eMG80/100/800& UCP& vUCP

Administration & Programming Manual

Please read this manual carefully before operating the System.
Retain it for future reference.

iPECS is an Ericsson-LG Brand

Revision History

ISSUE	DATE	DESCRIPTION OF CHANGES
1.0	Sep., 2013	Initial Release
1.1	Dec., 2013	Changed Ericsson-LG to Ericsson-LG Enterprise
1.2	Feb., 2015	Update contents according to S/W integration for both eMG80 & eMG800
1.3	May, 2015	S/W version 1.2.x. - On-line user guide - Terminal attributes (Small popup use, large popup timer, SLT open-loop time) - Web Access Authorization - NTP attributes - Digit Conversion Table - System attributes - U-LOOP, PBX code insertion for emergency call - Disconnect with Inband information - Temp License expiration notify - Trace Log via Web - Add System Date and Time to the Installation wizard
1.4	Jan., 2016	S/W version 2.0.x. - Added Speed code number plan in PGM100. - IPCR announce only for the incoming calls. - Updated the Strong password in PGM 160/161. - Updated 'Do not overwrite station name in PGM 211. - Added the Attendant ring mode in PGM 257. - Added more items for Alarm in PGM 163. - Added Flexible button default table (PGM 239) - Added Preset flexible button default (PGM 240) - Added System DST mode in PGM 439. - Added LDAP server setting in PGM 160/161. - Added the Arabic language. - Updated Message wait indication LED in PGM 112. - Updated Company directory in Station Name Display. - Added Station User Greeting in Station Data. - Added the search box in Maintenance. - Added MOH Management in Maintenance. - Updated the DB management by adding the Comment field. - Updated Install wizard - DTMF repeat tone has nothing to do with PSTN in PGM160-15 - Added Call wait signal and duration in PGM 113. - Added some admin (Alternate/Secondary signal port, Local route ID, Remote route ID, Sending Name option) in PGM 324. - Added SLT Pulse and SLT pulse-MW type in PGM 110. - Added Lift Handset for Page & Privacy in PGM 111. - Added Short Modem in PGM 112. - Added NFC Authorization Code uses in PGM 112. - Added rel 180 after 183 and "Add 'user=phone' param" in PGM 133.

		- Added Short Modem Timer in PGM 182~182, 186 - Added the Alarm mode to send email to the address in PGM 163. - Added the special character to DB management. - Added the Ring detection register setting in the Analog parameter. - Added LCD Dimming for LIP-9000 Series & LDP-9240D in PGM 112. - 'Go to assignment' function added to Personal group overview and can check the master & member list at a glance. - Added the Station ICR scenario (1201) to Station Data. - Change the name from UCS Standard to UCS data. - Added MOH management in Maintenance. - Added Keyset admin password to Install Wizard.
1.5	Apr, 2016	S/W version 2.0.x. - 'Unified SMB A&P manual' by integrating eMG and UCP.
1.6	Aug, 2016	S/W version 2.1.x. - The type of Speed numbering is added more in PGM 100. - 'DDNS usage of Firewall'&'Domain name of Firewall' is added in PGM 102. - The LCD LED is changed to the option 'MWI/Ring' or 'Ring.' - The ACD & CRM function is added for UCS Client: CRM function and ACD login/out & ACD On/Off duty in PGM 112. - UCS Dialing Rule Use for Standard UCS in PGM 112. - UCS Mobile Dial Use (Android) for Standard UCS in PGM 112. - The description of the CLI Name Display is changed. Refer to PGM 113. - Display full CLI function is added in PGM 113. - SMTP Server Address fills out up to 64 characters in PGM 127. - Proxy Server Address fills out up to 64 characters in PGM 133. - The range for ICLID Usage is changed to Disable, CLI, Name/CLI in PGM 140. - Web hacking block is added in PGM 160; Web admin login failure count to block, Web admin hacking block period, Wed admin hacking Email notification. - UCS Ring ACK count is added in PGM 160, and UCS Ring ACK timer is added in PGM 180. - SLT Line monitor and SLT Line Monitor time are added in PGM 160. - Dial Back to Caller from Remote VM Access is added in PGM 160. - The Alarm Display is added in PGM 163. - The range about Alarm is changed to Off, On, Alarm only, Alarm/Email. Especially, the default of Maintenance Expire Notify is Email only. - Message wait (Call back) for LED flash is added in PGM 170. - Outgoing Call type is added for All calls or Answered calls in PGM 177. - Call log/Directory Auto Idle Timer is added in PGM 180. - The range of Hot Desk for eMG and UCP is changed in PGM 250: eMG80 (100), eMG800 (300), UCP (1200). - The advice of Charge is added in PGM 133. - SIP Profile is added in PGM 211. - Signaling port, TLS Version, First & Second TLS crypto, SRTP usage, First & Second SRTP crypto are added in PGM 212. - The Interworking system is added in PGM 322. - The Name option is deleted in PGM 327.

		- The Alarm display is added in PGM 335. - Firewall IP is added in PGM 441. - MS Excel-like table data management is to be extended. - User Greeting is added to Maintenance. - Company Directory is added to Maintenance. - Web Certificate is added to Maintenance. - Custom 1 and Custom 2 are added in Web Access Authorization and User management. - Line Echo added to SLT attributes in PGM 112. - DSS in use added to LED Flashing Rates in PGM 170.
1.7	Nov, 2016	S/W version 2.2.x. - The search box is enhanced by adding an Attribute search and highlighting the result. - The virtual registration is available for up to 25 devices at one time and can copy/paste/drag like excel. - 'DSS LED service' for indicating the other station status is added in PGM 111. - 'Collect call block' is added in PGM 111. - 'Add 1st CO Group Access Code in Call log' is added in PGM 113. - Call Log Attribute is added in PGM 113. - 'Dial Digit' is added as the flexible button type in PGM 115/129. - The checkbox is added in PGM 117, PGM 118, and PGM 119. - The call forward type in PGM 120 is updated; changed Unconditional to Internal Unconditional and added External Unconditional. - Station ICR Scenario (PGM 1201) is updated about Call Profile Usage, Call Profile Timer, and Call Profile Apply Option. - Station CLI Program is added to Station Data. - CID/CPN Attributes (PGM 151) added. - Alarm Receiver E-Mail Address (To) & Notification E-Mail Address (To) is updated in PGM 160~161. - Resource Monitoring is added in PGM 160~161. - 'Display Forward Reason' is added in PGM 160~161. - 'CCR No Digit Error Timer' is added in PGM 180~182, 186. - Net Station as CO Type is added in System Speed Dial. - LIP-9050S and LIP-9071S are added to CONF TYPE in PGM 212. - 'Changed CLI' is added in PGM 270. - 'Register LM Device directly' is added in PGM 331. - 'Use Firewall IP' is added in PGM 441.
1.8	Jan, 2018	S/W version 3.0.x. - virtualized UCP - Mitel PMS Interface - User Base License - Multi-login support - Push service for iOS/Android mobile - Automatic failover for UCS Premium - Automatic failover for LIP-9000 (IPKTS) - Multi-zone for WTIM4/8 and WTIM24

		- User password length control - Access Control on PGM / MENU buttons - Improve UI of Message - The automatic alarm call and play a pre-recorded announcement - Emergency Page option - Outbound PRI Name Display - EXEC/SEC - add secretary call option - SMDR info for the incoming call to a group - Add an option for video call - Add base call cost option - Analog CO Call Charge with NPR metering - Add an option for built-in VM/VOIP channel (eMG80) - RTP/SRTP SSRC filtering - PPP over ISDN (eMG80/800) - CIQ Alert Announcement in case of being CPU Redundancy - Print Destination in CLI Print - Add '+' in Outgoing Call in SIP - SIP Name Display - Improved LDAP Attributes
1.9	July,2018	S/W version 3.1.x. - “Config Encryption” - Added “Conference room expansion.” - Add "USB serial usage." - Change the Range of Web Admin Login Failure count to block - Change the length of the max characters of "E-Mail Account Password." - Added "UCS PUSH POLLING Use" - Add "Key Pad Tone" option - Removed the “Cascade Apply Type” - Added “Clear Missed Call Log” - Change the length of the max characters of "E-Mail Account Password." - Changed the range of “Ring Group Indication.” - Added "T1 Timer" - Change to max 64 characters of the email address field - Change to max 32 characters of the unique ID field
2.0	Jan,2019	S/W version 3.5.x. - Added " Phone Lock/Unlock, "Flexible Page Prefix” - Added “Auto Transfer By Button To Last Call" and “DTMF tone for Flexible button” at the Tone/Ring Attributes - Added “PHONE Lock Status(Force to Set), “PHONE Auto Lock Usage,” “PHONE Auto Lock Timer,” “PHONE Lock Action for Hot-Desk,” “Allow to Stop - Flexible Paging” - Added " Coverage Call Log, "Page Call Log,” “Busy/DND/VM Log” - Added “REST API Service Port,” “REST API Session Timeout,” “Security (option for MSVC XML Port),” “CALL TRACKING Enable,” “SLT conference hook switch time.”

		- Added “UCS Server Link Down,” “PUSH Server Link Down, “System Act on Slave” - Added “Flexible Page Feature” - Added “Silent Text Message” - Added " SMDR REST API Service " - Updated “Button Idle Timer” - Added "Personal Group Individual Agent" - Added “Extend Wrap-Up Usage,” “Extended Wrap-Up Count,” “RING TONE" - Added “PAGE/PTT Receive” - Added “Print Destination in CLI Print “ - Added " TGID Usage, "Local Address Selection,” “ALTC Usage,” “INVITE(Replace) Usage” - Added " SIP MULTI HOME Option " - Added " CO Access Code " and “ALTC Usage” - Added the “suffix code.” - Updated “Customer Call Routing Table” - Added “Redundancy IP address.” - Added “Security (option for UCS XML Port)” - Added “REST API” - Added “LCD language download” at the Multi-Language File Download Refer to the “What’s New” for more detail
2.1	Nov.,2019	S/W version 3.6.x. - Added eMG100 System
2.2	Dec., 2019	S/W version 4.0.x. - Added “Private Mode for External Mobile or External Forwarded” and “Transfer for uncomplete call and Silent intercom busy service” and” Hot Desk Emergency Call Identity.” - Added “Default flexible button page and Headset button.” - Added the “Internal COS, External COS” of Call forward Type - Added “IP-DECT Message Server Port,” “XSI Service Port,” “ICM Hold Preference” - Added “Maintain Text Display” and “Do Not Prompt Paging EXT” - Added “Group Ring Back Tone” at the Terminal, ACD, Ring Group Attributes - Added “Intercom Busy Service” and “Incoming Trunk Choice” at the Miscellaneous Option, “System IPV6 Usage” at the SIP MULTI HOME Option - Updated the “Re-routed destination types.” - Updated the Access and use REST API features - Updated “Attendant User Program Codes”
	Feb., 2020	- Added 1000i Series IP phone
2.3	Sep., 2020	S/W version 4.1.x. - Added “DSS LED service on other station” and “Block Transferred Call.” - Changed E-Mail Account Password Range. (Max. 64 characters) - Added the “Intercom busy service - Added “Timeslot Full” - Added “ANNC Play-Start Delay” - Added “SMDR ICM Ring Info” and “SMDR ICM CPN Info”

		- Added “Web Connection” and “Telnet Connection” - Added MOH (after connection) option at the Group Ring Back Tone” of the Terminal, ACD, Ring Group Attributes - Added the “Digit Conversion table index.” - Enhanced VSF Range (VSF MOH4~30)
2.4	Mar., 2021	S/W version 5.0.x. - Added “System IPV6 Usage/ Address/ Router/ Net Prefix” at System IP Plan - Added “IP Address” and “Ipv6 Address” at Board Base Attributes - Added “ISDN Clock Sync” at ISDN Attributes
	May., 2021	- Added System register interval at T-NET CM Attributes - Added Register guard time at T-NET LM Attributes - Updated the PGM 160&161 for some missed Feature Descriptions.
	Jun., 2021	- Added All Clear the ACR at Station Voice Mail Attributes - Added Register guard time at T-NET LM Attributes - Updated the PGM 160&161 for some missed Feature Descriptions.
2.5	Jan., 2022	S/W version 6.0.x. - Added “Personal Group Login”, “Personal Group Logout” - Added “Online License” (vUCP only) - Added the “Online License” selection menu. (vUCP only) - Added “Simultaneous Ring To All Agents” at ACD Group Attributes - Added the “Online License” Section - Moved the Section 3. “Station Admin Programming for eMG” to the Appendix D
2.6	Mar., 2023	S/W version 6.1.x. - Added “DND 2ND ACT”, “Recall destination for transferring call” in PGM 111 - Added “Phone Link Down” in PGM 112 - Added “Board Disconnection Alarm” in PGM132 - Added “Online License, GW Online License, Phone/Gateway Link Down, ACD Manager TCP connection Error” in the Alarm System Notification. - Updated Screen Capture and description of Attendant Ring Mode in PGM257 - Added “IPCR Announce for only manually, IPCR CO PRIORITY” of System Attributes in PGM 160

Copyright© 2013 Ericsson-LG Enterprise Co., Ltd. All Rights Reserved

This material is copyrighted by Ericsson-LG Enterprise Co. Ltd. Any unauthorized reproductions, use, or disclosure of this material, or any part thereof, is strictly prohibited and is a violation of Copyright Laws.

Ericsson-LG Enterprise reserves the right to make changes in specifications at any time without notice.

The information furnished by Ericsson-LG Enterprise in this material is believed to be accurate and reliable but is not warranted to be true in all cases.

Ericsson-LG Enterprise and iPECS are trademarks of Ericsson-LG Enterprise Co., Ltd.

Table of Contents

1 Introduction 1
1.1 Manual Application 1
1.2 Manual Organization 1
2 System& Admin Information 3
2.1 System capacities for eMG and UCP 3
2.2 Initialization 10
2.2.1 eMG Initialization 10
2.2.2 UCP Initialization 11
2.2.2.1 Normal Registration Process 11
2.2.2.2 Replacement Module Registration 13
2.3 General Admin and Menu Structure 13
3 Station Admin Programming for eMG 14
4 WEB Service 15
4.1 General 15
4.1.1 PC/Browser 15
4.1.2 Environment for LAN connection 15
4.2 iPECS system Web Access & Login 16
4.3 Web Admin & Maintenance Main Page Overview 19
4.3.1 Favorite Program Groups 23
4.3.2 Using Function Base 24
4.3.3 iPECS Web Page Navigation 27
4.3.4 General Web Page Features 27
4.3.4.1 Web Page Range Entries 27
4.3.4.2 Table Check Boxes 27
4.3.4.3 Sorting Displayed Data 27
4.3.5 Install wizard 27
4.3.5.1 System Upgrade 28
4.3.5.2 Nation Code 28
4.3.5.3 Set System Time and Date 28
4.3.5.4 Set Station Number 29
4.3.5.5 Set Flexible Numbering Plan 29
4.3.5.6 Set CO Ring Assignment 29
4.3.5.7 Set Maintenance ID & Password 30
4.3.5.8 Set IP Information 30
4.3.5.9 Config Encryption 31
4.3.5.10 Set License Upload 31
4.4 Web Admin Programming 32
4.4.1 System ID & Numbering Plans 32
4.4.1.1 System ID – PGM 100 32
4.4.1.2 System Overview 37
4.4.1.3 Device Port Number Change– PGM 101 39
4.4.1.4 System IP Plan - PGM 102 41
4.4.1.5 Device IP Plan - PGM 103 44

4.4.1.6 CO Device Sequence Number - PGM 104 46
4.4.1.7 Flexible Station Numbering Plan - PGM 105 47
4.4.1.8 Flexible Numbering Plan - PGM 106 ~ 109 48
4.4.1.9 8Digit Extension Table - PGM 238 52
4.4.2 Station Data 53
4.4.2.1 Station Type - PGM 110 53
4.4.2.2 Common Attributes - PGM 111 54
4.4.2.3 Terminal Attributes - PGM 112 64
4.4.2.4 CLI Attributes - PGM 113 70
4.4.2.5 Flexible Buttons - PGM 115/129 75
4.4.2.6 Station COS - PGM 116 76
4.4.2.7 CO/IP Group Access - PGM 117 78
4.4.2.8 Internal Page Zone Access - PGM 118 79
4.4.2.9 PTT Group Access - PGM 119 80
4.4.2.10 Preset Call Forward - PGM 120 81
4.4.2.11 Station ICR Scenario - PGM 1201 82
4.4.2.12 Idle Line Selection - PGM 121 83
4.4.2.13 Station IP Attributes - PGM 122 84
4.4.2.14 Station Timers - PGM 123 85
4.4.2.15 Linked Station - PGM 124 86
4.4.2.16 Station ICM Group - PGM 125 88
4.4.2.17 Station Voice Mail Attributes – PGM 127 89
4.4.2.18 Station Personal CCR Table – PGM 128 93
4.4.2.19 Station Name Overview & Display 95
4.4.2.20 Station User Greeting 96
4.4.2.21 Station Data Copy 97
4.4.2.22 Station CTI IP Address (1st Party TAPI) 98
4.4.2.23 Station Recording Information 99
4.4.2.24 Station CLI Program 100
4.4.3 Board Based Data 101
4.4.3.1 H.323 VoIP Attributes - PGM 130 101
4.4.3.2 T1/E1/PRI Attributes - PGM 131 104
4.4.3.3 Board Base Attributes - PGM 132 105
4.4.4 CO Line Data 107
4.4.4.1 Common Attributes - PGM 140 108
4.4.4.2 Analog Attributes - PGM 141 113
4.4.4.3 VoIP Attributes - PGM 142 115
4.4.4.4 ISDN Attributes - PGM 143 116
4.4.4.5 CO/IP Ring Assignment - PGM 144 118
4.4.4.6 DID Service Attributes - PGM 145 119
4.4.4.7 DISA Service Attributes - PGM 146 120
4.4.4.8 CO/IP Preset Forward Attributes - PGM 147 121
4.4.4.9 MATM Attributes - PGM 149 122
4.4.4.10 NA ISDN Line Attributes - PGM 150 124
4.4.4.11 CID/CPN Attributes - PGM 151 126
4.4.4.12 T1 CO Line Attributes - PGM 152 130
4.4.4.13 DCOB CO Line Attributes - PGM 153 132
4.4.5 System Data 133
4.4.5.1 System Attributes - PGM 160 & 161 133
4.4.5.2 Config Encryption 148
4.4.5.3 System Password - PGM 162 149
4.4.5.4 Alarm Attributes - PGM 163 150

4.4.5.5 Alarm System Notification 151
4.4.5.6 Alarm Relay TNET Access 156
4.4.5.7 Alarm To External Call 157
4.4.5.8 Alarm Email Sending 159
4.4.5.9 Alarm Paging 160
4.4.5.10 Flexible Page Feature 161
4.4.5.11 Silent Text Messages 162
4.4.5.12 Attendant Assignment - PGM 164 163
4.4.5.13 Multi-cast IP/Port - PGM 165 164
4.4.5.14 DISA COS - PGM 166 170
4.4.5.15 DID/DISA Destination - PGM 167 171
4.4.5.16 External Control Contacts - PGM 168 172
4.4.5.17 LCD Display Mode - PGM 169 173
4.4.5.18 LED Flashing Rate - PGM 170 174
4.4.5.19 Music Sources - PGM 171 177
4.4.5.20 PBX Access Codes - PGM 172 178
4.4.5.21 Ringing Line Preference Priority - PGM 173 179
4.4.5.22 RS-232 Port Settings - PGM 174 180
4.4.5.23 Serial Port Selections - PGM 175 181
4.4.5.24 Pulse Dial (Break/Make) Ratio - PGM 176 182
4.4.5.25 SMDR Attributes - PGM 177 183
4.4.5.26 System Date & Time - PGM 178 187
4.4.5.27 System Multi-Language - PGM 179 188
4.4.5.28 System Timers - PGM 180 ~ 182 & 186 189
4.4.5.29 In-Room Indication - PGM 183 194
4.4.5.30 Web Access Authorization 195
4.4.5.31 Station Web Access Authorization 196
4.4.5.32 NTP Attributes - PGM 195 197
4.4.5.33 SNMP Attribute - PGM 196 198
4.4.5.34 Cabinet Attribute for UCP - PGM 197 200
4.4.5.35 Hot Desk Attributes - PGM 250 201
4.4.5.36 System Call Routing - PGM 251 202
4.4.5.37 CO Call Rerouting - PGM 252 204
4.4.5.38 VM COS Attributes – PGM 253 205
4.4.5.39 Static Route Attributes – PGM 254 206
4.4.5.40 Access Control List – PGM 255 207
4.4.5.41 Attendant Ring Mode – PGM 257 208
4.4.5.42 System Speed Dial 209
4.4.5.43 Custom Messages 210
4.4.5.44 PPTP Attributes 211
4.4.5.45 PPP Attributes for eMG– PGM 205 212
4.4.6 Station Group Data 213
4.4.6.1 Station Group Overview 214
4.4.6.2 Station Group Assignment - PGM 190 215
4.4.6.3 Station Group Attributes - PGM 191 215
4.4.6.4 Pick Up Group Overview 233
4.4.6.5 Pick Up Group - PGM 192 234
4.4.6.6 Personal Group Overview 234
4.4.6.7 Personal Group - PGM 260 235
4.4.6.8 Personal Group Attribute - PGM 261 236
4.4.7 ISDN Line Data 237
4.4.7.1 ISDN Attributes - PGM 200 238

4.4.7.2 CLIP/COLP Table - PGM 201 239
4.4.7.3 MSN Table - PGM 202 240
4.4.7.4 ICLID Route Table - PGM 203 241
4.4.7.5 ICLID Ring Assignment Table - PGM 204 242
4.4.7.6 PPP Attributes for UCP - PGM 205 243
4.4.7.7 Prefix Dialing Table - PGM 206 244
4.4.7.8 ISDN Clock Priority for eMG800 - PGM 207 246
4.4.8 SIP Data 247
4.4.8.1 SIP Common (System-based) Attributes - PGM 210 248
4.4.8.2 SIP Trunk Status Overview 254
4.4.8.3 SIP CO Attributes - PGM 133 255
4.4.8.4 SIP Registration Status Overview 269
4.4.8.5 SIP UID Allocation Status Overview 269
4.4.8.6 SIP User ID Attributes – PGM 126 270
4.4.8.7 SIP Phone Attributes - PGM 211 273
4.4.8.8 SIP Phone Provisioning - PGM 212 280
4.4.8.9 Provisioning File View & Delete 284
4.4.8.10 VMEX Station Data - PGM 215 285
4.4.8.11 VMEX Connection table - PGM 216 286
4.4.9 Tables Data 287
4.4.9.1 LCR Control Attributes - PGM 220 288
4.4.9.2 LCR LDT (Leading Digit Table) - PGM 221 290
4.4.9.3 LCR DMT (Digit Modification Table) - PGM 222 292
4.4.9.4 LCR Table Initialization - PGM 223 293
4.4.9.5 Digit Conversion Table - PGM 270 294
4.4.9.6 Toll Exception Table - PGM 224 295
4.4.9.7 Emergency Code Table - PGM 226 296
4.4.9.8 COS Table 297
4.4.9.9 Authorization Codes Table - PGM 227 298
4.4.9.10 Customer Call Routing Table - PGM 228 302
4.4.9.11 Executive/Secretary Table - PGM 229 304
4.4.9.12 Flexible DID Conversion Table - PGM 231 306
4.4.9.13 System Speed Zone Table - PGM 232 308
4.4.9.14 Auto Ring Mode Table - PGM 233 309
4.4.9.15 Voice Mail Dialing Table - PGM 234 310
4.4.9.16 Registration Table - PGM 235 312
4.4.9.17 Mobile Extension Table - PGM 236 313
4.4.9.18 IPCR Agent Table - PGM 237 315
4.4.9.19 Dummy Dial-Tone Digit Table 316
4.4.9.20 Flexible Button Default Table– PGM 239 317
4.4.9.21 Preset Flexible Button Default – PGM 240 318
4.4.9.22 Company Name Table – PGM 241 319
4.4.10 Networking Data 320
4.4.10.1 Network Basic Attributes - PGM 320 321
4.4.10.2 Network Supplementary Attributes - PGM 321 322
4.4.10.3 Net CO Line Overview 324
4.4.10.4 Network CO Line Attributes - PGM 322 325
4.4.10.5 Network Numbering Plan Table Overview 326
4.4.10.6 Network Numbering Plan - PGM 324 326
4.4.10.7 Network Feature Code Table - PGM 325 329
4.4.11 H.323 Routing Table 330
4.4.11.1 H.323 Basic Attributes -PGM 326 331

4.4.11.2 H.323 CO Group Attributes -PGM 327 332
4.4.11.3 H.323 Incoming Route table -PGM 328 334
4.4.12 T-NET Data 335
4.4.12.1 T-NET Basic Attributes -PGM 330 336
4.4.12.2 T-NET CM Attributes -PGM 331 337
4.4.12.3 T-NET LM Attributes -PGM 332 338
4.4.12.4 T-NET FoPSTN table -PGM 333 340
4.4.12.5 T-NET Control Contact -PGM 334 341
4.4.12.6 T-NET Music/Alarm -PGM 335 ~ 336 342
4.4.12.7 T-NET ISDN Clock Priority for eMG800 -PGM 337 343
4.4.13 Zone Data 344
4.4.13.1 Zone Number Overview 344
4.4.13.2 Device Zone Number – PGM 436 345
4.4.13.3 Device Zone Attributes – PGM 437 346
4.4.13.4 Access & Page Relay – PGM 438 348
4.4.13.5 Inside Zone Attributes Overview 349
4.4.13.6 Zone Attribute – PGM 439 350
4.4.13.7 Zone RTP Relay Group – PGM 440 353
4.4.13.8 Inter Zone Attribute – PGM 441 354
4.4.13.9 Zone Holiday Assignment - PGM 444 356
4.4.14 Device Login 357
4.4.14.1 Remote Device Registration – PGM 442 358
4.4.14.2 Station User Login – PGM 443 359
4.4.15 UCS Data 361
4.4.15.1 Common Attributes – PGM 445 362
4.4.15.2 UCS Standard Client Login – PGM 446 364
4.4.15.3 UCS Premium Client Login – PGM 446 366
4.4.15.4 UCS Standard Client Attributes – PGM 447 368
4.4.15.5 Administrative Message – PGM 448 369
4.4.15.6 UCS Push State 370
4.4.16 DECT Data 371
4.4.16.1 DECT Registration (0#) 372
4.4.16.2 DECT ATTRIBUTES - PGM 491 374
4.4.16.3 DECT Multi-zone support 375
4.4.17 Hotel Data 376
4.4.18 Green Mode for eMG - PGM 500 377
4.4.18.1 Green mode activation 378
4.4.18.2 Green Mode Time Setting 379
4.4.19 Redundancy Data for UCP600 & 2400 380
4.4.19.1 Redundancy Attributes – PGM 502 381
4.4.19.2 Redundancy IP Address – PGM 503 382
4.4.20 Initialization - PGM 450 383
4.4.20.1 Initialization Table - PGM 450 384
4.5 Maintenance 385
4.5.1 S/W Upgrade 387
4.5.1.1 File Upload 388
4.5.1.2 Upgrade Process 388
4.5.1.3 Upgrade HTML Files 390
4.5.1.4 WTIB Base upgrade Process for eMG800 390
4.5.2 Database 391
4.5.2.1 Database Upload 391

4.5.2.2 Database management....391
4.5.3 Multi-Language....392
4.5.3.1 Multi-Language File Upload....392
4.5.3.2 Multi-Language File Download....392
4.5.4 SMDR....393
4.5.5 File System....393
4.5.5.1 File View & Delete....393
4.5.5.2 File System Information....393
4.5.6 MOH (Music On-Hold) Management....394
4.5.6.1 MOH Delete& Download....394
4.5.6.2 MOH Upload....394
4.5.7 License Install....395
4.5.7.1 License upload....395
4.5.7.2 Gateway License for UCP....396
4.5.7.3 User Base License....397
4.5.7.4 Temp License Activation....398
4.5.7.5 Online License (vUCP only)....399
4.5.8 DECT Statistics Feature....400
4.5.9 VSF Prompt Upload....401
4.5.9.1 Prompt selection....401
4.5.9.2 Prompt Upload/Delete....402
4.5.9.3 Individual Upload....403
4.5.10 VSF System Greeting....404
4.5.10.1 Individual Upload....404
4.5.10.2 Individual download....405
4.5.10.3 System greeting Upload....405
4.5.10.4 System greeting Download....406
4.5.11 User Greeting....407
4.5.11.1 User Greeting Upload....407
4.5.11.2 User Greeting Download....408
4.5.12 Company Directory....409
4.5.12.1 CDN Upload....409
4.5.12.2 CDN Download....410
4.5.13 Voice Mail Management....411
4.5.13.1 Voice Mail Delete....411
4.5.13.2 Voice Mail USB Backup....412
4.5.14 Function program....413
4.5.14.1 User Function Management Page....413
4.5.15 User Management....416
4.5.15.1 Company (Tenant group) Administrator Account....417
4.5.16 Trace....418
4.5.17 TDM Gain Control....419
4.5.18 IP Gain Control....419
4.5.19 Tone/ Ring Gain &Cadence Control....420
4.5.20 Appliances Control....420
4.5.21 Web Certificate....421
4.6 On-Line web user guide....423

1 Introduction

1.1 Manual Application

This document provides detailed information covering the eMG/UCP database configuration and maintenance of the eMG/UCP.

The manual also details the power-up and initialization routines and the Station Web Portal.

The manual is written for the experienced installer with knowledge of telephony terms and functions of small and mid-sized business telecommunications systems.

Virtual machine UCP provides most features except the following features:

1) DB Backup to USB monthly / DB Backup to USB weekly - System Attributes
2) External Control contact - PGM168
3) Music Sources - PGM 171
4) RS-232 Port Settings - PGM174
5) Serial Port Selections - PGM175

1.2 Manual Organization

This manual is organized into four (4) major sections, including:

Section 1 Introduction:
This section introduces the content and organization of the manual.

Section 2 System & Admin Information
This section detailed general information on System capacities, power-up routines, and the system initialization process. Also, this section discusses the process for registration of IP and softphones with the system.

Section 3 Station Administration for eMG
This section is moved to the Appendix D

Section 4 Web Administration
Similar to the Station Administration section, the Web Administration section gives step-by-step procedures and descriptions for the configuration parameters and settings available using a Web browser.

- **Section 4.5 Maintenance**: The Maintenance section provides details on managing the eMG, including database upload and download, software upgrade, and user access management using the Web browser interface.
- **Section 4.6 Station Program**: This section discusses the configuration of the features and functions available in the portal.
- **Section 4.7 On-line web user guide**: This section explains the frequent use of features to a user. We didn't describe this section because you can easily get the information by clicking [User's guide] on the login page.

Appendix A

The Station and Attendant Station User Program codes are listed with the associated function. These fixed codes are available at the iPECS IP or LDP phones to configure basic functions such as ring tones, activate features, and assign features and functions to Flex buttons.

Appendix B

This section is a complete listing of the nine basic Flexible Numbering Plans. One is selected as the system's Flexible Numbering Plan. Each of the basic Numbering Plans includes all feature and resource access codes, and any individual code can be changed.

Appendix C

This Appendix includes a detailed listing of all the configurable parameters by Program group and includes the default values for each parameter. It is only for eMG Station Administration.

Appendix D Station Administration for eMG

This section provides details on configuring the eMG system employing station-allowed administrative access. Step-by-step procedures are given along with brief but concise descriptions of the various configuration parameters and available settings. We recommend that you use Section 4 Web administration.

2 System& Admin Information

2.1 System capacities for eMG and UCP

iPECS eMG is available in several hardware configurations based on the Main board of the KSU. The software will structure a database for the maximum possible station and CO/IP Line configurations upon initialization. Thus, the software port count capacities will differ from the hardware count. However, the hardware limitations always apply.

The total System ports supported by the software include the Station ports, CO/IP Line ports, and ports for various options, including the integrated AA/VM, Miscellaneous ports, etc. The hardware and software capacities are the same as the Station and CO/IP Line ports. The capacities relative to the software are provided in the table below.

Table 2.1-1 eMG80Software Capacity

Item	Capacity
CO/Trunk lines	Max. 74
Stations	Max. 140
Attendants	4
LAN port	2(1 each, KSU and VVMU)
Modem Channel	1(MODU)
Serial Port(RS-232C)	1
USB(2.0) Host port	1
Alarm/Doorbell input	2 (1 per KSU)
External Control Relays	2 (1 per KSU)
Music Source Inputs	1 Internal: select one of 13 melodies 1 External source input 5 SLT ports 3 VSF announcements
Power Fail Circuit	Max. 6 (1 per KSU, EKSU, CH204, CH408, CS416)
VSF Device 1: Built-in AA/VM - w/MEMU - w/MEMU2 VSF Device 2 (VVMU)	8 channels(2 Chan. by default, 1Channel by license), 1 hour 15 hours(no license needed) 60 hours(no license needed) 8 channels (by license) & 15 hours(by license), 1 hour(by default)
Conference channels	148 channels/13 parties per group
Max. WTIB	1
DECT Phones	48
Built-in VoIP channels	8(2 channels by default, 6 channels by license)
VVMU VoIP channels– eMG80	8(by license)
IP Stations and SIP Trunks	48 port (32 Stations+16 SIP Trunks)
External Page	1 port
Internal Page	35 zones
System Speed Dial	3000 numbers, 25 digits each

Table 2.1-1 eMG80Software Capacity

Item	Capacity
System Speed Dial Zones (Groups)	10 zones
Station Speed Dial	100 per station, 25 digits each(Max. 4000 numbers)
Last Number Redial	10 numbers
Save Number Redial	1 number
DSS Consoles per Station	3
Serial DSS - System	100
Serial DSS – Station (LIP-8000)	4
Serial DSS – Station (LIP-9000)	1
Serial DSS – Station (1000i)	1
SMDR buffer	10,000
CO Line Groups	20
Station &Station Groups	40
Station &Station Group Members	70
Pickup Group	50
Pickup Group Member	140
Conference Groups - System	40
Conference Groups - Station	20 per station
Executive/Secretary pairs	36
Authorization Codes	500 (Station: 140, System: 360)
Transparent Networking Table	15
ICLID Routing table	250
Tenancy (ICM) Group	15
Attendant Station	4
DID Digits Analysis	4
MSN Table	500
BHCC	7200(2CPS)

Table 2.1-2 eMG100 Software Capacities

Item	Capacity
CO/Trunk lines	Max. 74
Stations	Max. 140
Attendants	4
LAN port	2(1 each, KSU and VOIB48)
Modem Channel	1(MODU)
Serial Port(RS-232C)	1
USB(2.0) Host port	1
Alarm/Doorbell input	2 (1 on KSU, 1 on MISB)
External Control Relays	4 (1 on KSU, 3 MISB)
Music Source Inputs	1 Internal: select one of 13 melodies 1 External source input (1 on KSU, 1 on MISB) 5 SLT ports 3 VSF announcements

Table 2.1-2 eMG100 Software Capacities

Item	Capacity
Power Fail Circuit	none
VSF Device 1: Built-in AA/VM - w/MEMU - w/MEMU2	KSUD, KSUS:16 (4channels. by default, 12channels by license), 2 hour KSUSC:16(2 channels by default, 14channels by license), 2hour 15 hours(no license needed) 60 hours(no license needed)
Conference channels	148 channels/13 parties per group
Max. WTIB	none
DECT Phones	none
Built-in VoIP channels	KSUD, KSUS:16 (2 channels by default, 14 channels by license) KSUSC:16(0 channel by default, 16channels by license)
IP Stations and SIP Trunks	Simultaneously 100 Calls
External Page	2 port (1 on KSU, 1 on MISB)
Internal Page	35 zones
System Speed Dial	3000 numbers, 25 digits each
System Speed Dial Zones (Groups)	10 zones
Station Speed Dial	100 per station, 25 digits each(Max. 4000 numbers)
Last Number Redial	10 numbers
Save Number Redial	1 number
DSS Consoles per Station	3
Serial DSS - System	100
Serial DSS – Station (LIP-8000)	4
Serial DSS – Station (LIP-9000)	1
Serial DSS – Station (1000i)	1
SMDR buffer	10,000
CO Line Groups	20
Station &Station Groups	40
Station &Station Group Members	70
Pickup Group	50
Pickup Group Member	140
Conference Groups - System	40
Conference Groups - Station	20 per station
Executive/Secretary pairs	36
Authorization Codes	500 (Station: 140, System: 360)
Transparent Networking Table	15
ICLID Routing table	250
Tenancy (ICM) Group	15
Attendant Station	4
DID Digits Analysis	4
MSN Table	500
BHCC	3600(1CPS)

Table 2.1-3 eMG800 Software Capacities

Item	Capacity
CO/Trunk lines	Max. 600
Stations	Max. 1200
Attendants	5
LAN port	MPB(1), VOIB(1), VMIB(1)
Modem Channel	1(MODU)
Serial Port(RS-232C)	1
USB(3.0) Host port	1
Alarm/Doorbell input	1
External Control Relays	2 (1 per KSU)
Music Source Inputs	1 Internal: select one of 13 melodies 1 External source input 5 SLT ports 3 VSF announcements
Power Fail Circuit	1 port / 1 LCOB
VSF Device - VMIU - VMIB	 4ch, 1 hours 8ch, 100 hours
Conference channels	148 channels/13 parties per group
Max. WTIB	30
DECT Phones	192
Built-in VoIP channels	8 (4 channel by default)
VOIB128 channels	128 (32 channel by default)
IP Stations and SIP Trunks	600
External Page	1 port
Internal Page	100 zones
System Speed Dial	8000 numbers, 25 digits each
System Speed Dial Zones (Groups)	10 zones
Station Speed Dial	100 per station, 25 digits each(Max. 12,000 numbers)
Last Number Redial	10 numbers
Save Number Redial	1 number
DSS Consoles per Station	3
Serial DSS - System	500
Serial DSS – Station (LIP-8000)	4
Serial DSS – Station (LIP-9000)	1
Serial DSS – Station (1000i)	1
SMDR buffer	10,000
CO Line Groups	200
Station &Station Groups	200
Station &Station Group Members	200
Pickup Group	200
Pickup Group Member	12,000
Conference Groups - System	160

Table 2.1-3 eMG800 Software Capacities

Item	Capacity
Conference Groups - Station	100 per station
Executive/Secretary pairs	100
Authorization Codes	2,400 (Station: 1,200/System: 1,200)
Transparent Networking Table	32
ICLID Routing table	250
Tenancy (ICM) Group	32
Attendant Station	5
DID Digits Analysis	4
MSN Table	1,500
BHCC	21600(6CPS)

Table 2.1-4UCP System Capacities

ITEM	UCP100	UCP600	UCP2400	Remark
Main Cabinet	10 Slots			1 slot used by the PSU
System channels, basic - maximum	50 199	100 600	600 2400	 w/License
Stations	199	600	2400	Total stations and Lines cannot exceed the available System channels
CO/IP Lines (external network channels incl. VoIP)	199	600	998	
UCS Standard Clients - Registrations - Simultaneous UCS Premium Clients - Registrations	 100 100 199	 200 200 600	 400 400 2400	
Server Redundancy	No	Yes	Yes	Supports local and remote redundancy
Cabinet Power Redundancy	Yes			
Integrated Telephony ports*1 - standard - optional	 2 FXS (SLT) 4 CO, or 2 BRI or 4 BRI Lines	 None	 None	Two FXS ports are equipped as standard in the UCP100 module; an optional CO/BRI line unit may be equipped or installed.
Max. WTIM4/8 modules Max. WTIM24 modules	30 10			
Max DECT phones for WTIM4/8 Max DECT phones for WTIM24	192 254	192 254	192 254	 *Supports GDC-480H/500H
VoIP Switch channels, *2&3 - System Maximum	 199	 600	 998	 w/License (8ch increment) w/VOIM and VCIM
VoIP DSP channels, - Built-in max	 4	 6	 0	

Table 2.1-4UCP System Capacities

ITEM	UCP100	UCP600	UCP2400	Remark
Multi-party Conference Unit (MCIU) channels	6/10/14/18	6/18	0	VoIP DSP channels can be assigned to the MCIU, 2 VoIP = 4 Conf channels. For UCP100, see Note 1.
Maximum MCIMs	30			
Max SIP channels	100	600	1200	
VSF*4	8-Ch./4 Hrs.	8-Ch./6Hrs.	NA	
	14 Hours	16 Hours	NA	w/License
UVM capacity, basic - maximum	8 Channels at 50 hours 16 Channels at 200 hours			w/License
UVM per system	100			
Attendants	50			
Serial Port (RS-232C)	1			
USB Host port	1			
Alarm/Doorbell input	1	2		
External Control Relays	1	4		
Music Source Inputs (Ext)	1			
Power Fail Circuit	1	4		
External Page zones	1	2		
Internal Page Zones	100			
System Speed Dial	12,000			
System Speed Dial Zones (Groups)	50			
Station Speed Dial, per Station	100			
Total Station Speed Dial	24,000			
Call park	200			
Last Number Redial	10 (23 digits)			
Save Number Redial	1 (23 digits)			
Standard DSS Consoles/Station	9			
Serial DSS - System	500			
Serial DSS - Station (LIP-8000)	4			
Serial DSS - Station (LIP-9000)	1			
Serial DSS – Station (1000i)	1			
SMDR buffer	30,000			
CO Line Groups	200			
Station & Hunt Groups	200			
Station & Hunt Group Members	200			
Pickup Groups	200			
Pickup Group Member	2,400			
Personal Groups	1200			
Conference Group - System	160			
Conference Group - Station	100			

Table 2.1-4UCP System Capacities

ITEM	UCP100	UCP600	UCP2400	Remark
Executive/Secretary pairs	100			
Authorization Codes	5200 (Station:2400/System:2800)			
Transparent Networking Table	100			
Redundancy	N/A			Yes
Flex DID Table	10,000			
MSN table	2,400			
DID Digits Analysis	4			
Tenancy (ICM) Groups	100			
ICLID table	500			
BHCC	54000(15CPS)			

NOTE)

1) iPECS UCP-100 is equipped with two (2) FXS ports, and one of several built-in CO Line units may be factory or field installed.
   4 analog CO Lines (UCP-COIU4), uses two (2) VoIP DSP channels
   2 BRI Lines, 2B+D each, (UCP-BRIU2) , uses two (2) VoIP DSP channels
   4 BRI Lines, each 2B+D, (UCP-BRIU4) , uses four (4) VoIP DSP channels
2) Note the built-in PSTN interfaces require dedicated DSP resources. These DSP resources reduce the maximum VoIP DSP resources available shown in the above chart.
   The built-in VoIP Switching channels implement agent and packet relay functions. Remote device and network interfaces send RTP traffic to the VoIP channel, which forwards traffic to the appropriate local iPECS device. The VoIP Switching channel also forwards multi-cast packets to the remote end-points and local non-iPECS devices. Only the g.711 codec is allowed unless there is an available VoIP DSP channel.
3) The number of VoIP Switching channels can be increased to the maximum with license installation.
4) Approximately 35 minutes (16 Mbytes) of the VSF and UVM memories are used to provide basic system prompts. The remaining memory can be used for announcements and voice message storage. Note the built-in VSF supports the g.711 Codec only; the UVM supports g.711, g.729, g.723, and g.722 Codec.
5) For the detailed vUCP System capacity, refer to the Virtual UCP(vUCP) Installation Manual

2.2 Initialization

2.2.1 eMG Initialization

Before starting the configuration, the system should be initialized to assure a known starting point and automatically register installed boards. Also, if the Nation Code requires modification, the system will be initialized to establish tones and gains appropriate for the region. You can initialize the system using the Initialization switch (Dip-switch SW1, pole-2) in the KSU or the software Initialization PGM 450. Note the former must be used to change the Nation Code as detailed in section 3.3.1.

Basic Power-Up Routine

When the KSU power switch is turned On, or the KSU Reset button is pressed with power ON, the system will initiate the “Power-up” routine. During the Power-Up routine, the system checks the Initialization switch and, if the switch is in the Off position, the system will perform the basic Power-up routine; clear all scratch-pad memory, load run-time programs, establish communications with each registered Interface board, Function board, iPECS IP Phone and LDP Phone, send Restart commands and load appropriate settings to the boards and terminals.

The KSU also will attempt to communicate and register the EKSU. If a registered board or terminal does not respond after several attempts, the system places the device in an out-of-service mode but maintains the device's configuration. Once the Power-up routine is complete, the system will conduct normal operations.

Registration of Boards

If the Initialization switch is in the ON position, in addition to the Power-Up routine, the system will perform the full Initialization procedure. During initialization, the system attempts to communicate with the board in each Slot, starting with Slot 1 and progressing sequentially through the slots to determine the installed equipment.

If the board is installed, the Slot number (“Sequence Number”) is registered, an “Order number” is determined, and the MPB MAC and IP address are assigned. We are using Order Number, which is the order that devices of the same type (CO/IP Line, Station, VSF device, etc.) register, the system assigns the Station numbers and CO/IP Line numbers.

An exception to the above is the MAC and IP address of the VOIB, which covers the VoIP channels on the VVMU. The VOIB has a separate MAC address, and the IP address is assigned from the system. Note this IP address can be modified at a later time.

Once the system is operational and the database configured, the system can be expanded manually by registering the optional boards as detailed in PGM 235, Registration Table.

Initial Station and CO Numbering

The default Station Numbering Plan assigns a Three-digit number to each station port. Starting at the first (left) port of Slot 1, the system assigns the Station Numbers beginning at “100 (eMG80/100) or 1000 (eMG800)”. The Station number increments for each port in the slot, moving to the right until reaching the last port. The process is repeated for each Station slot (1 to 6), assigning consecutive Station Numbers.

Note the Station Number Plan can be two to four digits, and the Station Number for each port can be modified individually.

Slots 7 to 14 are then registered and, since they are CO/IP Lines, the Order numbers 1 to 8 are used to number the CO/IP Lines. The process is repeated for each device type.

IP Phone Registration

An unregistered iPECS IP Phones attempt to discover and register with a local (on the same LAN) iPECS system, in this case, the eMG. The phone will send a registration request to the MPB IP address. If no response is received, the phone will send a multi-cast request. With the request, the phone will send the MAC address. This address must be assigned in the PGM 235.

When the system receives the request, the MAC address received is compared to the Registration table, and, if matched, the phone is registered. The next available sequence number starts at “19” and is assigned the next available Station Number.

If the iPECS IP Phone is configured as a remote device, it will send a registration request to the iPECS system at the configured IP address. When the system receives the request, it is normally processed except the MAC address in PGM 442 Remote Device Register.

Default Database

Based on the installed equipment, the system populates the database with the default values. Refer to Appendix C based on Keyset administration as numbering plan 1. Once the database is set to default, the system will conduct normal operations.

2.2.2 UCP Initialization

When power is applied to the UCP or the UCP Reset button is pressed, the system will initiate the “Power-up” routine. The system will check the Initialization switch (pole 4th of UCP Mode Dip Switch). If the switch is in the OFF position, the system will perform a simple Power-Up routine; clear all scratch-pad memory, load run-time programs, establish communications with each registered gateway Module and iPECS terminal, send RESTART commands and load appropriate settings to the Modules and terminals. If a Module or terminal does not respond after several attempts, the system places the device in an out-of-service mode but maintains the database settings. Once the Power-up routine is complete, the system will conduct normal operations.

If the Initialization switch is in the ON position, the system will perform the full Initialization procedure in place of the Power-Up routine. The initialization procedure will set the system database to default values. Further, during the full initialization procedure, the system will establish communications with each gateway Module and iPECS terminal for registration. This communication will use the default device IP address and the UCP MAC address for system identification. The system will maintain IP addresses and Sequence Numbers for previously registered gateway Modules and iPECS terminals. These values are employed for subsequent communication and logical assignments of numbering plans, respectively. In addition, the system sends commands to modify all settings to the default values, including IP addresses but maintains the existing Sequence Numbers.

After successful initialization, should a device not respond to several attempts by the system to communicate, the system places the device in an out-of-service mode but maintains the database. Once initialization is complete, set the initialization switch to the OFF position to protect the database. The system must be restarted to complete the initialization.

2.2.2.1 Normal Registration Process

Module & Terminal

When power is applied, and an Ethernet link is established, an unregistered device will attempt to discover and register with a local (on the same LAN) iPECS system. The Module or terminal will send a registration request to the assigned IP address of the iPECS system (UCP). If no response is received, the device will generate a Multi-cast discovery request for registration.

Remote iPECS Phone & Remote Services Module

A remote device, iPECS Phone or gateway Module, registers with the system using the device's MAC address. The MAC address must be assigned in the system database, and the system's IP address must be assigned to the remote device. For using the address, the remote device will attempt to register with the assigned iPECS system. When the system receives the registration request, the MAC address is compared with the database to authenticate the remote device. With a matching MAC, the system will accept the registration request and provide the remote device with the appropriate settings. Note that the position of the UCP Registration switch does not affect remote registration.

iPECS Softphone or SIP Phone

iPECS softphones (iPECS UCS Client) and SIP phones register with the system employing the User Id and Password. When the system receives the registration request, the Id and password are compared to the Station Login parameters. If a match is found in the Station Login Table, the system registers the device and assigns the phone the Station Number requested (Desired number), if available. As with remote registration, the position of the UCP Registration switch will not affect Softphone or SIP Phone registration.

iPECS system

When power is applied, an Ethernet link is established, and the Registration switch (UCP DIP Switch position 3) is in the ON position, the UCP will send a Multi-cast request to unregistered gateway Modules and iPECS terminals for registration.

When the system receives a valid registration or discovery request, and the Registration switch (UCP DIP Switch position 3) is in the ON position, the system will respond to the gateway Module or terminal with a Registration command including the system IP and MAC address. During the registration process, the Module or terminal will receive data from the system, including a Sequence Number, IP address, RTP characteristics, etc., as well as default settings appropriate to the type of Module or terminal. Once registered, the Module or terminal will maintain the system IP and MAC address in non-volatile memory and will not attempt further registrations. If the Registration switch is in the OFF position, the system will not respond to normal registration requests from a local device.

Sequence Number

Sequence numbers are allocated to the different device types and are assigned sequentially to devices of the same type, as shown in Table 2.3.1 below.

Table 2.3.1 Sequence Number Allocation

Device Type	Start Sequence Number	End Sequence Number
Station	1	2400
CO line	2401	3000
VSF	3001	3100
MISC	3101	3200
MCIM	3201	3230
UCS server	3231	3246
IPCR and 3rd party server	3247	3256
WTIM	3257	3388

2.2.2.2 Replacement Module Registration

Under certain situations, it is necessary to force the registration of gateway modules and terminals, specifically when a UCP, gateway Module, or iPECS Terminal is replaced. When replacing a UCP module, gateway Modules and iPECS terminals must be forced to register with the new system. The system must recognize the “replacement” status with Module or terminal replacement to transfer the existing database values.

When replacing a UCP, the local Web interface is used to access the system. The user may update the system database using the database downloaded from the previous UCP memory.

Using the Terminal mode Command Line interface (“maint > reset ip”), the user provides the new UCP with the IP address of the previous UCP and issues the Register command. The new system will then send a Uni-cast Register command to each gateway Module and iPECS terminal registered to the previous system. This Register command will include the previous system IP address. These commands are repeated several times only. As communication is established, the new UCP will update the settings of the gateway Modules and iPECS terminals appropriately. When the gateway Modules and terminals respond, they are registered to the new system.

When replacing a gateway Module, use PGM 103 “Device IP Plan” in Web admin to change the service mode to “Out of Service,” change the MAC information for the new module, change the service mode to in-service and install the new gateway Module.

When replacing an iPECS terminal, using PGM 103 “Device IP Plan” in Web admin, change the service mode to “Out of Service,” change the MAC information for the new iPECS terminal, change the service state to in-service, and install the new terminal.

2.3 General Admin and Menu Structure

The iPECS system can be configured to meet each customer's individual needs. System configuration may be accomplished by entering the “Program mode” at an assigned Admin Station or by pointing a Web Browser at the IP address of the MPB/UCP. Appendix D describes the eMG system for data entry using the Admin Station. Section 4 discusses configuration employing the Web browser. Note that some parameters are available through Web Admin and not the Keyset Admin.

Configurable items are organized as “Data” groups with a common effect, i.e., station, system, numbering plan, etc. Items are further grouped into “Programs,” forming a multi-layered menu structure like the following list. Each program group is assigned a three-digit “Program” (PGM) code used to access the group. The top-level Data groups include:

- System ID& Numbering Plans
- Station Data
- Board Based Data
- CO Line Data
- System Data
- Station Group Data
- ISDN Line Data
- SIP Data
- Tables Data
- Networking Data

- H.323 Routing Table
- T-NET Data
- Zone Data
- Device Login
- UCS Data
- DECT Data
- Redundancy Data (for UCP600 & UCP2400)
- Hotel Data
- Green Mode for eMG
- Initialization

The default and range of values for each configurable parameter are provided in Section Web admin programming. The index and charts are helpful references when entering data into the system‘s database.

3 Station Admin Programming for eMG

The Station Admin Programming for eMG is moved to Appendix D. Please refer to Appendix D for the detail station Admin program.

4 WEB Service

4.1 General

The iPECS system incorporates a Web Server, which the system's Web Service employs. By using a Web browser, the system's Web Server can be accessed, and the database managed in a user-friendly environment.

In addition to modifying the system database, Web Admin provides Maintenance such as system file upload, remote upgrade, database download, and maintenance functions.

We provide an Online web user guide to a user. You can get the information about the frequent use of features by clicking [User's Guide] on the login page.

The default database includes the assignment of a private IP address to the system. This address (10.10.10.2) may be used to access the system from the LAN. However, a routable IP address must be assigned for access from a remote location.

To access the iPECS Web Server requires:

- Operating iPECS series system
- IP address assigned in the system and is known
- TCP port assigned for the KSU LAN port and is known
- iPECS system connected to an accessible LAN
- iPECS system password (Keyset Admin, Remote access, and CID), if any, is known

4.1.1 PC/Browser

- MS Explore 10.0, Chrome 24.0, Firefox 18.0 or higher version is recommended (HTML5 support required)
- Windows PC, at least 32MB RAM (64MB or more RAM is recommended)
- NIC (Network Interface Card)

4.1.2 Environment for LAN connection

- IEEE 802.3, 10/100 Base T
- Static/DHCP addressing
- The firewall, requires Network Administrator to allow access.
- Remote access requires a routable IP address for the iPECS System Web Server. This must be assigned to the system before access.

4.2 iPECS system Web Access & Login

Enter the MPB or UCP IP address (default is 10.10.10.2) and TCP port in the browser' ADDRESS' field. Select GO; the Web server returns iPECS system Web Services Login page, Figure 4.2.1-1. The Web services include the Admin and Maintenance functions and the Station Program User Portal.

For access to the Admin and Maintenance function, the User ID and Password should be matched with the assignments in the User Management.

The default Maintenance User ID is ‘admin,’ and the password is ‘1234’. The system will return the Admin & Maintenance Main page, section 4.3.

To access the Station program, the user must enter their Station number and full Authorization code (station number and Auth code) in Tables Data – Station Authorization Code (PGM 227). The system will return the Station Program Main page as shown in section 4.6.

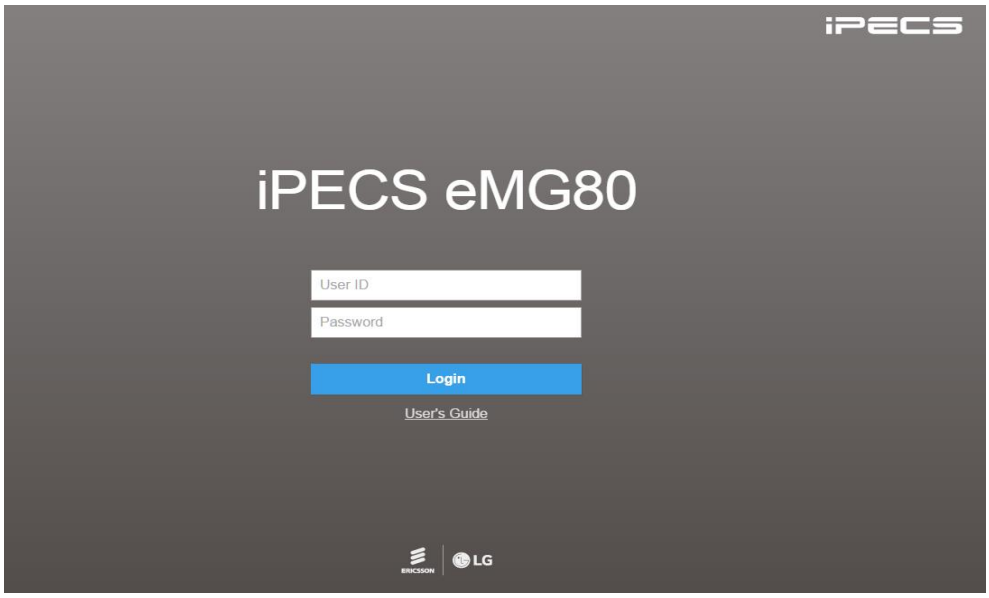


Figure 4.2-1 iPECS eMG80 Home page



Figure 4.2-2 iPECS eMG100Home page

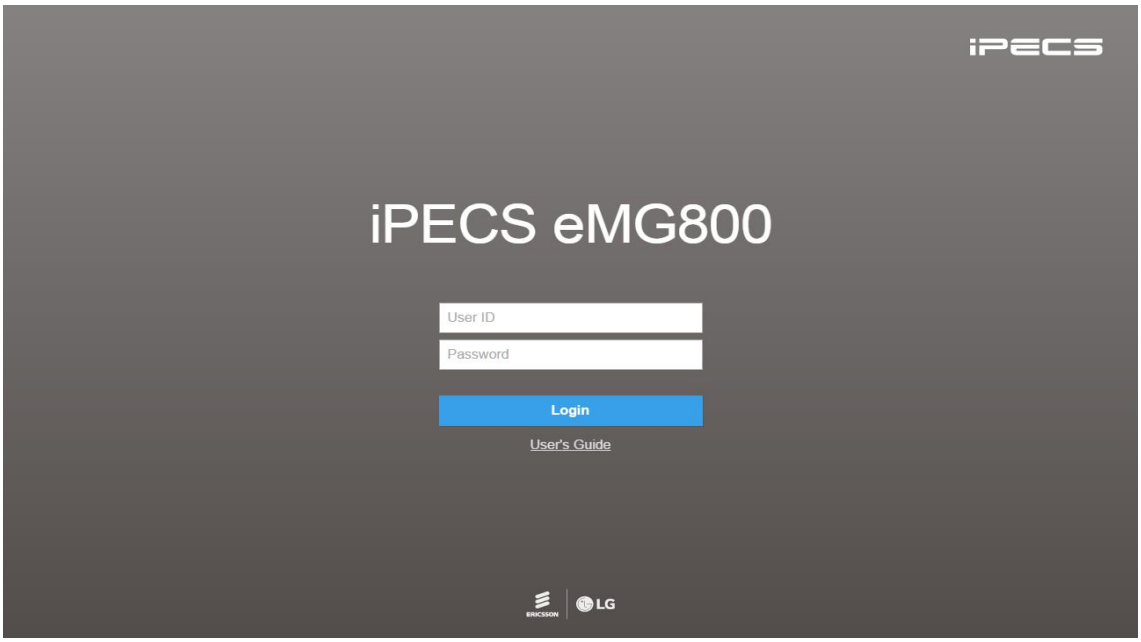


Figure 4.2-3 iPECS eMG800Home page



Figure 4.2-4 iPECS UCP600Home page

For reference, we explain Admin and Maintenance based on UCP600. The home page is displayed according to eMG80/100, eMG800 & UCP type (UCP100, UCP600, UCP2400).

To access the User portal, the user must enter the **Station number and full Authorization code** (station number and Auth code) as defined in Tables Data – Station Authorization Codes (PGM 227). The system will go to the user portal on the Main page as below. For detailed information, refer to the “User Portal User Guide” provided.

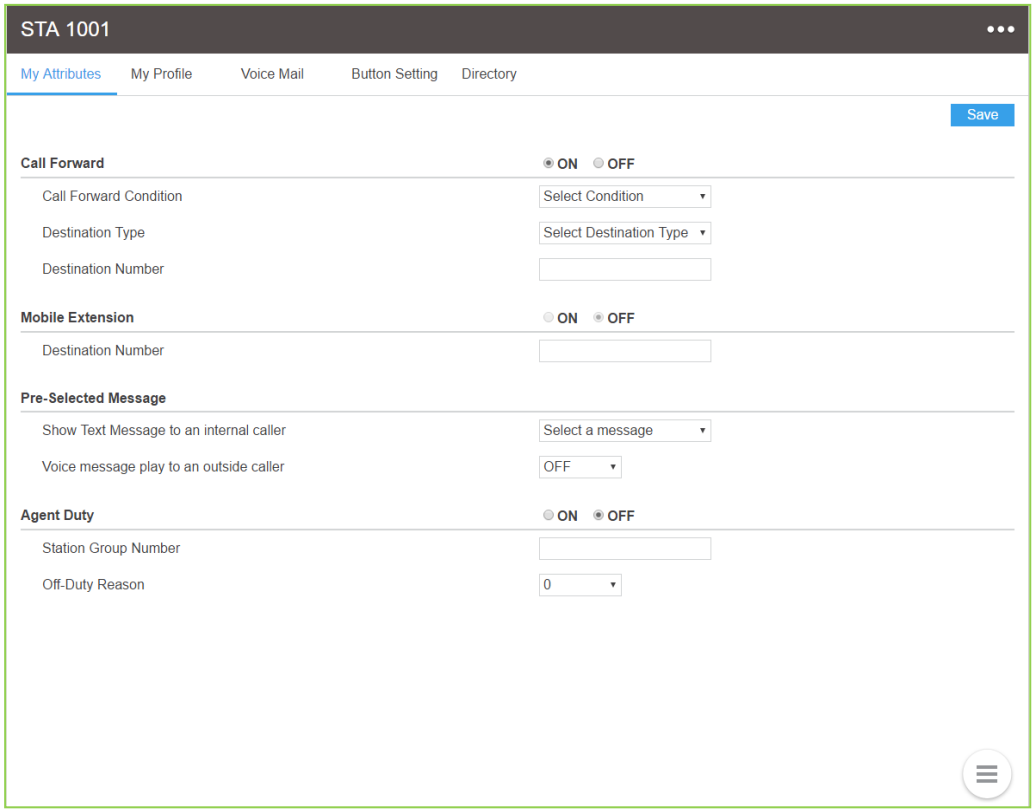


Figure 4.2-5 iPECS User Portal main page

4.3 Web Admin & Maintenance Main Page Overview

In the Web Admin Login screen (see section 4.2), enter the User ID, and Password then clicks the **[Login]** button to access the iPECS Admin & Maintenance Main Page as shown in Figure 4.3-1.

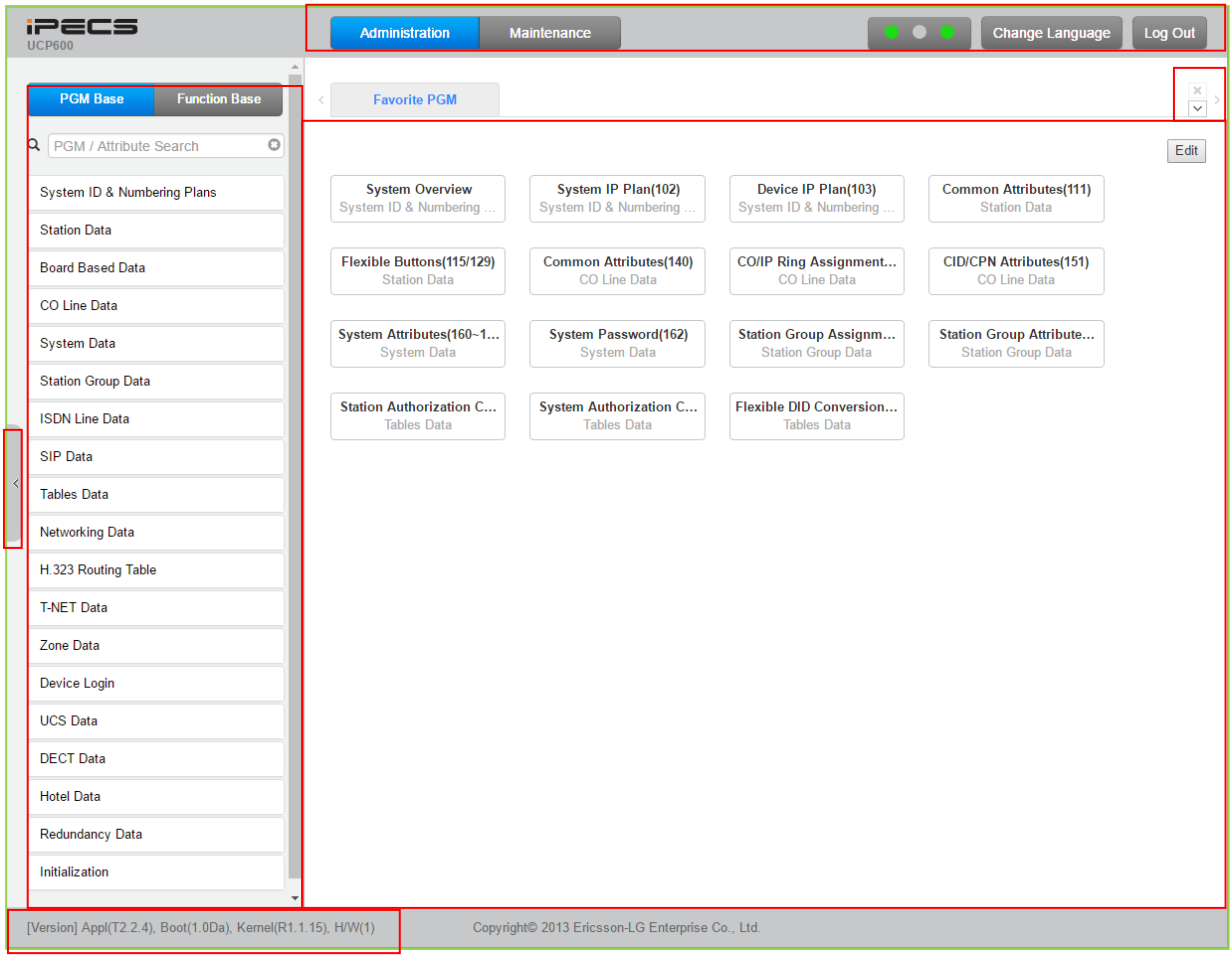


Figure 4.3-1 iPECS UCP Admin & Maintenance Main Page

The Admin & Maintenance Main Page has three sections,

- Menu bar – Upper frame

  Administration – accesses the system database.

  Maintenance – SW upgrade, Database, Multi Language, SMDR, VSF, Voice Mail, Trace, etc.

  Change Language– change the desired language.

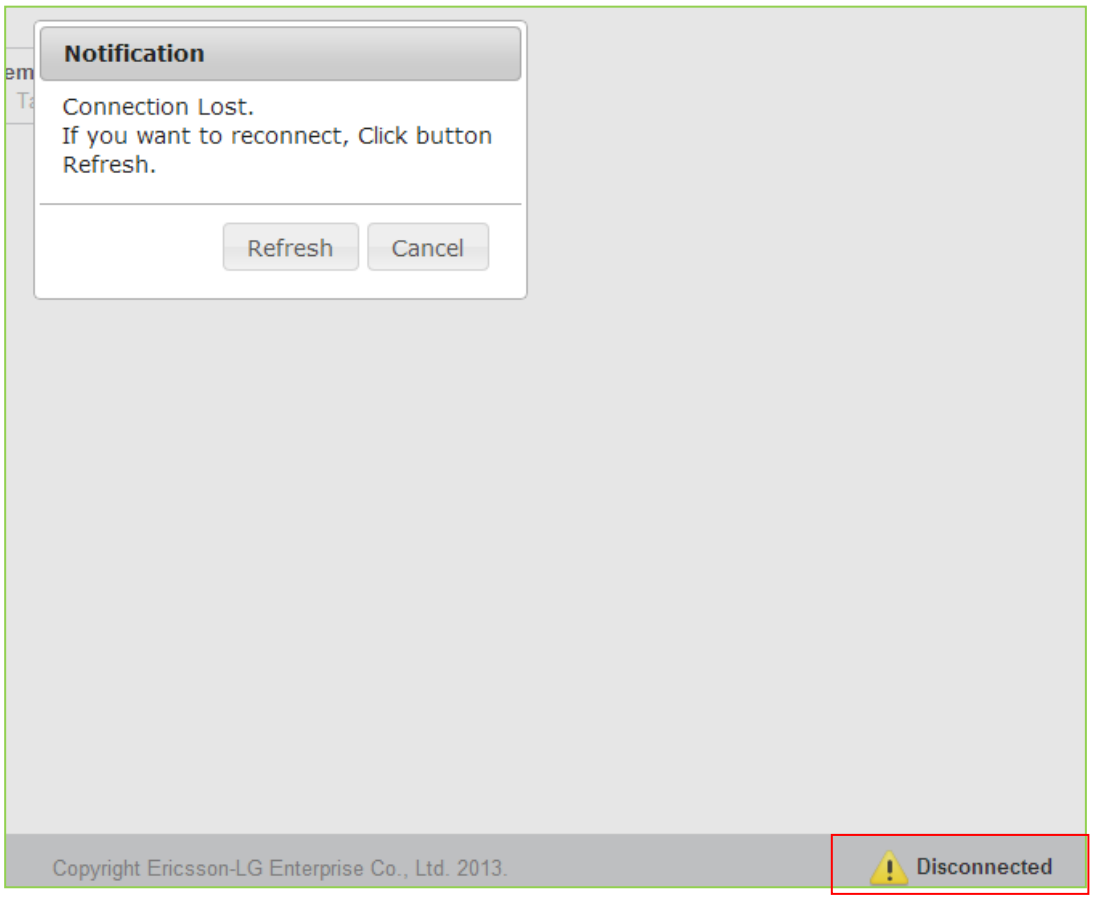
  Log out – log out the web server
- Search box, PGM Base, Function Base– Left frame
- Favorite Programs and Entry section – Central frame

What is the meaning of Buttons and Text on-page?

1) Search Box: When the user clicks the PGM search menu for the first time, it takes 4 seconds to build the index. Whenever the user types a keyword or PGM number, PGMs that have the keyword will be shown at the left menu. Searched text will be highlighted in green when the PGM window shows. Users can search for the related feature easily in Administration and Maintenance.
2) Hide the menu by clicking the left arrow in the middle of the window on the left side.

3) X button at the top of the page on the right side functions whether the current tab or all tabs are closed or not.
4) Button will display all PGM by click and check which PGM is using.
5) The Application, Boot, and Kernel versions can find on the left side of the bottom.
6) Users can check the status indicator at the bottom on the right side of the page by displaying text such as Disconnected or Read-Only User.

- Disconnected: disconnected to Web Admin Server without working for a long time. Users can connect to Web Admin Server by clicking the Refresh button.
- Read-Only User: The user who accesses Web Admin Sever has no authority to set the function as the maintenance user and is only for the read.



License State Display

If “Installation Period” or the color of SW Maint. is GREEN, system software can be upgraded.

Major version upgrade is possible in the “Installation” or “Maintenance” Period, but Minor version upgrade is possible in the “Warranty” Period. In other states, both upgrade and downgrade are not allowed.



- First LED: SW maintenance
- The second LED: Temporary License
- Third LED: T-Net (eMG & UCP) /Redundancy (UCP only)

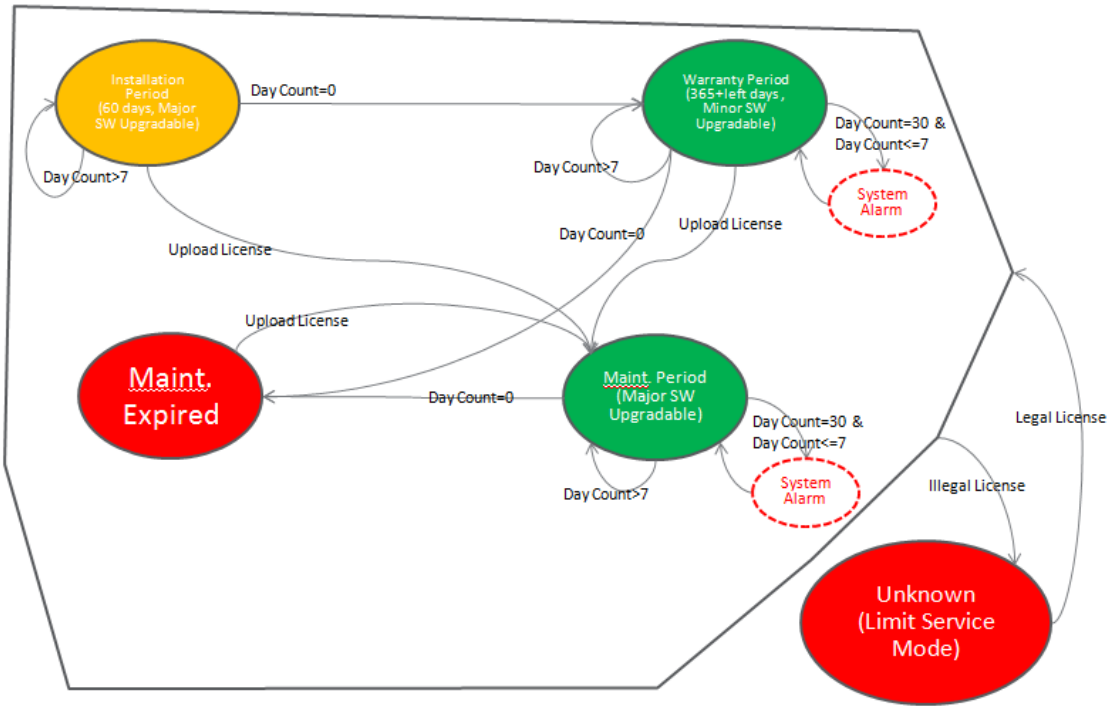
Note)

- The administrator can set ‘Alarm Enable’ to OFF in System Data > Alarm Attributes (163) > Alarm enables: OFF to turn off the alarm. For more information, refer to Alarm Attributes.
- To turn off the alarm on the phone, press ‘Alarm reset’ PGM code *565 to stop. It’s a one-time thing. Please check the exact alarm reset code in the Flexible Numbering Plan (106~109) because the code is different according to the numbering plan?

SW Maintenance State

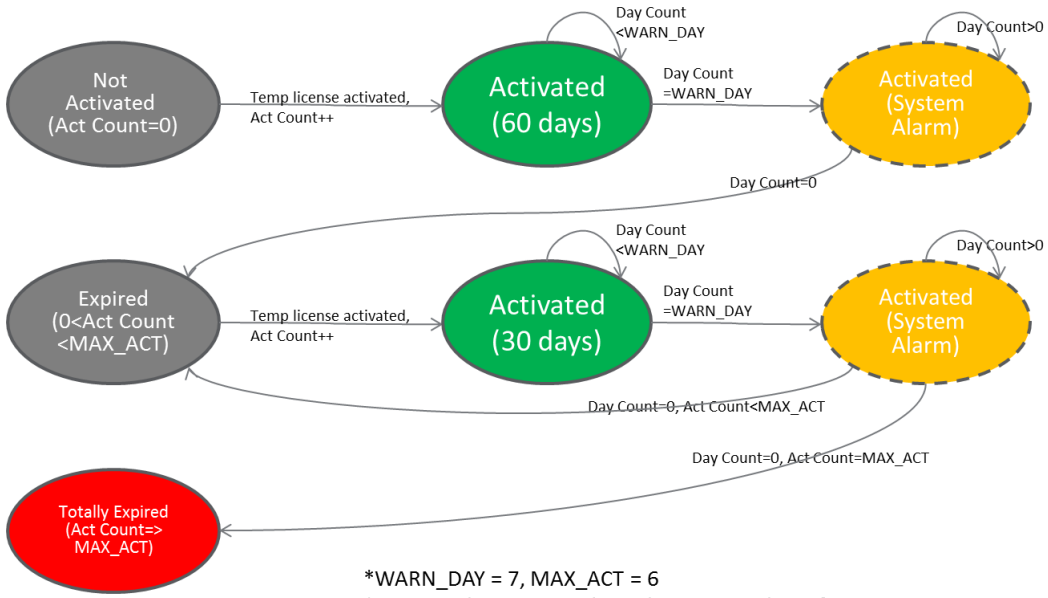
The following figure is the SW Maintenance state for SMB. System Alarm (Attendant alarm & E-mail notification) occurs once 30 days before expiration and daily during 7 days before expiration.

If the system goes to the limited-service mode, the station COS is changed to 7.



Temp License State

Temp License can be activated a total 6 times. It is valid for 60 days at first and 30 days from the second to last. System Alarm occurs daily for 7 days before expiration.



*WARN_DAY = 7, MAX_ACT = 6
* System Alarm = Attendant Alarm + E-mail Notification

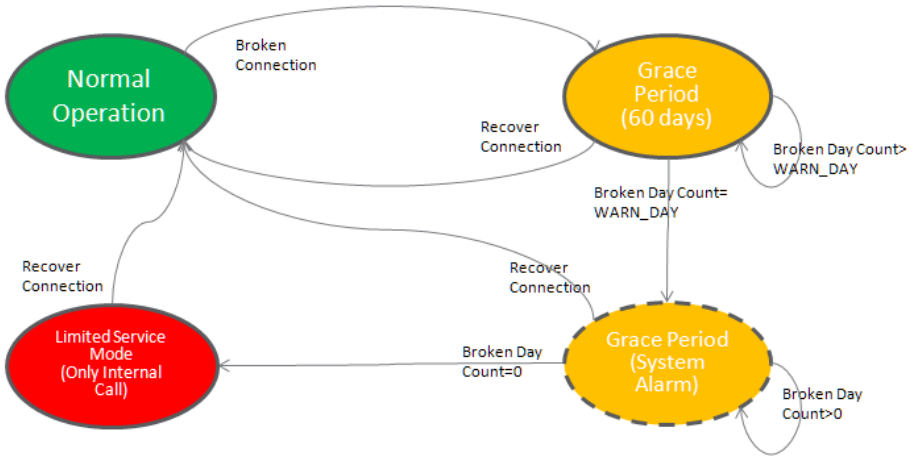
T-Net or Redundancy State

T-Net LCM license is valid for 60 days if the connection is broken. And Redundancy for the UCP system is valid for 60 days if the System is slave, active state, and the connection is broken.

But the limitation is not applied in the Master system. System Alarm occurs daily whenever the broken day counter is smaller than 7, and the alarm will be stopped if the connection is restored.

- Below cases are always “Normal”.

1. TNLS license
2. Master system when redundancy



*WARN_DAY = 7, MAX_ACT = 6
* System Alarm = Attendant Alarm + E-mail Notification

4.3.1 Favorite Program Groups

The iPECS Admin Main Page displays a Favorite PGM list to ease access to a frequently used program. The Favorite PGM list buttons, when selected, return the associated Web page. Up to 20 favorites are configured using the Edit button in the upper right of the page.

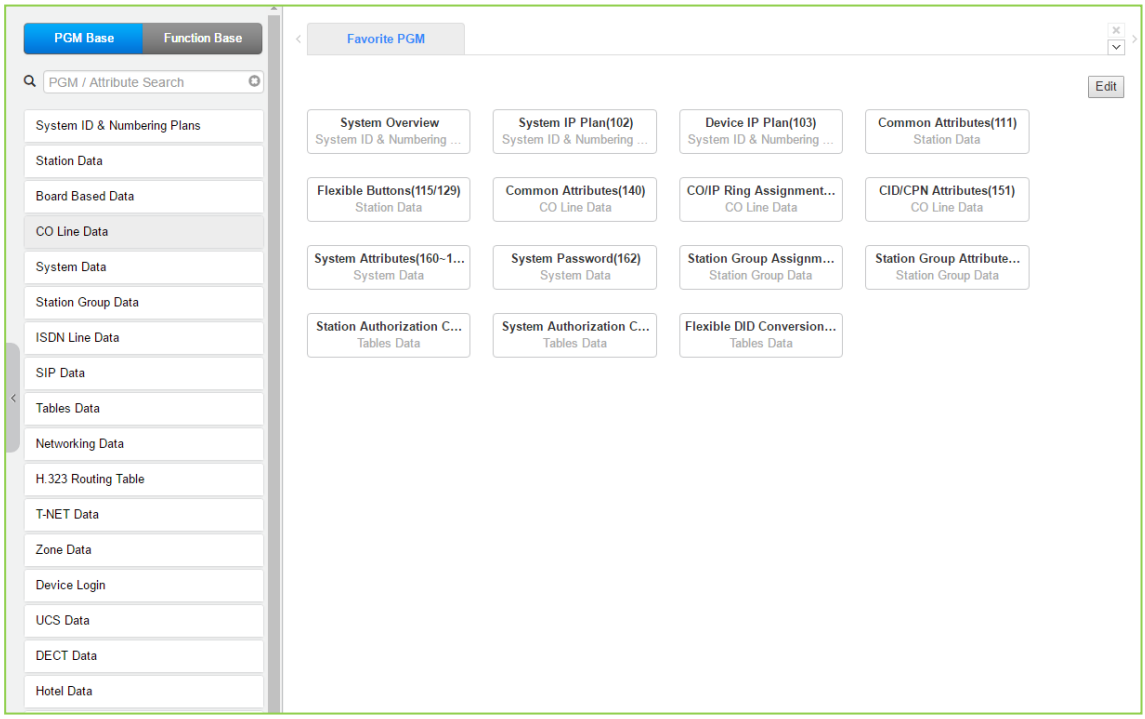


Figure 4.3.1-1 Favorite Program

To register a Favorite program: Click the Edit button. The following page will be displayed.

- Clear button: Clears the check box for all programs.
- Save button: Saves the Web page, PGMs with checked boxes are stored as Favorites, up to 20.
- Back button: Returns to the previous page.

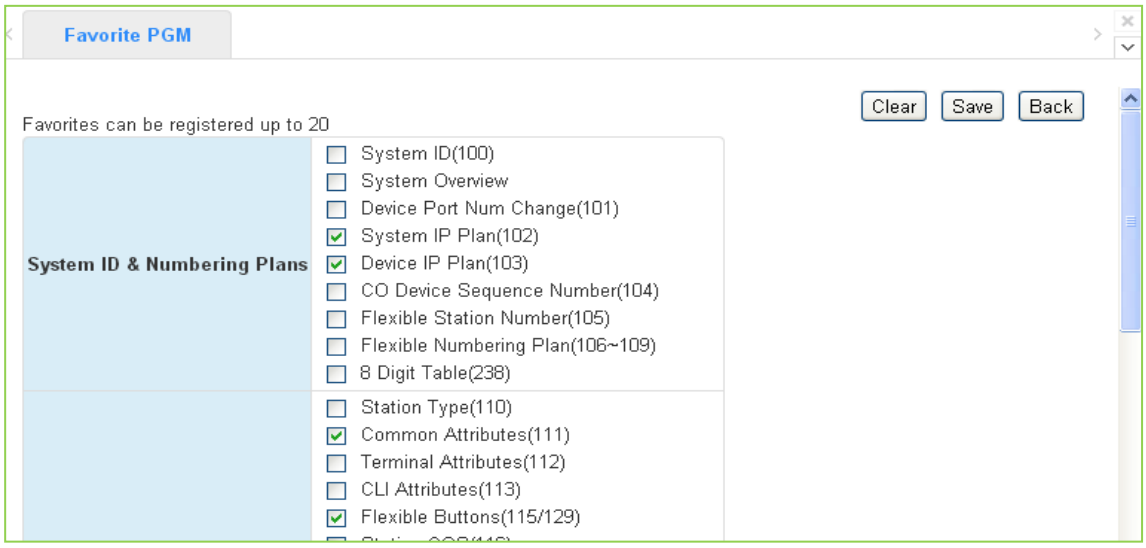


Figure 4.3.1-2 Favorite Program Groups for edit

4.3.2 Using Function Base

Function Base is designed to customize the feature or PGM by configuring the Function base so that customers can easily use the desired and frequent feature.

There are two buttons: Common Function List and User Function List. The feature or PGM can register up to 20 as a Favorite function.

Common Function List

Generally, the iPECS system supports the basic function list as default. The available function is 5 (DID Setting Scenario, Network Scenario, SIP Extension Registration, SIP Trunk Configuration, Station Group Scenario). The 5 functions can't be deleted or editable.

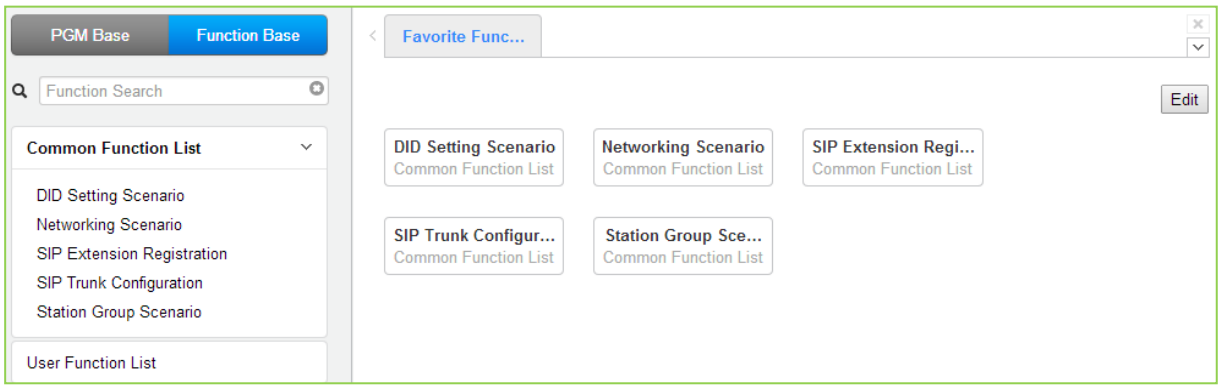


Figure 4.3.2-1 Common Function List

User Function List

To configure the user function list, click the Maintenance button and then you can see the Function Program in the left frame and click the sub menu 'User Function Management' as the following figure. On this web page, you can add or delete the function.

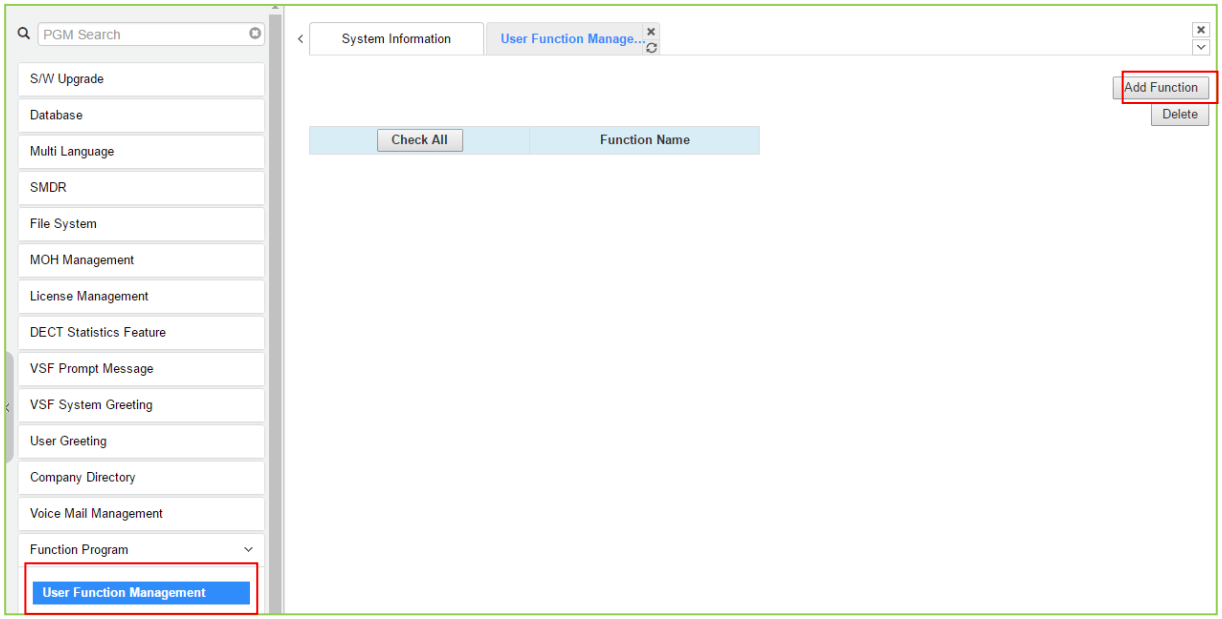
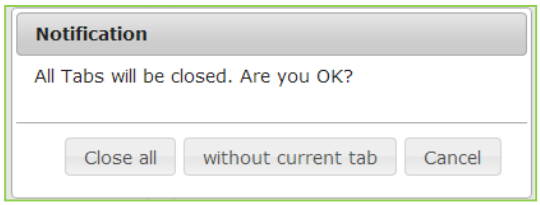


Figure 4.3.2-2 User Function Management

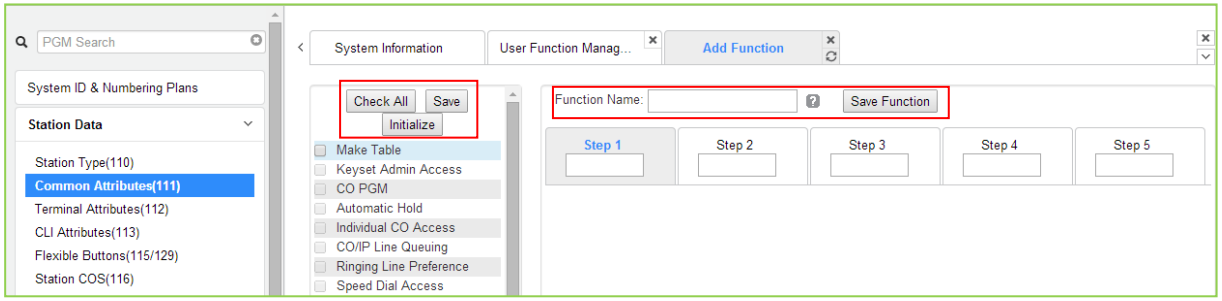
Adding Function

This step is divided into 5 steps, and you can make the desired function in each step. The following is the guide to make a Name and add the function on each step:

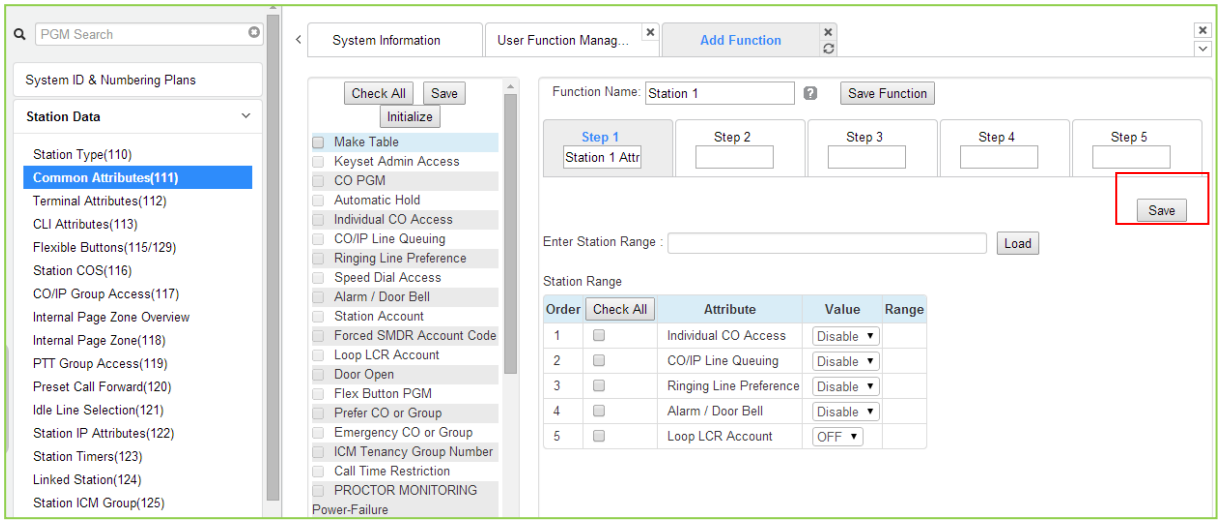
- English, Numbering, Underscore (_), and Parentheses are available to enter the function name. Function name has to be filled out.
- To enter the step name, English, Numbering, and Special letters except Double quotation marks are available.
- The step name doesn't need to be filled out, but the function has to be configured for each step.
- To cancel or close this tab, click the close button (X) and pop up the blow;



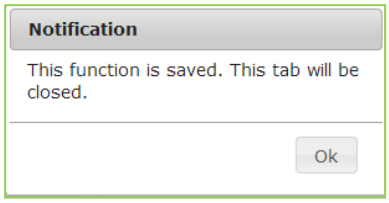
1) Click the Add Function button.
2) On the below window, click the desired PGM in the left frame. First, fill out the function name and step name. To configure step 1, click the Make table to check the desired function and then click the **[Save]** button.
   - Check All: check all functions
   - Save: Save the checked functions
   - Initialize: Initialize the checked functions

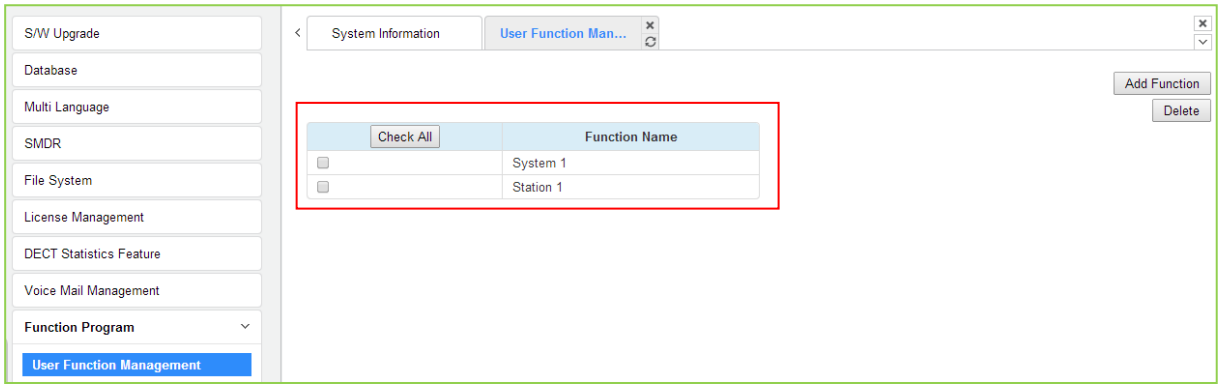


3) The selected functions are displayed and click the **[Save]**button after checking each function. The rest steps are the same as step 1.

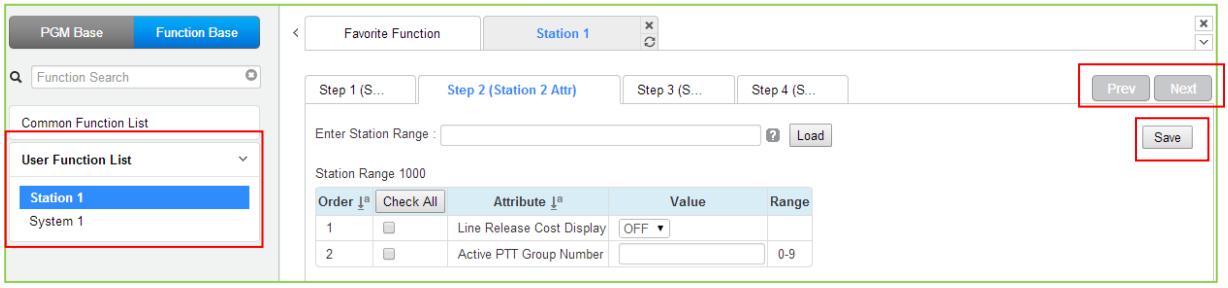


4) Finally, click the **[Save]** Function to save and then click the **[OK]** button.



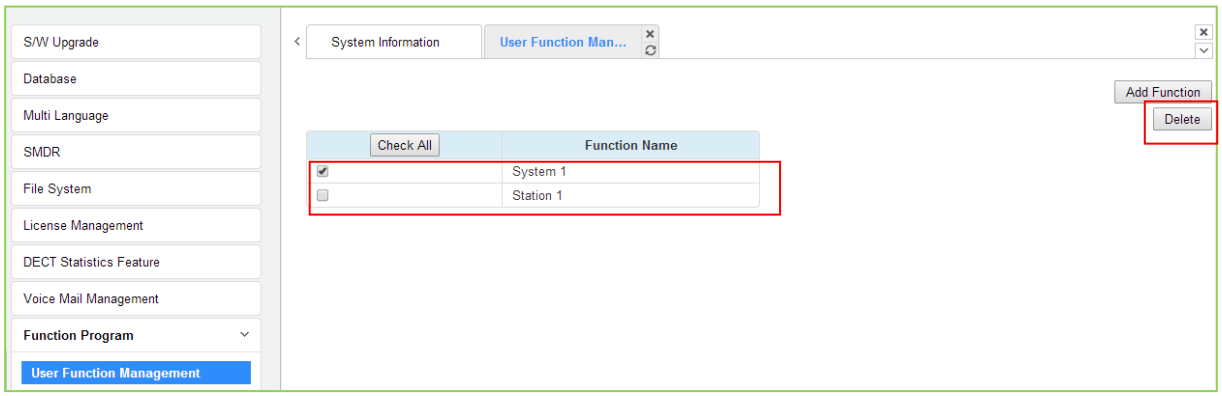


5) To check the function, click the Function Base button in the left frame and User Function List, and you will see the following figure.
You can enable or disable the function by checking each function and then click the save after setting Value. Also, move to each step by clicking the **[Next]** button or **[Previous]** button.



Deleting Function

To delete the user function, click Maintenance at the top of the window and then click the Function Program -> User Function Management. Check the desired function to delete and click the **[Delete]** button.



4.3.3 iPECS Web Page Navigation

The Navigation frame appears on the left after login; refer to Figure 4.3-1. Selecting a Program group from either the Navigation pane or the Favorites list will display the selected Web entry page. Each of the system‘s data entry Web pages includes a frame for data display and modification. To modify data, click on the data field. A drop-down menu will appear for entry selection, or a cursor will appear in the field, and the user may type in the required data. Once all new data for a Web page has been entered, the **[Save]** button must be clicked to send the new page to the system and save the modified data. In some cases, where mentioned, it may be necessary to reset the system. The system can be reset manually as described in the **iPECS Hardware Description and Installation Manual** by selecting the Reset System button on the Initialization Web page or using the reset button.

4.3.4 General Web Page Features

4.3.4.1 Web Page Range Entries

On many Web pages for Station, CO Line, and Tables Data, a range of the station, lines, or table indices must be entered to display the appropriate data entry page. In this case, a range of devices or indices can be selected by entering the lowest and highest device number separated by a dash. In addition, a comma can be used to enter non-sequential numbers. Note no space characters should be entered before or after the dash or comma. Note the data entry page displays the data for the lowest device or table index entered.

4.3.4.2 Table Check Boxes

Data entry pages that require a range entry only display the data for the lowest device number or Table index entered in the range. A check box is located in front of each attribute to ensure that only the appropriate data is changed for all entries in the range. When the page is saved, only data for attributes with the box checked are saved for the range, while data for unchecked attributes are not modified.

4.3.4.3 Sorting Displayed Data

Charts in the data pages typically allow the data to be sorted based on a given column in either ascending or descending order. In the column header, the sorting symbol displays to indicate the sorting function is available for the column.

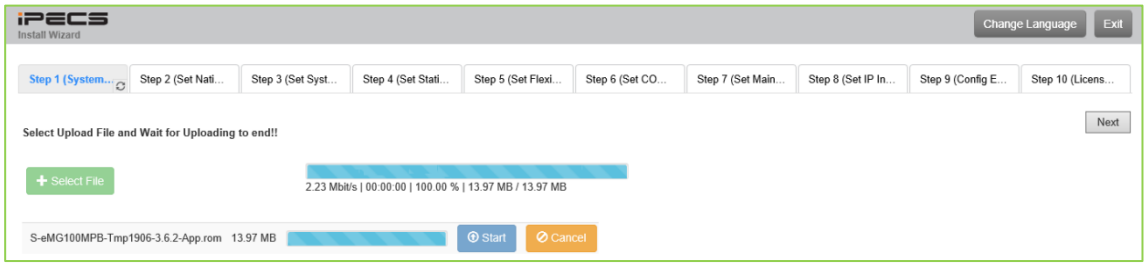
4.3.5 Install wizard

After the system is initialized, the first time Web Admin is accessed, the Install Wizard is displayed. The Wizard presents 10 pages in sequence with parameters that should be verified or commonly need modification prior to operation of the system, including:

- System Upgrade
- Nation Code
- System Time&Date
- Station Number
- Flexible Numbering Plan
- CO Ring Assignment
- Maintenance ID &Password
- IP Information
- Config Encryption
- License Upload

4.3.5.1 System Upgrade

Click the Select files button and then open the pop-up folder. Select the desired file to upload to the system's memory and click the **[Start]** button. The file is sent to the system's memory, saved, and automatically loaded upon a system reset or restart.



4.3.5.2 Nation Code

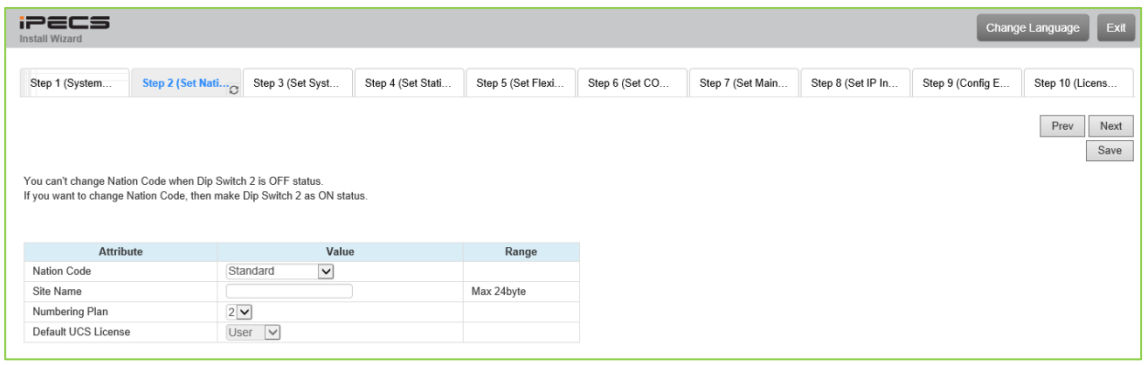
During initialization, the system employs the Nation Code to establish the default gains and tones for the various interfaces (analog CO Lines, ISDN lines, etc.) and the numbering plans for the specific country. The gains, in particular, must be set to comply with the local regulatory requirements. Normally, the Nation Code will be set at the factory. However, assure the Nation code matches the system location.

Changing Nation Code

1) Dip Switch pole 4 of UCP100 (or UCP600, UCP2400) moves to ON. Dip Switch pole 2 of KSU (eMG) moves to ON.
2) Change Nation Code by clicking in the combo box.
3) Click the **[Save]** button, and then the system starts resetting to apply.

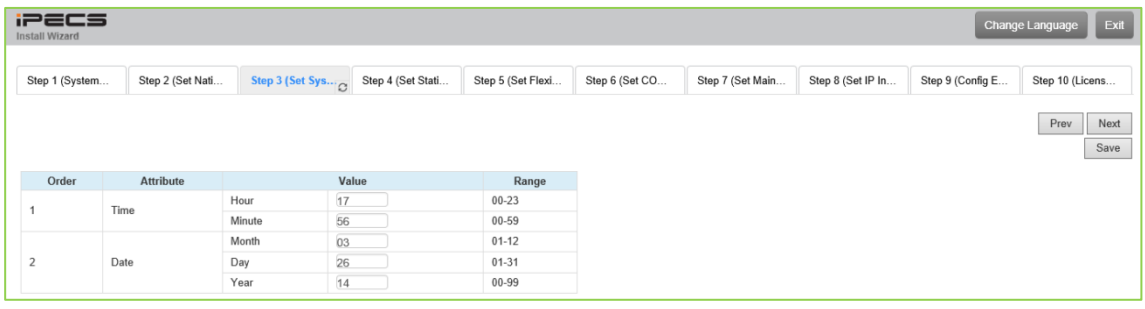
In addition, all other data will be initialized, so the Nation Code should be set appropriately before another programming. You can change the numbering plan for your situation. A Default UCS License is added.

UCP systems provide built-in UCS licenses. You can select the type of that except for vUCP.



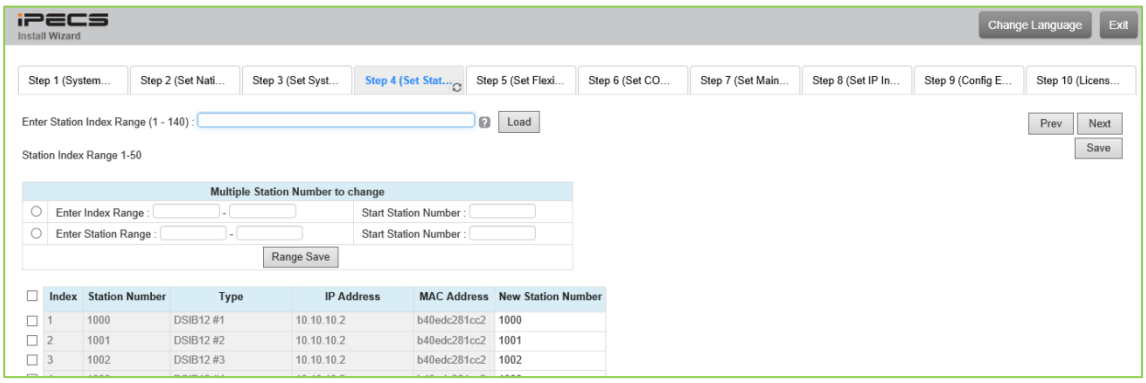
4.3.5.3 Set System Time and Date

You can set the System time and date on this page.



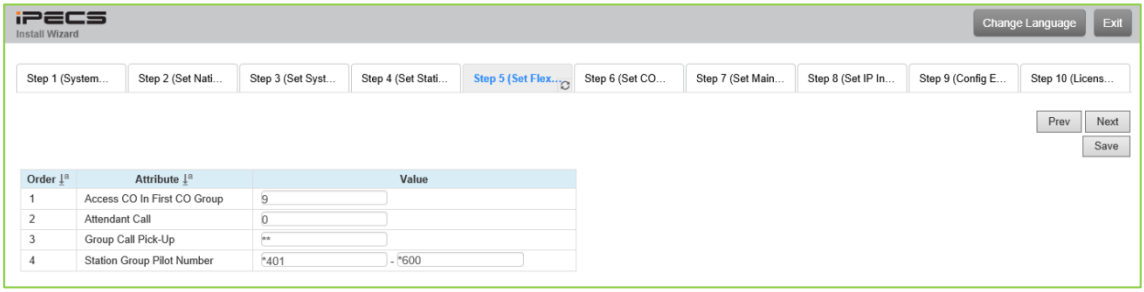
4.3.5.4 Set Station Number

You want to change the current station number to New station number. On this page, you can change the station number.



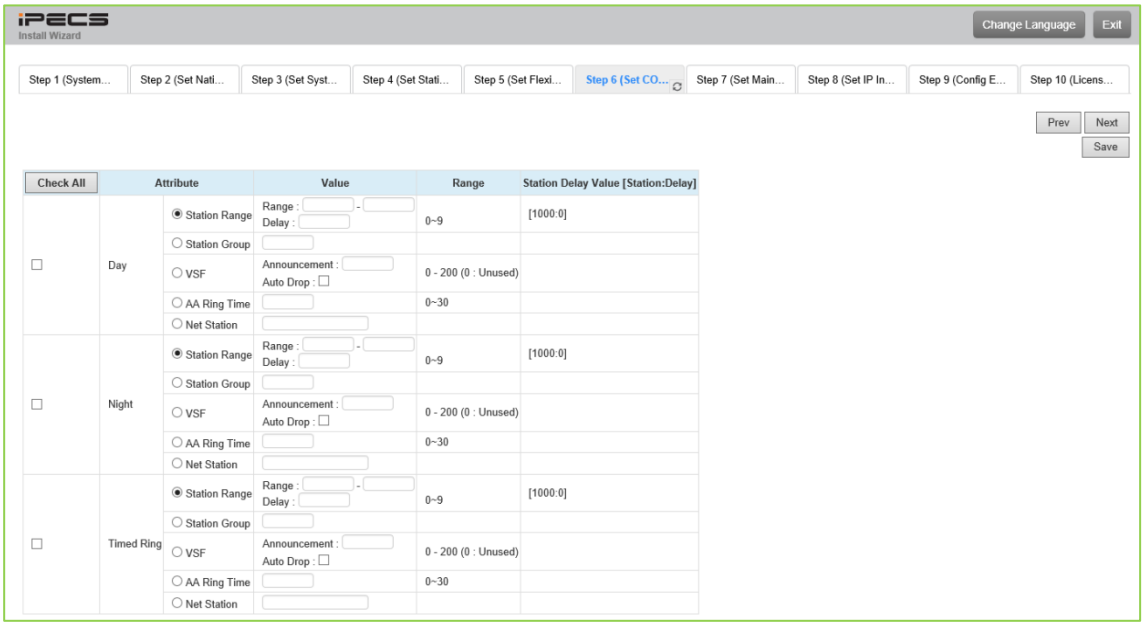
4.3.5.5 Set Flexible Numbering Plan

The Flexible Numbering Plan defines the various digit strings (codes) users may dial to access system resources (outside lines, page zones, etc.) and features. In the wizard, codes for features that commonly may require modification are displayed.



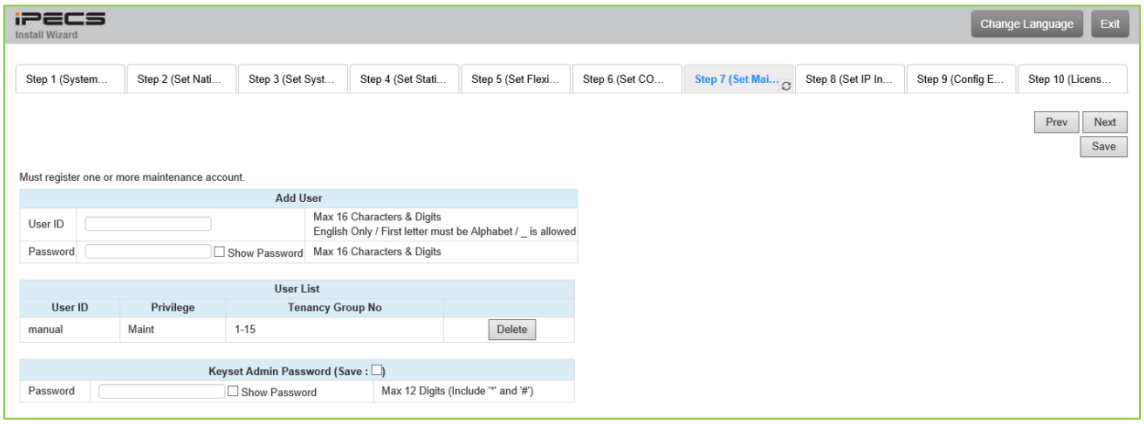
4.3.5.6 Set CO Ring Assignment

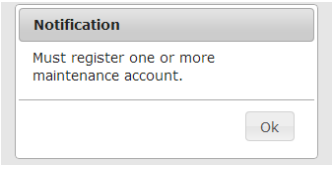
CO Ring Assignment establishes how the system will route incoming calls. The wizard assignments cover all CO/IP Lines in the system, and the Ring assignments for Day, Night, and Timed Ring modes can be established.



4.3.5.7 Set Maintenance ID & Password

The Wizard includes a password entry page. It is strongly recommended that a unique User ID and strong password be entered to minimize unauthorized personnel's risk of admin and maintenance access. In order to finish the final step, you should register at least a maintenance ID. If not so, the Wizard can't go on to the next. Also, the Keyset admin password can be registered on this page.





NOTE)

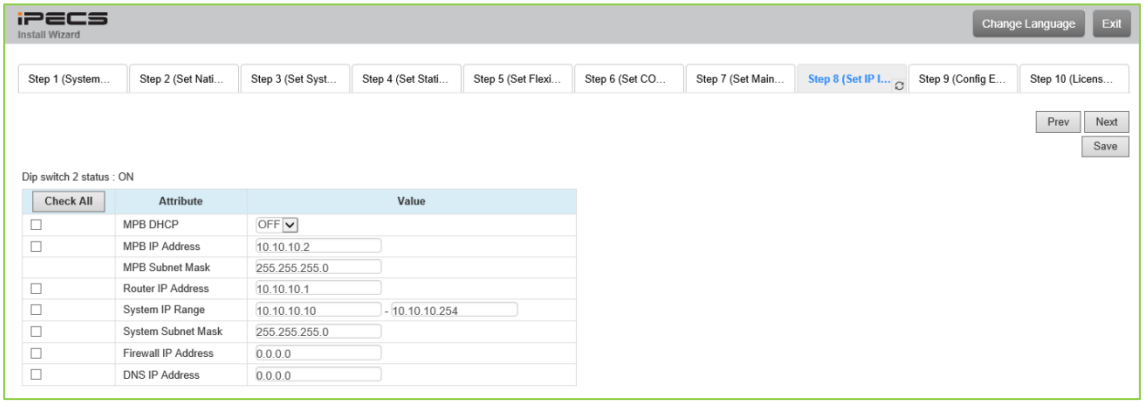
The new information will be in effect immediately upon saving the information. When a new Admin User ID and Password are saved, the Web login screen appears. A new Admin session will be required using the new login credentials. The number of Tenancy groups for each system is as below:

UCP100/600/2400	100 groups
eMG800	32 groups
eMG80/100	15 groups

4.3.5.8 Set IP Information

The IP Information page establishes the IP address scheme. DHCP can be enabled, or static addressing can be configured. When the system is behind a firewall, the Firewall address must be entered, allowing proper operation with remote users, devise and SIP trunks. A DNS (Directory Name Server) for Domain Name resolution should also be entered on this page.

Note that changing any IP address requires a system reset; the reset does not initialize data.

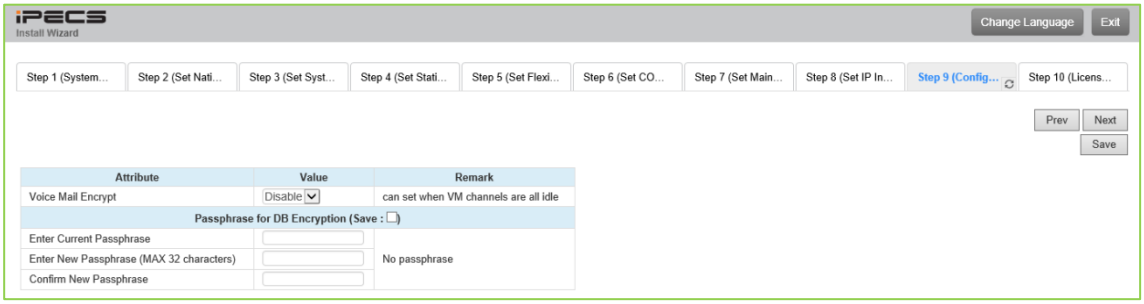


4.3.5.9 Config Encryption

The passphrase is used for DB encryption. If the value is set, the private date in your system will be encrypted. Therefore even if the files which include private data are leaked, they cannot be read. When you don't want this encryption feature, you have to set the passphrase to blank.

Note that, before the encryption, it is better backup your DB for the emergency case and remember the passphrase. Otherwise, you cannot decrypt the system DB.

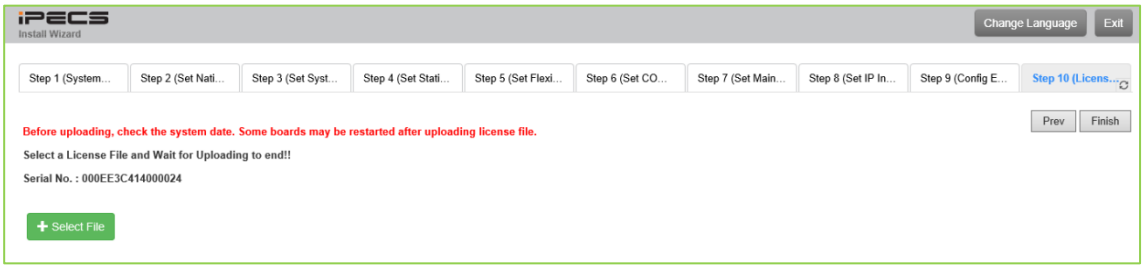
If the passphrase is assigned, the system DB, which includes private data, will be encrypted. If the passphrase is lost, you cannot change it or decrypted system DBs,



4.3.5.10 Set License Upload

Before License upload, make sure that the date of the system is set correctly. Click the **[Select files]** button and open the pop-up folder—select a valid license file to upload to the system and click the **[Start]** button.

If the file which is sent to the system is "System License File," it will be saved and automatically applied without restart. The enabled features by uploading the license file can be shown on the "System Overview" page.



4.4 Web Admin Programming

4.4.1 System ID & Numbering Plans

Selecting the System ID & Numbering Plans expands the Navigation frame to display the available Program groups below.

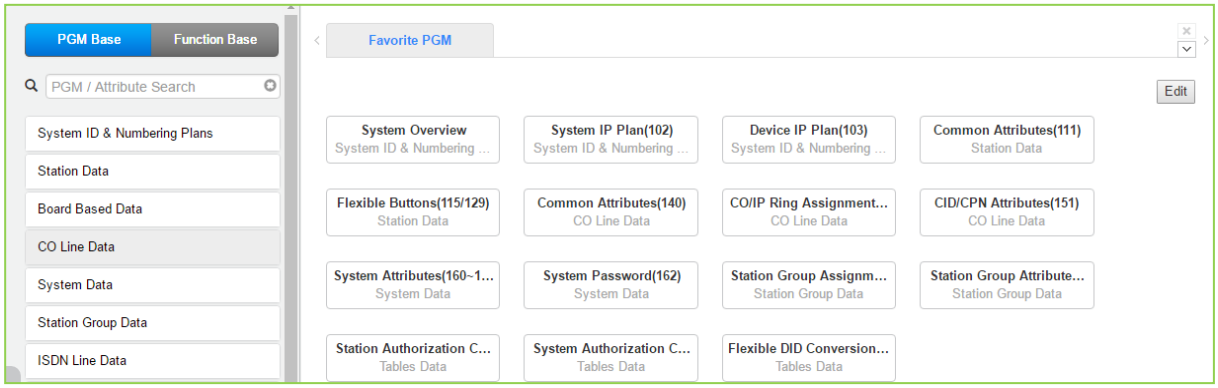


Figure 4.4.1-1 System ID & Numbering Plans sub-menu

4.4.1.1 System ID – PGM 100

Selecting System ID will display the following Input Entry page. Click **[Reset System]** to restart the system after changing Nation code, Site name, Site detail, My area code, Multi-area code, Numbering Plan, etc.

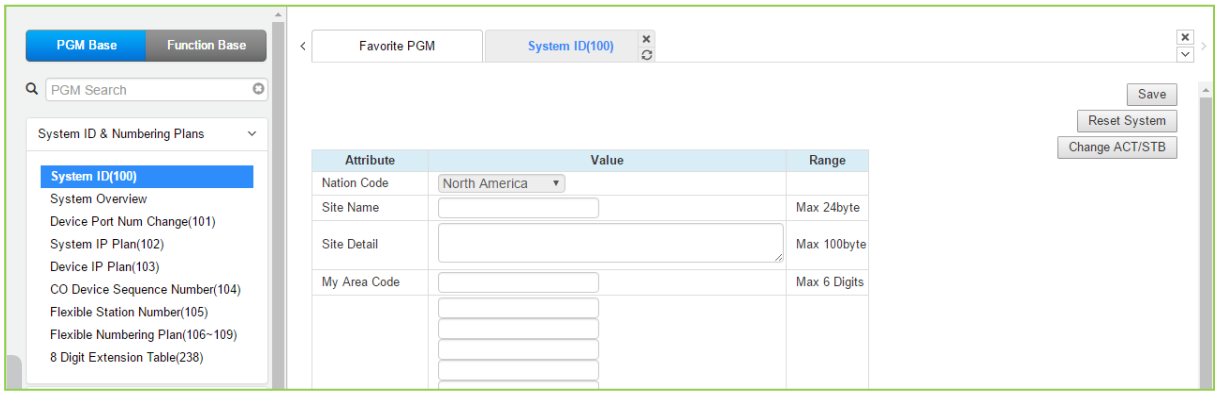


Figure 4.4.1.1-1 System ID

Under System ID, the country is identified using the international dial codes (Nation Code). A twenty-four (24) character Site Name, Site detail, and the local My Area Code may be defined. This information set gain, frequencies, and other system characteristics specific to the country and regional regulatory requirements. The Site Name is primarily useful for the installer/programmer as a reference to the customer.

Note)

- In eMG, to change the Nation code, Dip-switch 1 pole # 2 is ON; you cannot change the Nation code while the switch is OFF.
- In UCP, to change the Nation Code, the UCP Module “Mode” dipswitch pole 4 must be ON; you cannot change the Nation code while the switch is OFF.
- The rest attributes are additional options for the Customer’s convenience.
- In the case of UCP, the built-in VoIP DSP channels (VOIU) can be disabled, allowing the DSPs for the Multi-party Conference function.
- In the case of UCP100, SLIU channels cab be disabled or enabled.

Numbering Plan

The system employs one of the nine (9) basic Flexible Number Plans as detailed in Appendix B. Individual items from the selected Numbering Plan can be changed under Flexible Numbering Plan in section 4.4.1.7.

Note) The numbering plan on this manual is based on Numbering plan 2. The value (or feature code) may be different according to the Numbering plan.

eMG80



Flexible VMIU/VOIU(MPB) channel & Flexible VMIB/VOIB(VVMU) channel

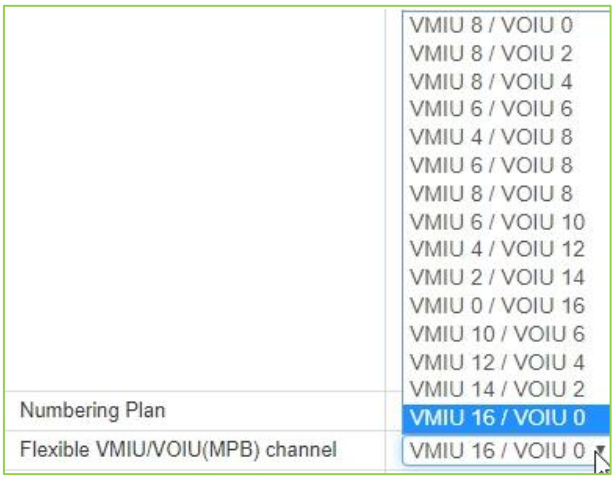
You can select one of the following types according to the current configuration using Voice mail and VoIP channel

Flexible VMIU/VOIU(MPB) channel	Flexible VMIB/VOIB(VVMU) channel
VMIU8 / VOIU0	VMIB8 / VOIB4
VMIU8 / VOIU2	VMIB6 / VOIB6
VMIU8 / VOIU4	VMIB4 / VOIB8
VMIU6 / VOIU6	
VMIU4 / VOIU8	

1) The administrator can select the channel capacity of VoIP and Voice Mail in this field.
   In the case of VMIU8/VOIU0, the default 2 channels of VoIP can't be used.
2) VVMU channel field can't be available if VVMU is not installed.
3) Select VoIP and Voice mail channel for Built-in (MPB) and VVMU by referring to the below chart.

Item		Specification
VOIU(MPB)	Built-in VoIP	Max. 8 Channels
		- 2 Channels (by default)
		- 6 Channels (1 Channel increment by license)
VMIU(MPB)	Built-in Voice Mail	Max. 8 Channels
		- 2 Channels (by default)
		- 6 Channels (1 Channel increment by license)
VOIB(VVMU)	VoIP	Max. 8 Channels
		- 8 Channels (1 Channel increment by license)
VMIB(VVMU)	Voice Mail	Max. 8 Channels
		- 8 Channels (1 Channel increment by license)

eMG100



Flexible VMIU/VOIU(MPB) channel

You can select one of the following types according to the current configuration using Voice mail and VoIP channel

Flexible VMIU/VOIU(MPB) channel	
VMIU8 / VOIU0	VMIU4 / VOIU12
VMIU8 / VOIU2	VMIU2 / VOIU14
VMIU8 / VOIU4	VMIU0 / VOIU16
VMIU6 / VOIU6	VMIU10 / VOIU6
VMIU4 / VOIU8	VMIU12 / VOIU4
VMIU6 / VOIU8	VMIU14 / VOIU2
VMIU8 / VOIU8	VMIU16 / VOIU0
VMIU6 / VOIU10	

1) The administrator can select the channel capacity of VoIP and Voice Mail in this field.
   In the case of VMIU8/VOIU0 and VMIU16 / VOIU0, the default 2 channels of VoIP can't be used.
2) Select VoIP and Voice mail channel for Built-in (MPB) by referring to the below chart.

Item		Specification
VOIU(MPB)	Built-in VoIP	Max. 16 Channels
		- 2 Channels (by default)
		- 14 Channels (1 Channel increment by license)
VMIU(MPB)	Built-in Voice Mail	Max. 16hannels
		- 2 Channels (by default)
		- 14hannels (1 Channel increment by license)

eMG800



Flexible VMIU/VOIU channel

You can select one of the following types according to the current configuration using Voice mail and VoIP channel.

Flexible VMIU/VOIU channel
VMIU8 / VOIU0
VMIU8 / VOIU2
VMIU8 / VOIU4
VMIU4 / VOIU8

UCP

You can set VOIU on this page.

The MCIU (Audio Conference) channel is flexible according to VoIU 'Enable or Disable' and installing the related module as below:

Channel / System		UCP100			UCP600
		4CO/2BRI	4BRI	No TDM	No TDM
CO/BRI		4	8	0	0
MISC		2	2	2	4
SLT		2	2	2	0
Built-in MCIU (Auido Conference)	VoIU: Enable	6	6	6	6
	VoIU: Disable	14	10	18	18
Built-in VoIP channel when VoIU is enabled		4	2	6	6
Built-in VoIP (Switching) by license (8 Ch)		8/16			8/16/24

*VoIU: Built-in VoIP (DSP).
*VoIU set the default value 'Enable or Disable' in Install wizard or PGM100.
*The number of channel for MCIU is flexible according to using VoIU and Option boards as the above.

Speed Numbering'

You can easily memorize the system speed dial code and station dial code by selecting the desired type depending on the situation among the following types:

eMG80/100

1) Type (0): System speed (2000~4999), Station speed (000~099)
2) Type (1): System speed (200~999), Station speed (000~099)
3) Type (2): System speed (200~999), Station speed (00~19)
4) Type (3): System speed (20~99), Station speed (00~19)
5) Type (4): System speed (1000~3999), Station speed (000~099)
6) Type (5): System speed (100~999), Station speed (000~099)
7) Type (6): System speed (100~999), Station speed (00~09)
8) Type (7): System speed (10~99), Station speed (00~09)
9) Type (8): System speed (1~9), Station speed (0~0)

eMG800

1) Type (0): System speed (2000~9999), Station speed (000~099)
2) Type (1): System speed (200~999), Station speed (000~099)
3) Type (2): System speed (200~999), Station speed (00~19)
4) Type (3): System speed (20~99), Station speed (00~19)
5) Type (4): System speed (1000~8999), Station speed (000~099)
6) Type (5): System speed (100~999), Station speed (000~099)
7) Type (6): System speed (100~999), Station speed (00~09)
8) Type (7): System speed (10~99), Station speed (00~09)
9) Type (8): System speed (1~9), Station speed (0~0)

UCP

1) Type (0): System speed (20000~31999), Station speed (000~099)
2) Type (1): System speed (2000~9999), Station speed (000~099)
3) Type (2): System speed (200~999), Station speed (000~099)
4) Type (3): System speed (200~999), Station speed (00~19)
5) Type (4): System speed (20~99), Station speed (00~19)
6) Type (5): System speed (1000~9999), Station speed (000~099)
7) Type (6): System speed (100~999), Station speed (000~099)
8) Type (7): System speed (100~999), Station speed (00~09)
9) Type (8): System speed (10~99), Station speed (00~09)
10) Type (9): System speed (1~9), Station speed (0~0)

The notifications are displayed ‘Speed Numbering type is successfully changed.

Please refresh this page to reload Speed numbering data.” According to selecting the speed numbering type, the range of the system and Station speed dial is changed over the related PGM.

Default UCS License’

UCP systems provide built-in UCS licenses. You can select the type of that except for vUCP.



4.4.1.2 System Overview

Selecting System Overview will display the System Overview page. This page displays the system capacity, the system license overview related to the Application, Device ID list, and Gateway list. Note that data cannot be entered on this page. Especially, you can check the status of the software license and Temp license.

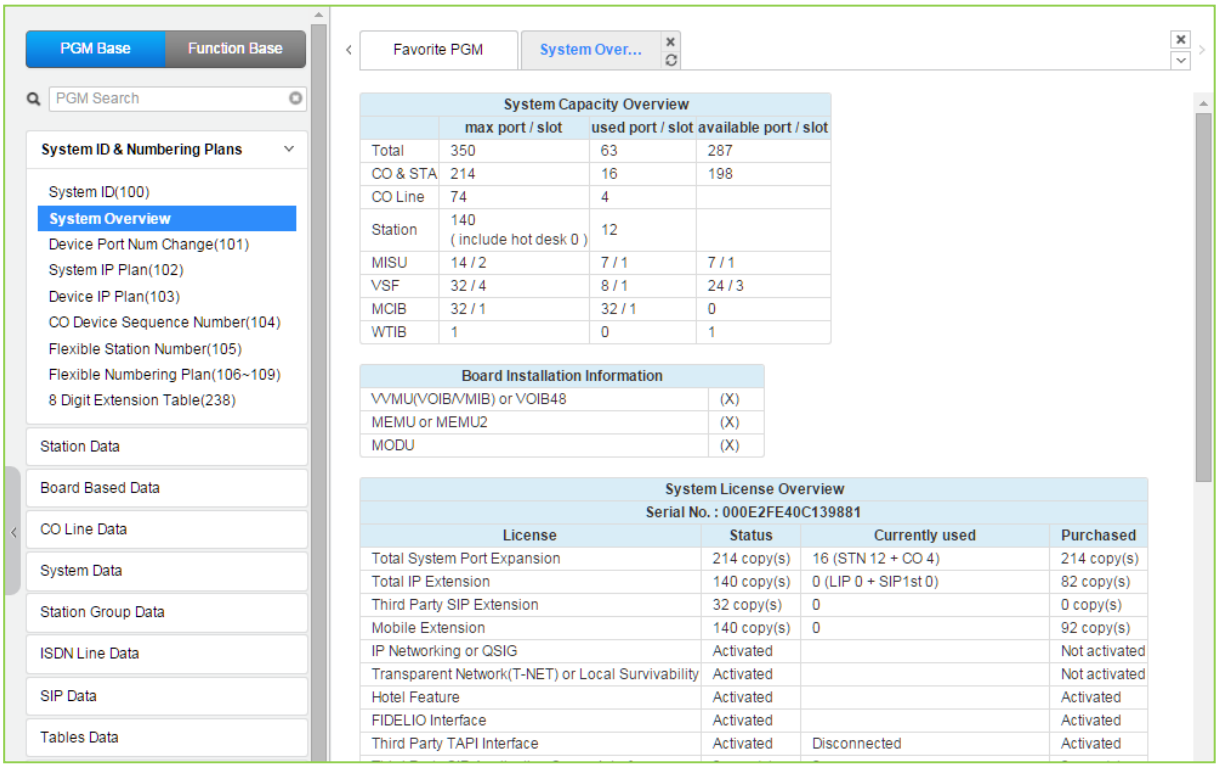


Figure 4.4.1.2-1 eMG80/100System Overview

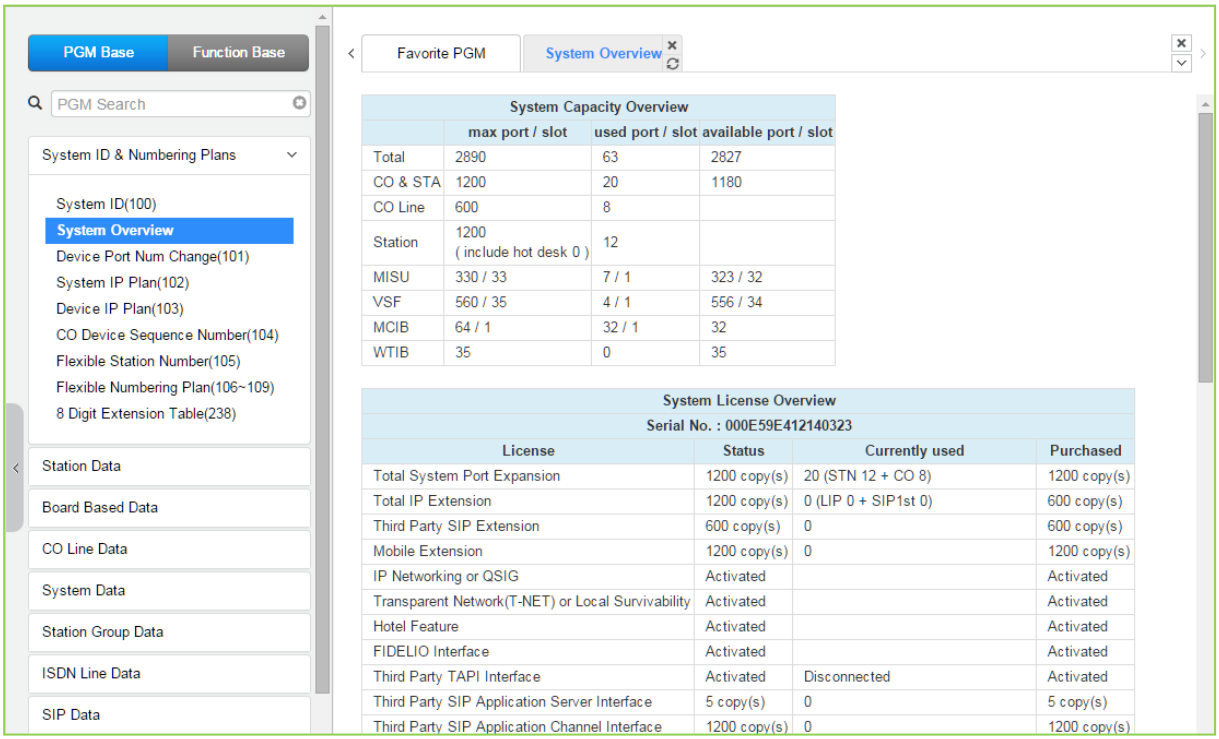


Figure 4.4.1.2-2eMG800 System Overview

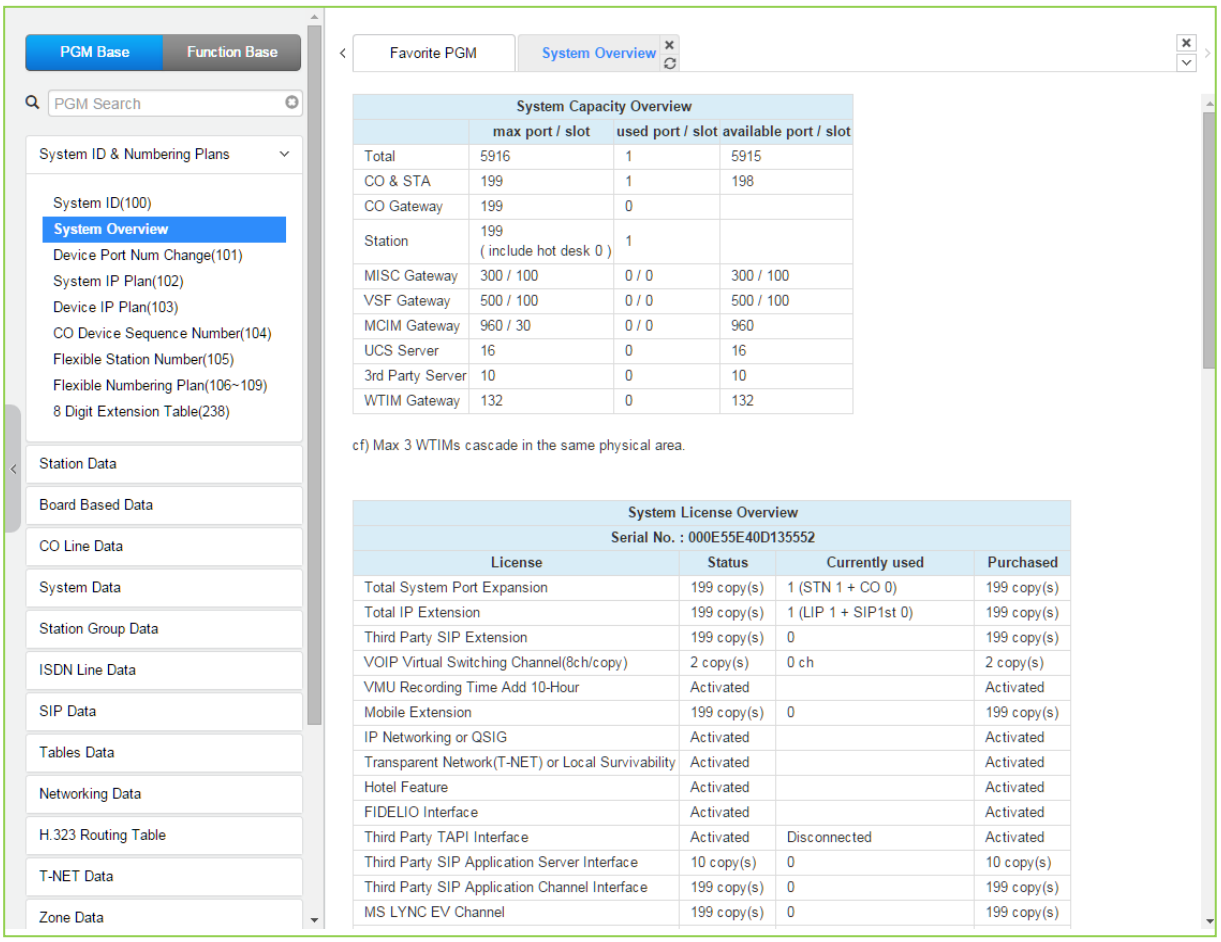


Figure 4.4.1.2-3UCP System Overview

The above information may be different according to installing the related board and license.

Especially UCP is different according to UCP type (UCP100, UCP600, UCP2400).

Note) System overview may show different figures between the below and yours according to installing Module, Device, etc.

4.4.1.3 Device Port Number Change– PGM 101

Selecting Device Port Num Change (101) will display the input entry page.

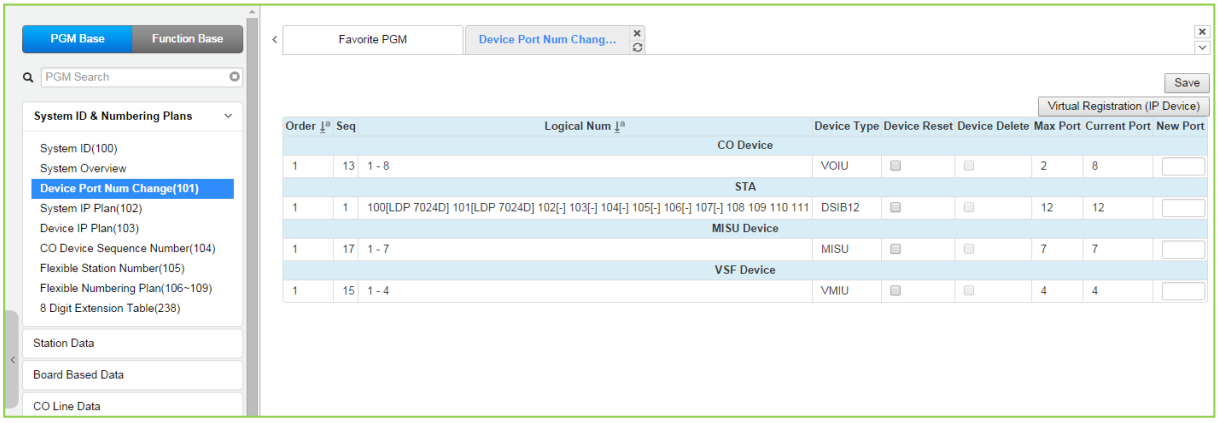


Figure 4.4.1.3-1 eMG80/100Device Port Num Change

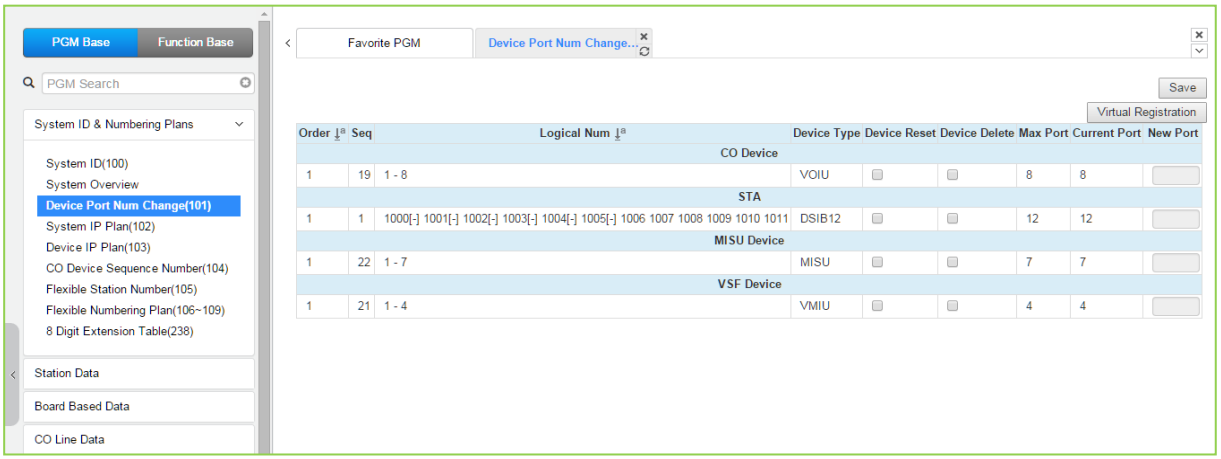


Figure 4.4.1.3-2 eMG800 Device Port Num Change

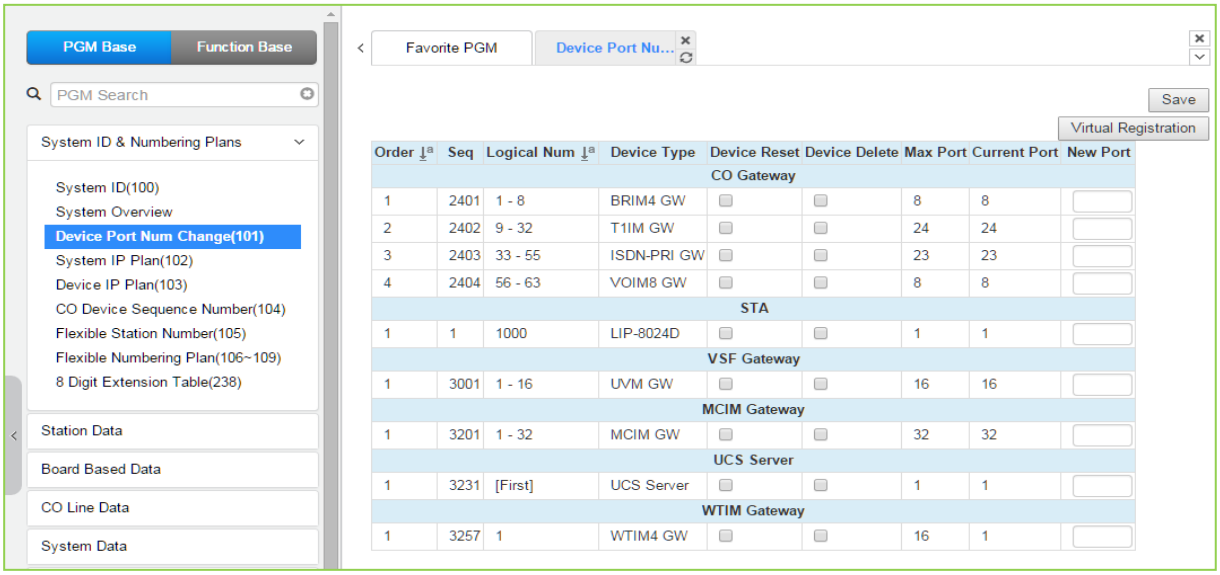


Figure 4.4.1.3-3 UCP Device Port Num Change

The system supports changing the port count of a device or deleting devices. In this window, the device's Device ID, Mac address, IP address, and port count can be modified.

Also, checking the**[Device Delete]** check box will delete the device.

Devices may be registered through the Virtual Registration page by accessing to “Device Port Number Change” page.

Devices can be registered with or without a MAC address, and the number of ports associated with the device may be limited.

This may be useful, for example, to implement a “partial T1” gateway where only some of the T1 channels are available. Note to virtually register a SIP trunk, use the Device Type of CO and device as VOIM, enter the desired number of channels.

If you want to use a virtual MAC address when registering a Device, please check the check box in front of the MAC address input field. Click the **[Register]** button after finishing the desired value.

The administrator can register 25 devices at one time and can copy/paste/drag like excel.

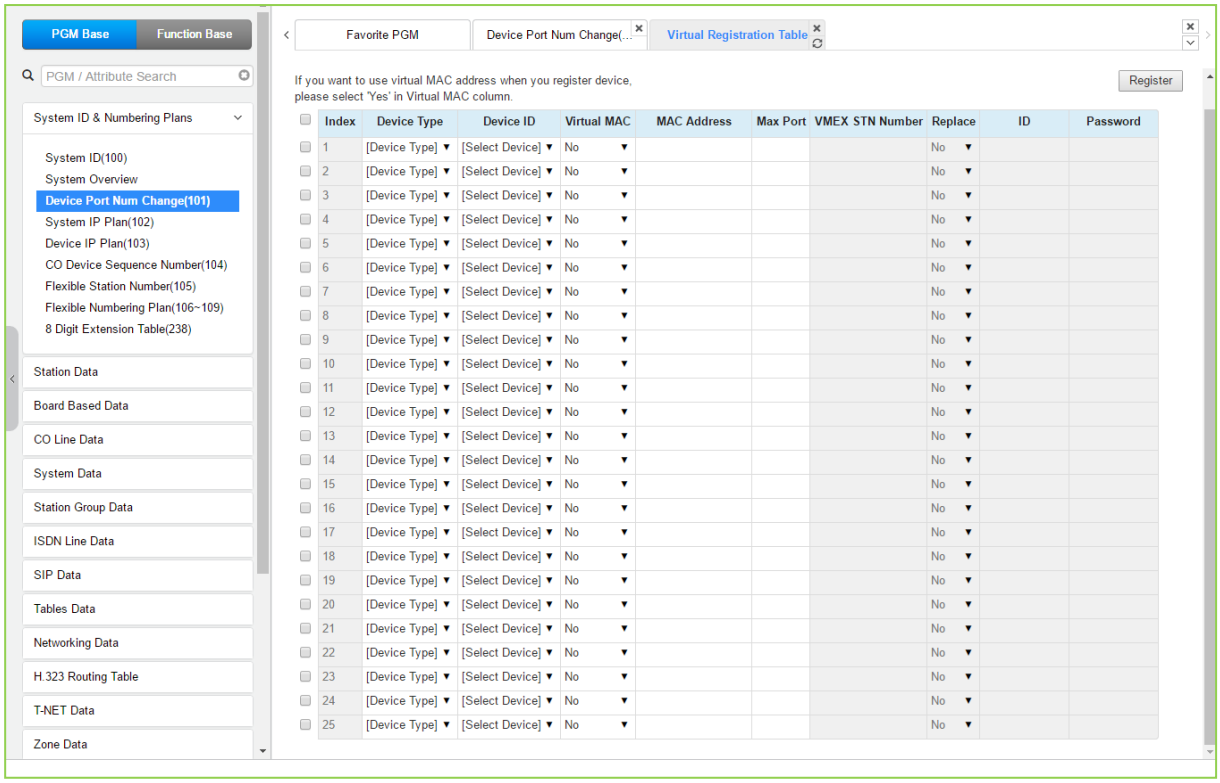


Figure 4.4.1.3-4 Virtual Registration

4.4.1.4 System IP Plan - PGM 102

Selecting System IP Plan will display the following input entry page.

Use the checkboxes to indicate which attributes to modify, and the data for checked attributes is stored for the entire range of stations when saved.

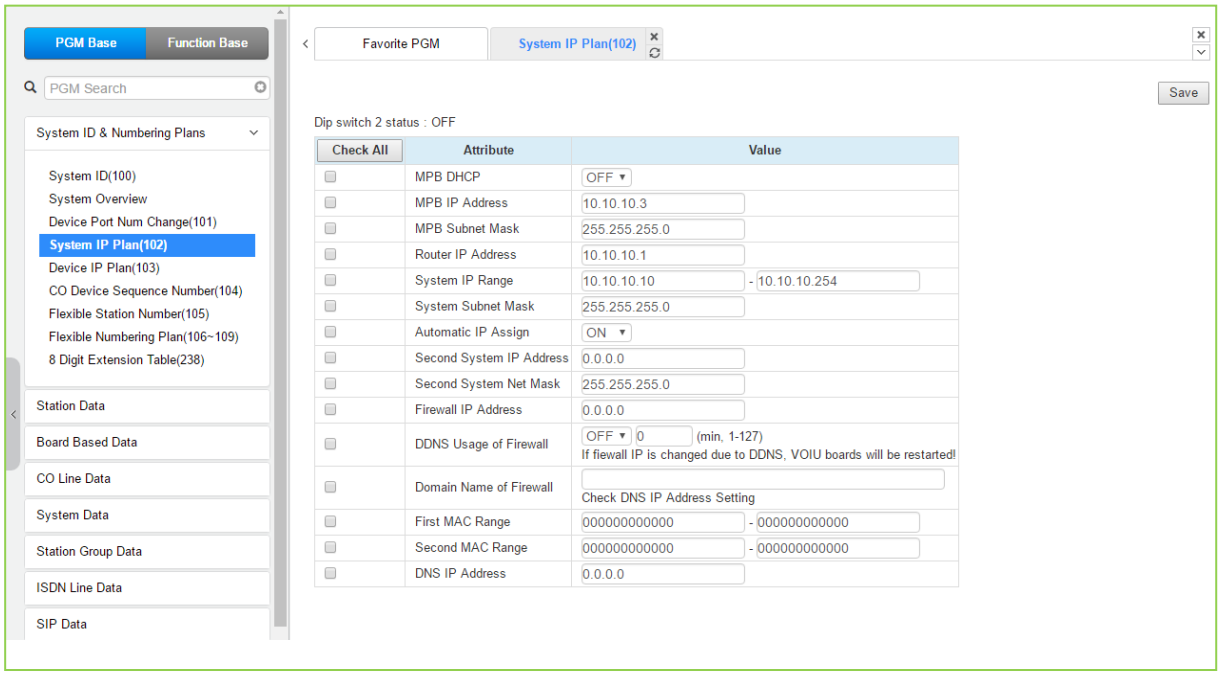


Figure 4.4.1.4-1 eMG System IP Plan

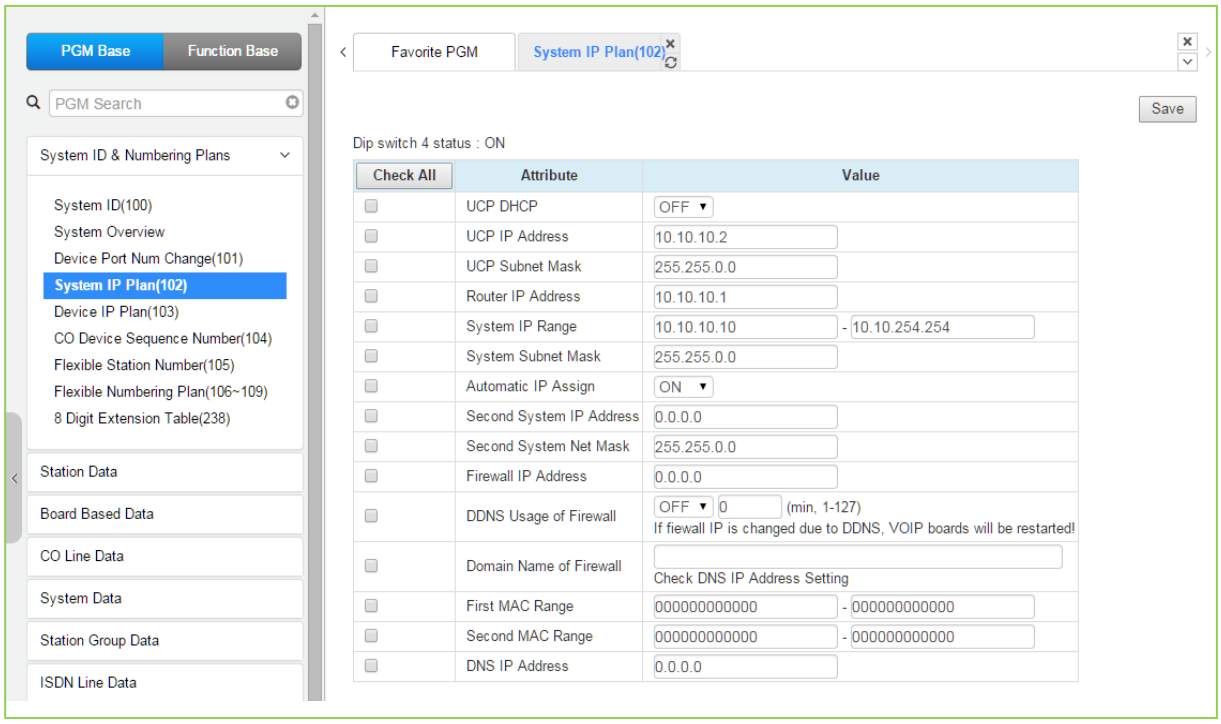


Figure 4.4.1.4-2UCP System IP Plan

The System IP Plan sets several IP addresses, including the MPB (UCP) IP address required for external VoIP calls, the IP address for the router, and the system‘s internal private IP address Plan.

Note that the LAN and Router addresses must be routable IP addresses for access to an external VoIP network, remote access by an iPECS Phone, or remote Web access.

When used, the LAN port of the VVMU(eMG80), VOIB(eMG100/800), or VOIM (Voice over IP device unit) must also have a routable IP address for access to/from an external VoIP network and a remote iPECS device.

When “Automatic IP Assign” is enabled, the system will assign IP addresses to each iPECS IP terminal and gateway Modules, including any VOIM using the System IP address range defined. These addresses are used for communications between the system and other VOIMs and terminals.

When “Automatic IP Assign” is enabled, the system will assign IP addresses to each iPECS IP terminal and board (Gateway Modules), including any VVMU, VOIB, or VOIM using the System IP address range defined. These addresses are used to communicate between the system and other VVMU (VOIB, VOIM) terminals.

The system may be connected to a LAN that is segmented by two separate private IP address schemes. This segmenting technique is often used to separate voice and data devices.

However, with this segmenting technique, the system will normally treat the segmented devices such as IP softphones as remote devices, using valuable WAN bandwidth. Assigning the “Second Sys IP address” with a valid IP address from the second segment permits the system to communicate directly with the devices over the LAN.

iPECS can be installed behind a NAPT server if the NAPT server provides fixed address translation and port forwarding to the system. In this case, the system will employ the “Firewall IP address” as the fixed IP address for communication with remote devices. This address must be assigned as the “MPB (UCP)” address in the remote device.

Table 4.4.1.4-1 SYSTEM IP ADDRESS PLAN

ATTRIBUTE	DESCRIPTION	DEFAULT
MPB (UCP) DHCP	Control the DHCP client function for MPB in the KSU or UCP.	OFF
MPB (UCP) IP Address	Public IP Address of the KSU (UCP) LAN port that is required for remote user and external VoIP network access. IPv4 format.	10.10.10.2
MPB (UCP) Subnet Mask	Define the system subnet for MPB (UCP) IP addresses.	255.255.255.0
Router IP Address	Router IP Address for external network (WAN) access. It is required for shared voice and data LAN, external VoIP, and remote Web access.	10.10.10.1
System IP Range	It is the range for private IP addresses of Modules/Terminals.	
System Subnet Mask	Define the system subnet for private IP addresses.	255.255.255.0
Automatic IP Assign	The system automatically assigns IP addresses to modules and terminals (ON) or, when OFF, IP addresses are assigned manually in Device IP Address Table or from the DHCP address assigned to the device.	ON
Second System IP Address	When devices have different address schemes on the same LAN, enter an IP address from the second LAN for use by the system.	0.0.0.0

Table 4.4.1.4-1 SYSTEM IP ADDRESS PLAN

ATTRIBUTE	DESCRIPTION	DEFAULT
Second System Net Mask	Net mask of the second private IP addresses	255.255.255.0
Firewall IP Address	When the system is installed behind a NAPT server, the fixed IP Address provided by the NAPT server must be assigned here. Also, use this IP address to identify the MPB (UCP) in remote devices.	0.0.0.0
DDNS Usage of Firewall	If the firewall of the system has a dynamic IP address, you can use Dynamic DNS by setting 'DDNS Usage of Firewall' and 'Domain Name of Firewall.' Note that the VOIP (UCP) / VOIU (eMG)board will be restarted after the firewall's IP address is changed.	ON/OFF, 1-127 (Min.)
Domain Name of Firewall		
First MAC Range	MAC Address Range to register a device if device MAC address is included in the range.	000000000000~ 000000000000
Second MAC Range	MAC Address Range to register a device if device MAC address is included in the range.	000000000000~ 000000000000
DNS IP Address	The IP Address of the Domain Name Server is the iPECS system that will use to resolve a URL to an IP address. The DNS provides the resolution after receiving the name from iPECS.	0.0.0.0
System IPV6 Usage	Usage of IPV6 Address in SIP signaling	No
System IPV6 Address	IPV6 address used for System - User can set Unicast IP or set based on SLAAC Info.	
System IPV6 Router	IPV6 Router used for System - User can set Router IP or set based on SLAAC Info.	
System IPV6 Net Prefix	IPV6 Prefix used for System - User can set Prefix or set based on SLAAC Info.	64

4.4.1.5 Device IP Plan - PGM 103

Selecting Device IP Plan will display the input entry page.

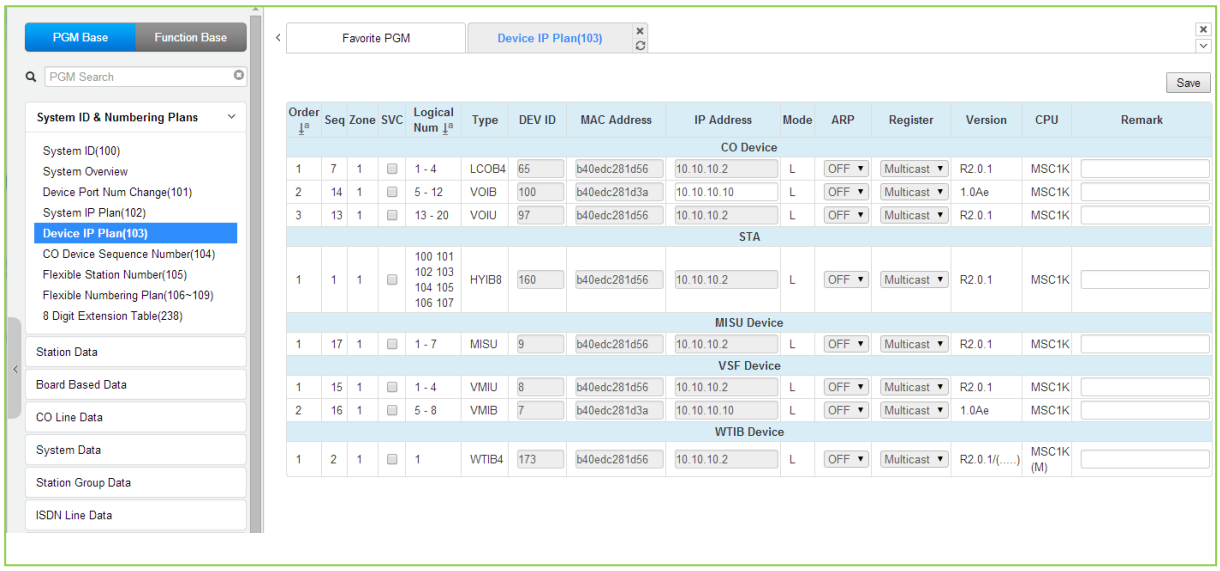


Figure 4.4.1.5-1 eMG Device IP Plan

TDM board is registered with its own slot number. It is registered automatically without any configuration.

If the station is assigned to Master or Slave by linked station, the bracket '[M] or [S]' will be displayed by the station number in PGM 101, 103, 105, 124 of the Web page.

To register IP device:

As Gateway/board and terminals are registered to the iPECS, a slot number is assigned, indicating the registration order.

Also, based on the type of device (CO Gateway/board, Terminal, or Station board).

Thus, Sequence Numbers for CO Gateway/board, Terminals are independently assigned based on the type of Gateway/board.

These Sequence Numbers are employed to provide a relationship between the physical MAC address and the logical port numbers of the device.

The system may assign a default private IP address to each Sequence Number. If desired, this program may be used to modify the assigned IP address for each Gateway/board and iPECS Phone.

Each Gateway/board and terminal can be assigned for "Direct Send." With Direct Send enabled, the system will employ the Ethernet MAC address of the device to send iPECS protocol messages to the device. This reduces the overall LAN traffic by eliminating the need for IP address headers in the messages.

The system normally employs IP multi-cast protocol to respond to a Gateway/board or terminal registration request.

When a router separates the device, the system must use the IP unicast protocol. The "Local Device" assignment establishes this. When disabled (Off), the system will send an IP unicast message to the device in response to a registration request.

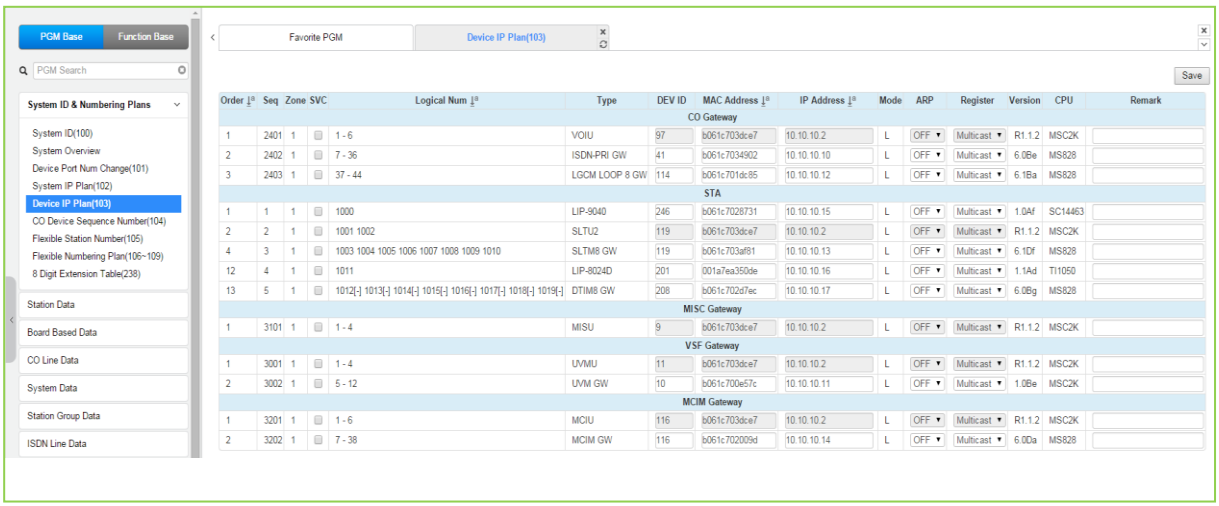


Figure 4.4.1.5-2 UCP Device IP Plan

This page displays all of the devices registered to the iPECS UCP by grouping them into the type of device (CO, STA, etc.).

If the station is assigned to Master or Slave by linked station, the bracket '[M] or [S]' will be displayed by the station number in PGM 101, 103, 105, 124 of the Web page.

Selecting the SVC button for a device will toggle the service mode between in and out-of-service. The device type can be modified as well as the MAC and IP address.

Using the SVC check box to place a device out of service, an errant device can be replaced without affecting the database. After placing the device out-of-service, it can be removed, replaced, and the MAC address of the new device entered.

The SVC check box is used to bring the new device into service, employing the replaced device's database.

The system may assign a default private IP address to each device. If desired, this program may be used to modify the assigned IP address for each Gateway/board and iPECS Phone.

The device mode, connected to a local or remote LAN, is displayed. Each Gateway/board and terminal can be assigned for "ARP." With ARP disabled, the system will employ the Ethernet MAC address of the device to send iPECS protocol messages to the device.

This reduces the overall LAN traffic by eliminating ARP messages and the need for IP address headers in the messages.

The system normally employs IP multi-cast protocol to respond to a Gateway/board or terminal registration request.

When a router separates the device, the system must use the IP unicast protocol. The "Local Device" assignment establishes this.

When disabled (OFF), the system will send an IP unicast message to the device in response to a registration request.

4.4.1.6 CO Device Sequence Number - PGM 104

Selecting CO Gateway/board Sequence Number will display the input entry page. Selecting the blue-colored text in the Table header will sort the table based on the selected column. Click the **[Save]** button after changing Value to apply.

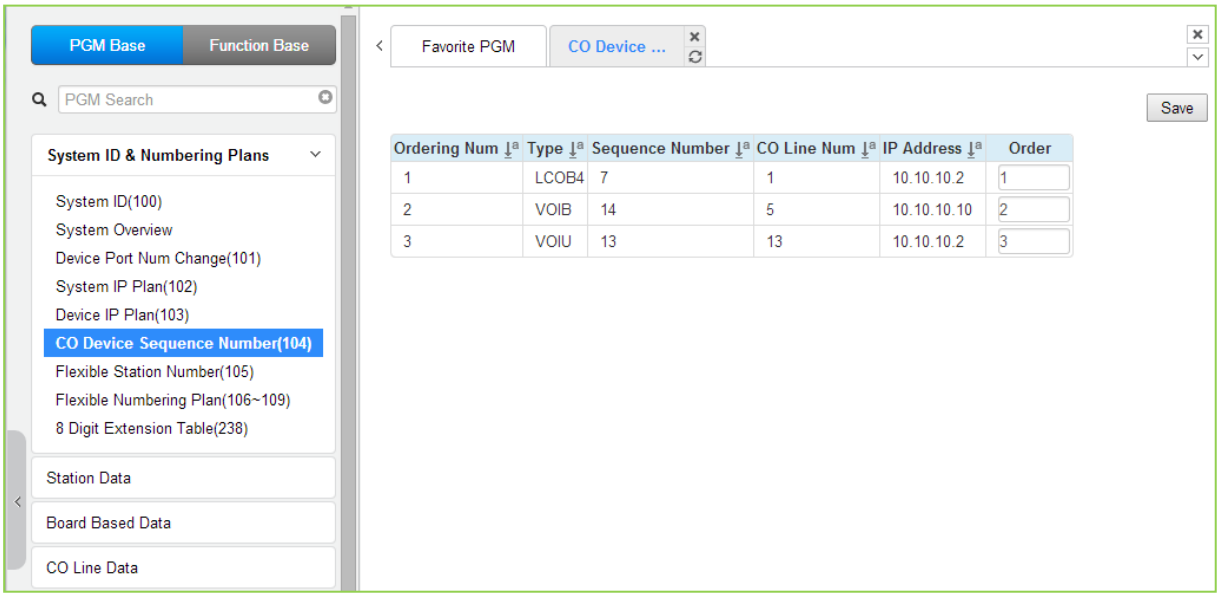


Figure 4.4.1.6-1 eMG CO Device Sequence Number

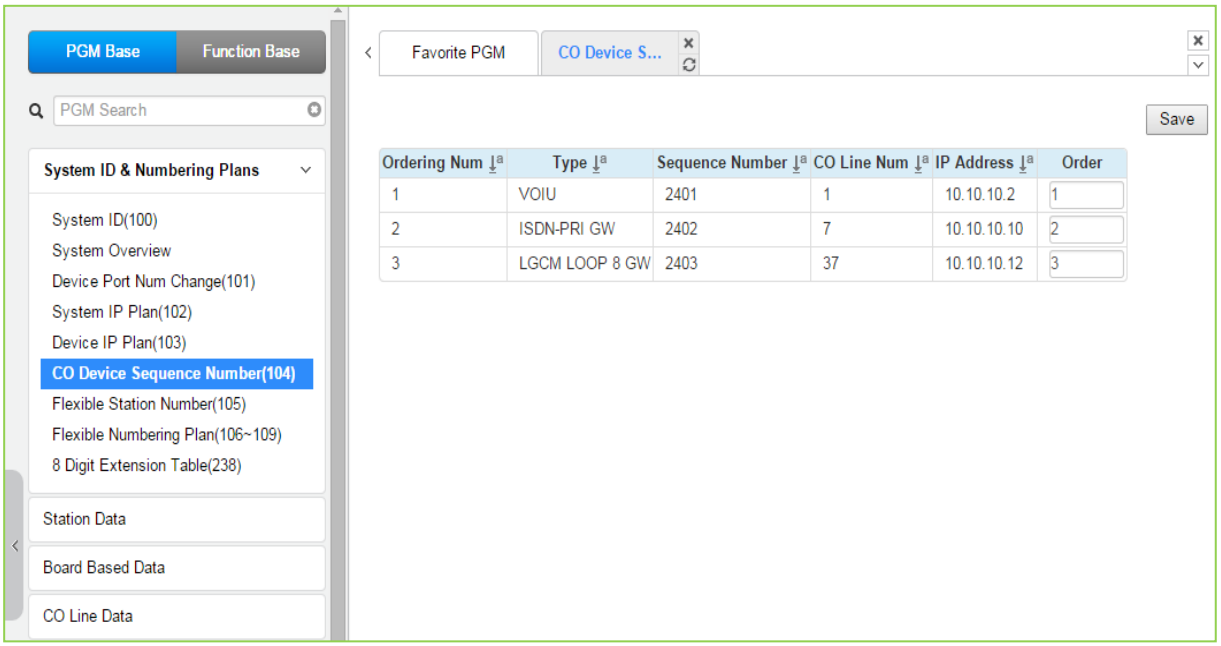


Figure 4.4.1.6-1 UCP CO Device Sequence Number

The system configures the CO/IP Line numbers as discussed in section 2.3. In the case of eMG, each slot is assigned the starting CO/IP Line number based on the Order Numbering.

With UCP, each Module is assigned the starting CO/IP Line number based on the registration order.

In place of the default Order Numbering, the “Order” number assigned in this PGM can be used to reorder the CO/IP numbering.

4.4.1.7 Flexible Station Numbering Plan - PGM 105

Selecting Flexible Station Number will return the data entry page. For convenience, the copy, paste, and drag are available to enter or modify data.

This page permits changes in the Station Numbering Plan using one of three methods:

- **Enter Station Index Range:** eMG80/100: 1-140 / eMG800: 1-1200 / UCP: 1-2400
- **Station Index Range:** use to change the station numbers associated with a range of “Order Numbers” (the indexes). The “Start Station Number” is assigned to the station with the first index, then the station number is incremented by one and assigned to the next station in the range. The process is repeated until the station number with the last index is changed.
- **Station Number:** enter the station number to search. The station number is displayed, and then you can change the new station number as you wish.
- **Multiple Station Number to change:** there are two ways to search the station number for change; Enter Index Range or Enter Station Range.

You can change station numbers over a range of stations using the “Start Station Number” as the first station number for the range. The station number is incremented by one for each successive station in the range.

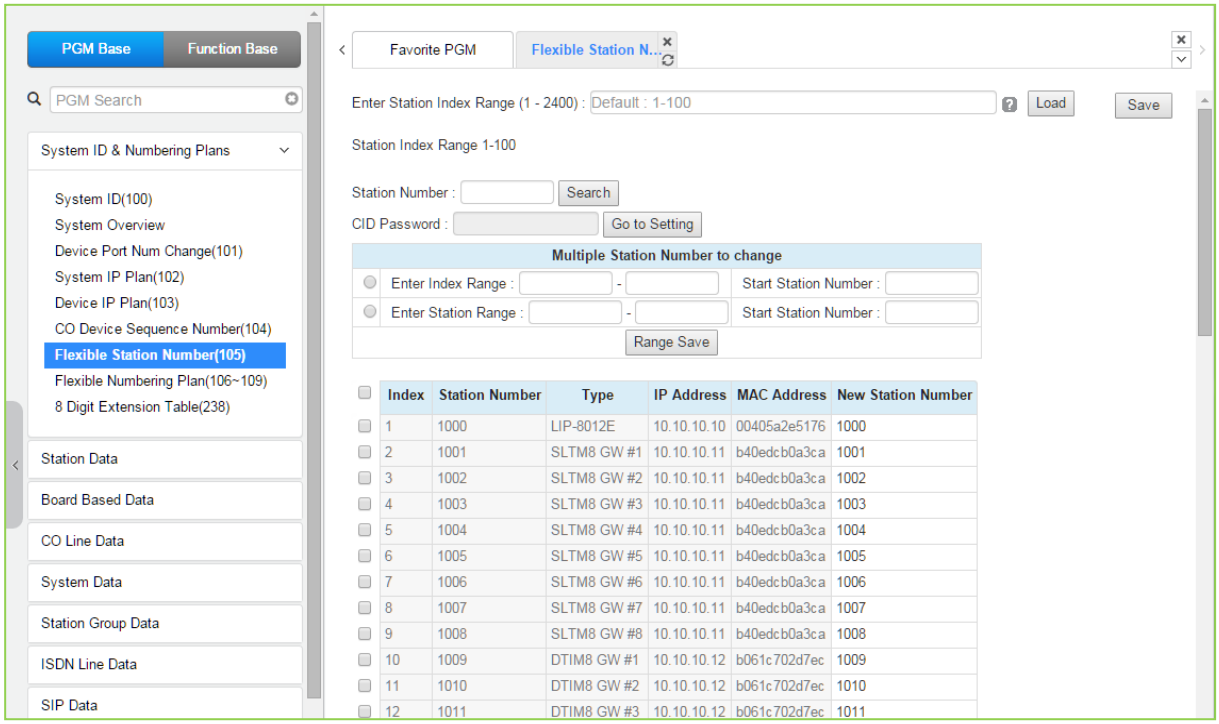


Figure 4.4.1.7-1 Flexible Station Number

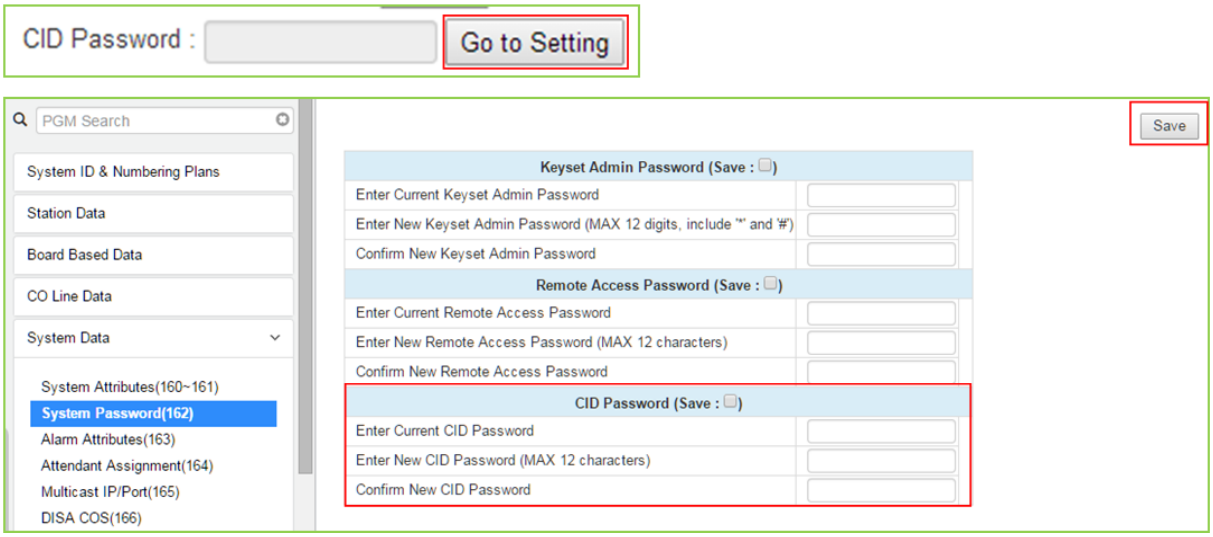
Each iPECS IP and LDP Phone and SLT are assigned a logical order number, shown as the “Index” number on the Web page during the registration process. The station Index number is incremented from 1 as each terminal device is registered.

At registration, station numbers increment sequentially with the index and are assigned starting at Station 100 for eMG80/100 and Station 1000 for eMG800/UCP.

The Station Numbering Plan allows the station numbers to be two (2) to eight (8) digits in length as long as the number of digits in the Station numbers is the same.

Setting CID Password directly

You can set the CID password by clicking the “Go to Setting” button. After clicking it, you will move to the following PGM 162, set the CID password, save the CID password from the marking tick on the save box and click the **[Save]** button.



4.4.1.8 Flexible Numbering Plan - PGM 106 ~ 109

Selecting Flexible Numbering Plan will display the input entry page. Selecting the blue-colored text in the Table header will sort the table based on the selected column. Click the **[Save]** button after changing Value to apply.

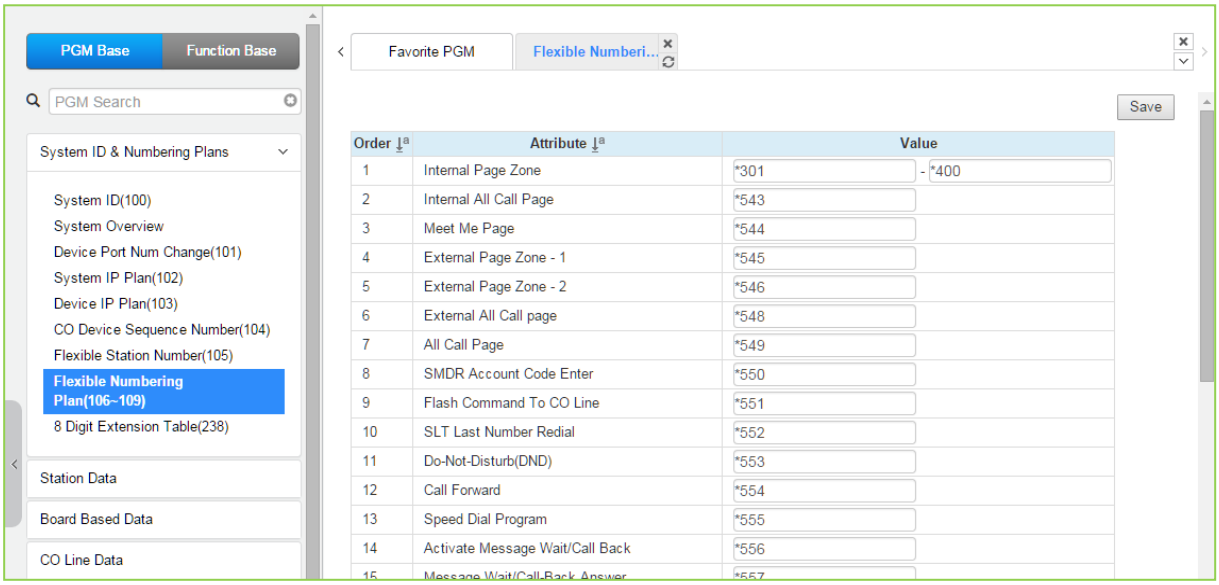


Figure 4.4.1.8-1 Flexible Number Plan

Feature dial codes for the system can be assigned using the system‘s Flexible Number Plan. Feature codes should be one (1) to four (4) digits in length and must not conflict. For example, Feature codes 53 and 536 represent a conflict. The system will not update the database until correct data is entered. Table 4.4.1.8-1 provides a brief description for each feature and the default codes as they appear in Numbering Plan 2. The default values for other numbering plans, which may be selected on the title “System ID (100)” and other numbering plan is described in Appendix B.

Table 4.4.1.8-1 FLEXIBLE NUMBERING PLAN CODES

Order	ATTRIBUTE	DESCRIPTION	DEFAULT
1	Internal Page Zone	Internal Page Zone access codes. eMG80/100:301~335, eMG800:*301~*400, UCP:*301~*400	Refer to description
2	Internal All Call Page	Internal All Call Page access code.	*543
3	Meet Me Page	Meet-Me-Page answer code.	*544
4	External Page Zone – 1	External Page Zone 1 access code.	*545
5	External Page Zone – 2	External Page Zone 1 access code only for UCP/eMG100.	*546
6	External All Call Page	External All Call Page access code.	*548
7	All Call Page	All Call Page access code.	*549
8	SMDR Account Code Enter	Dial code to signify the start of an SMDR Account Code.	*550
9	Flash Command To CO Line	Dial code to generate a Flash on the active CO Line.	*551
10	SLT Last Number Redial	SLT Last number redial feature access code.	*552
11	Do-Not-Disturb(DND)	Dial code to activate Do-Not-Disturb.	*553
12	Call Forward	Code to activate Call Forward.	*554
13	Speed Dial Program	SLT Speed Dial programming access code.	*555
14	Activate Message Wait/Call Back	Code to activate Message Wait/Call Back.	*556
15	Message Wait/Call-Back Answer	Code to return Message Wait/Call Back.	*557
16	SLT Speed Dial Access	SLT Speed Dial access code.	*558
17	DND/FWD Cancel	Code to cancel DND/FWD/MSG Wait.	*559
18	SLT CO System Hold	Code to place a CO Line call on System Hold.	*560
19	SLT Program Mode Access	SLT user program access code.	*561
20	Attendant Unavailable	Code to make attendant “unavailable”.	*562
21	AME Feature	Dial code to assign an Answering Machine Emulation Flex button.	*564
22	Alarm Reset	Code to terminate an Alarm signal.	*565
23	Group Call Pick-Up	Group Call Pick-up code.	*566
24	Universal Night Answer	Universal Night Answer code.	*567
25	Account Code With Bin	Dial code for entering an Account Code.	*568
26	Walking COS	Dial code to activate Walking Class-of-Service.	*569
27	ACD Agent ON/OFF Duty	Code to toggle ACD Supervisor ON and OFF duty.	*571
28	ACD Supervisor Login	Supervisor log-in code.	*572
29	ACD Supervisor Logout	Supervisor log-out code.	*573
30	ACD Help Code	Agent &Supervisor code for Supervisor help.	*574
31	ACD Call In Queue Display	Dial code to display calls in queue.	*575
32	ACD Supervisor Status	Dial code to display group status.	*576
33	ACD Supervisor Monitor	Dial code to activate Supervisor monitor.	*577
34	ACD Reroute Queued Call Answer	Code to reroute call after answer.	*578

Table 4.4.1.8-1 FLEXIBLE NUMBERING PLAN CODES

Order	ATTRIBUTE	DESCRIPTION	DEFAULT
35	ACD Reroute Queued Call No Answer	Code to reroute call prior to answer.	*579
36	Camp-On Answer	Dial code to answer a Camped On call.	*621
37	Call Park Locations	Dial code to place/retrieve a call in a system Park Orbit. eMG80/100:#601~#619, eMG800:#601~#**800,** **UCP**:#601~#**800**	Refer to description
38	Station Group Pilot Number	Station group pilot number. eMG80/100: *****401~*****4**0,** eMG800: *****401~***500,** UCP: *401~*500	Refer to description
39	Station User VSF Features Access	VSF feature access code.	66
40	Call Coverage Ring	Code for Call Coverage button.	*76
41	Direct Call Pick-Up	Dial code to activate Directed Call Pick-up.	*77
42	Access CO Group	Dial code to access a CO Line from a group.	89
43	Access Individual CO/IP	Dial code to access a specific CO/IP Line.	88
44	Access Held CO/IP	Dial code to access the last CO/IP Line from Hold.	8*
45	Access Held Individual CO/IP	Dial code to access a specific CO/IP Line from Hold.	8#
46	Access CO In First CO Group	Dial code to access the 1st available CO/IP Line in any accessible group.	9
47	Attendant Call	Dial code to call Main Attendant.	0
48	VM MSG Wait Enable	Dial code for external Voicemail to activate Message Wait indication.	*8
49	VM MSG Wait Cancel	Dial code for external Voice Mail to deactivate Message Wait indication.	*9
50	Door Open	Dial code to activate Door 1contact.	#*1
51	Door Open	Dial code to activate Door 2contact.	#*2
52	Door Open	Dial code to activate Door 3 contact only for UCP/eMG100.	#*3
53	Door Open	Dial code to activate Door 4 contact only for UCP/eMG100.	#*4
54	MCID Request	Dial code to activate Malicious Caller Id (Except USA version).	*0
55	Unsupervised Conf Timer Extend Code	Dial code to extend unsupervised conference time.	##
56	PTT Group Logon/Logoff	Push-To-Talk group login and logout dial code. The station must have a PTT button for proper operation.	#0
57	ACD Agent Primary Login	ACD Agent Primary Login code.	*581
58	ACD Agent Primary Logout	ACD Agent Primary Logout code.	*582
59	ACD Agent Secondary Login	ACD Agent Secondary Login Code.	*583
60	ACD Agent Secondary Logout	ACD Agent Secondary Logout Code.	*584
61	Wrap-up End	ACD Agent Wrap-up end code.	*585
62	T-NET CM LOGIN/OUT	T-NET CM Login/out code	*586

Table 4.4.1.8-1 FLEXIBLE NUMBERING PLAN CODES

Order	ATTRIBUTE	DESCRIPTION	DEFAULT
63	ENTER INTOCONF ROOM	Code for a station to enter a conference room.	*59
64	ENTER INTOCONF-GROUP	Code for a station to initiate a conference group.	*68
65	STATION ICR	Code for a station to activate ICR forward.	*587
66	PICK UP GROUPPICK-UP	Pick Up Group Call Pick-up dialing code.	*588
67	EMERGENCYPAGE	Code for emergency page.	*589
68	REMOTE MEXCONTROL	Code to control the mobile extension settings remotely.	*580
69	Agent ON/OFF Duty In ALL GRP	Code to change the state of the Agent ON/Off duty in all Station groups.	*58*
70	SLT ACNR	Dial code for an SLT to activate ACNR	*58#
71	ACD Supervisor Ring Mode	Code to check and change ACD group Ring mode by ACD group supervisor.	*570
72	Company Directory Name	Code to check and record a user's Name greeting for the Company Directory feature.	*563
73	ISDN Supplementary HOLD	ISDN Supplementary HOLD Numbering Plan Code.	*57*
74	ISDN Supplementary Conference	ISDN Supplementary Conference Numbering Plan Code (Not supported).	*57#
75	Forced Channel Seize	Code to disconnect an existing call and seize the CO/IP Line or connect to the station.	*56*
76	Override DND/Forward	Dial code to override DND or Call Forward activated by a station.	*56#
77	Cancel call back	Code to cancel a Callback request.	
78	Transfer to VSF Number	While on a CO/IP Line call, this code may be used to transfer a call to a valid system announcement, [Transfer] + [*55*] + valid system announcement (01-200). The outside party receives the system announcement, and the DISA service activates.	*55*
79	CCR	It is used in digit conversion.	#2
80	Room Type Conf Group Join	After a UCS client activates a UCS Conference Group, other users may dial this code and the group number to enter the Conference.	5*0
81	Phone Lock/Unlock	Protect a phone from normal call features and allow only the making of emergent call features.	47*
82	Flexible Page Prefix	Prefix code to access extended Page Codes.	*7*
83	Personal Group Login	Personal group log in using numbering plan + Station number + password	
84	Personal Group Logout	Personal group log out using numbering plan + Station number + password	

4.4.1.9 8Digit Extension Table - PGM 238

Selecting 8 Digit Extension Table will display the input entry page. Click the [Save] button after changing Value to apply.

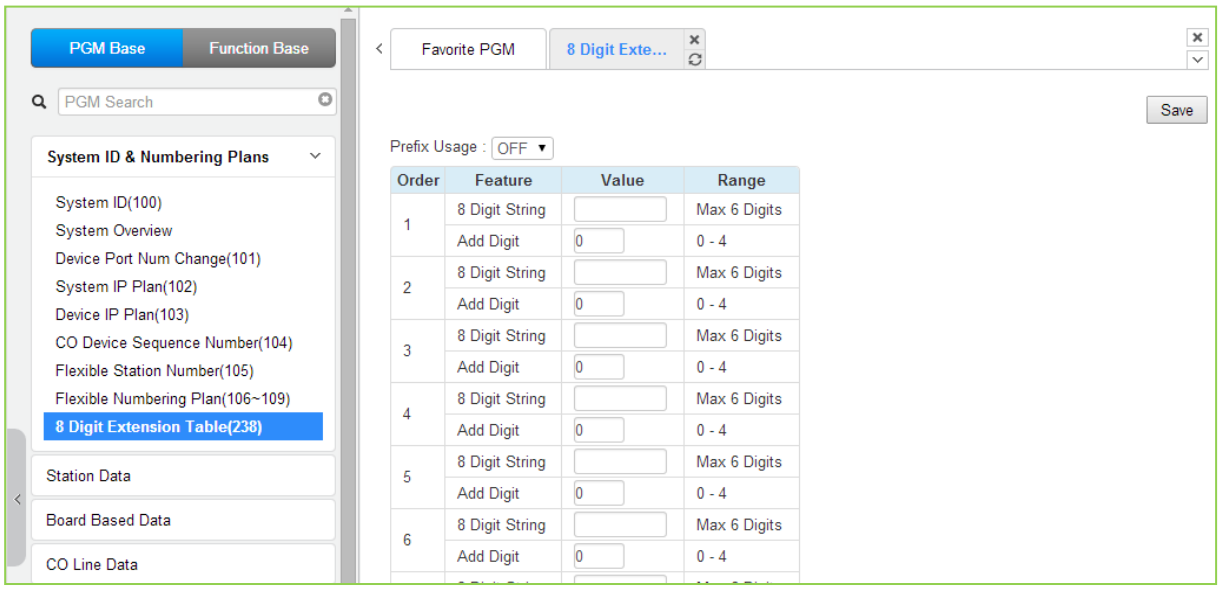


Figure 4.4.1.9-1 8 Digit Table

The iPECS system supports a Station Numbering Plan of up to eight digits. By combining a prefix digit string (8 Digit String) of up to six (6) digits with the Add Digit count (digit count from the Station Numbering assigned in PGM 105), Station Numbering can support up to eight digits. Note that multiple prefixes (8 Digit Strings) with varying ADD Digit counts can be assigned. In addition, in case of a conflict, the Prefix digit string will prioritize the Flexible Numbering Plan, thus disabling the feature associated with the digit string but allowing the station to receive calls.

4.4.2 Station Data

Selecting the Station Data group will display the Station Data sub-menu displayed in the left frame below.

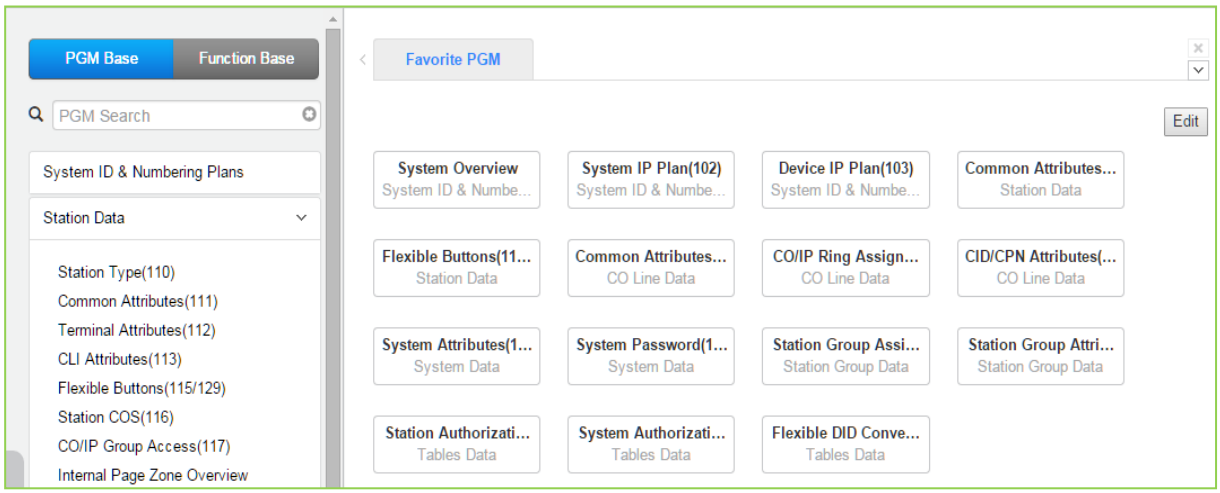


Figure 4.4.2-1 Station Data Main Page

4.4.2.1 Station Type - PGM 110

Selecting Station Type will display the Station Type data input entry page. Enter a valid station range and click **[Load]** to modify the Station Type data. Click the **[Save]** button after changing Value to apply.

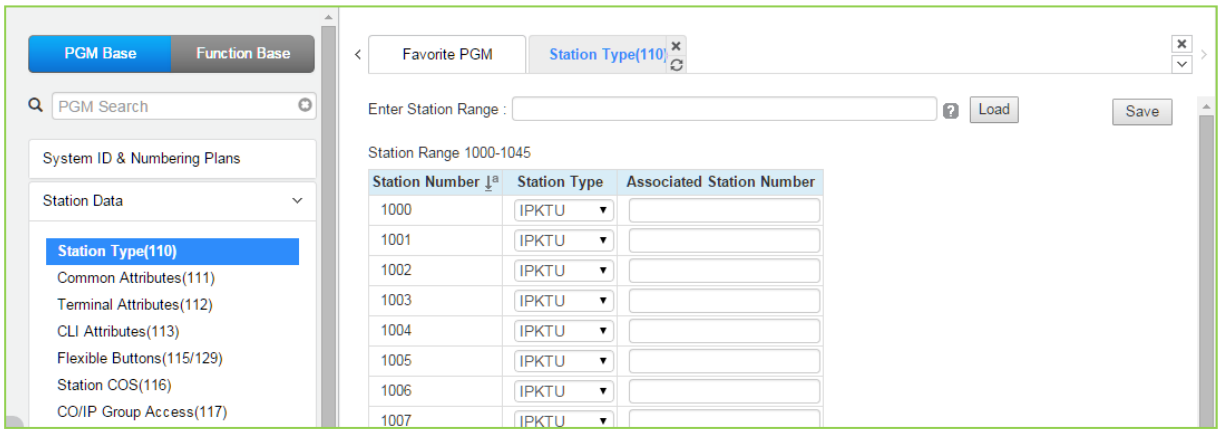


Figure 4.4.2.1-1 Station Type

Each station is assigned a type selected from the “Station Type” drop-down menu. The system uses the type to recognize the station‘s capability and set default Flex button configurations. In addition, for standard iPECS DSS/BLF consoles, the ‘AssociatedStation Number’ is required, so the system will recognize the station that is used with the console. Note this is not used with the Serial DSS/BLF Consoles. In the case of selecting SLT type, there are 6 types as below:

- SLT (DTMF)
- SLT (Pulse)
- SLT (DTMF VOL-MW)
- SLT (Pulse-MW)
- SLT (DTMF FSK-MW)
- SLT (DTMF POL-MW)

4.4.2.2 Common Attributes - PGM 111

Selecting Common Attributes will display the common attributes data input page. Enter a valid station range and click the**[Load]** button to enter Common Attributes data.

Use the checkboxes to indicate which attributes to define; data for checked attributes is stored for the entire range of stations by clicking the **[Save]**button after changing Value.

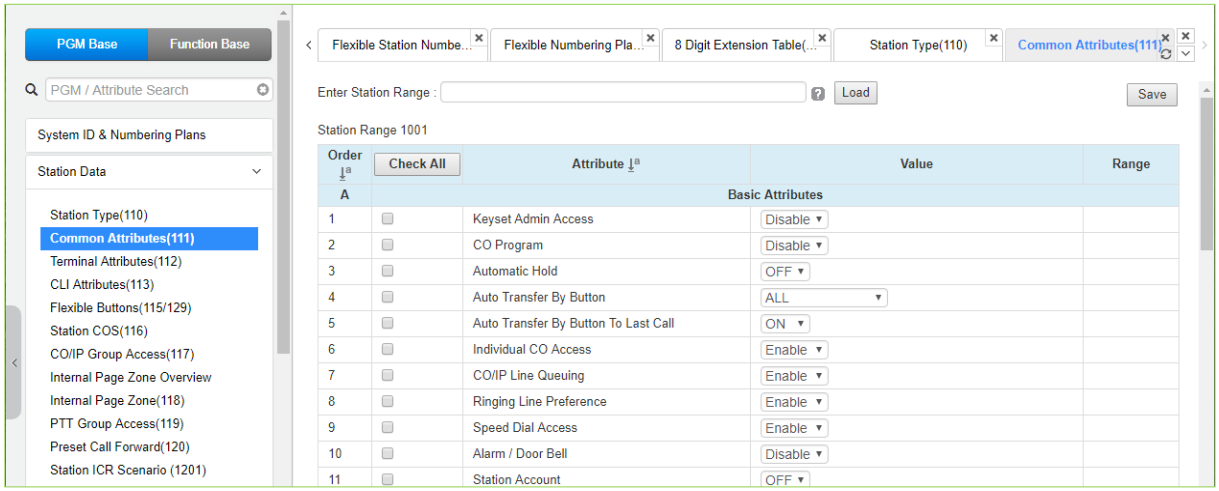


Figure 4.4.2.2-1 Common Attributes

Common Attributes define features and functions available to the station. Generally, the entry will turn the feature ON (enable) or OFF (disable). Refer to the following table for a description of the features and the input required.

Table 4.4.2.2-1 Common Attributes

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Keyset Admin Access	When enabled, the station can access the system Database.	Disable Enable	Enable
CO PGM	A station can be permitted to change the CO/IP Line numbers (ports) associated with a Flexible button.	Disable Enable	Disable
Automatic Hold	Enables Auto Hold for the station. With Auto Hold enabled, the system will place an active external call on hold if the user presses a CO/IP Line or DSS button.	OFF ON	ATD: ON Others: OFF
Auto Transfer By Button	Transfer a talking call to a new making call by pressing the station (DSS)/CO(Loop)/U-Loop flexible button. **OFF, ALL Except CO to CO**	Refer to description	ALL
Auto Transfer By Button To Last Call	Transfer a talking call to only last new making call when using Auto Transfer By Button. Ex) Talking -> press Button A -> press Button B -> On Hook: Talking is transferred to Button B	OFF ON	ON
Individual CO Access	Permits stations to use dial codes to access individual CO/IP Lines.	Disable Enable	Enable
CO/IP Line Queuing	Permits the station to queue for the next available Line when an All Lines Busy signal is received.	Disable Enable	Enable
Ringing Line Preference	Enables Ringing Line Preference for the station. Calls that ring the telephone can be answered by going off-hook without selecting the CO/IP Line button.	Disable Enable	Enable

Table 4.4.2.2-1 Common Attributes

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Speed Dial Access	Allows the station to access System Speed Dial bins.	Disable Enable	Enable
Alarm/Door Bell	Assigns a station to receive the Alarm/Door Bell signal.	Disable Enable	Disable
Station Account	When ON, the station user must enter an authorization code to access CO/IP Lines.	OFF ON	OFF
Forced SMDR Account Code	When On, the user must enter an Account code to place an outgoing call.	OFF ON	OFF
Loop LCR Account	The Station may be required to enter a Station Authorization code to access loop LCR operation.	OFF ON	OFF
Door Open	Enable use of the Door open feature by the station.	Disable Enable	Enable
Flex Button PGM	The iPECS IP and LDP Phones can control the ability to assign Flexible buttons. The user may assign features to Flexible buttons but requires special assignments to configure CO/IP Line buttons when allowed here.	OFF ON	ON
Prefer CO or Group	The System will seize this CO/IP Line or a Line from the CO/IP group number when the station dials “9” (First available Co-access code) **CO, IP Line, CO Group number**	Refer to description	Access code
Emergency CO or Group	This field defines the CO/IP Line or Group employed by the system to place Emergency Assistance calls. **CO #, CO Group #**	Refer to description	Any CO
ICM Tenancy Group	Assign stations to an ICM Tenancy Group. eMG80/100:1~15, eMG800:0~32, UCP:0~100	Refer to description	1
Call Time Restriction	All outgoing calls will disconnect at the expiration of the call Restrict Timer. The Cut-Off Timers can be set the time for Station and CO Line. For the cut-off timer of the Station, refer to the title “Station Timers (123)”. Refer to the title “CO Line data: Common Attributes (144)” for the CO line.	OFF ON	OFF
Proctor Monitoring Power-Fail	Enable use of PABX ANI Link device for E-911support. Only an SLT port can be used for this feature.	OFF ON	OFF
Line Release Cost Display	When a CO/IP line is released, the disconnect cause or call cost is displayed in the iPECS IP or LDP Phone LCD.	OFF ON	OFF
Active PTT Group Number	A station can be assigned to a PTT (Push-to-Talk) group, and the group is enabled so the station can place and receive PTT announcements for the group.	0~9	
Hot Desk Station	A station (only IP Phone) can be assigned as a Hot Desk phone. Users and agents can log in and use resources of the system through the Hot Desk phone.	OFF ON	OFF
SMDR Hidden Dialed Digits	If this feature enables, the dialed digit can be hidden on SMDR output.	Disable Enable	Disable

Table 4.4.2.2-1 Common Attributes

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Left Message to Executive	When a call forwards to the Secretary of an executive/Secretary pair, messages can be left for the executive (ON) or Secretary (OFF).	OFF ON	ON
Station Web Level	Based on this level, the user will view the specified programs within the Station User Web portal. Level 1 can view all programs. Levels 2 and 3 are configured in the title “System data: Station Web Authorization.” This is a Web-only PGM.	LEVEL 1 ~ LEVEL 3	LEVEL 2
Headset page mode	When a page announcement is received, it is generally played over the iPECS IP or LDP Phone Speaker. For headset users, the page can be played to the headset or both the headset and speaker. **SPKR, HEADSET, BOTH**	Refer to description	Speaker
Progress Indication	When employing a non-ISDN terminal, specifically a modem or analog FAX, the ISDN call SETUP message must include this message, and “Progress Indication” should be set to “ON.”	OFF ON	OFF
3.1 KHz Audio	When an analog device (SLT or FAX) uses an ISDN Line in the system, the Information Element of the ISDN SETUP message must indicate the device only has 3.1 KHz audio capabilities. If an SLT or analog FAX is allowed access to the ISDN Lines, this parameter must be “ON.”	OFF ON	OFF
Pickup by flexible button	When a station receives a call, the DSS/BLF button at other stations will flash, and, if allowed, other stations may use the button to answer (pick-up) the call. **ON:** User can pick up by DSS button. **OFF:** User can’t pick up by DSS button.	OFF ON	ON
Prepaid Call	It is a useful feature for users to pay the money within the budget (Prepaid) for outgoing calls. For more information, refer to the below feature, “Prepaid money.”	OFF ON	OFF
Prepaid Money (0 - 999999) & Used Prepaid Money	An amount can be associated with the station as a prepayment for outgoing calls. The assigned “Pre-paid Money” is reduced by the calculated call cost (Call Metering or cost/minute). This parameter displays the remaining funds for outgoing calls. Prepaid Money is often used in small hospitality businesses. The “Used Pre-paid Money” displays the money that has been used.	000000 – 999999 000000 - 999999	0 0
SIP USER TABLE INDEX	These fields reference the index to the SIP User ID Attributes Table. The referenced SIP User ID may be employed for several of the SIP headers for outgoing calls and may be employed for incoming call routing as configured in the SIP CO Attributes PGM 133, “ID Assigned Station.” Up to three SIP User Id indices can be assigned to each station to permit the use of up to three SIP Trunk service providers. eMG80/100:0~140, eMG800:0~1200, UCP:0~2400	Refer to description	0
SIP USER TABLE INDEX2			0
SIP USER TABLE INDEX3			0

Table 4.4.2.2-1 Common Attributes

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Station Web Language	Users can select the desired language for Station Web. **English, Local language**	Refer to description	English
Lift Handset for page	If an iPECS IP or LDP Phone user attempts to page using the speakerphone, pre-selection will be activated, and the display shows “Lift Handset for Page when Lift Handset for Page is ON.” If Lift Handset for Page is OFF, the User can make a page on speakerphone without lifting the handset.	OFF ON	ON
Privacy	If Privacy is ON, then any person could not barge-in into the station, and also Attendant can’t intrude on Station. Also, if Privacy is ON, any person can’t forcefully disconnect the station.	OFF ON	OFF
Collect call block	This option enables each station to block a collect call by setting OFF.	OFF ON	OFF
DSS LED service	This option indicates whether to use the other station by showing the LED of the DSS button if the other station is assigned to the DSS button. If this option is ON, the DSS LED light appears red. The LED DSS light is unavailable even though the station number is assigned to the DSS button if this option is OFF.	OFF ON	ON
DSS LED service on other station	This option indicates whether DSS LED is updated or not on another station If it is ON, then the DSS button LED of the other station is updated. If it is OFF, then the DSS button LED of the other station is not updated	OFF ON	ON
Stop Emergency page announcement	If this is set to "After the announcement," the system will keep playing the announcement regardless of the calling party's status. **By calling party, After announcement**	Refer to description	By calling party
Send LM IP to UC client	If it is set to the available number, the system sends LM IP to the UC premium client even though it is connected to CM. It is used for local survival. UCP:1-100, eMG800:1-32,eMG80/100: 1-15	Refer to description	
Media Option	The only audio path is connected when making an internal call/answer. Both Audio and Video path is connected when making internal call/answer between LIP-9070/9071. **Audio only, Audio & Video**	Refer to description	Audio only
Hot Desk Emergency Call Identity	When a Hot desk station makes an emergency call, the specification of the CO line seized and caller number(CLI) is used with stations according to this option. • **Follow Logged-in Agent:** Use Emergency CO Group and CLI of hot desk logical user station. • **Follow Hot Desk Phone:** Use Emergency CO Group and CLI of hot desk physical phone the user logged in.	Refer to description	Follow Logged-in Agent

Table 4.4.2.2-1 Common Attributes

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Hot Desk Page Identity	Page identity and page group and zone. • **Follow logged-in agent** • **Hot desk phone**	Refer to description	Follow Logged-in Agent
DTMF across the Page - DTMF Receive & ACK Allow	For Paged endpoint - Allow or do not allow the DTMF Receiving and sending of DTMF ACK digit string.	OFF ON	OFF
Call Coverage Attributes			
Call Coverage Mode	The Call Coverage feature permits an iPECS IP or LDP Phone user to receive rings and answer calls for other stations.	OFF ON	OFF
Call Coverage Delay Ring	When a covered station rings, the **{CALL COVERAGE}** button LED will flash at the covering station, and the station will receive a ring (immediate or delayed by 0 to 15 ring cycles).	0~15	0
Call Coverage On Busy	**OFF:** Call Coverage is implemented when a covered station is in an idle state. **ON:** Call Coverage is implemented when a covered station is in an idle or busy state.	OFF ON	ON
Call Coverage Through Mobile Extension	**OFF:** Call Coverage Ring is not delivered to Mobile Extension **ON:** Call Coverage Ring is not delivered to Mobile Extension	OFF ON	ON
Call Coverage On Busy Range	**External Call Only**: Call Coverage only for external calls when the covered station is busy **External and Internal Call**: Call Coverage both for external & internal calls when the covered station is busy	Refer to description	External Call Only
Call Coverage Delay Ring Method	**by Originator:** Call Coverage Delay is implemented by the covered station's "Call Cover Delay Ring" delay count.' **by Member:** Call Coverage Delay is implemented by covering the station's "Call Cover Delay Ring" delay count.'	Refer to description	by Originator
Call Coverage For Wakeup Ring	**OFF:** Wakeup Ring to covered station is not covered **ON:** Wakeup Ring to covered station is covered	OFF ON	OFF
Call Coverage Ring Type on Member	**Silence**: No audible ring is presented, and the user must press the flashing Call Coverage button to answer the call. **Normal Ring:** Audible ring is presented, and the call can be answered by simply lifting the handset or pressing the Speaker button. **Mute ring** is only supported in the LIP-8000E series. Silence, Normal Ring, Muted(Continuous)-80XXE only, Muted(One Burst)-80XXE only	Refer to description	Normal Ring

Table 4.4.2.2-1 Common Attributes

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Tone/Ring Attributes			
Call Time Tone	A tone can be sent periodically with indicating the elapsed time of an outgoing CO/IP call. The Elapsed Call Timer determines the period between tones. For more information about Elapsed Call timer, refer to the title “System data: System timer (180~182, 186)”.	OFF ON	OFF
Camp-on Tone	When the Camp-on feature is enabled for the station, the LCD indicates the camped on-call if the station is busy and receives a Camp-on request. If the Camp-on tone is enabled, the Camp-On tone is sent to the station as an audible signal for the camp-on.	OFF ON	ON
ICM Dial Tone Source	One of four dial tone sources can be selected for each station. **Dial Tone / Internal music / External music / VSF MOH / SLT MOH1~5 / VSF MOH2~30**	Refer to description	Dial Tone
ICM Ring Back Tone Source	One of four ring-back tones can be selected for each station. **Ring Back Tone / Internal music/External music/VSF MOH/SLT MOH1~5/VSF MOH2~30**	Refer to description	Ring Back Tone
Off-hook ring type	While the station is an Off-hook ring, the ring-type can be adjusted as a single burst, muted normal ring, system ring, or no audible ring signal. **BURST, MUTE, Refer to System Attributes, SILENCE**	Refer to description	Refer to System attributes
SIP color ring	With a SIP-based AA/VM that supports color ring, the color ring may be provided to SIP phones. The group number associated with the external AA/VM should be entered as the SIP Color Ring source.		Station number
Gain table index	Selects one of three Tables to employ to set the gain from a device to other device types. PGM 410 to 417 under the Maintenance tab set the individual gains.	1-3	1
Tone table index	Selects one of five Tables to determine the tones sent to the Station. The individual tones are configured in PGM 410 to 417 under Maintenance.	1-5	1
Digit conversion table	One of the Digit Conversion Tables can be configured for use for this CO/IP Line. **eMG80/100:1-15, eMG800:1-32, UCP: 1-32**	Refer to description	
DTMF tone for Flexible button	If enabled, the system provides a DTMF tone when a user presses the flexible button to send the DTMF tone to the called party.	OFF ON	OFF
Routing Attributes			
Call Forward	When allowed, Call Forward can be activated by the station.	OFF ON	OFF
DND	Enables DND to be activated by the station. The station can be limited to activate DND for outside calls (CO/IP Only) or internal calls (ICM only) if desired. **OFF, ALL, ICM call only, CO call only**	Refer to description	OFF

Table 4.4.2.2-1 Common Attributes

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
DND 2ND ACT	If set to Apply Page Only, can block the station from page announcement. **OFF, Apply Page Only**	Refer to description	OFF
Off-net Forward	A station must be allowed Off-Net Fwd to forward external incoming calls outside the system or otherwise establish a CO-to-CO connection(Unsupervised Conference). (Except USA version)	Disable Enable	Enable
ACD Group Service	When unavailable, DID/DISA calls to the station can route to the ACD Group to which the station is a member.	OFF ON	OFF
Ring Group Service	When unavailable, DID/DISA calls to the station can route to the Ring Group to which the station is a member.	OFF ON	OFF
ACD Login Priority	ACD Group members may be assigned a priority, 0-9. Members with the highest priority are sent calls ahead of lower priority members. This field is the same as PGM 191-button 19.	0 ~ 9	0
Prime Line	This feature enables Delayed Prime Line (Idle Line) activation; see the title “Idle Line Selection (121)” and “System data: System timer: Prime Line Delay timer (180~182 & 186)”.	HOT WARM	WARM
Auto ACD DND	If an Agent does not answer an ACD call in the ACD No Answer timer, the Agent enters an Unavailable state with the Reason code entered here. The reason code is sent in ACD Event messages.	None #, *, 1~9	NONE
Forward if OOS	If a station is Out-of-Service and has previously forwarded calls, the system will forward the calls to the previous destination if enabled here.	OFF ON	OFF
LDT Table Index	LCR operation for the station will employ the LDT Table index defined by this entry. eMG80/100: 1-10, eMG800:1-32, UCP:1-32	Refer to description	1
LDT Zone number	If the LDT Zone Number of an LDT table (LCR LDT(221)) is equal to this value, the LDT table is available to this station.	1-100	1
Mobile (Web) Client Service	When enabled, the station can activate call back from the Station Web portal.	Disable, Enable	Disable
Click to call service	It should be enabled to use the click call application.	Disable, Enable	Disable
MS Lync RCC service	It should be enabled to use the MS Lync RCC.	Disable, Enable	Disable
MSN Wait	When a call corresponding to an MSN Telephone Number comes into the system, the call is routed to idle stations with a free MSN button assigned for the corresponding Telephone Number. And also, the call can be routed to busy stations in the following condition. **OFF:** if a keyset is in busy status, cannot receive incoming MSN Telephone Number corresponding call even though it has a free(idle) corresponding MSN LOOP Button **ON:** if a keyset is in busy status, it can receive incoming MSN Telephone Number corresponding call if it has a free(idle) corresponding MSN LOOP Button.	OFF ON	OFF

Table 4.4.2.2-1 Common Attributes

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
DID Restriction	A call routed using DID normally routes to the appropriate station. If desired, a Station can be restricted from receiving DID calls.	OFF ON	OFF
DISA Restriction	A call routed using DISA normally routes to the appropriate station. If desired, a Station can be restricted from receiving DISA calls.	OFF ON	OFF
Pre-Selected Msg DND	When the user activates Pre-Selected or Custom Messages, the system can automatically activate DND for the station so that the station will not receive the ring and the call is routed based on the DND treatment.	OFF ON	OFF
Private Mode for External Mobile or External Forwarded	This is about presenting numbers in the display of internal caller's or callee's station in the following cases. 1) extension 'A' calls extension 'B' that is forwarded to the external number of 'B.' • ON: extension number or extension name of 'B' is presented in the display of extension 'A.' • OFF: external number of 'B' or SPEED name of the external number 'B' is presented in the display of extension 'A.' 2) external number that is registered as extension 'B' calls extension 'A.' • ON: extension number or extension name of 'B' is presented in the display of extension 'A.' • OFF: external number of 'B' or SPEED name of the external number 'B' is presented in the display of extension 'A.'	OFF ON	ON
Voice Attributes			
Page Access	Stations must be allowed Page access to send a page over the system's Paging facilities.	OFF ON	OFF
Forced hands-Free Mode	When placing an intercom call, a user can change the ICM signaling mode, Tone Ring to Hands-free answer mode, or HF Answer to Tone Ring.	OFF ON	OFF
Group Listening	Enables Group Listens to feature. Audio is sent to both the handset and speaker with the handset microphone active and speakerphone microphone OFF.	Disable Enable	Enable
Override Privilege	Enables intrusion to gain access to an active CO/IP call.	Disable Enable	Disable
Voice Over	Enable use of Voice Over by the station.	Disable Enable	Enable
Barge In Mode	Barge-in permits an authorized Station to intrude into other existing outside/internal calls or to force disconnection existing of an existing call. **Disable, Only Monitor, Monitor &Join &Disconnect**	Refer to description	Disable
Camp on enable	The station can receive a Camp-on while busy. If 'Camp On Tone' is enabled, the stations receive Camp-on tone. Otherwise, only the LCD will indicate the camp on call. If the station is not allowed to receive a Camp-On, the calling user receives an error tone.	OFF ON	ON

Table 4.4.2.2-1 Common Attributes

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Video Show on Calling (ex. IP Video Door Phone)	When VoIP video door phone rings to a video-enabled IPKTS handset, the video streaming commences immediately while the IPKTS handset is in the ringing and the video stream continues when answered. **OFF:** normal implementation (video starts after answer) **ON:** video stream from this Video Door Phone to the ringing video-enabled LIP Phone even though this is alerting stage. **Condition:** A VOIU/VOIB channel for RTP-Packet-Relay purpose is required to serve ring-back-tone generation via a DSP channel. The system does pre-answer to the Video Door Phone even though the receiving station is in alerting state.	OFF ON	OFF
Silent intercom busy service	It is used to mute automatically when making intercom busy service (intrusion/voice-over), and also it overrides “Ring Group Service”/”ACD Group Service.”	OFF ON	OFF
Transfer for uncomplete call	When a user transfers a call to a busy extension, it defines as allowing the transfer call. it is not working on the SIP phone • **Transfer**: the call is transferred to a busy extension • **Recall**: the call is recalled to transferring extension	Refer to description	Transfer
Block Transferred Call	When a user transfers a call to an extension, it defines to allow the transfer call. • **Allow CO & ICM transfer**: Allow CO and ICM call transfer • **Block CO & ICM transfer**: Block CO and ICM call transfer • **Block CO transfer**: Block CO call transfer • **Block ICM transfer**: Block ICM call transfer	Refer to description	Allow CO & ICM transfer
Recall destination for transferring call	When a user transfers a call to an extension, it defines recall destination. • **Transferring station:** the recall ring will be provided to transferring station. • **Attendant:** the recall ring will be provided to attendant	Refer to description	Transferring station
MOH Attributes			
Default MOH for External Call	Default MOH type that holding party serves for an external call. • Refer To Zone or Sys MOH, • Internal Music1, • External Music2, • VSF MOH, • SLT MOH1~5, • VSF MOH2~30	Refer to description	Refer To Zone or Sys MOH
Default MOH for Internal Call	Default MOH type that holding party serves for an internal call. • Refer To Zone or Sys MOH, • Internal Music1, • External Music2, • VSF MOH, • SLT MOH1~5, • VSF MOH2~30	Refer to description	Refer To Zone or Sys MOH

Table 4.4.2.2-1 Common Attributes

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Override MOH Of External CPN(231)	Default MOH type of holding party can override the MOH of CPN that is programmed in Flexible DID Conversion Table(231).	OFF ON	OFF
Override MOH Of CO Line(140)	Default MOH type of holding party can override the MOH of CO Line that is programmed in CO Line MOH(140).	OFF ON	OFF
Zone MOH – Follow Holding party Zone	If MOH of device-specific (CO or Station) is set to “Refer To Zone or Sys MOH” and Zone MOH type is set to a specific MOH that is not following “Refer To Sys MOH,” MOH is type is decided by Zone MOH(P439).	OFF ON	OFF
Sys MOH – Follow Holding party Sys(TNET)	If MOH of device-specific (CO or Station) is set to “Follow Zone or Sys MOH” and Zone MOH is set to “Refer To Sys MOH,” MOH type decided by System(P171) or TNET(P335) Music Source setting.	OFF ON	OFF

4.4.2.3 Terminal Attributes - PGM 112

Selecting Terminal Attributes will display the Terminal Attributes data input page. Enter a valid station range and click**[Load]** to enter Terminal Attributes data. Use the checkboxes to indicate which attributes to define; data for checked attributes is stored for the entire range of stations by clicking the **[Save]** button after changing Value.

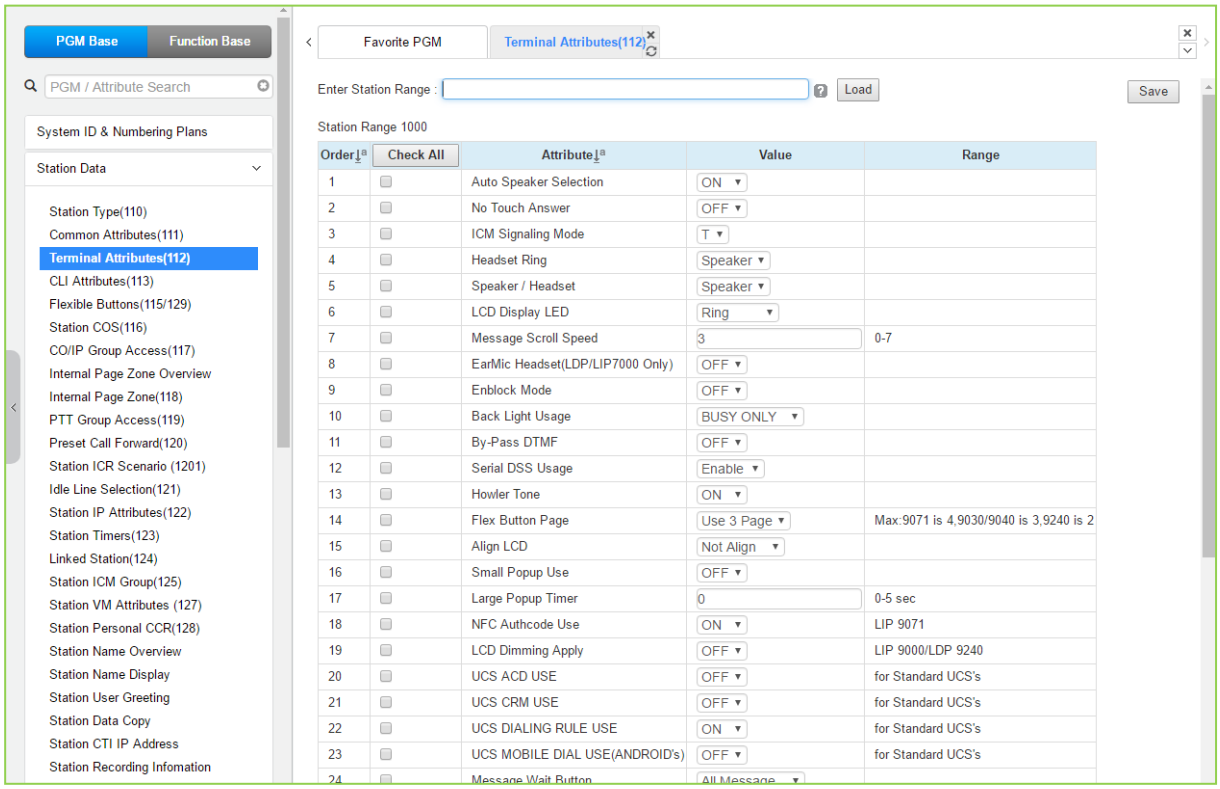


Figure 4.4.2.3-1 Terminal Attributes (PGM 112)

Terminal Attributes define features and functions available to the terminal itself. Generally, the entry will turn the feature ON (enable) or OFF (disable). Refer to the following table for a description of the features and the input required.

Table 4.4.2.3-1Terminal Attributes

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Auto Speak Selection	Enables **[SPEAKER]** activation when a CO/IP Line, DSS, or other feature button is pressed; there is no need to lift the handset.	OFF ON	ON
No-Touch Answer	Enables No-touch answer, which automatically connects transferred calls to the station's speakerphone after a short tone.	OFF ON	OFF
ICM signaling Mode	The user may select Hands-free (H), Privacy (P), or Tone Ring (T) for the ICM Signaling mode.	H, T, P	T
Headset Ring	The user can select how to receive Incoming ring signals among speakers, headsets, or Both.	Speaker/ Headset/ Both	Speaker
Speaker/Headset	The user can select between Speaker and Headset for Call.	Speaker/ Headset/	Speaker

Table 4.4.2.3-1Terminal Attributes

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
LCD Display LED	The LCD LED, upper left of LCD, may be used for intercom Call ring Indication or both Message Wait and ring indication.	MWI/Ring, Ring	MWI/Ring
Message Scroll Speed	The user can adjust the scroll speed on the message from 0 to 7.	0 ~7	3
Ear& Mic Headset	The user can use Ear Microphone Headset for Internal or external calls if the phone has the Ear. Microphone headset port.	OFF ON	OFF
Enblock mode	When On, the user-dialed digits are stored at the iPECS IP or LDP Phone until explicitly sent by the user. When sent, all dialed digits are sent to the system in a block. Enblock mode is only available to iPECS IP or LDP Phones with3-Soft keys.	OFF ON	OFF
Back Light Usage	The backlight of iPECS IP and LDP Phones is assigned to stay off, light only when the station is busy, or light constantly. Please check the phone if the feature is available before setting this option. **Always Off, Busy Only, Always On**	Refer to description	Busy Only
By Pass DTMF	When detected, DTMF from an SLT may be regenerated by CO/IP Line interface circuitry. The SLT port can bypass detection, so DTMF is not detected.	OFF ON	OFF
Serial DSS Usage	Enables a LIP-8000/LIP-9000/1000i station to have a Serial DSS/BLF Console attached.	Disable Enable	Enable
Howler Tone	Howler tone can be sent to a phone when left off-hook.	OFF ON	ON
Flex Button Page	LDP-9240D,LIP-9030/9040(C), LIP-9071, 1020i, 1030i, 1040i, 1050i,1080ihas flexible button page in LCD. (Max: LIP-9071,1080i: 4, LIP-9030/9040(C)/1020i/1030i/1040i/1050i : 3, LDP-9240: 2) The Navigation Up/Down button is used to scroll through the Flex buttons pages assigned. **Use 1 Page, Use 2 Page, Use 3 Page, Use 4 Page**	Refer to description	Use 3 Page
Default flexible button page	The flexible button page automatically goes to a predefined page when the phone goes idle. **Use 1 Page, Use 2 Page, Use 3 Page, Use 4 Page**	Refer to description	Use 1 Page
Align LCD	For the iPECS LIP-9010/20/30/40, character alignment for messages to the phone can be right or left aligned by the system or alignment controlled by the phone (“Not Align”). For the other phone, please check if the feature is available before using this option.	Not Align Align Left Align Right	Not Align
Small Popup Use	If this option is set to ON, small popup is displayed on the LCD of LIP-9030/9040/1010i/1020i/1030i/1040i/1050i. If it is set to OFF, the top bar is displayed instead of a small popup.	OFF ON	OFF

Table 4.4.2.3-1Terminal Attributes

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Large Popup Timer	When the large popup timer is set to any value from 1 to 5 except 0, the display of the large popup disappears after the timer expired, and then the large popup information is displayed at the top bar.	0~5 (Sec.)	0
NFC Authorization code Use	If this option is ON, the User enters the Authorization code to use the NFC function for LIP-9071.	OFF ON	ON
LCD Dimming Apply	If this option is ON, LCD dimming is available only for LIP-9000 Series and LDP-9240D. LCD is dark when the phone is paused, so some light is needed. So we provide dimmable lights.	OFF ON	OFF
UCS ACD Use	If the ACD (Automatic Call Distribution) option is set to ON, the ACD menu is displayed on Tools of UCS. UCS can use ACD login/logout and ACD On/Off Duty.	OFF ON	OFF
UCS CRM Use	If the CRM (Customer Relationship Management) option is set to ON, the CRM menu is displayed, and the CRM installation tray icon is displayed on Tools of UCS. UCS can use the CRM function after the installation of CRM integration.	OFF ON	OFF
UCS DIALING RULE USE	UCS client users can use the 'Dialing Rule' of UCS client such as CO Access, PBX code, Country Code, Area code, International Call, Long distance call, Add zero setting, etc., by setting ON. But, if this option is OFF, the UCS Client user follows the 'System Dialing Rule' such as Digit Conversion and LCR.	OFF ON	OFF
UCS MOBILE DIAL USE (ANDROID'S)	This option is only for the Android UCS Client. If this option is ON, the UCS client user can call using the UCS client application. But, if this option is OFF, the UCS client user places a call by Mobile Network (Communication network where the last link is wireless).	OFF ON	OFF
UCS PUSH POLLING Use	It is only used for iOS clients that are not ringing or long delay to ring when receiving a PUSH message. If it is ON, the system sends a PUSH polling message so that the UCS application will wake up periodically. so it could consume more batter ON: System sends a PUSH polling message OFF: The system does not send a PUSH polling message	OFF ON	OFF
Message Wait Button	Users can program MWI (Message Wait Indication) LED according to the following type: • **All Messages**: LED is blinking about all calls and Messages. • **Voice Mail**: blinking in case of getting Voice mail. • **Missed Call**: blinking in case of being Missed call. • **SMS**: blinking in case of getting Short message • **ICM Call Back**: blinking in case of Incoming call	Refer to description	All Message
PGM button	If this option is set to Enable, you can access Programming by pressing the PGM button.	Disable Enable	Enable

Table 4.4.2.3-1Terminal Attributes

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
MENU button	If this option is set to Enable, you can access MENU by pressing the Menu button. Some phones have no MENU button to check if the phone has a Menu button or not in advance.	Disable Enable	Enable
Headset button	If this option is set to Enable, you can change Headset mode by pressing the Headset button.	Disable Enable	Enable
Key Pad Tone	It only works with LIP90xx 2.0Aa or a later version. **Tone off, Dual-tone, Single tone**	Refer to description	Dual-tone
***PHONE Lock Status(Force to Set)	Force to lock or unlock by admin	Unlock / Lock	Unlock
PHONE Auto Lock Usage	To lock a phone automatically after some minutes of idle state or after some minutes since unlocked **Do Not Apply, After Duration of Idle, After Duration from Unlock**	Refer to description	Do Not Apply
PHONE Auto Lock Timer	After this duration, a Phone goes to the locked state	0 - 1430 (minutes)	0 (minute)
PHONE Lock Action for Hot-Desk	Phone Lock/Unlock for Hot-Desk **<Hot-Desk Login - Using Unlock>** • Step1) from a Locked (Dummy) Station • Step2) Phone Lock/Unlock Code(or Button) • Step3) Authorization (Station Number & Password of a Hot-Desk) • Step4) Login To a Hot-Desk **<Hot-Desk Logout - Using Lock>** • Step1) from a Hot-Desk Station • Step2) Phone Lock/Unlock Code(or Button) • Step3) Authorization (Station Password of the Hot-Desk Station) • Step4) Locked Hot-Desk (remain in the Hot-Desk Station) in condition - Option 1 (Station Data > Terminal Attributes (P.112) > PHONE Lock Action for Hot-Desk = "Just Lock Phone") Or, Logout To Locked Dummy Station (Logout from the Hot-Desk Station) in condition - Option 2(Station Data > Terminal Attributes (P.112) > PHONE Lock Action for Hot-Desk = "Logout from Hot-Desk") **Just Lock Phone, Logout from Hot-Desk**	Refer to description	Just Lock Phone

Table 4.4.2.3-1Terminal Attributes

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Allow to Stop - Flexible Paging	Permission to stop ongoing announce or silent message paging **<To Stop/Cancel Page initiated by Me>** • In condition, Allow to Stop Flexible Paging = “Allow to Stop Initiated by Me Only” or “Allow to Stop Initiated by Any One” • Dial the Stop/Cancel Code or press the One-Touch flex button that has the code: Flexible Page Prefix Code + 00 (ex. *7400) **< To Stop/Cancel Page initiated by All (including Me)>** • In condition, Allow to Stop Flexible Paging = “Allow to Stop Initiated by Any One” • Dial the Stop/Cancel Code or press the One-Touch flex button that has the code: Flexible Page Prefix Code + ** (ex. *7***) **Not Allow to Stop, Allow to Stop Initiated by Me Only, Allow to Stop Initiated by Any One**	Refer to description	Not Allow to Stop
Separated Flex Button in Call Control	It is used only for IP Attendant No Voice mode login. The IP ATD flex button is synchronized with the hard phone's flex button if this option is OFF. If this option is ON, the IP ATD flex button is worked individually.	OFF ON	OFF
Phone Link Down Alarm	Implement Alarm System Notification – Phone/Gateway Link Down when a station is disconnected from system.	OFF ON	OFF
SLT Attributes			
Data Security	Disable override and camp-on tones to the station. This feature is commonly used for an analog modem or FAX to assure tones do not affect received information.	OFF ON	OFF
ECM Faxes in T.38	ECM stands for Error Correction Mode. If you failed to send something via Faxes, you could send it again until it is successful.	Allow, Prevent	Allow
MODEM Enable	When an SLT port is connected to a Modem, the port can be enabled for Modem operation. This will activate Echo Cancellation and disregard any Camp-on/Call Wait to improve modem performance.	OFF ON	OFF
SLT CID TYPE	Caller ID can be sent to an SLT as FSK or DTMF signals.	FSK DTMF	FSK
Send SLT CLI Info	When allowed, the system sends CLI (Calling Line Identification) information to SLT.	OFF ON	ON
SLT Flash Mode	When an SLT activates a Hook-flash the system will perform one of the following operations: • **Flash Transfer**: the active call is placed on hold, and the dial tone is returned. • **Flash-Drop**: the active call is dropped. • **Flash-Ignore**: the Hook-flash is ignored, no action is taken. • **Hold Release:** the active call is placed on hold, and if the SLT returns to idle, the call is dropped.	Refer to description	Flash Transfer

Table 4.4.2.3-1Terminal Attributes

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
SLT configuration mode	For the South African region, the SLT gain is adjusted based on the SLT Configuration Mode. **Default, Short, Long, Far**	Refer to description	Default
Block Back Call	When an SLT attempts to transfer a CO/IP call to another CO/IP Line, the transfer can be blocked, and the call released.	OFF ON	OFF
SLT Open Loop Time	Send open-loop signal to SLT port when counter party user hangs up SLT.	0~9 (100ms)	0
Short Modem	If this value of an SLT is ON, the SLT is the modem mode in seizing a CO line. When the CO line is CO board, the {short modem timer} is starting when the SLT seizes the CO line. And if the {short modem timer} is expired, the SLT goes to the original mode. When the CO line is ISDN, the {short modem timer} is starting after receiving the ISDN connect message. And if the {short modem timer} is expired, the SLT goes to the original mode.	OFF ON	OFF
Line Echo	When LKA-200 SLT is used, the echo may be hearing. If this option is set to ON, the echo won't happen.	OFF ON	OFF

4.4.2.4 CLI Attributes - PGM 113

Selecting CLI Attributes will display the CLI Attributes data input page. Enter a valid station range and click **[Load]** to enter CLI Attributes data.

Use the checkboxes to indicate which attributes to define; data for checked attributes is stored for the entire range of stations by clicking the **[Save]** button after changing Value.

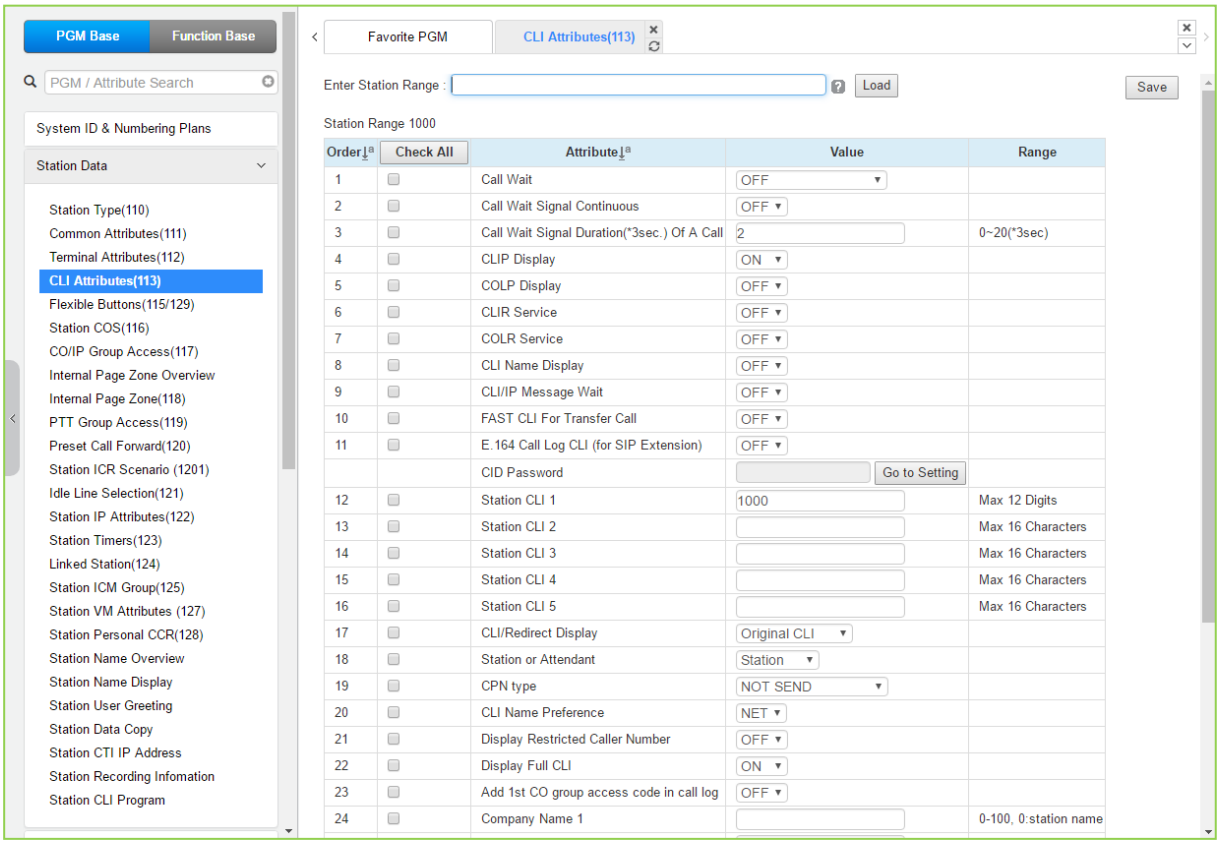


Figure 4.4.2.4-1 CLI Attributes (PGM 113)

CLI Attributes define features and functions available to the station. Generally, the entry will turn the feature ON (enable) or OFF (disable) or enter the text box. Refer to the following table for a description of the features and the input required.

Setting CID Password directly

You can set the CID password by clicking the **[Go to Setting]** button. After clicking it, you will move to the following PGM 162, set the CID password, save the CID password from the marking tick on the save box and click the **[Save]** button.

Table 4.4.2.4-1 CLI Attributes

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Call Wait	When a busy station receives a call, the call may queue to the station instead of receiving busy treatment. Call Wait will hear a Ring-back tone, and the CO/IP Line LED flashes with Call Wait. Also, the CLI for the new incoming call displays. **OFF, For External/Internal, For External, For Internal**	Refer to description	For External /Internal

Table 4.4.2.4-1 CLI Attributes

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Call wait signal continuous	When this field is set On, you will continuously get the call wait signal without returning to the current conversation. In the case of Off, you will return to the current conversation after 1 cycle of Call waits for signal indication.	ON, OFF	OFF
Call wait signal duration (*3sec.) of a call	You can set the call wait signal duration of a waiting call: the default is 2 (2*3sec.), and the range is from 0 to 20.	0-20 (*3sec)	2
CLIP Display	CLIP (Calling Line Identification Presentation), a carrier service, sends the calling party's number to the system in the call SETUP message. If enabled here, the number will be shown in the iPECS Phone LCD.	OFF ON	ON
COLP Display	COLP (Connected Line Id Presentation), a carrier service, sends the number of the answering party to the system in the call CONNECT message. If enabled here, the number will be shown in the iPECS Phone LCD.	OFF ON	ON
CLIR Service	CLIR (Calling Line Identification Restriction), a carrier service, removes the calling party ID sent from the ISDN to the called party with a RESTRICT instruction in the SETUP message. If enabled here, the system will send the RESTRICT instruction to the PSTN when an outgoing ISDN call is placed.	OFF ON	OFF
COLR Service	COLR (Connected Line Id Restriction), a carrier service, removes connected party ID sent from the ISDN to the calling party with a RESTRICT instruction in the CONNECT message. If enabled here, the system will send the restricted instruction to the PSTN when the station answers an ISDN call.	OFF ON	OFF
CLI Name Display	When the Incoming CLI data from the carrier matches a number in Speed Dial, or Outgoing dial data from a user matches a number in Speed Dial, the system can display the name associated with the Speed Dial bin is set to ON.	OFF ON	ON
CLI/IP Message Wait	A log of missed calls with caller identification can be maintained, permitting the user to call back the identified party. Up to 1000 entries are maintained in the log system-wide.	OFF ON	OFF
FASTCLI For Transfer Call	If this option is set to ON, when a transferred call is routed to an SLT or DECT phone, and the CLI for the CO/IP call is sent to the SLT or DECT phone instead of transferring the station number.	OFF ON	OFF
E.164 Call Log CLI (for SIP Extension)	WHEN ENABLED, the E.164 format CLI is sent to SIP Extensions for an incoming CO/IP call.	OFF ON	OFF

Table 4.4.2.4-1 CLI Attributes

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Station CLI 1	To use this option, 'CLIR Service' or 'COLR Service' is set to OFF. The CLI number is entered up to 12 digits. As a suffix, the entered CLI number is added to the number set in CLIP/COLP Table (201). Also check 'COLP Table Index', 'CLIP Table Index', and 'Station CLI Type' in CID/CPN Attributes (151). The entered CLI number sends the called party via ISDN call setup or connected message. Default: eMG80/100:100, eMG800:1000, UCP:1000	Max. 12 digits	Refer to description
Station CLI 2 Station CLI 3 Station CLI 4 Station CLI 5	To use this option, 'CLIR Service' or 'COLR Service' is set to OFF. The CLI number is entered up to 16 digits. As a suffix, the entered CLI number is added to the number set in CLIP/COLP Table (201). Also check 'COLP Table Index', 'CLIP Table Index', and 'Station CLI Type(2~5)' in CID/CPN Attributes (151).The entered CLI number sends the called party via ISDN call setup or connected message.	Max. 16 characters	Related with PGM 143 – Station CLI Type
CLI / Redirect Display	When an incoming call is redirected to the carrier's network, the SETUP message will contain an original and redirected CLI. This selection determines if the iPECS IP and LDP Phone will display the original or redirected number.	Original CLI/ Redirect CLI	Original CLI
Station or Attendant	When the system sends a station number with CLIP or COLP, the number can be either the Attendant number or the number of the station.	Station Attendant	Station
CPN Type	**NOT SEND:** CPN is not sent to the S0 interface. **STATION NUMBER:** Station number is sent as CPN to S0 interface. **BYPASS FROM NET:** Incoming CPN is sent as CPN to the S0 interface.	Refer to description	Not send
CLI Name Preference	**NET:** If the CLI name is provided from the network, then it is displayed. If CLI name is not provided from the network, the matched Speed name is displayed. **SPD:** If CLI is matched with Speed bin and has a name, the matched Speed name is displayed. If CLI is not matched or matched Speed name is not configured, CLI name from the network is displayed.	NET, SPD	NET
Display Restricted Caller Number	When {Display Restricted Caller Number} in CLI Attributes(113) of a station is ON, although the caller number is restricted in ISDN message, the ringing station displays the caller number.	OFF ON	OFF

Table 4.4.2.4-1 CLI Attributes

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Display Full CLI	The system provides CLI information by displaying it on LCD. If this option is ON, the full CLI information is displayed on the second line of LCD. The CLI information is partially displayed from the left to the center on the second line if the option is OFF. It means the CLI information is limited so that the full CLI can't be displayed.	OFF ON	ON
Add 1st CO group access code in call log	To use this option, 'Digit Conv. Table (PGM 111)' must be checked in advance and then set whether to add 1st CO Group access code in call log for Call back by setting ON or OFF.	OFF ON	OFF
Emergency CLI 1	Emergency CLI is used for CLI if the dialed number is matched with Emergency Code Table(PGM226).	Max 16 Characters	
Emergency CLI 2			
Emergency CLI 3			
Emergency CLI 4			
Emergency CLI 5			
Company Name 1	It is used to send name to ISDN(PRI/BRI) eMG80/100: 1~16, eMG800: 1~100,UCP: 1~1000, (0: Station name)	Refer to description	
Company Name 2			0
Company Name 3			0
Company Name 4			0
Company Name 5			0
Call Log Attributes			
Call Log usage	Most Phones show the call log. But the way to display the call log is different between System Serve and Phone self. This option is to select which way to display the call log. The available phone type is LIP-8012D/8024D/8040L and LIP-9008/9010/9020/9030/9040/1010i/1020i/1030i/1040i/1050i. **Condition** • For color graphic phones (8050V/9070/9071,1080i), UCS client, and DECT phone: only 'Phone self' automatically regardless of this option. • For other phone types except for the above LIP and LDP phones: only 'System serve' automatically regardless of this option. **System serve, Phone self**	Refer to description	System serve
Call Log menu	This option selects the call log menu for a call log type. The call log types have 4: Lost call, All call, Received call, and Dialed call. • **ALL:** display all calls. • **Type:** display the call log 4 types and then select the desired type.	All, Type	All

Table 4.4.2.4-1 CLI Attributes

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Answered By Group Member	One of the members can answer the call to the same ring group, such as call coverage, linked pair, etc. At that time, the call log can set whether to leave the received call list or not by selecting Answered or Do-Not-Log. But the call log is left in the received call list on the phone even though setting Do-Not-Log. • **Answered**: the call log is left in the received call list on the same ring group phone. • **Do-Not-Log**: the call log is left in the received call list only on the phone except for other member phones.	Refer to description	Answered
Coverage Call Log	This is an option about the log of coverage call of a slave station. When gets a coverage ring for a master station, slave station leaves or does not leave log according to conditions in option. **All, Except Answered By Other, Only Answered By Me, None**	Refer to description	All
Internal Call Log	This option enables the call log to display 'Both (Incoming and Outgoing)' or 'Incoming only' or 'None.' • **Both:** Incoming and outgoing call • **Incoming only**: Show Incoming call only. • **None**: Don't leave the internal call as a call log.	Refer to description	Both
Clear Missed Call Log	When the missed call is left in a station, the LOG soft button is indicated as LOG(M), and missed call icon is displayed. When this option is ON, and missed call is left, if a user enters call log list by pressing the LOG button and go out from the call log list, then missed call indication(LOG(M) & missed call icon) is deleted. When this option is OFF, and missed call is left, if a user enters call log list by pressing the LOG button and go out from the call log list, then missed call indication(LOG(M) & missed call icon) is not deleted. In this case, missed call log indication is deleted after checking all missed calls.	OFF ON	OFF
Page Call Log	This is an option about log for a receiving page call. • **None:** do not leave log for receiving page • **All:** go log for all kinds of receiving page • **Emergency(Including Urgency Level 0) Only:** leave log only for receiving an emergency page	Refer to description	None
Busy/DND/VM Log	If it is On, the system call log is left when the call is delivered to busy/DND/unconditional forward to the VM destination.	OFF ON	OFF

4.4.2.5 Flexible Buttons - PGM 115/129

Selecting Flex Buttons will display the Flex buttons data input page. Enter a valid Station range and click**[Load]** to enter Flex button data. For convenience, the copy, paste, and drag are available to enter or modify data. Please click the **[Save]** button after entering or modifying data to apply.

You can set the initial system default value if there is no assignment in Flexible Button Default Table (239) and Preset Flexible Button Default (240) by clicking **[Default Value]**. Otherwise, you can set the flexible button value according to Flexible Button Default Table (239) and Preset Flexible Button Default (240) by clicking **[Default Value]**.

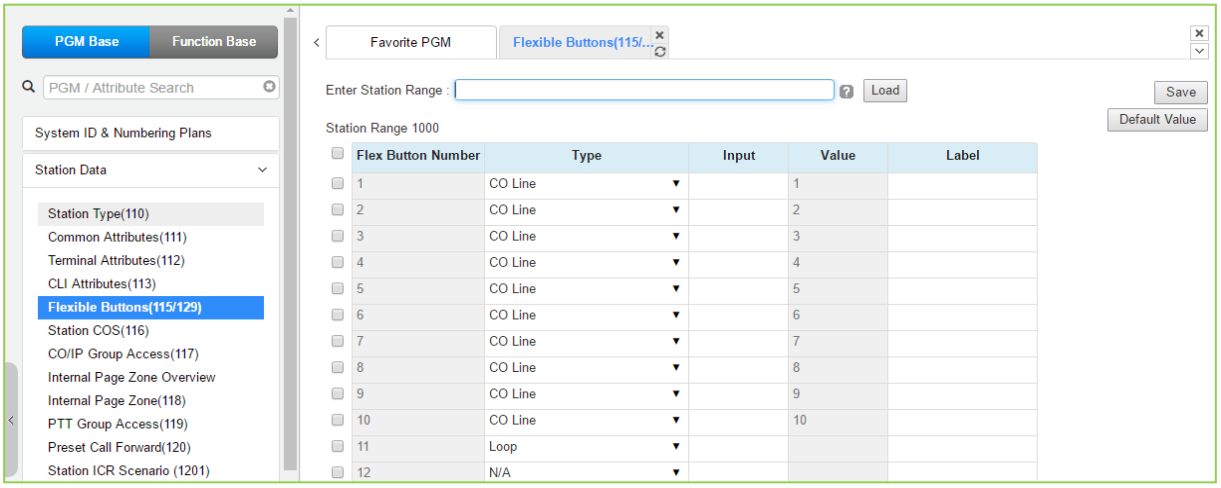


Figure 4.4.2.5-1 Flex Buttons Assignment

Each Flex button for each iPECS IP and LDP Phone and DSS Console can be assigned a function (TYPE) as below. After selecting the Type for a button, enter the value, if required. The types are available from the drop-down menu are shown in the table below. In addition, for the LIP Phone models 8040, 8050, 9070, 9071, and the LSS Console models, a label can be assigned that is used as the designation for the button in the LCD of the phone.

Table 4.4.2.5-1 FLEX BUTTON TYPE & VALUE

TYPE	REMARK
N/A	Empty (unassigned) may be defined by the user.
CO Line	Assign a button to access a defined CO/IP line.
CO Group	Assign a button to access a free line in the CO/IP Group.
Loop	Assign a button to access a loop line.
Station Number	Assign a button as DSS/BLF for the assigned station number.
Programming (Numbering Plan)	Assign a button to dial a code from the Flexible Numbering Plan. See Appendix section.
Programming (PGM)	Assign a button to perform a User Program function from the Fixed Numbering Plan, Appendix section.
Station Speed	Station Speed Dial bin.
System Speed	System Speed Dial bin.
Net Station	Refer to Network Numbering Plan Table - PGM 324.
U-Loop	U-Loop button for call wait of internal & external call
Dial Digit	The user can assign the desired number on the Flexible button by selecting 'Dial Digit' in the field of Type. The user can make a call by pressing the assigned flexible button.

4.4.2.6 Station COS - PGM 116

Selecting Station COS will display the Station COS data input page. Enter a valid station range and click **[Load]** to enter the Station COS data. Use the checkmark to indicate which attributes to modify; checked attributes are stored by clicking the **[Save]** button.

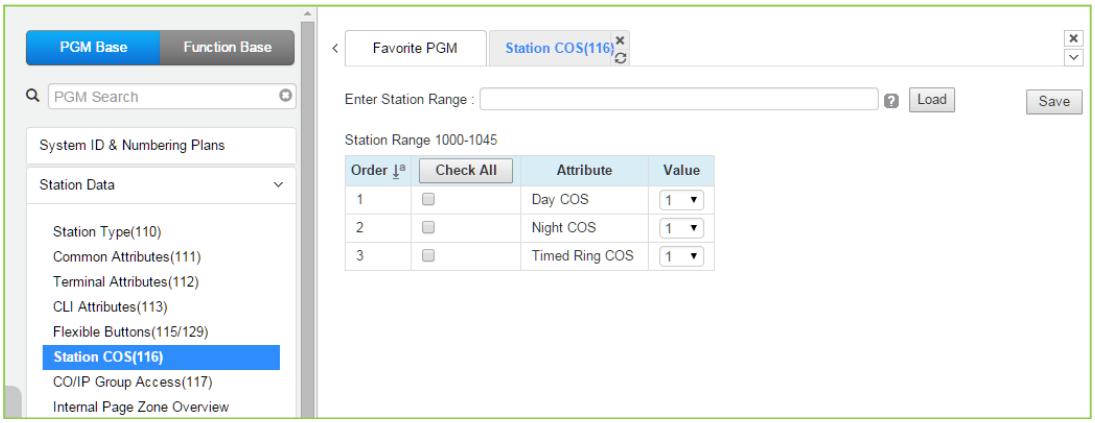


Figure 4.4.2.6-1 Station COS

In the case of PGM 116 is in a condition of limited service mode due to a License issue, the default value is 7 for all COS types. All stations are assigned a Class-of-Service (COS), which determines the ability of the user to dial certain types of calls, refer to Table 4.4.2.6-1. Separate COS assignments are made for Day, Timed, and Night Mode operations. As a default, all stations are assigned with a Station COS of 1 for all modes, with no restrictions.

The station COS interacts with the CO Line COS to establish overall dialing or Toll restrictions. This interaction and the resulting restrictions are given in Table 'Station/CO COS'.Long-distance calls are determined by the first dialed digit ("0" or "1") and the number of digits dialed. If the first digit dialed is an LD code, default "0" or "1", or, if the number of digits dialed exceeds the assigned LD digit counter in 'System Data SMDR Attributes section,' the call is considered a Long Distance call and appropriate restrictions applied.

Table 4.4.2.6-1 STATION COS

STATION	RESTRICTIONS
1	No restrictions are placed on dialing from the station.
2	The assignments in Exception Table A are monitored for allowing and deny numbers.
3	The assignments in Exception Table B are monitored for allowing and deny numbers.
4	The assignments in both Exception Tables A & B are monitored for allowing and deny numbers.
5	The leading digit dialed cannot be a Long Distance code, default "0" or "1", and further denied/allowed based on Exception Table C.
6	The leading digits dialed cannot be a Long Distance code & digit count can not exceed the LD digit counter, default 7 digits, and further denied/allowed based on Exception Table C.
7	Intercom and paging calls are allowed. No outgoing dialing except for emergency calls is allowed on CO Lines.
8	The assignments in the Exception Table D are monitored for allowing and deny numbers.
9	The assignments in the Exception Table E are monitored for allowing and deny Numbers
10	The assignments in the Exception Table D & E are monitored for allowing and deny numbers.
11	The Exception Table A & B and D & E assignments are monitored for allowing and denying numbers.

Table 4.4.2.6-1 STATION COS

STATION	RESTRICTIONS

Table 4.4.2.6-2 STATION/CO COS

	CO COS 1	CO COS 2	CO COS 3	CO COS 4	CO COS 5
STA COS 1	No Restriction	No Restriction	No Restriction	Only Local Call (LD code/counter) and Table C	No Restriction
STA COS 2	Exception Table A governs the dialing	Exception Table A governs the dialing	No Restriction	Only Local Call (LD code/counter) and Table C	No Restriction
STA COS 3	Exception Table B governs the dialing	No Restriction	Exception Table B governs the dialing	Only Local Call (LD code/counter) and Table C	No Restriction
STA COS 4	Exception Table A & B governs the dialing	Exception Table A governs the dialing	Exception Table B governs the dialing	Only Local Call (LD code/counter) and Table C	No Restriction
STA COS 5	Local Call only (LD Code, “1”or“0”) and Table C	Local Call only (LD Code, “1” or “0”) and Table C	Local Call only (LD Code, “1”or“0”) and Table C	Only Local Call (LD code/counter) and Table C	No Restriction
STA COS 6	Only Local Call (LD code/counter) and Table C	Only Local Call (LD code/counter) and Table C	Only Local Call (LD code/counter) and Table C	Only Local Call (LD code/counter) and Table C	No Restriction
STA COS 7	In-house dialing only	In-house dialing only	In-house dialing only	In-house dialing only	In-house dialing only
STA COS 8	Exception Table D governs the dialing	Exception Table D governs the dialing	No Restriction	Only Local Call (LD code/counter) and Table C	No Restriction
STA COS 9	Exception Table D governs the dialing	Exception Table D governs the dialing	No Restriction	Only Local Call (LD code/counter) and Table C	No Restriction
STA COS 10	Exception Table D & E governs the dialing	Exception Table D & E governs the dialing	No Restriction	Only Local Call (LD code/counter) and Table C	No Restriction
STA COS 11	Exception Table A & B and D & E governs the dialing	Exception Table A & B and D & E governs the dialing	No Restriction	Only Local Call (LD code/counter) and Table C	No Restriction

4.4.2.7 CO/IP Group Access - PGM 117

Selecting CO/IP Group Access will display the CO/IP Group Access data input page. Enter a valid station range and click **[Load]** to enter CO/IP Group Access data. Check the appropriate boxes to allow or delete access to each CO/IP Group. Click the **[Save]** button after changing Value to apply.

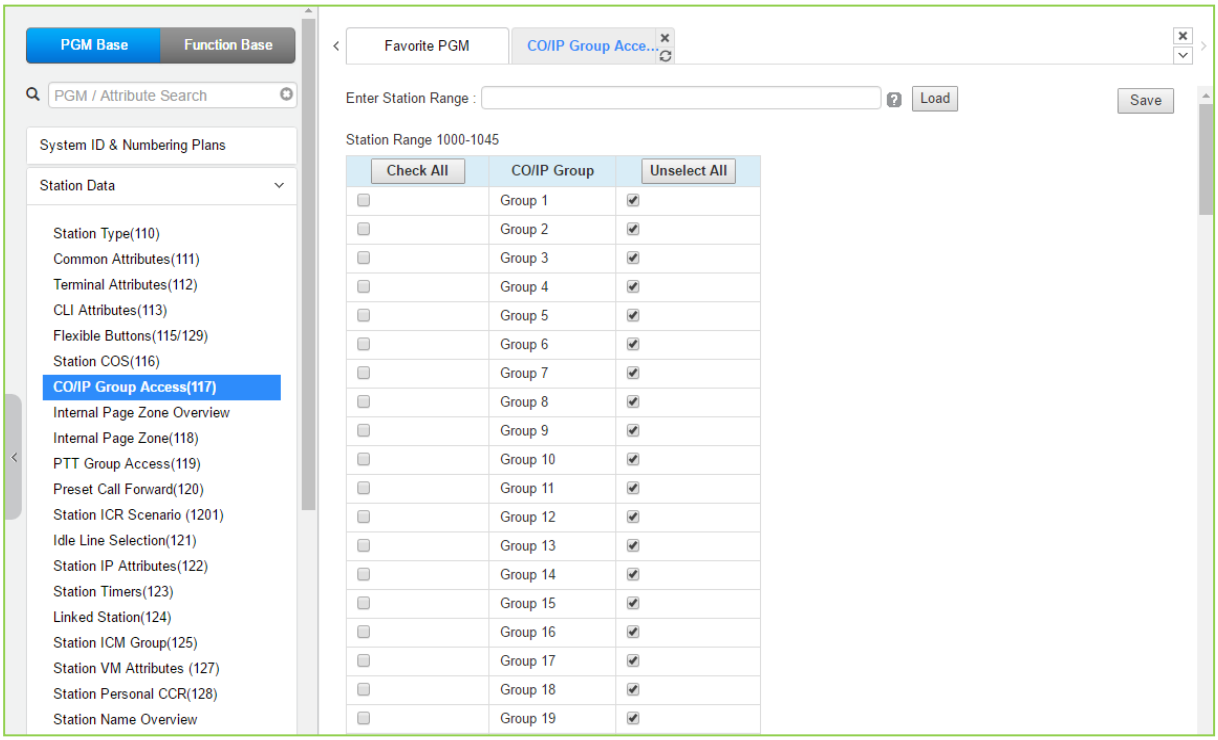


Figure 4.4.2.7-1 CO/IP Group Access

Stations can be allowed or denied access to CO Lines and IP Channels by group (eMG80/100: 20 & eMG800/UCP: 200). As a default, all stations are allowed access to all groups except Private Lines (group 00) and unused CO Lines. The CO Line is assigned as a Private Line by default.

4.4.2.8 Internal Page Zone Access - PGM 118

Selecting Internal Page Zone will display the Internal Page Zone data input page. Enter a valid station range and click **[Load]** to enter the Internal Page Zone Access data. Check the appropriate boxes to allow or delete access to each Internal Page Zone. Click the **[Save]** button after changing Value to apply.

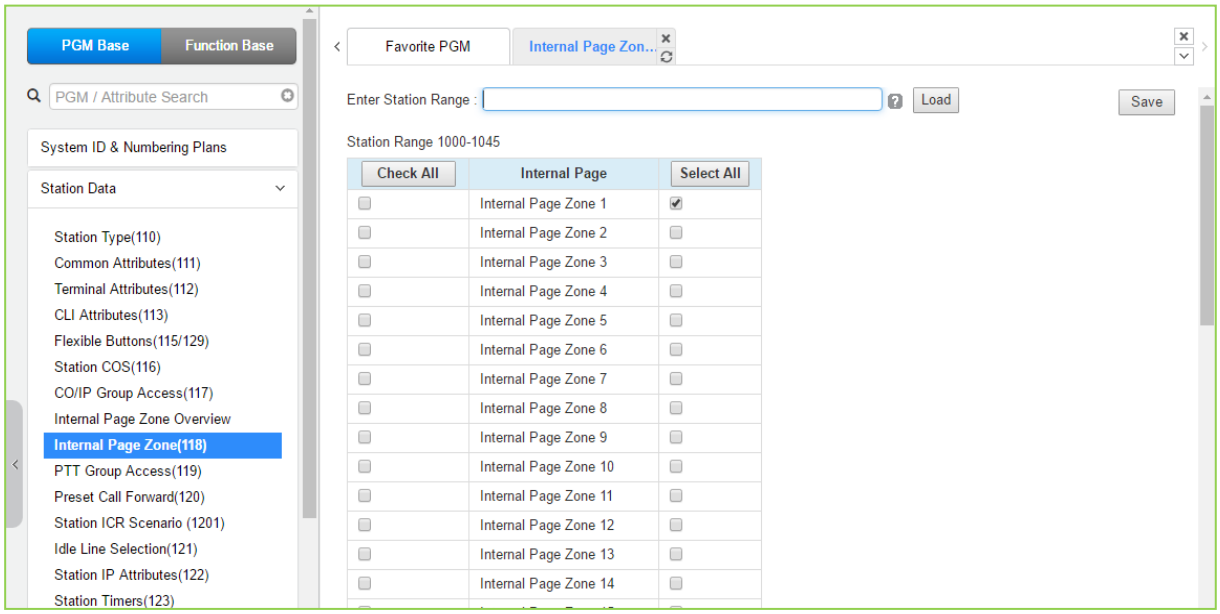


Figure 4.4.2.8-1 Internal Page Zone

Each iPECS IP and LDP Phone is assigned to receive announcements from each Internal Page Zone. A station can be assigned to any, all, or no-zones. Note a remote station or a station not assigned to any Internal Zone will not receive any page announcements, including Internal All Call. As a default, all stations except remote stations are assigned to zone 1.

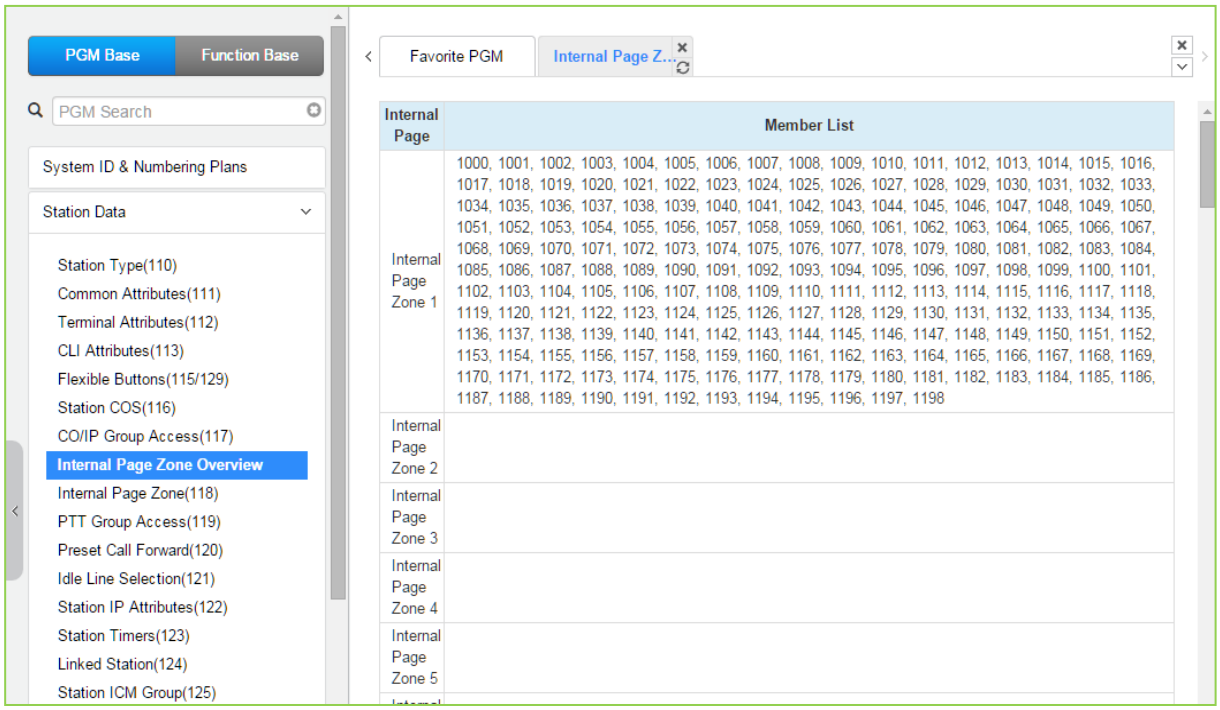


Figure 4.4.2.8-2 Internal Page Zone overview

4.4.2.9 PTT Group Access - PGM 119

Selecting PTT Group Access will display the PTT Group Access data input page. Enter a valid Station range and click **[Load]** to enter the PTT Group Access data. Check the appropriate boxes to allow or delete access to each PTT Group. Click the **[Save]** button after changing Value to apply.

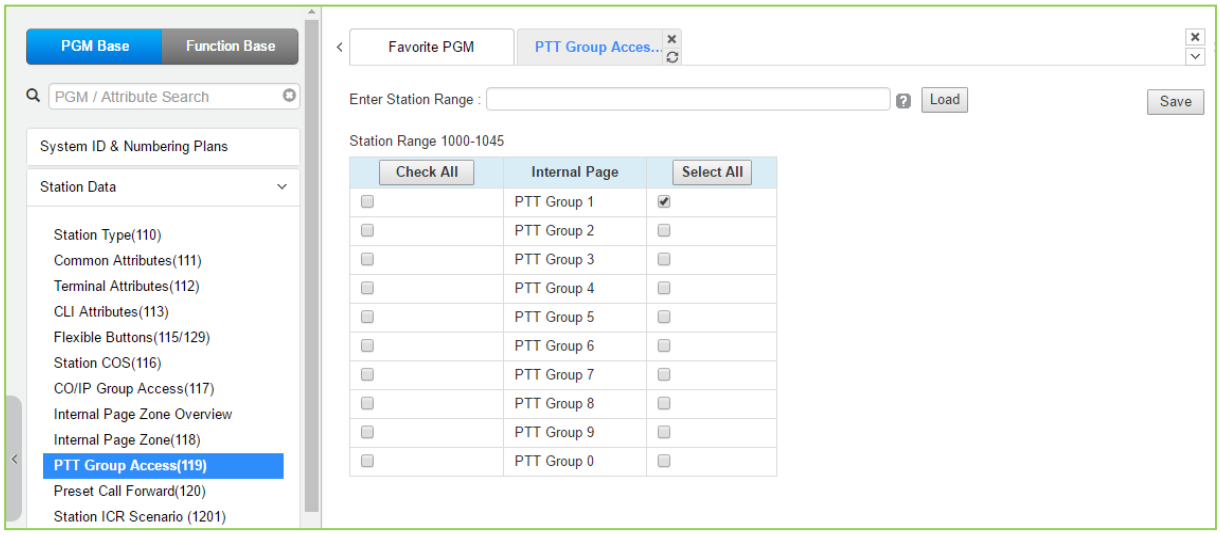


Figure 4.4.2.9-1 PTT Group Access

Each iPECS IP or LDP Phone is assigned to receive PTT announcements from any combination of the ten (10) PTT groups. Note a station not assigned to any group will not receive PTT page announcements, including the Internal All PTT group page. As a default, all stations except remote stations are assigned to group 1.

4.4.2.10 Preset Call Forward - PGM 120

Selecting Preset Call Forward will display the Preset Call Forward data input page. Enter a valid station range and click **[Load]** to enter the Station Preset Call Forward data. Use the checkmark to indicate which attributes to modify; checked attributes are stored by clicking the **[Save]** button.

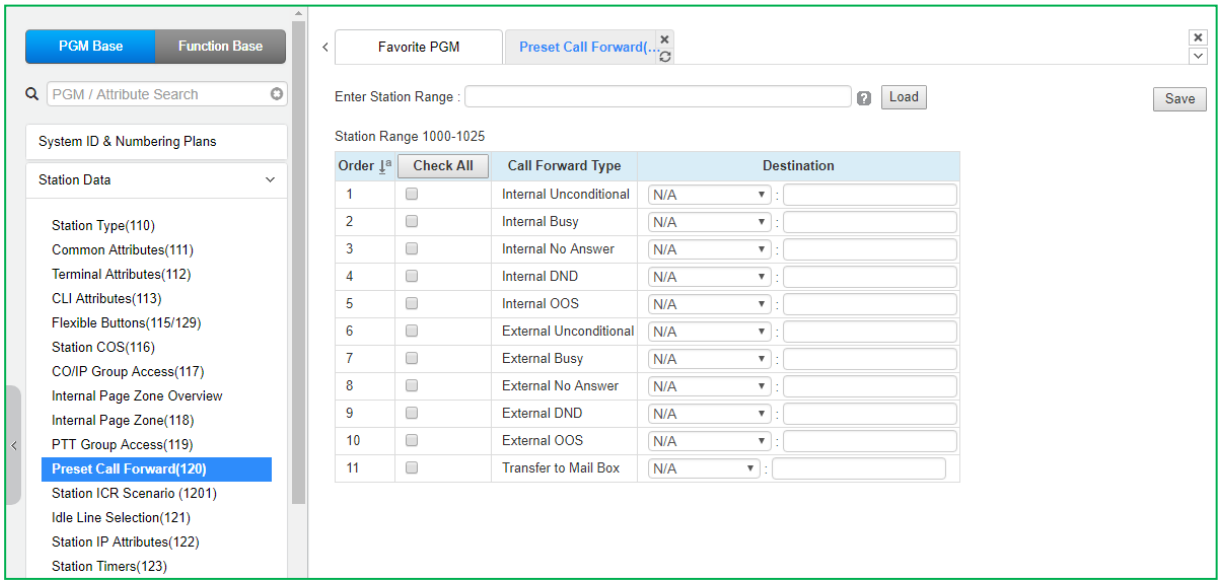


Figure 4.4.2.10-1 Preset Call Forward

Stations can be programmed so that incoming CO/IP and Intercom call forward to a preset station or station group. This allows an external or internal call to initially ring at a station and forward to a pre-determined destination.

Preset Forward can be separately assigned Internal Unconditional, Internal Busy, Internal No Answer, Internal DND, Internal OOS, External Unconditional, External Busy, External No Answer, External DND, External OOS preset forwarding to any station, Station group, system speed dial bin (off-net) or Station ICR.

As a default, no Preset Call Forward is assigned. For “Transfer Mail-Box,” enter the Station Group number of the Voice Mail group (external VM, VSF, or Feature Server Voice Mail group). This will permit other users to transfer calls directly to the desired user‘s Voice Mailbox.

4.4.2.11 Station ICR Scenario - PGM 1201

Selecting Station ICR Scenario displays the input entry page.

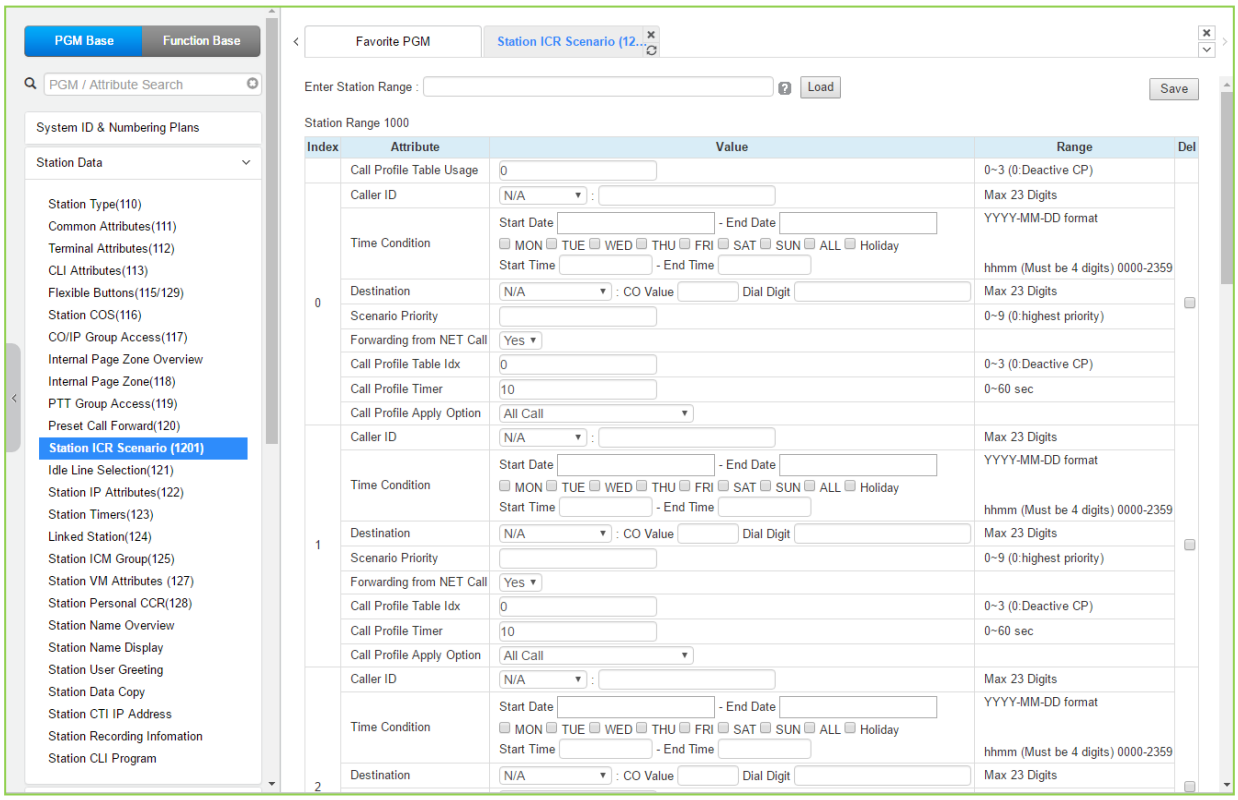


Figure 4.4.2.11-1 Station ICR Scenario

Station ICR is an extension of call forward where the user enters scenarios to define the call forward feature. Each station has ten (10) routing scenarios that define conditions for routing a user's incoming calls.

Each scenario may define the time of day, day of the week, date, caller ID, and destination for incoming calls. In addition, the scenarios may be prioritized; calls are routed to the destination with the highest priority-matching scenario.

Call Profile Table Usage

This option selects Call profile table usage from 0 to 3. O means that Station User doesn't use Call profile usage. Station user can set the ICR Scenario up to 10 (0 to 9) according to the environment by setting many options, including 'Call Profile Table Idx (0-3)', 'Call Profile Timer,' and 'Call Profile Apply option.'

Anytime Station User can change the call profile table usage by changing the value so that the Station user can apply the related station ICR scenario index.

Call Profile Timer

Station users can set the time for applying the call profile. If the station user can set 0 as the timer, ICR operates immediately.

Call Profile Apply Option

This option selects the call type for applying ICR. If this option is All Call, ICR applies to all calls. If this option is Direct call (Except CCR, DISA), ICR applies only to DID call.

4.4.2.12 Idle Line Selection - PGM 121

The selecting Idle Line Selection will display the Idle Line Selection data input page. Enter a valid Station range and click **[Load]** to enter the Idle Line Selection data. Check the appropriate radial button and enter the value for the Idle Line Selection. Click the **[Save]** button after changing Value to apply.

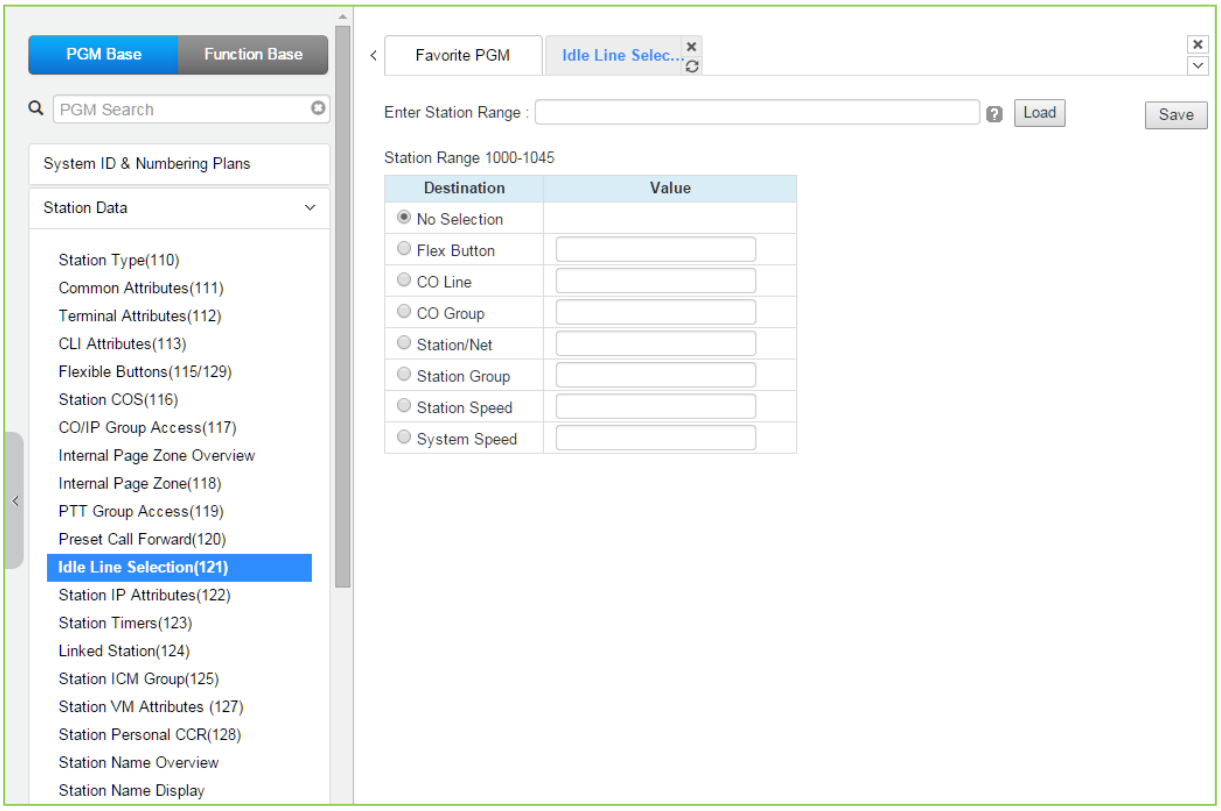


Figure 4.4.2.12-1 Idle Line Selection

When a station goes to an off-hook condition (lifts handset or presses **[SPEAKER]** button), the system normally provides an intercom dial tone.

In place of dial tone, the station can be programmed to access a CO Line, CO/IP Group, or call a Station or Station Group as described in Table 4.4.2.12-1 when the station goes off-hook.

The Idle Line Selection (Prime-Line) can be either immediate or delayed after going off-hook. The immediate/delay selection is based on the Hot/Warm assignment in 'Common Attributes - Prime-Line.'

Table 4.4.2.12-1 IDLE LINE SELECTION TYPE & VALUE

TYPE	DESCRIPTION
No Selection	Returns Intercom dial tone.
Flex Button	The flex button activates the Flex button as if pressed.
CO Line	CO/IP path seizes CO line.
CO/IP Group	CO/IP Group seizes CO line from the CO/IP Group.
Station/Net	The station calls the assigned station.
Station group	The Station group calls the assigned station group.
Station speed	Station speed calls the assigned station speed.
System speed	System speed calls the assigned system speed.

4.4.2.13 Station IP Attributes - PGM 122

Selecting Station IP Attributes will display the Station IP Attributes data input page.

Enter a valid Station range and click **[Load]** to enter the Station IP Attributes data. Use the checkmark to indicate which attributes to modify; checked attributes are stored by clicking the **[Save]** button.

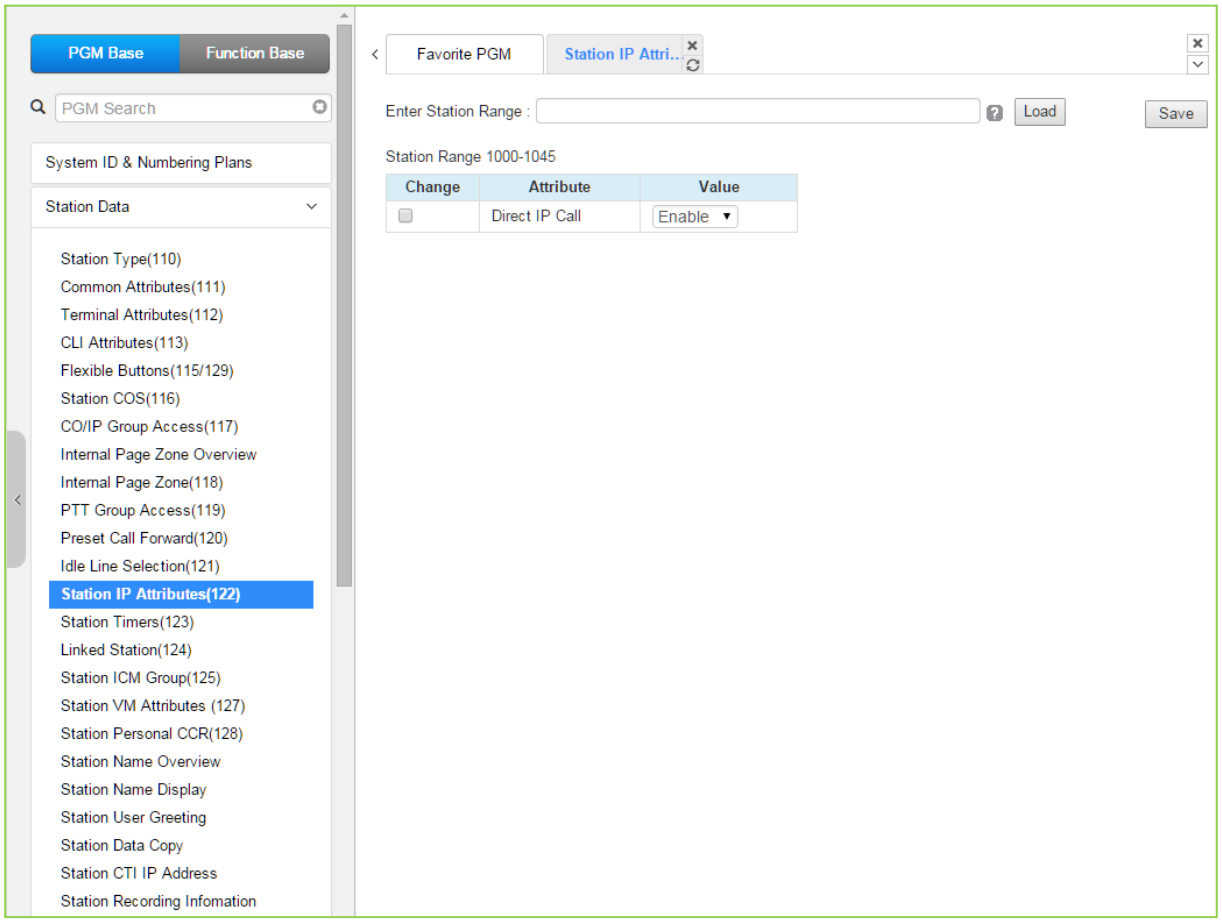


Figure 4.4.2.13-1 Station IP Attributes

Stations are allowed access to the system's VoIP resources based on the Station IP Attributes.

4.4.2.14 Station Timers - PGM 123

Selecting Station Timers will display the Station Timers input page.

Enter a valid Station range and click **[Load]** to enter the Station Timers data. Use the checkmark to indicate which attributes to modify; checked attributes are stored by clicking the **[Save]** button.

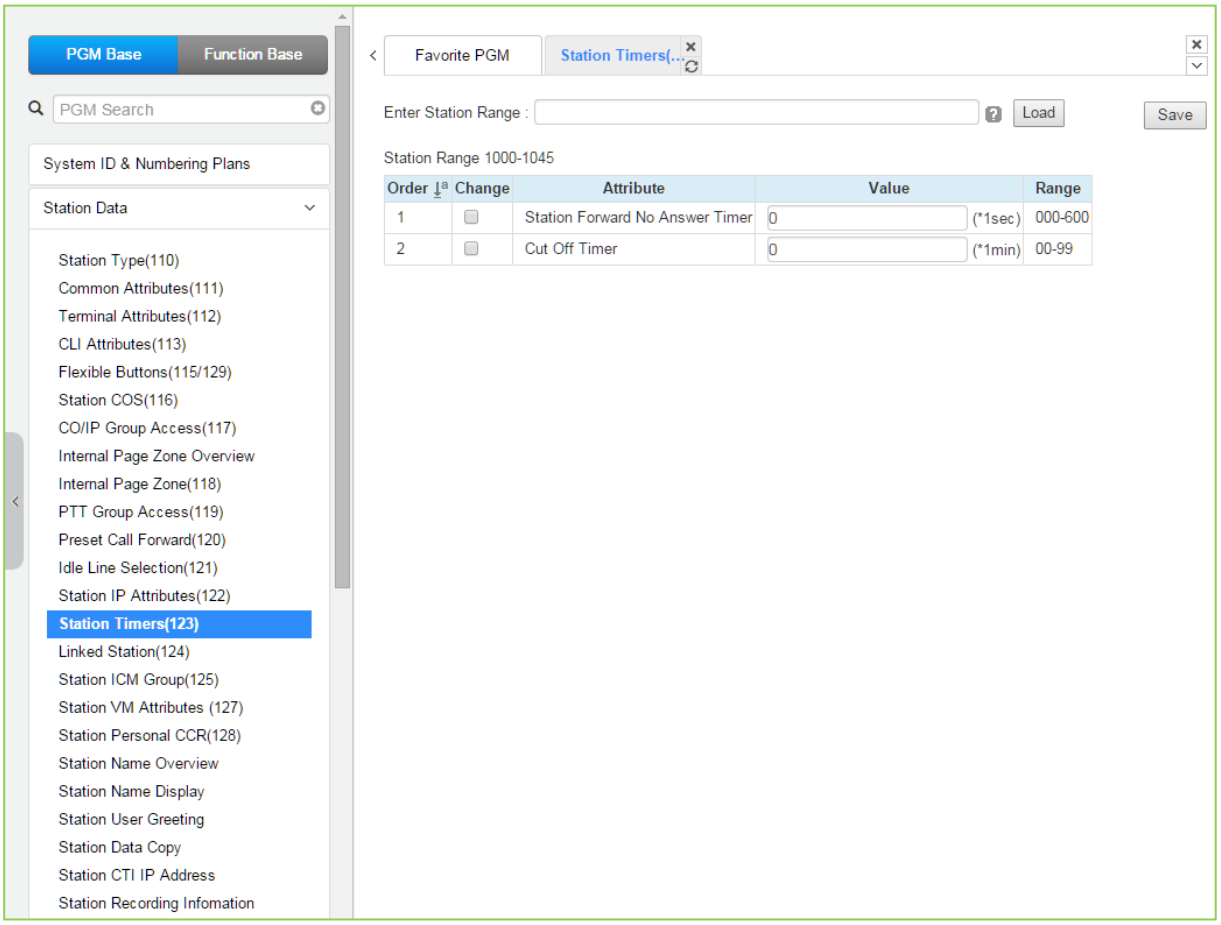


Figure 4.4.2.14-1 Station Timers

Certain timers can be assigned on a station basis. Available timers, descriptions, and valid inputs are given in the below table.

Table 4.4.2.14-1 STATION TIMERS (PGM 123)

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Station Forward No Answer Timer	This timer sets the duration that the station will ring before Ring-No-Answer Forward. This setting affects manual and 'Preset Call Forward' and overrides 'Call forward No Answer timer in System timer of System data.'	000-600 (seconds)	000
Cut Off Timer	Allowed length of CO/IP calls when a station is assigned 'Call Time restriction in Common Attributes of Station data.'	00-99 (minutes)	00

4.4.2.15 Linked Station - PGM 124

Selecting Linked Station will display the Linked Station input page. Enter a valid Station range and click **[Load]** to enter the Linked Station data. Click the **[Save]** button after changing Value to apply.

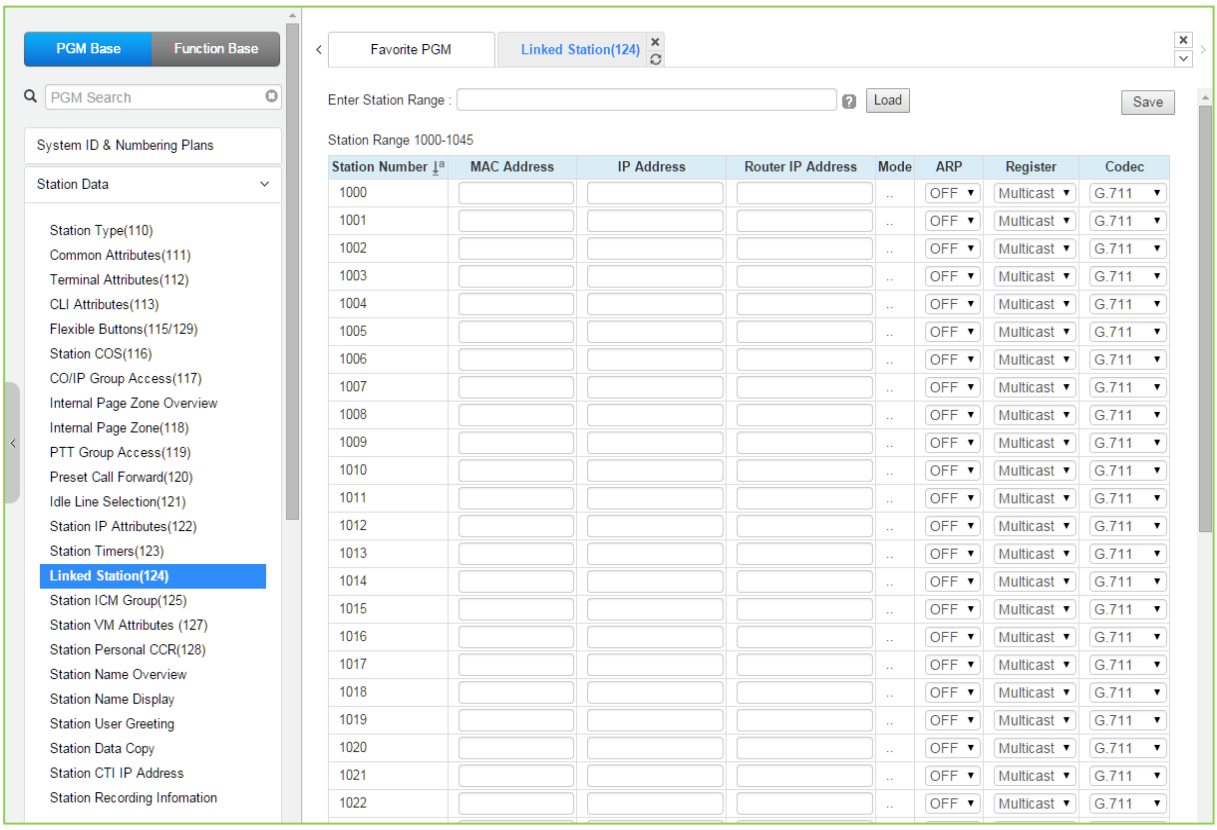


Figure 4.4.2.15-1 Linked Station Pair

For UCS Client, it is recommended that PGM 443 be employed for an unregistered (MAC Linked pair) station. When unregistered station linking is used, the linked station does not reduce the system‘s capacity.

However, in this case, the linked station must be an iPECS IP Phone. Unregistered linking is allowed only to an iPECS IP Phone. Once UCS Client is linked, it will display on this Web page as well as in PGM 103 and 443.

If the station is assigned to Master or Slave by linked station, the bracket ‘[M] or [S]’ will be displayed by the station number in PGM 101, 103, 105, 124 of the Web page.

To link registered stations, the Personal Group feature is used and configured in PGM 260 and 261.

Table 4.4.2.15-1 LINKED STATION TABLE

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
MAC Address	Set MAC address of the linked un-registered station, required data. Note the secondary station must not be registered in the system prior to linking. If needed, delete the device from the system prior to linking.		
IP Address	The linked station IP Address	IPv4 address	
Router IP Address	Set the Router IP address for a linked station.	IPv4 address	

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Mode	Display operating mode of the station, remote or local, and NAT or NAPT. • **Remote:** R/NAPT, R/NAT, R/NAP, R • **Local remote:** LO/NAPT, LO/NAT, LO/NAP, LO Local, L/NAPT, L/NAT, L/NAP, L	Refer to description	L (Local)
ARP	The system will employ layer 2 switching over the LAN to communicate with the linked station if set OFF. If set ON, the system will employ ARP (Address Resolution Protocol) to determine the device's IP address, if required, and communicate using IP.	OFF ON	OFF
Register	Normally, iPECS IP devices register using multi-cast packets. When separated from the system, that is when the device is remote, unicast is used.	Multicast Unicast	Multicast
Codec Type	A specific Codec type can be configured for the station. The system uses the codec defined for the system	G.711 G.723.1 G.729	G.711

4.4.2.16 Station ICM Group - PGM 125

Selecting Station ICM Tenancy Group displays the Station ICM Tenancy Group input page. Select ICM Tenancy Group and click **[Load]**. The system will display the ICM Tenancy Group Characteristics. Enter the Station number of the group Attendant and check the appropriate box to allow calling to the group. Click the **[Save]** button after changing Value to apply.

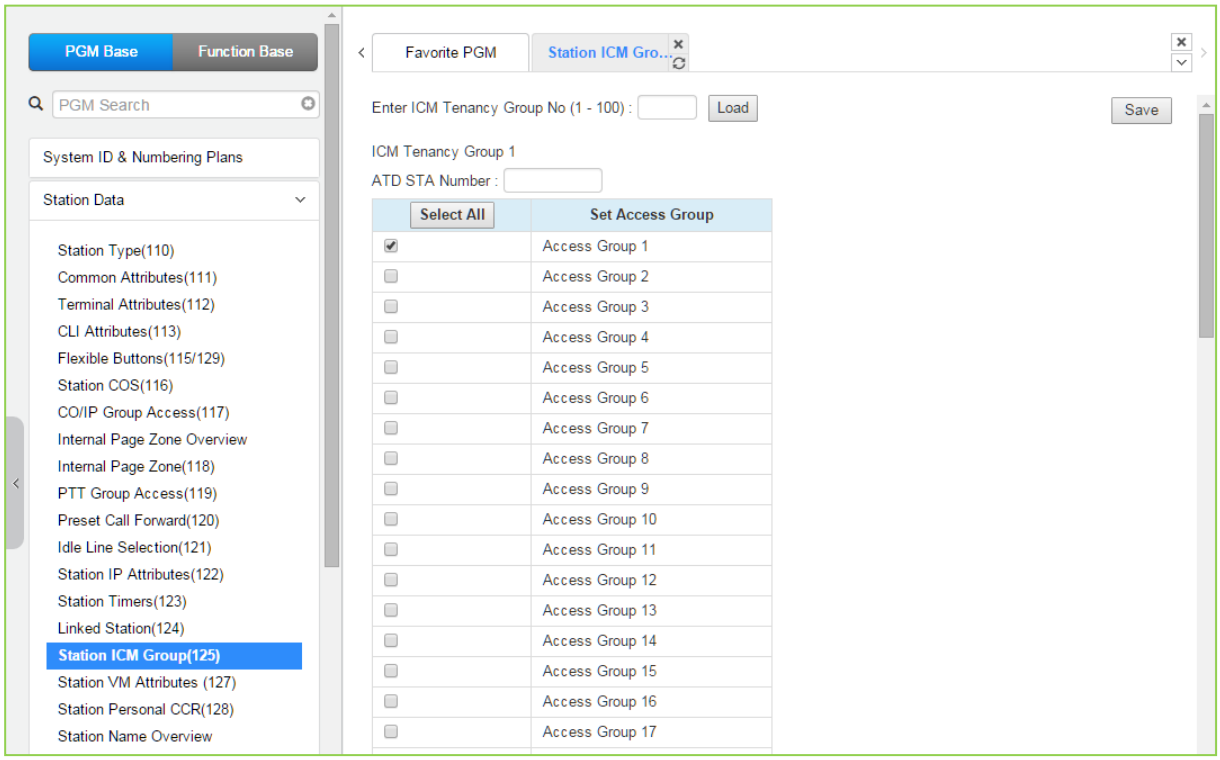


Figure 4.4.2.16-1 Station ICM Group

Stations can be assigned to an ICM group under the ‘Common Attributes section. It can be defined up to 15 Tenant groups for eMG80/100(up to 32 for eMG800 and up to 100 for UCP). Each group is configured to allow or deny placing intercom calls, including transfers, to stations in other groups, and an Attendant station can be defined for each group. The Attendant will receive “dial 0” calls and controls Day/Night mode for the group.

Table 4.4.2.16-1 STATION ICM GROUP ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Tenancy ATD	Attendant station for the ICM Tenant group ATD receives dial ‘0’ calls and controls Day/Night Service.	Station No.	
Group Access	ICM tenancy groups allowed access by stations of the selected group.	eMG80/100:1~15 eMG800:1~32 UCP:1~100	1

4.4.2.17 Station Voice Mail Attributes – PGM 127

Selecting VM Attributes displays the Station Voice Mail Attributes input page. Enter a valid Station range and click **[Load]** to enter the Station Voice Mail Attributes data. Use the checkmark to indicate which attributes to modify; checked attributes are stored by clicking the **[Save]** button.

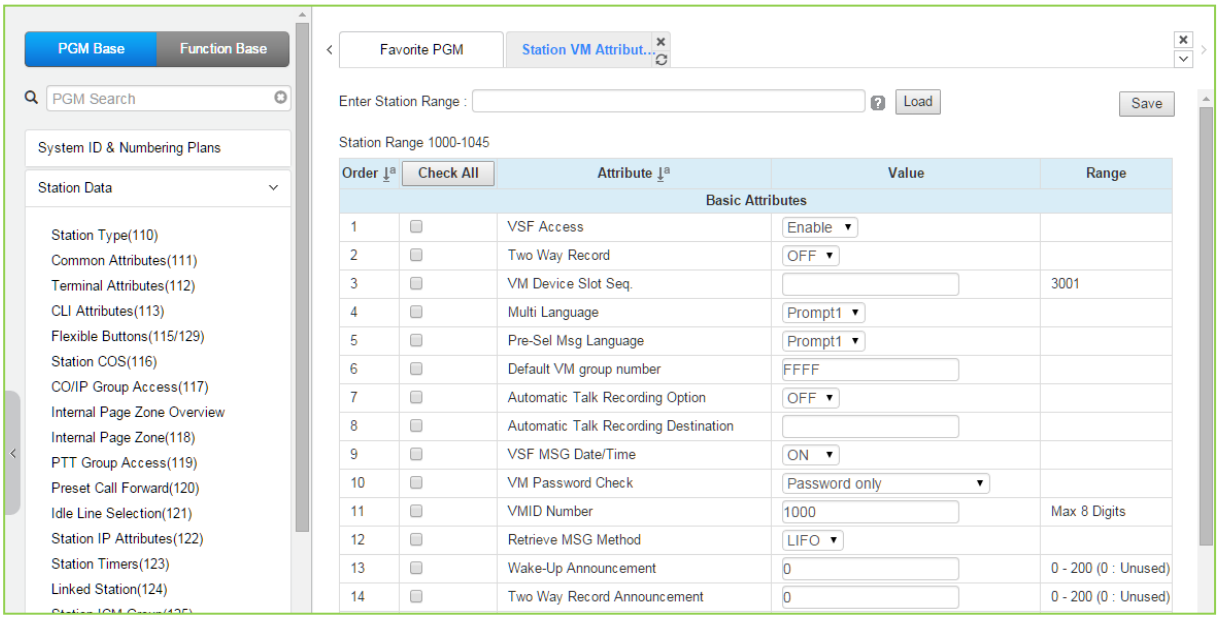


Figure 4.4.2.17-1 Station VM Attributes

The Station VM Attributes are divided into three sub-sections. The Basic Attributes assign general characteristics of the Station's Voice Mail and announcements. Enhanced Attributes assign characteristics including VM COS, notification, cascading, and Company Directory Names. The E-Mail Notification section defines various SMTP server data such as the Station and System E-mail account data.

Table 4.4.2.17-1 STATION VM ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Basic Attributes			
VSF Access	The station must be permitted VSF access to access the built-in Voice Mailbox.	Disable Enable	Enable
Two way Record	When allowed, the station can activate the Two-way record feature to record a conversation.	OFF ON	OFF
VM Device Slot Seq.	The sequence number defines the VMIU, or VMIB where messages for the station are stored	Seq. No.	
Multi-Language	The selected language is employed for prompts played to the user when accessing the VSF.	Prompt1~6	Prompt 2
Pre-selected Message Language	The selected language is employed for prompts played to an external CO caller if the called station has activated the Pre-selected Message.	Prompt1~6	Prompt 2
Default VM group number	When the user has no Voice messages and selects the **[Call Back/Msg]** button, the "Default VM group number" is called.		

Table 4.4.2.17-1 STATION VM ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Auto Talk Recording Option	This field enables unconditional recording of all calls placed/received by the station. Recordings, in .wav format, are stored at the UCS Client defined as the Call Recording Station below.	OFF, ALL, CO	OFF
Auto Talk Recording Destination	When Auto Call Recording is defined for a station, the destination for the recording is defined here. The UCS Client Station number or an IPCR or 3rd party SIP recording server.	Station or Group	
VSF MSG Date/Time	When ON, the date/time the message was received is played to the user prior to the message.	OFF ON	ON
VM Password check	When ON, the user must enter their valid Authorization code to access their VSF Voice Mailbox. The password can be defined as none, the Authorization code only, or the normal Station Number and Authorization code. **No password, Password only, Station number and password**	Refer to description	Password only
VMID Number	When using an adjunct VM, the system can translate the Mailbox number from the user's station number to the assigned VMID. The system sends the station number or VMID, if assigned, to the VM (in-band or SMDI) in order to identify the appropriate Voice Mailbox. **Default: eMG80/100:100, eMG800:1000, UCP:1000**	Max. 8 digit	Refer to description
Retrieve MSG Method	Based on this entry, messages stored in the VSF may be retrieved in either a FIFO (first-in-first-out) or LIFO (last-in-first-out) order.	FIFO/ LIFO	LIFO
Wake-Up Announcement	A VSF system announcement can be recorded to play to the station as a Wakeup Announcement.	0-200	0
Two-way record announcement	The two-way record announcement can be recorded to play to the station as Announcement.	0-200	0
Message Wait Notice(MWI, CLI, VM)	When a user has voice mail, the system can provide this as a voice prompt instead of a dial tone according to the option based on station. • **Disable:** The system provides a normal dial tone when a user goes to off-hook status. • **Tone:** The system provides a warning tone instead of a dial tone to indicate when a user goes to off-hook status. • **Prompt:** The system provides message indication as a voice prompt when a user goes to off-hook status. DECT phones do not support this feature.	Disable, Tone, Prompt	Tone
Password Retry Attempts	Password retry count for voice mailbox access	Disable 1~5	Disable
All Clear ACR	If All Clear ACR is ON, it will work as on-demand recording using pressing the two-way record button.	OFF ON	OFF

Table 4.4.2.17-1 STATION VM ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Enhanced Attributes			
VM Message No	The number of Voice Messages in the user's Mailbox		000
VM COS	Each Voice Mailbox is assigned one of five VM Classes of Service (COS) that determine basic characteristics of the Mailbox, such as message retention. The Voice Mail COS attributes are set in PGM 253.	1-5	1
Administrator Mailbox	A Mailbox can be assigned as an Administrator Mailbox permitting broadcast messaging and control of other user mailboxes.	Disable Enable	Disable
Announce Only Mailbox	A mailbox can be configured to hear the greeting so the connected party cannot leave a message, Announce Only. After the greeting, the call is routed based on the Announce Only Option.	Disable Enable	Disable
Announce Only Option	After hearing the Announce Only Mailbox greeting, this option determines if the caller will be disconnected or returned to the previous menu.	Previous Menu/ Hang Up	Previous menu
Company Directory – First Name	This field is the first name of a station for the Company Directory feature.	Max. 12 characters	N/A
Company Directory – Last Name	This field is the last name of a station for the Company Directory feature.	Max. 12 characters	N/A
Message Rewind/Fast-Forward Time	While listening to a message, the user may rewind or Fast forward. This field determines the Rewind and Fast Forward time.	03 - 99	04
VM Notify retry count	If the notification to the user's mobile repeatedly fails, the system will send the call to the Attendant to complete the notification after the retry count.	00 - 99	03
VM Notify dial time	When the mobile notification call is placed, the system will terminate the call, considering the call a failed attempt, if no digits are received from the mobile phone user before the timer expires.	00 - 99	15 sec
VM Forward Option	When a left message is forwarded, this option is applied.	Move / Copy	Move
Cascade Mailbox 1	A left message is copied or moved to the 1'st mailbox destination station.	Station No	N/A
Cascade Mailbox 2	A left message is copied or moved to the 2'nd mailbox destination station.	Station No	N/A
Cascade Mailbox 3	A left message is copied or moved to the 3'rd mailbox destination station.	Station No	N/A
Cascade Mailbox 4	A left message is copied or moved to the 4'th mailbox destination station.	Station No	N/A
Cascade Mailbox 5	A left message is copied or moved to the 5'th mailbox destination station.	Station No	N/A

Table 4.4.2.17-1 STATION VM ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Cascade Method	The Cascade method is determined. **Disable, Copy, Move**	Refer to description	Disable
Cascade Message Type	Cascade Message Type is determined. **Normal Only, Urgent Only, All**	Refer to description	Normal only
Cascade Apply Timer	Cascade Apply Timer is set.	001 ~250 (min)	0
Cascade For Read Message	If this value is set to Enable, the left message can be cascaded to the next destination regardless the message is read or not. If this value is set to Disable, cascading action is stopped when the left message is read.	0: Disable 1: Enable	Enable
E-Mail notification			
[Send Mail] button: click the [Send mail] button to send mail for notification			
E-Mail Notification Enable	If this option is set ON, the system sends Email as soon as getting Voice mail.	OFF ON	OFF
SMTP Server Address (IP or Domain Name)	This field defines the address or URL of the SMTP mail server for the notification. **IP v4 addressor Mail server name**	Refer to description	Max. 64 characters
SMTP Port	This field defines the TCP/IP port the system will employ when communicating with the SMTP E-mail server.	1 - 65535	25
SMTP Security Connection	The system can support basic security policies when communicating with the SMTP E-mail server. Note the server must also be configured for the selected security protocol. **No Security, SSL, TLS**	Refer to description	No Security
E-Mail Account ID	This field defines the account Identification for the system configured in the SMTP server.		
E-Mail Account Password	This field defines the password for the system's E-mail account in the SMTP server.	Max. 64 characters	
Sender E-Mail Address (From)	This field defines the E-mail address used to send the new Voice Message notification via E-mail.	E-mail address	
Receiver E-Mail Address (To)	This field defines the E-mail address to notify when a new VSF message is received for the station.	E-mail address	
Attach Message Option	When E-mail notification is enabled in the VM COS (PGM 253), the E-mail may include the voice mail as a wav file attachment. The proper information must be assigned for the receiver mail and system mail account information.	OFF ON	ON
Delete Message Option	After sending an e-mail notification, the system will automatically delete the Voice message from the user's Voice Mailbox if this parameter is ON.	OFF ON	OFF

4.4.2.18 Station Personal CCR Table – PGM 128

Selecting Station, Personal CCR displays the Station Personal CCR Table input page. Enter a valid Station range and click **[Load]** to enter the Station Personal CCR Table data. Click the **[Save]** button after changing the type or value.

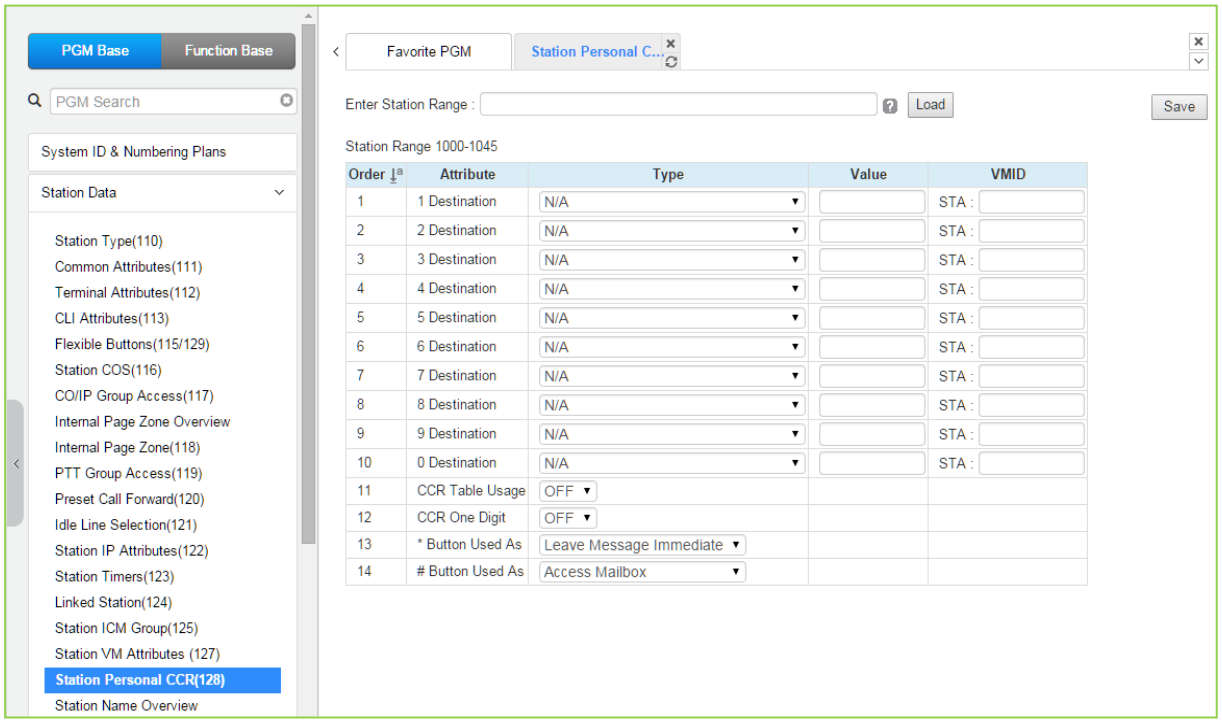


Figure 4.4.2.18-1Station Personal CCR Table

Table 4.4.2.18-1 STATION CCR Table

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
1-9, 0 Destination	Digit dialed by outside caller. A destination type and value can be programmed by dialed digit.15 kinds destination is available.	…	NA
CCR One Digit	When ON, the system will analyze the first digit received only. Additional digits dialed by the caller are ignored.	OFF ON	OFF
CCR Table Usage	If this option is ON, the CCR table can be activated. If this option is OFF, the CCR table is not available. Instead of that, dialing digits by an outside caller can be recognized as DISA dialing.	ON OFF	OFF
*Button Used As	It can be used as the following: • System Numbering Plan • Replay Greeting • Access Mailbox • Leave Message Immediate	Refer to Description	System Numbering Plan
# Button Used As	It can be used as the following: • System Numbering Plan • Replay Greeting • Access Mailbox • Leave Message Immediate	Refer to Description	Access Mailbox

Table 4.4.2.18-2STATION CCR DESTINATIONS

DESTINATION TYPES
Route to a Station
Route to a Station Group
Route with System Speed Dial
Route as PBX Transfer with System Speed Dial (Flash then dial speed dial digits)
Route to VSF Announcement
Route to VSF Announcement and disconnect
Route to Networked Station.
Conference Room
Internal Page
External page
All Call Page
Route to voice mail(station group/station number)
Company Directory
Record VM Greeting
Room Type Conf Group Join (Value: system conference group number) (Value Range: eMG80/100(0 or 100~139), eMG800/UCP(0 or 100~259)

4.4.2.19 Station Name Overview & Display

Selecting Station Name Overview shows the current station name.

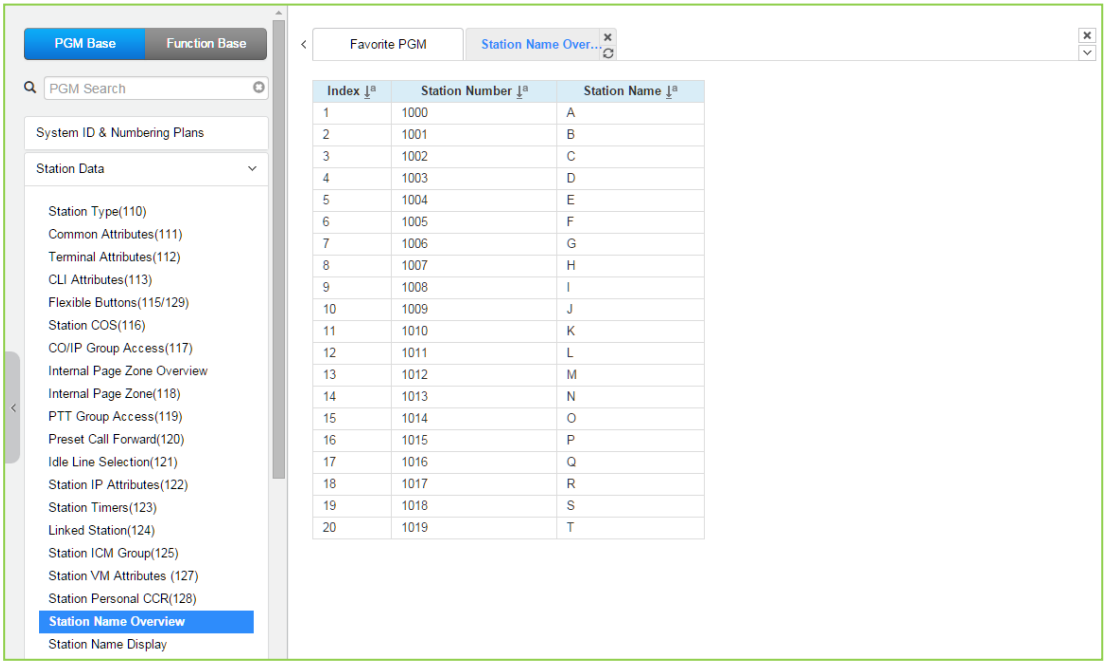


Figure 4.4.2.19-1 Station Name Overview

Each station name will be displayed if each station has the name. Selecting Station Name Display will display the Station Name input page. Enter a valid Station range and click **[Load]** to enter the Station Name data. For convenience, the copy, paste, and drag are available to enter or modify data. Click the **[Save]** button after changing the type or value.

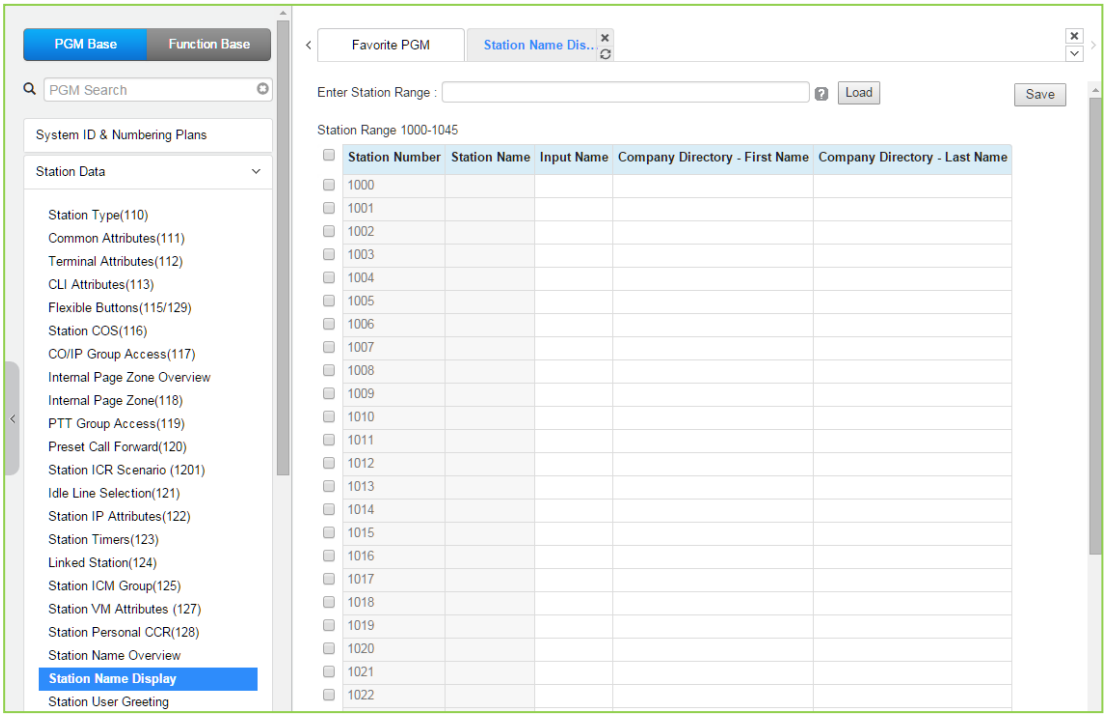


Figure 4.4.2.19-2 Station Name Display

You can fill out the Station name, Input name (up to 20 digits), company directory, first name, & Last name for the customer's convenience.

4.4.2.20 Station User Greeting

Selecting Station User Greeting will display the Station User Greeting data input page.

Enter a valid Station range and click **[Load]** to enter the Station Voice Mail Attributes data.

Use the checkmark to indicate which attributes to modify; checked attributes are stored by clicking the **[Save]** button.

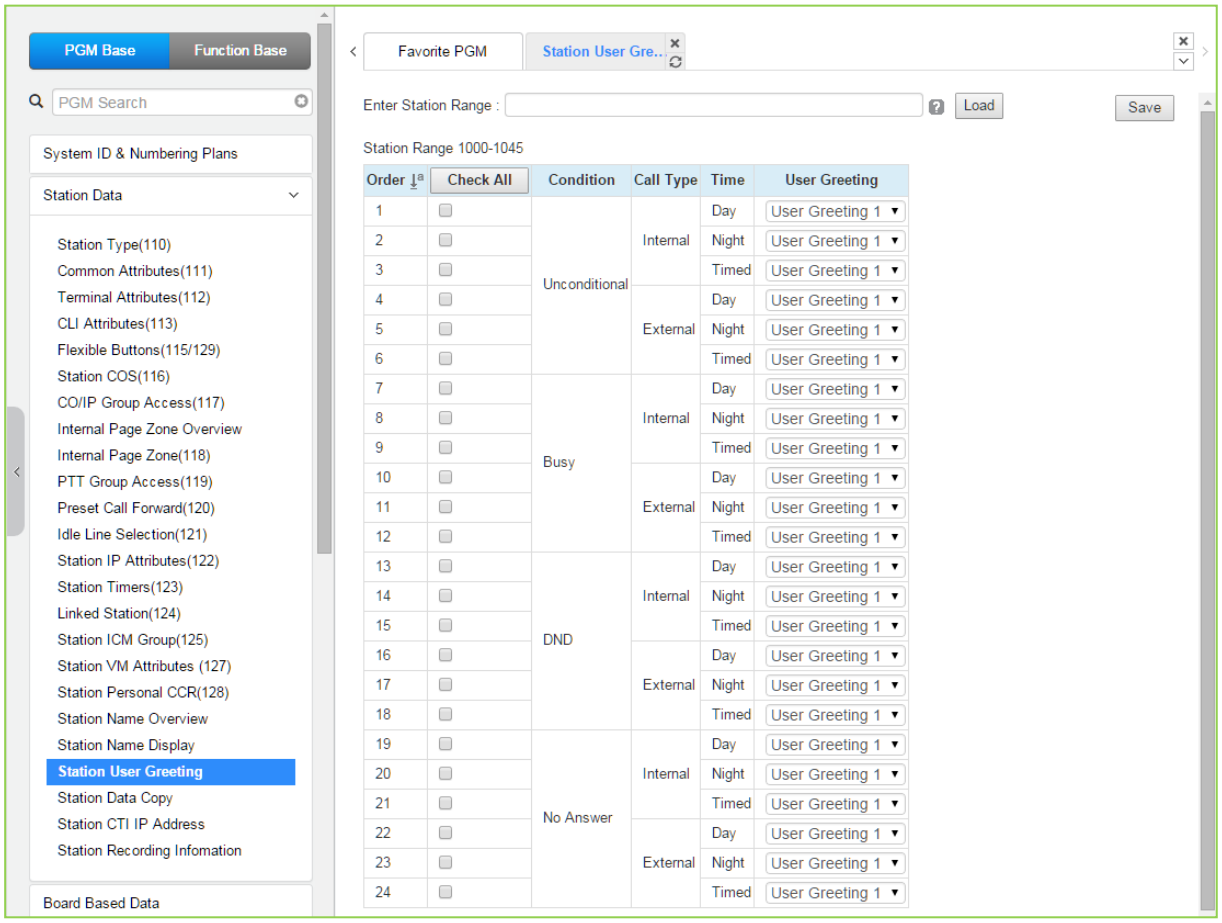


Figure 4.4.2.20-1 Station User Greeting

There are 4 User greetings for each station.

Users can select multi-user greetings depending on the condition, call type, and time.

- Condition: unconditional, busy, DND, No answer
- Call Type: Internal, External
- Call Time: Day, Night, Timed

4.4.2.21 Station Data Copy

Selecting Station Data Copy will display the Station Data Copy data input page. Enter a valid Source Station, Destination Station Range, and click **[Copy]** to copy the station data. Note that this function is not available for an Attendant station.

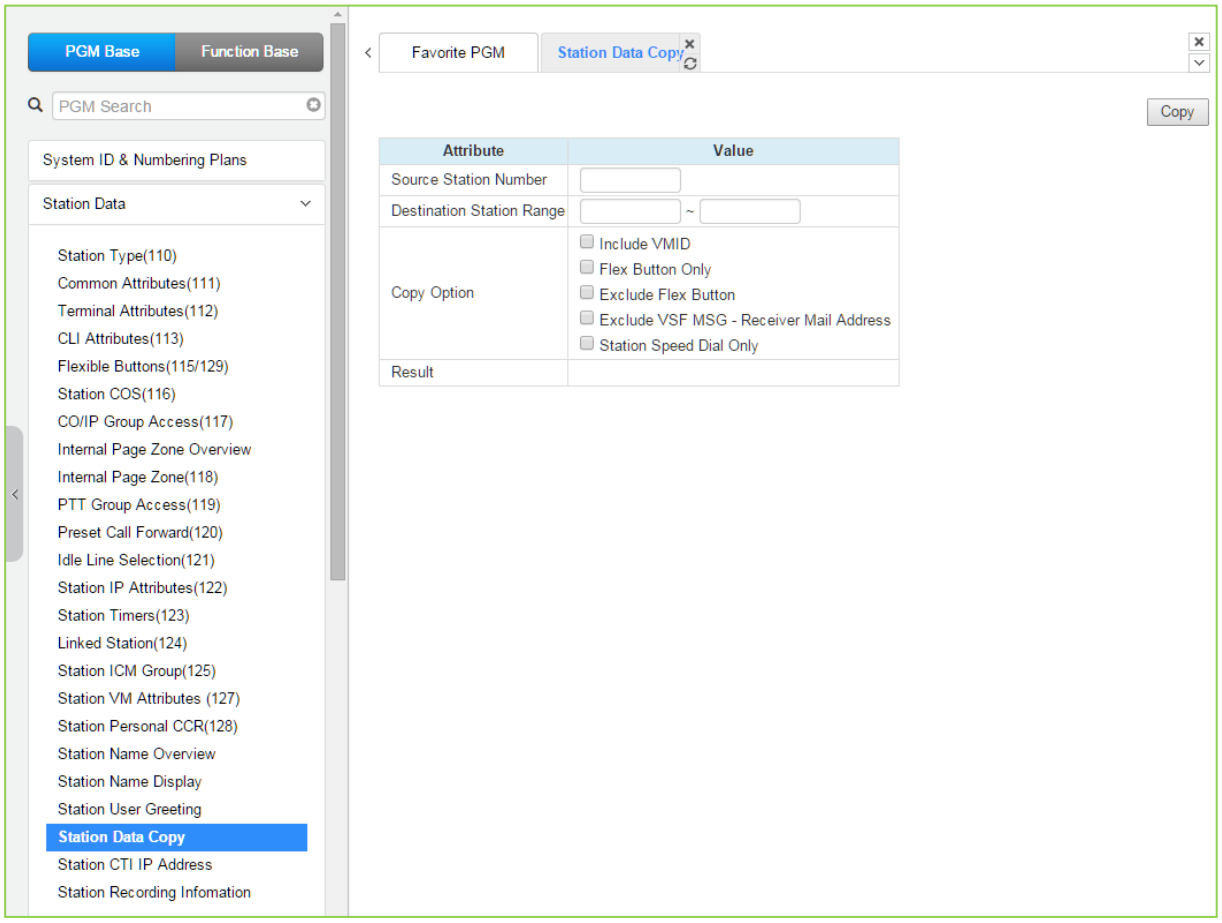
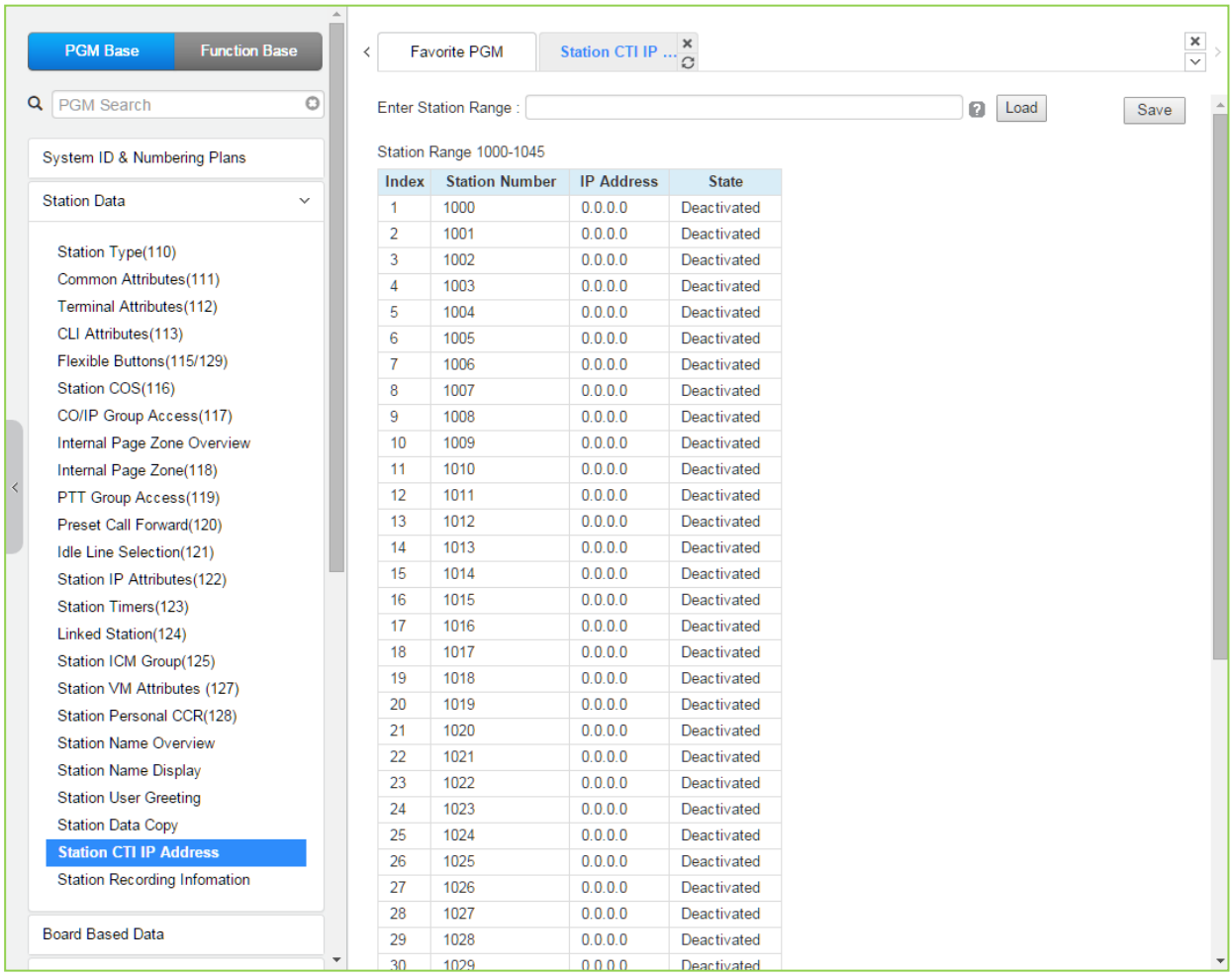


Figure 4.4.2.21-1 Station Data Copy

4.4.2.22 Station CTI IP Address (1st Party TAPI)

Selecting Station CTI IP Address displays the page shown in the following figure. Enter a Station Range and click **[Load]** to display and modify the CTI IP address. Click the **[Save]** button after changing the type or value.



Index	Station Number	IP Address	State
1	1000	0.0.0.0	Deactivated
2	1001	0.0.0.0	Deactivated
3	1002	0.0.0.0	Deactivated
4	1003	0.0.0.0	Deactivated
5	1004	0.0.0.0	Deactivated
6	1005	0.0.0.0	Deactivated
7	1006	0.0.0.0	Deactivated
8	1007	0.0.0.0	Deactivated
9	1008	0.0.0.0	Deactivated
10	1009	0.0.0.0	Deactivated
11	1010	0.0.0.0	Deactivated
12	1011	0.0.0.0	Deactivated
13	1012	0.0.0.0	Deactivated
14	1013	0.0.0.0	Deactivated
15	1014	0.0.0.0	Deactivated
16	1015	0.0.0.0	Deactivated
17	1016	0.0.0.0	Deactivated
18	1017	0.0.0.0	Deactivated
19	1018	0.0.0.0	Deactivated
20	1019	0.0.0.0	Deactivated
21	1020	0.0.0.0	Deactivated
22	1021	0.0.0.0	Deactivated
23	1022	0.0.0.0	Deactivated
24	1023	0.0.0.0	Deactivated
25	1024	0.0.0.0	Deactivated
26	1025	0.0.0.0	Deactivated
27	1026	0.0.0.0	Deactivated
28	1027	0.0.0.0	Deactivated
29	1028	0.0.0.0	Deactivated
30	1029	0.0.0.0	Deactivated

Figure 4.4.2.22-1 Station CTI IP Address

The system supports 1st party TAPI (Telephony Application Programming Interface) for CTI (Computer Telephony Integration). The system will send specific TAPI information to the IP address for activity by the associated Station.

4.4.2.23 Station Recording Information

Selecting Station recording information displays the page shown in the following figure.

Enter a Station Range and click **[Load]** to display and check the current recording information on each station.

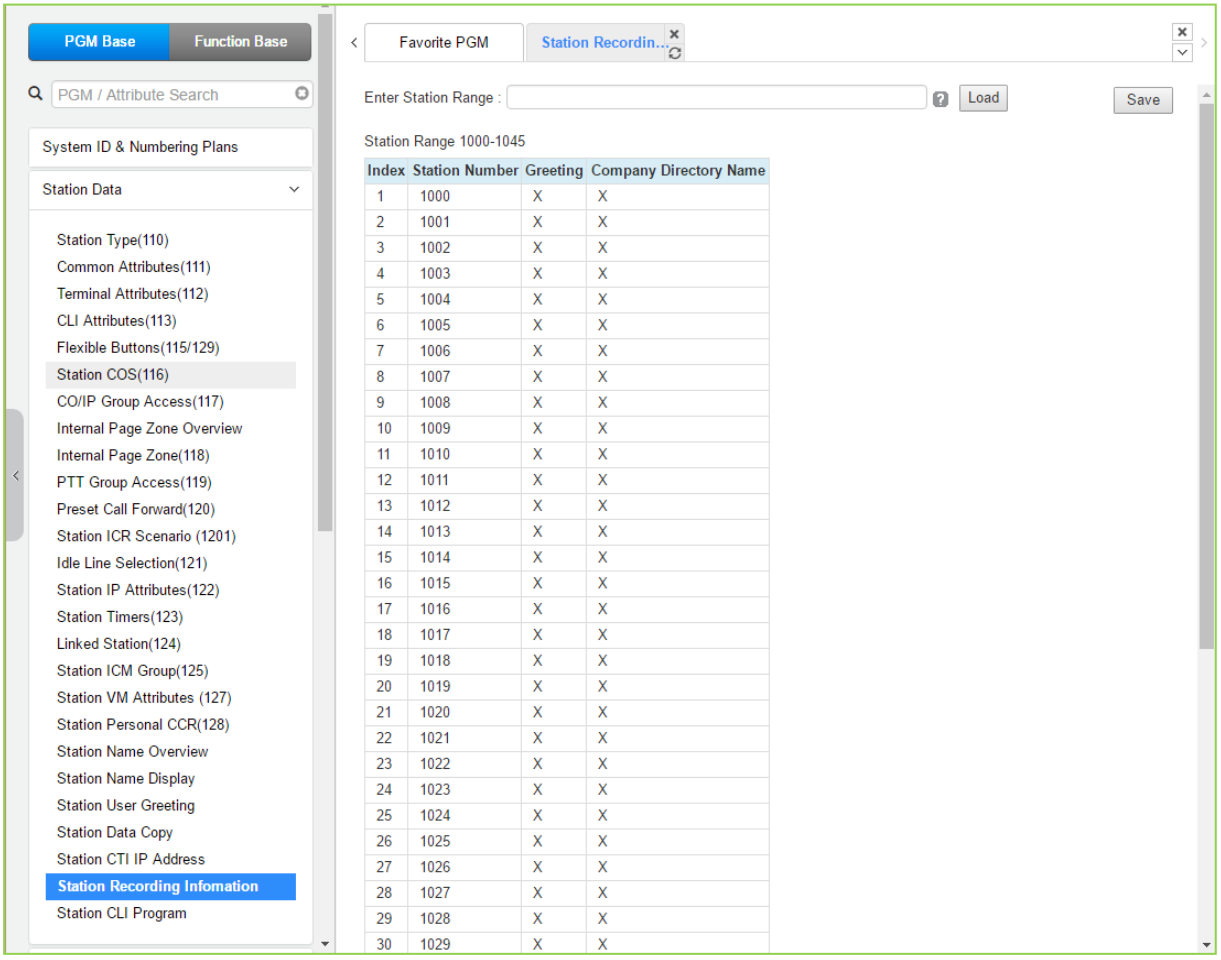


Figure 4.4.2.23-1 Station Recording Information

The {Station Recording information} displays the recording state of voice mail greeting and company directory name with O and X. (O: recorded, X: not recorded)

4.4.2.24 Station CLI Program

Selecting Station CLI Program displays the page shown in the following figure.

Enter a Station Range and click **[Load]** to display and enter the desired Station CLI from 1 to 5. Click the **[Save]** button after finishing the value by checking the checkbox.

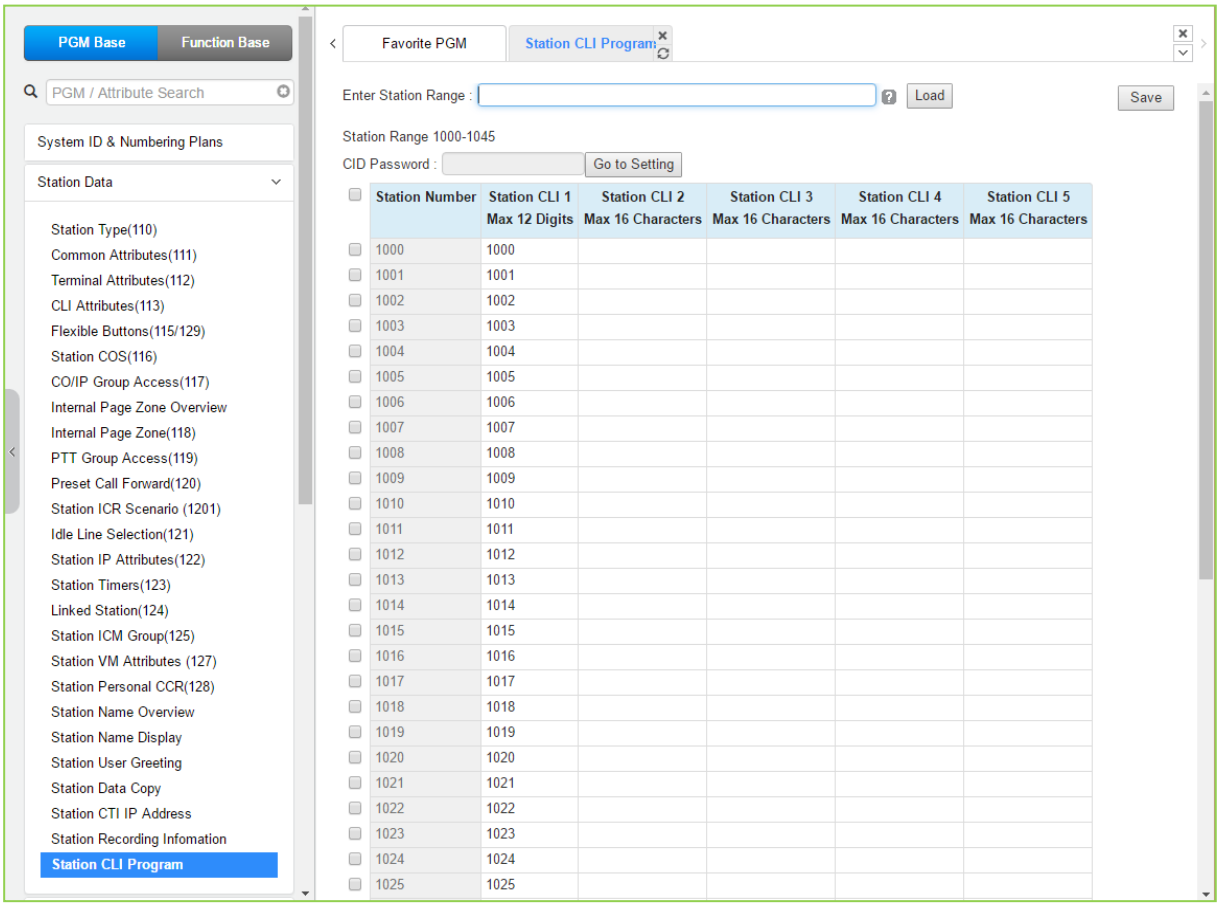


Figure 4.4.2.24-1 Station CLI Program

Station users can set the station CLI up to 5. Station user can send only the CLI number (1~5) or the desired CLI number by applying CLIP/COLP Table (291) to the called party.

Station CLI 1

To use this option, 'CLIR Service' or 'COLR Service' is set to OFF. The CLI number is entered up to 12 digits.

As a suffix, the entered CLI number is added to the number set in CLIP/COLP Table (201). Also check 'COLP Table Index', 'CLIP Table Index', and 'Station CLI Type' in CID/CPN Attributes (151).

The entered CLI number sends the called party via ISDN call setup or connected message.

Station CLI 2~5

To use this option, 'CLIR Service' or 'COLR Service' is set to OFF. The CLI number is entered up to 16 digits.

As a suffix, the entered CLI number is added to the number set in CLIP/COLP Table (201). Also check 'COLP Table Index', 'CLIP Table Index', and 'Station CLI Type(2~5)' in CID/CPN Attributes (151).

The entered CLI number sends the called party via ISDN call setup or connected message.

4.4.3 Board Based Data

Selecting the Board Based Data program group returns the sub-menu displayed in the left frame as shown in the following figure.

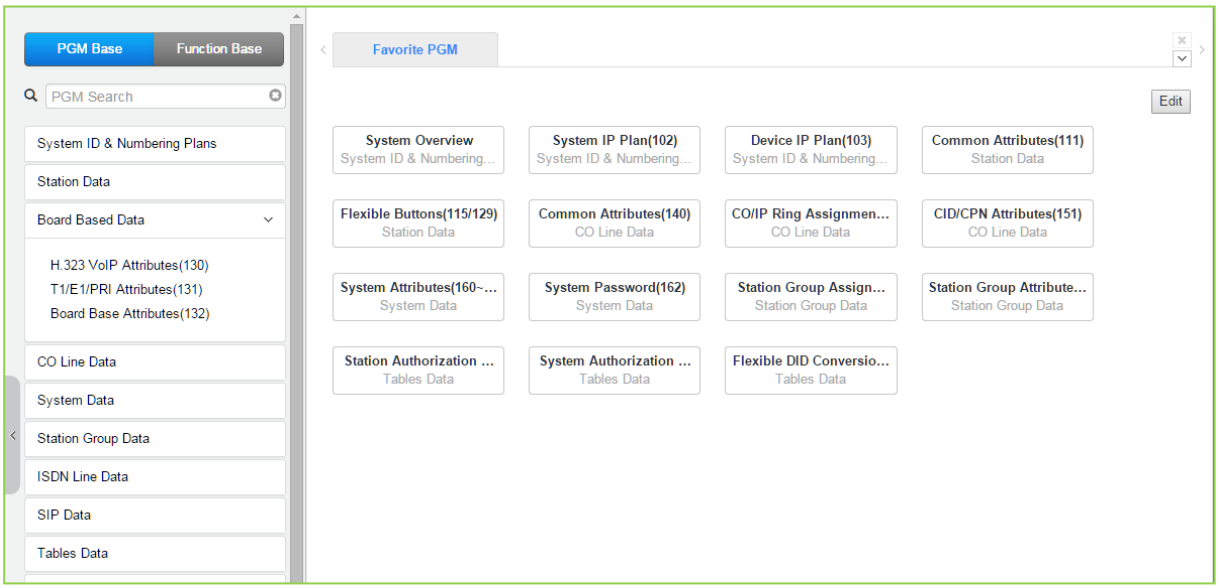


Figure 4.4.3-1 Board Based Data Main Page

4.4.3.1 H.323 VoIP Attributes - PGM 130

Selecting H.323 VoIP Attributes returns the H.323 VoIP Attributes data input page. Enter the VoIP gateway Sequence number (refer to 'Device IP Plan' if you want to find the sequence number) and click**[Load]** to enter VoIP data. Click the **[Save]** button after changing Value.

Enter Device/GW slot sequence number: eMG80/100: 1-300 / eMG800: 1-2890 / UCP:1-3688

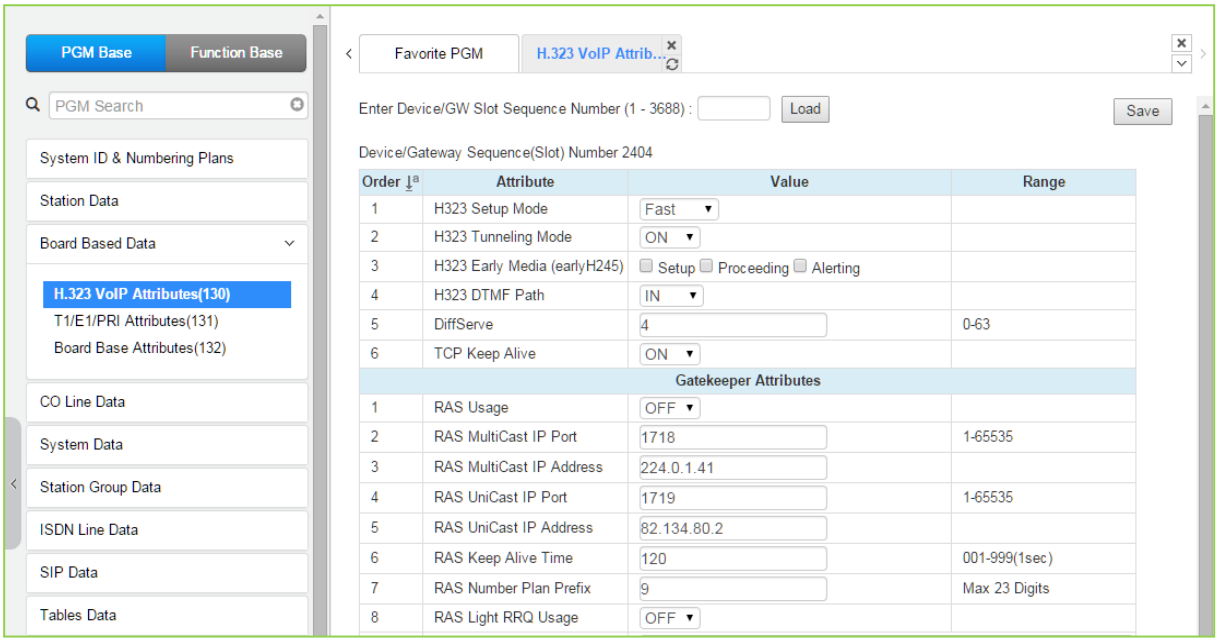


Figure 4.4.3.1-1 H.323 VoIP Attributes

The VOIP channels may be used for Distributed Networking, access to SIP or H.323 networks, and for remote iPECS devices. When the standard H.323 VoIP protocol is employed for an external VoIP call, several attributes of these channels can be assigned. The H.323 call set-up mode and tunneling (H.245 Encapsulation) can be established.

Also, for H.323 support, a RAS (Registration, Admissions, and Status) channel can be defined. The RAS channel IP addresses (unicast and multicast), IP port Numbering Plan and other H.323 set-up characteristics are defined.

This page also allows setting the IP TOS bit for Diffserv, a commonly recognized packet prioritization protocol. Higher priority packets are given priority in the Default gateway or Layer 3 Switch queue. However, they are the first to be discarded in the event of long queue delays, which may cause excess packet loss and poor voice quality.

Refer to the following table for a description of the features and the input required.

Table 4.4.3.1-1 H.323 VOIP ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
H323 Setup Mode	IP calls can be set up using the H.323 normal or Fast Start mode.	Normal/ Fast	Fast
H323 Tunneling Mode	IP calls can be set up using the H.245 encapsulation (Tunneling).	OFF ON	ON
H323 Early Media (early H245)	This feature allows two user endpoints to communicate before a call is actually established in normal call mode. This feature is not used when 'H323 Setup Mode' is 'Fast.' • **Setup:** The caller party tries to open early media on receiving the Setup message. • **Proceeding:** Calling party tries to open early media on receiving the Proceeding message. • **Alerting:** Calling party tries to open early media on receiving the Alerting message.	Refer to description	
H323 DTMF Path	During a call, DTMF can be sent in-band or out-of-band (H.245) **Out-band, In-band, 2833**	Refer to description	In-band
DIFFSERV	This parameter sets Diff Serv pre-tagging for the Voice packet. Note high values may cause high packet discard levels.	0~63	4
TCP Keep-Alive	The system will send a polling message every 75 seconds to assure the status of the TCP connection.	OFF ON	ON
Gatekeeper Attributes			
RAS Usage	When this feature is ON, the VoIP channel is used as the Gatekeeper.	OFF ON	OFF
RAS Multicast IP Port	This field defines the Multicast TCP/IP Port for RAS Information of Gatekeeper.	TCP/IP Port	1718
RAS Multi-cast IP Address	This field defines the Multicast IP address for RAS Information of Gatekeeper.	IP Address	224.0.1.41
RAS Uni-cast IP Port	This parameter defines the Unicast IP Port for RAS Information of Gatekeeper.	TCP/IP Port	1719

Table 4.4.3.1-1 H.323 VOIP ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
RAS Uni-cast IP Address	This parameter defines the Unicast IP address for RAS Information of Gatekeeper.	IP Address	82.134.80.2
RAS Keep Alive Time	To maintain a connection, the system and Gate Keeper must exchange RAS Information prior to the expiration of this timer.	001-999 (seconds)	120
RAS Number Plan Prefix	The numbering plan for Calling Numbers in RAS Setup.	Max. 23 digit	9
RAS Light RRQ Usage	The system can be assigned to use the simple RRQ (Registration Request) message (ON) or the full RRQ message (OFF).	OFF ON	OFF
RAS Gateway ID	The Gatekeeper ID.	128 characters	
Fail Over Usage	If an H.323 call fails to set up in the ‘Call Setup No Response time’ below, the system will attempt to place the call on the Failover CO/IP group also defined below.	OFF ON	OFF
Call Setup No Response Time	When Failover is enabled, the system places the fail-over call if this timer expires before the system receives a response to setup messages.	0, 3-15 Sec.	5
Failover CO Group Number	The system will place the Fail-over call employing a CO/IP line from the assigned CO/IP Line Group. eMG80/100:1-21, eMG800:1~201, UCP:1~201	Refer to description	
VOIP(VOIU) GW Port Usage			
Q.931 Port Range	IP-Binding H.323 signaling option: Q.931 TCP Port Range.	TCP port	2048-2559
H.245 Port	Range IP-Binding H.323 signaling option: H.245 TCP Port Range.	TCP port	2560-3071
RAS Port Range	IP-Binding H.323 signaling option: RAS UDP Port Range.	UDP port	2048-3071
Media Port Range	IP-Binding media option: Media UDP Port Range. Default: eMG80/100:6000-7036, eMG800:6000-14400, UCP:6000-19972	UDP port	Refer to description
Data Sharing Port Range	IP-Binding option: Data Sharing TCP Port Range.	TCP port	8500-8548
External CODEC Priority Configuration			
External CODEC Priority Configuration	The system supports five Codecs and, for negotiating purposes, the priority of each can be defined. Codecs not assigned a consecutive priority are not available during negotiations with the host.	None/ g.711-u/ g.711-a/ g.723.1/ g.729/ g.729a	None

4.4.3.2 T1/E1/PRI Attributes - PGM 131

Selecting T1/E1/PRI Attributes returns the T1/E1/PRI Attributes data input page.

Enter the Device Sequence number (refer to 'Device IP Plan' if you want to find the sequence number) and click **[Load]** to enter T1/E1/PRI data. Click the **[Save]** button after changing Value.

Enter Device/GW slot sequence number:eMG80/100: 1-300 / eMG800: 1-2890 / UCP:1-3688

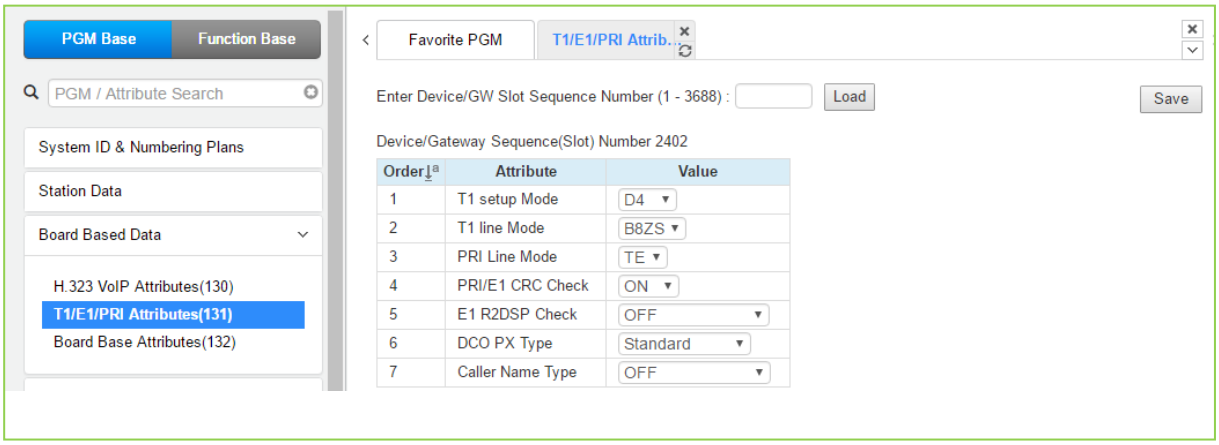


Figure 4.4.3.2-1 T1/E1/PRI Attributes

Each T1/E1/PRI module can be assigned for various attributes of the interface.

The T1 interface framing and line coding can be selected and, for the PRI, TE, or NT operation, can be selected. Refer to the following table for a description of the features and the input required.

Table 4.4.3.2-1 T1/E1/PRI ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
T1 Setup Mode	Select T1 Setup mode **D4** frame: Using In-Band Control Protocol. **ESF:** Using Datalink Message.	ESF/ D4	D4
T1 Line Mode	Select T1 line coding (AMI/B8ZS).	AMI/ B8ZS	B8ZS
PRI Line Mode	Select TE/NT Mode.	TE/NT	TE
PRI /E1 CRC Check	Enable CRC (Cyclical Redundancy Check).	OFF ON	OFF
E1 R2DSP check	Used for R2-E1 Device or E1 Device.	OFF/ ON	OFF
DCO PX Type	Reserved for future usage for R2 E1 Device. **S1240, TDX1B, STANDARD, CONGES_DIS**	Refer to description	STANDARD
Caller Name Type	(the USA only) If the caller has a name, the Caller Name is sent to the network according to the option **Facility message, Display message, OFF**	Refer to description	OFF

4.4.3.3 Board Base Attributes - PGM 132

Selecting Board Base Attributes will display the Board Base Attributes data input page.

Enter the Sequence number (refer to 'Device IP Plan' if you want to find the sequence number) and click **[Load]** to enter attribute values.

Use the checkboxes to indicate which attributes to modify; data for checked attributes is stored for the entire range of devices when saved. Click the **[Save]** button after changing Value.

Enter Device/GW slot sequence number: eMG80/100: 1-300 / eMG800: 1-2890 / UCP:1-3688

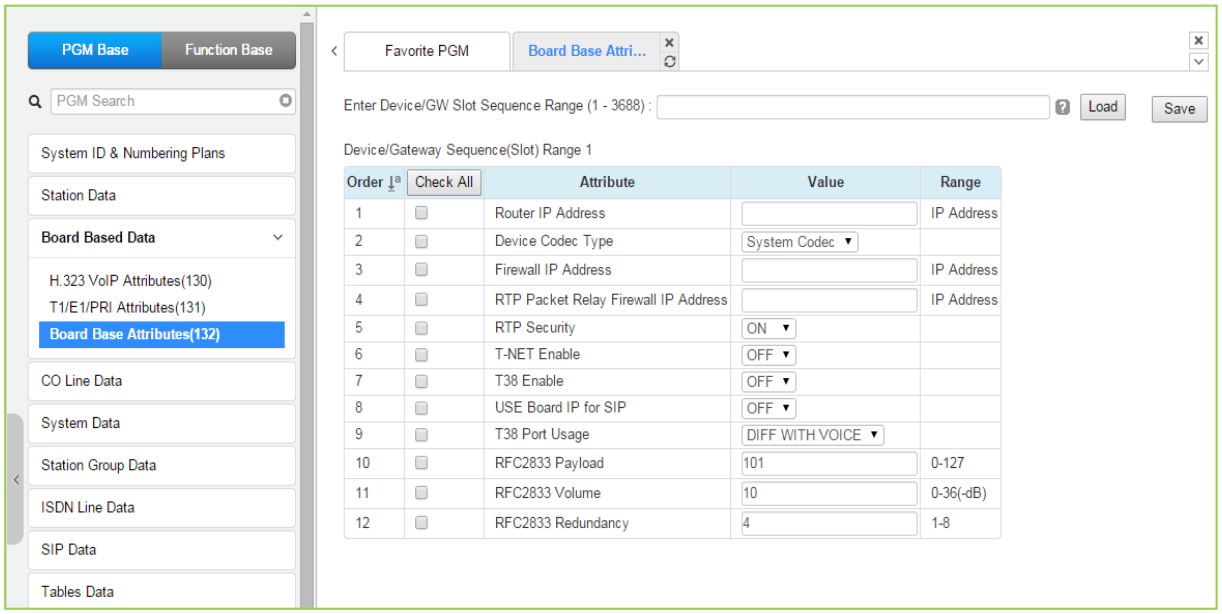


Figure 4.4.3.3-1 Board Base Attributes

Appliances (Devices and IP Phones) can be connected to the iPECS over a managed WAN without employing a VoIP channel.

In this case, the system does not implement security (IPSec) or QoS treatment over the link. To implements the managed WAN connectivity, the iPECS must be assigned with the router's IP address for all appliances that may attempt a point-to-point connection over the managed WAN, including devices on the iPECS LAN.

Note that if the device's Router IP address is not defined, the system will use the Router IP address defined in System & Device IP Address Plan.

The default codec employed by each device can be specifically defined as G.711, G.729, G.723, G.722, or the system default codec assigned.

Appliances include support for SRTP (Secure Real-Time Protocol), which employs Advanced Encryption Standard (AES) to secure RTP packets. If RTP security is enabled, then IPSEC or SRTP is implemented for the RTP packet.

Table 4.4.3.3-1 BOARD BASE ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
IP Address	Device IP address		Read-only
IPv6 Address	Device IP v6 address		Read-only
Router IP Address	Enter the Default gateway (router) IP address associated with the selected devices.	IP Address	
Device Codec Type	Select the CODEC type for each device. **G.711, G.723.1, G.729, G.722, SYSTEM CODEC**	Refer to description	SYSTEM CODEC
Firewall IP Address	Enter the Firewall IP address of the selected devices.		0.0.0.0
RTP Packet Relay Firewall IP Address	Enter the Firewall IP address associated with the Remote Phone or Gateway if there is a dual broadband connection for SIP trunks and Remote phones (using a VOIB/VOIM).		0.0.0.0
RTP Security	SRTP implements AES (Advanced Encryption Standard) for packets between other devices with RTP Security enabled. To reduce bandwidth use or to use an external VPN, this parameter must be OFF.	OFF ON	ON
TNET Enable	When a module or station is to be connected in a Centralized Control network (TNET), the device must be enabled for TNET operation. **eMG80/100:ON, eMG800:OFF, UCP: OFF**	OFF ON	Refer to description
T38 Enable	FAX over IP Lines is supported when T38 mode is ON.	OFF ON	OFF
USE Board IP for SIP	When the VoIP channels of a VOIB/VOIM are used for SIP, such as a SIP Trunk, the IP address of the VOIB/VOIM must be used for the SIP messages (ON).	OFF ON	OFF
T38 Port Usage	The TCP/IP port employed for T38 packets is negotiated, and the system can allow the port to be the same as or different from the preceding Voice packets. The system can also employ NAT to determine the port. **Different from Voice, Same as Voice, NAT Triggering**	Refer to description	Different from Voice
RFC2833 Payload	Payload value for RFC2833	0~127	101
RFC2833 Volume	Volume(Gain) of RFC2833 payload	0~36(-dB)	10
RFC2833 Redundancy	Sending time of end packet of RFC2833	1~8	4
Web Connection	Setting for Web connect.	OFF ON	ON
Telnet Connection	Setting for Telnet connect.	OFF ON	OFF
Board Disconnection Alarm	Implement Alarm System Notification – Phone/Gateway Link Down when a gateway board (SLT/DKT/CO board) is disconnected from system.	OFF ON	OFF

4.4.4 CO Line Data

The following figure shows that selecting the CO Line Data program group returns the sub-menu displayed in the left frame.

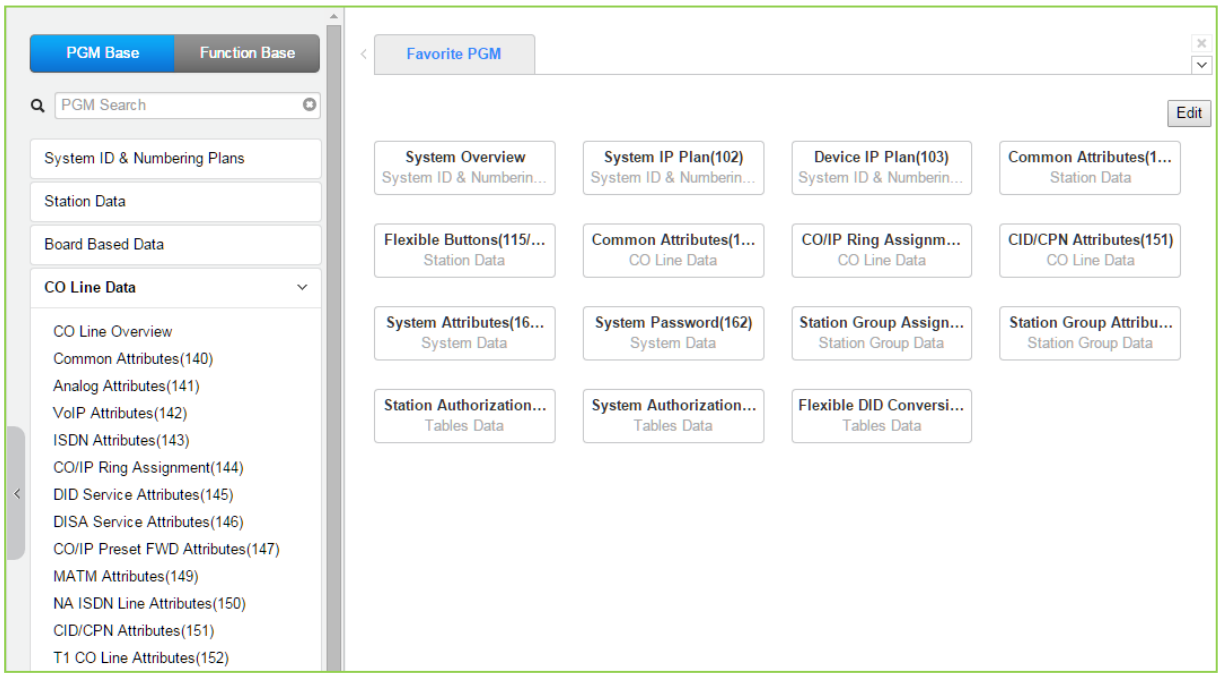


Figure 4.4.4-1 CO Line Data Main Page

Selecting the CO Line Overview will show the current overview of the CO line. The information may vary depending on installed modules.

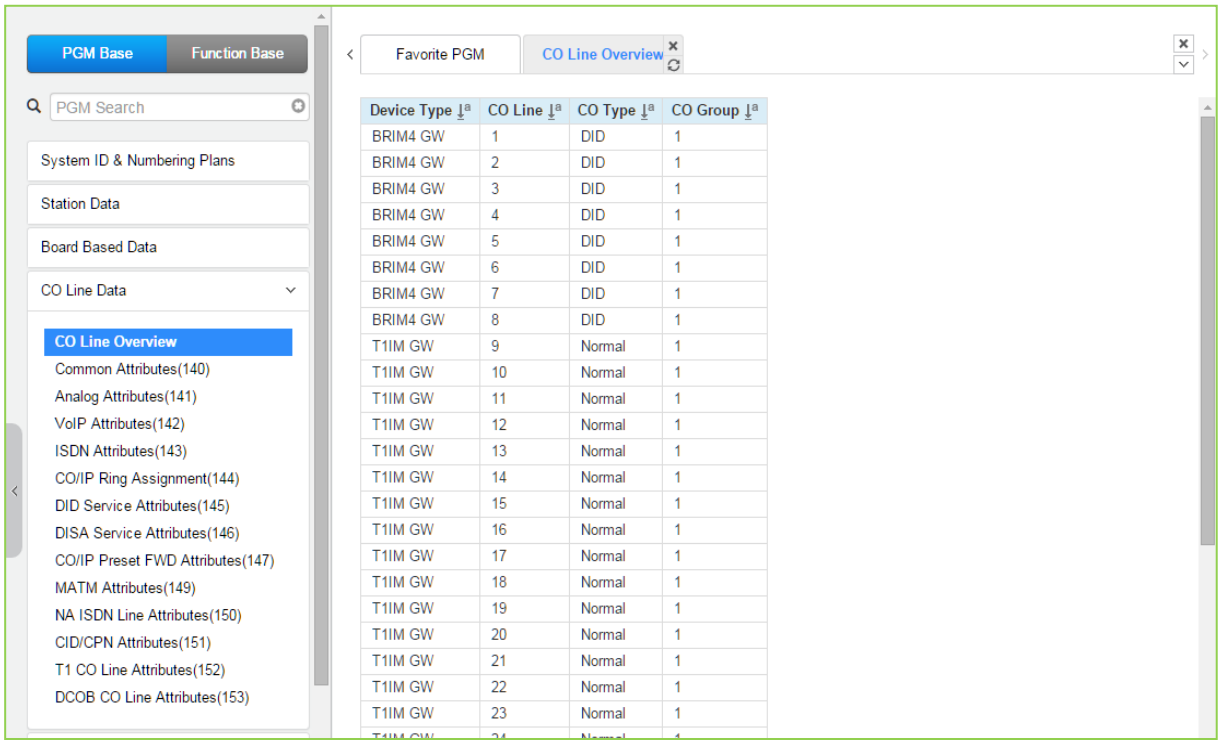


Figure 4.4.4-2 CO Line Overview

4.4.4.1 Common Attributes - PGM 140

Selecting Common Attributes will display the Common Attributes data input page. Enter a valid CO range and click **[Load]** to enter the Common Attributes data. Use the checkmark to indicate which attributes to modify; checked attributes are stored by clicking the **[Save]** button.

Enter CO Range: eMG80/100: 1-74 / eMG800: 1-600 / UCP: 1-998

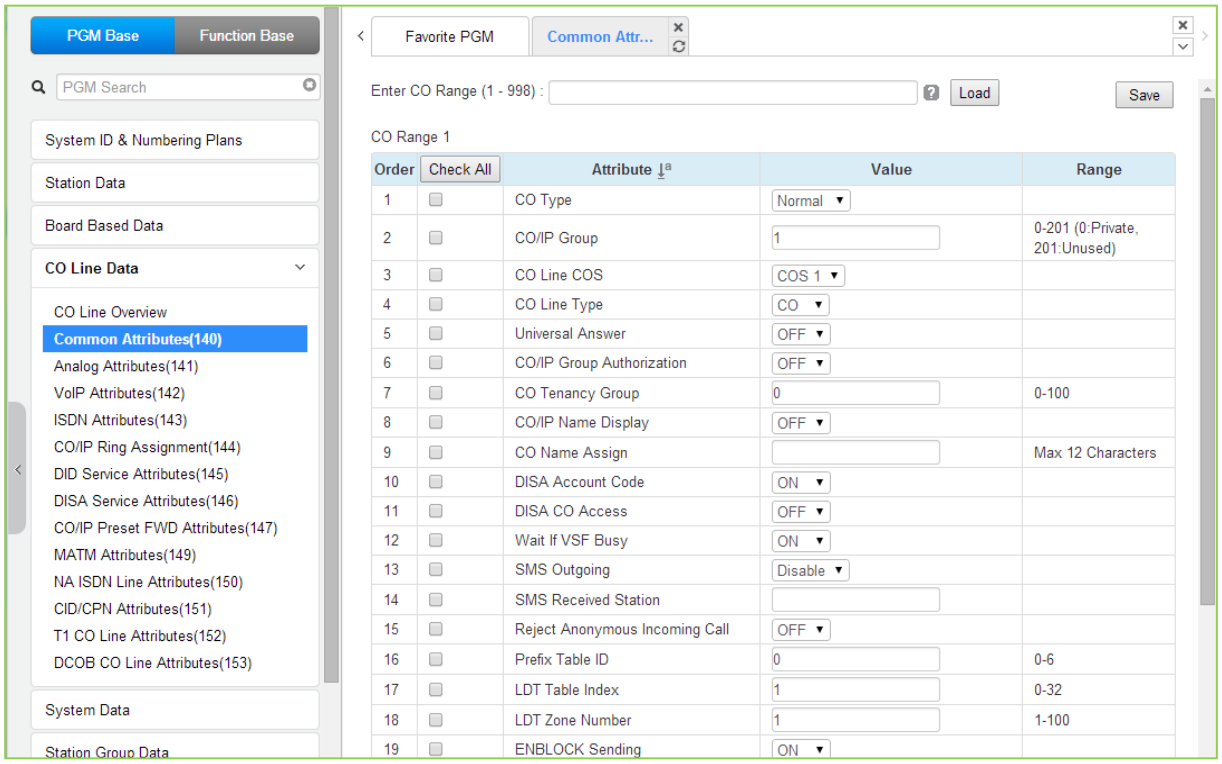


Figure 4.4.4.1-1 Common Attributes

Common Attributes define various characteristics of CO lines facilities under the control of the system. Most characteristics require an On/Off setting; refer to the following table. Specific descriptions for Class-of-Service and CO line Call Metering tones are provided in Table 4.4.4.1-3.

Table 4.4.4.1-1 Common Attributes

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
CO Type	Each CO Line is assigned a type, Normal, DID, or TIE Line. **Normal, DID, TIE, Unused**	Refer to description	Normal
CO/IP Group	Each CO/IP Line is assigned to a group; grouping should be based on the Line type, technology, and COS. 0-21(eMG80/100), 0-201(eMG800), 0-201(UCP)	Refer to description	1
CO Line COS	Each CO/IP Line is assigned a Class-of-Service that interacts with the Station COS, refer to Table 4.4.4.1-2 CO COS 1: Station COS applies CO COS 2: Exception Table A governs CO COS 3: Exception Table B governs CO COS 4: Restricts LD calls & Exception Table C CO COS 5: Overrides Station COS 2~6 with no restrictions.	COS 1~5	COS 1

Table 4.4.4.1-1 Common Attributes

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
CO Line Type	Each CO/IP Line can be assigned as connected to a CO Line or a PBX/CTX Line.	PBX CO	CO
Universal Night Answer	Universal Night Answer (UNA) allows any station user to answer a CO/IP line call by dialing the UNA code.	OFF ON	OFF
CO/IP Group Authorization	Each CO/IP Group can be assigned to require the user to enter an Authorization Code.	OFF ON	OFF
CO Tenancy Group	Only stations in the assigned Tenancy group are permitted access to the defined CO Line. 0-15(eMG80/100), 0-32(eMG800), 0-100(UCP)	Refer to description	0
CO/IP Name Display	IF ASSIGNED BELOW, the IP Phone display can indicate the CO line/IP channel number or the twelve (12) character name.	OFF ON	OFF
CO Name Assign	Each CO Line and IP group can be assigned a twelve (12)-character name for display purposes.	Max. 12 characters	
DISA Account Code	With DISA Account Code “ON,” users are required to enter a DISA Authorization code. Codes are entered in the ‘Authorization Code Table section.’	OFF ON	ON
DISA CO Access	When enabled, DISA users may access the VoIP facilities of the system.	OFF ON	OFF
Wait If VSF Busy	When a DID/DISA call assigned to receive a VSF announcement arrives, and all channels are busy, the call may wait with Ring back until a channel is available (ON) or route to the DID/DISA Destination -PGM 167-.	OFF ON	ON
SMS Outgoing	Each CO line can be assigned to support PSTN SMS.	Disable Enable	Disable
SMS Received Station	When a PSTN SMS is received, the system delivers the message to the assigned station.	Station	….
Reject Anonymous Incoming Call	When REJECT ANONYMOUS is enabled, incoming calls without a Caller ID are rejected.	OFF ON	OFF
Prefix Table ID	When the Prefix Dialing Table (PGM 206) feature is used, this Prefix Table ID is employed. If this value is set to 0, the Prefix Table feature is disabled.	0 – 6. 0(Disable)	0
LDT Table Index	When LCR is configured, this LDT Table index is referenced for outgoing calls on this CO/IP Line. 0-10(eMG80/100), 0-32(eMG800), 0-32(UCP)	Refer to description	1
LDT Zone Number	If the LDT Zone Number of an LDT table (LCR LDT(221)) is equal to this value, the LDT table is available to this CO Line.	1-100	1
ENBLOCK Sending	This entry determines if the system sends dialed digits to the ISDN line as they are received (OFF) or collects all digits and forwards them in a block. (ON).	OFF ON	ON
DID preserve Name	For DID lines, the CLI is normally displayed only during ringing. If enabled here, the CLI will be displayed for the entire call duration.	OFF ON	OFF

Table 4.4.4.1-1 Common Attributes

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Burst Tone to Caller	When DID Call Wait is assigned for the station, the system can send audible off-hook signals as a short burst of tone for DID calls from this CO/IP Line.	OFF ON	OFF
Collect Call Blocking	This parameter defines the type of Collect Call Blocking supported for E1 CO lines with R2 signaling. (Intended for Brazil only)**Disable, Double Answer, Double Answer w/Indication**	Refer to description	Disable
Collect Call Answer Timer	These parameters determine the treatment of an incoming call when Collect Call Blocking Double Answer is assigned. In this case, the system answers the call and maintains the connection for the Call Answer time. Then, the system will disconnect for the Call Idle time before finally reconnecting the call.	1-250 (100ms)	10
Collect Call Idle Timer		1-250 (100ms)	20
Gain table index	One of three Gain tables can be configured for TDM connections.	1-3	1
Tone table index	One of the five Tone tables can be configured for use with the CO/IP Line.	1-5	1
Digit conversion table index	One of the Digit Conversion Tables can be configured for use for this CO/IP Line. 1-15(eMG80/100), 1-32(eMG800), 1-32(UCP)	Refer to description	1
Prepaid Call	The Pre-paid Call feature must be enabled for use by a station. Users can set the budget for the station call charge in advance.	OFF ON	OFF
Prepaid Money (0-999999) & Used Prepaid Money	An amount can be associated with the station as a prepayment for outgoing calls. The assigned “Pre-paid Money” is reduced by the calculated call cost (Call Metering or cost/minute). This parameter displays the remaining funds for outgoing calls. Prepaid Money is often used in small hospitality businesses. The “Used Pre-paid Money” displays the money that has been used.	0-999999	0
Automatic call recording destination	When desired, the IP CR server can be used to record calls on the CO/IP Line. This value defines the Station Group of the IP CR server. The IP CR Agent object, see PGM 237, must be assigned as CO Line for proper operation.		
ICLID Usage	An incoming call can be routed to the destination based on the Calling Name. • **Disable** - ICLID feature is disabled • **CLI** - ICLID feature is operated with CLI • **Name, CLI** - ICLID feature is operated with Name and CLI	Refer to description	CLI
PBX Code Insertion for Emergency call	The system can insert PBX code automatically if pre-configured when a user makes an emergency call. **Disable, PBX code1~4**	Refer to description	Disable
Timer Attributes			
Cut Off Timer	When the Station is assigned Call Time restriction is assigned, this timer defines the allowed call duration.	00-99 00 = disable	0

Table 4.4.4.1-1 Common Attributes

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
DISA Delay Timer	Once answered, the system attaches a DTMF receiver to the DISA call to receive caller-dialed digits. This timer introduces a delay before attaching the DTMF receiver to the CO line. (Intended for Russia only)	0-9 seconds	0
DISA Answer Timer	When a call is received on a CO line with DISA service, the system will answer the call when the DISA Answer Timer expires. (Intended for Russia only)	0-9 seconds	0
Tone Attributes			
CO Line MOH	A held call can be connected to one (1) of ten (10) possible audio sources while on Hold as Music-on-Hold (MOH). Refer to Sys Hold, Internal Music, External Music, VSF MOH, **SLT MOH1~5, VSF MOH2~30**	Refer to description	Refer to Sys Hold
CO Dial Tone	ISDN Lines may provide a digital signal rather than actual tones. In this case, the iPECS can provide the tones. If the ISDN provides the tone, the Tone is “ON” for an iPECS system-generated tone. The tone is set to “OFF.”	OFF ON	ON
CO Ring Back Tone		OFF ON	OFF
CO Error Tone		OFF ON	OFF
CO Busy Tone		OFF ON	OFF
CO Line Dial Tone Source	One of eleven sources can be defined as a dial tone for use by the CO line. Dial Tone, Internal Music, External Music, VSF MOH, **SLT MOH1~5, VSF MOH2~30**	Refer to description	Dial Tone
CO Ring Back Tone Source	One of eleven sources can be defined as a ring-back tone for use by the CO line. Ring Back Tone, Internal Music, External Music, VSF MOH, **SLT MOH1~5, VSF MOH2~30**	Refer to description	Ring Back Tone
COL Ring Tone	One of sixteen Ring Tones can be configured for use by this CO Line.	00-16 0: NA	0

Table 4.4.4.1-2 STATION/CO LINE TOLL RESTRICTIONS

	CO COS 1	CO COS 2	CO COS 3	CO COS 4	CO COS 5
STA COS 1	No Restriction	No Restriction	No Restriction	Only Local Call (LD code/counter) & Table C	No Restriction
STA COS 2	Exception Table A governs the dialing	Exception Table A governs the dialing	No Restriction	Only Local Call (LD code/counter) & Table C	No Restriction
STA COS 3	Exception Table B governs the dialing	No Restriction	Exception Table B governs the dialing	Only Local Call (LD code/counter) & Table C	No Restriction
STA COS 4	Exception Table A & B governs the dialing	Exception Table A governs the dialing	Exception Table B governs the dialing	Only Local Call (LD code/counter) & Table C	No Restriction
STA COS 5	Local Call only (LD Code, “1” or “0”) and Table C	Local Call only (LD Code, “1” or “0”) and Table C	Local Call only (LD Code, “1” or “0”) & Table C	Only Local Call (LD code/counter) & Table C	No Restriction
STA COS 6	Only Local Call (LD code/counter) & Table C	Only Local Call (LD code/counter) & Table C	Only Local Call (LD code/counter) & Table C	Only Local Call (LD code/counter) & Table C	No Restriction
STA COS 7	In-house dialing only	In-house dialing only	In-house dialing only	In-house dialing only	In-house dialing only
STA COS 8	Exception Table D governs the dialing	Exception Table D governs the dialing	No Restriction	Only Local Call (LD code/counter) & Table C	No Restriction
STA COS 9	Exception Table D governs the dialing	Exception Table D governs the dialing	No Restriction	Only Local Call (LD code/counter) & Table C	No Restriction
STA COS 10	Exception Table D & E governs the dialing	Exception Table D & E governs the dialing	No Restriction	Only Local Call (LD code/counter) & Table C	No Restriction
STA COS 11	Exception Table A & B and D & E governs the dialing	Exception Table A & B and D & E governs the dialing	No Restriction	Only Local Call (LD code/counter) & Table C	No Restriction

Table 4.4.4.1-3 CALL METERING FUNCTION

ENTRY	CALL METERING TYPE
00	- None
01	- 50 Hz
02	- 12 KHz
03	- 16 KHz
04	- Singular Polarity Reverse (SPR)
05	- Plural Polarity Reverse (PPR)
06	- No Polarity Reverse (NPR)

4.4.4.2 Analog Attributes - PGM 141

Selecting Analog Attributes will display the Analog Attributes data input page.

Enter a valid CO range and click **[Load]** to enter the Analog (PSTN) Attributes data.

Use the checkmark to indicate which attributes to modify; checked attributes are stored by clicking the **[Save]** button.

Enter CO Range: eMG80/100: 1-74 / eMG800: 1-600 / UCP: 1-998

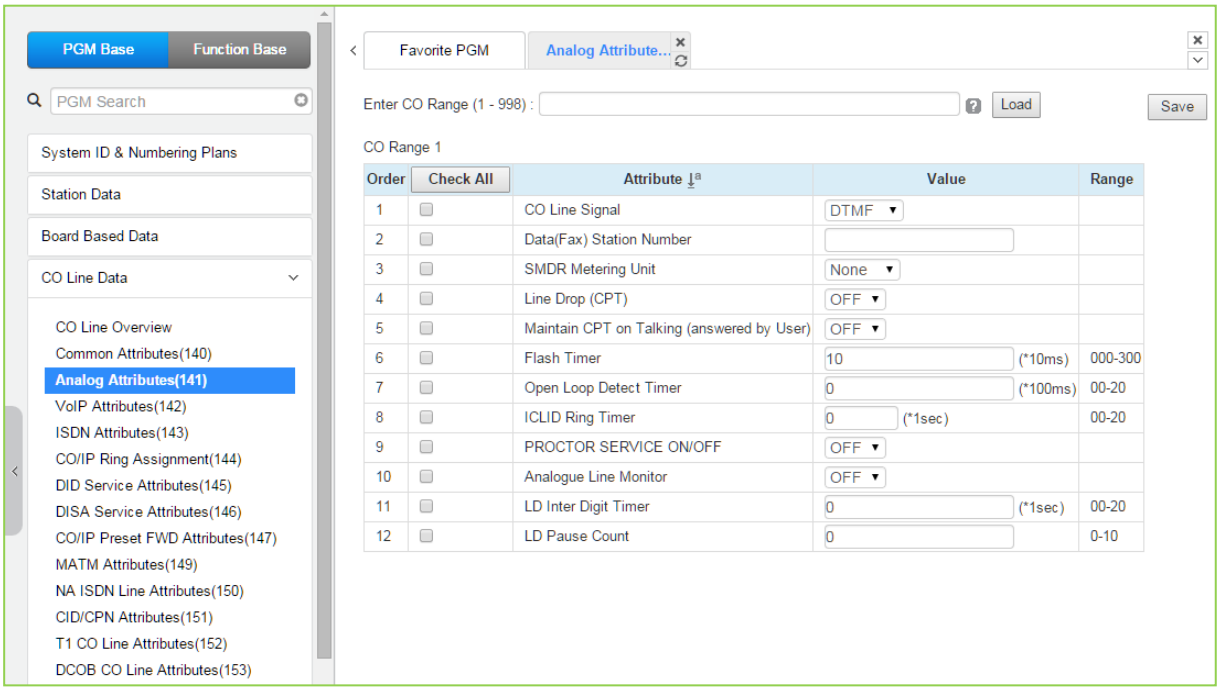


Figure 4.4.4.2-1 Analog Attributes

Analog Attributes define various characteristics of AnalogCO Lines under the control of the system.

Most characteristics require an On/Off setting; refer to the following table.

Specific descriptions for CO Line (SMDR) Call Metering tones are provided in the second following table.

Table 4.4.4.2-1 Analog ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
CO Line Signal	Each analog CO Line can be assigned to send either DTMF or Pulses for dialed digits to the PSTN.	DTMF Pulse	DTMF
Data(Fax) Station Number	Each CO line can be assigned to recognize a FAX call when a specified station answers.	Station Number	
SMDR Metering Unit	This field selects the call-metering signal from the PSTN to indicate call cost. Refer to the following table.		None
Line Drop (CPT)	Each CO Line can be programmed to disconnect if an error tone is detected.	OFF ON	OFF
Maintain CPT on talking (Answer by User)	The system can continuously monitor the CO Line during a call and drop the call if an error tone is detected.	OFF ON	OFF

Table 4.4.4.2-1 Analog ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Flash Timer	This time sets the flash time.	000-300 (*10 msec)	50
Open Loop Detect timer	This entry sets the duration of the open-loop that will be recognized as a “Disconnect Signal.”	00-20 (*100 msec)	04
ICLID Ring Timer	The system may use ICLID (Incoming Caller ID) when a call is received to route the call. The system will delay routing a call for this duration while awaiting ICLID. Enter a 00 to disable ICLID routing.	00-20 (*Sec)	4
Proctor Service	Each analog CO line can be assigned to send the station number as DTMF digits for Proctor service.	OFF ON	OFF
Analog Line monitor	The system can monitor and report faults on an analog CO Line.	OFF ON	ON
LD Inter Digit Timer	This time is for setting the duration between digits for LD (Long Distance) call.	00-20 (*1sec)	0
LD Pause count	This count sets the number of Pause for Long distance calls.	0-10	0

Table 4.4.4.2-2 CALL METERING FUNCTION

ENTRY	SMDR METERING UNIT TYPE
00	- None
01	- 50 Hz
02	- 12 KHz
03	- 16 KHz
04	- Singular Polarity Reverse (SPR)
05	- Plural Polarity Reverse (PPR)
06	- No Polarity Reverse (NPR)

4.4.4.3 VoIP Attributes - PGM 142

Selecting VoIP Attributes will display the Analog Attributes data input page.

Enter a valid CO range and click **[Load]** to enter the VoIP Attributes data.

Use the checkmark to indicate which attributes to modify; checked attributes are stored by clicking the **[Save]** button.

Enter CO Range: eMG80/100: 1-74 / eMG800: 1-600 / UCP: 1-998

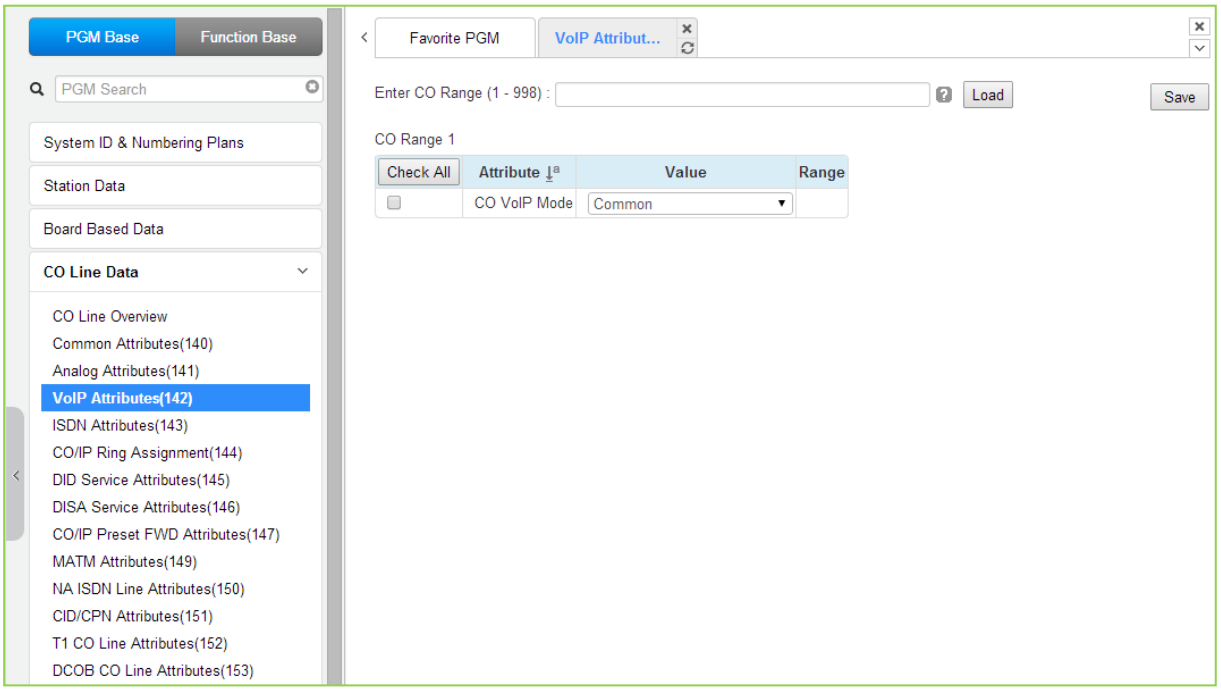


Figure 4.4.4.3-1 VoIP Attributes

Table 4.4.4.3-1 VoIP ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
CO VoIP Mode	The VoIP channels can support iPECS, H.323, or SIP protocols. This field defines the protocol for the VoIP channel(s). • COMMON • H323 only • SIP only • RTP-Packet-Relay only • H323 & RTP-Packet-Relay • SIP & RTP-Packet-Relay	Refer to description	COMMON

4.4.4.4 ISDN Attributes - PGM 143

Selecting ISDN Attributes will display the ISDN Attributes data input page. Enter a valid CO range and click the **[Load]** button to enter the ISDN Attributes data. Use the checkmark to indicate which attributes to modify; checked attributes are stored by clicking the **[Save]** button.

Enter CO Range: eMG80/100: 1-74 / eMG800: 1-600 / UCP: 1-998

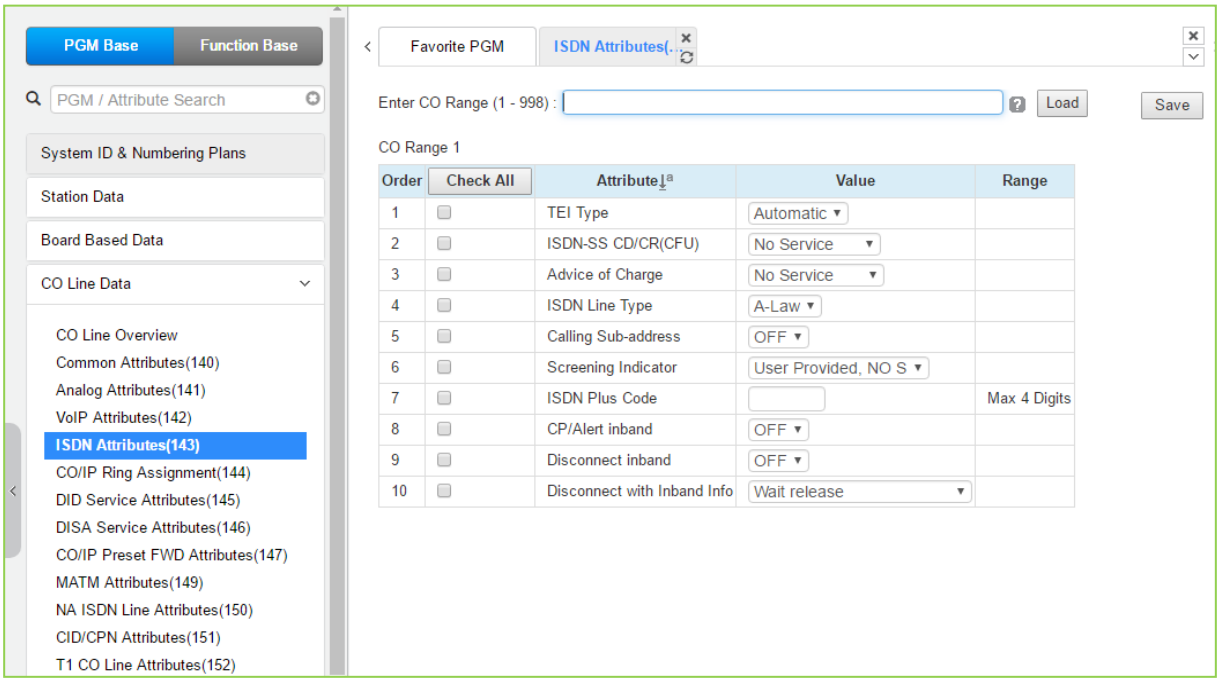


Figure 4.4.4.4-1 ISDN Attributes

PGM 143 assigns attributes associated with ISDN lines in the entered range.

Table 4.4.4.4-1 ISDN ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
TEI Type	The TEI (Terminal Endpoint Identifier) is a unique identifier for each device attached to the ISDN line. When the system shares an ISDN connection with other devices, the TEI should be automatic to ensure no conflict with the other attached devices. Otherwise, the Fixed identifier option should be employed.	Fixed/ Automatic	Automatic
ISDN – SS CD/CR(CFU)	Permits a user to access to ISDN Supplementary Call Deflection Service. (Except USA version). **No Service, Call Deflection, Call Rerouting**	Refer to description	No Service
Advice of Charge	When assigned, the system will analyze the Advice of Charge information in the Facility Message according to the ETSI specifications with appropriate regional protocol support. **No AOC, Italy & Spain, Finland, Australia, Belgium, ETSI STD**	Refer to description	No AOC
ISDN Line Type	The system will encode voice using the A-law or u-law PCM format to match the installed ISDN backbone.	µ-Law/ A-Law	A-Law
Calling Sub-address	The user's station number may be included in the ISDN call SETUP message Sub-address field for outgoing calls.	OFF ON	OFF

Table 4.4.4.4-1 ISDN ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Screening indicator	The ISDN Screening Indicator can configure. • User-Provided, No Service • User-Provided, Pass • User-Provided, Fail • Network Provided.	Refer to description	User-Provided, No Service
ISDN PLUS Code	When the incoming CLI starts with "+," this value will be inserted in the place of the "+" sign.	0000-9999	-
CP/Alert inband	Send progress indication with in-band information in Call proceeding and Alerting messages.	OFF ON	OFF
Disconnect inband	Send progress indication with in-band information in the Disconnect message.	OFF ON	OFF
Disconnect with Inband Info	When the system receives a DISCONNECT message with Inband information from PSTN, the following option can be applied: • **Ignore Inband information:** Line is disconnected • **Bypass Inband information:** Progress Information is transferred • **Wait Release:** The system wait to send a Release message till the other party is disconnected	Refer to description	Wait Release
ISDN Clock Sync	ISDN clock synchronization is working when "Network Time & Date"(PGM195) is set to "ISDN CLOCK" and "ISDN Clock Sync" (PGM143) is ON. It could be controlled by CO line base.	OFF ON	ON

4.4.4.5 CO/IP Ring Assignment - PGM 144

Selecting CO/IP Ring Assignment will display the CO/IP Ring Assignment data input page. Enter a valid CO range and click **[Load]** to enter the CO/IP Ring Assignment data. Use the checkmark to indicate which attributes to modify; checked attributes are stored by clicking the **[Save]** button.

Enter CO Range: eMG80/100: 1-74 / eMG800: 1-600 / UCP: 1-998

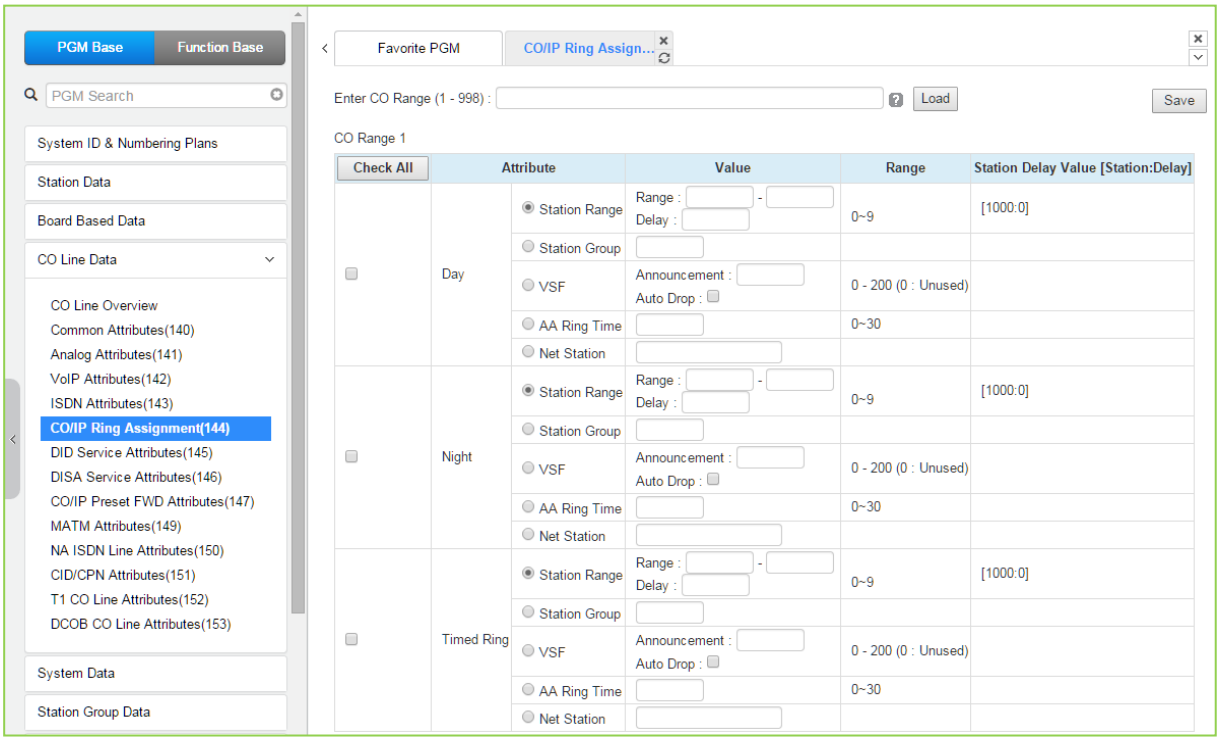


Figure 4.4.4.5-1 CO/IP Ring Assignment

Each “Normal” CO/IP line is assigned to signal a station, station group, or VSF Announcement for an incoming call (Ring). Separate ring assignments are made for Day, Night, and Timed Ring mode. A delay from 1 to 9 Ring cycles can also be assigned. Based on this assignment, the station/Station group will receive an audible ring after a delay of the number of Ring cycles entered. In addition, when assigned to ring a VSF Announcement, the system can be programmed to disconnect after the announcement, ‘Auto Drop.’

When CO/IP Lines are programmed to ring the built-in Auto Attendant, a delay of 0 to 30 seconds can be assigned as the AA Ring Time. The delay allows stations to be assigned Ring and to answer prior to signaling the AA. At the expiration of the AA Ring Time, the call is sent to the assigned VSF announcement or announcement 1 when no VSF announcement is assigned.

4.4.4.6 DID Service Attributes - PGM 145

Selecting DID Service Attributes will display the DID Service Attributes data input page. Enter a valid CO range and click the **[Load]** button to enter the DID Service Attributes data. Use the checkmark to indicate which attributes to modify; checked attributes are stored by clicking the **[Save]** button.

Enter CO Range: eMG80/100: 1-74 / eMG800: 1-600 / UCP: 1-998

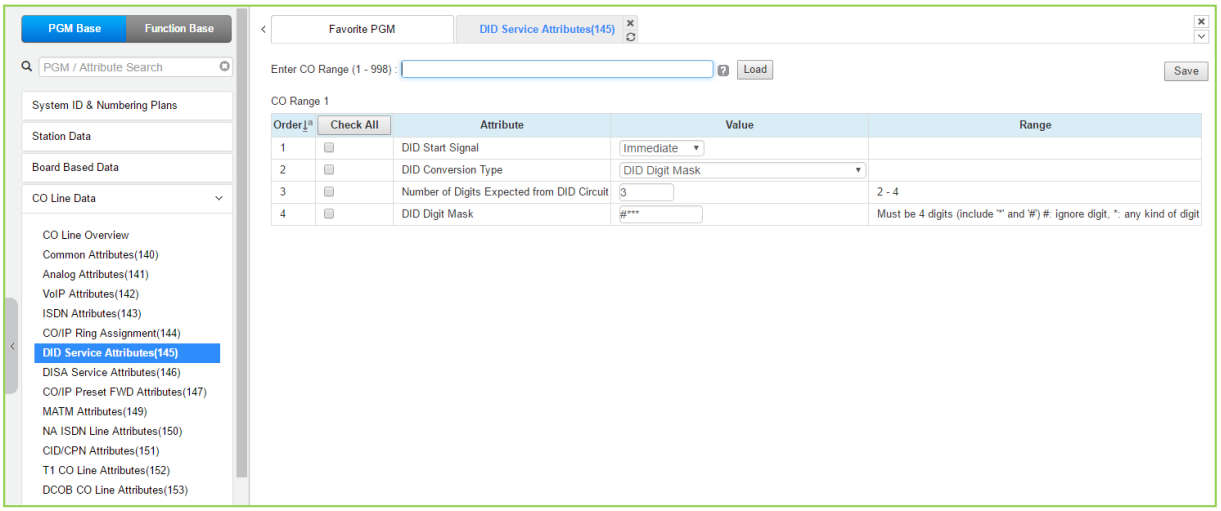


Figure 4.4.4.6-1 DID Service Attributes

DID lines can be assigned the type of “Start” signaling and treatment of received digits. Digits can be used “as is” to route the call within the system, digits can be converted and used to route the call, or digits can be converted to a Table index to determine the call routing from a Table look-up. Refer to the following table for additional descriptions of attributes and values.

Table 4.4.4.6-1 DID SERVICE ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
DID Start Signal	Assigns the type of DID to start signaling, Immediate, Wink, or Delayed for the CO/IP Line. **Immediate, Wink, Delayed**	Refer to description	Immediate
DID Conversion Type	The received DID digits can be treated to determine call routing, simple conversion (Convert), use “as is” (no treatment), or modify using Flexible DID Conversion Table (Look-up). • DID Digit Mask • Use ‘as is.’ • Modify using Flexible DID conversion table	Refer to description	DID Digit Mask
Number of Digits Expected from DID Circuit	The number of digits expected from the PSTN DID circuit.	2~4	3
DID Digit Mask	DID digit modification sequence: “#,” “*,” a digit (0~9) replaces the digit. The modification is based on the position of the digit (1~4) in the received number. It must be 4 digits, including #,*. **(0~9, *, #)“#.”: ignored digit,“*”: any kind of digit**	Refer to description	#***

4.4.4.7 DISA Service Attributes - PGM 146

Selecting DISA Service Attributes will display the DISA Service Attributes data input page.

Enter a valid CO range and click **[Load]** to enter the DISA Service Attributes data.

Use the checkmark to indicate which attributes to modify; checked attributes are stored by clicking the **[Save]** button.

Enter CO Range: eMG80/100: 1-74 / eMG800: 1-600 / UCP: 1-998

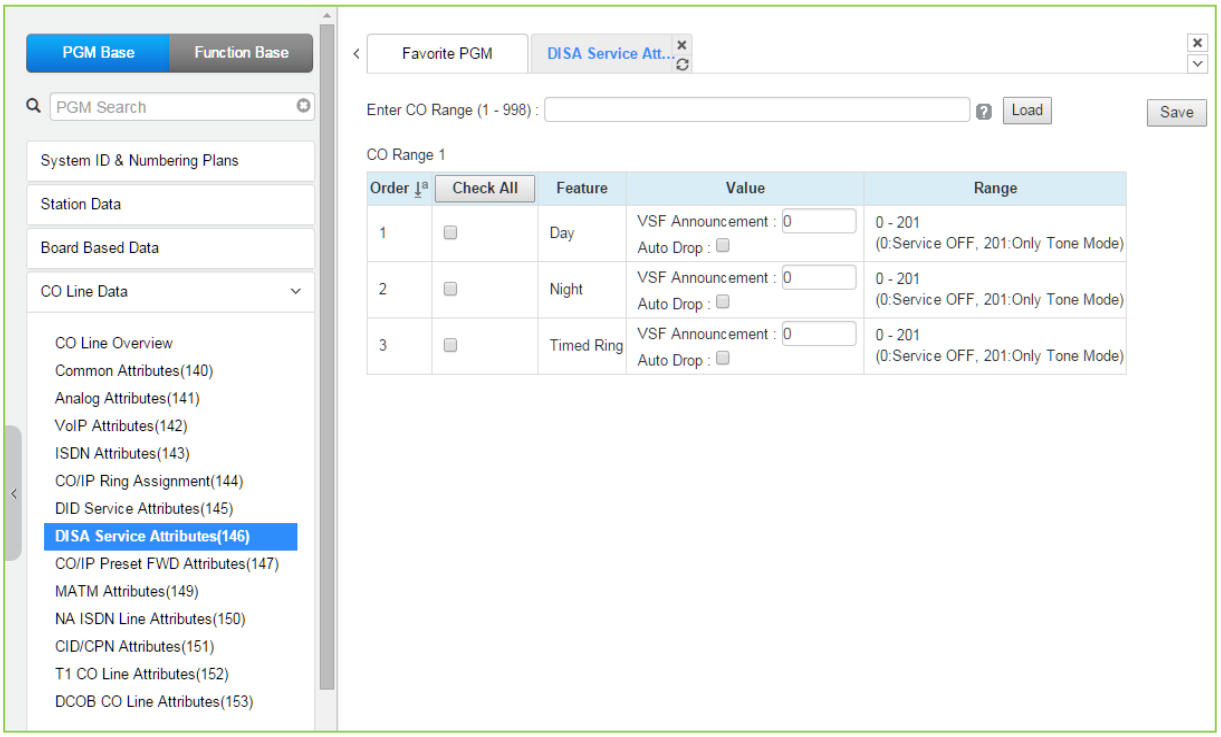


Figure 4.4.4.7-1 DISA Service Attributes

DISA Service can be enabled on CO lines based on the system operation mode (Day, Night, and Timed).

DISA call may be routed to dial tone and await user dialing (simple routing) or through a multi-layered Audio Text menu assigning a VSF Announcement and a Customer Call Route (CCR) Table Index.

The system can be programmed to disconnect after the announcement, 'Auto Drop,' or follow the CCR Table routing with a user-recorded announcement requesting specific inputs from the user.

4.4.4.8 CO/IP Preset Forward Attributes - PGM 147

Selecting CO/IP Preset Forward Attributes will display the CO/IP Preset Forward Attributes data input page.

Enter a valid CO range and click **[Load]** to enter the CO/IP Preset Forward Attributes data.

Use the checkmark to indicate which attributes to modify; checked attributes are stored by clicking the **[Save]** button.

Enter CO Range: eMG80/100: 1-74 / eMG800: 1-600 / UCP: 1-998

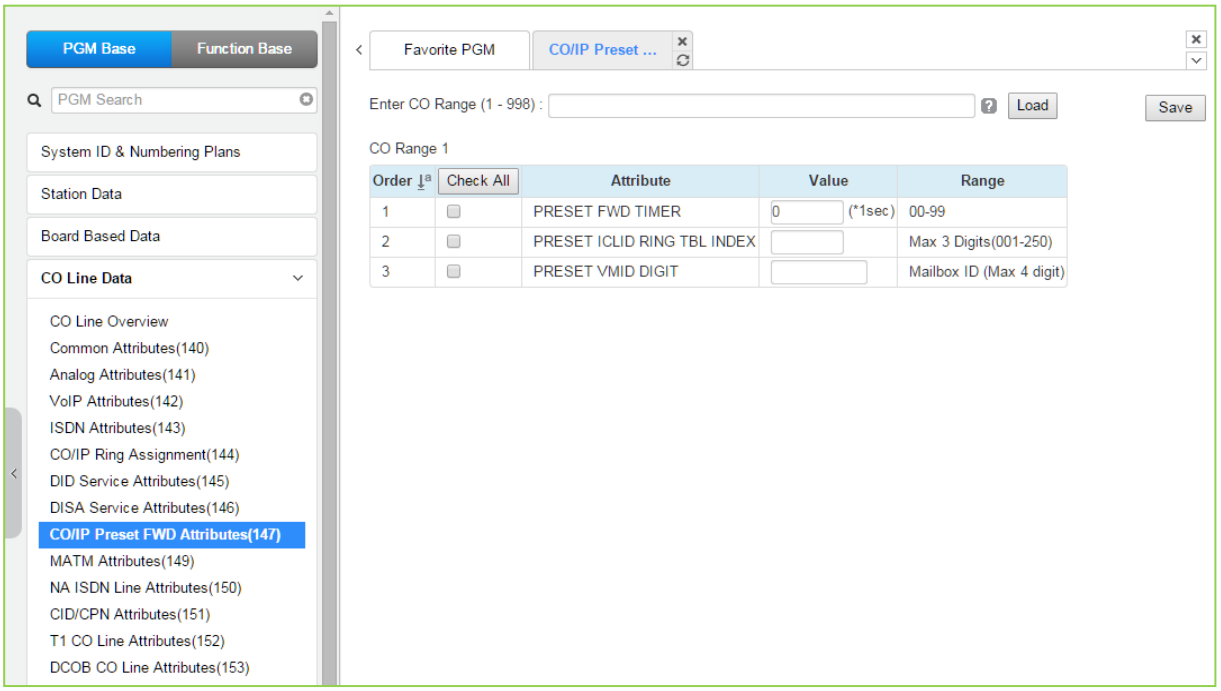


Figure 4.4.4.8-1 CO/IP Preset Forward Attributes

The CO/IP Preset Call Forward feature enables a CO line to initially ring at multiple stations and forward to a pre-determined destination. A separate timer can be defined for each CO/IP line for no answer.

The destination can be an index to the ICLID Ring Table in section 4.4.7.5 or a Voice Mailbox. The VMID field allows selecting a specific mailbox when the CO line calls forwards to an external VM group.

Table 4.4.4.8-1 CO/IP PRESET FORWARD ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Preset FWD Timer	An incoming call, which remains unanswered for this timer, is routed as defined in the 'ICLID Ring Table Index section.'	00-99 (Sec.)	00
Preset ICLID Ring Table Index	If an incoming call remains unanswered after the Preset Fwd time above, the call is routed as defined in the 'ICLID Ring Table index' defined here.	001-250	
Preset VMID Digit	Each CO/IP line can be assigned a VMID (Voice Mail Id) that is sent to the external VM group to identify the desired Mailbox for the call.	Mailbox ID (Max. 4 digits)	

4.4.4.9 MATM Attributes - PGM 149

Selecting MATM Attributes will display the MATM Attributes data input page. Enter a valid CO range and click **[Load]** to enter the MATM Attributes data. Use the checkboxes to indicate which attributes to modify; data for checked attributes is stored for the entire range of CO/IP Lines when saved.

Use the checkmark to indicate which attributes to modify; checked attributes are stored by clicking the **[Save]** button. These attributes are available for Country code 82.

Enter CO Range: eMG80/100: 1-74 / eMG800: 1-600 / UCP: 1-998

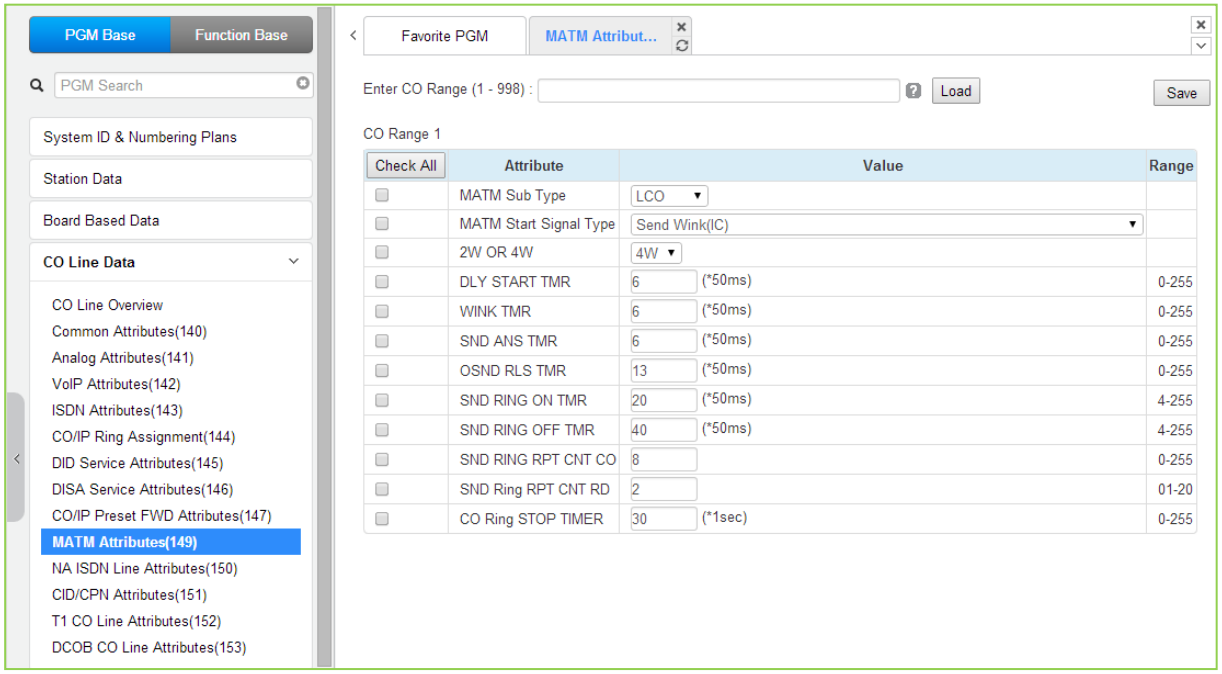


Figure 4.4.4.9-1 MATM Attributes

Table 4.4.4.9-1 MATM ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
MATM Sub Type	This is the analog trunk type for the MATM option board. • COIU: LCO • RDIU: RD (ring down, only for the national army) • LDIU: LD (loop dial, only for the national army) • EMC: E&M continuous • EMD: E&M discontinuous **LCO, RD, LD, EMC, EMD, Unused**	Refer to description	LCO
MATM Start Signal Type	This is the signal type for the analog trunk. This should be set with an alternate trunk type. These can be set by testing with available values. • Send Wink (IC), Wait Seize Ack(OG) • Send Wink (IC) &Wait Seize Ack(OG) • Send Sub Answer (IC) & Wait Sub Answer(OG) • Send Wink and Send Sub Answer(IC) • Wait Ack and Wait Sub Answer(OG) • Send Wink and Send Sub Answer(IC) & Wait Wink and wait sub answer(OG) • Unused Type	Refer to description	Send Wink (IC)

Table 4.4.4.9-1 MATM ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
2W or 4W	For E&M Lines, this value should be set as 2 wire or 4wire to match the line.	2W/ 4W	4W
DLY Start Timer	It is the timer value for analog signaling.	0~255	6
Wink Timer	It is the timer value for analog signaling.	0~255	6
SND ANS Timer	It is the timer value for analog signaling.	0~255	6
SND RLS Timer	It is the timer value for analog signaling.	0~255	13
SND RING ON Timer	It is the timer value for analog signaling.	4~255	20
SND RING OFF Timer	It is the timer value for analog signaling.	4~255	40
SND RING RPT CNT CO	It is the timer value for analog signaling.	0~255	8
SND RING RPT CNT RD	It is the timer value for analog signaling.	01~20	2
CO Ring STOP Timer	It is the timer value for analog signaling.	0~255	30

4.4.4.10 NA ISDN Line Attributes - PGM 150

Selecting NA (North America) ISDN Line Attributes will display the NA ISDN Line Attributes data input page.

Enter a valid CO range and click **[Load]** to enter the NA ISDN Line Attributes data. Use the checkmark to indicate which attributes to modify; checked attributes are stored by clicking the **[Save]** button.

Enter CO Range: eMG80/100: 1-74 / eMG800: 1-600 / UCP: 1-998

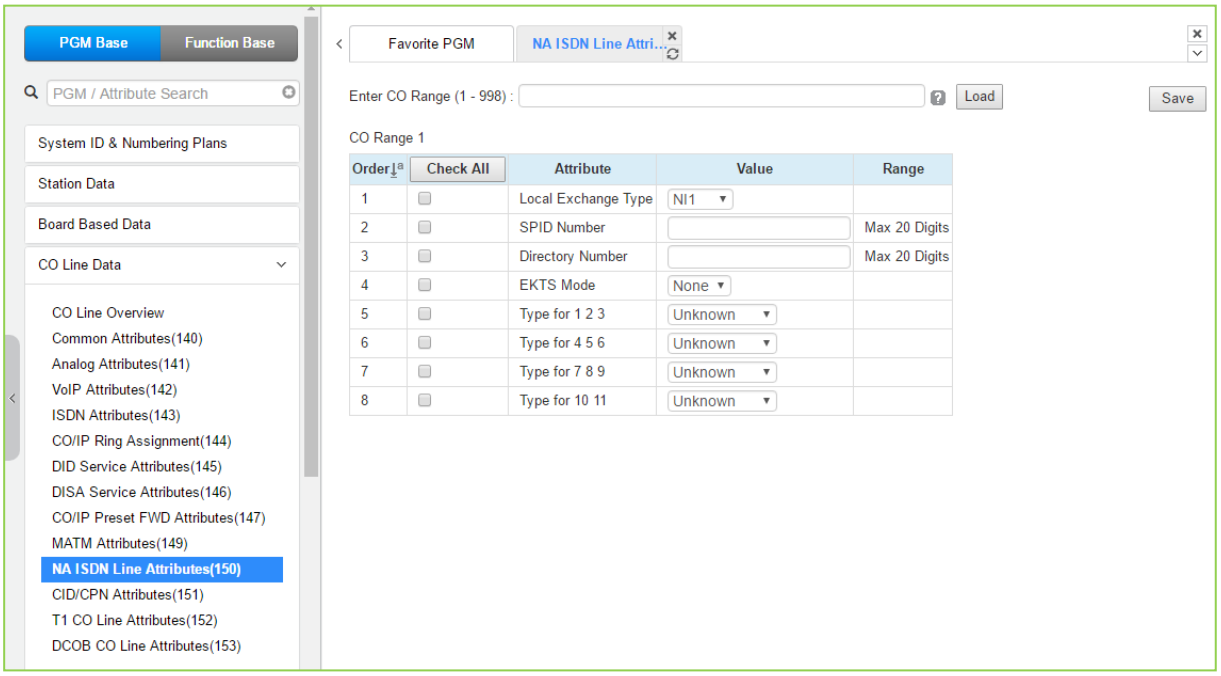


Figure 4.4.4.10-1 NA ISDN Line Attributes

To complies with the North American ISDN standards, certain attributes must be defined for the system. These include Directory (telephone) Number and Service Profile Id (SPID) for the device.

Note that this programming is required only for “Country Code” 1, USA installations. Refer to Table 4.4.4.10-1 for information on individual attributes.

Table 4.4.4.10-1 NA ISDN LINE ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Local Exchange Type	The type of ISDN determines several specifics of the protocol and is required for proper operation. **NI 1, NI 2, 5 ESS, Nortel**	Refer to description	NI 1
SPID Number	The Service Profile Identifier (SPID) is a number assigned to a fully initializing ISDN terminal and enables the Stored Program Control switching System (SPCS) to identify the ISDN terminal at layer 3 of the D-channel signaling protocol. The SPID is a free-formatted numeric string composed of 9 to 20 numeric {0-9} and International Alphabet (IA5) characters. The SPID uniquely identifies a particular set of subscription parameters assigned to a TSP.	20 digits	
Directory Number	Initializing terminals are required to store a 7-digit DN in order to perform the compatibility checking procedures that are part of call termination.	20 digits	

Table 4.4.4.10-1 NA ISDN LINE ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
EKTS Mode	The EKTS (Electronic Key Telephone Service) terminal permits users to operate those features specific to EKTS and voice features that may function distinctly in the EKTS environment. EKTS allows a DN to be shared by more than one terminal, on the same or on different interfaces.	NONE/ EKTS	NONE
Type for 1/2/3	ISDN CALLED NO uses the international format, National format, Network format, Subscriber format, or Abbreviated format when the user dials 1~3digits. • Unknown • International • National • Network • Subscriber • Abbreviated	Refer to description	Unknown
Type for 4/5/6	ISDN CALLED NO is constructed with the international format, National format, Network format, Subscriber format, or Abbreviated format when the user dials 4~6 digits. • Unknown • International • National • Network • Subscriber • Abbreviated	Refer to description	Unknown
Type for 7/8/9	ISDN CALLED NO is constructed with the international format, National format, Network format, Subscriber format, or Abbreviated format when the user dials 7~9 digits. • Unknown • International • National • Network • Subscriber • Abbreviated	Refer to description	Unknown
Type for 10/11	ISDN CALLED NO is constructed with the international format, National format, Network format, Subscriber format, or Abbreviated format when the user dials more than 10 digits. • Unknown • International • National • Network • Subscriber • Abbreviated	Refer to description	Unknown

4.4.4.11 CID/CPN Attributes - PGM 151

Selecting CID/CPN Attributes will display the CID/CPN Attributes data input page. Enter a valid CO range and click **[Load]** to enter the CID/CPN Attributes data. Use the checkmark to indicate which attributes to modify; checked attributes are stored by clicking the **[Save]** button.

Enter CO Range: eMG80/100: 1-74 / eMG800: 1-600 / UCP: 1-998

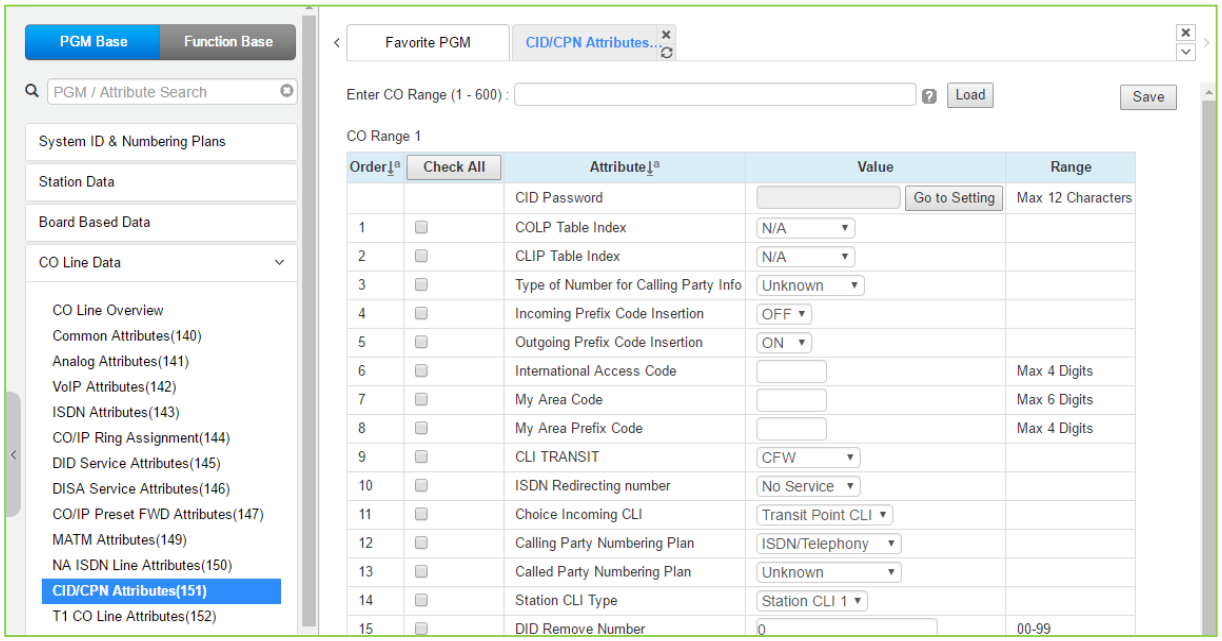


Figure 4.4.4.11-1 CID/CPN Attributes

- COLP: Connected Line Presentation
- CLIP: Calling Line Identification Presentation

Setting CID Password directly

You can set the CID password by clicking the “Go to Setting” button. After clicking it, you will move to the following PGM 162, set the CID password, save the CID password from the marking tick on the save box, and click the Save button.

Refer to Table 4.4.4.11-1 for information on individual attributes.

Table 4.4.4.11-1 CID/CPN ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
COLP Table Index	When an incoming call on an ISDN Line is answered, the system will send the caller id using the number from the CLIP/COLP Table (section 4.4.7.2) entry defined by this parameter. The station number is included as a suffix of the caller id. For “Using Station’s COLP Attribute,” the Station CLI type entered below will be used in place of the station number.	N/A 0-49 Station CLI	N/A
CLIP Table Index	When a call is placed on an ISDN Line, the system will send the caller id using the number from the CLIP/COLP Table entry defined by this parameter. The station number is included as a suffix of the caller id. For “Using Station’s CLIP Attribute,” the Station CLI Type entered below will be used in place of the station number.	N/A 0-49 Station CLI	N/A

Table 4.4.4.11-1 CID/CPN ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Type of Number for Calling Party Info	For outgoing calls on an ISDN Line, this parameter defines the "Type of Number Plan" provided in the Calling Party Information Element of the ISDN call SETUP message. **Unknown, International, National, Unused, Subscriber**	Refer to description	Unknown
Incoming Prefix Code Insertion	Regional ISDN providers may use the Local Area Prefix code for special services. In cases where the code is not provided in the incoming call SETUP message, the system can insert the My Local Prefix and My Area Code below in SMDR, LNR, displays, etc.	OFF ON	OFF
Outgoing Prefix Code Insertion	Regional ISDN providers may use the Local Area Prefix code for special services. The system can insert the "My Area Code" and "My Local Prefix Code" in the Connect message as defined in those items below.	OFF ON	ON
International Access Code	When an incoming call includes the international Country code in the ISDN call SETUP message, the Country code can be included in the station display. To include the Country code, Incoming Prefix insertion, and CLI display in Station Data must be ON.	Max. 4 digits	-
My Area Code	Regional ISDN providers may use the Local Prefix and Area codes for special services. The system will insert this Local Area Code in the call SETUP messages defined under the Incoming/Outgoing Prefix Code Insertion entries above.	Max. 6 digits	-
My Area Prefix Code	Regional ISDN providers may use the Local Prefix and Area codes for special services. The system will use this code for insertion of the Local Prefix Code in the call SETUP messages if Local Prefix Insertion is enabled above.	Max. 4 digits	-
CLI Transit	When the system must send CLI to the ISDN for an off-net call, the CLI can be either the original caller's CLI or the CLI of the Off-net forwarding/transferring station.	ORI/ CFW	CFW
ISDN Redirecting Number	When the system needs to send a Redirecting number to the ISDN for an off-net call, the Redirecting number can be either the original caller's CLI or the CLI of the Off-net forwarding/transferring station. If it is no service, then the system will not send this information. If it is configured for OGR CLI (original CLI), the system will send the original CLI from the incoming CO line. If it is CFW CLI, then the system will send the redirecting CLI that is the CLI of the off-net call forwarding station. **NO SERVICE, ORG CLI, CFW CLI**	Refer to description	NO SERVICE
Choice incoming CLI	Incoming CLI Choice – When the ISDN setup message has two CLIs (Transit Point CLI / Original CLI), this option determines the CLI the system will recognize. **Original CLI, Transit Point CLI**	Refer to description	Transit point CLI

Table 4.4.4.11-1 CID/CPN ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Calling party numbering Plan	ISDN Calling Party Numbering Plan can be configured. Unknown, ISDN/Telephony, Data/Numbering, Telex, **National Std, Private, Reserved**	Refer to description	ISDN/ Telephony
Called party numbering Plan	ISDN Calling Party Numbering Plan can be programmable. Unknown, ISDN/Telephony, Data/Numbering, Telex, **National Std, Private, Reserved**	Refer to description	Unknown
Station CLI Type	When the Station CLI is used with the CLIP or CLOP, one of five Station CLIs as defined in PGM 114 section 4.4.7.2 is used for this CO/IP Line as selected here.	Station CLI 1 –CLI 5	Station CLI 1
DID Remove Number	When a DID call is received on an ISDN Line, this entry determines the number of digits that will be removed starting at the first received digit.	00~99	00
One Digit Remove	Selects one digit remove mode in ISDN Called Digits for Italy DID.	Enable Disable	Disable
CID mode	The type of CID signal can be assigned according to the type of CID from the carrier. **Disabled, FSK, DT-AS(TAS) FSK, DTMF, RCID**	Refer to description	DT-AS(TAS) FSK
RCID detect	Russia CID Detect Mode.	LOCAL/ ALL	ALL
RCID request	Russia CID Request Mode.	USER/ AUTO	AUTO
RCID Request First Delay Timer	Russia CID First Delay Timer.	010–150 (10msec)	30
RCID No-Answer Timer	Russia CID No–Answer Timer.	001–300 (Sec.)	20
RCID Digit Number	Russia CID Digit Number.	04–10	07
RCID Request Count	Russia CID Request Count.	1–3	1
RCID Request Retry Delay Timer	Russia CID Retry Delay Timer.	10–30 (10msec)	10
LD DIGIT COUNT	To use LD(Long Distance) Digit Count, the 'My Area Prefix code' must be set in advance. This option enables the call log to add 'My Area Prefix Code' If Incoming CLI is shorter than 'LD DIGIT COUNT' and is not matched with Multi Area Code or without change if Incoming CLI is equal to or longer than 'LD DIGIT COUNT.' The default is 11 for North America and 0 for other countries.	00-23	11

Table 4.4.4.11-1 CID/CPN ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
LOCAL DIGIT COUNT	To use this option, the 'My Area Prefix code' must be set in advance. This option enables the call log to add 'My Area Code' by setting ON for 'ADD MY AREA CODE' If Incoming CLI is equal to or shorter than 'LOCAL DIGIT COUNT.' The default is 7 for North America and 0 for other countries.	00-23	7
ADD MY AREA CODE	To use this option, the 'My Area Prefix code' must be set in advance. This option selects My Area Code usage by setting ON. This option is related to 'LOCAL DIGIT COUNT.' ** As we mentioned the rule of 'LD DIGIT COUNT' and 'LOCAL DIGIT COUNT,' the incoming CLI is followed the above rule. But in the case of the other cases, the system compares the incoming CLI with Multi Area Code (PGM 100), and then My Area Prefix Code will be added to the call log.	OFF ON	OFF

4.4.4.12 T1 CO Line Attributes - PGM 152

Selecting T1 CO Line Attributes will display the T1 Line Attributes data input page. Enter a valid CO range and click **[Load]** to enter the T1 Line Attributes data. Use the checkmark to indicate which attributes to modify; checked attributes are stored by clicking the **[Save]** button.

Enter CO Range: eMG80/100: 1-74 / eMG800: 1-600 / UCP: 1-998

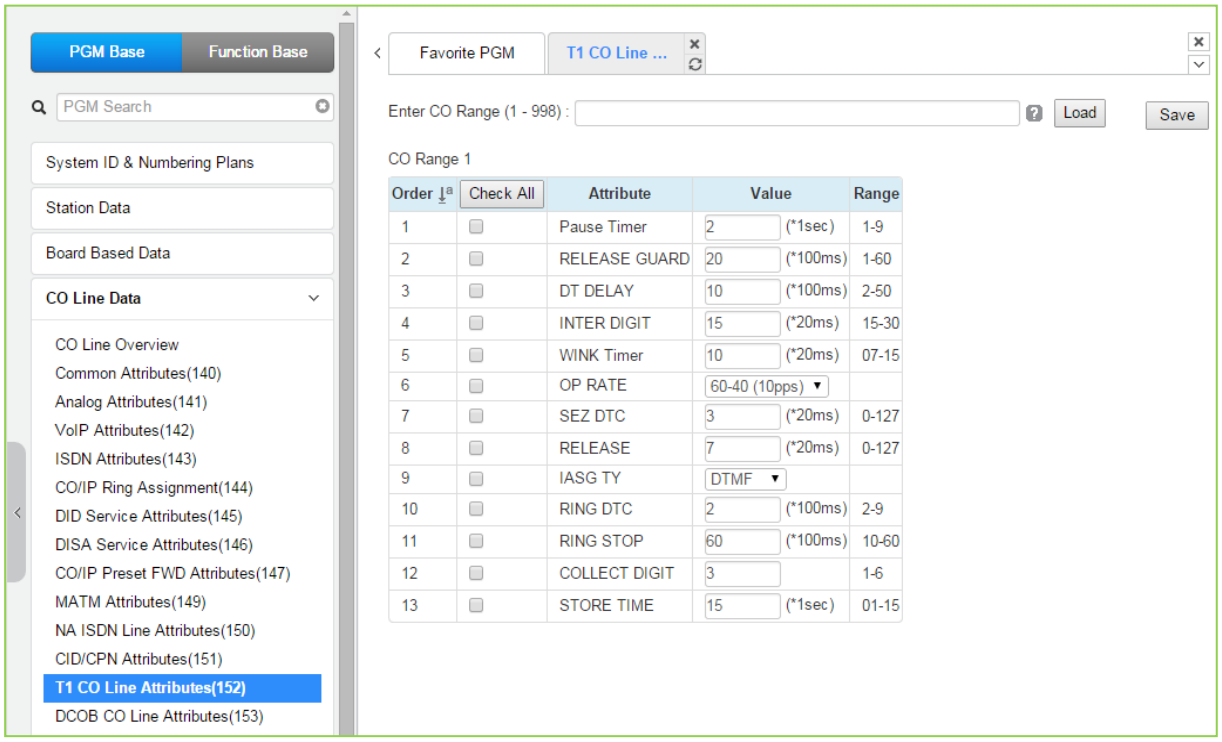


Figure 4.4.4.12-1 T1 CO Line Attributes

North American T1 standards require that the T1 terminating device, in this case, the iPECS system, include various “adjustable” timers and counters as described below.

Table 4.4.4.12-1 T1 CO LINE ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Pause Timer	A timed pause may be included in a Speed Dial number. In which case, the pause time is defined by this entry, not currently implemented.	1~9 (seconds)	2
RELEASE GUARD	The release guard timer defines the length of time the system will maintain a Line as busy after the call has been terminated to assure the PSTN has sufficient time to ‘clear down’ the circuit, not currently implemented.	01~60 (100 ms)	20
DT DELAY	The DT (Dial tone) Delay timer defines the duration dial tone must be received for DT recognition. It is not currently implemented.	02~50 (100 ms)	10
INTER DIGIT	The Inter Digit timer defines the duration between digit transmissions. Not currently implemented.	15~30 (20 ms)	15
WINK Timer	For TIE or DID Lines, the Wink timer defines the length of time the ‘wink’ (T1 TIE line circuit reversal) will last.	7~15 (20 ms)	10

Table 4.4.4.12-1 T1 CO LINE ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
OP RATE	For Pulse signaling, defines the duration and make/break ratio of each pulse. 60-40(10pps), 66-33(10pps), 60-40(20pps), 66-33(20pps)	Refer to description	60-40 (10pps)
SEZ DTC	This timer defines the length of a valid 'line seizure' signal.	0~127 (20 ms)	3
RELEASE	For Ground Start, this timer defines the minimum time ground will not be applied to the TIP side from the PSTN.	0~127 (20 ms)	7
IASG TY	Incoming Address Signaling Type defines the type of signaling (DTMF or Pulse) expected.	PULSE/ DTMF	DTMF
RING DTC	The Ring DTC (detect) timer defines the minimum acceptable length of the Ring-on time during a ring cycle.	2~9 (100 ms)	2
RING STOP	The Ring Stop timer defines the maximum Ring-off time during a ring cycle.	10~60 (100 ms)	60
COLLECT DGT	Collect DGT (digits) defines the number of digits expected on a DID line.	1~6	3
STORE TIME	For DID lines, this timer defines the maximum delay between incoming DID digits.	1~15 (second)	15

4.4.4.13 DCOB CO Line Attributes - PGM 153

Selecting DCOB CO Line Attributes will display the DCOB Line Attributes data input page. Enter a valid CO range and click the **[Load]** button to enter the DCOB Line Attributes data. Use the checkmark to indicate which attributes to modify; checked attributes are stored by clicking the **[Save]** button.

Enter CO Range: eMG80/100: 1-74 / eMG800: 1-600 / UCP: 1-998

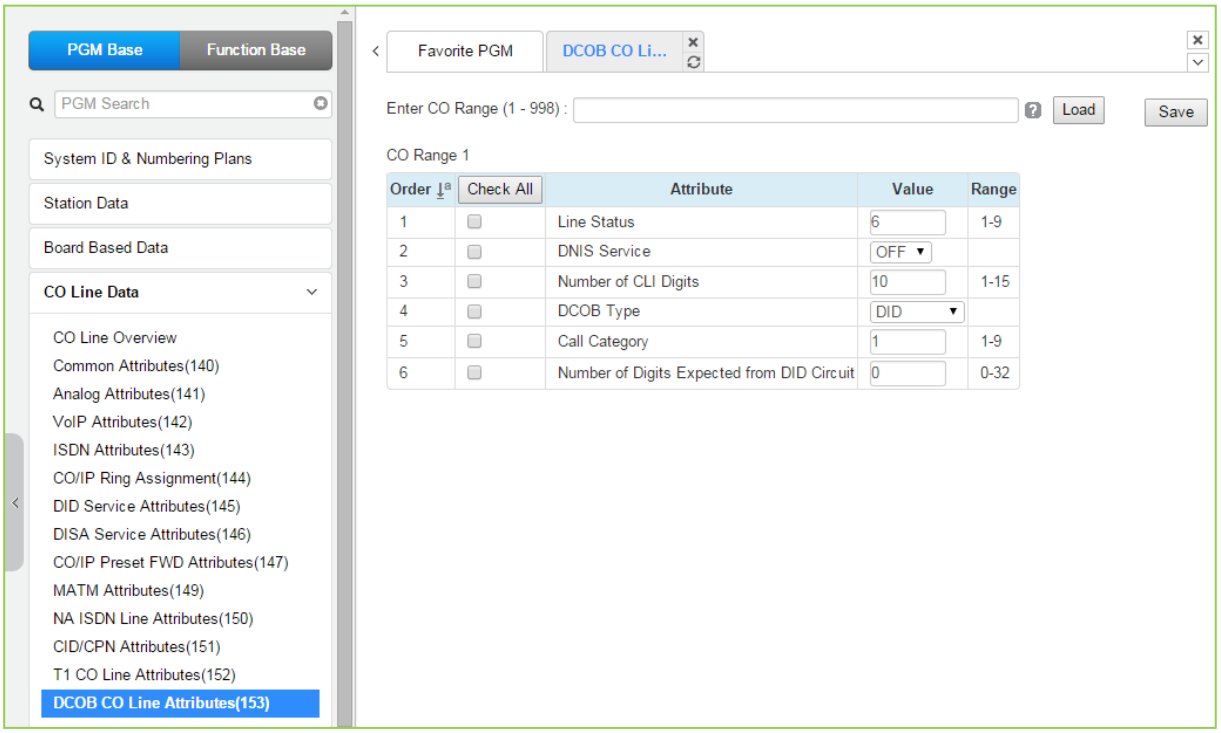


Figure 4.4.4.13-1 DCOB CO Line Attributes

Table 4.4.4.13-1 DCOB LINE ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Line Status	This parameter defines the code that the system will send to indicate idle line status following E1R2 specifications.	1~9	6
DNIS Service	In R2, this field determines whether the system will send caller information to PX or not.	OFF ON	OFF
Number of CLI Digits	This parameter defines the number of digits expected as the Calling Line Identification from digital CO lines.	01~15	10
DCOB Type	According to this type, the line can be restricted to the type of service, incoming DID, and outgoing calls (DOD).	DID/DOD, DOD, DID	DID
Call Category	This parameter defines the code sent in response to a call category request from the network following E1R2 specifications.	1~9	1
Number of Digits Expected from DID circuit	This parameter defines the number of digits expected as DID digits from digital CO lines. If set to “0”, the number of digits defined in PGM 145 is used.	0~32	0

4.4.5 System Data

Selecting the System Data program group returns the sub-menu displayed in the left frame, as shown in the following figure.

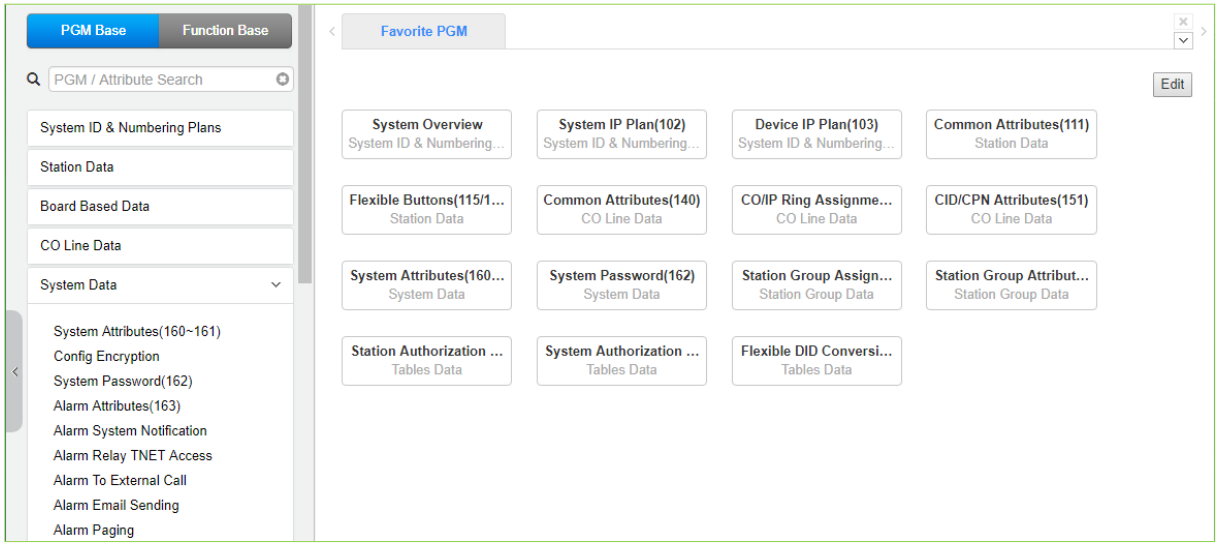


Figure 4.4.5-1 System Data Main Page

4.4.5.1 System Attributes - PGM 160 & 161

Selecting System Attributes will display the System Attributes data entry page. Selecting the blue-colored text in the Table header will sort the table based on the selected column. Click the **[Save]** button after changing Value.

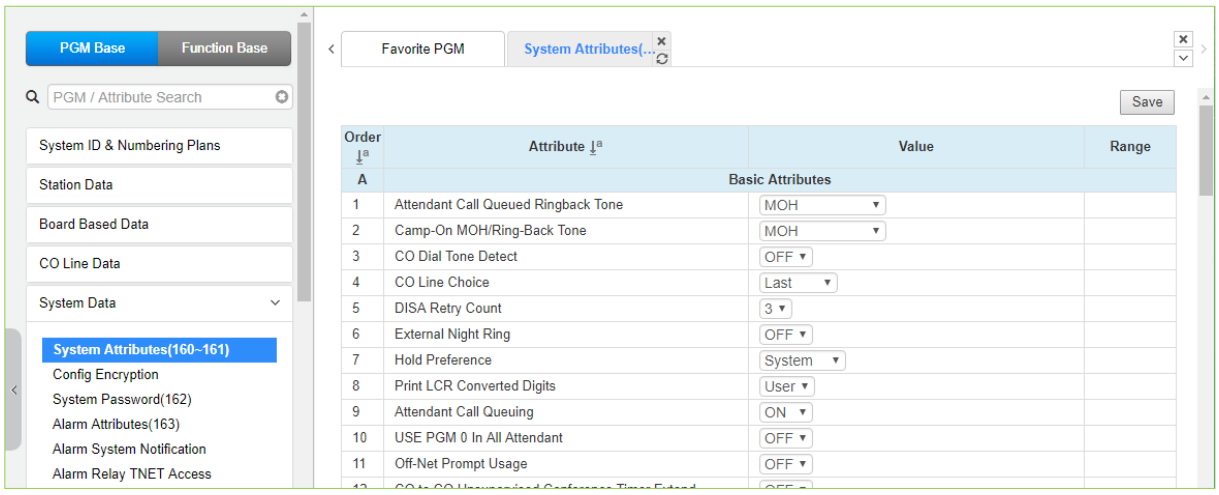


Figure 4.4.5.1-1 System Attributes

System Attributes define settings that affect system-wide features and functions. Generally, the entry will turn the feature ON (enable) or OFF (disable). Refer to Table 4.4.5.1-1 for a description of the Attributes and the data entries required.

Setting CID Password directly

You can set the CID password by clicking the “Go to Setting” button. After clicking it, you will move to the following PGM 162, set the CID password, save the CID password from the marking tick on the save box, and click the Save button.

Table 4.4.5.1-1 SYSTEM ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Attendant Call Queued Ring Back Tone	When the Attendant is busy receiving a call, the system will provide either Ring-back tone or Background music (MOH). If MOH is selected, the Music Source must be defined in 'Music source – PGM171'.	MOH/ Ring-Back Tone	MOH
Camp-On MOH/Ring-Back Tone	When Camp-On is used, the calling station will receive either a ring-back tone or MOH. If MOH is selected, a source must be defined in 'Music source – PGM171'.	MOH/ Ring-Back Tone	MOH
CO Dial Tone Detect	The system can use dial-tone detection or a timed pause for speed dial numbers that contain a Pause.	OFF ON	OFF
CO Line Choice	The system selects CO Lines from groups using either the LAST used, FIRST, or ROUND robin method.	LAST FIRST ROUND	LAST
DISA Retry Count	A DISA user is allowed to retry erroneous authentication code entries. This entry sets the number of retries before the system disconnects.	1~9	3
External Night Ring	CO/IP calls, which are assigned UNA, can activate the Loud Bell Contact. While in the Night mode, an incoming call will activate the contact.	OFF ON	OFF
Hold Preference	A single depression of the **[Hold]** button during CO call places the call on the preferred hold, System, or Exclusive.	System/ Exclusive	System
Print LCR Converted digits	SMDR will output the number dialed by either the system's LCR or the user.	LCR/ USER	User
Attendant Call Queuing	The system can be configured to queue incoming calls to a busy Attendant.	OFF ON	ON
USE PGM_0 IN ALL ATD	This field allows Main Attendants to activate Day/Night mode and other system Attendant menus except PGM 06 – Record system announcement. (Not available in USA version.)	OFF ON	OFF
Off-net Prompt Usage	The Off-Net routing prompt can be played when a call is routed to a destination external to the iPECS. (Not available in US version)	OFF ON	OFF
CO to CO Unsupervised Conference Timer Extend	When an Unsupervised Conference is established with DISA, Off-Net Fwd, etc., The Unsupervised Conference timer determines the allowed duration of the call. If enabled here, the user may extend the allowed duration.	OFF ON	OFF
ACD Manager Print	When the optional ACD Event messages are required, the system must be enabled here to send the events.	OFF ON	OFF
Repeat DTMF tone	If enabled, the system will repeat DTMF tones to the caller's station when the call is routed to an off-net location.	OFF ON	ON
Off-Hook Ring Type	An off-hook ring can be a single-tone burst or muted normal ring.	MUTE/ BURST	MUTE
Page Warning Tone	A warning tone can be sent before a page announcement.	OFF ON	ON

Table 4.4.5.1-1 SYSTEM ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Automatic Privacy	Automatic Privacy can be disabled, allowing stations to join an active CO/IP call. A warning tone can be provided. See Privacy Warning Tone below.	OFF ON	ON
Privacy Warning Tone	If desired, a warning tone can be provided when privacy is overridden.	OFF ON	ON
ACD Print Enable	ACD statistics can be periodically sent to the assigned serial port. To provides the periodic reports, this feature must be ON.	OFF ON	OFF
ACD Print Timer	This entry defines the time, in 10-second increments, between the periodic ACD reports assigned above.	001~255 (1 sec)	10
CALL TRACKING Enable	It transfers the tracking information to 3rd Party VM SIP.	OFF ON	OFF
Clear ACD Database	When a periodic report is sent, the ACD database can be cleared automatically if “ON.”	OFF ON	OFF
Override 1st CO Group	When a user dials ‘9’, the system can search all CO/IP Groups for the first available CO/IP line.	OFF ON	OFF
Codec Type	The default codec can be defined as G.711, G.729, G.722, or G.723.1 for decreased bandwidth needs. The selected codec will be used on all internal communications as well as for remote iPECS devices.	G.729/ G.723.1/ G.711/ G.722	G.711
G.711 Packetization	The G.711 voice frame packetization time determines the interval at which voice samples are packetized and sent when the G.711 codec is used.	10/20/30 (1 msec)	020
G.723 Packetization	The G.723.1 voice frame packetization time determines the interval at which voice samples are packetized and sent when the G.723.1 codec is used.	30/60 (1 msec)	030
Network Time/Date	The system can use ISDN Network time or NTP to synchronize time with the ISDN or data network. ISDN sync is not available in the USA version.	Disable/ ISDN/ NTP	Disable
Incoming Toll Check	The system can invoke COS dialing restrictions when a user dials while connected to the incoming call.	OFF ON	OFF
Web Server Port/TLS for Web	This field determines the TCP port employed to access the system WEB server. This field also enables Transport Layer Security (TLS) for access to Web Admin. **00001-65535/Enable or Disable**	Refer to description	443/ Enable
REST API Service Port	The REST API Service Port is the TCP port for the REST API service. It will be started with the web admin server after refreshing when you assign or change the port. **0(Unused), 1024-65535**	Refer to description	0
REST API Session Timeout	The REST API Session Timeout value means the duration for REST API service after login with ID and Password. After the timeout value, the session will be expired if there are any requests from the user.	1-60 (1 min)	2

Table 4.4.5.1-1 SYSTEM ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Auth Retry Count	When an Authorization code is required, the user may attempt to enter a Valid code up to the maximum value defined in this field.	1-9	3
Simple Auth Code Usage	The user enters system Authorization codes as "*" and the code (ON) or "*"+ the Auth code index and the code (OFF).	OFF ON	ON
COS 7 when Auth Fail	If a user fails to enter a valid Authorization code in the number of attempts assigned in Auth Retry Count above, the station is disconnected, or the Station COS is changed to COS 7. In the latter case, the user must employ COS Restore in Station User PGM 2 to return the station to the normal COS.	OFF ON	OFF
Unified Message Format	System Integration Messages are sent out the defined serial or TCP channel.	OFF ON	OFF
Conference Room CO Tel Number	ISDN DID number an external party must dial to enter a Conference room.	Max. 15 digits	
Record warning tone	When call recording is active, a tone can be sent to all connected parties to indicate the conversation is being recorded.	OFF ON	ON
UCP (MPB) DIFF SERVE	Diff-Serv Code Point applied to packets from LAN port of the UCP (iPECS eMG LAN port of the MPB). TOS: Route(0),Priority(8),Immediate(16),Flash(24),Flash Override(32),Critic(40),Internetwork Control(48),Network Control(56)	00-63	4
Device Upgrade Mode	Transfer mode for upgrades from MPB to an iPECS device.	FTP TFTP	FTP
CO Transfer Tone	Ring Back Tone or Music On Hold will be played to the CO Line when a CO call is transferred to a busy extension. **MOH, Ring-Back Tone**	Refer to description	Ring-Back Tone
Conference Warning Tone	When a new member joins a conference room, the system provides a warning tone to conference members.	OFF ON	ON
Dummy Dial Tone	The system can provide a dummy dial tone when a CO line does not provide a dial tone.	Unused/ Use	Unused
SIP Station Mode	SIP phones may set up a point-to-point RTP connection (PTP), or to assure a controlled connection, RTP can be routed via a VoIP channel (RTD).	RTD/ PTP	Routed
SMS Center Number	When the PSTN is used to send SMS, the phone number of the Short Message Service Center must be entered.	Max. 23 digits	
SMS Center CLI	When the CO/IP Line is used to receive SMS, the Caller Id expected from the Short MSG Service Center must be defined.	Max. 23 digits	
SMS Protocol	The Short Message Service Protocol must be selected to support SMS. **None, ETSI-P1, ETSI-P2, KT-Living Net, SIP-Text, SIP-XML, KT IP-PBX, SKN IP-PBX, KT XML**	Refer to description	NONE

Table 4.4.5.1-1 SYSTEM ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
G.722 Packetization	The G.722 voice frame packetization time determines the interval at which voice samples are packetized and sent when the G.722 codec is used.	10/20/30 (1 msec)	020
Transit-out security	The system will check the IP address for transit-out calls in the master system. If not valid, the transit-out call is denied.	Unused/ Use	Use
Emergency call attendant Notify	The Attendant can be notified when another user in the system dials an emergency number.	Unused/ Use	Use
3-Way Conference Preference	When 3-way conference calling, the system uses the selected device to establish the conference mixing. When “Local” is assigned, the device must provide the mixing, such as a SIP phone. This option is available only for UCP.	Local/ MCIM	Local
First digit * in SPD	Normally, when “*” is the first digit in a Speed Dial number, the Display Security feature is activated so that the number is not shown in the LCD of iPECS IP or LDP Phones. Otherwise, the “*” is sent as the first digit to the carrier. **Display Security, Digit ***	Refer to description	Display Security
Use Strong Password	When enabled, passwords in PGM 162 must be longer than 10 digits and include both numbers and characters.	OFF ON	ON
Station password minimum length	If a strong password is ON, then "minimum station password length" is used. If input station password length is less than "minimum station password length," then it is not saved.	01~12	6
VSF SMTP port	SMTP port used for the VSF and UVM gateway (VMIU/VMIB).	00001~ 65535	25
CTI IP	When assigned, the system will accept 3rd party TAPI messages only from the assigned IP address.		0.0.0.0
Intercom busy service	When busy, an intercom call may use Off-hook Voice-Over, intrusion, or multi barge in a room to connect to the called intercom party. **Voice-over, Intrusion, Barge-in (Monitoring), Barge-in(Conference)**	Refer to description	Voice over
Autosave new message	After listening to a voice message, the system can automatically save the message or leave the message in the new message category if the user takes no action.	Unused/ Use	Unused
IGMP query usage	The system employs multi-cast packets for registration and certain general functions such as MOH. With some multicast snoop-enabled Layer 2 switches, multicast packets are not forward unless an IGMP query device exists in the network. This entry enables the IGMP query option, and the system sends periodic IGMP query messages to avoid multicast blocking.	OFF ON	OFF
IGMP query interval timer	This timer defines the interval for each IGMP query message.	0~3600 (Sec.)	180

Table 4.4.5.1-1 SYSTEM ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
IGMP query all host	IGMP queries are sent to all IP hosts (ON) on the network or to iPECS devices only. For All Hosts, IP address 224.0.0.1 is used. Otherwise, the iPECS specific 239.20.19.50 IP address is used. If problems occur with MOH, the “All Hosts” may correct the issue.	OFF ON	ON
IGMP query generic	This entity specifies a group address being queried. If ON is selected, all multicast groups are queried. If OFF is selected, iPECS registering device group (239.20.19.50) is queried only. This should be ON when there is a MOH problem.	OFF ON	OFF
Restrict star and pound	If enabled, calls using * or # as the first digit are prohibited by the system.	OFF ON	ON
Restricted Dialing Display After Answer	If a restricted number is called, the system will output an SMDR record for the call after the call is answered.	OFF ON	ON
IP BIND USAGE	If It’s ON, VOIU/VOIB/VOIM will apply IP-Binding with information in PGM130 / PGM133 (Media port).	OFF ON	OFF
New 5 Wake Up Usage	With the “New Wake-Up” option, the user can assign five-alarm notification times; otherwise, only one Wake-Up time can be set.	OFF ON	OFF
Easy 5 Wake Up Usage	If this value is set to ON, and New 5 Wake Up Usage is also set to ON, each station user can enter his/her wake up time without entering wake up type and wake up an index.	OFF ON	OFF
Station VM Feature Usage	The Station VM feature (PGM 127) can be used if this option is set to ON. Enhanced features of the VSF/UVM can be disabled. Features controlled by this setting include as below: • Company Directory • Remote Announcement Recording • Administrator Mailbox • Distribution List • Mark a Message as Private, • Urgent or Delivery Confirmation • Record Greeting through CCR • Voice Mail Class of Service	OFF ON	OFF
End code(#) usage in System Auth Code	If this option is set to ON, the End code (#) must be entered when the system Auth code is entered.	OFF ON	OFF
Remote VM Access	If this value is OFF, the user cannot access to VSF mailbox via DID, DISA CO call, and so on (i.e., through CO line channel).	OFF ON	ON
Transfer Tone Usage	If this value is ON, a Warning tone is served to the [transfer to] station. This is only applied to the screened transfer case.	OFF ON	OFF
CID Password Usage	If this value is ON, a user must enter the CID password to modify an admin value about the CID setting.	OFF ON	OFF

Table 4.4.5.1-1 SYSTEM ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
LCR Dial Tone Detect	If this value is set to ON, the system first checks dial tone in the case on analog CO Lines then LCR dialing is completed. If no dial tone is detected, the call is rerouted to Alternate DMT Index. If the LCR type is set to M13, the LCR dial tone detect option is not applied.	OFF ON	OFF
Mobile Phone Presence Service port	This is for an interface between eMG and an external server that sends http/xml data. Currently, the first usage of this port is the 'mobile phone presence' service. If set to a valid port, the presence service will be implemented, and the system will await messages for presence from the external server.	00001~ 65535	00000
Mobile Phone Presence State Sync	When the system receives presence information for a mobile extension from the external server, the system synchronizes the station's call state with this presence information. A busy presence will set the station to busy. **OFF, DSS LED only, Station Status**	Refer to description	Station Status
Mobile Phone Presence Force Idle Timer	The system will return a station's state to idle if there is no updated presence information from the external server for the duration of this timer.	0~3600 (Sec.)	0
Attendant Password Usage	If this value is set to ON, the system requests a password: When a user enters Attendant program ([PGM] + 0, When an Attendant enters the Speed program, When a user assigns attendant program code ([PGM] + 0) to the Flexible button,	OFF ON	OFF
Picked-up station name usage	The name of the picked-up station is displayed when pickup an internal call.	OFF ON	OFF
Display LCR mode	Display "LCR MODE" when LCR is activated.	OFF ON	ON
VM Notify to Mobile Extension over CO	If this value is set to ON, an analog Loop Start CO Line can be used for the VM notification call to the Mobile Extension.	Disable Enable	Disable
MODEM Associated Station/CO line	The call is routed to the system's built-in modem when the assigned CO Line receives a call. This option is available only for eMG80/100& eMG800. eMG80/100: STA/239, eMG800: STA/ 2199	CO/STA	Refer to description
Display {MEET ME} Soft button	If this value is set to OFF, **{MEET ME}** soft button is not displayed during a paged.	OFF ON	ON
Number of CLI Wait List	The system checks the status of each device with a polling message periodically using this timer.	0-255	0
Emergency Mailbox Station	When an Emergency Mailbox Station is assigned, an emergency call placed by a station is recorded automatically to the assigned mailbox.		

Table 4.4.5.1-1 SYSTEM ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
MSVC XML Port	The XML port used to support Web callback, call-through, and iPECS Click Call application for MSVC (Mobile Service) must be defined.	00001~ 65535	7878
Security (option for MSVC XML Port)	It is security option for MSVC XML Port. (7878) If it is “TLS1.2,” then the system accepts only TLS 1.2. Other TLS1.1(or below) and SSL will be rejected. The ″Default” option is used for application compatibility as below. **UCS version that can support TLS1.2:** • UCS Win Client: 6.1.5 • UCS Mac Client: 6.1.3 • UCS Android Client: 6.1.6 • UCS iOS Client: 6.1.3 **iPECS Click Call version that can support TLS1.2:** • 1.0Ar • 2.0Ac **Report plus, CCS that can support TLS1.2:** (TBD: it will be supported in 2019 Q2) So, if both UCS and report plus are used, then “Default” should be used before the new report plus/CCS package is released.	DEFAULT TLS 1.2	DEFAULT
IPCR Announce for recording warning	When ON, the IPCR server Call Recording notification announcement is played to the caller in place of the warning tone.	OFF ON	OFF
IPCR Announce for only incoming	Users can select IPCR Announce only when it’s incoming by setting ON.	OFF ON	OFF
IPCR Announce for only manually	When ON, announce will send by only user manually.	OFF ON	OFF
IPCR CO PRIORITY	If this is ON, CO recording is recorded with priority over station.	OFF ON	OFF
PROTECT UCS 3G CALL	If this is ON, PROTECT UCS 3G CALL is on.	OFF ON	OFF
Mobile EXT CO Access Password Check	When a mobile extension places an external call using an iPECS CO/IP Line, the user may be required to enter a valid Authorization code to place the call.	OFF ON	OFF
Hold key usage on paging	When ON, the Hold key is used for paging.	OFF ON	ON
Device Info Request Interval	The system checks the status of each device with a polling message at intervals of this timer.	15 ~ 255 (seconds)	15

Table 4.4.5.1-1 SYSTEM ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Dial By Name List	The Dial by Name feature allows stations in any ICM tenancy group to call a station in the ICM Tenancy group. When desired, Dial by Name can be limited to function within allowed Tenancy calling groups, PGM 125. **All, Accessible ICM Group only**	Refer to description	ALL
Dial By System Speed Name List	If this value is set to "Accessible System Speed Zone Only," the system speed dial number of Accessible system speed zone (System Speed Zone (232)) is displayed in {Dial by Name}. **All/ Accessible System Speed Zone Only**	Refer to description	ALL
Default Web Language	The user can select the display language used in the Web pages. Either English or the “Local” language can be selected. Note the “Local Language” must be entered in the Multi-Language file in the Maintenance section. **English, Local language**	Refer to description	English
No Range Load Limit on Web Admin	OFF: Limited index range will be accepted (e.g. 1-100) ON: No limitation of table index (e.g. 221, 222, 270, etc)	OFF/ON	ON
Forward limitation by caller COS	Caller(internal station) call to a station offnet forwarded. It can be forwarded by caller COS if it's ON.	OFF/ON	OFF
No CLI Call Log	Leave system Call log even though there is no CLI information if it is ON. Otherwise, the Call log is not left.	OFF ON	OFF
Remote VM Forward Access	If the value is ON, the Call Forwarding settings from remote access are enabled. If the value is OFF, the Call Forwarding settings from remote access are disabled.	OFF ON	ON
DB Backup to USB monthly	The system downloads the database to USB periodically. The user can access, copy and delete files on a USB drive via web admin. So you can back up DB by choosing the specific date for Monthly or Weekly. vUCP/eMG100 is not available for this feature.	N/A, 1, 15	N/A
DB Backup to USB weekly		N/A, Mon ~ Sun.	N/A
SLT Line Monitor	SLT line supervision is to be supported to periodically check the line connection/disconnection as programmed - daily or programmed time. When the line is disconnected, alarm call/message notification is provided to pre-defined destinations like other alarms. The system will send e-mail notifications according to "Common SMTP Attributes" and "Alarm Attributes." This is to provide more reliability for mission-critical services for hospitality or health care solutions (i.e., bath alarms using the SLT line).	OFF ON	OFF

Table 4.4.5.1-1 SYSTEM ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
SLT Line Monitor	**Conditions** • Normal SLT service is not available during the detection period since the detection takes several seconds. • The Ringer test determines the presence of appropriate ringer terminations on the line. The measured impedance must be within the defined limits: 1.4 kΩ (5 REN) ~ 40 kΩ (0.175 REN). Otherwise, the test fails, which means that a normal SLT device can be detected, but if a simple device that does not provide the proper ringer impedance is connected, we cannot detect it properly. • Supported system options: UCP/eMG80/100/800 with Unified 2.1 software • Supported G/W & Boards: UCP-SLTM, UCP100 SLTU, eMG80/100/800 SLIB	OFF ON	OFF
SLT Line Monitor Time	The system monitors if SLT Line functions correctly at a preset time in this field.	0-23	0
UCS Ring ACK Count	UCS Client can be checked by Ring ACK Message. If the Ring ACK message is sent and gets no ACK message, the system sets the state of UCS Client on OOS(Out of service) after the set of Ring ACK count. If the Ring ACK Count is 0, the UCS Client goes to OOS (Out Of Service) after 1 time. If the count is 2, UCS Client can go to OOS (Out Of Service) at 3 times. UCS Client is ringing before expiring the Ring ACK timer set on System Timers 'UCS Ring ACK Timer' and afterward will hear Error tones.	0-9	0
Dial Back to Caller from Remote VM Access	A user accesses voice mail from a remote. The user can make a call to the caller of the voice mail like below. If 'Toll-Free' is selected, the user can call the caller of the voice mail. If 'toll check' is selected, Station COS will be applied. If 'Rejected' is selected, the user can't call the caller of the voice mail. **Toll Free, Toll Check, Rejected**	Refer to description	Toll Free
Web Admin Login Failure count to block	For security, the administrator can set the limited count to log in to Web admin from 5 to 63.	5-63, 0(unused)	5
Web Admin Hacking Block Period	This setting time is the duration of blocking the access to Web admin if Web admin login fails.	5-60 minutes	5
Web Admin Hacking Block Email Notification	If this option is enabled, System sends the notification by email about blocking the web admin. The email address is following the below 'Alarm Receiver E-Mail Address(To) & Notification Receiver E-Mail Address(To)'.	Disable, Enable	Disable

Table 4.4.5.1-1 SYSTEM ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
RTP/SRTP SSRC filtering	It is used to remove noise by SSRC filtering. LIP phone could be locked up if the LIP-9002/9008/9008G version is lower than 1.2Aa when enabled.	Disable, Enable	Disable
USB serial usage	It should be enabled when a USB terminal is used. vUCP/eMG100 is not available for this feature.	Disable, Enable	Disable
Display Forward Reason	This option shows the forward reason and the original station number for an external call on the upper part of the LCD by setting ON. The related PGM are as below: • The normal forward from Station to Station. • The value 'Attendant' is checked in 'DID/DISA Destination (167)'. • The type 'Attendant' is selected in 'CCR Table (228)'. • 'Reroute Destination' is selected 'Station' in 'Flexible DID Conversion (231)'.	OFF ON	OFF
Conference room expansion	If this option is set to ON, conference room no is increased. • **OFF:** Conference room 1~9 • **ON:** Conference room 1-100(eMG80/100), Conference room 1-200(eMG800,UCP)	OFF ON	OFF
SLT conference hook switch time	It is used to make a conference call on SLT. The user has to make the hook flash two times within this time.	2 – 9	AUS, NZ: 3 Others: 2
IP DECT Message Server Port	This port is used to send/receive a message with IP-DECT. The setting must be changed in IP-DECT Base.	0, 1024-65535	0(Unused)
XSI Service Port	This port is used to search directory through Broadsoft XSI(Extended service interface) protocol The setting must be changed in IP-DECT Base.	0, 1024-65535	0(Unused, Web Reload)
ICM Hold Preference	Depression of the [Hold] button during ICM call places the call on the preferred hold, System or Exclusive.	System/ Exclusive	Exclusive
Max 100 Icon In IP Attendant	Maximum 100 devices could be shown in a monitoring window if it is ON. If it is OFF, then all devices could be shown in monitoring windows.	OFF ON	OFF
Speed List as Directory	[DIR] search is working when the user press [SPEED] twice or [SPEED] and {LIST}	OFF ON	OFF
DTMF across the Page - Usage	This is for the Telephone event of DTMF sending and ACK functionality during a Page. DTMF functionality flow : • A Page caller can send DTMF to Paged endpoints. • A Paged endpoint can send DTMF ACK to the Page caller. The Page is stopped, and a confirmation tone or announcement is played to the Page caller.	Disable Enable	Disable
DTMF across the Page - DTMF ACK codes	DTMF ACK digit codes programmed for comparison.	[empty], 0-9, *, #	[empty]

Table 4.4.5.1-1 SYSTEM ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
DTMF across the Page - DTMF ACK functionality	Select the following action after receiving of DTMF ACK digit string. **No action** **Disconnect Page followed by Confirm Tone** **Disconnect Page followed by Announcement**	Refer to description	No action
DTMF across the Page - DTMF following Announcement	DVU Announcement number that is used for DTMF ACK following action.	[empty], 1-200	[empty]
Centralized multicast RTP relay	Centralized VSF MOH(vUVM) is relayed by vVOIM/T in vUCP if it is ON	OFF ON	OFF
SMDR/ACD/Alarm Mail Attribute			
Common SMTP Attributes			
SMTP Server IP Address	SMTP server IPv4 address to receive the SMDR E-mail reports.	12-digits	0.0.0.0
SMTP Server Domain Address	SMTP Mail server Domain address to receive the SMDR e-mail reports. Check DNS IP address setting.		
SMTP Port	This field defines the TCP/IP port the system will employ when communicating with the SMTP E-mail server. (It is moved to web admin PGM 160-161)	1-65535	25
SMTP Security Connection	The system can support basic security policies when communicating with the SMTP E-mail server. Note the server must also be configured for the selected security protocol. **No security, SSL, TLS**	Refer to description	No security
E-Mail Account ID	This field defines the user's ID for the SMTP server. If the user's ID and password are assigned, the SMTP server will check the validity of the user ID and password.	Max.64characters	
E-Mail Account Password	This field defines the user's password for the SMTP server. If the user's ID and password are assigned, the SMTP Mail server will check the validity of the user ID and password.	Max.64 characters	
Sender E-Mail Address (From)	E-Mail addresses as the "From" address when sending Database, SMDR, ACD, and Alarm reports.	Max.64characters	
Sender System Domain Name	The domain name of the SMTP Mail server to receive SMDR reports. This field is used in place of the SMTP Mail Server IP Address above.	Max. 18 characters	
Database Attributes [Send Mail]			
[Send Mail] button is used for sending the mail after filling out the below menu			
Database Mail Send Monthly Set	Sets day of the month for Database to be sent on a monthly basis (NA for no monthly reports, select the day for 1 or 15).	NA/ 1/ 15	NA

Table 4.4.5.1-1 SYSTEM ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Database Mail Send Weekly Set	Sets day of the week to send Database weekly.	Day-of week	N/A
Database Type	Select the desired database type: All database, System speed, Station speed, LCR, etc.		All Database
Database Receiver Mail Address	E-mail address to receive the Database E-mail reports.	Max. 64 characters	
SMDR Attributes			
[Send Mail] button is used for sending the mail after filling out the below menu			
SMDR Mail Send Weekly Set	Sets day of the week to send SMDR data weekly.	NA, Monday to Sunday	N/A
SMDR Mail Send Daily Set	Sets time-of-day for SMDR data to be sent on a daily basis (00 for no daily records, 01-23 for hour of the day).	00-23	
SMDR Mail Auto Send Set	If the SMDR buffer is full, the system can automatically send a notification by E-mail.	OFF ON	OFF
SMDR Mail Auto Delete Set	Delete SMDR records after sending an E-mail.	OFF ON	OFF
SMDR Receiver Mail Address	E-mail address to receive the ACD E-mail reports.	Max.64characters	
ACD Attributes			
[Send Mail] button is used for sending the mail after filling out the below menu			
ACD Mail Send Weekly Set	Sets day of the week to send ACD statistic data weekly.	NA, Monday to Sunday	N/A
ACD Mail Send Daily Set	Sets time-of-day for ACD statistic data to be sent on a daily basis (00 for no daily records, 01-23 for hour of the day).	00-23	N/A
ACD Database Delete After Mail Send	Delete ACD statistic data after sending E-mail	OFF ON	OFF
ACD Receiver Mail Address	E-mail address to receive the ACD E-mail reports.	Max.64characters	
Alarm Attributes			
[Send Mail] button is used for sending the mail after filling out the below menu			
Alarm Receiver E-Mail Address(To) & Notification Receiver E-Mail Address(To)	The system will send an email to the saved E-Mail Address when a system alarm occurs or the system restarts, and UCP System sends the information by email when changing to ACT mode during Redundancy.	Max.64characters	

Table 4.4.5.1-1 SYSTEM ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
LDAP Server Settings			
Server Display Name	When the UCS Client requires access to an LDAP server, the system will provide the LDAP server information to the client. The server name is defined in this field.	15 characters	LDAP Server
Server IP	When an LDAP server is employed, the IP address of the server must be defined.		0.0.0.0
Server Port	When an LDAP server is employed, the TCP/IP port of the server must be defined.	0001-65535	
Require Login	The UCS Client ID and Password may be required to log in to the LDAP server.	OFF ON	ON
Use SSL	The client can employ SSL (Secure Sockets Layer) when supported by the server for added security.	OFF ON	OFF
Search Base	Server base means Search option. You can get the search option from the LDAP Server manager. For example, if OU (Organization Unit) is OC and DC (Directory Company) is ucapp and com, you can give the option "OU=OC, DC=ucapp, DC=com" in this field. You will get the desired directory.	Max. 100 characters	
LDAP User ID	ID and Password must be required to connect to LDAP Server.		
LDAP User Password		All characters	
Resource Monitoring			
Resource monitoring is a software function to log the over usage events of some CPU resources. This function is implemented to find out the root cause of unwanted system reboot by high CPU load. The log data by resource monitoring is a built-in system DB file and checked by using maintenance CLI ‘smblog view’.			
Resource Monitoring Process	This option determines whether to turn on/off a function.	OFF ON	OFF
Event Log Interval Time	This value specifies an interval time of the event log when the same event is detected consecutively. The purpose is to avoid CPU overhead from logging events frequently. A minimum value that can be programmed is 10 seconds.	10-3600sec	60
Reboot on Detecting because of File Open Overflow	By software bug, file open leak problem can happen, and the user can't connect to the web page or system can't work correctly if this type of leak happens, System will be rebooted if this field is configured to ON after log event.	OFF ON	OFF
Reboot on Detecting because of Memory Usage Overflow	The system will reboot by itself when memory over usage happens. Up to now, this function is not implemented.	OFF ON	OFF
Free Memory Threshold	This value specifies a threshold value to detect memory leakage events.	KB, 1-65535	4096

Table 4.4.5.1-1 SYSTEM ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Reboot on Detecting because of CPU Usage Overflow	The system will reboot by itself when CPU over usage happens. Up to now, this function is not implemented.	OFF ON	OFF
CPU Usage Threshold	This value specifies the threshold value to detect CPU over usage events.		95
Reboot on Detecting because of Network Busy Traffic	The system will reboot by itself when a busy network usage (receiving side) happens. Up to now, this function is not implemented.		OFF
Received Packet Count Threshold	This value specifies the threshold value to detect the busy Ethernet traffic (receiving side). The value is packets count per second.		40000
Received Octet Count Threshold	This value specifies the threshold value to detect the busy Ethernet traffic (receiving side). The value is bytes count per second. When both Packet and Octet count values are specified, packet count is used for detecting.		0
IP DECT Message Server Port	This port is used to send/receive a message with IP-DECT. The setting must be changed in IP-DECT Base.	1024-65535, 0(Unused)	
XSI Service Port	This port is used to search directory through Broadsoft XSI(Extended service interface) protocol The setting must be changed in IP-DECT Base.	1024-65535, 0(Unused)	

4.4.5.2 Config Encryption

The passphrase is used for DB encryption. If the value is set, the private data in your system will be encrypted. Therefore even if the files which include private data are leaked, they cannot be read. When you don't want this encryption feature, you have to set the passphrase to blank.

Note that, before the encryption, it is better backup your DB for the emergency case and remember the passphrase. Otherwise, you cannot decrypt the system DB.

If the passphrase is assigned, the system DB, which includes private data, will be encrypted.

If the passphrase is lost, you cannot change it or decrypted system DBs,

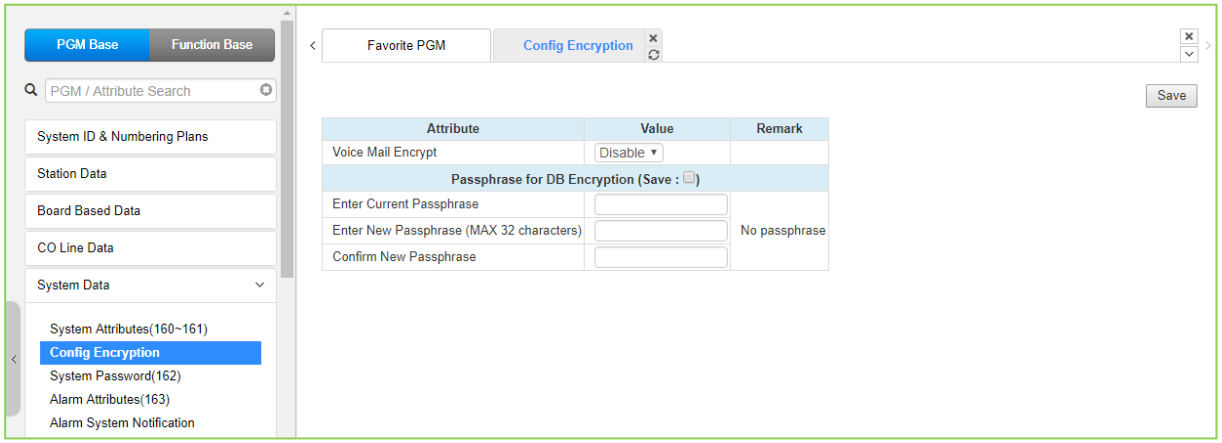


Figure 4.4.5.2-1 Config Encryption

Table 4.4.5.2-1 Config Encryption

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Voice Mail Encrypt	VM recording message (user message wait) is encrypted if it is ON. The e-mail attached file is not encrypted. So "Attach Message Option" in PGM127 should be OFF if the user does not want to send an un-encrypted recording file. **ON:** VM recording file is encrypted. **OFF:** VM recording file is not encrypted.	OFF ON	OFF
Passphrase for DB Encryption	System DB that has personal information is encrypted if a Passphrase is assigned. It could not be changed if Passphrase is lost (there is no way to change/remove it)	max 32 character	Not assigned

4.4.5.3 System Password - PGM 162

Selecting System Password will display the System Password data entry page. Use the checkboxes to indicate which attributes to modify; data for checked attributes is stored for the Keyset Admin, Remote Access Password, or CID password when saved. Click the **[Save]** button after changing Value.

It is important to use a strong password to lower the overall risks of a security breach. The best way to choose a good password is designed to make passwords less easily discovered by intelligent guessing.

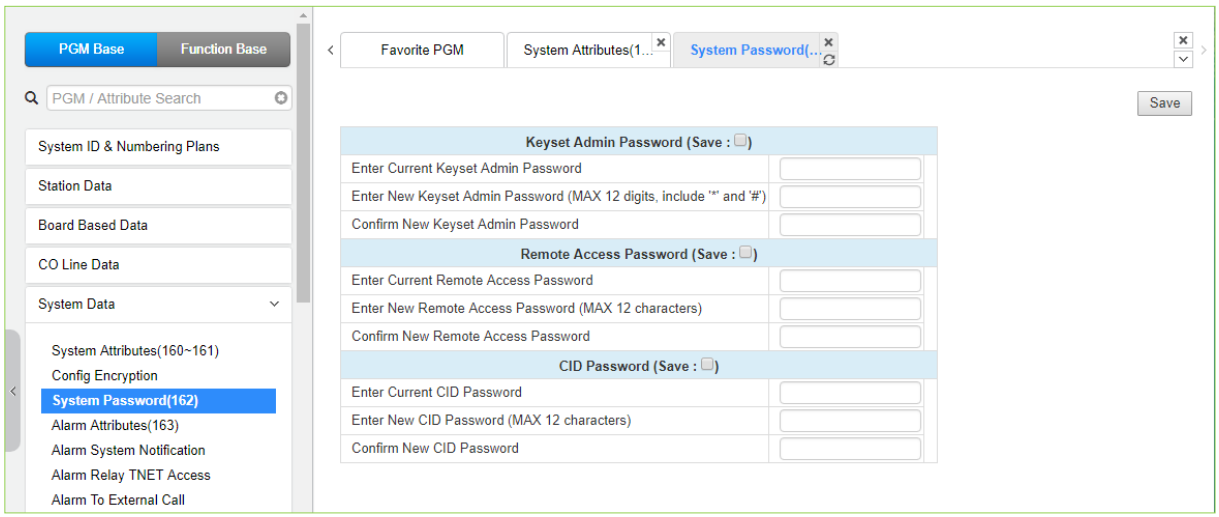


Figure 4.4.5.3-1 System Password

Passwords can protect access to the system database and maintenance functions up to twelve (12) digits. Three passwords can be defined, Keyset Admin, Remote Access, and CID.

Check the save box and enter the password and click the save button.

The following success message is displayed if the password is correct and saved successfully.

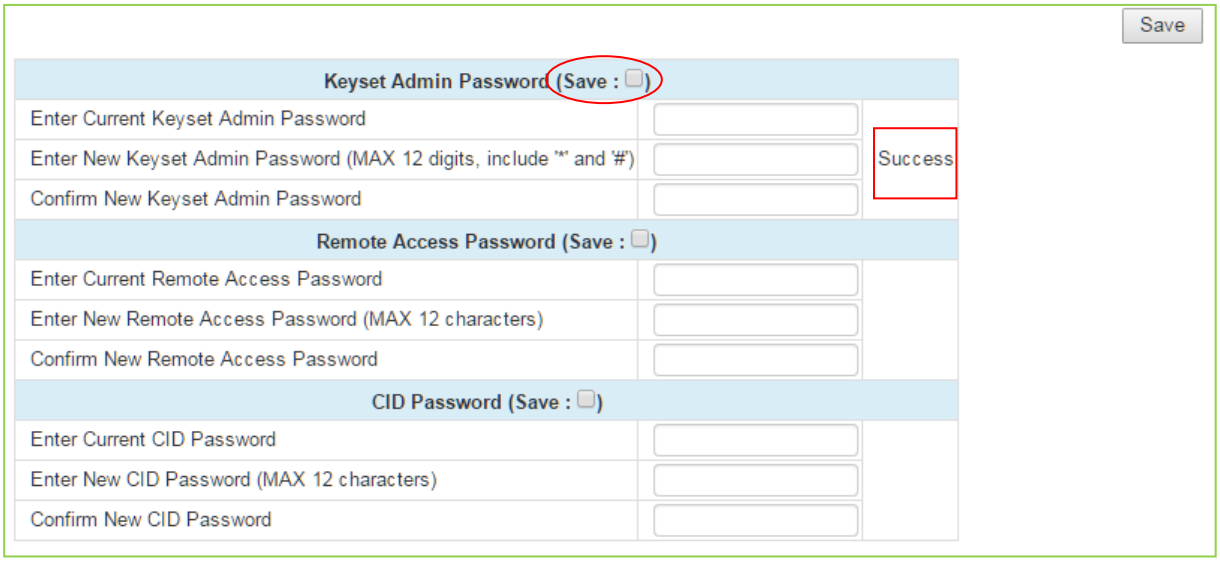


Figure 4.4.5.3-2 System Password

4.4.5.4 Alarm Attributes - PGM 163

Selecting Alarm Attributes will display the Alarm Attributes data entry page. Click the **[Save]** button after changing Value.

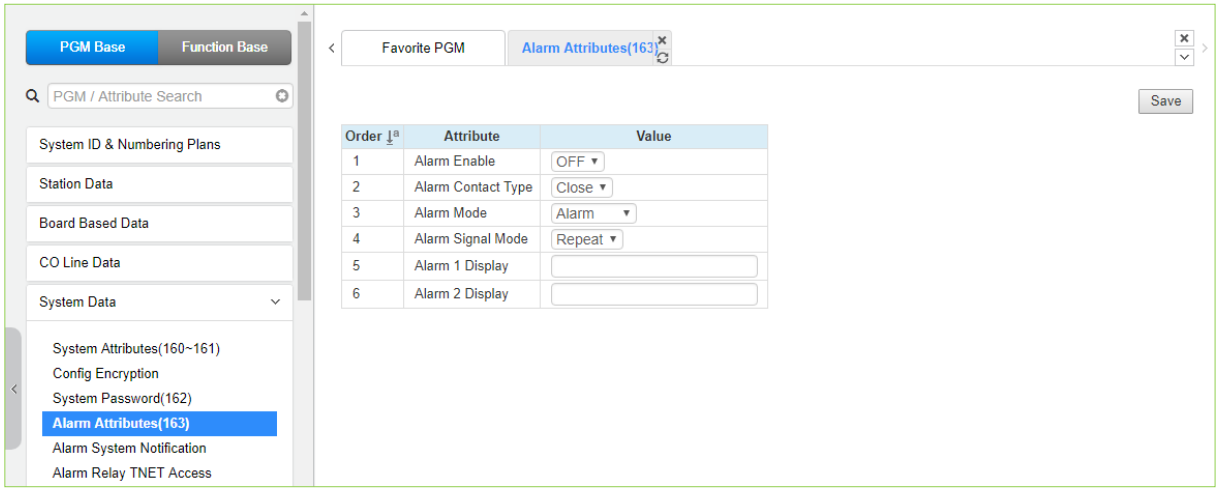


Figure 4.4.5.4-1 Alarm Attributes

The system can monitor an external contact. This contact is most often employed as an Alarm indicator or Doorbell. The Alarm attributes define the operation of the external contact. For the Alarm, the signal to assigned stations can be repeating or a single burst. The former is often desired. For the Doorbell, a single tone is sent each time the contact activates. Refer to Table 4.4.5.3-1 for a description of the features and the data entries required for each attribute.

Table 4.4.5.4-1 Alarm Attributes

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Alarm Enable	This entry enables/disables the contact monitoring circuitry.	OFF ON	OFF
Alarm Contact Type	This parameter establishes the contact state that will activate the Alarm, close or open.	Close/ Open	Close
Alarm Mode	The contact can be treated to function as a doorbell or an alarm.	Alarm/ Door-Bell	Alarm
Alarm Signal Mode	The assigned stations will receive a Repeating signal or single burst (Once) of alarm tone.	Repeat/ Once	Repeat
Alarm 1 Display	In case of eMG100/UCP600/2400, {Alarm 1 Display} and {Alarm 2 Display} are added. Otherwise, {Alarm Display} is added. When alarm port 1 is activated, the string of {Alarm 1 Display} or {Alarm Display} is displayed in assigned stations. When alarm port 2 is activated, the string of {Alarm 2 Display} is displayed in assigned stations.(eMG100/UCP600/2400)		
Alarm 2 Display			

4.4.5.5 Alarm System Notification

Selecting Alarm Attributes will display the Alarm Notify Condition data entry page. Click the [Save] button after changing Value. Alarm signal is provided to internal/external/e-mail/page. The online license selection menu can use at the vUCP System only.

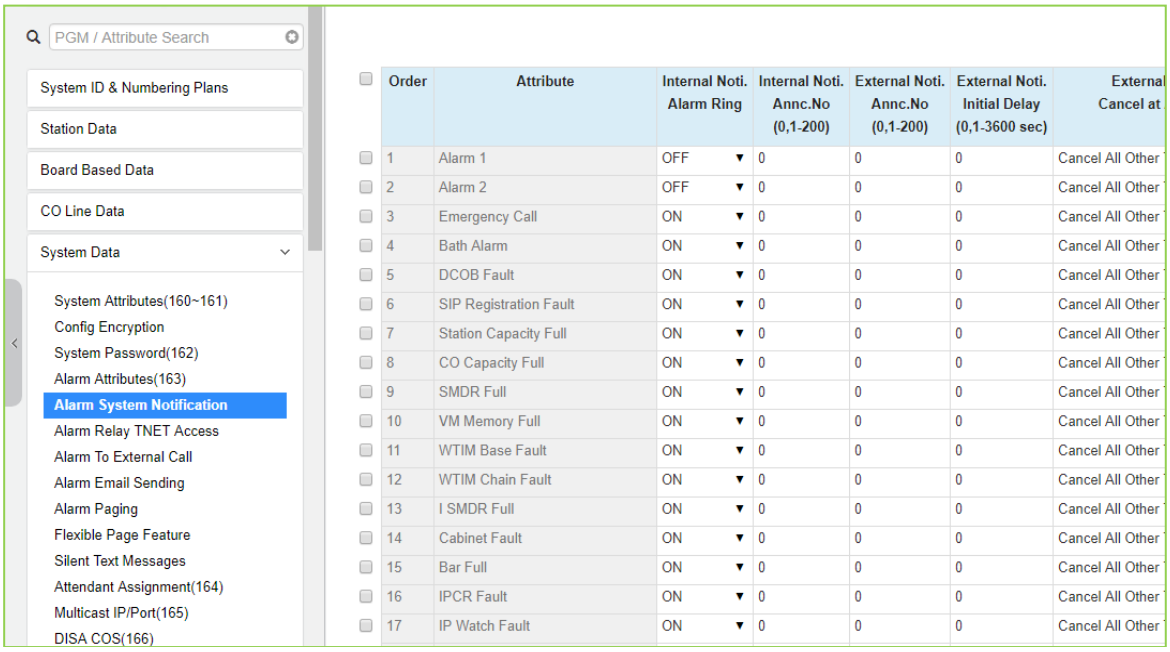


Figure 4.4.5.5-1 Alarm System Notification

Table 4.4.5.5-1 Alarm System Notification Types

System Notification	
Emergency Call Notify	This entry enables/disables the Emergency call notification.
DCOB Fault Notify	This entry enables/disables DCOB Fault notification.
SIP Registration Fault Notify	This entry enables/disables SIP Registration Fault notification.
Station Capacity Full Notify	This entry enables the user to get the notification as an alarm when Station Capacity is over the capacity.
CO Capacity Full Notify	This entry enables the user to get the notification as an alarm when CO Capacity is over the capacity.
SMDR Full Notify	This entry enables the user to get the notification as an alarm when SMDR is over the capacity.
VM Memory Full Notify	This entry enables the user to get the notification as an alarm when the memory of Voice Mail is full.
WTIM (WTIB) Base Fault Notify	This entry enables the user to get the notification as an alarm when WTIM (WTIB) base gets the fault.
WTIM (WTIB) Chain Fault Notify	This entry enables the user to get the notification as an alarm when WTIM (WTIB) chain gets the fault.
I SMDR Full Notify	This entry enables the user to get the notification as an alarm when I SMDR is over the capacity.
Cabinet Fault Notify	This entry enables the user to get the notification as an alarm when the cabinet has fault only for eMG800 & UCP.

Bar Full Notify	This entry enables the user to get the notification as an alarm when Bar is full.
IPCR Fault Notify	This entry enables the user to get the notification as an alarm when IPCR gets the fault.
IP Watch Fault Notify	This entry enables the user to get the notification as an alarm when IP Watch has fault only for eMG800 & UCP.
Bath Alarm Notify	This entry enables the user to get the notification as an alarm about Bath Alarm.
Temp activation of all licenses Expiry Notify	This entry enables the user to get the notification as an alarm before the Temp activation of all licenses expires.
Maintenance Expire Notify	This entry enables the user to get the notification as an alarm before the Maintenance license expires.
Excessive Registration over license Notify	This entry enables the user to get the notification as an alarm in case of excessive registration over License.
Geo-Slave/Survival Mode (T-NET LCM) Expire Notify	This entry enables the user to get the notification as an alarm before the Geographical slave/Survival mode (T-NET LCM) license expires.
TAPI Disconnected Notify	This entry enables the user to get the notification as an alarm when TAPI is disconnected.
Mitel PMS Link Down Notify	This entry enables the user to get the notification as an alarm when Mitel PMS links down.
UCS Server Link Down	UCS Server is disconnected
PUSH Server Link Down	PUSH Server is disconnected
System Act on Slave	Alarm Notification on CPU Redundancy is Act on Slave UCP • Slave/Act - Slave UCP Activated: Alarm and Email • Master/Act - Master UCP Activated: Email
WEB API SMDR Full	This entry enables the user to get the notification as an alarm when WEB API SMDR is over the capacity.
Online License	This entry enables the user to get the notification as an alarm when online license checking is failed. (vUCP only)
Timeslot Full	This entry enables the user to get the notification as an alarm when the timeslot is full-on eMG800.
Online License	This entry enables the user to get the notification as an alarm when online license checking is failed. (vUCP only)
GW Online License	This entry enables the user to get the notification as an alarm when Gateway online license checking is failed.
Phone/Gateway Link Down	This entry enables the user to get the notification as an alarm when phone or gateway board is disconnected from system.
ACD Manager TCP connection Error	This entry enables the user to get the notification as an alarm when ACD Manager TCP connection for 3rd party interface go tofailure.

Below alarm notify condition can be set for each alarm type.

Table 4.4.5.5-2 Alarm System Notification Attributes

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Internal Noti. Alarm Ring	Alarm ring to alarm ring enabled stations. **Alarm enabled stations**: system-attendant, Alarm / Door Bell Enabled Stations, Emergency Call Notification Stations, DCOB Fault Notify Station, Stations who have Alarm Ring Coverage button(s) Alarm coverage button assignment: [Trans/PGM] + Flex button + 76 + ## + Alarm Type(0-22) **Alarm Type :** All(0), Emergency(1), DCO Fault(2), SIP Reg Fail(3), BATH(4), DOOR-Bell(5), Alarm-Bell(6), Station Overflow(7),CO Overflow(8), SMDR(9), VM FULL(10), WTIM Base fail(11), WTIM Chain fail(12), I-SMDR full(13), CABINET alarm(14), BAR full(15), IPCR fault(16), IPWATCH fail(17), Temp License Expire(18), License Expire(19), License Overflow(20),TNET License Expire(21), TAPI fail(22), PMS fail(23)	ON/OFF	ON
Internal Noti. Alarm Ring	**To stop an alarm**: alarm stop is supported only by alarm ringing station or external called party after answer. So, at least one station for internal alarm ring needed to be assigned, and "Internal Noti. Alarm Ring = ON" is strongly suggested currently • By dial "alarm reset" code on a station that has the alarm ring • By press the "stop" soft button on a station that has the alarm ring • By press, the "alarm coverage" button and select '1(me)/0(all)' on a station that has the alarm ring • By dial [alarm reset code] by an external party after answer the alarm ring	ON/OFF	ON
Internal Noti.Annc No.	Play & Repeat VSF announcement when a station answers an alarm-to-internal ring. **0(not assign), 1-200**	Refer to description	0
External Noti. Annc No.	Play & Repeat VSF announcement when an external party answers an alarm-to-external ring. Even without a valid announcement, an external ring is implemented. **0(not assign), 1-200**	Refer to description	0
External Noti. Initial Delay	Duration of delay before external ring starts **0(immediate), 1-3600 sec**	Refer to description	0
External Noti. Cancel at Answer	Option to cancel simultaneous ring or cancel on-going failover scenario when an external party answers the alarm ring • Do not Cancel Other Trying Calls: leave all of the ongoing ring or retying calls • Cancel All Other Trying Calls: cancel all ongoing ring or retying calls except answered calls • Cancel All Except Prior Trying: cancel all except on-going ring or retying calls in prior Priority and answered calls	Refer to description	Cancel all other trying calls

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
External Noti. Next Prio. On Failover	Option for a condition to start of failover scenario to next priority (from 0 to 9) • Immediately Go To Next: immediately implement next(less) priority at first busy/error/unanswered status of previous(prior) calls • After Retry All Counts: implement next(less) priority after previous(prior) calls are all (re)tried and stopped by failure(busy/error/unanswered).	Refer to description	Immediately go to next
External Noti. Next Prio. On Answer	Normally failover scenario is not implemented anymore if anybody answers the alarm ring. But if this timer is set(1-3600 sec.), then the failover scenario is started/resumed after this duration even after somebody answers the alarm ring. **0(immediate), 1-3600 sec**	Refer to description	0
Page Noti. Annc No.	Play & Repeat VSF announcement to page group(s) Without a valid announcement, paging is not implemented **0(not assign), 1-200**	Refer to description	0
Page Noti. Initial Delay	Duration of delay before paging starts **0(immediate), 1-3600 sec**	Refer to description	0
Page Noti. Page Urgency Level	'0' is highest, and '255' is the lowest level Privilege to override other ongoing pages **Case 1) page group busy** - If the page group is occupied by other paging, the higher-level page will override the lower page so that the previous, ongoing page will be stopped **Case 2) page member busy** - If a station is receiving lower paging, then it is overridden by a higher level paging so that the station will hear new paging Emergency, SoS pages are fixed to level '0.' Normal pages are fixed to level '255.' The alarm page is programmable from level '0' to '255.'	0-255	0
Page Noti. Override By Urgency	Override paging calls only or override all calls. **Override paged call only/ Override all calls**	Refer to description	Override paged call only
Page Noti. Override DND	Override DND/Pre-selected-msg. status of a station	ON/OFF	OFF
Page Noti. Page Repeat Count	Repeat count of paging Total Play count : default(1) + repeat count(0-99)	0-99	2
Page Noti. Page Repeat Interval	Interval of paging repeat	0-255	10
Page Noti. Annc Repeat Count	Repeat count play announce per one repeat of paging Total Play count : default(1) + repeat count(0-99)	0-99	2

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Page Noti. Next Prio. on Failover	Option for a condition to start of failover scenario to next priority (from 0 to 39) • Immediately Go To Next: immediately implement next(less) priority at the first busy status of previous(prior) paging • After Retry All Counts: implement next(less) priority after previous(prior) paging are all (re)tried and stopped by failure(busy)	Refer to description	Immediately go to next
Page Noti. Next Prio. after Page	Normally failover scenario is not implemented anymore if a page to a group is played to an external page or listened to by at least one station internally. But if this timer is set(1-3600 sec.), the failover scenario is started/resumed after this duration, even after successfully paging. **0(immediate), 1-3600 sec**	Refer to description	0

4.4.5.6 Alarm Relay TNET Access

Selecting Alarm – External Relay Control will display the following page. Click the **[Save]** button after changing Value. The online license selection menu can use at the vUCP System only.

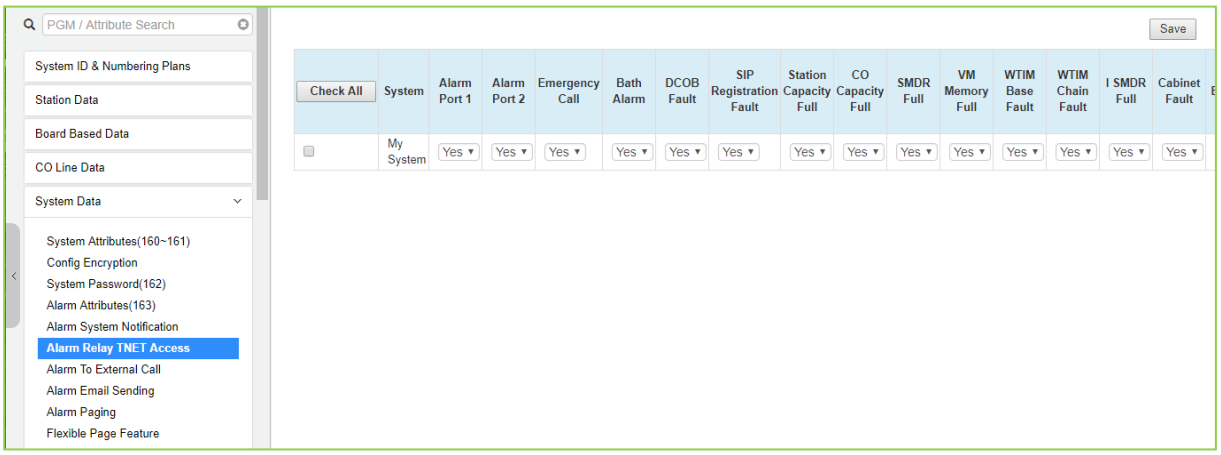


Figure 4.4.5.6-1 Alarm Relay TNET Access

The system can control an external circuit connected to the relay by associating an alarm type with an external relay port. The association will create hardwired signaling externally when an alarm condition is initiated.

Operation

1) Assign Target system of T-NET including my system.<Alarm – External Relay Control>

	Alarm Port1	Alarm Port2	Emergency Call	DCO Fault	. . .
My System	On/Off	On/Off	On/Off	On/Off	On/Off
CM	On/Off	On/Off	On/Off	On/Off	On/Off
LM 1	On/Off	On/Off	On/Off	On/Off	On/Off
LM 2	. . .				
LM 3					

2) Set usage to ‘Alarm’ for external control contact port(s) and mark alarm types for association.<External Control Contacts (168)><T-NET Control Contact (334)>

External Control Contact	Usage
First	(x) Unused (x) LBC (x) Door Open (x) External Control Device 1 (x) External Control Device 2 (O) Alarm [Mark] Alarm Port 1, Alarm Port 2 911, DCO, SIO, STA, CO,STA, CO, …
Second	. . .
Third	. . .
Fourth	. . .

4.4.5.7 Alarm To External Call

Selecting Alarm External Destination will display the following page. Click the [Save] button after hanging Value. The online license selection menu can use at the vUCP System only.

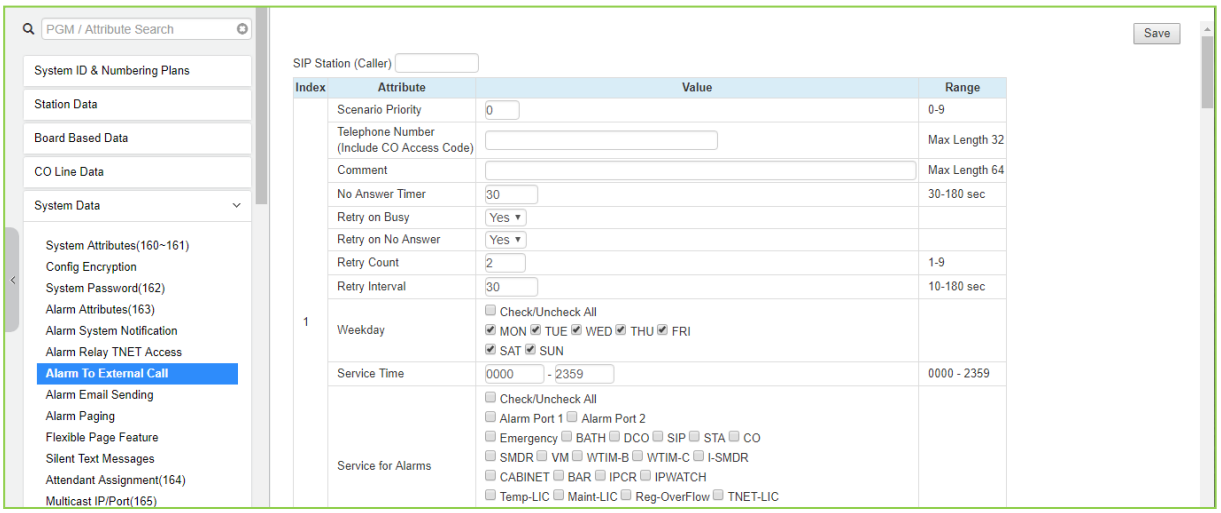


Figure 4.4.5.7-1 Alarm To External Call

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
SIP Station (Caller)	< Registration of a Third Party SIP Extension > License : “Third Party SIP Extension” It is a virtual Extension without a physical phone New Registration • Refer to “Flexible Station Number (P.105)” and get an unused Station Number • Input the Station Number to “SIP Station (Caller)” and press [Save] • A new Third Party SIP Extension will be registered automatically Replace an existing Third Party SIP Extension • Refer to “Device IP Plan (P.103)” and get a used Third-Party SIP Station Number • Input the Station Number to “SIP Station (Caller)” and press [Save] • The Third-Party SIP Extension will be re-registered as a virtual Extension mode automatically Delete the virtual Third-Party SIP Extension • Empty the “SIP Station (Caller)” and press [Save] • The Third-Party SIP Extension will be automatically removed from the system Replace the previous virtual Third-Party SIP Extension • Input different Station numbers in the “SIP Station (Caller)” and press [Save] • The previous Third-Party SIP Extension will be automatically removed from the system, and the input is (re)registered as the virtual Third-Party SIP Extension.	Station Number	

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Scenario Priority	'0' is highest, '9' is the lowest priority For single destination: anything of 0-9 (meaningless) For multiple destinations for simultaneous ring: same priority value For failover (busy/error/unanswered) scenario: different priority	0-9 0 is highest	0
Telephone Number	Mandatory input Without this, no service	Max.32 character	
Comment	Just for memorization by naming	Max.64 character	
No Answer Timer	Unanswered duration of the external call, after this timer, the external is disconnected if not answered	30-180 second	30
Retry on Busy	Retry to make the external call if a busy cause disconnects calling. If the called party system serves 'busy prompt' after connecting the call, it is not regarded as the busy cause but as answered.	Yes No	Yes
Retry on No Answer	Retry to make the external call if the call is disconnected after 'No Answer Timer.'	Yes No	Yes
Retry Count	In addition to the first trial, the system will call until these counts on fail (busy/error/unanswered) condition.	1-9	2
Retry Interval	Pause duration per a retrial	30-180 second	30
Weekday	Monday to Sunday **All, MON, TUE, WED, THU, FRI, SAT, SUN**	Refer to description	All
Service Time	'start time' to 'end time' (start time can be longer than end time, etc. 2300 - 0559)	0000-2359	0000-2359
Service for Alarms	Selection of alarm types to serve by this table Mandatory input Without the selection of an alarm type, the alarm type is served		

4.4.5.8 Alarm Email Sending

We are selecting Alarm EmailDestinationwill display the following page. Click the [Save] button after hanging Value. The online license selection menu can use at the vUCP System only.

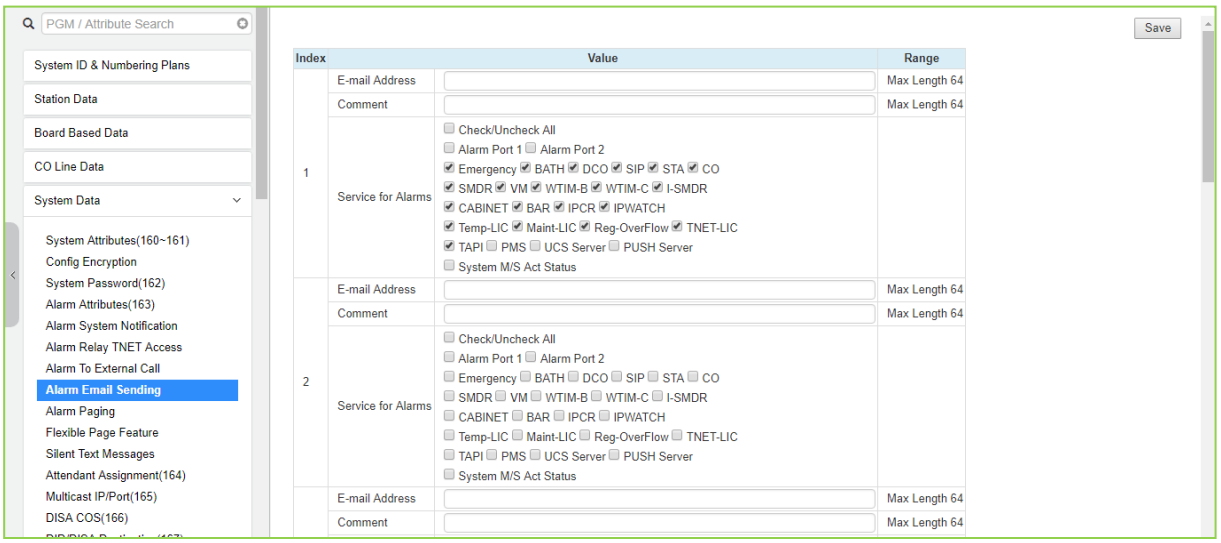


Figure 4.4.5.8-1 Alarm Email Sending

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
E-mail Address	Mandatory input Without this, no service	0-9 0 is highest	0
Comment	Just for memorization by naming	Max.64 character	
Service for Alarms	Selection of alarm types to serve by this table Mandatory input Without the selection of an alarm type, the alarm type is served		

4.4.5.9 Alarm Paging

We are selecting Alarm PagingDestinationwill display the following page. Click the [Save] button after hanging Value. The online license selection menu can use at the vUCP System only.

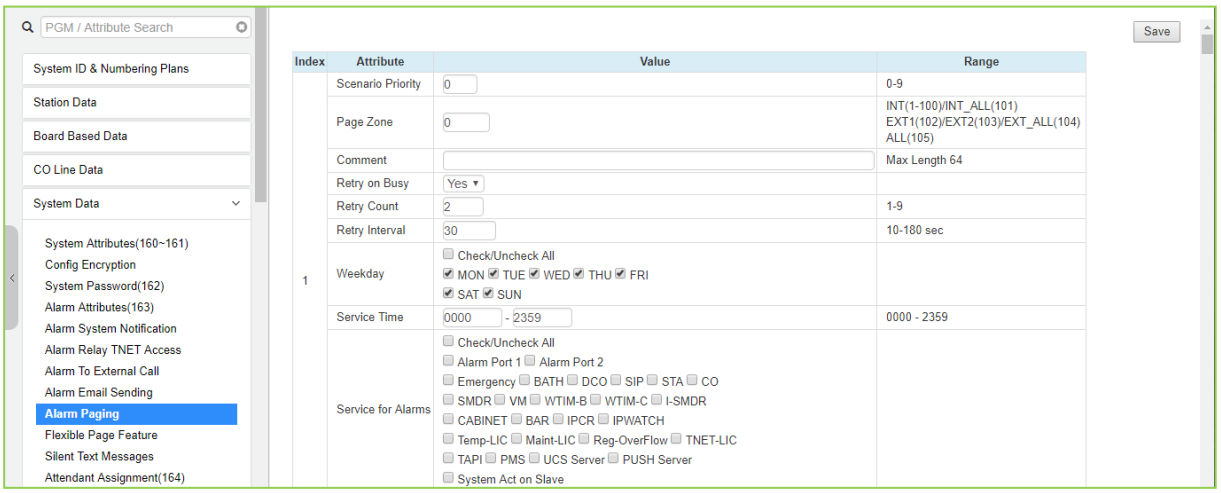


Figure 4.4.5.9-1 Alarm Paging

Table 4.4.5.9-1 Alarm Paging

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Scenario Priority	'0' is highest, '39' is lowest priority **For single destination:** anything of 0-39 (meaningless) For multiple destinations for simultaneous paging: same priority value For failover (busy) scenario: different priority	0-9 0 is highest	0
Page zone	Mandatory input Without this, no service 0 (not assign), INT(1-100), INT_ALL(101), EXT1(102), EXT2(103), EXT_ALL(104), ALL(105)	Refer to description	0
Comment	Just for memorization by naming	Max.64 character	
Retry on Busy	Retry to make paging If page group is occupied by other paging. Or, all of the page receiving member stations are not in a valid state to receive page	Yes No	Yes
Retry Count	Additional to the first trial, the system will try to make paging till this counts on fail (busy) condition.	1-9	2
Retry Interval	Pause duration per a retrial	30-180 second	30
Weekday	Monday to Sunday All, MON, TUE, WED, THU, FRI, SAT, SUN	Refer to description	All
Service Time	'start time' to 'end time.' (start time can be longer than end time, etc. 2300 - 0559)	0000-2359	0000-2359
Service for Alarms	Selection of alarm types to serve by this table Mandatory input. Without the selection of an alarm type, the alarm type is served		

4.4.5.10 Flexible Page Feature

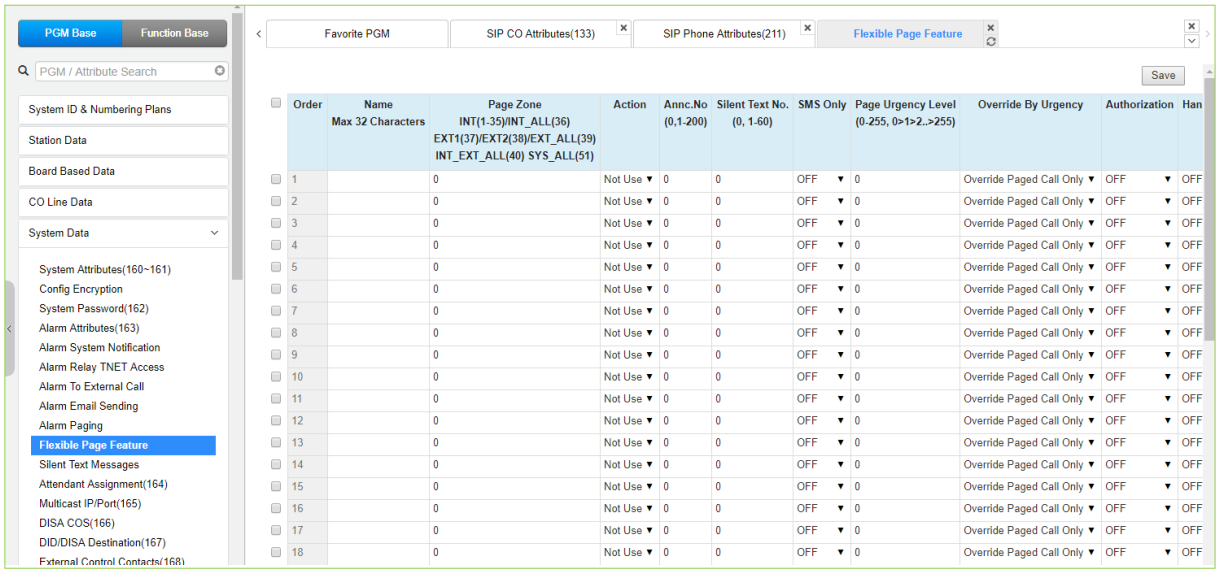


Figure 4.4.5.10-1 Flexible Page Feature

Table 4.4.5.10-1 Flexible Page Feature

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Name	Subject (Identity) of the Page that is used for display of Paging on the paged station.	Max.32 character	
Page zone	Page zone is page group number. It is mandatory attributes to be a valid page code. Range of each System as below • **eMG80/100: INT(1-35) / INT_ALL(36) / EXT1(37) / EXT2(38) / EXT_ALL(39) / INT_EXT_ALL(40) / SYS_ALL(51)** • **eMG800/UCP: INT(1-100) / INT_ALL(101) / EXT1(102) / EXT2(103) / EXT_ALL(104) / INT_EXT_ALL(105) / SYS_ALL(106)**	0 (not assign)/ Refer to the Description	0
Action	Action is page source. Attributes must be a valid page code. **Not Use, Live Voice, Announce Play, Silent Message**	Refer to the Description	Not Use
Annc. No	It is an announcement play-related attribute. Annc. No is system announcement # recorded.	0,1-200	0
Silent Text No.	It is a silent message-related attribute. Silent Text No. is the index # of silent text messages.	0,1-60	0
SMS Only	It is silent message related attributes. It sends both Paging and SMS or sends SMS only.	OFF ON	OFF
Maintain Text Display	It is used to maintain the display of silent text paged forever until it meets any user's physical actions.	OFF ON	OFF
Page Urgency Level	It is a common attribute. Page Urgency Level is the resolution for conflict of page zone# between ongoing pages. Making a page with higher-level urgency overrides an ongoing page with lower-level urgency.	0-255 0 is highest	0

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Override By Urgency	It is a common attribute and emergency-oriented attribute. **Override Paged Call Only, Override All Call Only**	Refer to the Description	Override Paged Call Only
Authorization	It is a common attribute. It asks for the station password before paging.	OFF ON	OFF
Hands-Free	It is live voice-related attributes. It asks handset off-hook before paging.	OFF ON	OFF
Page Repeat Count	It is announced play-related attributes. How many times to repeat the announce page.	0-99	0
Page Repeat Interval	It is announced play-related attributes. Pause interval between the page repeat counting.	5-255(sec)	5
Annc. Repeat Count	It is announced play-related attributes. How many times to repeat play of announcement at one repeat of the announce page.	0-99	0
Do Not Prompt Paging EXT	It is used to not play “extension XXX” in front of a flexible announce play page prompt.	OFF ON	OFF
ANNC Play-Start Delay	A safety time gives a wait for voice path connection between devices before the start of playing announcement. This is used to guard the full audible playing of the announcement. If you need the immediate start of the playing announcement right after user input, then set this time to ‘0’.	0-5(sec)	3

4.4.5.11 Silent Text Messages

Pre-defined silent text messages serve by SMS sending when the user conducts a Silent Paging.
60 messages in System Data > Silent Text Messages.

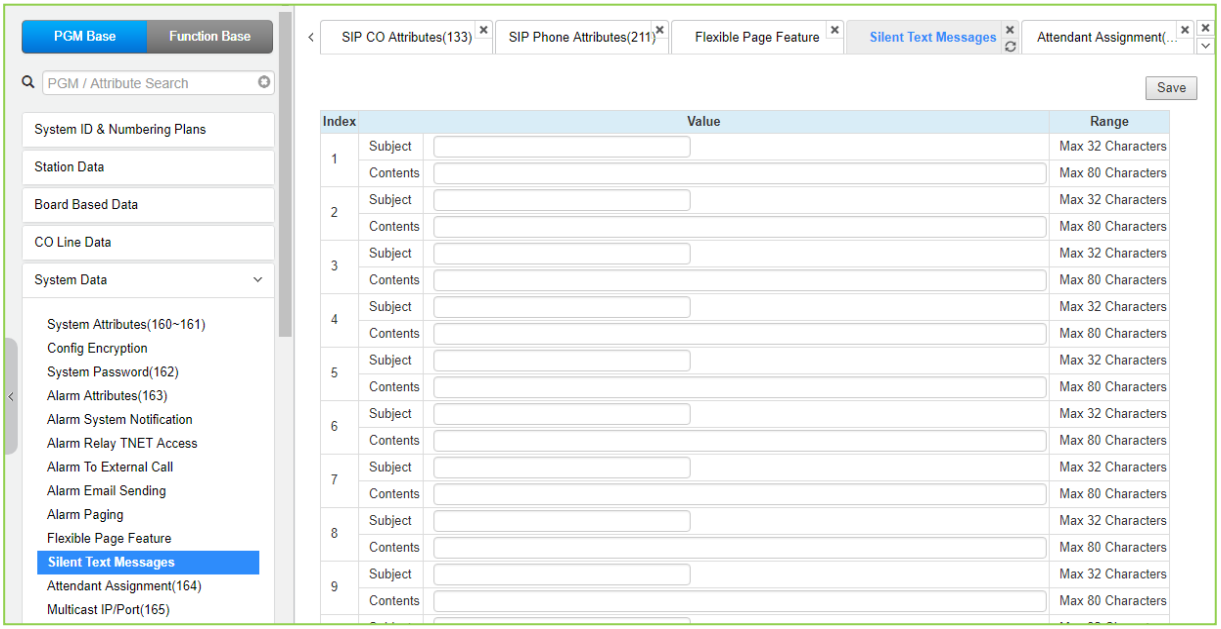


Figure 4.4.5.11-1 Silent Text Messages

Table 4.4.5.11-1 Silent Text Messages

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Subject	Normally, just dummy(not used). Backup for 'Name' of Page (Used instead of 'Name' of the Flexible Page if it is empty). Backup for 'Contents' (Used instead of 'Contents' of a Silent Text message if it is empty).	Max. 32 character	
Contents	It is used for SMS messages.	Max. 80 character	

4.4.5.12 Attendant Assignment - PGM 164

Selecting Attendant Assignment will display the Attendant Assignment data entry page. Click the **[Save]** button after changing Value.

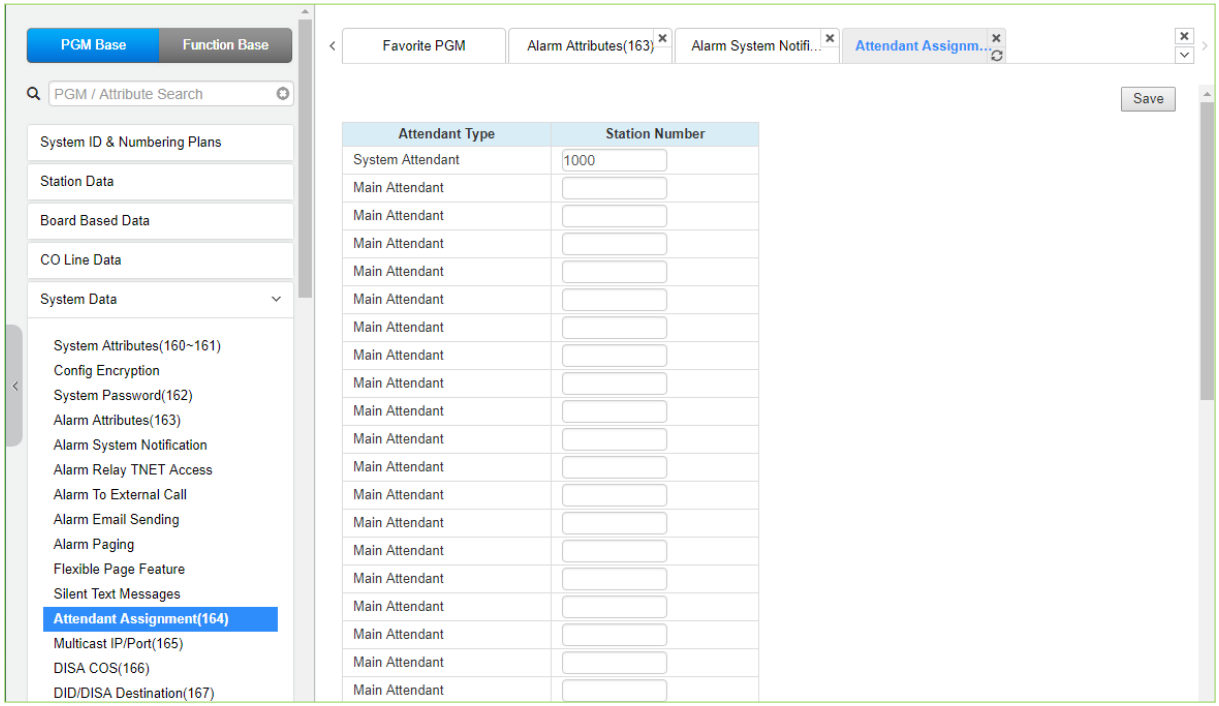


Figure 4.4.5.12-1 Attendant Assignment

The eMG80/100 is consists of 1 System attendant and 3 Main attendants. eMG800 is consists of 1 System attendant and 4 Main attendants. UCP is consists of 1 System attendant and 49 Main attendants.

The System Attendant has higher priority in call handling and system management functions. As a default, the System Attendant is assigned Station 100 for eMG80/100& Station 1000 for eMG800/UCP. Main Attendants are not assigned by default.

4.4.5.13 Multi-cast IP/Port - PGM 165

Selecting Multi-cast IP/Port will display the Multi-cast IP/Port data entry page. Click the **[Save]** button after changing Value.

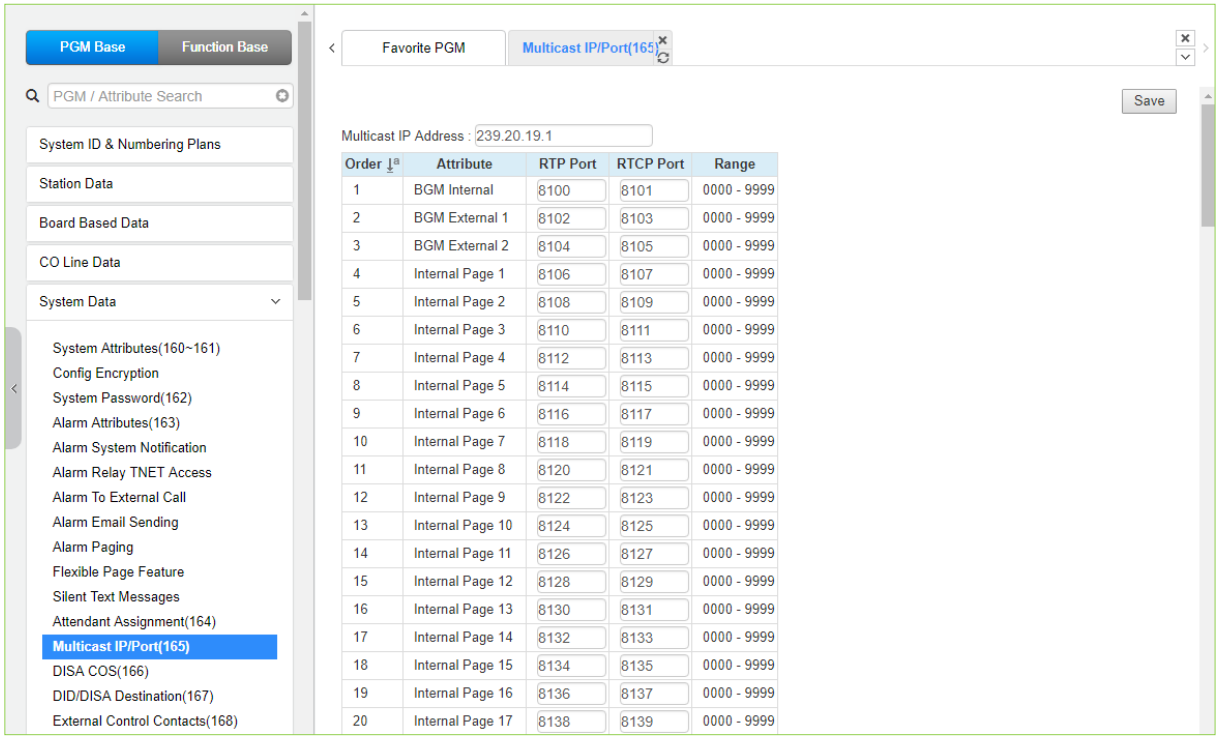


Figure 4.4.5.13-1 Multi-cast IP/Port

The system employs Multi-cast to send BGM, MOH, paging, and Push-To-Talk packets.

Employing a single multi-cast packet reduces the overall LAN traffic. In some cases, specifically, when multiple systems are connected to the same default gateway (router), defining different IP ports for each system may be advantageous.

Table 4.4.5.13-1eMG80/100MULTI-CAST IP/Port

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
BGM Internal	RTP and RTCP ports for internal BGM.	0000-9999	8100 (8101)
BGM External 1	RTP and RTCP ports for external BGM 1.	0000-9999	8102 (8103)
BGM External 2	RTP and RTCP ports for external BGM 1.	0000-9999	8104 (8105)
Internal Page 1	RTP and RTCP ports for Internal Page 1.	0000-9999	8106 (8107)
Internal Page 2	RTP and RTCP ports for Internal Page 2.	0000-9999	8108 (8109)
Internal Page 3	RTP and RTCP ports for Internal Page 3.	0000-9999	8110 (8111)
Internal Page 4	RTP and RTCP ports for Internal Page 4.	0000-9999	8112 (8113)

Table 4.4.5.13-1eMG80/100MULTI-CAST IP/Port

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Internal Page 5	RTP and RTCP ports for Internal Page 5.	0000-9999	8114 (8115)
Internal Page 6	RTP and RTCP ports for Internal Page 6.	0000-9999	8116 (8117)
Internal Page 7	RTP and RTCP ports for Internal Page 7.	0000-9999	8118 (8119)
Internal Page 8	RTP and RTCP ports for Internal Page 8.	0000-9999	8120 (8121)
Internal Page 9	RTP and RTCP ports for Internal Page 9.	0000-9999	8122 (8123)
Internal Page 10	RTP and RTCP ports for Internal Page 10.	0000-9999	8124 (8125)
Internal Page 11	RTP and RTCP ports for Internal Page 11.	0000-9999	8126 (8127)
Internal Page 12	RTP and RTCP ports for Internal Page 12.	0000-9999	8128 (8129)
Internal Page 13	RTP and RTCP ports for Internal Page 13.	0000-9999	8130 (8131)
Internal Page 14	RTP and RTCP ports for Internal Page 14.	0000-9999	8132 (8133)
Internal Page 15	RTP and RTCP ports for Internal Page 15.	0000-9999	8134 (8135)
Internal Page 16	RTP and RTCP ports for Internal Page 16.	0000-9999	8136 (8137)
Internal Page 17	RTP and RTCP ports for Internal Page 17.	0000-9999	8138 (8139)
Internal Page 18	RTP and RTCP ports for Internal Page 18.	0000-9999	8140 (8141)
Internal Page 19	RTP and RTCP ports for Internal Page 19.	0000-9999	8142 (8143)
Internal Page 20	RTP and RTCP ports for Internal Page 20.	0000-9999	8144 (8145)
Internal Page 21	RTP and RTCP ports for Internal Page 21.	0000-9999	8146 (8147)
Internal Page 22	RTP and RTCP ports for Internal Page 22.	0000-999	8148 (8149)
Internal Page 23	RTP and RTCP ports for Internal Page 23.	0000-9999	8150 (8151)
Internal Page 24	RTP and RTCP ports for Internal Page 24.	0000-9999	8152 (8153)
Internal Page 25	RTP and RTCP ports for Internal Page 25.	0000-9999	8154 (8155)

Table 4.4.5.13-1eMG80/100MULTI-CAST IP/Port

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Internal Page 26	RTP and RTCP ports for Internal Page 26.	0000-9999	8156 (8157)
Internal Page 27	RTP and RTCP ports for Internal Page 27	0000-9999	8158 (8159)
Internal Page 28	RTP and RTCP ports for Internal Page 28	0000-9999	8160 (8161)
Internal Page 29	RTP and RTCP ports for Internal Page 29	0000-9999	8162 (8163)
Internal Page 30	RTP and RTCP ports for Internal Page 30	0000-9999	8164 (8165)
Internal Page 31	RTP and RTCP ports for Internal Page 31	0000-9999	8166 (8167)
Internal Page 32	RTP and RTCP ports for Internal Page 32	0000-9999	8168 (8169)
Internal Page 33	RTP and RTCP ports for Internal Page 33	0000-9999	8170 (8171)
Internal Page 34	RTP and RTCP ports for Internal Page 34	0000-9999	8172 (8173)
Internal Page 35	RTP and RTCP ports for Internal Page 35	0000-9999	8174 (8175)
Internal Page All	RTP and RTCP ports for Internal All Call Page	0000-9999	8176 (8177)
External Page 1	RTP and RTCP ports for External Page 1.	0000-9999	8178 (8179)
External Page 2	RTP and RTCP ports for External Page 2.	0000-9999	8180 (8181)
External Page All	RTP and RTCP ports for External All Call Page.	0000-9999	8182 (8183)
Page All	RTP and RTCP ports for All Call Page.	0000-9999	8184 (8185)
PTT 1	RTP and RTCP ports for PTT group 1.	0000-9999	8186 (8187)
PTT 2	RTP and RTCP ports for PTT group 2.	0000-9999	8188 (8189)
PTT 3	RTP and RTCP ports for PTT group 3.	0000-9999	8190 (8191)
PTT 4	RTP and RTCP ports for PTT group 4.	0000-9999	8192 (8193)
PTT 5	RTP and RTCP ports for PTT group 5.	0000-9999	8194 (8195)
PTT 6	RTP and RTCP ports for PTT group 6.	0000-9999	8196 (8197)

Table 4.4.5.13-1eMG80/100MULTI-CAST IP/Port

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
PTT 7	RTP and RTCP ports for PTT group 7.	0000-9999	8198 (8199)
PTT 8	RTP and RTCP ports for PTT group 8.	0000-9999	8200 (8201)
PTT 9	RTP and RTCP ports for PTT group 9.	0000-9999	8202 (8203)
PTT All	RTP and RTCP ports for PTT group ALL	0000-9999	8204 (8205)
BGM Internal VSF	RTP and RTCP ports for VSF BGM	0000-9999	8206 (8207)
SLT MOH 1	RTP and RTCP ports for SLT MOH1	0000-9999	8208 (8209)
SLT MOH 2	RTP and RTCP ports for SLT MOH2	0000-9999	8210 (8211)
SLT MOH 3	RTP and RTCP ports for SLT MOH3	0000-9999	8212 (8213)
SLT MOH 4	RTP and RTCP ports for SLT MOH4	0000-9999	8214 (8215)
SLT MOH 5	RTP and RTCP ports for SLT MOH5	0000-9999	8216 (8217)
VSF MOH2	RTP and RTCP ports for VSF MOH2	0000-9999	8218 (8219)
VSF MOH3	RTP and RTCP ports for VSF MOH3	0000-9999	8220 (8221)
VSF MOH4~30	RTP and RTCP ports for VSF MOH4~30	0000-9999	8222~8328 (8223~8329)

Table 4.4.5.13-2eMG800 MULTI-CAST IP/Port

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
BGM Internal	RTP and RTCP ports for internal BGM.	0000-9999	8100 (8101)
BGM External 1	RTP and RTCP ports for external BGM 1.	0000-9999	8102 (8103)
BGM External 2	RTP and RTCP ports for external BGM 1.	0000-9999	8104 (8105)
Internal Page 1-100	RTP and RTCP ports for Internal Page 1.	0000-9999	8106-8304 (8107-8305)
Internal Page All	RTP and RTCP ports for Internal All Call Page	0000-9999	8306 (8307)
External Page 1	RTP and RTCP ports for External Page 1.	0000-9999	8308 (8309)
External Page 2	RTP and RTCP ports for External Page 2.	0000-9999	8310

Table 4.4.5.13-2eMG800 MULTI-CAST IP/Port

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
			(8311)
External Page All	RTP and RTCP ports for External All Call Page.	0000-9999	8312 (8313)
Page All	RTP and RTCP ports for All Call Page.	0000-9999	8314 (8315)
PTT 1-9	RTP and RTCP ports for PTT group 1.	0000-9999	8316-8332 (8317-8333)
PTT All	RTP and RTCP ports for PTT group ALL	0000-9999	8334 (8335)
BGM Internal VSF	RTP and RTCP ports for VSF BGM	0000-9999	8336 (8337)
SLT MOH 1-5	RTP and RTCP ports for SLT MOH1	0000-9999	8338-8346 (8339-8347)
VSF MOH2-3	RTP and RTCP ports for VSF MOH2	0000-9999	8348-8350 (8349-8351)
VSF MOH4~30	RTP and RTCP ports for VSF MOH4~30	0000-9999	8352~8458 (8353~8459)

Table 4.4.5.13-3 UCP MULTI-CAST RTP/RTCP

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
BGM Internal	RTP and RTCP ports for internal BGM.	0000-9999	8100 (8101)
BGM External 1	RTP and RTCP ports for external BGM 1.	0000-9999	8102 (8103)
BGM External 2	RTP and RTCP ports for external BGM 1.	0000-9999	8104 (8105)
Internal Page 1 ~ Page 100	RTP and RTCP ports for Internal Page 1.	0000-9999	8106~8304 (8107~8305)
Internal Page All	RTP and RTCP ports for Internal All Call Page	0000-9999	8306 (8307)
External Page 1	RTP and RTCP ports for External Page 1.	0000-9999	8308 (8309)
External Page 2	RTP and RTCP ports for External Page 2.	0000-9999	8310 (8311)
External Page All	RTP and RTCP ports for External All Call Page.	0000-9999	8312 (8313)
Page All	RTP and RTCP ports for All Call Page.	0000-9999	8314 (8315)
PTT 1	RTP and RTCP ports for PTT group 1.	0000-9999	8316 (8317)
PTT 2	RTP and RTCP ports for PTT group 2.	0000-9999	8318 (8319)

Table 4.4.5.13-3 UCP MULTI-CAST RTP/RTCP

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
PTT 3	RTP and RTCP ports for PTT group 3.	0000-9999	8320 (8321)
PTT 4	RTP and RTCP ports for PTT group 4.	0000-9999	8322 (8323)
PTT 5	RTP and RTCP ports for PTT group 5.	0000-9999	8324 (8325)
PTT 6	RTP and RTCP ports for PTT group 6.	0000-9999	8326 (8327)
PTT 7	RTP and RTCP ports for PTT group 7.	0000-9999	8328 (8329)
PTT 8	RTP and RTCP ports for PTT group 8.	0000-9999	8330 (8331)
PTT 9	RTP and RTCP ports for PTT group 9.	0000-9999	8332 (8333)
PTT All	RTP and RTCP ports for PTT group ALL	0000-9999	8334 (8335)
BGM Internal VSF	RTP and RTCP ports for VSF BGM (VSF MOH)	0000-9999	8336 (8337)
SLT MOH 1	RTP and RTCP ports for SLT MOH1	0000-9999	8338 (8339)
SLT MOH 2	RTP and RTCP ports for SLT MOH2	0000-9999	8340 (8341)
SLT MOH 3	RTP and RTCP ports for SLT MOH3	0000-9999	8342 (8343)
SLT MOH 4	RTP and RTCP ports for SLT MOH4	0000-9999	8344 (8345)
SLT MOH 5	RTP and RTCP ports for SLT MOH5	0000-9999	8346 (8347)
VSF MOH2	RTP and RTCP ports for VSF MOH2	0000-9999	8348 (8349)
VSF MOH3	RTP and RTCP ports for VSF MOH3	0000-9999	8350 (8351)
VSF MOH4~30	RTP and RTCP ports for VSF MOH4~30	0000-9999	8352~8458 (8353~8459)

4.4.5.14 DISA COS - PGM 166

Selecting DISA COS will display the DISA COS data entry page. Click **the [Save]** button after changing Value.

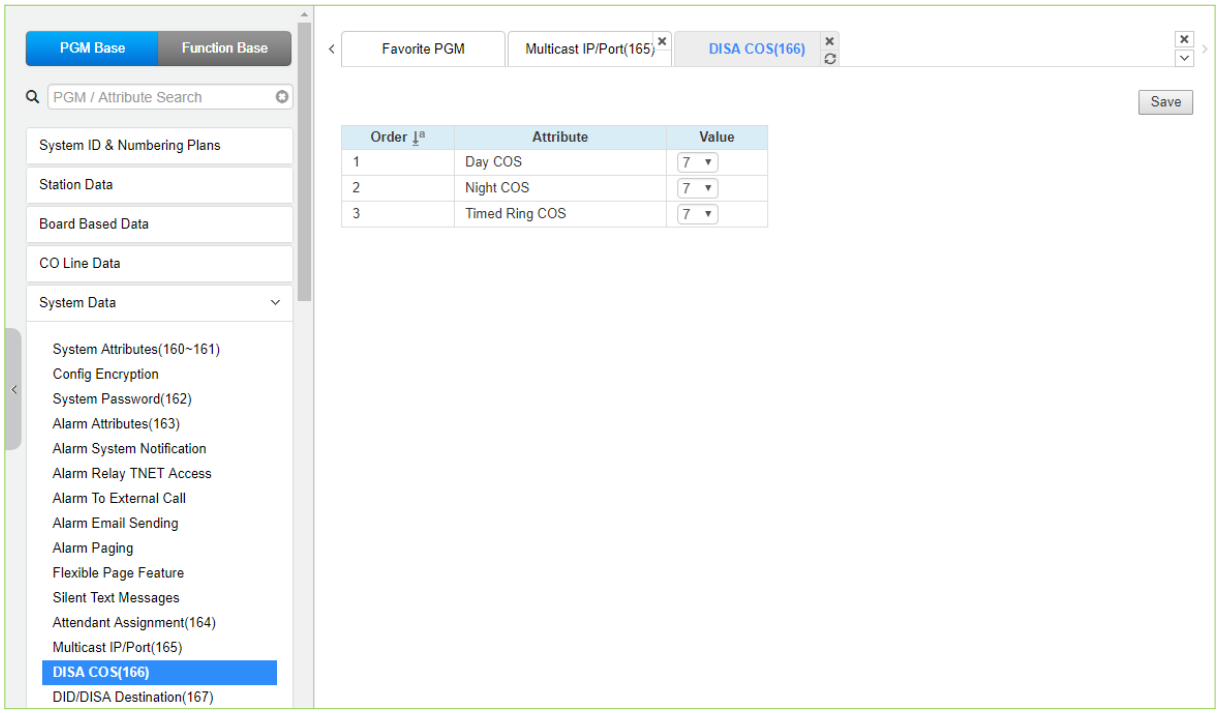


Figure 4.4.5.14-1 DISA COS

A DISA user is subject to the dialing restrictions assigned in the DISA Class-of-Service (COS). The restrictions applied are the same as with the corresponding Station COS levels 1~11 and interact with the CO/IP COS in the same manner. An assignment is made for the Day, Timed, and Night Ring mode of system operation. The default for all three modes (Day, Night, Timed ring) of DISA COS is 7, allowing internal calls only.

4.4.5.15 DID/DISA Destination - PGM 167

Selecting DID/DISA Destination displays the Tenant Group input page. Select Tenant Group. The system will display the DID/DISA Destination Attributes. Click **the [Save]** button after changing Value.

Enter ICM Tenancy group: eMG80/100 : 0-15 / eMG800: 0-32 / UCP: 0-100

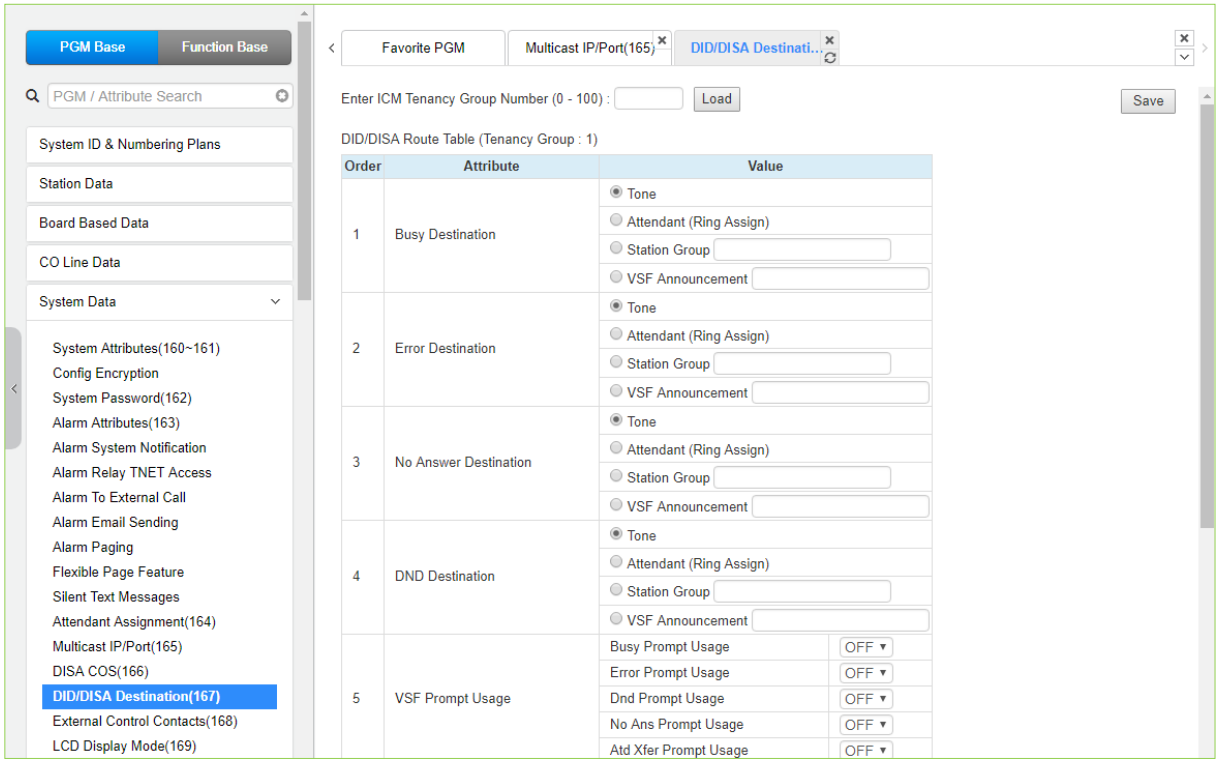


Figure 4.4.5.15-1 DID/DISA Destination

When a DID line or DISA user dials an invalid/vacant or busy station number, the caller will be sent to the assigned destination that is selected according to the CO Tenancy group of the DID/DISA line.

The destination is separately defined for invalid, busy, and No Answer conditions and can be defined as the Attendant, busy tone, a Station Group, or a VSF Announcement.

For calls on a DID line to a busy station, DID Call Wait can be assigned. Refer to the ‘Common Attributes section,’ and the call will queue for the station for the No-Answer time. After the No-answer time, the call routes to the DID/DISA Destination unless forwarded.

Also, for DID calls only, announcements (prompts) can be sent from the VSF or UVM gateway (in case of UCP) to the caller for various conditions, busy, error, DND, No Answer, or Attendant Transfer.

4.4.5.16 External Control Contacts - PGM 168

Selecting External Control Contacts will display the External Control Contact data entry page. Click **the [Save]** button after changing Value.

The number of External Control Contact: 2 (eMG80/100), 2 (eMG800), 4 (eMG100/UCP)

The vUCP is not available for this feature.

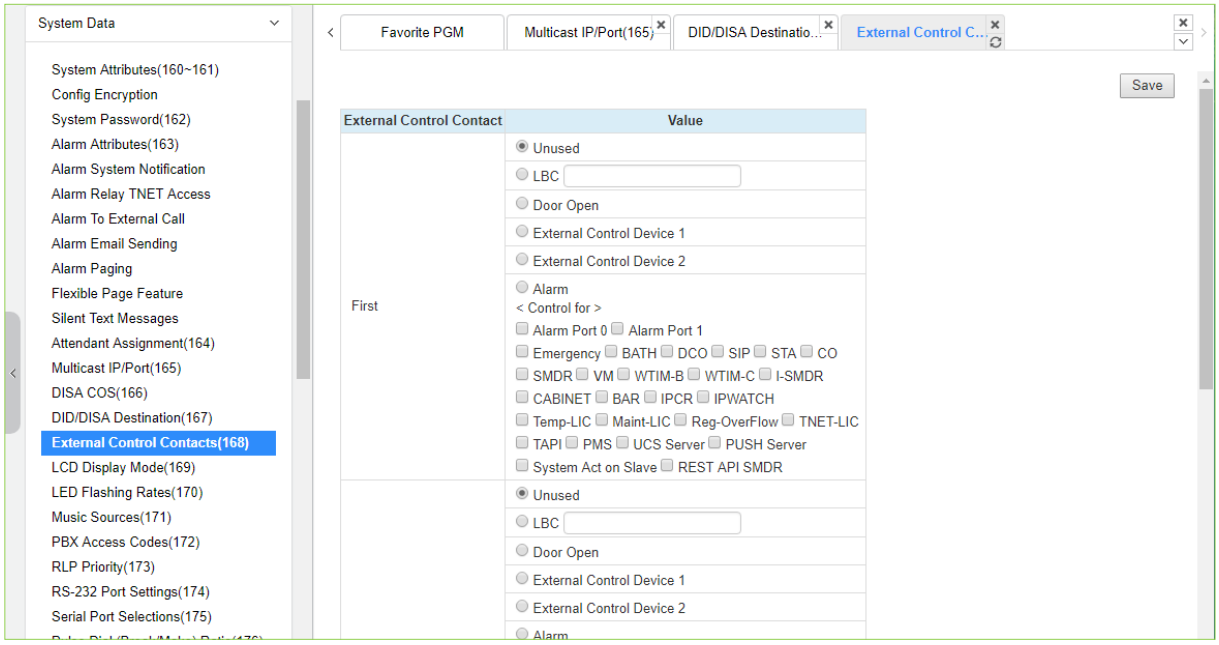


Figure 4.4.5.16-1 External Control Contact

The system includes a programmable contact, which can be used to control external devices. Refer to the table ‘System capacity’ for a number of available contacts. Each contact is assigned to activate under one of several conditions. As a Loud Bell Contact (LBC), the contact will activate when the assigned station or group receives an external call. For LBC, when the system is in the Night or Timed Ring mode, the contact will activate for incoming UNA (Universal Night Answer) calls and will ignore any station assignment. The contact may alternatively activate as a Door Lock Release contact when External Page Zone 1 is accessed or when External Page Zone 2 is accessed.

In the case of setting Alarm, you can select the desired alarm type for each contact.

4.4.5.17 LCD Display Mode - PGM 169

Selecting LCD Display Mode will display the data entry page. Click **the [Save]** button after changing Value.

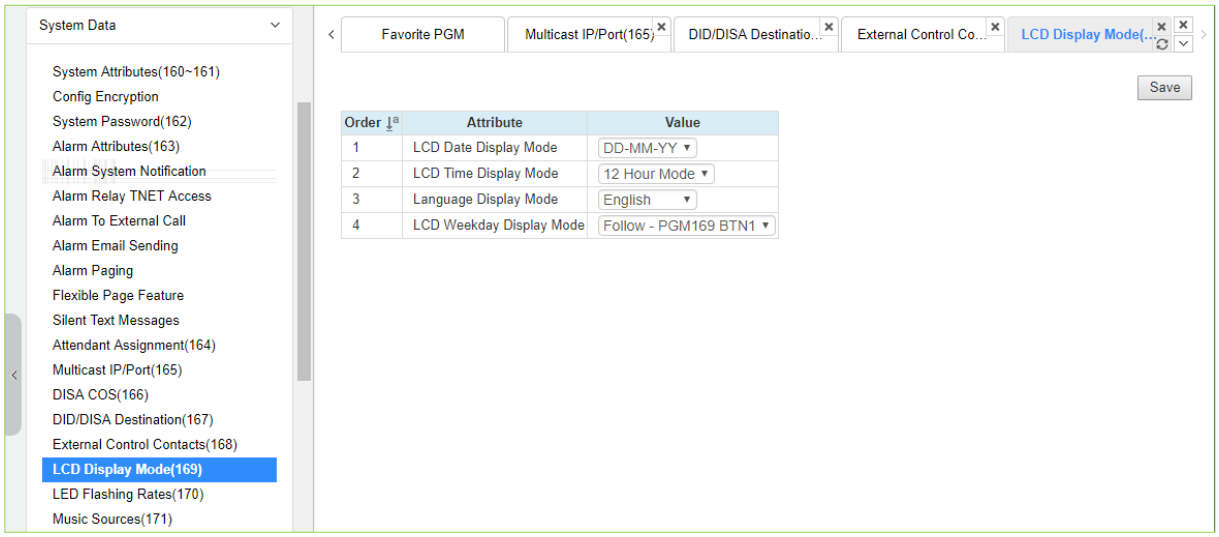


Figure 4.4.5.17-1 LCD Display Mode

The LCD display mode sets the time (12/24 hr.), date (day/month order), and language. Refer to Table 4.4.5.10-1 and Table 4.4.5.10-2 for a description of the modes and the data entries required.

Table 4.4.5.17-1 LCD DISPLAY MODES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
LCD Date Display Mode	Sets the Date display as month/day or day/month. **DD-MM-YY, MM-DD-YY**	Refer to description	DD-MM-YY
LCD Time Display Mode	Sets the Time display mode as 12 hour or 24-hour (military) time. **12 Hour Mode, 24 Hour Mode**	Refer to description	12 Hour Mode
Language Display Mode	Sets the language used in the display; refer to Table 4.4.5.10-2 below.		English
LCD Weekday Display Mode	Sets the Day-of-Week (DoW) display mode: No DoW display mm/dd/DoW, alpha month display, overrides setting of button 1above.display mm/dd/DoW, numeric month display, overrides setting of button 1 above. • Follow - PGM169 BTN1 • Type1(MM/DD WDY) • Type2(MM DD WDY)	Refer to description	Follow - PGM169 BTN1

Table 4.4.5.17-2 LCD LANGUAGE SELECTION

English	Swedish	German	Korean	Polish
Italian	Danish	French	Estonian	Greek
Finnish	Norwegian	Portuguese	Russian	Arabic
Dutch	Hebrew	Spanish	Turkish	

4.4.5.18 LED Flashing Rate - PGM 170

Selecting LED Flashing Rate will display the data entry page. Click **the [Save]** button after changing Value.

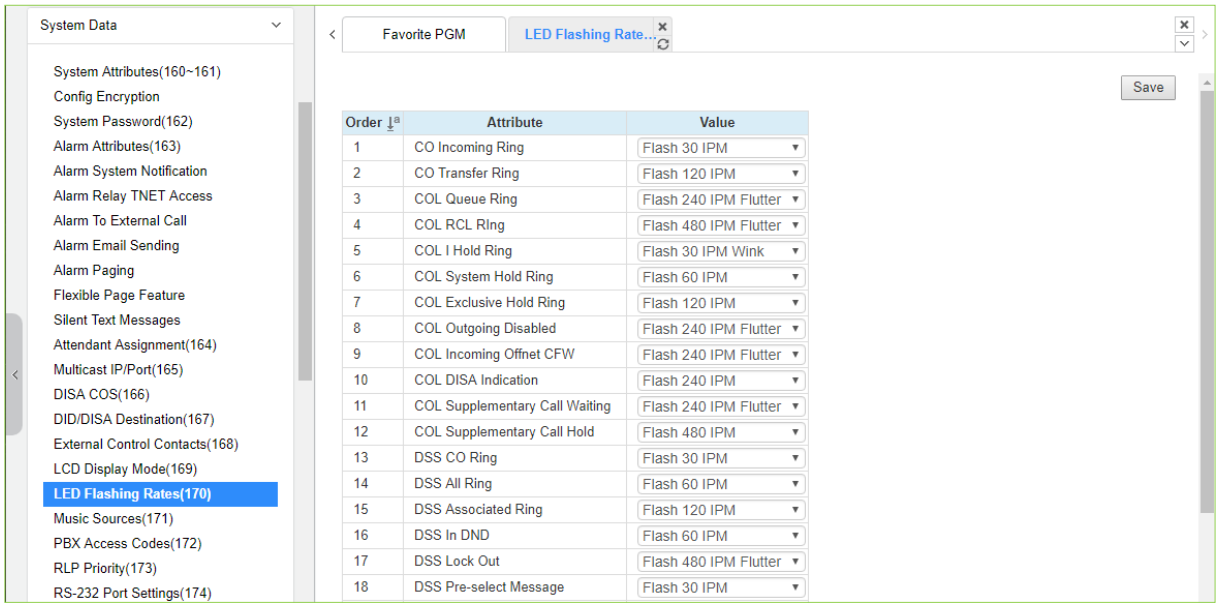


Figure 4.4.5.18-1 LED Flashing Rate

The LED flash rate for various functions and states can be assigned any one of the system‘s 15 signals. The various functions and states are shown in the following table. The 15 flash signals available in the system are shown in the table ‘LED flash rate.’

Table 4.4.5.18-1 LED INDICATION

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
CO Incoming Ring	CO button Incoming ring flashing rate.	00-14	FLASH 30 IPM(2)
CO Transfer Ring	It is CO button transfers ring flashing rate.	00-14	FLASH 120 IPM(10)
COL Queue Ring	It is CO button queue callback ring flashing rate.	00-14	FLASH 240 IPMFLUTTER(6)
COL RCL Ring	It is CO button recall ring flashing rate.	00-14	FLASH 480 IPMFLUTTER(8)
COL I Hold Ring	CO button I hold flashing rate.	00-14	FLASH 30 IPM WINK(12)
COL System Hold Ring	CO button system holds flashing rate.	00-14	FLASH 60 IPM(3)
COL Exclusive Hold Ring	CO button exclusives hold flashing rate.	00-14	FLASH 120 IPM(10)
COL Outgoing Disabled	It is CO button outgoing disabled flashing rate.	00-14	FLASH 240 IPMFLUTTER(6)
COL Incoming Off-net CFW	CO button incoming off-net call forward flashing rate.	00-14	FLASH 240 IPMFLUTTER(6)
COL DISA Indication	It is CO button DISA indication flashing rate.	00-14	FLASH 240 IPM(5)

Table 4.4.5.18-1 LED INDICATION

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
COL Supplementary Call Waiting	It is CO button supplementary call waiting flashing rate.	00-14	FLASH 240 IPMFLUTTER(6)
COL Supplementary Call Hold	CO button supplementary hold flashing rate.	00-14	FLASH 480 IPM(8)
DSS CO Ring	DSS button CO ring flashing rate.	00-14	FLASH 30 IPM(2)
DSS All Ring	DSS button ICM ALL ring flashing rate.	00-14	FLASH 60 IPM(3)
DSS Associated Ring	DSS button ICM ring associate device flashing rate.	00-14	FLASH 120 IPM(10)
DSS Incoming Ring	DSS button station is in DND.	00-14	FLASH 60 IPM(3)
DSS Lock Out	DSS button station is in a lockout.	00-14	FLASH 480 IPMFLUTTER(8)
DSS Pre-select Message	DSS button station is in a pre-selected message.	00-14	FLASH 30 IPM(2)
DSS camp on ICM Hold	DSS button station is in ICM hold.	00-14	FLASH 60 IPM(3)
DSS Other	DSS button station is in other states.	00-14	FLASH 120 IPM(10)
ACD Queue Ring 2	CIQ #1 Threshold.	00-14	FLASH 60 IPM(3)
ACD Queue Ring 6	CIQ #2 Threshold.	00-14	FLASH 120 IPM(10)
ACD Queue Ring 7-X	CIQ #3 Threshold.	00-14	FLASH 240 IPM(5)
ACD DND (Off Duty)	ACD an agent is off duty (ACD DND).	00-14	FLASH 120 IPM(10)
ACD Warning	ACD warning tone.	00-14	FLASH 120 IPM(10)
ACD Help	ACD help request/response.	00-14	FLASH 120 IPM(10)
Feature Record	FEATURE voice record button.	00-14	FLASH 240 IPM(5)
Feature Message Wait	FEATURE message wait.	00-14	FLASH 30 IPM(2)
DSS Out-of-service state	DSS button a station is in an out-of-service state.	00-14	FLASH OFF (00)
On-demand Ring mode	DND led of attendant station for ring mode.	00-14	FLASH 60 IPM(3)
Night Ring mode	DND led of attendant station for ring mode.	00-14	FLASH Steady

Table 4.4.5.18-1 LED INDICATION

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Timed Ring mode	DND led of attendant station for ring mode.	00-14	FLASH 240 IPM(5)
Auto Ring mode	DND led of attendant station for ring mode.	00-14	FLASH 480 IPM(8)
Page Hold Button	HOLD LED for paging.	00-14	FLASH 60 IPM(3)
DSS Station DND(off duty)	DSS button station in Station DND.	00-14	FLASH 120 IPM(10)
Message Wait (Call Back)	Message wait.	00-14	FLASH 30 IPM(2)
DSS in use	DSS button station is in use.	00-14	Steady On (1)

Table 4.4.5.18-2 LED FLASH RATE TABLE

Flash Rate	DESCRIPTION
1	Steady On
2	30 ipm flash (30% On)
3	60 ipm flash (30% On)
4	60 ipm double wink (30% On-Off-On-Off & 70% On)
5	240 ipm flash (30% On)
6	240 ipm flutter (30% On-Off-On-Off-On & 70% Off)
7	480 ipm flash (30% On)
8	480 ipm flutter (30% On-Off-On-Off-On & 70% Off)
9	15 ipm flash (30% On)
10	120 ipm flash (30% On)
11	120 ipm flutter (30% On-Off-On-Off-On & 70% Off)
12	30 ipm double flash (30% On-Off-On & 70% Off)
13	480 ipm double wink (30% On-Off-On-Off & 70% On)
14	480 ipm double flash (30% On-Off-On & 70% Off)

4.4.5.19 Music Sources - PGM 171

Selecting Music Sources will display the Music Sources data entry page. Click **the [Save]** button after changing Value.

The vUCP is not available for this feature.

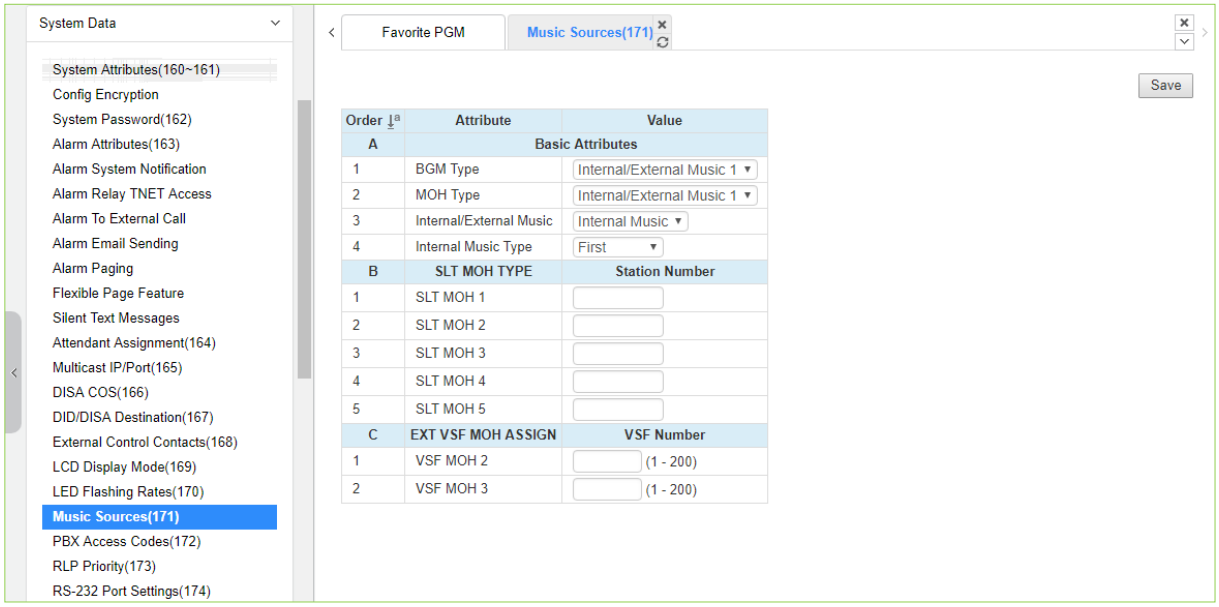


Figure 4.4.5.19-1 Music Sources

Music inputs are provided for use as the Background Music and/or Music-On-Hold source inputs. Up to thirty SF announcements may be recorded and played as MOH to the connected caller. The “VSF MOH” selection employs System announcement number 201, and for the VSF MOH 2~30 selections, any unused announcement can be employed. In addition, up to five SLT ports may be used as MOH to the held caller.

4.4.5.20 PBX Access Codes - PGM 172

Selecting PBX Access Codes will display the PBX Access Codes data entry page. Click the **[Save]** button after changing Value.

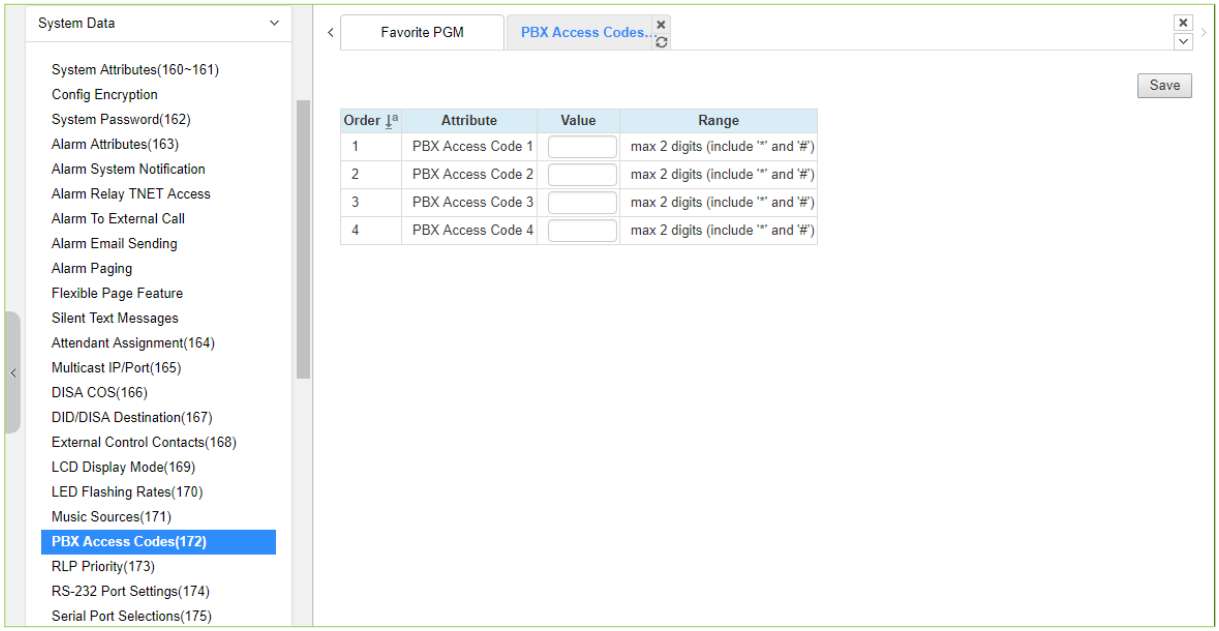


Figure 4.4.5.20-1 PBX Access Codes

When the system is used “behind” a PBX/CTX, the system needs to recognize the PBX/CTX Trunk access codes to implement proper dialing restriction, tone detection sequences, and Flash timing. A maximum of four (4) Trunk Access Codes of one (1) or two (2) digits can be entered.

4.4.5.21 Ringing Line Preference Priority - PGM 173

Selecting Ring Line Preference Priority will display the Ringing Line Preference Priority data entry page. Click **the [Save]** button after changing Value.

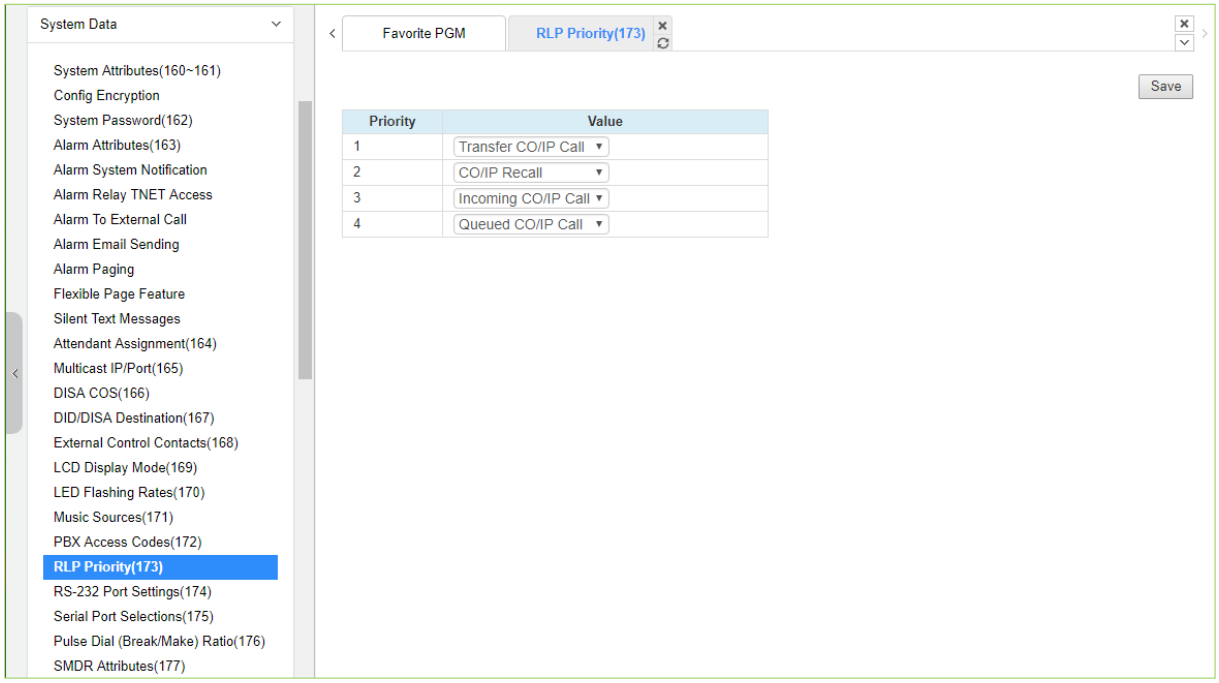


Figure 4.4.5.21-1 Ringing Line Preference Priority

When multiple calls are ringing at the same time to a station assigned Ringing Line Preference, the order of preference is based on the type of call: CO/IP Transfer, CO/IP Recall, Incoming call, CO/IP Queue. A queued CO/IP call is always assigned the lowest priority.

4.4.5.22 RS-232 Port Settings - PGM 174

Selecting RS-232 Port and USB 1&2 port Settings will display the RS-232 Port and USB 1&2 port Settings data entry page. Click **the [Save]** button after changing Value.

The vUCP is not available for this feature.

eMG100 does not support USB serial feature.

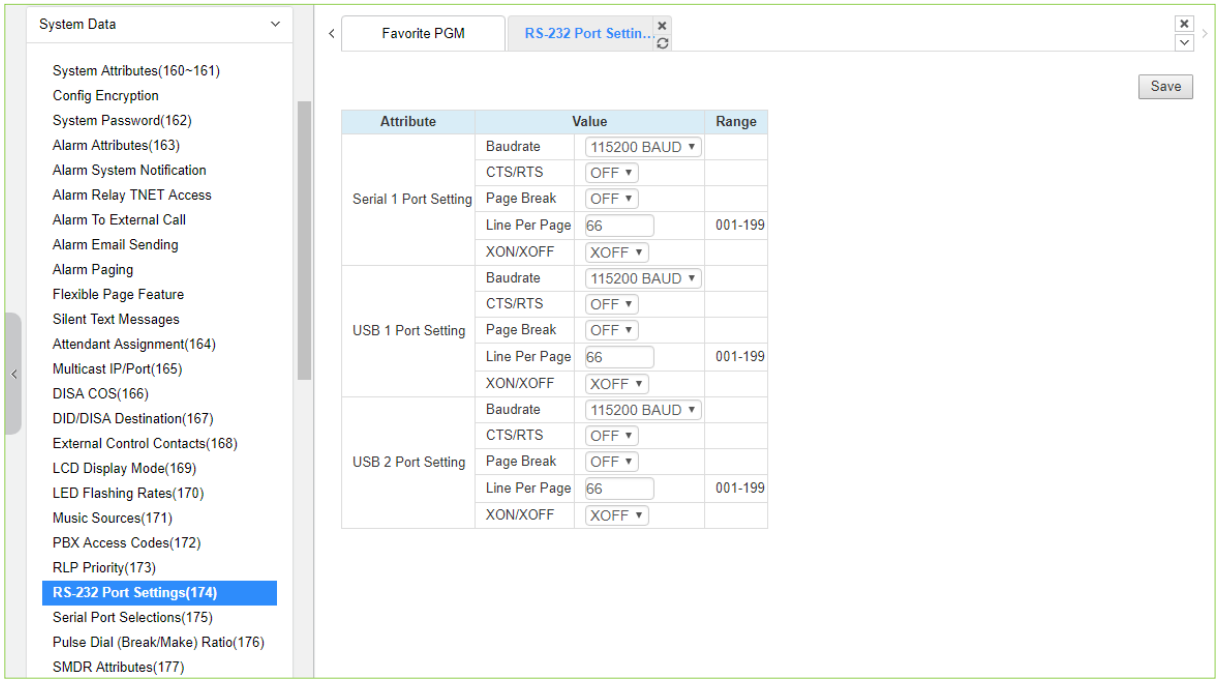


Figure 4.4.5.22-1 RS232 Port and USB 1&2 port Settings

Certain characteristics of each port are programmable, including baud rate, RS 232 control, and page settings. Refer to the following table for a description of the settings and the data entries available.

Table 4.4.5.22-1 RS232 PORT and USB 1&2 port Settings

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Baud Rate	This entry establishes the BAUD rate for the RS-232 serial port. **Unknown, 9600, 19200, 38400, 57600, 115200**	Refer to description	115200
CTS/RTS	The system's RS232 port can support Clear-to-Send (CTS), and Ready-to-Send (RTS) control leads.	OFF ON	OFF
Page Break	The system can send a page break command over the serial port at the end of each page. See Lines per Page below for page length set-up.	OFF ON	OFF
Line Per Page	This entry sets the page length, the number of lines the system will send before sending the page break.	001~199	66
XON/XOFF	This entry enables/disables XON/XOFF protocol.	XON/ XOFF	XOFF

4.4.5.23 Serial Port Selections - PGM 175

Selecting Serial Port Selections will display the Serial Port Selections data entry page. For each function, select the desired output using the drop-down menu and enter the TCP port if a TCP channel is assigned. Click **the [Save]** button after changing Value.

The vUCP is not available for this feature.

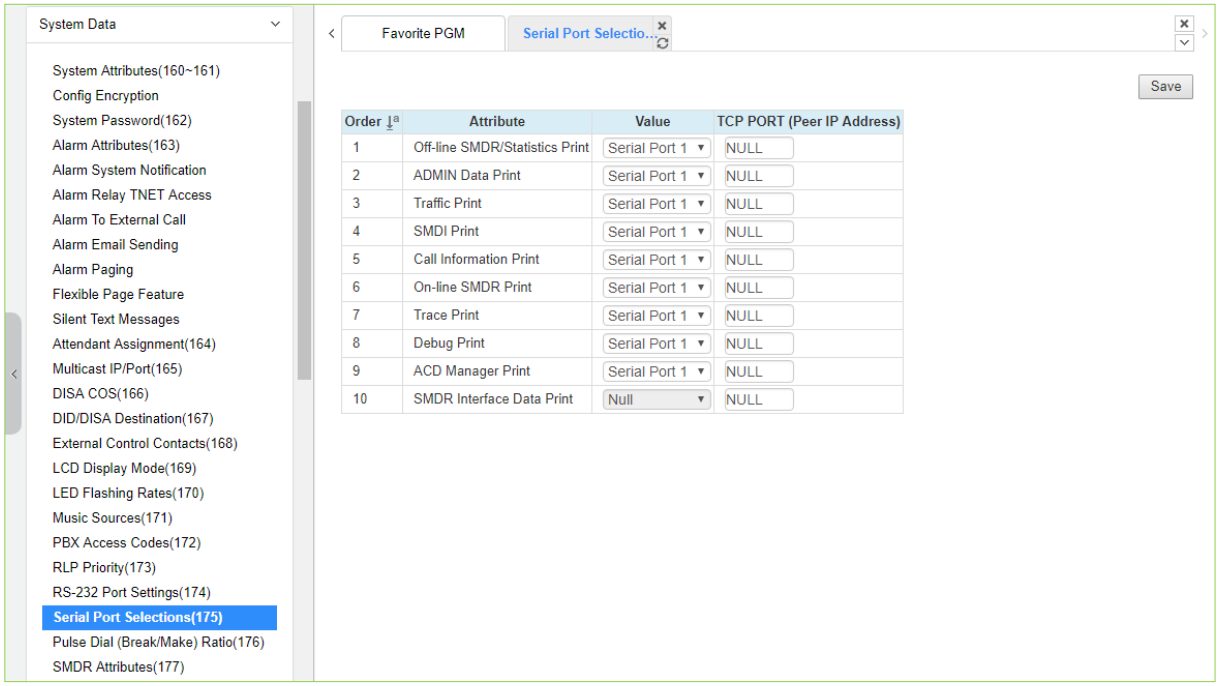


Figure 4.4.5.23-1 Serial Port Selections

The system has six (6) serial ports (1 RS232, 3 TCP Channels, and 2 USB serial). A serial port is assigned to each function that requires a serial output.

4.4.5.24 Pulse Dial (Break/Make) Ratio - PGM 176

Selecting Pulse Dial (Break/Make) Ratio will display the Break/Make Ratio data entry page. Click **the [Save]** button after changing Value.

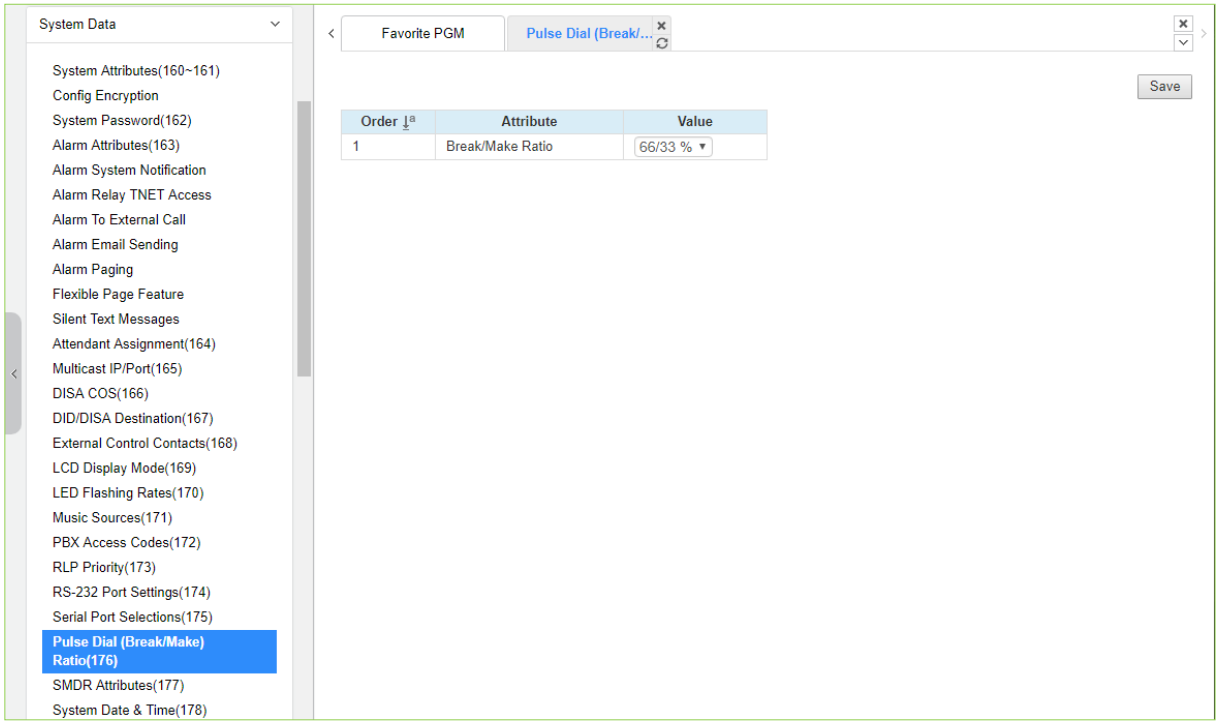


Figure 4.4.5.24-1 Break/Make Ratio

For Pulse dial CO Lines, the system supports 10pps and break/make ratios of 60/40% or 66/33%.

4.4.5.25 SMDR Attributes - PGM 177

Selecting SMDR Attributes will display the SMDR Attributes data entry page. Click **the [Save]** button after changing Value.

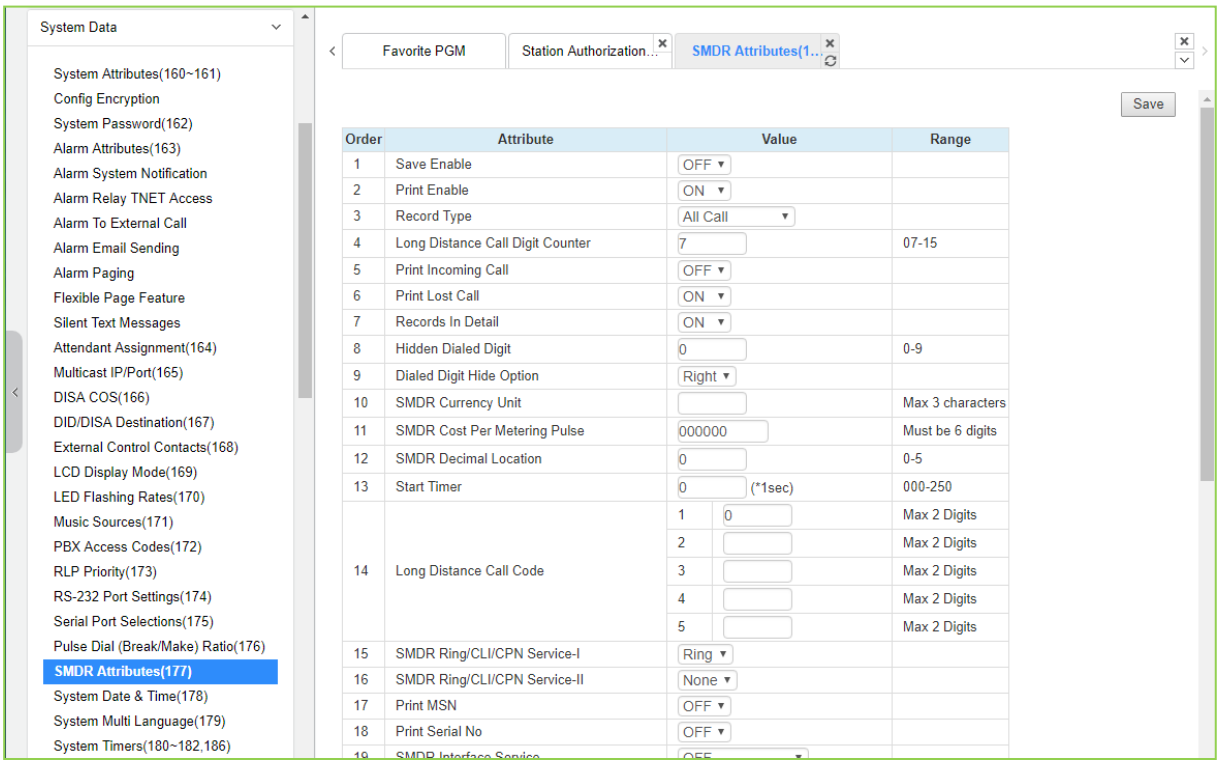


Figure 4.4.5.25-1 SMDR Attributes

Station Message Detail Recording (SMDR), which is output over a RS 232 port or TCP channel, contains both incoming and outgoing calls. Various SMDR attributes can be assigned, including; output records for all calls or LD only, call cost per pulse when using call metering, etc.

Refer to the following table for a description of each Attribute and the data entries required.

Table 4.4.5.25-1 SMDR ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Save Enable	The system can output all outgoing call records (ON) or allow for PSTN call set-up times, only records for calls exceeding the SMDR Timer (OFF). For SMDR Timer settings, refer to “Start Timer” as the below.	OFF ON	OFF
Print Enable	The system can output SMDR records automatically as they occur (real-time) or only when requested. When this attribute is ON, SMDR is sent at call completion.	OFF ON	ON
Record Type	The system can record all outgoing calls or only long-distance calls. The LD digit count and LD codes are assigned in “Long Distance code.”	Long Distance/ ALL calls	Long Distance
Long Distance Call Digit Counter	Dialed numbers, which exceed the assigned LD digit count have been considered long-distance calls for SMDR and COS purposes.	07-15	07

Table 4.4.5.25-1 SMDR ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Print Incoming Call	The system can output records for Incoming calls as well as outgoing calls. If enabled, incoming as well as outgoing calls are recorded.	OFF ON	OFF
Print Lost Call	The system can also provide records for unanswered incoming (abandoned) calls when incoming call records are enabled.	OFF ON	ON
Records In Detail	The system can output detailed call records (ON) or summary call information (total number of calls, cost, and cost for each station).	OFF ON	ON
Hidden Dialed Digit	For security purposes, digits dialed for an outgoing call can be hidden and replaced with "*." This field defines the number of digits to hide. The Dialed Digit Hide Option below defines whether leading or trailing digits are hidden. The station must be assigned for SMDR Hidden digits in the 'Common Attributes section.	0~9	0
Dialed Digit Hide Option	When "HIDDEN DIALED DIGIT" is enabled, above, this field determines if leading or trailing digits are hidden.	Right/ Left	Right
SMDR Currency Unit	The unit of currency used for call cost can be identified with 3-characters for easy reference.	Max. 3 characters	
SMDR Cost Per Metering Pulse	When the PSTN provides call metering, the cost per metering pulse can be assigned.	6-digits	000000
SMDR Decimal Location	This value determines the decimal position in the Cost per Pulse entry above, starting from the rightmost digits.	0~5	0
Start Timer	A "Valid call timer" can be set to allow for call set-up times through the PSTN.	000~250 (msec)	0
Long Distance Code	For SMDR and COS purposes, five (5) Long Distance codes of up to two (2) digits each can be assigned. If we dial as the 1st digits, the call is considered an LD call. **5 two digit LD codes, use * as wild card(any digit)**	Refer to description	
SMDR CLI or Ring Service I	For incoming calls, the system will send the defined data item for "Field I." The data item may be CLI, CPN, or Ring Service Time. Note the User dialed number is always provided for an outgoing call.	RING/ CLI/ CPN	RING
SMDR Ring/CLI/CPN Service II	For incoming calls, the system will send the defined data item for "Field II." The data item may be CLI, CPN, or Ring Service Time.	RING/ CLI/ CPN/ None	None
Print MSN	The MSN number Information can be included in the SMDR Record for an ISDN call involving an MSN number.	OFF ON	OFF
Print Serial No	Each SMDR Record can include a record number starting at 1 and incrementing until the records are deleted. The record number will reset to 1 when SMDR capacity is reached, or SMDR Mail Auto Delete Set is enabled under System Attributes.	OFF ON	ON

Table 4.4.5.25-1 SMDR ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
SMDR Interface Service	When enabled, the system stores SMDR data to send to applications, including NMS (Network Management System) upon request. **OFF, CO CALL, CO & ICM CALL**	Refer to description	OFF
SMDR ICM Save	When enabled, intercom call data is stored as part of the SMDR data.	OFF ON	OFF
SMDR ICM Print	When enabled, intercom call data is printed as part of the Online SMDR.	OFF ON	OFF
SMDR Disconnect Cause	When enabled, the disconnect cause is stored in Offline SMDR data and printed as parted of the Online SMDR.	OFF ON	OFF
Long time call	To monitor long-duration external calls, a “Long Time Call” can be set. If CO call duration exceeds this value, a notification will be sent to the NMS server and alarm. If set to “000,” the feature is disabled.	000 ~ 144 (10 min.)	0
Print SMDR from any CO to NET call	When a CO call is transferred to a Net transit-out CO, the local SMDR record is deleted.	OFF ON	OFF
Transfer Call Charge Rate	The SMDR record can be charged based on the following options when a station transfers a call. • **Individual station**: When a call is transferred to another station, the transferred call is charged to both stations based on the time on the call. • **Integrate transferring station:** When a call is transferred to another station, the call is charged to the transferring station. • **Integrate transferred station:** When a call is transferred to another station, the call is charged to the station receiving the transfer.	Refer to description	Individual station
Attendant Transfer Charge Rate	The SMDR record can be charged based on the following options when a station transfers a call. • **Individual charging:** When the Attendant places an outgoing call and transfers the call to a station, the Transfer Call Charge Rate is above. • **Attendant station charging:** When the Attendant places an outgoing call and transfers this call to a station, the call is charged to the Attendant. • **Transferred station charging:** When the Attendant places an outgoing call and transfers this call to a station, the call is charged to the receiving station.	Refer to description	Individual charging
International Access Code	When dialed as the first digits, the system will recognize the digits assigned as the International access code digit sequence.	Max. 4 digits	
Mobile Access Code	When dialed as the first digits, the system will recognize the digits assigned as the Mobile network access code digit sequence.	Max. 4 digits	

Table 4.4.5.25-1 SMDR ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
VSF Voicemail indication	Calls to the Voice Mail may be shown as I (Incoming call) or V(New indication) for Voice Mail in the SMDR record. **I (Incoming call), V (New indication)**	Refer to description	I
Display Nxxxx for Net number	An “N” can be included in the SMDR to identify the call as a Network call.	OFF/ ON	OFF
Outgoing call type	Select SMDR type for an outgoing call. • **All call:** SMDR can be provided for all outgoing calls. • **Answered call:** SMDR can be provided in case the called party is answered.	Refer to description	All Call
Print Dialed number	According to this option, you can print the dialed number. **Dialed digits to PSTN, Dialed digits by user**	Refer to description	Dialed digits to PSTN
SMDR REST API Service	When enabled, the system stores SMDR data to send to the REST API application.	OFF ON	OFF
SMDR ICM Ring Info	When enabled, intercom call data has additional information about ringing duration. With this option disabled, cannot differentiate calls if they are answered or unanswered because the TIME field is used for both talking and ringing durations. With this option enabled, TIME is only for talking duration, and RING duration is presented separately as it is presented for CO call data.	OFF ON	OFF
SMDR ICM CPN Info	When enabled, intercom call data has additional information about original dialed digits. With this option disabled, always only the last talking or ringing station is specified as called party. With this option enabled, the original dialed number is presented separately in the CPN field.	OFF ON	OFF

4.4.5.26 System Date & Time - PGM 178

Selecting System Date & Time will display the System Date & Time and DST data entry page. Click **the [Save]** button after changing Value.

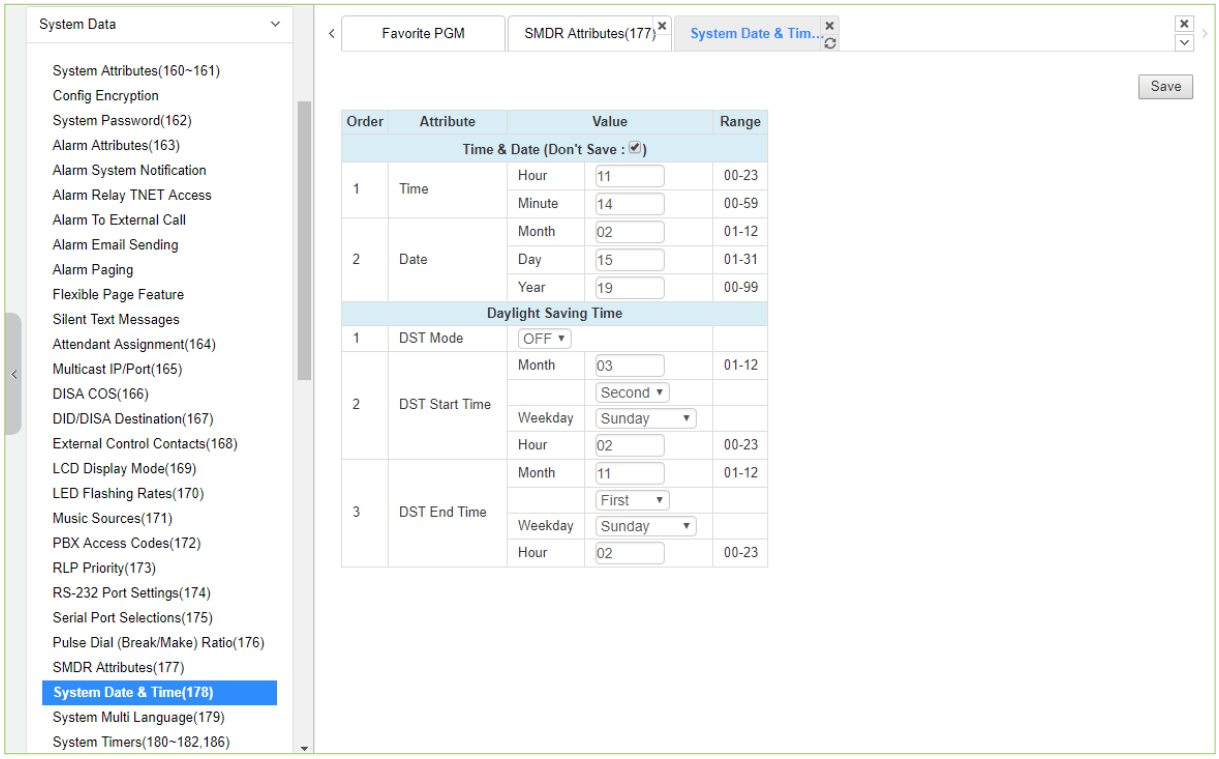


Figure 4.4.5.26-1 System Date & Time

The System Date and Time are established by the [Time & Date] menu. The date and time are employed for several features and functions, including; LCR, LCD displays, SMDR outputs, Auto Ring mode Selection, Wake-up Alarm, etc.

If Daylight Savings Time is enabled, the system time will be adjusted one hour forward and back at the DST start and end times, respectively.

4.4.5.27 System Multi-Language - PGM 179

Selecting System Multi-Language will display the System Multi-Language data entry page. Click **the [Save]** button after changing Value.

Enter Device/GW slot sequence number: eMG80/100: 1-300 / eMG800: 1-2890 / UCP: 1-3688

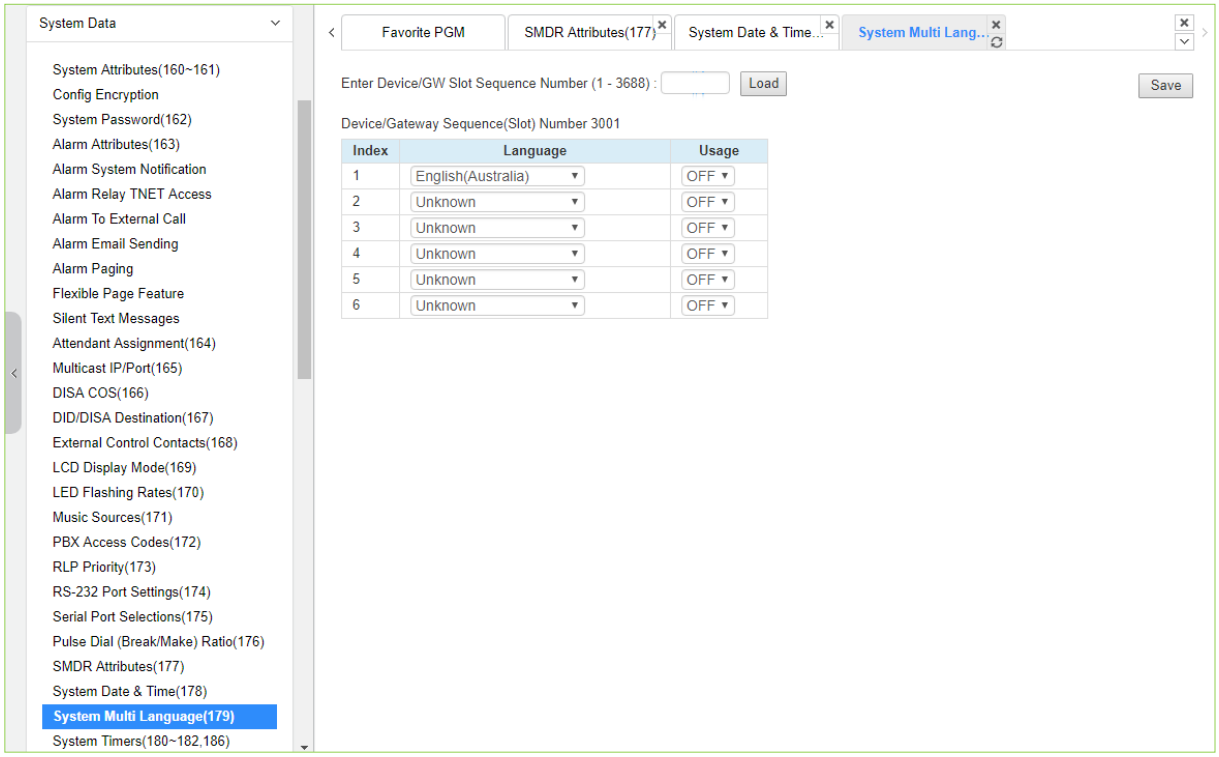


Figure 4.4.5.27-1 System Multi-Language

The VSF (VMIU, VMIB, UVM) supports multiple languages (19 languages); up to six languages may be supported simultaneously.

Once the prompts are downloaded to the VMIU and VMIB, the caller receives the Language selection announcement for DISA, CCR calls, preceding a Station Group announcement, or the DID error announcement.

The language selection announcement will only affect the language prompts enabled for use with the device indicated by the Sequence number.

4.4.5.28 System Timers - PGM 180 ~ 182 & 186

Selecting System Timers will display the System Timers data entry page. Click **the [Save]** button after changing Value.

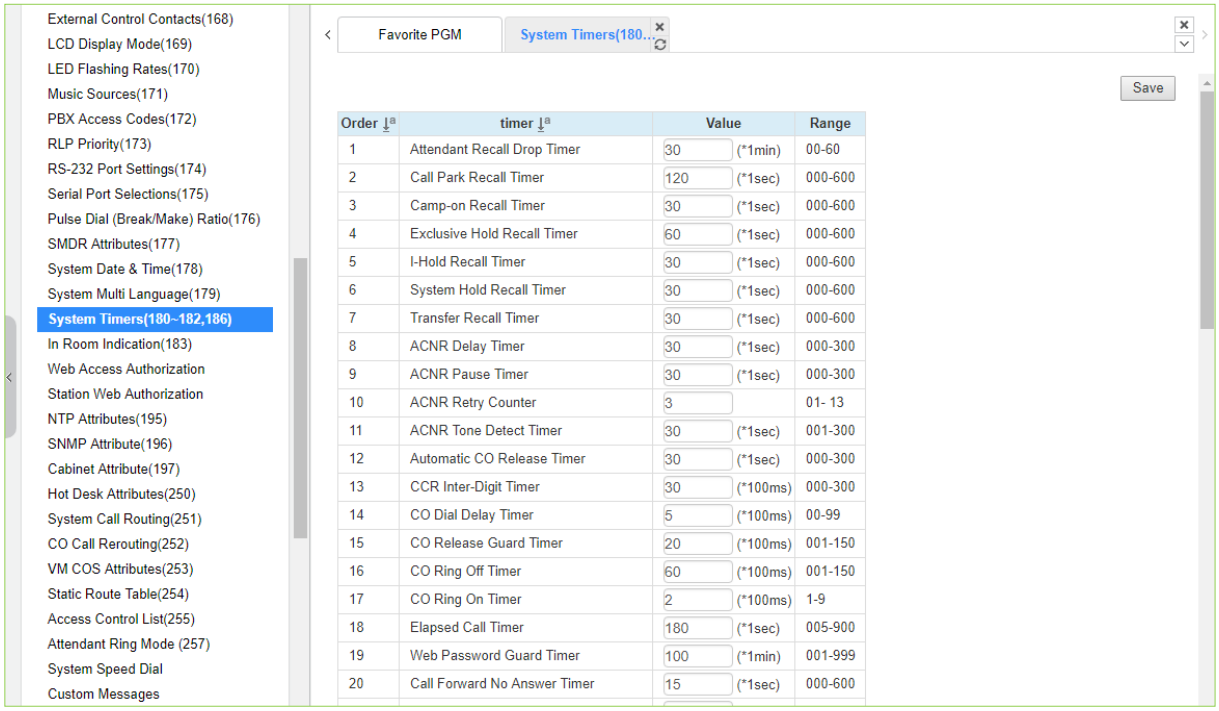


Figure 4.4.5.28-1 System Timers

A number of timers can be assigned to control and affect many features and functions. Refer to the following table for a description of the timers and the input required.

Table 4.4.5.28-1 SYSTEM TIMERS

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Attendant Recall Drop Timer	Enter the desired time that the Attendant receives recall after the system will disconnect the call.	00~60 (minutes)	30
Call Park Recall Timer	Enter the desired recall time for call park. The parked call will recall the station at a specified time.	000~600 (seconds)	120
Camp-on Recall Timer	When a call is transferred using Camp-On, this field determines the desired recall time for Camp-on. The station receives the call again at a specified time.	000~600 (seconds)	030
Exclusive Hold Recall Timer	Enter the desired time for Exclusive hold. The station receives the call again after a specified time.	000~600 (seconds)	060
I-Hold Recall Timer	Enter the desired time for Hold recall. The station receives the call again after a specified time.	000~600 (seconds)	030
System Hold Recall Timer	Enter the desired time for System hold recall time. The station receives the call again after a specified time.	000~600 (seconds)	030
Transfer Recall Timer	Enter the desired time for transferring the call again to the receiving station.	000~600 (seconds)	030

Table 4.4.5.28-1 SYSTEM TIMERS

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
ACNR Delay Timer	If the ACNR Pause Timer expires and no CO/IP Line is available for ACNR recall, in this field, you can set the delay time before ACNR attempts to access a CO/IP line again. This feature doesn't affect the ACNR retry counter.	000~300 (seconds)	030
ACNR Pause Timer	Enter the desired time for the pause between ACNR recall attempts.	000~300 (seconds)	030
ACNR Retry Counter	Enter the number of ACNR retry attempts. ACNR will finish after a specified time. Regarding CIS country, the range is from 1 to 9.	1~13	03
ACNR Tone Detect Timer	If call progress tones are not available for ACNR, the system will wait the specified time after dialing before considering the called party as "busy/no answer."	001~300 (seconds)	30
Automatic CO Release Timer	If a user accesses a CO/IP Line and takes no action, the system will automatically release the CO/IP Line when the specified time is over or expired.	000~300 (seconds)	030
CCR Inter-digit Timer	The inter-digit timer is used with the Customer Call Routing function.	000~300 (seconds)	030
CO Dial Delay Timer	To prevent dialing when CO/PBX has a slow response.	00~99 (minutes)	05
CO Release Guard Timer	When a CO/IP Line is returned to idle, the system will deny access for the specified time to assure the PSTN returns the CO/IP Line circuitry to be idle.	010~150 (seconds)	020
CO Ring Off Timer	This timer sets the maximum 'OFF' duration of the incoming ring cycle for the Ring Detect circuitry of the system to detect an abandoned call.	001~150 (seconds)	060
CO Ring ON Timer	This timer sets the 'ON' time of the incoming ring cycle for the Ring Detect circuitry of the system to recognize an incoming call.	1~9 (100 msec)	2
Elapsed Call Timer	Users can receive a periodic tone indicating the length of an outgoing call. This timer sets the time before and between the tones. Note CO Warning Tone must be enabled for the station in Station Data in the 'Station Data section.'	005~900 (seconds)	180
Web Password Guard Timer	If no data packet is received during a Web connection, the system will initiate a password check after the guard time.	001~999 (minutes)	5
Call Forward No Answer Timer	When a user activates No-Answer Forward, calls will ring for this duration before being forward. The Station No-Answer Forward timer section will take precedence.	000~600 (seconds)	15
DID/DISA No Answer Timer	A DID/DISA call to a busy station will forward to the DID/DISA Destination assigned under section should this timer expires.	000~255 (seconds)	20
VSF User Maximum Record Timer	This timer sets the maximum duration allowed for the User Greeting in the system's VSF.	000~999 (seconds)	60
VSF Valid User Message Timer	This timer sets the minimum duration allowed for a User Greeting.	0~9 (seconds)	4

Table 4.4.5.28-1 SYSTEM TIMERS

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Door Open Timer	This timer sets the minimum time required to activate the contact assigned as a door open contact.	00~99 (100 msec)	20
ICM Dial Tone Timer	If a user goes off-hook to receive an Intercom dial tone and takes no action for this timer, the user will receive an error tone.	001~255 (seconds)	10
Inter Digit Timer	This timer sets the maximum time allowed between each user-dialed digit. At expiration, the user will receive an error tone.	01~20 (seconds)	5
MSG Wait Reminder Tone Timer	An iPECS IP or LDP Phone user will receive periodic reminder tones of a message waiting at intervals of this timer.	00~60 (minutes)	00
Paging Timeout Timer	Determines the maximum duration of a page after which the caller and Page Zone is released.	000~255 (seconds)	15
Pause Timer	A Timed pause of this duration is used in speed dial and during other automatically dialed digits sent to the PSTN.	1~9 (seconds)	1
Soft auto RLS Timer	When a Soft Key is used on the 6000 or 7000 series iPECS IP or LDP Phone, after the expiration of this timer, the display will return to the previous display.	1-30 (seconds)	10
VM Pause Timer	When the system sends a “Pause” to Voice Mail using in-band signals, this timer defines the Pause duration. (Not available in the USA.)	1-90 (ms)	30
SLT Hook Switch Bounce Timer	This timer determines the system's duration considers an actual state change in the hook-switch and not a spurious contact bounce.	01~25 (100 msec.)	1
SLT Maximum Hook Switch Flash Timer	This timer sets the maximum time an SLT user can depress the hook-switch for a Flash signal.	01~25 (100 msec.)	1
SLT Minimum Hook Flash Timer	This time sets the minimum time an SLT user must depress the hook-switch for a Flash signal.	000~250 (10 msec.)	4
Station Auto Release Timer	The system will return a station to idle for an internal call if the call remains unanswered for this duration.	000~300 (seconds)	60
Unsupervised Conference Timer	This timer determines an “Unsupervised Conference” duration before the station is recalled or the conference is dropped. 00 means 10 minutes.	00~99 (minutes)	10
Prime-Line Delay Timer	This timer sets the delay (no action duration) for delayed (Warm) Prime Line operation.	01~20 (seconds)	5
Wink Signal Timer	This timer sets the duration of the “Seize Acknowledge Signal” (Wink) sent to the PSTN on a DID line.	010~200 (10 msec.)	10
En-block Inter Digit Timer	When an ISDN Line is assigned to send digits En-block, CO Attribute section, the system will send digits if the user dials “#” or this En-block inter-digit timer expires.	01~20 (seconds)	5
DTMF Duration Timer	This timer establishes the duration of DTMF tones sent on an analog CO line.	04~99 (10 msec.)	10

Table 4.4.5.28-1 SYSTEM TIMERS

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Flex DID Timer	The system will receive DID digits for this timer. After the timer expires, the system will use the last 2 to 4 digits received as DID digits.	01~99 (100 msec)	10
R2 Out Manage Timer	Reserved for future usage for R2 timers.	01~50 (seconds)	14
R2 In Manage Timer	Reserved for future usage for R2 timers.	01~50 (seconds)	14
R2 Disappear Timer	Reserved for future usage for R2 timers.	01~50 (seconds)	14
R2 Pulse Timer	Reserved for future usage for R2 timers.	01~30 (*20ms)	7
R2 Ready Timer	Reserved for future usage for R2 timers.	000~500 (*200ms)	7
Dial Tone Delay Timer	Reserved for future usage for R2 timers.	01~30 (*20ms)	20
Wake Up Fail Timer	At the expiration of this timer, the system will notify the Attendant when a user does not respond to a Wake-up alarm.	00~99	20
VSF Cut Error Tone Timer	This timer reduces the duration of Voice Messages in the built-in Voice Mail to remove the error tone that the carrier may send after disconnect.	00~90 (seconds)	0
On-Hook Auto Idle Timer	When an iPECS IP or LDP Phone receives a disconnect message or signal from the CO line, the phone goes idle after this timer.	00~99 (seconds)	0
IP Watch Timer	When Local redundancy is implemented, both call servers may attempt to be active should the LAN cable fail. To protects against this “dual active” case, the system can periodically check for an active backup module.	0~250 (1 sec.)	0
Prepaid Call Drop Warning Timer	When the Prepaid funds are exhausted, the user will receive a warning tone indicating the call will be dropped after this timer expires.	00-99	10
Emergency retry timer	The system tries to make an emergency call according to the CO access rule/Prefer CO/CO group if the system could not seize a predefined emergency Co line within this timer.	00~99 (seconds)	0
Record Warning Repeat Timer	If the record warning tone is set and this timer is set greater than 1, it works periodically when it’s recorded.	000~999 (seconds)	0
Error Tone Timer	This timer sets the duration for Error Tone.	5~180 (seconds)	30
Howling Tone Timer	This timer sets the duration for Howling Tone.	0~180 (seconds)	30
VM Notify Play Delay Over CO Timer	When VM notification to the mobile uses an analog loop-start Line, the system will treat the call as the answer after this timer and play the new message prompt.	1~99 (1 sec.)	10

Table 4.4.5.28-1 SYSTEM TIMERS

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Fax Detect timer	It is the maximum fax tone detection time to deliver FAX calls to the fax destination.	1~20 (1 sec.)	10
Auto Pause Release timer	This auto-pause released timer will release IPCR Mute function.	0~255 (1 sec.)	0
UCS Ring ACK Timer	UCS Client is ringing before expiring the Ring ACK timer and afterward will hear Error tones.	0~20 (seconds)	0
Short Modem Timer	If {Short modem} of an SLT is ON, the SLT maintains the modem mode for this time.	01~60 (1 sec.)	10
Button Idle Timer	When a button is pressed, an auto-idle timer is added. A button is pressed in an idle state. It goes to a menu list state(not calling state).In the menu list state, this auto-idle timer is applied. The button that is applied to this timer is as below. • Transfer / PGM. • Speed. • Menu. • Directory. • Message. • Call Log. **Condition** The Button Idle timer is supported only below phones. • LIP-90xx series(9010/20/30/40) • LIP-80xxE series(8012E/24/40E) • LDP phones. The firmware of the LIP-90xx & LIP-80xxE series should be upgraded. • LIP-90xx: A.0Eb or later version • LIP-80xxE: A.1Fn or later version The DECT phone and LIP-9070 do not support the Button Idle timer.	00, 10-99 (1 sec.)	0
CCR No Digit Error Timer	'CCR No Digit Error Timer' is the specific time when the digit is not entered after the announcement. After CCR no digit error timer, the call is routed to 'Error destination' that is set in CCR Table (228).	01-99 (100ms)	50
Fax No Answer Timer	When Data(Fax) station number is defined in the analog CO line, the system automatically answers the incoming call to detect the Fax tone. If the fax tone is not detected, the call is routed to the ring assigned destination. If the destination does not answer the call, it is disconnected after fax no answer timer is expired.	10-99 (1 sec.)	30

4.4.5.29 In-Room Indication - PGM 183

Selecting the In-Room indication will display the In-Room data entry page. Click **the [Save]** button after changing Value.

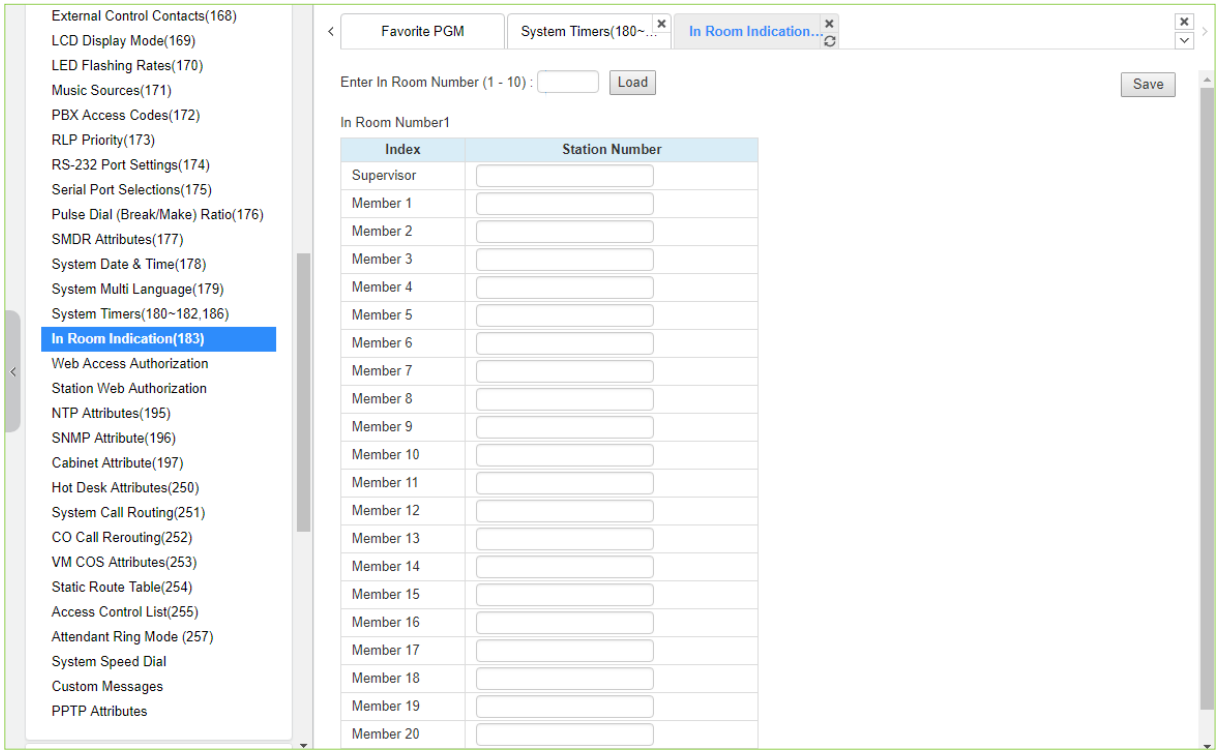


Figure 4.4.5.29-1 In-Room Indication

The Supervisor Station can set the In-Room Indication for all members in the In-Room indication group. Up to 10 Supervisors (groups) can be configured and programmed. And each can have up to 20 members in the group, excluding the Supervisor.

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Supervisor	This entry assigns the Station number for the In-Room Group Supervisor.	Station number	
Member 01~20	This entry assigns stations as members of the In-Room Group.	Station number	

4.4.5.30 Web Access Authorization

Selecting Web Access Authorization will display the Web Access Authorization data entry page. This page is only displayed when a password is defined. Click **the [Save]** button after changing Value. The online license selection menu can use at the vUCP System only.

A user can select three authorization options (N/A, Read, Read/Write) only in Web Access & Station Web Authorization PGM of Web Admin.

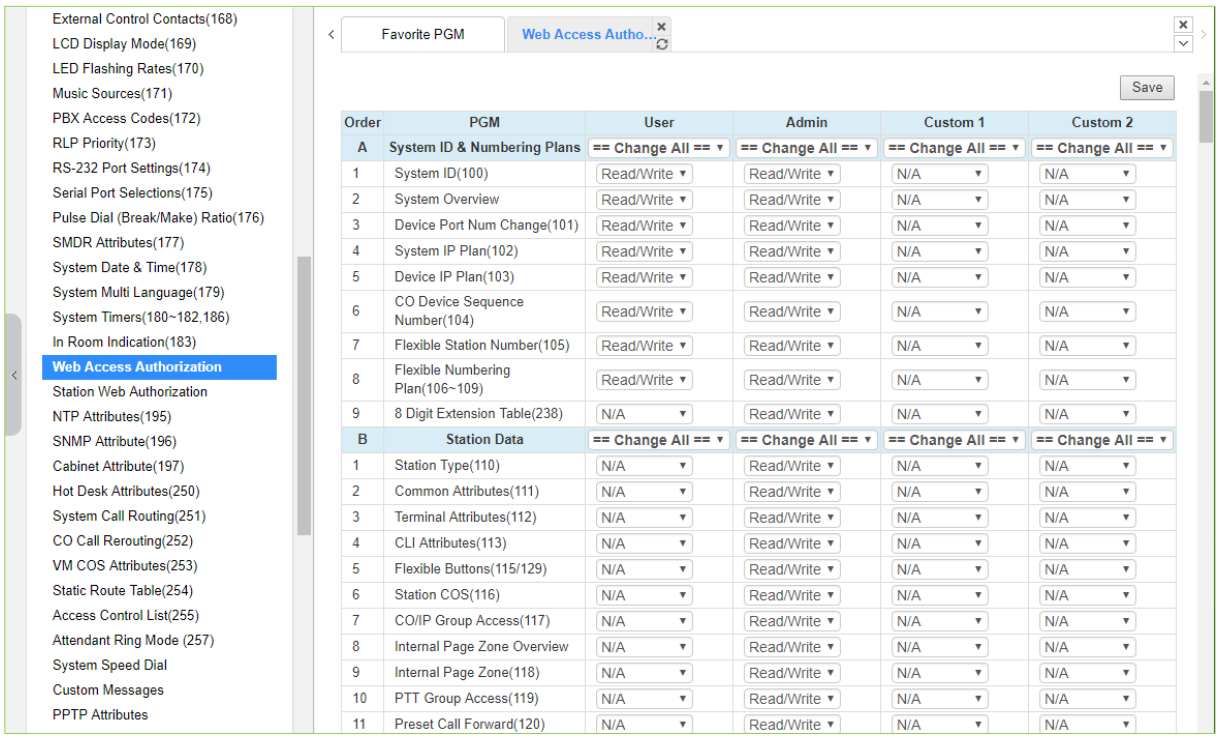


Figure 4.4.5.30-1 Web Access Authorization

Three different passwords can be assigned for access to the iPECS Web administration to allow different access levels to the program fields. Four levels (User, Administrator, Custom1, and Custom2)have access to the assigned fields on this page by selecting N/A, Read, Read/Write. The Maintenance password has access to all the programming fields and the maintenance fields, including trace settings, device log view, gain & cadence control, lock key install, and device deletes feature. In addition, the Maintenance level user can assign the authorities of the other user levels.

In the Maintenance menu, the Database, SMDR, and Voice Mail Delete fields can be chosen by User level or Admin Level.

4.4.5.31 Station Web Access Authorization

Selecting Station Web Authorization will display the Web authorization data entry page. Click **the [Save]** button after changing Value.

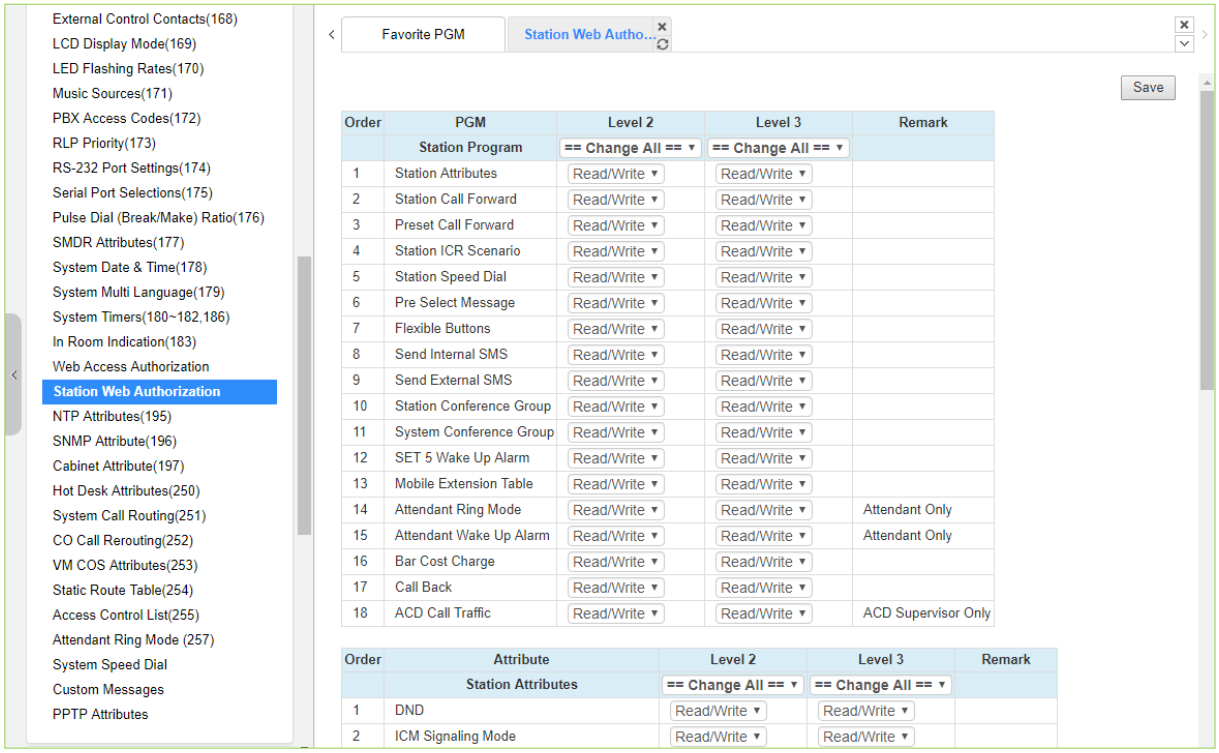


Figure 4.4.5.31-1 Station Web Access Authorization

Three access levels can be assigned to each station to access the Station Web pages in Station Data (Common Attributes (111): ‘Station Web Level’). Level 1 has access to all Station pages and attributes. The pages and attributes for Levels 2 and 3 are programmable.

4.4.5.32 NTP Attributes - PGM 195

Selecting NTP Attributes will display the System NTP Attributes entry page.

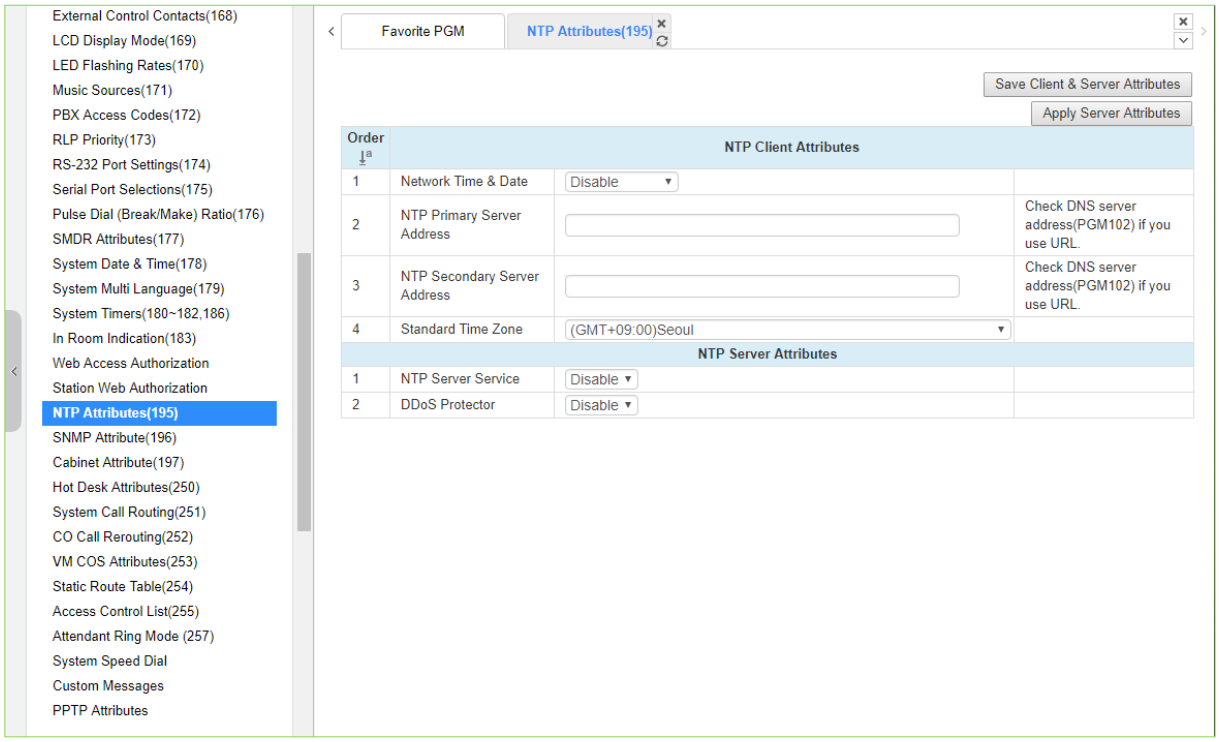


Figure 4.4.5.32-1 NTP Attributes

The system can employ the Network Time Protocol (NTP) to synchronize the system time with an NTP time server. The system requests the time from the NTP server at 10-minute intervals and then determines the time differential. If the system time is 2 seconds off the NTP time, the system time is adjusted to synchronize with the NTP server time.

4.4.5.33 SNMP Attribute - PGM 196

Selecting SNMP Attribute will display the SNMP Attributes entry page. Click **the [Save]** button after changing Value.

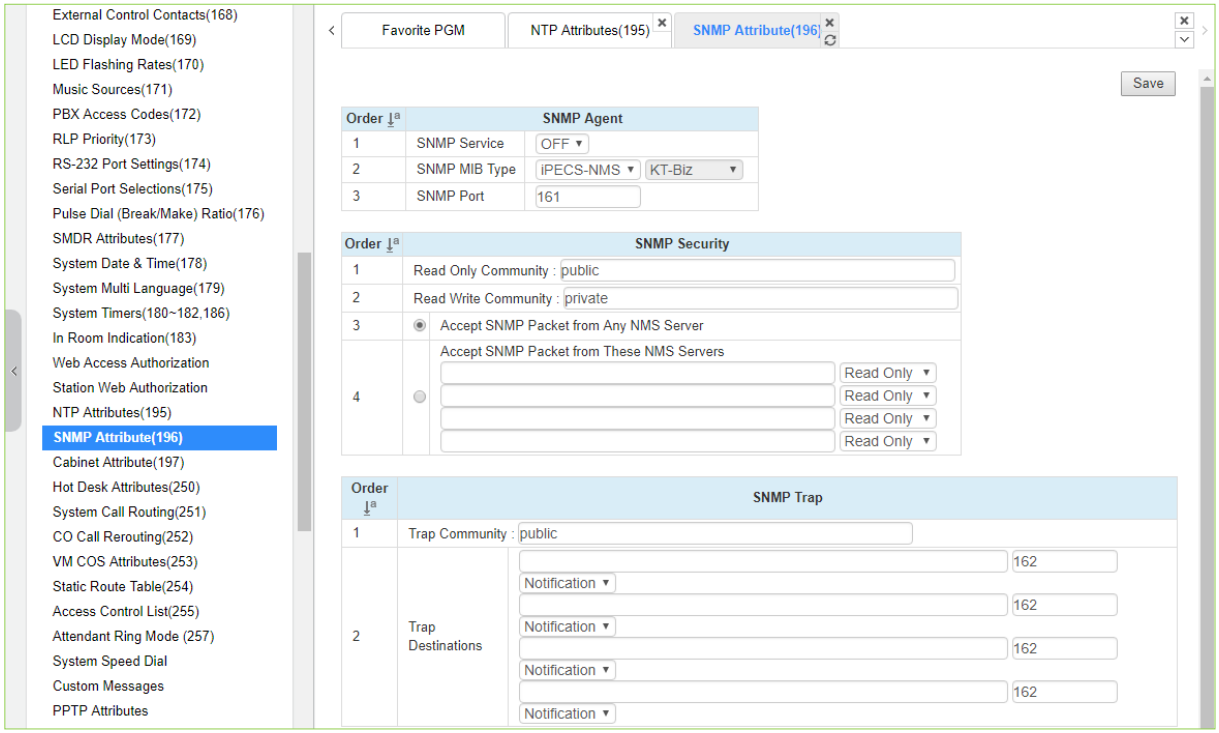


Figure 4.4.5.33-1 SNMP Attribute

The screen shows that SNMP Attributes are divided into three categories: SNMP Agent, SNMP Security, and SNMP Trap. The SNMP Service field enables the SNMP agent to run in the iPECS call server. The SNMP port field defines the UDP port used for communications from the iPECS system for SNMP messages. This port should not be changed.

In SNMP Security are the Read Only and Read Write SNMP Community fields, 4 to 16 characters. The SNMP community designates an SNMP communication group to which an SNMP message belongs and is a logical relationship between the SNMP agent (iPECS system) and SNMP manager (iPECS NMS). The SNMP community settings must be the same for the iPECS system and the iPECS NMS server.

- Read Only Community (default=Public)—Defines a community string used when the iPECS NMS reads data from the iPECS system.
- Read Write Community (default=Private)—Defines the community string used when iPECS NMS reads or writes data to iPECS system.

Although the iPECS system can accept packets from any SNMP manager such as iPECS NMS, for improved security, the IP address of specific servers can be defined and allowed Read-only or Read-Write access. It is recommended that the system be assigned the IP address of a specific NMS server with reading Write access.

The SNMP Trap configuration defines the Trap Community and the Trap Destination, which includes the IP Address of the SNMP manager, iPECS NMS, and the .message type. The Trap Community designates a communication group to which a Trap message belongs and is a logical relationship between the SNMP agent (iPECS system) and SNMP manager (iPECS NMS).

This 4 to 16 character string should be the same as the Trap community string defined in the iPECS NMS. The Trap community should be the same for all iPECS systems registered to an iPECS NMS server, whereas the SNMP community may be defined with different strings for each iPECS system.

The Trap Destination defines the IP address of the iPECS NMS server and the port, 162. Enter the IP address of the NMS server but, the port should not be changed. The pull-down menu next to the address is used to define the message type. Three values are available:

- Trap – message type is defined in SNMPv1, but because iPECS-NMS and iPECS system use SNMPV2, the Trap type message is not recommended.
- Notification – message type send from the SNMP agent once without checking the reception of the message.
- Inform – message type requires an acknowledgment from the SNMP manager. If the agent does not receive a response, the message is resent. Inform messages are intended for use in environments with high packet loss; however, use of the Inform message type may detrimentally affect iPECS system performance.

The iPECS SNMP attributes are defined here. Refer to Table 4.4.5.26-1 for description and values that can be entered.

Table 4.4.5.33-1 SNMP ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
SNMP service	SNMP Service field is used to set the SNMP agent in the iPECS ON or OFF.	OFF ON	OFF
SNMP MIB Type	Select SNMP MIB specification. U-CEMS is a KOREA telecom speciation.	iPECS-NMS/ U-CEMS	iPECS-NMS
SNMP Port	SNMP Protocol port number.		161
Read Only Community	The read-only community should be used when the SNMP manager (NMS) is trying to read data from the SNMP agent (eMG)	4 ~ 16 characters	public
Read Write Community	When the SNMP manager (NMS) needs to read and write data to the agent (iPECS system). This attribute should be enabled.	4 ~ 16 characters	private
Trap Community	For the SNMP agent (eMG/UCP), this field defines the destination IP address to receive trapped messages (Alarm/fault events).	4 ~ 16 characters	public
Trap Destination	The IP address of the iPECS NMS server, port 162, should not be changed.	IP address	Public
Message Type	Defines how the agent sends the Message.	Notification/ Inform/ Trap	Notification

4.4.5.34 Cabinet Attribute for UCP - PGM 197

Selecting Cabinet Attribute will display the Cabinet Attributes entry page. Click **the [Save]** button after changing Value.

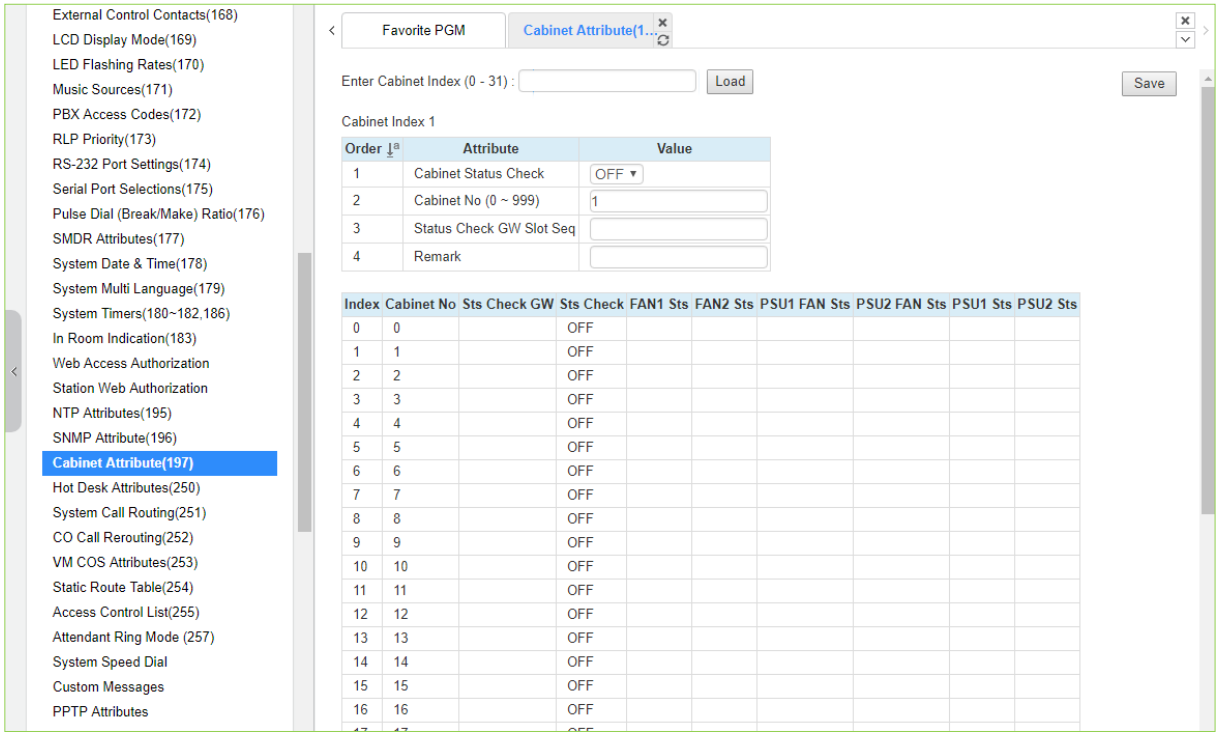


Figure 4.4.5.34-1 Cabinet Attribute

This Web page displays system cabinet configurations and alarm status.

4.4.5.35 Hot Desk Attributes - PGM 250

Selecting Hot Desk Attributes will display the Hot Desk Attributes data entry page. Click **the [Save]** button after changing Value.

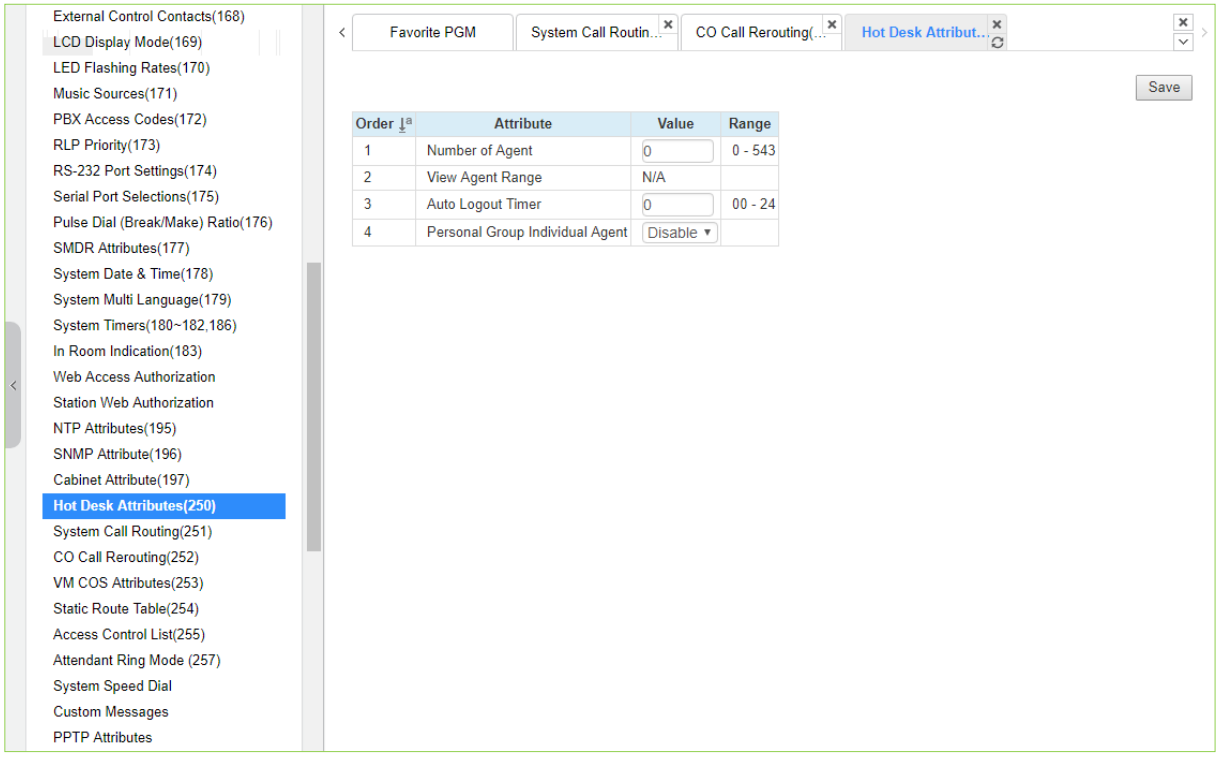


Figure 4.4.5.35-1 Hot Desk Attributes

Hot Desk feature is available only for LIP phones, NOT for Digital phones and LIP-8002/2E.

A Hot Desk station allows a user to log in for access to the system features and resources. Once logged in, the user is provided access to system features and resources employing the database for the user's assigned station.

User station numbers, which are used as the Agent ID, are assigned automatically by the system. The system assigns station numbers to each agent starting at the highest station number available.

Table 4.4.5.35-1 HOT DESK ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Number of Agent	Assign number of Hot desk agent.	eMG80/100: 0-100 eMG800: 0-300 UCP:0-1200	0
View Agent Range	View the assigned station numbers for agents.		N/A
Auto Logout Timer	A Hot desk station will return to inactive if the logged-in user takes no action for the Auto Logout timer.	00~24 Hrs.	00
Personal Group Individual Agent	If this is enabled, then Hot desk login/logout will work individually. To use UCS call control, then it should be enabled.	Enable/Disable	Disable

4.4.5.36 System Call Routing - PGM 251

Selecting System Call Routing will display the System Call Routing data entry page. Enter a valid Index range and click **[Load]** to enter Call Routing data. Click **the [Save]** button after changing Value.

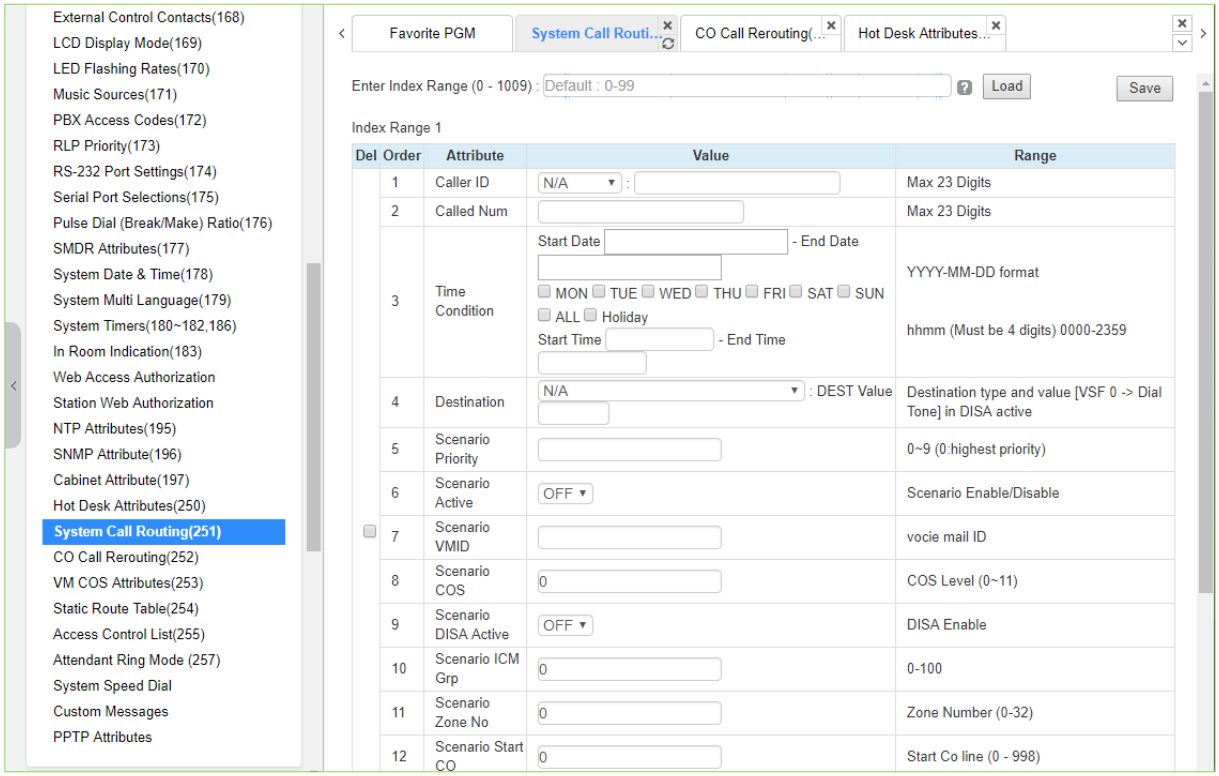


Figure 4.4.5.36-1 System Call Routing

System Call Routing establishes scenarios with criteria to route calls. Criteria include a time of day, day of the week, Caller and Called numbers, etc. System Call Routing takes precedent over another system-based call routing. However, Station and CO Call Routing scenarios take precedence over System Call Routing scenarios.

Table 4.4.5.36-1 System Call Routing Attributes

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Caller ID	This field defines the Caller Id for the scenario.	Max. 23 Digits	N/A
Called Num	This field defines the Called number for this scenario.	Max. 23 Digits	
Time condition (Start Day and End Day, weeks, start time and end time)	The time and day for activation of the scenario can be defined. **YYYY-MM-DD hhmm (Must be 4 digits)**	Refer to description	
Destination (Type and Value)	This field defines the destination type and value for call routing when the scenario criteria are met. **N/A, STA, Station Group, SPD, PABX, VSF, VSF(#), Net Station, Company room, INT Page, EXT Page, All Page, VM, ICLID Table**	Refer to description	N/A

Table 4.4.5.36-1 System Call Routing Attributes

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Scenario Priority	Each scenario can be assigned a priority. The highest priority scenario meeting the criteria is used to route the call.	0-9 (Highest priority)	
Scenario Active	A scenario must be active to be employed. If not active, the scenario is ignored.	ON OFF	OFF
Scenario VMID	A Voice Mail Id can be associated with the scenario for routing to a Voice Mailbox.	Voice mail ID	
Scenario COS	If DISA is active for the scenario, the COS can be assigned for the call. **0-11(COS level)**	Refer to description	0
Scenario DISA Active	The scenario can employ DISA for the incoming call routing.	OFF/ ON	OFF
Scenario ICM Group	The scenario can route calls to a specific Tenancy group. eMG80/100:0-15, eMG800:0-32, UCP:0-100	Refer to description	0
Scenario Zone No.	A zone can be assigned so that only CO calls to a CO/IP Line in the Zone will route based on the scenario.	0-32	0
Scenario Start CO and End CO	This field defines a range of CO/IP Lines that will employ in the scenario. eMG80/100:0-74, eMG800:0-600, UCP:0-998	Refer to description	0
Scenario Group: this is used for scenario group by attendant.	Scenarios can be group allowing the Attendant to select a group of scenarios to route calls. • eMG80/100: Group number(01~15/ 00: unused), • eMG800: Group number(01~32/ 00: unused), • UCP: 0-100	Refer to description	0
Zone Holiday	A Zone can be assigned for routing calls using the scenario during Holiday periods defined for the Zone.	0-32	0

4.4.5.37 CO Call Rerouting - PGM 252

Selecting CO Call Rerouting will display the CO Call Rerouting data entry page. Enter a valid Index range and click **[Load]** to enter Call Routing data. Click the **[Save]** button after changing Value.

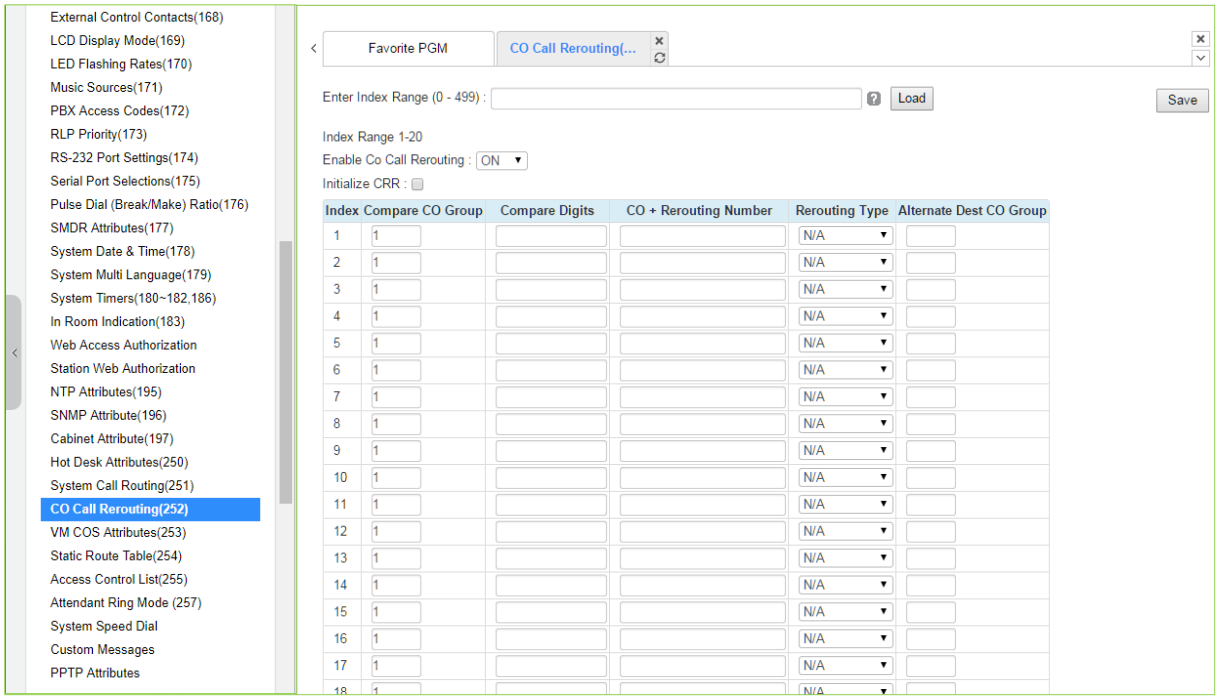


Figure 4.4.5.37-1 CO Call Rerouting

CO Call Rerouting establishes routing for CO/IP calls with a specified caller id on CO/IP Lines from a specified group. The rerouting sends calls out over another CO/IP Line or group, a network destination, a DISA call, or to another station. The incoming CO group and compare digits determine if the call should be rerouted, and the destination is determined by the CO code and Telephone number, which is dialed when the incoming group and compare digits are matched. The routing type determines if the call is routed normally (N/A) or if the call is routed over a network or employs DISA. The example CRR chart is as below

Index	Incoming CO group	Compare Code	CO Code + Tel number	Routing Type
0	1	454	88005123456	N/A
1	2	456**	8901123456	N/A
2	1	42*555	9123456	N/A
3	5	353	8901123456	NET Type
4	5	401		DISA Type

- Index 0: If an incoming call on a CO/IP Line from a group has digits “454,” then seize CO 5 and send digit 123456.
- Index 1: If an incoming call on a CO/IP Line from group 2 has digits “456**,” then seize CO group 1 and send digit 123456.
- Index 2: If an incoming call on a CO/IP Line from group1 has digits “42*555,” then seize the first CO/IP Line and send digit 123456.
- Index 3; if an incoming call on a CO/IP Line from group 5 has digits “353,” then seize CO group 1 and send digit 123456 as a transit-out call over the Network.
- Index 4: If an incoming call on a CO/IP Line from group 5 has digits “401,” then activate DISA and await digits from the caller.

4.4.5.38 VM COS Attributes – PGM 253

Selecting VM COS Attributes will display the VM COS Attributes data entry page. Select a valid VM COS and click **[Load]** to enter VM COS data. Click the **[Save]** button after changing Value.

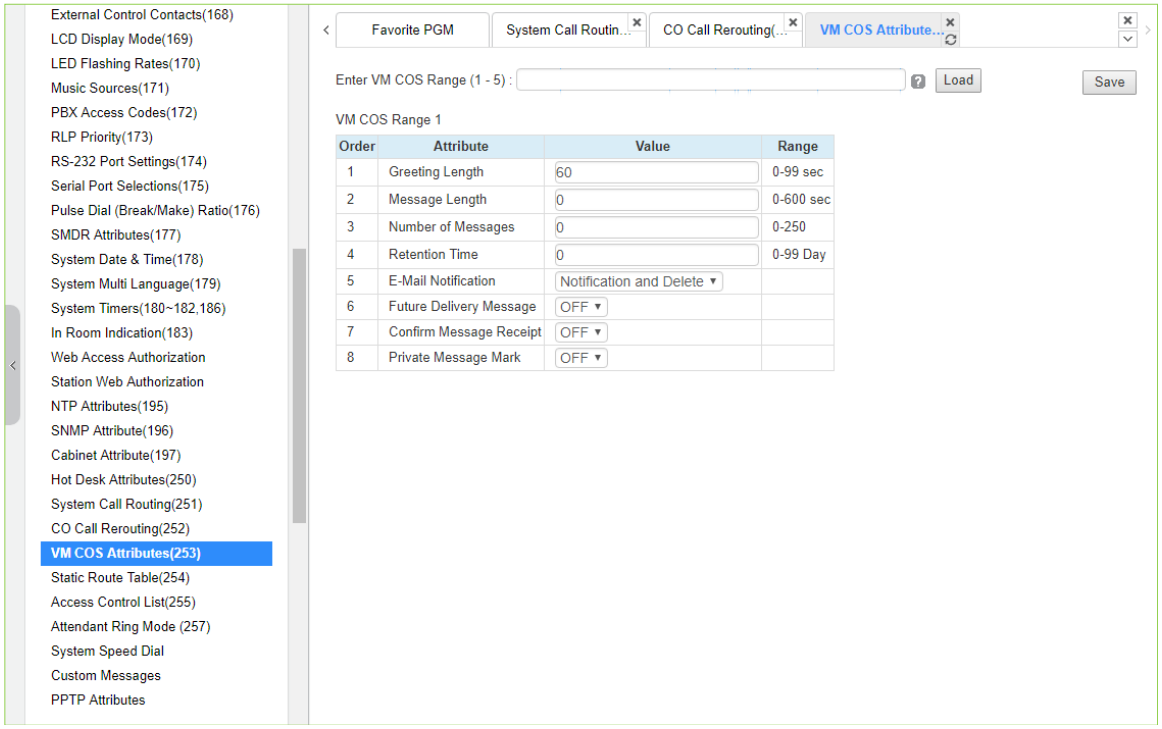


Figure 4.4.5.38-1 VM COS Attributes

VM COS establishes various common characteristics of the user's Voice Mailbox, including greeting and message length, E-mail notification, message retention, etc.

Table 4.4.5.38-1 VM COS ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Greeting Length	This defines maximum user greeting length.	0-99(Seconds)	60
Message Length	This defines maximum user message recording time.	0-600(Seconds)	0
Number Of Messages	This defines the maximum number of voice mail messages.	0-250	0
Retention Time	Voice mail messages will be automatically deleted after this number of days.	0-99Days	0
E-Mail Notification	E-mail notification can be enabled or disabled and, if enabled, the message can be deleted after notification. **Disable, Notification Only, Notification & Delete**	Refer to description	Notification & Delete
Future Delivery Message	Future Delivery of messages can be enabled or disabled.	OFF ON	OFF
Confirm Message Receipt	Confirm message receipt can be enabled or disabled.	OFF ON	OFF
Private Message Mark	Private message marks can be enabled or disabled.	OFF ON	OFF

4.4.5.39 Static Route Attributes – PGM 254

Selecting Static route Attributes will display the static route attributes data entry page. Click the **[Save]** button after changing Value.

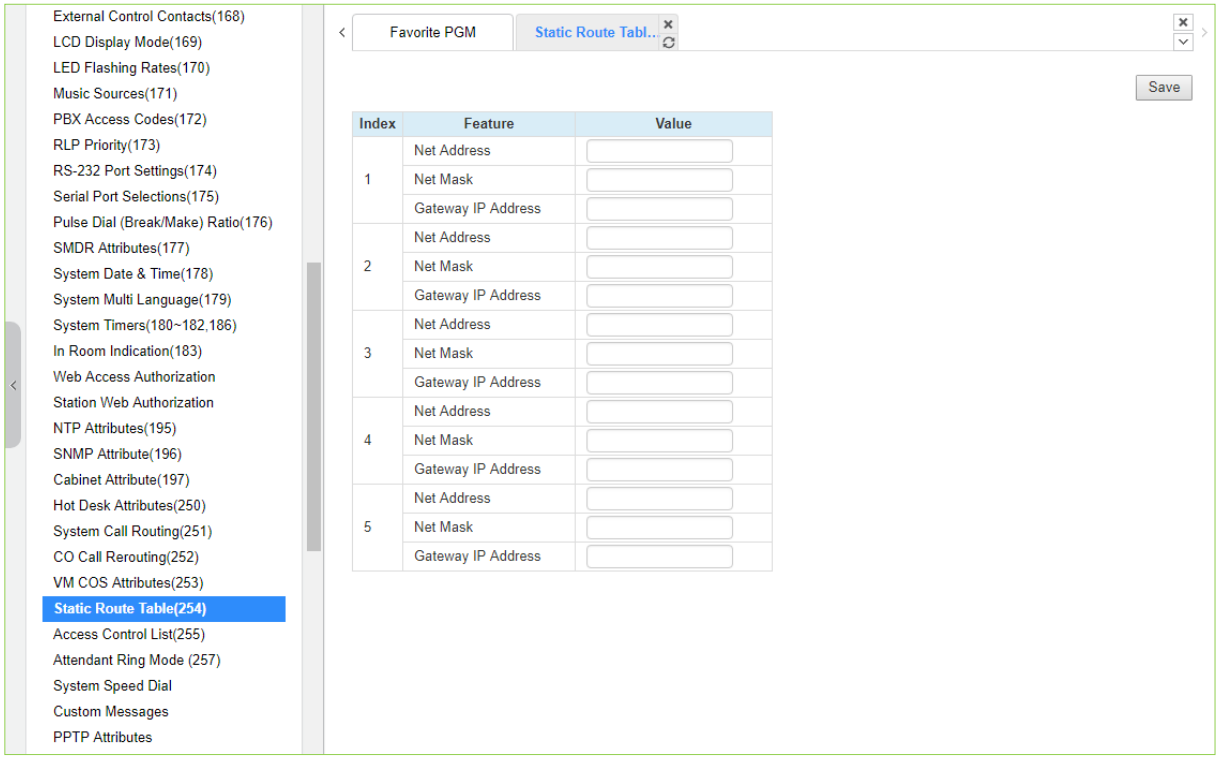


Figure 4.4.5.39-1 Static Route Table Attributes

Table 4.4.5.39-1 STATIC ROUTE TABLE ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Net address	Network IP address	IP address	
Net mask	Net mask		
Gateway IP address	Gateway(route) IP address	IP address	

4.4.5.40 Access Control List – PGM 255

Access Control List will display the access control attributes data entry page. Enter a valid index range and click **[Load]** to enter ACL data. Click the **[Save]** button after changing Value.

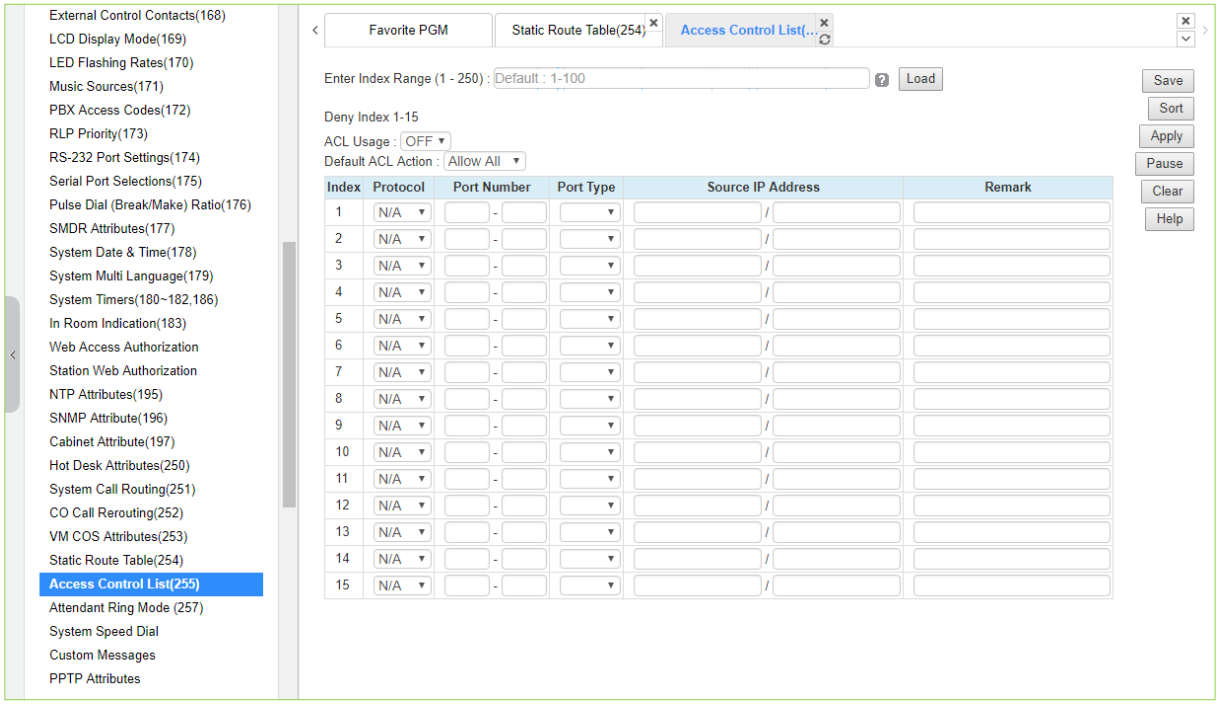


Figure 4.4.5.40-1 Access Control List

Access Control determines the Source IP addresses that can access the system for specific protocols.

Table 4.4.5.40-1 ACCESS CONTROL LIST

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Protocol	This field defines the accessing protocol type. **N/A, ALL, TCP, UDP, ICMP**	Refer to description	N/A
Port number	This field further defines the protocol TCP/IP port number.		
Port type	The port number can be configured as either the source or destination port number.	DEST/ SRC	
Source IP address	The allowed source IP address and netmask allowed this field defines access.		
Remark	This is a general remark field.		

4.4.5.41 Attendant Ring Mode – PGM 257

Selecting Attendant ring mode will display the Attendant ring mode entry page. Click the **[Save]** button after changing Value.



Figure 4.4.5.41-1 Attendant Ring Mode

The administrator assigns the ring mode to 1 Main attendant and 15 ICM Tenancy Group attendants.

Five ring modes are supported as Day, Night, Timed, Auto, On-demand ring mode (eMG80/100: 1~15/ eMG800: 1~32/UCP: 1~100).

The Attendant controls the system Ring mode changing from Auto ring Mode to Day, Night, Timed, or On-demand ring mode. Based on the ring mode selected in the field of Saved Ring Mode, different ring assignments, COS (Class of Service), and answering privileges are invoked for the system users.

In case the Main attendant selects the other ring mode of Day ring mode in the field of Saved Ring Mode, the ICM Tenancy group attendant controls the system ring mode instead of the Main attendant. So Current Ring Mode and the Saved Ring Mode of ICM Tenancy group attendant may be different.

It can make system return to Auto ring mode automatically from Day, Night, Timed ring mode user set temporarily.If DST or local time zone of an ICM group is different from System Time, need to input Zone Number for the ICM group.With Zone number input for local time of ICM groups, you can input Auto ring mode return time based on user' local time.With input of zone number, also if set Time Zone in Auto Ring Mode Table(233) to Based on Local/Zone Time(439), user can program Auto Ring Mode table (233) based on local time without calculatingoffset of time from System Time. Without Zone number, should input the Auto ring mode return time based on relative time to system time calculating difference of time.For more description, operation, condition, etc. about this feature you can refer to Auto_Return_To_Auto_RingMode.doc.

4.4.5.42 System Speed Dial

Selecting System Speed Dial will display the System Speed Dial entry page. Enter a valid range of System Speed Dial numbers and click **[Load]** to enter Speed Dial data. For convenience, the copy, paste, and drag are available to enter or modify data. Click the **[Save]** button after changing Value.

The index range is flexible according to selecting 'Speed Numbering' in 'System ID (100)'.

Enter Index range: eMG80/100: 2000-4999 / eMG800: 2000-9999 / UCP: 20000-31999

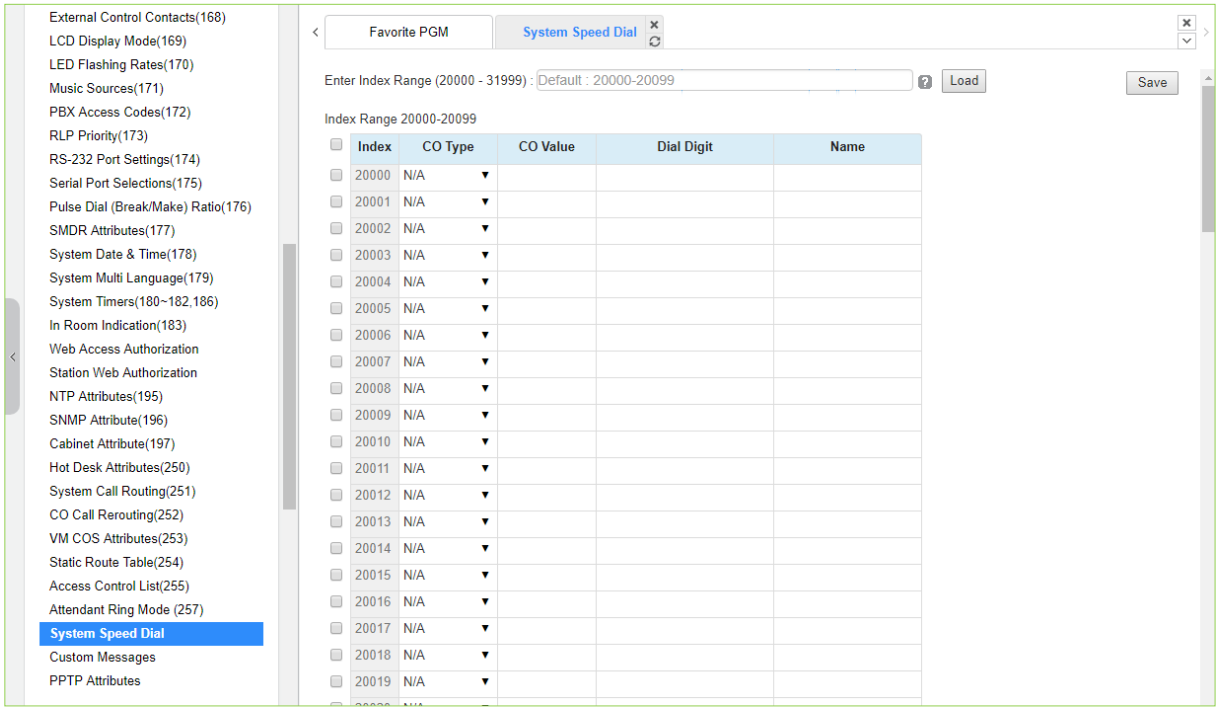


Figure 4.4.5.42-1 System Speed Dial List

The eMG80/100 (eMG800/UCP) has a memory for 3000(8000/12,000) Speed Dial numbers of up to 25 digits each. Each System Speed bin (index) is assigned the CO/IP Line for the Speed Dial, the number to be dialed, and a name for Dial-by-Name.

The administrator can assign each index to the desired speed number by entering CO Type, CO value, Dial Digit, and name. In the field of CO Type, there are many types; N/A, CO Line, CO Group, Loop, Transit-out, and Net Station. According to the CO type, you can fill out CO Value, Dial digit, and Name.

Network station numbers can be saved in speed dial that could be used for Dial by Name. It is used to use the dial by name feature for networking numbers.

4.4.5.43 Custom Messages

Selecting Custom Messages will display the Custom Message Table data entry page. Click the **[Save]** button after changing Value.

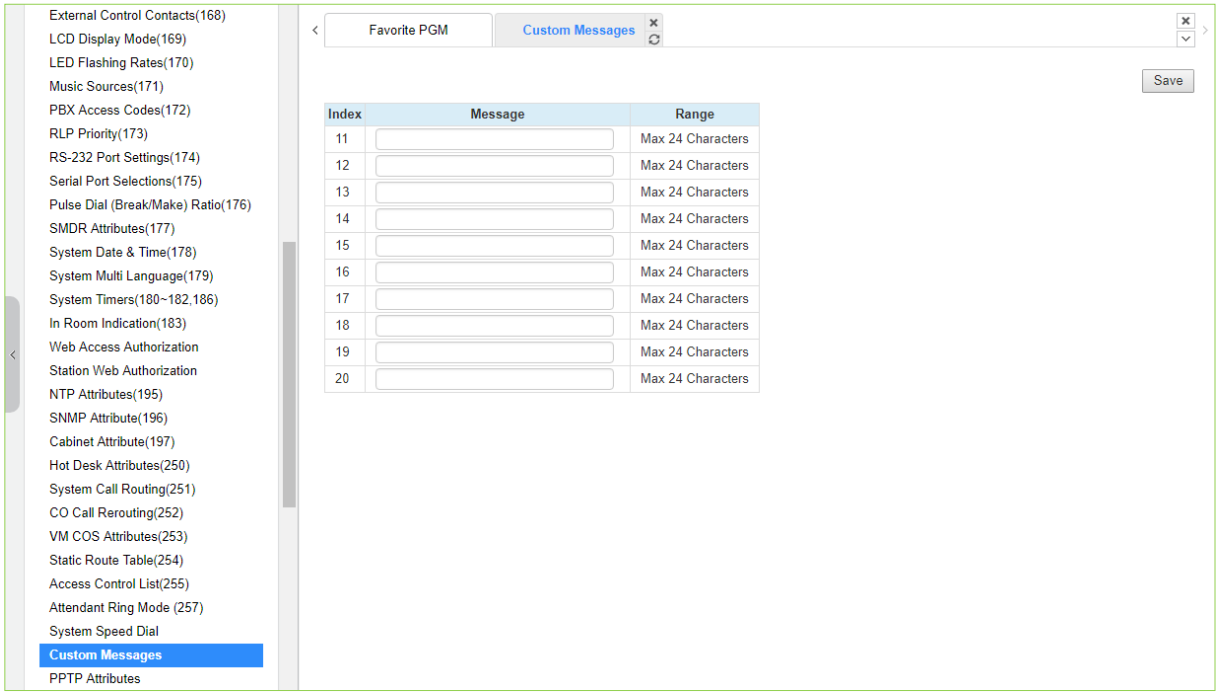


Figure 4.4.5.43-1 Custom Message

The system's 10 Custom messages can be defined with up to 24 characters each

4.4.5.44 PPTP Attributes

Selecting PPTP Attributes will display the PPTP Attributes Table data entry page. Click the **[Save]** button after changing Value.

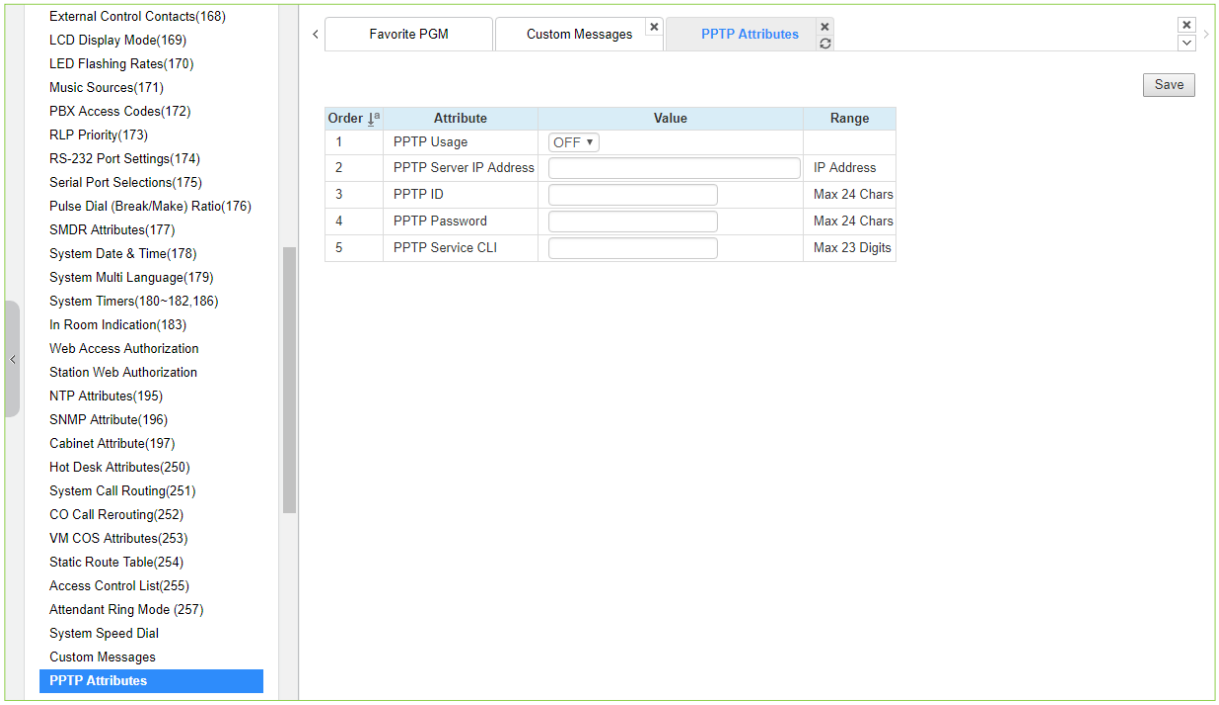


Figure 4.4.5.44-1 PPTP Attributes

When required, the system supports Point to Point Tunneling Protocol (PPTP). PPTP must be enabled, and values for the PPTP server IP address, Id, and password must be entered, and a server name may be entered.

4.4.5.45 PPP Attributes for eMG– PGM 205

Selecting PPP Attributes will display the PPP Attributes data entry page. Use the checkmark to indicate which attributes to modify; checked attributes are stored by clicking the **[Save]** button.

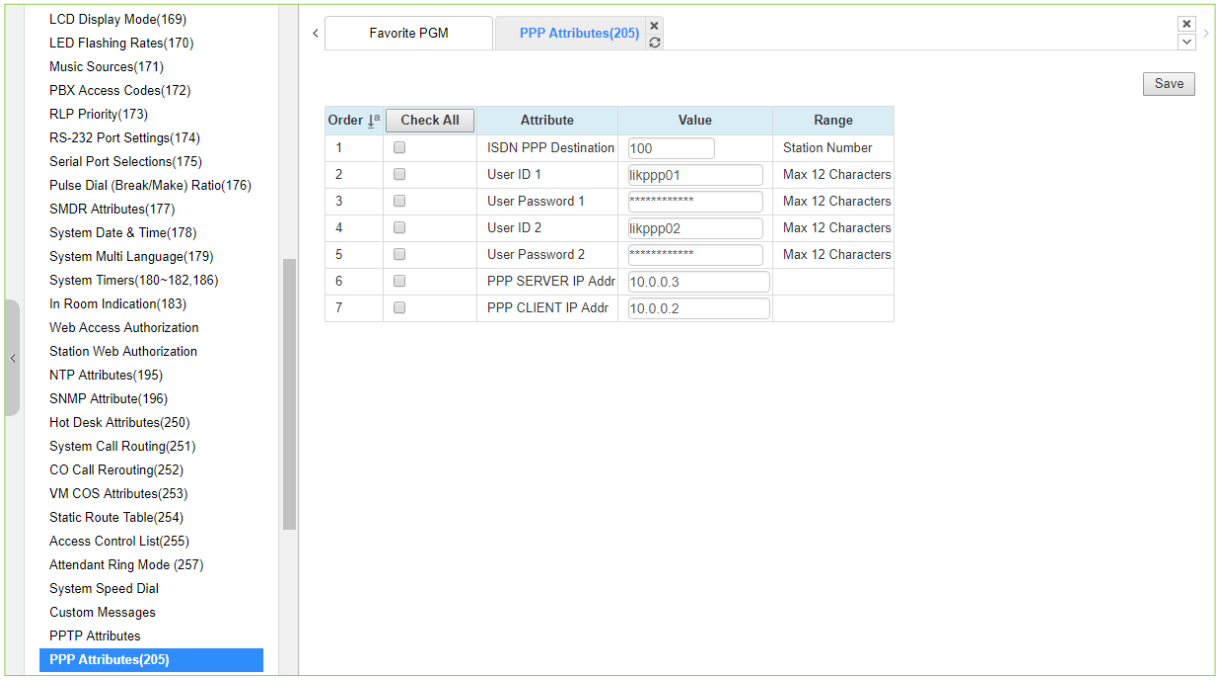


Figure 4.4.5.45 PPP Attributes

In addition to remote access via an IP network connection, the system database may be accessed remotely via an ISDN connection. Placing a call over an ISDN Line to the designated PPP Station will connect to the system database. The system will request a user id and password, matching one of the User Ids and passwords assigned. After a matching id and password are received, the iPECS Login Home page is provided.

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
ISDN PPP Destination	Suppose the incoming capability is 64 Kbps unrestricted digital, and the called party number matches the PPP destination. In that case, the system will automatically answer the call and request a PPP ID and password.	Station number	
User ID 1	The System accepts this PPP ID 1 as valid.	Max. 12 characters	likppp01
User Password 1	The password entered is used to authorize PPP ID 1.	Max. 12 characters	Ipkts01
User ID 2	The System accepts this PPP ID 2 as valid.	Max. 12 characters	likppp02
User Password 2	The password entered is used to authorize PPP ID 2.	Max. 12 characters	Ipkts02
PPP Server IP Address	When configured, the PPP Server IP Address must match this entry. To applies this option, the system must be restarted.	IP Address	
PPP Client IP Address	When configured, the PPP Client IP Address must match this entry. To applies this option, the system must be restarted.	IP Address	

4.4.6 Station Group Data

Selecting the Station Group Data program group returns the sub-menu displayed in the left frame as shown in the following figure.

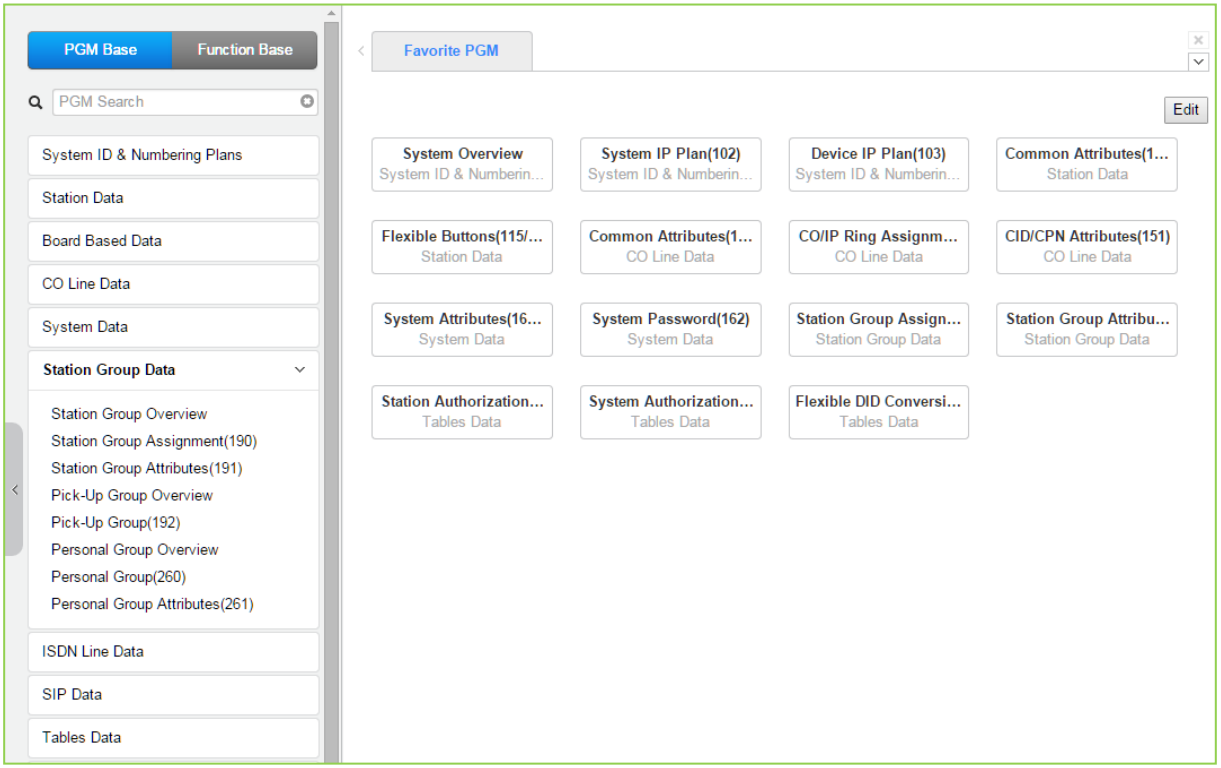


Figure 4.4.6-1 Station Group Data

Stations can be grouped so that incoming calls will search (Station) for an idle station in the group. The system allows the assignment of three Station processes, Circular, Terminal, and ACD. In addition, there are eight (8) functional groups available: ACD (Automatic Call Distribution) based on ACD station, Ring, Call Pick-Up, External Voice Mail (SLT connected), VSF-Voice Mail, iPECS Feature Server Voice Mail and Network Voice Mail, and UCS Groups.

Certain types of groups can incorporate announcements, which are given to the calling party. The system‘s VSF can store up to two hundred (200) announcements for use with Station Groups.

Note that a station can belong to multiple groups if the groups are all of the same types. Also, note that when a station group is assigned to a group type (Circular, Terminal, ACD, VM, FS VM, VSF-VM, Net VM, UCS, and Ring), the group attributes are initialized to the default values.

4.4.6.1 Station Group Overview

Selecting the Station Group Overview item will return the Station Group Overview page. This page displays the Station Group attributes (type, pick-up attribute, Member list, and Group name) for all the Station Groups.

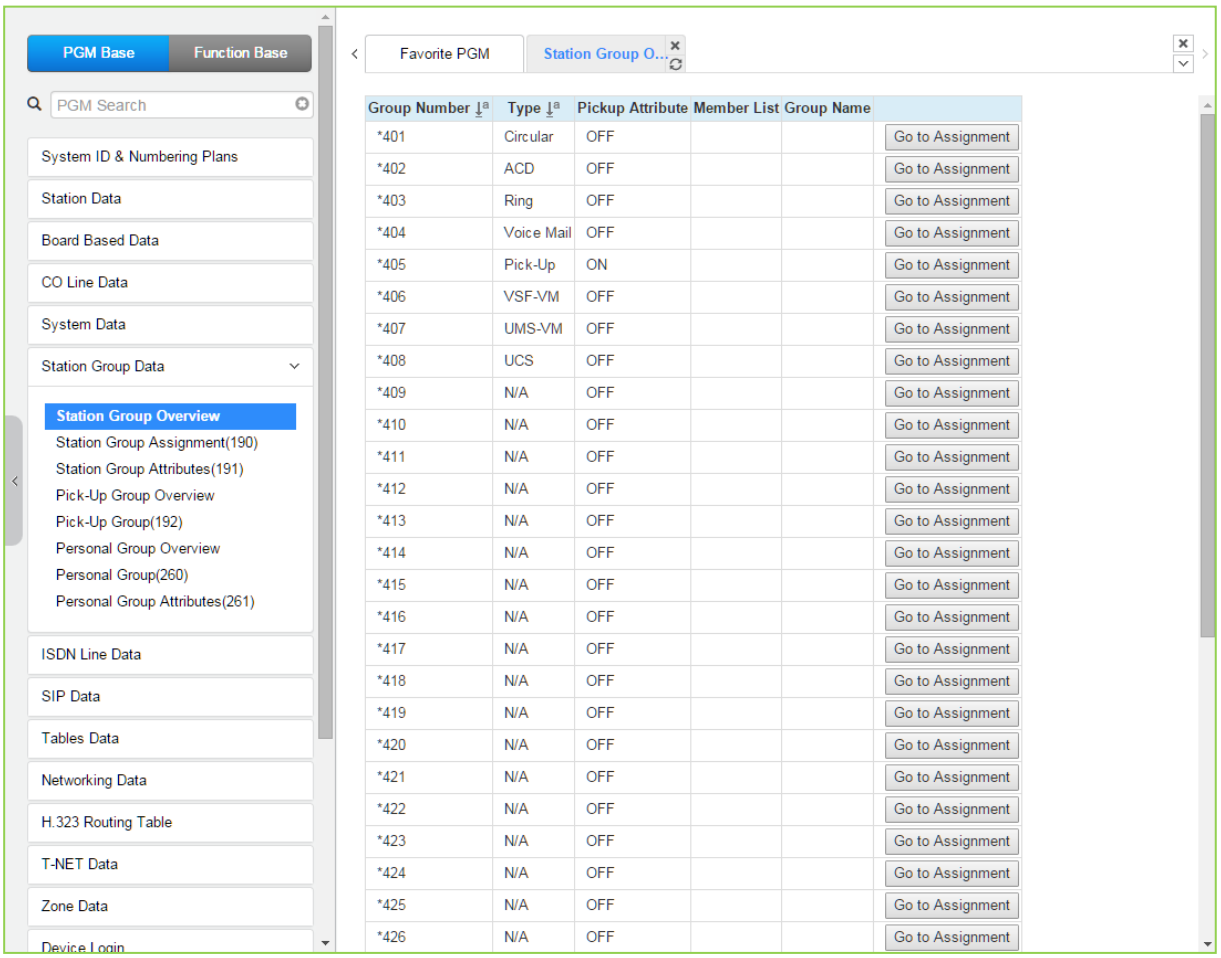


Figure 4.4.6.1-1 Station Group Overview

All information of each group will be displayed and changed the assignment on this page.

Each Group can be assigned Type, Pickup attributes, Member list, and Group name by clicking “Go to Assignment” on this page. Station Group Assignment (190) will be displayed and directly go to Station Group Attributes (191) of the group by clicking “Go to Attributes.”

4.4.6.2 Station Group Assignment - PGM 190

Selecting Station Group Assignment will display the Station Group data entry page. Enter the desired Station Group number and click **[Load]** to display the Group Assignment.

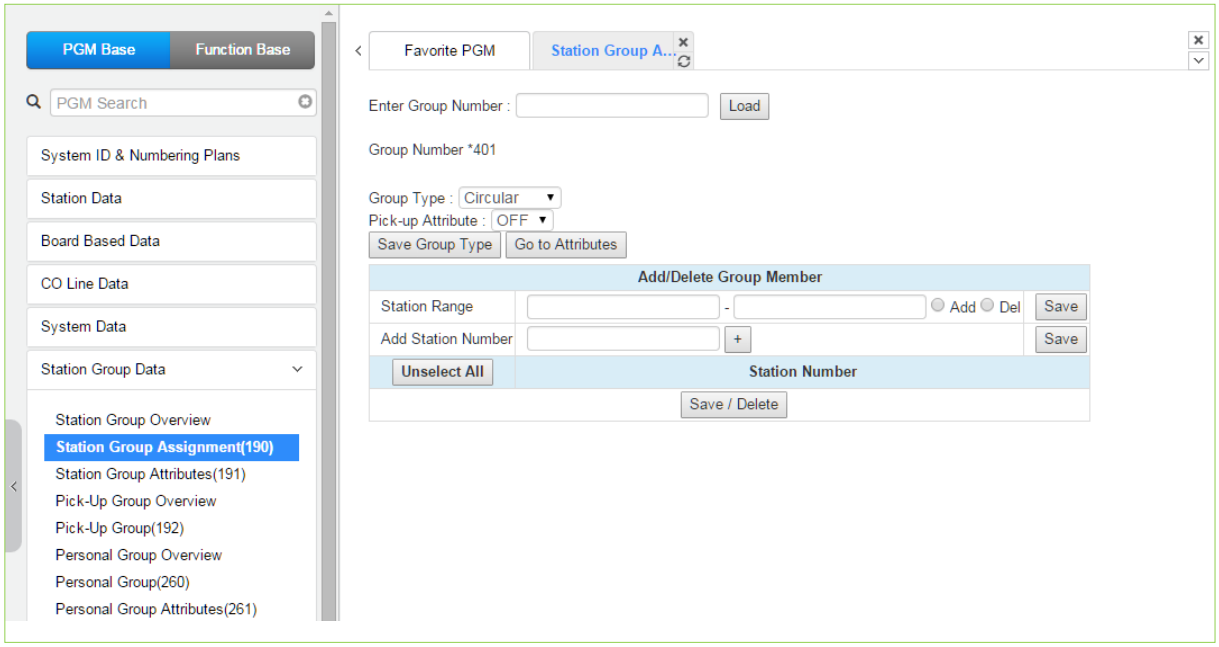


Figure 4.4.6.2-1 Station Group Assignments

Under Station Group Assignments, the type, members, and Pick-Up attributes are assigned to the Station Group. Note for the Net VM group. The network number must be assigned as the Net VM group member station.

Table 4.4.6.2-1 STATION GROUP ASSIGNMENT

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Group Type	Defines the type of station group. N/A, Circular, Terminal, ACD, Ring, Voice Mail, Pick-Up, **VSF-VM, UMS VM, NET VM, UCS**	Refer to description	N/A
Pick-up Attribute	Stations can pick up group calls ringing at other stations in the group. This does not apply to the VM groups.	OFF ON	OFF
Member	Assigns stations as members of a station group or, for the Net VM group type, defines the Net Number of the group.		-

4.4.6.3 Station Group Attributes - PGM 191

Selecting Station Group Attributes will display the Station Group Attributes data entry page. Enter the Station Group number and click **[Load]**. The Web page for the selected group will be displayed as in Figure 4.4.6.3-1 to Figure 4.4.6.3-8 based on the Group type.

Each type of group has a different set of available attributes relating to announcements, timers, overflow, etc. Table 4.4.6.3-1 through Table 4.4.6.3-8 provides descriptions for the attributes and data entries required. Note that the attributes for the Circular and Terminal Station groups are given in Table 4.4.6.3-1, and the UCD attributes include the ACD functions Table 4.4.6.3-2.

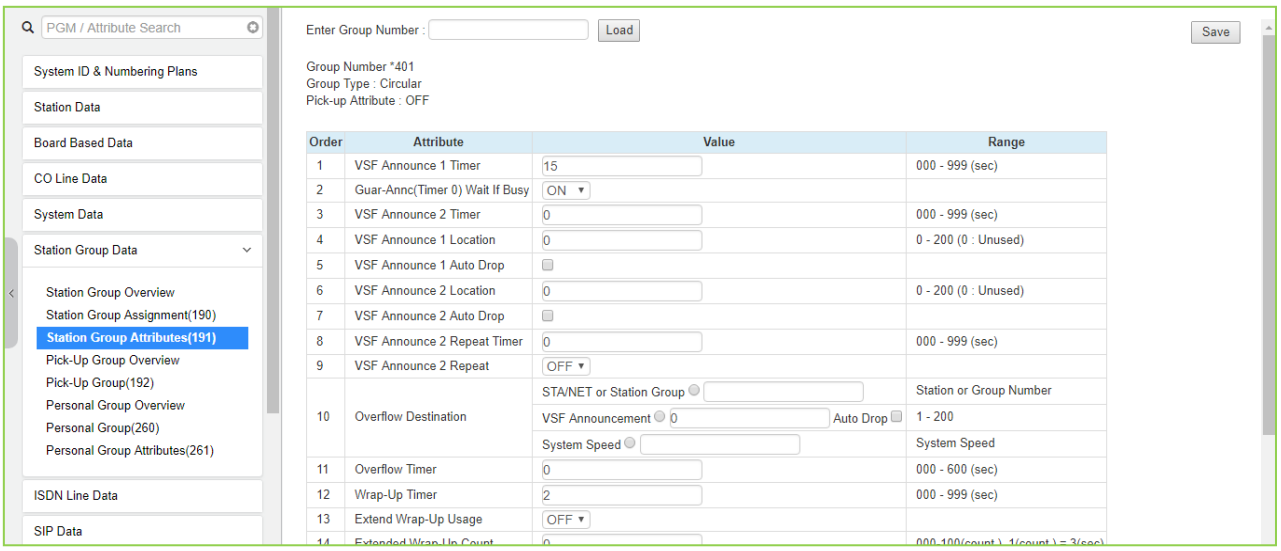


Figure 4.4.6.3-1 Terminal & Circular Group Attributes

Table 4.4.6.3-1 TERMINAL & CIRCULAR GROUP ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
VSF Announce 1 Timer	If all stations in the group are busy when a call is offered, the call may continue to wait (queue) for an available station. If the queue period exceeds the VSF Announce 1 timer, the call is sent to a VSF announcement. If the timer is set to 000, the call will receive the first announcement, in full, prior to the station process (guaranteed announcement).	000~999 (seconds)	015
Guar-Annc(Timer 0) Wait If Busy	When a call assigned to receive a guaranteed announcement arrives and all channels are busy, the call may wait with Ringback until a channel is available (ON) or bypass the announcement (OFF).	OFF ON	ON
VSF Announce 2 Timer	After the 1st announcement, the 2nd ANNC TMR is activated. At expiration, if the call remains queued to the group, the call is sent to the assigned 2nd VSF announcement.	000~999 (seconds)	000
VSF Announce 1 Location	The Station Group can be assigned an announcement, which is played if the call remains queued beyond the VSF Announce 1 Timer duration. The announcement location is the VSF Announcement number. An entry of 00 indicates no announcement.	00~200	00: none
VSF Announce 1 Auto Drop	If this attribute is selected, the call will drop after the 1st VSF announcement.	Check box	
VSF Announce 2 Location	The Station Group can be assigned a 2nd announcement, which is played if the call remains queued beyond the VSF Announce 2 Timer duration. The announcement location is the VSF Announcement number. An entry of 00 indicates no announcement.	00~200	00: none
VSF Announce 2 Auto Drop	If this attribute is selected, the call will drop after the 2nd VSF announcement.	Check box	

Table 4.4.6.3-1 TERMINAL & CIRCULAR GROUP ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
VSF Announce 2 Repeat Timer	The 2nd announcement can be repeated to callers that remain in the queue at Announcement 2 Repeat Timer intervals. Note VSF Announce 2 Repeat below must be “ON.”	000~999 (seconds)	000
VSF Announce 2 Repeat	After the 2nd announcement, if the call remains queued to the group, the 2nd VSF announcement can be repeated at the Announce 2 Repeat Timer interval, defined above.	OFF ON	OFF
Overflow Destination	A call to the group will continue to route through the group until answered or all group members have been tried. The call will remain at the last station or route to the assigned overflow destination. If VSF Announcement is selected, Auto Drop can be checked. **STA/NET or Station Group, VSF Announcement, Auto Drop, System SPD**	Refer to description	
Overflow Timer	A call to the group will remain at the last station in the group or can be sent to the assigned Overflow Destination after the expiration of the Overflow Timer.	000~600 (seconds)	180
Wrap-Up Timer	After terminating a group call, a Group member will be maintained in a busy state for the duration of the Wrap-Up timer.	000~999 (seconds)	002
Extend Wrap-Up Usage	Sometimes, a special wrap-up duration is required for an agent to allow the agent to do follow-up actions after hold or park a call connected. The basic wrap-up duration is not enough to care for an agent to allow some more extended intervals before receiving a new incoming ring. • Following rings are protected for the agent in wrap-up duration. - New incoming Station Group call - Queued call or indication ring - New incoming normal internal or external call • Following rings are not protected by the wrap-up duration. - Directly transferred a call to the agent - Recalling ring	OFF ON	OFF
Extended Wrap-Up Count	In every 1 count (3 seconds), the system checks the status of a held/parked Station Group call. If none of held/parked Station Group call remained, then the system clears the wrap-up status for the agent automatically.	000-100 (count),	0
Extended Wrap-Up Count	If any of held/parked Station Group call remained, then the system continues the wrap-up status during the next 1 count(3 seconds) till the max count of this input.	1(count) = 3(sec)	0
No Answer Timer	Calls to a station in the group are directed to the station, if unavailable or unanswered in the No Answer Timer. The call can be routed based on the assigned hunt process.	00~99 (seconds)	15
Pilot Station Group	A circular/terminal Station group can be set so that only calls to the pilot number (station group number) will hunt.	OFF ON	ON

Table 4.4.6.3-1 TERMINAL & CIRCULAR GROUP ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
REPT No Member	If a call is received and no members are on duty, an ICM call will return the re-order tone, while a CO/IP call will be routed to the overflow destination.	OFF ON	OFF
Music Source	A Music source can be assigned so that calls to the group will receive audio from the assigned source in place of ring-back tone. **Ring back tone, Internal Music, External Music** **VSF MOH, SLT MOH1~5, VSF MOH2~30**	Refer to description	Internal Music
Allow Forward Member	A member activating Call forward may be placed in an unavailable state for Station group calls (ON). When OFF, group calls are sent to the member as normal (OFF).	OFF ON	ON
Mailbox Message Wait Station	When a call overflows or routes to the VM group, a station number is used to identify the Mailbox for the group messages.	Station Number	
Mailbox Password	The password associated with a group Mailbox is defined here. The password is used in conjunction with the group Mailbox as with a normal station.	Max. 12 digits	
Forced Forward Destination	Calls to a Station group may forward directly to a defined destination, bypassing the hunt process. “Forced Forward,” below, must be enabled. **STA/NET or Station group, VSF Announcement, Sys. Speed**	Refer to description	
Forced Forward Destination Usage	Calls to a Station group may forward directly to a defined destination. See above “Forced Forward Destination” when Forced Forward is enabled for the group.	OFF ON	OFF
Group Name	A name can be designated for the group.	Max. 12 characters	
Maximum Queued Call Counter	When the number of calls queued to the group match this parameter, new calls will receive an error tone and be disconnected after the VSF Announcement 1, if assigned, is played.	00-99	99
Ring Tone	When a call is routed to a group, the group member's programmed ring tone is served.	00-16 (00:N/A)	0
Group Ring Back Tone	When a group member is ringing to the group, The ring-back tone can be provided to the caller according to the ring-back tone for the group. • **Ringback tone**: ring back tone is provided when the member of the group is ringing • **MOH**: MOH is provided when the member of the group is ringing. • **MOH (after connection)**: MOH is provided when the system answered the call	Refer to description	Ringback tone

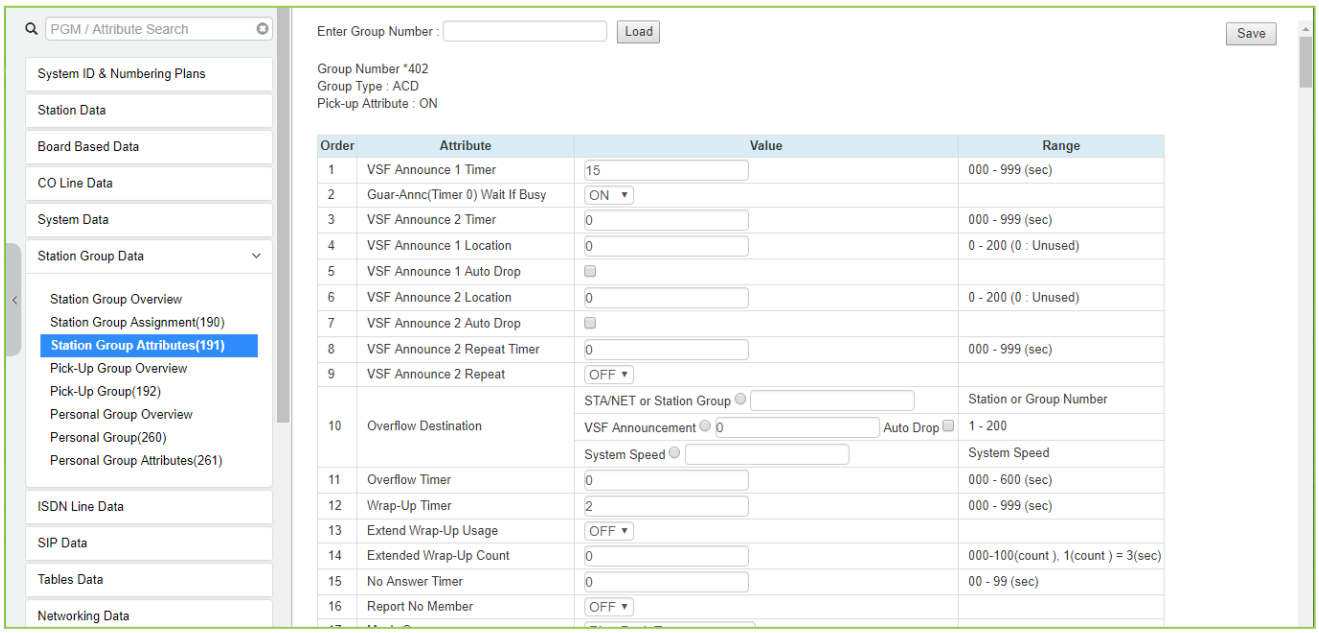


Figure 4.4.6.3-2 ACD Group Attributes

Table 4.4.6.3-2ACD GROUP ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
VSF Announce 1 Timer	If all stations in the group are busy when a call is offered, the call may continue to wait (queue) for an available station. If the queue period exceeds the VSF Announce 1 Timer, the call is sent to a VSF announcement. If the timer is set to 000, the call will receive the first announcement, in full, prior to the hunt process (guaranteed announcement).	000~999 (seconds)	015
Guar-Annc (Timer 0) Wait If Busy	When a call assigned to receive a guaranteed announcement arrives and all channels are busy, the call may wait with Ringback until a channel is available (ON) or bypass the announcement. (OFF)	OFF ON	ON
VSF Announce 2 Timer	After the 1st announcement, a 2nd timer is activated. At expiration, if the call remains queued to the group, the call is sent to the assigned 2nd VSF announcement.	000~999 (seconds)	000
VSF Announce 1 Location	Each Station Group can be assigned an announcement, which is played if the call remains queued beyond the VSF Announce 1 Timer duration. The announcement location is a VSF announcement number. An entry of 00 indicates no announcement.	00~200	00: none
VSF Announce 1 Auto Drop	If this attribute is selected, the call will drop after the 1st VSF announcement		
VSF Announce 2 Location	The Station Group can be assigned a 2nd announcement, which is played if the call remains queued beyond the VSF Announce 2 Timer duration. The announcement location is a VSF announcement number. An entry of 00 indicates no announcement.	00~200	00: none

Table 4.4.6.3-2ACD GROUP ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
VSF Announce 2 Auto Drop	If this attribute is selected, the call will drop after the 2nd VSF announcement		
VSF Announce 2 Repeat Timer	The 2nd announcement can be repeated to calls that remain in the queue at the VSF Announce 2 Repeat Timer intervals. Note repeating must be “ON” under VSF Announce 2 Repeat below.	000~999 (seconds)	000
VSF Announce 2 Repeat	After the 2nd announcement, if the call remains queued to the group, the 2nd VSF announcement can be repeated at the VSF Announce 2 Repeat Timer interval.	OFF ON	OFF
Overflow Destination	A call to the group will continue to route through the group until answered or all group members have been tried. The call will queue to the group or route to the assigned Overflow Destination. If VSF Announce is assigned, Auto Drop is available. • STA/NET or Station Group, • VSF Announce**ment,** • Auto Drop, • System SPD	Refer to description	
Overflow Timer	A call to a group will remain queued to the group or be sent to the assigned Overflow Destination after the expiration of the Overflow Timer	000~600 (seconds)	180
Wrap-Up Timer	After terminating a group call, a Station Group member will be maintained in a busy state for the duration of the Wrap-Up timer.	000~999 (seconds)	002
Extend Wrap-Up Usage	Sometimes, a special wrap-up duration is required for an agent to allow the agent to do follow-up actions after hold or park a call connected. The basic wrap-up duration is not enough to care for an agent to allow some more extended intervals before receiving a new incoming ring. Following rings are protected for the agent in wrap-up duration. • New incoming Station Group call • Queued call or indication ring • New incoming normal internal or external call Following rings are not protected by the wrap-up duration. • Directly transferred a call to the agent • Recalling ring	OFF ON	OFF
Extended Wrap-Up Count	In every 1 count (3 seconds), the system checks the status of a held/parked Station Group call. If none of held/parked Station Group call remained, then the system clears the wrap-up status for the agent automatically. If any of held/parked Station Group call remained, then the system continues the wrap-up status during the next 1 count(3 seconds) till the max count of this input.	000-100 (count), 1(count) = 3(sec)	0
ACD No Answer Timer	Calls to an agent in the group are directed to the station. If unanswered in the NO ANSWER TIMER, the call can be routed to another agent	00-99 (seconds)	00

Table 4.4.6.3-2ACD GROUP ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
REPT No Member	If a call is received and no members are on duty, an ICM call will return the re-order tone, while a CO/IP call will be routed to the overflow destination.	OFF ON	OFF
Music Source	A Music source can be assigned so that calls to the group will receive audio from the assigned source in place of ring-back tone while in the queue. • Ringback tone, • Internal Music, • External Music, • VSF MOH, • SLT MOH1~5, • VSF MOH2~30	Refer to description	Internal Music
ACD Warning Tone	An ACD supervisor can monitor agent conversations. When the supervisor activates the monitor feature, a warning tone can be provided to the agent and connected party.	OFF ON	OFF
Alternate Destination	When a call comes into the group and no group members are available, the call will be routed to the assigned Alternate Destination. **STA/NET or Station, Group, System SPD**	Refer to description	....
Supervisor Timer	When calls have been in queue longer than the Supervisor Timer, the ACD supervisor is notified by a display of the longest queue time.	000~999 (seconds)	030
Supervisor Call Count	When the number of calls in a queue exceeds the Supervisor Call Count, the ACD Supervisor is notified by a display of queued calls.	00~99	00
Maximum Queued Call Counter	When the number of calls queued to the group match this parameter, new calls will receive an error tone and be disconnected after the VSF Announcement 1, if assigned, is played.	00-99	99
Supervisor 1 to 5	Any valid iPECS IP or LDP Phone with the display can be assigned as a supervisor, max. 5 ACD Supervisors.	Station	
ACD DND Wrap Timer	This parameter sets the duration a station will receive a ring before the system places the station in ACD DND and is unavailable for group calls. A setting of ‘00’ disables automatic ACD DND.	002~200 (Sec.)	010
Entered Caller ID ICLID Usage	Within 5 seconds of a guaranteed announcement, the caller may dial digits as an ICLID. The user-dialed digits are compared to the ICLID Table entries for routing or, for a single dialed digit, to the ACD CCR table below.	OFF ON	OFF
Forward Member Calls	A member activating Call Forward may be placed in an unavailable state for Station group calls (ON). When OFF, group calls are sent to the member as normal. **OFF: no FWD, ON: FWD**	Refer to description	ON

Table 4.4.6.3-2ACD GROUP ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Group Name	An ACD group name can be designated.	Max. 12 characters	
CIQ Route 1 CIQ Route 2 CIQ Route 3 CIQ Route 4 CIQ Route 5 CIQ Route 6 CIQ Route 7 CIQ Route 8 CIQ Route 9 CIQ Route 0	When an ACD call is queued, the caller may be allowed to dial a digit to exit the queue and route to another destination. The alternate destination is based on the user-dialed digit and can be a station, Station group, system-speed bin, or network station. Dial the digit below for the type of destination and enter the value associated with the destination. 1: Enter a station number. 2: Enter a Station group number. 3: Enter a system speed bin. 4: Enter a network station number		Not selected
ZAP Tone	Agents using a headset can have ACD calls connected to them automatically preceded by a tone (Zap tone).	OFF ON	OFF
CIQ Announcement	If enabled, queued callers receive the CIQ message (You are # in a queue) after the 1st and 2nd announcements.	OFF ON	OFF
Mailbox Message Wait Station	When an ACD call overflows or routes to the VM group, a station number is used to identify the Mailbox for the ACD group messages	Station number	
Mailbox Password	The password associated with an ACD group Mailbox is defined here. The password is used in conjunction with the ACD group Mailbox as with a normal station.	Max. 12 digits	
CIQ Display To Agent - Mode	When an ACD call is in a queue, the Call in queue information is displayed in the LCD of agent and supervisor phones.	OFF ON	OFF
CIQ Page VM Slot	If the queued call count exceeds the threshold, the system plays the CIQ Alert Announcement. You can fill out the sequence number of the UVM module for CIQ Alert Announcement in case of being CPU Redundancy. The sequence number of UVMU is used for CIQ Alert announcement by default, but the UVMU is out of service during Redundancy, so that the sequence number of UVM is needed for happening Redundancy.	VM Sequence number	0
CIQ #1 Page Alert -Threshold	If the queued call count exceeds the threshold, the system plays the CIQ #1 Announcement to the CIQ #1 Page Zone after the CIQ #1 Announcement Delay Timer. The announcement is repeated at intervals of the CIQ #1 Announcement Repeat Timer.	00-99	10
CIQ #1 Page Alert –Announcement Location	VSF announcement number for the CIQ #1 Announcement.	00-200	0
CIQ #1 Page Alert – Page Zone	Page Zone to receive CIQ #1 Announcement. eMG80/100:00~15 or00-40, eMG800:0~105, UCP:0~105	Refer to description	00

Table 4.4.6.3-2ACD GROUP ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
CIQ #1 Page Alert -Delay Time	Delay timer for CIQ #1 Announcement	000-180	015
CIQ #1 Page Alert -Repeat Time	Interval for repeating the CIQ #1 Announcement.	000-180	045
CIQ #2 Page Alert -Threshold	If the queued call count exceeds the threshold, the system plays the CIQ #2 Announcement to the CIQ #2 Page Zone after the CIQ #2 Announcement Delay Timer. The announcement is repeated at intervals of the CIQ #2 Announcement Repeat Timer.	00-99	20
CIQ #2 Page Alert -Announcement Location	VSF announcement number for the CIQ #2 Announcement.	00-200	0
CIQ #2 Page Alert – Page Zone	Page Zone to receive CIQ #2 Announcement. eMG80/100:00~15 or00-40, eMG800:0~105, UCP:0~105	Refer to description	00
CIQ #2 Page Alert -Delay Time	Delay timer for CIQ #2 Announcement	000-180	015
CIQ #2 Page Alert -Repeat Time	Interval for repeating the CIQ #2 Announcement.	000-180	025
CIQ #3 Page Alert -Threshold	If the queued call count exceeds the threshold, the system plays the CIQ #3 Announcement to the CIQ #3 Page Zone after the CIQ #3 Announcement Delay Timer. The announcement is repeated at intervals of the CIQ #3 Announcement Repeat Timer.	00-99	30
CIQ #3 Page Alert -Announcement Location	VSF announcement number for the CIQ #3 Announcement.	00-200	0
CIQ #3 Page Alert – Page Zone	Page Zone to receive the CIQ #3 Announcement. eMG80/100:00~15 or00-40, eMG800:0~105, UCP:0~105	Refer to description	00
CIQ #3 Page Alert -Delay Time	Delay timer for the CIQ #3 Announcement	000-180	015
CIQ #3 Page Alert -Repeat Time	Interval for repeating the CIQ #3 Announcement.	000-180	005
Forced Forward Destination	Calls to a Station group may forward directly to a defined destination, bypassing the hunt process. “Forced Forward,” below, must be enabled. • STA/NET or Station group, • VSF Announcement, • Sys. Speed	Refer to description	
Forced Forward Dest. Usage	Calls to a Station group may forward directly to a defined destination. See above “Forced Forward Destination” when Forced Forward is enabled for the group.	OFF ON	OFF

Table 4.4.6.3-2ACD GROUP ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Auto Ring Mode	Reference table of Auto Ring Mode Table Time for ACD Group Ring Mode. When Manual Change is selected, the Group supervisor can manually change the ACD group ring mode with ACD Group Ring Mode flexible number. Manual Change eMG: Table 0 ~ 15, UCP: Table 0 ~ 100	Refer to description	Manual Change
Day Destination	When the ACD Ring Mode Table schedule is in the Day mode, the ACD group calls route to the destination defined here. • Normal Service, • STA/NET or Station group, • VSF Announcement, • Sys. Speed	Refer to description	Normal Service
Night Destination	When the ACD Ring Mode Table schedule is in the Night mode, the ACD group calls route to the destination defined here. • Normal Service, • STA/NET or Station group, • VSF Announcement, • Sys. Speed	Refer to description	Normal Service
Timed Destination	When the ACD Ring Mode Table schedule is in the Timed mode, the ACD group calls route to the destination defined here. • Normal Service, • STA/NET or Station group, • VSF Announcement, • Sys. Speed	Refer to description	Normal Service
ACD Group Queuing Call Indication	If there are queued group calls, the queuing indication can be served to group members by Mute Ring and LED button flashing. **OFF, ON (RING and LED), ON (LED only)**	Refer to description	OFF
Route Alternative Dest. by ACD DND	The call is delivered to ACD alternative destination if all ACD member is in AND DND state.	OFF ON	ON
Ring Tone	When a call is routed to a group, a programmed ring tone is served to the group member.	00-16 (00:N/A)	0
Group Ring Back Tone	When a group member is ringing for the group, The ring-back tone can be provided to the caller according to the ring-back tone for the group. • **Ring back tone**: ring back tone is provided when the member of the group is ringing • **MOH**: MOH is provided when the member of the group is ringing. • **MOH (after connection)**: MOH is provided when the system answered the call	Refer to description	Ring back tone

Table 4.4.6.3-2ACD GROUP ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Simultaneous Ring To All Agents	For an ACD group type, the Simultaneous Ring option is available. • OFF: each agent rings for each of different call • ON: all agents ring for the same call. When the call is answered, the next call is presented. For an example of ON case, - agent A, B, C - agent A and B is idle, C is busy. - An incoming call to the ACD group rings to A and B. - another incoming call to ACD group queued to the group hearing CIQ ment and music. - when C hangs up and goes to the idle state, the first call rings to C when an agent picks up the ring (first call), the next call rings to agents.	OFF ON	OFF

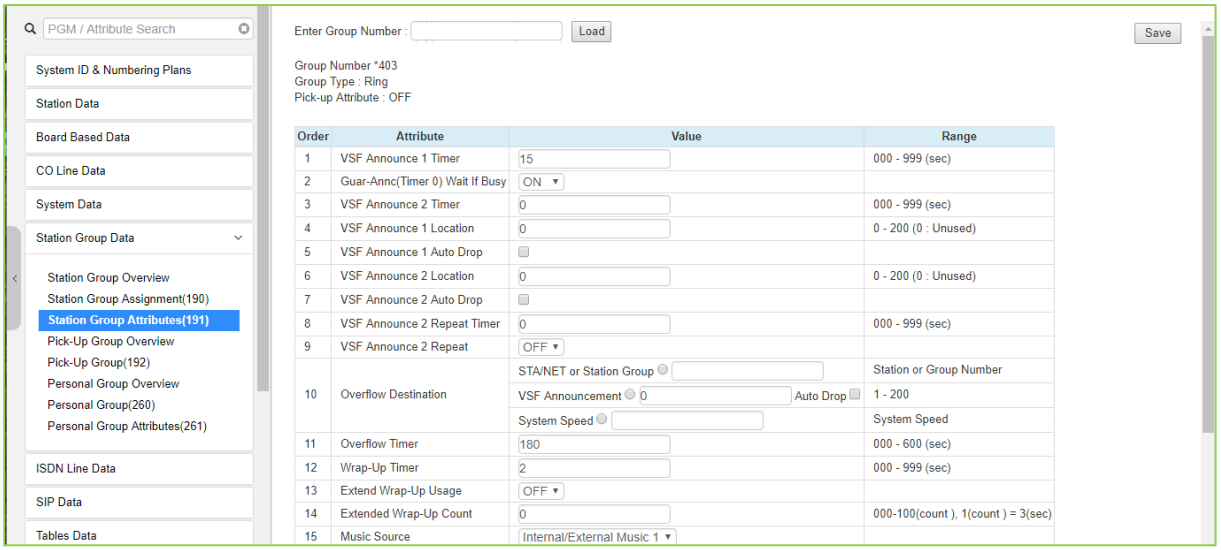


Figure 4.4.6.3-3 Ring Group Attributes

Table 4.4.6.3-3 RING GROUP ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
VSF Announce 1 Timer	If all stations in the group are busy when a call is offered, the call may continue to wait (queue) for an available station. If the queue period exceeds the VSF Announce 1 Timer, the call is sent to a VSF announcement. If the timer is set to 000, the call will receive the first announcement, in full, prior to the hunt process (guaranteed announcement).	000~999 (seconds)	015

Table 4.4.6.3-3 RING GROUP ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Guar-Ann(Timer 0) Wait If Busy	When a call assigned to receive a guaranteed announcement arrives and all channels are busy, the call may wait with Ringback until a channel is available (ON) or bypass the announcement. (OFF)	OFF ON	ON
VSF Announce 2 Timer	After the 1st announcement, a 2nd announcement Timer is activated. At expiration, if the call remains queued to the group, the call is sent to the assigned 2nd VSF announcement.	000~999 (seconds)	000
VSF Announce 1 Location	Each Ring Group can be assigned an announcement, which is played if the call remains queued beyond the VSF Announce 1 Timer duration. The announcement location is a VSF Announcement number. An entry of 00 indicates no announcement.	00~200	00: none
VSF Announce 1 Auto Drop	If this attribute is selected, the call will drop after the 1st VSF announcement.	Check box	
VSF Announce 2 Location	The Ring Group can be assigned a 2nd announcement, which is played if the call remains queued beyond the VSF Announce 2 Timer duration. The announcement location is a VSF Announcement number. An entry of 00 indicates no announcement.	00~200	00: none
VSF announce Auto Drop	If this attribute is selected, the call will drop after the 2nd VSF announcement	Check box	
VSF Announce 2 Repeat Timer	The 2nd announcement can be repeated to calls that remain in the queue at the VSF Announce 2 Repeat Timer intervals. Note VSF Announce 2 Repeat below must be “ON.”	000~999 (seconds)	000
VSF Announce 2 Repeat	After the 2nd announcement, if the call remains queued to the group, the 2nd VSF announcement can be repeated at the VSF Announce 2 Repeat Timer interval, defined above.	OFF ON	OFF
Overflow Destination	A call to the group will continue to ring group member stations until answered. The call will remain at the last station or routes to the assigned Overflow Destination. If VSF Announce is assigned, Auto Drop is available. • STA/NET or Station Group, • VSF Announcement, • Auto Drop, • System SPD	Refer to description	
Overflow Timer	A call to a group will remain in the group or route to the assigned Overflow Destination after the expiration of the Overflow Timer.	000~600 (seconds)	180
Wrap-Up Timer	After terminating the group call, a Station Group member will be maintained in a busy state for the duration of the Wrap-Up Timer.	000~999 (seconds)	002

Table 4.4.6.3-3 RING GROUP ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Extend Wrap-Up Usage	Sometimes, a special wrap-up duration is required for an agent to allow the agent to do follow-up actions after hold or park a call connected. The basic wrap-up duration is not enough to care for an agent to allow some more extended intervals before receiving a new incoming ring. Following rings are protected for the agent in wrap-up duration. • New incoming Station Group call • Queued call or indication ring • New incoming normal internal or external call Following rings are not protected by the wrap-up duration. • Directly transferred the call to the agent • Recalling ring	OFF ON	OFF
Extended Wrap-Up Count	In every 1 count (3 seconds), the system checks the status of a held/parked Station Group call. If none of held/parked Station Group call remained, then the system clears the wrap-up status for the agent automatically. If any of held/parked Station Group call remained, then the system continues the wrap-up status during the next 1 count(3 seconds) till the max count of this input.	000-100 (count), 1(count) = 3(sec)	0
Music Source	A Music source can be assigned so that calls to the group will receive audio from the assigned source in place of ring-back tone. • Ring back tone • Internal Music • External Music • VSF MOH, MOH2~30 • SLT MOH1~5	Refer to description	Internal Music
Maximum Queued Call Counter	When the number of calls queued to the group match this parameter, new calls will receive an error tone and be disconnected after the VSF AA announcement, if assigned, is played.	00-99	99
Allow Forward Member	A member activating Call Forward may be placed in an unavailable state for Station group calls (ON). When OFF, group calls are sent to the member as normal. **OFF: no FWD, ON: FWD**	Refer to description	ON
Group name	A group name can be designated.	Max.12characters	
Mailbox Message Wait Station	When a call overflows or routes to the VM group, a station number is used to identify the Mailbox for the group messages.	Station number	
Mailbox Password	The password associated with the group Mailbox is defined here. The password is used in conjunction with the group Mailbox as with a normal station.	Max. 12 digits	

Table 4.4.6.3-3 RING GROUP ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Forced Forward Destination	Calls to a Station group may forward directly to a defined destination, bypassing the hunt process. “Forced Forward,” below, must be enabled. • STA/NET or Station group, • VSF Announcement, • Sys. Speed	Refer to description	
Forced Forward Dest Usage	Calls to a Station group may forward directly to a defined destination. See above “Forced Forward Destination” when Forced Forward is enabled for the group.	OFF ON	OFF
Ring group indication	When a station calls a Ring Group, DSS/BLF buttons assigned for the calling station will flash, and the muted ring is received. **OFF, ON (Ring and LED), ON (LED only)**	Refer to description	ON (Ring and LED)
Ring Tone	When a call is routed to a group, a programmed ring tone is served to the group member.	00-16 (00:N/A)	0
Group Ring Back Tone	When a group member is ringing for the group, The ring-back tone can be provided to the caller according to the ring-back tone for the group. • **Ring back tone**: ring back tone is provided when the member of the group is ringing • **MOH**: MOH is provided when the member of the group is ringing. • **MOH (after connection)**: MOH is provided when the system answered the call	Refer to description	Ring back tone

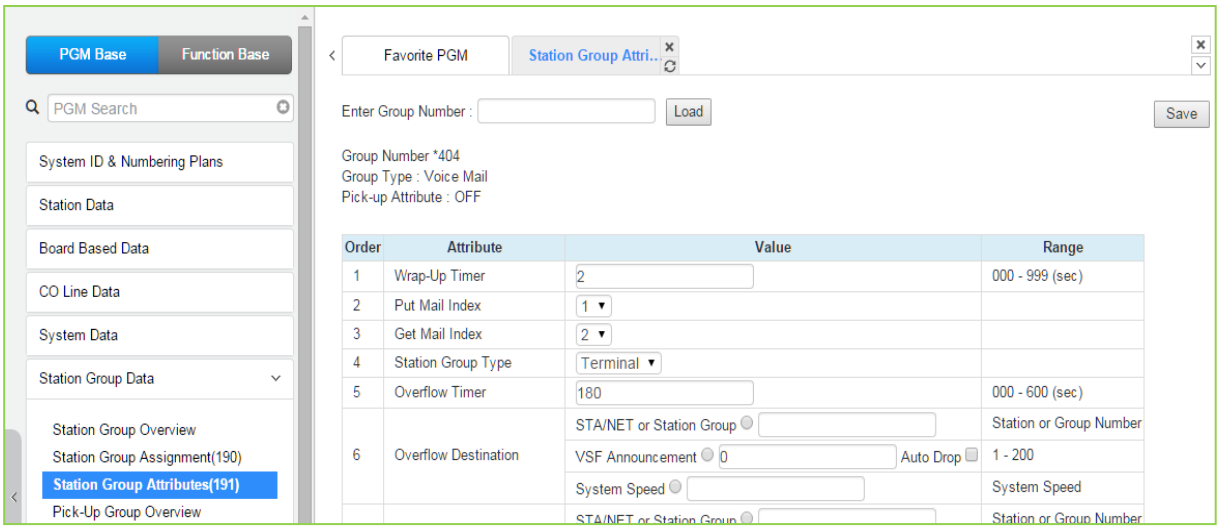


Figure 4.4.6.3-4 External Voice Mail Group Attributes

Table 4.4.6.3-4 EXTERNAL VOICE MAIL GROUP ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Wrap-Up Timer	After terminating a group call, the VM port will be maintained in a busy state for the duration of the Wrap-Up timer.	000~900 (seconds)	002

Table 4.4.6.3-4 EXTERNAL VOICE MAIL GROUP ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Put Mail Index	For external analog Voice Mail groups, an index to the Voice Mail Dial Table that contains the “Put Mail” dial code.	1~4	1
Get Mail Index	For external analog Voice Mail groups, an index to the Voice Mail Dial Table that contains the “Get Mail” dial code.	1~4	2
Station Group Type	The type of Station Group process applied to the SLT ports connected to the VM can be assigned as Circular or Terminal.	Terminal/ Circular	Terminal
Overflow Timer	A call to a group will remain at the last station in the group or be sent to the assigned Overflow Destination after the expiration of the Overflow Time.	000~600 (seconds)	180
Overflow Destination	A call to the group will continue to route through the group until answered or all group members have been tried. The call will remain at the last station or will route to the assigned Overflow Destination. If assigned VSF Announce, Auto Drop is available. • STA/NET or Station Group, • VSF Announcement, • Auto Drop, • System Speed	Refer to description	-
Forced Forward Destination	Calls to a Station group may forward directly to a defined destination, bypassing the hunt process. “Forced Forward,” below, must be enabled. • STA/NET or Station group, • VSF Announcement, • Sys. Speed	Refer to description	
Forced Forward Dest Usage	Calls to a Station group may forward directly to a defined destination. See above “Forced Forward Destination” when Forced Forward is enabled for the group.	OFF ON	OFF
Group Name	A group name can be designated.	Max. 12 character	
Server type	When a third-party SIP server is used for AA/VM, or the IPCR or third party SIP recording server is used, the server type must be selected.	IPCR/ 3rd party	3rd party
Server number	Each IPCR and third-party SIP server must be assigned a server number from 01 ~ 10, which correlates this group with an Agent table.	eMG: 0-2 UPC:0-10	0
Member Type	Member type is assigned as SLT type or SIP Type. In the case of SIP Type, enter the capacity as below. eMG80/100:0-140, eMG800:0-1200, UCP:0-2400 (SLT Type/ SIP Type)	Refer to description	SLT Type

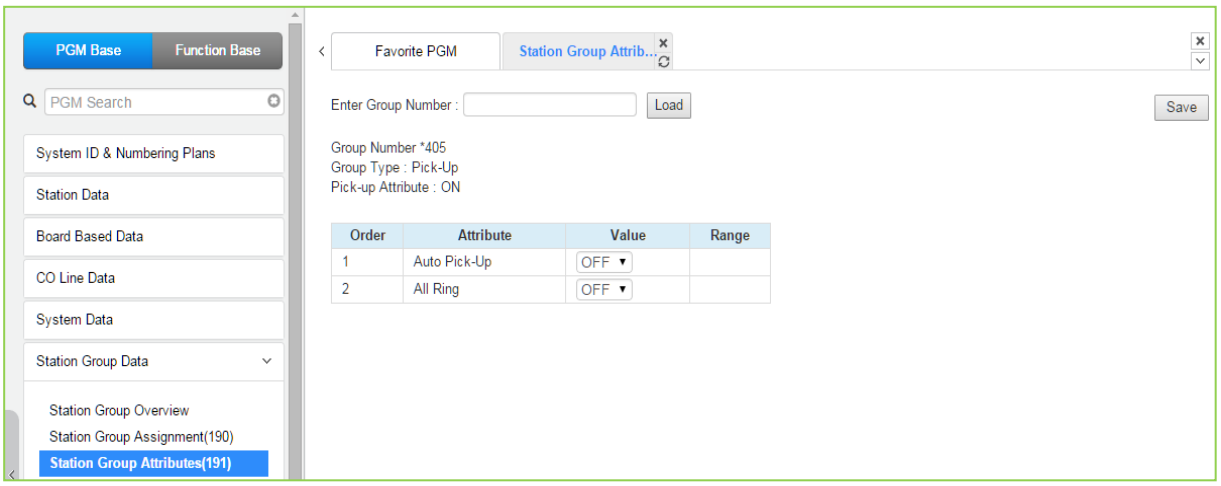


Figure 4.4.6.3-5 Pick-Up Group Attributes

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Auto Pick Up	If a group member is ringing, other group members can pick up the ringing call by simply going “Off-hook.”	OFF ON	OFF
All Ring	When a call is offered to a member of the Pick-Up Group in the Tone Ring mode, all members will ring. Note Auto Pickup above must be “ON.”	OFF ON	OFF

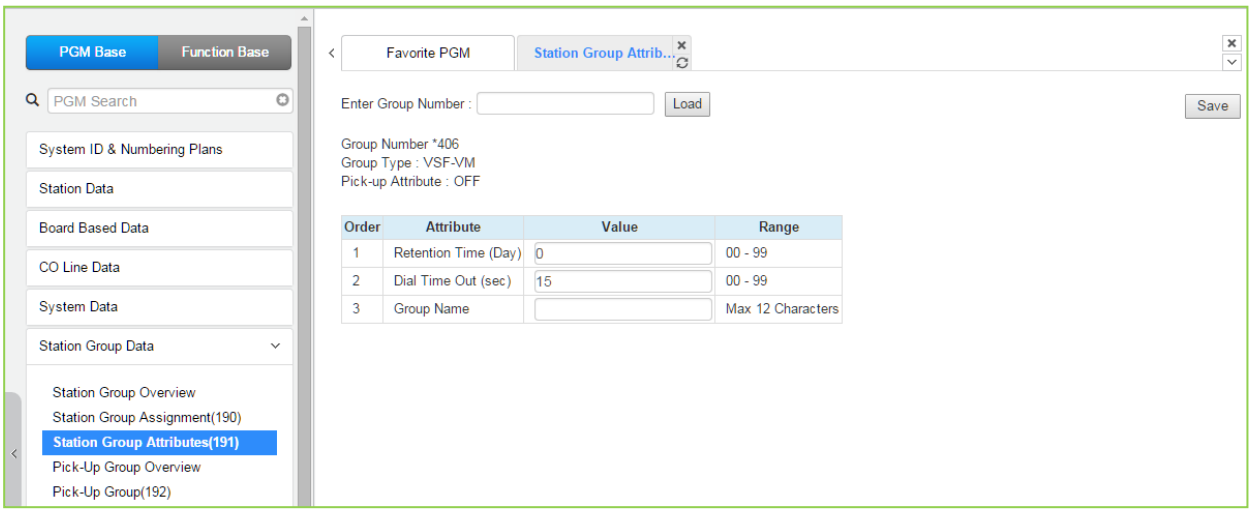


Figure 4.4.6.3-6 VSF Group Attributes

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Retention Time (day)	When voice messages are stored in the VSF, the system will maintain (store) the message for the maximum number of days set in this program (0 to 99 days). (Not used)	00-99 (day)	0
Dial Time Out (sec)	This timer determines the inter-digit time for a VSF-AA or a VM session. If this timer expires while the VSF AA or VM is awaiting user input, the system will assume the remote party has disconnected and will return the channel to idle.	00-99 (seconds)	15
Group Name	A group name can be designated.	Max. 12 characters	

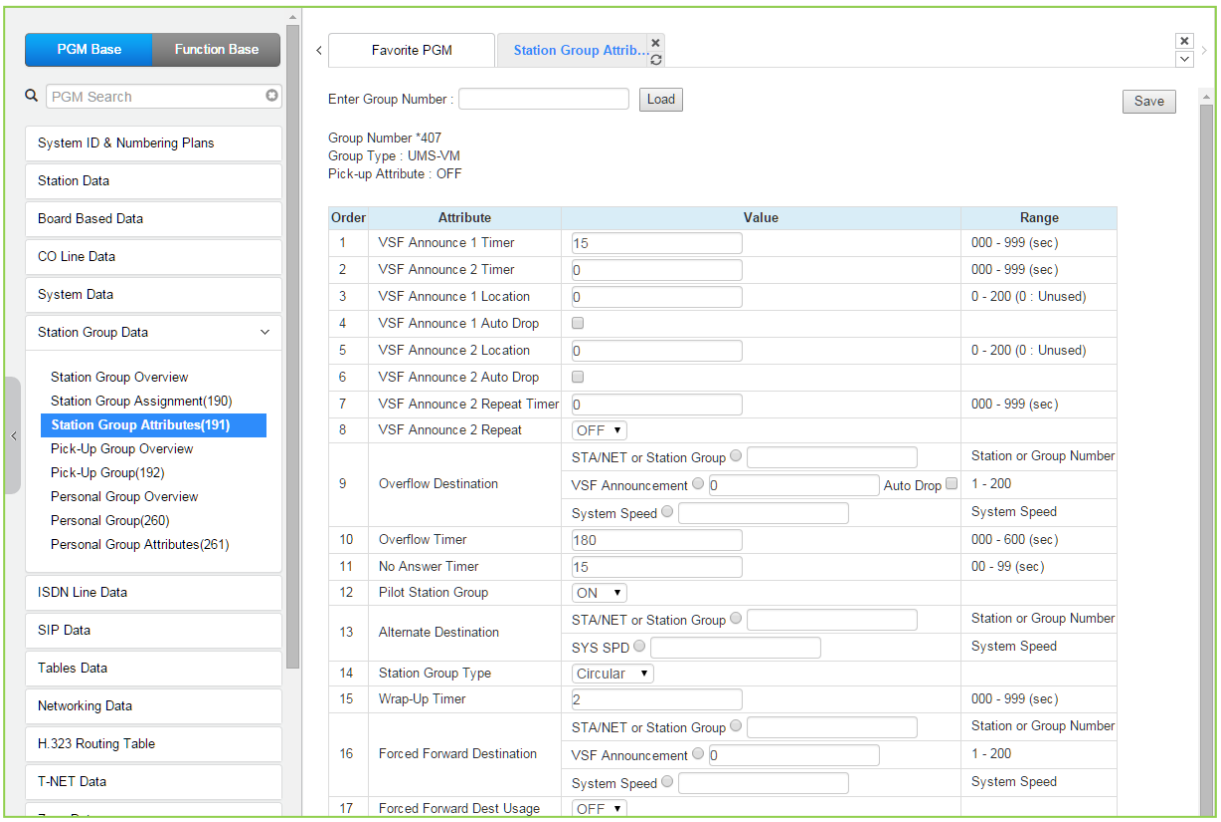


Figure 4.4.6.3-7 iPECS Feature Server Voice Mail Group (UMS-VM) Attributes

Table 4.4.6.3-7 FEATURE SERVER VOICE MAIL GROUP ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
VSF Announce 1 Timer	If all stations in the group are busy when a call is offered, the call may continue to wait (queue) for an available FS-VM channel. If the queue period exceeds the VSF Announce 1 Timer, the call is sent to a VSF announcement. If the timer is set to 000, the call will receive the first announcement, in full, prior to the station process (guaranteed announcement).	000~999 (seconds)	015
VSF Announce 2 Timer	After the 1st announcement, a 2nd Announcement Timer is activated. At expiration, if the call remains queued to the group, the call is sent to the assigned VSF Announce 2 Location.	000~999 (seconds)	000
VSF Announce 1 Location	Each group can be assigned an announcement, which is played if the call remains queued beyond the VSF Announce 1 Timer duration. The announcement location is a VSF Announcement number. An entry of 00 indicates no announcement.	00~200	00: none
VSF Announce 1 Auto Drop	If this attribute is selected, the call will drop after the 1st VSF announcement.	Check box	
VSF Announce 2 Location	The Group can be assigned a 2nd announcement, which is played if the call remains queued beyond the VSF Announce 2 Timer duration. The announcement location is a VSF Announcement number. An entry of 00 indicates no announcement.	00~200	00: none

Table 4.4.6.3-7 FEATURE SERVER VOICE MAIL GROUP ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
VSF Announce 2 Auto Drop	If this attribute is selected, the call will drop after the 2nd VSF announcement.	Check box	
VSF Announce 2 Repeat Timer	The 2nd announcement can be repeated to calls that remain in the queue at intervals of the announcement 2 repeat timer. Note VSF Announce 2 Repeat below must be “ON.”	000~999 (seconds)	000
VSF Announce 2 Repeat	After the 2nd announcement, if the call remains queued to the group, the 2nd VSF announcement can be repeated at the VSF Announce Repeat timer interval above.	OFF ON	OFF
Overflow Destination	A call to the group will continue to route through the group until answered or all group members have been tried. The call will remain at the last station or route to the assigned Overflow Destination. If assigned VSF Announce, Auto Drop is available. • STA/NET or Station group • VSF Announcement • Auto drop • System Speed	Refer to description	
Overflow Timer	A call to a group will remain at the last station in the group or route to the assigned Overflow Destination after the expiration of the Overflow Timer.	000~600 (seconds)	180
No Answer Timer	Calls to a station in the group are directed to the station if unavailable or unanswered in the No Answer Timer. The call can be routed based on the assigned hunt process.	00~99 (seconds)	15
Pilot Station Group	An FS-VM Station group can be set so that only calls to the pilot number (station group number) will hunt.	OFF ON	ON
Alternate Destination	When a call comes into the group and no group members are available, the call will be routed to the assigned Alternate Destination. **STA/NET or Station group, System SPD**	Refer to description	
Station Group type	The Station group process for the FS-VM group can be defined as Circular or Terminal.	Circular/ Terminal	Circular
Wrap-Up Timer	After terminating any call, the FS port will be maintained in a busy state for the duration of the Wrap-Up Timer.	000~999 (seconds)	2
Forced Forward Destination	Calls to a group may forward directly to a defined destination, bypassing the hunt process. “Forced Forward,” below, must be enabled. **STA/NET or Station group, VSF announcement, Sys. Speed**	Refer to description	
Forced Forward Dest Usage	Calls to a Station group may forward directly to a defined destination. See above “Forced Forward Destination” when Forced Forward is enabled for the group.	OFF ON	OFF
Group Name	A group name can be designated.	Max. 12 characters	

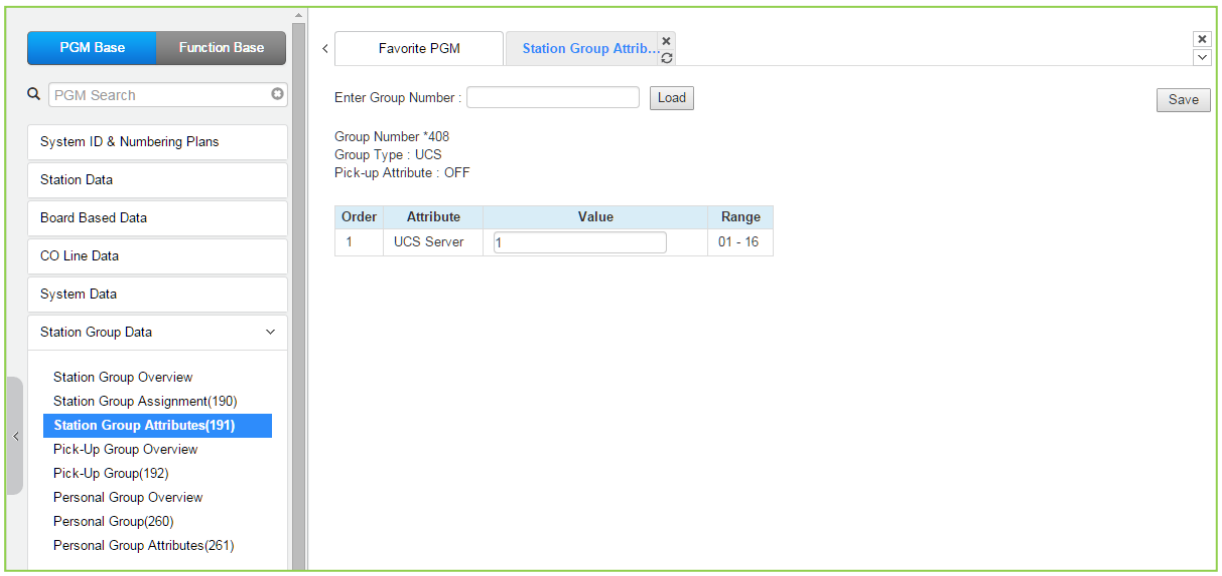


Figure 4.4.6.3-8 iPECS UCS Server Group Attributes

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
UC Server	UCS Server number, this value must be set to 1.	00-16	1

4.4.6.4 Pick Up Group Overview

Selecting the Pick Up Group Overview item will return the Station Pick Up Group Overview page. This page displays the Station Group member stations for all the Station Pick Up Groups. Note that data cannot be entered on this page.

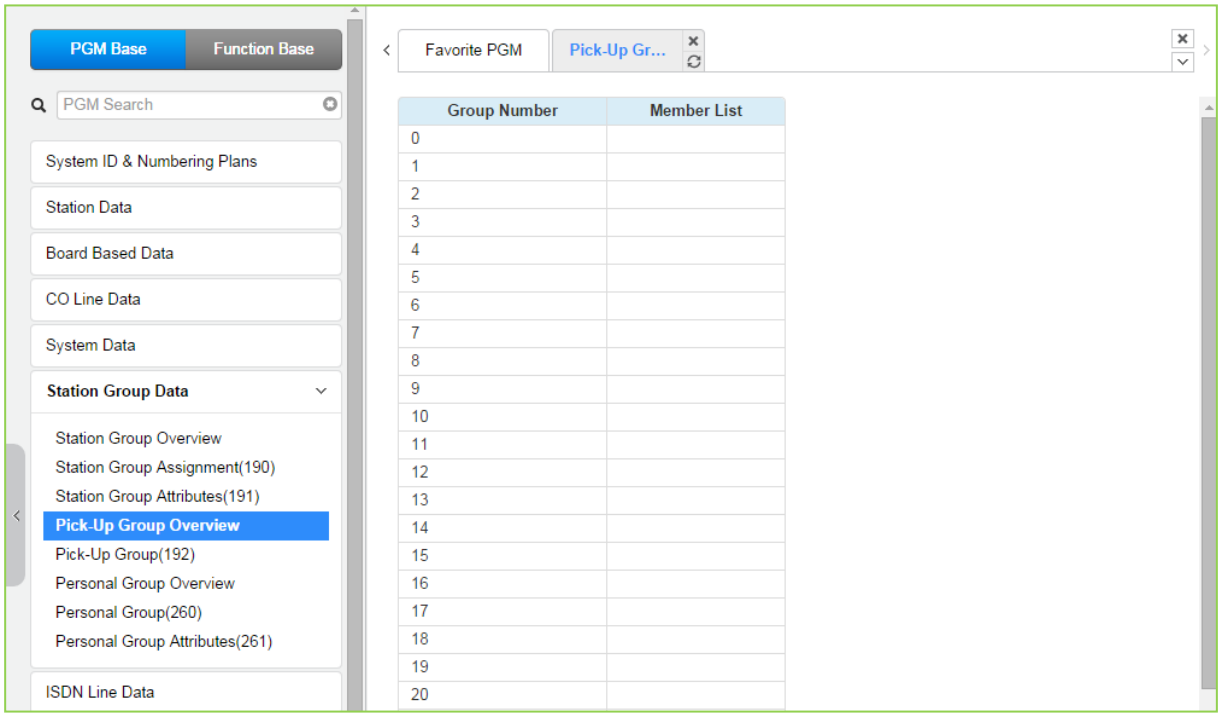


Figure 4.4.6.4-1 Pick Up Group Overview

4.4.6.5 Pick Up Group - PGM 192

Selecting Pick Up Group will display the Pick Up Group entry page. Enter the desired Pick Up Group number and click **[Load]** to display the group member Assignment.

Enter Group Number: eMG80/100: 0-49 / eMG800: 0-199 / UCP: 0-199

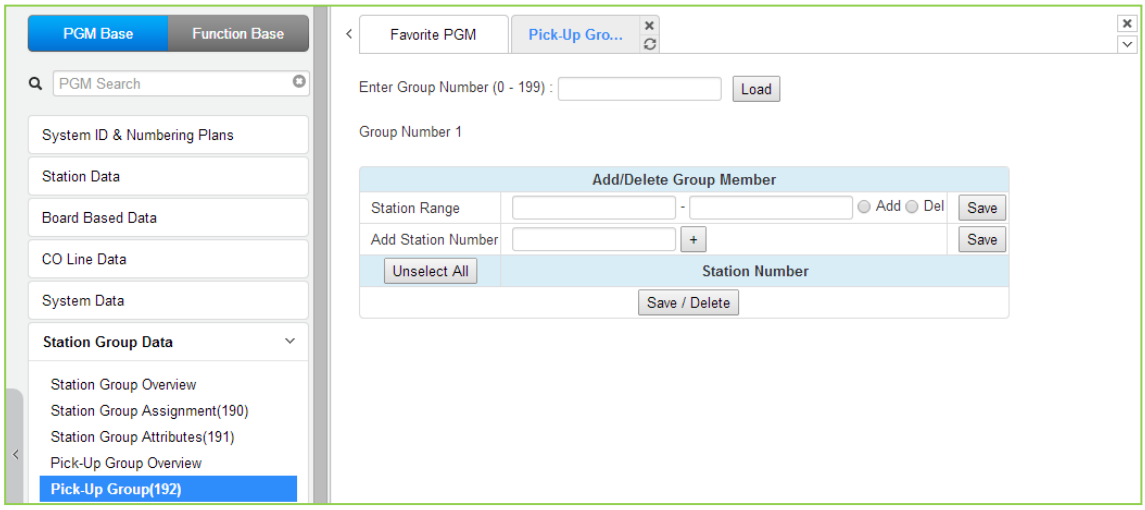


Figure 4.4.6.5-1 Pick Up Group

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Member	Assign stations as members of the Pick-Up group.		

4.4.6.6 Personal Group Overview

Selecting Personal Group Overview displays the master station and member list for all the personal groups.

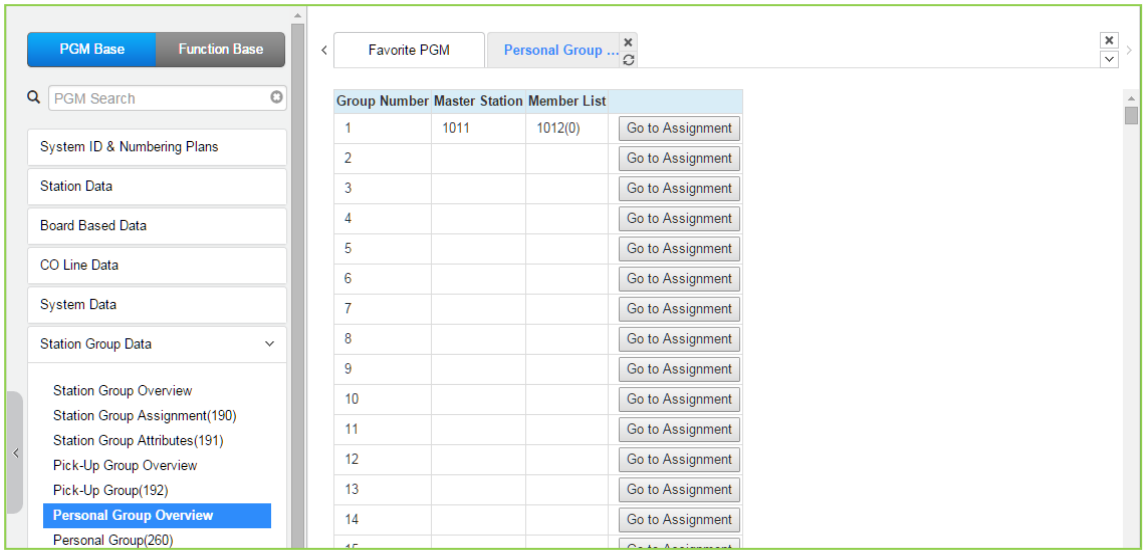


Figure 4.4.6.6-1 Personal Group Overview

Clicking **[Go to Assignment]** moves Personal group (260) for assigning Master station&Member Station and setting Personal group attributes directly.

4.4.6.7 Personal Group - PGM 260

Selecting Personal Group will display the Personal Group entry page. Enter a valid Personal Group number and click load to enter group data.

Enter Group Number: eMG80/100: 1-70 / eMG800: 1-600 / UCP: 1-1200

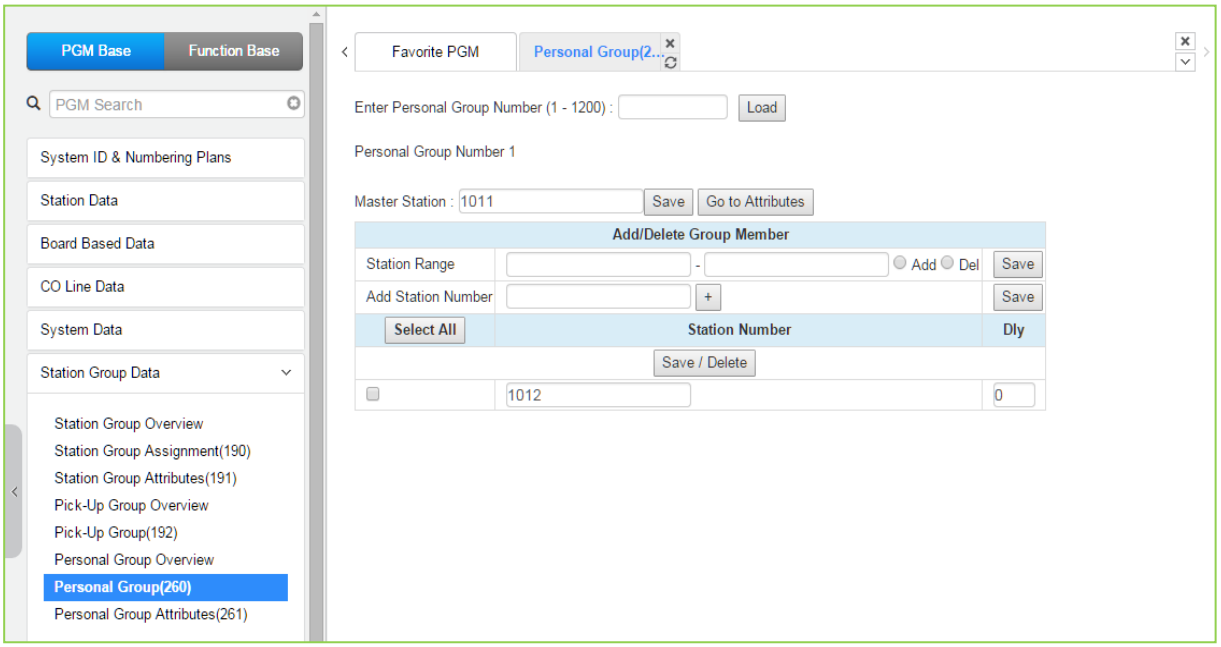


Figure 4.4.6.7-1 Personal Group

Several stations can share the same station number. That means Personal Group is an extended feature of Linked Pair. A Personal Group is composed of a master station and several member stations. A master station and all member stations share the master station‘s number. In the case of Member station, each member station can be set the delay (Dly) time.

By using this shared number, almost features (Call To xxx / Call From xxx / SMDR / Message Wait…) can be activated. But, some features can be chosen by PGM 261 attribute about all station activating or individual station working.

In PGM 260, Personal group master and member can be assigned.

In PGM 261, Personal group attribute can be set.

4.4.6.8 Personal Group Attribute - PGM 261

Selecting Personal Group Attribute will display the Personal Group Attribute entry page. Enter a valid Personal Group number to enter the group data. Click **the [Save]** button after changing Value.

Enter Group Number: eMG80/100: 1-70 / eMG800: 1-600 / UCP: 1-1200

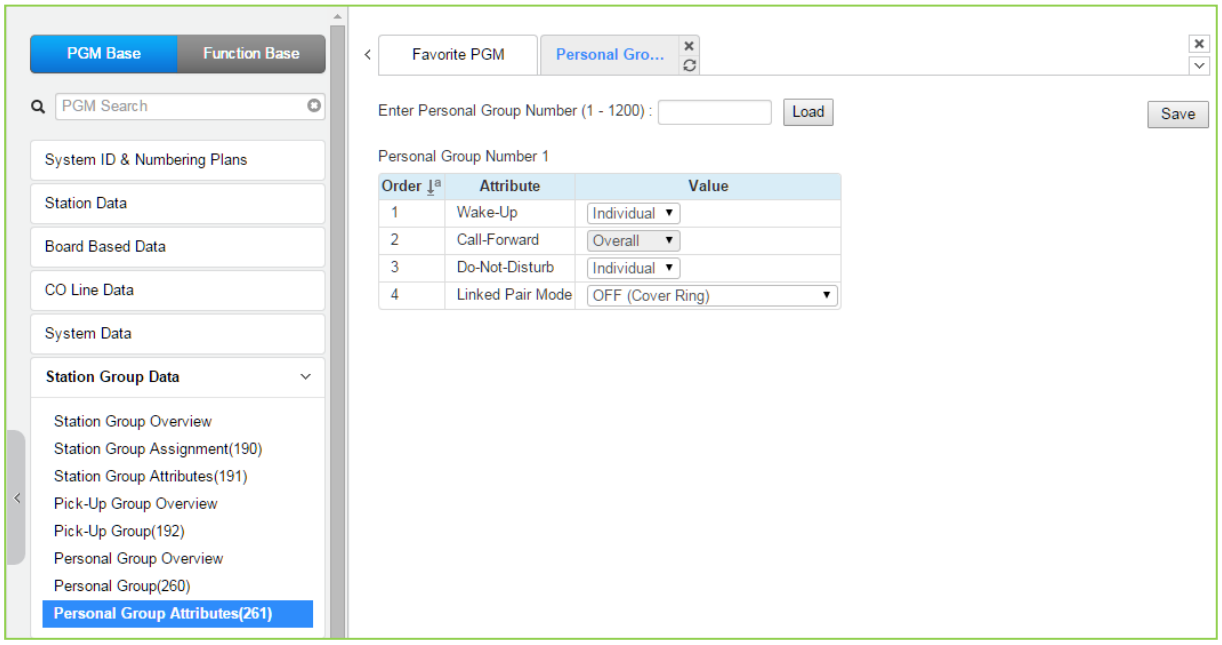


Figure 4.4.6.8-1 Personal Group Attributes

Table 4.4.6.8-1 PERSONAL GROUP ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Wake-Up	If this value is set to Overall, all members wake up, follow by master wake up. If this value is set to Individual, individual wake-up is worked by each station.	Individual/ Overall	Individual
Call-Forward	If this value is set to Overall, the call forward setting affects Master and all members. If this value is set to Individual, individual Call Forward is worked by each station.	Individual/ Overall	Overall
Do-Not-Disturb	If this value is set to Overall, the DND setting affects Master and all members. If this value is set to Individual, individual DND is worked by each station.	Individual/ Overall	Individual
Linked Pair Mode	If this value is set to ON, Master, and Member Stations are linked, and only one station can be activated. **OFF (Cover Ring), ON (Cover Ring and State Sync.)**	Refer to description	OFF (Cover Ring)
PAGE/PTT Receive	If set to Overall, PAGE and PTT calls are received by the Master and all members by the Master who belongs to the PAGE zone and PTT group. If this is set to Individual, PAGE and PTT calls are received only by each station that belongs to the PAGE zone and PTT group.	Individual / Overall	Overall

4.4.7 ISDN Line Data

The following figure shows that selecting the ISDN Line Data program group returns the sub-menu displayed in the left frame.

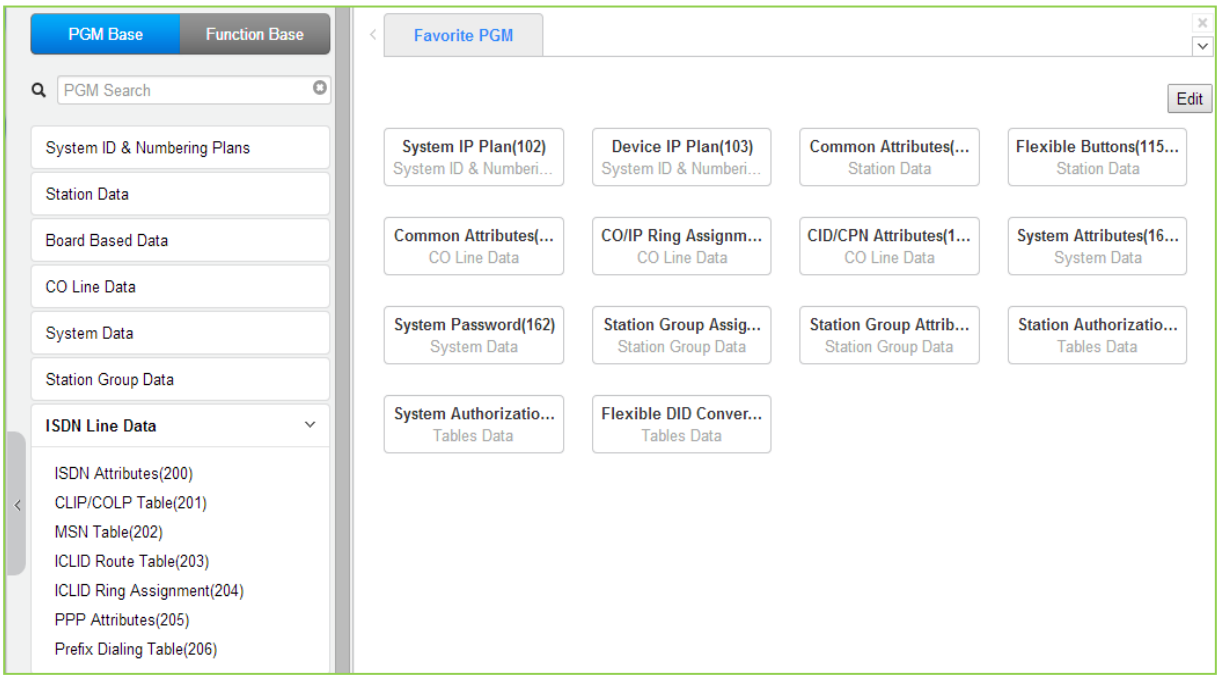


Figure 4.4.7-1 ISDN Line Data

Each ISDN (Integrated Services Digital Network) Line provides digital services to the end-user. The Basic Rate Lines have three (3) channels, 2 B channels, and a D channel.

The 2 B channel provides 64 Kbps each, a total of 128 Kbps for “Bearer” or voice channels. The D channel provides a 16 Kbps signaling channel. Primary Rate Lines have 23/30 64 Kbps ‘B’ channels and 1/2 64 Kbps signaling channels. For proper operation, entries are required for various attributes and Tables to match the ISDN circuit and services.

4.4.7.1 ISDN Attributes - PGM 200

Selecting ISDN Attributes will display the ISDN Attributes data entry page. Click **the [Save]** button after changing Value.

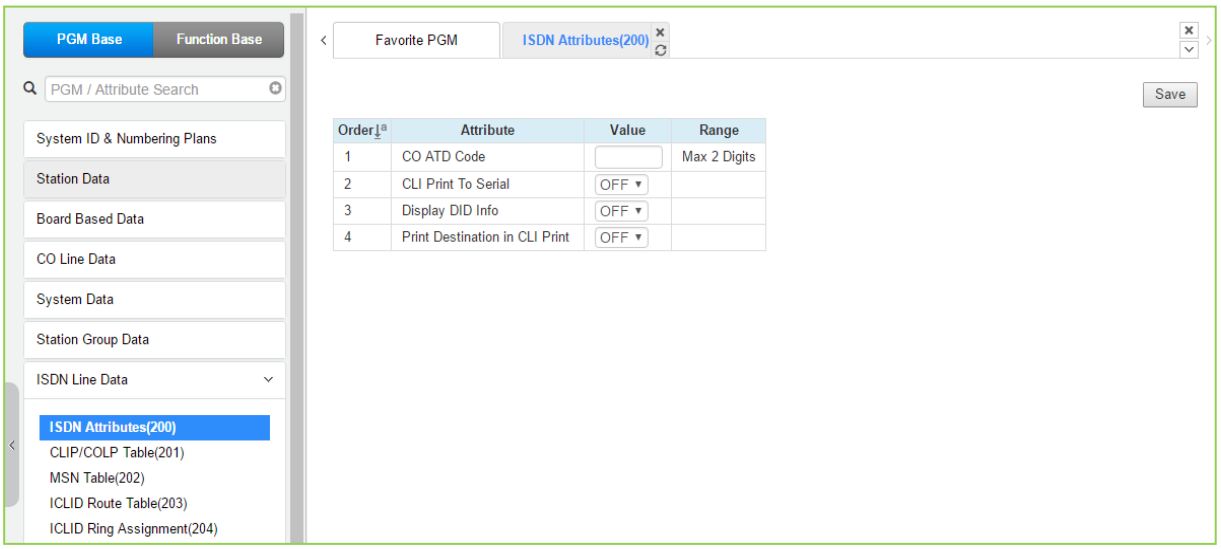


Figure 4.4.7.1-1 ISDN Attributes

ISDN attributes define several characteristics of the ISDN interface. ISDN call cost services (Advice of Charge), CLI modification, voice encoding, and other characteristics of the interface are defined. Refer to the following table.

Table 4.4.7.1-1 ISDN ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
CO ATD Code	When the system is set to send the station number with ISDN CLIP or COLP, either the station number or this ATD code will be sent based on the Common Attributes section, EXT, or ATD assignment.	Max.2 Digits	
CLI Print To Serial	The ISDN Calling Line Id may be included in call records. Refer to the SMDR Attributes section.	OFF/ ON	OFF
Display DID Information	Display DID digit information on LCD and printed it to the serial port.	OFF/ ON	OFF
Print Destination in CLI Print	If this is set to ON, the following destination number is provided with ring Information. Station Number, Station Group, CCR, Net station, Conference room	OFF/ ON	OFF

4.4.7.2 CLIP/COLP Table - PGM 201

Selecting the CLIP/COLP Table will display the CLIP/COLP Table Attributes data entry page. Click **the [Save]** button after changing Value.

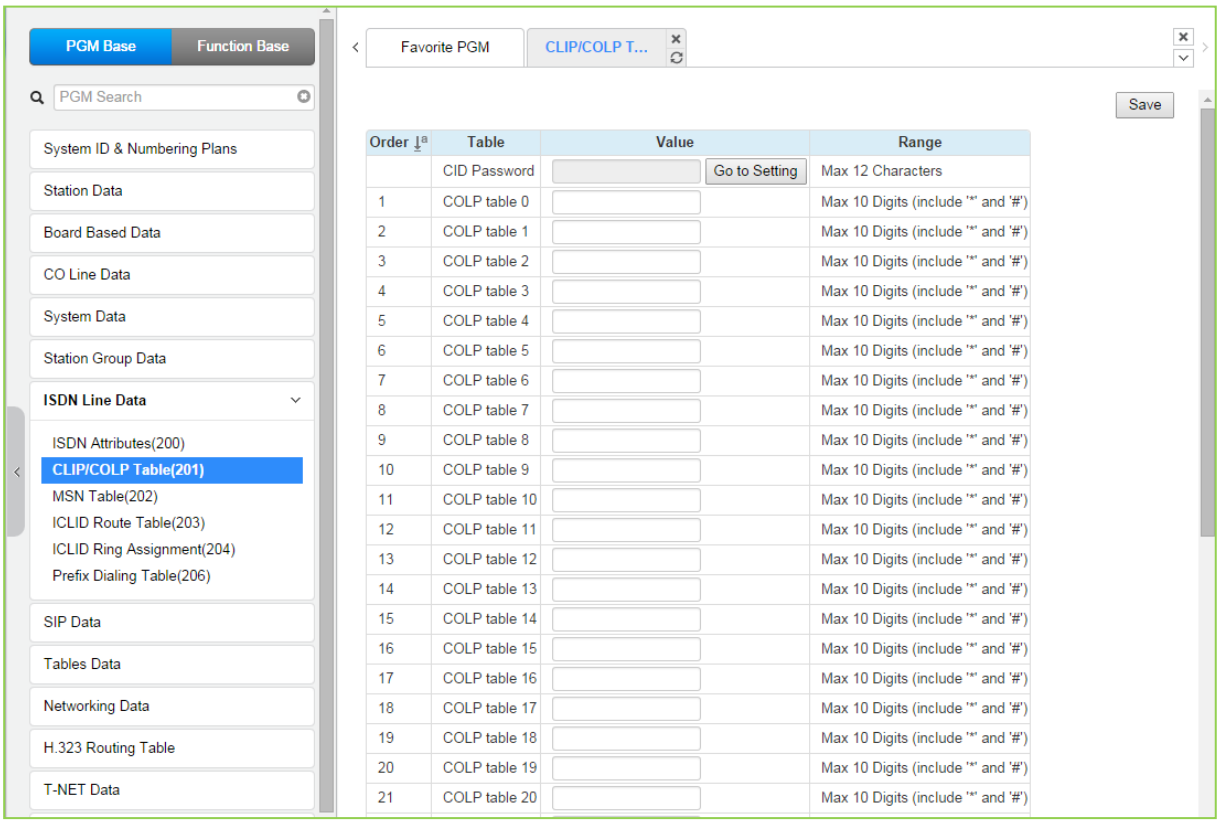


Figure 4.4.7.2-1 CLIP/COLP Table

Normally, the system will send the primary Directory Number of the ISDN Line in the ISDN call SETUP and CONNECT messages to identify the caller (CLIP) or the answering (COLP) party, respectively. Under certain circumstances, it may be desirable to provide the secondary or DID number for the ISDN Line. In these cases, the CLIP/COLP Table may be used to define the digits sent. The number sent is selected based on the CO/IP Line index under the 'CID/CPN Attributes section.'

The CLI Station Number is sent in place of the station number. For all other entries, the station number is sent as a suffix to the number in the Table. Note that this number is sent only if CLIR/COLR is disabled under the CLIR Service and COLR Service assignments in the Station ISDN Attributes.

Setting CID Password directly

You can set the CID password by clicking the "Go to Setting" button. After clicking it, you will move to the following PGM 162, set the CID password, save the CID password from the marking tick on the save box, and click the Save button.

4.4.7.3 MSN Table - PGM 202

Selecting MSN Table will display the MSN Table data entry page. For convenience, the copy, paste, and drag are available to enter or modify data. Click **the [Save]** button after changing Value.

Enter Index Range: eMG80/100: 1-500 / eMG800: 1-1500 / UCP: 1-2400

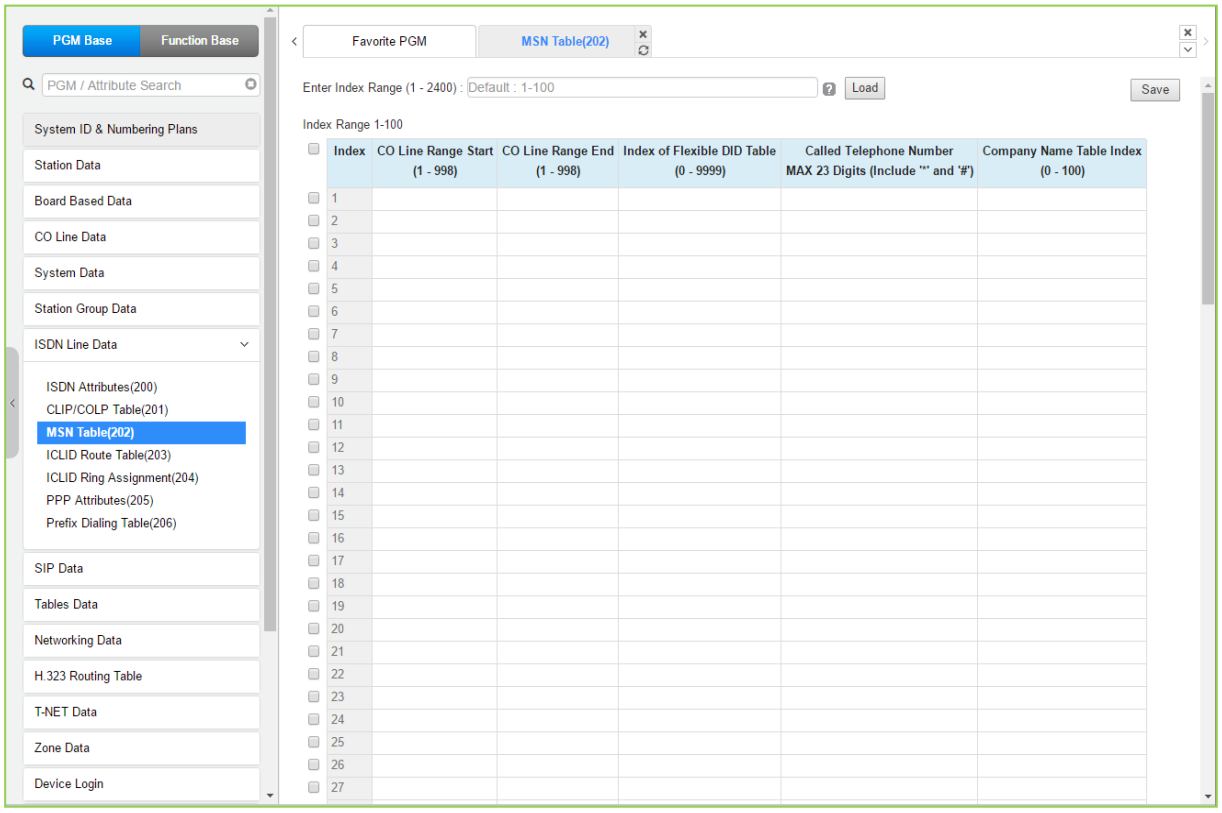


Figure 4.4.7.3-1 MSN Tables

When an ISDN Line assigned for DID operation receives an incoming call, the call will be routed to a station based on the Flexible DID Table Index assigned in the MSN Table. Each iPECS configuration has a different capacity, as indicated by the entry range in the following table.

Table 4.4.7.3-1 MSN TABLE ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
CO Line Range	Enter the CO Line Range. eMG80/100:1-74, eMG800:1-600, UCP:1-998	Refer to description	None
Index of Flexible DID Table	Index to the Flexible DID Table.	0~9999	None
Called Telephone Number	The call is routed based on the DID Table index entered above when the received MSN number matches this entry. **Max. 23 Digits(Include * and #)**	Refer to description	None
Company Name Table Index	The system provides the company name of the MSN table for MSN calls according to assigning the Company Name Table (241).	0-100 (0:Station Name)	None

4.4.7.4 ICLID Route Table - PGM 203

Selecting ICLID Route Table will display the ICLID Route Table data entry page. Click **the [Save]** button after changing the field.

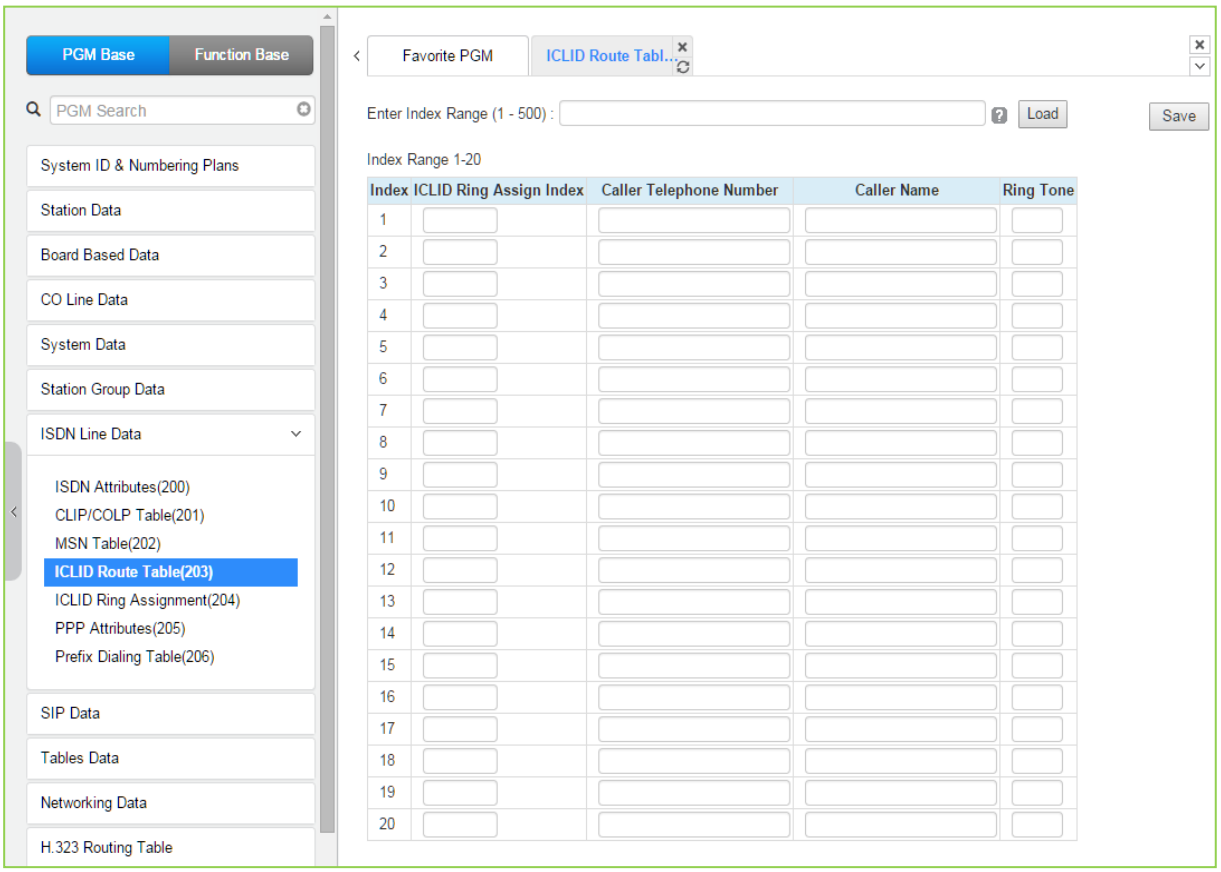


Figure 4.4.7.4-1 ICLID Route Table

The system can employ ICLID (Incoming Calling Line Id) to determine the routing of incoming external calls. Each CO/IP Line, including DID Lines and ACD group calls, may be assigned to employ ICLID routing. The system will compare the received ICLID to entries in the ICLID Route Table and, if a match is found, will route the call to the destination defined in the ICLID Ring Assignment Table index assigned here.

Table 4.4.7.4-1 ICLID ROUTE TABLE ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
ICLID Ring Assign Index	Index to the ICLID Ring Assignment Table that determines the call routing. eMG: 001~250, UCP: 001~500	Refer to description	None
Caller Telephone Number	ICLID (Incoming Caller Id) to match for the index. If the Caller Id matches the Table entry, the index is used to select the route.	24 Digits	None
Caller Name	ICLID name that is sent by the system to the destination for the ICLID routed call.	12characters	None
Ring Tone	If the received Caller Id matches the Caller Telephone Number, the Ring tone selected here is employed for the call alert.	01 ~ 16	Ring Tone

4.4.7.5 ICLID Ring Assignment Table - PGM 204

Selecting ICLID Ring Assignment Table will display the ICLID Ring Assignment Table data entry page. The station number starts 100 for eMG80/100 and 1000 for eMG800/UCP. Click **the [Save]** button after changing Value.

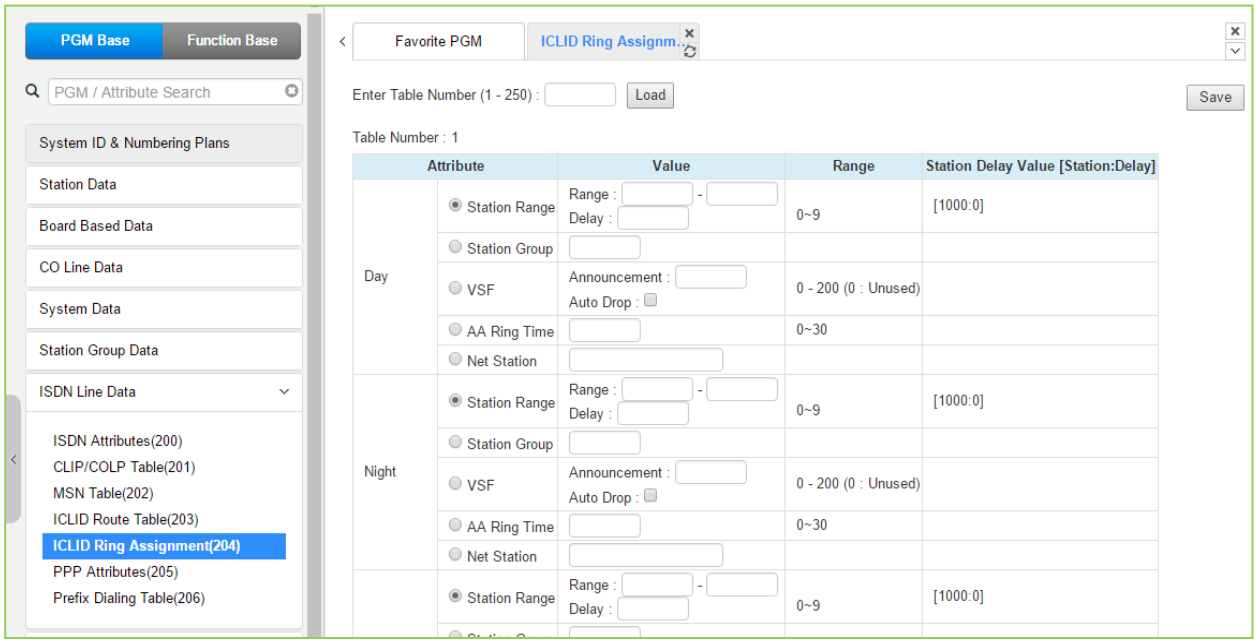


Figure 4.4.7.5-1 ICLID Ring Assignment Table

If the Incoming Caller ID matches an entry in the ICLID Route Table, the index from the Table is used to determine the call routing from the ICLID Ring Assignment Table. Separate ring assignments are made for Day, Night, and Timed Ring mode for each index, 001 to 250, in this table. When assigned to ring to a VSF announcement, the call can be automatically dropped after the announcement by entering '#' after the announcement number.

When CO Lines are programmed to Ring an external AA/VM, VSF, or Feature Server Group as an Automated Attendant, the Ring signal can be immediate or delayed, allowing other stations/groups to be assigned Ring and answer prior to signaling the AA. The delay is defined in seconds from 00 to 30.

4.4.7.6 PPP Attributes for UCP - PGM 205

Selecting PPP Attributes will display the PPP Attributes data entry page. Use the checkboxes to indicate which attributes to define; data for checked attributes is stored for the entire range of stations when saved. Click **the [Save]** button after changing Value.

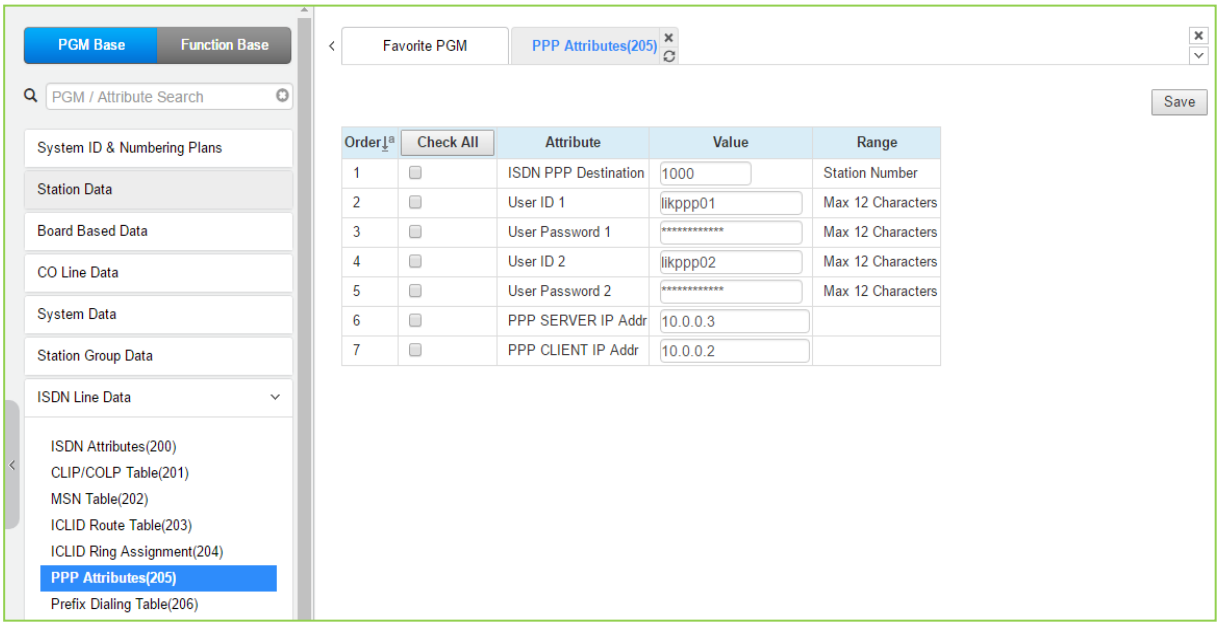


Figure 4.4.7.6-1 PPP Attributes

In addition to remote access via an IP network connection, the system database may be accessed remotely via an ISDN connection. Placing a call over an ISDN Line to the designated PPP Station will provide a connection to the system database. The system will request a user id and password, which must match one of the User Ids and passwords assigned. After a matching ID and password are received, the iPECS Login Home page is provided.

Table 4.4.7.6-1 PPP ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
ISDN PPP Destination	If the incoming capability is 64 Kbps unrestricted digital and the called party number matches the PPP destination, the system will automatically answer the call and request a PPP ID and password.	Station number	None
User ID 1	The System accepts this PPP ID 1 as valid.	Max. 12 characters	likppp01
User Password 1	The password entered is used to authorize PPP ID 1.	Max. 12 characters	Ipkts01
User ID 2	The System accepts this PPP ID 2 as valid.	Max. 12 characters	likppp02
User Password 2	The password entered is used to authorize PPP ID 2.	Max. 12 characters	Ipkts02
PPP Server IP Address	When configured, the PPP Server IP Address must match this entry. To applies this option, the system must be restarted.	IP Address	
PPP Client IP Address	When configured, the PPP Client IP Address must match this entry. To applies this option, the system must be restarted.	IP Address	

4.4.7.7 Prefix Dialing Table - PGM 206

Selecting ISDN Prefix Dialing Attributes will display the Prefix Dialing Table Attributes data entry page. For convenience, the copy, paste, and drag are available to enter or modify data. Click **the [Save]** button after changing Value.

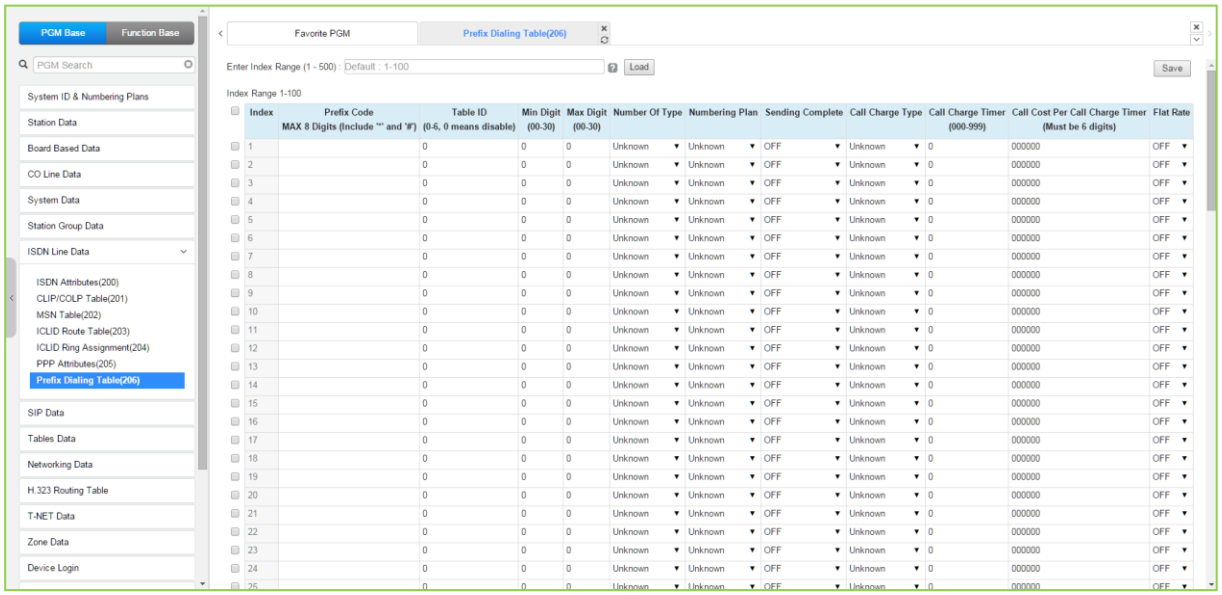


Figure 4.4.7.7-1 Prefix Dialing Table Attributes

Prefix Dialing Table. With this table, three features can be supported.

- CO Call Charge with NPR metering.
- SIP direct dialing with no wait inter-digit timer.
- ISDN Prefix Call – ISDN en-block Dialing with Prefix Call Setup.

If first some digits (up to 8 digits) of outgoing dial number are matched with Prefix Code of each table, this table can start work. By each Co-line (PGM 142 – F20), Table ID (0-6) can be set. This table ID (PGM 142 – F20) is associated with PGM 206 – each table ID.

Table 4.4.7.7-1 Prefix dialing Table Attributes

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Prefix Code	Enter the Prefix code. (Max 8 digits) **Max. 8 Digits(Include * and #)**	Refer to description	
Table ID	Enter Table ID (0-6). 0 means NOT used.	0-6	0
Min Digit	Select the minimum dial digits (00-30).	00-30	0
Max Digit	Select the maximum dial digits (00-30).	00-30	0
Number Of Type	Select Number of Type (0~6). • Unknown • International • National • Network Spec • Subscriber • Abbreviated • Reserved.	Refer to description	Unknown

Table 4.4.7.7-1 Prefix dialing Table Attributes

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Numbering Plan	Select Numbering Plan (0~6). • Unknown • ISDN Telephony • Data numbering • Telex • National standard • Private • Reserved	Refer to description	Unknown
Sending Complete	Select Sending Complete option. (On/Off)	ON/OFF	OFF
Call Charge Type	Call Charge Type (0~5). • Unknown • Local • long distance • International • Mobile • Reserved	Refer to description	Unknown
Call Charge Timer	Call Charge Timer can be assigned. By this time value, Call Metering can be established.	000-999	0
Call Cost	Call TIMER calculates cost. (ex: timer is 1 min, the cost is 000020, then after the 3-minute call, total call cost is calculated to 000060)	000000-999999	000000
Flat Rate	If Flat Rate is ON, Flat Rate is applied by CALL COST per a call.	ON/OFF	OFF
Base Call Cost	If this value is set, the base cost is applied. That means the first charge is applied to Base Call Cost, and the second charge is applied to the Call Cost Per Call Charge Timer. If Base Call Cost is 0, the base cost is not applied.	000000-999999	000000

4.4.7.8 ISDN Clock Priority for eMG800 - PGM 207

Selecting ISDN Clock Priority will display the ISDN Clock priority Attributes data entry page. Click **the [Save]** button after changing Value.

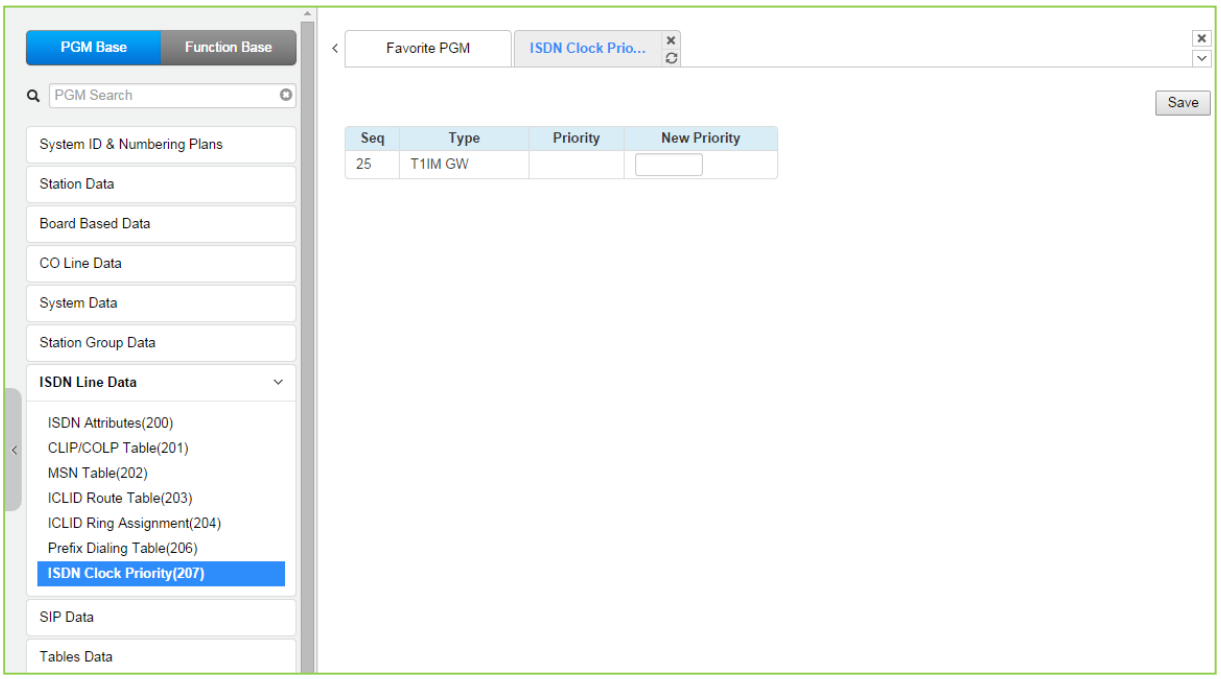


Figure 4.4.7.7-1 ISDN Clock Priority Attributes

Table 4.4.7.7-1 ISDN Clock Priority Attributes

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Priority	Clock priority if more than one ISDN board are used	1-18	

4.4.8 SIP Data

Selecting the SIP Data program group returns the sub-menu displayed in the left frame as shown in the following figure.

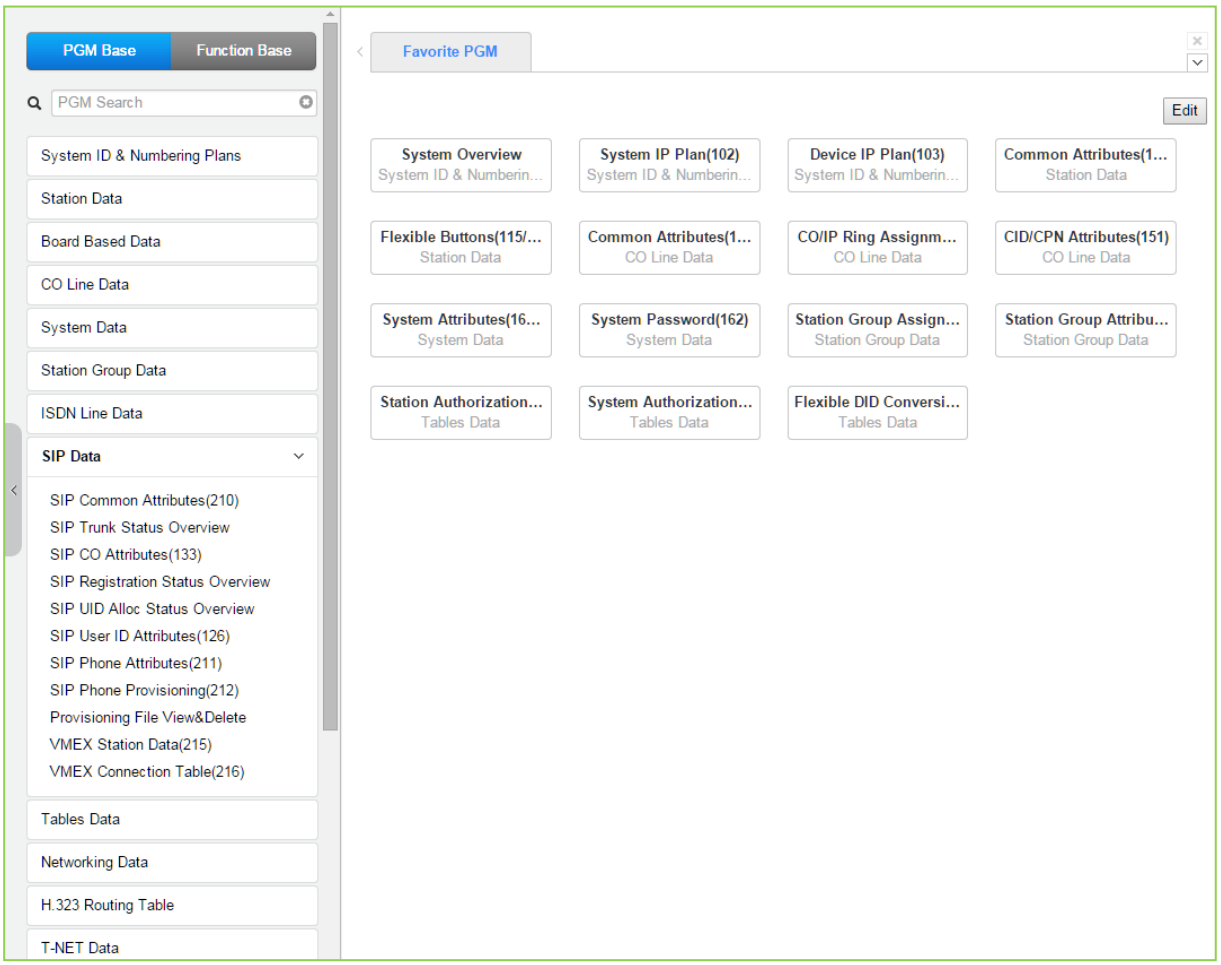


Figure 4.4.8-1 SIP Data

4.4.8.1 SIP Common (System-based) Attributes - PGM 210

Selecting SIP Common Attributes will display the SIP System-based Attributes data entry page. The attributes are system-based SIP server data that are running on MPB/UCP. Click **the [Save]** button after changing Value.

DNS server address is where the system can get the IP address of the external party that was written in Name in the system. Local UDP/TCP/TLS Port is MPB/UCP's SIP signaling port number.

'Signal TLS Option' is for the SIP signaling by TLS configuration.

'SIP Status' is the status of is running of the SIP server in MPB/UCP.

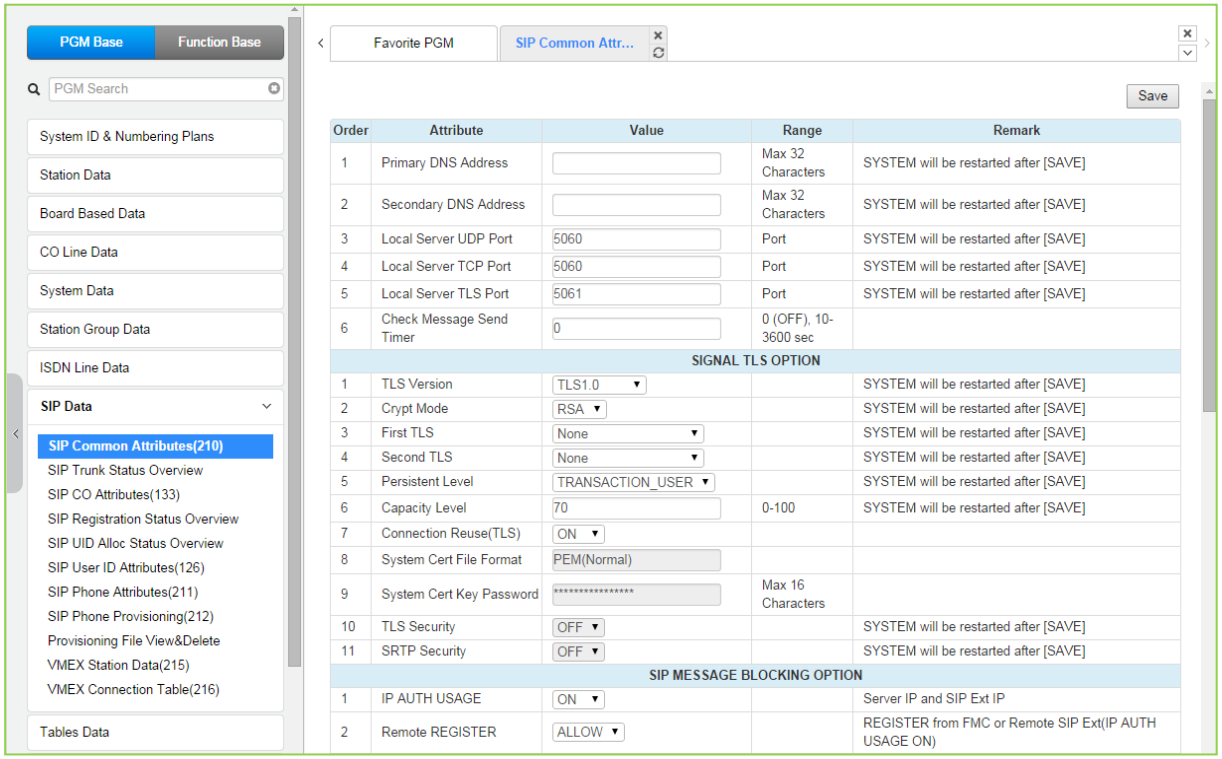


Figure 4.4.8.1-1 SIP Common Attributes

Check Message Send Timer – This is Keep-Alive Message (OPTIONS) frequency from the SIP server (MPB/UCP) to the SIP Phone. If a SIP Phone does not respond to the system's Keep-Alive Message, the system will make the SIP Phone 'disconnected' status in the system.

Keep-Alive Message (OPTIONS) programming for a SIP station is as below:

- Frequency: SIP Data / SIP Common Attributes (210) - Check Message Send Timer.
- Usage ON/OFF for a SIP Extension: SIP Data / SIP Phone Attributes (211) – Keep-Alive Usage.
- Retry Count: IP Data / SIP Phone Attributes (211) – Retry Count.

Table 4.4.8.1-1 SIP Common Attributes

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Primary DNS Address	Name Resolution Server. The system will be restarted after Save. **IP Address(Max. 32 characters)**	Refer to description	
Secondary DNS Address	Name Resolution Server. The system will be restarted after Save. **IP Address(Max. 32 characters)**	Refer to description	

Table 4.4.8.1-1 SIP Common Attributes

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Local Server UDP Port	SIP UDP signaling port. The system will be restarted after Save.		5060
Local Server TCP Port	SIP TCP signaling port. The system will be restarted after Save.		5060
Local Server TLS Port	SIP TLS signaling port. The system will be restarted after Save.		5061
Check Message Send Timer	Keep Alive (OPTIONS Message)sending frequency **0(Off) , 10 ~ 3600(Sec.)**	Refer to description	0
Signal TLS option			
TLS Version	TLS version. System will be restarted after Save. • **TLS1.0:** TLS1.0 is used for TLS connection. • **TLS1.2:** TLS1.2 is used for TLS connection. • **SSL3(Auto) :** TLS1.0 or TLS1.2 is used – auto negotiation	Refer to description	TLS1.0
Crypt Mode	TLS Crypt Mode. The system will be restarted after Save.	RSA/ECC	RSA
First TLS	SIP signaling TLS encryption primary key method. The system will be restarted after Save. • None • ARIA-128 • AES-128 • ARIA-128-SHA2 • AES-128-SHA2 • AES-256-SHA2(RSA)	Refer to description	None
Second TLS	SIP signaling TLS encryption secondary key method. The system will be restarted after Save. • None • ARIA-128 • AES-128 • ARIA-128-SHA2 • AES-128-SHA2 • AES-256-SHA2(RSA)	Refer to description	None
Persistent Level	TLS signaling path method. The system will be restarted after Save. • **TRANSACTION**: different path with INVITE, INFO, MESSAGE • **TRANSACTION_USER**: same path with INVITE, INFO, MESSAGE	Refer to description	TRANSACTION_USER
Capacity Level	TLS session maintenance rate, maximum 70%. The system will be restarted after Save.	0 - 100	70
Connection Reuse (TLS)	TLS session maintain or not.	OFF ON	ON
System Cert File Format	The system supports two certification formats Privacy-Enhanced Electronic Mail (PEM) or Distinguished Encoding Rules (DER). **PEM(Normal), DER (Normal)**	Refer to description	PEM (Normal)

Table 4.4.8.1-1 SIP Common Attributes

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
System Cert Key password	Password to encrypt the private key.	Max. 16 characters	
TLS Security	Change password that is used to encrypt TLS certification periodically.	OFF ON	OFF
SRTP Security	Allow only SRTP call (blocking none SRTP call).	OFF ON	OFF
SIP Message blocking option			
IP AUTH USAGE	ON: Discard SIP Request (INVITE, REGISTER, NOTIFY, OPTIONS, MESSAGE …) if VIA IP and From IP are neither the server IP nor SIP Extension IP.	OFF ON	ON
Remote Register	• **ALLOW:** Proceed REGISTER from the remote site. • **DENY:** Discard all remote REGISTER. It is applied with IP AUTH USAGE ON	ALLOW/ DENY	ALLOW
REGISTER Check Time	Time interval to check invalid remote REGISTER flooding. (It is applied with IP AUTH USAGE ON and Remote REGISTER ALLOW)	0~3600 (Sec.)	0
REGISTER Threshold	Threshold value to decide if it is invalid remote REGISTER flooding. (It is applied with IP AUTH USAGE ON and Remote REGISTER ALLOW)	0~60000	0
REGISTER Lock Time	Time interval to discard remote REGISTER if it is a REGISTER flooding state. (It is applied with IP AUTH USAGE ON and Remote REGISTER ALLOW)	0~250 (Min.)	0
SIP SMS Option			
SMS Domain	Domain Name used for sending SIPSMS	Max. 32characters	
SMS request URI	Request URI for sending SIP SMS. This is only for Korea telecom.	Max. 32characters	1549
SMS Mode	Assign SMS mode(normal or external) This is only for Korea telecom.	Normal, External	Normal
SIP FAX Option			
Start w/ G.711 Fax	G711 Fax path through Mode. G711 will be negotiated as a voice path, and Fax will send this voice path.	OFF ON	OFF
G.711 Fax method	G711 Fax Mode. VBD – VBD codec attribute will be added in SDP. **711A, 711U, 711A(VBD), 711U(VBD)**	Refer to description	711A
T38 FAX Failover(711)	When T38 Negotiation is failed, G711 Codec will be used for Fax Transmission.	OFF ON	OFF
Miscellaneous Option			
OCS Prefix Code	When the server type assigned for a SIP Trunk is OCS, the system will send these digits as a prefix to the number in the SIP “To:” header.	Max. 8 Digits	

Table 4.4.8.1-1 SIP Common Attributes

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
SIP Pound Use	SIP employs Enblock dialing, where the user dials all digits before they are sent to the carrier for processing. When the user completes dialing of a SIP call, '#' is used to indicate the end of dialing. If users must be able to dial '#,' SIP Pound Use can be disabled, and the system will automatically send digits at the expiration of the inter-digit time.	OFF ON	OFF
BLF SYNC NOTIFY Timer	When the system reboots, the button LEDs of SIP phones may indicate erroneous status. To displays proper status LEDs, the system sends a Notify message to synchronize the LED states at the expiration of this timer.	10-360	10
SRTP PATH(SIPEXT)	The SRTP path can be established through a VoIP channel (Packet Relay) or directly between the end-points for SIP extensions connected to the same LAN as the system.	VOIM RELAY or DIRECT	VOIM RELAY
DNS SRV Usage	The system can be configured to query the DNS for the SRV resource record, which defines domains for various services.	OFF ON	OFF
Out OF Rsc Response	When the system has no resources available for the SIP Request, the system will respond with this code.	503/ 486	503
Error Code For Trunk Rerouting	The call will be rerouted if the iPECS system receives this Error Code in response to a request—the semi-colon (;) is used to separate multiple SIP message codes.		
Intercom Busy Service	When the SIP extension hears a busy tone, the Call Back feature can be activated by pressing the # key. • **System Rule:** Follow PGM160- Intercom Busy Service • **CallBack:** Call Back feature	Refer to description	System Rule
Incoming Trunk Choice	Incoming SIP trunk will be seized based on this admin setting • **System Rule:** Follow PGM160 - CO Line Choice. • **Round:** round-robin rule. • **Last:** last available trunk • **First:** first available trunk	Refer to description	System Rule
SIP QOS Option			
SIP QOS Method Selection	For SIP messages, the system can employ Diff-Serv or TOS to implement QoS.	DSCP/ TOS	TOS
SIP Signal DSCP value	When Diff-Serv is selected as the QoS method, the DSCP value for SIP signaling messages is defined.	0~63	0
SIP Signal TOS value	When TOS is selected as the QoS method, the TOS value for SIP signaling messages is defined.	0~7	5
RTP DSCP value	When DSCP is selected as the QoS method, the DSCP value for RTP packets is defined.	0~63	0
RTP TOS value	When TOS is selected as the QoS method, the TOS value for RTP packets is defined.	0~7	5
SIP T-NET Option			
CM Prefix	Korea Telecom only, when employing an iPECS system as the CM, iPECS system will require a Prefix to set up a SIP trunk call.	Max. 6 Digits	

Table 4.4.8.1-1 SIP Common Attributes

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
CM Prefix Method	Korea Telecom only enables the Prefix method for processing a call with a SIP trunk through the iPECS system.	Normal, With prefix	Normal
SIP Trunk Register Option			
Register Retry Timer	When registration fails, the iPECS system attempts to register periodically at intervals of this timer.	20~3600	60
Option Check number	Korea Telecom only, a SIP Options message is used for redundancy. If the system does not respond to the Options message after the number of attempts, the redundant server becomes active	1~20	1
Option Check Interval	Korea Telecom only, a SIP Options message is used for redundancy. The Option message is sent at intervals of this timer.	20~3600	20
SIP Alarm Server Option			
Alarm Server Usage	If this value is changed, all WTIB will restart.	OFF/ON	OFF
Alarm Server Address	Enter the alarm server address up to 32 characters.	Max. 32 characters	
Alarm Server UDP Port	Default UDP port for Alarm server.	Port	5060
Alarm Server Check Usage	If IPECS doesn't receive a reply for this option 3 consecutive times, will not send Message and Information to the Alarm Server. PGM 210 check message send timer.	OFF/ ON	OFF
Terminal State Announcement	Information (Terminal state) is sent to the Alarm server if this value is ON, not sent to the Alarm server if this value is OFF.	OFF/ ON	OFF
600BE Channels for Alarm	The number of 600BE channels reserve for Alarm SMS.	0~1	0
SIP MULTIHOME Option			
SIP Multi-home Usage	Usage for Secondary IP and Secondary UDP port in SIP signaling. • **OFF:** Secondary IP and secondary UDP port are not used. • **EXT UDP Port:** PGM210-SIP Multi-home Ext UDP Port is used as a secondary UDP port. • **2nd IP:** PGM210-SIP Multi-home 2nd IP is used as secondary IP. Multi-home 2nd IP UDP Port, Multi-home 2nd IP TCP Portland Multi-home 2nd IP TLS Port are used with secondary IP. • **EXT UDP Port+2nd IP:** Multi-home Ext UDP Port and Multi-home 2nd IP is used.	Refer to description	OFF
SIP Multi-home Ext UDP Port	Ext UDP Port is used for secondary UDP port. This port is just used for SIP Extension.	Port	5070
SIP Multi-home 2nd IP	Multi-home 2nd IP is used for secondary IP for SIP signaling. It is different with System IP	Max. 32 characters	0.0.0.0
Delete Second Route	If this value is Yes, the routing table for PGM 210-SIP Multi-home 2nd IP is deleted. The default route is used for 2nd IP.	No, Yes	No

Table 4.4.8.1-1 SIP Common Attributes

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
SIP Multi-home 2nd IP UDP Port	Multi-home 2nd IP UDP Port is a UDP port used with Secondary IP. UDP port(Secondary IP: UDP Port) will be opened.	Port	
SIP Multi-home 2nd IP TCP Port	Multi-home 2nd IP TCP Port is TCP port used with Secondary IP. TCP port(Secondary IP: TCP Port) will be opened.	Port	
SIP Multi-home 2nd IP TLS Port	Multi-home 2nd IP TLS Port is a TLS port used with Secondary IP. TLS port(Secondary IP: UDP Port)will be opened.	Port	
System IPV6 Usage	Usage of IPV6 Address in SIP signaling	No, Yes	No
System IPV6 Address	IPV6 address used for System - User can set Unicast IP or set based on SLAAC Info.		
System IPV6 Router	IPV6 Router used for System - User can set Router IP or set based on SLAAC Info.		
System IPV6 Net Prefix	IPV6 Prefix used for System - User can set Prefix or set based on SLAAC Info.		64

4.4.8.2 SIP Trunk Status Overview

Selecting SIP Trunk Status Overview displays the overview page. The page displays the Proxy, Domain, etc., for the SIP Trunks configured in PGM 133.

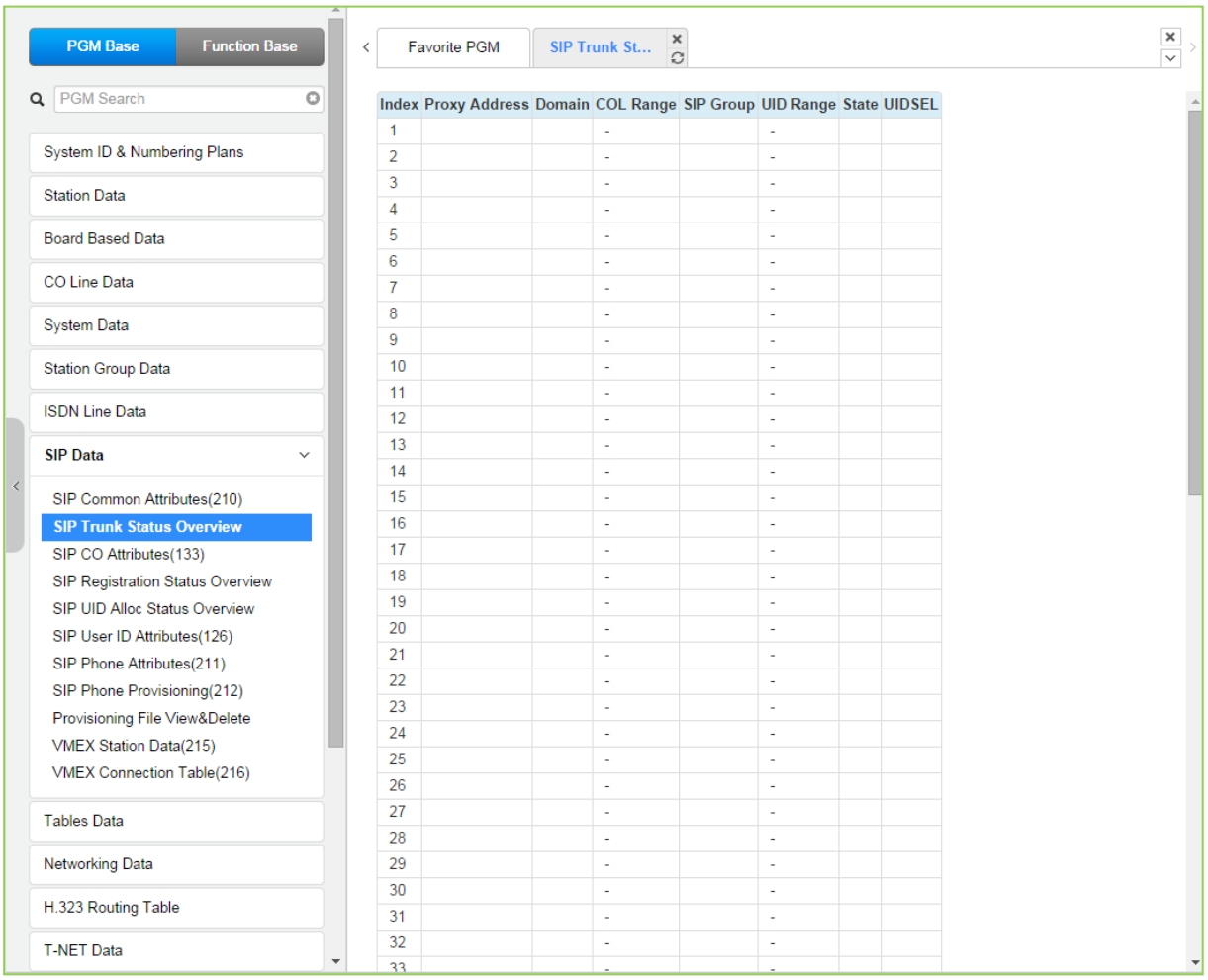


Figure 4.4.8.2-1 SIP trunk status overview

4.4.8.3 SIP CO Attributes - PGM 133

Selecting SIP CO Attributes returns the SIP CO Attributes data input page. Enter the CO Range and click **[Load]** to enter attribute values. Use the checkmark to indicate which attributes to modify; checked attributes are stored by clicking **the [Save]** button.

Enter CO Range: eMG80/100: 1-74 / eMG800: 1-600 / UCP: 1-998

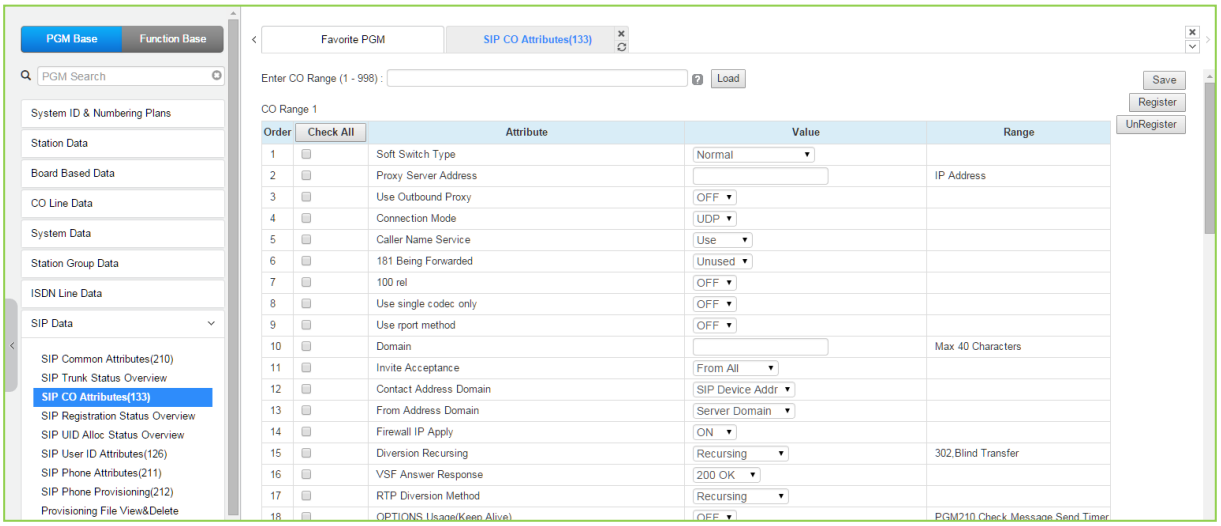


Figure 4.4.8.3-1 SIP CO Attributes

Various parameters must be entered for proper operation of the SIP Trunk, including the SIP proxy and Registrar, as outlined in the following table.

Table 4.4.8.3-1 SIP CO ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Soft Switch Type	Allows identification of soft-switch to support extended soft-switch capabilities. **KT, SK TELINK, etc.: Service Provider.** **Normal, Broadsoft, KT, SK TELINK, KT-C,** **MS OCS, SKYPE CONNECT,** **SIP-CC, TI PK0, ERICSSON IMS,** **DNS REDUNT(Tele2), MS LYNC, KT-CENTREX**	Refer to description	Normal
Proxy Server Address	SIP Proxy server IP address up to 64 characters.	IP address	
Use Outbound Proxy	The SIP module will communicate only to SIP Proxy Server. In this case, the destination address of all communication will be the IP of the SIP Proxy Server. Use Outbound Proxy flag should be 'OFF' when you use that SIP module for channels of 3rd-party SIP Extensions.	OFF/ ON	OFF
Connection Mode	This field establishes the SIP connection mode as UDP, TCP, or TLS for SIP signaling messages.	UDP/ TCP/ TLS	UDP
Caller Name Service	The caller's name may be included in SIP messages. When included, the name can display in the LCD of iPECS IP and LDP Phones. In addition, the Contact Display Name assigned to the SIP User Id (PGM 126) will be sent in the SIP message.	Unused / Use	Use

Table 4.4.8.3-1 SIP CO ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
181 Being Forwarded	A SIP 181 Message is sent when a call is being redirected or forwarded if enabled.	Unused / Use	Unused
100rel support	To improve the reliability of Provisional SIP messages, the system is configured to send and expect an ACK response to such messages.	OFF ON	OFF
Use single codec only	During capabilities negotiation, the system sends the first priority codec id or the prioritized list of codecs as defined in the Codec priority settings below.	OFF ON	OFF
Use rport method	When employed behind a NAPT server, the system can use the Rport parameter in the SIP Via header to request the SIP server respond to the IP address and port of the originator.	OFF ON	OFF
Domain	The Service Provider's SIP Call server's domain name is used in SIP "To:" headers.	Max. 40characters	
Invite Acceptance	The system can accept SIP INVITE requests from any domain or only from the "Domain" specified above.	Domain Only / From All	From All
Contact Address Domain	The system will populate the SIP "Contact" header Domain with either the iPECS device IP address or the "Domain" specified above. **SIP Device Addr, Server Domain**	Refer to description	SIP Device Addr
From Address Domain	The system will populate the SIP "From" header Domain with either the iPECS device IP address or the "Domain" specified above. **SIP Device Addr, Server Domain**	Refer to description	Server Domain
Firewall IP Apply	When the iPECS system and VoIP devices are assigned a Firewall IP address, the system can use either the Firewall or local IP address in the Via and Contact headers as well as in SDP messages.	OFF ON	ON
Diversion Recursing	When a 3xx Diversion response redirects a SIP call, such as when a call forwards, the SIP message can be forked (recursing) or forwarded (non-recursing). **Recursing, Non-Recursing**	Refer to description	Recursing
VSF Answer Response	The system can respond to a SIP Invite with a SIP 183 Session Progress message. This allows a VSF announcement to play and user dialed digits to be analyzed by CCR and, if the CCR destination is an external number, the system can send a SIP 3xx call diversion message to forward the call via the SIP network.	183 Msg. 200 OK	200 OK
RTP Diversion Method	Reserved Currently. **Recursing, Non-Recursing**	Refer to description	Recursing
OPTIONS Usage (Keep Alive)	With "OPTIONS Usage" ON, an Option message is sent at intervals of the Check Message Send Timer assigned in PGM 210 to assure a connection with the SIP CO. SIP COs generally provide an Option message. In this case, the UCP should not be enabled here.	OFF ON	OFF

Table 4.4.8.3-1 SIP CO ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Proxy Registration Timer	Periodically, the system must re-register with the SIP Registrar. While this timing is often negotiated with the Registrar, the system can be configured to establish the re-register interval with this timer.	1-65535	3600
Proxy Server UDP Port	When employing UDP transport, this port number is employed for messages to the SIP proxy.	Port	5060
Proxy Server TCP Port	When employing TCP transport, this port number is employed for messages to the SIP proxy.	Port	5060
Proxy Server TLS Port	When employing TLS transport, this port number is employed for messages to the SIP proxy.	Port	5061
Registration UID Range	The User Id indices from the SIP User ID Attributes Table PGM 126 that will register with the SIP Service Provider's SIP Registrar must be configured.	Max. 140 Entries	
DTMF Type	DTMF dialing signals can be sent from the system using in-band or various Info messages. The method or type must match the SIP Call Server. • INBAND, 2833, • INFO (DTMF), • INFO (DTMF RELAY), • INFO(TELEPHONE EVENT), • INFO(NORTEL NETWORKS)	Refer to description	INBAND
Action with REG Failure	When registration fails, the link is down to the SIP Call server, or the system receives no response to an Invite message in the "Call Setup No-response" timer below, the call will return an error tone (Wait Idle), or Fail-over to a Line from the Fail-over CO Group specified below (Idle).	IDLE/ WAIT IDLE	IDLE
Secondary Proxy Server			
Secondary Proxy Server Address	It is used for SIP proxy server redundancy. KOREA telecom only.	IP Address	
Secondary Domain	It is used for SIP proxy server redundancy. KOREA telecom only.	Max. 32 Characters	
Secondary Proxy Server UDP Port	It is used for SIP proxy server redundancy. KOREA telecom only.	Port	
ID Presentation Option			
ID Usage			
P-Asserted-ID	The system normally provides a P-Asserted ID in SIP messages. The system can be configured not to provide the header.	Unused Use	Use
Remote-Party-ID	The system normally provides a Remote-Party-ID in SIP messages. The system can be configured not to provide the header.	Unused Use	Use

Table 4.4.8.3-1 SIP CO ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Privacy(CLIR) Presentation	SIP employs various headers that include a User Id and Name. In some cases, it may be desirable to restrict the called party from receiving this information. Several options for Caller Id restriction can be applied. • Anonymous Name & Anonymous Number, • Anonymous Name, • Privacy: user, Privacy: id, • Privacy: user; id; critical, • Privacy: id & anonymous & P-Preferred-ID	Refer to description	Anonymous Name & Anonymous Number
ID Individuality			
CID Password	Enter CID Password.		
From ID	The Id in the “From” header of SIP messages can be based on the calling station, the User Id, or a fixed User Id. • **Extension SIP User Id:** one of three SIP User Ids is assigned to the station in PGM 111. Select which of the three indices to use in the SIP UID Selection below. • **Extension outgoing CLI:** the CLI configured for the station through Web PGM 113 and 151. • **Authorized Representative Id:** the User Id of the “Authorized Representative Id” assigned to the SIP User Id that is indexed to the station in PGM 111. The specific index is selected below as the SIP UID Selection. • **Fixed Table:** the SIP User ID from the SIP UID Fixed Table Index attribute is assigned below.	Refer to description	Extension SIP-User-ID Table
From Display	The “Display” field of the “From” header can be configured to use the below: • **System Rule:** - a. From ID = Extension SIP User-ID Table, display Contact Display Name from PGM 126, otherwise display Station Name from PGM 111 or blank. - b. From ID = Extension Outgoing CLI, display Station Name from PGM 111 or blank. - c. From ID = Authorized Rep Id, display Contact Display Name of Authorized Rep Id from PGM 126; otherwise, display Station Name from PGM 111 or blank. - d. From ID = Fixed Table display Contact Display Name from PGM 126 or Station Name from PGM 111 or blank. • **Extension outgoing CLI:** the CLI configured for the station through Web PGM 113 and 151	Refer to description	SYS RULE

Table 4.4.8.3-1 SIP CO ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
P-Asserted-ID	The Id in the “P-Asserted Id” header of SIP messages can be based on the calling station, the User Id, or a fixed User ID. • **Extension SIP User Id:** one of three SIP User Tables indicates the assigned station in PGM 111. Select which of three in the SIP UID Selection below. • **Extension outgoing CLI:** the CLI configured for the station through Web PGM 113 and 151. • **Authorized Representative ID**: the User Id of the “Authorized Representative ID” assigned to the SIP User Id that is indexed to the station in PGM 111. The specific index is selected below as the SIP UID Selection. • **Fixed Table**: the SIP User ID from the SIP UID Fixed Table Index attribute is assigned below.	Refer to description	Extension SIP-User-ID Table
P-Asserted-ID Display	The “Display” field of the “P-Asserted Id” header can be configured to use the below: • **System Rule:** - a. P-Asserted ID = Extension SIP User-ID Table, display Contact Display Name from PGM 126, otherwise display Station Name from PGM 111 or blank - b. P-Asserted ID = Extension Outgoing CLI, display Station Name from PGM 11 or blank - c. P-Asserted ID = Authorized Rep Id, display Contact Display Name of Authorized Rep Id from PGM 126 otherwise display Station Name from PGM 111 or blank - d. P-Asserted ID = Fixed Table display Contact Display Name from PGM 126 or Station Name from PGM 111 or blank • **Extension outgoing CLI:** the CLI configured for the station through Web PGM 113 and 151.	Refer to description	SYS RULE
Contact ID	The Id in the “Contact ID” header of SIP messages can be based on the calling station, the User Id, or a fixed User ID. • **Extension SIP User Id:** one of three SIP User Tables indicates assigned to the station in PGM 111. Select which of three in the SIP UID Selection below. • **Extension outgoing CLI**: the CLI configured for the station through Web PGM 113 and 151. • **Fixed Table:** the SIP User Id from the SIP UID Fixed Table Index attribute assigned below	Refer to description	Extension SIP-User-ID Table
Remote-Party-ID	The Id in the “Remote-Party ID” header of SIP messages can be based on the calling station, the User Id, or a fixed User Id. • **Extension SIP User ID:** one of three SIP User Table indices assigned to the station in PGM 111. Select which of three in the SIP UID Assignment section below. • **Extension outgoing CLI:** the CLI configured for the station through Web PGM 113 and 151. • **Fixed Table:** the SIP User ID from the SIP UID Fixed Table Index attribute is assigned below.	Refer to description	Extension SIP-User-ID Table

Table 4.4.8.3-1 SIP CO ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Offnet Call Route ID Transit			
CO to Offnet Direct Call Route The below applies to calls routed from a CO/IP Line to an Off-net location by the system over a SIP Trunk.			
From/Contact ID	The ID in the “From” and “Contact” headers of SIP messages employ System Attendant CLI, the original CLI, or a fixed User Id. • **Sys Atd:** the CLI configured for the System Attendant through Web PGM 113 and 151. • **Original CLI:** the CLI received by the system for the original incoming call. • **Fixed Table:** the SIP User ID from the SIP UID Fixed Table Index attribute is assigned below.	Refer to description	SYST ATD
From Display	The “Display” field of the “From” header can be configured to use the below: • **System Rule:** - a. From ID = System Atd, display Contact Display Name from PGM 126, otherwise display Attendant Station Name from PGM 111 or blank. - b. From ID = Original CLI, display the Name received by the system for the original call. - c. From ID = Fixed Table display Contact Display Name from PGM 126 or Station Name from PGM 111 or blank. • **Original CLI:** the CLI received by the system for the original incoming call.	Refer to description	SYS RULE
P-Asserted-ID	The ID in the “P-Asserted ID” header of SIP messages can be based on the System Attendant, the Original CLI, or a fixed User ID. • **Sys Atd:** CLI: the CLI configured for the System Attendant through Web PGM 113 and 151. • **Original CLI:** the CLI received by the system for the original incoming call. • **Fixed Table:** the SIP User Id from the SIP UID Fixed Table Index attribute assigned below.	Refer to description	SYST ATD

Table 4.4.8.3-1 SIP CO ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
P-Asserted-ID Display	The “Display” field of the “P-Asserted Id” header can be configured to use the below: • **System Rule:** - a. P-Asserted ID = System Atd, display Contact Display Name from PGM 126, otherwise display Attendant Station Name from PGM 111 or blank. - b. P-Asserted ID = Original CLI, display the Name received by the system for the original call. - c. P-Asserted ID = Fixed Table display Contact Display Name from PGM 126 or Station Name from PGM 111 or blank. • **Original CLI:** the CLI received by the system for the original incoming call.	Refer to description	SYS RULE
Remote-Party-ID	The Id in the “Remote-Party ID” header of SIP messages can be based on the System Attendant, the Original CLI, or a fixed User ID. • **Sys Atd:** the CLI configured for the System Attendant through Web PGM 113 and 151. • **Original CLI:** the CLI received by the system for the original incoming call. • **Fixed Table:** the SIP User ID from the SIP UID Fixed Table Index attribute is assigned below.	Refer to description	Original CLI
Diversion	The Id in the “Diversion” header of SIP messages can be based on the System Attendant, the Original CLI, a fixed User ID, or Unused. • **Unused:** no Diversion header provided. • **Sys Atd:** the CLI configured for the System. Attendant through Web PGM 113 and 151. • **Original CLI:** the CLI received by the system for the original incoming call. • **Fixed Table:** the SIP User ID from the SIP UID Fixed Table Index attribute is assigned below.	Refer to description	Unused
Offnet Call Forward by Station The below apply to calls routed from a CO/IP Line to an Off-net location by a station over a SIP Trunk.			
From/Contact ID	The Id in the “From” and “Contact” headers of SIP messages employ the forwarding Station, the original CLI, or a fixed User ID. • **Extension:** the Extension SIP User ID or Extension Outgoing CLI as assigned for the From ID under ID Individuality. • **Original CLI:** the CLI received by the system for the original incoming call. • **Fixed Table:** the SIP User ID from the SIP UID Fixed Table Index attribute is assigned below.	Refer to description	Extension

Table 4.4.8.3-1 SIP CO ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
From Display	The “Display” field of the “From” header can be configured to use the below: • **System Rule:** - a. From ID = Extension, display Contact Display Name from PGM 126, otherwise display Station Name from PGM 111 or blank. - b. From ID = Original CLI, display the Name received by the system for the original call. - c. From ID = Fixed Table display Contact Display Name from PGM 126 or blank. • **Original CLI:** the CLI received by the system for the original incoming call.	Refer to description	SYS RULE
P-Asserted-ID	The Id in the “P-Asserted ID” header of SIP messages employ the forwarding Station, the original CLI, or a fixed User ID • **Extension:** the Extension SIP User ID or Extension Outgoing CLI as assigned for the From ID under ID Individuality. • **Original CLI:** the CLI received by the system for the original incoming call • **Fixed Table:** the SIP User ID from the SIP UID Fixed Table Index attribute is assigned below.	Refer to description	Extension
P-Asserted-ID Display	The “Display” field of the “P-Asserted Id” header can be configured to use the below: • **System Rule:** - a. P-Asserted ID = Extension, display Contact Display Name from PGM 126, otherwise display Station Name from PGM 111 or blank. - b. P-Asserted ID = Original CLI, display the Name received by the system for the original call. - c. P-Asserted ID = Fixed Table display Contact Display Name from PGM 126 or blank. • **Original CLI:** the CLI received by the system for the original incoming call.	Refer to description	SYS RULE
Remote-Party-ID	The Id in the “Remote Party ID” header of SIP messages employs the forwarding station, the original CLI, or a fixed User ID. • **Extension:** the Extension SIP User ID or Extension Outgoing CLI as assigned for the From ID under ID Individuality. • **Original CLI:** the CLI received by the system for the original incoming call. • **Fixed Table:** the SIP User Id from the SIP UID Fixed Table Index attribute assigned below.	Refer to description	Extension

Table 4.4.8.3-1 SIP CO ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Diversion	The Id in the “Diversion” header of SIP messages can be based on the forwarding station, the Original CLI, a fixed User ID, or Unused. • **Unused:** no Diversion header provided. • **Extension:** the Extension SIP User ID or Extension Outgoing CLI as assigned for the From ID under ID Individuality. • **Original CLI:** the CLI received by the system for the original incoming call. • **Fixed Table:** the SIP User ID from the SIP UID. Fixed Table Index attribute assigned below.	Refer to description	Unused
Mobile Extension External Call The below applies to calls routed to a Mobile Extension over a SIP Trunk			
From/Contact ID	The Id in the “From” and “Contact” headers of SIP messages employ the calling station, the original CLI, or a fixed User ID. • **Extension:** the Extension SIP User ID or Extension Outgoing CLI as assigned for the From ID under ID Individuality. • **Original CLI:** the CLI received by the system for the original incoming call or Station number for ICM call. • **Fixed Table:** the SIP User ID from the SIP UID Fixed Table Index attribute is assigned below.	Refer to description	Extension
From Display	The “Display” field of the “From” header can be configured to use the below: • **System Rule:** - a. From ID = Extension, display Contact Display Name from PGM 126, otherwise display Station Name from PGM 111 or blank. - b. From ID = Original CLI, display Station Name from PGM 111 for ICM call or the Name in received by the system for the original outside call. - c. From ID = Fixed Table display Contact Display Name from PGM 126 or blank. • **Original CLI:** the CLI received by the system for the original incoming call.	Refer to description	SYS RULE
P-Asserted-ID	The Id in the “P-Asserted Id” header of SIP messages employs the calling station, the original CLI, or a fixed User ID. • **Extension:** the Extension SIP User ID or Extension Outgoing CLI as assigned for the From ID under ID Individuality. • **Original CLI:** the CLI received by the system for the original incoming call or station number for the ICM call. • **Fixed Table:** the SIP User ID from the SIP UID Fixed Table Index attribute is assigned below.	Refer to description	Extension

Table 4.4.8.3-1 SIP CO ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
P-Asserted-ID Display	The “Display” field of the “P-Asserted ID” header can be configured to use the below: • **System Rule:** - a. P-Asserted ID = Extension, display Contact Display Name from PGM 126, otherwise display Station Name from PGM 111 or blank. - b. P-Asserted = Original CLI, display Station Name from PGM 111 for ICM call or the Name in received by the system for the original outside call. - c. P-Asserted = Fixed Table display Contact Display Name from PGM 126 or blank. • **Original CLI:** the CLI received by the system for the original incoming call.	Refer to description	SYS RULE
Remote-Party-ID	The Id in the “Remote Party Id” header of SIP messages employ. The Station CLI, the original CLI, or a fixed User ID. • **Extension:** the Extension SIP User ID or Extension Outgoing CLII as assigned for the From ID under ID Individuality. • **Original CLI:** the CLI received by the system for the original incoming call or station number for the ICM call. • **Fixed Table:** the SIP User ID from the SIP UID Fixed Table Index attribute is assigned below.	Refer to description	Extension
Diversion	The Id in the “Diversion” header of SIP messages can be based on the calling station, the Original CLI, a fixed User ID, or Unused. • **Unused:** no Diversion header provided. • **Extension:** the Extension SIP User ID or Extension Outgoing CLII as assigned for the From ID under ID Individuality. • **Original CLI:** the CLI received by the system for the original incoming call or the station number for the ICM call. • **Fixed Table:** the SIP User Id from the SIP UID Fixed Table Index attribute assigned below.	Refer to description	Unused
SIP UID Assignment			
SIP User ID Fixed Table Index	When a header is assigned to use “Fixed Table,” the ID from this SIP User ID (PGM 126) Table index is used.	Index	
SIP User ID SELECTION	When a header is assigned to use the “Extension SIP-User-ID Table,” the SIP User ID is selected using this SIP UID index in the Station Attributes (PGM 111).	Index, Index 2, Index 3	SIP User Table Index
External CODEC Priority Configuration			
1st ~5th priority	1st. Priority, 2nd. Priority, 3rd. Priority, 4th. Priority, 5th. Priority, If It specifies priority to a specific CODEC, then it will work for negotiation RTP data. If the only 1st. priority is specified, and the others are none, then it will work as single CODEC only does **None/ g.711-u/ g.711-a/ g.723.1/ g.729/ g.729-a/ g.722**	Refer to description	none

Table 4.4.8.3-1 SIP CO ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
SIP Call Setup Failover Option			
Call Setup No Response	When the system initiates a SIP Trunk call and receives no response from the SIP proxy server, after the expiration of this timer, the SIP call is canceled, and a Fail-over call is placed on the Fail-over CO/IP Line group specified below. Note the timer can be set at 3 to 15 seconds and '0', which disables Fail-over.	0, 3 ~ 15 sec	5sec
Failover CO Group Number	When the system attempts to initiate a SIP Trunk call and the SIP Trunk is in an OOS state, or the SIP proxy server does not respond in the No Response time above, the system will cancel the SIP call and place a call over a CO/IP Line from this group. **eMG80/100:1 ~ 21, eMG800/UCP:1~201**	Refer to description	none
SIP Session Timer			
Session Timer Usage	During a SIP call or "session," there are no signaling packets sent or received from the SIP Call server. In order to assure a session is still active, the system can periodically send an Option message that the SIP Call server should acknowledge.	ON/OFF	OFF
Session Timer Value	When "Session Timer Usage" is enabled, the system will verify the session at this timer interval.	90~ 3600	360
Min SE	During the negotiation with "Session Timer Usage" enabled, the system will use this value as the minimum Session expiration timer and will not respond to a SIP Options message prior to the expiration of this timer.	90~ 3600	90
URI Formatting and Rules			
General Formatting			
To Field Method	The SIP "To:" header is formatted using the SIP or Telephony method, as shown below. • SIP method To: < sip:[Number]@[Domain];user=phone > • Telephony method To: < tel:+[Number] >Domain	Refer to description	SIP: method
Numbering Format	When assigned the Telephony method for the "To" header, the number format can be: • **Local** - [tel:+Number]@[Domain] • **Global**(+E164) - [tel:+E.164 Address]@[Domain] E.164 Address: Nation + Area Code + Number	Refer to description	Local
Local: include Area Code	The Area code (PGM 143) can be added as a prefix if the 'Numbering Format' is set as Local. Example: user dials '8701234' and the Area code is '042.' The resulting "To" field URI is tel:+0428701234@[Domain]	Yes No	No

Table 4.4.8.3-1 SIP CO ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Global: include phone-context	If the 'Numbering Format' is Global and the 'To Field Method' is Telephony, the 'phone context can be added below. user dials '0011428701234' from Country code 82 The resulting "To" field URI is, tel:+0011428701234@[Domain];phone-context=+82	Yes No	No
Add '+' in Outgoing Call	Add "+" in front of dialed number when it is YES	Yes No	No
Specific Formatting by Conversion (example)			
From 4 digits	**To 6 digits**	**User Dial**	**Result**
0	+82	0314504639	+82314504639
00	+	0082314504639	+82314504639
1588	1588	15886724	15886724
031		0314504639	4504639
SRTP Setting			
SRTP Usage	When implemented by the carrier, the system can encrypt media (RTP) packets employing SRTP (Secure Real-Time Transport Protocol). But VoIP Virtual switching channel does not support SRTP.	OFF ON	OFF
1st CRYPTO	The first priority Crypt method for SRTP. None • ARIA_CM_192_HMAC_SHA1_80 • AES_CM_128_HMAC_SHA1_80 • ARIA_CM_128_HMAC_SHA1_80 • AES_CM_192_HMAC_SHA1_80 • ARIA_CM_256_HMAC_SHA1_80 • AES_CM_256_HMAC_SHA1_80	Refer to description	None
2nd CRYPTO	The second priority Crypt method for SRTP. None • ARIA_CM_192_HMAC_SHA1_80 • AES_CM_128_HMAC_SHA1_80 • ARIA_CM_128_HMAC_SHA1_80 • AES_CM_192_HMAC_SHA1_80 • ARIA_CM_256_HMAC_SHA1_80 • AES_CM_256_HMAC_SHA1_80	Refer to description	None
Caller/Called ID			
ID Option			
Caller ID Selection	For display and ICLID call routing, iPECS employ this header as the "Caller ID." **P-Asserted-ID, Remote-Party-D, From ID**	Refer to description	P-Asserted-ID
Display Caller Name(Though Id is Anonymous)	Even though the User ID is Anonymous, the system can display the SIP "From" header "Display Name" field for the call.	No Yes	No

Table 4.4.8.3-1 SIP CO ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Called ID Selection	For call routing, the “SIP Request” or “To” header will be employed by the system as the “Called Party ID.” **Request URI, To ID**	Refer to description	Request URI
SIP Timer set			
T1 Timer	First retransmission timer in case of No Reply.	0.5 / 1 / 2	0.5 (Sec)
Miscellaneous set			
Drop Busy Station	While busy, the system can be configured to terminate a station call and accept and connect any new call from the SIP Trunk. For special use, it is available only in Italy.	No Yes	No
Ignore INBAND DTMF	In some situations, DTMF tones from the connected party may be received along with the DTMF Type specified above. This can cause errors in detection, such as double digits. In this case, the system can be configured to ignore Inband DTMF signals. If selected as the “DTMF Type” above, do not disable Inband signals, as this may disable DTMF detection.	No Yes	No
SIP Trunk Group	Multiple SIP User ID ranges may register with the SIP CO, for example, SIP COs from different providers. When different SIP User ID ranges are required on a SIP CO, a different SIP Trunk Group should be assigned to each range. Note this has no relationship with the CO/IP Line Group. **0~71 (0:Normal, 1-71:Check To header)**	Refer to description	0
Send Refer for Transfer	The system can employ the SIP Refer method to forward or transfer incoming calls to an “Off-net” location if supported by the SIP Service Provider.	No Yes	No
CN Payload Insert	When Comfort Noise generation is desired, the system will provide a Comfort Noise Payload during periods of silence.	No Yes	No
Ignore 180 after 183	If the option is Yes, an appropriate ringback tone may be played to the calling party when the called party's phone is alerting without changing the internal or system ringback tone. For example, when placing a call from the USA to Korea, the caller hears a Korean ringback tone.	No Yes	No
Add “user=phone” parameter	For outgoing SIP call, "user=phone" will be added in the Request URI of INVITE.	No Yes	No
Advice of Charge	When assigned, The system estimates the call cost for display on the phone with appropriate regional protocol support. **No Service, SIP AOC**	Refer to description	No Service
TGID Usage	Usage of “trgp” and “trunk-context” parameter in Contact header in INVITE • **YES:** “trgp” and ‘trunk-context” are added in the Contact header. • **NO:** “trgp” and ‘trunk-context” are not used.	No Yes	No

Table 4.4.8.3-1 SIP CO ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Local Address Selection	Users can select Local IP(From, Via, and Contact address) used for the SIP trunk. It is applied when PGM210- Multi-home Usage is 2nd IP or EXT UDP Port+2nd IP. First: System IP. Second: PGM210-SIP Multi-home 2nd IP.	First Second	First
ALTC Usage	Users can set ALTC sequence when IPv6 is used with SIP Trunk. • **OFF:** IPV4 or IPV6 only in SDP. • **IPV4:** IPV4 and IPV6 in ALTC info • **IPV6:** IPV6 and IPV4 in ALTC info.	OFF IPV4 IPV6	OFF

4.4.8.4 SIP Registration Status Overview

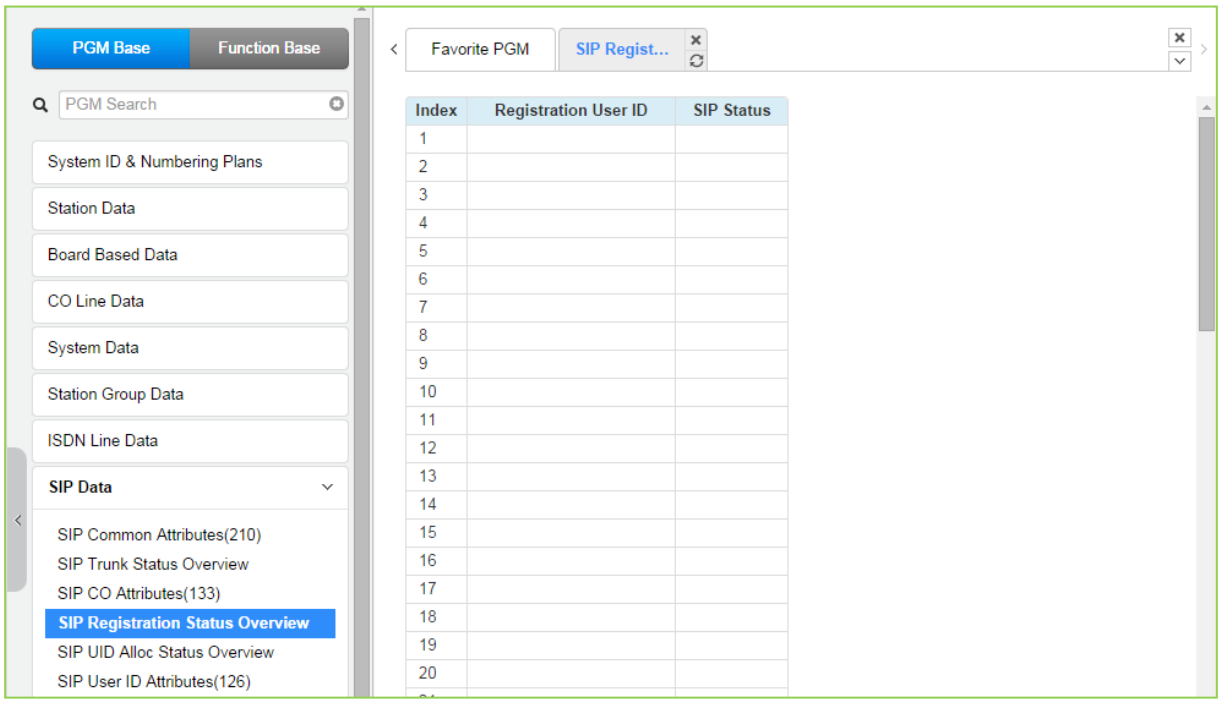


Figure 4.4.8.4-1 SIP Registration status overview

4.4.8.5 SIP UID Allocation Status Overview

Selecting SIP User ID Allocation Status will display the allocation overview page. The SIP User Id Allocation Status Overview page displays the station(s) assigned to each SIP User Id index in the Station Common Attributes PGM 111.

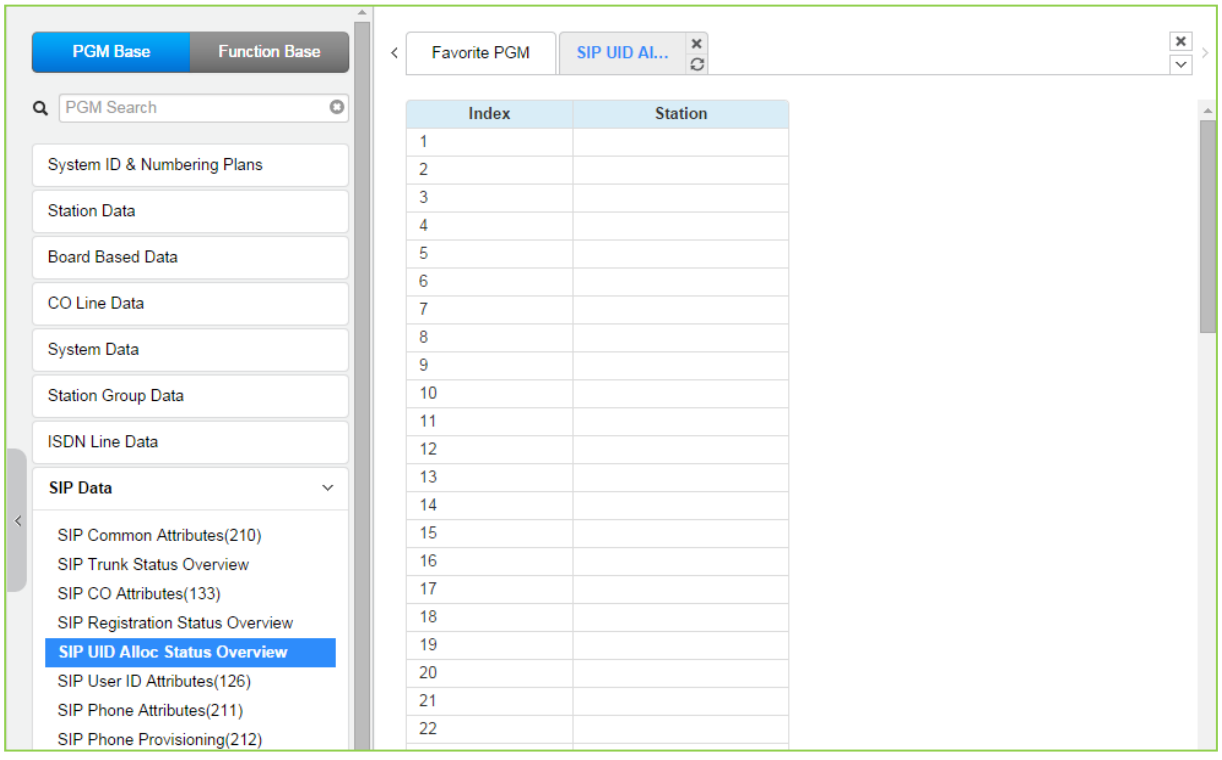


Figure 4.4.8.5-1 SIP UID Allocation Status Overview

4.4.8.6 SIP User ID Attributes – PGM 126

Selecting SIP User ID Attributes will display the SIP User ID input page.

Enter a valid SIP User ID Index Number range, see Station Data, and click **[Load]** to view the SIP User ID Attributes for the first index in the range.

Enter new data and click **[Save]** to modify the attributes for the index range.

Enter SIP User IDIndex number: eMG80/100: 1-140 / eMG800: 1-1200 / UCP: 1-2400

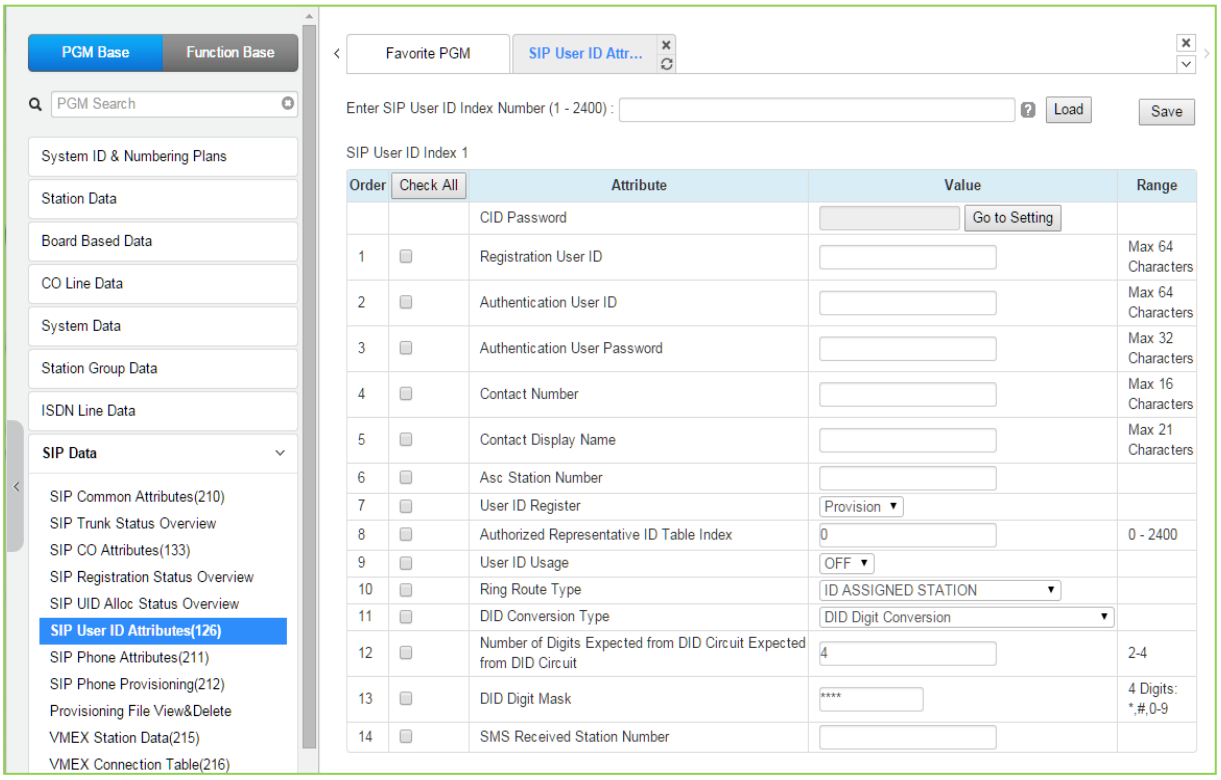


Figure 4.4.8.6-1 SIP User ID Attributes

An index to the SIP User Id Attributes Table is defined in PGM 111 Station Attributes for each station.

The SIP User Id Attributes Table defines SIP characteristics associated with the index, including User ID, Authentication name, etc.

These characteristics are required for proper operation of the system and registration of the iPECS IP and LDP phones when employed with the SIP trunk. See also, PGM 133.

Note PGM 126 and PGM 133 are accessible only via Web Admin.

Setting CID Password directly

You can set the CID password by clicking the “Go to Setting” button. After clicking it, you will move to the following PGM 162, set the CID password, save the CID password from the marking tick on the save box, and click the Save button.

Table 4.4.8.6-1 SIP User ID ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Registration User ID	This field defines the SIP User Id from the SIP Service provider. The User Id has the format User ID@Domain. Note the domain is commonly the system IP address.	Max. 64 characters	

Table 4.4.8.6-1 SIP User ID ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Authentication User ID	The SIP Service Provider may require authentication of the user for registration and during call setup. The Authentication name from the provider must be entered for proper SIP registration.	Max. 64 characters	
Authentication User Password	The SIP Service Provider may require authentication of the user for registration and during call setup. The Authentication password from the provider must be assigned for proper SIP registration.	Max. 32 characters	
Contact Number	The Contact header of SIP messages is populated with the specified SIP User ID.	Max. 16 characters	
Contact Display Name	The Display Name specified is used for the Contact header Name field.	Max. 21 characters	
Associative Station Number	Not used.	Station number	
User ID Register	The SIP Trunks are provided in two formats. • **Registered:** the system must register for service, often using Authentication • **Provision:** the provider sends all SIP messages to a fixed IP; the system does not register for service.	Refer to description	Provision
Authorized Representative ID Table Index	The User Id can be assigned an index of another User ID. When the SIP CO is configured to employ the Authorized Representative Id as the SIP “From” or “Contact” header, the indexed User ID is employed. eMG80/100:0~140, eMG800:0~1200, UCP:0~2400	Refer to description	0
User ID Usage	If registration is enabled (User ID Register above), the iPECS can send the User ID or Authorized Representative ID to the SIP Proxy to register the ID. Otherwise, only the Authentication Name and password are used.	OFF ON	OFF
Ring Route Type	Incoming calls from a SIP trunk can be routed to the ID assigned Station (any station with any of the SIP User ID Table Indices in PGM 111 matching the incoming SIP User Id), based on CO/IP Ring assignments (PGM 144), using DID treatment defined below table. Follow the MSN Table routing (PGM 145). • ID Assigned Station, • Ring Assignment, • DID Conversion, • MSN-DID Conversion(PGM145)	Refer to description	ID assigned Station

Table 4.4.8.6-1 SIP User ID ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
DID Conversion Type	When the Ring Route above is defined as DID, the system will send the call to a destination based on the DID conversion selected here. The digits in the SIP User ID may be used “as is” to identify the desired station, modified based on the DID Digit mask below and routed to the resulting station, or the modified DID number can be used as an index to the Flexible DID Conversion Table, PGM 231 to route the call. • DID Digit Conversion, • Use ‘as is,’ • Modify Using Flexible DID Conversion Table	Refer to description	Use ‘as is’
Number of Digits (2-4) Expected from DID Circuit	When DID Digit Conversion or Flexible DID Conversion Table routing is used, the number of digits received is defined in this field. **eMG80/100: 3, eMG800:4 , UCP: 4**	2-4	Refer to description
DID Digit Mask	When DID Digit Conversion or Flexible DID Conversion Table routing is used, the digit conversion is defined in this field. For each of the four (4) digits, use “*” to accept any digit, “#” to delete the digit, or a digit 0-9 to replace the digit. **eMG80/100: #***, eMG800: ****, UCP: ******	4 Digits: *, #, 0-9	Refer to description
SMS Received Station Number	When an SMS is received for this User Id, the SMS's station must be defined.		

4.4.8.7 SIP Phone Attributes - PGM 211

Selecting SIP Phone Attributes will display the SIP Phone input page. Enter a valid SIP Station Number or range, and click **[Load]** to view the SIP Phone Attributes for the first Station Number in the range. Enter new data and click **[Save]**to modify the attributes for a Station or range.

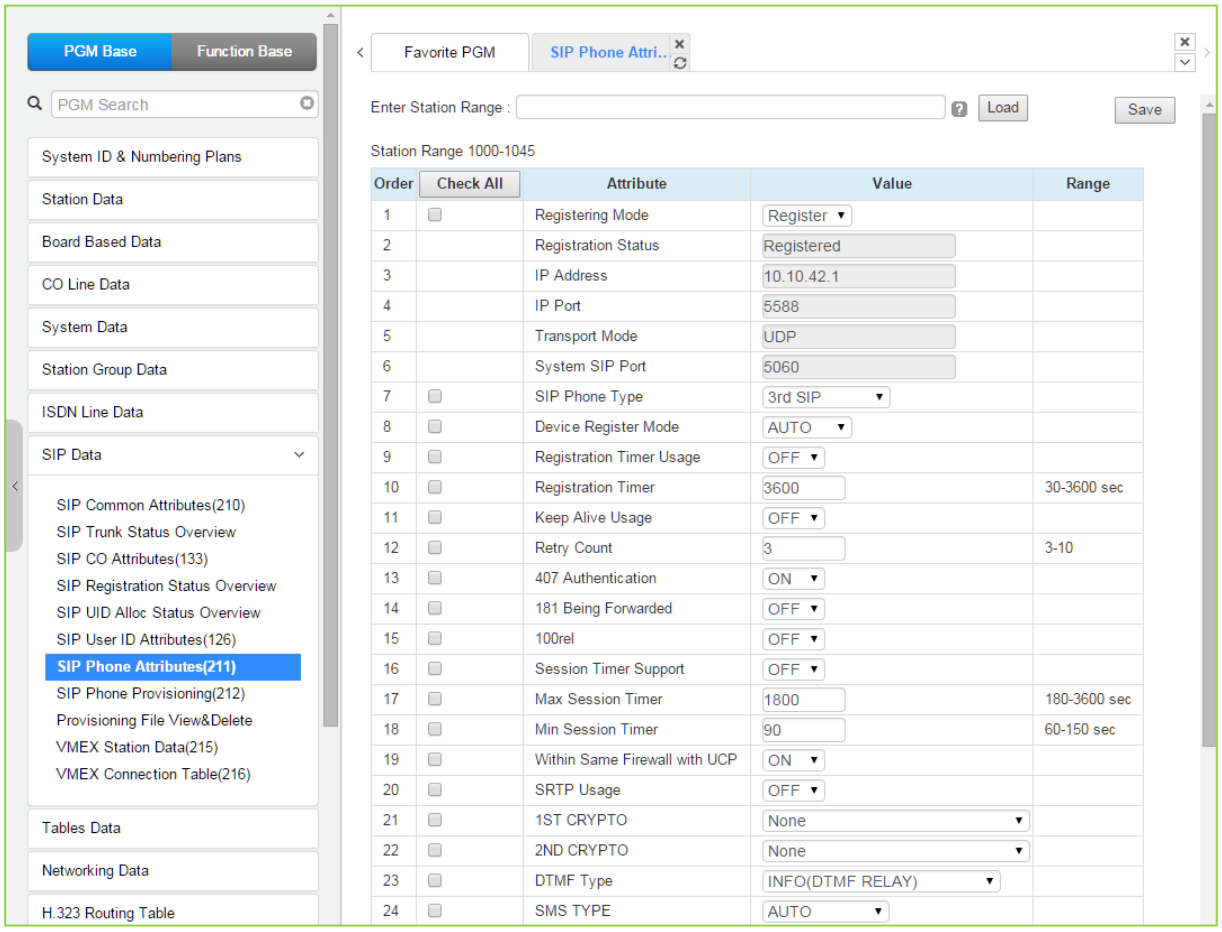


Figure 4.4.8.7-1 SIP Phone Attributes

Registration

For new registration of SIP station, input ID/PWD & Desired Station Number in PGM 443 of Station User Login Table. The SIP Phone Attributes are for Stations that are already registered to the system.

- Register Mode - Register/ Manual: Set Registration Time Out or Not
- Registration Status: View connection status (Disconnected or Not) for a station
- IP Address: SIP Phone‘s IP address
- IP Port: SIP Phone‘s IP Port Number
- Transport Mode: SIP signaling method
- SIP Phone Type: Automatically Assigned by System
- Device NAT Usage: Automatic Detection
- Registration Timer Usage: OFF – Assign (Re-) Registration Timer by Provisioning (212), ON – Assign (Re-) Registration Timer by SIP Phone Attributes (211).
- Registration Timer: recommended more than 10 minutes.
- 407 Authentication: Authentication of Registration (and Call Setup). To implement authentication, user login Password should be available in PGM 443 for the Station.

Keep Alive / NAT Resolution

To keep stable information of SIP Phone's Connection, IP address, and port number that is the under NAT environment, the system uses 'OPTIONS' message to implement Keep-Alive and assist NAT resolution - effort to maintain the IP address of SIP Phone by sending a message so often from system to SIP Phone.

SIP Phone should be capable to answer for 'OPTIONS' message

- Check Message Sending Timer in [SIP Data / SIP Attributes (210)] : 120 seconds
- Keep Alive Usage for a SIP Station in [SIP Data / SIP Phone Attributes (211)] : ON
- Retry Count for a SIP Station in [SIP Data / SIP Phone Attributes (211)] : 3

System Firewall Resolution

In the case of a firewall routed with MPB, a check bit is required per a SIP Station to distinguish remote SIP Phones outside the firewall from the local system.

With this check bit, the system can determine whether to serve communication using firewall mapped WAN IP address of MPB or serve communication using LAN IP address of MPB/UCP.

- SIP Phones outside the system protect firewall: [SIP Data / SIP Phone Attributes (211)] – 'Same Firewall with MPB/UCP' to 'OFF.'

Session Timer

To confirms the talk state frequently during the talk state, the system sends an 'UPDATE' message to SIP Phone. If there is no response for the UPDATE message within the Maximum session timer, the system will disconnect the talking call.

- [SIP Data / SIP Phone Attributes (211)] – Session Timer Support: ON
- [SIP Data / SIP Phone Attributes (211)] – Max Session Timer: if it exceeds, disconnect talking call
- [SIP Data / SIP Phone Attributes (211)] – Min Session Timer: minimum guard timer for session timer negotiation.

SRTP

Voice & Video Data Encryption requires synchronization of CRYPTO method between system and SIP Phone side. If the system specifies SRTP information, then the same information should be in SIP Phone side by Phone user programming.

SRTP usage requires an SRTP relay channel via system VOIU and VOIB/VOIM.

- [SIP Data / SIP Phone Attributes (211)] – SRTP Usage: ON
  - SIP Phone self-programming is required, too – SRTP ON
- [SIP Data / SIP Phone Attributes (211)] – 1st CRYPTO key generation type: one of ARIA_CM_192_HMAC_SHA1_80, AES_CM_128_HMAC_SHA1_80, ARIA_CM_128_HMAC_SHA1_80
  - SIP Phone self-programming is required, too – 1st/2nd CRYPTO method
- [SIP Data / SIP Phone Attributes (211)] – 2nd CRYPTO key generation type: one of ARIA_CM_192_HMAC_SHA1_80, AES_CM_128_HMAC_SHA1_80, ARIA_CM_128_HMAC_SHA1_80
  - SIP Phone self-programming is required, too – 1st/2nd CRYPTO method

DTMF

- INFO (OUT BAND) type DTMF
  - Presented in SIP signaling message.
  - INFO (SIMPLE DTMF) / INFO (NORTEL NETWORKS) / INFO (DTMF RELAY) / INFO (TELEPHONE EVENT)
  - Default: INFO (DTMF RELAY)
- TONE (INBAND) type DTMF
  - Presented in RTP packet
  - Additional VOIU/VOIB (VOIM) DSP channel is required to detect DTMF in RTP
  - INBAND / 2833

CO DIAL TONE

It is to avoid double play of CO dial tone. 'Set' if SIP phone plays CO dial tone by itself. If not, there will be another CO dial tone from external.

Request URI Type

Some SIP Phones will reject Request-URI if IP and port in the domain field are different from its contact IP and port.

- 'Normal': IP and port number in the Request URI domain field will be the real IP and port number of the SIP phone.
- 'KT-FMC': IP and port number in Request URI domain field will be system IP and port

Busy Serve

System Busy Tone: there will be a 'busy tone on a busy state that is presented by the system. Additional VOIB/VOIU/VOIM DSP channel is required.486 Busy Message: there will be a '486 busy' SIP signaling response on the busy state.

Call Initiation Mode

For a SIP station, the system can establish multiple or single call sessions. With this option, the system can control 'call wait option on the system side. Normally, the SIP Phone has its 'call-wait ON/OFF' option by itself. Options are as below:

- 'Multiple': The system initiates every SIP Phone call regarding its idle state for a new additional call to SIP Phone. The 'call-wait allow/deny' is decided by SIP Phone itself.
- 'Single': system initiates only one call for a SIP Phone. The system side denies the 'call wait. So, a call to a busy SIP station will be implemented on a busy state call control.

Table 4.4.8.7-1 SIP PHONE ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Registration Mode	Initial registration of a SIP phone is accomplished employing the parameters set in Station User Login PGM 443. The SIP phone can be required to register with the system periodically based on the Registration Timer. The registration can be maintained without the need for the SIP phone to reregister with the system (Manual).	Manual Register	Register
Registration Status	The system will display the status of the SIP phone registration.		
IP address	The system will display the IP address of the registered SIP phone.		
IP Port	The system will display the IP port used for the registered SIP phone.		
Transport Mode	The system will display the IP transport used by the registered SIP phone for signaling messages (UDP, TCP, or TLS). In the case of TLS, the options configured in the SIP Common Attributes (PGM 210) apply.		UDP
System SIP Port	The system will display the system SIP Port.		
SIP Phone Type	The type of SIP phone is generally determined by the system and can be an Ericsson-LG standard SIP phone or the 3rd party SIP phone type.		3rd SIP
Device register mode	The Register Mode determines if the SIP phone is behind a NAT server. When set in the Auto mode, the system will determine if the phone is behind a NAT server.	AUTO, NO NAT, NAT	AUTO
Registration Timer usage	When the Registration Mode is “Register,” the phone must register with the system periodically. The timer that determines the period can be the Registration Timer below (ON) or, when OFF, the timer is assigned through provisioning (PGM212).	OFF ON	OFF
Registration Timer	When the Registration Timer is enabled above, the system informs the SIP phone that registration is required at intervals of this Registration Timer. If the phone does not register within the timer, the phone is placed in an Out-of-Service state until the phone registers. Note shorter times will increase LAN traffic.	30-3600	3600
Keep Alive Usage	The system will periodically send an Option message to assure a connection with the registered SIP phone. Note when separated by a NAT server, Keep-Alive should be employed to maintain the NAT table record. The Check Message Sending Timer in PGM 210 determines the frequency.	OFF ON	OFF
Retry Count	The system periodically sends an Option message to assure a connection with the registered SIP phone. If there is no response, the system sends additional Option messages and, after the retry count, considers the SIP phone Out-of-Service.	3-10	3

Table 4.4.8.7-1 SIP PHONE ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
407 Authentication	The system can challenge the SIP phone during registration and outgoing call setup. A SIP 407 Authentication message requires the SIP phone to provide the Authentication Id and password assigned in the Station Login PGM 443.	OFF ON	ON
181 Being Forwarded	N/A	OFF ON	OFF
100 rel Support	N/A	OFF ON	OFF
Session Timer Support	During a SIP call or “session,” there are no signaling packets sent or received from the SIP Call server. In order to assure a session is still active, the system can periodically send an Update message that the SIP Call server should acknowledge.	OFF ON	OFF
Max Session Timer	When “Session Timer Support” is enabled, the system will verify the session at this timer interval.	180-3600	1800
Min Session Timer	During the negotiation with “Session Timer Support” enabled, the system will use this value as the minimum Session expiration timer and will not respond to a SIP Options message prior to the expiration of this timer.	60-150	90
Within same firewall with UCP (MPB)	The system must communicate with the phone employing the system’s “Firewall” address (OFF). Otherwise, the system employs the LAN address to communicate with the SIP phone.	OFF ON	ON
SRTP Usage	When supported by the SIP phone, the system can encrypt media (RTP) packets employing SRTP (Secure Real-Time Protocol).	OFF ON	OFF
1st CRYPTO	The first priority cryptographic method for SRTP is selected from the below: None • ARIA_CM_192_HMAC_SHA1_80 • AES_CM_128_HMAC_SHA1_80 • ARIA_CM_128_HMAC_SHA1_80 • AES_CM_192_HMAC_SHA1_80 • ARIA_CM_256_HMAC_SHA1_80 • AES_CM_256_HMAC_SHA1_80	Refer to description	None
2nd CRYPTO	The second priority cryptographic method for SRTP is selected from the below: None • ARIA_CM_192_HMAC_SHA1_80 • AES_CM_128_HMAC_SHA1_80 • ARIA_CM_128_HMAC_SHA1_80 • AES_CM_192_HMAC_SHA1_80 • ARIA_CM_256_HMAC_SHA1_80 • AES_CM_256_HMAC_SHA1_80	Refer to description	None

Table 4.4.8.7-1 SIP PHONE ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
DTMF Type	DTMF dialing signals sent by the SIP phone must be defined for the system to detect the tones properly. For Inband DTMF, a VoIP channel is required. • INBAND • 2833 • INFO(SIMPLE DTMF) • INFO(NORTEL NETWORKS) • INFO(DTMF RELAY) • INFO(TELEPHONE-EVENT)	Refer to description	INFO (DTMF RELAY)
SMS Type	The Short Message Service Protocol (type) must be selected to support SMS. • AUTO, • Text/plan, • Text/plan(KR), • Xnipm+xml	Refer to description	AUTO
CO DIAL TONE	When the user of a SIP phone dials a CO/IP Line access code with Enblock dialing, the system can provide a virtual dial tone to the user.	OFF ON	OFF
MWI NOTIFY	For compatible SIP phones, the system supports SIP Subscribe/Notify. When enabled here, the system sends Message Waiting notifications to the SIP phone. **OFF, message-summary**	Refer to description	OFF
Request URI Type	The SIP Request header Domain field can use the SIP phone's IP address and port (Normal), or for 'KT-FMC,' the Request URI Domain field will be system IP and port.	Normal KT FMC	Normal
Busy Service	To indicate a busy condition to the SIP phone, the system can provide RTP packets with a busy tone or the SIP 486 Busy message. Providing a busy tone requires a VoIP DSP channel in the system. **System Busy Tone, 486 Busy Message**	Refer to description	System Busy Tone
Call Initiation Mode	The system can route calls to the SIP phone while busy (Multiple). In this case, the SIP phone determines if Call Waiting is supported. Otherwise, if the SIP phone is busy, the system routes call based on the busy treatment (Single).	Multiple, Single	Multiple
Pre Audio Connection For DTMF	The system normally provides the 183 Session Progress SIP message to establish a "Pre-audio" connection. The "Pre-audio" connection permits the system to send tones (CO dial tone or ringback tone) to the SIP phone. In addition, the SIP phone can send DTMF tones the user dials in response to CO dial tone or a remote IVR message. Some SIP phones may require the 200 OK messages, which "answer" the call, to allow dialing after the call has been initiated. **183 Session Progress,200 OK**	Refer to description	183 Session Progress

Table 4.4.8.7-1 SIP PHONE ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Do Not Overwrite Station Name	This feature can be set in case of the following Range: • **OFF(REG):** Extension name will be updated with displayed in REGISTER message. • **ON:** The extension name will not be updated. • **OFF(INV):** Extension name will be updated with displayed in the INVITE message. • **OFF(REG+INV):** Extension name will be updated with displayed in REGISTER or INVITE message.	Refer to description	OFF (REG)
Follow CO Enblock Process	Skip the "dial tone by system" phase and deliver a transparent message of CO trunk to the SIP phone.	OFF ON	OFF
Suffix DID Table to CLI	If this option is ON, CLI is published by suffixing DID Conversion table index.	OFF ON	OFF
SIP Profile	Select the SIP Profile type between Default and CISCO-CP. Default: Normal SIP phone. CISCO-CP: CISCO SIP phone.	Default, CISCO-CP	Default
SIP Name Display	Deliver display name of SIP extension to SIP trunk without modification. ON: Deliver display name of SIP extension to SIP trunk without modification. OFF: Send name according to system rule (station name/speed name etc.)	OFF ON	OFF
CO Access Code	When the ELG SIP phone receives an incoming trunk call, the Call-Info header is inserted. - “Call-Info: co-access XX.” XX value is used for a callback from the SIP phone log. • **OFF:** Call-Info is not inserted. • **1st Co Code:** PGM106- Access CO in First CO Group will be used as XX. • **CO Grp Code:** Co Group Code+Co Group number will be used as XX. • **CO Number:** Individual CO Access Code + Co Number will be used as XX.	Refer to description	1st Co Code.
ALTC Usage	ALTC Usage of SIP phone in case of IPV6 connection. OFF: ALTC is not used. ON: ALTC is used.	OFF ON	OFF
INVITE(Replace) Usage	Original Caller ID is shown in ringing for blind transfer in the below case. If “INVITE(Replace) Usage” is on and Replace header in the INVITE message is supported on the SIP phone	OFF ON	OFF

4.4.8.8 SIP Phone Provisioning - PGM 212

Selecting SIP Phone Provisioning will display the SIP Phone Provisioning Data input page.

Select one of CONFTYPE (Ericsson-LG Enterprise SIP Phone Type) and set the attributes you want to set for those types of SIP Phones on their registration to system and press the **[Save]** button.

To store provisioning files that have been uploaded to the iPECS system, press **[Store uploaded Provision files]**.To view the stored configuration files, press **[View Provision files]**.

To download Provision files, press **[Download Provision files]**. To view TLS Cert. files, press the **[View TLS Cert files]** button.

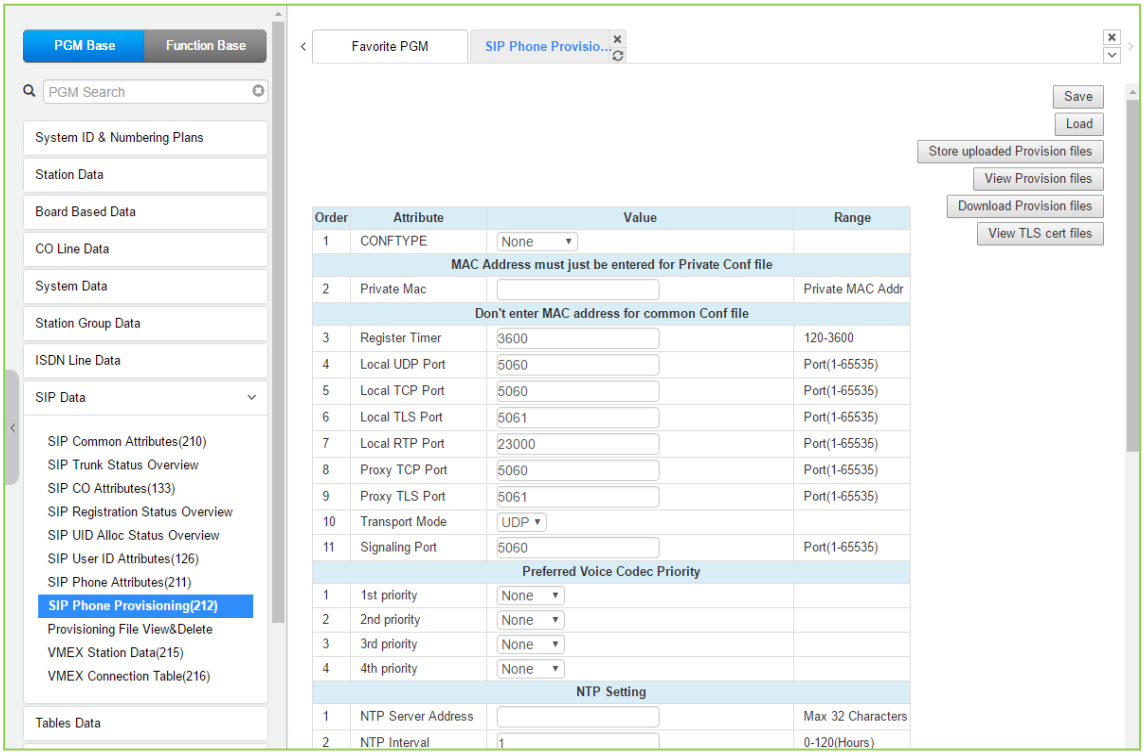


Figure 4.4.8.8-1 SIP Phone Provisioning

Why?

It is to pre-assign default attributes and download configuration to SIP Extensions when they register to System.

For who? (For all of the specified Phone types or for one MAC specified Phone)

CONFTYPE: select Phone Type / Mandatory

< Ericsson-LG Enterprise WIT-400HE>
Currently, MPB/UCP (TFTP only) does not proceed to provision for WIT400H(http only) because of a different method. But, WIT-400HE follows System's default provisioning by itself automatically.

<Ericsson-LG Enterprise LIP8002 / LIP88xx/LIP-8XXXE>
MPB/UCP proceed provisioning for LIP8002 / LIP88xx/LIP-8XXXE

< Other 3rd party SIP Extensions >
Does not proceed with provisioning

Private Mac

Specify MAC address if provisioning target is only for one specific SIP extension / Optional

For what?

Re-Registration Timer

It will be useless if [SIP User ID Attributes (PGM 126) - Registration Timer Usage] is ON

SIP Extension's Local UDP/TCP/TLS Port number

Proxy Port

Server port number insight of SIP Extension toward MPB/UCP

Transport

Signaling mode

SIP Extension's CODEC Priority

NTP Server and DST setting

The default volume of Speaker/Handset/Headset, the maximum volume of Handset

Table 4.4.8.8-1 SIP PHONE PROVISIONING

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
CONFTYPE	To modify or view a Configuration file, select an Ericsson-LG Enterprise SIP Phone type from the drop-down.		None
MAC address must just be entered for Private Conf file			
Private MAC	There are two types of Config files, a global file for all phones of a specific type and a phone-specific file. To view or modify a Phone specific file, enter the MAC address of the SIP phone.	Private MAC address	
Don't enter MAC address for common Conf file			
Registration Timer	When the SIP User ID Attributes are configured with Registration Mode=Register and the Registration Timer Usage=OFF, this timer is used to determine the valid registration period.	120-3600	3600
Local UDP Port	When employing UDP transport, this port number is employed for messages from the SIP phone.	Port (1-65535)	5060
Local TCP Port	When employing TCP transport, this port number is employed for messages from the SIP phone.	Port (1-65535)	5060
Local TLS Port	When employing TLS transport, this port number is employed for messages from the SIP phone.	Port (1-65535)	5061
Local RTP Port	The system sends RTP packets to the SIP phone using the first port available, starting with this port number.	Port (1-65535)	23000
Proxy TCP Port	The SIP phone will send messages to the system over this SIP Server port.	Port (1-65535)	5060
Proxy TLS Port	The SIP phone will send messages to the system over this SIP Server port.	Port (1-65535)	5061
Transport Mode	The IP packet transport mode used between the system and SIP phone for signaling messages is defined as UDP, TCP, or TLS. In the case of TLS, the options configured in the SIP Common Attributes (PGM 210) apply.	UPD TCP TLS	UDP

Table 4.4.8.8-1 SIP PHONE PROVISIONING

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Signaling Port	When the SIP phone transports the message to the system, this port number is employed for messages from the SIP phone.	Port (1-65535)	5060
Preferred Voice CODEC Priority			
1st priority ~ 4th priority	When the system negotiates with the SIP phone, the Codec priority specified is employed. If only the 1st. Priority Codec is defined, only that Codec is available from the phone. If the remote party does not support the Codec, the call will fail.	G.711-u G.711-a G-729 G.722	None
NTP Setting (Need for TLS)			
NTP Server Address	The IP8800 series phones employ NTP to determine the time of day. The NTP server-id must be configured for the phone.	Max. 32 Characters	
NTP Interval	The phone periodically checks the NTP server to determine the proper time of day.	0-120(Hours)	1
NTP Time Zone	The phone must be configured with the local Time Zone for proper operation and time display.	GMT	
DST Usage	The phone must be configured to support Daylight Saving Time.	ON OFF	OFF
DSP Setting			
Speaker Volume	The default volume level of the SIP phone speaker can be set through the Config file.	1-11, 1-7 (IP8850)	6
Handset Volume	The default volume level of the SIP phone handset can be set through the Config file.	1-11, 1-7 (IP8850)	6
Headset Volume	The default volume level of the SIP phone headset can be set through the Config file.	1-11, 1-7 (IP8850)	6
MAX Handset Volume	The default maximum volume level of the SIP phone handset can be set through the Config file.	1-11	11
Digit Map			
Dial Tone Digit	A digit string can be defined in the Config file so that the SIP phone will provide a “Second Dial Tone” to the user.	Max. 256Digits	
Inter Digit Timer	Inter digit timer between Dial digit in SIP Phone.	01-20(Sec.)	3
Pause Timer	Dial Pause timer in SIP Phone.	01-20(Sec.)	3
Digit Map	Send setup to system numbering plan.	Max. 1000	
Emergency Code	The Emergency dial code for the SIP phone can be set through the Config file.	Max. 1000	
System Setting			
Feature Sync.	With Do Not Disturb and Call Forward feature synchronization ON, when SIP Phone changes the DND or Call Forward state, the system is informed of the change in status.	ON OFF	ON

Table 4.4.8.8-1 SIP PHONE PROVISIONING

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Auto Idle Timer	The phone goes idle after this timer when the phone receives a disconnect message or signal from the system.	00-99(Sec.)	5
Check Domain	The IP8800 SIP Phones can be configured to verify the domain in SIP messages match the registered proxy server.	OFF ON	ON
Telnet Usage	The IP8800 series phones can support Tenet access to the CLI.	Enable Disable	Disable
WEB Usage	The IP8800 series phones incorporate a Web server for access to the phone configuration files.	Enable Disable	Disable
Security Setting			
Cert File Format	The system supports two certification formats Privacy-Enhanced Electronic Mail (PEM) or Distinguished Encoding Rules (DER).**PEM(Normal), DER (Normal)**	Refer to description	PEM (Normal)
Crypt Mode	The system provisioning cryptosystem is configured to employ either RSA or ECC (Elliptic Curve Cryptography).	RSA ECC	RSA
TLS Version	TLS (Transport Layer Security) version can be selected. The default is TLS 1.2 for strong security.	TLS1.0 TLS1.2	TLS1.2
First TLS Crypto	SIP signaling TLS encryption primary key method. The system will be restarted after Save. • None, • AES_128_CBC_SHA, • ARIA_128_CBC_SHA, • AES_128_CBC_SHA256, • ARIA_256_CBC_SHA256	Refer to description	None
Second TLS Crypto	SIP signaling TLS encryption second key method. The system will be restarted after Save. • None, • AES_128_CBC_SHA, • ARIA_128_CBC_SHA, • AES_128_CBC_SHA256, • ARIA_256_CBC_SHA256	Refer to description	None
SRTP Usage	When implemented by the carrier, the system can encrypt media (RTP) packets employing SRTP (Secure Real-Time Transport Protocol).	Disable, Enable	Disable
First SRTP Crypto	The first priority Crypt method for SRTP. • None, • AES_CM_128_HMAC_SHA1_80, • ARIA_CM_128_HMAC_SHA1_80, • ARIA_CM_192_HMAC_SHA1_80	Refer to description	None
Second SRTP Crypto	The second priority Crypt method for SRTP. • None, • AES_CM_128_HMAC_SHA1_80, • ARIA_CM_128_HMAC_SHA1_80, • ARIA_CM_192_HMAC_SHA1_80	Refer to description	None

Table 4.4.8.8-1 SIP PHONE PROVISIONING

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
	• Save button: save provisioning for the specified common CONFTYPE or specific SIP Extension with Private MAC. • Store uploaded Provision files button: Store the uploaded provision files. • Download Provision files button: download the provision files. • View Provision files button: display all of the saved provisioning information. • View TLS Cert files button: display all of saved TLS Cert files information.		

4.4.8.9 Provisioning File View & Delete

Selecting Provisioning File View & Delete displays a list of all the Provisioning files stored in the provisioning files directory, as shown in the following figure. Note this does not include files that have been uploaded to iPECS eMG/UCP file system but not “stored” under PGM 212. To delete a file from the provisioning file directory, check the box in front of the file to be deleted, then click **[Delete]**.

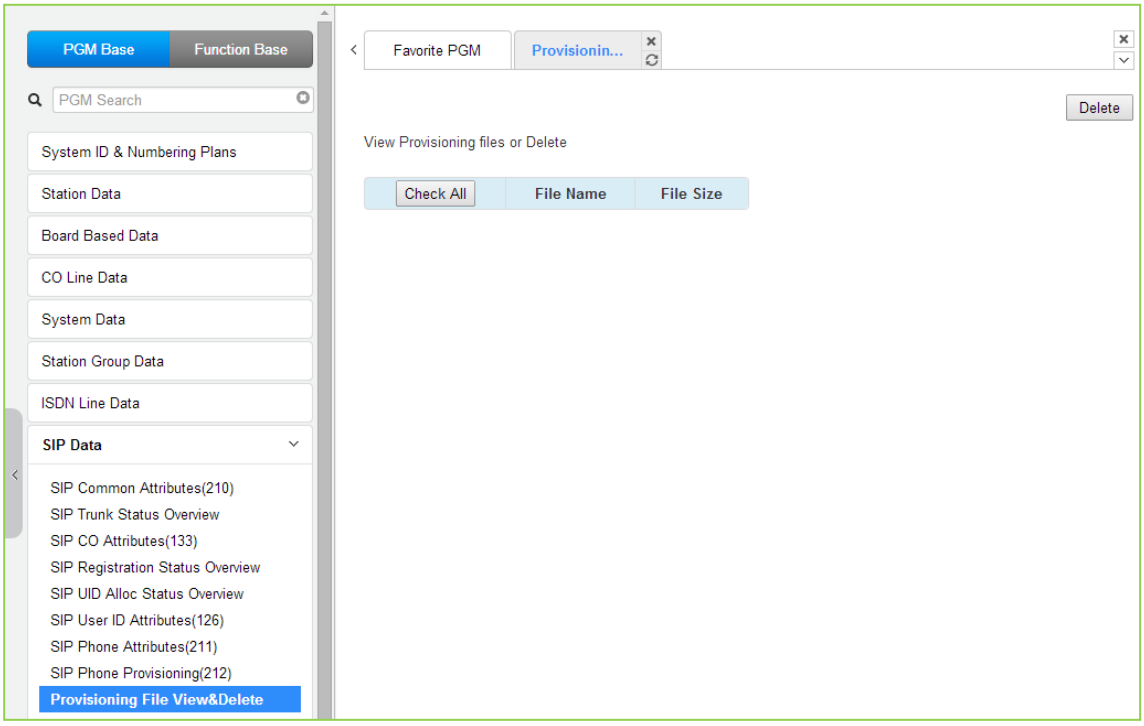


Figure 4.4.8.9-1 Provisioning File View & Delete

4.4.8.10 VMEX Station Data - PGM 215

Selecting VMEX Station data will display the VMEX Station Data input page as shown in the following figure. Enter a range, and click **[Load]** to view the VMEX Data for all stations in the range. Use the checkboxes to indicate the VMEX Station Data to modify. After modifying the data, click **[Save]** to store the VMEX Station Data.

Enter VMEX Station Index Range: eMG80/100: 1-140 / eMG800: 1-1200 / UCP: 1-2400

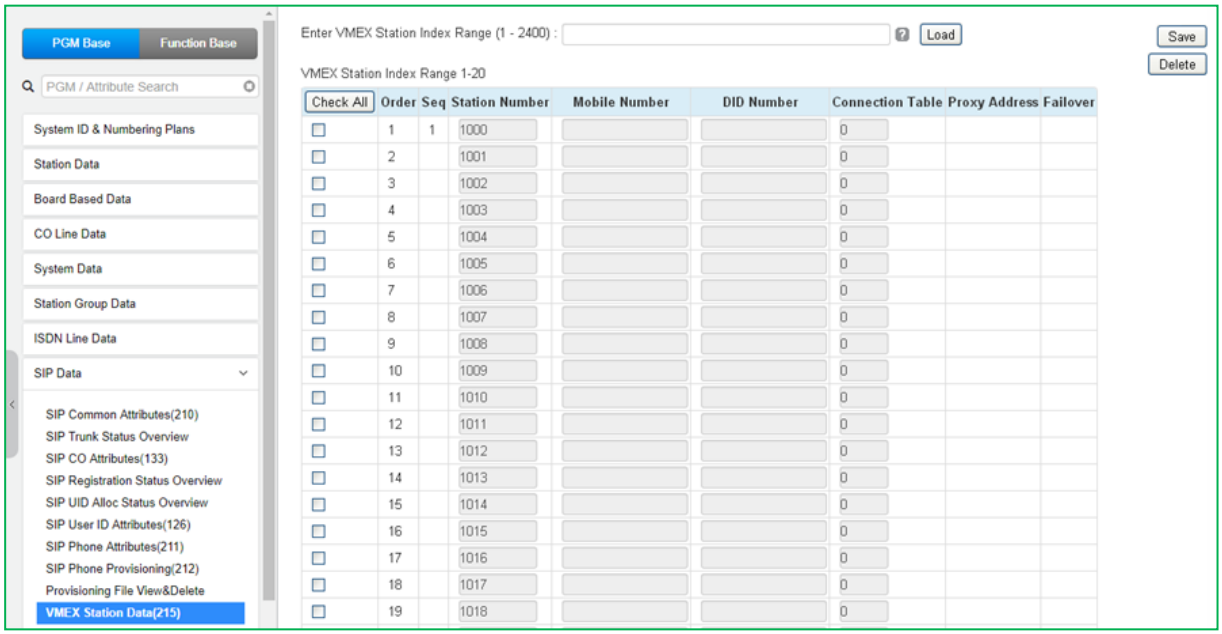


Figure 4.4.8.10-1 VMEX Station Data

The Virtual Mobile Extension feature permits a remote mobile phone to act as a station within the system employing SIP. Various parameters, as shown in the following table, must be configured for the Station data for proper operation.

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Station Number	The station number of the VMEX can be modified. The VMEX station number must not conflict with other numbering plans. The station number can be modified here or in PGM 105 and is affected by the 8 Digit Table	Station Number	
Mobile Number	The Caller Id of the Mobile phone must be entered to allow the system to recognize the VMEX phone. The mobile number here must match the number in the SIP From the header.		
DID Number	The DID number associated with the VMEX must be configured to allow for recognition of calls to the VMEX.		
Connection Table	An index to the Connection Table PGM 216 must be entered. One of ten indices can be assigned permitting the use of multiple SIP Call servers.	0 ~ 10	
Proxy Address	The SIP Proxy for the VMEX must be configured for access to the VMEX.		
Fail-over	The index (Station Number) of the Mobile Extension Table (PGM 236) can be assigned for Fail-over operation. In this case, the Table entry must be configured for fail-over operation.	Station Number	

4.4.8.11 VMEX Connection table - PGM 216

Selecting the VMEX Connection table will display the VMEX Connection Data input page. Use the checkboxes to indicate the Table index data to modify and click the **[Save]** button to store.

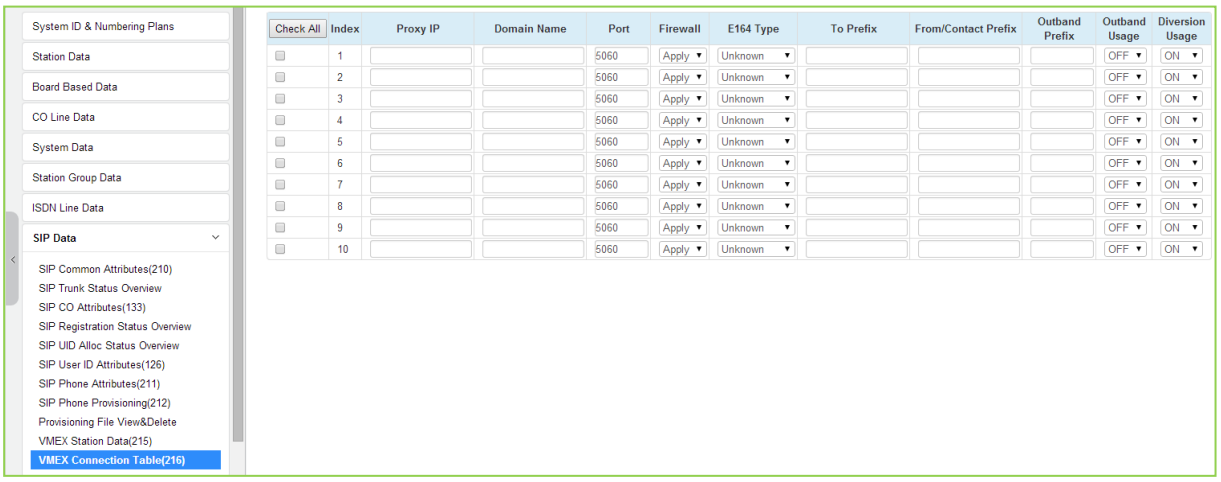


Figure 4.4.8.11-1 VMEX Connection Table

With VMEX, the carrier's Mobile network sends calls to and from the Mobile phone directly to the system employing a SIP Call server. The SIP Call server must be configured for proper operation, and special prefix codes must be defined for calls from and to the mobile phone.

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Proxy IP	This field assigns the IP address or URL of the Service Provider's SIP Proxy server.		
Domain Name	The Service Provider's SIP Call server's domain name is used in SIP "To:" headers.		
Port	Normally SIP signaling messages are sent on port 5060. If desired, a different port can be defined.		5060
Firewall	The iPECS system can use the Firewall address or LAN address of the iPECS system board when communicating with the VMEX.	Not/ Apply	Apply
E164	The structure of the received SIP invites To header from the VMEX can be defined for proper conversion. This field is not presently used. **Unknown, International, National, Local**	Refer to description	Unknown
To Prefix	A special prefix code is included in the SIP invite "To" header sent from the iPECS system to the carrier's SIP Call server to identify the VMEX service	3 to 5 digits	
From Contact Prefix	A special prefix code is included in the SIP invite "From" and "Contact" header sent from the iPECS system to the carrier's SIP Call server to identify the VMEX service	3 to 5 digits	
Outbound Prefix	A special prefix code must be in the SIP invite "To" header received by the iPECS system for calls from the VMEX. If the prefix received does not match this entry, the call is rejected.	8 digits	
Outbound Usage	Not used.		
Diversion Usage	Not used		

4.4.9 Tables Data

Selecting the Tables Data group returns the sub-menu displayed in the left frame as shown in the following figure.

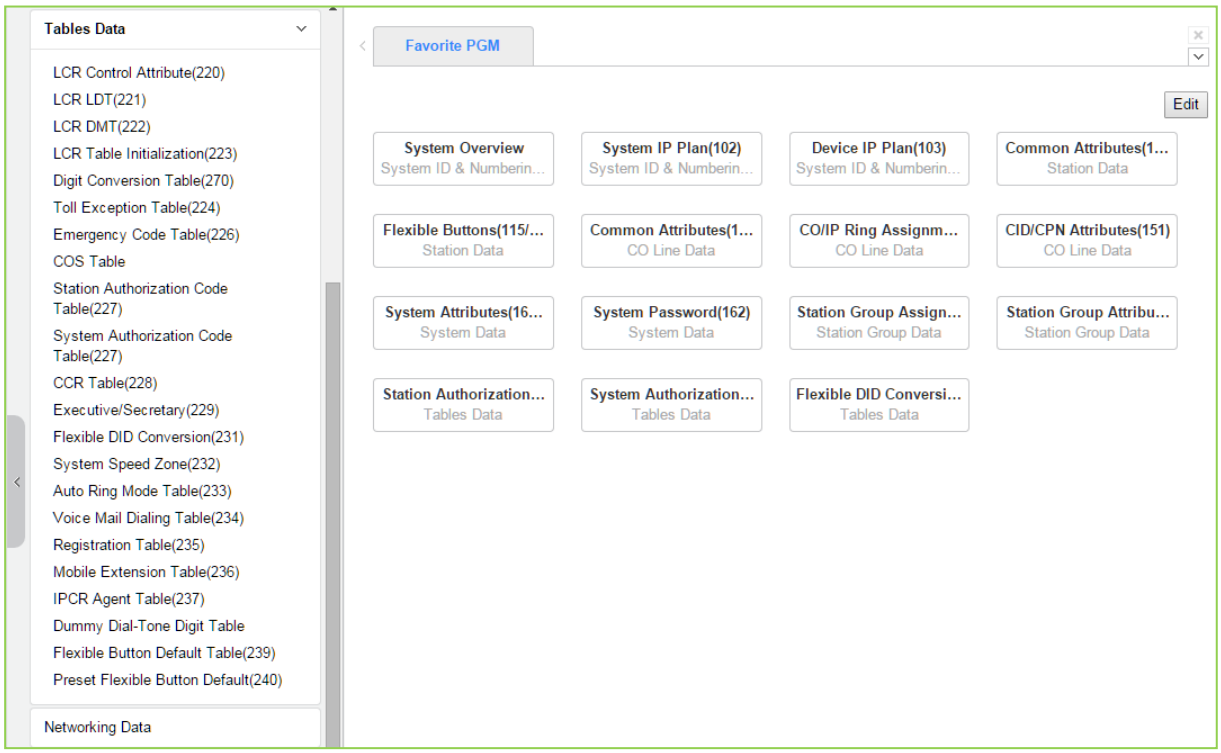


Figure 4.4.9-1 Tables Data

4.4.9.1 LCR Control Attributes - PGM 220

Selecting LCR Control Attributes will display the LCR Control Attributes data entry page. Click the **[Save]** button after changing Value.

The LCR Tables provide a mechanism to define the database, which will route outgoing calls, particularly long-distance, using the most cost-effective route.

User dialed digits are compared to table entries and modified appropriately based on time of day, day of the week, and assigned routes.

There are four LCR Tables, LCR Control Attributes, LCR Leading Digit Table, LCR Digit Modification Table, and LCR Initialization Table.

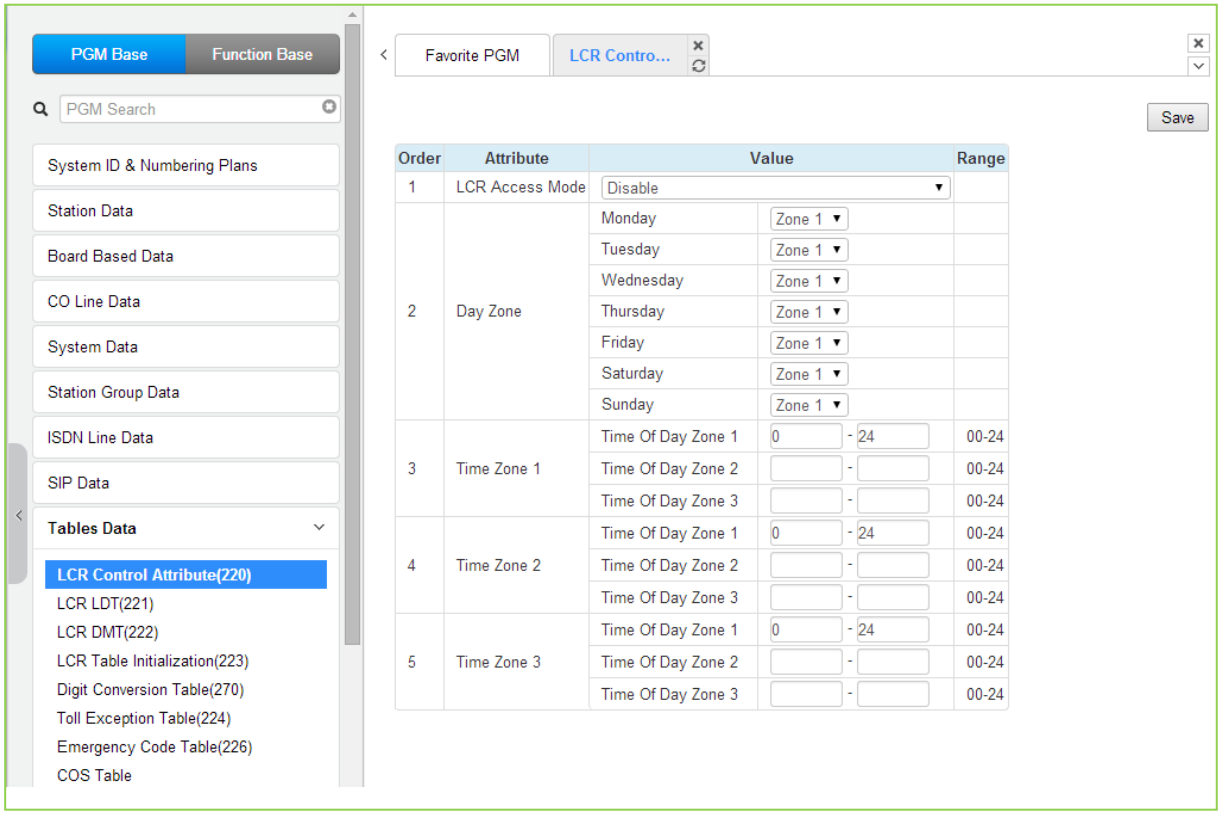


Figure 4.4.9.1-1 LCR Control Attributes

The LCR Control Attributes Table, among other items, allows assignment of the LCR Access Modes. The LCR Access Modes define the user operations that will access the LCR feature.

The LCR Access Modes are:

- LCR Disabled.
- Loop (user dials ‘9’ or CO/IP Group code (8xx), or presses a Loop button).
- Loop and Internal (user dials digits without a CO/IP Access Code prefix).
- Loop and Direct CO Line (user dials CO Line Access Code (88xx) or pressing a {CO line} button).
- Loop, Direct CO Line, and Internal.
- Internal, Loop, Direct CO, and Direct Loop.

In addition, days of the week are grouped into zones (Day Zones), and the time of day can be set into three groups (Time Zones). The following table provides general descriptive information and input ranges.

Table 4.4.9.1-1 LCR Control Attribute

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
LCR Access Mode	This entry defines the effective LCR modes, the modes by which the user can access LCR. Disable Only Loop LCR Internal and Loop LCR Loop and Direct CO LCR Internal, Loop, and Direct CO LCR Internal, Loop, Direct CO, and Direct Loop LCR	Refer to description	Disable
Day Zone	Each day of the week is assigned to a Day Zone (1~3). The active Day Zone is the Zone assigned to the current day of the week.	Zone1~3 (days of the week)	Zone 1
Time Zone1	This entry defines the hours of the day during which each Zone is active for Time Zone 1. Note hours not defined in Time Zone 2 and 3 are automatically part of Time Zone 1.	00~24	00~24
Time Zone2	This entry defines the hours of the day during which each Zone 2 is active for Time Zone 2. Note hours not defined in Time Zone 2 and 3 are automatically part of Time Zone 1.	00~24	00~24
Time Zone3	This entry defines the hours of the day during which Zone 3 is active for Time Zone 3. Note hours not defined in Time Zone 2 and 3 are automatically part of Time Zone 1.	00~24	00~24

4.4.9.2 LCR LDT (Leading Digit Table) - PGM 221

Selecting LCR-LDT (Leading Digit Table) will display the LCR-LDT data entry page. Select the LDT Index range desired, the blue text above the table header. Click the **[Save]** button after changing Value.

Enter LDT Table Index Range: eMG80/100: 1-10 / eMG800: 1-32 / UCP: 1-32

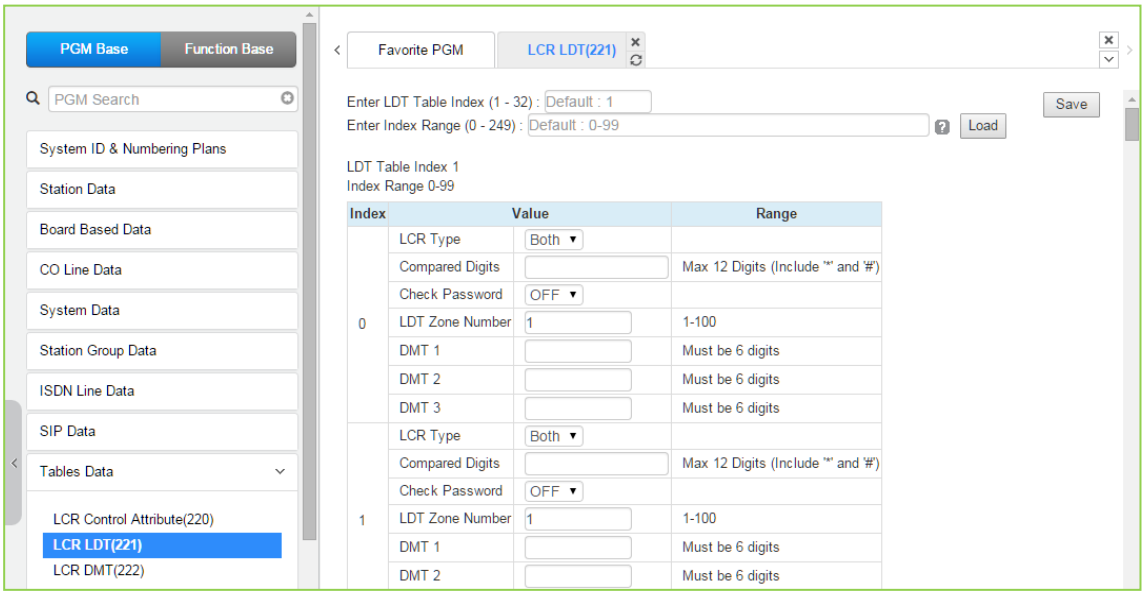


Figure 4.4.9.2-1 LCR Leading Digit Table

The Leading Digits Table is used to analyze the user-dialed digits to determine an appropriate Digit Modification Table Index.

LDT Tables are provided for 10 for eMG80/100 system& 32 for eMG800/UCP system. The Table is divided into bins. The user's applicable LCR Access Modes (LCR Type) and the digits (up to the first 12) dialed are compared with the entries in the Leading Digit Table.

In addition, indices to the Digit Modification Table are defined for each of the three (3) Zones and Time Zones configured in the LCR Control Attributes. The following table provides a brief description and entries for the Leading Digit Table.

Table 4.4.9.2-1 LCR LEADING DIGITS

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
LCR Type	This entry defines the LCR modes that will apply to this LDT index.	Internal, CO Line, Both	Both
Compared Digits	Up to 12 digits that, if matched by the user dialed digits, will access the DMT Indices of the associated Leading Digit Table bin.	Max. 12 digits (Include * and #)	
Check Password	If enabled (ON), when the dialed digits match the LDT digits, the system will send a second dial tone to request the user input a valid Authorization code.	OFF ON	OFF
LDT Zone Number	If the LDT Zone Number of a station/co line is equal to this value, this LDT table is available to the station/co line.	1-100	1

Table 4.4.9.2-1 LCR LEADING DIGITS

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
	(Station Data->Common Attributes(111), CO Line Data->Common Attributes(140))		
DMT1	This entry defines the Digit Modification Table index (00~99) for each Time Zone for Day Zone 1. The appropriate index will be selected for the current Day and Time Zone. One entry (DMT index) is made for each Time Zone, six (6) digits.	Must be 6 digits 3 DMT indices	
DMT2	This entry defines the Digit Modification Table index (00~99) for each Time Zone for Day Zone 2. The appropriate index will be selected for the current Day and Time Zone. One entry (DMT index) is made for each Time Zone, six (6) digits.	Must be 6 digits 3 DMT indices	
DMT3	This entry defines the Digit Modification Table index (00~99) for each Time Zone for Day Zone 3. The appropriate index will be selected for the current Day and Time Zone. One entry (DMT index) is made for each Time Zone, six (6) digits.	Must be 6 digits 3 DMT indices	

4.4.9.3 LCR DMT (Digit Modification Table) - PGM 222

Selecting LCRDMT (Digit Modification Table) will display the LCR-DMT data entry page. Enter the DMT Table Index range, then click **[Load]** to modify the DMT data. Click the **[Save]** button after changing Value.

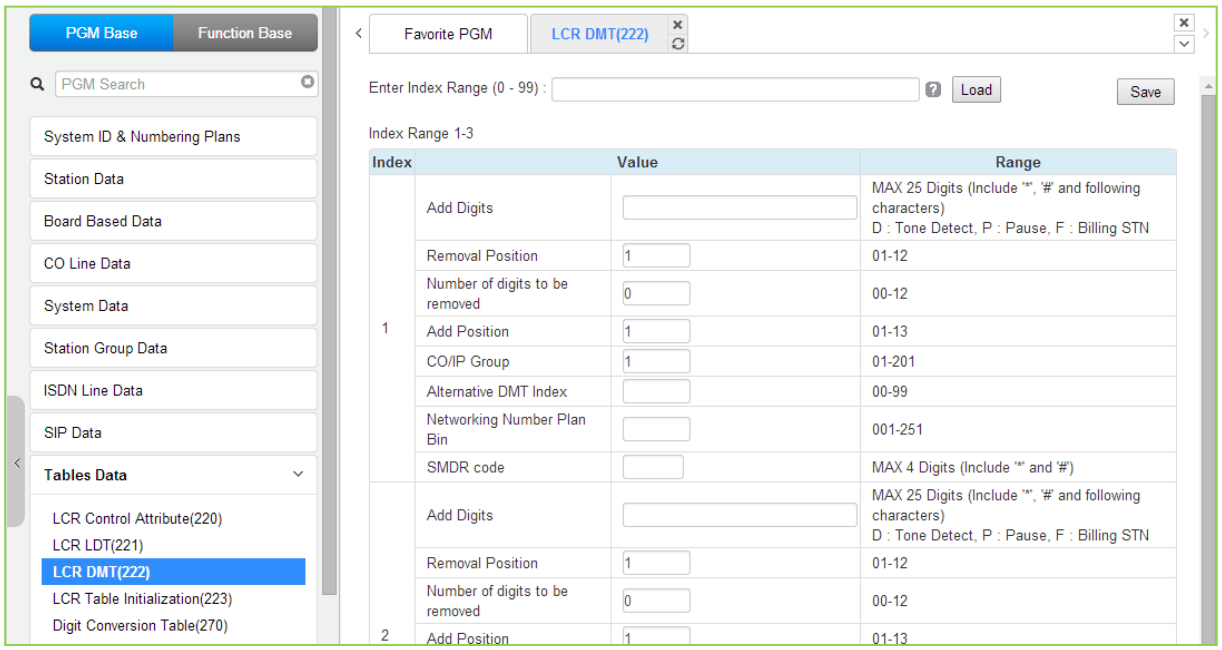


Figure 4.4.9.3-1 LCR Digit Modification Table

Using the index determined from the LCR Leading Digits Table analysis, the dialed number is modified following the Digit Modification Table and sent over the CO/IP group assigned for the index.

Digits of the dialed number can be deleted based on the “Removal Position” and “Number of digits to be removed” entries, and a digit stream can be inserted in the resulting number. Counting from the first dialed digit, the Removal Position defines the location of the digit where removal begins and, the number of digits to be removed defines the number of digits to remove. The “Add Digits” are then inserted in the resulting number at the digit position assigned by the Add Position entry. The resulting number is then dialed over the CO/IP path assigned. If the assigned path is not available, the “Alternate DMT index” is used to determine the number and CO/IP path to be used.

Table 4.4.9.3-1 LCR DIGIT MODIFICATION

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Add Digits	This entry defines the digit stream to insert in the number after digit removal. Digits 0~9, '*, ‘'#, ‘and special characters, • P: timed Pause • D: Dial tone detect • F: Billing station number	Max. 25 digits	
Removal Position	This entry defines the position of the digit where removal is to begin, starting with the 1st dialed digit (01).	01~12	1
Number of digits to be removed	This entry defines the number of digits to remove starting at the “Removal Position	00~12	0
Add Position	This entry defines the position in the number after digit removal, where the Add Digits are inserted.	01~13	1

Table 4.4.9.3-1 LCR DIGIT MODIFICATION

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
CO/IP Group	This entry defines the CO/IP Group that the system will attempt to use for the call.	eMG80/100:01-21 eMG800:01-201 UCP: 01-201	1
Alternative DMT Index	This entry defines an Alternate Digit Modification Table Index to use if no path is available in the assigned CO/IP Group.	00~99	
Networking Number Plan Bin	This entry defines the Net Number Plan Table bin that the system will attempt to use for the transit outcall.	001-251	
SMDR Code	This is only used for TNET with CM. This code will be sent to CM when the TNET status is changed from Local survival mode to bypass mode.	Max. 4 digits (Include * and #)	

4.4.9.4 LCR Table Initialization - PGM 223

Selecting LCR Table Initialization will display the LCR Table Initialization data entry page. Click the **[Initialize]** button to initialize input data.

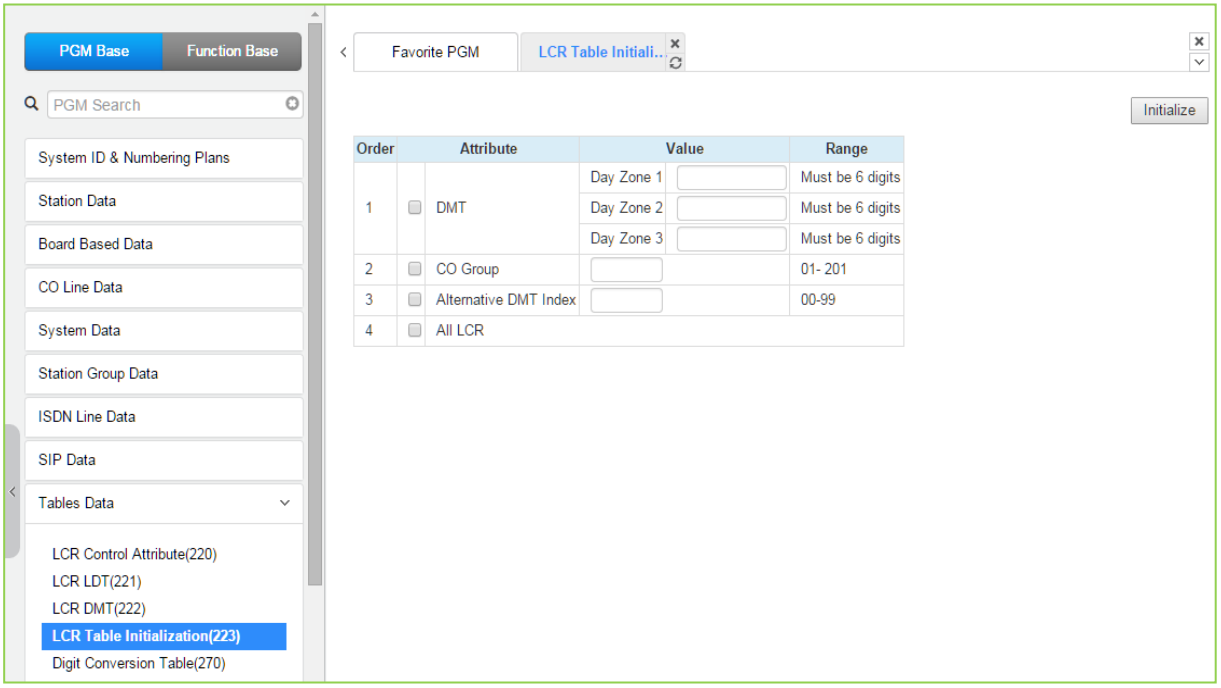


Figure 4.4.9.4-1 LCR Table Initialization

The LCR Table Initialization allows global values to be assigned to the various Digit Modification Table entries. In addition, the LCR Leading Digits and LCR Digit Modification Tables can be initialized to the default (no entries) state.

The CO group range is from 1 to 21 for eMG80/100 and 1 to 201 for eMG800/UCP.

4.4.9.5 Digit Conversion Table - PGM 270

Selecting Digit Conversion Table will display the page shown. Click the **[Save]** button after changing Value.

EnterTable Number: eMG80/100: 1-15 / eMG800: 1-32 / UCP: 1-32

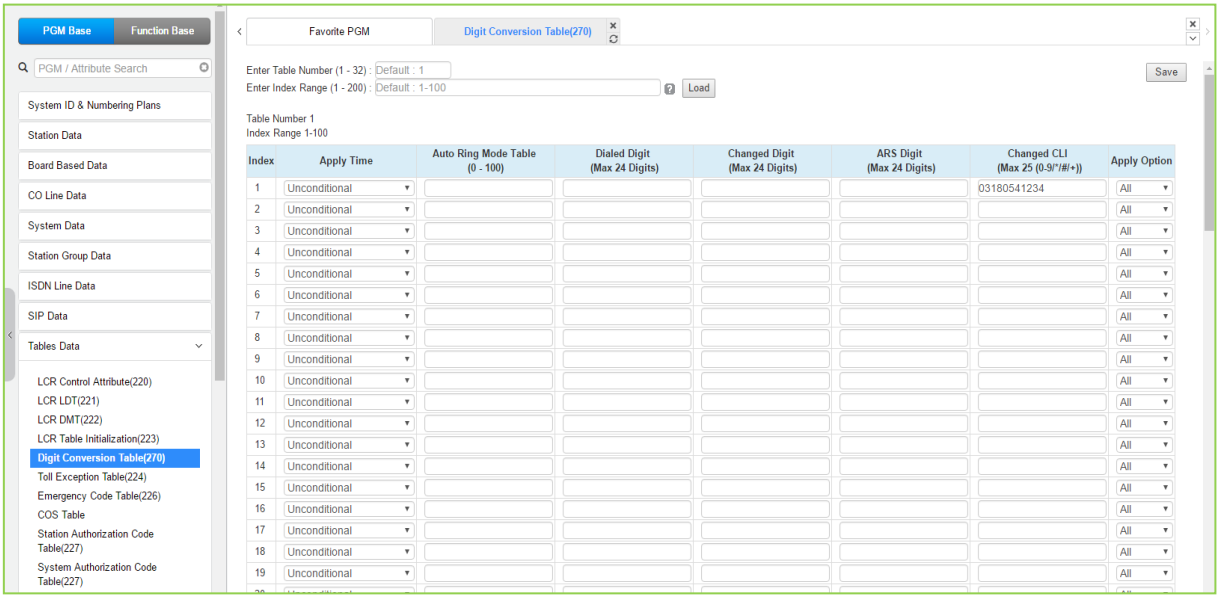


Figure 4.4.9.5-1 Digit Conversion Table

The Digit Conversion Table index is assigned to the Station and CO line. In addition, as necessary, digit conversion can be applied according to the Apply Time Type (Unconditional, Day/Night/Timed, or LCR/Time). Each Table has 200 entries of up to 24 digits. Entries in the Tables can be any digit (0-9), “*,” “#,” X” (Mask Digit), “F” (Ignore digit). Each Index can be applied by Apply Option (All/Station/CO line/Disable).

Table 4.4.9.5-1Digit Conversion table

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Apply time	The Apply time type is to be applied when the dialed digit is dialed. **Unconditional, Follow Day/Night/Timed, Follow LCR**	Refer to description	Un conditional
Auto Ring Mode table	Day/Night/Timed Time Table Index. **N/A, eMG:00-15, UCP:00-100**	Refer to description	
Dialed digit	It is the dialed digit to be compared.	Max. 24 Digits	
Changed digit	Changed digit.	Max. 24 Digits	
ARS Digit	Suppose a selected path is not available for some reason (All Busy, Line Fault, etc.) after digit conversion. In that case, Alternative Route Selection (ARS) will connect calls using predefined designated ARS digits in the digit conversion table.	Max. 24 Digits	
Changed CLI	The different CLI as Changed CLI according to Dialed digit can be sent.	Max. 25 Digits	
Apply option	The Apply Option can be applied according to the caller. **All, Station, CO line, Disable**	Refer to description	All

4.4.9.6 Toll Exception Table - PGM 224

Selecting the Toll Exception Table will display the Toll Table data entry page. Select the desired Allow or Deny Table, the blue text above the table header, desired. Click the **[Save]** button after changing Value.

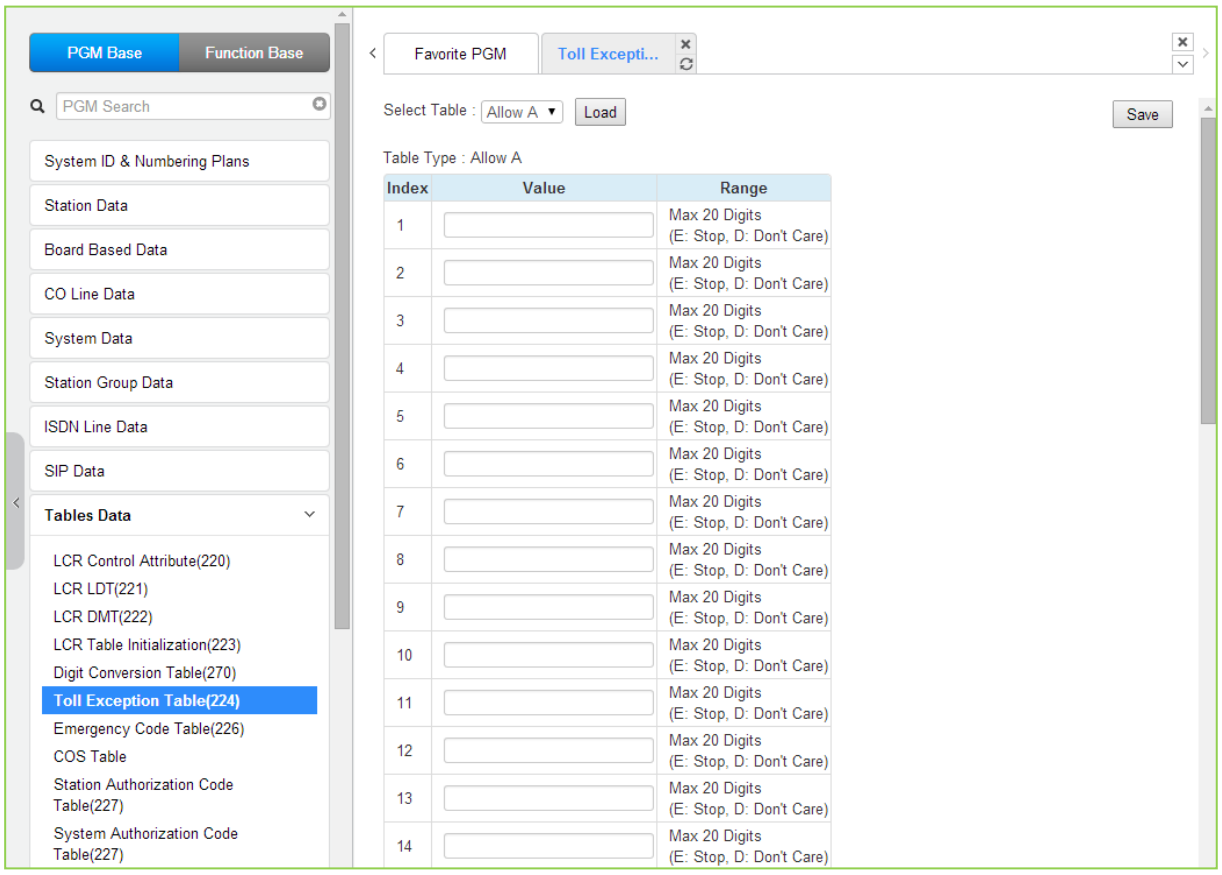


Figure 4.4.9.6-1 Toll Exception Table

There are ten Toll restriction Tables arranged in pairs. Each pair consists of an Allow Table and a Deny Table. Allow and Deny entries for Table `A‘ apply to Station and DISA Class of Service 2/4 and 11. Allow and Deny entries for Table `B‘ apply to Station and DISA Class of Service 3/4 and 11. Allow and Deny entries for Table `C‘ apply to Station and DISA Class of Service 5 and 6. Allow and Deny entries for Table `D‘ apply to Station and DISA Class of Service 8/10 and 11. Allow and Deny entries for Table `E‘ apply to Station and DISA Class of Service 9 to 11. The Allow and Deny Tables each permitted up to 50 entries of up to 20 digits. Entries in the Tables can be any digit (0-9), “#” as a wild card (don‘t care) digit, or “*” as an end of entry digit.

Based on Table entries, stations or DISA users are allowed or denied dialing specified numbers. The following rules apply to establishing restrictions based on the Table entries:

- No restrictions are applied if the appropriate Allow/Deny Table pair has no entries and COS is 2 to 4. If the COS is 5 or 6, no Long-Distance dialing is allowed.
- If entries are only made in the Allow Table, only those numbers entered can be dialed. All other dialed numbers will be restricted.
- If entries are only made in the Deny Table, only those numbers entered will be restricted, and all other numbers can be dialed.
- When there are entries in both the Allow and Deny Table pair, the number will be restricted if the number is in the Deny Table. Otherwise, the number can be dialed without restriction.

4.4.9.7 Emergency Code Table - PGM 226

Selecting Emergency Code Table will display the Emergency Code Table data entry page. Click the **[Save]** button after changing Value.

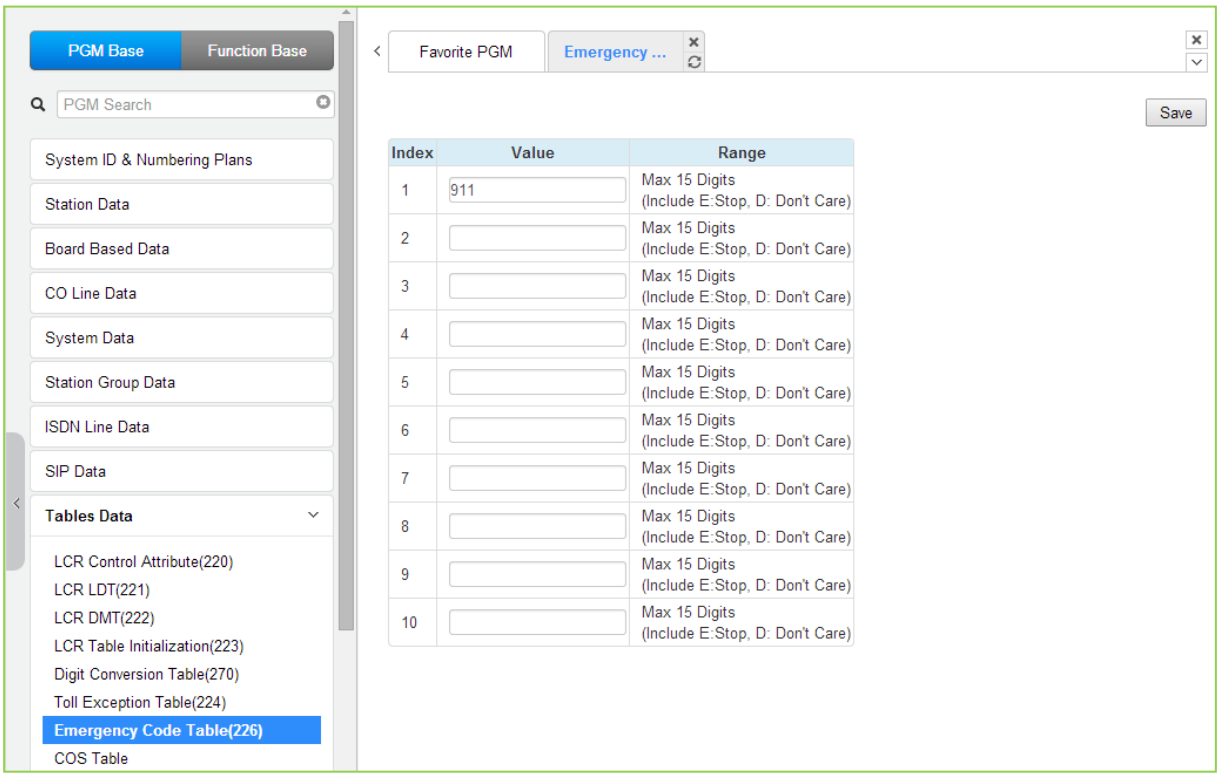


Figure 4.4.9.7-1 Emergency Code Table

The Emergency Code Table is used to identify emergency numbers that will override all COS dialing restrictions when dialed. An Emergency Code number may be up to fifteen (15) digits in length.

4.4.9.8 COS Table

Selecting COS Table will display the COS Table data entry page. Data can be filtered to display specific modes, and the values to change can be limited to a specific mode and type, Station or System Authorization codes.

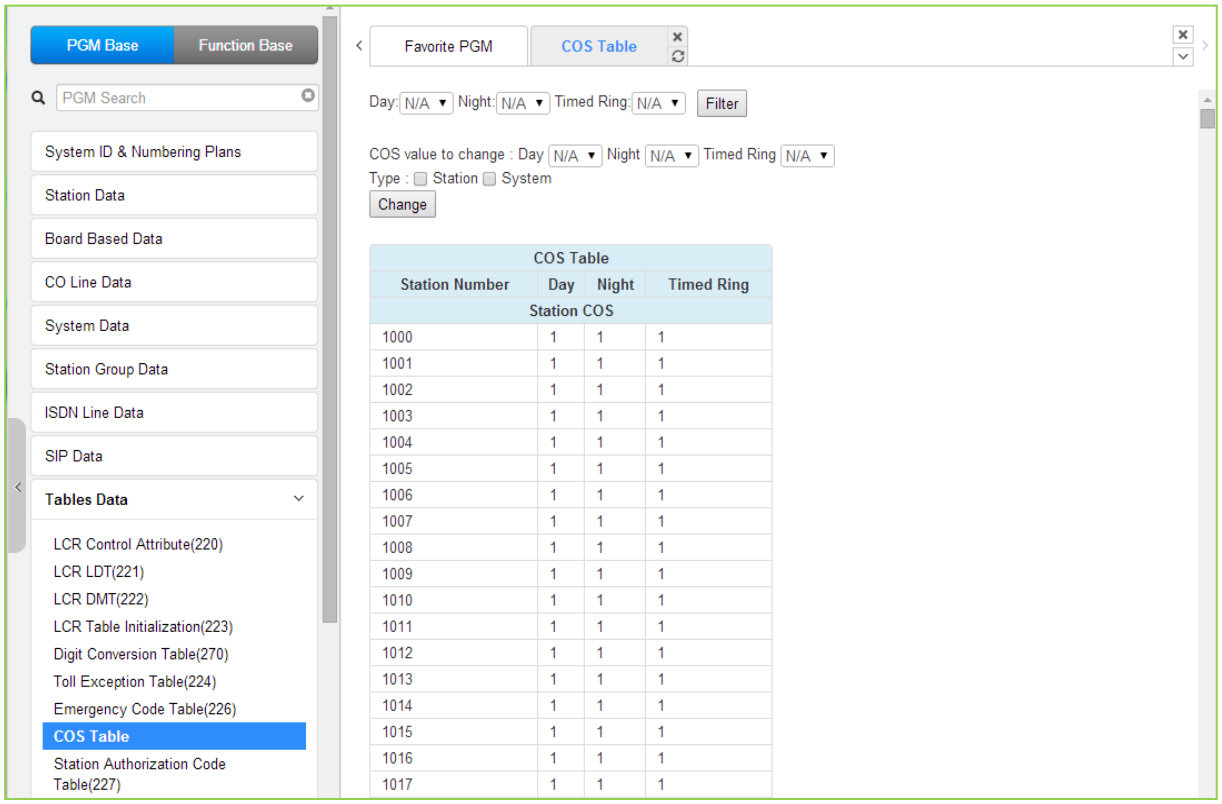


Figure 4.4.9.8-1 COS Table

Assignments for COS are made for the Day, Night, and Timed Ring for each station and system Authorization code. The standard Station COS 1 to 11 is assigned to each Authorization code. Note the COS may also be defined in the Station and System Authorization Code Tables.

4.4.9.9 Authorization Codes Table - PGM 227

There are two Authorization Code Tables, the System Authorization Code Table and Station Authorization Code Table.

Selecting Station Authorization Code Table will display the data entry page in Figure 4.4.9.9-1, and selecting System Authorization Code Table will display the page in Figure 4.4.9.9-2.

Enter a Station or System Index range and click **[Load]** to modify the data. For convenience, the copy, paste, and drag are available to enter or modify data. Please click the **[Save]** button to apply after changing Value.

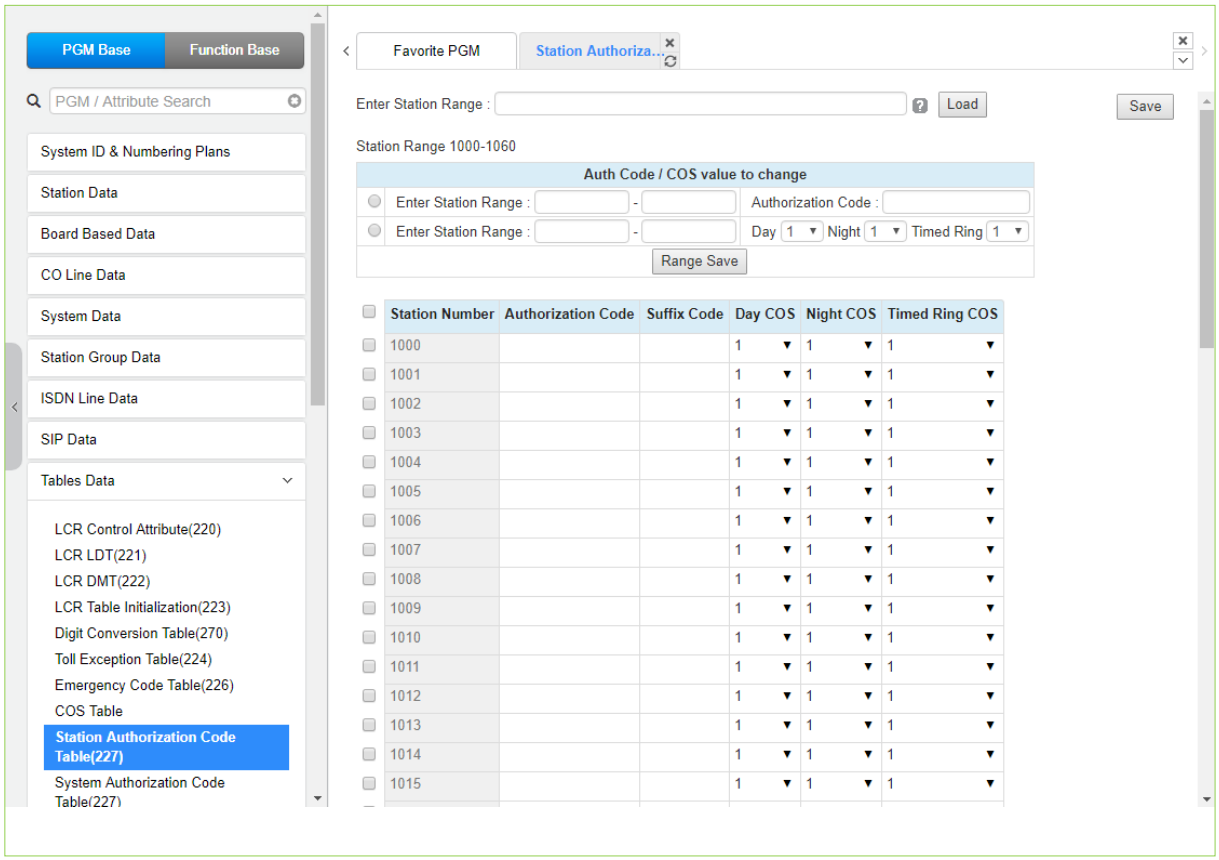
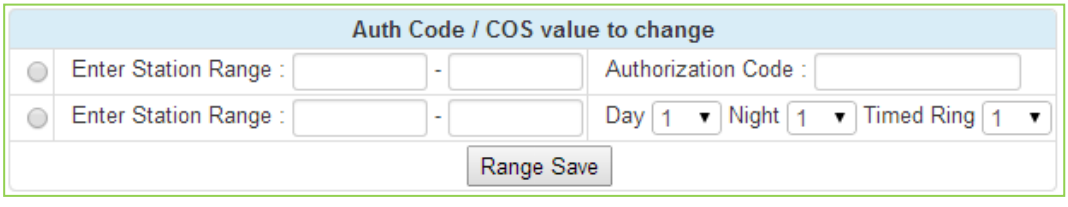


Figure 4.4.9.9-1 Station Authorization Code Table



Users can change the authorization code and COS for the station range across the board and click the Range save button to save.

You can use the suffix code, which is 8 characters in length when the station user accesses to station web admin, user portal, or click to call service for security enhancement.

A station user has to input the code after the authorization code if the code is set. If you don't set the code, the station user doesn't need the code. The station user can access with only the authorization code.

Enter System Index Range: eMG80/100: 1-360 / eMG800: 1-1200 / UCP: 1-2800

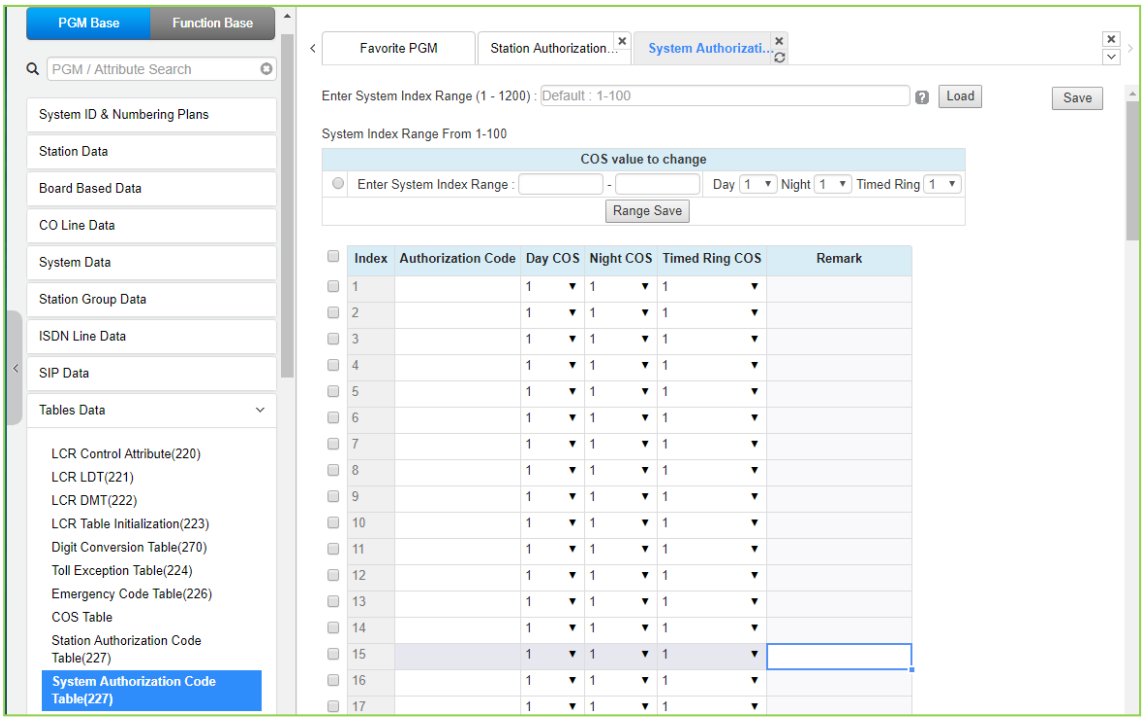
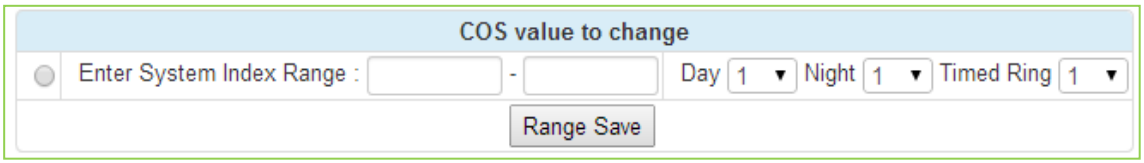


Figure 4.4.9.9-2 System Authorization Code Table



Users can change COS for the system index range across the board and click the Range save button to save.

Authorization codes are employed to control access to system resources and facilities. Walking COS, CO/IP Group access, DISA calls, and certain Call Forward types may require the input of a valid Authorization code. Codes up to 12 digits may be entered into the system database.

There are two types of Authorization codes, station, and system. The Station entries are associated with individual stations. The number of system Authorization codes varies based on the configuration; the number of available codes is provided in Table 2.1-x. Each Authorization code may be assigned a separate COS for Day, Night, and Timed Ring mode operation.

The system will allow the station-associated Authorization codes to be duplicated. However, the iPECS will not allow duplicate or conflicting system level codes unless the '*' and Authorization table indexing is used to enter codes. Conflicting codes occur when a shorter code contains the first digits of a longer code, i.e., 12 conflicts with 1234.

Table 4.4.9.9-1 STATION/CO LINE COS TOLL RESTRICTIONS

	CO COS 1	CO COS 2	CO COS 3	CO COS 4	CO COS 5
STA COS 1	No Restriction	No Restriction	No Restriction	Only Local Call(LD code/counter) and Table C	No Restriction
STA COS 2	Exception Table A governs the dialing	Exception Table A governs the dialing	No Restriction	Only Local Call(LD code/counter) and Table C	No Restriction
STA COS 3	Exception Table B governs the dialing	No Restriction	Exception Table B governs the dialing	Only Local Call(LD code/counter) and Table C	No Restriction
STA COS 4	Exception Table A & B governs the dialing	Exception Table A governs the dialing	Exception Table B governs the dialing	Only Local Call(LD code/counter) and Table C	No Restriction
STA COS 5	Local Call only (LD Code, “1” or “0”) and Table C	Local Call only (LD Code, “1” or “0”) and Table C	Local Call only (LD Code, “1” or “0”) and Table C	Only Local Call(LD code/counter) and Table C	No Restriction
STA COS 6	Only Local Call (LD code/counter) and Table C	Only Local Call (LD code/counter) and Table C	Only Local Call (LD code/counter) and Table C	Only Local Call(LD code/counter) and Table C	No Restriction
STA COS 7	In-house dialing only	In-house dialing only	In-house dialing only	In-house dialing only	In-house dialing only
STA COS 8	Exception Table D governs the dialing	Exception Table D governs the dialing	No Restriction	Only Local Call(LD code/counter) and Table C	No Restriction
STA COS 9	Exception Table E governs the dialing	Exception Table E governs the dialing	No Restriction	Only Local Call(LD code/counter) and Table C	No Restriction
STA COS 10	Exception Table D & E governs the dialing	Exception Table D & E governs the dialing	No Restriction	Only Local Call(LD code/counter) and Table C	No Restriction
STA COS 11	Exception Table A & B and D & E governs the dialing	Exception Table A & B and D & E governs the dialing	No Restriction	Only Local Call(LD code/counter) and Table C	No Restriction

Table 4.4.9.9-2 STATION CLASS-OF-SERVICE

STATION COS	RESTRICTIONS
1	No restrictions are placed on dialing from the station.
2	The assignments in Exception Table A are monitored for allowing and deny numbers.
3	The assignments in Exception Table B are monitored for allowing and deny numbers.
4	The assignments in both Exception Tables A & B are monitored for allowing and deny numbers.
5	The leading digit dialed cannot be a Long-Distance code, default “0”, and further denied/allowed based on Exception Table C.

Table 4.4.9.9-2 STATION CLASS-OF-SERVICE

STATION COS	RESTRICTIONS
6	The leading digits dialed cannot be a Long-Distance code & digit count cannot exceed the LD digit counter, default 8 digits, and further denied/allowed based on Exception Table C.
7	Intercom and paging calls are allowed. No outgoing dialing except for emergency calls is allowed on CO Lines.
8	The assignments in the Exception Table D are monitored for allowing and deny numbers.
9	The assignments in the Exception Table E are monitored for allowing and deny numbers.
10	The assignments in the Exception Table D & E are monitored for allowing and deny numbers.
11	The Exception Table A & B and D & E assignments are monitored for allowing and denying numbers.

4.4.9.10 Customer Call Routing Table - PGM 228

Selecting CCR Table will display the Customer Call Routing data entry page. Enter an index to select the appropriate CCR Table and click **[Load]** to modify the table. Click the **[Save]** button after changing Value.

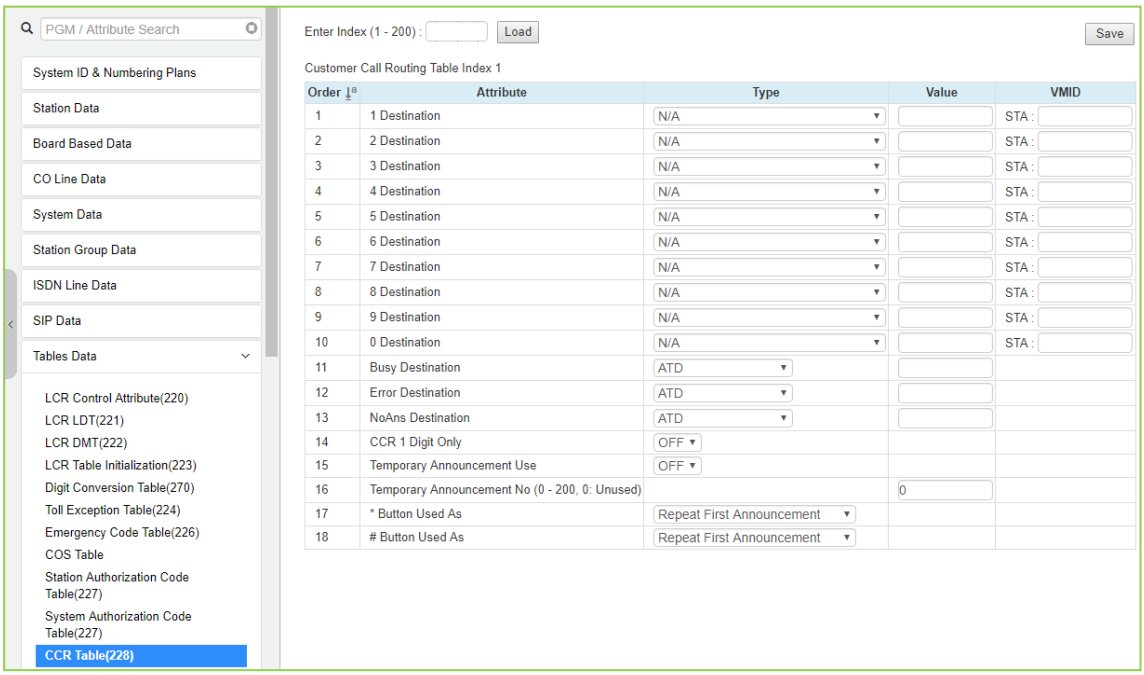


Figure 4.4.9.10-1 Customer Call Routing Table

The system incorporates IVR (Interactive Voice Response) capabilities called CCR (Customer Call Routing). After or during a VSF Announcement, the caller may dial digits to select a destination or route for the call. The CCR Table defines the destination type and value associated with the digit dialed by the caller in response to the index, a VSF Announcement (01-200). The available destinations are shown in Table 4.4.9.10-1 below.

Up to 70 single-level Audio Text menus may be assigned or, multi-level menu structures (maximum 70 levels) can be established using one menu as a destination for the previous level. Each CCR announcement can have a re-route destination – Busy / Error / No Answer case.Each re-routed destination types are Tone / Attendant / Station Group / VSF Announcement number / Station / System Speed / Networking / Voice Mail (Station group).

The table includes a “CCR 1 Digit Only” option. When this option is enabled, the system will accept only a single digit as the entry. When the option is OFF, the caller can dial multiple digits that are accepted as DISA dialing.

The temporary announcement can be used in holiday or emergency cases. When Temporary Announcement Usage is set to ON, programmed Temp Announcement is played instead of CCR table announcement. This TemporaryAnnouncement can also be set by Remote Access - by using the [Remote Access to Mobile Extension] feature.

After access to Mobile Extension,

- To turn On Temp Announcement, 8 + CCR Announcement Number.
- To turn Off Temp Announcement, 9 + CCR Announcement Number.

[*] Button Used As, [#] Button Used As has 3 available options for [*] or [#] button

- Repeat First Annc
- Repeat Current Annc

- Access Voice Mail Remotely

Table 4.4.9.10-1 CCR DESTINATIONS (PGM 228)

TYPE	DESCRIPTION
00	N/A
01	Route to a Station
02	Route to a Station Group
03	Route with System Speed Dial
04	Route as PBX Transfer with System Speed Dial (Flash then dial speed dial digits)
05	Route to VSF Announcement
06	Route to VSF Announcement and disconnect
07	Route to Networked Station
08	Conference Room
09	Internal Page
10	External page
11	All Call Page
12	Route to voice mail (station group/station number)
13	Company Directory
14	Record VM Greeting
15	Room Type Conf Group Join (Value: system conference group number) (Value Range: eMG80/100(0 or 100~139), eMG800/UCP(0 or 100~259)

4.4.9.11 Executive/Secretary Table - PGM 229

Selecting Executive/Secretary will display the Executive/Secretary Table data entry page. Click the **[Save]** button after changing Value.

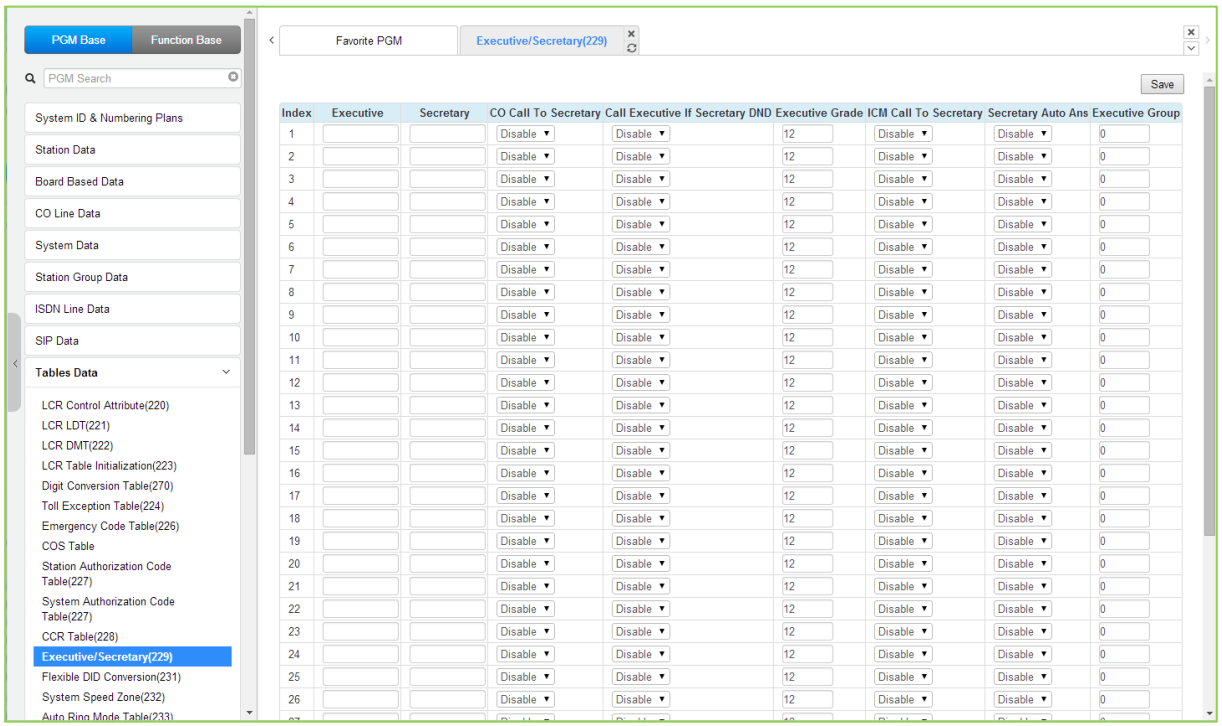


Figure 4.4.9.11-1 Executive/Secretary Table

Stations can be paired as Executive/Secretary pairs so that when the Executive enters DND, intercom, and transfers calls are automatically routed to the Secretary. An Executive may have only one Secretary; however, a Secretary can be assigned to multiple Executives. A Secretary of one pair may be the Executive of another; however, assignments that form a loop-back are not allowed. In addition, when active, the Secretary can be assigned to receive the Executive‘s voice messages. Refer to the Common Attributes section.

The “CO Call to Sec” option will route all CO calls to the Executive to the defined Secretary‘s station regardless of the Executive‘s station status. The “Call Executive if Secretary DND” option will route Executive calls back to the Executive if the Secretary is in DND.

The Exec Grade permits higher grade Executives to override the Executive/Secretary Forward feature to call a lower grade Executive (Korea only). The highest grade is 1, and the lowest grade is 12. The “ICM Call to Secretary” option will route all internal calls to the Executive(except for calls from higher or same grade executive) to the defined Secretary‘s station regardless of the Executive‘s station status.

Refer to the following table for a description of the Executive/Secretary parameters and the input required.

Table 4.4.9.11-1 Executive/Secretary Table

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Executive	Assign Executive.		
Secretary	Assign Secretary.		
Executive grade	Higher (or equal) grade Executives can override the Executive/Secretary Forward feature (5th: ICM call to SEC) to call a lower grade Executive. Highest grade: 01, Lowest grade: 12.	01~12	12

Table 4.4.9.11-1 Executive/Secretary Table

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Executive Group	If Group is greater than 1, it works that lower grade executives can call higher grade executives directly when they are in the same group.	00-50	00
ICM Call to Secretary	If this option is ON, all internal calls to the executive station (except for calls from higher or same grade executive) are routed to the Secretary's station regardless of the Executive's status. 8801 Default value Korea, India, Israel, Turkey, Thailand: ON Otherwise: OFF	Enable/ Disable	Disable
CO Call to Secretary	If desired, all incoming CO calls to the Exec. The call is routed to the Secretary's station regardless of the Executive's status.	Enable/ Disable	Disable
Call Executive if Secretary is in DND	If the Secretary is in DND, Executive calls can be routed back to the Executive.	Enable/ Disable	Disable
Call Executive If High Secretary	If this value is set to ON, the high-grade secretary calls to low-grade executive, although ICM Call To Secretary option is ON.	Enable/ Disable	Disable
Secretary Auto Answer	When the executive calls the secretary who is in the 'T' mode, The call will be answered in hands-free mode if it is ON.	Enable/ Disable	Disable

4.4.9.12 Flexible DID Conversion Table - PGM 231

Selecting the Flexible DID Conversion Table will display the Flexible DID Table data entry page. For convenience, the copy, paste, and drag are available to enter or modify data. Click the **[Save]** button after changing Value. Click **[Initialize All table Data]** to initialize all tables and Click **[Delete All Table Data]** to delete.

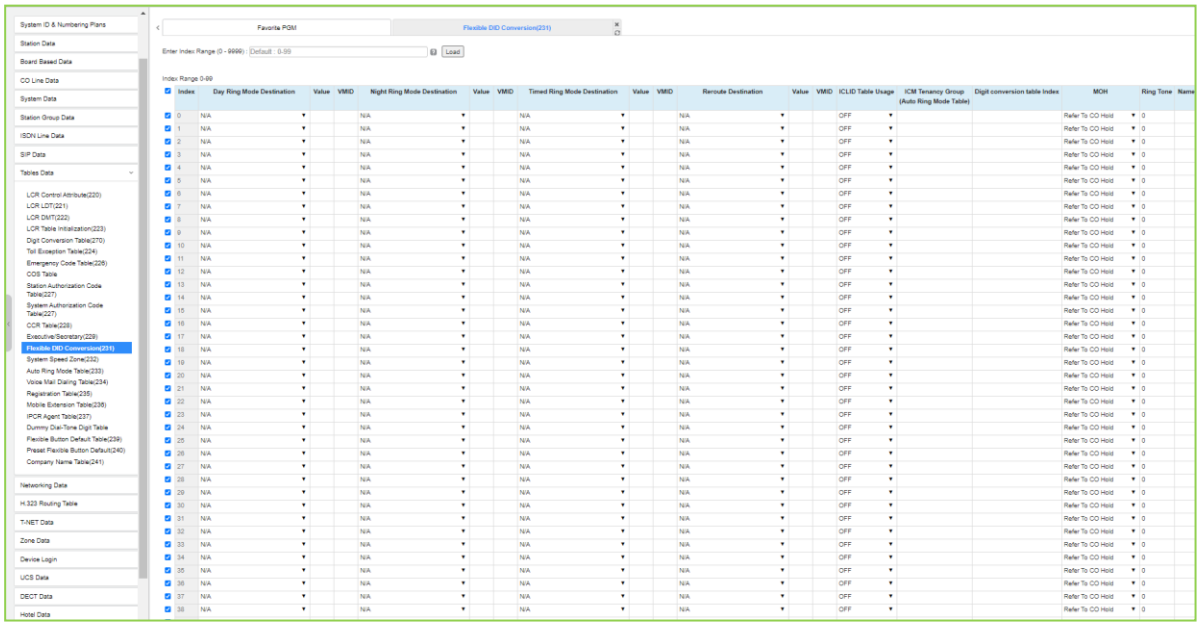


Figure 4.4.9.12-1 Flexible DID Conversion Table

When the received DID digits are converted, the resulting three-digit number may be used as an index to the Flexible DID Conversion Table.

The Flexible DID Table index is used when DID Line is assigned a Conversion type 2. Refer to the DID Service attributes section 4.4.4.6. Using the digit conversion index, a DID a Look-up determines call destination in the Flexible DID Table.

The destination for the call is generally defined as a type and a value. The type selects options such as station, station group, VSF, etc. The value specifies the particular station, station group, etc. In addition, ICLID routing can be enabled for DID lines or can be assigned as an index to the Auto Ring Mode table.

Table 4.4.9.12-1 FLEXIBLE DID CONVERSION

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Day Ring Mode Destination	Destination setting for Day Ring mode.	• N/A, • Station, • Station Group, • System Speed, • PABX transfer with system speed, • VSF announcement, • VSF announcement and Disconnect, • Networking • Conference room, • Internal page • External page, • All call page • Voice mail (Station group), • ICLID Table • Company Directory, • Record VM Greeting, • Room Type Conf Group Join	N/A
Night Ring Mode Destination	Destination setting for Night Ring mode.		N/A
Timed Ring Mode Destination	Destination setting for Timed Ring mode.		N/A
Reroute Destination	Destination setting for Reroute Ring mode.		N/A
ICLID Table	Use ICLID Routing, section 4.4.7.4.	OFF/ON	OFF
ICM Tenancy Group (Auto Ring Table)	A DID Conversion Table Index can be assigned to employ an ICM Tenancy Group Auto Ring Table to determine Day/Night/Timed operation mode.	eMG80/100: 0~15 eMG800: 0~32 UCP: 0~100	N/A
Digit Conversion table index	A DID Conversion Table Index can be assigned to employ a digit conversion table	eMG80/100: 0~15 eMG800: 0~32 UCP: 0~32	N/A
MOH	A Music source is assigned so that calls to the destination receive audio from the source in place of ring-back tone.	• Refer to CO Hold • Internal/External Music 1 • External Music 2 • VSF MOH • SLT MOH 1~5 • VSF MOH 2~30	Refer to CO Hold
Ring Tone	A call routed with the DID Conversion Table will employ the selected Ring tone to alert the destination.	0-16	0
Name	An eleven-character Name can be configured for the Table bin.	11 characters	

4.4.9.13 System Speed Zone Table - PGM 232

Selecting System Speed Zone will display the System Speed Zone data entry page. Click the **[Save]** button after changing Value.

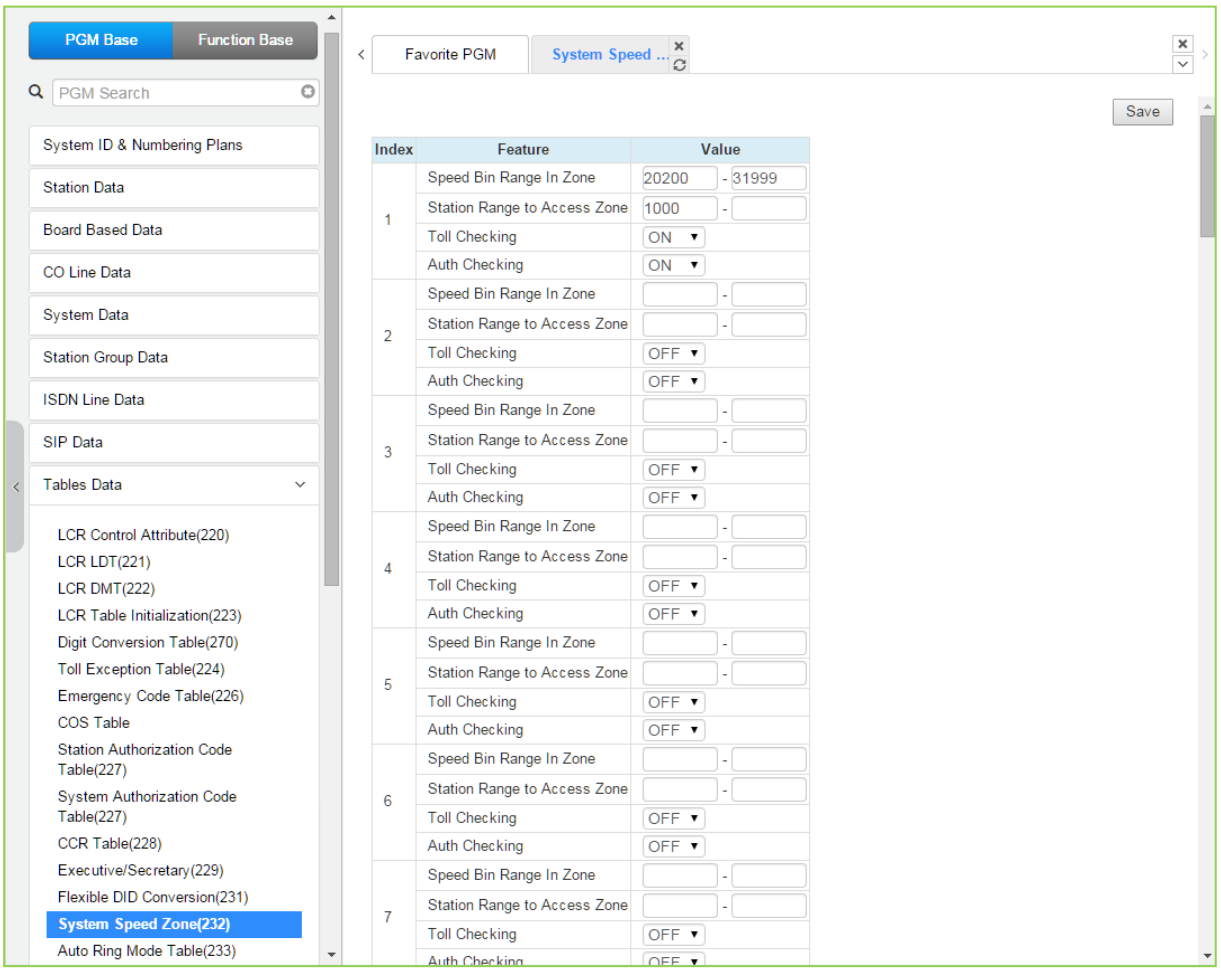


Figure 4.4.9.13-1 System Speed Zone

System Speed Dial Bins assigned to a zone are only available to stations allowed access to that zone. Each zone can be assigned to apply the appropriate Station and CO Line COS for the speed dial number prior to dialing. The speed Bin in Zone and Station Range to access zone is different according to selecting Speed Numbering; refer to 'Speed Numbering' in System ID (100)

Table 4.4.9.13-1 SYSTEM SPEED ZONES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Speed Bin Range in Zone	A range of Speed Dial Bins is assigned to a zone.		
Station Range to Access Zone	A range of Stations is permitted access to the System Speed dials in the Zone.		
Toll Checking	Toll restriction can be applied to Speed Dials in the Zone.	OFF ON	ON
Auth Checking	The user can be required to enter a valid Authorization code to use Speed Dials in the zone.	OFF ON	ON

4.4.9.14 Auto Ring Mode Table - PGM 233

Selecting Auto Ring Mode Table will display the Auto Ring Mode Table data entry page. Enter the desired index (Tenancy Group) and click **[Load]** to enter data. Click the **[Save]** button after changing Value.

Enter Index: eMG80/100: 0-15 / eMG800: 0-32 / UCP: 0-100

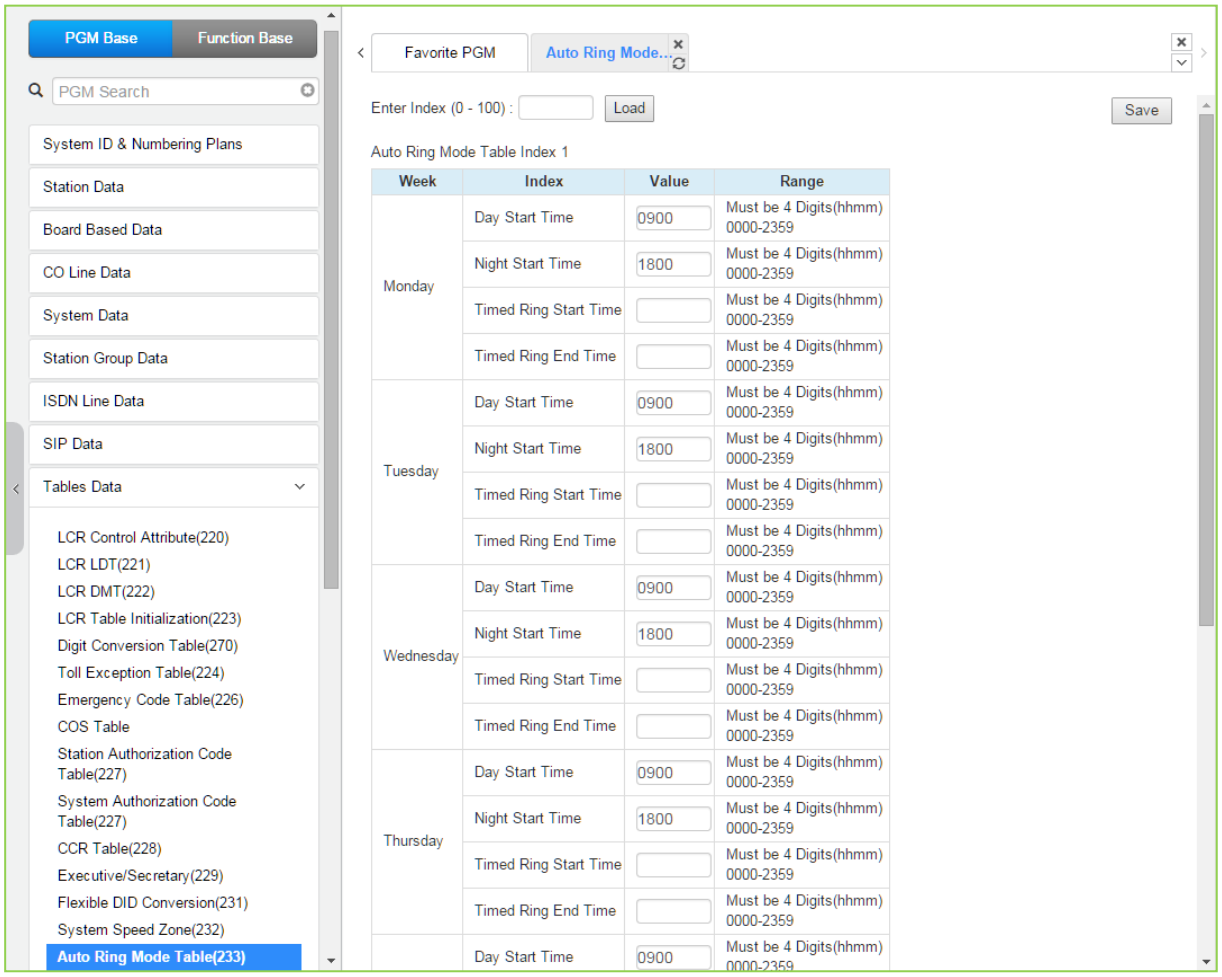


Figure 4.4.9.14-1 Auto Ring Mode Table

The system can be programmed to automatically select the Ring and COS based on the time of day and day of the week. Three Ring & COS modes are available, Day, Night, and Timed.

The Ring assignments are as defined in CO Ring Assignments. COS assignments are made in the Station COS and DISA COS programs discussed in sections, respectively.

The start times for Day, Night, and start and end times for Timed modes are entered for each day of the week. After the Timed end time, the mode returns today if time is not in the Night mode.

The Attendant can override the Automatic selection and select the desired mode (Day, Night, and Timed) manually. A separate Auto Ring Table can be established for each ICM Tenancy Group in section (indices 1 ~ 15for eMG80/100& indices 1~32 for eMG800& 1~100 for UCP) and for the system (index 00).

4.4.9.15 Voice Mail Dialing Table - PGM 234

Selecting Voice Mail Dialing Table will display the Voice Mail Dialing data entry page. Click the **[Save]** button after changing Value.

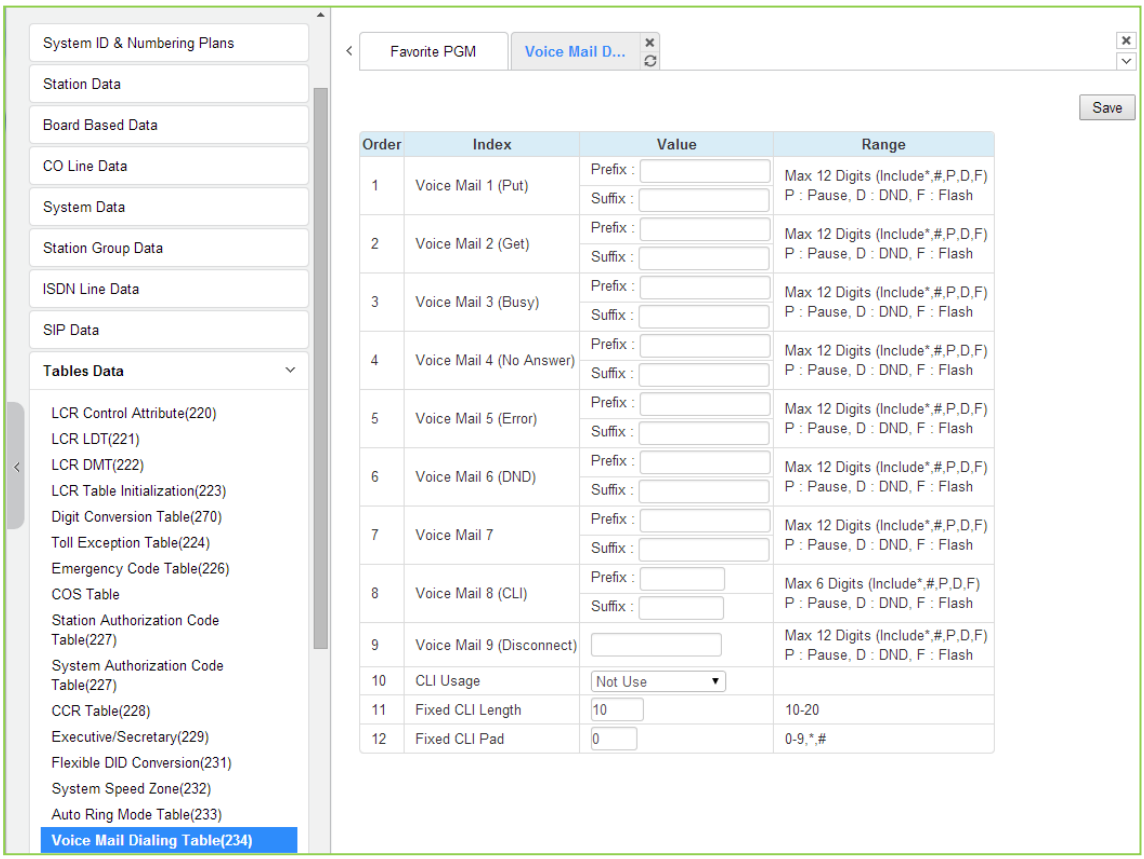


Figure 4.4.9.15-1 External Voice Mail Dialing Table

When an external Voice Mail system is used that connects to an SLT port, a digit sequence must be defined for the system to signal various call characteristics to the Voice Mail system. The external Voice Mail uses the sequences to determine appropriate announcements or further call routing. The Table permits the definition of digits as either a prefix or suffix to other digits (station number for mailbox identification). Sequences are defined for such call characteristics as Put Mail, Get Mail, No Answer call, etc., as described in the following table.

Table 4.4.9.15-1 VOICE MAIL DIALING TABLE

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Voice Mail1 (Put)	Code to send when the voice mail is to receive a call to record a message. [Put Mail] When you enter the Digit, the Digit means are P: Pause, D: DND, F: Flash	Prefix Suffix (Max. 12 Digits/ Include *, #, P, D, F)	
Voice Mail 2 (Get)	Code to send when the voice mail is to playback a recorded message.[Get Mail] When you enter the Digit, the Digit means are P: Pause, D: DND, F: Flash	Prefix Suffix (Max. 12 Digits/ Include *, #, P, D, F)	

Table 4.4.9.15-1 VOICE MAIL DIALING TABLE

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Voice Mail 3 (Busy)	Code to send when the voice mail is to receive a call when the user is busy. [Busy Mail] When you enter the Digit, the Digit means are P: Pause, D: DND, F: Flash	Prefix Suffix (Max. 12 Digits/ Include *, #, P, D, F)	
Voice Mail 4 (No Answer)	Code to send when the voice mail is to receive a call when the user did not answer. [No Answer Mail] When you enter the Digit, the Digit means are P: Pause, D: DND, F: Flash	Prefix Suffix (Max. 12 Digits/ Include *, #, P, D, F)	
Voice Mail 5 (Error)	Code to send when the voice mail is to receive a call when a user dialing error exists. [Error Mail] When you enter the Digit, the Digit means are P: Pause, D: DND, F: Flash	Prefix Suffix (Max. 12 Digits/ Include *, #, P, D, F)	
Voice Mail 6 (DND)	Code to send when the voice mail is to receive a call when the user is in DND. [DND Mail] When you enter the Digit, the Digit means are P: Pause, D: DND, F: Flash	Prefix Suffix (Max. 12 Digits/ Include *, #, P, D, F)	
Voice Mail 7	When you enter the Digit, the Digit means are P: Pause, D: DND, F: Flash	Prefix Suffix (Max. 12 Digits/ Include *, #, P, D, F)	
Voice Mail 8(CLI)	When you enter the Digit, the Digit means are P: Pause, D: DND, F: Flash	Prefix Suffix (Max. 12 Digits/ Include *, #, P, D, F)	
Voice Mail 9 (Disconnect)	Code for disconnect call. [Disconnect Mail] When you enter the Digit, the Digit means are P: Pause, D: DND, F: Flash	Prefix Suffix (Max. 12 Digits/ Include *, #, P, D, F)	
CLI Usage	• **Not use:** Do not send CLI • **Real CLI length:** Send CLI without padding before prefix code. • **Fixed CLI length:** Send CLI with fixed length.	Not use, Real CLI length, Fixed CLI length	Not use
Fixed CLI Length	Define the length of CLI.	10-20	10
Fixed CLI Pad	Define padding character for CLI.	0-9,*,#	0

4.4.9.16 Registration Table - PGM 235

Selecting Registration Table will display the Registration data entry page. Click the **[Save]** button after changing Value.

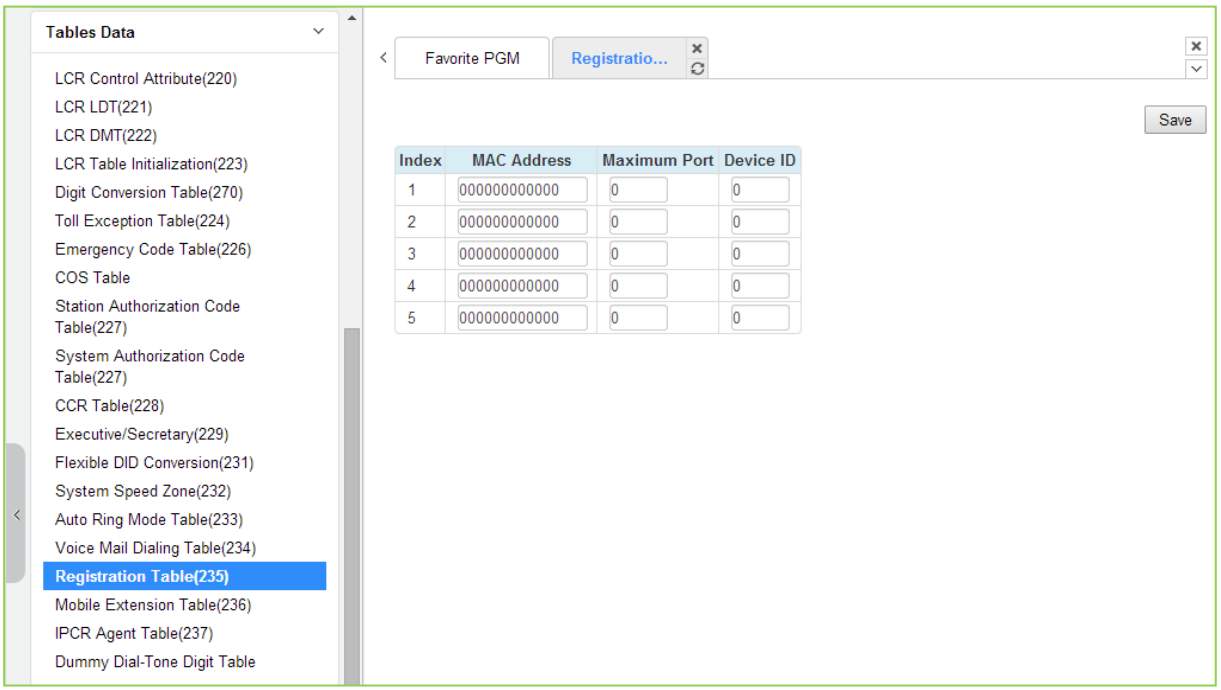


Figure 4.4.9.16-1 MAC Registration Table

When multiple iPECS systems are located on the same LAN, it may be desirable to register add-on devices employing the Registration Table.

Table 4.4.9.16-1 MAC REGISTRATION TABLE

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
MAC Address	Enter MAC address of a device to register		000000000000
Maximum Port	Enter a maximum number of ports (channels) for the device.	00-99	00
Device ID	A device ID may be entered for registration. The Device ID available is shown at the bottom of the System Overview Web page.	0-255	0

4.4.9.17 Mobile Extension Table - PGM 236

Selecting Mobile Extension Table will display the Mobile Extension data entry page. Select the Station Order range desired, the blue text above the table header. Selecting the blue-colored text in the Table header will sort the table based on the selected column. Click the **[Save]** button after changing Value.

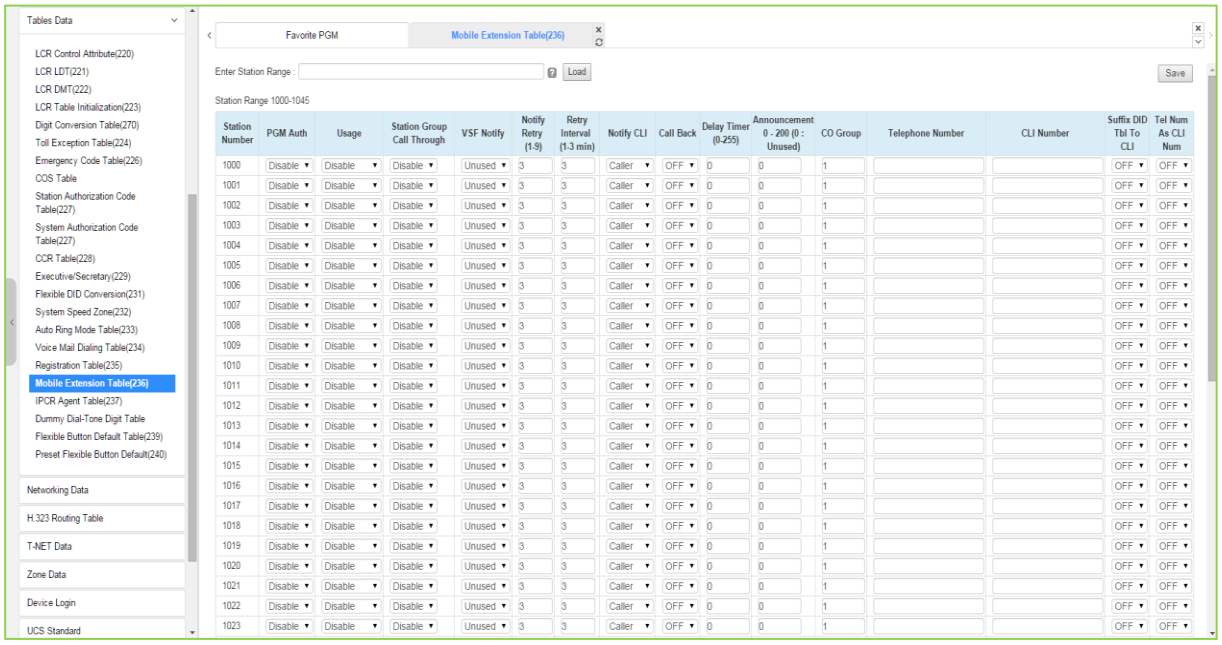


Figure 4.4.9.17-1 Mobile Extension Table

A mobile phone can be used in conjunction with an iPECS Phone. The Mobile phone can access system resources available to the user‘s wired phone and will receive a ring for incoming iPECS calls. The user may be allowed to enable the Mobile extension and define the mobile number. The system can be defined to employ a specific CO/IP Line Group to place calls to the Mobile phone. In addition, the mobile phone can be assigned to receive Station group calls to the primary extension. Also, parameters for notification of new VSF voice mails can be defined.

Table 4.4.9.17-1 MOBILE EXTENSION TABLE

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
PGM Authority	The user may be allowed to activate the mobile extension feature.	Disable Enable	Disable
Usage	Mobile extension feature can be enabled, and Fail Over to Mobile extension can be included.	Disable Mobile Ext Fail Over	Disable
Station Group Call Enable	When the paired station is a member of a Station group (ACD, Circular, or Terminal), group calls can be sent to the active mobile extension.	Disable Enable	Disable
VSF Notify	When enabled, the active Mobile Extension will receive notification by the system when the user has a new message in the built-in Voice Mail.	Unused Use	Unused
Notify Retry	The number of attempts the system will make to complete a notification when receiving a busy/no-answer is defined.	1 – 9 Times	3 Times
Retry Interval	This field defines the time between notification attempts. If a notification fails, the system will retry after the timer expires.	1 – 3 minutes	3 Minute

Table 4.4.9.17-1 MOBILE EXTENSION TABLE

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Notify CLI	When the system sends CLI to the Mobile Extension, the CLI can be either the original caller's CLI or the CLI of the station.	Caller, My Ext.	Caller
Call Back	If "ON," an incoming Mobile Extension call will be released before answered, and the system places a call to Mobile Extension. After the Mobile answers, the dial tone is provided, and the Mobile Extension can place internal or external calls.	OFF ON	OFF
Delay Timer	When the Mobile Extension requests a Call Back, the system will place the Call Back after the expiration of this Delay timer.	0 ~ 255	0
Announcement	A system announcement can be recorded to provide the Mobile caller with a menu of dialing commands available to the mobile user's remote control.	0-200	0
CO Group	The CO/IP Line group used to call (ring) the Mobile Extension is defined. eMG80/100:1~20, eMG800:1~200, UCP: 1~200	Refer to description	1
Telephone Number	The telephone number of the Mobile extension or Fail-over number of the station must be assigned for proper operation.		Not assigned
CLI Number	When the Mobile Telephone number and CLI do not match, the CLI entered here is used to authorize incoming calls from the Mobile.		Not assigned
Suffix DID table index to the CLI	An incoming DID call is passed to the Mobile Extension with the original caller's CLI, and the Flexible DID Conversion Table index. (format: 'original CLI' + '*' + 'DID Table Index')	OFF/ON	OFF
Tel Num As CLI Num	If this option is set to ON, the Telephone Number is used the same as CLI Number. That means, when the mobile user calls to his station, if Telephone Number or CLI Number is matched with his mobile number, then the mobile user hears system dial tone, and calling to the outside is available. If this option is set to OFF, only CLI Number is matched, system dial tone is served.	OFF/ON	ON

4.4.9.18 IPCR Agent Table - PGM 237

Selecting IPCR Agent Table will display the IPCR Agent data entry page. Select the Index and Agent ID Order range desired, the blue text above the table header. Selecting the blue-colored text in the Table header will sort the table based on the selected column. Click the **[Save]** button after changing Value.

Enter the Agent order: eMG80/100: 1-140 / eMG800: 1-1200 / UCP: 1-2400

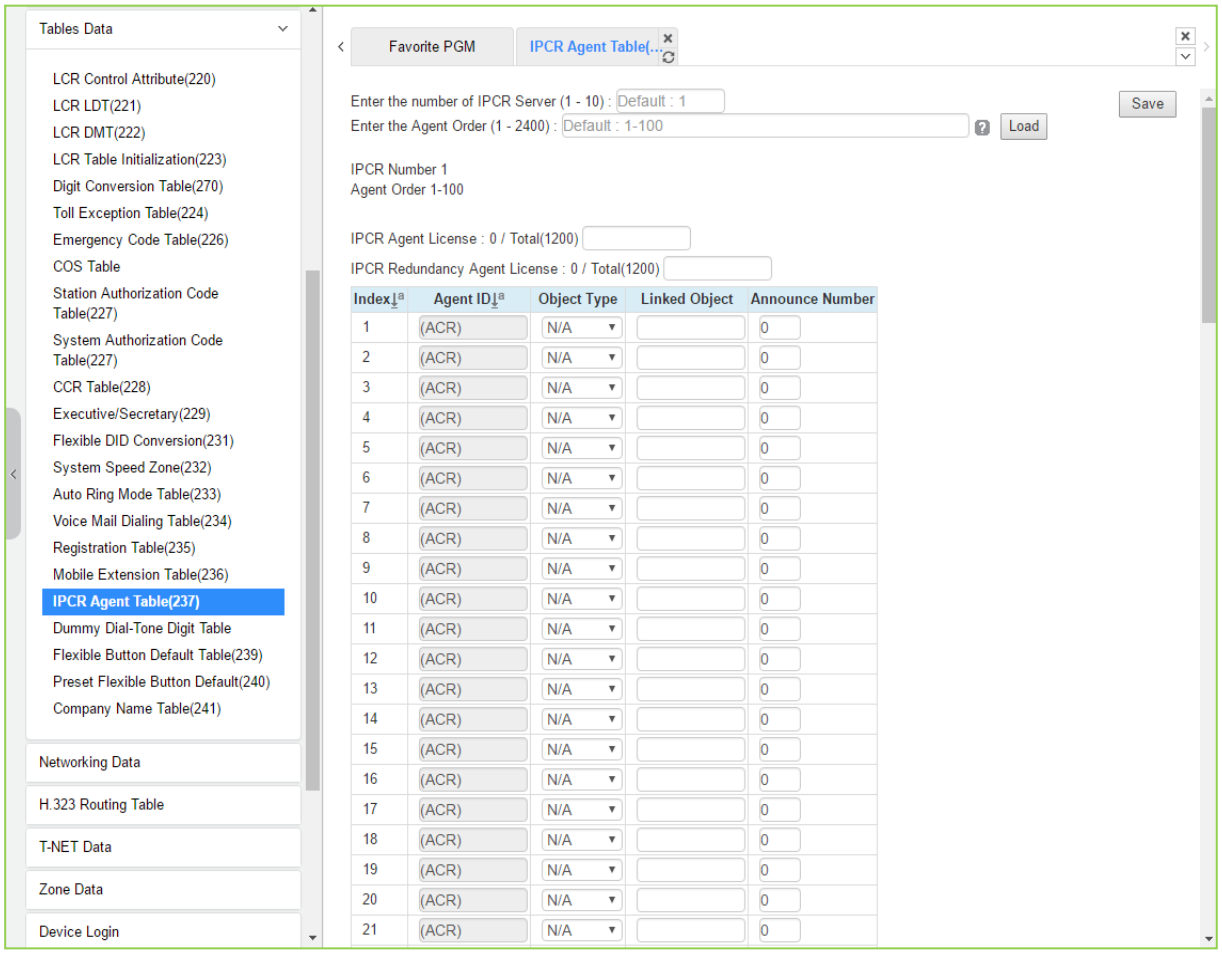


Figure 4.4.9.18-1 IPCR Agent Table

This table correlates an Object Type (Station or CO/IP Line) to the IPCR (Call Recording) Agent index in the IPCR server. The table is also employed with third-party servers for call recording. When a call is placed or received by the station or CO/IP Line, the call is recorded in the IPCR server under the Agent ID (Order number).

Multiple Announcements (1~9) in IPCR can be entered in 'Announce Number.'

4.4.9.19 Dummy Dial-Tone Digit Table

Selecting Dummy Dial-Tone Digit Table will display the Dummy Dial-Tone Digit data entry page. Click the **[Save]** button after changing Value.

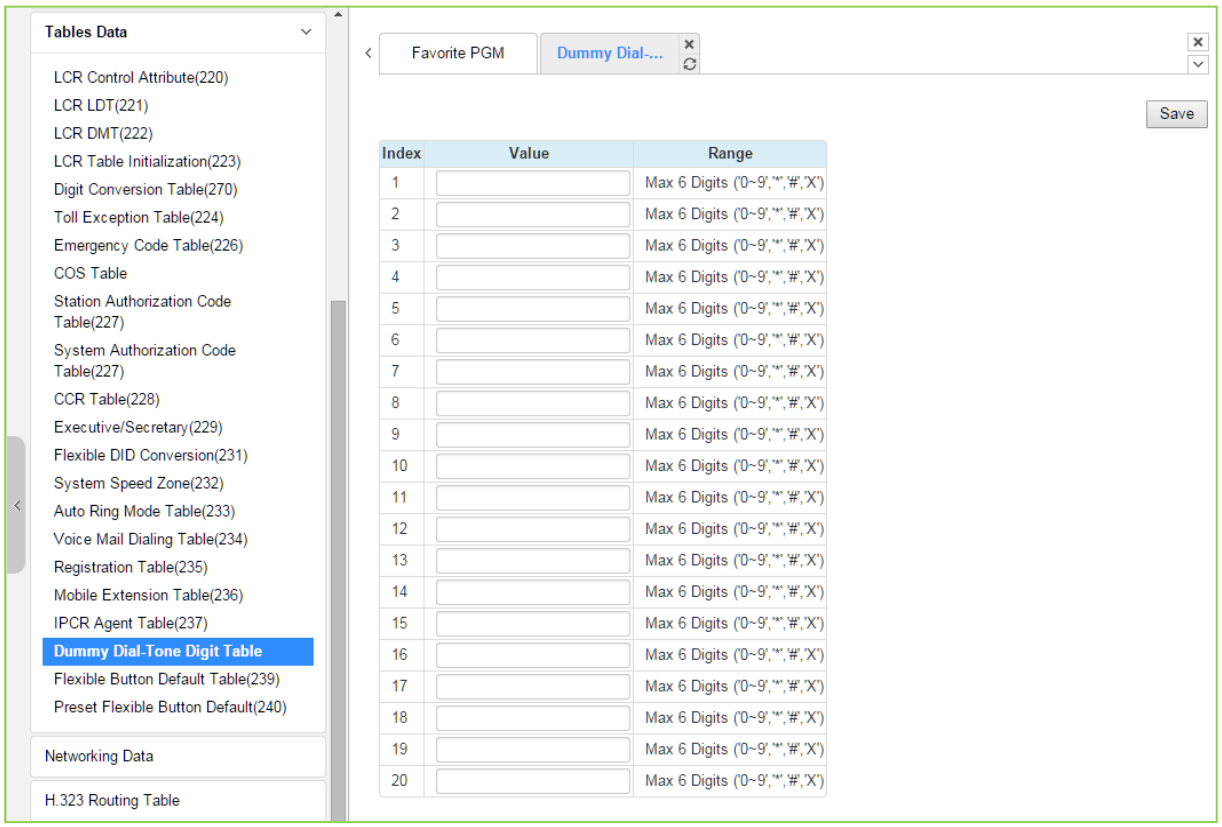


Figure 4.4.9.19-1 Dummy Dial-Tone Digit Table

When digit conversion is programmed, the CO line is seized after digit conversion is completed. Therefore the user cannot hear the CO dial tone from PX until completing digit conversion. For this case, a dummy dial tone can be programmed. Pressing one pre-programmed digit (‘0–9’, ‘*,’ ‘#,’ X’) will provide a CO dial tone to the user regardless of CO line seizure.

4.4.9.20 Flexible Button Default Table– PGM 239

Selecting the Flexible button default table will display the below page. For convenience, the copy, paste, and drag are available to enter or modify data. Please click the **[Save]** button to apply after changing Value.

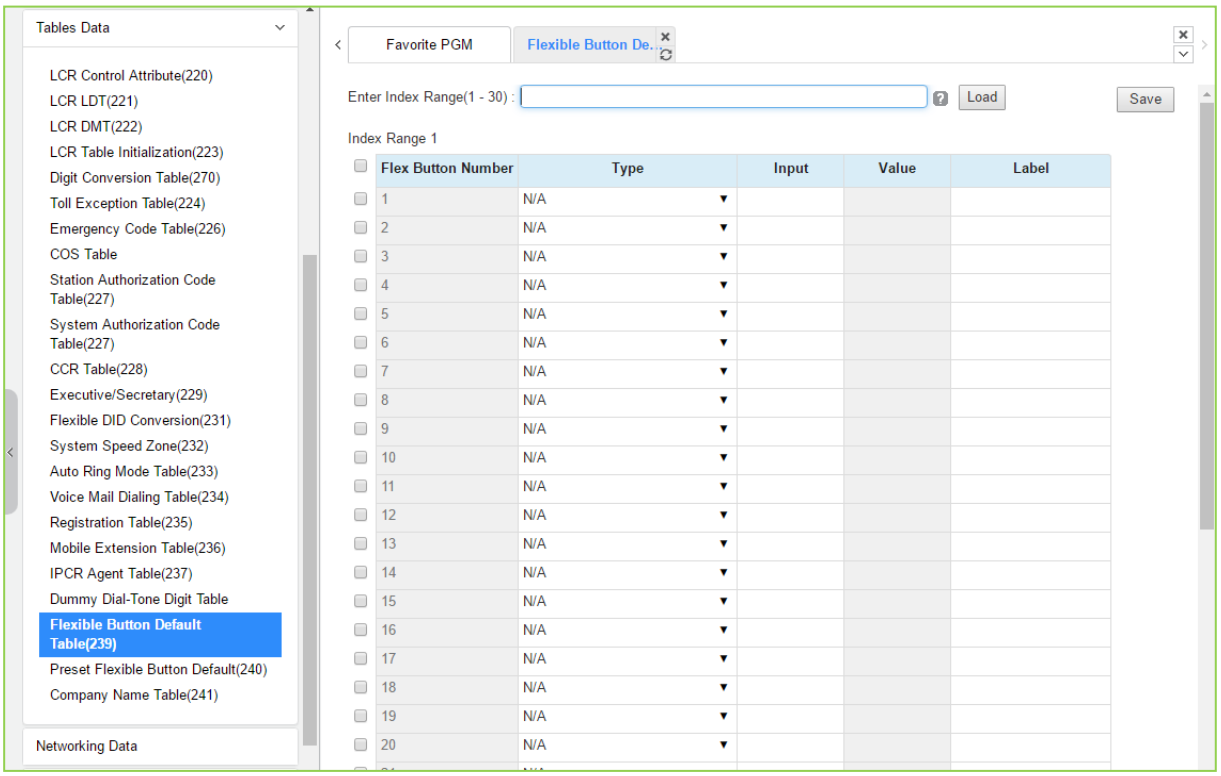


Figure 4.4.9.20-1 Flexible Button Default Table

The system provides 30 default flexible button tables so the administrator can configure each table using ‘Preset Flexible Button Default (240)’. The administrator can assign the type among the below types on the Flexible button.

Table 4.4.9.20-1 FLEX BUTTON TYPE

TYPE	REMARK
N/A	Empty (unassigned) may be defined by the user.
CO Line	Assigns a button to access a defined CO/IP line.
CO Group	Assigns a button to access a free line in the CO/IP Group.
Loop	Assigns a button to access a loop line.
Station Number	Assign a button as DSS/BLF for the assigned station number.
Programming (Numbering Plan)	Assigns a button to dial a code from the Flexible Numbering Plan. See Appendix section.
Programming (PGM)	Assigns a button to perform a User Program function from the Fixed Numbering Plan, Appendix section.
Station Speed Bin	Station Speed Dial bin.
System Speed Bin	System Speed Dial bin.
Net Station Number	Refer to section Network Numbering Plan Table - PGM 324.
U-Loop	U-Loop button for call wait of internal & external call.
Dial Digit	Assign button for any dial digit.

4.4.9.21 Preset Flexible Button Default – PGM 240

Selecting the Preset flexible button default will display the below page. Click the **[Save]** button after changing Value.

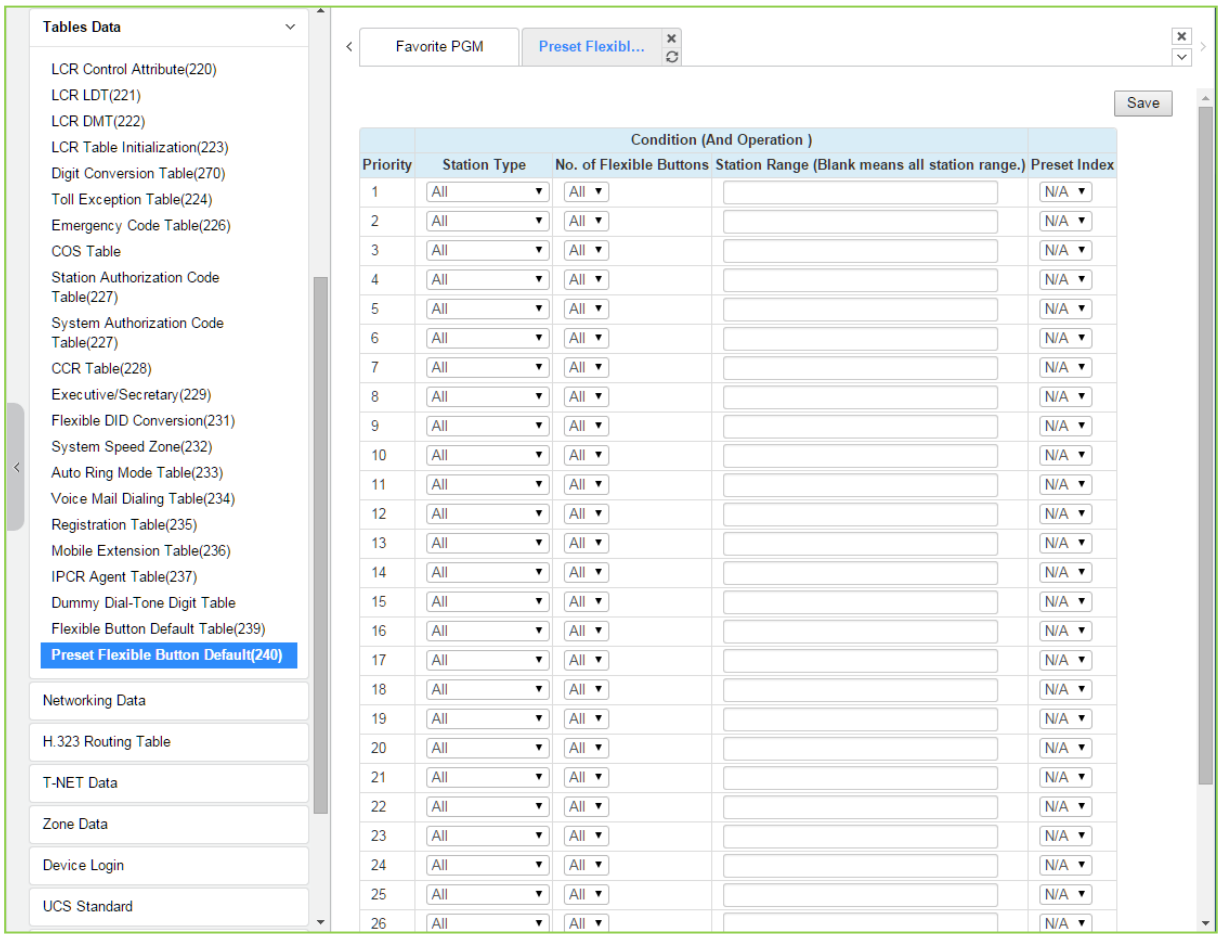


Figure 4.4.9.21-1 Preset Flexible Button Default

The administrator can assign the Preset flexible button table to the station automatically by default. Before connecting the station, the administrator has to set this table according to Priority, Station Type, the number of Button, Station Range, and check the preset Index (1~30). The preset index means the range of Flexible Button Default Table (PGM 239).

4.4.9.22 Company Name Table – PGM 241

Selecting Company Name Table will display the below page. Click **[Save]** button after changing Company name. (eMG80/100: 16, eMG800/UCP: 100)

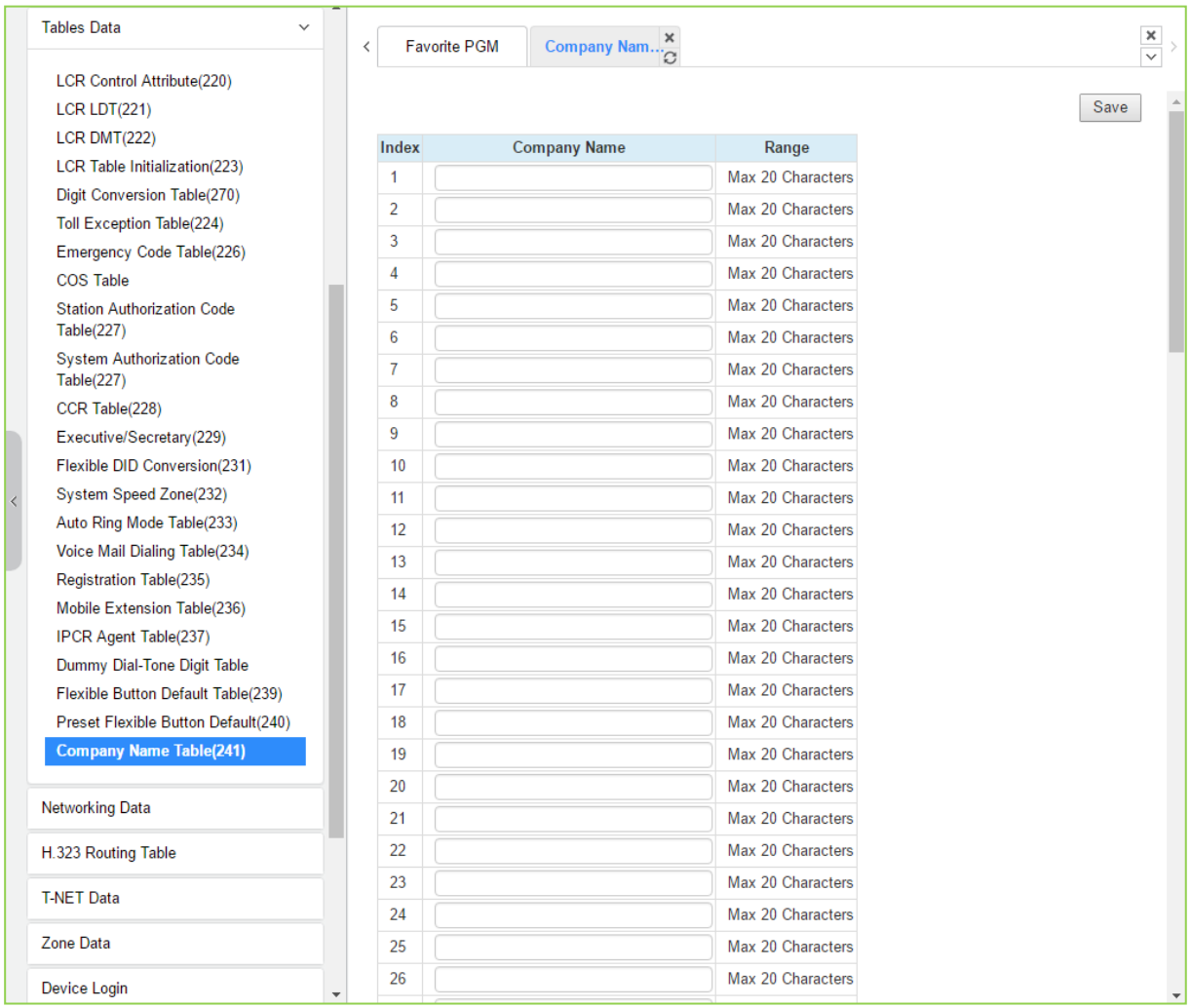


Figure 4.4.9.22-1 Company Name Table

4.4.10 Networking Data

Selecting the Networking Data program group returns the sub-menu displayed in the left frame as shown in the following figure.

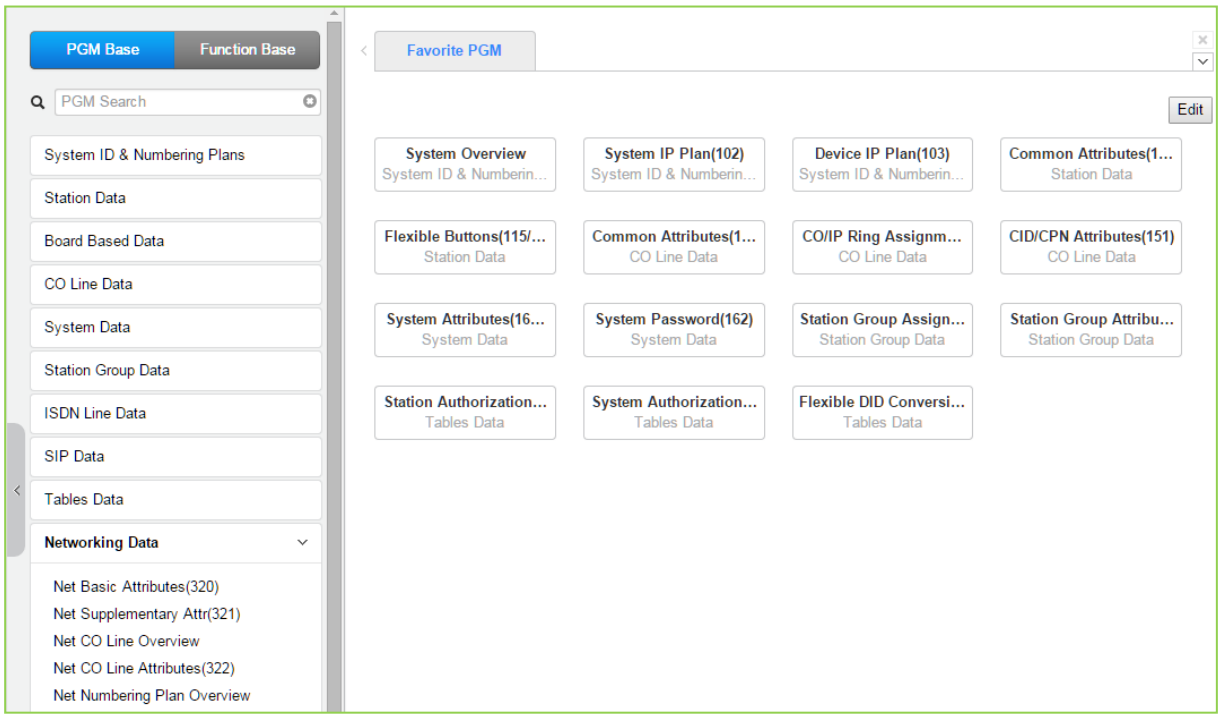


Figure 4.4.10-1 Networking Data

4.4.10.1 Network Basic Attributes - PGM 320

Selecting Network Basic Attributes will display the Network Basic Attributes entry page. Click the **[Save]** button after changing Value.

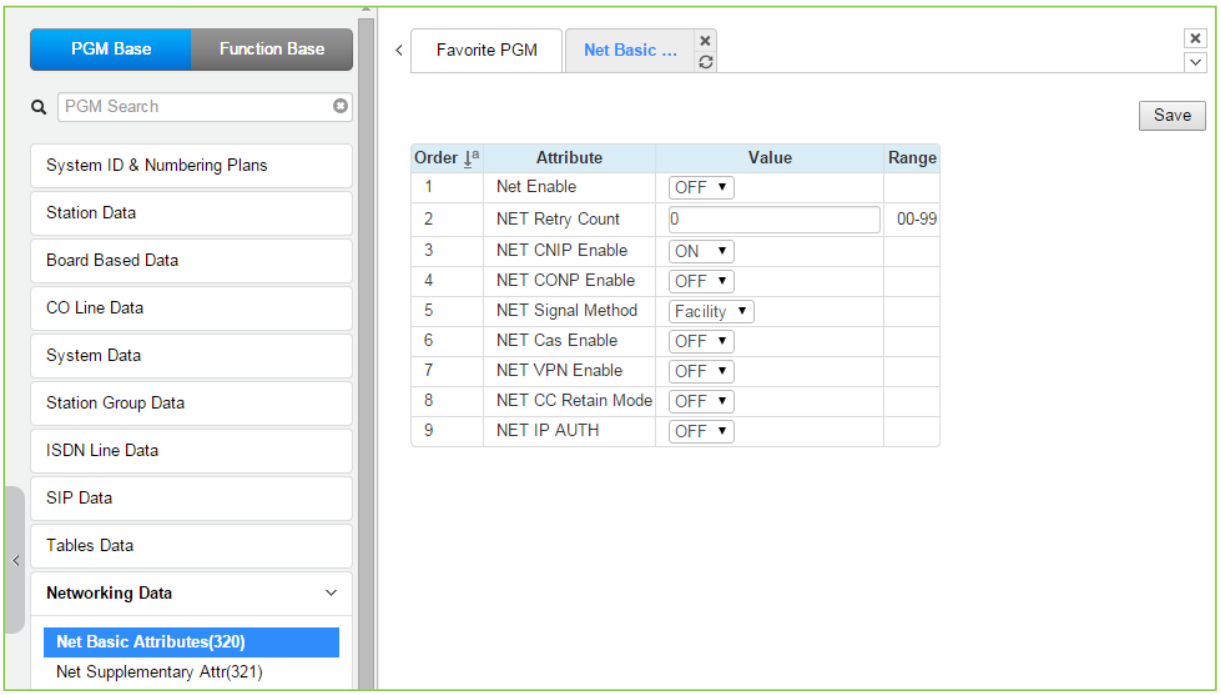


Figure 4.4.10.1-1 Network Basic Attributes

Table 4.4.10.1-1 NETWORK BASIC ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Net Enable	For operation, the Networking function must be enabled here. Note a license is required.	OFF ON	OFF
Net Retry Count	Not used.	00-99	0
Net CNIP Enable	The name of the calling station is sent to the called iPECS UCP. CNIP is shown in the LCD of the called party's station.	OFF ON	ON
Net CONP Enable	The name of the connected station is sent to the calling iPECS system. The CONP is shown in the LCD of the calling party's station.	OFF ON	OFF
Net Signal Method	Network signaling can be sent in the Facility or User QSIG supplementary service message.	UUS/ Facility	Facility
Net Cas Enable	Not used.	OFF ON	OFF
Net VPN Enable	Not used.	OFF ON	OFF
Net CC Retain Mode	This field defines the Network signaling retain mode for CCBS service.	OFF ON	OFF
Net IP Auth.	For operation, the Networking function must be enabled here. Note a license is required.	OFF ON	OFF

4.4.10.2 Network Supplementary Attributes - PGM 321

Selecting Network Supplementary Attributes will display the Network Supplementary Attributes entry page. Click the **[Save]** button after changing Value.

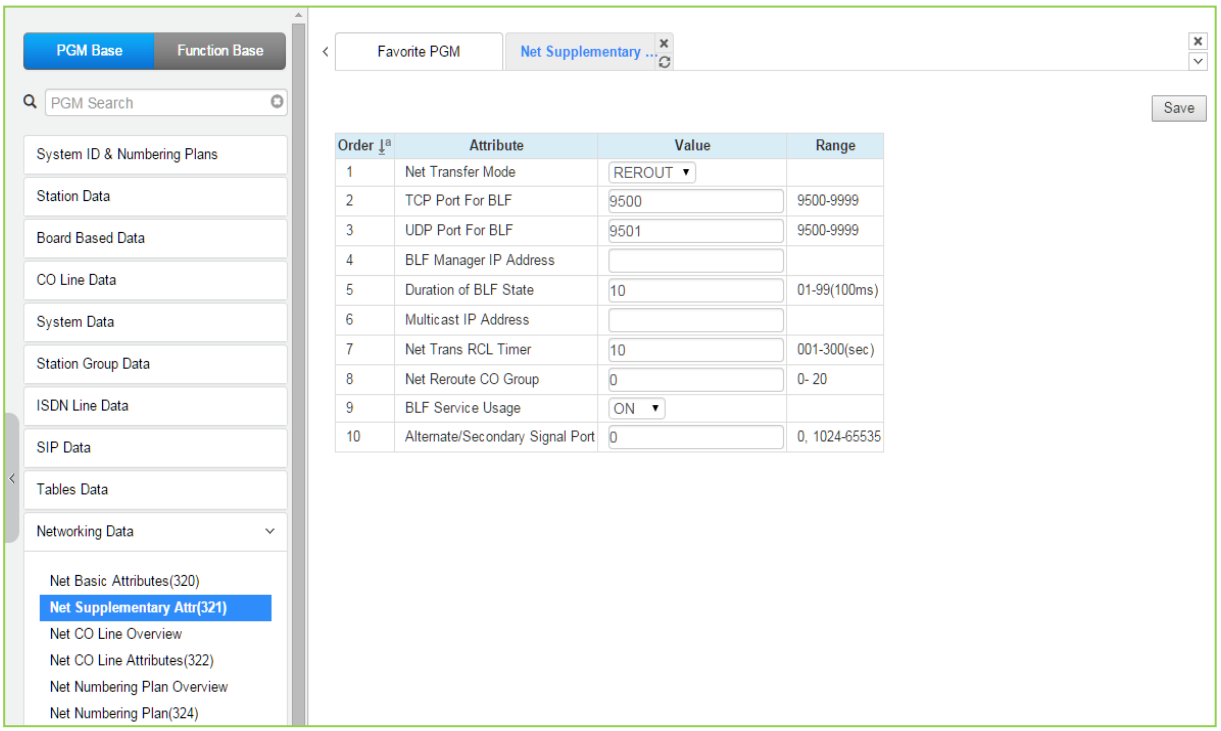


Figure 4.4.10.2-1 Network Supplementary Attributes

Table 4.4.10.2-1 NETWORK SUPPLEMENTARY ATTRIBUTES

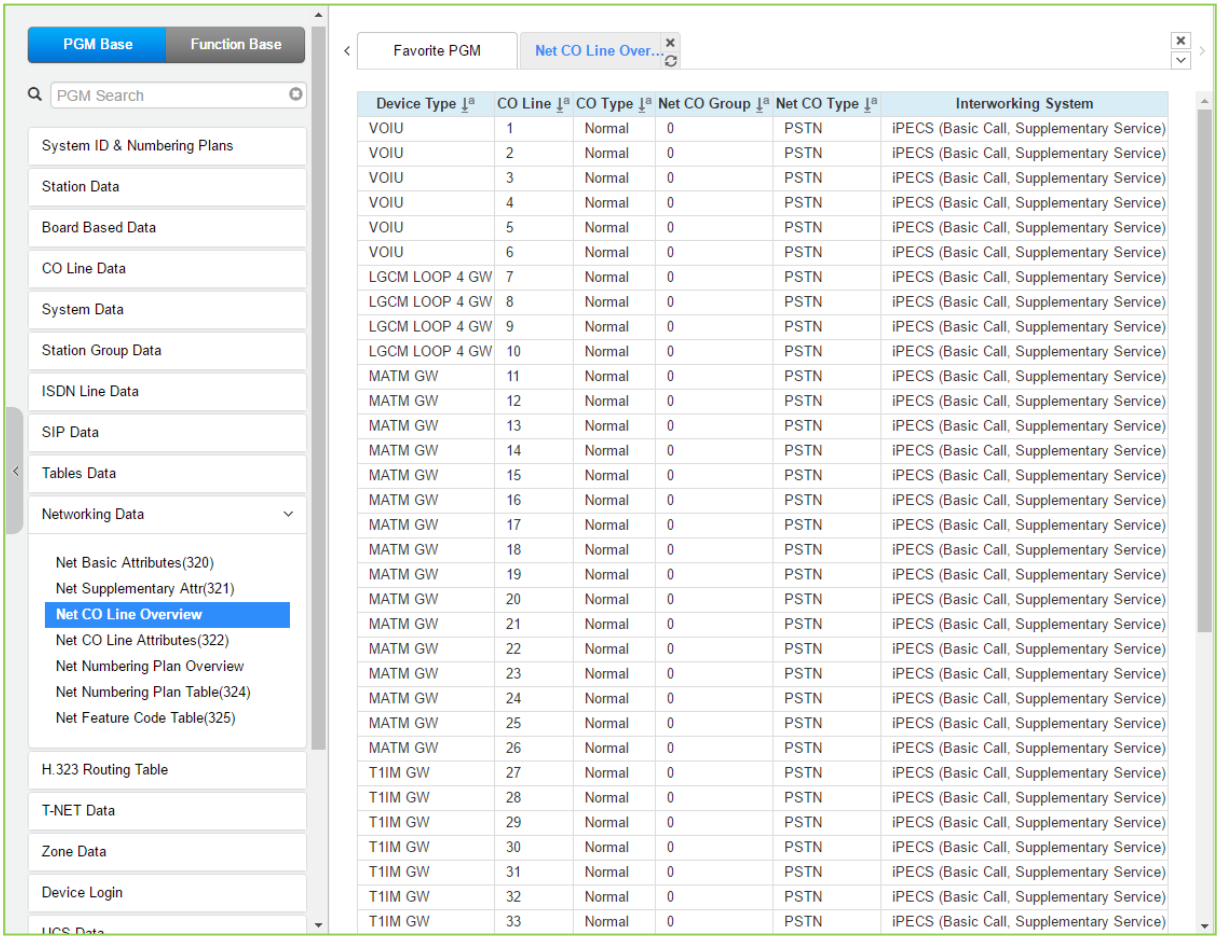
ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Net Transfer Mode	Call Forward and Transfer over the network employs the selected Rerouting or Join method	REROUT/ JOIN	REROUT
TCP Port for BLF	The TCP/IP port for BLF message packets to BLF Manager is defined.	9500-9999	9500
UDP Port for BLF	The UDP port for BLF message packets to BLF Manager is defined.	9500-9999	9501
BLF Manager IP	The IP Address of the BLF Manager server is required when iPECS UCP is configured with eMG systems in the Network.		0.0.0.0
Duration of BLF State	The system sends BLF messages to the BLF Manager at intervals of this timer.	01-99 (Sec.)	10
Multicast IP	The multicast IP address for BLF service.		0.0.0.0
Net Trans Recall timer	When a call forward or transfer does not receive a response from the Network system, the call recalls the transferring party at the expiration of this timer.	001-300 (msec)	10
NET Reroute CO Group	If an outgoing SIP call receives no response after the expiration of this timer, the call is rerouted to the alternate CO line. eMG80/100:0~20, eMG800:0~200, UCP:0~200	Refer to description	
BLF Service Usage	BLF Manager support must be enabled for use.	OFF, ON	ON

Table 4.4.10.2-1 NETWORK SUPPLEMENTARY ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Alternate/Secondary signal port	This signal port is used to add an alternate or secondary receiving signal port. A default receiving signal port is TCP 1720, and an additional signal port will be opened if this field is configured to a valid value. When the system is installed behind the xDSL modem, the problem of the consecutive second call can happen by the uncontrolled H.323 ALG function at the xDSL modem. This field can be used to solve the problem of the consecutive second call.	0, 1024-65535	0

4.4.10.3 Net CO Line Overview

Selecting Net CO Line Overview will be displayed as below.



Device Type	CO Line	CO Type	Net CO Group	Net CO Type	Interworking System
VOIU	1	Normal	0	PSTN	iPECS (Basic Call, Supplementary Service)
VOIU	2	Normal	0	PSTN	iPECS (Basic Call, Supplementary Service)
VOIU	3	Normal	0	PSTN	iPECS (Basic Call, Supplementary Service)
VOIU	4	Normal	0	PSTN	iPECS (Basic Call, Supplementary Service)
VOIU	5	Normal	0	PSTN	iPECS (Basic Call, Supplementary Service)
VOIU	6	Normal	0	PSTN	iPECS (Basic Call, Supplementary Service)
LGCM LOOP 4 GW	7	Normal	0	PSTN	iPECS (Basic Call, Supplementary Service)
LGCM LOOP 4 GW	8	Normal	0	PSTN	iPECS (Basic Call, Supplementary Service)
LGCM LOOP 4 GW	9	Normal	0	PSTN	iPECS (Basic Call, Supplementary Service)
LGCM LOOP 4 GW	10	Normal	0	PSTN	iPECS (Basic Call, Supplementary Service)
MATM GW	11	Normal	0	PSTN	iPECS (Basic Call, Supplementary Service)
MATM GW	12	Normal	0	PSTN	iPECS (Basic Call, Supplementary Service)
MATM GW	13	Normal	0	PSTN	iPECS (Basic Call, Supplementary Service)
MATM GW	14	Normal	0	PSTN	iPECS (Basic Call, Supplementary Service)
MATM GW	15	Normal	0	PSTN	iPECS (Basic Call, Supplementary Service)
MATM GW	16	Normal	0	PSTN	iPECS (Basic Call, Supplementary Service)
MATM GW	17	Normal	0	PSTN	iPECS (Basic Call, Supplementary Service)
MATM GW	18	Normal	0	PSTN	iPECS (Basic Call, Supplementary Service)
MATM GW	19	Normal	0	PSTN	iPECS (Basic Call, Supplementary Service)
MATM GW	20	Normal	0	PSTN	iPECS (Basic Call, Supplementary Service)
MATM GW	21	Normal	0	PSTN	iPECS (Basic Call, Supplementary Service)
MATM GW	22	Normal	0	PSTN	iPECS (Basic Call, Supplementary Service)
MATM GW	23	Normal	0	PSTN	iPECS (Basic Call, Supplementary Service)
MATM GW	24	Normal	0	PSTN	iPECS (Basic Call, Supplementary Service)
MATM GW	25	Normal	0	PSTN	iPECS (Basic Call, Supplementary Service)
MATM GW	26	Normal	0	PSTN	iPECS (Basic Call, Supplementary Service)
T1IM GW	27	Normal	0	PSTN	iPECS (Basic Call, Supplementary Service)
T1IM GW	28	Normal	0	PSTN	iPECS (Basic Call, Supplementary Service)
T1IM GW	29	Normal	0	PSTN	iPECS (Basic Call, Supplementary Service)
T1IM GW	30	Normal	0	PSTN	iPECS (Basic Call, Supplementary Service)
T1IM GW	31	Normal	0	PSTN	iPECS (Basic Call, Supplementary Service)
T1IM GW	32	Normal	0	PSTN	iPECS (Basic Call, Supplementary Service)
T1IM GW	33	Normal	0	PSTN	iPECS (Basic Call, Supplementary Service)

Figure 4.4.10.3-1 Network CO Line Overview

4.4.10.4 Network CO Line Attributes - PGM 322

Selecting Network CO Line Attributes will display the Network CO Line Group entry page. Enter a valid CO/IP Line range and click **[Load]** to enter the Network CO Line data. Click the **[Save]** button after changing Value.

Enter CO Range: eMG80/100: 1-74 / eMG800: 1-600 / UCP: 1-998

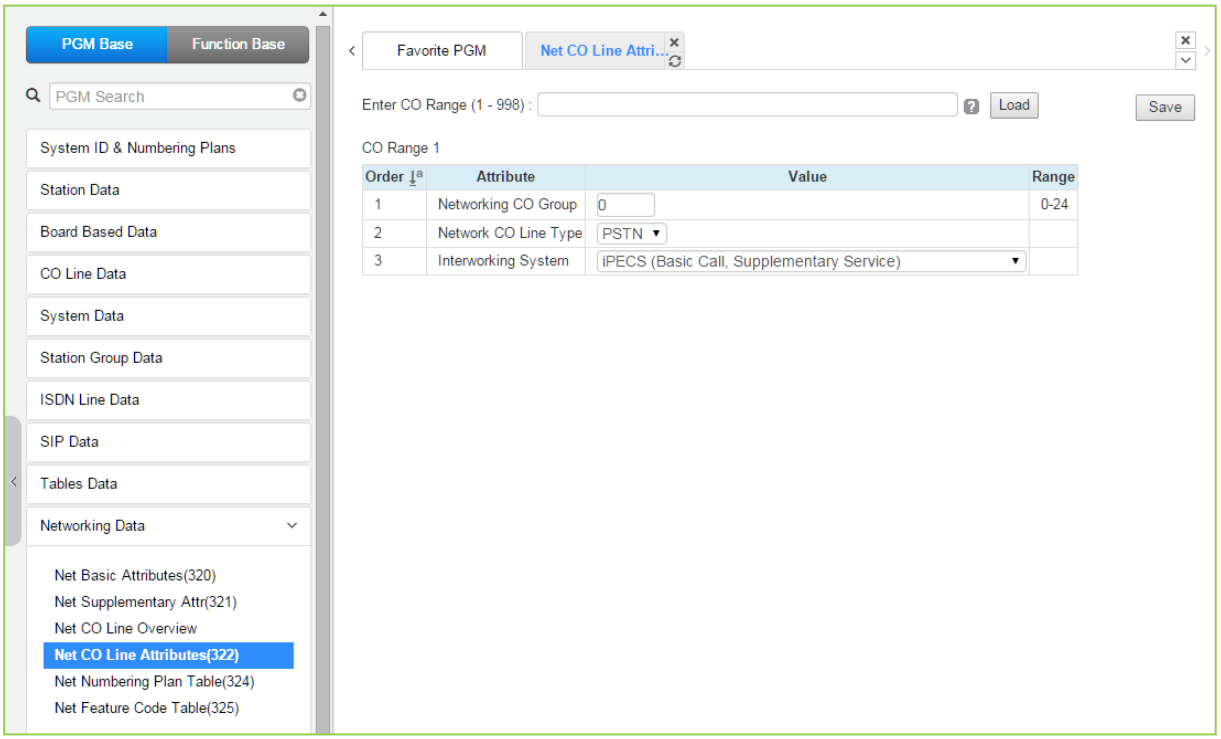


Figure 4.4.10.4-1 Network CO Line Attributes

Table 4.4.10.4-1 NETWORK CO LINE ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Networking CO Group	The CO/IP Lines in the assigned group are employed as Network CO Lines, connecting to other systems in the network.	00-24	00
Network CO Line Type	The CO/IP Line is assigned for use by the network as a PSTN (carrier) or connection to the network.	NET/ PSTN	PSTN
Interworking System	Select the Qsig interworking system among the below type. • iPECS (Basic call, Supplementary service) • Nortel (Basic call, Name service) • Panasonic (Basic call, Name service-Tunneled message) • Cisco (Basic call, Name service-Display IE) • Simens (Basic call, Name service) • Astra (Basic call)	Refer to description	iPECS (Basic call, Supplementary service)

4.4.10.5 Network Numbering Plan Table Overview

Selecting Network Numbering Plan Table Overview will be displayed as below.

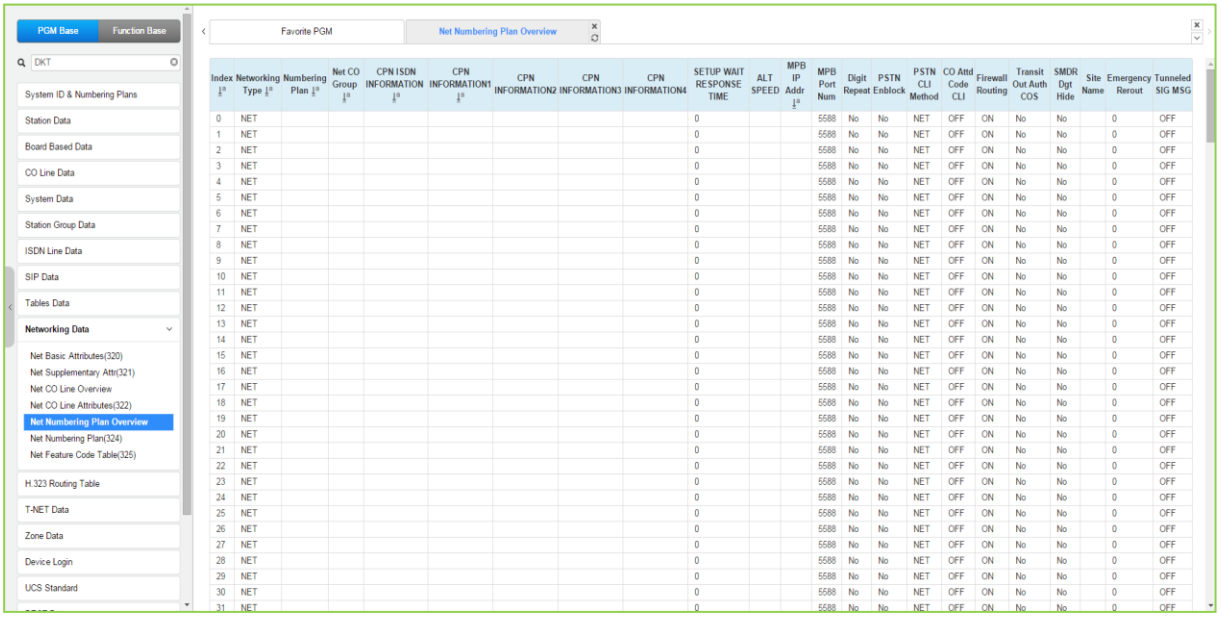


Figure 4.4.10.5-1 Network Numbering Plan Table overview

4.4.10.6 Network Numbering Plan - PGM 324

Selecting Network Numbering Plan Table will display the Network Numbering Plan Table data entry page. Enter a valid table index and click **[Load]** to enter the Network Numbering Plan data. For convenience, the copy, paste, and drag are available to enter or modify data. Click the **[Save]** button after changing Value.

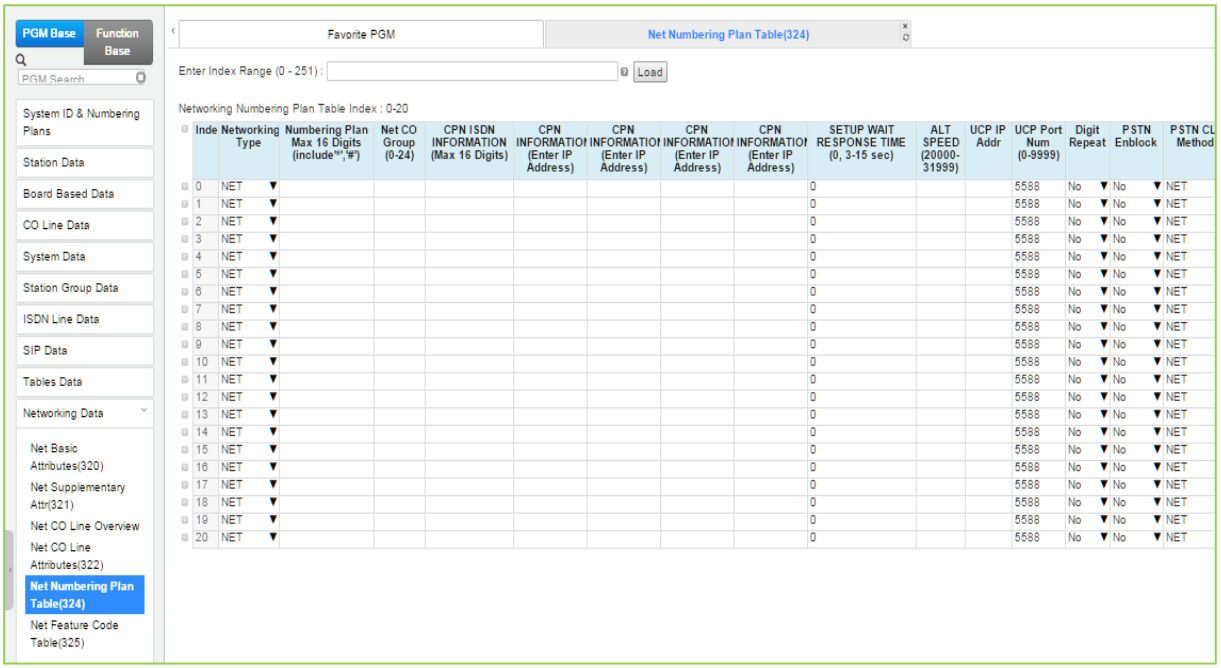


Figure 4.4.10.6-1 Network Numbering Plan Table

The Network Numbering Plan establishes the digit strings that make up the numbering plan and associated routing for each Plan code.

Table 4.4.10.6-1 NETWORK NUMBERING PLAN TABLE

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Network Type	The type of use of the code is defined as directed to the PSTN (carrier) or a Networked system.	NET / PSTN	NET
Numbering Plan Code	This field defines the digits, 0 ~ 9 that make up a Network Numbering Plan code. An '*' will represent any digit. To assign the code for the stations in another system, enter the common station number digits followed by "#." **Max. 16 digits(Include * and #)**	Refer to description	
Networking CO Group	The Numbering Plan CO Group indicates the Network CO/IP Group that is used for the connection. A '00' entry is an internal net station number.	00-24	
CPN ISDN Information	When an ISDN Line is used to place a network call, the CPN ISDN Information and the network Number are used as the Called party number.	Max. 16 digits	
CPN Information	When a VoIP channel is used to place a network call, the CPN used is the IP address associated with the VoIP channel. • 1: 00 CPN INFORMATION 01 • 2: 00 CPN INFORMATION 02 • 3: 00 CPN INFORMATION 03 • 4: 00 CPN INFORMATION 04	Enter IP address	
Setup Wait Response Time	Networking call-setup failure timer when there is no proceeding message from the network (i.e., IP-Network is down)	0, 3~15 Sec.	0
ALT Speed Bin	Should the Network path fail, the system can place the call over an alternative path using a System Speed Dial number. eMG80/100:2000~4999, eMG800:2000~9999, UCP: 20000~31999	Refer to description	
MPB IP Address	This field is the IP Address of the destination system for the code		0.0.0.0
MPB Port number	The TCP/IP port number of the destination system for the Net Numbering Plan code is defined.	0000-9999	5588
Digit Repeat	When the number plan code, see above, is for PSTN call or transit-call, the number code can be included in the SETUP message.	Yes No	No
PSTN Enblock	When a PSTN receives a Transit-out call from a networked user, the digits can be sent En-block (YES) or Over-lap (NO).	Yes No	No
PSTN CLI Method	The CLI sent with the call for this code can be set as the NET CLI (station number) or PSTN, which sends the CLI configured for the CO/IP Line and Station CLI.	NET PSTN	NET
CO Attendant Code CLI	When a networked system places a transit outcall, the Centralized ATD CLI can be sent.	OFF ON	OFF
Firewall Routing	When the system can communicate with the networked system directly, over a common VPN, the system's Non-Firewall address is sent in IP packets (OFF). Otherwise, the Firewall IP address is sent (ON).	OFF ON	ON

Table 4.4.10.6-1 NETWORK NUMBERING PLAN TABLE

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Transit Out Auth COS	When a user requests a transit-out call by seizing a CO line, COS may be applied according to the authorization code.	Yes No	No
SMDR Digit Hide	For a Transit-out call from the iPECS, the networked system that places the call may desire to receive the Authorization code	Yes No	No
Site name	A twelve-character name can be assigned to the system for use with network calls.	Max. 12 characters	
Emergency reroute timer	When a networked station places an emergency call, and the “Emergency CO or Group” in the Station Common Attributes is a Transit-out CO/IP Line or group, the call will be Fail-over to the “Fail-over CO Group” in PGM 133 or the “Net Reroute CO Group” in PGM 321 after this timer expires. The “Fail-over CO Group” will have priority.	0-10 (Sec.)	00
Tunneled SIG MSG	Send and Receive H323 messages that include ISDN QSIG messages. It is used to do networking with the Panasonic system.	OFF ON	OFF
Alternate/Secondary signal port	This destination signal port is used on calling the remote network system. A default destination signal port is TCP 1720, but the port number is changed if this field is configured to a valid value. When the system is installed behind the xDSL modem, the problem of the consecutive second call can happen by the uncontrolled H.323 ALG function at the xDSL modem. This field can be used to solve the problem of the consecutive second call. Here, the value should be an alternate or secondary receiving signal port that is configured at the remote system.	0-65535	
Local route ID	These two fields are used when a remote network system wants to check the route ID value to authenticate the system. Here, ‘Local Route ID’ is the route ID string for the local system. And ‘Remote Route ID’ is the route ID string for the remote system.	Max. 15 characters	
Remote route ID		Max. 15 characters	
Sending Name option	Basically, the calling party name is transferred in QSIG messages. This field is an additional way to send the calling party name. In some PBX systems, the Q.931 Display IE field is used to transferring the calling party name, and this value can be used as an interoperating solution for displaying the calling party name. **OFF, Display IE(CISCO)**	Refer to description	OFF
Redundancy IP address	The redundancy IP address is used for Geographical redundancy in voice networking. If the called party system does not respond to the SETUP message, the system tries to make a call with the Redundancy IP address	Enter IP address	

4.4.10.7 Network Feature Code Table - PGM 325

Selecting Network Feature Code Table returns the data entry page. Click the **[Save]** button after changing Value.

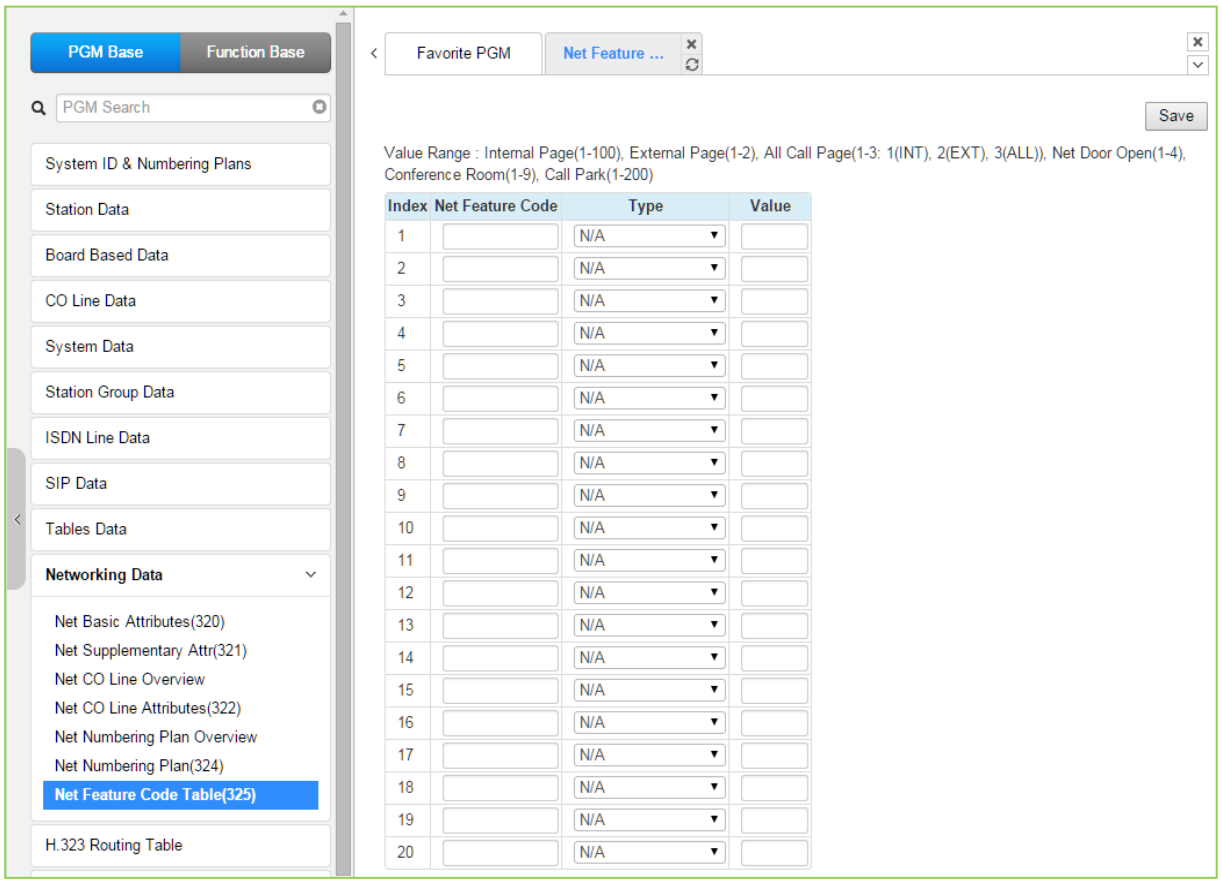


Figure 4.4.10.7-1 Network Feature Code Table

Table 4.4.10.7-1 NETWORK FEATURE CODE TABLE

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Net Feature Code	Digit sequence or code used to activate special Network Features.	16 digits	None
Net Feature type	Each Network Feature Code is assigned to activate a feature in the destination system. **N/A, Internal Page, External Page, All Call Page, Net Door Open, Conference Room, Call Park,**	Refer to description	N/A

eMG80/100 value range

Internal page: 1-35, External page (1), All Call page (1-3: 1(INT), 2(EXT), 3(ALL)), Net door Open (1-2), Conference Room (1-9), Call Park (1-19)

eMG80/100 value range

Internal page: 1-35, External page (1), All Call page (1-3: 1(INT), 2(EXT), 3(ALL)), Net door Open (1-4), Conference Room (1-9), Call Park (1-19)

eMG800value range

Internal page: 1-100, External page (1), All Call page (1-3: 1(INT), 2(EXT), 3(ALL)), Net door Open (1-2), Conference Room (1-9), Call Park (1-200)

4.4.11 H.323 Routing Table

Selecting the H.323 Data program group returns the sub-menu displayed in the left frame as shown in the following figure.

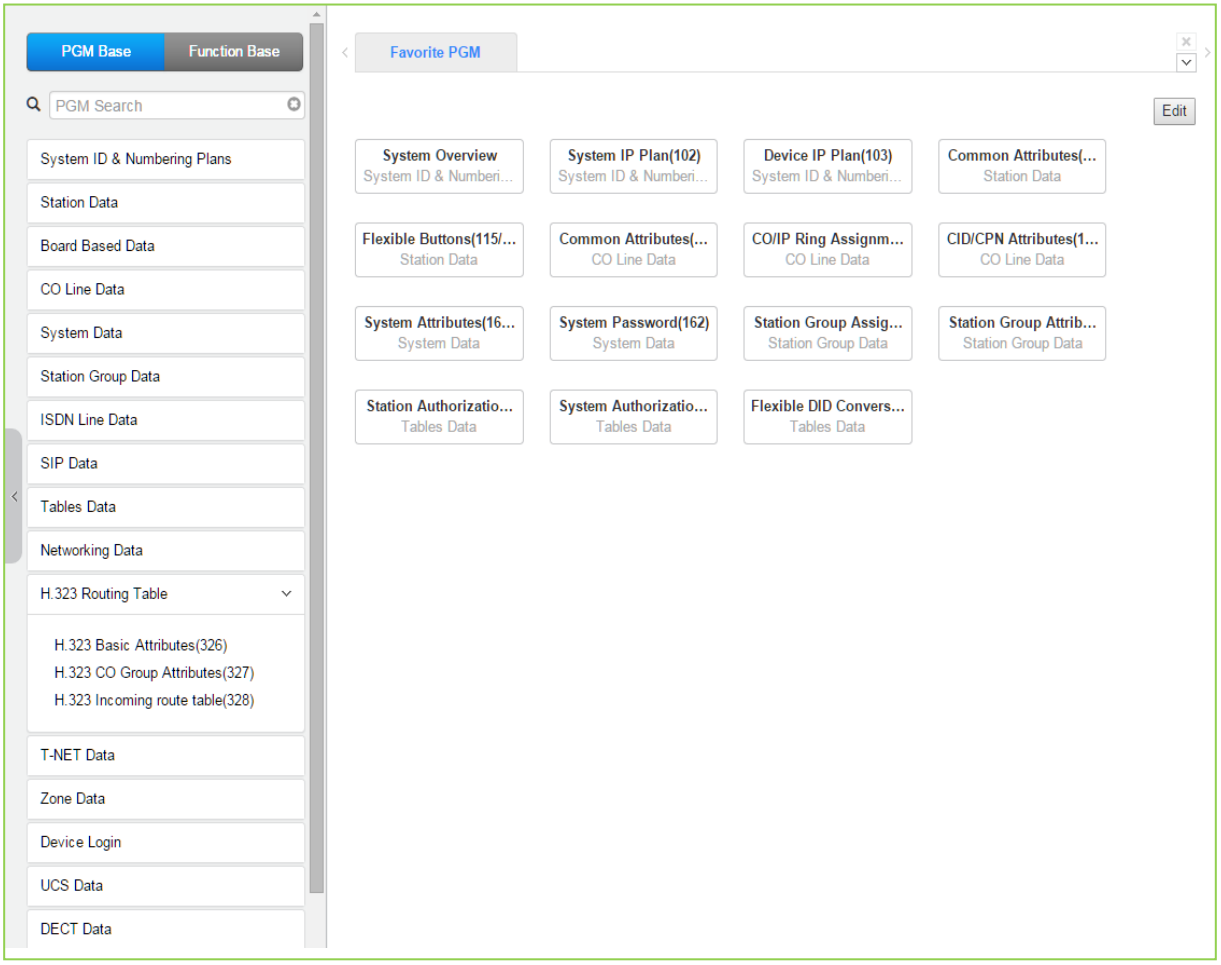


Figure 4.4.11-1 H.323 Routing Table Main Page

4.4.11.1 H.323 Basic Attributes -PGM 326

Selecting H.323 Basic Attributes will display the data entry page. Click the **[Save]** button after changing Value.

Enter Device/GW slot sequence number: eMG80/100: 1-300 / eMG800: 1-2890 / UCP: 1-3688

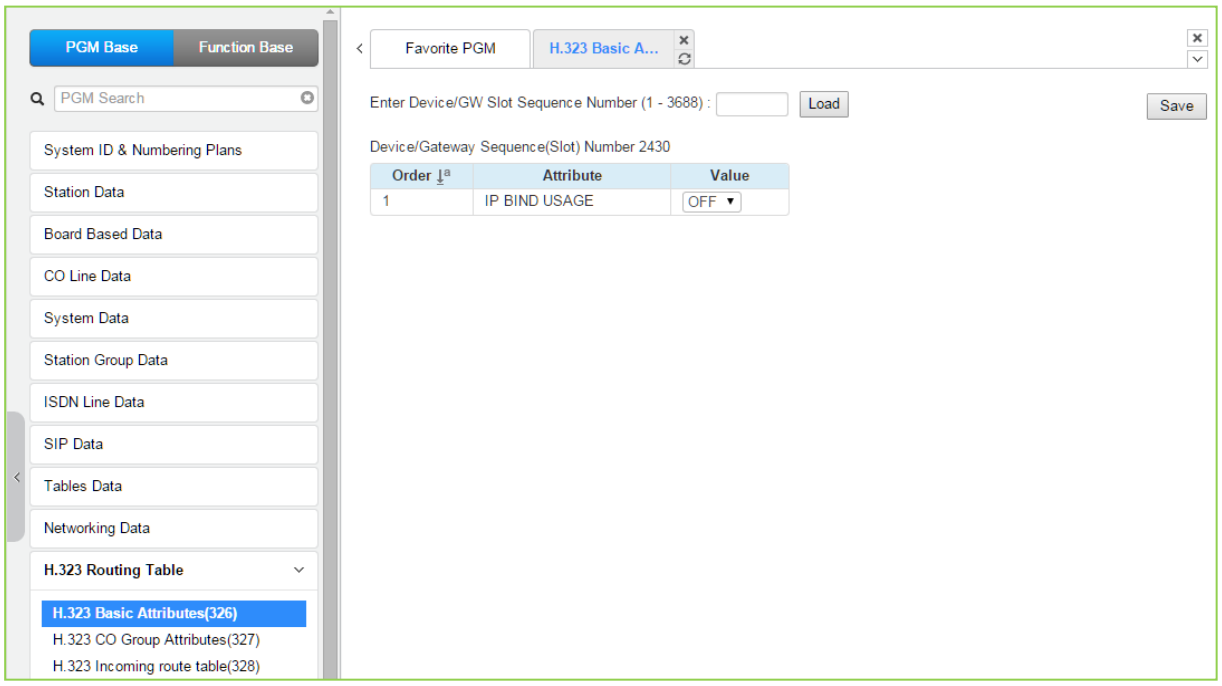


Figure 4.4.11.1-1 H.323 Basic Attributes

H.323 Signaling can be operated with each VOIB/VOIM or MPB/UCP.

Table 4.4.11.1-1 H.323 Basic Attributes

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
IP Band Usage	If it is set to ON, the system allows H.323 signaling with a system IP address. Or, each VOIB/VOIM IP Address can be used.	OFF ON	OFF

4.4.11.2 H.323 CO Group Attributes -PGM 327

Selecting H.323 CO Group Attributes will display the data entry page. Click the **[Save]** button after changing Value.

Enter Group number: eMG80/100: 1-20 / eMG800: 1-200 / UCP: 1-200

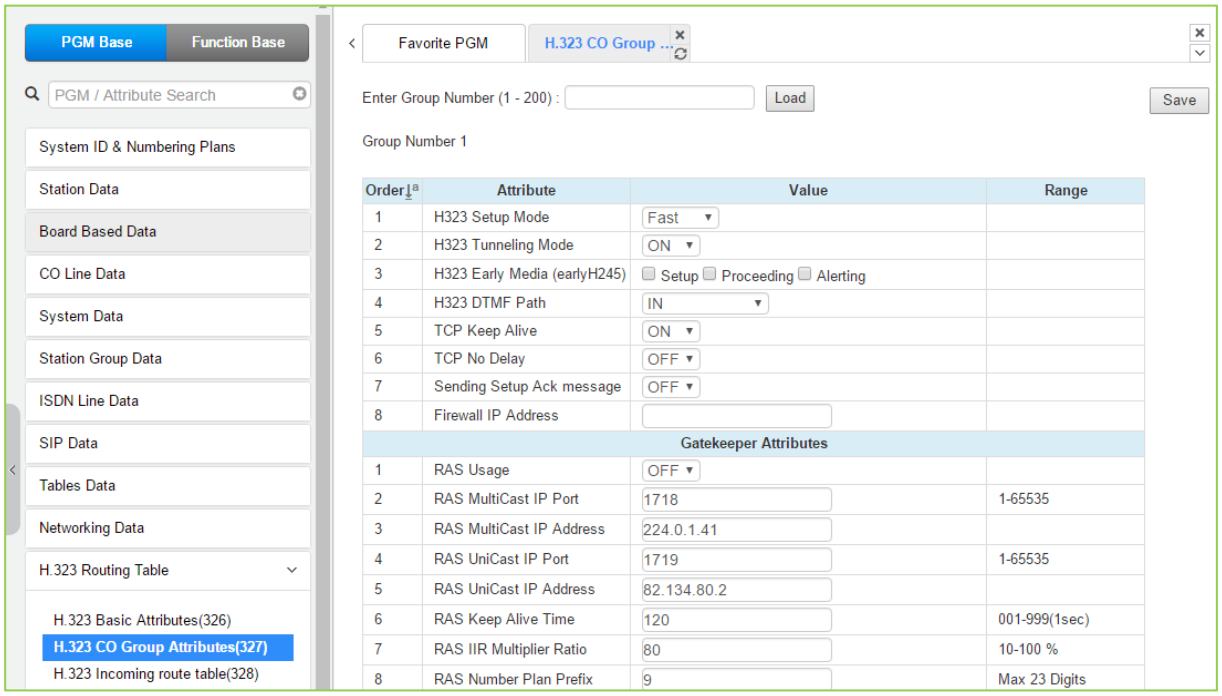


Figure 4.4.11.2-1 H.323 CO Group Attributes

The VOIP channels are used for Distributed Networking, SIP or H.323 networks, and remote iPECS devices. When the standard H.323 VoIP protocol is employed for an external VoIP call, several attributes of these channels can be assigned.

The H.323 call set-up mode and tunneling (H.245 Encapsulation) can be established. Also, for H.323 support, a RAS (Registration, Admissions, and Status) channel can be defined. The RAS channel IP addresses (unicast and multicast), IP port Numbering Plan and other H.323 set-up characteristics are defined.

Table 4.4.11.2-1 H.323 CO Group Attributes

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
H.323 Setup mode	H.323 IP calls can be set up using the H.323 normal or Fast Start mode.	Fast Norm	Fast
H.323 Tunneling mode	H.323 IP calls can be set up using the H.245 encapsulation (Tunneling).	OFF ON	ON
H323 Early Media (early H245)	This feature is the ability of two user endpoints to communicate before the call is actually established in normal call mode. This feature is not used when 'H323 Setup Mode' is 'Fast.' • **Setup:** The caller party tries to open early media on receiving the Setup message. • **Proceeding**: Calling party tries to open early media on receiving the Proceeding message. • **Alerting:** Calling party tries to open early media on receiving the Alerting message.	Refer to description	

Table 4.4.11.2-1 H.323 CO Group Attributes

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
H.323 DTMF Path	During a connection, DTMF Digits can be sent in-band or out of band (H.245). **IN, RFC2833, H245_ALNUM, H225_SIG, H245_SIG**	Refer to description	IN
TCP Keep-Alive	The system will send a polling message every 75 seconds to assure the status of the TCP connection.	OFF ON	ON
TCP No Delay	Normally small chunks of TCP (H323) messages are combined into one packet and be sent to the remote party to improve the efficiency of the network. Sometimes this action yields the H323 signaling problem when the system is behind the NAT router, and there is H323 ALG is running. 'OFF' value can be a solution to overcome the problem.	OFF ON	OFF
Sending Setup Ack message	The system provides a SETUP ACK message when there is no sending complete IE' in the SETUP message.	OFF ON	OFF
Firewall IP Address	Enter the firewall IP Address.		
Gatekeeper Attributes			
RAS Usage	Determine whether VOIU/VOIB/VOIM will be used as a Gatekeeper.	OFF ON	OFF
RAS MultiCast IP Port	Multi-cast IP Port for RAS Information of Gatekeeper.	1~65535	1718
RAS MultiCast IP Address	The multi-cast IP address for RAS Information of Gatekeeper.	IP Address	224.0.1.41
RAS UniCast IP Port	Uni-cast IP Port for RAS Information of Gatekeeper.	1~65535	1719
RAS UniCast IP Address	Uni-cast IP address for RAS Information of Gatekeeper.	IP Address	82.134.80.2
RAS Keep Alive Time	The time between exchange of RAS Information between GK and VOIB/VOIU.	001-999 (SEC)	120
RAS IIR Multiplier Ratio	This feature is used when the RAS gatekeeper routes the H323 call. The gatekeeper provides the keep-alive interval time between the system and gatekeeper on registration time. This value of the ratio is used to change the keepalive interval time from the gatekeeper.	10~100%	80
RAS Number Plan Prefix	The numbering plan for Calling Numbers in RAS Setup.	Max. 23 digits	
RAS Light RRQ usage	The Gatekeeper ID (This can be programmed only via WEB Admin).	OFF ON	OFF
RAS Gateway ID	The system can be assigned to use the simple RRQ (Registration Request) message (ON) or the full RRQ message (OFF).	Max. 128 characters	
Failover Usage	The H.323 call will be failover to another line (FAILOVER USAGE: ON).	OFF ON	OFF
Call Setup No Response time	The H.323 call will be failover. The time will be set.	0, 3-15 (Sec.)	0

Table 4.4.11.2-1 H.323 CO Group Attributes

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Failover CO Group number	If the H.323 call is failover, assign another CO group. eMG80/100:1-20, eMG800:1-200, UCP:1-200	Refer to description	

4.4.11.3 H.323 Incoming Route table -PGM 328

Selecting H.323 Incoming Route table will display the data entry page. Click the **[Save]** button after changing Value.

Enter CO Group number: eMG80/100 : 1-20 / eMG800: 1-200 / UCP: 1-200

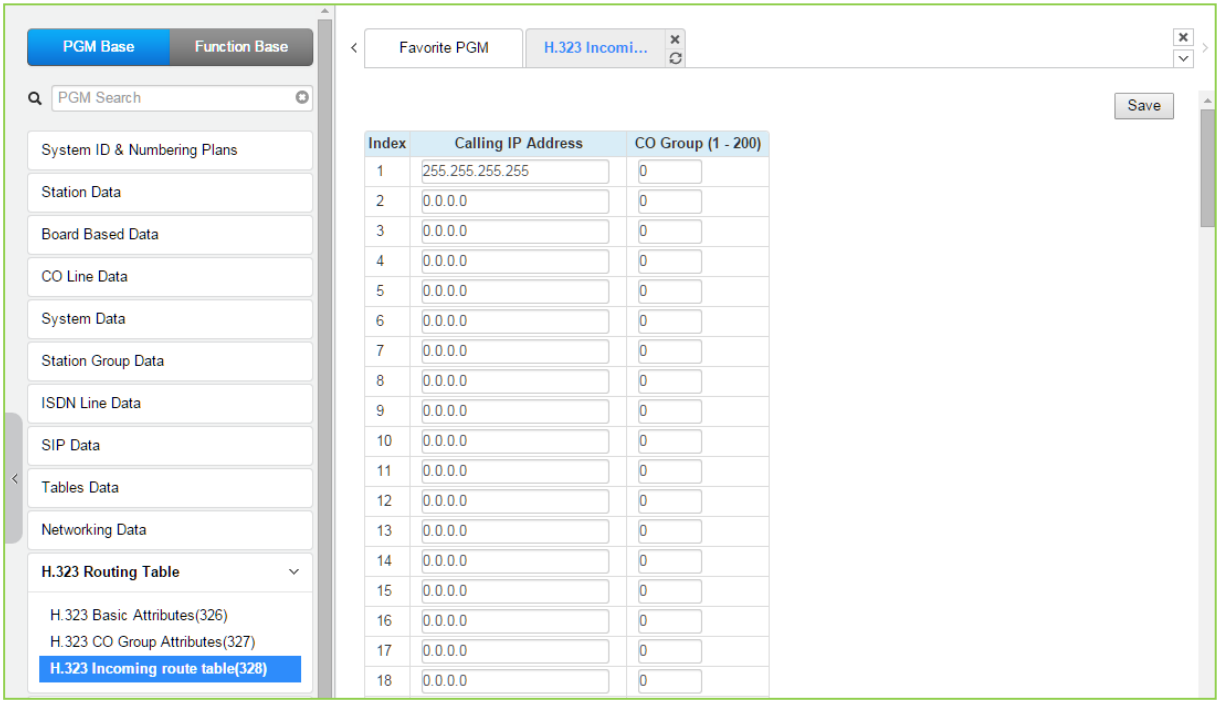


Figure 4.4.11.3-1 H.323 Incoming Route table

It is to get the direct H.323, the From IP-Address and 'incoming CO Group number' to be routed should be assigned.

Table 4.4.11.3-1 H.323 Incoming Route table

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Calling IP Address	IP address associated with H.323 incoming calls. 255.255.255.255 is used when the external call comes from an unknown IP Address which is not listed in this table entry.		0.0.0.0
CO Group	CO group number associated with H.323 incoming calls. eMG80/100:1~20, eMG800:1~200, UCP:1~200	Refer to description	0

4.4.12 T-NET Data

The following figure shows that selecting the T-NET Data program group returns the sub-menu displayed in the left frame.

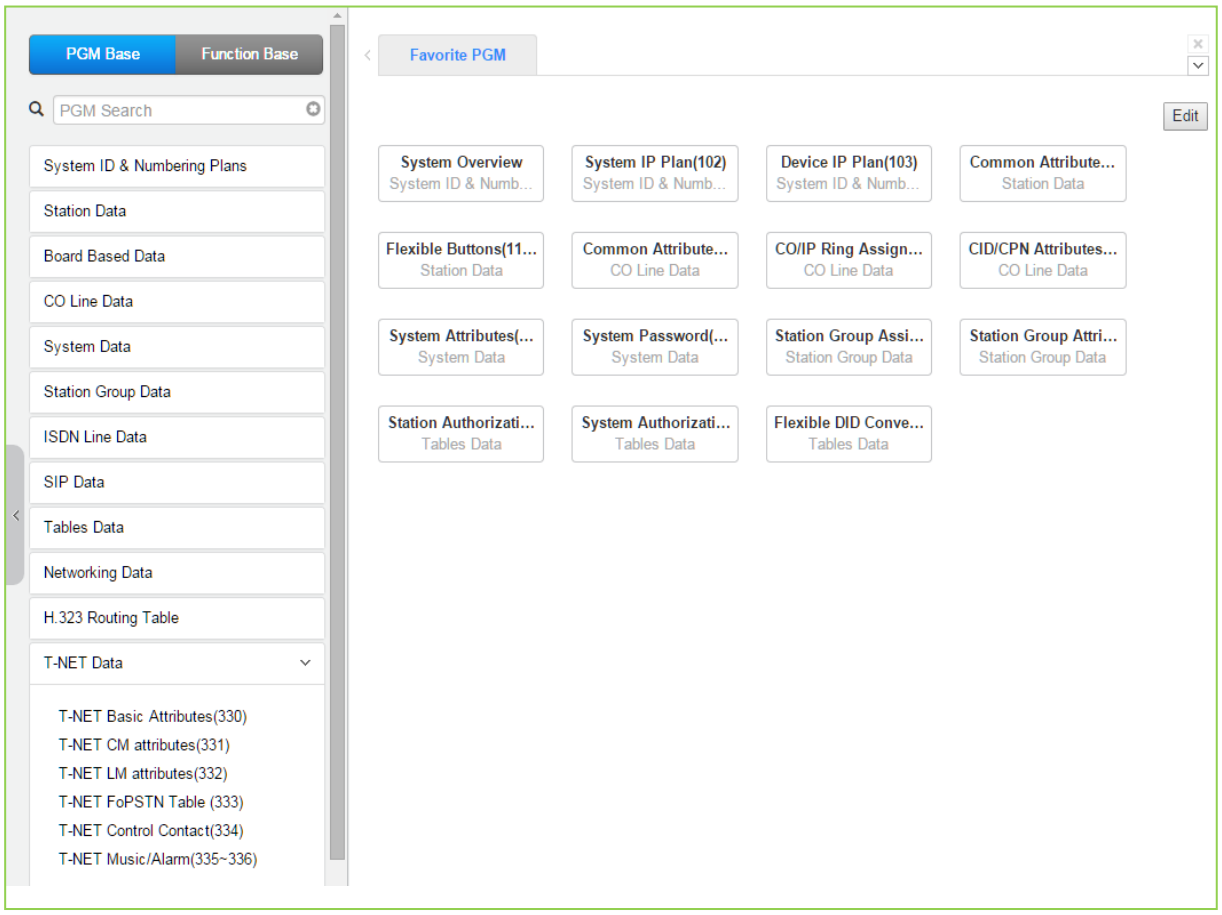


Figure 4.4.12-1 T-NET Data Main Page

In a Centralized Control T-NET (Transparent Network), remote devices may be registered to a Central iPECS system(CM) and a Local iPECS system (LM). In this way, the CM maintains control of the remote device. Should the WAN connection between an LM and CM fail (polling error), the LM will initiate operational control of the locally registered devices. Calls between the systems (CM and LM) can automatically shift to PSTN Modules registered with the LM for Fail-over operation. The configuration and characteristics of LMs and CM are configurable, as is Fail-over operation.

4.4.12.1 T-NET Basic Attributes -PGM 330

Selecting T-Net Basic Attributes will display the data entry page. Click the **[Save]** button after changing Value.

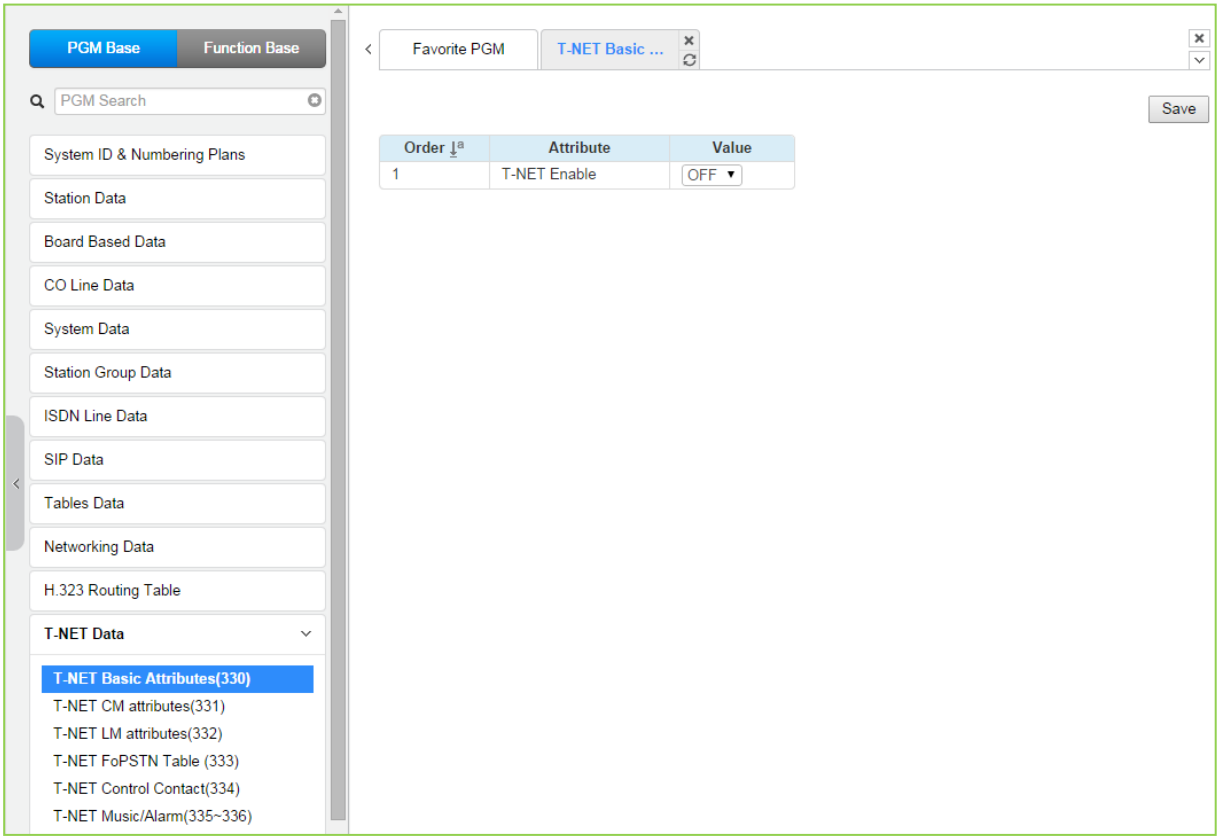


Figure 4.4.12.1-1 Zone number overview

Each iPECS system in a Central Control network environment must be enabled for T-NET operation to function as part of the network.

4.4.12.2 T-NET CM Attributes -PGM 331

Selecting T-Net CM Attributes will display the data entry page. Click the **[Save]** button after changing Value.

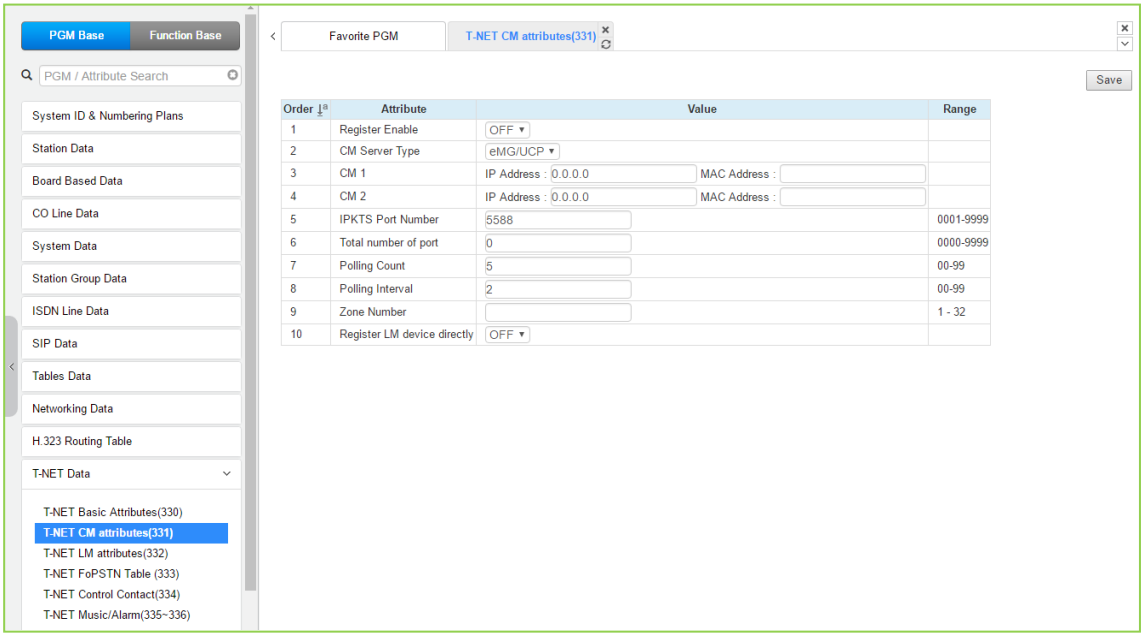


Figure 4.4.12.2-1 T-NET CM Attributes

Each LM (Local iPECS system), which is part of a Central Control Network, must be defined with the IP Address of the CM (Central iPECS system). The LM configuration data is sent to the CM at the time the LM registers with the CM. Total port counts define the ports allocated in the CM database for use by devices registered to the LM. The number of ports defined in the database of each LM must be equal to or less than the ports defined in the CM for the LM, see PGM 332, to register properly.

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Register Enable	This field informs the LM to attempt registration with the CM. This field must be set to ON for proper registration.	OFF ON	OFF
CM server type	Assign the type of CM server; iPECS eMG/UCP or iPECS CM.	eMG/UCP, CM	eMG/UCP
IP Address	This field defines the IP address of the CM that the LM will use.	IPv4 address	
IPKTS Port number	In the TNET environment, the IPKTS protocol signaling the UDP port is defined. At present, this field is not used, do not change this port number.	0001-9999	5588
Total number of port	This field defines the total number of ports the LM will request to be allocated by the CM for devices attached to the LM. This value must be equal to or less than the port count in the CM for the LM devices.	0000-9999	0
Polling Count	This field defines the maximum polling failures an LM considers a WAN fault.	00-99	5
Polling interval	This field defines the interval time between LM to CM polling attempts.	00-99	2
Zone Number	Zone number can be assigned to Device or GW.	1-32	

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Register LM device directly	This option enables LM (Local system) device to register CM (Central system) directly without T-NET by setting ON.	OFF ON	OFF
System register interval	It is an LM system register interval. If it Is not zero, then the LM system will be registered to CM sequentially.	00-99 (minute)	00

4.4.12.3 T-NET LM Attributes -PGM 332

Selecting T-Net LM Attributes will display as below. Click the **[Save]** button after changing Value.

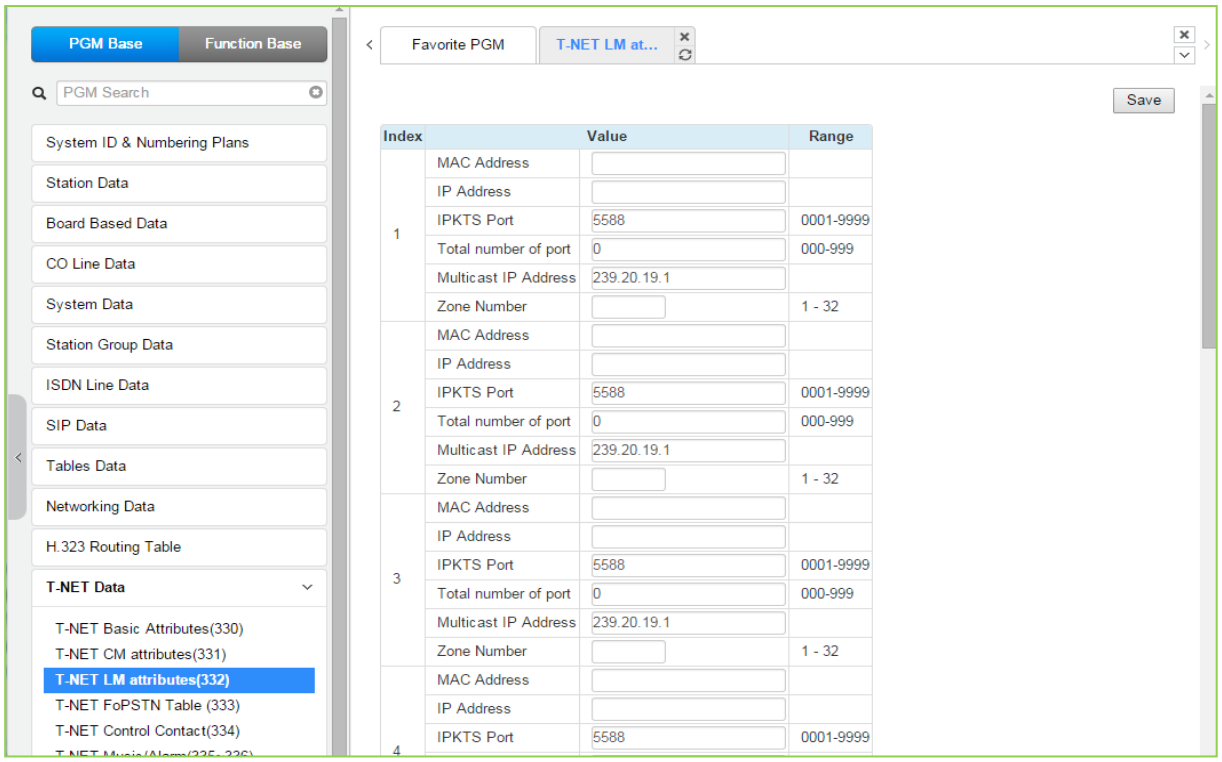


Figure 4.4.12.3-1 T-NET LM Attributes

The CM (Central iPECS system) must be programmed with the MAC and IP address of each LM (Local iPECS system) in the Centralized Control network and the maximum configuration of each LM. Up to 100 Local iPECS systems (LMs) may be defined, and configuration entered.

The port counts define the ports allocated in the CM database for use by devices registered to the LM. The number of ports defined in the database for each LM in PGM 331 must be equal to or less than the ports defined in the CM to register properly.

Table 4.4.12.3-1 T-NET LM ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Mac Address	This field defines the MAC address of the LM that will be part of the T-NET environment and is used by the CM for authorization.	MAC address	
IP Address	This field is the IP address of the LM.	IPv4 address	
IPKTS Port	In the T-NET environment, the IP KTS protocol signaling the UDP port is defined. At present, this field is not used, do not change this port number.	0001-9999	5588

Table 4.4.12.3-1 T-NET LM ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Total no of port	This field defines the total number of ports the LM will request from the CM for devices attached to the LM. This value must be equal to or more than the port count defined in the LM.	000-999	0
Multicast IP address	This field defines the multicast IP address that could be used in the T-NET branch site.	IPv4 address	
Zone number	Zone number can be assigned to Device or GW.	1-32	
Register guard time	TNET LM system will register to CM at least after this time from the previous registration	00-99 (minute)	0

4.4.12.4 T-NET FoPSTN table -PGM 333

Selecting the T-NET FoPSTN Table will display the data entry page. Enter an index range, then click **[Load]** to modify the data. Click the **[Save]** button after changing Value.

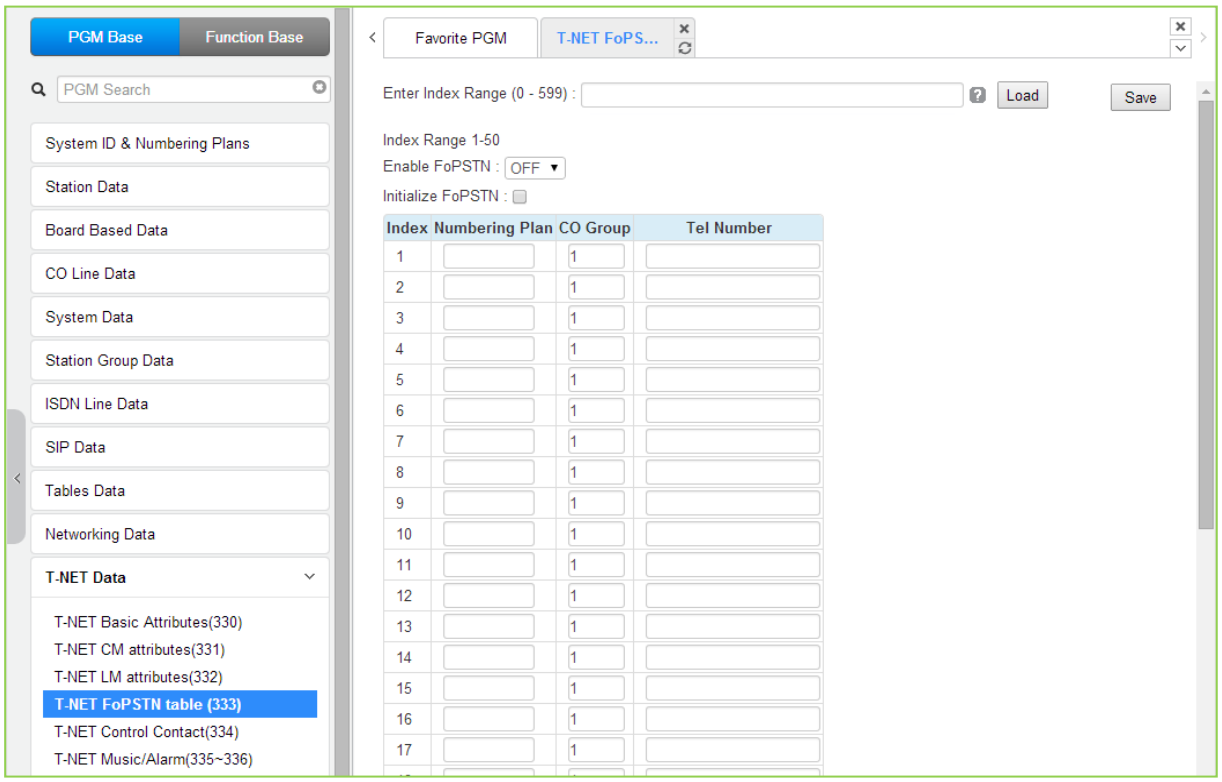


Figure 4.4.12.4-1 T-NET FoPSTN table

The Fail-over function allows the systems in the T-NET environment to complete calls between systems over a PSTN (analog or digital) line should the WAN connection to the CM fail. A CO gateway Module must be registered to the LM for local CO services. Users may call others in the normal manner, and the call is routed over CO facilities to the remote CM. When calls are directed to a DID line at the receiving system, the system will select a line from the assigned CO Group and dial the Tel Number with the station number dialed as the trailing digits.

Table 4.4.12.4-1 Fail Over to PSTN ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Numbering Plan	Station numbers are associated with the remote system. A range can be indicated by using “*” to indicate the range. Example: 21* covers 210 to 219 or 2100 to 2199.	Station number	
CO Group	This field defines the CO Group of the local system that will be used to place calls to the stations entered in the Fail Over Numbering Plan above, should WAN failure occur. eMG80/100:1~20, eMG800:1~200, UCP:1~200	Refer to description	
Tel Number	This field defines the telephone number the system should dial to place a call to the stations entered in the FO Numbering Plan, should WAN failure occur. An “*” may be entered as a wild card to indicate insertion of the dialed station number.	24 digits	

4.4.12.5 T-NET Control Contact -PGM 334

Selecting T-NET Control Contact will display the data entry page. Enter the T-NET range from the T-Net LM Attributes, then click **[Load]** to modify the data. Click the **[Save]** button after changing Value.

Enter T-NET Range: eMG80/100: 1-15 / eMG800: 1-32 / UCP: 1-100

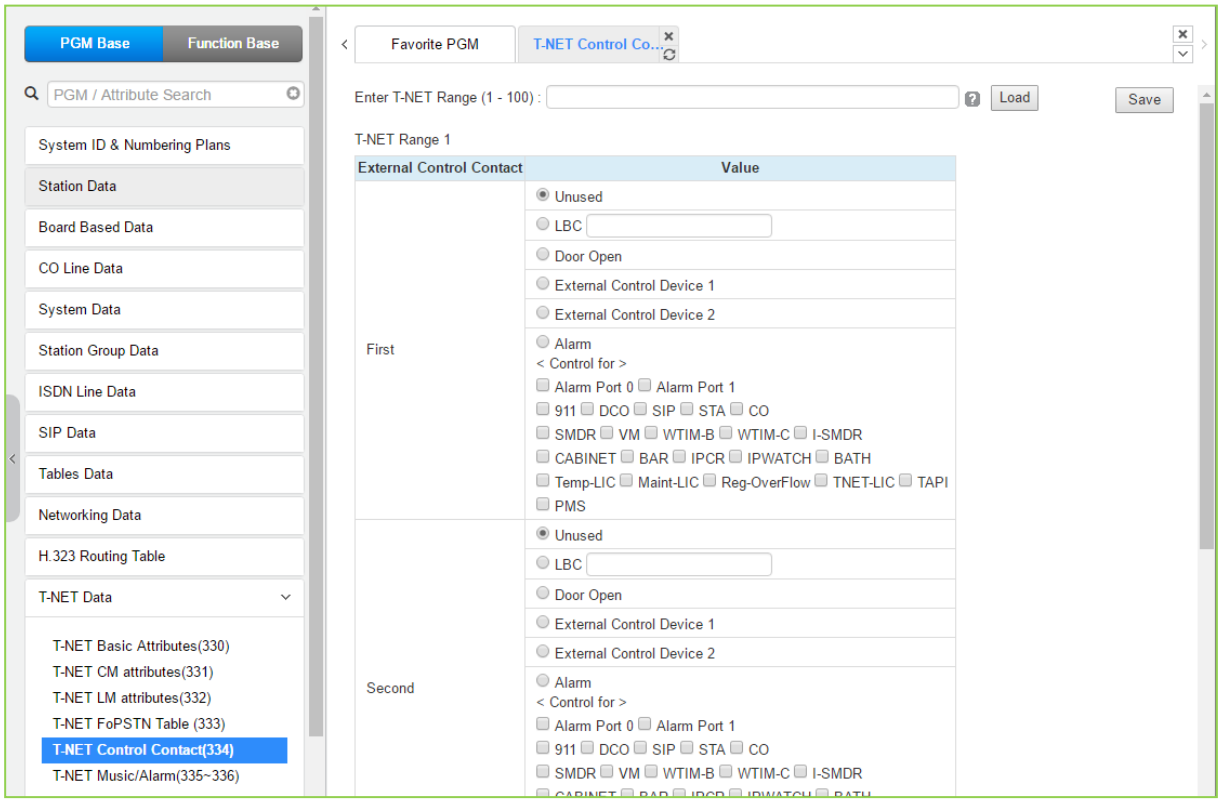


Figure 4.4.12.5-1 T-NET Control Contact

Each LM incorporates relay contacts that can be employed as a Door Lock Release. The contact activates a third-party Door Lock Release mechanism activated by dialing the Door Unlock code at a local station. In the case of selecting Alarm, you can choose the desired alarm types for the association.

4.4.12.6 T-NET Music/Alarm -PGM 335 ~ 336

Selecting T-NET Music/Alarm will display the data entry page. Enter the T-NET range from the T-Net LM Attributes, then click **[Load]** to modify the data. Click the **[Save]** button after changing Value.

Enter T-NET Range: eMG80/100: 1-15 / eMG800: 1-32 / UCP: 1-100

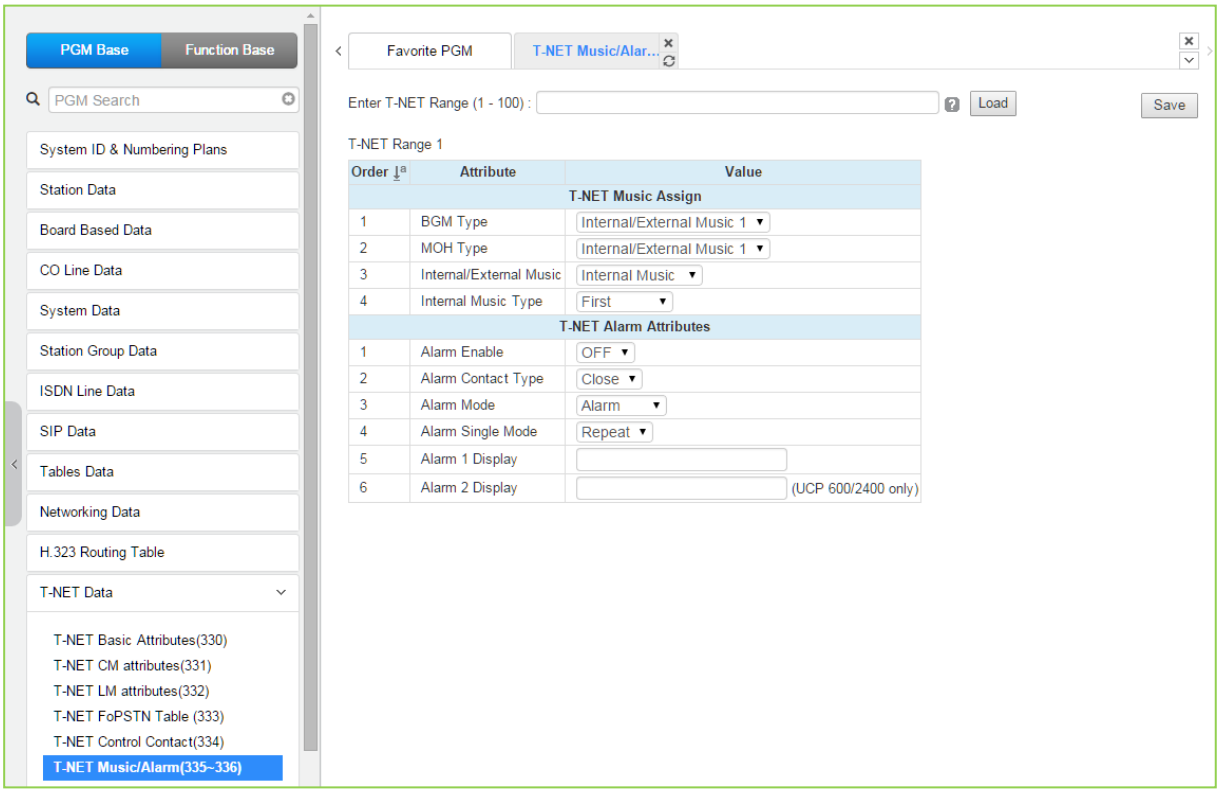


Figure 4.4.12.6-1 T-NET Music/Alarm

To minimize WAN traffic, the CM does not provide BGM/MOH to an LM. The LM employs local BGM and MOH facilities to reduce traffic load on the WAN and IP channel processors. The LM uses IP Multicast for local BGM and MOH transport. In addition, the Alarm contacts of the LM can be defined for use as a local alarm or doorbell.

When alarm port 1 of the LM is activated, the string of {Alarm 1 Display} is displayed in assigned stations.

When alarm port 2 of the LM is activated, the string of {Alarm 2 Display} is displayed in assigned stations(if LM is UCP600/2400).

4.4.12.7 T-NET ISDN Clock Priority for eMG800 -PGM 337

Selecting T-NET ISDN Clock priority will display the data entry page. Enter the T-NET range from the T-Net LM Attributes, then click **[Load]** to modify the data. Click the **[Save]** button after changing Value.

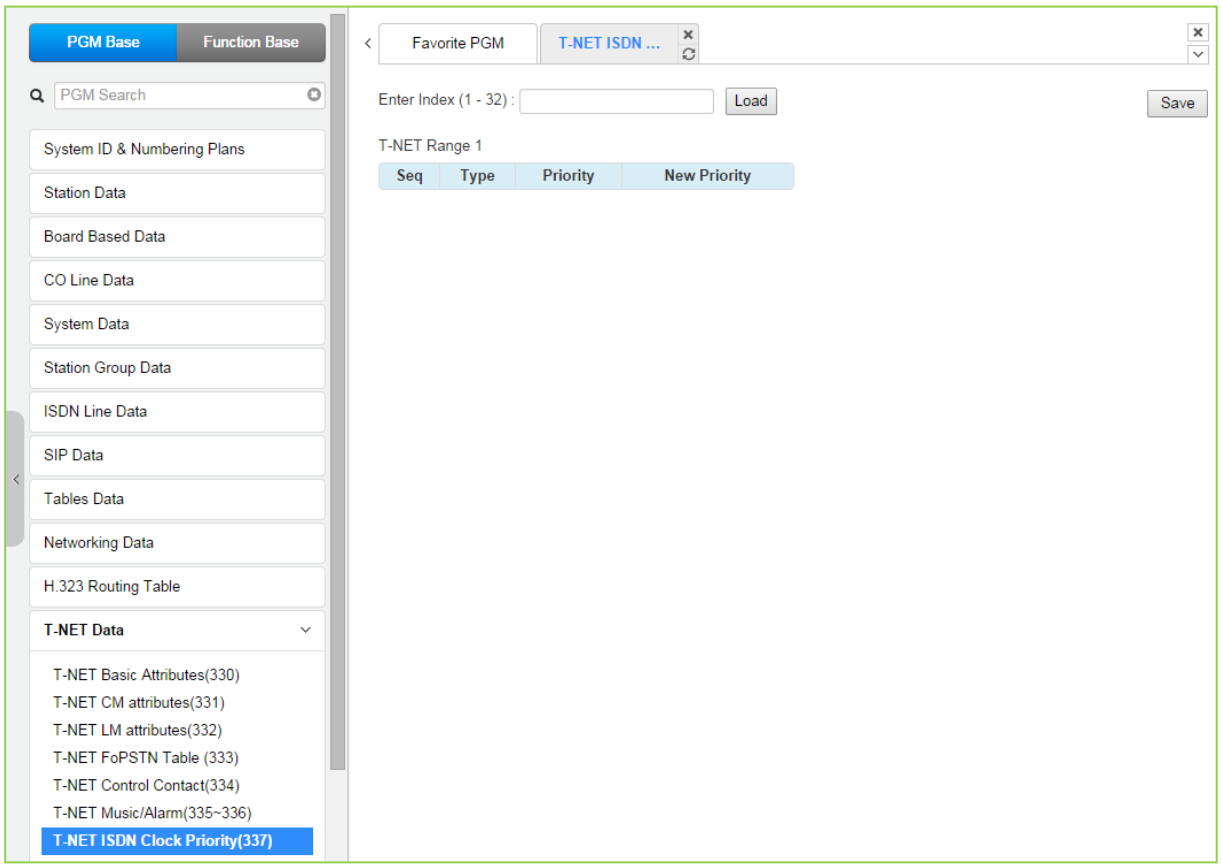


Figure 4.4.12.7-1 T-NET ISDN Clock Priority

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Priority	ISDN clock priority in a TNET site.	1-18	

4.4.13 Zone Data

Selecting the Zone Data program group returns the sub-menu displayed.

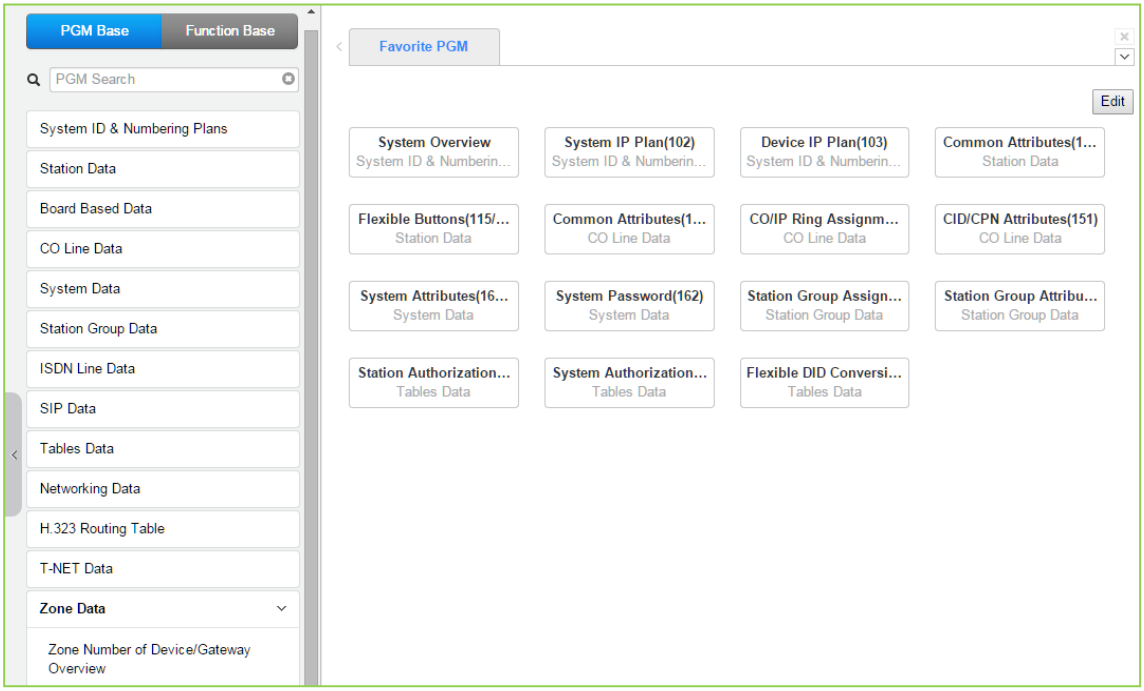
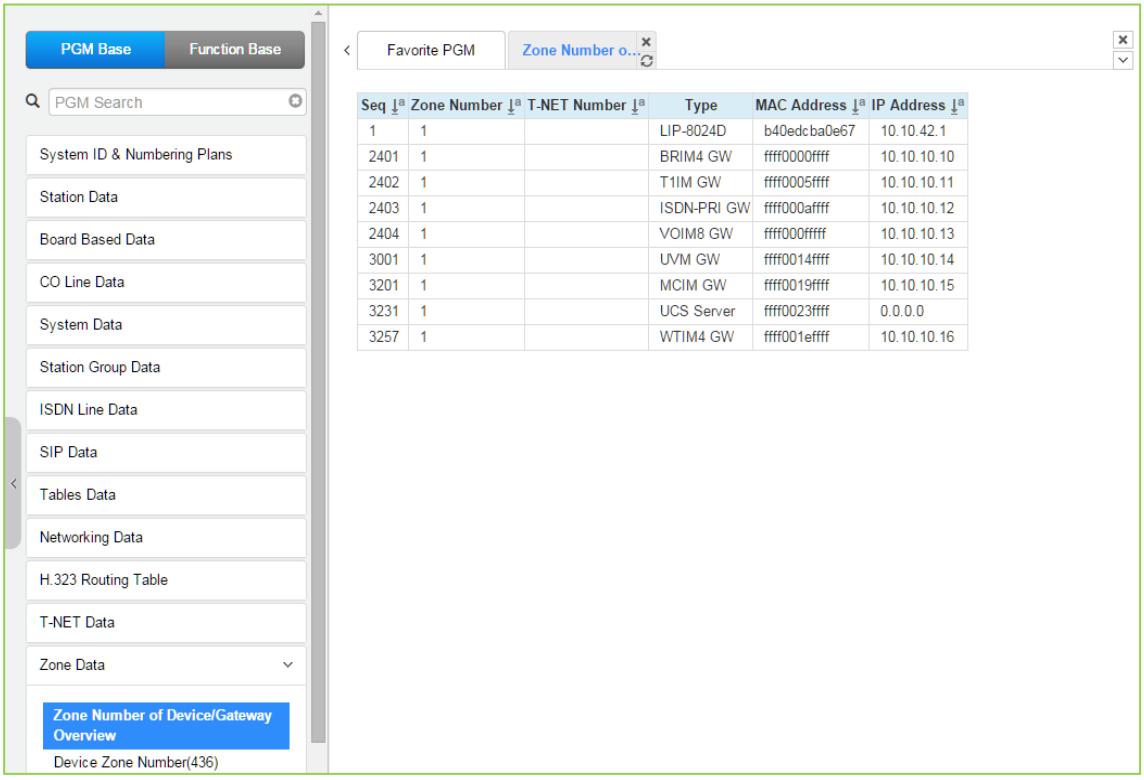


Figure 4.4.13-1 Zone Data Main Page

4.4.13.1 Zone Number Overview

Selecting Zone Number Overview returns the data entry page.



Seq	Zone Number	T-NET Number	Type	MAC Address	IP Address
1	1		LIP-8024D	b40edcba0e67	10.10.42.1
2401	1		BRIM4 GW	ffff0000ffff	10.10.10.10
2402	1		T1IM GW	ffff0005ffff	10.10.10.11
2403	1		ISDN-PRI GW	ffff000affff	10.10.10.12
2404	1		VOIM8 GW	ffff000fffff	10.10.10.13
3001	1		UVM GW	ffff0014ffff	10.10.10.14
3201	1		MCIM GW	ffff0019ffff	10.10.10.15
3231	1		UCS Server	ffff0023ffff	0.0.0.0
3257	1		WTIM4 GW	ffff001effff	10.10.10.16

Figure 4.4.13.1-1 Zone number overview

Zone data is a tool employed to easily manage the characteristics of groups of devices under the control of an MPB/UCP. Such devices can be grouped into a Zone to define common characteristics, including Country Code, DSCP, RTP packet handling, etc. Common attributes are defined at the device, Zone, and Inter-zone levels. Device settings have priority over system and Zone settings, while Zone settings have priority over system settings.

Generally, the transport of RTP packets should be peer-to-peer communication over either a LAN or VPN. If iPECS devices are separated by a NAPT server or direct peer-to-peer communications are not available, packet relay must be employed to assure communication. In packet relay, RTP packets are received by a local VoIP channel, which is under control of the MPB/UCP, and the IP address is translated from public to the device's private address. The VoIP channel implements a secure channel using IPSec protocol. Devices can be assigned as part of an "RTP Relay group" to use the same VoIP channels to implement the relay of RTP packets. Packet relay groups also provide for conversion of multi-cast packets from the MPB/UCP to uni-cast and back again at the group level to multi-cast. Note packet relay requires a VoIP channel to be available locally for each simultaneous call that requires packet relay.

4.4.13.2 Device Zone Number – PGM 436

Selecting the Device Zone Number returns the Zone Number data input page. Enter the Sequence number range (refer to section 4.4.1.4System & Device IP Address Plan - PGM 102 & 103) and click **[Load]**to assign a device's zone number. Click the **[Save]** button after changing Value.

Enter Device/GW sequence Range: eMG80/100: 1-300 / eMG800: 1-2890 / UCP: 1-3688

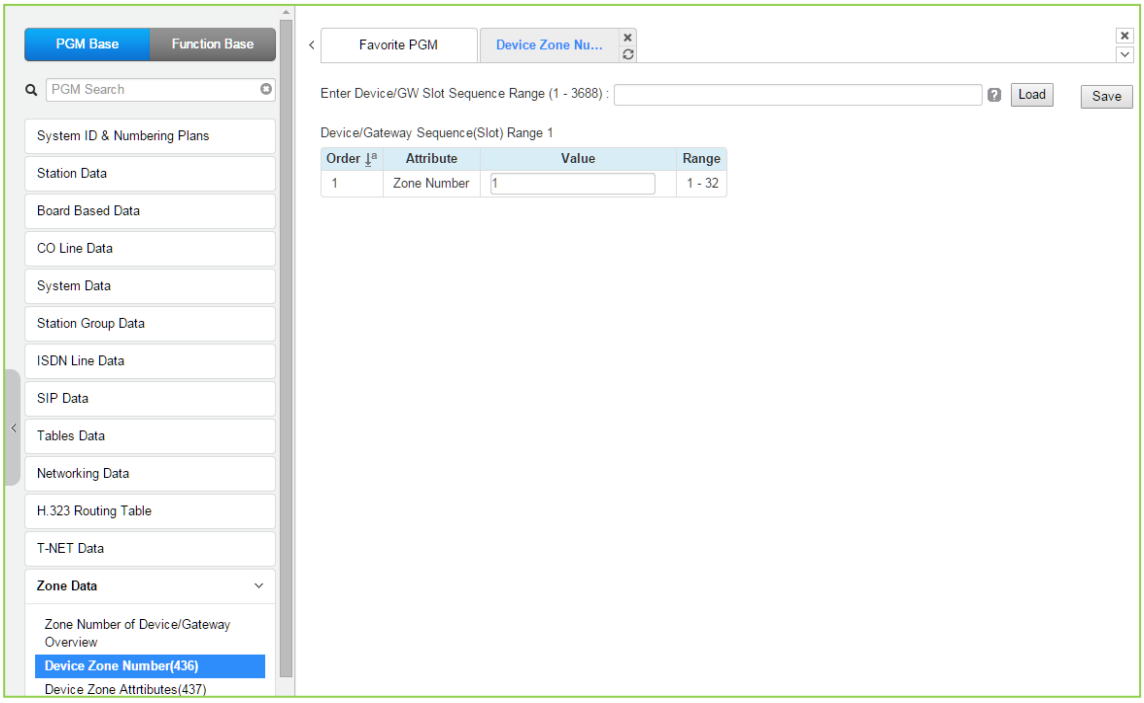


Figure 4.4.13.2-1 Device Zone Number

Device Zone Number assigns a device to one of up to 32 specific Zones.

Table 4.4.13.2-1 DEVICE ZONE ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Zone number	Zone number can be assigned to Device or GW.	1-32	1

4.4.13.3 Device Zone Attributes – PGM 437

Selecting the Device Zone Attributes returns the Device Zone Attributes data input page. Enter the Sequence number Range (refer to section 4.4.1.4 System & Device IP Address Plan - PGM 102 & 103) and click **[Load]**to assign a device's zone number. Use the checkmark to indicate which attributes to modify; checked attributes are stored by clicking the **[Save]** button.

Enter Device/GW sequence Range: eMG80/100: 1-300 / eMG800: 1-2890 / UCP: 1-3688

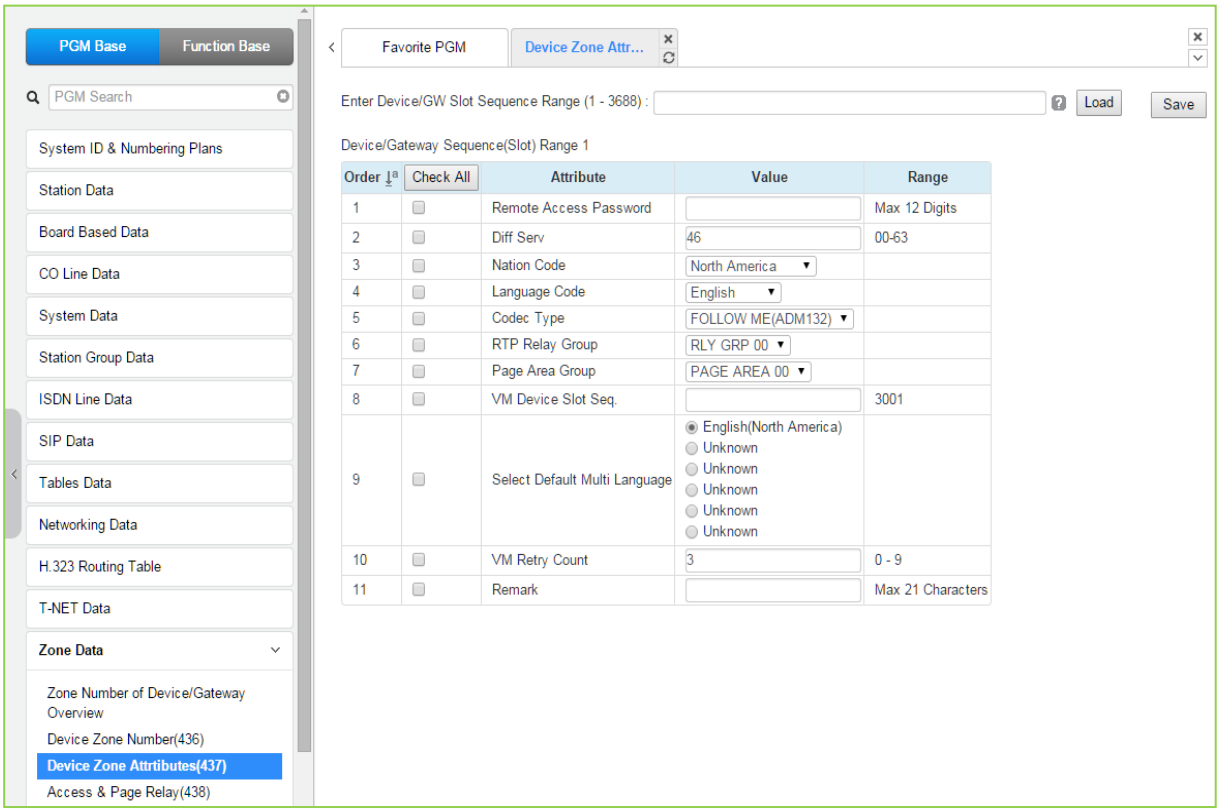


Figure 4.4.13.3-1 Device Zone Attributes

Device Zone Attributes define characteristics specific to the device, including the registration password, DiffServ Code Point, Nation, etc. In addition, Zone characteristics set at the Device level take precedence over characteristics for the Zone Attributes. While a Zone may incorporate up to 15 different RTP packet Relay Groups, for clarity, a single RTP Relay Group should be used within a Zone.

Table 4.4.13.3-1 DEVICE ZONE ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Remote Access Password	Registration password assigned in device for Remote stand-alone device only	Max. 12 digits	None
Diff Serv	The MPB assigned code point will take precedence. Applies to all devices	0-63	4
Country Code	Country location of the device. Available selections are given in the Country code table.	Country Code	Nation dependent
Language Code	Each device can be assigned a local language or English as the LCD Display Language.	Language Code	Nation dependent

Table 4.4.13.3-1 DEVICE ZONE ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Codec Type	The codec selection method can be defined as device-based, see PGM 132, or based on the codec type assigned to the Zone. **Follow Zone, Follow Me (ADM132)**	Refer to description	Follow Me (ADM132)
RTP Relay Group	This attribute defines the RTP Relay group employed by the device, 00-no relay. Zone parameters define the VoIP device to employ.	00-15	00 (no relay)
Page Area Group	The Paging Area Group identity is employed to determine when multicast to unicast conversion is needed to relay paging data across the network using a VoIP channel of a VOIU/VOIM or Paging Agent (VoIP channel of an iPECS LIP Phone). 00: same paging relay area	00-15	00
VM Device Slot Sequence. (VMIU/VMIB Slot Sequence)	The VSF gateway used to support Voice Mail for a device is defined. The VSF/UVM must be under the control of the same eMG/UCP as the device. **eMG80/100: Max. 3 Digits, eMG800/UCP: Max. 4Digits**	Refer to description	
Select Default Multi-Language	The recorded language selection prompt is played to the user when accessing the built-in AA/VM. The system supports up to six languages.	1 ~ 6	1
VM Retry Count	The user may select an available language. If the language is unavailable, the user may attempt to enter a valid language type based on this retry counter. If the user cannot enter a valid language, the announcement is provided in the default language.	0-9	3
Remark	Descriptive information to help installer/programmer in identifying the device Zone, i.e., Branch1.	Max. 21 characters	

4.4.13.4 Access & Page Relay – PGM 438

Selecting Access & Page Relay returns the Access & Page RTP packet relay data input page. Enter the Sequence number Range (refer to section 4.4.1.4 System & Device IP Address Plan - PGM 102 & 103) and click **[Load]**to define packet relay characteristics for Paging between Zones. Click the **[Save]** button after changing Value.

Enter Device/GW sequence Range: eMG80/100: 1-300 / eMG800: 1-2890 / UCP: 1-3688

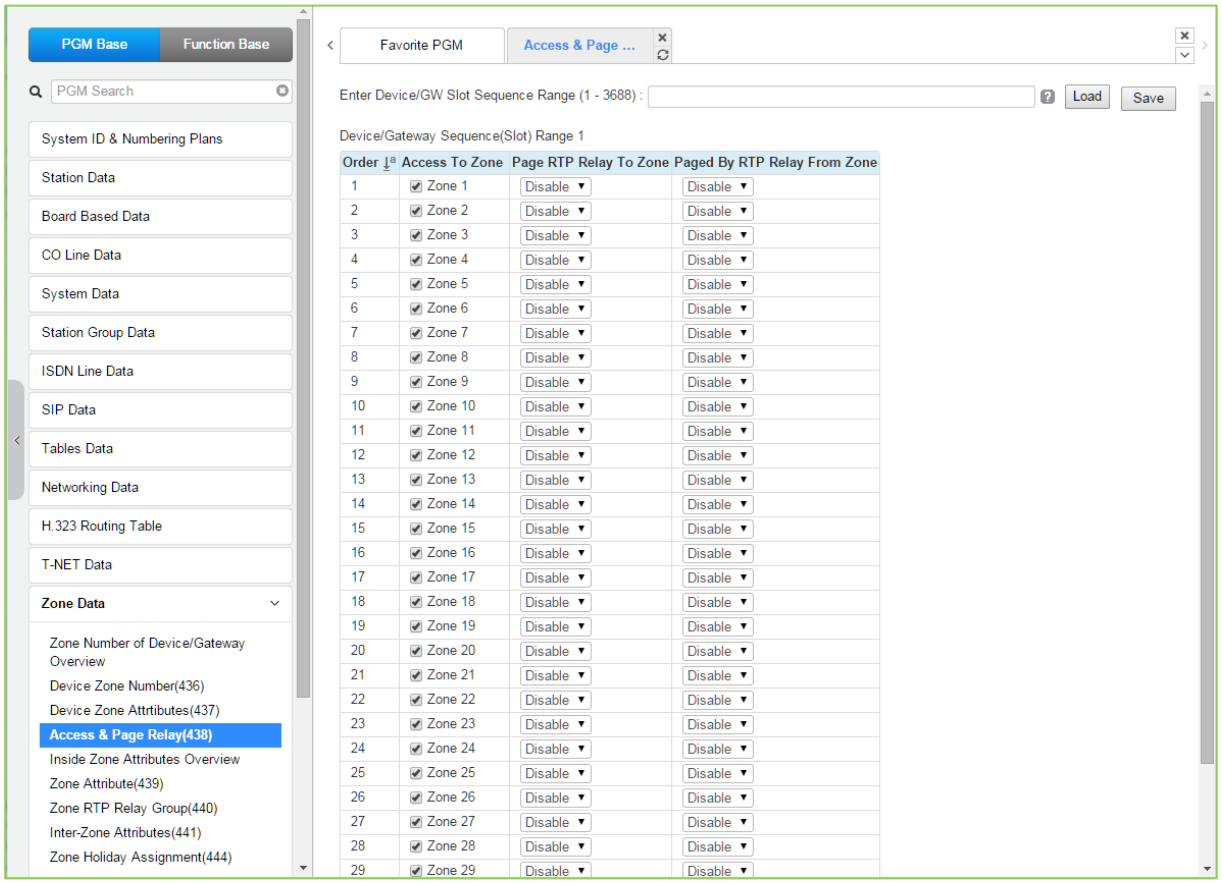


Figure 4.4.13.4-1 Zone Page RTP Packet Relay

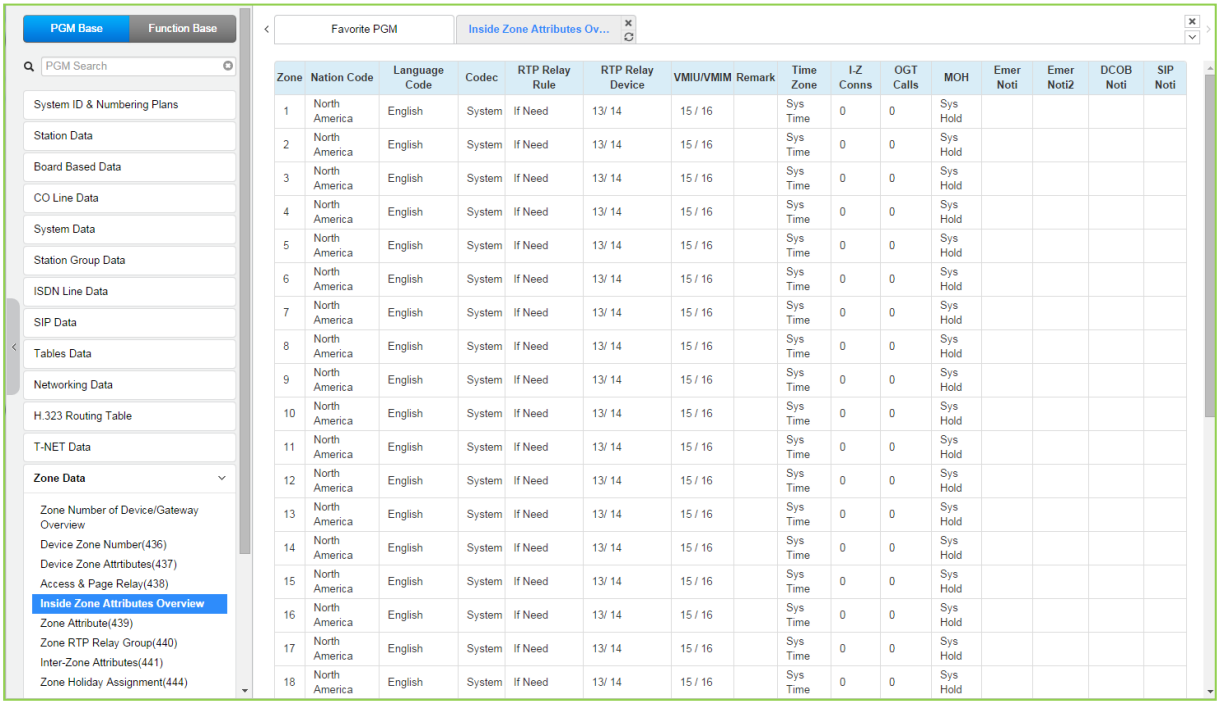
iPECS protocol employs multi-cast to send RTP packets to multiple devices at one time. This improves efficiency and lowers traffic by sending a single multicast packet to multicast group members. In particular, paging employs this multi-cast technique.

However, since multi-cast is not commonly supported outside of the LAN, uni-cast must be used to transport such signals between routers. At the receiving Zone, a local VoIP channel receives the uni-cast signal from the controlling MPB. The VoIP channel then converts the packet address to a multi-cast signal for delivery to devices in the same Zone RTP Relay Group.

Table 4.4.13.4-1 Zone Page RTP Packet Relay

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Page RTP Relay to Zone	The device can be configured to relay RTP packets for paging to other zone members, Paging Relay.	Disable Enable	Disable
Page By RTP Relay From Zone	The device can be configured to receive relayed packets from the assigned Zones(s).	Disable Enable	Disable

4.4.13.5 Inside Zone Attributes Overview



Zone	Nation Code	Language Code	Codec	RTP Relay Rule	RTP Relay Device	VMIU/VMIM	Remark	Time Zone	I-Z Conns	OGT Calls	MOH	Emer Noti	Emer Noti2	DCOB Noti	SIP Noti
1	North America	English	System	If Need	13/ 14	15 / 16		Sys Time	0	0	Sys Hold				
2	North America	English	System	If Need	13/ 14	15 / 16		Sys Time	0	0	Sys Hold				
3	North America	English	System	If Need	13/ 14	15 / 16		Sys Time	0	0	Sys Hold				
4	North America	English	System	If Need	13/ 14	15 / 16		Sys Time	0	0	Sys Hold				
5	North America	English	System	If Need	13/ 14	15 / 16		Sys Time	0	0	Sys Hold				
6	North America	English	System	If Need	13/ 14	15 / 16		Sys Time	0	0	Sys Hold				
7	North America	English	System	If Need	13/ 14	15 / 16		Sys Time	0	0	Sys Hold				
8	North America	English	System	If Need	13/ 14	15 / 16		Sys Time	0	0	Sys Hold				
9	North America	English	System	If Need	13/ 14	15 / 16		Sys Time	0	0	Sys Hold				
10	North America	English	System	If Need	13/ 14	15 / 16		Sys Time	0	0	Sys Hold				
11	North America	English	System	If Need	13/ 14	15 / 16		Sys Time	0	0	Sys Hold				
12	North America	English	System	If Need	13/ 14	15 / 16		Sys Time	0	0	Sys Hold				
13	North America	English	System	If Need	13/ 14	15 / 16		Sys Time	0	0	Sys Hold				
14	North America	English	System	If Need	13/ 14	15 / 16		Sys Time	0	0	Sys Hold				
15	North America	English	System	If Need	13/ 14	15 / 16		Sys Time	0	0	Sys Hold				
16	North America	English	System	If Need	13/ 14	15 / 16		Sys Time	0	0	Sys Hold				
17	North America	English	System	If Need	13/ 14	15 / 16		Sys Time	0	0	Sys Hold				
18	North America	English	System	If Need	13/ 14	15 / 16		Sys Time	0	0	Sys Hold				

Figure 4.4.13.5-1 Zone Attributes Overview

4.4.13.6 Zone Attribute – PGM 439

Selecting the Zone Attributes returns the Zone Attributes data input page. Enter the desired zone number range and click **[Load]**to assign Zone characteristics. Use the checkmark to indicate which attributes to modify; checked attributes are stored by clicking the **[Save]** button.

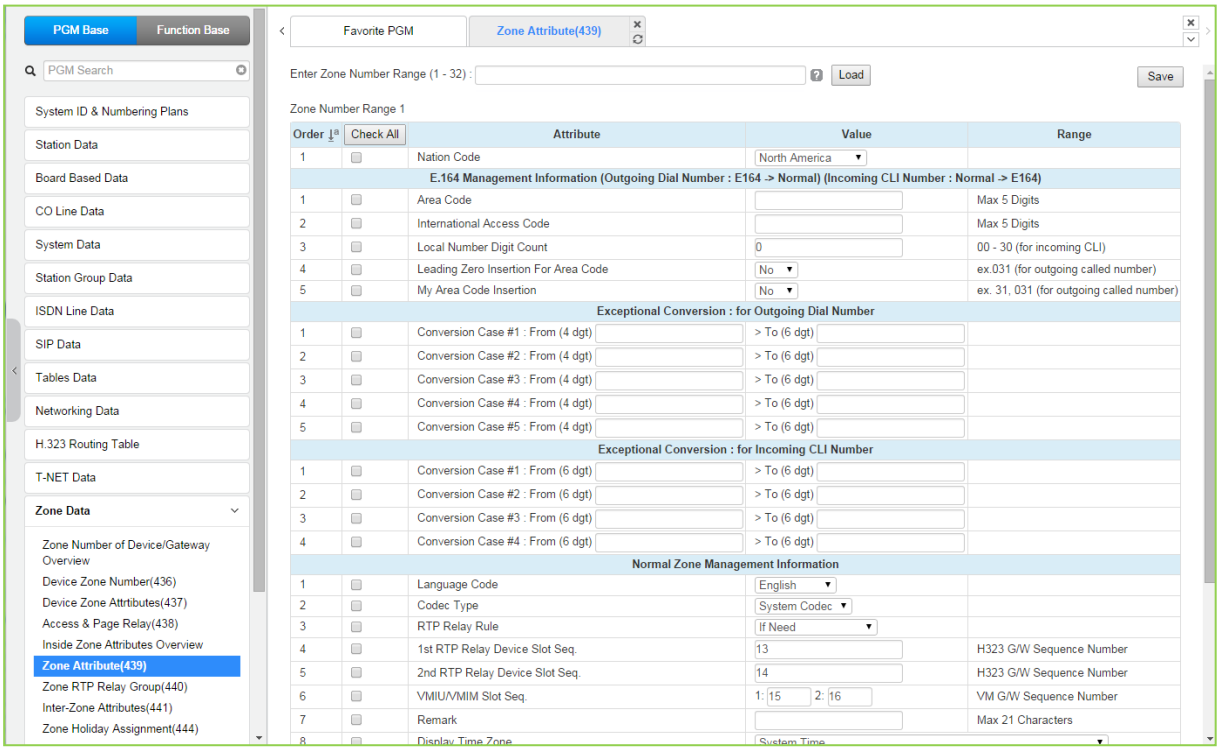


Figure 4.4.13.6-1 Zone Attributes

The nation code, codec, and VMIU/VMIB assigned for a Zone will be employed by all devices in the Zone unless a different entry is made in Device Zone data. If the Device Zone data is default or assigned by the MPB, the Zone data will take precedence.

The Zone Attributes define when and which VoIP channels to use for RTP packet relay. Local VoIP channels are assigned to perform the packet relay function, and the user can be defined as “if needed” or use the assigned RTP Relay Group. For “if Need,” the MPB will employ the IP KTS STUN protocol to determine when packet relay is required. If assigned “RTP Relay Group,” packet relay will always be employed for RTP packet receipt.

Table 4.4.13.6-1 ZONE ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Nation Code	The Nation code of devices in the zone-Available selections are given in the Country code table.	Country code	
E.164 Management Information (Outgoing Dial Number : E164-> Normal) (Incoming CLI Number: Normal ->164)			
Area Code	Assign area code that is used to convert CLI format (normal <-> E.164)	Max 5 Digits	
International Access Code	Assign international access code that is used to convert CLI format (normal <-> E.164)	Max 5 Digits	

Table 4.4.13.6-1 ZONE ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Local Number Digit Count	CLI length is over this count, and then it is a long-distance call; otherwise, it is a local call. (it is for incoming CLI)	00-30	0
Leading Zero Insertion for Area code	For an outgoing call, the system can insert a zero (‘0’) in front of the area code.	No Yes	No
My Area Code Insertion	For an outgoing call, the system can insert my area code in the CLI.	No Yes	No
Exceptional Conversion: for Outgoing Dial Number			
Conversion Case #1 Conversion Case #2 Conversion Case #3 Conversion Case #4 Conversion Case #5	The first digits, up to four (4), dialed by the user can be converted to a digit string of up to six (6) digits and may include a plus (+) sign. For example, if the “From” digits are 00 and the “To” digits are +820, if the user dials 002233432, the system converts the number to +820 2233432.	From (4-digits) To (6-digits)	
Exceptional Conversion: for Incoming CLI Number			
Conversion Case #1 Conversion Case #2 Conversion Case #3 Conversion Case #4	The first digits, up to four (4), received as the CLI can be converted to a digit string of up to six (6) digits and may include a plus (+) sign. For example, if the “From” digits are 00 and the “To” digits are +820, if the user dials 002233432, the system converts the number to +820 2233432.	From (4-digits) To (6-digits)	
Normal Zone Management Information			
Language Code	Language code of devices in the zone.	Language Code	Nation dependent
Codec Type	It assigns the codec employed by devices in the Zone. **System codec, G.711, G.723.1, G.729, G.722**	Refer to description	System codec
RTP Relay Rule	Assigns when to use the packet relay function with “If Need,” the MPB will automatically determine when to use packet relay, while “RTP Relay Group” will always implement packet relay for RTP packets. **If need, Relay Group, Forced to Relay**	Refer to description	If need
1st RTP Relay Device Slot Seq.	Assigns the local VOIU or VOIB IP channels that will be used to implement packet relay for devices in the Zone. eMG80/100:13, eMG800:19	Sequence Number	Refer to description
2nd RTP Relay Device Slot Seq.	Back-up VoIP channels for RTP packet relay used in the Zone. eMG80/100:14, eMG800:NA	Sequence Number	Refer to description
VM Device Slot Sequence (VMIU/VMIB Slot Sequence)	Assigns the UVMU/UVM/VMIU/VMIB used to support Voice Mail devices in the Zone. The UVMU/UVM/VMIU/VMIB must control the same MPB/UCP as the device is assigned. eMG80/100: 2 (1:15/2:16), eMG800: 3	Sequence Number	Refer to description

Table 4.4.13.6-1 ZONE ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Remark	Descriptive information to help installer/programmer in identifying the device Zone, i.e., Branch1.	Max. 21 characters	
Display time zone	The time & date displayed at the station are based on the time zone selected or the system time **Time zone, System time**	Refer to description	System time
Max Total Inter-Zone Connections	This parameter may be used to limit the number of maximum Inter-Zone connections. When this value is set to 0, there is no limit on the total Inter-Zone connections. eMG80/100:0-140, eMG800: 0-1200, UCP: 0-2400 (0: No limit)	Refer to description	0
Max Outgoing CO Calls	This field may be used to limit the number of outgoing CO/IP calls from the Zone. When this value is set to 0, there is no limit on the number of outgoing CO/IP calls. eMG80/100:0-74, eMG800: 0-600, UCP: 0-998 (0: No limit)	Refer to description	0
Zone MOH Assign	A Music source can be assigned, so that calls to this zone. Refer to Sys Hold, Internal music, External Music, **VSF MOH, SLT MOH1~5, VSF MOH2~30**	Refer to description	Refer to Sys Hold
Emergency Call Notify Station	It assigns the destination station for Emergency Call Notification.	Station number	
Emergency Call Notify 2nd Station	This field assigns a secondary station to receive notification of an emergency call from a device in the Zone.	Station number	
DCOB Fault Notify Station	This field assigns the station to receive notification of a DCOB (Digital CO Board) fault.	Station number	
SIP Registration Fault Notify Station	This field assigns the station to receive notification of a SIP Trunk registration fault.	Station number	
Daylight Saving Usage	If the option is "System DST mode," the zone will follow the system DST mode (System Date & Time(178)). If the option is "OFF," the zone will not apply the Daylight-Saving Time. **System DST mode, OFF**	Refer to description	System DST mode

4.4.13.7 Zone RTP Relay Group – PGM 440

Selecting the Zone RTP Relay Group returns the RTP Relay ON/OFF data input page. Enter the desired Zone and Group numbers and click the **[Load]**button to assign Zone characteristics. Click the **[Save]** button after changing Value.

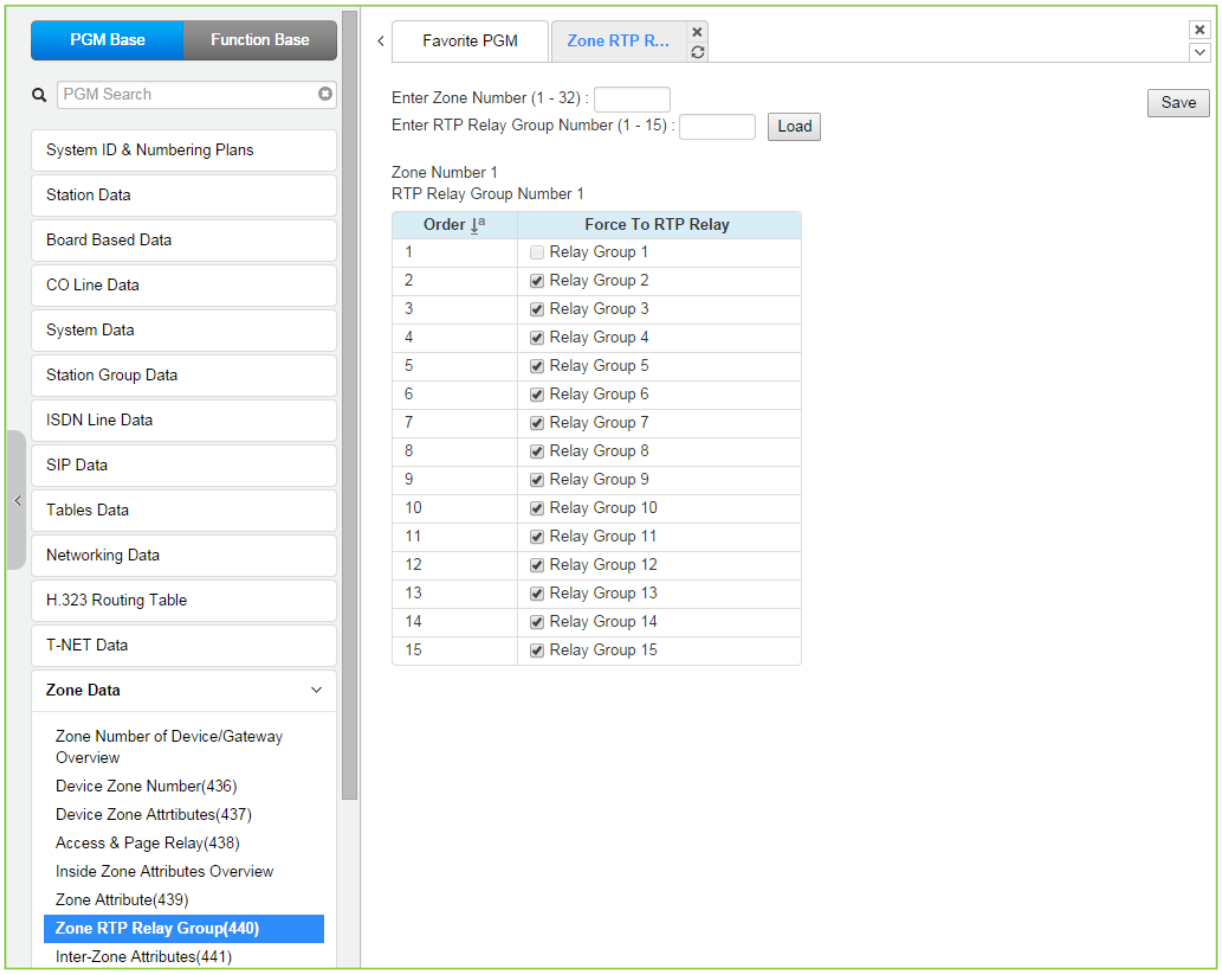


Figure 4.4.13.7-1 Zone RTP Packet Relay Groups

While it is strongly recommended that a Zone only have a single RTP Relay Group, up to 15 Groups can be assigned to a Zone. Devices in an RTP Relay Group should have common requirements for packet relay use. In some situations, it may be necessary to implement packet relay to groups in a Zone. Note that assignments here are ignored when “if Need” is assigned as the RTP Relay Rule in the Zone Attributes.

4.4.13.8 Inter Zone Attribute – PGM 441

Selecting the Inter-Zone Attribute returns the data input page. Enter the desired Source and Destination Zone number range and click **[Load]**to assign Zone characteristics. Click the **[Save]** button after changing Value.

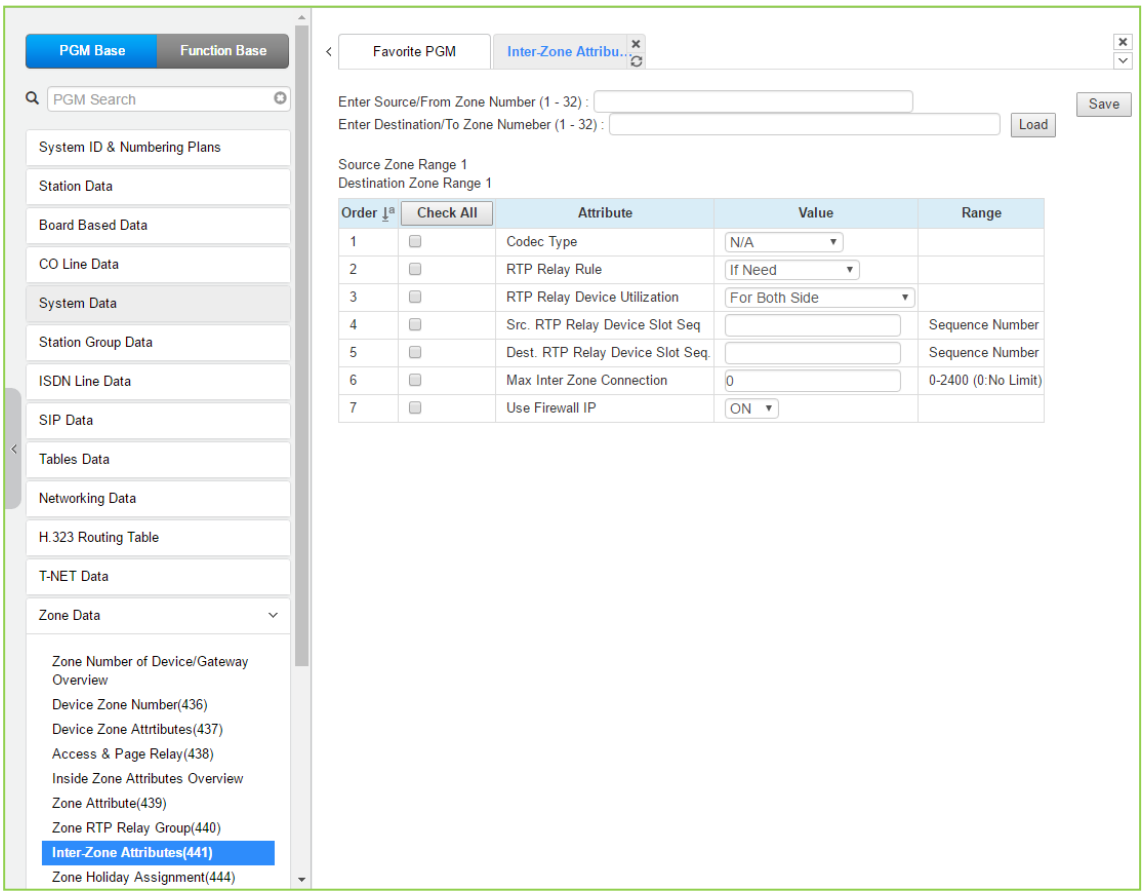


Figure 4.4.13.8-1 Inter-Zone Attributes

Inter Zone Attributes define RTP packet relay treatment for communications between devices in different Zones.

Table 4.4.13.8-1 INTER-ZONE ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Codec Type	It assigns the codec employed by devices in the Zone. **System Codec, G.711, G.723.1, G.729, G.722**	Refer to description	NA
RTP Relay Rule	Assigns when to use the packet relay function between Zones. With “If Need,” the MPB will automatically determine when to use packet relay, while “RTP Relay Group” will always implement packet relay for RTP packets between the Zones. **If need, Always not, Forced to do**	Refer to description	If need
RTP Relay Device Utilization	Assigns how to employ the Source and Destination VoIP channels. The assigned Source channels may be used for both sides of the communication or separately only for a device in the Source Zone. The Destination channels are then used as backup channels or only for devices in the Destination Zone. **For Both Side, Separated(SRC to DEST)**	Refer to description	For Both side

Table 4.4.13.8-1 INTER-ZONE ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Src RTP Relay Device Slot Seq.	The Sequence number is associated with the VoIP channels in the Source Zone that handle Packet Relay.	Sequence Number	
Dest. RTP Relay Device Slot Seq.	The Sequence number associated with the VoIP channels to handle packet relay for the Destination Zone is defined. When Utilization is Separate, the channels are used for devices in the destination Zone. Otherwise, they are used as a backup for both sides.	Sequence Number	
Max Inter-Zone connection	This field determines the maximum Inter-Zone connections between the source zone and destination zone. When this value is set to 0, there is no limit on the number of connections between the zones. eMG80/100:0-140, eMG800: 0-1200, UCP:0-2400	Refer to description	0
Use Firewall IP	If this option is set to ON, System uses the Firewall IP of the VoIP board for RTP relay between Zones. But, if this option is OFF, the System uses the Local IP of the VoIP board for RTP relay between zones.	OFF ON	ON

4.4.13.9 Zone Holiday Assignment - PGM 444

Selecting the Zone Holiday Assignments returns the data input page. Enter the desired Source and Destination Zone numbers range and click **[Load]**to assign Zone holiday. Click the **[Save]** button after changing Value.

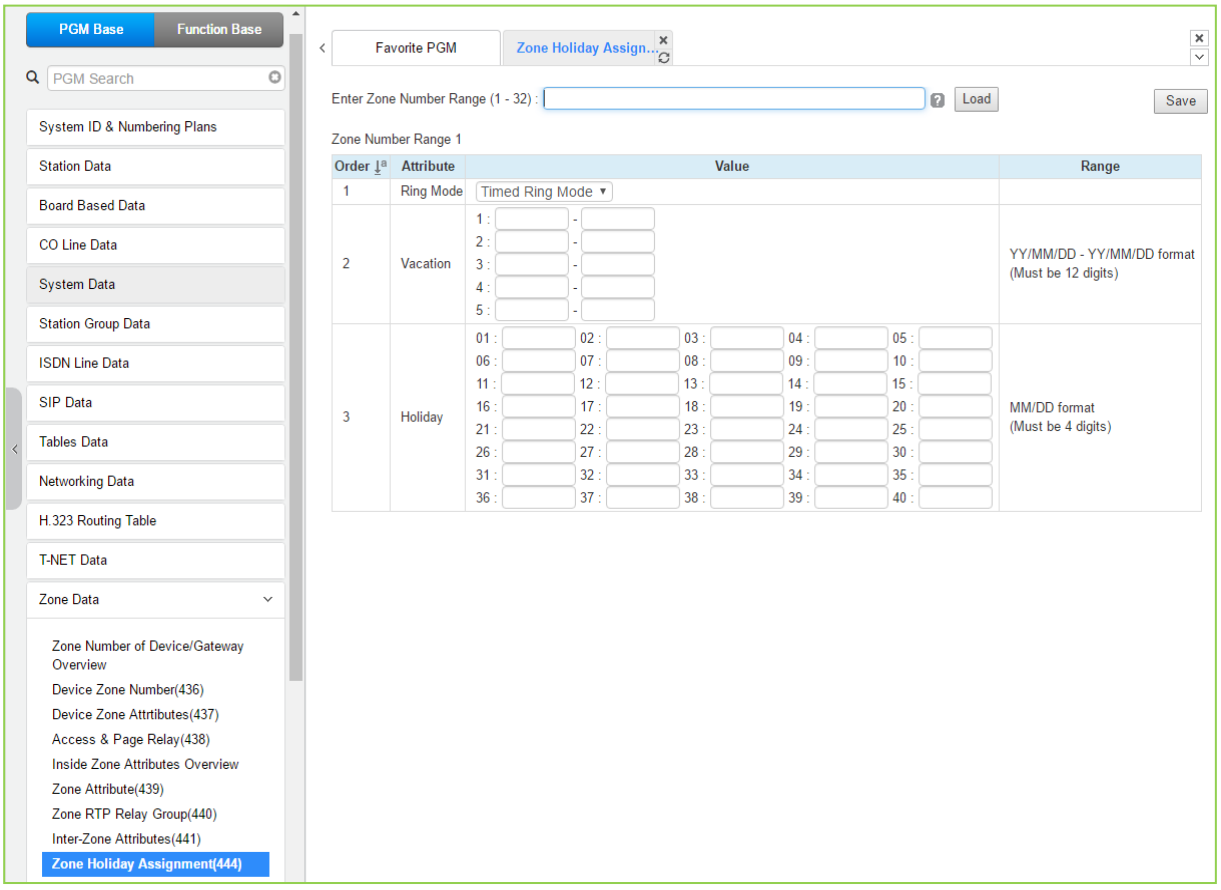


Figure 4.4.13.9-1 Zone Holiday Assignment

Holidays and vacation day intervals for each zone can be established to define the Service mode (Day, Night, and Timed). Up to 40 holidays and 5 vacation intervals can be defined.

Table 4.4.13.9-1 ZONE HOLIDAY ASSIGNMENT

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Ring Mode	Enter the desired Service mode for the Holiday or Vacation. **Day Ring Mode, Night Ring Mode, Timed Ring Mode, N/A**	Refer to description	Timed Ring Mode
Vacation	Five ranges may be entered for vacation periods. Enter the start and end dates as YY/MM/DD – YY/MM/DD.	Must be 12 digits	None
Holiday	Each Zone can have up to 40 holidays assigned, entering the date as MM/DD.	Must be 4 digits	None

4.4.14 Device Login

Selecting the Device Login Data program group returns the sub-menu displayed in the left frame, as shown in the following figure.

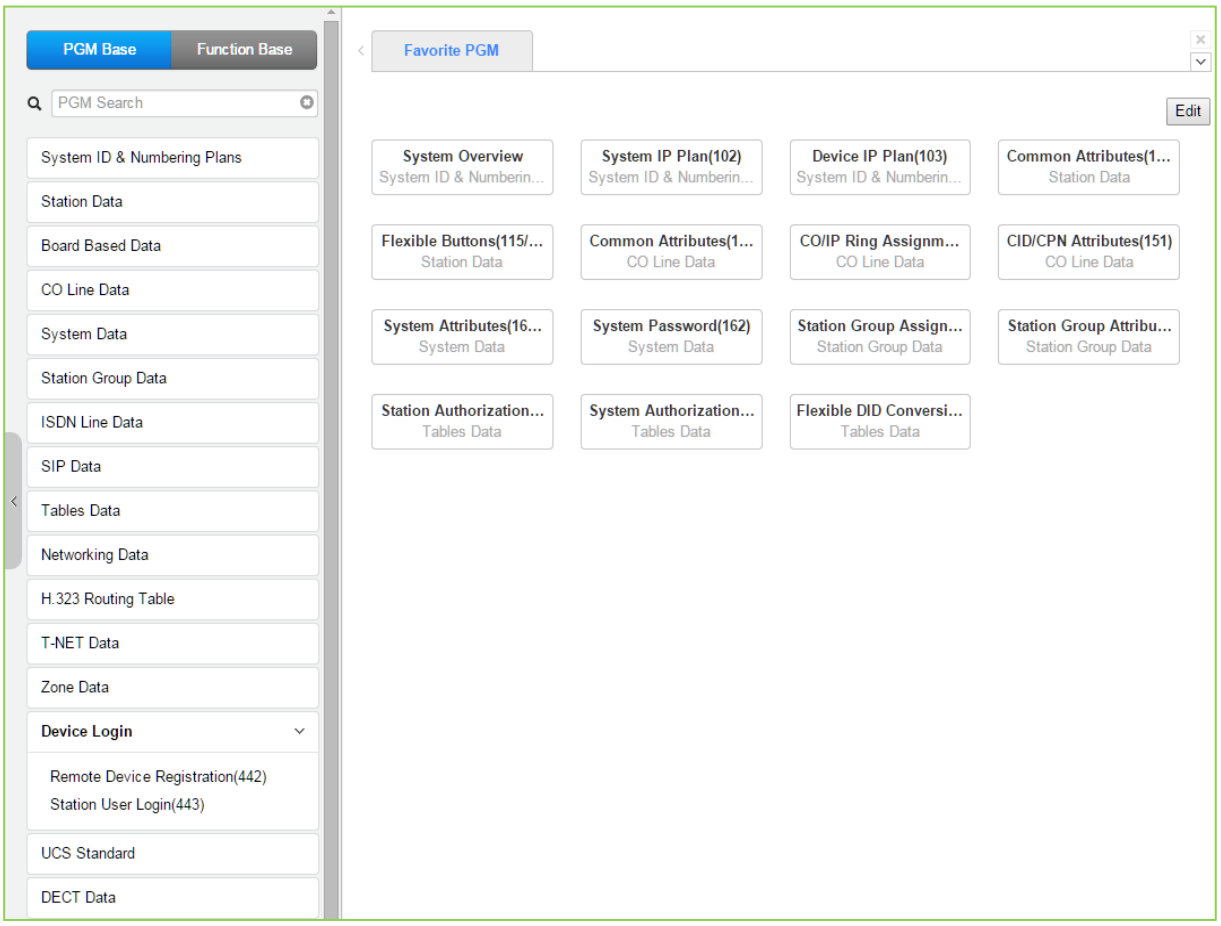


Figure 4.4.14-1 Device Login Data Main Page

4.4.14.1 Remote Device Registration – PGM 442

Selecting the Remote Device Registration will display the Remote Registration Table data input page. Enter a Table index range and select **[Load]** to enter MAC address information. For convenience, the copy, paste, and drag are available to enter or modify data. Click the **[Save]** button after changing Value.

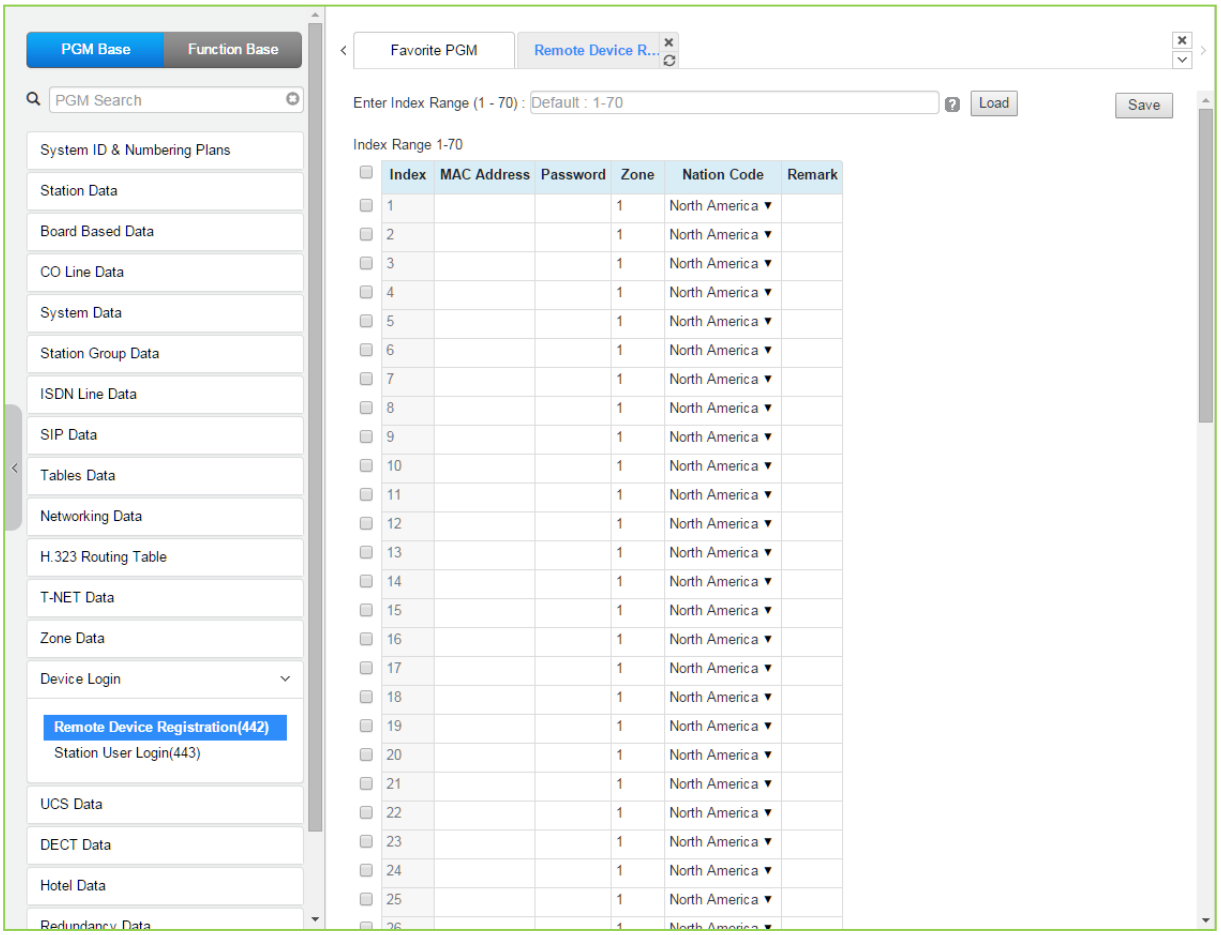


Figure 4.4.14.1-1 Remote Device Registration

When a device attempts to register with the controlling iPECS, the system will check the device MAC address and password against the Registration table. If a match is found, the device is registered regardless of the Dip-switch 2 position of eMG and Dip Switch position 3 of UCP. The system database is updated, and the device receives device-specific configuration data from the MPB/UCP.

Table 4.4.14.1-1 REMOTE DEVICE REGISTRATION

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Mac Address	Mac address of remote device	MAC Address	
Password	Password, if any, assigned in the devices database via Device Web admin.	Up to 12 digits	
Zone	The Zone is to be assigned to the device.	01-32	01
Nation code	It is the nation or country location of the device.		Assigned in System ID

4.4.14.2 Station User Login – PGM 443

Selecting the Station User Login will display the User Login Registration data input page.

Enter an index range, then click **[Load]** to modify Station Login data.

For convenience, the copy, paste, and drag are available to enter or modify data. Click the **[Save]** button after changing Value.

Enter Index Range: eMG80/100: 1-140 / eMG800: 1-1200 / UCP: 1-2400

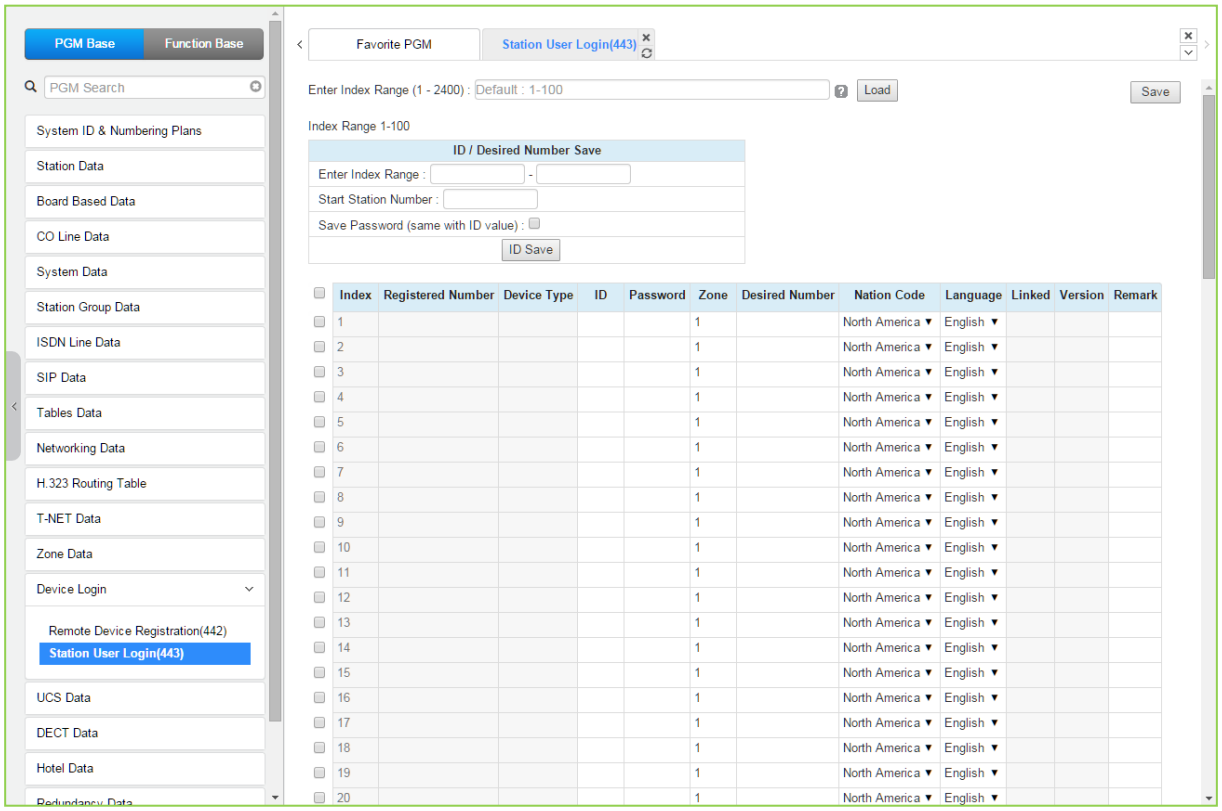


Figure 4.4.14.2-1 Station User Login

Station User Login configures User credentials for registration of iPECS UCS clients and initial registration of SIP phones. A station must register with the system each time it is connected to the system.

The ID and password are assigned along with other characteristics of the remote station such as Zone, desired station number, country code, Language, and a remark can be defined.

The iPECS UCS Client can be configured as a link-paired station by assigning the same Desired-Number as a registered desktop iPECS LIP Phone.

Note for the UCS Client, the UCS Standard Client Login, PGM 446, may be employed in place of PGM 443 as a single point to configure the client information.

Table 4.4.14.2-1 STATION USER LOGIN

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Registered Number	Station number registered to the station is displayed only after registration.	Station number	
Device Type	This field is indicated what kind of device type.		

Table 4.4.14.2-1 STATION USER LOGIN

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
ID	The User Login ID must be entered for registration	12 Characters	
Password	The User Login password must be entered for registration.	12 digits	
Zone	The device can be assigned to a Zone.	1-32	1
Desired Number	The desired number can be entered for the device. To link an iPECS UCS and iPECS LIP Phone, enter the station number of the registered iPECS LIP Phone prior to registration of the iPECS UCS or the UCS Client. PGM 446 may be used as the single administration point.	Station number	
Nation code	The Nation code for the device is assigned.		Assigned in System ID
Language	The default Language type for system voice prompts can be assigned to the device from the available languages.	Language Code	Nation dependent
Linked	This field indicates the Linked pair status of the station.		

4.4.15 UCS Data

Selecting the UCS Data group returns the sub-menu displayed in the left frame, as shown in the following figure.

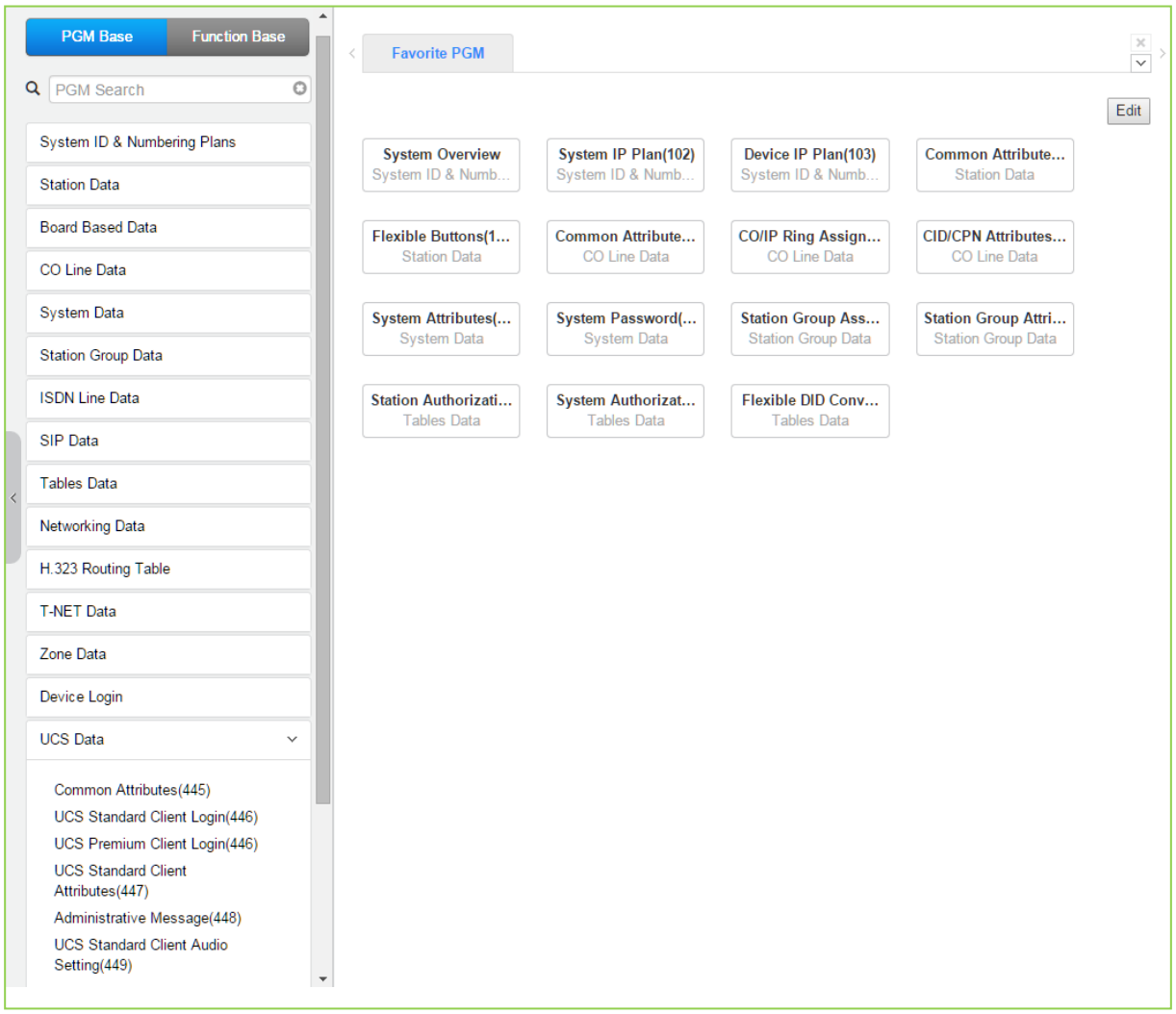


Figure 4.4.15-1 UCS Data Main Page

4.4.15.1 Common Attributes – PGM 445

Selecting Common attributes will display the common attributes input page.

Click the **[Save]** button after changing Value.

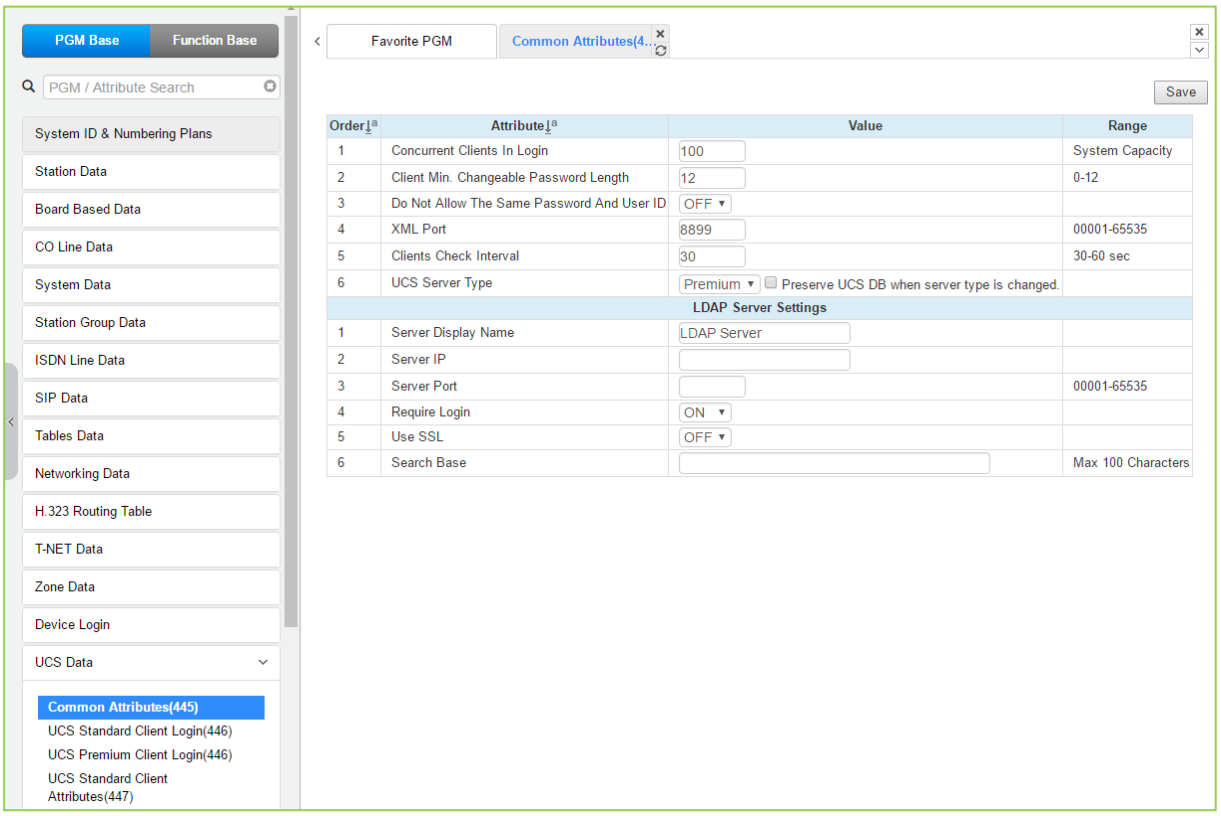


Figure 4.4.15.1-1 Common Attributes

Common Attributes for the UCS Clients include client login characteristics and LDAP server information shared with the clients, as shown in the following table.

Table 4.4.15.1-1 Common attributes

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Concurrent Clients in login	The iPECS system employs a per-seat license. The number of UCS Clients that are active at a time cannot exceed the licensed capacity.	System capacity	100
Minimum Password Length	The minimum length of a UCS Client password can be defined as up to 12 characters.	0-12	12
Do Not Allow the Same Password and User ID	The User ID can be employed as the password if permitted (OFF).	OFF ON	OFF
XML Port	The system employs XML to send or request certain information, such as the User picture. The TCP/IP port can be defined.		8899

Table 4.4.15.1-1 Common attributes

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Security (option for UCS XML Port)	It is security option for UCS XML Port. (8899) If it is “TLS1.2,” then the system accepts only TLS 1.2. Other TLS1.1(or below) and SSL will be rejected. The ″Default” option is used for application compatibility as below. **UCS version that can support TLS1.2:** • UCS Win Client: 6.1.5 • UCS Mac Client: 6.1.3 • UCS Android Client: 6.1.6 • UCS iOS Client: 6.1.3	DEFAULT TLS 1.2	DEFAULT
Clients Check Interval	Periodically, the iPECS system will verify the status of logged-in UCS clients.	30-60 Seconds	30
UCS Server Type	The UCS service server can be the iPECS system (Standard) or the external UCS Server (Premium). The UCS Server provides additional video and collaboration features as Premium service. When the UCS Server is employed, the Standard Client Login information (PGM 446) is transferred from the iPECS system to the UCS Server after the client is registered. If "Preserve UCS DB when server type is changed" is checked, UCS DB will not be initialized when UCS server mode is changed.	Standard Premium	Standard
LDAP Server Settings			
Server Display Name	When the UCS Client requires access to an LDAP server, the system will provide the LDAP server information to the client. The server name is defined in this field.	15 characters	
Server IP	When an LDAP server is employed, the IP address of the server must be defined.		0.0.0.0
Server Port	When an LDAP server is employed, the TCP/IP port of the server must be defined.	00001-65535	
Require Login	The UCS Client ID and Password may be required to log in to the LDAP server.	OFF ON	ON
Use SSL	The client can employ SSL (Secure Sockets Layer) when supported by the server for added security.	OFF ON	OFF
Search Base	Search base means Search option. You can get the search option from the LDAP Server manager. For example, if OU (Organization Unit) is OC and DC (Directory Company) is ucapp and com, you can give the option "OU=OC, DC=ucapp, DC=com" in this field. You will get the desired directory.	Max. 100 characters	

4.4.15.2 UCS Standard Client Login – PGM 446

It is selecting UCS Standard Client Login will display the UCS standard client login input page. Enter the Client index and click **[Load]** to modify the Client data. Use the checkboxes to indicate the attributes to modify. Click the **[Save]** button after changing Value. Click the **[Delete]** button if you want to delete it after checking the box.

Enter UCS Client Index: eMG80/100: 1-32 / eMG800: 1-200 / UCP: 1-200

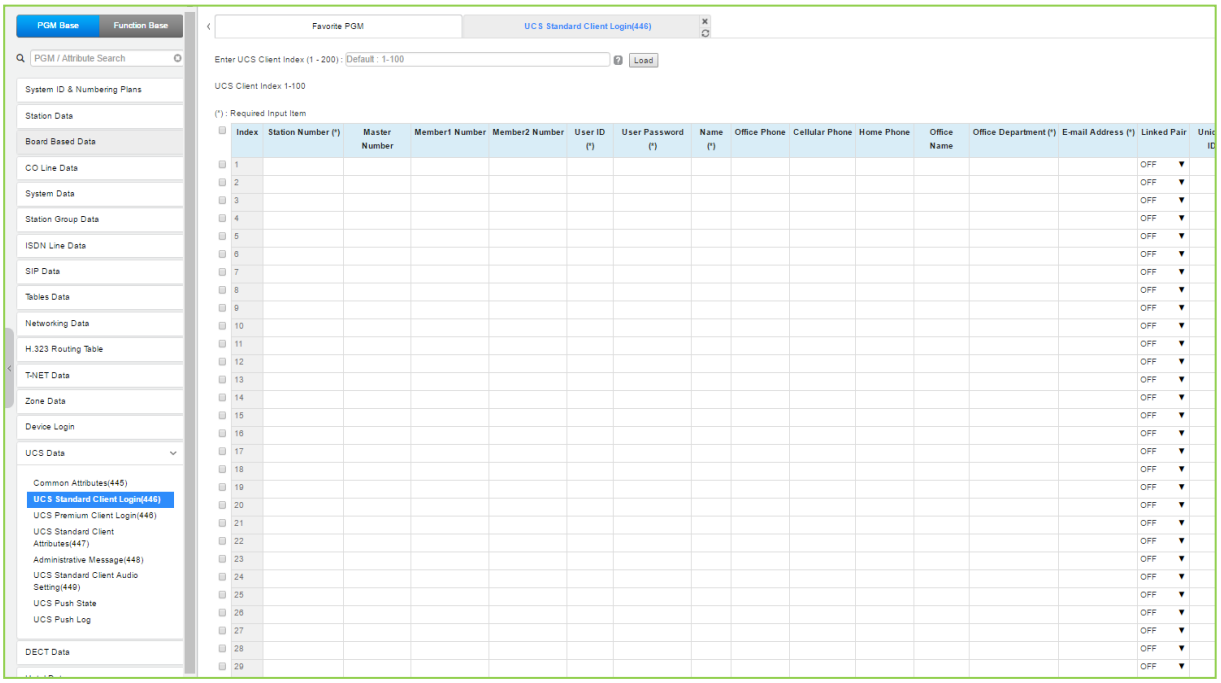


Figure 4.4.15.2-1 UCS Standard Client Login

The UCS Client information is configured for each client before registration. When the UCS Server is employed to provide Standard service, the iPECS system will transfer the information to the server after the client registers. After registration, any changes to the client configuration are accomplished in the UCS Server.

You can use the following items to log into multiple accounts at the same time, such as PC, Mobile, Tablet, etc.

- **Master Number**: It is the key number for the related members. The master number can be the same as the station number. In this case, the master number is UCS Client. Or the master number can enter the other desired number. You can check the master and member in Personal Group (PGM 260) after finishing the value.
- **Member 1 Number**: In this field, you can enter the number for the Mobile UCS Client.
- **Member 2 Number**: In this field, you can enter the number for the Tablet UCS Client.

Table 4.4.15.2-1 UCS Standard Client Login

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Station Number	The station number for the UCS Client can be assigned here and will update PGM 103 and 443.		
Master Number	The master number can be the same as the station number. In this case, the master number is UCS Client. Or the master number can enter the other desired number.		
Member 1 Number	You can enter the number for the Mobile UCS Client.		

Table 4.4.15.2-1 UCS Standard Client Login

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Member 2 Number	You can enter the number for the Tablet UCS Client.		
User ID	The UCS Client Id for the UCS Client can be assigned here and update PGM 103 and 443.	Min. 4 characters	
User PWD	For the UCS Client password, up to 32 characters must be assigned.	Max. 32 characters	
Name	The user's name, up to 32 characters, should be entered.	Max. 32 characters	
Office Phone	Set Office phone number.	Max. 32 characters	
Cellular Phone	Set Cellular phone number.	Max. 32 characters	
Home Phone	Set Home phone number.	Max. 32 characters	
Office Name	Set Office name.	Max. 32 characters	
Office Department	Set Office Department.	Max. 32 characters	
Email address	Set Email address.	Max. 64 characters	
Linked Pair	If the UCS Client is part of a Linked pair, it must be enabled here. By entering the Station number of iPECS IP Phone as the UCS Client Station Number, the stations will employ MAC linking.	OFF ON	OFF
Unique ID	When the UCS Server is employed, each client must have a unique Id of at least 40 characters, which identifies the clients to the UCS Server. Once the Client registers, the iPECS system will send the information to the UCS Server. Note that the UCS Server Type in PGM 445 must be configured as "Premium."	Max. 32 characters	
Mutual presence permission	The presence status of the Client can be shared with other clients.	OFF ON	ON
License	The status of the license will be displayed, and select the license for usage among the range.	ADVANCED BASIC POWER STD-V(M), STD-NV(M), MOBILE	ADVANCED

4.4.15.3 UCS Premium Client Login – PGM 446

It is selecting UCS Premium Client Login will display the UCS Premium client login input page. Enter the Client index and click **[Load]** to modify the Client data. Use the checkboxes to indicate the attributes to modify. Click the **[Save]** button after changing Value. Click the **[Delete]** button if you want to delete it after checking the box.

Enter UCS Server ID: eMG80/100: 1-2 / eMG800: 1-5 / UCP: 1-16

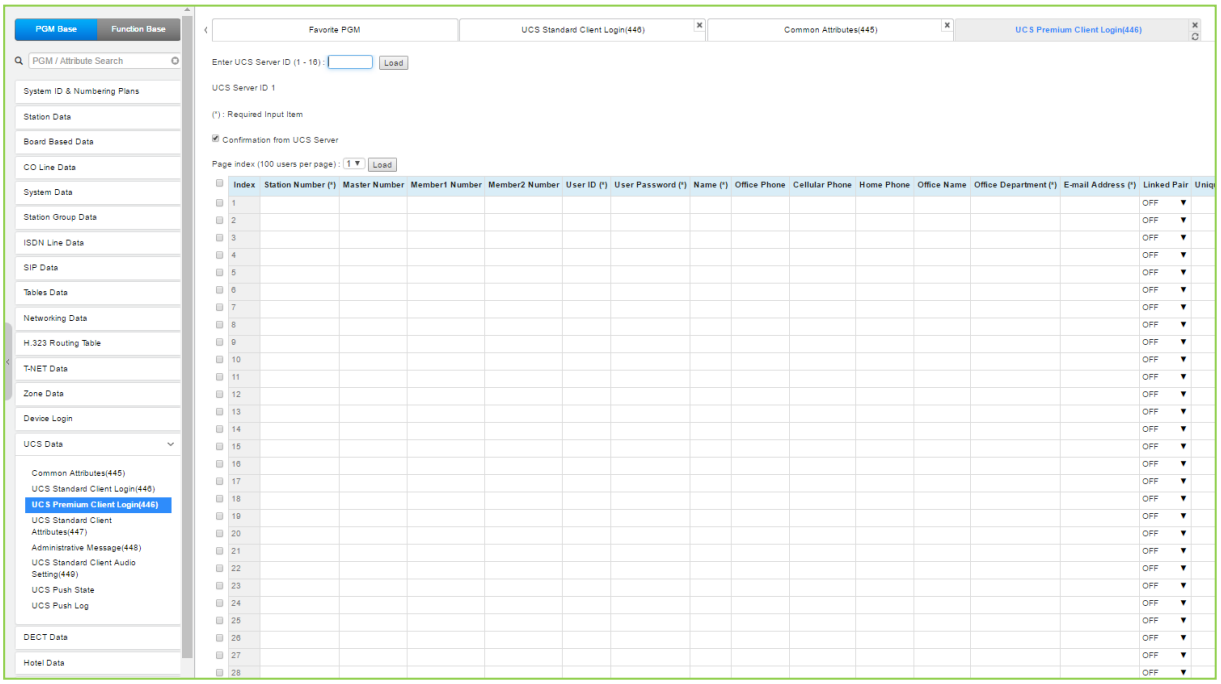


Figure 4.4.15-1 UCS Premium Client Login

The UCS Client information is configured for each client prior to registration. When the UCS Server is employed to provide Premium service, the iPECS system will transfer the information to the server after the client registers and, after registration, any changes to the client configuration are accomplished in the UCS Server.

You can use the following items to log into multiple accounts at the same time, such as PC, Mobile, Tablet, etc.

- **Master Number**: It is the key number for the related members. The master number can be the same as the station number. In this case, the master number is UCS Client. Or the master number can enter the other desired number. You can check the master and member in Personal Group (PGM 260) after finishing the value.
- **Member 1 Number**: In this field, you can enter the number for the Mobile UCS Client.
- **Member 2 Number**: In this field, you can enter the number for the Tablet UCS Client.

Table 4.4.15.3-1 UCS Premium Client Login

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Station Number	The station number for the UCS Client can be assigned here and will update PGM 103 and 443.		
Master Number	The master number can be the same as the station number. In this case, the master number is UCS Client. Or the master number can enter the other desired number.		

Table 4.4.15.3-1 UCS Premium Client Login

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Member 1 Number	You can enter the number for the Mobile UCS Client.		
Member 2 Number	You can enter the number for the Tablet UCS Client.		
User ID	The UCS Client Id for the UCS Client can be assigned here and update PGM 103 and 443.	Min. 4 characters	
User PWD	For the UCS Client password, up to 32 characters must be assigned.	Max. 32 characters	
Name	The user's name, up to 32 characters, should be entered.	Max. 32 characters	
Office Phone	Set Office phone number.	Max. 32 characters	
Cellular Phone	Set Cellular phone number.	Max. 32 characters	
Home Phone	Set Home phone number.	Max. 32 characters	
Office Name	Set Office name.	Max. 32 characters	
Office Department	Set Office Department.	Max. 32 characters	
Email address	Set Email address.	Max. 40 characters	
Linked Pair	If the UCS Client is part of a Linked pair, it must be enabled here. By entering the Station number of iPECS IP Phone as the UCS Client Station Number, the stations will employ MAC linking.	OFF ON	OFF
Unique ID	When the UCS Server is employed, each client must have a unique Id of at least 40 characters, which identifies the clients to the UCS Server. Once the Client registers, the iPECS system will send the information to the UCS Server. Note that the UCS Server Type in PGM 445 must be configured as "Premium."	Min. 40 characters	
Mutual presence permission	The presence status of the Client can be shared with other clients.	OFF ON	OFF
License	The status of the license will be displayed, and select the license for usage among the range.	ADVANCED BASIC POWER PREM-V PREM-NV MOBILE	ADVANCED

4.4.15.4 UCS Standard Client Attributes – PGM 447

Selecting UCS Standard client attributes will display the UCS standard client attributes input page. Enter the UCS Client index, then click **[Load]** to modify the client data. Use the checkmark to indicate which attributes to modify; checked attributes are stored by clicking the **[Save]** button.

Enter UCS Client Index: eMG80/100: 1-32 / eMG800: 1-200 / UCP: 1-200

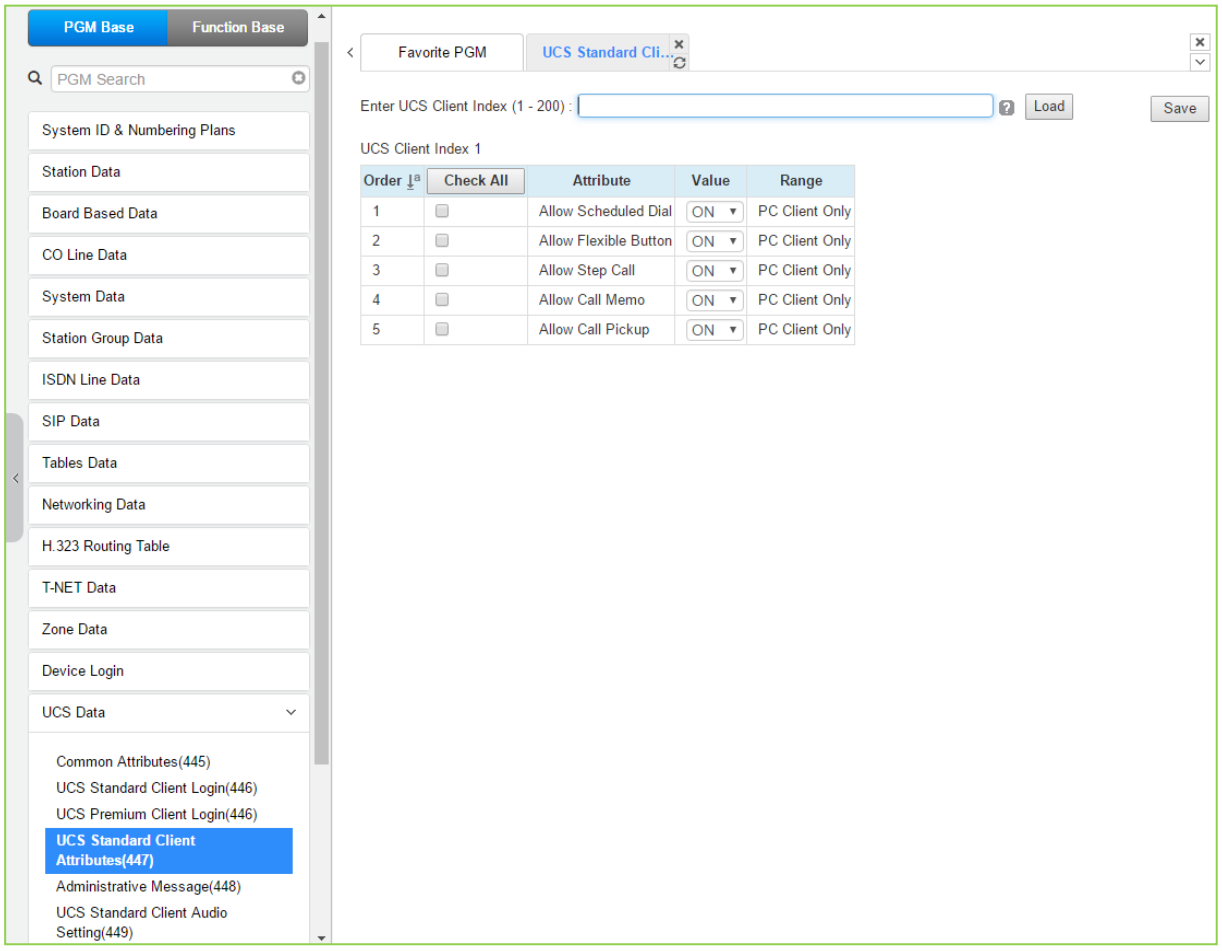


Figure 4.4.15.4-1 UCS Standard Client Attributes

The UCS Client can be allowed or denied access to several features described in Table 4.4.15.4-1. The following attributes are available only for PC Clients.

Table 4.4.15.4-1 UCS Standard Client Attributes

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Allow Scheduled Dial	Allows Scheduled Dialing from the client.	OFF/ON	ON
Allow Flexible Button	Allows the user to access Flex buttons on the UCS Client.	OFF/ON	ON
Allow Step Call	Allows access to the step-call feature by the UCS client.	OFF/ON	ON
Allow Call Memo	Allows the UCS Client access to the Call Memo feature.	OFF/ON	ON
Allow Call Pickup	It permits the UCS Client to use the Direct and Group Call Pick-up features.	OFF/ON	ON

4.4.15.5 Administrative Message – PGM 448

Selecting Administrative Message will display the administrative message input page. Click the **[Send]** button after filling out the subject and Contents and checking the destination.

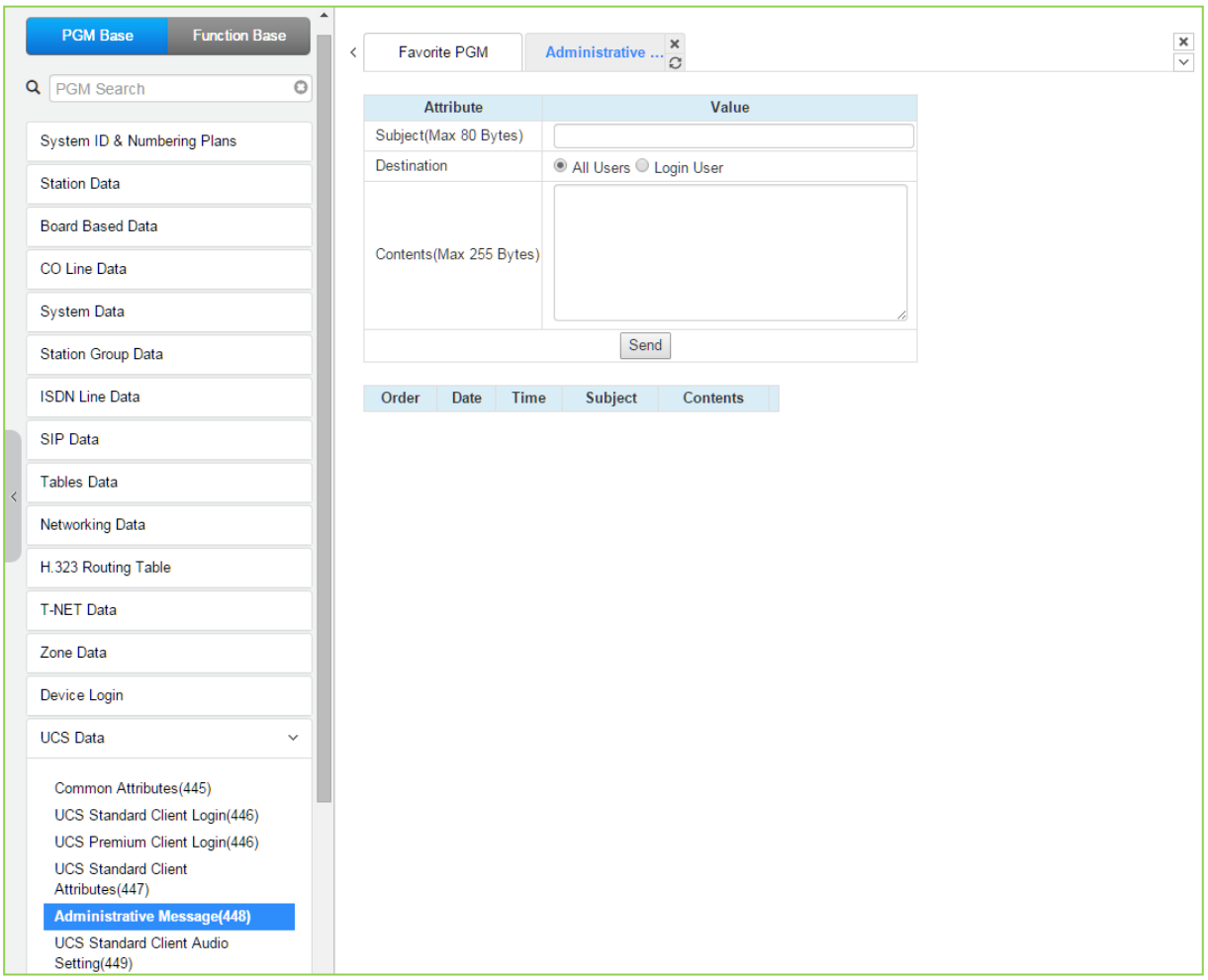


Figure 4.4.15.5-1 Administrative Message

An administrator can send a message to UCS Clients, such as a Welcome message.

Table 4.4.15.5-1 Administrative Message

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Subject	Message subject.	Max. 80 bytes	
Destination	The message can be sent to currently active UCS Clients or All Clients. For the All-Clients selection, the message is sent to all active Clients and as each Client logs in.	Login user All users	All
Contents	Message body.	Max. 255 bytes	

4.4.15.6 UCS Push State

Selecting UCS Push State will display the related push attributes. Set Attributes and click **[Save]** to apply.

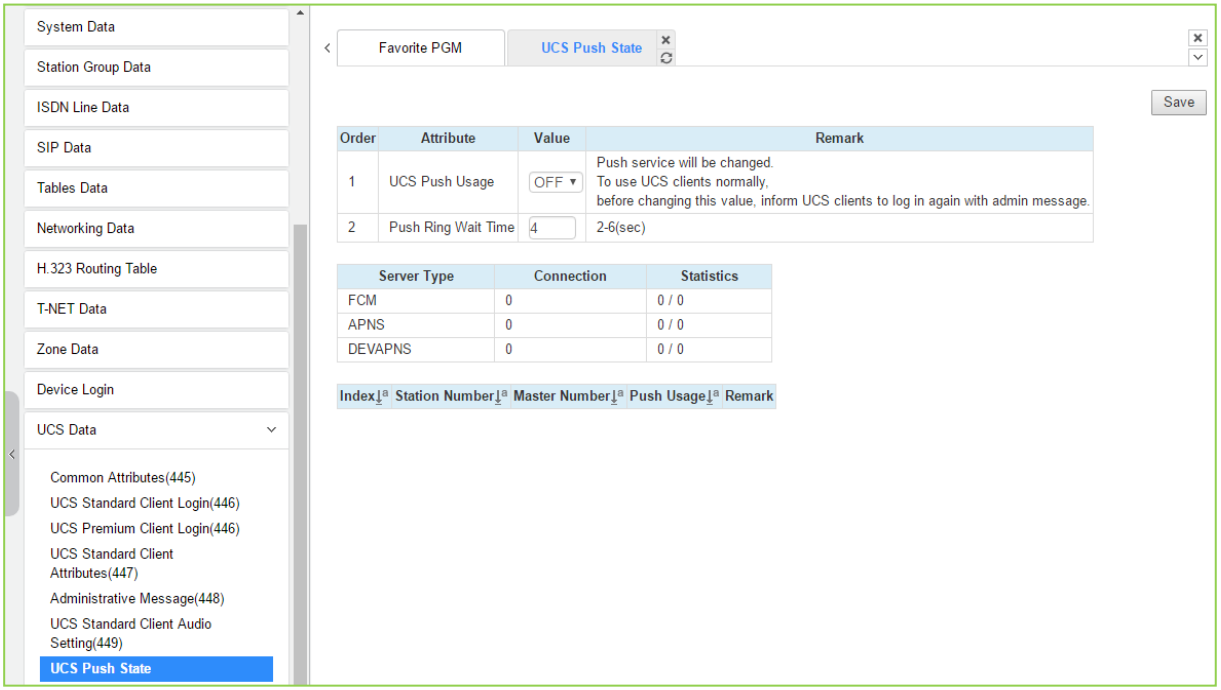


Figure 4.4.15.6-1 UCS Push State

You can see the current station number, Master number, and Push Usage on the last table.

Table 4.4.15.6-1 UCS Push State

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
UCS Push Usage	Mobile UCS client gets the push notification message for Ring, Voice mail, SMS, etc., by setting ON. You must log in again after changing the value.	OFF ON	OFF
Push Ring Wait Time	It is a waiting time after sending the Ring push message.	6-12 (Sec.)	10
Server Type	You can see the server type for Push service. • **Connection:** You can see the number of connections to the server. • **Statistics**: You can see the statistics for Success and Fail.		

4.4.16 DECT Data

Selecting the DECT Data program group returns the sub-menu displayed in the left frame as shown in the following figure.

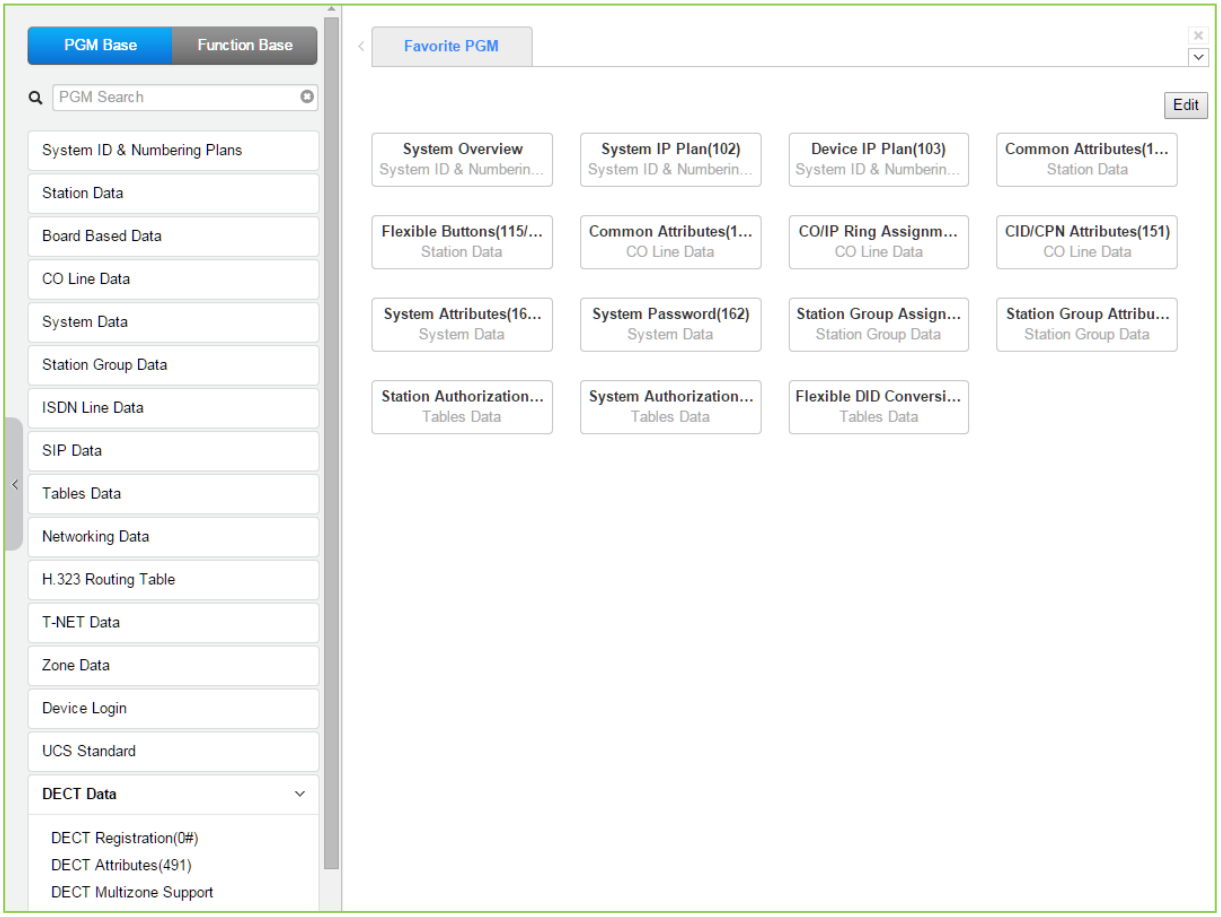


Figure 4.4.16-1 DECT Data Main Page

4.4.16.1 DECT Registration (0#)

Selecting DECT Registration returns the DECT Registration input page. Use the checkmark to indicate which attributes to modify; checked attributes are stored by clicking **the [Save]** button.

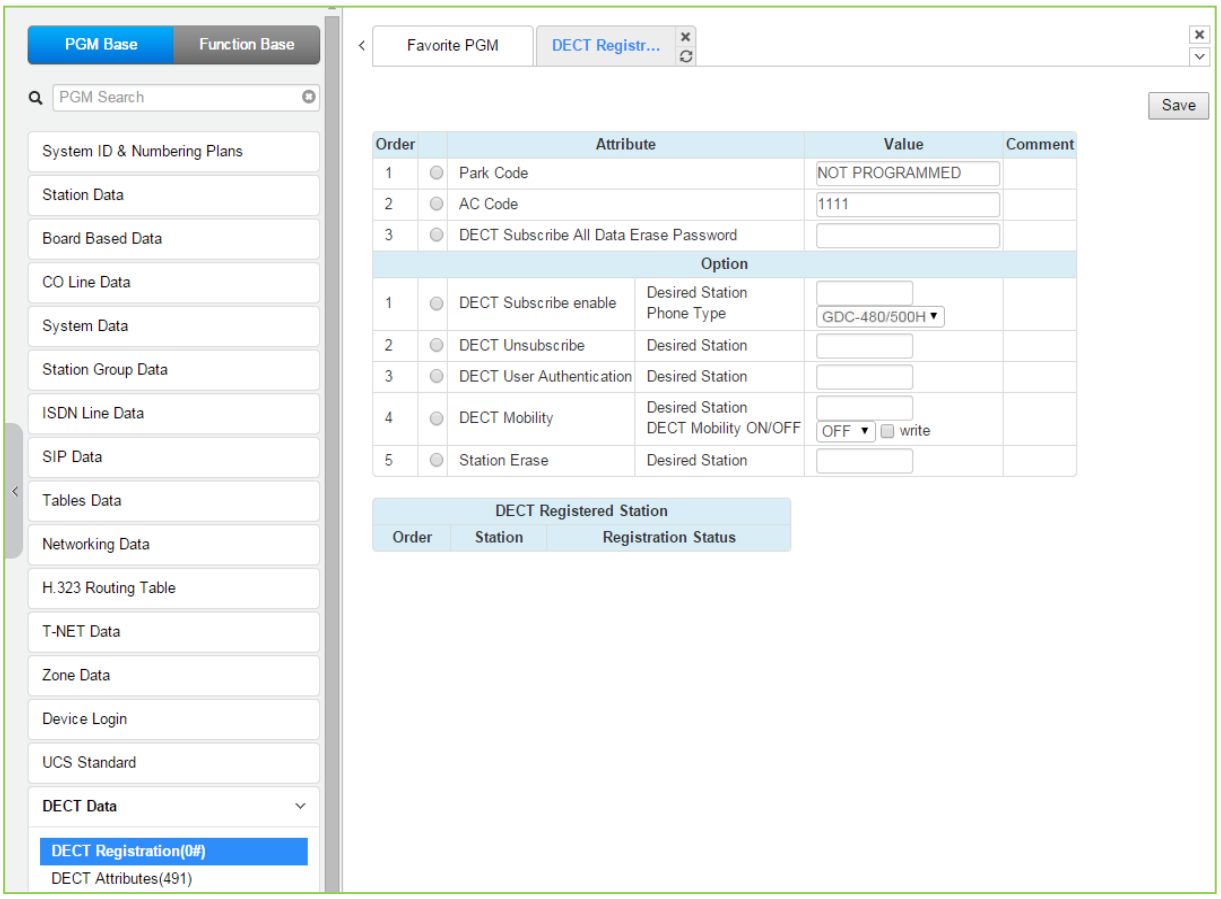


Figure 4.4.16.1-1 DECT Subscription Screen

On this page, the DECT PARK and authorization codes are defined. Several “Options” are available to enable subscription, unsubscribe a DECT station, enable mobility, etc. A chart is included displaying the registered and subscribed DECT terminals.

Table 4.4.16.1-1 DECT Registration

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Park Code	The PARK (Portable Access Rights Key) Code is a unique system Id entered at the DECT handset during the subscription process.	14 digits	Not programmed
AC Code	The Authentication Code is entered at a DECT handset to verify the subscription.	Up to 8 digits	1111
DECT Subscribe All Data Erase Password	To erase all data of DECT, enter the password.		
Option			
DECT Subscribe Enable	Enables the system to accept subscriptions from a DECT handset.		
Desired Station	It is desired station number for the wireless DECT handset.	Station Number	

Table 4.4.16.1-1 DECT Registration

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Phone Type	Several types of handsets may be selected. Press the **[Send]** button after entering the number and type. **GDC-480H/500H, GDC-400/450H, Standard GAP**	Refer to description	GDC-480H/500H
DECT Unsubscribe	To terminate a subscription, enter the station number for the DECT handset. Note the Station must be connected. Otherwise, use the Station Erase field below.	Station number	
DECT User Authentication	The user will be required to enter the Station Authorization Code from PGM 227 to subscribe.		
DECT Mobility	When a DECT handset is registered to multiple systems that are networked, calls can be routed over the network to the DECT handset location.	Station number	
	Enter the registered station number, select Mobility ON or OFF, click the **[write]** box, then Save the page.	OFF ON	OFF
Station Erase	To terminate the registration for a DECT phone that is not connected, enter the registered station number and click the **[Save]** button.	Station number	

4.4.16.2 DECT ATTRIBUTES - PGM 491

Selecting the DECT Attributes returns the DECT ATTRIBUTES input page. Click **the [Save]** button after changing Value.

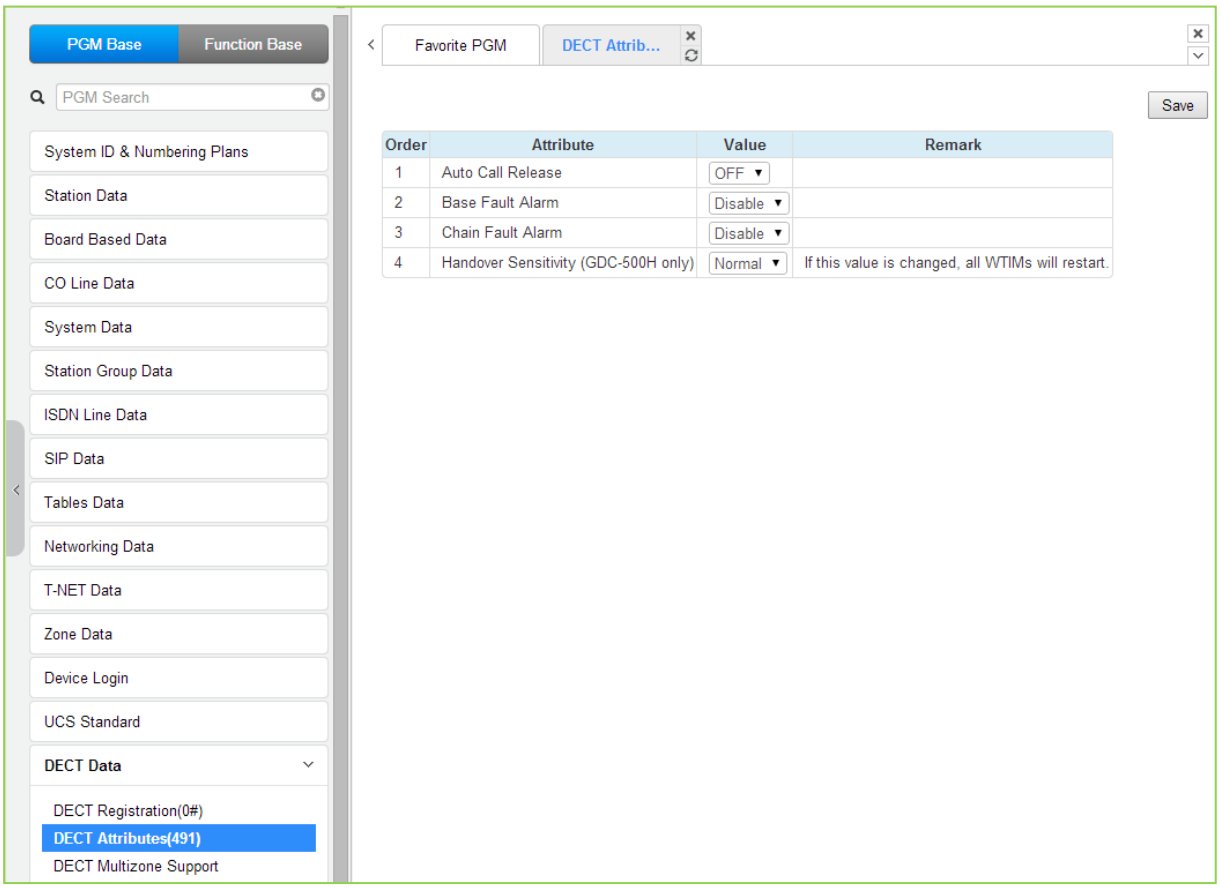


Figure 4.4.16.2-1 DECT ATTRIBUTES

DECT Attributes define functions associated with the DECT equipment and operation as shown in the following table.

Table 4.4.16.2-1 DECT Attributes

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Auto Call Release	If enabled, when the other party of an active internal call disconnects, the DECT terminal returns to idle.	OFF ON	OFF
Base Fault Alarm	If enabled, DECT Base station alarms are sent to the Attendant.	Disable Enable	Disable
Chain Fault Alarm	If enabled, alarms are sent to the Attendant indicating a fault in the link between WTIM modules. This feature is only for UCP.	Disable Enable	Disable
Handover Sensitivity	The user can control the handover sensitivity of GDC-500H only. (Normal or Strong) If this value is changed, all WTIBs will restart.	Normal Strong	Normal

4.4.16.3 DECT Multi-zone support

Selecting the DECT Multi-zone support will display the DECT Multi-zone support input page. Click **[Save and All WTIM (WTIB) reset]** button after changing the Value

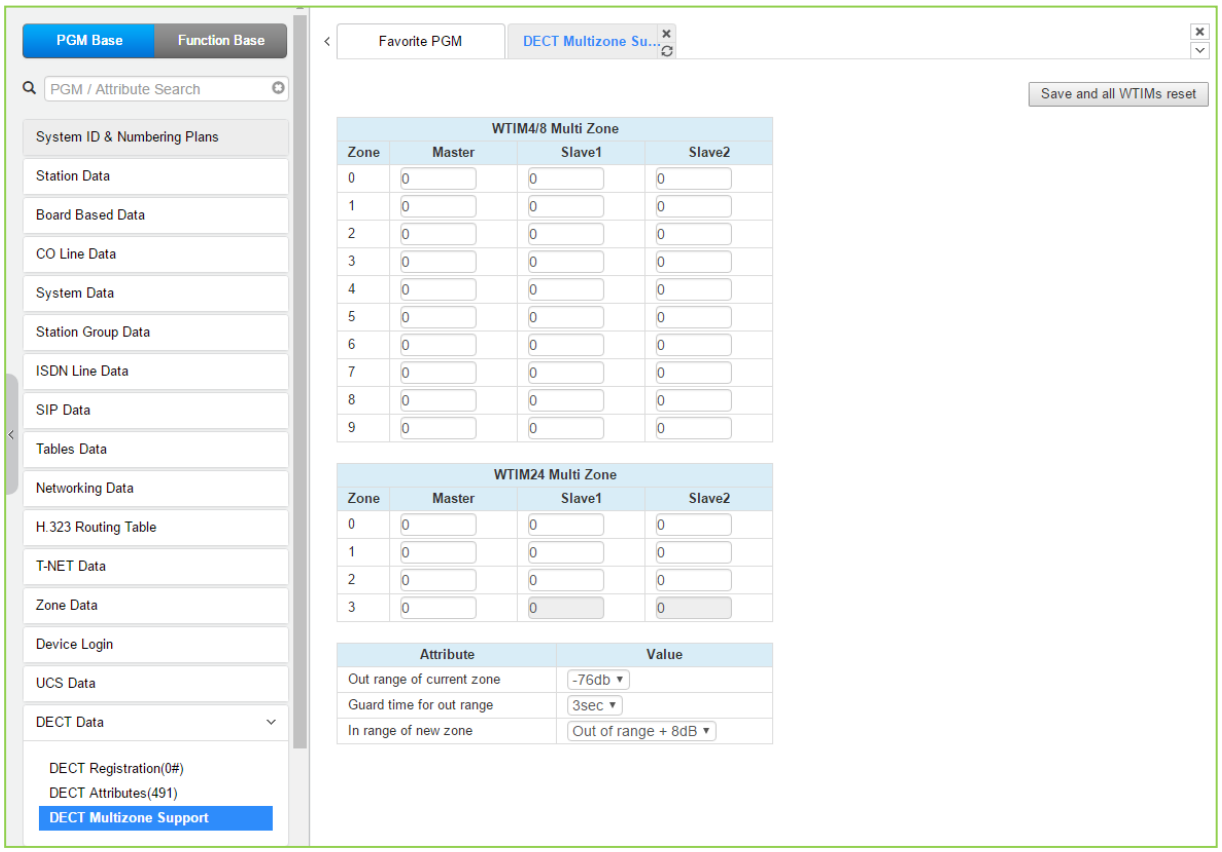


Figure 4.4.16.3-1 DECT Multi-zone support attributes

It is for roaming of DECT phones in large sites with more than 3 WTIM (WTIB).

For detailed information, you can get it from DECT Installation Guide.

It is recommended to use one type of WTIM (WTIM 24 or WTIM 4/8)

If both are used in a site, then the zone number of WTIM 4/8 should be lower than the zone number of WTIM 24.

The maximum DECT phone number is 192 if WTIM is combined

The maximum DECT phone number is 254 if only WTIM 24 is used in a site.

4.4.17 Hotel Data

Selecting the hotel data returns the sub-menu displayed in the left frame, as shown in the following figure.

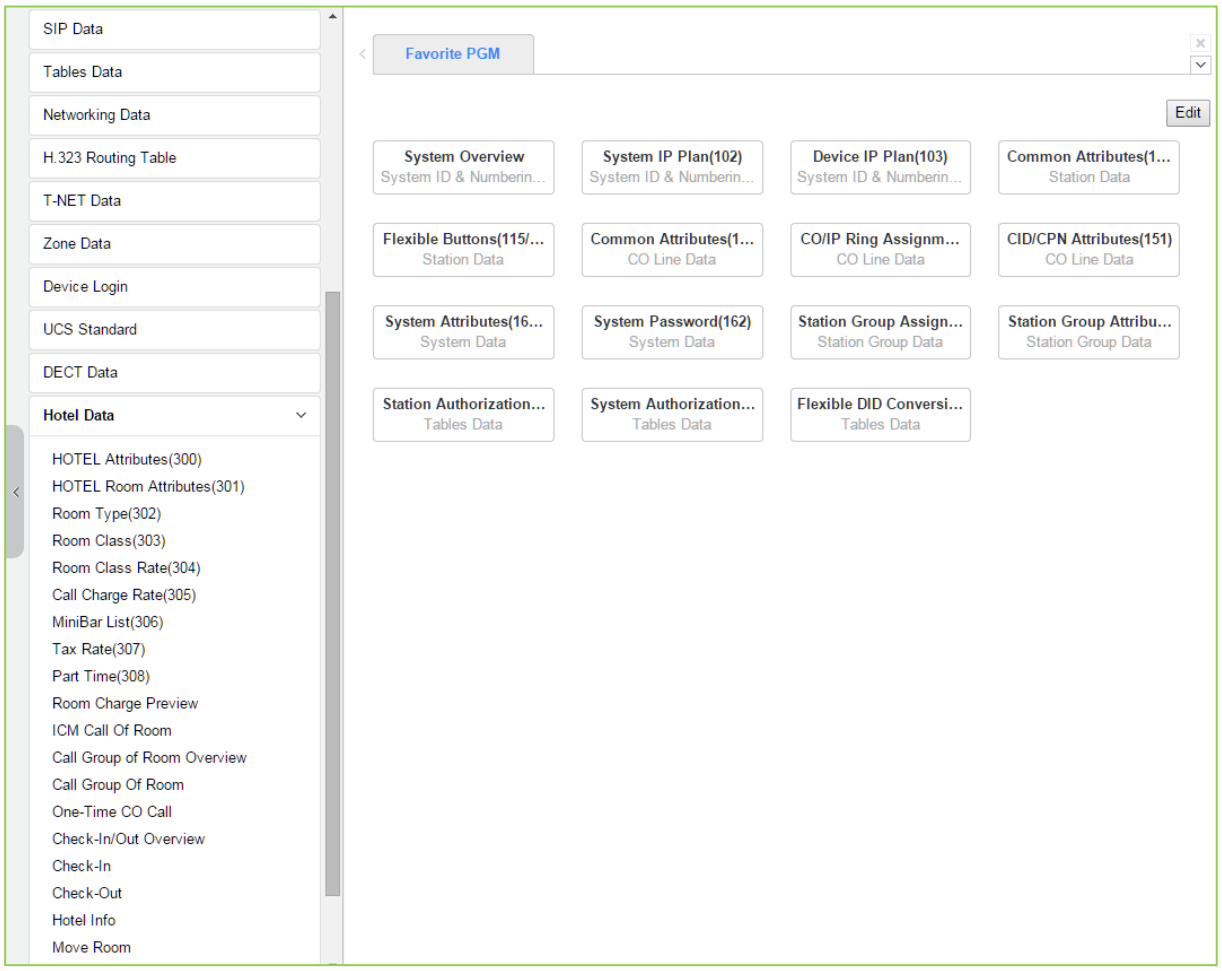


Figure 4.4.17-1 Hotel Data main page

With Hotel Data, we describe the function on another Hotel Feature and Programming manual. Refer to “Hotel Feature and Programming manual’.

4.4.18 Green Mode for eMG - PGM 500

Selecting the Green Mode program group returns the sub-menu displayed in the left frame, as shown in the following figure.

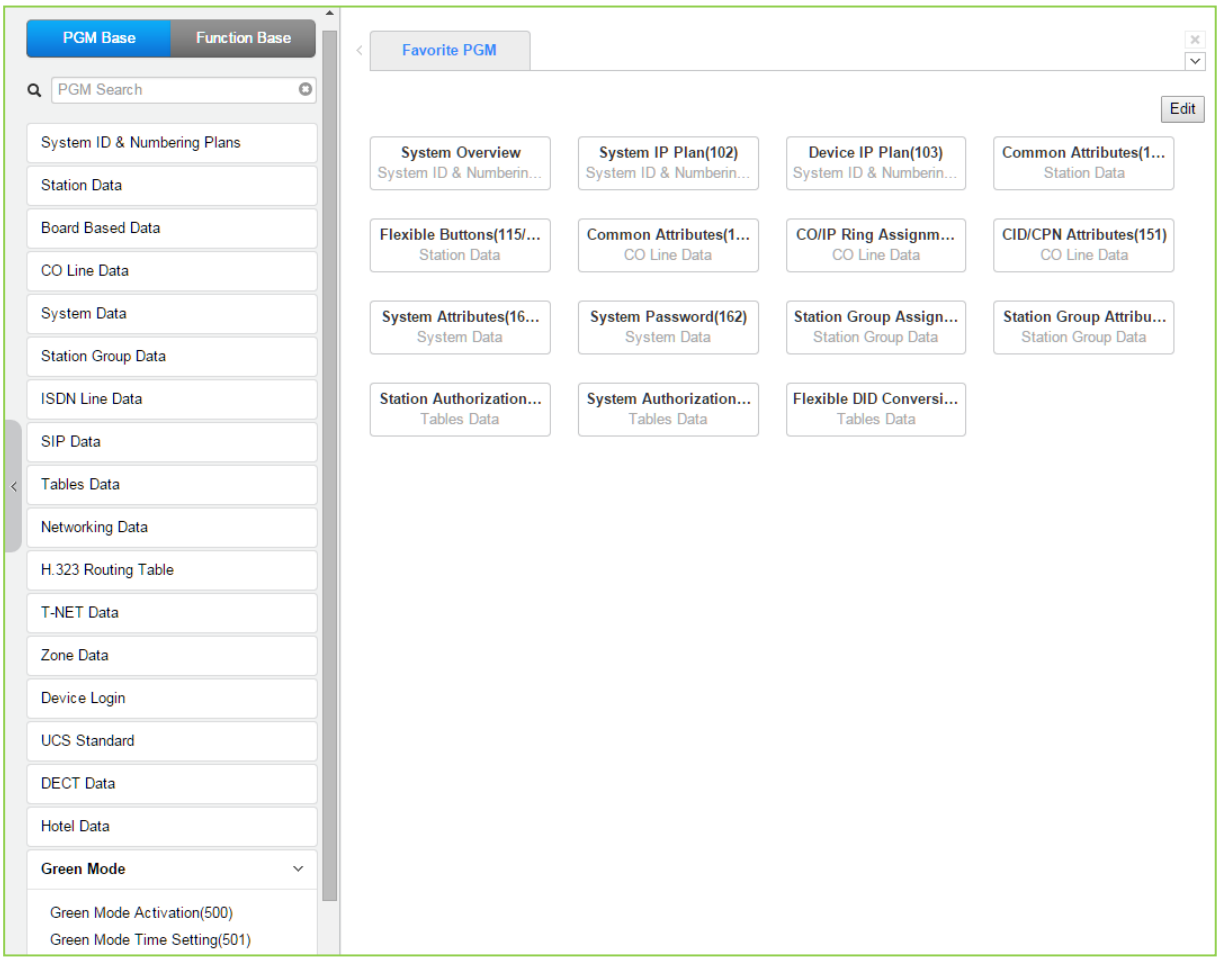


Figure 4.4.18-1 Green mode main page

4.4.18.1 Green mode activation

Selecting Green Mode Activation returns the page shown. Click the **[Save]** button after changing Value.

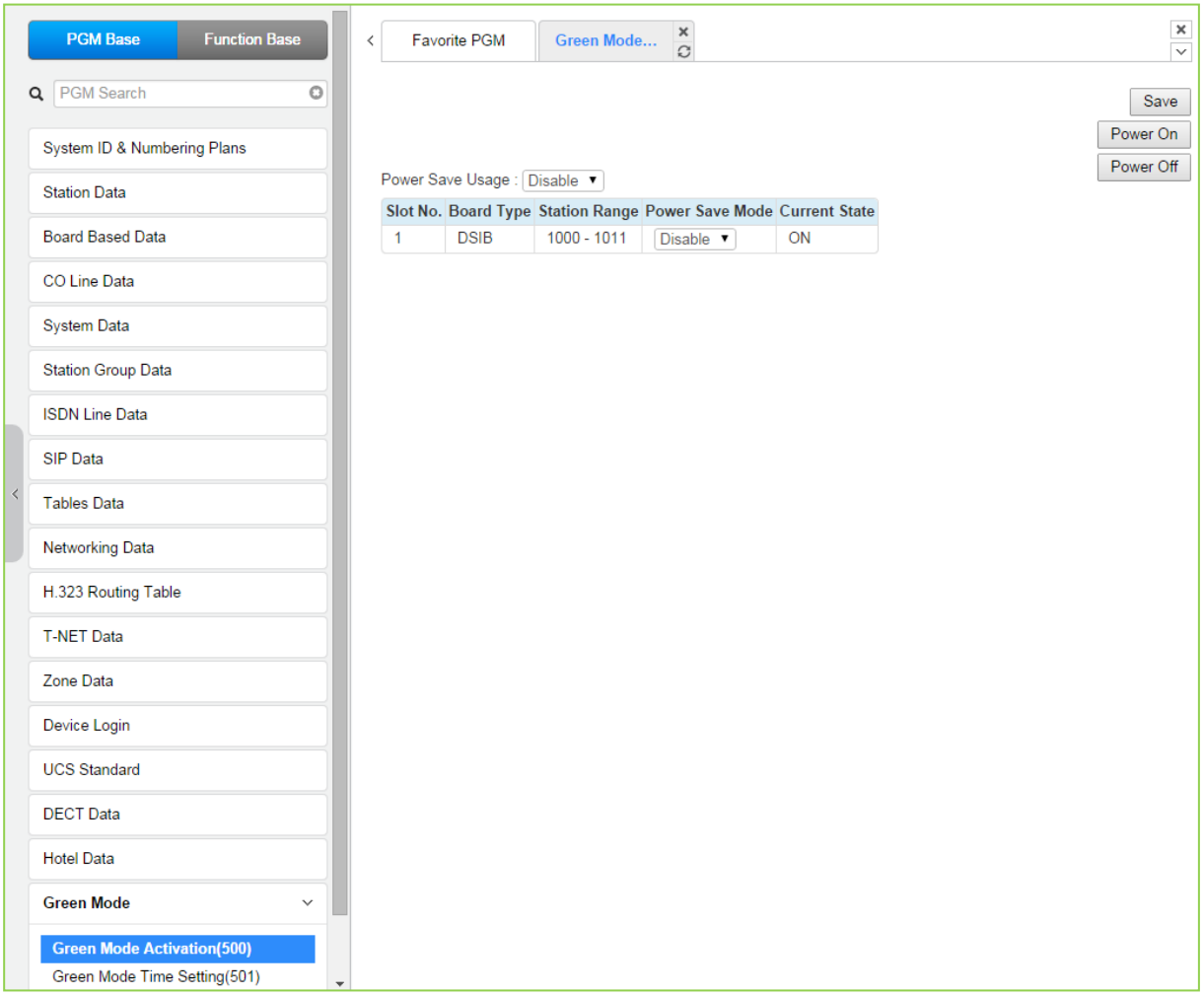


Figure 4.4.18.1-1 Green Mode Activation

The system can disable the power of a Digital Phone or Single Line Telephone (SLT) installed in the HYIB/SLIB/DSIB to save power during night or holiday mode. The power ON/OFF can be controlled by Web admin manually or automatically by assigning power ON/OFF time.

Table 4.4.18.1-1 Green Mode Activation Attributes

ATTRIBUTE	DESCRIPTION	DEFAULT
Power Save Usage	Enables or Disables Power Save usage.	Disable
Slot No.	The Slot Number of the board are supporting power control.	
Board Type	Board Type.	
Station Range	Station Number Range of board supporting power control.	
Power Save Mode	Enables or Disables Power Save Usage Mode of each board.	Disable
Current Status	It displays the current status of board power ON/OFF.	ON
Power ON button	Power ON manually all of the stations in Power Save used board.	
Power OFF button	Power OFF manually all of the stations in Power Save used board.	

4.4.18.2 Green Mode Time Setting

Selecting the Green Mode Time Setting returns the page shown. Click the **[Save]** button after changing Value.

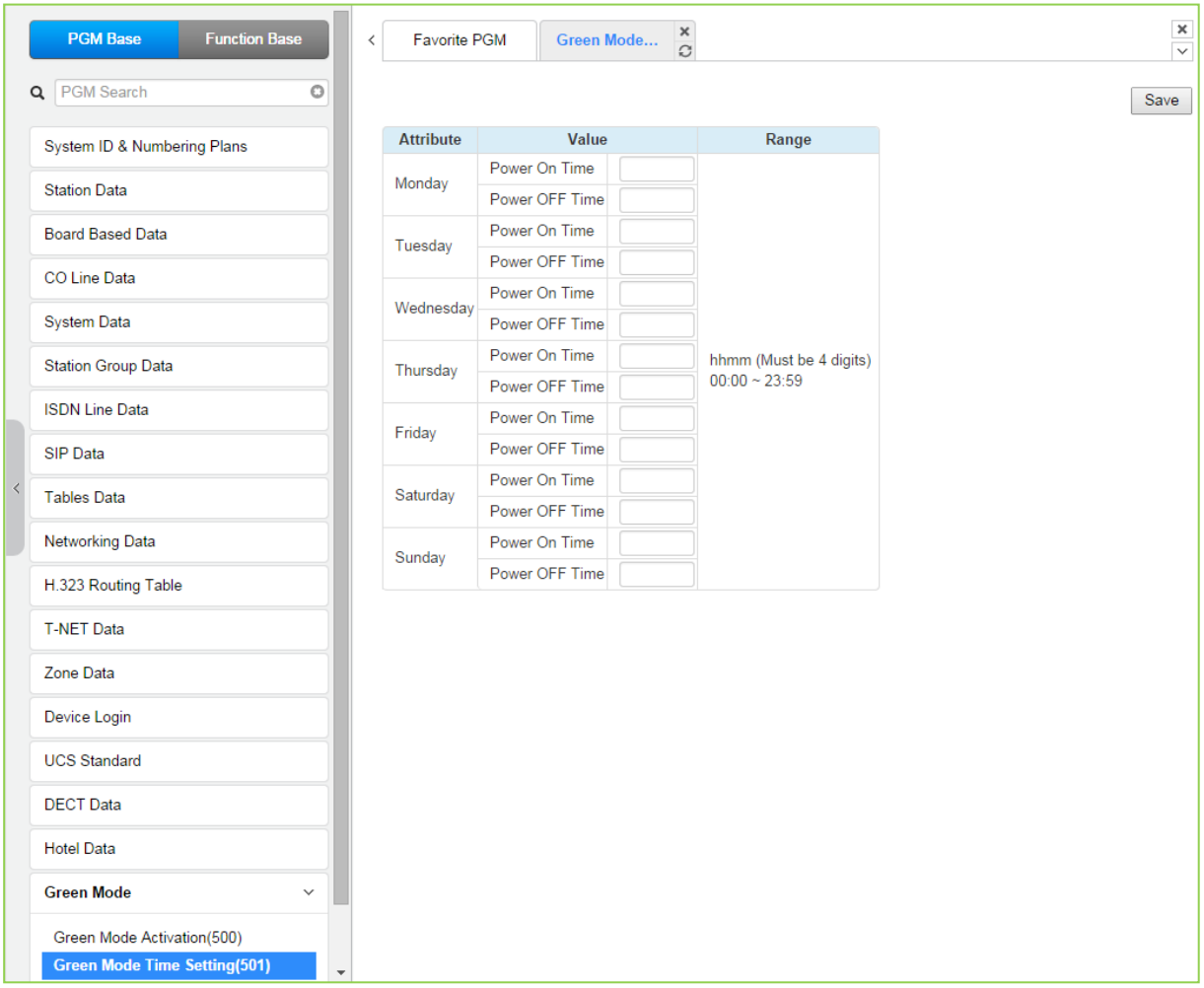


Figure 4.4.18.2-1 Green Mode Time Setting

The power ON/OFF time can be assigned to control Green Mode automatically. The power ON/OFF time can be defined on each day in a week. And when defined at that time, power to assign board will be served or not.

Table 4.4.18.2-1 Green Mode Time Setting

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Power ON Time	The time to start power supply to the assigned board.	hhmm (Must be 4 Digits)	
Power OFF Time	The time to stop power supply to the assigned board.	hhmm (Must be 4 Digits)	

4.4.19 Redundancy Data for UCP600 & 2400

Selecting the redundancy data returns the sub-menu displayed in the left frame, as shown in the following figure.

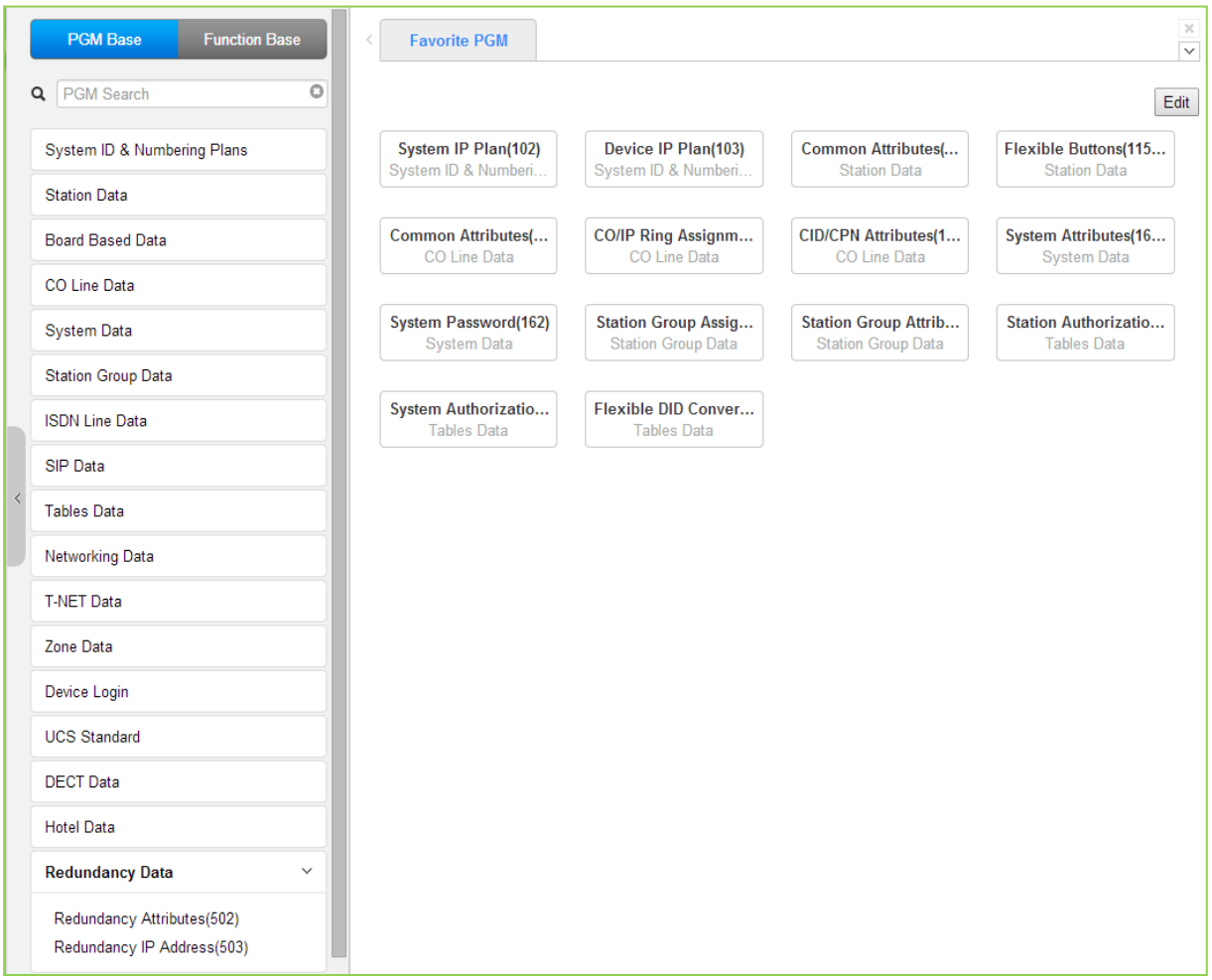


Figure 4.4.19-1 Redundancy Data main page

4.4.19.1 Redundancy Attributes – PGM 502

Selecting Redundancy attributes will display the page shown. Click the **[Save]** button after changing Value.

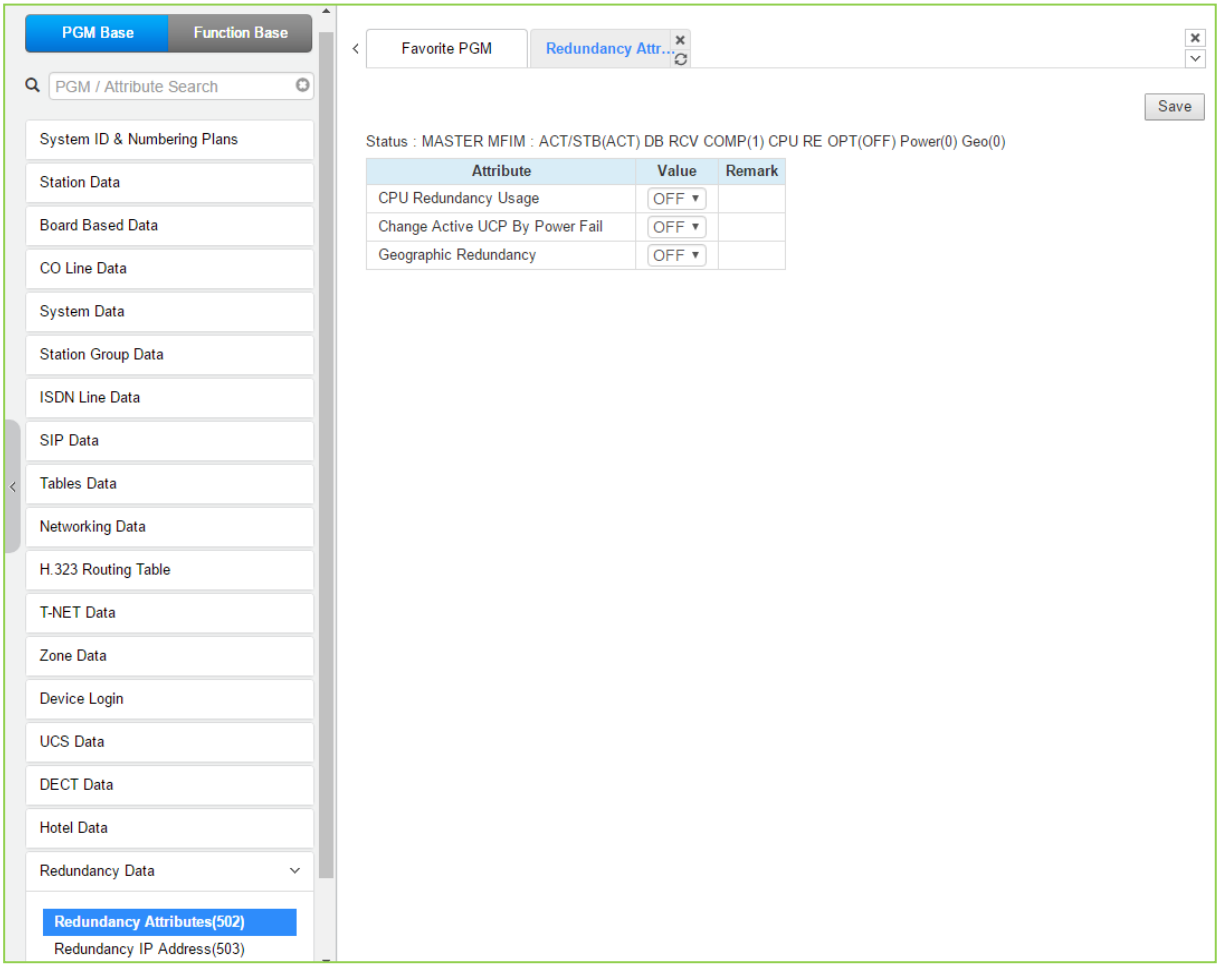


Figure 4.4.19.1-1 Redundancy Attributes

The Redundancy attributes enable redundancy and activate “Geographical” redundancy.

Table 4.4.19.1-1 Redundancy Attributes

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
CPU Redundancy usage	When redundancy is employed, this field informs the master UCP that a redundant UCP is available.	OFF ON	OFF
Change Active UCP By Power Fail	When power fails, the active UCP is changed to the standby mode, and the standby UCP becomes active.	OFF ON	OFF
Geographical Redundancy	Geographical redundancy permits the remote location of the redundant UCP modules.	OFF ON	OFF

4.4.19.2 Redundancy IP Address – PGM 503

Selecting the redundancy IP Address will display the page shown. Click the **[Save]** button after changing Value.

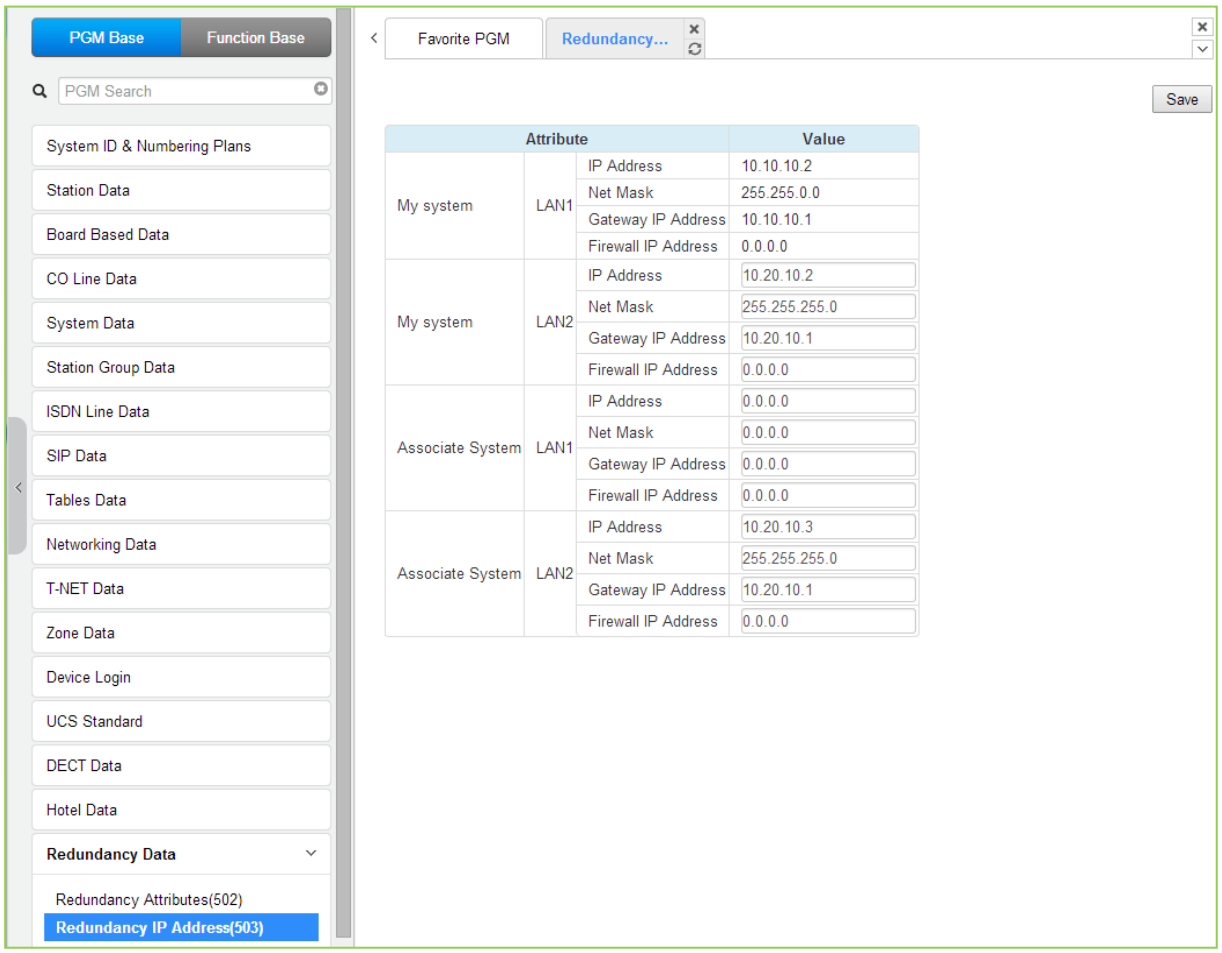


Figure 4.4.19.2-1 Redundancy IP Address

For proper operation, It must be that the IP address parameters of the LAN1 ports of the redundant UCP modules are defined for Redundancy.

4.4.20 Initialization - PGM 450

Selecting Initialization will return the sub-menu in the left frame in as shown in the following figure.

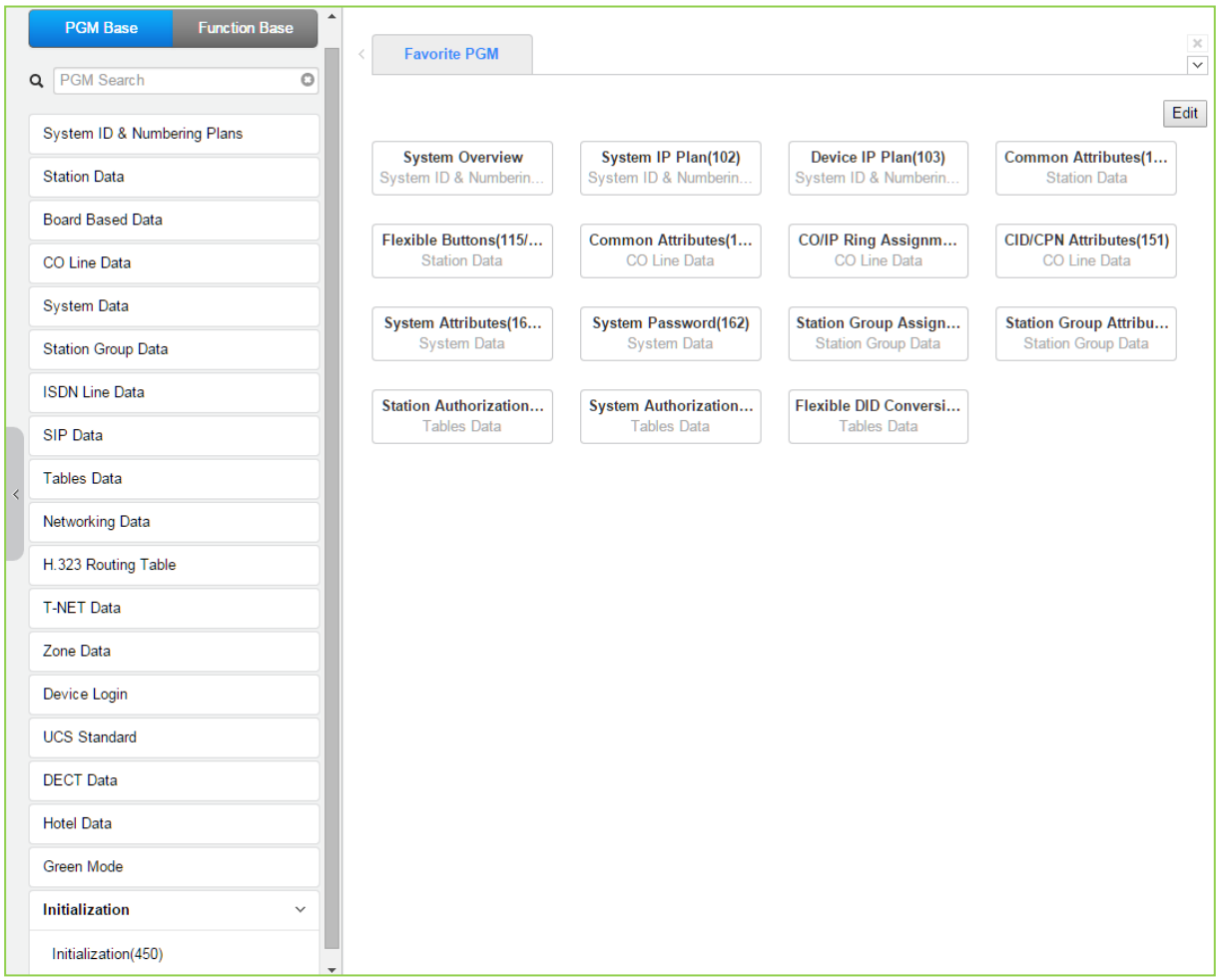


Figure 4.4.20-1 Initialization

4.4.20.1 Initialization Table - PGM 450

Selecting Initialization will display the Initialization Table data entry page. Use the checkmark to indicate which attributes to modify; data for checked attributes are initialized by clicking **the [Initialize]** button or reset the system by clicking the **[Reset System]** button.

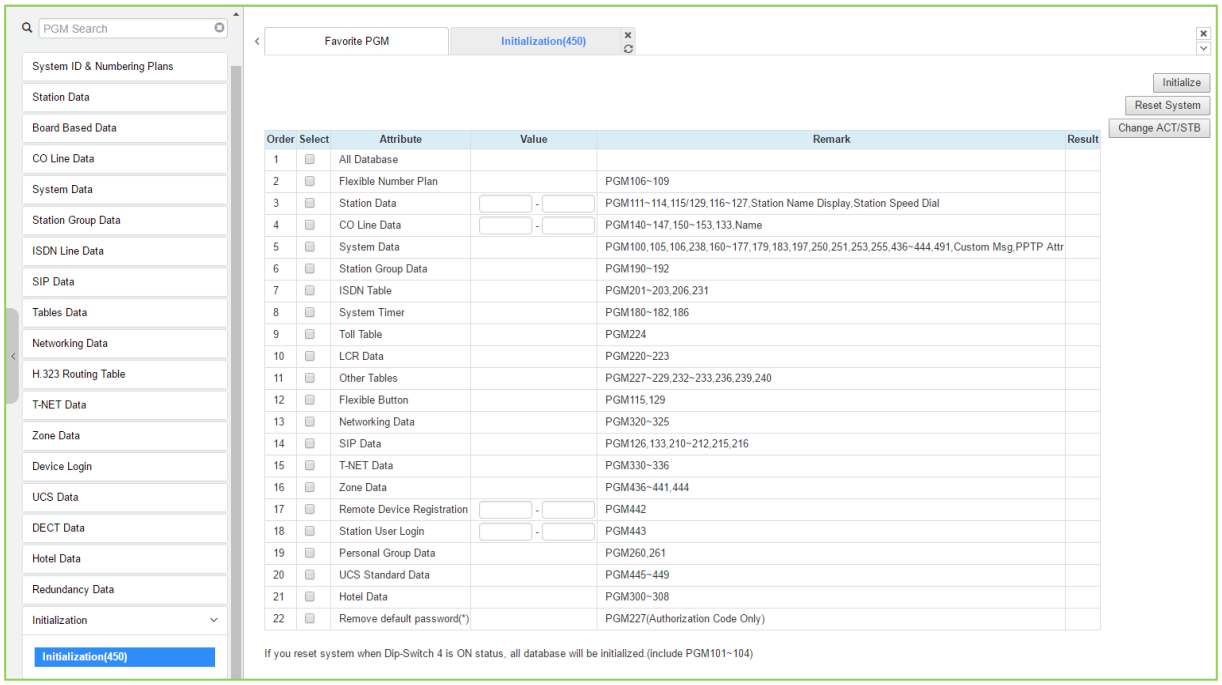


Figure 4.4.20.1-1 Initialization Menu

The system has been pre-programmed with certain features using the default data. The default data are loaded into memory when the system is initialized. The system should always be initialized when first installed, or the database appears corrupted.

In addition, the UCP system can be restarted from this page and, if redundant processors are equipped, the active and standby UCP modules can be modified.

The system can be initialized manually during installation.

Note

If you reset the eMG system when Dip switch 2 is On, all databases will be initialized, including PGM 101-104.

If you reset the UCP system when Dip switch 4 is On, all databases will be initialized, including PGM 101-104.

4.5 Maintenance

The Maintenance tab main screen displays information on the system software versions and information on modules and terminals connected to the system.

The database upload/download, software upgrade, access control, license install, and other management functions shown in Figure 4.5-1~ 4.5-3 are accessed from this page.

In addition, at the top of the central screen, detailed software version information and system resource status (CPU, memory, storage, and network) are provided. Also, you can monitor the device in real-time by clicking **[Real-time Device Monitoring]**.

As eMG/UCP software is being upgraded regularly, we cannot guarantee the software version displayed, and it may be different from the current version.

Among Menus on Maintenance, the following functions are not available at UCP2400.

- VSF Prompt message
- VSF System greeting
- Voice Mail USB Backup on VSF Mail Management (for eMG80/800, UCP)
  eMG100/vUCP: Voice Mail Web Backup/Restore

Real-time monitoring for Device

You can monitor the current status of the device in real-time. The new information is highlighted in red.

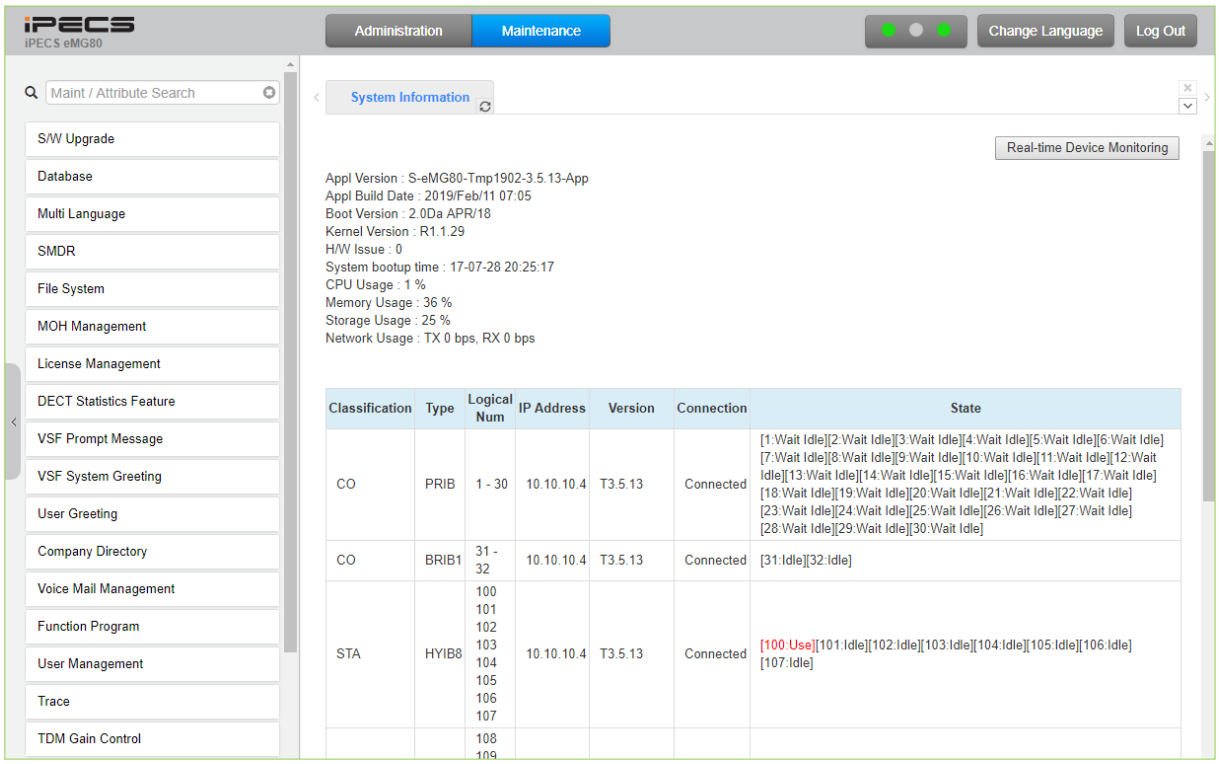


Figure 4.5-1 eMG80/100Maintenance Main Page

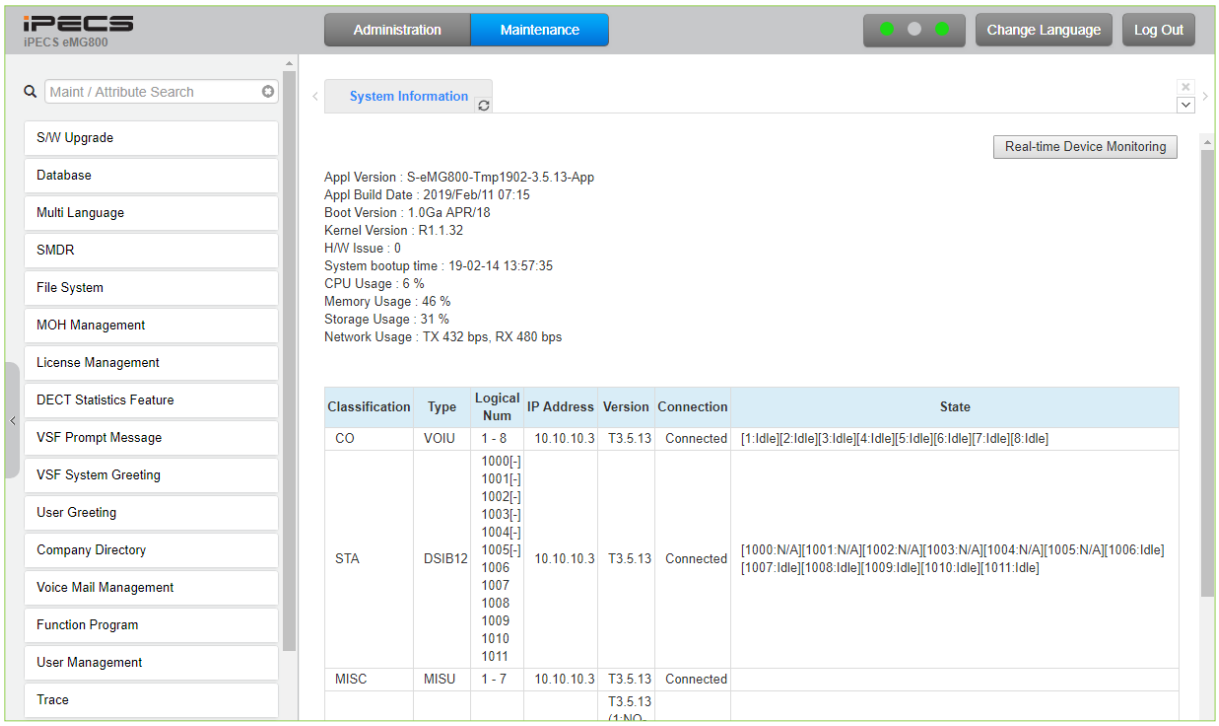


Figure 4.5-2eMG800 Maintenance Main Page

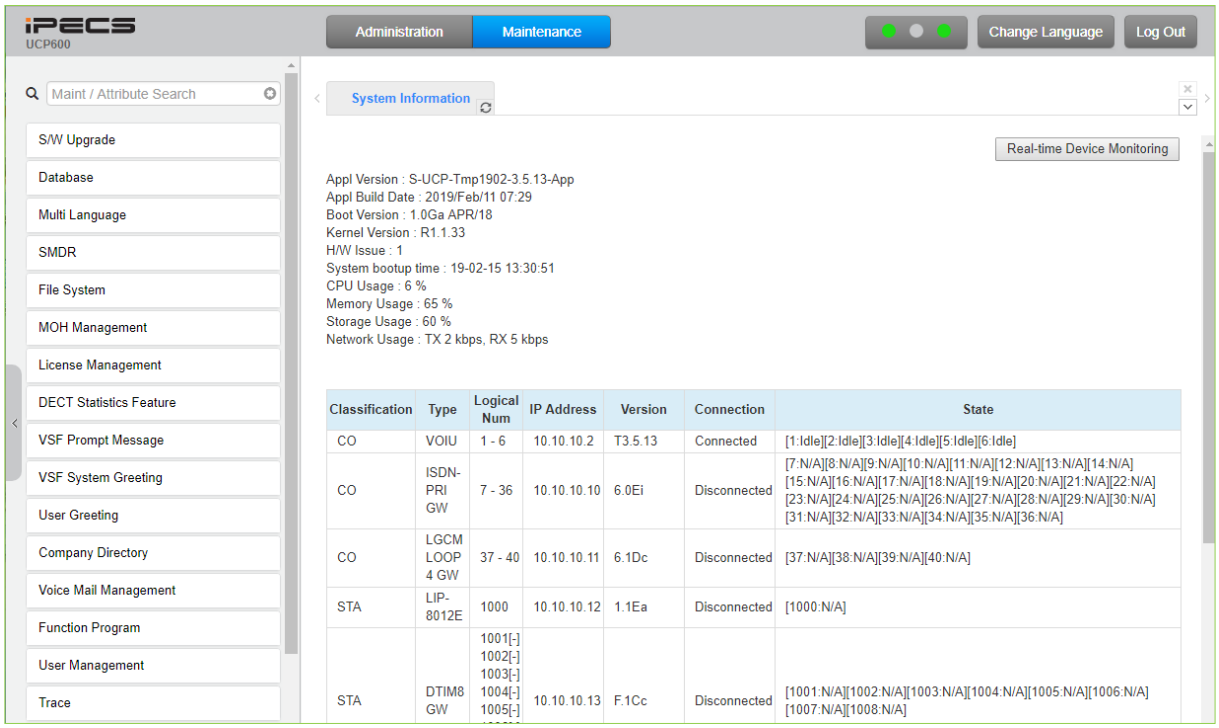


Figure 4.5-3UCP Maintenance Main Page

4.5.1 S/W Upgrade

iPECS system employs a NAND-based memory file system; thus, we can upload html, UCP/MPB upgrade, and iPECS appliance image files without impacting the current database. All of the iPECS series modules can be upgraded by remote access through the system. Selecting S/W Upgrade from the Maintenance page displays the Appliance Version page and sub-menus display in the left frame as shown in the following figure.

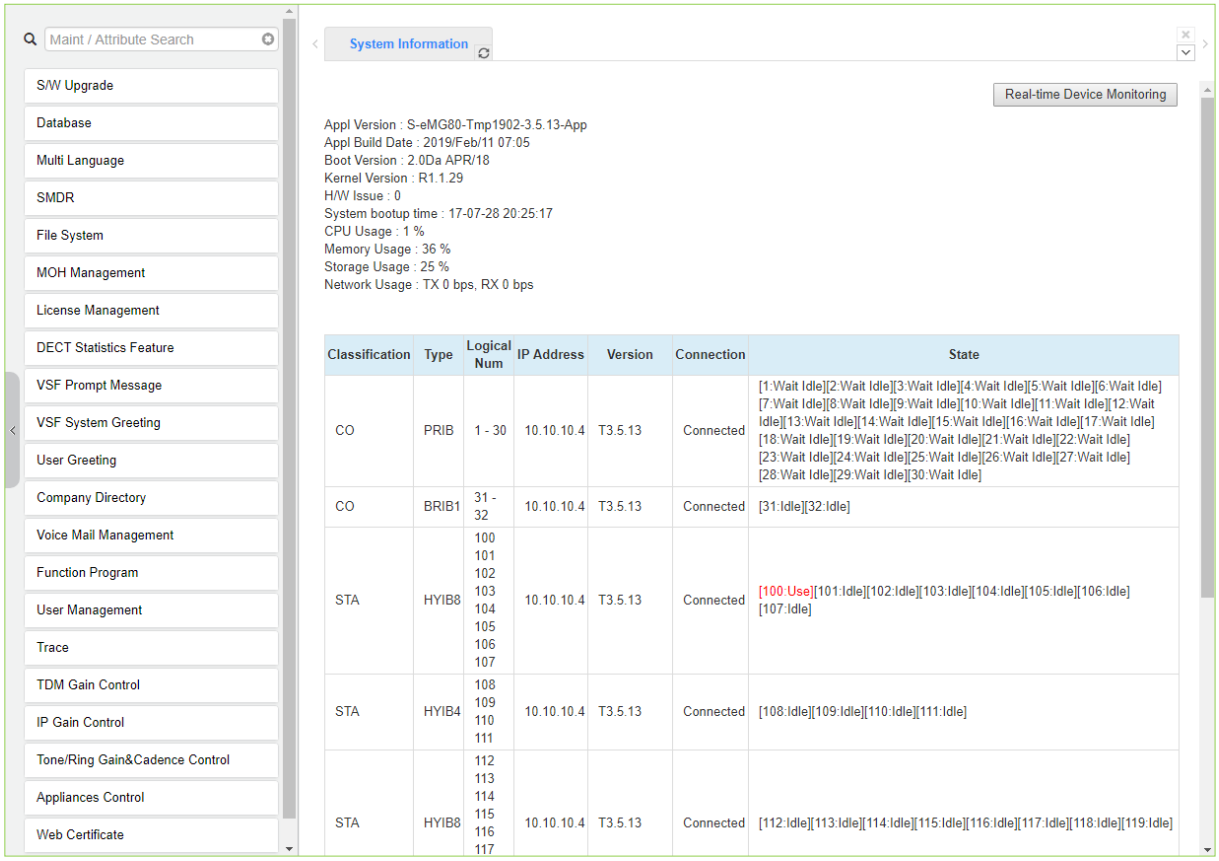


Figure 4.5.1-1 S/W Upgrade

There are two types of upgrade images: application and kernel image. If both are required, upgrade the kernel first and then the application.

The VMIU is part of the MPB, and VSF prompts are upgraded by uploading prompt files to the MPB. VMIB prompts are upgraded by direct upload of prompt files to the VMIB.

4.5.1.1 File Upload

From the File Upload page, click the **[Select file]** button and open the pop-up folder. Select the desired file to upload to the system's memory and click the **[Start]** button. The file is sent to the system's memory, saved, and automatically loaded upon reset or restart.

Before upload, verify sufficient memory is available in eMG/UCP File System for the files to be uploaded. Refer to the 'File System section' to view the free disk space and delete unused files. Note names of files required for normal system operation will be grey out and cannot be deleted.

Html image files are extracted, and previous HTML files are deleted after the upload process. New VSF prompt files are also available immediately upon successful upload. If file upload succeeds, a success page will be displayed.

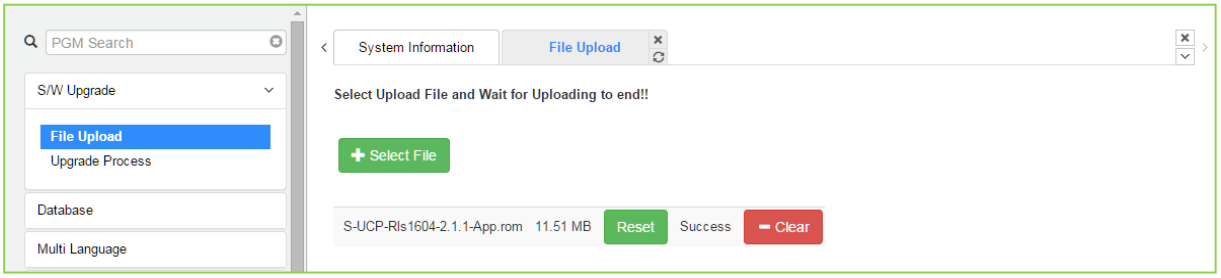


Figure 4.5.1.1-1 File Upload

4.5.1.2 Upgrade Process

If the iPECS Appliance image is uploaded, the appliances of the type for which an image was uploaded will be displayed and can be selected to upgrade, as shown in the following figure Upgrade Process. Select the desired appliance and click the **[Upgrade]** button, the upgrade process will start, and a progress screen will be displayed.

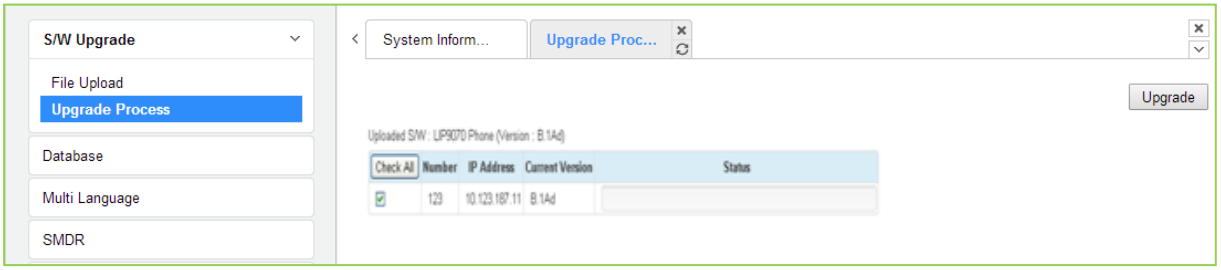


Figure 4.5.1.2-1 Upgrade Process

4.5.1.2.1 Upgrade Process View

The Upgrade Process View provides a status window; refer to the following Upgrade Process View for Module and terminal upgrade activity in a process.

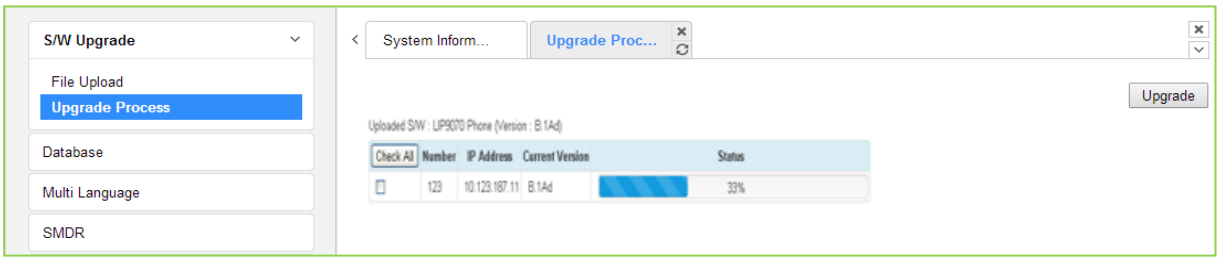


Figure 4.5.1.2-1 Upgrade Process View

4.5.1.2.2 iPECS eMG/UCP Upgrade Process

iPECS Software Full Upgrade Sequence

The following shows the order in which the upgrade process proceeds and firmware files for iPECS and modules. Note the xxxx in the ROM file names indicates the version number of the file.

MPB/UCP Upgrade Process

1) Upload MPB/UCP application image.

iPECS UCP	UCP application image (Example, S-UCP-Rls1601-2.1.1-app.rom)
iPECS eMG	eMG 80/100/800 MPB application image (Example, eMG80: S-eMG80MPB-Rls1512-2.1.1-App) (Example, eMG100: S-eMG100MPB-Rls1512-2.1.1-App) (Example, eMG800: S-eMG800MPB-Rls1512-2.1.1-App)

2) Restart MPB/UCP.

Note)

If the new system database is not compatible with the existing system database, it will be necessary to initialize it.

This can be done manually using the Initialize Dip Switch located on the UCP/MPB module or via the Initialization Web page.

Upgrade of the UCP/MPB includes HTML files; a separate upload of the HTML files is not required. HTML files can be separately upgraded under the File System

Appliances Upgrade Process

1) Upload Appliance application image to MPB

LIP 8012/8024/8040E application image:	GS98Pxxxx.rom (xxxx indicates the version)
LIP 8002E application image:	GS99Pxxxx.rom (xxxx indicates the version)

2) Select target appliances & Upgrade application image and click **[Upgrade]**.
3) Wait until the upgrade process completes.
4) Automatically restart when the upgrade completes successfully.

Upgrade of Voice Prompt for eMG

1) Access to VSF Prompt Upgrade page.
2) Select First/Second/Third for multiple language voice prompt.
3) Upload the proper prompt file.

VSF prompt file:	??96Wxxxx.rom (?? Is nation, i.e. GS, DM, KR, etc. ; xxxx indicates the version)

Upgrade of Voice Prompt to VMIU for eMG

1) Access to MPB.
2) Select First/Second/Third for multiple languages of voice prompt.
3) Upload the proper prompt file to VMIU.

VMIB prompt file:	??96Wxxxx.rom (?? Is nation, i.e. GS, DM, KR, etc. ; xxxx indicates the version)

4.5.1.3 Upgrade HTML Files

The “File View” Menu is used to upload a file and reload the system’s html files. Upload time of html will take 5 ~ 10 minutes.

4.5.1.3.1 Appliances Upgrade (Device and iPECS Phone)

Upload appliance image, and click the **[Upgrade process]** button to select upgrade appliances. If appliances are selected, click the **[Upgrade]** button. The page shown in Figure 4.5.1.2-1 will indicate that the Upload command has been sent and the upgrade process is working.

This page will display the Upload status. When the appliance upgrade process is successful, the status is updated to “Success.” If the upgrade process fails, the process is attempted an additional three (3) times before being abandoned.

4.5.1.3.2 Direct Appliances Upgrade

Should the above-managed upgrade process fail, appliances (Devices and iPECS Phones) can be upgraded directly using the appliance IP address as the upgrade destination address. Note the later time may require local access.



Figure 4.5.1.3.2-1 iPECS Phone Direct Connect Upgrade

4.5.1.4 WTIB Base upgrade Process for eMG800

Upgrade WTIB base image of eMG800.

1) Upload WTIB base image to MPB.
2) Select target base& Upgrade.
3) Wait until the upgrade process completes.
4) Automatically restart when the upgrade completes successfully.

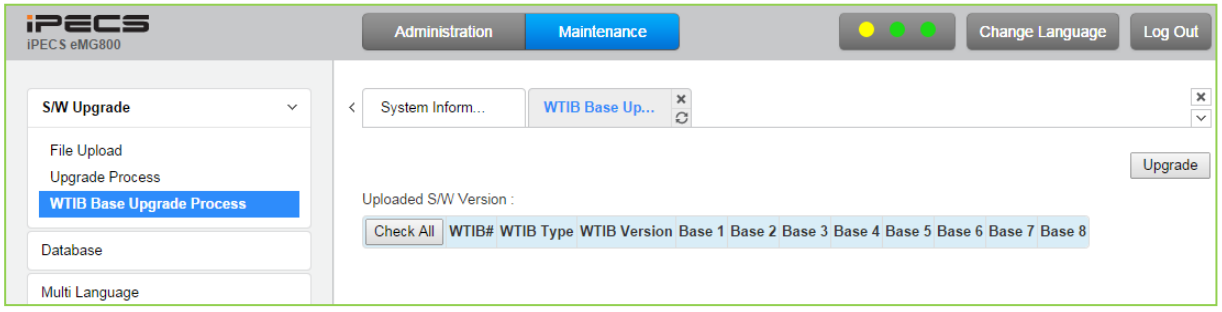


Figure 4.5.1.4WTIB Base Upgrade Process

4.5.2 Database

4.5.2.1 Database Upload

The Database Upload selection will display the Database Upload page as shown in the figure. Select **[Select Files],** select the desired database file from the local PC and click **[Start]** to upload the database to the system.

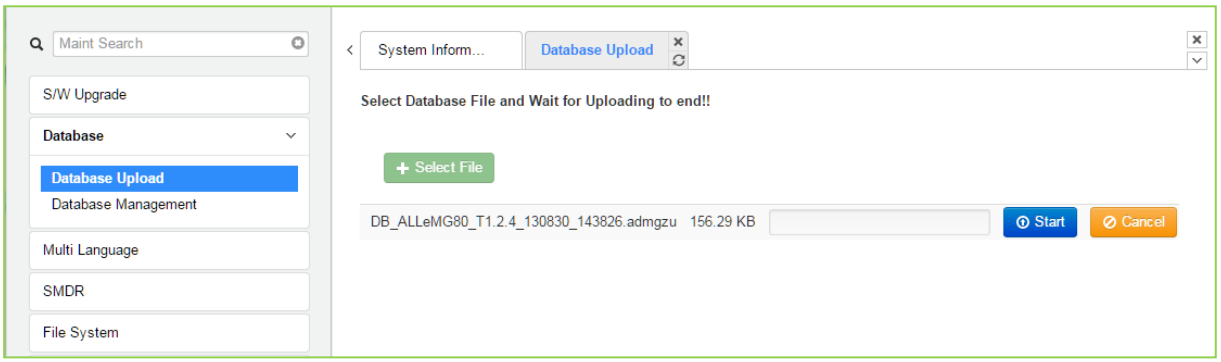


Figure 4.5.2.1-1 Database Upload

4.5.2.2 Database management

Selecting Database Management will display the Database Download page. Select the structure to determine the portion or structure of the download.

Click **[Download],** then select the directory and file name in the pop-ups that follow to save the file to the PC.

After building a database file, the download function will be available. We can build a maximum of five downloadable files for various types of data and structure; building additional files deletes the oldest.

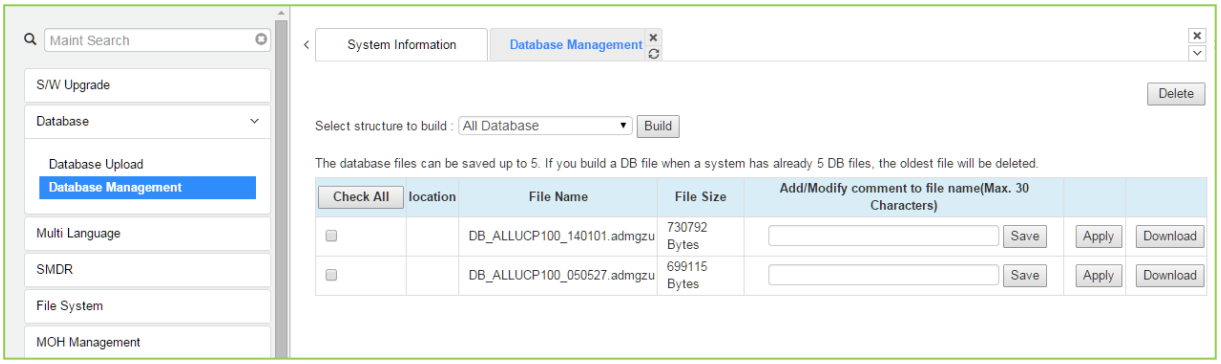


Figure 4.5.2.2-1 Database Download

You can add or modify the file name by entering the characters including special character (#, $, %,&, ', ( ), -, ., @, _). The comment will be created as [XXXXX] before '.admgzu.' It is useful to search DB after downloading.

Clicking on the **[Download]** button will present the File Download window. Files should be saved to disk. Note that this screen will appear for all download processes.

4.5.3 Multi-Language

The system can employ either English or a “Local Language” for the Web page displays. The multi-language file, a csv (comma separated variable) formatted file, is downloaded to a PC, and the English terms are translated to the local language.

The modified file can then be uploaded to the iPECS system. Once uploaded, the user can select the “Change Language” button and select either English or the Local Language translation for Web page displays.

4.5.3.1 Multi-Language File Upload

The Multi-Language File Upload selection returns the Multi-Language File Upload page, as shown in the figure. By selecting the Multi-Language File desired from the local PC, the desired Multi-Language File can be uploaded to the iPECS system.

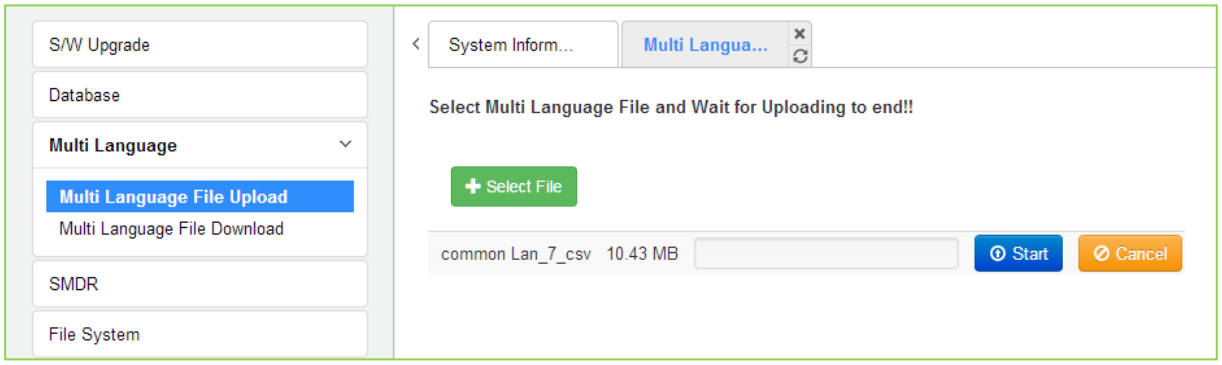


Figure 4.5.3.1-1 Multi-Language File Upload

4.5.3.2 Multi-Language File Download

Selecting Multi-Language File Download will display the Multi-Language File Download page figure. Selecting this option will download the entire iPECS system the Multi-Language File to the local PC.

It also allows the Multi-Language File in the PC to be uploaded to the iPECS system using the file upload procedures in the S/W Upgrade section.

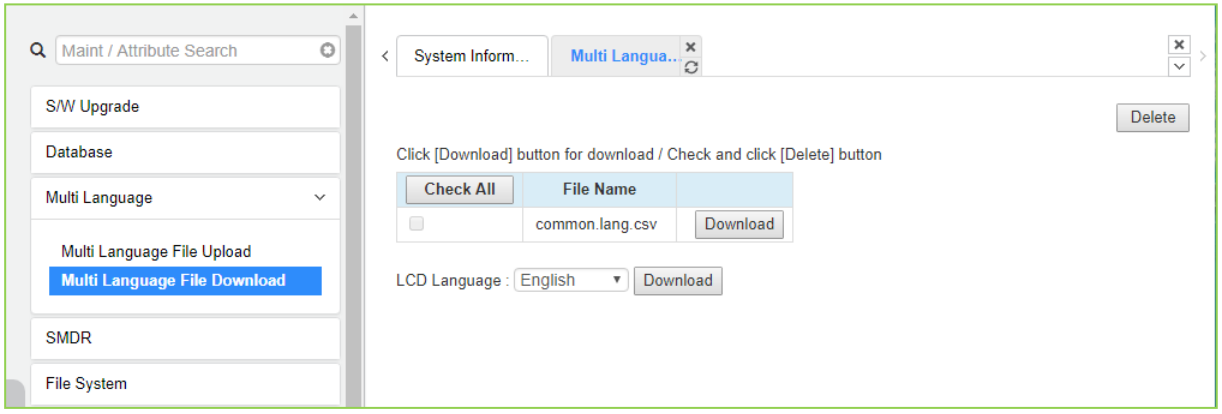


Figure 4.5.3.2-1Multi Language File Download

4.5.4 SMDR

The iPECS system can download SMDR data in an SYLK format file (.slk). The file is compressed using the “gz” file format. After unzipping, the file can be opened under any common spreadsheet application. The system will provide a view of SMDR data for the station range entered in the Web page Figure. This page may also be employed to delete SMDR records for the station range entered.

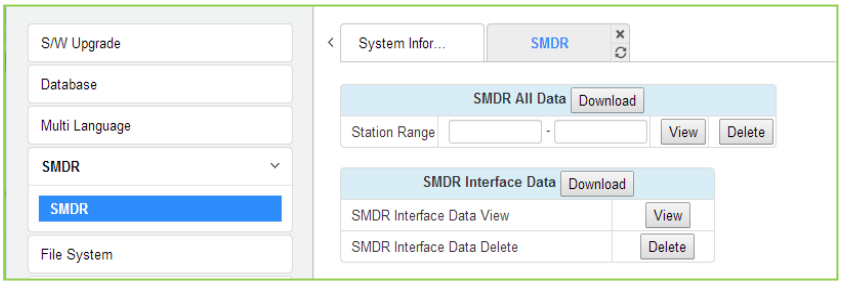


Figure 4.5.4-1 SMDR Access

4.5.5 File System

4.5.5.1 File View & Delete

The File View & Delete page displays various files stored in the file system memory. To delete a file, check the box for the file and click **[Delete]**. Files can also be downloaded to the PC using the **[Download]** button to the right of the file name. Note the system requires the files displayed in grey, and the system will not allow deletion of these files.

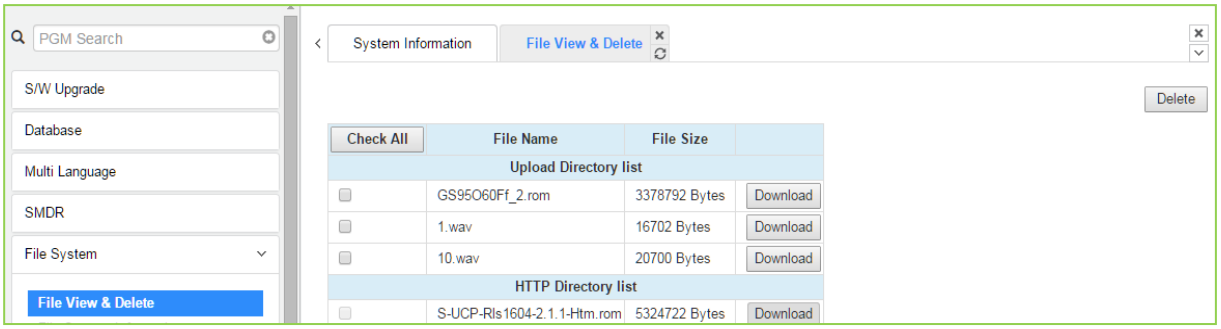


Figure 4.5.5.1-1 File View and Delete

4.5.5.2 File System Information

The File System Information page displays the disk status, including the total and free disk space as shown in the figure. Use this page to determine if the free space on the disk is sufficient for uploading Upgrade files, section 4.5.1.

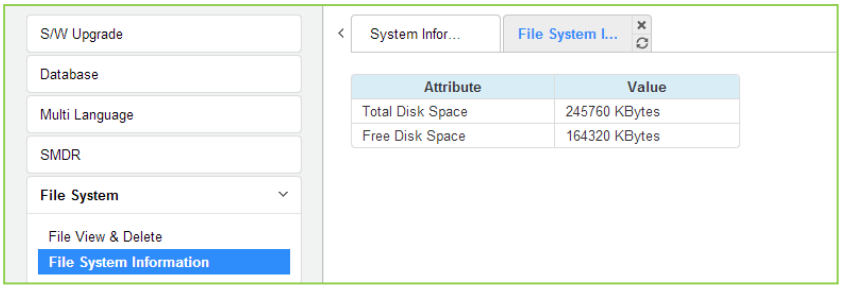


Figure 4.5.5.2-1 File System Information

4.5.6 MOH (Music On-Hold) Management

4.5.6.1 MOH Delete& Download

The MOH Delete& Download page displays a list of the thirteen files stored in the file system memory. To delete a file, check the box for the file and click **[Delete]**. Files can also be downloaded to the PC using the **[Download]** button to the right of the file name.

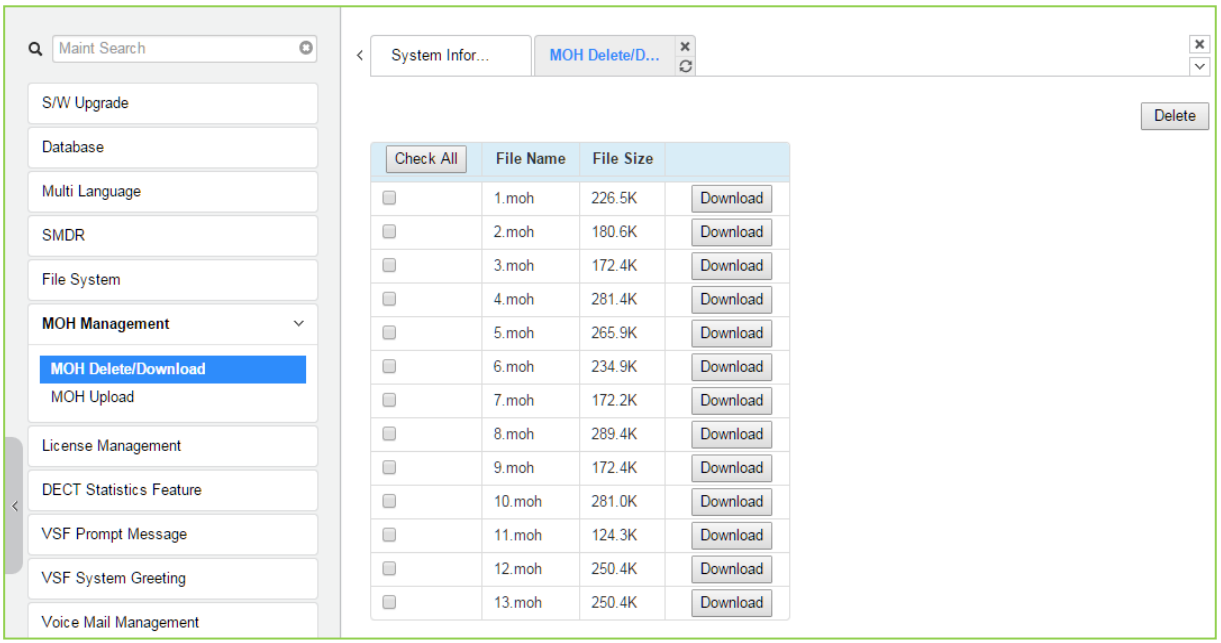


Figure 4.5.6.1-1 MOH Delete& Download

4.5.6.2 MOH Upload

Selecting “MOH Upload” will display the page shown in the figure. Here MOH can be uploaded to the system for each of up to thirteen (13) MOH. MOH files format must be followed as shown on the page ‘G.711 a/u-Law wav (8000Hz, 16bit, mono)’.

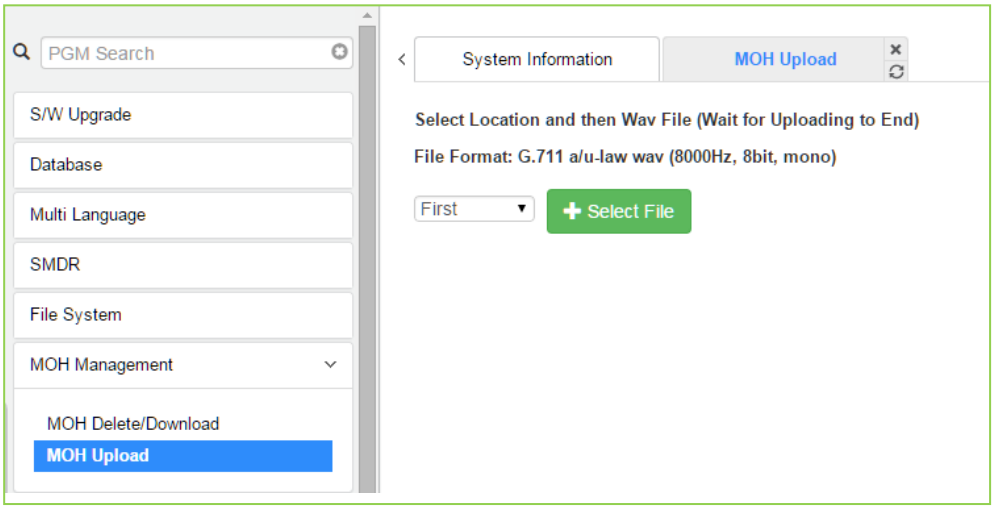


Figure 4.5.6.2-1 MOH Upload

4.5.7 License Install

Various licenses can be installed to expand the capacity of the system and Auto Attendant/Voice Mail services available in the system, as well as soft clients and feature applications. After obtaining a license, you can find the status of each license.

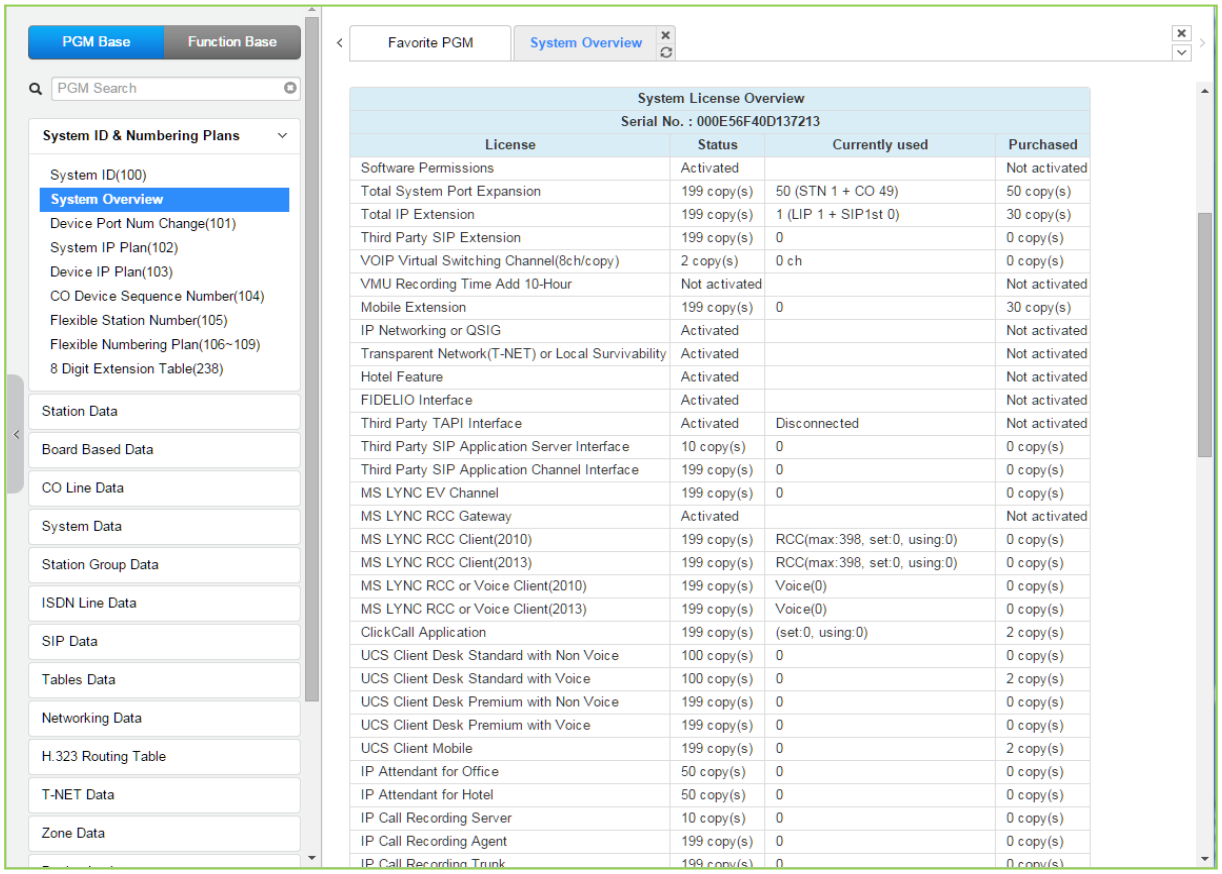


Figure 4.5.7-1 License Install

4.5.7.1 License upload

Before License upload, make sure that the date of the system is set correctly. Click the Select files button and then open the pop-up folder—select a valid license file to upload to the system and click the **[Start]** button. If the file which is sent to the system is “System License File,” it will be saved and automatically applied without restart. The enabled features by uploading the license file can be shown on the “System Overview” page.

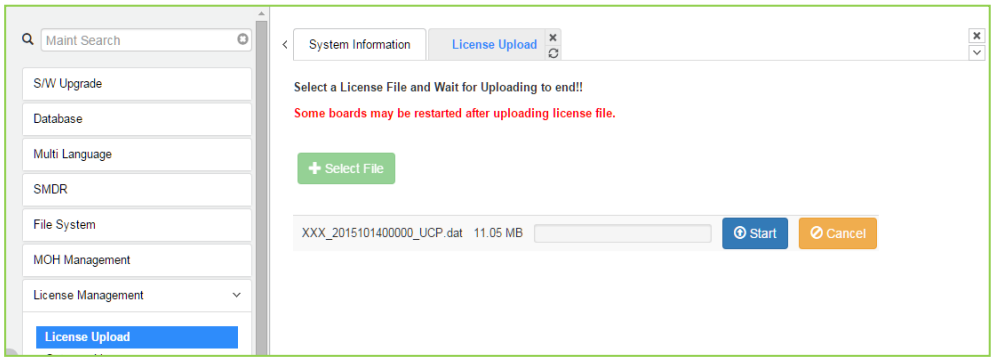


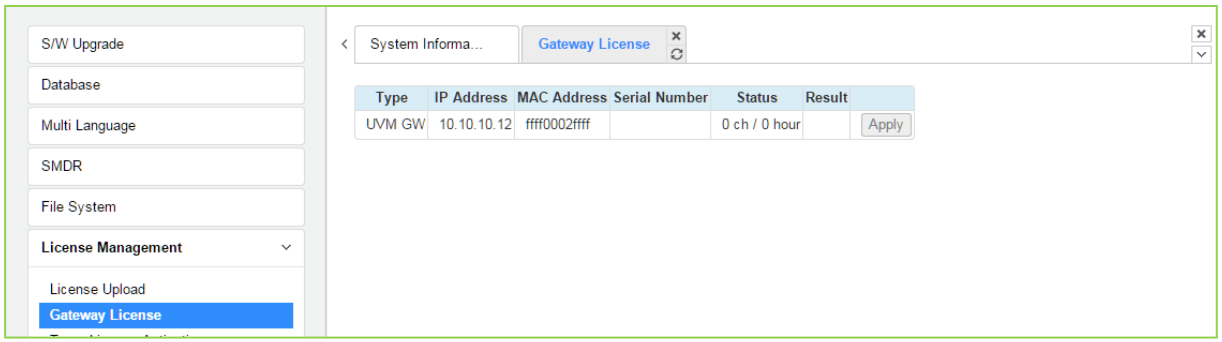
Figure 4.5.7.1-1 License Upload

You can check the license upload detailed log by clicking the "Log View" button.

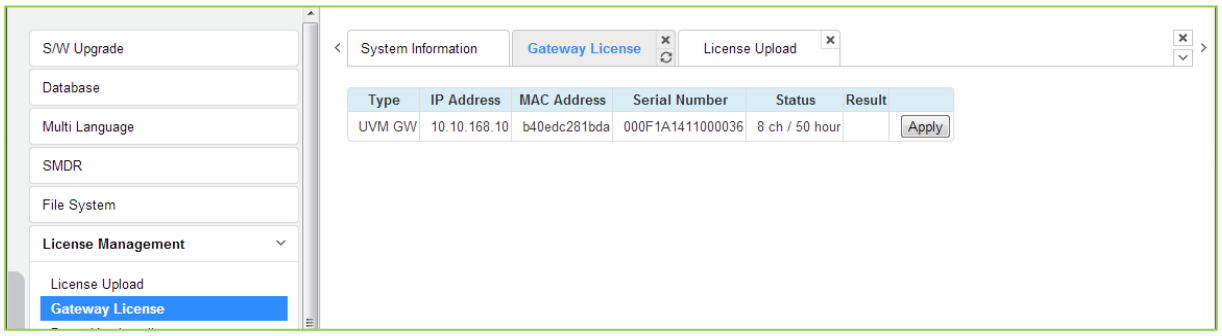
4.5.7.2 Gateway License for UCP

All gateways which can have gateway license types are displayed on this web page. If a valid gateway license file was uploaded by “License Upload” and a gateway with matched serial number is registered in the system, the **[Apply]** button will be activated. This button is used to send the license file to the gateway. After the license file is sent, it will be deleted, and the gateway will be restarted to apply the features of the license file.

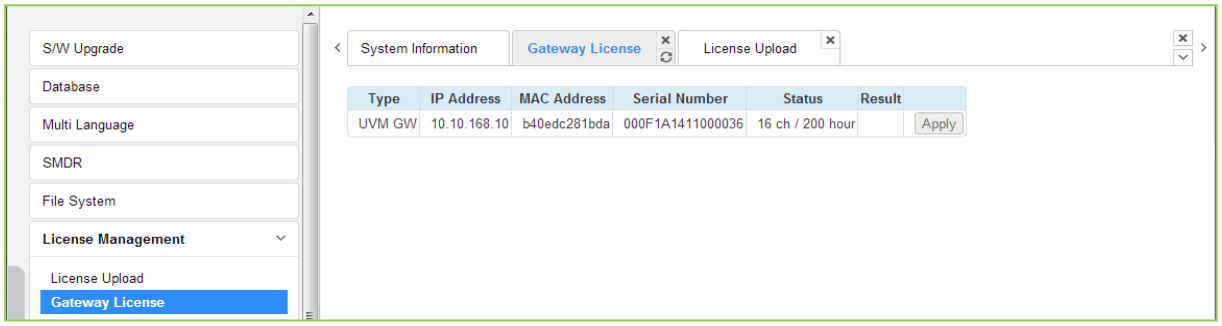
1) The following figure is before uploading the license.



2) After refresh, the following figure is displayed, and click the apply button to activate.



3) The final step is to reset the gateway license and then refresh. You can see the following figure for the Gateway license.



4.5.7.3 User Base License

Selecting User Base License displays the license input page. Enter the station index range and click **[Load]** to assign the desired license for each station number. Click the **[Save]** button after changing the license.

Enter Station Index Range: eMG80/100: 1-140 / eMG800: 1-1200 / UCP: 1-2400

The license is the following type for UCS Client:

- Device: if "Device" is selected, it should be configured in PGM446.(Default: Device)
- Basic: The standard license is available for Desktop Call Control.
- Advanced: The advanced license is available for Single login and multiple devices.
- Power: The standard license is available for multiple logins and multiple devices.

* Basic / Advanced / Power licenses are user base license

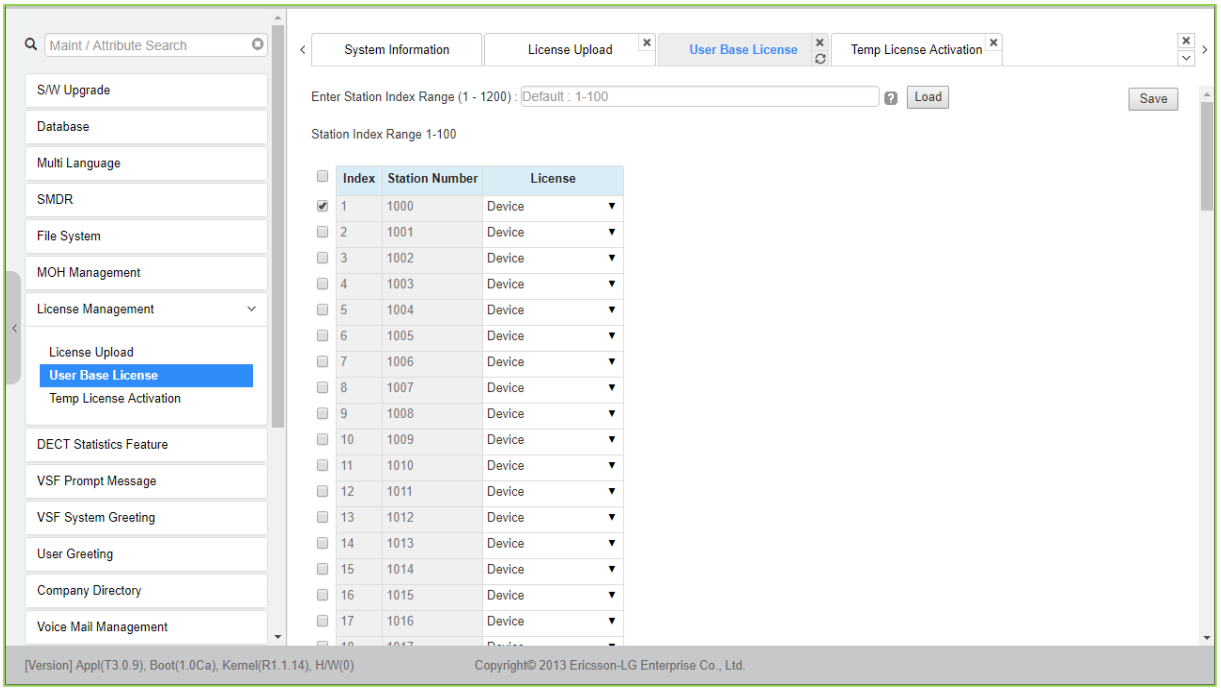


Figure 4.5.7.3-1 User Base License

4.5.7.4 Temp License Activation

Before Temp License Activation, make sure that the date of the system is set correctly. On this page, Temp License can be activated by clicking the **[Activation]** button. The remaining days and activation times are displayed in the State column. The Temp License can be activated a total of 6 times. It is valid for 60 days at the first activation and is valid 30 days from the second activation. Therefore the license file which has the correct port number and features must be uploaded. Otherwise, the system may enter “Limited Service Mode” due to the mismatched license.

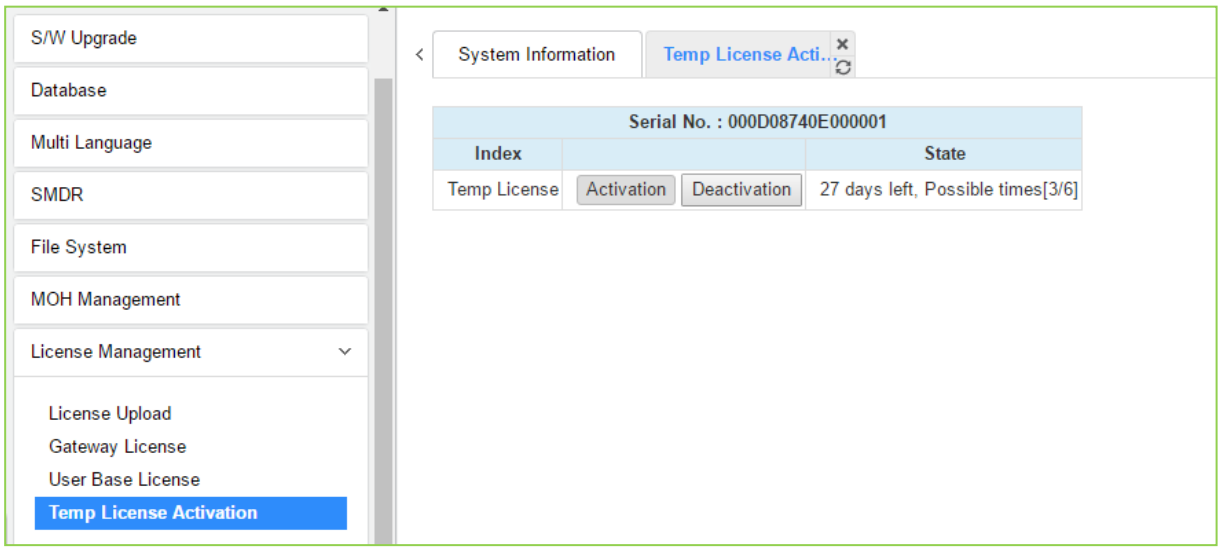


Figure 4.5.7.4-1 Temp License Activation

Notification

- Please backup your DB before you activate a temporary license.
- Must verify the present license before the temporary license expires.
- If a temp license expires, upload a new license file or use it within the scope of the current license file. Otherwise, the system may go to [Limited Service Mode].

4.5.7.5 Online License (vUCP only)

Since managing a unique fingerprint on a virtual machine is impossible, the license is periodically checked online. The manager must obtain an ID and PWD from the local dealer and program it. If you have not uploaded your license file, you will also need it.

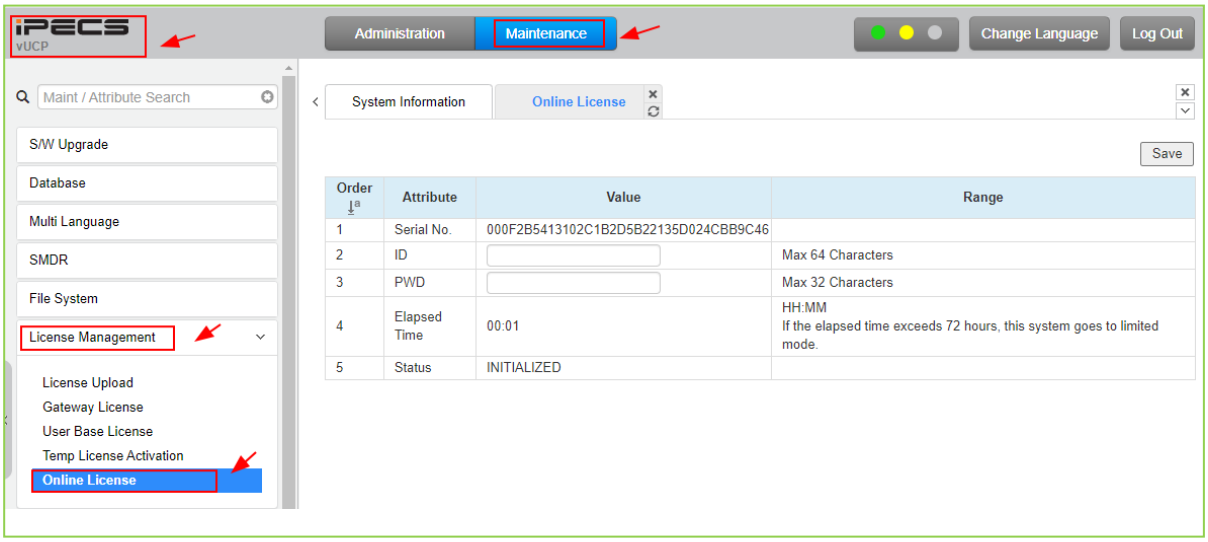


Figure 4.5.7.5-1 Online License

Notification

1) Serial No.: Serial Number of this system
2) ID/PWD: ID/PWD of AM
3) Elapsed Time: Time after successful checking
4) Status: Checking result

When vUCP is upgraded to 6.0, it starts a timer if a license has been uploaded. vUCP will check the license every 24 hours. After 15 days of no verification, the system goes into limited mode.

4.5.8 DECT Statistics Feature

Selecting DECT Statistics Feature displays the page shown in the figure. Select the desired radial button and, where needed, enter the WTIM/WTIB sequence number, then click **[Send]** to view the statistics.

For example, the following box in red is information about the state view of WTIM by entering the Sequence number and clicking the [Send] button. So you can get the information about all attributes.

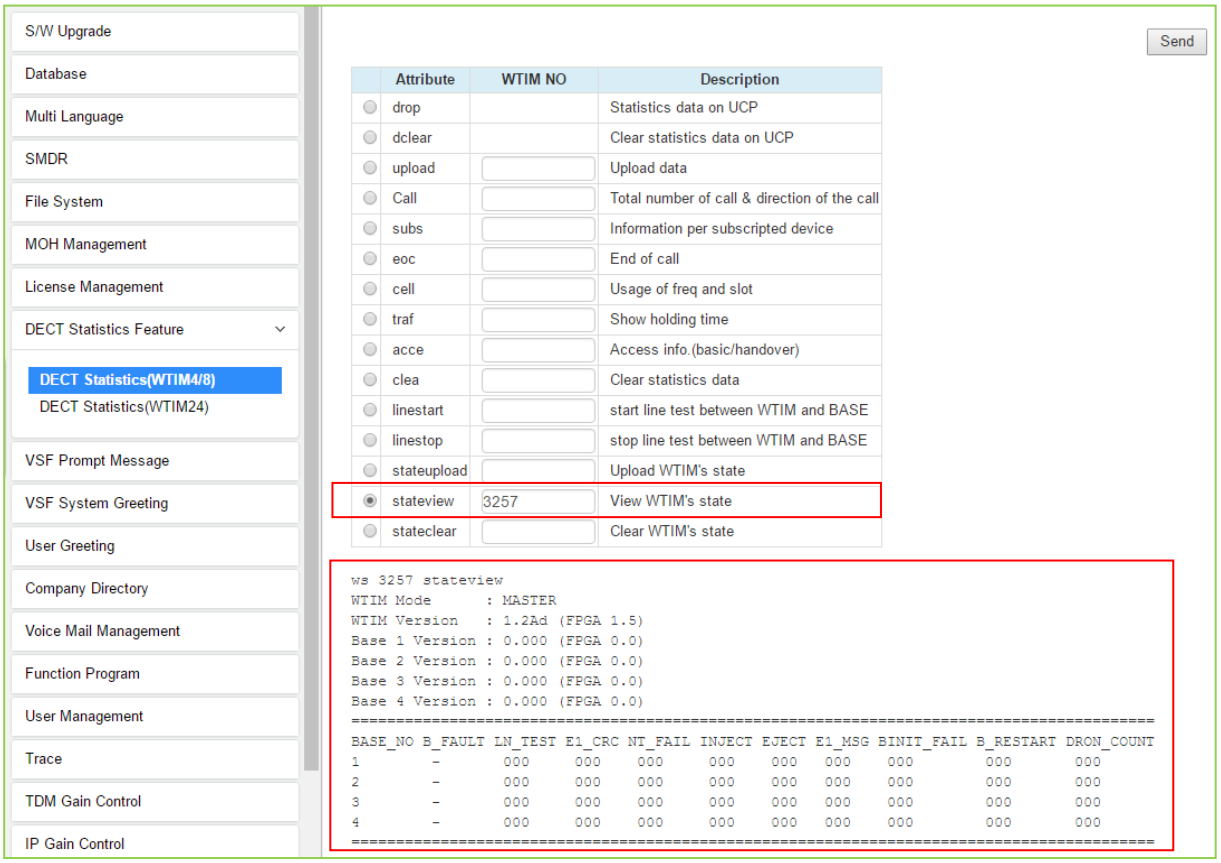


Figure 4.5.8-1 DECT Statistics (WTIM4/8 or WTIB4/8)

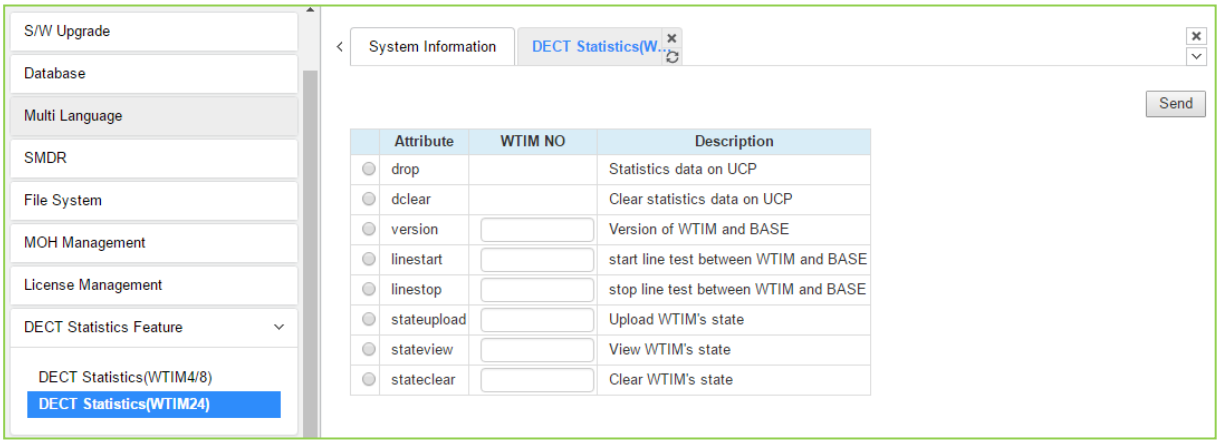


Figure 4.5.8-2 DECT Statistics (WTIM24)

4.5.9 VSF Prompt Upload

The iPECS system delivers system prompts in up to six (6) languages. The prompts for each language are stored in a separate file. Files for each of the languages supported are available from the local Ericsson-LG Enterprise representative. The entire prompt file or individual may be uploaded to the system. Once uploaded to the system, the file is employed to play prompts to iPECS eMG/UCPuser.

UCP2400 doesn't support VSF prompt messages.

VSF prompt sub-menu is a little differentamongeMG80/100, eMG800, and UCP.

- Prompt selection: eMG800 and UCP are available.
- Prompt Upload /Delete: Available.
- Individual upload: Available.

4.5.9.1 Prompt selection

Selecting Prompt Selection displays the page shown in the figure. The System Voice Prompt language files are stored in the VSF memory and are enabled with the Prompt Selection page. A reference "Position" is assigned a language selected from the drop-down menu. Once the language for each position is selected, saving the page enables all the chosen languages.

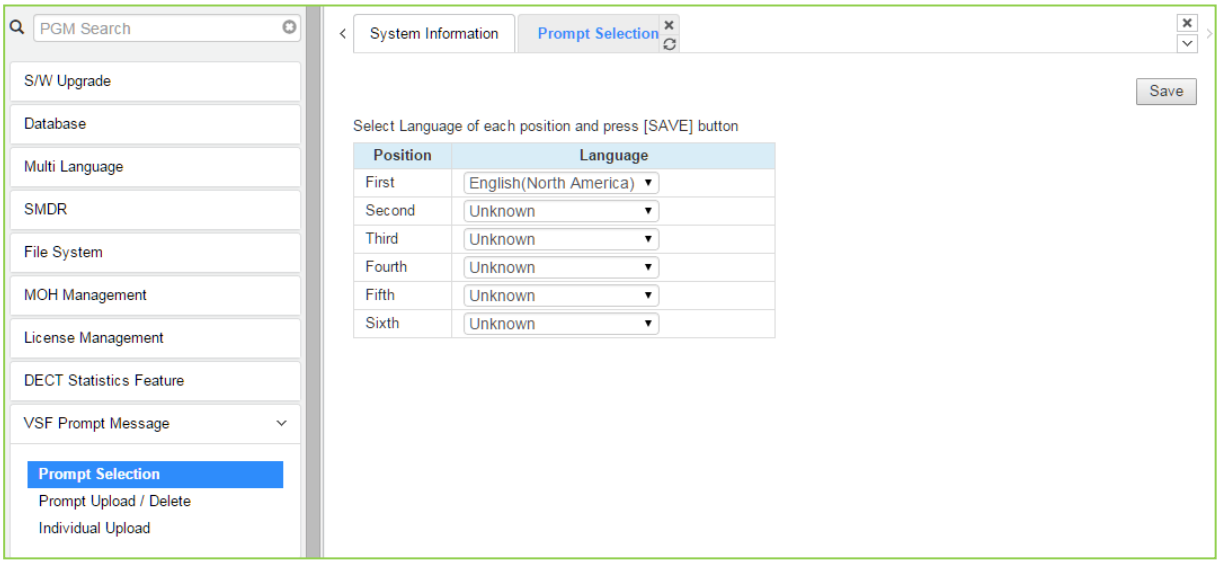


Figure 4.5.9.1-1PromptSelection for eMG800& UCP

4.5.9.2 Prompt Upload/Delete

Selecting Prompt Upload/Delete displays the page shown in Figure 4.5.9.2-1 &Figure 4.5.9.2-2. The entire prompt file for selected languages can be deleted from this page and updated prompt files uploaded to the system. The Select file button is used to upload files. The check box and Delete button are used to delete old or unused language files.

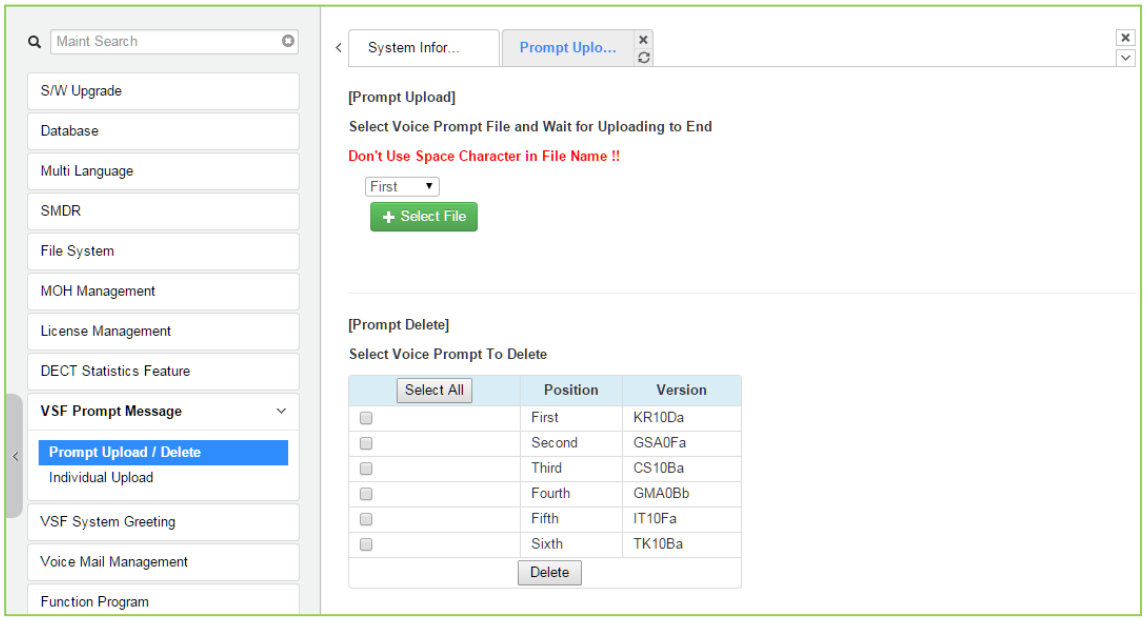


Figure 4.5.9.2-1Prompt Upload& Delete for eMG80/100

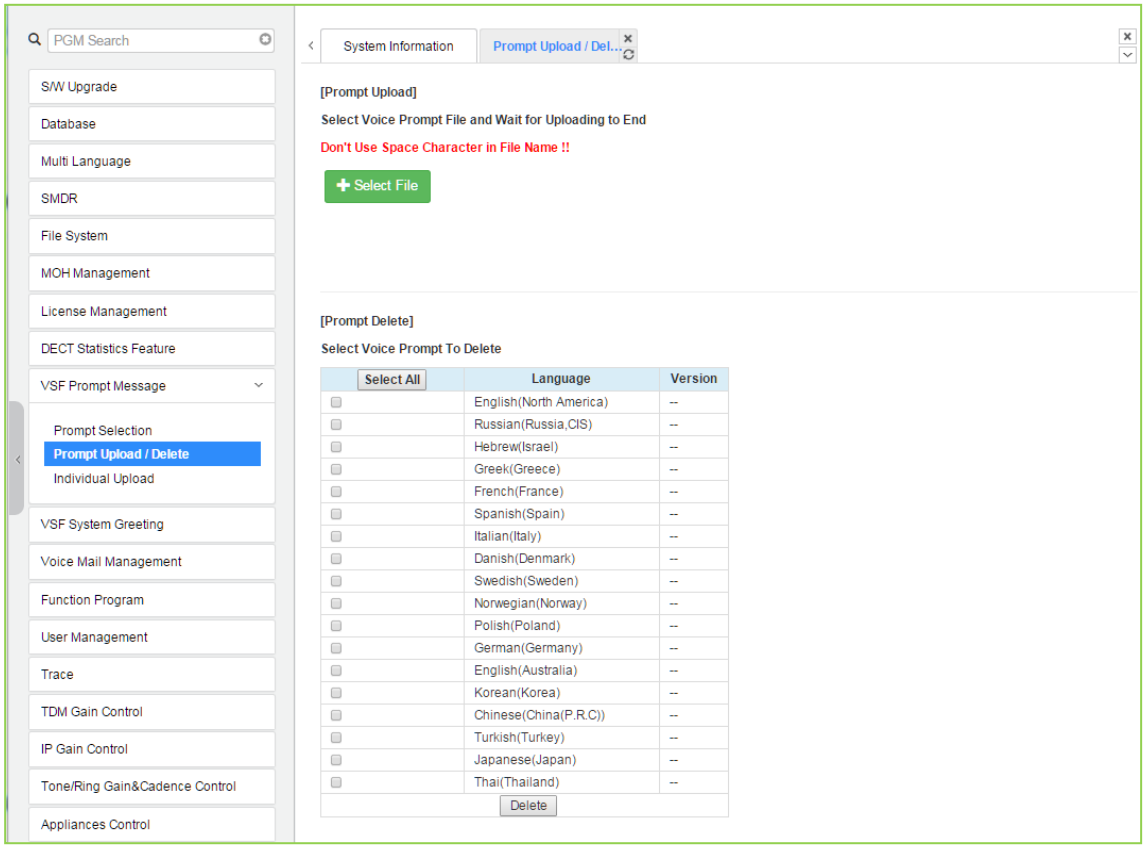


Figure 4.5.9.2-2Prompt Upload& Delete for eMG800& UCP

4.5.9.3 Individual Upload

Selecting “Individual Upload” will display the page shown in the figure. Here individual system prompts can be uploaded to the system for up to six (6) languages. Prompt files must be appropriately named and must be in a G.711 a/u-Law format.

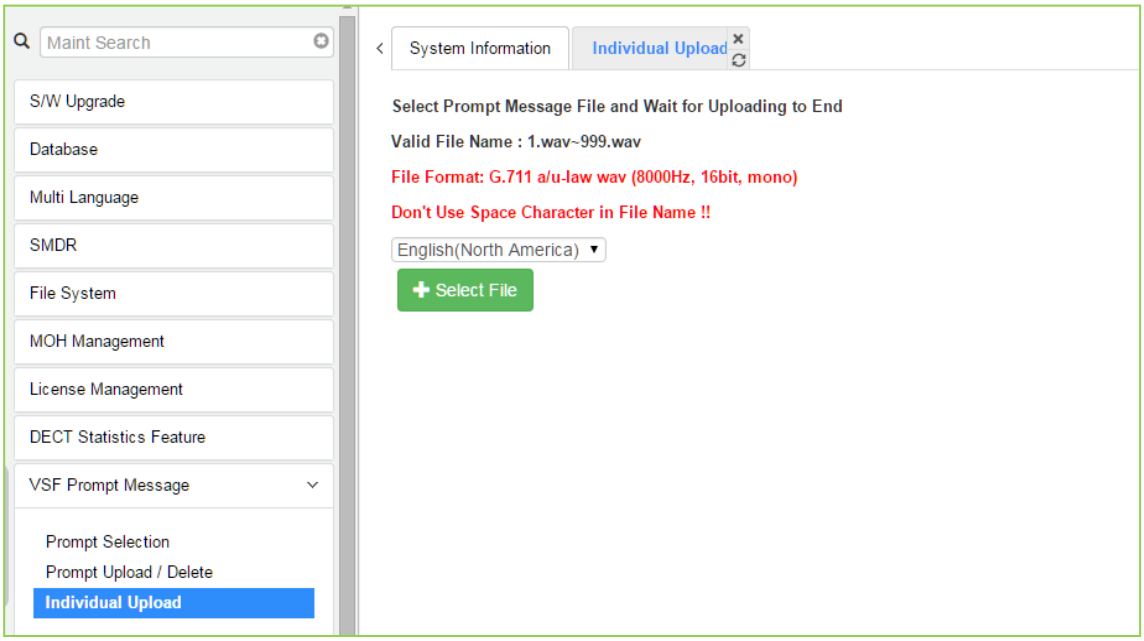


Figure 4.5.9.3-1Individual Upload

4.5.10 VSF System Greeting

The System Greetings (Announcements) can be downloaded from the system or Uploaded to the system. Individual announcements can be recorded externally and then uploaded to the system. Like prompts, the individual announcement files must be in a .wav format using the g.711 codec. Individual greetings for each Language position can be uploaded as well as downloaded. Clicking on the message will download the message to the browser, which will play the message. To save the message, right-click and select save as. Locate a directory and change the file name, if desired, and click save.

All announcements can be downloaded from the system as a backup file and uploaded to the VSF memory as required.

UCP2400 doesn't support VSF system greetings.

4.5.10.1 Individual Upload

Selecting Individual Upload displays the page shown in Figure 4.5.10.1-1. From this page, pre-recorded announcements for each language position can be uploaded to the VSF gateway from the PC. Select the language position and ensure the file name matches the appropriate System Announcement number. The file format must be shown on the page.

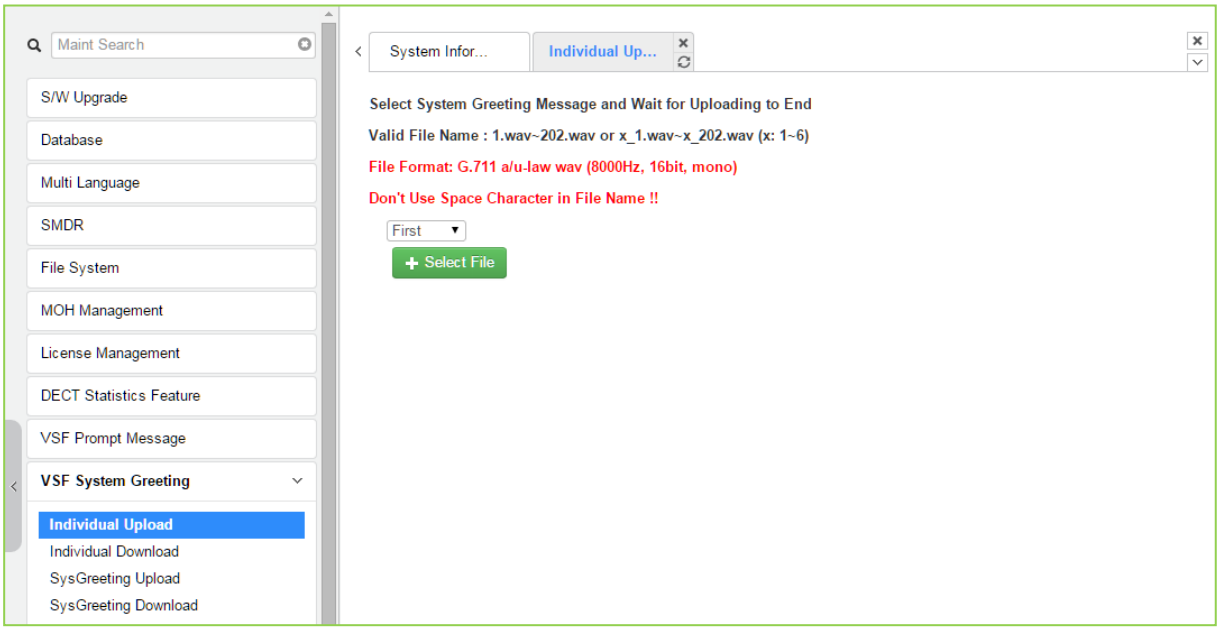


Figure 4.5.10.1-1 Individual Upload

4.5.10.2 Individual download

Selecting Individual Download displays the page shown in the figure. The page will display a list of System announcements in the VSF memory. Individual files may be downloaded with the Download button next to the announcement file name. By using the checkbox and the delete button, the announcement can be deleted from the VSF memory.

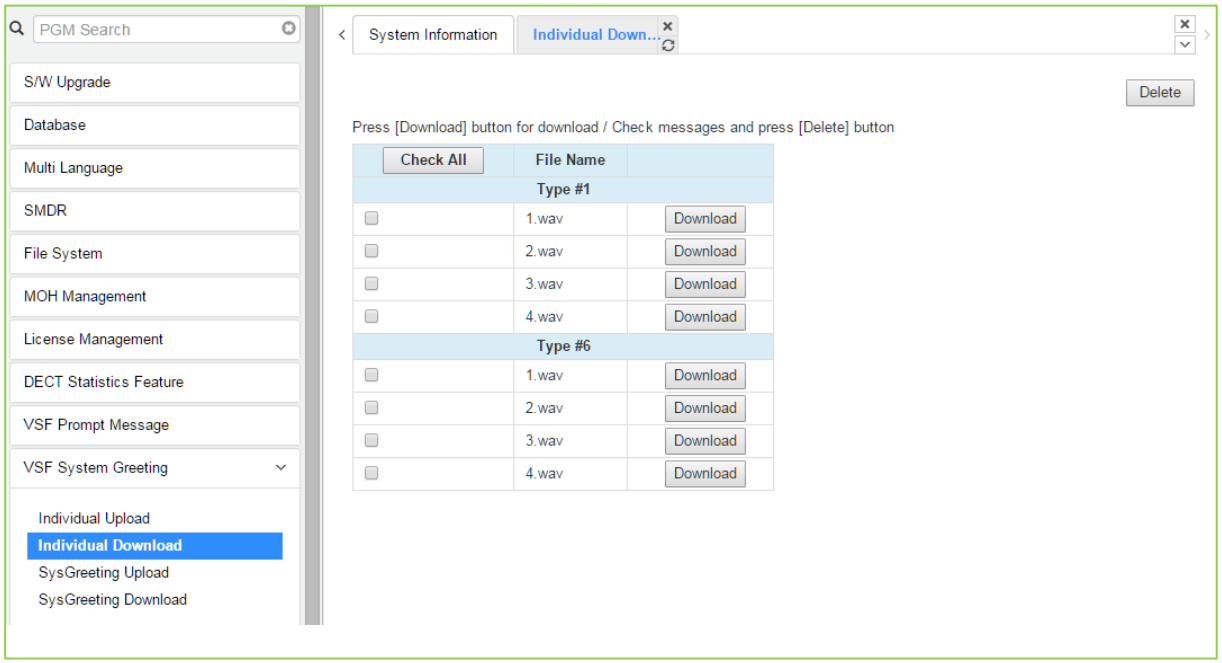


Figure 4.5.10.2-1 Individual Download

4.5.10.3 System greeting Upload

Selecting System Greeting Upload displays the page shown in the figure. From this page, announcements for each language “Position” can be uploaded to the VSF memory. First, select the language position, then click the Select Files button to select the file to upload from the PC.

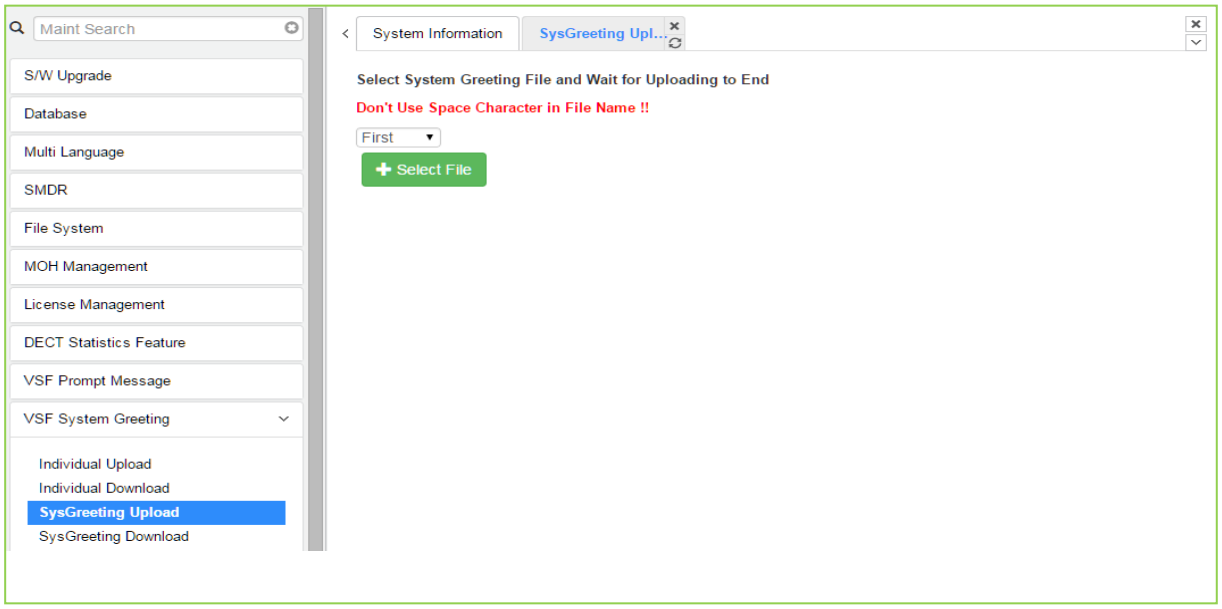


Figure 4.5.10.3-1 System Greeting Upload

4.5.10.4 System greeting Download

Selecting System Greeting Download displays the page shown in the figure. From this page, announcements for each language “Position” can be downloaded from the VSF memory as a backup file. First, select the language position, click the Download button, and then follow the normal save file process to store the file.

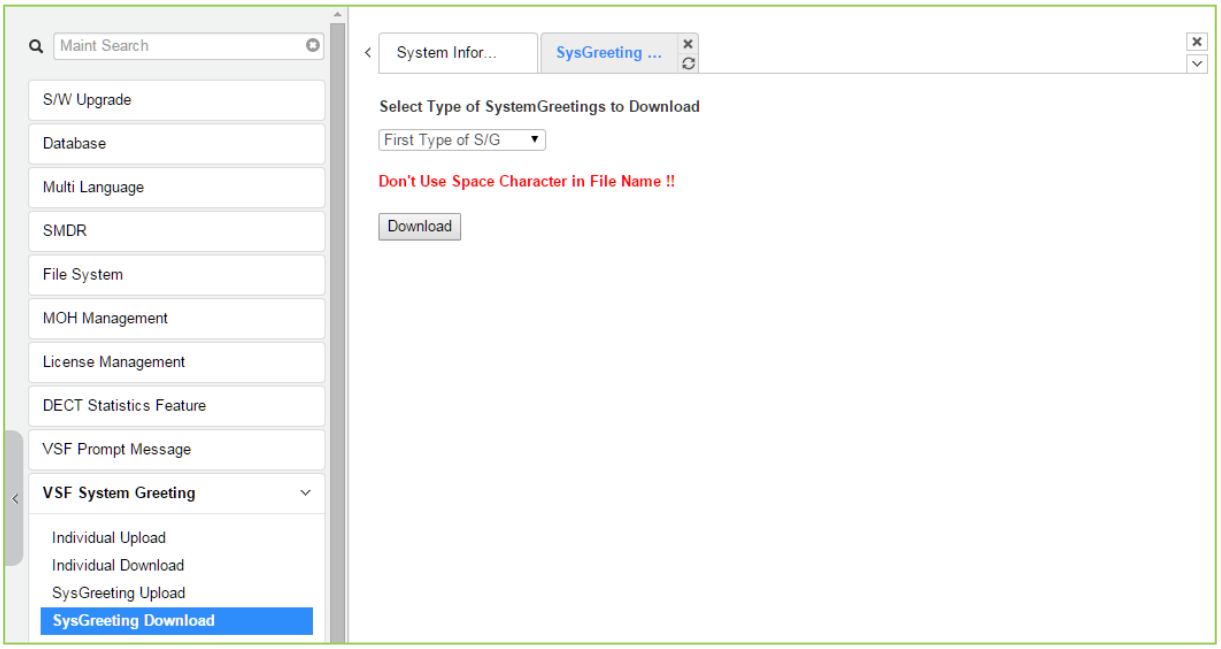


Figure 4.5.10.4-1 System Greeting Download

4.5.11 User Greeting

Administrators can upload or download the User greeting to System. So User greetings are available to use on iPECS phones.

4.5.11.1 User Greeting Upload

To upload the User Greeting, complete the following steps:

1) Click **[Select File]** button.
2) Select **the User greeting file (rom file)** from the folder**.**
3) Click **[Start]** to upload and then display the following figure 'success'.

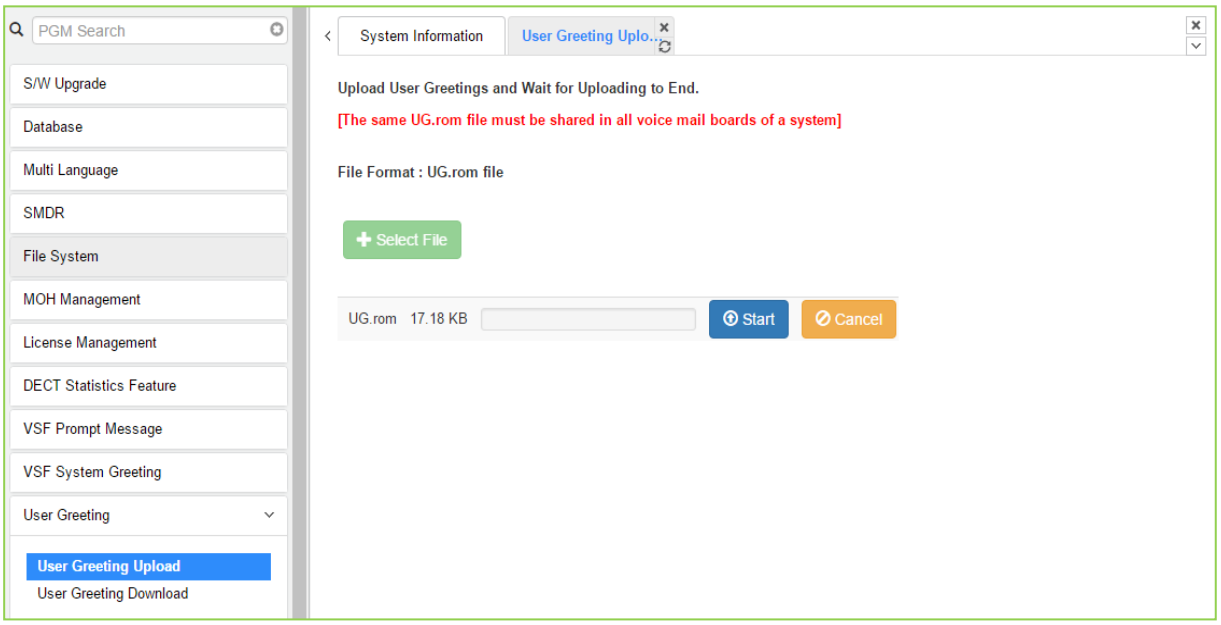


Figure 4.5.11.1-1User Greeting Upload

4.5.11.2 User Greeting Download

To download the User Greeting from System, complete the following steps:

1) Click the **[Download]** button.
2) The tab will be displayed at the left bottom of the page. Click the arrow box and select **[Open]** to show.

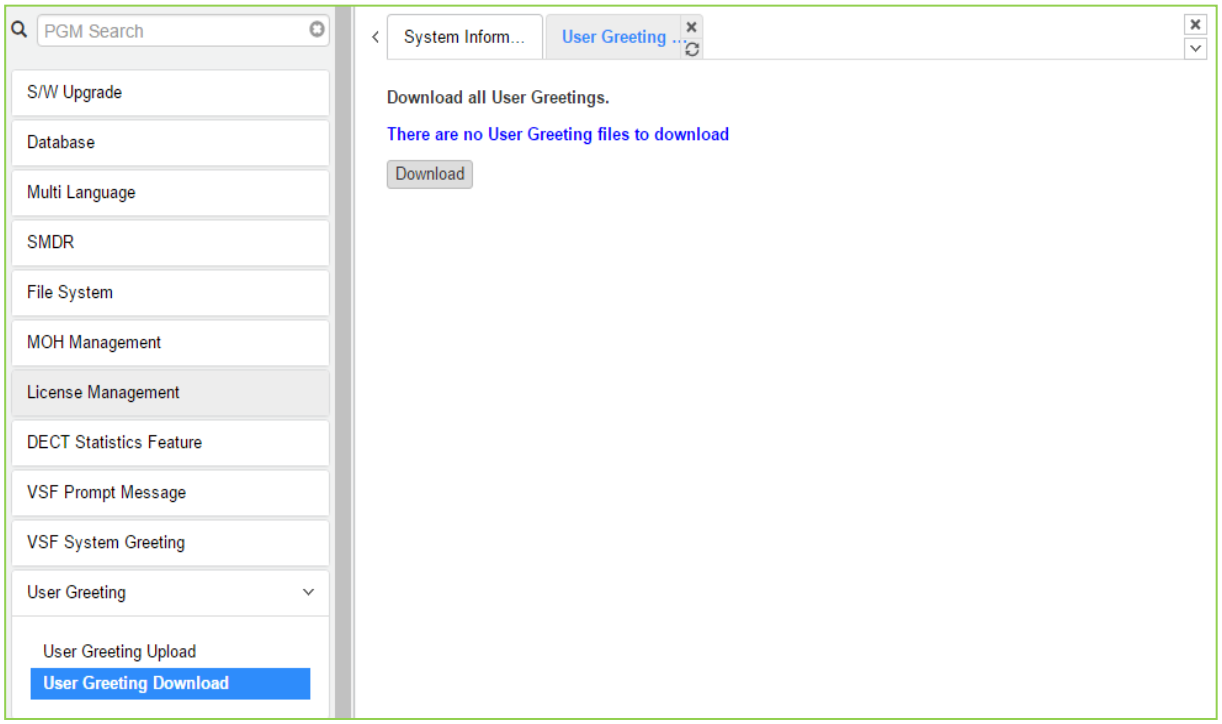


Figure 4.5.11.2-1User Greeting Download

4.5.12 Company Directory

Administrators can upload or download company directories to System. So company directories are available to use on iPECS phones.

4.5.12.1 CDN Upload

To upload the Company Directory, complete the following steps:

1) Click **[Select File]** button.
2) Select **the Company Directory file (rom file)** from the folder**.**
3) Click **[Start]** to upload and then display the following figure ‘success’.

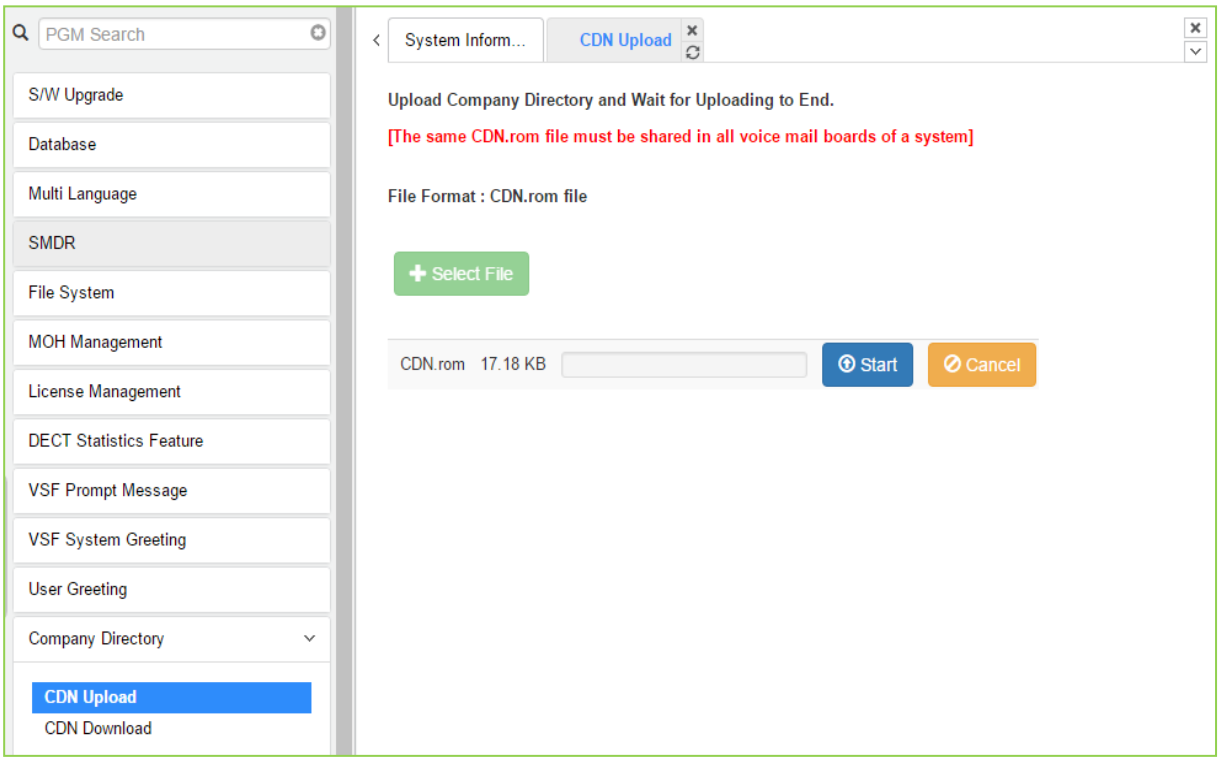


Figure 4.5.12.1-1CDN Upload

4.5.12.2 CDN Download

To download the Company Directory from System, complete the following steps:

1) Click the **[Download]** button.
2) The tab will be displayed at the left bottom of the page. Click the arrow box and select **[Open]** to show.

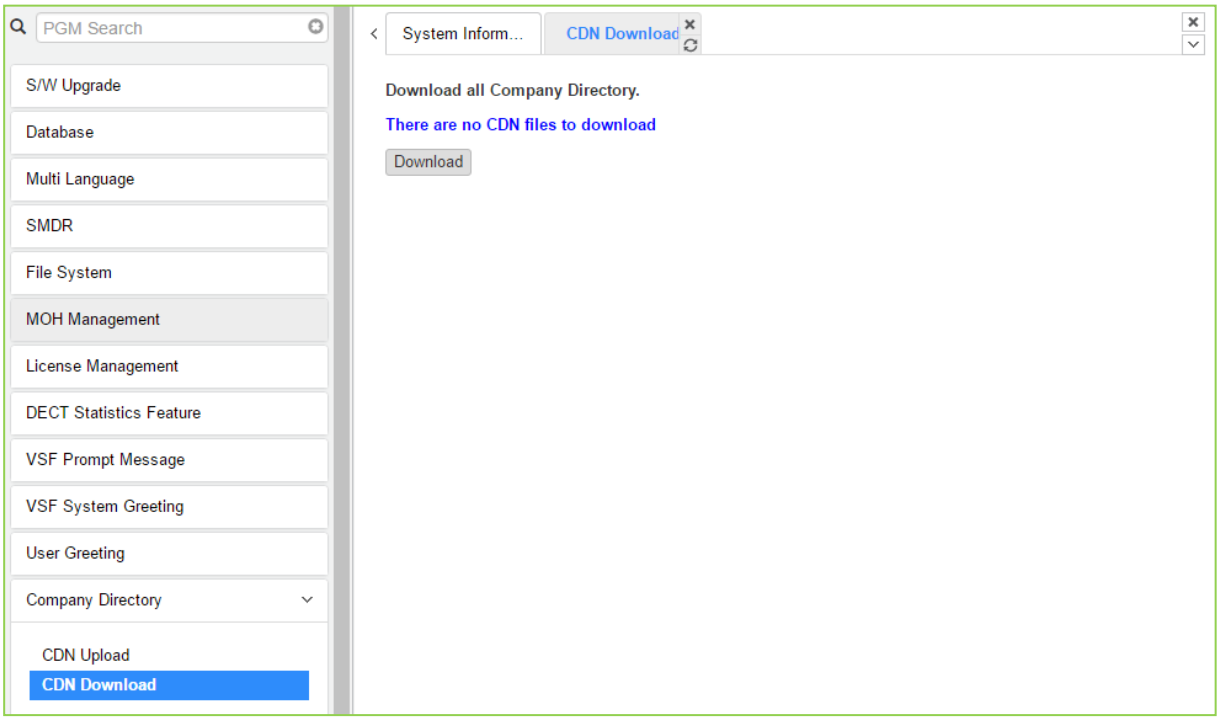


Figure 4.5.12.2-1CDN Download

4.5.13 Voice Mail Management

The Voice Mail Management permits the administrator to view the status of the built-in Voice Mailboxes and delete all messages, delete messages for specific stations, or back up all the messages to the PC.

4.5.13.1 Voice Mail Delete

Selecting Voice Mail Delete displays the page as shown in the figure. Message stored in the VMIU (VMIB) can be deleted from this page for all stations or a station range. In addition, the number of messages for each station is displayed using the “Display Station Voice Mail Status” button.

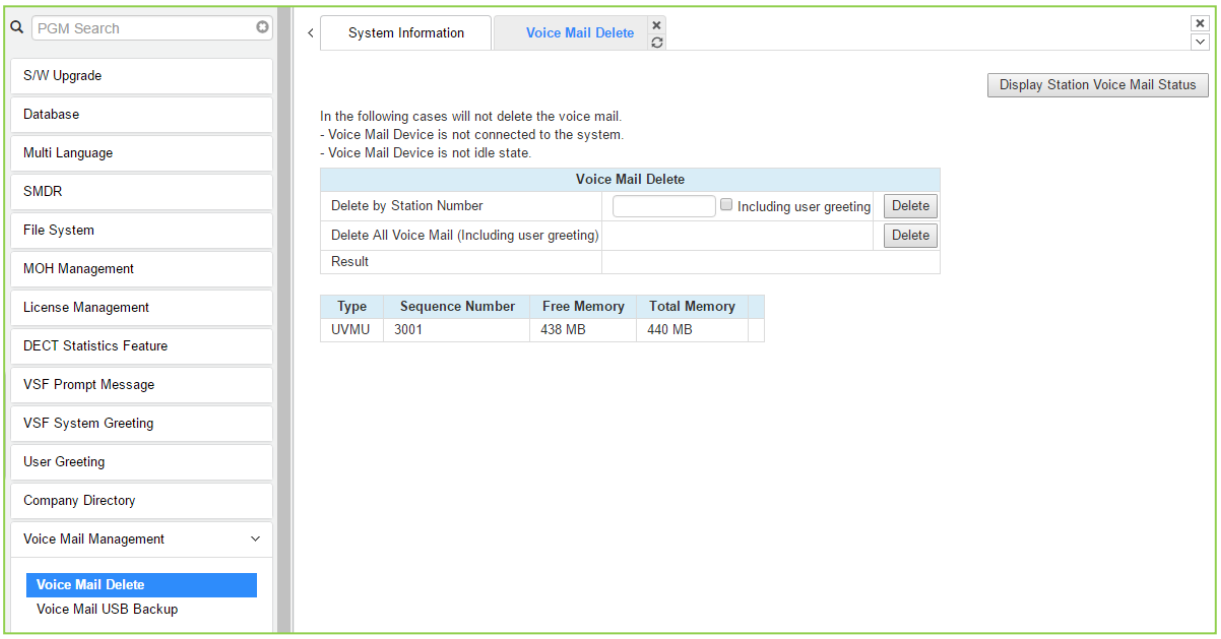


Figure 4.5.13.1-1 Voice Mail Delete

A user can delete a user greeting if you set the "Including user greeting" option when a user deletes voice mail.

4.5.13.2 Voice Mail USB Backup

Selecting Voice Mail Backup displays the page shown in the figure.

In the case of eMG, this page permits the Administrator to send all Voice messages in the VMIU/VMIB memory to the USB port of the KSU. Note the VSF must be idle and a USB memory device installed in the system. The eMG800 has only [Backup Voice Mail to USB (VMIU)].

In the case of UCP, this page permits the Administrator to send all Voice messages in the VSF gateway memory to the USB port of the UCP module. Note the VSF gateway must be idle and a USB memory device installed in the UCP module. The UCP2400& vUCP, and eMG100 don't support Voice mail USB Backup.

vUCP/eMG100 supports Voice Mail Web Backup/Restore.

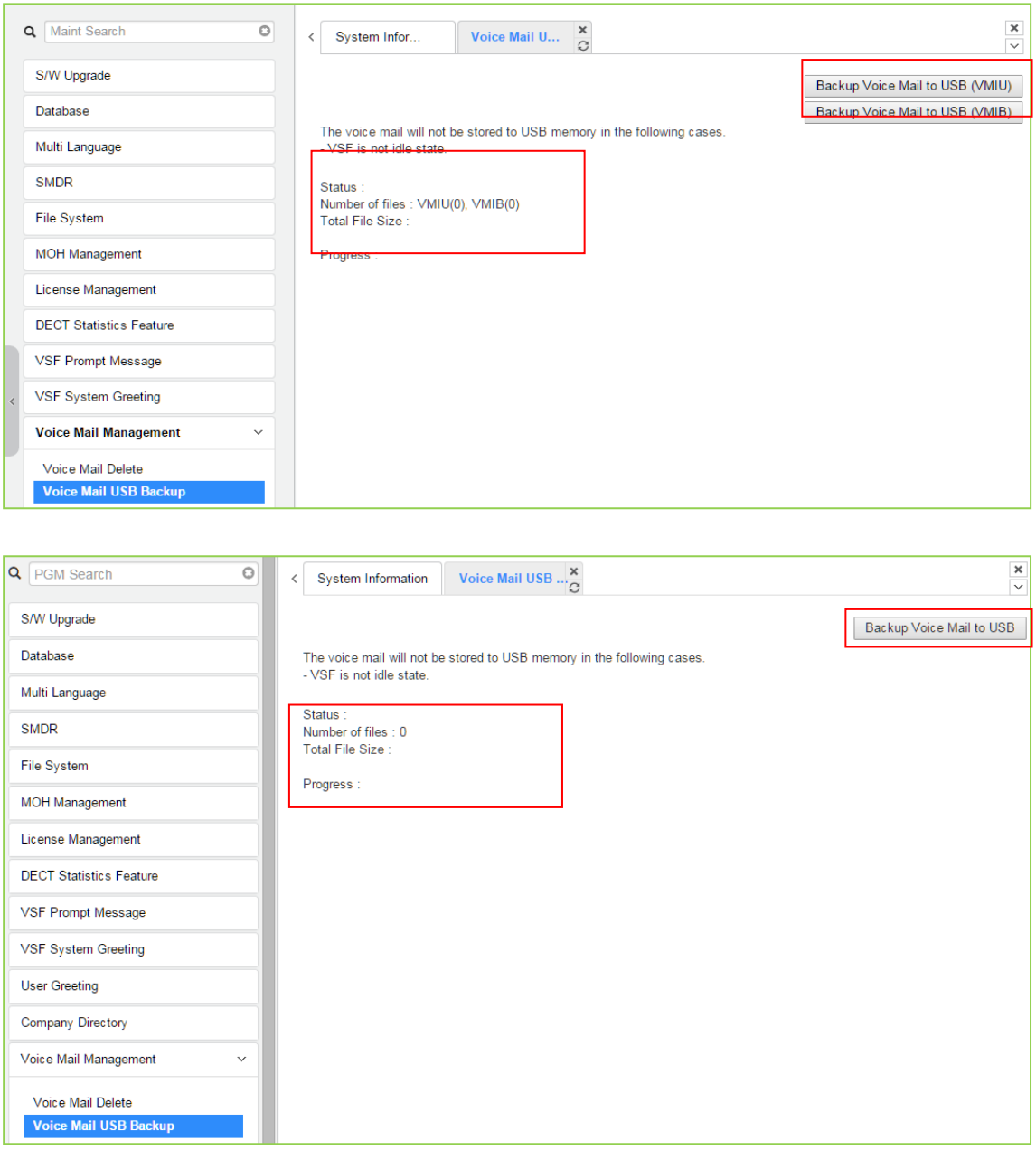


Figure 4.5.13.2-1 Voice Mail USB Backup

To back up Voice Mail, click the backup Voice Mail to USB button. Users can find all information about the status, Number of files, Total file size, and the percentage of Progress by text.

4.5.14 Function program

The Function Program allows the administrator to build a set of programs with attributes in a structure customized to the administrator. The Function programs can then be accessed under the Administration pages using the “Function Base” button at the top of the left navigation page. Single-level and multi-level programs can be structured. The User Function Management permits functions to be deleted or, with the “Add Function” button, new program functions can be added.

4.5.14.1 User Function Management Page

Selecting User Function Management displays the page shown in the figure. Using the check box and Delete button, Function programs previously saved can be deleted.

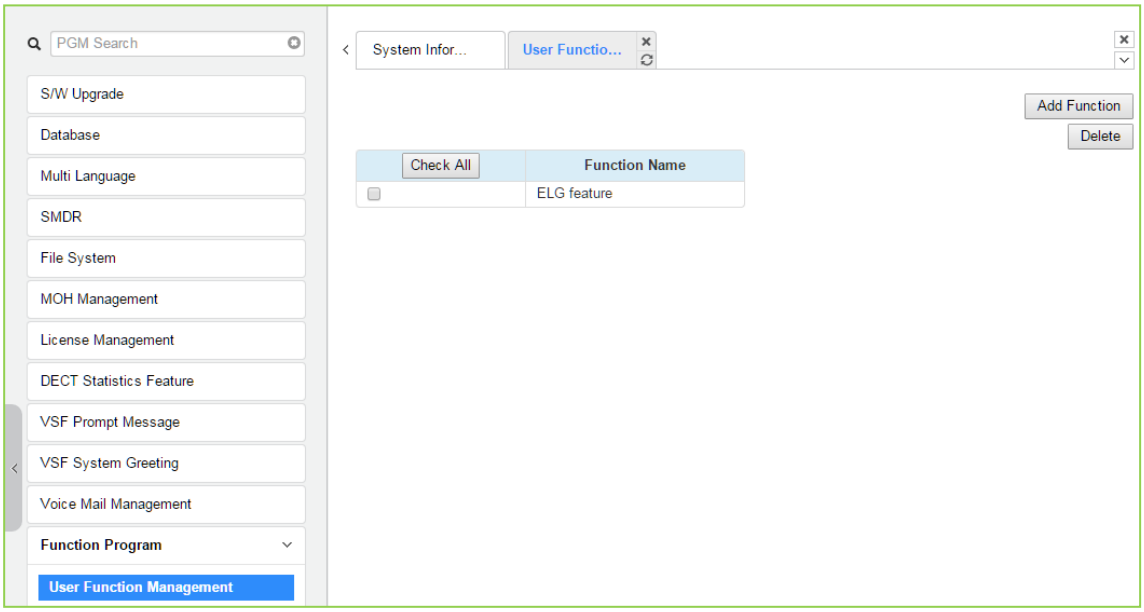
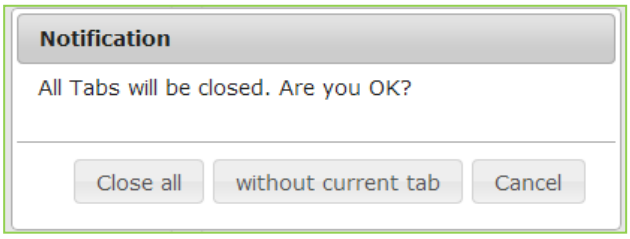


Figure 4.5.14.1-1 User Function Management Page

Adding Function

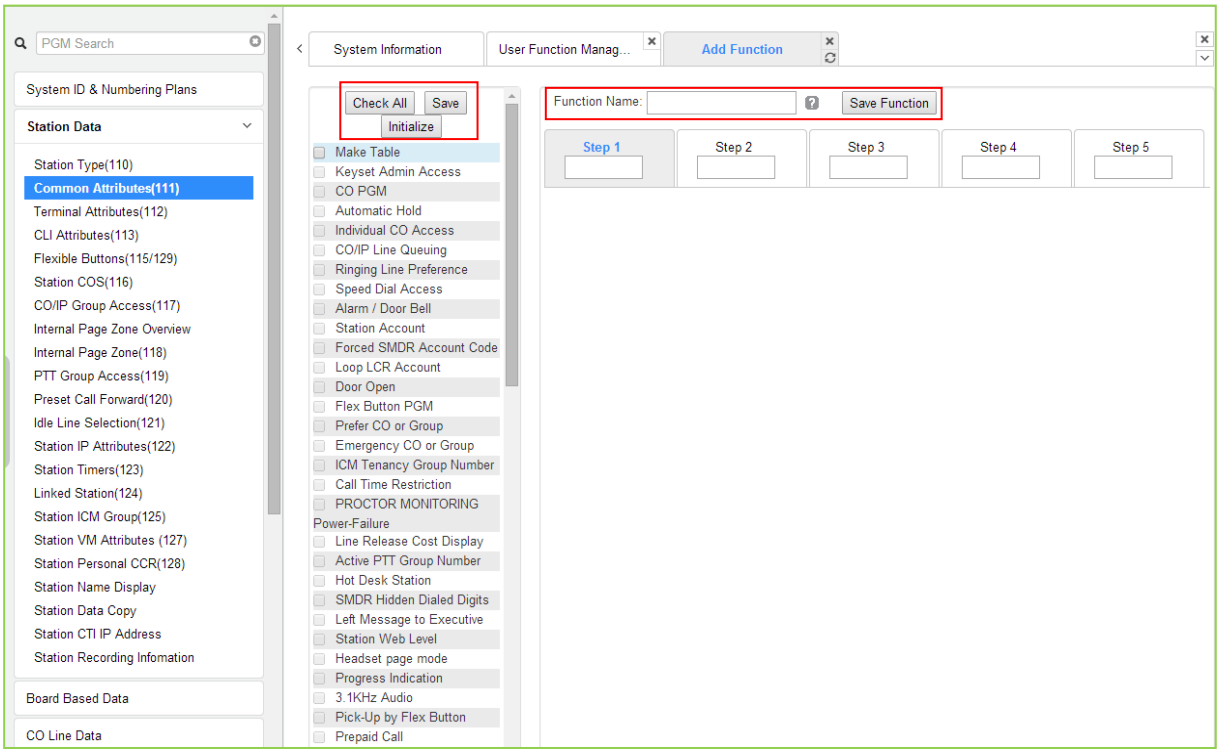
This step is divided into 5 steps, and you can make the desired function in each step. The following is the guide to make a Name and add the function on each step:

- English, Numbering, Underscore (_), and Parentheses are available to enter the function name. Function name has to be filled out.
- To enter the step name, English, Numbering, and Special letters except Double quotation marks are available.
- The step name doesn’t need to be filled out, but the function has to be configured for each step.
- To cancel or close this tab, click the close button (X) and pop up the blow;

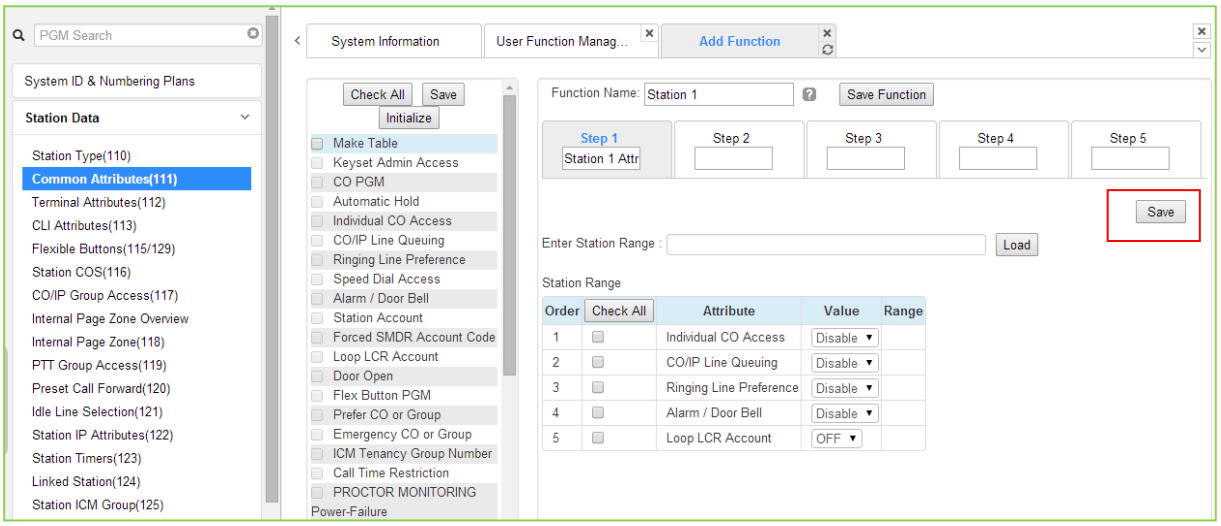


1) Click the Add Function button.

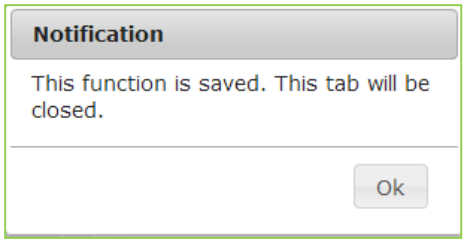
2) On the below window, click the desired PGM in the left frame. First, fill out the function name and step name. To configure step 1, click the Make table to check the desired function and click the Save button.
   - Check All: check all functions
   - Save: Save the checked functions
   - Initialize: Initialize the checked functions

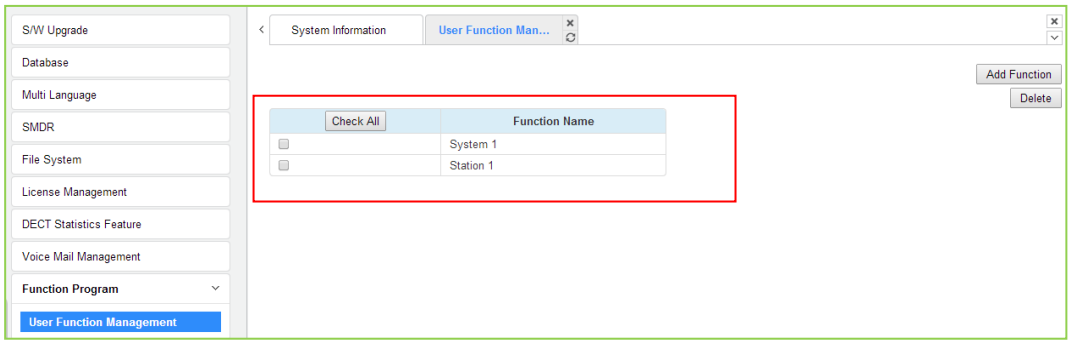


3) The selected functions are displayed, and click the Save button after checking each function. The rest steps are the same as step 1.

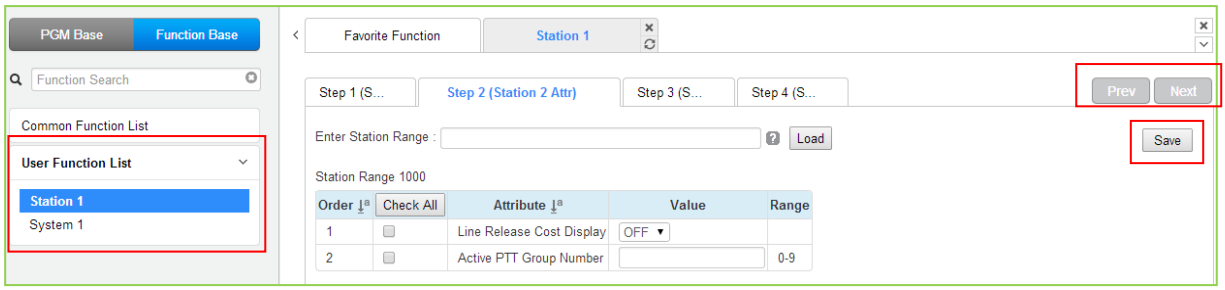


4) Finally, click the Save Function to save and then click the OK button.



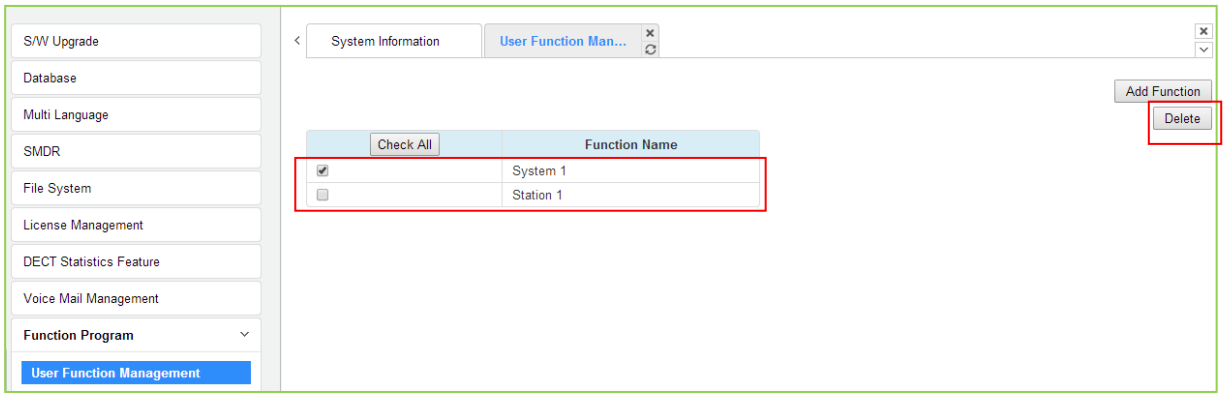


5) To check the function, click the Function Base button in the left frame and User Function List, and you will see the following figure.
You can enable or disable the function by checking each function and clicking the save after setting Value. Also, move to each step by clicking the next button or the Previous button.



Deleting Function

To delete the user function, click Maintenance at the top of the window and click the Function Program -> User Function Management. Check the desired function to delete and click the delete button.



4.5.15 User Management

The iPECS UCP supports up to 50 system accounts, and up to ten (10) users may simultaneously access system Web services. The default ID is ‘admin,’ and the password is ‘1234’. The Access privilege is determined based on the entered system account (ID/Password) and the privilege assigned for the user.

The REST API privilege is for the REST API access account. The user can access and use REST API features. (SMDR, FLEXPAGE, and CALL-API)This user can't access web admin.

Please follow up the below instructions to make a User ID:

- Maximum 16 characters & digits.
- In English only.
- The first letter must be Alphabet. The rest are available: Alphabet, number, underscore (_).
- Don’t use ‘blank.’

It is strongly recommended that a unique User ID and strong password be entered to minimize unauthorized personnel's risk of admin and maintenance access.

Users should register more than a maintenance ID.

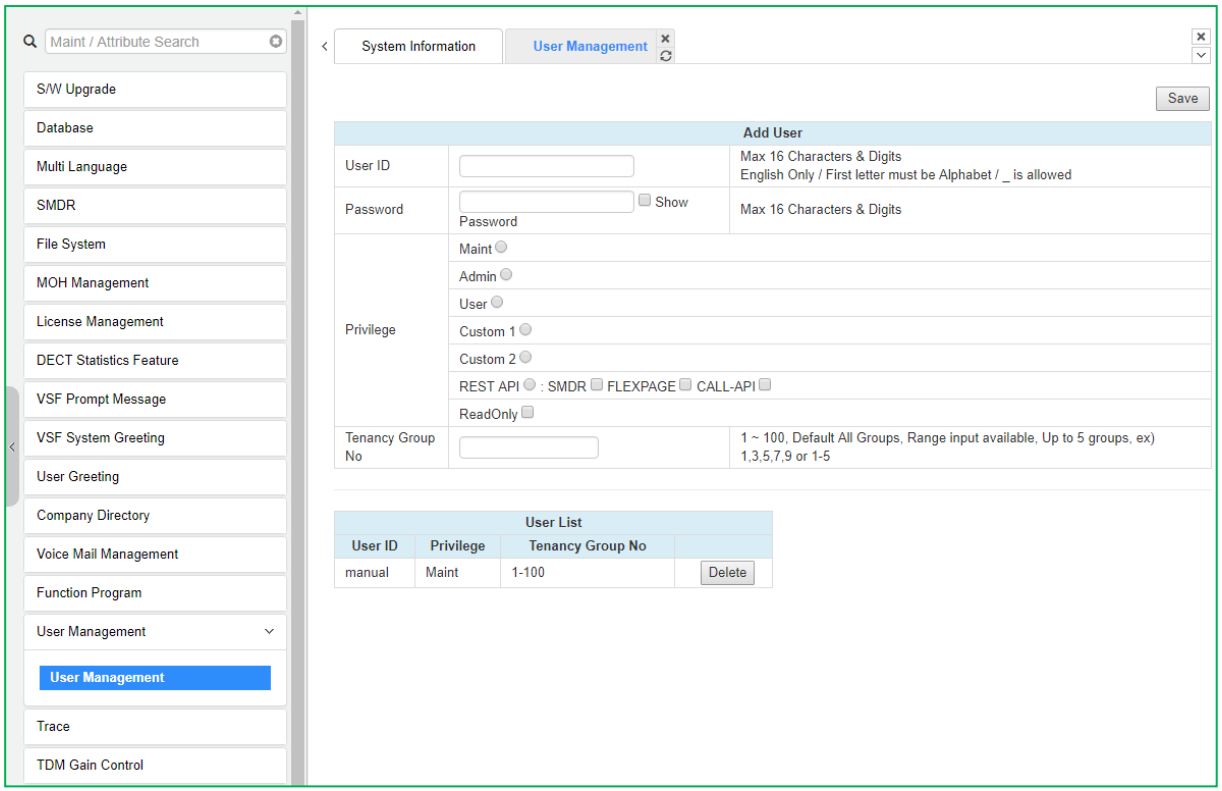


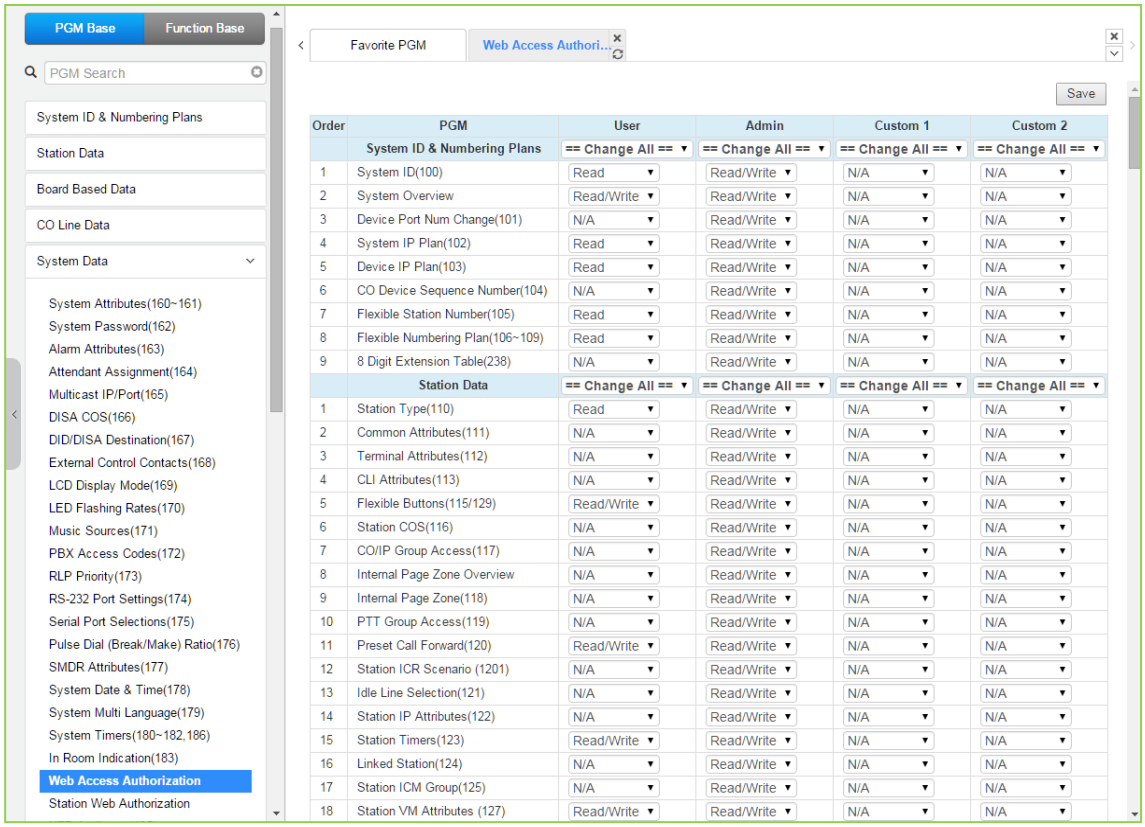
Figure 4.5.15-1 User Management

4.5.15.1 Company (Tenant group) Administrator Account

The system's main (maintenance) administrator can make a new administrator account for each tenant group. The tenant group administrator can configure the system according to tenant group and 'Web access authorization' in System Data. Managing the available feature will be assigned Web Access Authorization in System Data.

Web Access Authorization

>Program Custom#1 and #2 privilege columns by selecting N/A, Read, Read/Write for Tenant group administrator.



User Management: add a User account for the Tenant group administrator.

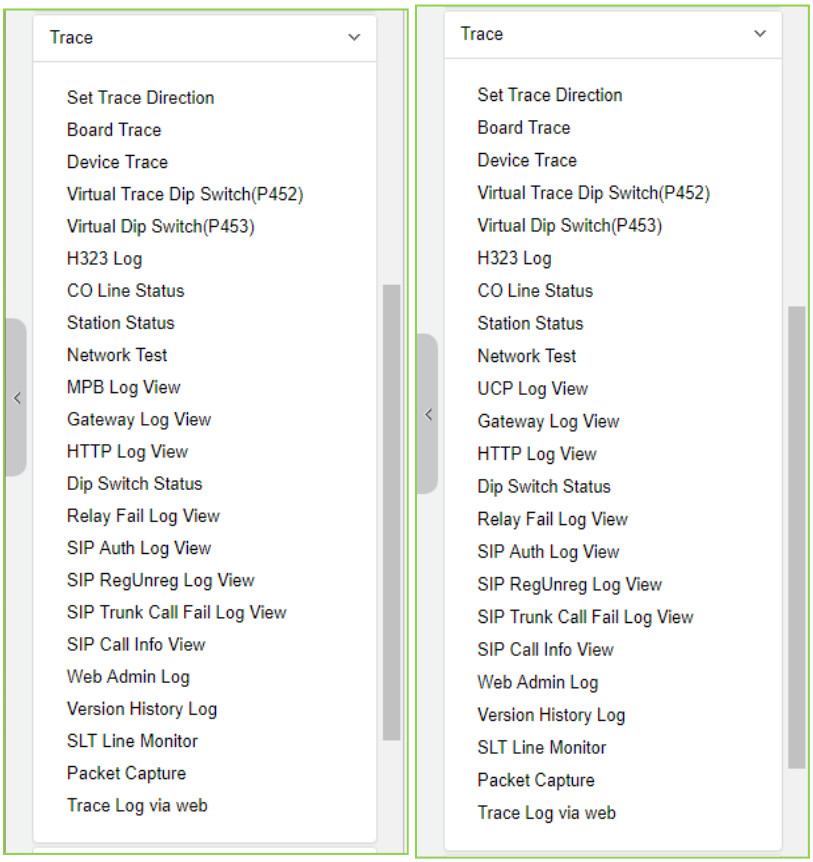
1) Enter ID and Password.
2) Select Custom 1 or Custom 2.
3) Enter the desired Tenant group number.
   - UCP100/600/2400: 100 Groups
   - eMG800: 32 Groups
   - eMG80/100: 15 Groups

Note) Maximum 50 users (including Maintenance, Admin, and User privilege). The main administrator can't add a Tenant group administrator account for all tenant groups because the number of tenant groups of UCP is 100.

4) Click the **[Save]** button to create an Account.
5) Log in with the account.
6) The available PGM menu will be displayed by assigning 'Web Access Authorization.'

4.5.16 Trace

The system software incorporates routines to monitor and output detailed call and feature processing information and event logs. Information is provided on a system or device level as requested. Administrators can find the information on this page.



[eMG80/100, eMG800] **[UCP]**

Figure 4.5.16-1 Trace Main Page

We explain [Packet Capture] and [Trace Log via web] among them because it is very useful to use Web admin.

Packet Capture

A user can start and stop capturing packets and download packet capture results. The dump file will be replaced when new capturing is started.

Default option is included.The file name is packetdump.cap. -i eth0 -w packetdump.cap -c 10000

Option explanation

protocol filter: tcp or udp or icmp

port filter: both source and destination port -> port #number, source port -> src port #number, destination port -> dst port #number

IP filter: both source and destination host IP -> host #IP_ADDR, source host IP -> src host #IP_ADDR, destination host IP -> dst host #IP_ADDR

Example) UDP and Port 5588 and Source IP address 10.1.1.100: udp and port 5588 and src host 10.1.1.100

Trace Log via web

A user can start and stop logging and download trace log results. The log file will be replaced when new logging is started.

1) Set 'Trace Attribute' to 'COM1(UART1)' from the 'Set Trace Direction' menu.
2) Set 'Board Trace,' 'Device Trace,' and 'Virtual Trace Dip Switch(P452)' menu.
3) Click the [Start] button.

4.5.17 TDM Gain Control

Control voice gain of TDM device for each direction. For more information to change Value, it is recommended that you ask your dealer or an authorized Ericsson-LG Enterprise representative. We can't guarantee the damage according to changing Value arbitrarily.

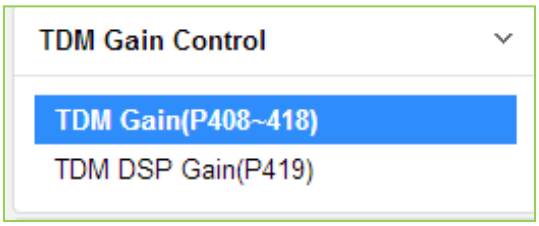


Figure 4.5.17-1 TDM Main Page

4.5.18 IP Gain Control

Audio gain for signals from and to each device is adjustable through the IP Gain Control page. The default gain values for the system are set to match the Nation Code. For more information to change Value, it is recommended that you ask your dealer or an authorized Ericsson-LG Enterprise representative. We can't guarantee the damage according to changing Value arbitrarily.

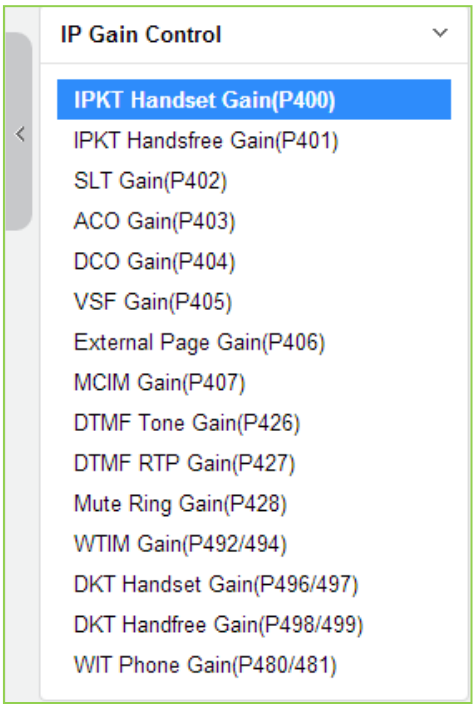


Figure 4.5.18-1 IP Gain Control Main Page

4.5.19 Tone/ Ring Gain &Cadence Control

Selecting Tone Table will display the page shown. Here the tones, cadence, and gain used with features can be managed. For more information to change Value, it is recommended that you ask your dealer or an authorized Ericsson-LG Enterprise representative. We can't guarantee the damage according to changing Value arbitrarily.

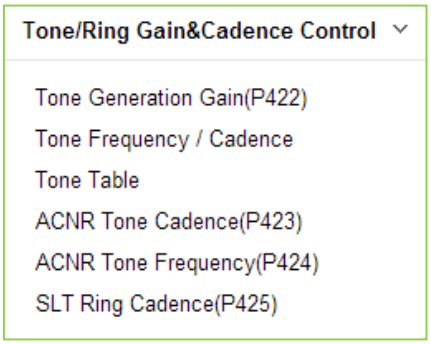


Figure 4.5.19-1 Tone/Ring Gain & Cadence Control Main Page

Control system tone/ring cadence and frequency.

System announcement or music can be provided instead of system ring/tone if it is assigned in the tone table.

4.5.20 Appliances Control

The Appliances Control page permits control of several characteristics of IP phones and analog CO lines such as Comfort Noise level and sidetone. For more information to change Value, it is recommended that you ask your dealer or an authorized Ericsson-LG Enterprise representative. We can't guarantee the damage according to changing Value arbitrarily.

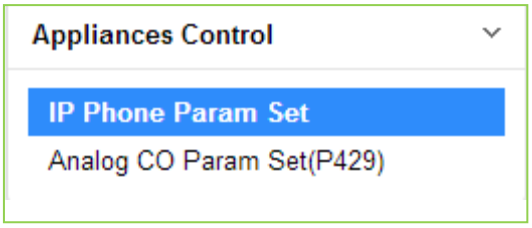


Figure 4.5.20-1 Appliance Control Main Page

4.5.21 Web Certificate

SSL stands for Secure Sockets Layer, a global standard security technology enabling encrypted communication between a web browser and a web server. It is utilized by millions of online businesses and individuals to decrease the risk of sensitive information (e.g., credit card numbers, user names, passwords, emails, etc.) being stolen or tampered with by hackers and identity thieves. In essence, SSL allows for a private “conversation” just between the two intended parties. For creating this secure connection, an SSL certificate (also referred to as a “digital certificate”) is installed on a web server and serves two functions:

- It authenticates the identity of the website (this guarantees visitors that they’re not on a bogus site)
- It encrypts the data that’s being transmitted.

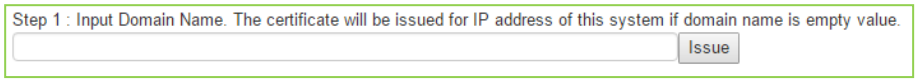
The web server certificate must have a domain name however default web certificate of a system has no information for the domain. So, a web browser displays a warning message about ERR_CERT_AUTHORITY_INVALID.

To clear this warning, an administrator has to issue a certificate for the system. There is a need to generate own self-signed certificate to mitigate the vulnerability of security and not display the caution pop-up such as 'un-trusted site' because the system uses an IP address or URL. This certificate is needed to use 'https//XXX' , not 'http://xxx'.

To create Certificate

Please must check the date and time. The certificate will not operate well on a PC or Mobile device if the certificate issued between the system and PC or Mobile device is different.

1) **Step 1:** Enter the Domain name and then click the **[Issue]** button. The certificate will be used for the IP address of this system if the Domain name is not entered as blank.

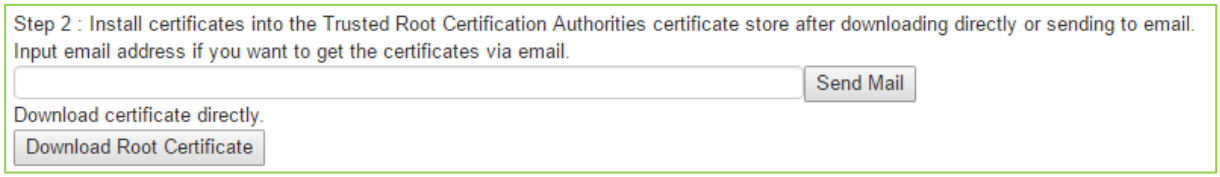


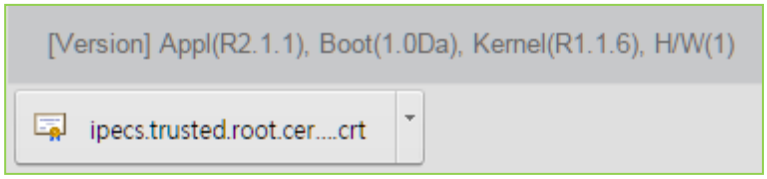
- The following result is displayed on a browser.



2) **Step 2:** Install Certificates into the Trusted Root Certification Authorities certificate store after downloading directly as below picture or sending to email for installing the desired devices if you want to get the certificates via email.

- Install Certificates is followed by the type of Windows OS, Android OS, or iOS OS.





3) **Step 3:** Restart Web server to apply New certificate by clicking **[Web Server Restart]** button.
Note) Clean up all certificates and files by clicking the **[Server Certificate Clean up]** button.

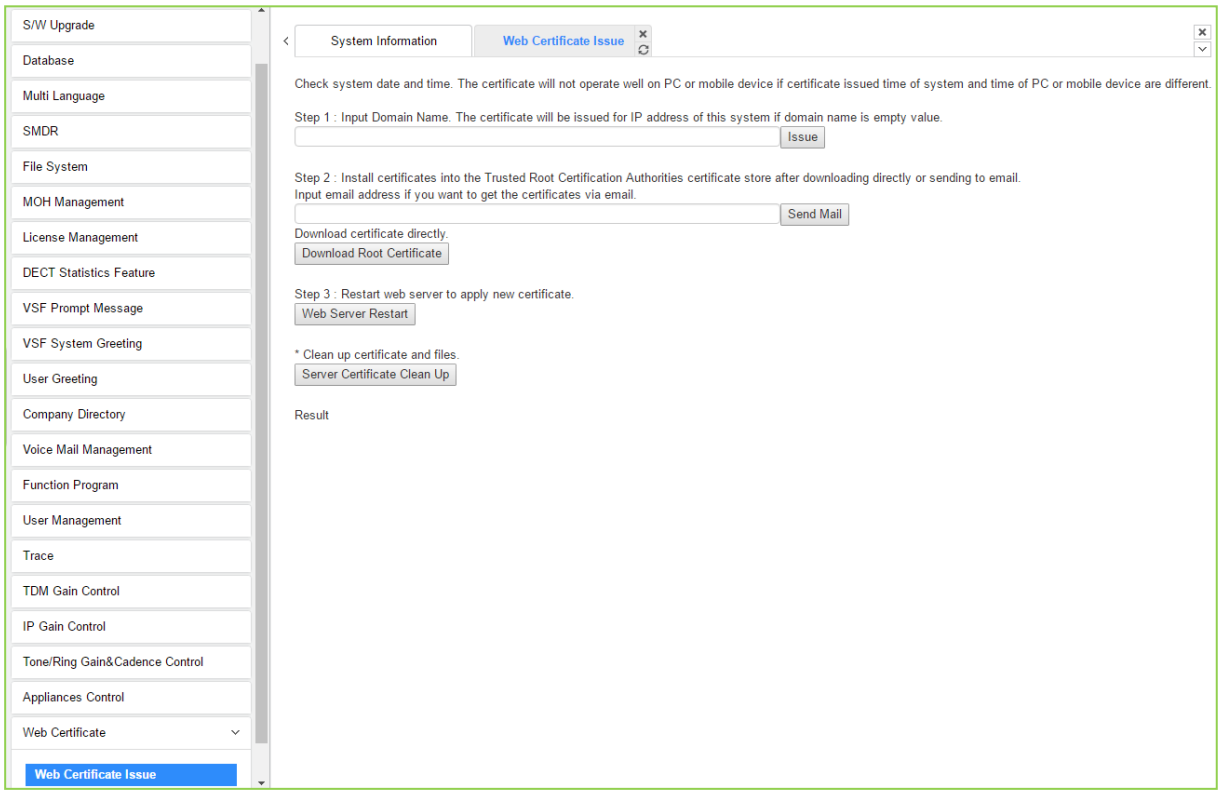


Figure 4.5.21-1 Web Certificate Issue

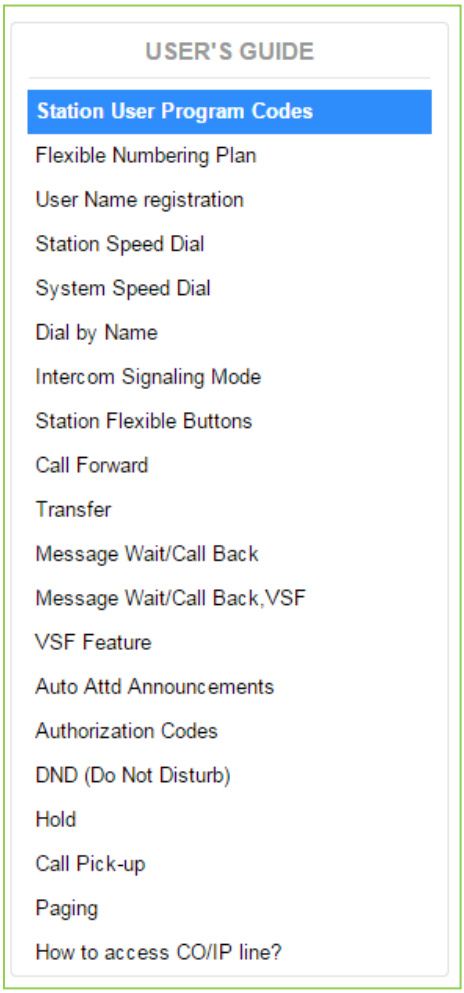
4.6 On-Line web user guide

We provide an Online web user guide about the frequent use of features to a user.

You can access it on the login page as below without entering your ID and Password.

We didn't explain the user guide because you can easily get the information on the following features on the web.





A&P Appendix

Revision History

ISSUE	DATE	DESCRIPTION OF CHANGES
2.5	Jan.,2022	S/W version 6.0.x. - Separated the “A&P Appendix” from “A&P Manual.” - Added the Appendix D (Station Admin Programming for eMG)
2.6	Mar.,2022	S/W version 6.1.x. - Applied S/W version 6.1.x.

Table of Contents

1 Appendix A: Program Codes 1
2 Appendix B: Flexible Numbering Plan (Web-based) 3
3 Appendix C: Database Details & Default for Station Admin for eMG 24
4 Appendix D: Station Admin Programming for eMG 72
4.1 General 72
4.1.1 LCD & Button Functions 72
4.1.2 Alphanumeric Data Entries 72
4.2 Data Entry Mode 73
4.3 Procedure for Data Entry 74
4.3.1 System ID —PGM 100 74
4.3.2 NUMBERING PLANS DATA — PGM 102 to 109 76
4.3.2.1 System IP Address Plan — PGM 102 76
4.3.2.2 Device IP Address Plan -PGM 103 78
4.3.2.3 CO Device Sequence Number -PGM 104 83
4.3.2.4 Flexible Station Numbering Plan -PGM 105 83
4.3.2.5 Flexible Numbering Plan part A to D - PGM 106 to 109 84
4.3.2.6 8-Digit Table 91
4.3.3 Station Data –PGM 110-125 92
4.3.3.1 Station Type -PGM 110 92
4.3.3.2 Station Attributes I to III -PGM 111-113 93
4.3.3.3 Station Attributes IV -PGM 114 103
4.3.3.4 Flexible button Assignment -PGM 115 109
4.3.3.5 Station Class-of-Service – PGM 116 113
4.3.3.6 CO/IP Group Access – PGM 117 115
4.3.3.7 Internal Page Zone Access – PGM 118 115
4.3.3.8 PTT (Push-To-Talk) Group Access – PGM 119 116
4.3.3.9 Preset Call Forward – PGM 120 117
4.3.3.10 Idle Line Selection – PGM 121 118
4.3.3.11 Station IP Attributes – PGM 122 119
4.3.3.12 Station Timers – PGM 123 120
4.3.3.13 Linked Station Table – PGM 124 121
4.3.3.14 ICM Tenancy Group – PGM 125 122
4.3.3.15 Station VM Attributes – PGM 127 122
4.3.3.16 Station CCR Table – PGM 128 125
4.3.3.17 LSS Label Edit – PGM 129 126
4.3.4 BOARD DATA – PGM 130 to 132 127
4.3.4.1 H.323 VoIP Attributes – PGM 130 127
4.3.4.2 T1/E1/PRI Attributes – PGM 131 130
4.3.4.3 Board Base Attributes – PGM 132 131
4.3.5 CO LINE DATA – PGM 140 to 151 133
4.3.5.1 CO Service Type – PGM 140 133
4.3.5.2 CO/IP Attributes I ~ III - PGM 141~143 133
4.3.5.3 CO/IP Ring Assignment – PGM 144 143
4.3.5.4 DID Service Attributes – PGM 145 144
4.3.5.5 DISA Service – PGM 146 145

4.3.5.6 CO Line Preset Forward Attributes – PGM 147 146
4.3.5.7 CO Additional Attributes – PGM 148 147
4.3.5.8 NA ISDN Line Attributes – PGM 150 149
4.3.5.9 ISDN CO Line Attributes – PGM 151 151
4.3.5.10 T1 Line Timers – PGM 152 153
4.3.5.11 DCOB CO Attribute – PGM 153 155
4.3.6 SYSTEM DATA –PGM 160 to 182 156
4.3.6.1 System Attributes I &II–PGM 160 to 161 156
4.3.6.2 System Password – PGM 162 166
4.3.6.3 Alarm Attributes – PGM 163 167
4.3.6.4 Attendant Assignment – PGM 164 168
4.3.6.5 Multi-cast RTP/RTCP Ports – PGM 165 168
4.3.6.6 DISA COS – PGM 166 173
4.3.6.7 DID/DISA Destination – PGM 167 174
4.3.6.8 External Control Contacts – PGM 168 175
4.3.6.9 LCD Display Mode -PGM 169 176
4.3.6.10 Button LED Flash Rate – PGM 170 177
4.3.6.11 Music Sources – PGM 171 180
4.3.6.12 PABX Access Codes – PGM 172 182
4.3.6.13 Ringing Line Preference Priority – PGM 173 182
4.3.6.14 RS-232 Port Settings – PGM 174 183
4.3.6.15 Serial Port Function Selections – PGM 175 184
4.3.6.16 Break/Make Ratio – PGM 176 186
4.3.6.17 SMDR Attributes – PGM 177 186
4.3.6.18 System Date, Time and Daylight Saving Time (DST) – PGM 178 192
4.3.6.19 Multi-Language – PGM 179 193
4.3.6.20 System Timers I to III - PGMs 180-182 194
4.3.6.21 In-Room Indication – PGM 183 200
4.3.6.22 DCOB SYS Timers – PGM 186 201
4.3.6.23 NTP Attributes – PGM 195 202
4.3.6.24 CRR Attributes – PGM 252 203
4.3.6.25 VM COS Attributes – PGM 253 204
4.3.6.26 Personal Group – PGM 260 205
4.3.6.27 Personal Group Attribute – PGM 261 205
4.3.7 STATION GROUP DATA – PGM 190 & 192 206
4.3.7.1 Station Group Assignment -PGM 190 206
4.3.7.2 Station Group Attributes – PGM 191 207
4.3.7.3 Pick Up Group Assignment – PGM 192 222
4.3.8 ISDN LINE & ICLID ROUTING DATA – PGM 200-206 223
4.3.8.1 ISDN Attributes – PGM 200 223
4.3.8.2 CLIP/COLP Table – PGM 201 224
4.3.8.3 MSN Table – PGM 202 225
4.3.8.4 ICLID Route Table – PGM 203 226
4.3.8.5 ICLID Ring Assignment – PGM 204 227
4.3.8.6 PPP Attributes – PGM 205 228
4.3.8.7 Prefix Dialing Table – PGM 206 229
4.3.9 TABLES DATA – PGM 220 to 235 231
4.3.9.1 LCR Assignment Tables - PGM 220 to 223 231
4.3.9.2 Toll Tables – PGM 224 237
4.3.9.3 Emergency Code Table – PGM 226 238
4.3.9.4 Authorization Codes Table – PGM 227 239
4.3.9.5 Customer Call Routing/VSF AA Table – PGM 228 240

4.3.9.6 Executive/Secretary Table – PGM 229 242
4.3.9.7 Flexible DID Conversion Table – PGM 231 243
4.3.9.8 System Speed Zone Table – PGM 232 245
4.3.9.9 Auto Ring Mode – PGM 233 245
4.3.9.10 Voice Mail Dialing Table – PGM 234 247
4.3.9.11 Registration & Fractional Module Table – PGM 235 248
4.3.9.12 Mobile Extension Table – PGM 236 249
4.3.9.13 Hot Desk Attributes – PGM 250 251
4.3.9.14 CO Call Rerouting – PGM 252 252
4.3.9.15 Digit Conversion Tables – PGM 270 253
4.3.10 NETWORKING DATA –PGM 320 to 324 256
4.3.10.1 Network Basic Attribute – PGM 320 256
4.3.10.2 Network Supplementary Attribute – PGM 321 257
4.3.10.3 Network CO LINE Attribute – PGM 322 258
4.3.10.4 NET Numbering Plan Table – PGM 324 259
4.3.10.5 Network Feature Code Table – PGM 325 261
4.3.11 TNET (Centralized Networking) – PGM 330 ~ 336 262
4.3.11.1 TNET Basic Attributes – PGM 330 262
4.3.11.2 TNET CM Attributes – PGM 331 262
4.3.11.3 TNET LM ATTRIBUTES – PGM 332 264
4.3.11.4 FoPSTN Attributes – PGM 333 265
4.3.11.5 TNET LM External Contact Attributes – PGM 334 266
4.3.11.6 TNET LM Music Attributes – PGM 335 267
4.3.11.7 TNET LM Alarm Attributes – PGM 336 268
4.3.12 Zone Data – PGM 436 - 441, 444 269
4.3.12.1 Zone Holiday Assignment – PGM 444 269
4.3.13 GREEN MODE 270
4.3.13.1 Green mode activation – PGM 500 270
4.3.13.2 Green mode time setting – PGM 501 270
4.3.14 INITIALIZATION — PGM 450 272
4.3.15 PRINT-OUT DATABASE — PGM 451 274
4.3.16 VIRTUAL TRACE DIP-SWITCH — PGM 452 276
4.3.17 VIRTUAL DIP-SWITCH — PGM 453 278
4.3.18 3.3.18 DECT ATTRIBUTES — PGM 4913 279

1 Appendix A: Program Codes

User and Attendant Program Codes, refer to Table A-1 and A-2, are digit sequences users, and the Attendant may dial while in the User Program Mode to assign Flex buttons and affect the status of a feature or setting. For more information on the User Program Mode, refer to the iPECS Features and Operation Manual. Many of these codes may be assigned to a button of an iPECS IP or LDP Phone by pressing the **[PGM]** button as the first entry of a Flexible button assignment. See Flex button Programming in the iPECS Features and Operation Manual.

Table A-1Station User Program codes

Code	Description	Code	Description
11X	Intercom Differential Ring	82	{COLR} Button Assignment
12X	CO Line Differential Ring	83	{ATD DND} button assignment
13	Intercom Answer Mode (1: HF/2: TONE/3: PV)	84	{Account Code} Button Assignment
14X	Call Coverage Attribute Setting	85	{LOOP} Button Assignment
15X	Station Ring Download	86	{ATD Intrusion} Button Assignment
21	Knock Down Station COS	87	{INTERCOM} Button Assignment
22	Restore Station COS	88	{Camp-on} Button Assignment
23	Walking COS	89	{Send Keypad Facility IE} Button Assignment
30	VM Mobile Notify	8#	{OHVO} Button Assignment
31	Message Retrieve Method	8*1	DID Restiction Button Assignment
32	Message Retrieve Example	8*2	DISA Restiction Button Assignment
		8*3	Bomb Threat History Button Assignment
33	User Authorization Code Registration	8*5	Headset Button Assignment
34	DID Call Wait	8*6XYZA	Toggle Ring Mode Button Assignment X,Y,Z,A : 1(Day), 2(Night), 3(Timed), 4(Auto)
35	Message Wait in Executive/Secretary pair		
36	Send SMS Message	90	{SPEED} Button Assignment
37	Register Mobile Extension	91	{CONFERENCE} button assignment
38	Make Mobile Extension active	92	{CALLBACK} button assignment
39	Register Mobile Extension CLI	93	{DND} button assignment
41	Set Wake-Up Time	94	{FLASH} button assignment
42	Wake-Up Time Disable	95	{MUTE} button assignment
51XX	Custom/Pre-select Message Display (XX = 00-20)	96	{MONITOR} button assignment
52	Register Custom Message (Message 00)	97	{REDIAL} button assignment
53	Active Conference Room	98	{CALL FORWARD} button assignment
54	Deactive Conference Room	99	{PTT} button assignment
551	CONF Group Monitor	9*XX	{In-Room Indication} button assignment (XX = 01-10)
552	CONF Group Active	*6XXX	Set Forced Fwd Dest (XXX : hunt group no.)
553	CONF Group Deactive	*7XXX	Forced FWD To Dest (XXX : hunt group no.)
57	{Call Log Display} Button Assignment	*8	Register Bluetooth
61	Headset/Speakerphone Mode	*9	Bluetooth Usage
62	Change Ring Mode	*0	Hotdesk Login
71	LCD Display Mode	**	Hotdesk Logout
72	Version Display		
73	Background Music		
74	Station User Name Registration		
75	Display Phone IP Address		
76	Change Phone IP Address		
77	Display Phone MAC Address		
78	Network Config		
79	Display Phone Version		
7#	Forced Release Button Assignment		
80	{Record} Button Assignment - With Voice Mail		
81	{CLIR} Button Assignment		



Table A-2 Attendant User Program Codes

CODE	FUNCTION
0111	Print SMDR, by Station
0112	Delete SMDR, by Station
0113	Display Call Charge
0114	Abort Print

CODE	FUNCTION
0115	Print Lost Call Report
0116	Delete Lost Call Report
0121	Print Traffic Analysis (All summary)
0122	Print Traffic Analysis (All summary periodically)
0123	Abort “Print Traffic Analysis (All summary periodically)”
0124	Print Traffic Analysis (Attendant)
0125	Print Traffic Analysis (Call summary)
0126	Print Traffic Analysis (Call Hourly)
0127	Print Traffic Analysis (H/W Usage)
0128	Print Traffic Analysis (CO summary)
0129	Print Traffic Analysis (CO Hourly)
021	Set ICM only Mode
022	Restore Station COS
031	Authorization Code Registration
032	Erase Authorization
040	Reset Group Wake Up
041	System Date/Time set
042	LCD Date Mode
043	LCD Time Mode
044	Set Wake Up Time from Attendant
045	Wake Up Disable from Attendant
046	PX Clock Set through ISDN message
047	Hot Desk login
048	Hot Desk logout
049	Set Group Wake Up
051	Custom/Pre-select Message
052	DND/Call Forward/Pre-selected MSG Cancel
053	Custom Display Message (11-20)
054	Monitor Conference Room
055	Delete Conference Room
06	VSF – Record System Greeting
071	Register Station Name
072	Isolate CO Fault Line
073	Automatic Day/Night/Timed Ring Table
074	External Page Music -1 Assignment/Cancel
075	External Page Music -2 Assignment/Cancel
076	LCD Display Language
077	PTT Login / Logout
078	Display CPU redundancy state
079	Font Set
070	Contrast Set
08	Emergency History about emergency call
*#	Admin Programming Code to enter

2 Appendix B: Flexible Numbering Plan (Web-based)

The System Numbering Plan can be selected from 1 of 9 basic Numbering Plans. Table B-1 provides a brief description of the plans, and Table B-2 for eMG and Table B-3 for UCP provides the Numbering Plan codes for each of the nine basic plans. The Number Plan is selected in Program 100, and individual codes in the plan can be changed using the Flexible Numbering Plan Programs106 to 109.

Table B-1 Numbering Plan Description

Plan Number	Description	eMG80/100	eMG800	UCP
1	Basic Numbering Plan	100 - 239	1000-2199	1000 – 3399
2	The station number can be within 799	100 - 239	1000-2199	1000 – 3399
3	Australia Default	100 - 239	1000-2199	1000 – 3399
4	New Zealand Default	700– 839	7000-8199	1000 – 3399
5	Italy Default	200– 339	2000-3199	2000– 4399
6	Finland Default	210 – 349	2100-3299	2100 –4499
7	Default for Sweden	100– 239	1000-2199	1000 – 3399
8	Default for Norway	100– 239	1000-2199	1000 – 3399
9	Default for Israel	100– 239	1000-2199	1000 – 3399

Table B-2-1 eMG 80 Basic Numbering Plan 1-4, Default Values

	Feature	Basic Numbering Plan				
		1	2	3	4	Remark
	Intercom Call	100 ~239	100-239	100-239	700-839	
1	Internal Page Zone	301~335	*301~*335	*101~*135	#101~#135	
2	Internal All Call Page	543	*543	#3	#3	
3	Meet Me Page	544	*544	##	##	
4	External Page Zone 1	545	*545	#41	#41	
5	External All Call Page	548	*548	#5	#5	
6	All Call Page (Internal/External)	549	*549	#00	#00	
7	SMDR Account Code Enter	550	*550	550	550	SLT
8	Flash Command to CO Line	551	*551	551	551	SLT
9	SLT Last Number Redial	552	*552	552	552	SLT
10	Do Not Disturb (Toggle On/Off)	553	*553	553	553	SLT
11	Call Forward	554	*554	554	554	
12	Speed Dial Programming	555	*555	555	555	SLT
13	Activate Message Wait/Callback	556	*556	556	556	SLT
14	Message Wait/Callback Answer	557	* 557	557	557	SLT
15	SLT Speed Dial Access	558	* 558	558	558	SLT
16	DND/FWD Cancel	559	* 559	559	559	SLT
17	SLT CO System Hold	560	* 560	560	560	SLT
18	SLT Program Mode Access	561	* 561	561	561	SLT
19	Attendant Unavailable	562	* 562	562	562	

Table B-2-1 eMG 80 Basic Numbering Plan 1-4, Default Values

	Feature	Basic Numbering Plan				
		1	2	3	4	Remark
20	AME Feature	564	* 564	564	564	
21	Alarm Reset	565	* 565	565	* 565	
22	Group Call Pickup	566	**	**	*1	
23	Universal Night Answer	567	* 567	567	567	
24	Account Code with bin	568	* 568	568	568	
25	Walking COS	569	* 569	569	569	
26	ACD agent On/Off Duty	571	* 571	571	571	
27	ACD Supervisor Login	572	* 572	572	572	
28	ACD Supervisor Logout	573	* 573	573	573	
29	ACD Help Code	574	* 574	574	574	
30	ACD Calls In Queue Display	575	* 575	575	575	
31	ACD Supervisor Status	576	* 576	576	576	
32	ACD Supervisor Monitor	577	* 577	577	577	
33	ACD Reroute Queued Call Answer	578	* 578	578	578	
34	ACD Reroute Queued Call No answer	579	* 579	579	579	
35	Camp-On Answer	621	* 621	*521	*521	SLT
36	Call Park Locations	#601~#619	#601 -# 619	#601 – #619	#601 – #619	
37	Station Group Pilot Number	401~449	*401 – *440	*620 – *659	*620 – *659	
38	Station User VSF Features Access	*66	66	*78	*78	
39	Call Coverage Ring	76	*76	*76	*76	
40	Direct Call Pickup	*77	*77	*77	*77	
41	Access CO Group	89	89	#89	#89	
42	Access Individual CO/IP Line	88	88	#88	#88	
43	Access Held CO/IP	8*	8*	#8*	#8*	
44	Access Held Individual CO/IP	8#	8#	#8#	#8#	
45	Access CO in First CO Group	9	9	9	0	
46	Attendant Call	0	0	0	9	
47	VM Message Wait Enabled	*8	*8	*8	*8	
48	VM Message Wait cancel	*9	*9	*9	*9	
49	Door Open (1st Door)	#*1	#*1	#*1	#*1	
50	Door Open (2nd Door)	#*2	#*2	#*2	#*2	
51	MCID Request	*0	*0	*0	*0	
52	Unsupervised conference time Extension code	##	##	*##	*##	
53	PTT Group Login/Logout	#0	#0	#*0	#*0	
54	ACD Agent primary login	581	* 581	581	581	
55	ACD Agent primary logout	582	* 582	582	582	
56	ACD Agent secondary login	583	* 583	583	583	
57	ACD Agent secondary logout	584	* 584	584	584	
58	Wrap-up end	585	* 585	585	585	
59	T-NET CM Login/out	586	* 586	586	586	

Table B-2-1 eMG 80 Basic Numbering Plan 1-4, Default Values

	Feature	Basic Numbering Plan				
		1	2	3	4	Remark
60	Enter Into Conf-Room	59	* 59	*59	*59	
61	Enter Into Conf-Group	68	* 68	*79	*79	
62	Station ICR	587	* 587	587	587	
63	Pick up Group Pick-Up	588	* 588	588	588	
64	Emergency Page	589	* 589	589	589	
65	Remote Mobile Extension Control	580	* 580	580	580	
66	ACDagent ON/OFF Duty-All group	58*	* 58*	58*	58*	
67	SLT ACNR	58#	* 58#	58#	58#	
68	ACD Supervisor Ring Mode	570	* 570	570	570	
69	Company Directory Name	563	* 563	563	563	
70	ISDN Supplementary Hold	57*	*57*	57*	57*	
71	ISDN Supplementary Conf	57#	*57#	57#	57#	
72	Forced Channel Seize	56*	*56*	56*	56*	
73	Override DND/Forward	56#	*56#	56#	56#	
74	Cancel Call Back					
75	Transfer to VSF Number	55*	*55*	55*	55*	
76	CCR	#2	#2	#2	#2	
77	Room type conf Group join	5*0	5*0	5*0	5*0	
77	Last Number Redial (LNR)	[REDIAL]	[REDIAL]	[REDIAL]	[REDIAL]	Keyset
78	Save Number Redial	[Save]	[Save]	[Save]	[Save]	Keyset
79	Station Speed Dial Access	[SPEED] + XXX	[SPEED] + XXX	[SPEED] + XXX	[SPEED] + XXX	
80	System Speed Dial Access	[SPEED] + XXXX	[SPEED] + XXXX	[SPEED] + XXXX	[SPEED] + XXXX	

Table B-2-2 eMG80 Basic Numbering Plan 5-9, Default Values

	Feature	Basic Numbering Plan					
		5	6	7	8	9	Remark
	Intercom Call	200-339	210-349	100-239	100-239	100 ~239	
1	Internal Page Zone	*101-*135	*301-*335	401- 429	*301- *335	301~335	
2	Internal All Call Page	#3	*543	43	*543	543	
3	Meet Me Page	##	*544	44	*544	544	
4	External Page Zone 1	#41	*545	45	*545	545	
5	External All Call Page	#5	*548	48	*548	548	
6	All Call Page (Internal/External)	#00	*549	49	*549	549	
7	SMDR Account Code Enter	50	*550		*550	550	SLT
8	Flash Command to CO Line	51	*551	51	*551	551	SLT
9	SLT Last Number Redial	52	*552	52	*552	552	SLT

Table B-2-2 eMG80 Basic Numbering Plan 5-9, Default Values

	Feature	Basic Numbering Plan					
		5	6	7	8	9	Remark
10	Do Not Disturb (Toggle On/Off)	53	*553	53	*553	553	SLT
11	Call Forward	54	*554	54	*554	554	
12	Speed Dial Programming	55	*555	55	*555	555	SLT
13	Activate Message Wait/Callback	56	*556	56	*556	556	SLT
14	Message Wait/Callback Answer	57	*557	57	*557	557	SLT
15	SLT Speed Dial Access	58	*558	58	*558	558	SLT
16	DND/FWD Cancel	59	*559	59	*559	559	SLT
17	SLT CO System Hold	690	*560	*10	*560	560	SLT
18	SLT Program Mode Access	691	*561	50	*561	561	SLT
19	Attendant Unavailable	692	*562	*12	*562	562	
20	AME Feature	694	*564	*36	*564	564	
21	Alarm Reset	695	*565	*13	*565	565	
22	Group Call Pickup	**	*566	*14	*566	**	
23	Universal Night Answer	697	*567	*15	*567	567	
24	Account Code with bin	698	*568	*16	*568	568	
25	Walking COS	699	*569	*17	*569	569	
26	ACD agent On/Off Duty	671	*571	*20	*571	571	
27	ACD Supervisor Login	672	*572	*21	*572	572	
28	ACD Supervisor Logout	673	*573	*22	*573	573	
29	ACD Help Code	674	*574	*23	*574	574	
30	ACD Calls In Queue Display	675	*575	*24	*575	575	
31	ACD Supervisor Status	676	*576	*25	*576	576	
32	ACD Supervisor Monitor	677	*577	*26	*577	577	
33	ACD Reroute Queued Call Answer	678	*578	*27	*578	578	
34	ACD Reroute Queued Call No answer	679	*579	*28	*579	579	
35	Camp-On Answer	621	*621	*29	*621	*621	SLT
36	Call Park Locations	#601–#619	#601–#619	601–619	#601–#619	#601~#619	
37	Station Group Pilot Number	720 – 759	*401 - *440	620 – 659	*401 - *440	620~659	
38	Station User VSF Features Access	*66	66	*11	66	*66	
39	Call Coverage Ring	*76	*76	*30	*76	76	
40	Direct Call Pickup	*77	*77	7	*77	*77	
41	Access CO Group	89	89	89	#89	89	
42	Access Individual CO/IP Line	88	88	88	#88	88	
43	Access Held CO/IP	8*	8*	8*	#8*	8*	

Table B-2-2 eMG80 Basic Numbering Plan 5-9, Default Values

	Feature	Basic Numbering Plan					
		5	6	7	8	9	Remark
44	Access Held Individual CO/IP	8#	8#	8#	#8#	8#	
45	Access CO in First CO Group	0	9	9	0	9	
46	Attendant Call	9	0	0	#9	0	
47	VM Message Wait Enabled	*8	*8	*8	*8	*8	
48	VM Message Wait cancel	*9	*9	*9	*9	*9	
49	Door Open (1st Door)	#*1	#*1	*31	#*1	#*1	
50	Door Open (2nd Door)	#*2	#*2	*32	#*2	#*2	
51	MCID Request	*0	*0	*35	*0	*0	(Except USA)
52	Unsupervised conference time Extension code	*##	##	*37	##	##	
53	PTT Group Login/Logout	#*0	#0	*38	#0	#0	
54	ACD Agent primary login	681	*581	*40	*581	581	
55	ACD Agent primary logout	682	*582	*41	*582	582	
56	ACD Agent secondary login	683	*583	*42	*583	583	
57	ACD Agent secondary logout	684	*584	*43	*584	584	
58	Wrap-up end	685	*585	*44	*585	585	
59	T-NET CM Login/out	686	*586	*45	*586	586	
60	Enter Into Conf-Room	*59	*59	*46	*59	59	
61	Enter Into Conf-Group	*68	*68	*47	*68	*68	
62	Station ICR	687	*587	*48	*587	587	
63	Pick up Group Pick-Up	688	*588	*49	*588	588	
64	Emergency Page	689	*589	*50	*589	589	
65	Remote Mobile Extension Control	680	*580	**	580	580	
66	ACDAgent ON/OFF Duty-All group	68*	*58*	*5#	*58*	58*	
67	SLT ACNR	68#	*58#	*51	*58#	58#	
68	ACD Supervisor Ring Mode	67*	*570	*52	*570	570	
69	Company Directory Name	*21	*563	*53	*563	563	
70	ISDN Supplementary Hold	*22	*57*	*54	*57*	57*	
71	ISDN Supplementary Conf	*23	*57#	*55	*57#	57#	
72	Forced Channel Seize	*24	*56*	*56	*56*	56*	
73	Override DND/Forward	*25	*56#	*57	*56#	56#	
74	Cancel Call Back			*58			
75	Transfer to VSF Number	*55	*55*	*59	*55*	55*	
76	CCR	#2	#2*		#2	#2	
77	Room type conf Group join	5*0	5*0	*61	5*0		
77	Last Number Redial (LNR)	[REDIAL]	[REDIAL]	[REDIAL]	[REDIAL]	[REDIAL]	Keyset

Table B-2-2 eMG80 Basic Numbering Plan 5-9, Default Values

	Feature	Basic Numbering Plan					
		5	6	7	8	9	Remark
78	Save Number Redial	[Save]	[Save]	[Save]	[Save]	[Save]	Keyset
79	Station Speed Dial Access	[SPEED] + XXX	[SPEED] + XXX	[SPEED] + XXX	[SPEED] + XXX	[SPEED] + XXX	
80	System Speed Dial Access	[SPEED] + XXXX	[SPEED] + XXXX	[SPEED] + XXXX	[SPEED] + XXXX	[SPEED] + XXXX	

Table B-3-1 eMG 100 Basic Numbering Plan 1-4, Default Values

	Feature	Basic Numbering Plan				
		1	2	3	4	Remark
	Intercom Call	100 ~239	100-239	100-239	700-839	
1	Internal Page Zone	301~335	*301~*335	*101~*135	#101~#135	
2	Internal All Call Page	543	*543	#3	#3	
3	Meet Me Page	544	*544	##	##	
4	External Page Zone 1	545	*545	#41	#41	
5	External Page Zone 2	546	*546	#42	#42	
6	External All Call Page	548	*548	#5	#5	
7	All Call Page (Internal/External)	549	*549	#00	#00	
8	SMDR Account Code Enter	550	*550	550	550	SLT
9	Flash Command to CO Line	551	*551	551	551	SLT
10	SLT Last Number Redial	552	*552	552	552	SLT
11	Do Not Disturb (Toggle On/Off)	553	*553	553	553	SLT
12	Call Forward	554	*554	554	554	
13	Speed Dial Programming	555	*555	555	555	SLT
14	Activate Message Wait/Callback	556	*556	556	556	SLT
15	Message Wait/Callback Answer	557	* 557	557	557	SLT
16	SLT Speed Dial Access	558	* 558	558	558	SLT
17	DND/FWD Cancel	559	* 559	559	559	SLT
18	SLT CO System Hold	560	* 560	560	560	SLT
19	SLT Program Mode Access	561	* 561	561	561	SLT
20	Attendant Unavailable	562	* 562	562	562	
21	AME Feature	564	* 564	564	564	
22	Alarm Reset	565	* 565	565	* 565	
23	Group Call Pickup	566	**	**	*1	
24	Universal Night Answer	567	* 567	567	567	
25	Account Code with bin	568	* 568	568	568	
26	Walking COS	569	* 569	569	569	
27	ACD agent On/Off Duty	571	* 571	571	571	
28	ACD Supervisor Login	572	* 572	572	572	
29	ACD Supervisor Logout	573	* 573	573	573	
30	ACD Help Code	574	* 574	574	574	
31	ACD Calls In Queue Display	575	* 575	575	575	
32	ACD Supervisor Status	576	* 576	576	576	
33	ACD Supervisor Monitor	577	* 577	577	577	
34	ACD Reroute Queued Call Answer	578	* 578	578	578	
35	ACD Reroute Queued Call No answer	579	* 579	579	579	
36	Camp-On Answer	621	* 621	*521	*521	SLT
37	Call Park Locations	#601~#619	#601 -# 619	#601 – #619	#601 – #619	
38	Station Group Pilot Number	401~449	*401 – *440	*620 – *659	*620 – *659	
39	Station User VSF Features Access	*66	66	*78	*78	
40	Call Coverage Ring	76	*76	*76	*76	

Table B-3-1 eMG 100 Basic Numbering Plan 1-4, Default Values

	Feature	Basic Numbering Plan				
		1	2	3	4	Remark
41	Direct Call Pickup	*77	*77	*77	*77	
42	Access CO Group	89	89	#89	#89	
43	Access Individual CO/IP Line	88	88	#88	#88	
44	Access Held CO/IP	8*	8*	#8*	#8*	
45	Access Held Individual CO/IP	8#	8#	#8#	#8#	
46	Access CO in First CO Group	9	9	9	0	
47	Attendant Call	0	0	0	9	
48	VM Message Wait Enabled	*8	*8	*8	*8	
49	VM Message Wait cancel	*9	*9	*9	*9	
50	Door Open (1st Door)	#*1	#*1	#*1	#*1	
51	Door Open (2nd Door)	#*2	#*2	#*2	#*2	
52	Door Open (3rd Door)	#*3	#*3	#*3	#*3	
53	Door Open (4th Door)	#*4	#*4	#*4	#*4	
54	MCID Request	*0	*0	*0	*0	
55	Unsupervised conference time Extension code	##	##	*##	*##	
56	PTT Group Login/Logout	#0	#0	#*0	#*0	
57	ACD Agent primary login	581	* 581	581	581	
58	ACD Agent primary logout	582	* 582	582	582	
59	ACD Agent secondary login	583	* 583	583	583	
60	ACD Agent secondary logout	584	* 584	584	584	
61	Wrap-up end	585	* 585	585	585	
62	T-NET CM Login/out	586	* 586	586	586	
63	Enter Into Conf-Room	59	* 59	*59	*59	
64	Enter Into Conf-Group	68	* 68	*79	*79	
65	Station ICR	587	* 587	587	587	
66	Pick up Group Pick-Up	588	* 588	588	588	
67	Emergency Page	589	* 589	589	589	
68	Remote Mobile Extension Control	580	* 580	580	580	
69	ACDagent ON/OFF Duty-All group	58*	* 58*	58*	58*	
70	SLT ACNR	58#	* 58#	58#	58#	
71	ACD Supervisor Ring Mode	570	* 570	570	570	
72	Company Directory Name	563	* 563	563	563	
73	ISDN Supplementary Hold	57*	*57*	57*	57*	
74	ISDN Supplementary Conf	57#	*57#	57#	57#	
75	Forced Channel Seize	56*	*56*	56*	56*	
76	Override DND/Forward	56#	*56#	56#	56#	
77	Cancel Call Back					
77	Transfer to VSF Number	55*	*55*	55*	55*	
78	CCR	#2	#2	#2	#2	
79	Room type conf Group join	5*0	5*0	5*0	5*0	
80	Last Number Redial (LNR)	[REDIAL]	[REDIAL]	[REDIAL]	[REDIAL]	Keyset

Table B-3-1 eMG 100 Basic Numbering Plan 1-4, Default Values

	Feature	Basic Numbering Plan				
		1	2	3	4	Remark
81	Save Number Redial	[Save]	[Save]	[Save]	[Save]	Keyset
82	Station Speed Dial Access	[SPEED] + XXX	[SPEED] + XXX	[SPEED] + XXX	[SPEED] + XXX	
83	System Speed Dial Access	[SPEED] + XXXX	[SPEED] + XXXX	[SPEED] + XXXX	[SPEED] + XXXX	

Table B-3-2 eMG100 Basic Numbering Plan 5-9, Default Values

	Feature	Basic Numbering Plan					
		5	6	7	8	9	Remark
	Intercom Call	200-339	210-349	100-239	100-239	100 ~239	
1	Internal Page Zone	*101-*135	*301-*335	401- 429	*301- *335	301~335	
2	Internal All Call Page	#3	*543	43	*543	543	
3	Meet Me Page	##	*544	44	*544	544	
4	External Page Zone 1	#41	*545	45	*545	545	
5	External Page Zone 2	#42	*546	46	*546	546	
6	External All Call Page	#5	*548	48	*548	548	
7	All Call Page (Internal/External)	#00	*549	49	*549	549	
8	SMDR Account Code Enter	50	*550		*550	550	SLT
9	Flash Command to CO Line	51	*551	51	*551	551	SLT
10	SLT Last Number Redial	52	*552	52	*552	552	SLT
11	Do Not Disturb (Toggle On/Off)	53	*553	53	*553	553	SLT
12	Call Forward	54	*554	54	*554	554	
13	Speed Dial Programming	55	*555	55	*555	555	SLT
14	Activate Message Wait/Callback	56	*556	56	*556	556	SLT
15	Message Wait/Callback Answer	57	*557	57	*557	557	SLT
16	SLT Speed Dial Access	58	*558	58	*558	558	SLT
17	DND/FWD Cancel	59	*559	59	*559	559	SLT
18	SLT CO System Hold	690	*560	*10	*560	560	SLT
19	SLT Program Mode Access	691	*561	50	*561	561	SLT
20	Attendant Unavailable	692	*562	*12	*562	562	
21	AME Feature	694	*564	*36	*564	564	
22	Alarm Reset	695	*565	*13	*565	565	
23	Group Call Pickup	**	*566	*14	*566	**	
24	Universal Night Answer	697	*567	*15	*567	567	
25	Account Code with bin	698	*568	*16	*568	568	

Table B-3-2 eMG100 Basic Numbering Plan 5-9, Default Values

	Feature	Basic Numbering Plan					
		5	6	7	8	9	Remark
26	Walking COS	699	*569	*17	*569	569	
27	ACD agent On/Off Duty	671	*571	*20	*571	571	
28	ACD Supervisor Login	672	*572	*21	*572	572	
29	ACD Supervisor Logout	673	*573	*22	*573	573	
30	ACD Help Code	674	*574	*23	*574	574	
31	ACD Calls In Queue Display	675	*575	*24	*575	575	
32	ACD Supervisor Status	676	*576	*25	*576	576	
33	ACD Supervisor Monitor	677	*577	*26	*577	577	
34	ACD Reroute Queued Call Answer	678	*578	*27	*578	578	
35	ACD Reroute Queued Call No answer	679	*579	*28	*579	579	
36	Camp-On Answer	621	*621	*29	*621	*621	SLT
37	Call Park Locations	#601 – #619	#601 – #619	601 – 619	#601 – #619	#601~#619	
38	Station Group Pilot Number	720 – 759	*401 - *440	620 – 659	*401 - *440	620~659	
39	Station User VSF Features Access	*66	66	*11	66	*66	
40	Call Coverage Ring	*76	*76	*30	*76	76	
41	Direct Call Pickup	*77	*77	7	*77	*77	
42	Access CO Group	89	89	89	#89	89	
43	Access Individual CO/IP Line	88	88	88	#88	88	
44	Access Held CO/IP	8*	8*	8*	#8*	8*	
45	Access Held Individual CO/IP	8#	8#	8#	#8#	8#	
46	Access CO in First CO Group	0	9	9	0	9	
47	Attendant Call	9	0	0	#9	0	
48	VM Message Wait Enabled	*8	*8	*8	*8	*8	
49	VM Message Wait cancel	*9	*9	*9	*9	*9	
50	Door Open (1st Door)	#*1	#*1	*31	#*1	#*1	
51	Door Open (2nd Door)	#*2	#*2	*32	#*2	#*2	
52	Door Open (3rd Door)	#*3	#*3	*33	#*3	#*3	
53	Door Open (4th Door)	#*4	#*4	*34	#*4	#*4	
54	MCID Request	*0	*0	*35	*0	*0	(Except USA)
55	Unsupervised conference time Extension code	*##	##	*37	##	##	
56	PTT Group Login/Logout	#*0	#0	*38	#0	#0	

Table B-3-2 eMG100 Basic Numbering Plan 5-9, Default Values

	Feature	Basic Numbering Plan					
		5	6	7	8	9	Remark
57	ACD Agent primary login	681	*581	*40	*581	581	
58	ACD Agent primary logout	682	*582	*41	*582	582	
59	ACD Agent secondary login	683	*583	*42	*583	583	
60	ACD Agent secondary logout	684	*584	*43	*584	584	
61	Wrap-up end	685	*585	*44	*585	585	
62	T-NET CM Login/out	686	*586	*45	*586	586	
63	Enter Into Conf-Room	*59	*59	*46	*59	59	
64	Enter Into Conf-Group	*68	*68	*47	*68	*68	
65	Station ICR	687	*587	*48	*587	587	
66	Pick up Group Pick-Up	688	*588	*49	*588	588	
67	Emergency Page	689	*589	*50	*589	589	
68	Remote Mobile Extension Control	680	*580	**	580	580	
69	ACDAgent ON/OFF Duty-All group	68*	*58*	*5#	*58*	58*	
70	SLT ACNR	68#	*58#	*51	*58#	58#	
71	ACD Supervisor Ring Mode	67*	*570	*52	*570	570	
72	Company Directory Name	*21	*563	*53	*563	563	
73	ISDN Supplementary Hold	*22	*57*	*54	*57*	57*	
74	ISDN Supplementary Conf	*23	*57#	*55	*57#	57#	
75	Forced Channel Seize	*24	*56*	*56	*56*	56*	
76	Override DND/Forward	*25	*56#	*57	*56#	56#	
77	Cancel Call Back			*58			
77	Transfer to VSF Number	*55	*55*	*59	*55*	55*	
78	CCR	#2	#2*		#2	#2	
79	Room type conf Group join	5*0	5*0	*61	5*0		
80	Last Number Redial (LNR)	[REDIAL]	[REDIAL]	[REDIAL]	[REDIAL]	[REDIAL]	Keyset
81	Save Number Redial	[Save]	[Save]	[Save]	[Save]	[Save]	Keyset
82	Station Speed Dial Access	[SPEED] + XXX	[SPEED] + XXX	[SPEED] + XXX	[SPEED] + XXX	[SPEED] + XXX	
83	System Speed Dial Access	[SPEED] + XXXX	[SPEED] + XXXX	[SPEED] + XXXX	[SPEED] + XXXX	[SPEED] + XXXX	

Table B-4-1 eMG 800 Basic Numbering Plan 1-4, Default Values

	Feature	Basic Numbering Plan				
		1	2	3	4	Remark
	Intercom Call	1000-2199	1000-2199	1000-2199	1000-2199	
1	Internal Page Zone	*301~*400	*301~*335	*101~*135	#101~#135	
2	Internal All Call Page	543	*543	#3	#3	
3	Meet Me Page	544	*544	##	##	
4	External Page Zone 1	545	*545	#41	#41	
5	External All Call Page	548	*548	#5	#5	
6	All Call Page (Internal/External)	549	*549	#00	#00	
7	SMDR Account Code Enter	550	*550	550	550	SLT
8	Flash Command to CO Line	551	*551	551	551	SLT
9	SLT Last Number Redial	552	*552	552	552	SLT
10	Do Not Disturb (Toggle On/Off)	553	*553	553	553	SLT
11	Call Forward	554	*554	554	554	
12	Speed Dial Programming	555	*555	555	555	SLT
13	Activate Message Wait/Callback	556	*556	556	556	SLT
14	Message Wait/Callback Answer	557	* 557	557	557	SLT
15	SLT Speed Dial Access	558	* 558	558	558	SLT
16	DND/FWD Cancel	559	* 559	559	559	SLT
17	SLT CO System Hold	560	* 560	560	560	SLT
18	SLT Program Mode Access	561	* 561	561	561	SLT
19	Attendant Unavailable	562	* 562	562	562	
20	AME Feature	564	* 564	564	564	
21	Alarm Reset	565	* 565	565	* 565	
22	Group Call Pickup	566	**	**	*1	
23	Universal Night Answer	567	* 567	567	567	
24	Account Code with bin	568	* 568	568	568	
25	Walking COS	569	* 569	569	569	
26	ACD agent On/Off Duty	571	* 571	571	571	
27	ACD Supervisor Login	572	* 572	572	572	
28	ACD Supervisor Logout	573	* 573	573	573	
29	ACD Help Code	574	* 574	574	574	
30	ACD Calls In Queue Display	575	* 575	575	575	
31	ACD Supervisor Status	576	* 576	576	576	
32	ACD Supervisor Monitor	577	* 577	577	577	
33	ACD Reroute Queued Call Answer	578	* 578	578	578	
34	ACD Reroute Queued Call No answer	579	* 579	579	579	
35	Camp-On Answer	621	* 621	*521	*521	SLT
36	Call Park Locations	#601~#800	#601 -# 619	#601 – #619	#601 – #619	
37	Station Group Pilot Number	401~500	*401 – *440	*620 – *659	*620 – *659	
38	Station User VSF Features Access	*66	66	*78	*78	
39	Call Coverage Ring	76	*76	*76	*76	
40	Direct Call Pickup	*77	*77	*77	*77	

Table B-4-1 eMG 800 Basic Numbering Plan 1-4, Default Values

	Feature	Basic Numbering Plan				
		1	2	3	4	Remark
41	Access CO Group	89	89	#89	#89	
42	Access Individual CO/IP Line	88	88	#88	#88	
43	Access Held CO/IP	8*	8*	#8*	#8*	
44	Access Held Individual CO/IP	8#	8#	#8#	#8#	
45	Access CO in First CO Group	9	9	9	0	
46	Attendant Call	0	0	0	9	
47	VM Message Wait Enabled	*8	*8	*8	*8	
48	VM Message Wait cancel	*9	*9	*9	*9	
49	Door Open (1st Door)	#*1	#*1	#*1	#*1	
50	Door Open (2nd Door)	#*2	#*2	#*2	#*2	
51	MCID Request	*0	*0	*0	*0	
52	Unsupervised conference time Extension code	##	##	*##	*##	
53	PTT Group Login/Logout	#0	#0	#*0	#*0	
54	ACD Agent primary login	581	* 581	581	581	
55	ACD Agent primary logout	582	* 582	582	582	
56	ACD Agent secondary login	583	* 583	583	583	
57	ACD Agent secondary logout	584	* 584	584	584	
58	Wrap-up end	585	* 585	585	585	
59	T-NET CM Login/out	586	* 586	586	586	
60	Enter Into Conf-Room	59	* 59	*59	*59	
61	Enter Into Conf-Group	68	* 68	*79	*79	
62	Station ICR	587	* 587	587	587	
63	Pick up Group Pick-Up	588	* 588	588	588	
64	Emergency Page	589	* 589	589	589	
65	Remote Mobile Extension Control	580	* 580	580	580	
66	ACDagent ON/OFF Duty-All group	58*	* 58*	58*	58*	
67	SLT ACNR	58#	* 58#	58#	58#	
68	ACD Supervisor Ring Mode	570	* 570	570	570	
69	Company Directory Name	563	* 563	563	563	
70	ISDN Supplementary Hold	57*	*57*	57*	57*	
71	ISDN Supplementary Conf	57#	*57#	57#	57#	
72	Forced Channel Seize	56*	*56*	56*	56*	
73	Override DND/Forward	56#	*56#	56#	56#	
74	Cancel Call Back					
75	Transfer to VSF Number	55*	*55*	55*	55*	
76	CCR	#2	#2	#2	#2	
77	Room type conf Group join	5*0	5*0	5*0	5*0	
77	Last Number Redial (LNR)	[REDIAL]	[REDIAL]	[REDIAL]	[REDIAL]	Keyset
78	Save Number Redial	[Save]	[Save]	[Save]	[Save]	Keyset
79	Station Speed Dial Access	[SPEED] + XXX	[SPEED] + XXX	[SPEED] + XXX	[SPEED] + XXX	

Table B-4-1 eMG 800 Basic Numbering Plan 1-4, Default Values

	Feature	Basic Numbering Plan				
		1	2	3	4	Remark
80	System Speed Dial Access	[SPEED] + XXXX	[SPEED] + XXXX	[SPEED] + XXXX	[SPEED] + XXXX	

Table B-4-2 eMG800 Basic Numbering Plan 5-9, Default Values

	Feature	Basic Numbering Plan					
		5	6	7	8	9	Remark
	Intercom Call	2000-3199	2100-3299	1000-2199	1000-2199	1000-2199	
1	Internal Page Zone	*101-*135	*301-*335	401- 429	*301- *335	301~335	
2	Internal All Call Page	#3	*543	43	*543	543	
3	Meet Me Page	##	*544	44	*544	544	
4	External Page Zone 1	#41	*545	45	*545	545	
5	External All Call Page	#5	*548	48	*548	548	
6	All Call Page (Internal/External)	#00	*549	49	*549	549	
7	SMDR Account Code Enter	50	*550		*550	550	SLT
8	Flash Command to CO Line	51	*551	51	*551	551	SLT
9	SLT Last Number Redial	52	*552	52	*552	552	SLT
10	Do Not Disturb (Toggle On/Off)	53	*553	53	*553	553	SLT
11	Call Forward	54	*554	54	*554	554	
12	Speed Dial Programming	55	*555	55	*555	555	SLT
13	Activate Message Wait/Callback	56	*556	56	*556	556	SLT
14	Message Wait/Callback Answer	57	*557	57	*557	557	SLT
15	SLT Speed Dial Access	58	*558	58	*558	558	SLT
16	DND/FWD Cancel	59	*559	59	*559	559	SLT
17	SLT CO System Hold	690	*560	*10	*560	560	SLT
18	SLT Program Mode Access	691	*561	50	*561	561	SLT
19	Attendant Unavailable	692	*562	*12	*562	562	
20	AME Feature	694	*564	*36	*564	564	
21	Alarm Reset	695	*565	*13	*565	565	
22	Group Call Pickup	**	*566	*14	*566	**	
23	Universal Night Answer	697	*567	*15	*567	567	
24	Account Code with bin	698	*568	*16	*568	568	
25	Walking COS	699	*569	*17	*569	569	
26	ACD agent On/Off Duty	671	*571	*20	*571	571	
27	ACD Supervisor Login	672	*572	*21	*572	572	
28	ACD Supervisor Logout	673	*573	*22	*573	573	
29	ACD Help Code	674	*574	*23	*574	574	
30	ACD Calls In Queue Display	675	*575	*24	*575	575	

Table B-4-2 eMG800 Basic Numbering Plan 5-9, Default Values

	Feature	Basic Numbering Plan					
		5	6	7	8	9	Remark
31	ACD Supervisor Status	676	*576	*25	*576	576	
32	ACD Supervisor Monitor	677	*577	*26	*577	577	
33	ACD Reroute Queued Call Answer	678	*578	*27	*578	578	
34	ACD Reroute Queued Call No answer	679	*579	*28	*579	579	
35	Camp-On Answer	621	*621	*29	*621	*621	SLT
36	Call Park Locations	#601–#619	#601–#619	601–619	#601–#619	#601~#619	
37	Station Group Pilot Number	720 – 759	*401 - *440	620 – 659	*401 - *440	620~659	
38	Station User VSF Features Access	*66	66	*11	66	*66	
39	Call Coverage Ring	*76	*76	*30	*76	76	
40	Direct Call Pickup	*77	*77	7	*77	*77	
41	Access CO Group	89	89	89	#89	89	
42	Access Individual CO/IP Line	88	88	88	#88	88	
43	Access Held CO/IP	8*	8*	8*	#8*	8*	
44	Access Held Individual CO/IP	8#	8#	8#	#8#	8#	
45	Access CO in First CO Group	0	9	9	0	9	
46	Attendant Call	9	0	0	#9	0	
47	VM Message Wait Enabled	*8	*8	*8	*8	*8	
48	VM Message Wait cancel	*9	*9	*9	*9	*9	
49	Door Open (1st Door)	#*1	#*1	*31	#*1	#*1	
50	Door Open (2nd Door)	#*2	#*2	*32	#*2	#*2	
51	MCID Request	*0	*0	*35	*0	*0	(Except USA)
52	Unsupervised conference time Extension code	*##	##	*37	##	##	
53	PTT Group Login/Logout	#*0	#0	*38	#0	#0	
54	ACD Agent primary login	681	*581	*40	*581	581	
55	ACD Agent primary logout	682	*582	*41	*582	582	
56	ACD Agent secondary login	683	*583	*42	*583	583	
57	ACD Agent secondary logout	684	*584	*43	*584	584	
58	Wrap-up end	685	*585	*44	*585	585	
59	T-NET CM Login/out	686	*586	*45	*586	586	
60	Enter Into Conf-Room	*59	*59	*46	*59	59	
61	Enter Into Conf-Group	*68	*68	*47	*68	*68	
62	Station ICR	687	*587	*48	*587	587	
63	Pick up Group Pick-Up	688	*588	*49	*588	588	
64	Emergency Page	689	*589	*50	*589	589	
65	Remote Mobile Extension Control	680	*580	**	580	580	

Table B-4-2 eMG800 Basic Numbering Plan 5-9, Default Values

	Feature	Basic Numbering Plan					
		5	6	7	8	9	Remark
66	ACDAgent ON/OFF Duty-All group	68*	*58*	*5#	*58*	58*	
67	SLT ACNR	68#	*58#	*51	*58#	58#	
68	ACD Supervisor Ring Mode	67*	*570	*52	*570	570	
69	Company Directory Name	*21	*563	*53	*563	563	
70	ISDN Supplementary Hold	*22	*57*	*54	*57*	57*	
71	ISDN Supplementary Conf	*23	*57#	*55	*57#	57#	
72	Forced Channel Seize	*24	*56*	*56	*56*	56*	
73	Override DND/Forward	*25	*56#	*57	*56#	56#	
74	Cancel Call Back			*58			
75	Transfer to VSF Number	*55	*55*	*59	*55*	55*	
76	CCR	#2	#2*		#2	#2	
77	Room type conf Group join	5*0	5*0	*61	5*0		
77	Last Number Redial (LNR)	[REDIAL]	[REDIAL]	[REDIAL]	[REDIAL]	[REDIAL]	Keyset
78	Save Number Redial	[Save]	[Save]	[Save]	[Save]	[Save]	Keyset
79	Station Speed Dial Access	[SPEED] + XXX	[SPEED] + XXX	[SPEED] + XXX	[SPEED] + XXX	[SPEED] + XXX	
80	System Speed Dial Access	[SPEED] + XXXX	[SPEED] + XXXX	[SPEED] + XXXX	[SPEED] + XXXX	[SPEED] + XXXX	

Table B-5-1 UCP Basic Numbering Plan 1-4, Default Values

Feature	Basic Numbering Plan				
	1	2	3	4	Remark
Intercom Call	1000 ~3399	1000 ~3399	1000 ~3399	1000 ~3399	
Internal Page Zone	*301~*400	*301~*400	*101~*200	*301~*400	
Internal All Call Page	543	*543	#3	#43	
Meet Me Page	544	*544	##	##	
External Page Zone 1-2	545-546	*545-*546	#41-#42	#41-#42	
External All Call Page	548	*548	#5	#5	
All Call Page	549	*549	#00	#00	
SMDR Account Code Enter	550	*550	550	#9	SLT
Flash Command to CO Line	551	*551	551	551	SLT
SLT Last Number Redial	552	*552	552	552	SLT
DND (Toggle On/Off)	553	*553	553	553	SLT
Call Forward	554	*554	554	554	
Speed Dial Programming	555	*555	555	555	SLT
Activate Message Wait/Callback	556	*556	556	*66	SLT
Message Wait/Callback Answer	557	* 557	557	*67	SLT
SLT Speed Dial Access	558	* 558	558	#8	SLT
DND/FWD cancel	559	* 559	559	559	SLT
SLT CO System Hold	560	* 560	560	560	SLT
SLT Program Mode Access	561	* 561	561	561	SLT
Attendant Unavailable	562	* 562	562	562	
AME Feature	564	* 564	564	564	
Alarm Reset	565	* 565	565	* 565	
Group Call Pickup	566	* 566	**	*1	
Universal Night Answer	567	* 567	567	2	
Account Code with bin	568	* 568	568	568	
Walking COS	569	* 569	569	569	
ACD Agent On/Off Duty	571	* 571	571	571	
ACD Supervisor Login	572	* 572	572	572	
ACD Supervisor Logout	573	* 573	573	573	
ACD Help Code	574	* 574	574	574	
ACD Calls In Queue Display	575	* 575	575	575	
ACD Supervisor Status	576	* 576	576	576	
ACD Supervisor Monitor	577	* 577	577	577	
ACD Reroute Queued Call Answer	578	* 578	578	578	
ACD Reroute Queued Call NoAnswer	579	* 579	579	579	
Camp-On Answer	621	* 621	621	621	SLT
Call Parking Locations	#601~#800	#601~#800	#601~#800	#101~#300	
Station Group Pilot Number	401 – 500	*401 – *500	*401 – *500	#620 – #719	
Station User VSF Features Access	66x	66x	*66x	69x	x: 1 ~ 3
Call Coverage Ring	76	*76	*76	67	
Direct Call Pickup	77	*77	*77	*77	

Table B-5-1 UCP Basic Numbering Plan 1-4, Default Values

Feature	Basic Numbering Plan				
	1	2	3	4	Remark
Access CO Group	89xx	89xx	89xx	89xx	xxx: 000~201,
Access Individual CO/IP Line	88xxx	88xxx	88xxx	48xxx	xxx: 001~999
Access Held CO/IP	8*	8*	8*	4*	
Access Held Individual CO/IP	8#xx	8#xx	8#xx	4#xx	xx: 01~74
Access CO in First CO Group	9	9	9	1	
Attendant Call	0	0	0	0	
VM Message Wait Enabled	*8	*8	*8	*8	
VM Message Wait Cancel	*9	*9	*9	*9	
Door Open (1st Door)	#*1	#*1	#*1	#*1	
Door Open (2nd Door)	#*2	#*2	#*2	#*2	
Door Open (3rd Door)	#*3	#*3	#*3	#*3	
Door Open (4th Door)	#*4	#*4	#*4	#*4	
MCID Request	*0	*0	*0	*0	
Unsupervised conference time Extension code	##	##	* ##	*22	
PTT Group Login/Logout	#0	#0	#*0	*21	
ACD Agent primary login	581	* 581	581	581	
ACD Agent primary logout	582	* 582	582	582	
ACD Agent secondary login	583	* 583	583	583	
ACD Agent secondary logout	584	* 584	584	584	
Wrap-up end	585	* 585	585	585	
T-NET CM Login/out	586	* 586	586	586	
Enter Into Conf-Room	59	* 59	* 59	59	
Enter Into Conf-Group	68	* 68	* 68	68	
Station ICR	587	* 587	587	587	
Pick up Group Pick-Up	588	* 588	588	588	
Emergency Page	589	* 589	589	589	
Remote Mobile Extension Control	580	* 580	580	580	
ACD Agent ON/OFF Duty-All group	58*	* 58*	58*	58*	
SLT ACNR	58#	* 58#	58#	58#	
ACD Supervisor Ring Mode	570	* 570	570	570	
Company Directory Name	563	* 563	563	563	
ISDN Supplementary Hold	57*	*57*	57*	57*	
ISDN Supplementary Conf	57#	*57#	57#	57#	
Forced Channel Seize	56*	*56*	56*	56*	
Override DND/Forward	56#	*56#	56#	56#	
Cancel Call Back					
Transfer to VSF Number	55*	*55*	55*	55*	
CCR	#2	#2	#2	#2	
Room type Conf Group join	5*0	5*0	5*0	5*0	
Last Number Redial (LNR)	[REDIAL]	[REDIAL]	[REDIAL]	[REDIAL]	Keyset

Table B-5-1 UCP Basic Numbering Plan 1-4, Default Values

Feature	Basic Numbering Plan				
	1	2	3	4	Remark
Save Number Redial	[Save]	[Save]	[Save]	[Save]	Keyset
Station Speed Dial Access	[SPEED] + XXX	[SPEED] + XXX	[SPEED] + XXX	[SPEED] + XXX	XXX: 000~099
System Speed Dial Access	[SPEED] + XXXXX	[SPEED] + XXXXX	[SPEED] + XXXXX	[SPEED] + XXXXX	XXXXX: 20000~31999

Table B-5-2 UCP Basic Numbering Plan 5-9, Default Values

Feature	Basic Numbering Plan					
	5	6	7	8	9	Remark
Intercom Call	2000-4399	2100-4439	1000-3339	1000-3339	1000-3339	
Internal Page Zone	*101-*200	*301-*400	301- 400	*301- *400	*301- *400	
Internal All Call Page	#3	*543	43	*543	543	
Meet Me Page	##	*544	44	*544	544	
External Page Zone 1-2	#41- #42	*545 - *546	45- 46	*545 - *546	545-546	
External All Call Page	#5	*548	48	548	548	
All Call Page	#00	*549	49	*549	549	
SMDR Account Code Enter	50	*550	0	*550	550	SLT
Flash Command to CO Line	51	*551	51	*551	551	SLT
SLT Last Number Redial	52	*552	52	*552	552	SLT
DND (Toggle On/Off)	53	*553	53	*553	553	SLT
Call Forward	54	*554	54	*554	554	
Speed Dial Programming	55	*555	55	*555	555	SLT
Activate Message Wait/Callback	56	*556	56	*556	556	SLT
Message Wait/Callback Answer	57	*557	57	*557	557	SLT
SLT Speed Dial Access	58	*558	58	*558	558	SLT
DND/FWD cancel	59	*559	59	*559	559	SLT
SLT CO System Hold	690	*560	*10	*560	560	SLT
SLT Program Mode Access	691	*561	50	*561	561	SLT
Attendant Unavailable	692	*562	*12	*562	562	
AME Feature	694	*564	*36	*564	564	
Alarm Reset	695	*565	*13	*565	565	
Group Call Pickup	**	*566	*14	*566	**	
Universal Night Answer	697	*567	*15	*567	567	
Account Code with bin	698	*568	*16	*568	568	
Walking COS	699	*569	*17	*569	569	
ACD Agent On/Off Duty	671	*571	*20	*571	571	
ACD Supervisor Login	672	*572	*21	*572	572	
ACD Supervisor Logout	673	*573	*22	*573	573	
ACD Help Code	674	*574	*23	*574	574	
ACD Calls In Queue Display	675	*575	*24	*575	575	
ACD Supervisor Status	676	*576	*25	*576	576	

Table B-5-2 UCP Basic Numbering Plan 5-9, Default Values

Feature	Basic Numbering Plan					
	5	6	7	8	9	Remark
ACD Supervisor Monitor	677	*577	*26	*577	577	
ACD Reroute Queued Call Answer	678	*578	*27	*578	578	
ACD Reroute Queued Call NoAnswer	679	*579	*28	*579	579	
Camp-On Answer	621	*621	*629	*621	*621	SLT
Call Parking Locations	#601–#800	#601–#800	#601–#800	#601–#800	#601–#800	
Station Group Pilot Number	720 – 819	*401 - *500	#401-#500	*401 - *500	620-719	
Station User VSF Features Access	*66x	66x	67x	66x	*66	x: 1 ~ 3
Call Coverage Ring	*76	*76	*76	*76	76	
Direct Call Pickup	*77	*77	*77	*77	*77	
Access CO Group	89xxx	89xxx	89xxx	#89xxx	89	xxx: 000-201
Access Individual CO/IP Line	88xxx	88xxx	88xxx	#88xxx	88	xxx: 001~999
Access Held CO/IP	8*	8*	8*	#8*	8*	
Access Held Individual CO/IP	8#xxx	8#xxx	8#xxx	#8#xxx	8#	xxx: 001~999
Access CO in First CO Group	0	9	9	0	9	
Attendant Call	9	0	0	#9	0	
VM Message Wait Enabled	*8	*8	*8	*8	*8	
VM Message Wait Cancel	*9	*9	*9	*9	*9	
Door Open (1st Door)	#*1	#*1	*31	#*1	#*1	
Door Open (2nd Door)	#*2	#*2	*32	#*2	#*2	
Door Open (3rd Door)	#*3	#*3	*33	#*3		
Door Open (4th Door)	#*4	#*4	*34	#*4		
MCID Request	*0	*0	*35	*0	*0	(Except USA)
Unsupervised conference time Extension code	*##	##	*37	##	##	
PTT Group Login/Logout	#*0	#0	*38	#0	#0	
ACD Agent primary login	681	*581	*40	*581	581	
ACD Agent primary logout	682	*582	*41	*582	582	
ACD Agent secondary login	683	*583	*42	*583	583	
ACD Agent secondary logout	684	*584	*43	*584	584	
Wrap-up end	685	*585	*44	*585	585	
T-NET CM Login/out	686	*586	*45	*586	586	
Enter Into Conf-Room	*59	*59	*46	*59	59	
Enter Into Conf-Group	*68	*68	*47	*68	*68	
Station ICR	687	*587	*48	*587	587	
Pick up Group Pick-Up	688	588	*49	*588	588	

Table B-5-2 UCP Basic Numbering Plan 5-9, Default Values

Feature	Basic Numbering Plan					
	5	6	7	8	9	Remark
Emergency Page	689	*589	*50	*589	589	
Remote Mobile Extension Control	680	*580	**	#1	580	
ACD Agent ON/OFF Duty-All group	68*	*58*	*5#	*58*	58*	
SLT ACNR	68#	*58#	*51	*58#	58#	
ACD Supervisor Ring Mode	67*	*570	*52	*570	570	
Company Directory Name	*21	*563	*53	*563	563	
ISDN Supplementary Hold	*22	*57*	*54	*57*	57*	
ISDN Supplementary Conf	*23	*57#	*55	*57#	57#	
Forced Channel Seize	*24	*56*	*56	*56*	56*	
Override DND/Forward	*25	*56#	*57	*56#	56#	
Cancel Call Back						
Transfer to VSF Number	55*	*55*	*59	*55*	55*	
CCR	#2	#2*	#2	#2	#2	
Room type Conf Group join	5*0	5*0	5*0	5*0		
Last Number Redial (LNR)	[REDIAL]	[REDIAL]	[REDIAL]	[REDIAL]	[REDIAL]	Keyset
Save Number Redial	[Save]	[Save]	[Save]	[Save]	[Save]	Keyset
Station Speed Dial Access	[SPEED] + XXX	[SPEED] + XXX	[SPEED] + XXX	[SPEED] + XXX	[SPEED] + XXX	XXX: 000~099
System Speed Dial Access	[SPEED] + XXXXX	[SPEED] + XXXXX	[SPEED] + XXXXX	[SPEED] + XXXXX	[SPEED] + XXXXX	XXXXX: 20000~ 31999

3 Appendix C: Database Details & Default for Station Admin for eMG

The following Tables divided based on the Program group and Program, provide the default values assigned to all Admin entries. Before changing an entry during programming, ensure you understand the program and its purpose.

Table C-1 SYSTEM ID

BTN	SUB-MENU	DEFAULT	REMARK
PGM: 100 -System ID			
1	Country Code	1	Maximum 4 digits
2	Customer Site Name		Maximum 24 characters
3	My Area Code		Maximum 6 digits
4	Numbering Plan Type	1	Overall default Numbering Plan, the 1st station digit should be 1 – 4.
		2	The station number can be from 100~799.
		3	Australia Default
		4	New Zealand Default
		5	Italy Default
		6	Finland Default, Max Station Ports is 60. Stations above Max ports will be displayed “***”.
		7	Max Station Ports 70 Stations above Max ports will be displayed “***”.
		8	The station number can be from 100~ 999.
5	PREFIX Usage		
6	System ID reset		System reset

Table C-2 Numbering Plans

BTN	SUB-MENU	DEFAULT	REMARK
PGM: 102 -System IP Address Plan			
1	MPB Address	10.10.10.2	Public IP Address for H.323 calls
2	MPB Subnet mask	255.255.255.0	
3	Router IP Address	10.10.10.1	Router IP Address for WAN access
4	System start IP address	10.10.10.10	Private start address for the system to module & terminal communications
5	System end IP address	10.10.10.254	Private end address for the system to module & terminal communications
6	System Subnet mask	255.255.255.0	
7	Automatic IP Address Assignment	ON	
8	Second System IP Address	0.0.0.0	Second Private IP Address for modules
9	Second System Net Mask	255.255.255.0	Second Private Sub-net Mask for modules
10	Firewall IP Address	0.0.0.0	IP Address of firewall for an external network (WAN/IP) access

Table C-2 Numbering Plans

BTN	SUB-MENU	DEFAULT	REMARK
11	First Start Mac Address	00:00:00:00:00:00	First: Start MAC Address to register a device regardless of the 3rd dip switch
12	First End Mac Address	00:00:00:00:00:00	First: End MAC Address to register a device regardless of the 3rd dip switch
13	Second Start Mac Address	00:00:00:00:00:00	Second: Start MAC Address to register a device regardless of the 3rd dip switch
14	Second End Mac Address	00:00:00:00:00:00	Second: End MAC Address to register a device regardless of the 3rd dip switch
15	System IP Address plan Reset		Returns System IP Address Plan to default values.
16	Unused	0.0.0.0	
17	Unused	0.0.0.0	
18	MPB DNS IP Address	0.0.0.0	
19	MPB DHCP	OFF	
PGM: 103 Device IP Address Plan			
1	CO/IP Device IP Address	10.10.10.10~254 - OFF MCAST	Flex 1: Set IP Address Flex 2: Set Mac Address Flex 3: ARP Flex 4: Registration Flex 5: CPU Type Flex 6: Device ID (type)
2	Station IP Address	10.10.10.10~254 - OFF MCAST	Flex 1: Set IP Address Flex 2: Set Mac Address Flex 3: ARP Flex 4: Registration Flex 5: CPU Type Flex 6: Device ID (type)
3	MISU IP Address	10.10.10.10~254 - OFF MCAST	Flex 1: Set IP Address Flex 2: Set Mac Address Flex 3: ARP Flex 4: Registration Flex 5: CPU Type Flex 6: Device ID (type)
4	VMIB& VSF IP Address	10.10.10.10~254 - On On	Flex 1: Set IP Address Flex 2: Set Mac Address Flex 3: ARP Flex 4: Registration Flex 5: CPU Type Flex 6: Device ID (type)

Table C-2 Numbering Plans

BTN	SUB-MENU	DEFAULT	REMARK
5	MCIB_V IP Address	10.10.10.10~254 - OFF MCAST	Flex 1: Set IP Address Flex 2: Set Mac Address Flex 3: ARP Flex 4: Registration Flex 5: CPU Type Flex 6: Device ID (type)
6	Device IP Address Plan	System Reset	
7	WITB IP Address	10.10.10.10~254 - OFF MCAST	Flex 1: Set IP Address Flex 2: Set Mac Address Flex 3: ARP Flex 4: Registration Flex 5: CPU Type Flex 6: Device ID (type)
PGM: 104 - CO/IP Device Sequence Number			
	CO/IP Device Sequence Assignment	Next available	Sequence numbers are assigned to the maximum available for the system.
PGM: 105 - Flexible Station Number, Base 1			
	Flexible Station Number	1~140	Default Numbering Plan Country Code 1.
PGM: 106 -Flexible Numbering Plan part A, Base 1			
1	Internal Page Zone	301~335	
2	Internal All Call Page	543	
3	Meet Me Page	544	
4	External Page Zone 1	545	
5	Unused		
6	External All Call Page	548	
7	All Call Page (Internal & External)	549	
8	SMDR Account Code Enter	550	SLT
9	Flash Command to CO Line	551	SLT
10	Last Number Redial	552	SLT
11	DND (Toggle On/Off)	553	SLT
12	Call Forward	554	
13	Speed Dial Programming	555	SLT
14	Message Wait/Callback Enable	556	SLT
15	Message Wait/Callback Return	557	SLT
16	Speed Dial Access	558	SLT
17	Cancel DND/FWD/Pre-MSG	559	SLT
18	CO System Hold	560	SLT
19	Programming Mode Enter Code	561	SLT
20	Attendant Unavailable	562	
21	Alarm Reset	565	
22	Group Call Pickup	566	
23	Universal Night Answer	567	
24	Account Code	568	

Table C-2 Numbering Plans

BTN	SUB-MENU	DEFAULT	REMARK
PGM: 107 -Flexible Numbering Plan part B, Base 1			
1	Walking COS Code	569	
2	ACD Agent On/Off Duty	571	
3	ACD/UCD Supervisor Login	572	
4	ACD/UCD Supervisor Logout	573	
5	ACD/UCD Help Code	574	
6	ACD/UCD Calls In Queue Display	575	
7	ACD/UCD Supervisor Status Display	576	
8	ACD Supervisor Monitor	577	
9	ACD Reroute Queued Call w/ answer	578	
10	ACD Reroute Queued Call w/o answer	579	
11	Camp-On Answer	621	
12	Call Park Locations	#601~#619	
13	Group Pilot Number	401-440	
14	Station User VSF Features	*66	
15	Call Coverage Ring	76	
16	Direct Call Pickup	*77	
17	CO/IP Group Access	89	
18	Individual CO/IP Access	88	
19	Retrieve Last Held CO/IP	8*	
20	Retrieve Held Individual CO/IP	8#	
21	Access 1st available CO Line	9	
22	Attendant Call	0	
23	VM Message Waiting Enable	*8	
24	VM Message Waiting Cancel	*9	
PGM: 108 - Flexible Numbering Plan part C, Base 1			
1	1st Door Open	#*1	
2	2nd Door Open	#*2	
3	3rd Door Open	#*3	
4	4th Door Open	#*4	
PGM: 109 - Flexible Numbering Plan part D, Base 1			
1	MCID Request	*0	
2	Answering Machine Emulation	564	
3	Unsupervised conference extend code	##	
4	PTT Group login in-out code	#0	
5	ACD Agent Primary Login Code	581	
6	ACD Agent Primary Logout Code	582	
7	ACD Agent Secondary Login Code	583	
8	ACD Agent Secondary Logout Code	584	
9	ACD Wrap-up End	585	

Table C-2 Numbering Plans

BTN	SUB-MENU	DEFAULT	REMARK
10	TNET Login/out Code	586	
11	Enter Into Conf-Room	59	
12	Enter into Conf-Group	68	
13	Station ICR	587	
14	Pick Up Group Pick-up	588	
15	Emergency Page	589	
16	Remote MEX Control	580	
17	All Group Agent On/Off Duty	58*	
18	SLT ACNR Code	58#	
19	ACD Supervisor Ring Mode	570	
20	Company Directory Name	563	
21	ISDN SUPPLEMENT HOLD	57*	
22	ISDN SUPPLEMENT CONFERENCE	57#	
23	Forced Seize Busy Station/CO	56*	
24	Added Flexible Numbering Plan		
24-1	Override DND/Call forward	56#	
24-2	Cancel Call Back		
24-3	Transfer To VSF Announcement Number	55*	
24-4	CCR	#2	

Table C-3 STATION DATA

BTN	SUB-MENU	RANGE	DEFAULT	REMARK
PGM: 110 - Station Type				
1	Station Type	1-8		
2	DSS/DLS MAP	Station		
PGM: 111 -Station Attributes I				
1	Auto Speaker Selection	1: ON, 0: OFF	ON	
2	Call Forward	1: ON, 0: OFF	OFF	
3	DND	0: OFF, 1:ALL, 2:icm call only, 3:co call only	OFF	
4	Data Line Security	1: ON, 0: OFF	OFF	
5	Howler Tone	1: ON, 0: OFF	ON	
6	No Touch Answer	1: ON, 0: OFF	OFF	
7	Page Access	1: ON, 0: OFF	OFF	
8	Speaker/Headset Ring	S/H/BOTH	Speaker	SPKR: Speakerphone
9	Speakerphone/Headset	ON/OFF	Speaker	ON: Speakerphone
10	LCD Display LED	Ring/MWI	MWI	

Table C-3 STATION DATA

BTN	SUB-MENU	RANGE	DEFAULT	REMARK
11	Loop LCR Account	1: ON, 0: OFF	OFF	Station-based LOOP LCR authorization option
12	Call Coverage	1: ON, 0: OFF	OFF	
13	Call Coverage Delay Ring	0~9	0	
14	Off-net Forward Disable	0:ENA, 1:DIS	Enable	Off-net Forward Activation (Except USA version)
15	Forced ICM Mode Change	1:ON, 0:OFF	OFF	
16	Active PTT Group	0~9		
17	Station ICM Tenancy Group	1~15	1	
18	VMIU/VMIBBoard			Sequence Number
19	SIP User ID Table Index	000-140	000	Index to Station SIP Attributes Table (PGM 126, Web only)
20	Camp on Tone	1: ON, 0: OFF	ON	
21	Serial DSS	1: Disable 0: Enable	Enable	
22	ICM Dial Tone Source	0: dial tone 1: Int/Ext 1 2: Ext 2 3: VSF 4~8:SLT MOH1~5 9~37:VSF MOH2~30	dial tone	
23	ICM Ring Back Tone Source	0: ring back tone 1: Int/Ext 1 2: Ext 2 3: VSF 4~8:SLT MOH1~5 9~37:VSF MOH2~30	ring back tone	
24	UMS Attach Message	1: ON, 0: OFF	ON	
PGM: 112 - Station Attributes II				
1	CO Call Time Tone	1: ON, 0: OFF	OFF	
2	Automatic Hold	1: ON, 0: OFF	ATD: ON Others: OFF	
3	CO Call Time Restriction	1: ON, 0: OFF	OFF	
4	CO Line Access	EN/DIS	ENABLE	
5	CO/IP Line Queuing	EN/DIS	ENABLE	
6	CO PGM	EN/DIS	DISABLE	
7	Ringing Line Preference	EN/DIS	ENABLE	
8	Speed Dial Access	EN/DIS	ENABLE	
9	UCD Group Service	1: ON, 0: OFF	OFF	
10	Ring Group Service	1: ON, 0: OFF	OFF	
11	Two Way Record	1: ON, 0: OFF	OFF	

Table C-3 STATION DATA

BTN	SUB-MENU	RANGE	DEFAULT	REMARK
12	Message Speed Scroll	0-7	3	Scroll speed for Graphic LCD Key-set
13	Hot Desk Station	1:ON, 0:OFF	OFF	
14	Prefer CO/CO Group	CO Access Code Or CO Group Access Code	..	
15	Send SLT CLI	1:ON, 0:OFF	ON	Send CLI info to SLT/Soft/Wit phone.
16	ACD Member Priority	0 ~ 9	0	
17	ez Attendant Password	1: ON, 0: OFF	OFF	
18	Emergency CO	CO Access Code Or CO Group Access Code	Any CO	
19	Station Account code required	1: ON, 0: OFF	OFF	
20	Auto Call recording	1: ON, 0: OFF	OFF	
21	Call Recording Station	Station number		
22	Voice Mail Back-up	1: ON, 0: OFF	OFF	
23	VM Back-up Station	Station number		
24	VM Back-up Prompt	1: ON, 0: OFF	OFF	
PGM: 113 - Station Attributes III				
1	ADMIN	EN/DIS	ENABLE	
2	VSF Access	EN/DIS	ENABLE	
3	Group Listen	EN/DIS	DISABLE	
4	Override Privilege	EN/DIS	DISABLE	
5	SMDR Hidden Dialed Digits	EN/DIS	DISABLE	
6	Voice Over	EN/DIS	ENABLE	
7	Prime-Line	1: HOT, 0: WARM	WARM	
8	Alarm/Door Bell Attribute	EN/DIS	DISABLE	
9	DID Call Wait	1: ON, 0: OFF	ON	
10	Left Message Executive	1: ON, 0: OFF	ON	
11	E & MIC Headset	1: ON, 0: OFF	OFF	For new Soft-Key Key-set
12	En-block Mode	1: ON, 0: OFF	OFF	For new Soft-Key Key-set
13	VSF Message Retrieve	1: FIFO, 0: LIFO	FIFO	
14	VMID Number	Station number	STA #	For adjunct Voice Mail-box id
15	Auto ACD DND	dial-pad digit	0	0=no reason code
16	Fwd if OOS	1: ON, 0: OFF	OFF	
17	Backlight	0 ~2	busy	0: Off, 1: busy, 2: always on
18	VSF Mail Server IP address	0.0.0.0		
19	VSF Mail Address			Web Admin 132 to modify
20	Block Back Call	1: ON, 0: OFF	OFF	
21	By Pass DTMF	1: ON, 0: OFF	OFF	
22	Proctor Monitor	1: ON, 0: OFF	OFF	

Table C-3 STATION DATA

BTN	SUB-MENU	RANGE	DEFAULT	REMARK
23	VSF Mail Server ID			Web Admin
24	Added Station Attribute (2nd)			
24-1	VSF Mail Server P/W			Web Admin
24-2	Door Open	EN/DIS	ENABLE	
24-3	VSF MSG DD/TM	1: ON, 0: OFF	ON	
24-4	OGM DEST		NOT ASSIGNED	
24-5	VSF DEL MSG	1: ON, 0: OFF	OFF	
24-6	VM PWD CHECK	0: No password 1: PWD only 2: Station number and Password	Station number and password	
24-7	Barge In Mode	0: Disable 1: Monitor 2:Monitor&Join & Disconnect	Disable	
24-8	SLT Flash Mode	0: Transfer 1: Drop 2: Ignore 3: Hold Release	Transfer	
24-9	RLS Cost Display	1: ON, 0: OFF	OFF	
24-10	LDT Table Index	No. of LDT Table	1	
24-11	WEB Call Back	EN/DIS	DISABLE	
24-12	VSF SMTP Security	0-2	0	0 : NO Security 1 : SSL 2 : TLS
24-13	VSF SMTP Port	00001-65535	25	
24-14	VSF Sender Mail Address			Web Admin
24-15	Prepaid call	0: OFF 1: ON	OFF	
24-16	Prepaid money	000000 -999999	0	
24-17	Default VM number			
24-18	SKT mode	0: Default 1: Short 2: Long 3: Far	Default (0)	
24-19	Off-hook ring	0: BURST 1: MUTE 2: SYSTEM 3:SILENCE	Refer to System (2)	
24-20	SIP color ring			
24-21	Forced account code	0: OFF, 1: ON	OFF	
24-22	Flexible Bin PGM	0: OFF, 1: ON	ON	

Table C-3 STATION DATA

BTN	SUB-MENU	RANGE	DEFAULT	REMARK
24-23	Station Web level	LEVEL 1 ~ LEVEL 3	LEVEL 1	
24-24	Headset page	1: SPKR 2: HEADSET 3: Both	1: SPKR	
PGM: 114 - Station Attributes IV				
1	CLIP Display	1: ON, 0: OFF	OFF	
2	COLP Display	1: ON, 0: OFF	OFF	
3	Progress Indication	1: ON, 0: OFF	OFF	
4	CLIR Service	1: ON, 0: OFF	OFF	
5	COLR Service	1: ON, 0: OFF	OFF	
6	Station CLI 1	Max 12 digits	Station No	
7	3.1 kHz Audio	1: ON, 0: OFF	OFF	
8	CLI Name Display	1: ON, 0: OFF	OFF	
9	CLI/IP Redirect Display	1: Red, 0: CLI	CLI	
10	CLI Message Wait	1: ON, 0: OFF	OFF	
11	EXT OR ATD	1: ATD,0: EXT	EXT	
12	MSN Wait	1: ON, 0: OFF	OFF	
13	Unused			
14	DID Restriction	1: ON, 0: OFF	OFF	
15	DISA Restriction	1: ON, 0: OFF	OFF	
16	Unused			
17	Modem Enable	1: ON, 0: OFF	OFF	
18	FAST CLI For Transfer Call	1: ORI, 0: TRN	TRN	
19	Unused			
20	PICK UP By Flex Button	1: ON, 0: OFF	ON	
21	Multi-Language	Prompt 1 – 6	1	
22	Pre-Sel Msg DND	1: ON, 0: OFF	OFF	
23	Pre-Sel Msg Language	Prompt 1 – 6	1	
24	Added station attributes			
24-1	Station CLI 2	Max 16 Chars	Station No	
24-2	Station CLI 3	Max 16 Chars	Station No	
24-3	Station CLI 4	Max 16 Chars	Station No	
24-4	Station CLI 5	Max 16 Chars	Station No	
24-5	SLT CID type	(0:FSK/1:DTMF)	FSK	
24-6	Wakeup announcement	0-200	0	
24-7	Camp on enable	0: OFF 1: ON	ON	
24-8	Gain table	1–3	1	
24-9	Tone table	1–5	1	
24-10	Digit conversion table	eMG80/100: 1-15 eMG800: 1-32	0	
24-11	Video on calling	1: ON, 0: OFF	OFF	

Table C-3 STATION DATA

BTN	SUB-MENU	RANGE	DEFAULT	REMARK
24-12	E.164 CLI To	1: ON, 0: OFF	OFF	
24-13	Flexible page	1-3	3 page	
24-14	Align LCD	0-2	0	0: Not align, 1: Left, 2: Right
24-15	Two way recording	0-200	00	
24-16	LDT Zone	001-100	001	
24-17	ECM Fax (T38)	1: ON, 0: OFF	ON	
24-18	Display restrict	1: ON, 0: OFF	OFF	
24-19	Small popup use	1: ON, 0: OFF	OFF	
24-20	Large popup timer	0-5	0	
24-21	MWI LED	0-4	0	0:ALL MWI, 1:VM MWI 2: CLI MWI, 3: SMS MWI 4: ICM MWI
24-22	NFC Auth use	1: ON, 0: OFF	ON	
24-23	Short Modem	1: ON, 0: OFF	OFF	
PGM: 115 - Flexible Buttons Assignment				
01~24	Flexible Buttons Assignment	1: Empty Button		
		2: Station PGM Button		
		3: {Speed Dial xx}Button		
		4: Numbering Plan Button		
		5: Network DSS Number		
		6: MSN Number		
PGM: 116 - Station COS				
1	Station COS: Day Ring	1~11	1	
2	Station COS: Night Ring	1~11	1	
3	Station COS: Timed Ring	1~11	1	
PGM: 117 - CO Line/IP Channel Group Access				
	CO/IP Group	01~20	1	
PGM: 118 - Internal Page Zone Access				
	Internal Page Zone Access	001-024	Group 01	
PGM: 119 - PTT Group Access				
	PTT Page Zone	01~10		
PGM: 120 - Preset Call Forward				
	Preset Call Forward	1~8 + destination	-	1: Unconditional Forward 2: Internal Busy Forward 3: Internal No Answer Forward 4: External Busy Forward 5: External No Answer Forward 6: Voice Mailbox 7: Internal DND 8: External DND

Table C-3 STATION DATA

BTN	SUB-MENU	RANGE	DEFAULT	REMARK
PGM: 121 - Idle Line Selection				
	Type	1~7	-	1: Flex Button 2: CO Line 3: CO Group 4: Station Number 5: Hunt Group 6: Station Speed 7: System Speed
PGM: 122 – Station IP Attributes				
1	Direct IP Call	EN/DIS	ENABLE	
PGM: 123 - Station Timers				
1	Station Fwd No-Answer Timer	000~600	000	1 second increments
2	Cur off timer	00~99	00	1 minute increments
PGM: 124 - Linked Pair Station Attributes				
1	Set IP Address	xxx.xxx.xxx.xxx		
2	Router IP Address	xxx.xxx.xxx.xxx		
3	Set Mac Address	xx:xx:xx:xx:xx:xx		
PGM: 125 - ICM Tenant Group				
1	Group Attendant	Station No.		
2	Group Access	Group 01~15	Group 01	
PGM: 127 – Station VM Attributes				
1	VM COS	1-5	1	
2	Administrator Mail Box	EN/DIS	DISABLE	
3	Announce Only Mail Box	EN/DIS	DISABLE	
4	Announce Only Option	Previous Menu Hang Up	Previous Menu	
5	Company Directory–First Name			
6	Company Directory–Last Name			
7	Cascade Mail Box			
8	Cascade Type	1: ON, 0: OFF	OFF	
9	Message Rewind/Fast Forward Time	3-99(SEC)	4	
10	Notify Retry count	00-99	3	
11	Notify Dial time	00-99	5	
PGM: 128 – Station CCR Table				
1-10	Station CCR	1-14		
11	CCR table usage	1: ON, 0: OFF	OFF	
12	CCR One Digit	1: ON, 0: OFF	OFF	
13	* Button Used As	0-3	0	
14	# Button Used As	0-3	0	
PGM: 129 - DSS Label Edit				
	LSS Label	LSS index + button		Max 16 char.

Table C-4 BOARD DATA

BTN	SUB-MENU	RANGE	DEFAULT	REMARK
PGM: 130 - H.323 VoIP Attributes				
1	H.323 Setup Mode	0~1	Fast	0: Fast/1: Normal
2	H.323 Tunneling Mode	1: ON, 0: OFF	ON	0:Off/1:On
3	H.323 DTMF Path	0~1	0: In-band	1:Out/0:In
4	H.323 DiffServ Pre tagging	00~63	4	
5	RAS Usage	1: ON, 0: OFF	OFF	
6	RAS Multi-cast IP Address	IP address	224.0.1.41	
7	RAS Multi-cast IP port	Port number	1718	
8	RAS Uni-cast IP Address	IP address	82.134.80.2	
9	RAS Uni-cast IP port	Port number	1719	
10	RAS Keep-alive Timer	001 ~ 999	120	1 second increments
11	RAS Numbering Plan prefix	24 digits		
12	RAS Gateway Id	128 characters		Web Admin only
13	RAS Light RRQ	1: ON, 0: OFF	OFF	
14	TCP Keep Alive	1: ON, 0: OFF	ON	
15	Failover Usage	1: ON, 0: OFF	OFF	
16	Failover Time	03-10 (Sec.)	5	
17	Failover Group	01-21		
18	Q931 START PORT	00001-65535	2048	
19	Q931 END PORT	00001-65535	2559	
20	H245 START PORT	00001-65535	2560	
21	H245 END PORT	00001-65535	3071	
22	RAS START PORT	00001-65535	2048	
23	RAS END PORT	00001-65535	3071	
24	H.323 VoIP Attributes			
24-1	MEDIA START PORT	00001-65535	6000	
24-2	MEDIA END PORT	00001-65535	7036	
24-3	DATA START PORT	00001-65535	8500	
24-4	DATA END PORT	00001-65535	8548	
PGM: 131 -T1/E1/PRI Attributes				
1	T1 Setup Mode	0~1	D4	0:D4/1:ESF
2	T1 Line Mode	0~1	B8ZS	0: B8ZS/1:AMI
3	PRI Line Mode	0~1	TE	0:NT/1:TE
4	PRI/E1 CRC Check	1: ON, 0: OFF	OFF	
5	E1 R2 DSP Check	1: ON, 0: OFF	OFF	
6	DCO PX Type	1: S1240 2: TDX1B 3: STANDARD 4: CONGES_DIS	STANDARD	
PGM: 132 - Board Base Attributes				
1	Router IP address	IP Address		
2	Device CODEC Type	0-4	4	0: G.711,

Table C-4 BOARD DATA

BTN	SUB-MENU	RANGE	DEFAULT	REMARK
				1: G.723.1, 2: G.729, 3: G.722 4: System Codec refer to PGM 161-button 9.
3	Firewall IP address	IP Address		
4	RTP Security	1: ON, 0: OFF	ON	
5	TNET Enable	1: ON, 0: OFF	OFF	
6	UMS Sender e-mail address	40 Characters		Web-only to modify
7	T38 Enable	1: ON, 0: OFF	OFF	
8	USE Board IP for SIP	1: ON, 0: OFF	OFF	
9	RTP firewall IP	IP address		
10	T38 Port Usage	0: DIFF WITH VOICE 1: SAME AS VOICE 2:TRIGGERING	0	
11	RFC2833 Payload	000-127	0	
12	RFC2833 Volume	00-36	0	-dB
13	RFC2833 Redundancy	1-8	0	

Table C-5 CO LINE DATA

BTN	SUB-MENU	RANGE	DEFAULT	REMARK
PGM: 140 - CO Service Attributes				
	CO Service Type	Flex 1~4	1 (Normal)	1: Normal CO line, 2: DID, 3: TIE Line,4: Unused
PGM: 141 - CO/IP Line Attributes I				
1	CO/IP Group Assignment	01-20		
2	CO Line COS	1~5	1	
3	CO Start Signal	1: Ground, 0: Loop	Loop	
4	CO Line Type	1: PBX, 0: CO	CO	
5	CO Line Signal Type	1: DTMF, 0: Pulse	DTMF	
6	Flash Type	1: Ground, 0: Loop	Loop	
7	Universal Night Answer	1: ON, 0: OFF	OFF	
8	CO/IP Group Auth	1: ON, 0: OFF	OFF	
9	Data Station No	4 digits		FAX/Modem can be assigned to STA
10	Tenancy Group	00~ 15	00	
11	CO VoIP Mode	1 ~ 6	Common	1: Common, 2: H.323 only, 3: SIP only, 4: RTP RLY, 5: H.323/TRP RLY, 6: SIP/RTP RLY

Table C-5 CO LINE DATA

BTN	SUB-MENU	RANGE	DEFAULT	REMARK
12	PROCTOR ON/OFF	1: ON, 0: OFF	OFF	
13	WAIT IF VSF BUSY	1: ON, 0: OFF	ON	
14	Unused			
15	Unused			
16	COL RING TONE	1-12	0	0 is Not Available
17	Unused			
18	Gain table index	1-3	1	
19	Tone table index	1-5	1	
20	Digit conversion table index	01-15	01	
PGM: 142 - CO/IP Line Attributes II				
1	CO Line Name Display	1: ON, 0: OFF	OFF	
2	CO Line Name Assign	12 characters	-	Max 12 character, alpha entry
3	Metering Unit	0~6	0	
4	Line Drop using CPT	1: ON, 0: OFF	OFF	Not Supported
5	DISA Authorization Code	1: ON, 0: OFF	ON	
6	CO Line MOH	0~37	1	0: Refer to System hold, 1: INT Music, 2: EXT music, 3: VSF MOH, 4~8: SLT MOH1~5, 9~37: VSF MOH2~30
7	CO Dial Tone	1: ON, 0: OFF	ON	
8	CO Ring Back Tone	1: ON, 0: OFF	OFF	
9	CO Error Tone	1: ON, 0: OFF	OFF	
10	CO Busy Tone	1: ON, 0: OFF	OFF	
11	DISA CO Access	1: ON, 0: OFF	OFF	
12	CO Flash Timer	000~300	050	10 msec. Increments
13	Open Loop Detect Timer	00~20	04	100 msec. Increments
14	ICLID Detect Timer	00~20	00	1 sec. Increments
15	SMS OUTGOING	0:Disable 1:Enable	Disable	
16	SMS RCV STATION			
17	CO Line Dial Tone Source	0: dial tone 1: INT Music, 2: EXT music, 3: VSF MOH, 4~8: SLT MOH1~5, 9~37: VSF MOH2~30	dial tone	
18	CO Line Ring Back Tone Source	0: ring back tone 1: INT Music, 2: EXT music, 3: VSF MOH, 4~8: SLT MOH1~5, 9~37: VSF MOH2~30	ring back tone	

Table C-5 CO LINE DATA

BTN	SUB-MENU	RANGE	DEFAULT	REMARK
19	REJECT ANONYMOUS	1: ON / 0:OFF	OFF	
20	PREFIX TABLE ID	0-6	0	If prefix table ID is set to 0, then prefix dialing call cannot be applied. If prefix table ID is set to (1-6), then prefix dialing call can be applied with PREFIX DIALING TABLE(PGM 206)
21	Cut Off Timer	00-99	00	Co base call cut-off timer can be set at this field.
22	DISA Delay Timer	0-9	0	
23	LDT Table Index	1-10	1	
24	DISA Answer Timer	0-9	0	
PGM: 143 - ISDN Line Attributes				
1	COLP Table Index		None	
2	CLIP Table Index		None	
3	EN-BLOC Sending	1: ON, 0: OFF	ON	
4	Type Of Number	0~4	International	0: Unknown 1: International 2: National 3: Unused 4: Subscriber
5	DID Remove digit count	00~99	00	Received digits deleted from left
6	TEI Type	1: Auto, 0: Fixed	Auto	
7	ISDN-SS CD/CR	1: ON, 0: OFF	Disable	0: Disable, 1: Deflect, 3: Reroute (Except USA version)
8	ISDN One-Digit Remove	1: ON, 0: OFF	OFF	(For Italy)
9	Advice of Charge Type	0~5	0	0: None 1: Italy/Spain 2: Finland 3: Australia 4: Belgium 5: ETSI Standard
10	ISDN Line Type	1: μ-Law, 0: A-Law	μ-Law	
11	Calling Sub-address	1: ON, 0: OFF	OFF	
12	Incoming Prefix Code Insertion	1: ON, 0: OFF	OFF	
13	Outgoing Prefix Code Insertion	1: ON, 0: OFF	ON	
14	International Access Code	Max 4 digit		
15	My Area Code	Max 6 Digits		
16	My Area Prefix Code	Max 4 Digits		
17	CLI Transit Code	1: ORI 0: CFW	CFW	

Table C-5 CO LINE DATA

BTN	SUB-MENU	RANGE	DEFAULT	REMARK
18	Preserve Name for DID calls	1: ON, 0: OFF	OFF	
19	ISDN Redirecting number	No SVC / ORI/CFW	No SVC	
20	Choice Incoming CLI	Transit Point CLI / Original CLI	Transit Point CLI	
21	Calling Party Numbering Plan	0-6	1	0: Unknown. 1: ISDN / Telephony. 2: Data / Numbering. 3: Telex. 4: National Standard. 5: Private. 6: Reserved.
22	Called Party Numbering Plan	0-6	0	0: Unknown. 1: ISDN / Telephony. 2: Data / Numbering. 3: Telex. 4: National Standard. 5: Private. 6: Reserved.
23	Screening Indicator	0-3	0	0: User Provided, No Service. 1: User Provided, Pass. 2: User Provided, Fail. 3: Network Provided.
24	Added CO line attributes			
24-1	Station CLI Type	Station CLI 1-5	Station CLI 1	
24-2	ISDN PLUS Code	Max 4 digits	-	
24-3	CP/ALERT INBAND	1: ON, 0: OFF	OFF	
24-4	Disconnect INBAND	1: ON, 0: OFF	OFF	
24-5	Bursting to Caller	1: ON, 0: OFF	OFF	
PGM: 144 - CO Ring Assignment				
1	Day	Station/Group		Dial 1: Station + Delay (0~9 ring cycles) Dial 2: Hunt group Dial 3: VSF announcement (01~70) Dial 4: AA Ring delay Time (00~30 sec.)
2	Night	Station/Group		
3	Timed Ring	Station/Group		
PGM: 145 - DID Service Attributes				
1	DID Signal	1: Immediate 2: Wink 3: Delayed Dial	Wink	

Table C-5 CO LINE DATA

BTN	SUB-MENU	RANGE	DEFAULT	REMARK
2	DID conversion Type	0-2	1	0: DID Data Conversion(PGM230) 1: call to the valid extension. 2: convert with Flex DID Table (PGM231)
3	DID Digit Receive Number	2-4	3	
4	DID Digit Mask	4 digits	#***	
PGM: 146 - DISA Service Attributes				
	DISA (Day/Night/Timed Ring)	Flex 1: Day Flex 2: Night Flex 3: Timed		Enter VMIB/VMIU Announcement number.
PGM: 147 - CO Preset Forward Attributes				
1	CO Preset Forward Timer	00~99	00	1 second increments
2	ICLID Ring Table Index	001~250	None	
3	VMID Number	0000~9999	None	
PGM: 148 – CO Additional Attribute				
1	CID type	0: Disabled 1: FSK 2: DTAS FSK 3: DTMF 4: Russian CID	FSK	
2	RCID detect	0: LOCAL 1: ALL	ALL	
3	RCID request	0: USER 1: AUTO	AUTO	
4	RCID request first delay timer	10-150(10msec)	20	
5	RCID no answer timer	1-300(sec)	20	
6	RCID digit number	4-10	7	
7	RCID request count	1-3	1	
8	RCID request retry delay timer	10-30(10msec)	10	
9	COLLECT CALL BLOCKING	0: Disabled 1: Double Answer 2: With Indication	Disabled	
10	COLLECT CALL ANSWER TIMER	1-250	10	
11	COLLECT CALL IDLE TIMER	1-250	20	
12	Analog line monitoring	ON/OFF	ON	
13	Ring detection register	000-255	000	
PGM: 150 - NA ISDN Line Attributes				
1	Local Exchange Type	1~4	NI 1	1: NI 1 2: NI 2 3: 5 ESS 4: NORTEL

Table C-5 CO LINE DATA

BTN	SUB-MENU	RANGE	DEFAULT	REMARK
2	SPID Number	9~23 digits		
3	Directory Number	23 digits		
4	EKTS Mode	1:EKTS /0:NONE	NONE	
5	Type for 1/2/3	0~5	0	0: Unknown 1: International 2: National 3: Network 4: Subscriber 5: Abbreviated
6	Type for 4/5/6	0~5	0	0: Unknown 1: International 2: National 3: Network 4: Subscriber 5: Abbreviated
7	Type for 7/8/9	0~5	0	0: Unknown 1: International 2: National 3: Network 4: Subscriber 5: Abbreviated
8	Type for 10/11	0~5	0	0: Unknown 1: International 2: National 3: Network 4: Subscriber 5: Abbreviated
5	Type for 1/2/3	0~5	0	0: Unknown 1: International 2: National 3: Network 4: Subscriber 5: Abbreviated
PGM: 151 - ISDN CO Line Attributes				
1	T200	1~5 (Sec.)	1	
2	T201	1~5 (Sec.)	1	
3	T202	1~5 (Sec.)	2	
4	T203	5~15 (Sec.)	10	
5	T204	5~15 (Sec.)	10	
6	T302	10~30 (Sec.)	15	
7	T303	1~10 (Sec.)	4	
8	T305	10~60 (Sec.)	30	
9	T308	1~10 (Sec.)	4	

Table C-5 CO LINE DATA

BTN	SUB-MENU	RANGE	DEFAULT	REMARK
10	T309	1~100 (Sec.)	90	
11	T310	10~60 (Sec.)	40	
12	N200	1%	3	
13	N201	250~300 (bytes)	260	
14	N202	1~5	3	
15	N204	1~5	1	
16	K_Valule	1~5	1	
PGM: 152 - T1 Line Timers Attributes				
1	Pause Time	1~9	2	1 sec increments
2	Release Guard Time	01~60	20	100 msec increments
3	Dial-Tone Delay Time	02~50	10	100 msec increments
4	Inter-Digit Time	15~30	15	20 msec increments
5	Wink Time	07~15	10	20 msec increments
6	Pulse Rate	0~3	0	0 : 60-40(10pps) 1 : 66-33(10pps) 2 : 60-40(20pps) 3 : 66-33(20pps)
7	Seize DTC Time	0~127	3	20 msec increments
8	Release Time	0~127	7	20 msec increments
9	Address Signaling Type	1:DTMF, 0:Pulse	DTMF	
10	Ring Start Time	2~9	2	100 msec increments
11	Ring Stop Time	10~60	60	100 msec increments
12	Collect Digit	1~6	3	
13	Digit Store Time	01~15	15	1 sec increments
PGM: 153 - DCOB CO Line Attributes				
1	Line Status	1~9	6	
2	DNIS Service	1: ON, 0: OFF	OFF	
3	Number of CLI Digits	01-15	10	
4	DCOB Type	0-2	2	
5	Call Category	1-9	1	
6	DID Digit number	00~32	0	

Table C-6 SYSTEM DATA

BTN	SUB-MENU	RANGE	DEFAULT	REMARK
PGM: 160 - System Attributes I				
1	Attendant Call Queuing Ring-Back Tone	1: RBT, 0: MOH	MOH	
2	Camp-on, MOH/Ring-Back Tone	1: RBT, 0: MOH	MOH	
3	CO Dial-Tone Detect	1: ON, 0: OFF	OFF	
4	CO Line Choice	0 ~ 2	Last	0: Round Robin,1: Last Used, 2: First

Table C-6 SYSTEM DATA

BTN	SUB-MENU	RANGE	DEFAULT	REMARK
5	DISA Retry Counter	1~9	3	
6	External Night Ring	1: ON, 0: OFF	OFF	
7	Hold Preference	1: Sys, 0: Excl	System	System/Exclusive Hold
8	Print LCR Converted Digit	1: LCR, 0: User	LCR	
9	Attendant Call Queue Available	1: ON, 0: OFF	OFF	
10	All Attendant PGM ‘0’ Access	1: ON, 0: OFF	OFF	(Except USA version)
11	Off-Net Prompt Usage	1: ON, 0: OFF	OFF	(Except USA version)
12	Unsupervised Conf Timer Extension	1: ON, 0: OFF	OFF	
13	ACD Information Print	1: ON, 0: OFF	OFF	
14	Call Log List Number	15 ~ 50	15	
15	Off-net DTMF Tone	1: ON, 0: OFF	ON	
16	Authorization Retry Counter	1 ~ 9	3	
17	Conference Room Telephone number	8 digits		
18	MPB DIFFSERV	00-63	04	
19	UPGRADE MODE	1: FTP, 0: TFTP	FTP	
20	TRANSFER TONE	1: RBT, 0: MOH	RBT	
21	CONF WARN TONE	1: ON, 0: OFF	ON	
22	TLS for WEB	1: ON, 0: OFF	OFF	
23	DUMMY DIAL TONE	1: ON, 0: OFF	OFF	
24	ADDED ATTR		ADDED ATTR	
24-1	SIP STA MODE	0: RTD, 1: PTP	RTD	
24-2	SYS AUTH END CODE	0: OFF, 1: ON	OFF	
24-3	STN VM FEATURE USAGE	0: OFF, 1: ON	ON	
24-4	Remote VM access	0: OFF, 1: ON	ON	
24-5	Transfer Tone usage	0: OFF, 1: ON	OFF	
24-6	LCR Dial tone detect	0: OFF, 1: ON	OFF	
24-7	ICM Call log	0: OFF, 1: ON	OFF	
24-8	ATD password usage	0: OFF, 1: ON	OFF	
24-9	Pickup STA name usage	0: OFF, 1: ON	OFF	
24-10	Display LCR mode	0: OFF, 1: ON	ON	
24-11	Easy 5 wake up usage	0: OFF, 1: ON	OFF	
24-12	WEB login usage	0: OFF, 1: ON	OFF	
24-13	VM MEX notify over LCO	0: DISABLE 1: ENABLE	DISABLE	
24-14	Modem ASC CO line	00-74	0	
24-15	Meet me soft display	0: OFF, 1: ON	ON	
24-16	Device information request interval time	015-255	015	
24-17	Number of CLI Waitlist	000-255	000	

Table C-6 SYSTEM DATA

BTN	SUB-MENU	RANGE	DEFAULT	REMARK
PGM: 161 - System Attributes II				
1	Off-Hook Ring Signal Type	1: Mute, 0: Burst	Mute	
2	Page Warning Tone	1: ON, 0: OFF	ON	
3	Privacy	1: ON, 0: OFF	ON	
4	Privacy Warning Tone	1: ON, 0: OFF	ON	
5	ACD PRNT Enable	1: ON, 0: OFF	OFF	
6	ACD PRNT Timer	001~255	10	10 second increments
7	ACD Clear after PRNT	1: ON, 0: OFF	OFF	
8	Override 1st CO Group	1: ON, 0: OFF	ON	
9	Base Codec Type	0-3	G711	0: G711, 1: G.723.1, 2: G.729, 3: G.722
10	G.711 Packetization	10/20/30	20	1 msec increments
11	G.723 Packetization	30/60	30	1 msec increments
12	Network Time/Date	0: DISABLE 1: ISDN CLOCK 2: NTP	DISABLE	(USA version do not support ISDN CLOCK)
13	Incoming Call Toll Check	1: ON, 0: OFF	ON	
14	Web Server TCP port	00001~65535	00080	
15	Web Password Security	1: ON, 0: OFF	OFF	
16	Old Auth. Code Usage	1: ON, 0: OFF	ON	
17	COS 7 on Auth code entry failure	1: ON, 0: OFF	OFF	
18	Unified Message Format	1: ON, 0: OFF	OFF	
19	Record Warning Tone	1: ON, 0: OFF	ON	
20	Unused			
21	Unused			
22	SMS CENTER NUMBER	23 digits		
23	SMS PROTOCOL	0 ~ 8	NONE	0: No PSTN SMS support, 1: ETSI-P1 2: ETSI-P2 3: KT-LivingNet 4: SIP-Text, 5: SIP-XML 6: KT-IP-PBX 7: SKN-IP-PBX 8: KT XML
24	ADDED ATTR			
24-1	G.722 PACKETIZATION(1ms)	10/20/30 msec	20	
24-2	Unused			
24-3	SMS CENTER CLI	23 digits		
24-4	TRANSIT-OUT SECURITY	1: ON, 0: OFF	ON	
24-5	EMR CALL ATD NOTIFY	1: ON, 0: OFF	ON	

Table C-6 SYSTEM DATA

BTN	SUB-MENU	RANGE	DEFAULT	REMARK
24-6	Unused			
24-7	FIRST DIGIT * IN SPD	0: DISPLAY SECURITY 1: DIGIT *	DISPLAY SECURITY	
24-8	Strong password	1: ON, 0: OFF	ON	
24-9	VSF/VMIB SMTP PORT	0 – 65535	25	
24-10	ICM BUSY SVC	1: OHVO, 0: INTR	OHVO	
24-11	AUTO SAVE NEW MSG	1: ON, 0: OFF	OFF	
24-12	IGMP QUERY USAGE	1: ON, 0: OFF	OFF	
24-13	IGMP INTV_TMR(1sec)	0~3600 (Sec.)	180	
24-14	IGMP QUERY ALL HOSTS	1: ON, 0: OFF	ON	
24-15	IGMP QUERY GENERIC	1: ON, 0: OFF	OFF	
24-16	RING-GROUP INDICATION	1: ON, 0: OFF	OFF	
24-17	RESTRICT * AND #	1: ON, 0: OFF	OFF	
24-18	RESTRICT ANS DGT DISP	1: ON, 0: OFF	ON	
24-19	IP BIND USAGE	1: ON, 0: OFF	OFF	
24-20	ACD MAILSEND WEEKLY SET	0-7	0	
24-21	ACD MAILSEND DAILY SET	00-23		
24-22	ACD DEL AFTER MAILSEND	1: ON, 0: OFF	OFF	
24-23	NEW 5 WAKE UP USAGE	1: ON, 0: OFF	OFF	
24-24	ACD GROUP INDICATION	0: OFF, 1: ON RING, 2: ON LED	OFF	
PGM: 162 - System Password				
1	Admin Password	Max 12 digits	-	
2	Maintenance Password	Max 12 digits	-	
PGM: 163 - Alarm Attributes				
1	Alarm Enable	1: ON, 0: OFF	OFF	
2	Alarm Contact Type	1: Close, 0: Open	Close	
3	Alarm/Door Bell Mode	1: Alarm, 0: Door-Bell	Alarm	
4	Alarm Signal Mode	1: Repeat, 0: Once	Repeat	
5	Emergency call notification	0: OFF 1: ON	ON	
6	DCOB Fault notification	0: OFF 1: ON	ON	
7	SIP registration fault notification	0: OFF 1: ON	ON	
PGM: 164 - Attendant Assignment				

Table C-6 SYSTEM DATA

BTN	SUB-MENU	RANGE	DEFAULT	REMARK
1	Attendant Assignment	Station	1: 100 (1000)	Button 1 : System Attendant Button 2: Main Attendants
PGM: 165 - Multicast RTP / RTCP				
1	Multicast RTP	Flex 1 – 61	8100-8220	Max 4 digit
2	Multicast RTCP	Flex 1 – 61	8101 - 8221	Max 4 digit
PGM: 166 - DISA COS				
1	Day mode COS	1~11	1	
2	Night mode COS	1~11	1	
3	Timed mode COS	1~11	1	
PGM: 167 - DID/DISA Destination				
1	Busy Destination	Flex 1~4	Flex 1(Tone)	F1: Tone, F2: Attendant, F3: Hunt, F4: Announce
2	Error Destination	Flex 1~4	Flex 1(Tone)	F1: Tone, F2: Attendant, F3: Hunt, F4: Announce
3	No Answer Destination	Flex 1~4	Flex 1(Tone)	F1: Tone, F2: Attendant, F3: Hunt, F4: Announce
4	VSF Prompts usage	Flex 1~5	Flex 1~5: ON	1: ON, 0: OFF
5	Reroute Busy Destination	Flex 1~3	Flex 1(Tone)	F1: Tone, F2: Attendant, F3: Hunt
6	Reroute Error Destination	Flex 1~3	Flex 1(Tone)	F1: Tone, F2: Attendant, F3: Hunt
7	Reroute No Answer Destination	Flex 1~3	Flex 1(Tone)	F1: Tone, F2: Attendant, F3: Hunt
8	DND Destination	Flex 1~3	Flex 1(Tone)	F1: Tone, F2: Attendant, F3: Hunt
9	Reroute Net CO busy Destination	Flex 1~3	Flex 1(Tone)	F1: Tone, F2: Attendant, F3: Hunt
PGM: 168 - External Control Contacts				
1	First Contact	1~3	-	1: LBC, 2: Door, 3: Ext. 1,
2	Second Contact	1~3	-	1: LBC, 2: Door, 3: Ext. 1,
PGM: 169 - LCD Date/Time & Language Mode				
1	Date Display Mode	1: MMDDYY 0: DDMMYY	MMDDYY	
2	Time Display Mode	1: 12H, 0: 24H	12H	
3	Language Display Mode	00~17	00 (Eng)	
4	Weekday Display Mode	0~2	0	0: PGM 169 BTN 1 1: MM/DD WDY 2: MM DD WDY
PGM: 170 - Flexible Button LED Flashing Rate				
1	CO Incoming Ring Flashing Rate	00~14	FLASH 30 IPM (2)	
2	CO Transfer Ring Flashing Rate	00~14	FLASH120 IPM(10)	

Table C-6 SYSTEM DATA

BTN	SUB-MENU	RANGE	DEFAULT	REMARK
3	CO Queue Ring Flashing Rate	00~14	FLASH240 IPMFLUTTER(6)	
4	CO Recall Ring Flashing Rate	00~14	FLASH480 IPMFLUTTER(8)	
5	CO I Hold Flashing Rate	00~14	FLASH 30 IPM WINK(12)	
6	CO System Hold Flashing Rate	00~14	FLASH 60 IPM (3)	
7	CO Exclusive Hold Flashing Rate	00~14	FLASH120 IPM(10)	
8	CO Out-going disabled Flashing Rate	00~14	FLASH240 IPMFLUTTER(6)	
9	CO incoming call off-net forward Flashing Rate	00~14	FLASH240 IPMFLUTTER(6)	
10	CO DISA Indication Flashing Rate	00~14	FLASH240 IPM(5)	
11	CO supplementary call waiting Flashing Rate	00~14	FLASH240 IPMFLUTTER(6)	
12	CO Supplementary Hold Flashing Rate	00~14	FLASH480 IPM(7)	
13	DSS button Flashing Rate for CO Ring	00~14	FLASH 30 IPM (2)	
14	DSS button Flashing Rate for ICM all Call	00~14	FLASH 60 IPM (3)	
15	DSS button Flashing Rate for ICM Ring associate	00~14	FLASH120 IPM(10)	
16	DSS button Flashing Rate for a station in DND	00~14	FLASH 60 IPM (3)	
17	DSS button Flashing Rate for a station in Lock-out	00~14	FLASH480 IPMFLUTTER(8)	
18	DSS button Flashing Rate for a station in pre-selected message mode	00~14	FLASH 30 IPM (2)	
19	DSS button Flashing Rate for a station in ICM Hold	00~14	FLASH 60 IPM (3)	
20	DSS button Flashing Rate for a station in other cases	00~14	FLASH120 IPM(10)	
21	CIQ #1 Threshold	00~14	FLASH 60 IPM (3)	
22	CIQ #2 Threshold	00~14	FLASH120 IPM(10)	
23	CIQ #3 Threshold	00~14	FLASH240 IPM(5)	
24	ACD DND button	00~14	FLASH120 IPM(10)	
25	ACD Warning tone	00~14	FLASH120 IPM(10)	

Table C-6 SYSTEM DATA

BTN	SUB-MENU	RANGE	DEFAULT	REMARK
26	ACD Help Button	00~14	FLASH120 IPM(10)	
27	Voice Record button	00~14	FLASH240 IPM(5)	
28	Message Wait button	00~14	FLASH 30 IPM (2)	
29	DSS Out-of-service state	00~14	FLASHOFF (00)	
30	On-demand Ring mode	00~14	FLASH 60 IPM (3)	
31	Night Ring mode	00~14	FLASHSTEADY(01)	
32	Timed Ring mode	00~14	FLASH240 IPM(5)	
33	Auto Ring mode	00~14	FLASH480 IPM(7)	
34	Page Hold Button	00~14	FLASH 60 IPM (3)	
35	DSS Off duty	00~14	FLASH 120IPM (10)	
PGM: 171 - Music Source				
1	BGM Type	0~37	1	00: No BGM 01: INT Music 02: EXT Music 03: VSF MOH 04~08: SLT MOH1~5 09~37: VSF MOH2~30
2	MOH Type	0~37	1	00: Hold tone 01: INT Music 02: EXT Music 03: VSF MOH 04~08: SLT MOH1~5 09~37: VSF MOH2~30
3	Int/Ext1 Music	00~12	Romance	00: ROMANCE 01: TURKISH MARCH 02: GREEN SLEEVE 03: FUR ELISE 04: CARMEN 05: WALTZ 06: PAVANE 07: SICHILIANO 08: SONATA 09: SPRING 10: CAMPANELLA 11: BADINERIE 12: BLUE DANUBE

Table C-6 SYSTEM DATA

BTN	SUB-MENU	RANGE	DEFAULT	REMARK
4	SLT MOH	F1: SLTMOH1 F2: SLTMOH2 F3: SLTMOH3 F4: SLTMOH4 F5: SLTMOH5		
5	VSF MOH 2	01-70	N/A	
6	VSF MOH 3	01-70	N/A	
7~33	VSF MOH 4~30	01-70	N/A	
PGM: 172 - PBX Access Codes				
1 –4	PBX Access Code	Max 2 digits	-	Maximum 4 PBX access code
PGM: 173 - Ringing Line Preference Priority				
1	Transfer CO Call	1~4	1	
2	Recalling CO Call	1~4	2	
3	Incoming CO Call	1~4	3	
4	Queued CO Call	1~4	4	
PGM: 174 - RS-232 Port Settings				
1	Baud Rate	1~6	115200	1: Unused 2: 9600 BAUD 3: 19200 BAUD 4: 38400 BAUD 5: 57600 BAUD 6: 115200 BAUD
2	CTS/RTS	1: ON, 0: OFF	OFF	
3	Page Break	1: ON, 0: OFF	OFF	
4	Line Page	001~199	066	
5	XON/XOF	1: XON, 0: XOFF	XOFF	
PGM: 175 - Serial Port Function Selection				
	Print Port Selection	Flex 1~2		Flex 1: Select Print Port, Flex 2: Select TCP port
1	Select Print Port		SERIAL1	1-2: Serial, 3-5: dynamic TCP port
1-1	Off-line SMDR/Statistics Print	1~7	SERIAL1	
1-2	Admin Print	1~7	SERIAL1	
1-3	Traffic Print	1~7	SERIAL1	
1-4	SMDI Print	1~7	SERIAL1	
1-5	Call Info Print	1~7	SERIAL1	
1-6	On-line SMDR Print	1~7	SERIAL1	
1-7	Trace Print	1~5	SERIAL1	
1-8	Debug Print	1~7	SERIAL1	
1-9	ACD Package Print	1~7	SERIAL1	
2	Select TCP port			

Table C-6 SYSTEM DATA

BTN	SUB-MENU	RANGE	DEFAULT	REMARK
2-1	Off-line SMDR/Statistics Print	1-9999	NULL	
2-2	Admin Print	1-9999	NULL	
2-3	Traffic Print	1-9999	NULL	
2-4	SMDI Print	1-9999	NULL	
2-5	Call Info Print	1-9999	NULL	
2-6	On-line SMDR Print	1-9999	NULL	
2-7	Trace Print	1-9999	NULL	
2-8	Debug Print	1-9999	NULL	
2-9	ACD Package Print	1-9999	NULL	
2-10	ISMDR Print	1-9999	NULL	
PGM: 176 - Break/Make Ratio				
1	Break/Make ratio	1: 66/33 0: 60/40	60/40	
PGM: 177 - SMDR Attributes				
1	SMDR Save Enable	1: ON, 0: OFF	OFF	
2	SMDR Print Enable	1: ON, 0: OFF	ON	ON: Real-time, OFF: On-demand
3	SMDR Recording Call Type	1: LD, 0: ALL	LD	LD: Long Distance, ALL: All
4	SMDR LD Call Digit Counter	07~15	07	
5	Print Incoming Call	1: ON, 0: OFF	OFF	
6	Print Lost Call	1: ON, 0: OFF	ON	
7	Records in Detail	1: ON, 0: OFF	ON	
8	SMDR Dial Digit Hidden	0~9	0	
9	SMDR Currency unit	3 Characters	-	
10	SMDR Cost Per Unit Pulse	6 digits	000000	
11	SMDR Decimal Location	0~5	0	
12	SMDR Start Timer	000~250	000	1 sec increments
13	SMTP Mail Server Address	12 digits		
14	User Mail Address	e-mail address		40 character modify via Web only
	SMDR System Domain Name	18 characters		Web-only
15	Mail Send Weekly Set	0-7	0	
16	Mail Send Daily Set	00-23	00	
17	Auto Send Mode	1: ON, 0: OFF	OFF	
18	Auto Delete Mode	1: ON, 0: OFF	OFF	
19	SMDR Long Distance Codes	Flex 1~Flex 5	0	Maximum 5 LD codes, 2 digits each

Table C-6 SYSTEM DATA

BTN	SUB-MENU	RANGE	DEFAULT	REMARK
20	SMDR Ring/CLI/CPN (SVC_1)	0: Ring 1: CLI 2: CPN	RING	For incoming call, 0: Ring Service Time, 1: CLI, 2: CPN, 3: None Dialed number for outgoing call
21	MSN Print on SMDR	1: ON, 0: OFF	OFF	
22	SMDR Ring/CLI/CPN (SVC_2)	0: Ring 1: CLI 2: CPN 3: None	CPN	For an incoming call, 0: Ring Service Time, 1: CLI, 2: CPN, 3: None
23	Print Serial No	1: ON, 0: OFF	OFF	
24	SMDR Attributes	01-19		
24-1	Hidden digit location	1: Right, 0: Left	Left	
24-2	SMDR Interface Service	1: ON, 0: OFF	OFF	
24-3	SMDR ICM Save	1: ON, 0: OFF	OFF	
24-4	SMDR ICM Print	1: ON, 0: OFF	OFF	
24-5	SMDR Disconnect Cause	1: ON, 0: OFF	OFF	
24-6	Long Time Call(10min)	000-144	000	
24-7	SMDR No Out Net Call	1: ON, 0: OFF	OFF	
24-8	Unused			
24-9	Unused			
24-10	SMTP Mail Server ID	40 characters		
24-11	SMTP Mail Server PWID	20 characters		
24-12	Transferred Call Charge Rate	0,1,2	Individual	0: Individual 1: Integrate Transferring Station 2: Integrate Transferred Station
24-13	Attendant Transfer Charge Rate	0,1,2	Individual	0: Individual 1: Attendant Charging 2: Transferred Station Charging
24-14	SMTP Mail Server Domain Address	100 Character		
24-15	SMTP sender Mail (WEB)	Max 40 Characters	-	
24-16	SMTP security	0-2 0:No security 1:SSL 2:TLS	0	
24-17	SMTP port	1-65535	25	

Table C-6 SYSTEM DATA

BTN	SUB-MENU	RANGE	DEFAULT	REMARK
24-18	VSF VM Display	0:'I' 1:'V'	0:'I'	
24-19	Display N-type	1:ON, 2:OFF	OFF	
PGM: 178 - System Date & Time				
1	System Time	HH:MM	-	Hour/Minute sequence.
2	System Date	MMDDYY	-	Month/Day/Year sequence
3	DST Enable Mode	0: OFF, 1: ON	OFF	Activate / deactivate DST ability
4	DST Start Time	See DST Table	2nd Sunday of March at 2:00 AM	Web Only, DST Table format
5	DST End Time	See DST Table	1st Sunday in Nov. at 2:00 AM	Web Only, DST Table format
PGM: 179 - Multi-Language Support				
1	1st language	1: ON, 0: OFF	ON	US
2	2nd Language	1: ON, 0: OFF	OFF	Korea
3	3rd Language	1: ON, 0: OFF	OFF	Turkey
4	4th Language	1: ON, 0: OFF	OFF	Russia
5	5th Language	1: ON, 0: OFF	OFF	Australia
6	6th Language	1: ON, 0: OFF	OFF	Germany
PGM: 180 - System Timers I				
1	ATD Recall Timer	00~60	01	1 min increments
2	Call Park Timer	000~600	120	1 sec increments
3	Camp-On Recall Timer	000~200	030	1 sec increments
4	Exclusive Hold Recall Timer	000~300	060	1 sec increments
5	I-Hold Recall Timer	000~300	030	1 sec increments
6	System Hold Recall Timer	000~300	030	1 sec increments
7	Transfer Recall Timer	000~300	030	1 sec increments
8	ACNR Delay Timer	000~300	030	1 sec increments
9	ACNR Pause Timer	030~300	030	1 sec increments
10	ACNR Retry Counter	1~13	3	
11	ACNR Tone Detect Timer	001~300	030	1 sec increments
12	Automatic CO Release Timer	000~300	030	1 sec increments
13	CCR Inter-digit Timer	000~300	030	100 msec increments
14	CO Restrict Timer	00~99	00	1 minute increments
15	CO Dial Delay Timer	00~99	05	100 msec increments
16	CO Release Guard Timer	010~150	020	100 msec increments
17	CO Ring Off Timer	010~150	060	100 msec increments
18	CO Ring On Timer	1~9	2	100 msec increments
19	CO Elapsed Call Timer	005~900	180	1 sec increments
20	Web Password Guard Timer	001~999	5	1 min increments
21	On hook idle Timer	00~99	0	1 sec increments
22	Call recording repeat time	000~999	0	

Table C-6 SYSTEM DATA

BTN	SUB-MENU	RANGE	DEFAULT	REMARK
PGM: 181 - System Timers II				
1	Call Fwd No Answer Timer	000~600	015	1 sec increments
2	DID/DISA No Answer Timer	000~255	000	1 sec increments
3	VSF User Max Record Timer	000~999	60	1 sec increments
4	VSF Valid User Message Timer	0~9	4	1 sec increments
5	Door Open Timer	05~99	20	100 msec increments
6	ICM Dial Tone Timer	01~20	10	1 sec increments
7	Inter-Digit Timer	01~20	05	1 sec increments
8	Message Wait Reminder Tone Timer	00~60	00	1 min increments
9	Paging Timeout Timer	000~255	015	1 sec increments
10	Pause Timer	1~9	3	1 sec increments
11	3-Soft Auto Release Timer	01-30	10	1 sec increments (Reserved for new keyset)
12	VM Pause Timer	1-90	30	100 msec increments (Except USA version)
13	VSF cut error Timer	1-90	00	1 sec increments
14	Unused			
15	Emergency retry timer	00~99 (1 sec.)	00	1 sec increments
16	Error tone timer	005~180 (1 sec.)	30	1 sec increments
17	Howling tone timer	000~180 (1 sec.)	30	1 sec increments
18	Notification play delay	1~99 (1 sec.)	10	1 sec increments
19	Short Modem timer	1~60 (1 sec.)	10	1 sec increments
PGM: 182 - System Timers III				
1	SLT Hook Switch Bounce Timer	01~25	01	100 msec increments
2	SLT Max Hook Switch Flash Timer	01~25	07	100 msec increments
3	SLT Min Hook-flash Timer	000~250	010	10 msec increments
4	Station Auto Release Timer	000~300	060	1 sec increments
5	Unsupervised Conference Timer	00~99	10	1 minute increments
6	Prime Line Delay Timer	01~20	05	1 sec increments
7	Wink Timer	010~200	010	10 msec increments
8	En-block Inter-Digit Timer	01~20	5	1 sec increments
9	DTMF Duration Timer	04~99	10	10 msec increments
10	Flexible DID Timer	01~99	30	100 msec increments

Table C-6 SYSTEM DATA

BTN	SUB-MENU	RANGE	DEFAULT	REMARK
11	Wakeup fail Timer	00~99	20	1 sec increments
12	Prepaid warn timer	00~99	00	1 sec increments
PGM: 183 -In room indication				
1	Supervisor			
2	Member 01~20			
PGM: 186 - DCOB System Attributes				
1	R2 Out manage Timer	01~50	14	1 sec increments
2	R2 Incoming manage Timer	01~50	14	1 sec increments
3	R2 Disappear Timer	01~50	14	1 sec increments
4	R2 Pulse Timer	01~30	07	20 msec increments
5	R2 Ready Timer	000~500	07	20 msec increments
6	R2 Dial tone Delay Timer	01~30	20	1 sec increments
PGM: 195 – NTP Attributes				
1	Network Time/Date	0 : Disable 1: ISDN 2: NTP	Disable	TIME SOURCE
PGM: 253 – VM COS Attributes				
1	Greeting Length	00-99	60	
2	Message Length	000-600	0	
3	Number Of Messages	000-250	0	
4	Retention Time	00-99	0	
5	E-mail Notification	0, 1, 2	Notification& Delete	0: OFF 1: Notification 2: Notification& Delete
6	Future Delivery Message	1: ON, 0: OFF	OFF	
7	Confirm Message Receipt	1: ON, 0: OFF	OFF	
8	Private Message Mark	1: ON, 0: OFF	OFF	
PGM: 260 – Personal Group				
1	Master Station	Station Range	-	
2	Member Station	Station Range	-	
PGM: 261 – Personal Group Attributes				
1	Use Master Wake Up	1: ON, 0: OFF	OFF	
2	Use Master Call Forward	1: ON, 0: OFF	ON	
3	Use Master DND	1: ON, 0: OFF	OFF	
4	Set linked pair	1: ON, 0: OFF	OFF	

Table C-7 STATION GROUP DATA

BTN	SUB-MENU	RANGE	DEFAULT	REMARK
PGM: 190 - Station Group Assignment, 401 – 439				
1	Group Type	0~10	0	0: No Assignment 1: Circular 2: Terminal 3: UCD/ACD 4: Ring 5: VM 6: Pick-Up 7: VSF-VM 8: UMS 9: NET-VM 10: UCS
2	Pick-up Attribute	1: ON, 0: OFF	OFF	Not applicable VM group
3	Circular group			
PGM: 191 - Station Group Attributes, by Group Type				
CIRCULAR GROUP				
1	VSF Announce 1 Timer	000~999	015	1 second increments
2	VSF Announce 2 Timer	000~999	000	1 second increments
3	VSF Announce 1 Location	00~200	00	
4	VSF Announce 2 Location	00~200	00	
5	VSF Announce 2 Repeat Timer	000~999	000	1 second increments
6	VSF Announce 2 Repeat	1: ON, 0: OFF	OFF	
7	Overflow Destination	Station/Group/ VSF/Speed	-	
8	Overflow Timer	000~600	180	1 second increments
9	Wrap-Up Timer	000~999	002	1 second increments
10	No Answer Timer	00~99	15	1 second increments
11	Pilot Hunt	1: ON, 0: OFF	ON	
12	Report No Member	1: ON, 0: OFF	OFF	
13	Music Source	00~37	1	00: Ring-back 01: INT Music 02: EXT Music 03: VSF MOH 04~08: SLT MOH1~5 09~37: VSF MOH2~30
14	Member Forward	1: ON, 0: OFF	ON	
15	Mailbox Message Wait Station	Station Number	None	
16	Mailbox Password	12 digits	None	
17	Forced destination	1~4		
18	Forced forward destination usage	1: ON, 0: OFF	OFF	
19	WAIT IF 1ST ANNC BUSY	1: ON, 0: OFF	ON	
20	Group name	20 character	….	
21	Maximum queue call count	00-99	99	

Table C-7 STATION GROUP DATA

BTN	SUB-MENU	RANGE	DEFAULT	REMARK
TERMINAL GROUP				
1	VSF Announce 1 Timer	000~999	015	1 second increments
2	VSF Announce 2 Timer	000~999	000	1 second increments
3	VSF Announce 1 Location	00~200	00	
4	VSF Announce 2 Location	00~200	00	
5	VSF Announce 2 Repeat Timer	000~999	000	1 second increments
6	VSF Announce 2 Repeat	1: ON, 0: OFF	OFF	
7	Overflow Destination	Station/Group/ VSF/Speed	-	
8	Overflow Timer	000~600	180	1 second increments
9	Wrap-Up Timer	000~999	002	1 second increments
10	No Answer Timer	00~99	15	1 second increments
11	Pilot Hunt	1: ON, 0: OFF	ON	
12	Report No Member	1: ON, 0: OFF	OFF	
13	Music Source	00~37	1	00: Ring-back 01: INT Music 02: EXT Music 03: VSF MOH 04~08: SLT MOH1~5 09~37: VSF MOH2~30
14	Member Forward	1: ON, 0: OFF	ON	
15	Mailbox Message Wait Station	Station Number	None	
16	Mailbox Password	12 digits	None	
17	Forced destination	1~4		
18	Forced forward destination usage	1: ON, 0: OFF	OFF	
19	WAIT IF 1ST ANNC BUSY	1: ON, 0: OFF	ON	
20	Group name	20 character	….	
21	Maximum queue call count	00-99	99	
UCD/ACD GROUP				
1	VSF Announce 1 Timer	000~999	15	1 second increments
2	VSF Announce 2 Timer	000~999	000	1 second increments
3	VSF Announce 1 Location	00~200	00	
4	VSF Announce 2 Location	00~200	00	
5	VSF Announce 2 Repeat Timer	000~999	00	1 second increments
6	VSF Announce 2 Repeat	1: ON, 0: OFF	OFF	
7	Overflow Destination	Station/Group/ VSF/Speed	-	
8	Overflow Timer	000~600	180	1 second increments
9	Wrap-Up Timer	000~999	000	1 second increments
10	Report No Member	1: ON, 0: OFF	OFF	

Table C-7 STATION GROUP DATA

BTN	SUB-MENU	RANGE	DEFAULT	REMARK
11	Music Source	0~37	1	00: Ring-back 01: INT Music 02: EXT Music 03: VSF MOH 04~08: SLT MOH1~5 09~37: VSF MOH2~30
12	ACD Warning Tone	1: ON, 0: OFF	OFF	
13	Alternate Destination	Station/Group /Speed		
14	Supervisor Timer	000~999	030	1 second increments
15	Supervisor Call Count	00~99	00	
16	WAIT IF 1ST ANNC BUSY	1: ON, 0: OFF	ON	
17	Maximum Queued Call Counter	00~99	99	
18	Supervisors	Station	-	Max, 5 stations can be supervisors
19	UCD/ACD Station Priority	0~9	0	
20	ACD DND Wrap-up Timer	002~200	010	1 second increments
21	ACD ICLID Usage	1: ON, 0: OFF	OFF	When a guaranteed announcement is used
22	ACD Group Name	20 Character	-	
23	ACD CIQ Route	Flex 1 ~ 10		Flex 10: when caller dial “0” Flex 1~9: caller digit 1~9 Ex.) When Flex 1 is pressed 1: Station Number 2: Hunt Group Number 3: System Speed Number 4: Network Station Number
24	ACD Sub Attribute	Flex 1-20		
24-1	Zap Tone	1: ON, 0: OFF	OFF	
24-2	Mailbox Message Wait Station	Station Number	None	
24-3	Mailbox Password	12 digits	None	
24-4	Call In Queue Display	1: ON, 0: OFF	OFF	
24-5	Forced forward destination usage	1: ON, 0: OFF	OFF	
24-6	Call In Queue #1 Threshold	00~99	10	
24-7	Call In Queue #1 Announcement Location	00~200		
24-8	Call In Queue #1 Page zone	00~15 or 00~40	00	
24-9	Call In Queue #1 Announcement Delay Timer	000~180	015	1 second increments
24-10	Call In Queue #1 Announcement Repeat Timer	000~180	045	1 second increments
24-11	Call In Queue #2 Threshold	00~99	20	

Table C-7 STATION GROUP DATA

BTN	SUB-MENU	RANGE	DEFAULT	REMARK
24-12	Call In Queue #2 Announcement Location	00~200		
24-13	Call In Queue #2 Page zone	00~15 or 00~40	00	
24-14	Call In Queue #2 Announcement Delay Timer	000~180	015	1 second increments
24-15	Call In Queue #2 Announcement Repeat Timer	000~180	025	1 second increments
24-16	Call In Queue #3 Threshold	00~99	30	
24-17	Call In Queue #3 Announcement Location	00~200		
24-18	Call In Queue #3 Page zone	00~15 or 00~40	00	
24-19	Call In Queue #3 Announcement Delay Timer	000~180	015	1 second increments
24-20	Call In Queue #3 Announcement Repeat Timer	000~180	005	1 second increments
24-21	Call in Queue Mention	1: ON, 0: OFF	OFF	
24-22	ACD No-answer Timer	000 ~ 180	000	1 second increments
24-23	Member Forward	1: ON, 0: OFF	ON	
24-24	Forward destination	1-4		
RING GROUP				
1	VSF Announce 1 Timer	000~999	015	1 second increments
2	VSF Announce 2 Timer	000~999	00	1 second increments
3	VSF Announce 1 Location	00~200	00	
4	VSF Announce 2 Location	00~200	00	
5	VSF Announce 2 Repeat Timer	000~999	000	1 second increments
6	VSF Announce 2 Repeat	1: ON, 0: OFF	OFF	
7	Overflow Destination	Station/Group/ VSF/Speed	-	
8	Overflow Timer	000~600	180	1 second increments
9	Wrap-Up Timer	000~999	002	1 second increments
10	Music Source	0~37	1	00: Ring-back 01: INT Music 02: EXT Music 03: VSF MOH 04~8: SLT MOH1~5 09~37: VSF MOH2~30
11	Maximum Queued Call Counter	00~99	99	
12	Member Forward	1: ON, 0: OFF	ON	
13	Mailbox Message Wait Station	Station Number	None	
14	Mailbox Password	12 digits	None	
15	Forced destination	1~4		

Table C-7 STATION GROUP DATA

BTN	SUB-MENU	RANGE	DEFAULT	REMARK
16	Forced forward destination usage	1: ON, 0: OFF	OFF	
17	WAIT IF 1ST ANNC BUSY	1: ON, 0: OFF	ON	
18	Group name	20 characters	….	
External VM GROUP				
1	Wrap-Up Timer	000~999	000	1 second increments
2	Put Mail Index	1~4	1	
3	Get Mail Index	1~4	2	
4	VM Group Hunt Type	1: Circular 0: Terminal	Terminal	
5	Overflow Timer	000~600	180	1 second increments
6	Overflow Destination	Station/Group or System Speed	-	
7	Forced forward usage	0: OFF / 1: ON	OFF	
8	Forced forward destination	1-4	.	
9	Group name	20 characters	.	
10	Server type	0: IPCR 1: 3rd	3rd	
11	Server number	01-10		
12	Member type	0: SIP 1: SLT	SIP	
13	Server capacity	000~140	0	
PICK-UP GROUP				
1	Auto Pick-Up	1: ON, 0: OFF	OFF	
2	All Group Member Ringing	1: ON, 0: OFF	OFF	
VSF-VM GROUP				
1	Retention	00 ~ 99	00	1 Day increments
2	Dial time	00 ~ 99	15	1 second increments
3	Group name	20 characters	...	
UMS GROUP				
1	VSF Announce 1 Timer	000~999	15	1 second increments
2	VSF Announce 2 Timer	000~999	000	1 second increments
3	VSF Announce 1 Location	01~70	00	
4	VSF Announce 2 Location	01~70	00	
5	VSF Announce 2 Repeat Timer	000~999	00	
6	VSF Announce 2 Repeat	1: ON, 0: OFF	OFF	
7	Overflow Destination	Station/Group/ VSF/Speed	-	
8	Overflow Timer	000~600	180	1 second increments
9	No Answer Timer	00~99	15	1 second increments
10	Pilot Hunt	1: ON, 0: OFF	ON	
11	Alternate Destination	Station/Group		

Table C-7 STATION GROUP DATA

BTN	SUB-MENU	RANGE	DEFAULT	REMARK
12	Hunt Type	1: Circular 0: Terminal	Circular	
13	Wrap-Up Timer	002~999	002	1 second increments
14	Forced forward usage	0: OFF 1: ON	OFF	
15	Forced forward destination	1-4	...	
16	Group name	20 characters	...	
UCS GROUP				
	Select UCS	Flex 1		
1	UCS Server	01 ~ 16	1	Only selection 1 is supported
PGM: 192 - Pick up Group Assignment				
1	Member assignment	Station	-	

Table C-8 ISDN LINE & ICLID ROUTING DATA

BTN	SUB-MENU	RANGE	DEFAULT	REMARK
PGM: 200 - ISDN Attributes				
1	CO ATD CODE	2 digits	-	
2	CLI Print To Serial	1: ON, 0: OFF	OFF	
3	Display DID info	1: ON, 0: OFF	OFF	
4	Print Destination in CLI Print	1: ON, 0: OFF	OFF	
PGM: 201 - CLIP/COLP Table				
1	CLIP/COLP Table	00~49		
PGM: 202 - MSN Table				
1	CO range			
2	Index	000~999		Index to PGM 231 Table
3	Telephone number	23 digits		
PGM: 203 - ICLID Route Table				
1	Index	001~250	-	The bin no of PGM 204
2	ICLID Telephone number	24 digits	-	
3	ICLID Name	12 characters		
4	ICLID Tone	01~12		2 digits
PGM: 204 - ICLID RING Assignment Table				
1	Day	Station/Group		Flex 1: Station + Delay (0~9 ring cycles) Flex 2: Hunt group Flex 3: VSF announcement (01~70) Flex 4: AA Ring delay Time (00~30 sec.)
2	Night	Station/Group		
3	Timed Ring	Station/Group		
PGM: 205 - PPP Attributes				
1	PPP Destination Station number	Station Number	None	

Table C-8 ISDN LINE & ICLID ROUTING DATA

BTN	SUB-MENU	RANGE	DEFAULT	REMARK
2	PPP User ID 1	12 Characters	likppp01	
3	PPP Password 1	12 Characters	Ipkts01	
4	PPP User ID 2	12 Characters	likppp02	
5	PPP Password 2	12 Characters	Ipkts02	
6	Server IP address	IP address		
7	Client IP address	IP address		
PGM: 206 - PREFIX Dialing Table Attributes				
1	PREFIX CODE	Max. 8 digits	-	
2	TABLE ID	0-6	0	
3	MIN DIGIT	00-30	0	
4	MAX DIGIT	00-30	0	
5	NUM OF TYPE	0-6	0 (UNKNOWN)	0:Unknown 1:International 2:National 3:Network Spec. 4:Subscriber 5:Abbreviated 6:Reserved
6	NUM PLAN	0-6	0 (UNKNOWN)	0:Unknonw 1:ISDN/Telephony 2:Data numbering 3:Telex 4:National standard 5:Private 6:Reserved
7	SENDING COMPLETE	1:ON / 0:OFF	OFF	
8	CALL CHARGE TYPE	0-5	0 (UNKNOWN)	0:Unknown 1:Local 2:Long Distance 3:International 4:Mobile 5:reserved
9	CALL CHARGE TIMER	000-999	000	
10	Prefix table			

Table C-9 TABLES DATA

BTN	SUB-MENU	RANGE	DEFAULT	REMARK
PGM: 220 - LCR Control Attributes				
1	LCR Access Mode	1~6	M00	1: M00, 2: M01, 3: M02 4: M11, 5: M12, 6: M13
2	Set the Day of week zone			
	1	MON	1~3	1

Table C-9 TABLES DATA

BTN	SUB-MENU	RANGE	DEFAULT	REMARK
	2	TUE	1~3	1
	3	WED	1~3	1
	4	THUR	1~3	1
	5	FRI	1~3	1
	6	SAT	1~3	1
	7	SUN	1~3	1
3	Set the Time Zone of Day zone1			
	1~3	00~24		
4	Set the Time Zone of Day zone1			
	1~3	00~24		
5	Set the Time Zone of Day zone1			
	1~3	00~24		
PGM: 221 - LCR Leading Digit Table				
1	LCR Type	1~3	Both	1: Internal 2: CO Line, 3: Both
2	Code (leading digit)	Max. 12 digits	-	
3	Day Zone 1 DMT	6 digits		Time Zone 1~3: 2 digits each
4	Day Zone 2 DMT	6 digits		Time Zone 1~3: 2 digits each
5	Day Zone 3 DMT	6 digits		Time Zone 1~3: 2 digits each
6	Check Password	1: ON, 0: OFF	OFF	LCR code authorization
PGM: 222 - LCR Digit Modification Table				
1	Added Digit	Max. 25 digits		
2	Removal Position	01~12	01	
3	Number of Remove digits	00~12	00	
4	Add Position	01~13	01	
5	CO/IP Group	01-21	01	
6	Alt Index	00~99	-	
7	Net num plan bin	000~251		
8	SMDR code	4 digit		
PGM: 223 - LCR Table Initialization				
1	DMT Of Day zone 1	6 digits		Time Zone 1~3: 2 digits each
2	DMT Of Day zone 2	6 digits		Time Zone 1~3: 2 digits each
3	DMT Of Day zone 3	6 digits		Time Zone 1~3: 2 digits each
4	CO Group Init	01-21		
5	Alt Index Init	00~99		
6	Initialize All LCR			
PGM: 224 - TOLL Table				
1	Allow Table A (01~50)	Max. 20 digits	-	
2	Deny Table A (01~50)	Max. 20 digits	-	
3	Allow Table B (01~50)	Max. 20 digits	-	
4	Deny Table B (01~50)	Max. 20 digits	-	
5	Allow Table C (01~50)	Max. 20 digits	-	

Table C-9 TABLES DATA

BTN	SUB-MENU	RANGE	DEFAULT	REMARK
6	Deny Table C (01~50)	Max. 20 digits	-	
7	Allow Table D (01~50)	Max. 20 digits	-	
8	Deny Table D (01~50)	Max. 20 digits	-	
9	Allow Table E (01~50)	Max. 20 digits	-	
10	Deny Table E (01~50)	Max. 20 digits	-	
PGM: 226 - Emergency Code Table				
	Emergency Code Table (01~10)	Max. 15 digits		
PGM: 227 - Authorization Code Table				
	Table entry	Max. 12 digits		Flex 1: Station Flex 2: System
1	Station Authorization code			
1-1	Station Authorization code	Max. 12 digits		
2	System Authorization code	001~360		
2-1	System Authorization code	Max. 12 digits		
2-2	Set COS	Flex1~3		
PGM: 228 - Customer Call Routing Table				
	CCR Table index	01 ~ 70		
1~14	Select Flex 1 ~ 15 1: Station 2: Hunt Group 3: System Speed 4: PABX Xfer 5: VSF Announcement 6: Call DisconnectAnnouncement 7: Route to Networked Station 8: Conference Room 9: Internal Page 10: External Page 11: All Call Page 12: Voice Mail (Station Group) 13: Company Directory 14: Record VM Greeting 15: Room Type Conf Group Join	Station	-	
PGM: 229 - Executive/Secretary Pairs				
1	Executive/Secretary Pair	Station	36 entries	
2	CO Call to Secretary	ON/OFF	OFF	
3	Call to Exec if Secretary in DND	ON/OFF	OFF	
4	Executive grade	01 ~ 12	12	
5	ICM call to SEC	0: OFF 1: ON	OFF	

Table C-9 TABLES DATA

BTN	SUB-MENU	RANGE	DEFAULT	REMARK
6	SEC auto answer	0: OFF 1: ON	OFF	
7	EXEC GROUP	00-50	00	
PGM: 231 - Flexible DID Conversion Table				
1	DID Destination Name	11 characters	-	
2	Day Destination	1~15	-	1: station 2: group 3: System 4: PBX Xfer 5: VSF 6: VSF & Disconnect 7: Networked Station 8: Conference Room 9: Int Page 10: Ext Page 11: All Page 12: VM 13: ICLID Table 14: Company Directory 15: Record VM Greeting 16: Room Type Conf Group Join
3	Night Destination	1~15	-	
4	Timed Ring Destination	1~15	-	
5	Reroute Destination	1~16	-	
6	Use ICLID	ON/OFF	OFF	
7	Auto Ring Table	(00-16),16:N/A	N/A	
8	MOH	00-37	00	
9	Ring Tone	(00-12), 0:N/A	N/A	
PGM: 232 - System Speed Zone				
1	Speed Bin Range in Zone	2200~4999	2200~4999	
2	Station Range	100~239	100~239	
3	Toll Checking	1: ON, 0: OFF	ON	
4	Authorization check	1: ON, 0: OFF	ON	
PGM: 233 Auto Ring Mode Assignment (Day/Night/Timed RING) Table				
1	Monday Timer	0000~2359		Assign Day, Night, and Timed start times Default 0900, 1800, none
2	Tuesday Timer	0000~2359		
3	Wednesday	0000~2359		
4	Thursday	0000~2359		
5	Friday	0000~2359		
6	Saturday	0000~2359		
7	Sunday	0000~2359		
PGM: 234 - Voice Mail Dial Table				
1	VM dial codes 1	12 digits	P#	1: Prefix/2: Suffix/Any digits
2	VM dial codes 2	12 digits	P##	1: Prefix/2: Suffix/Any digits
3	VM dial codes 3	12 digits	P#*3P	1: Prefix/2: Suffix/Any digits

Table C-9 TABLES DATA

BTN	SUB-MENU	RANGE	DEFAULT	REMARK
4	VM dial codes 4	12 digits	P#*4P	1: Prefix/2: Suffix/Any digits
5	VM dial codes 5	12 digits	P#*5P	1: Prefix/2: Suffix/Any digits
6	VM dial codes 6	12 digits	P#*6P	1: Prefix/2: Suffix/Any digits
7	VM dial codes 7	12 digits		1: Prefix/2: Suffix/Any digits
8	VM dial codes 8	12 digits		1: Prefix/2: Suffix/Any digits
9	VM dial codes 9	12 digits	*****	1: Prefix/2: Suffix/Any digits
PGM: 235 – MAC Registration Table				
1	Mac Address Information		-	
2	Max port of the device	00~99	0	
3	Device ID	0~255	0 (N/A)	
PGM: 236 - Mobile Extension Table				
1	Program Authority	1: ON, 0: OFF	OFF	
2	Access Authority	0: Disable 1: Mobile EXT. 2: Failover	Disable	
3	CO Group	01-20	01	
4	Telephone number			
5	Mobile extension CLI			
6	Hunt Call enable	1: ON, 0: OFF	OFF	
7	VSF Notify	1: ON, 0: OFF	OFF	
8	Notify Retry	1 to 9 Times	3 Times	
9	Retry Interval	1 to 3 minute	3 minute	
10	Notify by My CLI	0: OFF, 1: ON	OFF	
11	Call back	0: OFF, 1: ON	OFF	
12	Delay timer	000~255	0	
13	Announcement	0~200	0	
14	Suffix DID table	0: OFF, 1: ON	OFF	
PGM: 250 –Hot Desk Attributes				
1	Number of Agents	000~140	000	
2	View Agent Range		N/A	
3	Auto Logout Timer	00~24	00	1 hours increments
PGM: 252 –CO Call Rerouting				
1	Enable CRR	1: ON, 0: OFF	OFF	
2	Init CRR			
3	CRR attributes	000~169		
3-1	Compare CO group	01~20	01	
3-2	Receive digit	Max. 12 digits		
3-3	CO+TEL number	Max. 20 digits		
3-4	Type			

Table C-9 TABLES DATA

BTN	SUB-MENU	RANGE	DEFAULT	REMARK
PGM: 270 –Digit conversion table				
1	Apply time	0: Unconditional 1: Follow DNT 2: Follow LCR	Unconditional	
2	Dialed digit	Max.24 digits		
3	Unconditionally changed	Max.24 digits		
4-15	Changed digit	Max.24 digits		
16	Ring mode table	00–15, none	0	
17	Apply option	0: All 1: Reserved 2: CO line 3: Disable	All	

Table C-10 NETWORKING DATA

BTN	SUB-MENU	RANGE	DEFAULT	REMARK
PGM: 320 - Network Basic Attributes				
1	Networking Enable	1: ON, 0: OFF	OFF	
2	Retry Count	00~99	00	
3	CNIP Enable	1: ON, 0: OFF	ON	
4	CONP Enable	1: ON, 0: OFF	OFF	
5	Signal Method	1: FAC, 0: UUS	FAC	
6	CAS Enable	1: ON, 0: OFF	OFF	(Not used)
7	VPN Enable	1: ON, 0: OFF	OFF	(Not used)
8	CC Retain Mode	1: ON, 0: OFF	OFF	(Not used)
PGM: 321 - Network Supplementary Attributes				
1	Transfer Mode	1: REROUTE 0: JOIN	REROUTE	
2	TCP Port for BLF	0000~9999	9500	
3	UDP Port for BLF	0000~9999	9501	
4	BLF Manager IP Address	IP address	0.0.0.0	(#: Skip)
5	Duration of BLF STS	01~99	10	100 ms increments
6	Multicast IP Address	IP address	0.0.0.0	(#: Skip)
7	Transfer Fault Recall Timer	001~300	10	1 second increments
8	VoIP Call Reroute	00~20	00	
9	BLF service usage	1: ON, 0: OFF	ON	
PGM: 322 - Network CO Line Attributes				
1	Network CO Line Group	00~24	00	CO group programming for Networking calls between systems.
2	Net CO Line Type	0: PSTN 1: NET	PSTN	

Table C-10 NETWORKING DATA

BTN	SUB-MENU	RANGE	DEFAULT	REMARK
PGM: 324 - Network Numbering Plan Table				
1	System Use	0: NET 1: PSTN	NET	
2	Numbering Plan Code	16 digits	-	
3	Numbering Plan Net CO Group	00~24		
4	CPN Information	Flex 1~2	-	
5	Alternate Speed Bin	2000~4999	-	
6	Destination MPB IP Address	IP address	0.0.0.0	(Skip: #)
7	Destination MPB Port No	0000-9999	5588	
8	Digit Repeat	0: NO, 1: YES	NO	
9	Net PSTN En-block	0: NO, 1: YES	NO	
10	CO ATD code CLI	1: ON, 0: OFF	OFF	
11	Firewall	1: ON, 0: OFF	OFF	
12	AUTO CODE COS USE	0: NO, 1: YES	NO	
13	SMDR DIAL HIDDEN	0: NO, 1: YES	NO	
14	NET PSTN CLI	0: NET 1: PSTN	NET	
15	Site name	Max.12 characters		
16	Emergency reroute	00~10	00	
PGM: 325 - Network Feature Code				
1	Net Feature Code	16 digits	-	
2	Net Feature Destination	1~6	-	1: INT PAGE 2: EXT PAGE 3: ALL CALL PAGE 4: DOOR OPEN 5:Conference Room (1-9) 6:Call park (01-19)

Table C-11Zone Holiday Assignment

BTN	SUB-MENU	RANGE	DEFAULT	REMARK
PGM: 444 – Zone Holiday Assignment				
1	Ring Mode	0:DAY 1: NIGHT 2:TIMED 3: N/A	TIMED	
2	Vacation	12 digits	-	
3	Holiday	4 digits	-	

Table D-12Green Mode Activation

BTN	SUB-MENU	RANGE	DEFAULT	REMARK

Table D-12Green Mode Activation

BTN	SUB-MENU	RANGE	DEFAULT	REMARK
PGM: 500 – Green Mode Activation				
1	Power Save Usage	0: Disable 1: Enable	Disable	
2	Power On/Off	0: OFF 1: ON	ON	
3	Power Save Mode	Flex 1~6	-	
4	Power Current State	Flex 1~6	-	
PGM: 501 – Green Mode Time Setting				
1	Power ON Time			
2	Power OFF Time			

Table C-13 INITIALIZATION

ITEM	DESCRIPTION	REMARK
PGM: 450 - Initialization		
1	Flexible Numbering Plan	
2	Station Data	
3	CO Line Data	
4	System Data	
5	Station Group Data	
6	ISDN Data	
7	System Timer Data	
8	Toll Table Data	
9	LCR Table Data	
10	Other Tables	
11	Flexible Button Data	
12	Network	
13	All Data	
14	System Reset	
15	Unused	
16	Personal Group	
17	Default Password	

Table C-14 PRINT-OUT DATABASE

ITEM	DESCRIPTION	REMARK
1	Flexible Numbering Plan	
2	IP Setting Plan	
3	Station Data	Enter station range
4	CO Line Data	Enter CO range
5	System Data	
6	Station Group Data	
7	ISDN Data	

Table C-14 PRINT-OUT DATABASE

ITEM	DESCRIPTION	REMARK
8	System Timer Data	
9	Toll Table Data	
10	LCR Table Data	
11	Other Tables	
12	Nation Specific Data	
13	Flexible Button Data	Enter station range
14	All Data	
15	LCD Message	
16	QUIT Print Out	
17	String Length	10 or 20 character
18	Board Base Attributes	
19	Networking Table	
20	Hotel Data	
21	String Length	
22	Working LCD Print-out	

Table C-15 VIRTUAL DIP SWITCH

BTN	SUB-MENU	RANGE	REMARK
PGM: 452 - Virtual Trace Dip Switch Access			
1	Call Trace	ON/OFF	Press Flex Button (Toggle: ON/OFF, LED lights if the trace is ON)
2	VoIP Trace	ON/OFF	Press Flex Button (Toggle: ON/OFF, LED lights if the trace is ON)
3	HTTP Trace	ON/OFF	Press Flex Button (Toggle: ON/OFF, LED lights if the trace is ON)
4	Multicast Trace	ON/OFF	Press Flex Button (Toggle: ON/OFF, LED lights if the trace is ON)
5	CTI Trace	ON/OFF	Press Flex Button (Toggle: ON/OFF, LED lights if the trace is ON)
6	Raw Trace	ON/OFF	Press Flex Button (Toggle: ON/OFF, LED lights if the trace is ON)
7	MPMP Trace	ON/OFF	Press Flex Button (Toggle: ON/OFF, LED lights if the trace is ON)
8	CPU Redundancy Trace	ON/OFF	Press Flex Button (Toggle: ON/OFF, LED lights if the trace is ON)
9	MISU/VMIU Trace	ON/OFF	Press Flex Button (Toggle: ON/OFF, LED lights if the trace is ON)
10	DSP Trace	ON/OFF	Press Flex Button (Toggle: ON/OFF, LED lights if the trace is ON)
11	SIP Trace	ON/OFF	Press Flex Button (Toggle: ON/OFF, LED lights if the trace is ON)
12	ISMDR Trace	ON/OFF	Press Flex Button (Toggle: ON/OFF, LED

Table C-15 VIRTUAL DIP SWITCH

BTN	SUB-MENU	RANGE	REMARK
			lights if the trace is ON)
13	SIP MSG Trace	ON/OFF	Press Flex Button (Toggle: ON/OFF, LED lights if the trace is ON)
14	FULL SIP Trace	ON/OFF	Press Flex Button (Toggle: ON/OFF, LED lights if the trace is ON)
15	Hotel Trace	ON/OFF	Press Flex Button (Toggle: ON/OFF, LED lights if the trace is ON)
16	SIP EXT Trace	ON/OFF	Press Flex Button (Toggle: ON/OFF, LED lights if the trace is ON)
17	DEBUG Trace	ON/OFF	Press Flex Button (Toggle: ON/OFF, LED lights if the trace is ON)
18	IPATD Trace	ON/OFF	Press Flex Button (Toggle: ON/OFF, LED lights if the trace is ON)
19	ISDN Trace	ON/OFF	Press Flex Button (Toggle: ON/OFF, LED lights if the trace is ON)
20	SPI Trace	ON/OFF	Press Flex Button (Toggle: ON/OFF, LED lights if the trace is ON)
21	DECT Trace	ON/OFF	Press Flex Button (Toggle: ON/OFF, LED lights if the trace is ON)
22	HTTP XML Trace	ON/OFF	Press Flex Button (Toggle: ON/OFF, LED lights if the trace is ON)
PGM: 453 - Virtual Dip Switch Access			
1	Device Polling	ON/OFF	Press Flex Button (Toggle: ON/OFF, LED lights if the trace is ON)
2	SMDI Setting	ON/OFF	Press Flex Button (Toggle: ON/OFF, LED lights if the trace is ON)
3	Multicast LED	ON/OFF	Press Flex Button (Toggle: ON/OFF, LED lights if the trace is ON)
4	Auto-Negotiation	MANUAL/AUTO	Press Flex Button (Toggle: ON/OFF, LED lights if the trace is Manual)
5	Full or Half-duplex	FULL/HALF	Press Flex Button (Toggle: ON/OFF, LED lights if the trace is HALF)
6	100 M or 10 M Tx/Rx bps	100/10	Press Flex Button (Toggle: ON/OFF, LED lights if the trace is 10 M bps)

Table C-16 DECT DATA

BTN	SUB-MENU	RANGE	DEFAULT	REMARK
PGM: 491 - DECT ATTRIBUTES				
1	AUTO CALL RLS	ON/OFF	OFF	
2	BASE FAULT ALARM	Enable/Disable	Disable	
3	CHAIN FAULT ALARM	Enable/Disable	Disable	

Table C-17 NATION SPECIFIC

BTN	SUB-MENU	RANGE	REMARK
PGM: 400 - IP Phone (H/S) Receive Gain Control			
-	IPKT Rx Gain	Flex 1-8	
PGM: 401 - IP Phone (H/F) Receive Gain Control			
-	IPKT Rx Gain	Flex 1-8	
PGM: 402 - SLT Receive Gain Control			
-	SLT Rx Gain	Flex 1-8	
PGM: 403 - ACO Receive Gain Control			
-	ACO Rx Gain	Flex 1-8	
PGM: 404 - DCO Receive Gain Control			
-	DCO Rx Gain	Flex 1-8	
PGM: 422 - Tone Generation Gain			
-	Tone Generation Gain	01-37	
PGM: 423 - ACNR Tone Cadence			
-	ACNR Tone Cadence	1-5	
PGM: 424 - ACNR Ring Frequency			
-	ACNR-Ring Frequency	1-5	
PGM: 425 - SLT Tone Cadence			
-	SLT Tone Cadence	1-2	
PGM: 426 - DTMF PCM Tone Generation Gain			
-	DTMF PCM Tone Generation Gain	1-5	
PGM: 427 - DTMF RTP Tone Generation Gain			
-	DTMF RTP Tone Generation Gain	1-4	
PGM: 429 - LCOB Configuration			
-	LCOB Configuration Type	1-5	
PGM: 480 - WIT Phone Rx Gain Control			
-	WIT Rx Gain	Flex 1-14	
PGM: 481 - WIT Phone Tx Gain Control			
-	WIT Tx Gain	Flex 1-14	
PGM: 496 - DKT Phone (H/S) Rx Gain Control			
-	DKT(H/S) Rx Gain	Flex 1-13	
PGM: 497 - DKT Phone (H/S) Tx Gain Control			
-	DKT(H/S) Tx Gain	Flex 1-13	
PGM: 498 - DKT Phone (H/F) Rx Gain Control			
-	DKT(H/F) Rx Gain	Flex 1-13	
PGM: 499 - DKT Phone (H/F) Tx Gain Control			
-	DKT(H/F) Tx Gain	Flex 1-13	

4 Appendix D: Station Admin Programming for eMG

4.1 General

4.1.1 LCD & Button Functions

While in the Program mode, the Liquid Crystal Display (LCD) and Flex button LEDs of an Admin Station are used to guide and indicate the status of the feature. The dial-pad is most often used to enter data after selecting a data item using the Flex buttons. In some cases, pressing a Flex button will toggle the entry with the Flex button LED indicating the status (On/Off).

For Programs with multiple Flex button selections, the volume controls (**[VOL UP]** and **[VOL DOWN]** buttons) may be used to select the next or previous item. The **[SPEED]** button is generally employed as a delete button to erase existing entries. However, where noted, it may be used to confirm a range input. Pressing the **[CONF]** button returns to the 1st step of the data entry procedure for the Program without storing unsaved entries.

The **[Save]**button is used to store data after entry. If there are no conflicts in the entered data, a confirmation tone will be received and the data stored. If a conflict exists, an error tone is provided, and newly entered data are not saved. Generally, corrected data may be entered and stored without restarting the entry procedure from the 1st step.

4.1.2 Alphanumeric Data Entries

In some cases, an alphanumeric entry is required. Two (2) dial-pad digits represent each character of an alphanumeric entry, as shown in Table 3.1.2–1 below. Use the Table to determine the two digits that must be entered from the dial-pad for each character.

Table 3.1.2-1 ALPHANUMERIC DIAL-PAD ENTRIES

1	Q – 11 Z – 12 . – 13 1 – 10	**2**	A - 21 B - 22 C - 23 2 - 20	**3**	D - 31 E - 32 F - 33 3 - 30
4	G – 41 H - 42 I - 43 4 - 40	**5**	J - 51 K - 52 L - 53 5 - 50	**6**	M - 61 N - 62 O - 63 6 - 60
7	P - 71 R - 72 S - 73 Q - 7* 7 - 70	**8**	T - 81 U - 82 V - 83 8 - 80	**9**	W - 91 X - 92 Y - 93 Z - 9# 9 - 90
*****	Blank - *1 : - *2 , - *3	**0**	0-00	**#**	#

4.2 Data Entry Mode

Limited data entry can be accomplished from an Admin Station or station assigned for data entry (Station Attributes III PGM 113, Flex button 1). After initialization and registration, any enabled iPECS IP or LDP Phone may access the system database. In addition, as default, there is no Station Admin password defined. To enter the Program mode from the Admin Station, follow the procedure below. The LCD displays in the left column of the chart, and in the right column are step-by-step instructions to modify database items.

PROCEDURE	
STATION 100 (T) 04 SEP 01 02:49 PM	Press the **[PGM]** button and Dial '*' and '#.'
ENTER ADMIN PASSWORD	Enter the Admin password. A confirmation tone is received. As a default, there is no password, and this step is skipped.
ADMIN PROGRAM START	
ENTER PGM NUMBER	To select a program, use the instructions in the following sections, starting with "Press the **[PGM]** button" and dial the specified Admin Program code.

4.3 Procedure for Data Entry

The following sections provide specific instructions for entering data from the Admin Station once in the Program mode. Each section provides descriptive information, step-by-step instructions, and Tables for determining appropriate entries.

4.3.1 System ID —PGM 100

Under System ID, the country is identified using the international dial codes (NATION CODE). If the NATIONC\defaults, gain, frequencies, and other system characteristics specific to the country and regional regulatory PGM

To change the NATION Code on eMG:

1) Set the MPB Dip-switch 1 pole 2 to the ON position,
1) Follow the procedure below to modify the NATION code
2) Press the reset button on the KSU, power the system Off and On, or use PGM 450 to initialize the system.
3) After initialization, reset switches as needed. Dip-switch 1 pole 2 should be OFF.

A twenty-four (24) character SITE NAME and the local Area Code are also defined in this program. The SITE NAME is primarily useful for the installer/programmer as a reference to the customer.

In addition, the system can be programmed to select one of eight (8) Flexible Number Plans under this program. Refer to Appendix B. Individual items from the selected Numbering Plan can be changed under Flexible Numbering Plan part A to D PGM 106 to 109- in section 3.3.2.5.

PROCEDURE	
SYSTEM ID PRESS FLEX KEY (1-6)	Press the **[PGM]** button and dial 100.
	Select the desired Flex button (1~5), refer to Table 3.3.1-1. For COUNTRY CODE, refer to Table 3.3.1-2 for appropriate entries.
	Use the dial-pad to enter desired System Id data. For System Reset, button 5, press **[Save]** to reset the System Id to default.
	To store the System Id data, press the **[Save]** button.

Table 3.3.1-1 SYSTEM ID (PGM 100)

BTN	DISPLAY	REMARK	RANGE	DEFAULT
1	COUNTRY CODE 1	Refer to Table 3.3.1-2 below. Note system must be re-initialized if changed.	4 digits	1
2	CUSTOMER SITE NAME ……	Refer to Table 3.1.2-1 for alphanumeric dial-pad entries.	24 character	
3	MY MULTI AREA CODE ENTER TABLE NO(00-40)	Enter the area code of the installed site.	6 digits	

Table 3.3.1-1 SYSTEM ID (PGM 100)

BTN	DISPLAY	REMARK	RANGE	DEFAULT
VOIU4	NUMBERING PLAN (1-9) 1	Refer to Appendix B for details of Numbering Plan selection.	1-9	1
5	PREFIX USAGE (1:ON/0:OFF) : OFF	Enable/Disable 8-digit Station Numbering Plan. Assign the Prefix codes in the 8-Digit Numbering Table (PGM238).	0: OFF 1: ON	OFF
6	SYSTEM ID SYSTEM RESET	Returns the System Id to default.		
11	WEB LOGIN ID (eMG100) RESET	Reset the eMG100 web administrator login ID.(eMG100, DKTU only)		

Table 3.3.1-2 COUNTRY CODES

COUNTRY	CODE	COUNTRY	CODE	COUNTRY	CODE	COUNTRY	CODE
America	1	Argentina	54	Australia	61	Bahrain	973
Bangladesh	880	Belgium	32	Bolivia	591	Brazil	55
Brunei	673	Burma	95	Cameroon	237	Chile	56
China (Taiwan)	886	CIS	7	Colombia	57	Costa Rica	506
Cyprus	357	Czech	42	Denmark	45	Ecuador	593
Egypt	20	El Salvador	503	Ethiopia	251	Fiji	679
Finland	358	France	33	Gabon	241	Germany	49
Ghana	233	Greece	30	Guam	671	Guatemala	502
Guyana	592	Haiti	509	Honduras	504	Hong Kong	852
India	91	Indonesia	62	Iran	98	Iraq	964
Ireland	353	Israel	972	Italy	39	Japan	81
Jordan	962	Kenya	254	Korea	82	Kuwait	965
Liberia	231	Libya	218	Luxembourg	352	Malaysia	60
Malta	356	Mexico	52	Monaco	377	Morocco	212
Netherlands	31	New Zealand	64	Nigeria	234	Norway	47
Oman	968	Pakistan	92	Panama	507	Paraguay	595
Peru	51	Philippines	63	P.N.G	675	Portugal	351
Qatar	974	Saudi Arabia	966	Senegal	221	Singapore	65
South Africa	27	Spain	34	Sri Lanka	94	Swaziland	268
Sweden	46	Switzerland	41	Thailand	66	Tunisia	216
Turkey	90	U.A.E.	971	United Kingdom	44	Uruguay	598
Venezuela	58	Y.A.R.	967				

4.3.2 NUMBERING PLANS DATA — PGM 102 to 109

4.3.2.1 System IP Address Plan — PGM 102

The System IP Address Plan sets several IP addresses, including the KSU LAN port IP address (MPB IP Address) required for external VoIP calls, the IP address for the router, and the system's internal private IP address Plan. Note that the MPB and Router addresses and sub-net masks must be routable IP addresses for access to an external VoIP network, remote access by a gateway/board or terminal, and remote Web access. The VOIB must also have a routable IP address for access to/from an external VoIP network or remote user.

When Automatic IP Assignment, button 7, is enabled, the system will assign IP addresses to each local terminal and the VOIB using the assigned System IP address range. These addresses are used for communications between the system and the VOIB and terminals. The system may be connected to a LAN that is segmented by two separate private IP address schemes. This segmenting technique is often used to separate voice and data devices. However, with this segmenting technique, the system would normally treat the segmented Terminals, such as iPECS Soft Phones, as remote devices, using valuable WAN bandwidth. Assigning the "Second Sys IP address" with a valid IP address from the second segment permits the system to communicate with the devices directly over the LAN.iPECS can be installed behind a NAPT server if the NAPT server provides fixed address translation and port forwarding to the system. In this case, the system will employ the "Firewall IP address," button 10, as the fixed public IP address for communication with remote devices. This address must be assigned as the "MPB" address in the remote device.

PROCEDURE	
SYSTEM IP ADDRESS PLAN PRESS FLEX KEY (01-17)	Press the **[PGM]** button and dial 102.
	Select the desired button 1~19, refer to Table 3.3.2.1-1.
	Use the dial-pad to enter desired IP addresses. Use an "*" to enter a dot (".")
	Press the **[Save]** button to store IP address entries.

Table 3.3.2.1-1 SYSTEM IP ADDRESS PLAN (PGM 102)

BTN	DISPLAY	DEFAULT	REMARK
1	MPB IP ADDRESS 10 .10 .10 .2	10.10.10.2	This is the IP address of the KSU LAN port A. A Public IP Address is required for remote user and external VoIP network access. IPv4 format.
2	MPB SUB NET MASK 255.255.255.0	255.255.0.0	
3	ROUTER IP ADDRESS 10 .10 .10 .1	10.10.10.1	IP Address of router for external network (WAN) access. Required for shared voice and data LAN, external VoIP, and remote Web access.
4	SYSTEM START IP ADDRESS 10.10.10.10	10.10.10.10	Start of range for private IP addresses assigned by the system to Modules/Terminals.
5	SYSTEM END IP ADDRESS 10.10.10.254	10.10.10.254	End of range for private IP addresses assigned by the system to Modules/Terminals.

Table 3.3.2.1-1 SYSTEM IP ADDRESS PLAN (PGM 102)

BTN	DISPLAY	DEFAULT	REMARK
6	SYSTEM SUB NET MASK 255.255.255.0	255.255.0.0	
7	AUTOMATIC IP ASSIGN (1:ON/0:OFF): ON	ON	The system will automatically assign IP addresses to modules and terminals (ON) or, when OFF, IP addresses are assigned manually in PGM 103 Device IP Address Plan.
8	SECOND SYS IP ADDRESS 0 .0 .0 .0	0.0.0.0	When devices are located on a different private address on the same net, enter the MPB IP address for the second LAN.
9	SECOND SYS SUB NET MASK 255.255.255 .0	255.255.255.0	
10	FIREWALL IP ADDRESS 0 .0 .0 .0	0.0.0.0	When the system is installed behind a NAPT server, the fixed IP Address provided by the NAPT server must be assigned in this field. Also, use this IP address for the MPB address in remote devices.
11	FIRST START MAC ADDR 000000000000	00.00.00.0 0.00.00	A range of MAC addresses can be entered to register devices. This entry is the start address of the first range.
12	FIRST END MAC ADDR 000000000000	00.00.00.0 0.00.00	A range of MAC addresses can be entered to register devices. This entry is the end address of the first range.
13	SECOND START MAC ADDR 000000000000	00.00.00.0 0.00.00	A range of MAC addresses can be entered to register devices. This entry is the start address of the second range.
14	SECOND END MAC ADDR 000000000000	00.00.00.0 0.00.00	A range of MAC addresses can be entered to register devices. This entry is the end address of the second range.
15	SYSTEM IP ADDRESS PLAN SYSTEM RESET		Returns System IP Address Plan to default values.
16	MPB DNS IP ADDR 0 .0 .0 .0	0.0.0.0	IP Address of Domain Name Server, which iPECS will use to resolve URL to an IP address. The DNS provides the resolution after receiving the name from iPECS.
17	MPB DHCP (1:ON/0:OFF) : OFF	OFF	Enable/Disable DHCP client function for the MPB.

4.3.2.2 Device IP Address Plan -PGM 103

TDM board is registered with its own slot number. It is registered automatically without any configuration.

To register an IP device:

As IP gateway/board and terminals register to the iPECS, a logical slot number is assigned, indicating the registration order. Also, based on the type of device (CO/IP gateway/board, Terminal), the system assigns a logical Sequence Number.

Thus, Sequence Numbers for CO gateway/board, Terminals are independently assigned based on the type of gateway/board. These Sequence Numbers are employed to provide a relationship between the physical MAC address and the logical port numbers of the device.

The system may assign a default private IP address to each Sequence Number. If desired, this program may be used to modify the assigned IP address for each gateway/board and iPECS Phone.

Each local gateway/board and terminal can be assigned for “Direct Send”. With Direct Send enabled, the system will employ the Ethernet MAC address, layer 2 switchings to eliminate the need for IP traffic overhead, reducing overall LAN traffic. The system normally employs IP multi-cast protocol to respond to a gateway/board or terminal registration request.

When the device is separated from the system by a router, the system must use the IP uni-cast protocol. The “Local Device” assignment establishes this. When disabled (Off), the system will send an IP uni-cast message to the device in response to a registration request.

PROCEDURE	
	Press the **[PGM]** button and dial 103.
	Select the desired Flex button. - Button 1: CO & VOIP Gateway/Board - Button 2: Stations - Button 3: MISU - Button 4: VMIU, VMIB - Button 5: MCIB - Button 6: SYSTEM RESET - Button 7: WTIB
DEVICE IP ADDRESS PLAN PRESS FLEX KEY (1-7)	Use the **[VOL UP]** and **[VOL DOWN]** buttons to see the next/ previous IP Address. Refer to Table 3.3.2.2-1 for display information.
	Press Flex 1~6 to select the Sub-menu item desired. See Table 3.3.2.2-1. - Button 1: IP address - Button 2: MAC address - Button 3: ARP - Button 4: REGISTRATION - Button 5: CPU Type - Button 6: Device (Board) ID
	Use the dial-pad to enter desired data. For IP and MAC addresses, an “*” is used to enter a dot (“.”)
	Press the **[Save]** button to store the data entry.

Table 3.3.2.2-1 DEVICE& STATION ADDRESS PLAN (PGM 103)

BTN	DISPLAY	FEATURE	DEFAULT
1	001-001 :B40EDCBF5606 VOIP 1 :10 .10 .10 .2	Line 1 - Sequence Number, 2 or 3 digits MAC Address, 12 digits Line 2 - Module Type, 4 characters First Logical port number IP Address, 7~12 digits	CO & VoIP board IP address set sequentially from the range in PGM 102.
1–1	SET IP ADDRESS VOIP 1 : 10.10.10.2	Use Flex button 1 to set the device's IP address in IP v4 format.	10.10.10.10~254
1–2	SET MAC ADDRESS 001-001 : B40EDCBF5606	Use Flex button 2 to enter the device's MAC address in the system memory.	None
1–3	ARP (1:ON/0:OFF): OFF	Use Flex button 3 to enable/disable Direct Send mode, which employs layer 2 switchings to local devices.	OFF
1–4	REGISTRATION (0:UCAST/1:MCAST): MCAST	Use Flex button 4 to enable/disable Local Device Mode, which defines the device as a common LAN with the PB.	MCAST
1–5	CPU TYPE MSC1K	Flex button 5 displays the type of CPU employed in the device.	
1–6	DEVICE(BOARD) ID PRIB	Flex button 6 displays the Board type designation.	
2	001-001 : B40EDCBF5606 KTU 100 :10.10.10.10	LCD shows: Line 1 Sequence Number, 3 digits MAC Address, 12 digits Line 2 Station Type, 3 characters Station Number, 2~4 digits IP Address, 7~12 digits	Station IP address set sequentially, from the range in PGM 102.
2–1	SET IP ADDRESS KTU 100 :10.10.10.10	Use Flex button 1 to set the device's IP address in IP v4 format.	10.10.10.10~254
2–2	SET MAC ADDRESS 001-001 : B40EDCBF5606	Use Flex 2 button to enter the device's MAC address into system memory.	None
2–3	ARP (1:ON/0:OFF): OFF	Use Flex button 3 to enable/disable Direct Send mode, which employs layer 2 switchings to local devices.	OFF
2–4	REGISTRATION (0:UCAST/1:MCAST): MCAST	Use Flex button 4 to enable/disable Local Device Mode, which defines the device as on a common LAN with the MPB.	MCAST

Table 3.3.2.2-1 DEVICE& STATION ADDRESS PLAN (PGM 103)

BTN	DISPLAY	FEATURE	DEFAULT
2–5	CPU TYPE MSC1K	Flex button 5 displays the type of CPU employed in the device.	
2–6	DEVICE(BOARD) ID HYIB	Flex button 6 displays the terminal type designation.	
3	001-017 : B40EDCBF5606 MISU :10.10.10.2	LCD shows: Line 1 Sequence Number, 2 digits MAC Address, 12 digits Line 2 “MISU” IP Address, 7~12 digits.	IP address of MISU. Functions in the system‘s MPB set automatically,
3–1	SET IP ADDRESS MISU :10.10.10.2	Use Flex button 1 to set the device‘s IP address in IP v4 format.	10.10.10.10~254
3–2	SET MAC ADDRESS 001-003 : B40EDCBF5606	Use Flex button 2 to enter the device‘s MAC address into system memory.	None
3–3	ARP (1:ON/0:OFF): OFF	Use Flex button 3 to enable/disable Direct Send mode, which employs layer 2 switchings to local devices.	OFF
3–4	REGISTRATION (0:UCAST/1:MCAST): MCAST	Use Flex button 4 to enable/disable Local Device Mode, which defines the device as a common LAN with the MPB.	MCAST
3–5	CPU TYPE MSC1K	Flex button 5 displays the type of CPU employed in the device.	
3–6	DEVICE(BOARD) ID MISU	Flex button 6 displays the MISU type designation.	
4	001-015 : B40EDCBF5606 VMIU :10.10.10.2	LCD shows: Line 1 Sequence Number, 2 digits MAC Address, 12 digits Line 2 device type and IP address.	.
4–1	SET IP ADDRESS VMIU :10.10.10.2	Use Flex button 1 to set the device‘s IP address in IP v4 format.	10.10.10.10~254
4–2	SET MAC ADDRESS 001-015 : B40EDCBF5606	Use Flex button 2 to enter the device‘s MAC address into system memory.	None

Table 3.3.2.2-1 DEVICE& STATION ADDRESS PLAN (PGM 103)

BTN	DISPLAY	FEATURE	DEFAULT
4–3	ARP (1:ON/0:OFF): OFF	Use Flex button 3 to enable/disable Direct Send mode, which employs layer 2 switchings to local devices.	OFF
4–4	REGISTRATION (0:UCAST/1:MCAST): MCAST	Use Flex button 4 to enable/disable Local Device Mode, which defines the device as on a common LAN with the MPB.	MCAST
4–5	CPU TYPE MSC1K	Flex button 5 displays the type of CPU employed in the device.	
4–6	DEVICE(BOARD) ID VMIU	Flex button 6 displays the type designation.	
5	001-018 : FFFF0000FFFF MCIB : 10 .10 .10 .2	LCD shows: Line 1 Sequence Number, 2 digits MAC Address, 12 digits Line 2 device type and IP address.	
5–1	SET IP ADDRESS MCIB :10.10.10.2	Use Flex button 1 to set the device‘s IP address in IP v4 format.	10.10.10.10~254
5–2	SET MAC ADDRESS 001-018 : FFFF0000FFFF	Use Flex button 2 to enter the device‘s MAC address into system memory.	None
5–3	ARP (1:ON/0:OFF): OFF	Use Flex button 3 to enable/disable Direct Send mode, which employs layer 2 switchings to local devices.	OFF
5–4	REGISTRATION (0:UCAST/1:MCAST): MCAST	Use Flex button 4 to enable/disable Local Device Mode, which defines the device as on a common LAN with the MPB.	MCAST
5–5	CPU TYPE MS828	Flex button 5 displays the type of CPU employed in the device.	
5–6	DEVICE(BOARD) ID MCIB_V	Flex button 6 displays the type designation MCIB_V.	
6	DEVICE IP ADDRESS PLAN SYSTEM RESET	If the **[Save]** button is pressed, the system will reset and restart.	
7	001-003 : 00405A142C67 WTIB : 10:10:10:14	Line 1 Sequence Number, 2 digits MAC Address, 12 digits Line 2 “WTIB” , and IP Address, 7~12 digits.	

Table 3.3.2.2-1 DEVICE& STATION ADDRESS PLAN (PGM 103)

BTN	DISPLAY	FEATURE	DEFAULT
7–1	SET IP ADDRESS WTIB :10.10.10.14	Use Flex button 1 to set the device‘s IP address in IP v4 format.	10.10.10.10~254
7–2	SET MAC ADDRESS 001-003 : 00405A142C67	Use Flex button 2 to enter the device‘s MAC address into system memory.	None
7–3	ARP (0:ON/1:OFF): OFF	Use Flex button 3 to enable/disable ARP, ARP OFF enables Direct Send, which employs layer 2 switching to local devices.	OFF
7–4	REGISTRATION (0:UCAST/1:MCAST):MCAST	Use Flex button 4 to disable/enable Local Device Mode, which defines the device as on a common LAN with the system. MCAST enables Local Device Mode.	MCAST
7–5	CPU TYPE MS828	Flex button 5 displays the type of CPU employed in the device.	
7–6	DEVICE(BOARD) ID WTIB	Flex button 6 displays the type designation, WTIB.	

4.3.2.3 CO Device Sequence Number -PGM 104

The system uses the Sequence Number to assign logical (software) port numbers. This Sequence Number relates the hardware and software port numbers for each device.

PROCEDURE	
001 002 003 004 005 006 009 007 008 013 014 . . .	Press the **[PGM]** button and dial 104.
	Press the Flex button (1~6) for the desired Sequence Number, use the **[VOL UP]** and **[VOL DOWN]** buttons for the next/previous set of six Sequence Numbers.
	Using the dial pad, enter new slot numbers. Note slot numbers cannot be duplicated, and duplicates will cause an error. The **[SPEED]** button may be used to erase the slot number associated with the selected Sequence Number.
	Press the **[Save]** button to store the new Slot data.

4.3.2.4 Flexible Station Numbering Plan -PGM 105

Each LDP Phone, iPECS IP Phone, and SLT is assigned a Sequence Number during the registration process.

The station Sequence Number is a 3-digit number starting at 001, which is incremented as each terminal device is registered.

At registration, station numbers increment sequentially with the Sequence Number and are assigned starting at station 100 for Sequence Number 001.

The Station Numbering Plan allows the station numbers to be Three (3) to eight (8) digits in length.

PROCEDURE	
001 002 003 004 100 101 102 103	Press the **[PGM]** button and dial 105.
	Use either of the two methods below to change the station number associated with a Sequence Number. Note pressing the **[SPEED]** button twice clears all station number assignments. The **[VOL UP] / [VOL DOWN]** buttons are used to view the next/previous 2 station Sequence Numbers.
001 002 003 004 … … … …	Range entry: Using the dial-pad, enter a station number range (first & last station number). The two station numbers must be of the same length, 2~8 digits. The range assignment begins with the first station number shown by the LCD and continues to the end of the entered range.
	Single entry: 4.1 Press the Flex button 1~4 to select the desired Sequence Number from the two shown by the LCD. 4.2 Dial new station number.
	Press the **[Save]** button to store the new station numbers.

4.3.2.5 Flexible Numbering Plan part A to D - PGM 106 to 109

Feature dial codes for the system can be assigned using the system's Flexible Numbering Plan. Feature codes should be one (1) to four (4) digits in length and must not conflict. For example, Feature dial codes 53 and 536 represent a conflict. The system will generate an error tone and will not update the database.

Table 3.3.2.5-1 to Table 3.3.2.5-4 below show the defaults for the 1st base Numbering Plan. Appendix B provides the default values for each of the 9 basic Numbering Plans. Select the base Numbering Plan in PGM 100. The default is based on Numbering plan 1.

PROCEDURE	
FLEX NUMBERING PLAN A PRESS FLEX KEY (01-24)	Press the **[PGM]** button and dial: - 106 for part A - 107 for part B - 108 for part C - 109 for part D.
	Select the desired button (01~24); refer to Table 3.3.2.5-1 to Table 3.3.2.5-4 for **PGM** 106 to 109, respectively.
	Use the dial-pad to enter desired data. Where a range is required, input the first and last numbers in the range.
	Press the **[Save]** button to store the new Numbering Plan data.

Table 3.3.2.5-1 FLEXIBLE NUMBERING PLAN PART A (PGM 106)

BTN	DISPLAY	FEATURE	DEFAULT
1	INT PAGE ZONES START& END:301-335	Internal Page Zone access codes. eMG80/100:301~335, eMG800:301~400	Refer to description
2	INT ALL CALL ENTER NEW #:543	Internal All Call Page access code.	543
3	MEET ME PAGE ENTER NEW #:544	Meet-Me-Page answer code.	544
4	EXT PAGE ZONE 1 ENTER NEW #:545	External Page Zone 1 access code.	545
5	EXT PAGE ZONE 2 ENTER NEW #:546	External Page Zone 2 access code.	546
6	EXT ALL CALL ENTER NEW #:548	External All Call Page access code.	548
7	ALL CALL PAGE ENTER NEW #:549	All Call Page access code.	549

Table 3.3.2.5-1 FLEXIBLE NUMBERING PLAN PART A (PGM 106)

BTN	DISPLAY	FEATURE	DEFAULT
8	SMDR ACT CODE ENTER ENTER NEW #:550	Dial code to signify the start of an SMDR Account Code.	550
9	FLASH CMD TO CO ENTER NEW #:551	Dial code to generate a Flash on the active CO Line.	551
10	SLT LAST SPD DIAL ENTER NEW #:552	SLT Last Number Redial feature access code.	552
11	DND ENTER NEW #:553	Dial code to activate Do-Not-Disturb.	553
12	CALL FWD ENTER NEW #:554	Dial code to activate Call Forward.	554
13	SPD DIAL PGM ENTER NEW #:555	Speed Dial programming access dial code for SLTs.	555
14	MSG WAIT ENABLE ENTER NEW #:556	Dial code to activate a Message Wait/Call Back.	556
15	MSG WAIT RETURN ENTER NEW #:557	Dial code to return a Message Wait/Call Back.	557
16	SPD DIAL ACCESS ENTER NEW #:558	SLT Speed Dial access code.	558
17	DND/FWD CANCEL ENTER NEW #:559	Dial code to cancel DND/FWD/MSG Wait.	559
18	CO SYS HOLD ENTER NEW #:560	Dial code to place a CO call on System Hold.	560
19	SLT PGM MODE ENTER ENTER NEW #:561	User program mode entry dial code for SLTs.	561
20	ATTD UNAVAILABLE ENTER NEW #:562	Dial code to place attendant in the “unavailable” mode, attendant only.	562

Table 3.3.2.5-1 FLEXIBLE NUMBERING PLAN PART A (PGM 106)

BTN	DISPLAY	FEATURE	DEFAULT
21	ALARM RESET ENTER NEW #:565	Dial code to terminate Alarm contact signal.	565
22	GROUP CALL PICK-UP ENTER NEW #:566	Group Call Pick-up dial code.	566
23	UNIVERSAL ANSWER ENTER NEW #:567	Universal Night Answer dial code.	567
24	ACCNT CODE WITH BIN ENTER NEW #:568	Dial code for entering an Account code.	568

Table 3.3.2.5-2 FLEXIBLE NUMBERING PLAN PART B (PGM 107)

BTN	DISPLAY	FEATURE	DEFAULT
1	WALKING COS ENTER NEW #:569	Dial code to activate Walking Class-of-Service.	569
2	ACD AGENT ON/OFF DUTY ENTER NEW #:571	Dial code to toggle ACD Agent or Supervisor ON and OFF duty.	571
3	ACD SUPERVISOR LOGIN ENTER NEW #:572	Supervisor login dial code.	572
4	ACD SUPERVISOR LOGOUT ENTER NEW #:573	Supervisor logout dial code.	573
5	ACD HELP CODE ENTER NEW #:574	Agent code requesting Supervisor help and Supervisor Help requests Response code.	574
6	ACD CALLS IN QUEUE ENTER NEW #:575	Dial code to display calls in queue.	575
7	ACD SUPERVISOR STATUS ENTER NEW #:576	Dial code to display group status.	576
8	ACD SUPERVISOR MONITOR ENTER NEW #:577	Dial code to activate Supervisor monitor.	577

Table 3.3.2.5-2 FLEXIBLE NUMBERING PLAN PART B (PGM 107)

BTN	DISPLAY	FEATURE	DEFAULT
9	ACD REROUTE QCALL ANS ENTER NEW #:578	Dial code to reroute call after answer.	578
10	ACD REROUTE QCALL NO AN ENTER NEW #:579	Dial code to reroute call prior to answer.	579
11	CAMP-ON ANSWER ENTER NEW #:621	Dial code to answer a Camped On call.	621
12	CALL PARK LOCATIONS START#:#601-#619	Dial code to place/retrieve a call in a Park location. eMG80/100:#601~#619, eMG800:#601~#800	Refer to description
13	STA GRP PILOT NUMBER START #:401-440	Station group pilot numbers. eMG80/100:401~440, eMG800:401~500	Refer to description
14	STA USER VSF FEATURES ENTER NEW #:*66	VSF feature access code.	*66
15	CALL COVERAGE RING ENTER NEW #:76	Code for Call Coverage button.	76
16	DIRECT CALL PICK-UP ENTER NEW #:*77	Dial code to activate Directed Call Pick-up.	*77
17	ACCESS CO GROUP FEAT ENTER NEW #:89	Dial code to access a CO Line or IP channel from a CO/IP group.	89
18	ACCESS IND CO/IP FEAT ENTER NEW #:88	Dial code to access a specific CO Line.	88
19	ACCESS HELD CO/IP FEAT ENTER NEW #:8*	Dial code to access last held CO Line or IP channel from Hold.	8*
20	ACCESS HELD IND CO/IP ENTER NEW #:8#	Dial code to access a specific CO Line/IP channel from Hold.	8#
21	ACCESS CO IN 1ST CO GRP ENTER NEW #:9	Dial code to access the 1st available CO Line in any accessible group.	9

Table 3.3.2.5-2 FLEXIBLE NUMBERING PLAN PART B (PGM 107)

BTN	DISPLAY	FEATURE	DEFAULT
22	ATTENDANT CALL ENTER NEW #:0	Dial code to call an Attendant.	0
23	VM MSG WAIT ENABLE ENTER NEW #:*8	Dial code for external Voice mail to activate Message Wait indication.	*8
24	VM MSG WAIT CANCEL ENTER NEW #:*9	Dial code for external Voice Mail to deactivate Message Wait indications.	*9

Table 3.3.2.5-3 FLEXIBLE NUMBERING PLAN PART C (PGM 108)

BTN	DISPLAY	FEATURE	DEFAULT
1	DOOR OPEN 1 ENTER NEW #:#*1	Dial code to activate Door 1 contact (open door 1)	#*1
2	DOOR OPEN 2 ENTER NEW #:#*2	Dial code to activate Door 2 contact (open door 2).	#*2

Table 3.3.2.5-4 FLEXIBLE NUMBERING PLAN PART D (PGM 109)

BTN	DISPLAY	FEATURE	DEFAULT
1	MCID REQUEST ENTER NEW #:*0	Dial code to activate Malicious Call ID Request in ISDN Supplementary service. Not available in USA version.	*0
2	AME FEATURE ENTER NEW #: 564	Dial code to assign an Answering Machine Emulation Flex button.	564
3	US-CONF TMR EXTENSION ENTER NEW #:##	Dial code to extend Unsupervised conference time.	##
4	PTT GROUP LOGIN/OUT ENTER NEW #:#0	Push-To-Talk group login and logout dial code. The station must have a PTT button for proper operation.	#0
5	ACD AGENT P LOGIN ENTER NEW #:581	ACD Agent Primary Login code.	581
6	ACD AGENT P LOGOUT ENTER NEW #:582	ACD Agent Primary Logout code.	582

Table 3.3.2.5-4 FLEXIBLE NUMBERING PLAN PART D (PGM 109)

BTN	DISPLAY	FEATURE	DEFAULT
7	ACD AGENT S LOGIN ENTER NEW #:583	ACD Agent Secondary Login code.	583
8	ACD AGENT S LOGOUT ENTER NEW #:584	ACD Agent Secondary Logout code.	584
9	ACD AGENT WRAPUP END ENTER NEW #:585	ACD Agent wrap-up end code.	585
10	TNET CM LOGIN/OUT ENTER NEW #:586	When Central Control networking (TNET) is employed, a station can be manually logged in or out of the Central system using this code.	586
11	ENTER INTO CONF-ROOM ENTER NEW #:59	Code for a station to enter a conference room.	59
12	ENTER INTO CONF-GROUP ENTER NEW #:68	Code to open a conference group.	68
13	STATION ICR ENTER NEW #:587	Code to activate Station ICR.	587
14	PICK UP GROUP PICK-UP ENTER NEW #:588	Pick Up Group Call Pick-up dials code.	588
15	EMERGENCY PAGE ENTER NEW #:589	Code for emergency page.	589
16	REMOTE MEX CONTROL ENTER NEW #:580	Code to control the mobile extension settings remotely.	580
17	ALL GR AGENT ON/OFF DUT ENTER NEW #:58*	Code to change the state of the Agent ON/Off duty in all hunt groups.	58*
18	SLT ACNR CODE ENTER NEW #:58#	In SLT, user can ACNR feature by using this numbering plan.	58#
19	ACD SUPERVISOR RING MODE ENTER NEW #:570	Code to check and change ACD group Ring mode by ACD group supervisor.	570

Table 3.3.2.5-4 FLEXIBLE NUMBERING PLAN PART D (PGM 109)

BTN	DISPLAY	FEATURE	DEFAULT
20	COMPANY DIRECTORY NAME ENTER NEW #:563	Code to check and change recording station subscribe name of Company Directory feature	563
21	ISDN SUPP HOLD ENTER NEW #:57*	ISDN Supplementary Service for HOLD.	57*
22	ISDN SUPP CONF ENTER NEW #:57#	ISND Supplementary Service for Conference (Not supported).	57#
23	FORCED SEIZE BUSY STN/CO ENTER NEW #:56*	Busy Station / CO can be connected with entering this Code.	56*
24	ADDED FLEX NUMBER PLAN PRESS FLEX KEY (1-5)		
24-1	OVERRIDE DND/CFW ENTER NEW #:56#	[56#] + Station number, then the station's DND or CFW setting will be overridden.	56#
24-2	CANCEL CALL BACK ENTER NEW #:….	It is used to cancel call back.	
24-3	XFER TO VSF ANNC NO ENTER NEW #:55*	When a station is talking over a CO line User, [Transfer] + [55*] + Valid system announcement (01-70), then Outside user can hear system announcement, and system starts DISA service.	55*
24-4	CCR ENTER NEW #:#2	It is used in digit conversion.	#2
24-5	UCS SYS CONF GRP JOIN ENTER NEW #:5*0	It is used to join UCS conference group by entering the code.	5*0

4.3.2.6 8-Digit Table

We can support it more 4 digits for station number. Station numbering should not conflict with the numbering plan. It is consists of prefix digits and adds digits. Prefix digits can have up to 4 digits, and Add digits can have up to 4 digits.

PROCEDURE	
DIGIT 8 TBL ENTER TBL NO(01-10)	Press the **[PGM]** button and dial 238.
Digit 8 TBL 1 : Empty	Use the dial-pad to enter the desired table number.
	Press the desired Flex button; refer to Table 3.3.2.6-1.
	Use the dial-pad to enter the required data.
	Press the **[Save]** button to store the data entry.

Table 3.3.2.6-1 8-Digit Table (PGM 238)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	TBL 1 : SET 8 digit 8 digit 1: …….	The user may be allowed to enter the prefix digits using character assign method. (ex : 4+0 → 4)	Up to 4digits	N/A
2	TBL 1: SET ADD DIGIT ADD DIGIT : 0	The user can be allowed to add digits. (ex: if it's set 3, prefix digits + xxx)	Up to 4 digits	0

4.3.3 Station Data –PGM 110-125

4.3.3.1 Station Type -PGM 110

Each station is assigned a type used by the system to recognize the station's capabilities and default Flex button configuration. In addition, for the iPECS DSS/BLF Consoles, the associated station number is identified here. Note that the maximum of three (3) DSS Consoles(LIP DSS & LDP DSS) can be associated and connected to a station.

PROCEDURE	
STATION TYPE ASSIGN ENTER STA RANGE	Press the **[PGM]** button and dial 110.
100-110 F1:TY F2:ASC IPKTU	Use the dial-pad to enter a station range (Ex 100~110). For a single station, enter the same number twice; use this procedure for an iPECS DSS
	Select Flex button 1, to set the station type and, for iPECS DSS Consoles (types 2~4), Flex button 2 assigns the associated station.
	Use the dial-pad to enter desired data: - 4-1. For Flex button 1 (TYPE), enter the station TYPE; refer to 3.3.3.1–1.
111-111 F1:TYPE F2 :ASC DSS MAP2 : STA	- 4-2. For Flex button 2 (Associated station), enter the number of the station used with the console. Flex button 2 is only available for iPECS DSS Consoles (Types 2~4). See Table 3.3.3.1-2 for default configurations.
	Press the **[Save]** button to store the data entries.

Table 3.3.3.1-2 STATION TYPE ASSIGNMENT — (PGM 110)

TYPE	DESCRIPTION
1	IP KEYSET
2	DSS MAP 1
3	DSS MAP 2
4	DSS MAP 3
5	SLT (DTMF)
6	SLT (DTMF) – Voltage Message lamp
7	SLT (DTMF) – FSK Message lamp
8	SLT (DTMF) – Polarity Reversal Message lamp

Table 3.3.3.1-1 CONSOLE BUTTON CONFIGURATION (PGM 110)

MAP	DEFAULT CONSOLE BUTTON CONFIGURATION		
MAP 1	Button 1: Intrusion	Button 2: All Call Page	Button 3: Call Park 1
	Button 4: Station Group 1	Button 5: Camp-On	Button 6: Internal All Call Page
	Button 7: Call Park 2	Button 8: Station Group 2	Button 9: [Release]
	Button 10: Ext. All Call Page	Button 11: Call Park 3	Button 12: Station Group 3
	Buttons 13 ~ 48: Station Ports 100 ~ 135		
MAP 2	Station Ports 136 ~ 183		
MAP 3	Station Ports 184 ~ 231		

4.3.3.2 Station Attributes I to III -PGM 111-113

Station Attributes define features and functions available to the station. Generally, the entry will turn the feature ON (enable) or OFF (disable). Refer to Table 3.3.3.2-1 to Table 3.3.3.2-3 for a description of the features and the input required.

PROCEDURE	
STATION ATT 1 ENTER STA RANGE	Press the **[PGM]** button and dial: - 111 for Station Attributes I - 112 for Station Attributes II - 113 for Station Attributes III
100-110 STATION ATT 1 PRESS FLEX_KEY (01-24)	Use the dial-pad to enter a station range (Ex. 100~110). For a single station, enter the same number twice.
	Press the desired Flex button; Refer to Table 3.3.3.2-1 to Table 3.3.3.2-3.
	Use the dial-pad to enter desired data for the attribute setting. Refer to Table 3.3.3.2-1 to Table 3.3.3.2-3.
	Press the **[Save]** button to store the data entry.

Table 3.3.3.2-1 STATION ATTRIBUTES I (PGM 111)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	100-110 AUTO SPKR (1:ON/0:OFF) : ON	Enables **[SPEAKER]** activation when a CO/IP, DSS, or other feature button is pressed. No need to lift the handset.	0: OFF 1: ON	ON
2	100-110 CALL FWD (1:ON/0:OFF) : OFF	Enables the Call Forward activation by the station.	0: OFF 1: ON	OFF
3	100-110 DND (0-3) : 0(OFF)	Enables the DND activation by the station. 0: OFF, 1: ALL, 2:ICM call only 3:CO call only	Refer to description	OFF
4	100-110 DATA SECURITY (1:ON/0:OFF) : OFF	Disables to override and camp-on tones to the station when busy.	0: OFF 1: ON	OFF
5	100-110 HOWLING TONE (1:ON/0:OFF) : ON	Permits Howler tone to be sent to an SLT when left off-hook.	0: OFF 1: ON	ON
6	100-110 NO TCH ANS (1:ON/0:OFF) : OFF	Enables No-touch answer; this will automatically connect transferred calls to the station‘s speakerphone.	0: OFF 1: ON	OFF
7	100-110 PAGE ACCESS (1:ON/0:OFF) : OFF	Allows station to access paging.	0: OFF 1: ON	OFF
8	100-110 HEADSET RING (1:S/2:H/3:BOTH) : SPKR	This item selects the device to receive incoming ring signals, Speaker, Headset, or Both.	1: Speaker 2: Headset 3: Both	SPKR

Table 3.3.3.2-1 STATION ATTRIBUTES I (PGM 111)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
9	100-110 SPKR/HEAD (1:SPKR/0:HEAD): SPKR	Selects Speakerphone mode or Headset mode	0: Headset 1: Speaker	SPKR
10	100-110 LCD DISP LED (1:RING/0:MWI): MWI	The LCD LED, upper left of LCD, may be used for Intercom Call ring Indication or Message Wait Indication.	0: MWI 1: Ring	MWI
11	100-110 LOOP LCR ACCT (1:ON/0:OFF) : OFF	Station based LOOP LCR authorization; is used for LOOP LCR operation.	0: OFF 1: ON	OFF
12	100-110 CALL COVERAGE (1:ON/0:OFF) : OFF	The Call Coverage feature permits an iPECS Phone user to receive ring and answer calls to other stations.	0: OFF 1: ON	OFF
13	100-110 CALL COVERAGE DELAY RING: 0	When a covered station rings, the **{CALL COVERAGE}** button LED will flash at the covering station and will receive a ring (immediate or delayed 0 to 9 ring cycles).	0~9	0
14	100-110 OFFNET FWD (1:DIS/0:EN):ENABLE	A station must be allowed Off Net Fwd to forward external incoming calls outside the system or otherwise establish a CO-to-CO connection (Unsupervised Conference). (Except USA version)	0: Enable 1: Disable	Enable
15	100-110 FORCED ICM (1:ON/0:OFF) : OFF	When placing an intercom call, a user can change the ICM signaling mode, Tone Ring to Hands free answer mode, or HF Answer to Tone Ring.	0: OFF 1: ON	OFF
16	100-110 ACT PTT GRP ACTIVE PTT GROUP:	A station can be assigned to a PTT group, and the group is enabled so the station can place and receive PTT announcements for the group.	0~9	.
17	100-110 ICM GROUP (01-15): 01	Assigns station to an ICM Tenancy Group, refer to PGM 125. eMG80/100:1~15, eMG800:0~32	Refer to description	1
18	100-100 VMIU/VMIB BOARD USE 1ST VMIU/VMIB	Assigns the VMIU or VMIB where messages for the station are stored.	Sequence number.	
19	100-110 SIP UID TBL (000-140) : 000	Index to SIP User ID table, PGM 126, for the station. Note PGM 126 is accessible Web-only.	000-140	000
20	100-110 CAMP ON TONE (1:ON/0:OFF) : ON	Permits camp-on tone to be sent to a station when the station receives camp-on request.	0: OFF 1: ON	ON

Table 3.3.3.2-1 STATION ATTRIBUTES I (PGM 111)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
21	100-110 SERIAL DSS (1:EN/0:DIS):ENABLE	Assigns Serial DSS usage authority.	0: Disable 1: Enable	Enable
22	100-110 DLTN (00-37) DIAL TONE (00)	Each station can choose one of the below dial tone sources • 00: dial tone, • 01: INT music • 02: EXT music, • 03: VSF MOH • 04~08: SLT MOH1~5, • 09~37: VSF MOH2~30	Refer to description	dial tone
23	100-110 RBTN (00-37) RING BACK TONE (00)	Each station can choose one of the below ring back tone sources • 00: ring back tone • 01: INT music • 02: EXT music • 03: VSF MOH • 04~08: SLT MOH1~5 • 09~37: VSF MOH2~30	Refer to description	ring back tone
24	100-110 ATTACH MSG (1:ON/0:OFF) : ON	When e-mail notification of a new VSF message is enabled (PGM 236-button 7), the e-mail may include the voice mail as a wav file attachment. VSF mail server IP (PGM 113-button18) &VSF Mail Address (PGM 113-button19) are required for proper operation.	0: OFF 1: ON	ON

Table 3.3.3.2-2 STATION ATTRIBUTES II (PGM 112)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	100-110 CALL TIME TN (1:ON/0:OFF) : OFF	A tone can be sent periodically indicating the elapsed time of an outgoing CO/IP call. The Elapsed Call Timer (PGM 180-button 19) determines the period between tones.	0: OFF 1: ON	OFF
2	100-110 AUTO HOLD (1:ON/0:OFF) : OFF	Enables Auto Hold for the station. With Auto Hold enabled, the system will place an active external call on hold if the user presses a CO/IP or DSS button.	0: OFF 1: ON	OFF
3	100-110 TIME RESTRICT (1:ON/0:OFF) : OFF	The system can automatically disconnect outgoing calls at the expiration of the Call Restricttimer (PGM 180-button 14).	0: OFF 1: ON	OFF
4	100-110 IND CO ACCESS (1:EN/0:DIS) : ENABLE	Permits stations to use dial codes to access individual COLines.	0: Disable 1: Enable	Enable

Table 3.3.3.2-2 STATION ATTRIBUTES II (PGM 112)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
5	100-110 CO/IP QUEUING (1:EN/0:DIS): ENABLE	Permits the station to queue for the next available Line when all Lines Busy signal is received.	0: Disable 1: Enable	Enable
6	100-110 CO PGM (1:EN/0:DIS): DISABLE	A station can be permitted to change the CO Line numbers(ports) associated with a COLine button.	0: Disable 1: Enable	Disable
7	100-110 RING LINE PRE (1:EN/0:DIS) : ENABLE	Enables Ringing LinePreference for the station. Calls that ring the telephone are answered by going off-hook.	0: Disable 1: Enable	Enable
8	100-110 SPD ACCESS (1:EN/0:DIS) : ENABLE	Allows the station assessment to system Speed Dial bins.	0: Disable 1: Enable	Enable
9	100-110 UCD GRP SVC (1:ON/0:OFF) : OFF	When unavailable, DID/DISAcalls to the station can be routed to the ACD Group to which the station is a member.	0: OFF 1: ON	OFF
10	100-110 RING GRP SVC (1:ON/0:OFF) : OFF	When unavailable, DID/DISAcalls to the station can be routed to the Ring Group to which the station is a member.	0: OFF 1: ON	OFF
11	100-110 TWO WAY RECD (1:ON/0:OFF) : OFF	When allowed, the station can activate the Two-way record feature to record a conversation.	0: OFF 1: ON	OFF
12	100-110 MSG SCRL SPD (0 - 7) : 3	Select message scroll speed for IP phone (Notpresently used).	0 ~ 7	3
13	100-110 HOT DESK STA (1:ON/0:OFF) : OFF	A station can be assigned as a Hot Desk phone. Users and agents can log in and use resources of the system through the Hot Desk phone.	0: OFF 1: ON	OFF
14	100-110 PREFER CO/GRP …..	The system will seize this COLine or CO group number when the station dials ‘9’ (The first available CO access code).	CO # CO Gr. #	..
15	100-110 SEND SLT CLI (1:ON/0:OFF) : ON	When allowed, system will sendCLI information to the SLT.	0: OFF 1: ON	ON
16	100-110 UCD PRIORITY (0-9) : 0	ACD Group members may be assigned a priority, 0-9. Members with the highest priority are sent calls ahead of lower priority members. This field is the same as PGM191-button 19 for ACD Groups.	0 ~ 9	0

Table 3.3.3.2-2 STATION ATTRIBUTES II (PGM 112)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
17	100-110 EZ PWD LOGIN (1:ON/0:OFF	For ez ATD. Enables/disablesrequired Auth code use.	0: OFF 1: ON	OFF
18	100-110 EMERGENCY CO …..	This field defines the CO Line orGroup employed by the system to place Emergency Assistance calls. **CO #, CO Group #, Transit-out**	Refer to description	Any CO
19	100-110 STA ACCOUNT (1:ON/O:OFF) : OFF	When ON, the station user must enter an authorization code to access CO Lines.	0: OFF 1: ON	OFF
20	100-110 AUTO CALL REC (0:OFF/1:ALL/2:CO): OFF	This field enables unconditional recording of all calls placed/received by the station. Recordings, in .wav format, are stored at the UCS Client or Recording Server (IPCR or 3rd party) defined under button 21. Station and CO calls are recorded with ALL. Only CO calls are recorded with CO.	0: OFF 1: ALL 2: CO	OFF
21	100-110 CALL REC DEST ……..	When Unconditional Call recording is enabled as above, the recording UCSClient station number is defined here.	station	
22	100-110 VSF BK DEL (1:ON/0:OFF) : OFF	UCS Client may monitor voice messages for another station as a backup. The UCS Client will include the message count for the station in the Voice message count. When enabled here, the UCS Client may delete messages for the station.	0: OFF 1: ON	OFF
23	100-110 VSF BK STA ……..	UCS Client may monitor voice messages for another station as a backup. UCS Client will include the message count for the station in the Voice message count. This field defines theUCS Client station number that will be used as theVMIU/VMIB backup.	station	
24	100-110 VSF BK PROM (1:ON/0:OFF) : OFF	Enables UCSClient to backup VSF Prompts.	0: OFF 1: ON	OFF

Table 3.3.3.2-3 STATION ATTRIBUTES III (PGM 113)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	100-110 ADMIN (1:EN/0:DIS) : ENABLE	Enables station access to the System Database.	0: Disable 1: Enable	Enable

Table 3.3.3.2-3 STATION ATTRIBUTES III (PGM 113)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
2	100-110 VSF ACCESS (1:EN/0:DIS) : ENABLE	Permits station access to the built-in AA/VM.	0: Disable 1: Enable	Enable
3	100-110 GROUP LISTEN (1:EN/0:DIS) : DISABLE	Enables Group Listens to feature. Audio is sent to both the handset and speaker with the handset microphone active and speakerphone microphone OFF.	0: Disable 1: Enable	Disable
4	100-110 OVERRIDE (1:EN/0:DIS) : DISABLE	Enables intrusion to gain access to an active CO/IP call.	0: Disable 1: Enable	Disable
5	100-110 SMDR HIDE (1:EN/0:DIS) : DISABLE	Enables hiding dialed digits in SMDR output.	0: Disable 1: Enable	Disable
6	100-110 VOICE OVER (1:EN/0:DIS) : ENABLE	Enables use of Voice Over by station.	0: Disable 1: Enable	Enable
7	100-110 PRIME LINE (1:HOT/0:WARM) : WARM	Enables Delayed Prime Line (Idle Line) activation. See PGM 121, Idle Line Selection, and PGM 182-button 6 for Prime-Line timer.	0: WARM 1: HOT	WARM
8	100-110 ALARM/DOORBEL (1:EN/0:DIS) : DISABLE	Assigns station to receive Alarm/Doorbell signal.	0: Disable 1: Enable	Disable
9	100-110 CALL WAIT (0-3) : For Ext/Int	When a busy station receives a call, the call may queue to the station instead of receiving a busy tone. With Call Wait, the caller will hear Ring-back, and the user sees the CO line LED flash. If this option is set to a station, and a co-line is ring assigned to the station, second ring assigned call CLI will show in the station's LCD. **0: OFF, 1:For External/Internal** **2:For External, 3:For Internal**	Refer to description	For External /Internal
10	100-110 LEFT MSG EXEC (1:ON/0:OFF) : ON	When a call is forward to the secretary of an Executive/Secretary pair, messages can be left for the Executive (ON) or secretary (OFF).	0: OFF 1: ON	ON
11	100-110 E&MIC HEADSET (1:ON/0:OFF) : OFF	Select E&MIC Headset mode.	0: OFF 1: ON	OFF

Table 3.3.3.2-3 STATION ATTRIBUTES III (PGM 113)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
12	100-110 ENBLOCK MODE (1:ON/0:OFF) : OFF	When On, the user-dialed digits are stored at iPECS IP or LDP Phonesuntil explicitly sent by the user. When sent, all dialed digits are sent to the system in a block. En-block mode is only available to iPECS IP and LDP Phones with 3-Soft keys.	0: OFF 1: ON	OFF
13	100-110 MSG RETRIEVE (1:FIFO/0:LIFO) : LIFO	Based on this entry, messages stored in the VSF may be retrieved in either a FIFO (first-in-first-out) or LIFO(last-in-first-out) order.	1: FIFO 0: LIFO	LIFO
14	100-110 VMID NUMBER 100	When using an adjunct VM, the system can translate the Mailbox number from the user's station number to the assigned VMID. The system sends the station number or VMID to the VM (in-band or SMDI) in order to identify the appropriate Voice Mailbox.	0000-9999	Station #
15	100-110 AUTO ACD-DND ([SPD],0-9,*,#): ..	If an Agent does not answer an ACD call in the ACD No Answer timer, the Agent enters an Unavailable state with the Reason code entered here. The reason code is sent in the ACD Event message.	0: None #, * 1 ~ 9	None
16	100-110 FWD IF OOS (1:ON/0:OFF) : OFF	If a station is Out-of-Service and has previously forwarded calls, the system will forward the calls if enabled here.	0: OFF 1: ON	OFF
17	100-110 BACK LIGHT (O:OFF/1:BUSY/2:ON): 1	The backlight of the LIP phones is assigned to stay off, light only when the station is busy or light constantly.	0: OFF 1: Busy 2: ON	Busy
18	100-110 VSF MailSvrIP ……..	The VMIB includes notification of new messages to the user's e-mail. This field displays the user's e-mail mail server for the notification. Use Web AdminPGM 132 to modify this value.	IP v4 address Or Mail server name	
19	100-110 VSF Mail Addr ……..	The VMIB includes notification of new messages to the user's e-mail. This field displays thee-mail address to notify when a new message is received at the VMIB. Use Web Admin to modify this value.	e-mail address	
20	100-110 BLOCK B-CALL (1:ON/0:OFF) : OFF	When an SLT extension tries to transfer a CO call to a CO line, it is blocked, and the call is released.	0: OFF 1: ON	OFF

Table 3.3.3.2-3 STATION ATTRIBUTES III (PGM 113)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
21	100-110 BY PASS DTMF (1:ON/0:OFF) : OFF	When detected, DTMF from an SLT may be regenerated by the analog CO line ports. The SLT port can by-pass detection, so DTMF is not detected.	0: OFF 1: ON	OFF
22	100-110 PROCTOR MONIT (1:ON/0:OFF) : OFF	Enables to use of PABX ANI Link device for E-911 supporting. Only an SLT can be used for this feature.	0: OFF 1: ON	OFF
23	100-110 VSF MailSvrID ……	The VMIU and VMIB include notification of new messages to the user's voice mail. This field defines the user's ID to notify when a new message is received at the VMIU or VMIB.		
24	ADDED STATION ATT3 PRESS FLEX KEY (01-24)		01-24	
24-1	100-110 VSF MailSvrPW ……	Unified Mail server password		
24-2	100-110 DOOR OPEN (1:EN/0:DIS) : ENABLE	Enables use of Door open feature by the station - Default value : Australia: Disable except for port 1or2 Otherwise: Enable	0: Disable 1: Enable	Enable
24-3	100-110 VSF MSG DD/TM (1:ON/0:OFF) : ON	When ON, play the date/timestamp of VSF message.	0 : OFF 1 : ON	ON
24-4	100-110 OGM DEST NOT ASSIGNED	Assign Mail box destination. When a user dials the attendant code('0' or '9'), if it is assigned, then the call will be delivered to the assigned mail box destination instead of the attendant. If it is not assigned, then the call will be delivered to the attendant.		Not Assigned
24-5	100-110 VSF DEL MSG (1:ON/0:OFF) : OFF	When ON, delete VSFmessages when send UMSe-mail notification.	0 : OFF 1 : ON	OFF
24-6	100-110 VM PWD CHECK (0-2) : STN&PWD	When ON, check the password when the user accesses the VSF messages. • 0: No Password • 1: PWD only • 2: station number and Password	Refer to description	station number and Password

Table 3.3.3.2-3 STATION ATTRIBUTES III (PGM 113)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
24-7	100-110 BARGE IN MODE (0-2) : DISABLE	Barge permits an authorized extension to intrude into another existing outside/internal call or to disconnect an existing call forcedly. • 0: Disable- Barge In is disabled. • 1: Monitor- Barge In monitors other conversations. • 2:Monitor&Join & Disconnect - Barge In monitors join and Forced Disconnect.	Refer to description	Disable
24-8	100 – 110 SLT FLASH MODE (0-3) : FLASH TRANSFER	SLT Flash works as followingoption. • 0: Flash Transfer– Flashdetected, the line is held and the line goes to the waiting state. • 1: Flash Drop - Flash detected, and Line is disconnected. • 2: Flash Ignore– Flashdetected, but Ignored. • 3: Hold Release– Flashdetected, then the line is held, and the line goes to waiting state. And the SLT user goes on-hook, then the held line is disconnected, not recalling.	Refer to description	Transfer
24-9	100 – 110 RLS COST DISP (1:ON/0:OFF) : OFF	When CO line is released,according to admin option,call-cost or disconnection-causecan be displayed to user LCD.	0 : OFF 1 : ON	OFF
24-10	100 – 110 LDT TBL INDEX (00-10) : 01	LCR will be operated with thisLDT table index	Number of LDT Table	1
24-11	100 – 110 WEB CALL BACK (1:EN/0:DIS) : DISABLE	Enable Web call back service. When enabled, call back service on station web admin could be used.	0: Disable 1: Enable	Disable
24-12	100 – 110 VSF SMTP SECU (0-2) : NO SECURITY	Security for VSF mail sending can choose. **0: No Security, 1: SSL, 2: TSL**	Refer to description	NoSecurity
24-13	100 – 110 VSF SMTP PORT (00001-65535) : 00025	When VSF mail sending, SMTPport can be program.	00001 – 65535	25
24-14	100–110 VSF S-MAILADDR ……	When VSF mail sending, SenderMail Address can be program.		
24-15	100 – 110 PREPAID CALL (1:ON/0:OFF) : OFF	Enable prepaid call service.	0: OFF 1: ON	OFF

Table 3.3.3.2-3 STATION ATTRIBUTES III (PGM 113)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
24-16	100–110 PREPAID MONEY 000000	Prepaid Money can be entered. By Call Metering signal, pre-paidmoney can be calculated.	000000 - 999999	0
24-17	100 – 110 DEFAULT VM NO ….	Default VM group number is used when users press the **[Msg/Call Back]**button, and there is no message.		
24-18	100 – 110 SLT MODE (0-3) : DEFAULT	SLT configuration mode.SLT gain is changed cording to this configuration. It is used only in South Africa.	0: Default 1: Short 2: Long 3: Far	Default
24-19	100 – 110 OFF HOOK RING (0-3) : REFER TO SYS	Off-hook ring-type could be selected by station base. **0: BURST, 1: MUTE, 2: SYSTEM, 3:SILENCE**	Refer to description	SYSTEM
24-20	100–110 SIP COLOR RING …..	The color ring is provided from the assigned SIP VM (UMS). SIP extension number that is connected to SIP VM (UMS) server should be assigned.		
24-21	100 – 110 FORCED ACNT (1:ON/0:OFF) : OFF	User should enter an Account Code prior to placing an outgoing call when this value has “ON.”	0: OFF 1: ON	OFF
24-22	100 – 110 FLEX BTN PGM (1:ON/0:OFF) : ON	A user can program Flex buttons at station.	0: OFF 1: ON	ON
24-23	100 – 110 STNWEB_LEVEL (1-3) : LEVEL 1	There are 3 access levels that can be assigned to a station. The station with level 1 can view/access all programs on the station web. The station with level 2/3 follows the Station Web Authorization menu (System Data -> Station Web Authorization).	LEVEL 1 ~ LEVEL 3	LEVEL 1
24-24	100 – 110 HEADSET PAGE (1:S/2:H/3:BOTH): SPKR	Paging is provided on the selected device while in the headset mode. **1:SPKR, 2:HEADSET, 3:Both**	Refer to description	1: SPKR

4.3.3.3 Station Attributes IV -PGM 114

When a station uses an ISDN Line, various parameters relating to ISDN Calling Line Identification and Connected Line Identification can be assigned for each station.

In addition, when the station is an SLT, several parameters must be set to indicate the capabilities related to the station, such as 3.1 KHz audio for ISDN use. Refer to Table 3.3.3.3-1 for a description of the attributes and the inputs available.

PROCEDURE	
STATION ATT 4 ENTER STA RANGE	Press the **[PGM]** button and dial 114.
100-110 STATION ATT4 PRESS FLEX_KEY (01-24)	Use the dial-pad to enter a station range (Ex. 100~110). For a single station, enter the same number twice.
	Press the desired Flex button; refer to Table 3.3.3.3-1.
	Use the dial-pad to enter desired data for the attribute. Refer to Table 3.3.3.3-1.
	Press the **[Save]** button to store the data entry.

Table 3.3.3.3-1 STATION ISDN ATTRIBUTES (PGM 114)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	100-110 CLIP DISPLAY (1:ON/0:OFF) : OFF	CLIP (Calling Line Identification Presentation), an ISDN service, sends the calling party's number to the system in the call SETUP message. If enabled here, the number will be shown in the iPECS Phone LCD.	0: OFF 1: ON	OFF
2	100-110 COLP DISPLAY (1:ON/0:OFF) : OFF	COLP (Connected Line Id Presentation), an ISDN service, sends the number of the answering party to the system in the call CONNECT message. If enabled here, the number will be shown in the iPECS Phone LCD.	0: OFF 1: ON	OFF
3	100-110 PROGRESS IND (1:ON/0:OFF) : OFF	When employing a non-ISDN terminal, specifically a modem or analog FAX, the ISDN call SETUP message must include this message, and the Progress Indication parameter should be set to “ON.”	0: OFF 1: ON	OFF
4	100-11- CLIR SERVICE (1:ON/0:OFF) : OFF	CLIR (Calling Line Identification Restriction), an ISDN service, removes the calling party Id sent from the PSTN to the called party with a RESTRICT instruction in the SETUP message. If enabled here, the system will send the RESTRICT instruction to the PSTN when an outgoing ISDN call is placed.	0: OFF 1: ON	OFF

Table 3.3.3.3-1 STATION ISDN ATTRIBUTES (PGM 114)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
5	100-110 COLR SERVICE (1:ON/0:OFF) : OFF	COLR (Connected Line Id Restriction), an ISDN service, removes connected party Id sent from the PSTN to the calling party with a RESTRICT instruction in the CONNECT message. If enabled here, the system will send the restricted instruction to the PSTN when the station answers an ISDN call.	0: OFF 1: ON	OFF
6	100-110 STN CLI 1 100	When not restricted (button 4 & 5 above) and entry 00 of the CLIP/CLOP Table is selected in PGM 143-button 1& 2, this entry is added to the number sent in the ISDN call SETUP or CONNECT message in place of the station number.	12 digits	Station number
7	100-110 3.1 kHz AUDIO (1:ON/0:OFF) : OFF	When an analog device (SLT or FAX) uses an ISDN Line in the system, the Information Element of the ISDN SETUP message must indicate it only has 3.1 KHz audio capabilities. If an SLT or analog FAX is allowed access to the ISDN Lines, this parameter must be “ON.”	0: OFF 1: ON	OFF
8	100-110 CLI NAME DISP (1:ON/0:OFF) : OFF	When the CLI data from the PSTN in the call SETUP message matches a number in Speed Dial, the system can display the name associated with the Speed Dial bin is set to ON.	0: OFF 1: ON	OFF
9	100-110 CLI/REDIRECT (1:RED/0:CLI) : CLI	When the ISDN redirects an incoming ISDN call, the call SETUP message will contain an original and redirected CLI. This selection determines if the iPECS Phone will display the original or redirected number.	0: CLI 1: Redirect	CLI
10	100-110 CLI MSG-WAIT (1:ON/0:OFF) : OFF	A log of caller identification can be maintained for the user, permitting the user to call back the identified party. System-wide, up to 1000 entries can be maintained in the log.	0: OFF 1: ON	OFF
11	100-110 EXTOR ATD (1:ATD/0:EXT) : EXT	When the system sends a station number with CLIP orCOLP, the number can be either the Attendant number or the number of the station.	0: EXT 1: ATD	EXT

Table 3.3.3.3-1 STATION ISDN ATTRIBUTES (PGM 114)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
12	100-110 MSN WAIT (1:ON/0:OFF) : OFF	When a call corresponding to a MSN Telephone Number comes into the system, the call is basically routed to idle stations that have a free MSN button assigned for the corresponding Telephone Number. And also, the call can be routed to busy stations in the following condition. **OFF:** if a keyset is in busy status, cannot receive incoming MSN Telephone Number corresponding call even though it has a free(idle) corresponding MSN LOOP Button **ON:** if a keyset is in busy status, can receive incoming MSN Telephone Number corresponding call if it has a free(idle) corresponding MSN LOOP Button	0: OFF 1: ON	OFF
14	100-110 DID RESTRICT (1:ON/0:OFF) : OFF	Enable station receive DID call.	0: OFF 1: ON	OFF
15	100-110 DISA RESTRICT (1:ON/0:OFF) : OFF	Enable station receive DISA call.	0: OFF 1: ON	OFF
17	100-110 MODEM ENABLE (1:ON/0:OFF) : OFF	It is used to set modem attributes.	0: OFF 1: ON	OFF
18	100-110 FAST XFER CLI (1:ORI/0:TRN) : TRN	If a user transfers a CO call with CLI to SLT or DECT, CO CLI can be seen instead of station number when this option is set to ORI.	0: TRN 1: ORI	TRN
20	100-110 PICKUP BY BTN (1:ON/0:OFF) : ON	It is used to set pick up by flex button.	0: OFF 1: ON	ON
21	100-110 MULTI LANG (1-6):PROMPT1 A.AMERICA	Selected language prompt is played to the user when accessing the VMIU or VMIB. The range is as below **1:US, 2:KOREA, 3:TURKIYE** **4:RUSSIA, 5:AUTRALIA, 6:GERMANY**	Refer to description	1
22	100-110 P-MSG DND (1:ON/0:OFF) : OFF	If it is ON, the pre-selected station doesn't receive the ring, and the caller hears the DND tone.	0: OFF 1: ON	OFF

Table 3.3.3.3-1 STATION ISDN ATTRIBUTES (PGM 114)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
23	100-110 P-MSG LANG (1-6):PROMPT1 U.S	Select a voice-enabled preselected message for a station playing toward an incoming CO call. The range is as below **1: US, 2:KOREA, 3:TURKIYE** **4:RUSSIA, 5:AUTRALIA, 6:GERMANY**	Refer to description	1
24	ADDED STATION ATT4 PRESS FLEX KEY (01-23)			
24-1	100-110 STN CLI 2 ……....	Station CLI 2 can be programmed. If a CO line is set to Station CLI 2, then this CLI is used for outgoing CLI.	16 Chars	None
24-2	100-110 STN CLI 3 ……....	Station CLI 3 can be programmed. If a CO line is set to Station CLI 3, then this CLI is used for outgoing CLI.	16 Chars	None
24-3	100-110 STN CLI 4 ……....	Station CLI 4 can be programmed. If a CO line is set to Station CLI 4, then this CLI is used for outgoing CLI.	16 Chars	None
24-4	100-110 STN CLI 5 ……....	Station CLI 5 can be programmed. If a CO line is set to Station CLI 5, then this CLI is used for outgoing CLI.	16 Chars	None
24-5	100-110 SLT CID TYPE (0:FSK./1:DTMF) : FSK	SLT can send CID by programming options.	0:FSK 1:DTMF	FSK
24-6	100-110 WAKEUP ANNC 00	Wakeup Announce can be programmed.	0-200	0
24-7	100-110 CAMP ON ENABLE (1:ON/0:OFF) : ON	If it is ON (enabled), then this station will receive camp on. But if it is OFF(Disabled), then this station will not receive camp on by another person.	0: OFF 1: ON	ON
24-8	100-110 GAIN TBL (1-3) : 1	TDM gain table can be programmed.	1-3	1
24-9	100-110 TONE TBL (1-5) : 1	Tone table can be programmed.	1-5	1
24-10	100-110 DGT CONV TBL (01-15) : 00	Set the digit conversion table. **eMG80/100:1-15, eMG800/UCP:1-32**	Refer to description	0

Table 3.3.3.3-1 STATION ISDN ATTRIBUTES (PGM 114)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
24-11	100-110 VIDEO ON CALLING (1:ON/0:OFF) : OFF	Video show to called party when calling (ex. IP Video Door Phone)	0: OFF 1: ON	OFF
24-12	100-110 E.164 CLI TO (1:ON/0:OFF) : OFF	Send CLI with E.164 format if it is ON.	0: OFF 1: ON	OFF
24-13	100-110 FLEX PAGE (1-3) : 3 PAGE	Some newly supported stations have physical flex buttons & also have flex button pages. That means a station has 8 physical flex buttons and 3 flex button pages, then 24 flex buttons are available. The Navigation Up/Down button is used to scroll through the Flex buttons pages assigned. This feature is supported as below types. • LIP-9030, LIP-9040 • LIP-9071 • 1020i, 1030i, 1040i, 1050i, 1080i	1-3 1-4(9071, 1080i)	3 PAGE
24-14	100-110 ALIGN LCD (0-2) : NOT ALIGN	For the iPECS LIP 9000 series and 1000i series, character alignment for messages to the phone can be right or left aligned by the system or alignment controlled by the phone (“Not Align”).	0: Not align 1: Left 2: Right	Not Align
24-15	100-110 TWOWA REC AN 00	The two-way record announcement can be recorded to play to the station as Announcement.	0-200	00
24-16	100-110 LDT ZONE (001-100) : 001	If the LDT Zone Number of an LDT table (LCR LDT(221)) is equal to this value, the LDT table is available to this CO Line.	001-100	001
24-17	100-110 ECM FAX(T.38) (1:ON/0:OFF) : ON	ECM stands for Error Correction Mode. If you failed to send something via Faxes, you could send it again until it is successful.	0: OFF 1: ON	ON
24-18	100-110 DISP RESTRICT (1:ON/0:OFF) : OFF	When {Display Restricted Caller Number} in CLI Attributes(113) of a station is ON, Although the caller number is restricted in the ISDN message, the ringing station displays the caller number.	0: OFF 1: ON	OFF
24-19	100-110 SMALL WIN USE (1:ON/0:OFF) : OFF	If this option is set to ON, the small popup is displayed on the LCD of LIP-9030/9040 and 1010i/1020i/1030i/1040i/1050i. If it is set to OFF, the top bar is displayed instead of a small popup.	0: OFF 1: ON	OFF

Table 3.3.3.3-1 STATION ISDN ATTRIBUTES (PGM 114)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
24-20	100-110 LARGE WIN TMR (0-5) : 0	When the large popup timer is set to any value from 1 to 5 except 0, the display of the large popup disappears after the timer expired and then the large popup information is displayed at the top bar.	0-5	0
24-21	100-110 MWI LED (0-4) : ALL MWI	Users can program a Message wait lamp for each type. Refer to the range. **0: All MWI , 1: VM MWI, 2: CLI MWI, 3: SMS MW, 4: ICM MWI**	Refer to description	ALL MWI
24-22	100-110 NFC AUTH USE (1:ON/0:OFF) : ON	If this option is ON, User enters Authorization code to use NFC function only for LIP-9071.	0: OFF 1: ON	ON
24-23	100-110 SHORT MODEM (1:ON/0:OFF) : OFF	If this value of SLT is ON, SLT is the modem mode in seizing a co-line. When the CO line is CO Board, the {short modem timer} is starting when the SLT seizes the CO line. And if the {short modem timer} is expired, the SLT goes to the original mode. When the CO line is ISDN, the {short modem timer} is starting after receiving the ISDN connect message. And if the {short modem timer} is expired, the SLT goes to the original mode.	0: OFF 1: ON	OFF

4.3.3.4 Flexible button Assignment -PGM 115

Each Flex button for each iPECS IP and LDP Phone and DSS Console is assigned a function (Type) and an associated Value as shown in Table 3.3.3.4-1.

For assignments to a DSS Console, the **[VOL UP]/[VOL DOWN]** buttons shift the Flex button appearance on the Admin station to the next or previous group of 24 buttons as they appear on the iPECS DSS Console.

When multiple DSS Consoles are associated with a station, **[VOL UP]/[VOL DOWN]** is used to access and assign a function to the console buttons. Each console contains entries for 48 buttons, even though the console may only have 12 buttons. In this case, assignments for buttons 13 to 48 are ignored.

Table 3.3.3.4-2 shows the default button assignments for the iPECS IP and LDP Phones and Table 3.3.3.4-3 and Table 3.3.3.4-6 provides default assignment for the various DSS Console button maps.

PROCEDURE	
FLEX BUTTON ASSIGN ENTER STA RANGE	Press the **[PGM]** button and dial 115.
100-110 BTN ASSIGN PRESS FLEX_KEY (1-24)	Use the dial-pad to enter a station range (Ex. 100~110). For a single station, enter the same number twice.
	Press the desired Flex button (1~24).
	Use the dial-pad to enter the desired button TYPE (1~6) and value, if required. • Refer to Table 3.3.3.4-1 for types and value range. • Defaults for the iPECS IP and LDP Phones are shown in Table 3.3.3.4-2. For DSS Console defaults, refer to Table 3.3.3.4-3. In addition, for the DSS Console, use **[VOL UP]/[VOL DOWN]** buttons to access the next/previous 24 flex buttons.
	Press the **[Save]** button to store the Flex button data entry.

Table 3.3.3.4-1 FLEX BUTTON TYPE & VALUE CODES (PGM 115)

TYPE	DESCRIPTION	Remarks
1	Empty Button	The empty (unassigned) button may be defined by the user.
2	User Program Fixed Numbering Plan	Assigns a button to perform a User Program function from the Fixed Numbering Plan, Appendix A.
3	{[SPEED] XXX}	Station or System Speed Dial bin.
4	Flexible Numbering Plan Code	Assigns a button to dial a code from the Flexible Numbering Plan. See Appendix B.
5	Station or Network Station	Assign network station number from network table.
6	MSN	Enter desired MSN Table index.
7	U-LOOP	U-Loop button for call wait of internal & external call

Table 3.3.3.4-2 iPECS IP & LDP PHONE BUTTON DEFAULT CONFIGURATION (PGM 115)

BTN	iPECS LDP Phone(9000/7000 Series)					
	9030	9008	7004	7008	7016	7024
1	{CO 1}	{CO 1}	Trans/ PGM*	DND	{CO 1}	{CO 1}
2	{CO 2}	{CO 2}	Speed*	Call Back	{CO 2}	{CO 2}
3	{CO 3}	{CO 3}	{LOOP}	{LOOP}	{CO 3}	{CO 3}
4	{CO 4}	{CO 4}	{LOOP}	{LOOP}	{CO 4}	{CO 4}
5	{CO 5}	{CO 5}		empty	{CO 5}	{CO 5}
6	{CO 6}	{CO 6}		empty	{CO 6}	{CO 6}
7	{CO 7}	{CO 7}		empty	{CO 7}	{CO 7}
8	{CO 8}	{LOOP}		empty	{CO 8}	{CO 8}
9	{CO 9}	empty			{CO 9}	{CO 9}
10	{CO 10}	empty			{CO 10}	{CO 10}
11	{LOOP}				{LOOP}	{LOOP}
12	{LOOP}				{LOOP}	{LOOP}
13	empty				empty	empty
14	empty				empty	empty
15	empty				empty	empty
16	empty				empty	empty
17	empty					empty
18	empty					empty
19	empty					empty
20	empty					empty
21	empty					empty
22	empty					empty
23	empty					empty
24	empty					empty

BTN	iPECS IP Phone (7000/8000/8000E series)								
	8004	8008	8012	8024	8040	7004	7008	7016	7024
1	{CO 1}	{CO 1}	{CO 1}	{CO 1}	{CO 1}	Trans/ PGM*	DND	{LOOP}	{CO 1}
2	{CO 2}	{CO 2}	{CO 2}	{CO 2}	{CO 2}	{LOOP}	{LOOP}	empty	{CO 2}
3	{CO 3}	{CO 3}	{CO 3}	{CO 3}	{CO 3}	{LOOP}	{LOOP}	empty	{CO 3}
4	{CO 4}	{CO 4}	{CO 4}	{CO 4}	{CO 4}		empty	empty	{CO 4}
5		{CO 5}	{CO 5}	{CO 5}	{CO 5}		empty	empty	{CO 5}
6		{CO 6}	{CO 6}	{CO 6}	{CO 6}		empty	empty	{CO 6}
7		{CO 7}	{CO 7}	{CO 7}	{CO 7}		empty	empty	{CO 7}
8		{LOOP}	{CO 8}	{CO 8}	{CO 8}			empty	{CO 8}
9			{CO 9}	{CO 9}	{LOOP}			empty	{CO 9}
10			{CO 10}	{CO 10}	{LOOP}			empty	{CO 10}
11			{LOOP}	{LOOP}				empty	{LOOP}
12			{LOOP}	{LOOP}				empty	{LOOP}
13				empty				empty	empty

BTN	iPECS IP Phone (7000/8000/8000E series)								
	8004	8008	8012	8024	8040	7004	7008	7016	7024
14				empty				empty	empty
15				empty				empty	empty
16				empty				empty	empty
17				empty					empty
18				empty					empty
19				empty					empty
20				empty					empty
21				empty					empty
22				empty					empty
23				empty					empty
24				empty					empty

BTN	iPECS IP Phone (9000 series)					
	9002	9010	9020	9030(8/24)	9040(12/36)	9070(48)
1	{LOOP}	{CO 1}	{CO 1}	{CO 1}	{CO 1}	{CO 1}
2	{LOOP}	{CO 2}	{CO 2}	{CO 2}	{CO 2}	{CO 2}
3		{CO 3}	{CO 3}	{CO 3}	{CO 3}	{CO 3}
4		{CO 4}	{CO 4}	{CO 4}	{CO 4}	{CO 4}
5		{LOOP}	{CO 5}	{CO 5}	{CO 5}	{CO 5}
6			{CO 6}	{CO 6}	{CO 6}	{CO 6}
7			{CO 7}	{CO 7}	{CO 7}	{CO 7}
8			{CO 8}	{CO 8}	{CO 8}	{CO 8}
9			{LOOP}	{CO 9}	{CO 9}	{CO 9}
10			{LOOP}	{CO 10}	{CO 10}	{CO 10}
11				{LOOP}	{LOOP}	{LOOP}
12				{LOOP}	{LOOP}	{LOOP}

BTN	iPECS IP Phone (1000i series)					
	1010i	1020i	1030i	1040i	1050i	1080i
1	{LOOP}	{CO 1}	{CO 1}	{CO 1}	{CO 1}	{CO 1}
2	{LOOP}	{CO 2}	{CO 2}	{CO 2}	{CO 2}	{CO 2}
3		{CO 3}	{CO 3}	{CO 3}	{CO 3}	{CO 3}
4		{CO 4}	{CO 4}	{CO 4}	{CO 4}	{CO 4}
5		{LOOP}	{CO 5}	{CO 5}	{CO 5}	{CO 5}
6			{CO 6}	{CO 6}	{CO 6}	{CO 6}
7			{CO 7}	{CO 7}	{CO 7}	{CO 7}
8			{CO 8}	{CO 8}	{CO 8}	{CO 8}
9			{LOOP}	{CO 9}	{CO 9}	{CO 9}
10			{LOOP}	{CO 10}	{CO 10}	{CO 10}
11				{LOOP}	{LOOP}	{LOOP}
12				{LOOP}	{LOOP}	{LOOP}

NOTE:These button definitions cannot be changed.

Table 3.3.3.4-3 IP CONSOLE BUTTON CONFIGURATION

MAP	DEFAULT CONSOLE BUTTON CONFIGURATION	
MAP 1	Button 1: Intrusion	Button 2: All Call Page
	Button 3: Call Park 1	Button 4: Station Group 1
	Button 5: Camp-On	Button 6: Internal All Call Page
	Button 7: Call Park 2	Button 8: Station Group 2
	Button 9: [Release]	Button 10: Ext. All Call Page
	Button 11: Call Park 3	Button 12: Station Group 3
	Buttons 13 ~ 48: Station Ports 100 ~ 135	
MAP 2	Station Ports 136 ~ 183	
MAP 3	Station Ports 184 ~ 231	

4.3.3.5 Station Class-of-Service – PGM 116

All stations are assigned a Class-of-Service (COS), which determines the ability of the user to dial certain types of calls, refer to Table 3.3.3.5-1. Separate COS assignments are made for Day, Timed, and Night Mode system operation. As a default, all stations are assigned with a Station COS of 1, with no restrictions for all three modes. The station COS interacts with the CO Line COS to establish overall dialing or Toll restrictions. This interaction and the resulting restrictions are given in Table 3.3.3.5-2.

Long-distance calls are determined by the 1st dialed digit (“0”) and/or the number of digits dialed. If the 1st digit dialed is an LD code, default “0”, or, if the number of digits dialed exceeds the assigned LD digit counter (SMDR Attributes PGM 177 button 4), the call is considering a Long Distance call, and appropriate restrictions are applied.

PROCEDURE	
STATION COS ENTER STA RANGE	Press the **[PGM]** button and dial 116.
100-110 STATION COS DAY=01 NIGHT=01 TIMED=01	Use the dial-pad to enter a station range (Ex. 100~110). For a single station, enter the same number twice.
	Press desired Flex button, - 1: Day mode COS - 2: Night mode COS - 3: Timed mode COS
	Use the dial-pad to enter desired data for the Station COS. Refer to Table 3.3.3.5-1 & Table 3.3.3.5-2.
	Press the **[Save]** button to store the data entry.

Table 3.3.3.5-1 STATION CLASS-OF-SERVICE (PGM 116)

STATION COS	RESTRICTIONS
1	No restrictions are placed on dialing from the station.
2	The assignments in Exception Table A are monitored for allowing and deny numbers.
3	The assignments in Exception Table B are monitored for allowing and deny numbers.
4	The assignments in both Exception Tables A & B are monitored for allowing and deny numbers.
5	The leading digit dialed cannot be a Long Distance code, default “0”, and further denied/allowed based on Exception Table C.
6	The leading digits dialed cannot be a Long Distance code & digit count cannot exceed the LD digit counter, default 8 digits, and further denied/allowed based on Exception Table C.
7	Intercom and paging calls are allowed. No outgoing dialing except for emergency calls is allowed on CO Lines.
8	The assignments in the Exception Table D are monitored for allowing and deny numbers.
9	The assignments in the Exception Table E are monitored for allowing and deny numbers.
10	The assignments in the Exception Table D & E are monitored for allowing and deny numbers.
11	The Exception Table A & B and D & E assignments are monitored for allowing and denying numbers.

Table 3.3.3.5-2 STATION/CO LINE COS TOLL RESTRICTIONS (PGM 116)

	CO COS 1	CO COS 2	CO COS 3	CO COS 4	CO COS 5
STA COS 1	No Restriction	No Restriction	No Restriction	Only Local Call (LD code/counter) and Table C	No Restriction
STA COS 2	Exception Table A governs the dialing	Exception Table A governs the dialing	No Restriction	Only Local Call(LD code/counter) and Table C	No Restriction
STA COS 3	Exception Table B governs the dialing	No Restriction	Exception Table B governs the dialing	Only Local Call(LD code/counter) and Table C	No Restriction
STA COS 4	Exception Table A & B governs the dialing	Exception Table A governs the dialing	Exception Table B governs the dialing	Only Local Call(LD code/counter) and Table C	No Restriction
STA COS 5	Local Call only (LD Code, “1” or “0”) and Table C	Local Call only (LD Code, “1” or “0”) and Table C	Local Call only (LD Code, “1” or “0”) and Table C	Only Local Call(LD code/counter) and Table C	No Restriction
STA COS 6	Only Local Call (LD code/counter) and Table C	Only Local Call (LD code/counter) and Table C	Only Local Call (LD code/counter) and Table C	Only Local Call(LD code/counter) and Table C	No Restriction
STA COS 7	In-house dialing only	In-house dialing only	In-house dialing only	In-house dialing only	In-house dialing only
STA COS 8	Exception Table D governs the dialing	Exception Table D governs the dialing	No Restriction	Only Local Call(LD code/counter) and Table C	No Restriction
STA COS 9	Exception Table E governs the dialing	Exception Table E governs the dialing	No Restriction	Only Local Call(LD code/counter) and Table C	No Restriction
STA COS 10	Exception Table D & E governs the dialing	Exception Table D & E governs the dialing	No Restriction	Only Local Call(LD code/counter) and Table C	No Restriction
STA COS 11	Exception Table A & B and D & E governs the dialing	Exception Table A & B and D & E governs the dialing	No Restriction	Only Local Call(LD code/counter) and Table C	No Restriction

4.3.3.6 CO/IP Group Access – PGM 117

Stations can be allowed or denied access to CO Lines and IP Channels by group(eMG80/100: 20 /eMG800:200), refer to CO Line Attributes, PGM 141, button 1.

As a default, all stations are allowed access to all groups except Private Lines (group 00) and unused CO Lines.

The CO Line of an RSGM is assigned as a Private Line by default.

PROCEDURE	
CO/IP GROUP ACCESS ENTER STA RANGE	Press the **[PGM]** button and dial 117.
100 – 110 CO/IP GRP PRESS FLEX KEY (01-20)	Use the dial-pad to enter a station range (Ex. 100~110). For a single station, enter the same number twice.
	The first 20 Flex button LEDs indicate group access for eMG. Press the desired Flex button to toggle CO/IP Group access, - LED on: group access allowed - LED off: group access not allowed
	Press the **[Save]** button to store the data entry.

4.3.3.7 Internal Page Zone Access – PGM 118

Each iPECS IP and LDP Phone is assigned to receive announcements from each Internal Page Zone.

A station can be assigned to any, all, or no-zones. Note a remote station or a station not assigned to any Internal Zone will not receive any page announcements, including Internal All Call.

As a default, all stations except remote stations are assigned to zone 1.

PROCEDURE	
INTERNAL PAGE ZONE ENTER STA NUMBER	Press the **[PGM]** button and dial 118.
100-110 I-PAGE ZONE PRESS FLEX KEY (001-024)	Use the dial-pad to enter a station range (Ex. 100~110). For a single station, enter the same number twice.
	The LEDs indicate the status for Page Zones 1 to 24. Use the **[VOL UP]**/**[VOL DOWN]** button to display Page Zones 25 to 35. Press the desired Flex button to toggle Internal Page Zone assignments, - LED On: station receives the announcement - LED Off: station does not receive the announcement.
	Press the **[Save]** button to store the Page Zone data.

4.3.3.8 PTT (Push-To-Talk) Group Access – PGM 119

Each iPECS Phone is assigned to receive PTT announcements from any combination of the nine PTT groups. Note remote stations and stations not assigned to a group will not receive PTT page announcements including All PTT group page.

As a default, all stations except remote stations are assigned to group 1.

PROCEDURE	
PTT GROUP ACCESS ENTER STA NUMBER	Press the **[PGM]** button and dial 119.
	Use the dial-pad to enter a station range (Ex. 100~110). For a single station, enter the same number twice.
100-110 PTT GRP ACC PRESS FLEX_KEY (01-10)	The first 10 Flex button LEDs indicate assigned zones. Press the desired Flex button to toggle Push-To-Talk group assignments, - LED On: station receives announcement - LED Off: station does not receive PTT announcement Flex button 10 assigns group 0, all groups.
	Press the **[Save]** button to store the PTT group data.

4.3.3.9 Preset Call Forward – PGM 120

This assignment allows an external or internal call to initially ring at a station and forward to a pre-determined destination. Preset Call Forward can be assigned separately for internal and external calls forwarding for all calls (Unconditional), Internal Busy, No-Answer or DND, or External Busy, No-Answer or DND. Calls can be set as Preset Forward to a Station, Hunt group, System Speed dial for Off-net, or Station ICR. For the "Transfer to Mail-Box," enter the Station Group number of the Voice Mail group (external VM, VSF, or Feature Server Voice Mail group). This will permit other iPECS IP Phone and LDP users to transfer a call directly to the desired user's Voice Mail-Box.

PROCEDURE	
CALL FWD PRESET ENTER STA RANGE	Press the **[PGM]** button and dial 120.
100 – 110 STA PRES FWD CONDITION CHOICE (F1 –F8)	Use the dial-pad to enter a station range (Ex. 100~110). For a single station, enter the same number twice.
F1:S F2:H F3:SPD F4:ICR UNCONDITION : ….	Press Flex Button for the desired type of forwarding: - 1. Unconditional - 2. Internal Busy - 3. Internal No Answer - 4. External Busy - 5. External No Answer - 6. Transfer to Mailbox (destination must be the VM Group). - 7. Internal DND - 8. External DND
ENTER FWD STA NO. UNCONDITION : STA ….	Select Flex button for the Destination type: - 1. Station - 2. Hunt Group - 3. System Speed Bin for Off-net - 4. Station ICR
	Use the dial pad to enter the value associated with the selected type: - For Station & Net Station, enter station number, - For Hunt Group, enter Station Group Number, - For System Speed Bin for Off-Net, enter Speed bin number.
	Press the **[Save]** button to store the data entry.

4.3.3.10 Idle Line Selection – PGM 121

When a station goes to an off-hook condition (lifts handset or presses **[SPEAKER]** button), the system normally provides an intercom dial tone.

In place of the dial tone, the station can be programmed to access a CO Line, CO/IP Group, or call a Station or Station Group as described in Table 3.3.3.10-1. The Idle Line Selection (Prime-Line) can be either immediate or delayed after going off-hook.

The immediate/delay selection is based on the Hot/Warm assignment in Station Attributes III Prime-Line PGM 113, button 7, and System timers PGM 182, button 6.

PROCEDURE	
IDLE LINE SELECTION ENTER STA RANGE	Press the **[PGM]** button and dial 121.
100-110 IDLE LINE NOT ASSIGNED (1-7)	Use the dial-pad to enter a station range (Ex. 100~110). For a single station, enter the same number twice.
	Use the dial-pad to enter the type and value for the desired Idle Line selection. Refer to Table 3.3.3.10-1.
	Press the **[Save]** button to store the data entry.

Table 3.3.3.10-1 IDLE LINE SELECTION TYPE & VALUE (PGM 121)

TYPE	VALUE	DESCRIPTION
1	Flex button	Flex button, activates Flex Number as if dialed.
2	CO line	CO/IP path seizes CO line.
3	CO group	CO/IP Group seizes CO line from the CO/IP Group.
4	Station	Station, calls the assigned station
5	Hunt Group	Call to Hunt Group
6	Station Speed	Call to Station Speed
7	System Speed	Call to System Speed

4.3.3.11 Station IP Attributes – PGM 122

Stations are allowed access to the systems H.323 VoIP resources based on the Station IP Attributes. Refer to Table 3.3.3.11-1 for a description of the attributes and the inputs available.

PROCEDURE	
STATION IP ATTRIBUTE ENTER STA RANGE	Press the **[PGM]** button and dial 122.
100-110 STA IP ATT PRESS FLEX KEY (1)	Use the dial-pad to enter a station range (Ex. 100~110). For a single station, enter the same number twice.
	Press the desired Flex button; refer to Table 3.3.3.11-1.
	Use the dial-pad to enter desired data for the Station IP Attribute. Refer to Table 3.3.3.11-1.
	Press the **[Save]** button to store the data entry.

Table 3.3.3.11-1 STATION IP ATTRIBUTES (PGM 122)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	100-110 DTR IP CALL (1:EN/0:DIS) : ENABLE	Enables station to access an IP channel directly by dialing the IP Group access code to place H.323 or SIP VoIP calls.	0: Disable 1: Enable	Enable

4.3.3.12 Station Timers – PGM 123

Certain timers can be assigned on a station basis. Available timers, descriptions, and valid inputs are given in Table 3.3.3.12-1.

PROCEDURE	
STATION TIMERS ENTER STA RANGE	Press the **[PGM]** button and dial 123.
100-110 STATION RANGE PRESS FLEX KEY (1-2)	Use the dial-pad to enter a station range (Ex. 100~110). For a single station, enter the same number twice.
	Press the desired Flex button.
	Use the dial-pad to enter desired data for the Station IP Attribute. Refer to Table 3.3.3.12-1.
	Press the **[Save]** button to store the data entry.

Table 3.3.3.12-1 STATION TIMERS (PGM 123)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	STA FWD NO ANS TMR (sec) (000-600) : 000	This timer determines the duration the station will ring prior to Ring-No-Answer Forward. This setting affects both manual and Preset Call Forward and overrides the System Ring No Answer timer PGM 181-button 1.	000-600 seconds	000
2	CUT OFF (Min) (00-99) : 00	Allowed length of CO/IP calls when the station is assigned Call Time restriction in Station Attributes II, PGM 112, button 3	00-99 minutes	00

4.3.3.13 Linked Station Table – PGM 124

A station can be linked to another station so that the two stations effectively act as a single station with the attributes of the primary station number.

An unregistered or registered station may be linked to a primary station. When unregistered station linking is used, the linked station does not reduce the system's capacity.

PROCEDURE	
LINKED STA TABLE ENTER STA NUMBER	Press the **[PGM]** button and dial 124.
STA 110 IS LINKED PAIR PRESS FLEX KEY (1-3)	Use the dial-pad to enter the primary station number for the Linked pair. (Ex. 110).
	Press the desired Flex button.
	Use the dial-pad to enter desired data. Refer to Table 3.3.3.13-1.
	Press the **[Save]** button to store the data entry.

Table 3.3.3.13-1 LINKED STATION ATTRIBUTES (PGM 124)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	DEFAULT
1	SET IP ADDRESS IP: IP NOT ASSIGNED	IP Address of the linked station not required.	
2	ROUTER IP ADDRESS IP: ROUTER IP NOT ASSIGN	Set Router IP address associated with the linked station.	
3	STA 110: SET MAC ADDR MAC: NOT ASSIGNED	Set MAC address of the linked un-registered station, required data. Note the secondary station must not be registered in the system prior to linking. If needed, delete the device from the system.	

4.3.3.14 ICM Tenancy Group – PGM 125

Stations can be assigned to an ICM Tenancy group under Station Attributes II PGM 111, button 17. Up to 15 Tenant groups for eMG80/100 and up to 32 for eMG800 can define. Each group is configured to allow or deny placing intercom calls to stations in other groups, and an Attendant station can be defined for each group. The Attendant will receive “dial 0” calls and controls Day/Night mode for the Group.

PROCEDURE	
ICM TENANCY GROUP ENTER GRP NUMBER (01-15)	Press the **[PGM]** button and dial 125.
	Use the dial-pad to enter the group number (Ex. 01)
	Press the desired Flex button; refer to Table 3.3.3.14-1.
	For the Attendant assignment, use the dial-pad to enter the station number of the Group Attendant.
ICM TENANCY GRP 01 F1:ATD F2:ACCESS	To assign the accessible ICM Tenancy groups for the group, the Flex button indicates the current Tenant group access. Press the Flex. Buttons to toggle the Group access settings. - LED ON: group access allowed - LED OFF: group access denied
	Press the **[Save]** button to store the data entry.

Table 3.3.3.14-1 ICM TENANCY GROUP ATTRIBUTES (PGM 125)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	ICM TENANCY GRP 01 ATD:	It is an Attendant station for the ICM tenancy group. ATD receives dial ‘0’ calls and controls Day/Night mode.	STA No	-
2	ICM TENANCY GRP 01 PRESS ACCESS GRP(1-15)	ICM Tenancy groups allowed access to the selected group. **eMG80/100:01-15, eMG800/UCP:01-32**	Refer to description	GROUP 1

4.3.3.15 Station VM Attributes – PGM 127

Voice Mail attributes can be assigned on a station basis. The description and valid inputs are given in Table 3.3.3.15-1.

PROCEDURE	
ENTER PGM NUMBER	Press the **[PGM]** button and dial 127.
STATION VM ATT ENTER STA RANGE	Enter Station Range.
100-110 STA VM ATT PRESS FLEX KEY (01-20)	Press the desired Flex button.
	Use the dial-pad to enter desired data. Refer to Table 3.3.3.15-1.
	Press the **[Save]** button to store the data entry.

Table 3.3.3.15-1 STATION VM Attributes (PGM 127)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	VM COS (1-5) : 1	Voice Mail COS (Grade) can be set on each station. Each COS attribute can be set at PGM 253.	1-5	1
2	ADMINISTRATOR MAILBOX (1:EN/0:DIS):DISABLE	If this option is set to ON, the Administrator Voice Mail feature can be accessed.	0: Disable 1: Enable	Disable
3	ANNC. ONLY MAILBOX (1:EN/0: DIS): DISABLE	If this option is set to ON, no message can be left, and only the greeting is played.	0: Disable 1: Enable	Disable
4	ANNC. ONLY OPTION (0-1): PREVIOUS MENU	This option is available only ANNC. ONLY MAIL BOX is set to ON. • Previous: after the greeting message is played, go to the previous menu. • Hang Up: after the greeting message is played, the call is hanged up.	0: Previous 1: Hang Up	Previous menu
5	COMPANY DIR FIRST NAME ….....	This field is the first name of a station for the Company Directory feature.	Max 12 Char	N/A
6	COMPANY DIR LAST NAME ….....	This field is the last name of a station for the Company Directory feature.	Max 12 Char	N/A
7	USER-MSG RW/FF TIME (03-99):04 Sec	User Message Rewind / Fast Forward is supported by this time.	03-99	04
8	NOTIFY REPEAT COUNT (00-99) : 03	It is used to transfer a call to the attendant if the retry count is over this for VM notification.	00-99	03
9	NOTIFY DIAL TIME (00-99) : 15 Sec	It is dial waiting time after provide VMIU/VMIB announcement for VM notification.	00-99 (seconds)	15
10	FORWARD OPTION (0-1) : MOVE	When a left message is forwarded, this option is applied.	0:Move 1: Copy	Move
11-15	CASCADE MAILBOX1-5 ….	Message cascading is a feature that copies messages left for the originating mailbox to another mailbox. This field is the destination mail box station.	Station No.	N/A
16	CASCADE METHOD (0-2): DISABLE	Cascade method is determined. **0:Disable, 1: Copy, 2: Move**	Refer to description	Disable

17	CASCADE MSG TYPE (0-2): NORMAL ONLY	Cascade Message Type is determined. 0:Normal Only, 1: Urgent Only, 2:All	Refer to description	Normal only
18	CASCADE TMR(min) (000-250): 000	Cascade Apply Timer is set.	000 ~250 (min)	0
19	MSG WAIT NOTICE (0-2): TONE	When a user has voice mail, the system can provide this as a voice prompt instead of a dial tone according to the option based on station. **Disable:** The system provides a normal dial tone when a user goes to off-hook status. **Tone:** The system provides a warning tone instead of a dial tone to give an indication when a user goes to off-hook status.	0: OFF 1:Tone 2:Prompt	Tone
19	MSG WAIT NOTICE (0-2): TONE	**Prompt:** The system provides message indication as a voice prompt when a user goes to off-hook status.	0: OFF 1:Tone 2:Prompt	Tone
20	CASCADE FOR READ MSG (0-1): ENABLE	If this value is set to Enable, the left message can be cascaded to the next destination regardless the message is read or not. If this value is set to Disable, cascading action is stopped when the left message is read.	0: Disable 1: Enable	Enable

4.3.3.16 Station CCR Table – PGM 128

CCR Table can be assigned on a station basis. The description and valid inputs are given in Table 3.3.3.16-1.

PROCEDURE	
ENTER PGM NUMBER	Press the **[PGM]** button and dial 128.
STATION CCR ENTER STA RANGE	Enter Station Range (Ex. 100~110).
100-110 STA CCR PRESS FLEX KEY (01-14)	Press the desired Flex button. Press the desired Flex button; refer to Table 3.3.3.16-1.

Table 3.3.3.16-1 STATION CCR Table (PGM 128)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1-10	101 – 110 STA CCR INPUT 0 : NOT ASSIGNED	Button 1 to 10 means outside user press 1 to 0. This dialing is matched with this table destination. The destination is 14 kinds.		NA
11	101 – 110CCR TBLUSAGE (1:ON/0:OFF) : OFF	If this option is set to ON, this CCR table is worked. If this option is set to OFF, this CCR table is not worked. Instead of that, the outside caller's dialed digit can be regarded as DISA dialing.	OFF ON	OFF
12	101 – 101 CCR 1 DGT ONLY (1:ON/0:OFF) : OFF	If this option is set to ON, Only the first digit that is user entered is affected by the CCR routing. If this option is set to OFF, the following next digits are also affected by the DISA routing.	ON/OFF	OFF
13	101 – 101 * USED AS (0-3): NUMBERING PLAN	While listening to User Greeting, the * button working is followed by this attribute. • 0: Numbering Plan • 1: Replay Greeting • 2: Access Mail Box • 3: Leave Message	Refer to description	Numbering Plan
14	101 – 101 # USED AS (0-3): ACCESS MAILBOX	While listening to User Greeting, the # button working is followed by this attribute. • 0: Numbering Plan • 1: Replay Greeting • 2: Access Mail Box • 3: Leave Message	Refer to description	Access Mailbox

Table 3.3.3.16-1 CCR DESTINATIONS (PGM 128)

TYPE	DESCRIPTION
1	Route to a Station
2	Route to a Hunt Group
3	Route with System Speed Dial
4	Route as PBX Transfer with System Speed Dial (Flash then dial speed dial digits)
5	Route to VSF Announcement
6	Route to VSF Announcement and disconnect
7	Route to Networked Station
8	Conference Room
9	Internal Page
10	External page
11	All Call Page
12	Route to voice mail (Hunt group/station number)
13	Company Directory
14	Record VM Greeting
15	Room Type Conf Group Join (Value: system conference group number) (Value Range: eMG80/100(0 or 100~139), eMG800/UCP(0 or 100~259)

4.3.3.17 LSS Label Edit – PGM 129

The LIP-8012 LSS 12 button DSS Console incorporates an LCD used to label the function of each button. The label, which can be up to 12 characters, is assigned in this program.

PROCEDURE	
LSS LABEL EDIT ENTER STA NUMBER	Press the **[PGM]** button and dial 129.
STA 100 LSS LABEL ENTER LSS IDX(1-4)	Use the dial-pad to enter the station number associated with the console (Ex. 100).
STA 100 LSS 1 ENTER BTN NO (01 – 12)	Consoles are indexed, allowing multiple consoles to be associated with a station. Use the dial-pad to enter the index of the LSS console (1 ~ 4).
STA 100 LSS 1 BTN 1 LABEL IS EMPTY	Use the dial-pad to enter the desired LSS console button number (1 ~ 12). Edit the label referring to Table 2.1.2-1 Alpha-numeric Entry Chart. Press the **[Save]** button to store the data entry.

4.3.4 BOARD DATA – PGM 130 to 132

4.3.4.1 H.323 VoIP Attributes – PGM 130

The VOIP channels are used for Distributed Networking, SIP or H.323 networks, and remote iPECS devices. When the standard H.323 VoIP protocol is employed for an external VoIP call, several attributes of these channels can be assigned. The H.323 call set-up mode and tunneling (H.245 Encapsulation) can be established. Also, for H.323 support, a RAS (Registration, Admissions, and Status) channel can be defined. The RAS channel IP addresses (uni-cast and multi-cast) and the IP port Numbering Plan and other H.323 set-up characteristics are defined.

This PGM also allows setting the IP TOS bit for Diffserv, a commonly recognized packet prioritization protocol. Higher priority packets are given priority in the Router or Layer 3 Switch queue. However, they are the first to be discarded in the event of long queue delays, which may cause excess packet loss and poor voice quality.

Refer to Table 3.3.4.1-1 for a description of the features and the input required.

PROCEDURE	
H323 VOIP ATTRIBUTE ENTER SEQ NO(001-300)	Press the **[PGM]** button and dial 130. eMG800 range is 0001-2890.
001 H323 VOIP ATTR PRESS FLEX KEY (01-24)	Use the dial pad to enter the VoIP board sequence number. Press the desired Flex button; refer to Table 3.3.4.1-1. Use the dial pad to enter the desired data. Refer to Table 3.3.4.1-1. Press the **[Save]** button to store the data entry.

Table 3.3.4.1-1 H.323 VOIP ATTRIBUTES (PGM 130)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	H.323 SETUP MODE (1:FAST/0:NORM): FAST	H.323 IP calls can be set-up using the H.323 normal or Fast Start mode.	0: Fast 1: Norm	Fast
2	H.323 TUNNEL MODE (1:ON/0:OFF) : ON	H.323 IP calls can be set up using the H.245 encapsulation (Tunneling).	0: OFF 1: ON	ON
3	H.323 DTMF PATH (0:IN/1:OUT/2:2833): 0	During a connection, DTMF Digits can be sent in-band or out of band (H.245). **0: In band, 1: Out band, 2: 2833**	Refer to description	0
4	DIFFSERV PRETAG TAG (00-63) : 04	Diffserv pre-tagging for Voice packet. Note high values may cause high packet discard levels.	0~63	4
5	RAS USAGE (1:ON/0:OFF) : OFF	Determine whether VOIU/VOIB Board will be used as a Gatekeeper.	0: OFF 1: ON	OFF
6	RAS MULTICAST IP 224.0.1.41	Multi-cast IP address for RAS Information of Gatekeeper.	IP Address	224.0.1.41

Table 3.3.4.1-1 H.323 VOIP ATTRIBUTES (PGM 130)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
7	RAS MULTICAST PORT (00001-65535): 01718	Multi-cast IP Port for RAS Information of Gatekeeper.	IP Port #	1718
8	RAS UNICAST IP 82.134.80.2	Uni-cast IP address for RAS Information of Gatekeeper.	IP Address	82.134.80.2
9	RAS UNICAST PORT (00001-65535): 01719	Uni-cast IP Port for RAS Information of Gatekeeper.	IP Port #	1719
10	RAS KEEP_ALIVE TM (001-999) : 120 (sec)	The time between exchange of RAS Information between GK and VOIB/VOIU.	001-999 (SEC)	120
11	RAS NUM PLAN PREFIX 9	The numbering plan for Calling Numbers in RAS Setup.	Number (24 digits)	9
12	RAS GATEWAY ID ONLY POSSIBLE BY WEB ADM	The Gatekeeper ID (This can be programmed only via WEB Admin).	128 Character	
13	RAS LIGHT RRQ (1:ON/0:OFF) : OFF	The system can be assigned to use the simple RRQ (Registration Request) message (ON) or the full RRQ message (OFF).	0: OFF 1: ON	OFF
14	TCP KEEP ALIVE (1:ON/0:OFF) : ON	The system will send a polling message every 75 seconds to assure the status of the TCP connection.	0: OFF 1: ON	ON
15	FAIL OVER USAGE (1:ON/0:OFF) : OFF	The H.323 call will be failover to another line (FAIL OVER USAG: ON).	0: OFF 1: ON	OFF
16	FAIL OVER TIME(sec) (03-10) : 05	The H.323 call will be failover. The time will be set.	03-10 (Sec.)	5
17	FAIL OVER CO GRP (01-21) : . .	If the H.323 call is failover, assign another CO group.	01-21	
18	Q931 START PORT (00001-65535) : 02048	IP-Binding H.323 signaling option: Q.931 TCP Start Port in case of outgoing call.	00001-65535	2048
19	Q931 END PORT (00001-65535) : 02559	IP-Binding H.323 signaling option: Q.931 TCP End port in case of outgoing call.	00001-65535	2559

Table 3.3.4.1-1 H.323 VOIP ATTRIBUTES (PGM 130)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
20	H245 START PORT (00001-65535) : 02560	P-Binding H.323 signaling option: H.245 TCP Start Port.	00001-65535	2560
21	H245 END PORT (00001-65535) : 03071	IP-Binding H.323 signaling option: H.245 TCP End Port.	00001-65535	3071
22	RAS START PORT (00001-65535) : 02048	IP-Binding H.323 signaling option: RAS UDP Start Port.	00001-65535	2048
23	RAS END PORT (00001-65535) : 03071	IP-Binding H.323 signaling option: RAS UDP End Port.	00001-65535	3071
24	001 H323 VOIP ATTR (2ND) PRESS FLEX KEY (1-4)			
24-1	MEDIA START PORT (00001-65535) : 06000	IP-Binding media option: Media UDP Start Port.	00001-65535	6000
24-2	MEDIA END PORT (00001-65535) : 07036	IP-Binding media option: Media UDP End Port.	00001-65535	7036
24-3	DATA START PORT (00001-65535) : 08500	IP-Binding option: Data Sharing TCP Start Port.	00001-65535	8500
24-4	DATA END PORT (00001-65535) : 08548	IP-Binding option: Data Sharing TCP End Port.	00001-65535	8548
24-5	H.245 SETUP (1:ON/0:OFF) : OFF	This feature is the ability of two user endpoints to communicate before call is actually established in normal call mode. This feature is not used when 'H323 Setup Mode' is 'Fast'. **Setup:** Caller party tries to open early media on receiving the Setup message. **Proceeding:** Calling party tries to open early media on receiving the Proceeding message. **Alerting:** Calling party tries to open early media on receiving the Alerting message.	0: OFF 1: ON	OFF
24-6	H.245 PROCEEDING (1:ON/0:OFF) : OFF		0: OFF 1: ON	OFF
24-7	H.245 ALERTING (1:ON/0:OFF) : OFF		0: OFF 1: ON	OFF

4.3.4.2 T1/E1/PRI Attributes – PGM 131

Each T1/PRI module can be assigned for various attributes of the interface. The T1 interface framing and line coding can be selected and, the PRI, TE, or NT operation and CRC check can be selected. Refer to Table 3.3.4.2-1 for a description of the features and the input required. Note that the Sequence Number can be determined in PGM 103, Button 1.

PROCEDURE	
T1 /E1/PRI ATTRIBUTE ENTER SEQ NO (001 –300)	Press the **[PGM]** button, dial 131, and enter the sequence number (Ex. 001). eMG800 range is 0001-2890.
001 T1 /PRI ATTR PRESS FLEX KEY (1 – 7)	Use the dial pad to enter the Sequence Number of the desired T1/PRI module. Use PGM 103 to determine Sequence Numbers. (e.g., enter the sequence number
	Press the desired Flex button; refer to Table 3.3.4.2-1.
	Use the dial pad to enter the desired data. Refer to Table 3.3.4.2-1.
	Press the **[Save]** button to store the Table data entry.

Table 3.3.4.2-1 T1/PRI MODE (PGM 131)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	T1 SETUP MODE (1:ESF/0:D4) : D4	Select T1 Setup mode. • **D4 frame**: Use In-Band Control Protocol. • **ESF:** Use Data link Message.	0: D4 1: ESF	D4
2	T1 LINE MODE (1:AMI/0:B8ZS) : B8ZS	Select T1 line mode (AMI/B8ZS).	0: B8ZS 1: AMI	B8ZS
3	PRI LINE MODE (1:TE/0:NT): TE	Select TE/NT mode.	0: NT 1: TE	TE
4	PRI/E1 CRC CHECK (1:ON/0:OFF): OFF	For PRI lines the CRC(Cyclical Redundancy Check) can be disabled (OFF).	0: OFF 1: ON	OFF
5	E1 R2DSP CHECK (1:ON/0:OFF): OFF	Used for R2-El board or E1 board.	0: OFF 1: ON	OFF
6	DCO PX TYPE (0-3): STANDARD (2)	Reserved for future use with R2 E1 board. **0: S1240, 1: TDX1B, 2: STANDARD, 3:CONGES**	Refer to Description	STANDARD
7	CALLER NAME TYPE (1:DISP/0:FAC) : FACILIT	The caller's name is sent to the network according to the option if the caller has a name. (the USA only)	0:FACILITY 1:DISPLAY	FACILITY

4.3.4.3 Board Base Attributes – PGM 132

Appliances (Boards and IP Phones) can be connected to the iPECS over a managed WAN without employing a VoIP channel.

In this case, the system does not implement security (IPSec) or QoS treatment over the link. To implement the managed WAN connectivity, the iPECS must be assigned with the router's IP address for all appliances that may attempt a point-to-point connection over the managed WAN, including devices on the iPECS LAN.

Note that if the device's Router IP address is not defined, the system will use the Router IP address defined in PGM 102.

The default codec employed by each device can be specifically defined as G.711, G.723, G.729, G.722, or the system default codec PGM 161 can be defined. Note that the Sequence Number can be determined in PGM 103, Button 1.

PROCEDURE	
BOARD BASE ATTRIBUTE ENTER RANGE (001–300)	Press the **[PGM]** button and dial 132, and enter Range (Ex. 001~002). eMG800 range is 0001-2890.
001-002 BOARD ATTRIBUTE PRESS FLEX KEY (01–13)	Use the dial pad to enter the Sequence Number range of the desired module. Use PGM 103 to determine Sequence Numbers.
	Press the desired Flex button; refer to Table 3.3.4.3-1.
	Use the dial pad to enter the desired data. Refer to Table 3.3.4.3-1.
	Press the **[Save]** button to store the Table data entry.

Table 3.3.4.3-1 BOARD ATTRIBUTES (PGM 132)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	001-002 ROUTER IP ADDR 0 .0 .0 .0	Enter the default Router IP address associated with the selected devices.		0.0.0.0
2	001-002 DEV CODEC TYPE (0-4): SYSTEM CODEC	Select the CODEC type for theselecteddevices: **0: G.711,1: G.723.1,2: G.729,3: G.722** **4: System Codec refer toPGM 161-button 9**.	0-4	4
3	001-002 FIRWALL IP ADDR 0 .0 .0 .0	Enter the Firewall IP address associated with the selected devices.		0.0.0.0
4	001-002 RTP SECURITY (1:ON/0:OFF) : ON	Remote iPECS IP & LDP phones use IPSec to assurea secure connection. To reducebandwidth use, IPSec may bedisabled.	0: OFF 1: ON	ON
5	001-002 TNET ENABLE (0:ON/0:OFF) : OFF	When a module or station is to be connected in a Centralized, Control network (TNET), the device must be enabled for TNET operation.	0: OFF 1: ON	OFF
6	001-002 VSF SENDER MAIL	VMIU/VMIB e-mail address for Mailbox Mail Sending.		NULL

Table 3.3.4.3-1 BOARD ATTRIBUTES (PGM 132)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
7	001-002 T38 ENABLE (1:ON/0:OFF) : OFF	T38 mode ON/OFF for FAX datatransfer.	0: OFF 1: ON	OFF
8	001-002 USE BRD IP FWIP (1:ON/0:OFF) : OFF	VOIB IP will be used for SIP signaling in Multi NATcircumstance.	0: OFF 1: ON	OFF
9	001-002 RTP FIRWALL IP 0 .0 .0 .0	Enter the Firewall IP address associated with the RemotePhone or Gateway/board if there needs a Dual Broadband connection forSIP trunks and Remote phones(using a VOIB).		0.0.0.0
10	001-002 T38 PORT USAGE (0:D/1:S/2:T) : 0	T38 Port can be different with Voice Port. Or, be same or betriggered.	0: D 1: S 2: T	0
11	001-002 2833 PAYLOAD (000-127) : 000	RFC 2833 Payload is programmable.	000-127	000
12	001-002 2833 VOLUME (00-36) : 00	RFC 2833 packet volume.	00-36	00
13	001-002 2833 REDUNDANCY (1-8) : 0	RFC2833 Packet Redundancy.	1-8	0
14	001-002 WEB CONNECT (1:ON/0:OFF) : OFF	Setting for web connection.	0: OFF 1: ON	ON
15	001-002 TELNET CONNECT (1:ON/0:OFF) : OFF	Setting for Telnet connection.	0: OFF 1: ON	OFF

4.3.5 CO LINE DATA – PGM 140 to 151

4.3.5.1 CO Service Type – PGM 140

Each CO Line is assigned a type, Normal or DID. Normal CO Lines can be employed for DISA Service PGM 146. DID lines are for incoming only operation and provide call routing based on signaling from the carrier. Refer to section 3.3.5.4 DID Service Attributes - PGM 145.

PROCEDURE	
COL SERVICE ATT ENTER COL RANGE	Press the **[PGM]** button, dial 140, and enter the range (Ex. 0102).
01-02 SVC TYPE PRESS FLEX KEY (1-1)	Press the desired Flex button.
01-02 SVC TYPE (1-4) NORMAL CO (1)	Use the dial pad to enter a CO Line range. For a single CO Line, enter the same number twice.
	Use the dial pad to enter the desired service type: - 1. Normal CO line, 2. DID line, 3. TIE line, 4. Unused
	Press the **[Save]** button to store the data entry.

4.3.5.2 CO/IP Attributes I ~ III - PGM 141~143

CO/IP Attributes define various characteristics of the CO lines and IP facilities under the system's control. Most require a dial pad input of 1 or 0 to set the characteristic. Refer to Table 3.3.5.2-1 to Table 3.3.5.2-3.

Specific descriptions for Class-of-Service and CO line Call Metering tones are provided in Table 3.3.5.2-4 and Table 3.3.5.2-5, respectively.

PROCEDURE	
CO/IP ATTRIBUTE 1 ENTER COL RANGE	Press the **[PGM]** button and dial: - 141 for CO/IP Attributes I - 142 for CO/IP Attributes II - 143 for CO/IP Attributes III.
01-02 CO/IP ATT 1 PRESS FLEX KEY (01-24)	Use the dial-pad to enter a CO/IP line range. For a single CO/IP Line, enter the same number twice.
	Press the desired Flex button; refer to Table 3.3.5.2-1 to Table 3.3.5.2-3.
	Use the dial-pad to enter desired data for the Attribute. Refer to Table 3.3.5.2-1 through Table 3.3.5.2-5.
	Press the **[Save]** button to store the data entry.

Table 3.3.5.2-1 CO/IP ATTRIBUTES I (PGM 141)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	DEFAULT
1	01-02 CO/IP GROUP GRPNO (01-20) : 01	Each CO Line is assigned to a group; grouping should be based on the Line type and COS.	01

Table 3.3.5.2-1 CO/IP ATTRIBUTES I (PGM 141)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	DEFAULT
2	01-02 CO LINE COS COS (1–5) : 1	Each CO Line is assigned a Class-of-Service which will interact with the Station COS, refer to section 3.3.5.2. • CO COS 1: Station COS applies • CO COS 2: Exception Table A governs • CO COS 3: Exception Table B governs • CO COS4: Restricts LD calls and Except Table C • CO COS 5: Overrides Station COS 2~6 with no restrictions.	1
3	01-02 CO START SIGNAL (1:GND/0:LOOP) : LOOP	The system can recognize a loop closure or a ground as the “connect” (start) signal on an analog CO Line.	LOOP
4	01-02 CO LINE TYPE (1:PBX/0:CO) : CO	Each CO Line can be assigned as connected to a CO Line or a PBX/CTX Line.	CO
5	01-02 CO LINE SIGNAL (1:DTMF/0:PULSE):DTMF	Each analog CO Line can be assigned to send either DTMF or Pulses for dialed digits to the PSTN.	DTMF
6	01-02 UNSED		
7	01-02 UNIVERSAL ANS (1:ON/0:OFF) : OFF	Universal Night Answer (UNA) allows any station to answer a call on the CO Line by dialing the UNA code.	OFF
8	01-02 CO/IP GRP AUTH (1:ON/0:OFF) : OFF	Each CO/IP Group can be assigned to require the user to enter an Authorization Code for access.	OFF
9	01-02 DATA STATION NO FAX : ….	Each CO/IP line can be assigned to recognize a FAX call when a specified station answers.	….
10	01-02 TENANCY GROUP (00-15) : 00	Only stations in the assigned Tenancy group are permitted access to the defined CO Line.	00
11	01-02 CO VOIP MODE VOIP MODE(1-6):COMMON	The VOIB channels can support iPECS, H.323, or SIP protocols. This field defines the protocol for the VoIP channel(s). **1: COMMON, 2:H.323 ONLY,** **3: SIP ONLY, 4:RTP RLY,** **5:H.323/RTP RLY, 6:SIP/RTP RLY**	COMMON
12	01-02 PROCTOR ON/OFF (1:ON/0:OFF) : OFF	Each analog CO line can be assigned to send the station number as DTMF digits for Proctor service.	OFF

Table 3.3.5.2-1 CO/IP ATTRIBUTES I (PGM 141)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	DEFAULT
13	01-02 WAIT IF VSF BUSY (1:ON/0:OFF) : ON	When a DID/DISA call assigned to receive a VMIU/VMIB announcement arrives, and all channels are busy, the call may wait with Ring back until a channel is available (ON) or route to the DID/DISA Destination - PGM 167.	ON
14-15	01-02UNUSED		
16	01-02 RING TONE (00-12, 0:N/A) : 00	Ring Tone can be programmable by CO-line base admin.	00
17	01-02 UNUSED		
18	01-02 GAIN TABLE (1-3) : 1	TDM gain table can be programmed.	1
19	01-02 TONE TBL (1-5) : 1	Tone table can be programmed.	1
20	01-02 DGT CONV. TBL (01-15) : 01	Select digit conversion table.	01
21	01-02 PREPAID CALL (1:ON/0:OFF) : OFF	Enables Pre-paid Call feature.	OFF
22	01-02 PREPAID MONEY 0 (USED:0)	An amount can be associated with the station as a prepayment for outgoing calls. The assigned “Pre-paid Money” is reduced by the calculated call cost (Call Metering or cost/minute). This parameter displays the remaining funds for outgoing calls. Prepaid Money is often used in small hospitality businesses. The “Used Pre-paid Money” displays the money that has been used.	
23	01-02 LDT ZONE (001-100) : 001	If the LDT Zone Number of a station/co line is equal to this value, this LDT table is available to the station/co line.	001
24	ADDED CO/IP ATTRIBUTE 1 PRESS FLEX KEY (1-2)		

Table 3.3.5.2-1 CO/IP ATTRIBUTES I (PGM 141)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	DEFAULT
24-1	01-02 ICLID USAGE (0-2) : CLI	An incoming call can be routed to the destination based on the Calling Name. • **Disable** - ICLID feature is disabled • **CLI** - ICLID feature is operated with CLI • **Name** - ICLID feature is operated with Name	CLI
24-2	01-02 EMERGENCY PBX C (0-4) : DISABLE	The system can insert PBX code automatically if pre-configured when a user makes an emergency call.	Disable

Table 3.3.5.2-2 CO/IP ATTRIBUTES II (PGM 142)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	DEFAULT
1	01-02 CO NAME DISPLAY (1:ON/0:OFF) : OFF	IF ASSIGNED, the IP Phone display can indicate the CO Line/IP channel number or a twelve (12)-character name.	OFF
2	01-02 CO NAME ASSIGN ……	Each CO Line and the IP group can be assigned twelve (12) character names for display purposes. See Table 3.1.2-1 for the character entry sequence.	
3	01-02 METERING UNIT 00:NONE (0-6)	Selects the call-metering signal from the PSTN to indicate call cost. Refer to Table 3.3.5.2-5.	00
4	01-02 LINE DROP(CPT) (1:ON/0:OFF) : OFF	Each CO Line can be programmed to disconnect if an error tone is detected.	OFF
5	01-02 DISA ACCT CODE (1:ON/0:OFF) : ON	With DISA ACCT CODE “ON,” users will be required to enter an Authorization code. Enter codes in Authorization Codes Table - PGM 227.	ON
6	01-02 MOH: (00-37) MUSIC 1 (01)	A held call can be connected to one of three possible audio sources while on Hold as Music-on-Hold (MOH). • 00:REFER TO SYS HOLD, • 01: INT MUSIC • 02: EXT MUSIC • 03: VSF MOH • 04~08: SLT MOH1~5 • 09~10: VSF MOH2~3 • 11~37: VSF MOH4~30	01
7	01-02 CO DIAL TONE (1:ON/0:OFF) : ON	ISDN Lines may provide a digital signal rather than actual tones. If the ISDN tone is set to “OFF,” iPECS can provide the tones.	ON
8	01-02 CO RBACK TONE (1:ON/0:OFF) : OFF	ISDN Lines may provide a digital signal rather than actual tones. If the ISDN tone is set to “OFF,” iPECS can provide the tones.	OFF

Table 3.3.5.2-2 CO/IP ATTRIBUTES II (PGM 142)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	DEFAULT
9	01-02 CO ERROR TONE (1:ON/0:OFF) : OFF		OFF
10	01-02 CO BUSY TONE (1:ON/0:OFF) : OFF		OFF
11	01-02 DISA CO ACCESS (1:ON/0:OFF) : OFF	Permits DISA users access to the VoIP facilities of the system.	OFF
12	01-02 FLASH TMR (000-300 10 ms) : 050	This entry sets the duration of a Flash on the CO Line.	050 500 msec
13	01-02 OPEN LOOP (00-20 100ms) : 04	This entry sets the duration of the open loop that will be recognized as a “Disconnect Signal.”	04
14	01-02 ICLI DT TMR (00-20 SEC) : 00	When a call is received, the system may use the ICLID (Incoming Caller ID) to route the call. The system will delay routing a call for this timer while awaiting ICLID. Enter a 00 to disable ICLID routing.	00
15	01-02 SMS OUTGOING (1:EN/0:DIS) : DISABLE	Each CO line can be assigned to support PSTN SMS.	Disable
16	01-02 SMS RCV STATION STA : ….	When a PSTN SMS is received, the system delivers the message to the assigned station.	….
17	01-02 DL TN:(00-37) DIAL TONE (00)	One of the below dial tones can be used by the CO line. • 00:DIAL TONE • 01:INT MUSIC • 02:EXT MUSIC • 03:VSF MOH • 04~08: SLT MOH1~5 • 09~10: VSF MOH2~3 • 11~37: VSF MOH4~30	Dial tone
18	01-02 RB TN: (00-37) RING BACK TONE (00)	One of the below ring back tones can be used by the CO line. • 00:RING BACK TONE • 01:INT MUSIC • 02:EXT MUSIC • 03:VSF MOH • 04~08: SLT MOH1~5 • 09~10: VSF MOH2~3 • 11~37: VSF MOH4~30	Ring back tone

Table 3.3.5.2-2 CO/IP ATTRIBUTES II (PGM 142)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	DEFAULT
19	01-02 REJECT ANONYMOUS (1:ON/0:OFF) : OFF	When REJECT ANONYMOUS “ON,” incoming calls without Caller ID will be rejected.	OFF
20	01-02 PREFIX TABLE ID (0-6) : 0	If prefix table ID is set to 0, then prefix dialing call cannot be applied. If prefix table ID is set to (1-6), then prefix dialing call can be applied with PREFIX DIALING TABLE (PGM 206)	0
21	01-02 CO CUT OFF TMR (00-99 MIN) : 00	Co base call cut-off timer can be set at this field.	00
22	01-02 DISA DELAY TMR (0-9 SEC): 0	It is only used for Russia. The system is immediately connected to a DISA call, and a DISA announcement is played after this timer.	0
23	01-02 LDT TBT INDEX (00-10) : 01	LCR will be operated with LDT table index.	1
24	01-02 DISA ANS TMR (0-9 SEC) : 0	It is only used for Russia. When DISA incoming call, the System is connected after DISA Answer Timer.	0

Table 3.3.5.2-3 CO/IP ATTRIBUTES III (PGM 143)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	DEFAULT
1	01-02 COLP TABLE IDX INDEX : NOT ASSIGNED	When an incoming call on an ISDN Line is answered, the system will send the caller id using the number from the CLIP/COLP Table –PGM 201- entry defined by this parameter.	None
2	01-02 CLIP TABLE IDX INDEX : NOT ASSIGNED	When a call is placed on an ISDN Line, the system will send the caller id using the number from the CLIP/COLP Table –PGM 201- entry defined by this parameter. For entry 00, the CLI STA NO entered in PGM 114-button 6 will be used in place of the station number. For other entries, the station number is added as a suffix to the entry in PGM 201.	None
3	01-02 ENBLOCKSENDING (1:ON/0:OFF) : OFF	This entry determines if the system sends dialed digits to the ISDN line as they are received (Overlap) or collects all digits and forwards them in a block, enblock. **<Default>eMG80/100 : OFF,eMG800: ON**	Refer ro description

Table 3.3.5.2-3 CO/IP ATTRIBUTES III (PGM 143)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	DEFAULT
4	01-02 TYPE OF NO(0-4) NATIONAL (2)	This parameter defines the “Type of Number Plan” provided in Calling Party Information Element of the ISDN call SETUP message for outgoing calls on the ISDN Line. **0: UNKNOWN, 1: INTERNATIONAL** **2: NATIONAL, 3: Unused, 4: SUBSCRIBER**	2
5	01-02 DID REMOVE NO (00-99) : 00	When a DID call is received on an ISDN Line, this entry determines the number of digits that will be removed starting with the first received digit.	00
6	02 TEI TYPE (1:AUTO/0:FIX) : AUTO	The TEI (Terminal Endpoint Identifier) is a unique identifier for each device attached to the ISDN line. When the system shares an ISDN connection with other devices, the TEI should be automatic to ensure no conflict with other attached devices. When the ISDN connection is not shared, the Fixed identifier option should be employed.	AUTO
7	02 ISDN-SS CD/CR (1:EN/0:DIS) : DISABLE	Permits user access to ISDN Supplementary Call Deflection or Call Re-route Service. (Except USA version)	Disable
8	02 ISDN 1 DGT RM (1:ON/0:OFF) : OFF	Select one digit removal mode in ISDN Called Digits (for Italy).	OFF
9	001-002 AOC TYPE (0-5) NO SERVICE (0)	When assigned, the system will analyze the Advice of Charge information in the Facility Message according to the ETSI specifications with appropriate regional protocol support.	No Service
10	001-002 ISDN LINE TYPE (1:U/0:A): U_LAW	The system will encode voice using the A-law or u-law PCM format and should be set to match the ISDN Back bone type.	u-Law
11	01-02 CALLING SUBADDR (1:ON/0:OFF) : OFF	The user’s station number may be included in the ISDN call SETUP message Sub-address field for outgoing calls.	OFF
12	01-02 IN PREFIX INS (1:ON/0:OFF) : OFF	Regional ISDN providers may use the Local Area Prefix code for special services. In cases where the code is not provided in the incoming call SETUP message, the system can insert the Local Prefix and Area code in SMDR, LNR, displays, etc.	OFF
13	01-02 OUT PREFIX INS (1:ON/0:OFF) : ON	Regional ISDN providers may use the Local Area Prefix code for special services. The system can insert the Local Prefix in the outgoing call SETUP message.	ON

Table 3.3.5.2-3 CO/IP ATTRIBUTES III (PGM 143)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	DEFAULT
14	01-02 INT ACCESS CODE ….	When an incoming call includes the international Country code in the ISDN call SETUP message, the Country code will be included in the station display. To include the Country code, Incoming Prefix insertion (button 12 above) and CLI Display for the station (PGM 114-button 1) must be On.	
15	01-02 AREA CODE ……	Regional ISDN providers may use the Local Prefix and Area codes for special services. The system will insert this Local Area Code in the call SETUP messages defined under button 13 above.	-
16	01-02 PREFIX CODE ….	Regional ISDN providers may use the Local Prefix and Area codes for special services. The system will insert this Local Prefix Code in the call SETUP messages defined under button 13 above.	-
17	01-02 CLI TRANSIT (1:ORI/0:CFW): CFW	When the system must send CLI to the ISDN for an off-net call, the CLI can be either the original caller's CLI or the CLI of the Off-net forwarding/transferring station.	CFW
18	01-02 PRESERVE NAME (1:ON/0:OFF): OFF	For DID lines, the CLI is normally displayed only during ringing. If enabled here, the CLI will be displayed for the entire call duration.	OFF
19	01-02 REDIRECT INFO NO SERVICE (0)	When the system needs to send the Redirecting number to the ISDN for an off-net call, the Redirecting number can be either the original caller's CLI or the Off-net forwarding/transferring station. If it is no service, then the system will not send this information. If it is OGR CLI (original CLI), the system will send the original CLI received from the incoming CO line. If it is CFW CLI, then the system will send redirecting CLI that is CLI for call off-net call forwarded station.	NO SERVICE
20	01-02 INC CLI CHOICE (1:ORI/0:TRANSIT): TRS	Incoming CLI Choice – When the ISDN setup message has two CLI (Transit Point CLI / Original CLI), by using this option, CLI can choose.	Transit
21	01-02 CALLING NUM PLAN (0-6):ISDN/TELEPHONY (1)	ISDN Calling Party Numbering Plan can be programmable. • 0: Unknown. • 1: ISDN / Telephony. • 2: Data / Numbering. • 3: Telex. • 4: National Standard. • 5: Private. • 6: Reserved.	ISDN/ Telephony

Table 3.3.5.2-3 CO/IP ATTRIBUTES III (PGM 143)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	DEFAULT
22	01-02 CALLED NUM PLAN (0-6) : UNKNOWN (0)	ISDN Called Party Numbering Plan can be programmable. • 0: Unknown. • 1: ISDN / Telephony. • 2: Data / Numbering. • 3: Telex. • 4: National Standard. • 5: Private. • 6: Reserved.	Unknown
23	01-02 SCREENING (0-3) USER PROVIDED, NO S (0)	ISDN Screening Indicator can be programmable. • 0: User-Provided, No Service. • 1: User-Provided, Pass. • 2: User-Provided, Fail. • 3: Network Provided.	User-Provided, No Service.
24	ADDED CO LINE ATT3 PRESS FLEX KEY (1-6)		
24-1	01-02 CLI TYPE (1-5) STN CLI 1 (1)	Outgoing CLI can be chosen from CLI 1 to CLI 5. This program is combined with PGM 114 – Station CLI 1 to Station CLI 5.	1 (Station CLI 1)
24-2	01-02 ISDN PLUSE CODE ….	When incoming CLI starts with “+” code, this Plus code can be translated as this program.	-
24-3	01-02 CP/ALERT INBAND (1:ON/0:OFF):OFF	Send progress indication with in-band information in call proceeding and alerting message.	OFF
24-4	01-02 DISCONNECT INBAND (1:ON/0:OFF):OFF	Send progress indication with in-band information in disconnect message.	OFF
24-5	01-02 BURSTTN TO CALLER (1:ON/0:OFF):OFF	Send to burst tone to a caller if it’s set ON.	OFF
24-6	01-02 DISCONN. (INBAND) IGNORE (0)	When the system receives a DISCONNECT message with Inband information from PSTN, the following option can be applied: • **Ignore Inband information:** Line is disconnected • **Bypass Inband information**: Progress Information is transferred • **Wait Release**: The system wait to send a Release message till the other party is disconnected	Ignore

Table 3.3.5.2-4 STATION/CO LINE COS TOLL RESTRICTIONS

	CO COS 1	CO COS 2	CO COS 3	CO COS 4	CO COS 5
STA COS 1	No Restriction	No Restriction	No Restriction	Only Local Call (LD Code / Counter) and Table C	No Restriction
STA COS 2	Exception Table A governs the dialing	Exception Table A governs the dialing	No Restriction	Only Local Call (LD Code / Counter) and Table C	No Restriction
STA COS 3	Exception Table B governs the dialing	No Restriction	Exception Table B governs the dialing	Only Local Call (LD Code / Counter) and Table C	No Restriction
STA COS 4	Exception Table A & B governs the dialing	Exception Table A governs the dialing	Exception Table B governs the dialing	Only Local Call (LD Code / Counter) and Table C	No Restriction
STA COS 5	Local Call only (LD Code, 1stdigit “0” or “1”) and Table C	Local Call only (LD Code, 1stdigit “0” or “1”) and Table C	Local Call only (LD Code, 1stdigit “0” or “1”) and Table C	Only Local Call (LD Code / Counter) and Table C	No Restriction
STA COS 6	Only Local Call (LD code/counter) and Table C	Only Local Call (LD code/counter) and Table C	Only Local Call (LD code/counter) and Table C	Only Local Call (LD Code / Counter) and Table C	No Restriction
STA COS 7	In-house dialing only	In-house dialing only	In-house dialing only	In-house dialing only	In-house dialing only
STA COS 8	Exception Table D governs the dialing	Exception Table D governs the dialing	No Restriction	Only Local Call (LD Code / Counter) and Table C	No Restriction
STA COS 9	Exception Table E governs the dialing	Exception Table E governs the dialing	No Restriction	Only Local Call (LD Code / Counter) and Table C	No Restriction
STA COS 10	Exception Table D & E governs the dialing	Exception Table D & E governs the dialing	No Restriction	Only Local Call (LD Code / Counter) and Table C	No Restriction
STA COS 11	Exception Table A & B and D & E governs the dialing	Exception Table A & B and D & E governs the dialing	No Restriction	Only Local Call (LD Code / Counter) and Table C	No Restriction

Table 3.3.5.2-5 CALL METERING FUNCTION

ENTRY	CALL METERING TYPE
00	- None
01	- 50 Hz
02	- 12 KHz
03	- 16 KHz
04	- Singular Polarity Reverse (SPR)
05	- Plural Polarity Reverse (PPR)
06	- No Polarity Reverse (NPR)

4.3.5.3 CO/IP Ring Assignment – PGM 144

Each CO/IP line is assigned to signal a station or group for an incoming call (Ring). Separate ring assignments are made for Day, Night, and Timed Ring modes.

When assigned to ring to a VSF announcement, the call can be dropped automatically after the assigned announcement by entering '#' after the VSF announcement number.

When CO Lines are programmed to Ring an external AA/VM or Feature Server Group as an Automated Attendant, the Ring signal can be immediate or delayed, allowing other stations/groups to be assigned Ring and answer prior to signaling AA.

The delay is defined in seconds from 00 to 30.

PROCEDURE	
CO RING ASSIGNMENT ENTER COL RANGE	Press the **[PGM]** button and dial 144.
	Use the dial-pad to enter a CO Line range. For a single CO Line, enter the same number twice.
	Press the desired Flex button: - Button 1: Day Ring - Button 2: Night Ring - Button 3: Timed Ring
01-02 PRESS KEY DAY NIGHT TIMED-R	Use the dial pad to select the destination type: - Dial 1: Station - Dial 2: Hunt Group - Dial 3: VSF - Dial 4: AA Ring Time - Dial 5: Net number
	Use the dial pad to enter a value for the selected destination type. For: - Dial 1: Enter a station range (enter the same station number twice to assign a single station) and the ring delay, if any, in-ring cycles (0~9). - Dial 2: Enter a hunt group number. - Dial 3: Enter the VSF announcement number and, if desired, '#' to drop the call after the announcement. - Dial 4: For AA Ring Time, enter the desired delay from 00 to 30 seconds.
	Press the **[Save]** button to store the data entry.

4.3.5.4 DID Service Attributes – PGM 145

PSTN DID lines can be assigned the “Start” signaling and treatment of any received digits.

Digits can be used “as is” to route the call within the system, digits can be converted and used to route the call, or digits can be converted to a Table index to determine the call routing based on the assigned conversion method, see Table 3.3.9.7-1 (PGM 231).

PROCEDURE	
DID ATTRIBUTES ENTER COL RANGE	Press the **[PGM]** button and dial 145.
01-02 DID ATTRIBUTE PRESS FLEX KEY(1–4)	Use the dial-pad to enter the DID Line range. For a single DID Line, enter the same number twice.
	Select the desired Flex button; refer to Table 3.3.5.4-1.
	Use the dial-pad to enter the desired value for the selected Attribute. Refer to Table 3.3.5.4-1.
	Press the **[Save]** button to store the data entry.

Table 3.3.5.4-1 DID LINE ATTRIBUTES (PGM 145)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	01-02 SIG. TYPE: 1-3 WINK (2)	Assigns the type of DID that starts signaling, Immediate, Wink, or Delayed.	1: Immediate 2: Wink 3: Delayed	Wink
2	01-02 DID CONV TYPE (0 – 2) : 1	The received DID digits can be treated to determine call routing, simple conversion (PGM 230), “use as is” (no treatment), or modify using look-up Table (PGM 231).	0: Convert 1: Use as is 2: Look-up	Use as is
3	01-02 DID DGT RCV NO 3 (2 – 4)	A number of digits are expected from the PSTN DID circuit.	2~4	eMG80/100:3 eMG800:4
4	01-02 DID DGT MASK #***	DID digit modification sequence: “#” deletes the digit, “*” accepts the digit as is, a digit (0~9) replaces the digit. The modification is based on the position of the digit (1~4) in the received number.	(0~9, *, #)	#***

4.3.5.5 DISA Service – PGM 146

DISA Service can be enabled on CO lines based on the system operation mode (Day, Night, and Timed).

DISA calls may be routed to dial tone and await user dialing (simple routing) or through a multi-layered Audio Text menu assigning a VSF Announcement/Customer Call Route (CCR) Table Index.

The system can be instructed to disconnect after the announcement or follow the CCR Table routing with a user-recorded announcement requesting specific inputs from the user.

PROCEDURE	
DISA ATTRIBUTES ENTER COL RANGE	Press the **[PGM]** button and dial 146.
01-02 DISA ATTRIBUTE F1:DAY F2:NIGHT F3:TIME	Use the dial-pad to enter the CO Line range. For a single CO Line, enter the same number twice.
001-002 DISA ATTRIBUTE DAY SERVICE 00 (00 – 71)	Select the desired Flex button: - Button 1: Day - Button 2: Night - Button 3: Timed
	Use the dial-pad to enter the desired VSF AA Announcement (00: disabled, 01~70 CCR Table index PGM 228, or 71: await user digits). Enter '#' after the entry to include a "drop after announcement instruction."
	Press the **[Save]** button to store the data entry.

4.3.5.6 CO Line Preset Forward Attributes – PGM 147

The CO Line Preset Forward feature enables a CO line to initially ring at multiple stations and forward to a pre-determined destination (PGM 204).

The destination can be a station, Voice Mailbox, ACD group, or Hunt group. Each CO line has a Preset Forward Timer. Each CO line can also be assigned a VMID (Voice Mail Id) to send specific VM digits when a CO line forwards to an external VM group.

PROCEDURE	
CO PRESET FWD ATT ENTER COL RANGE	Press the **[PGM]** button and dial 147.
01-02 CO PRE-FWD PRESS FLEX KEY(1–3)	Use the dial-pad to enter the CO Line range. For a single CO Line, enter the same number twice.
	Select the desired Flex button; refer to Table 3.3.5.6-1.
	Use the dial-pad to enter the desired value for the selected Attribute. Refer to Table 3.3.5.6-1.
	Press the **[Save]** button to store the data entry.

Table 3.3.5.6-1 CO LINE PRESET FORWARD ATTRIBUTES (PGM 147)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	01-02 PRESET FWD TMR (00-99 SEC) : 00	An incoming call, which remains unanswered for this timer, is routed to the pre-determined Ring Table Index, PGM 147-button 2.	00-99 Sec	00
2	01-02 RING TBL INDEX INDEX : NOT ASSIGNED	If an incoming call remains unanswered after the Preset Fwd time, the call is routed as defined in the ICLID Ring Assignment table bin entered here. Refer to PGM 204.	001-250	
3	01-02 VMID NUMBER ….	Each CO/IP line can be assigned a VMID (Voice Mail Id) that is sent to the VM group to identify the desired Mailbox for the CO/IP line.	0000~9999	

4.3.5.7 CO Additional Attributes – PGM 148

CID Attributes are assigned for Analog CO Line Caller Id services.

PROCEDURE	
CO ADDITIONAL ATTR ENTER COL RANGE	Press the [PGM] button and dial 163.
01–02 CID SETTING PRESS FLEX_KEY (01–13)	Use the dial–pad to enter a CO line range. For a single CO Line, enter the same number twice.
	Press the desired Flex button; refer to Table 3.3.5.7-1.
	Use the dial–pad to enter desired data for the Attribute.
	Press the [Save] button to store the data entry.

Table 4.3.5.7-1 CO Additional Attributes (PGM 148)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	01–02 CID MODE SELECT (0–4) : FSK	CID signal type can be assigned according to the CID type PSTN provides. **0:Disabled, 1:FSK, 2 :DTAS FSK, 3:DTMF, 4:Russia CID**	Refer to description	FSK
2	01-02 RCID DETECT (1: ALL/0: LOCAL) : ALL	Russia CID Detect Mode.	0: LOCAL 1: ALL	ALL
3	01-02 RCID REQUEST (1: AUTO/0: USER) : AUTO	Russia CID Request Mode.	0: USER 1: AUTO	AUTO
4	01-02 RCID REQ TMR(10ms) (010–150) : 030	Russia CID First Delay Timer.	010–150 (10msec)	030
5	01-02 RCID NOANS TMR(s) (001–300) : 020	Russia CID NO–Answer Timer.	001–300 (sec)	020
6	01-02 RCID DGT NUMBER (04–10) : 07	Russia CID Digit Number.	04–10	07
7	01-02 RCID REQ COUNT (1–3) : 1	Russia CID Request Count.	1–3	1
8	01-02 RCID REQ DELAY (10–30) : 10 (10ms)	Russia CID Retry Delay Timer.	10–30 (10msec)	10

Table 4.3.5.7-1 CO Additional Attributes (PGM 148)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
9	01-02 CC BLOCKING (0-2): DISABLED	It's for only Brazil R2. It blocks for a collect call if a double answer or with indication is selected. **0: Disabled, 1: Double Answer, 2: With Indicator**	Refer to description	Disabled
10	01-02 CC ANS TMR (001-250): 010 (100ms)	If it is set to Double Answer for collect call blocking, this timer is sending a dummy answer signal.	1-250 (100ms)	10
11	01-02 CC IDLE TMR (001-250): 020 (100ms)	If it is set to Double Answer for collect call blocking, this timer is sending a dummy idle signal.	1-250 (100ms)	20
12	01-02 LINE MONITORING (1: ON / 0: OFF): ON	This determines that detect line fault or not.	0: OFF 1: ON	ON
13	01-02 RING DETECT REG (000-255): 015	In the web admin, it is located in the Maintenance page [Appliances Control] > [Analog CO Parameter Set].	000-255	015

4.3.5.8 NA ISDN Line Attributes – PGM 150

The specific attributes must be defined to comply with the North American ISDN standards for the system. These include Directory (telephone) Number and Service Profile (SPID) for the device. Note that this programming is required only for “Country Code” 1, USA installations.

PROCEDURE	
COL NA ISDN ATT ENTER CO RANGE	Press the **[PGM]** button and dial 150.
01-02 COL NA ISDN ATT PRESS FLEX KEY (1-8)	Use the dial-pad to enter a CO Line range. For a single CO Line, enter the same number twice.
	Press the desired Flex button; refer to Table 3.3.5.8-1.
	Use the dial-pad to enter desired data for the Attribute. Refer to Table 3.3.5.8-1.
	Press the **[Save]** button to store the data entry.

Table 3.3.5.8-1 NA ISDN ATTRIBUTES (PGM 150)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	01-02 TYPE OF PX(1-4) NI1 (1)	The type of PSTN determines several specifics of the protocol and is required for proper operation. **1: NI 1, 2: NI 2, 3: 5 ESS, 4: NORTEL**	Refer to description	NI 1
2	01-02 SPID NUMBER ……	The Service Profile Identifier(SPID) is a number assigned to a fully initializing ISDN terminal and enables the Stored ProgramControl switching System(SPCS) to identify the ISDNterminal at layer 3 of the D-channel signaling protocol. The SPID is a free-formatted numeric string composed of 9 to23 numeric {0-9} and InternationalAlphabet (IA5) characters. TheSPID uniquely identifies a particular set of subscription parameters assigned to a TSP.	9~23 digits	
3	01-02 DN NUMBER ……	Initializing terminals are required to store a 7-digit DN in order to perform the compatibility checking procedures that are part of call termination.	23 digits	-
4	01-02 EKTS MODE (1:EKTS/0:NONE) : NONE	The EKTS (Electronic KeyTelephone Service) terminal permits a user to operate those features specific to EKTS and voice features that may function distinctly in the EKTS environment. EKTSallows a DN to be shared by more than one terminal, on the same or on different interfaces.	0: None 1: EKTS	NONE

Table 3.3.5.8-1 NA ISDN ATTRIBUTES (PGM 150)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
5	01-02 TYPE FOR 1/2/3 UNKNOWN (0)	ISDN CALLED NO is made with the International format, National format, Network format, Subscriber format, or Abbreviated format when the user dials 1~3 digits. • 0: Unknown • 1: International • 2: National • 3: Network • 4: Subscriber • 5: Abbreviated	Refer to description	Unknown
6	01-02 TYPE FOR 4/5/6 UNKNOWN (0)	ISDN CALLED NO is made with the International format, Nationalformat, Network format, Subscriber format, or Abbreviated format when the user dials 4~6 digits. • 0: Unknown • 1: International • 2: National • 3: Network • 4: Subscriber • 5: Abbreviated	Refer to description	Unknown
7	01-02 TYPE FOR 7/8/9 UNKNOWN (0)	ISDN CALLED NO is constructed with the International format, National format, Network format, Subscriber format, or Abbreviated format when the user dials 7~9 digits. • 0: Unknown • 1: International • 2: National • 3: Network • 4: Subscriber • 5: Abbreviated	Refer to description	Unknown
8	01-02 TYPE FOR 10/11 UNKNOWN (0)	ISDN CALLED NO is constructed with the International format, National format, Network format, Subscriber format, or Abbreviated format when the user dials more than 10 digits. • 0: Unknown • 1: International • 2: National • 3: Network • 4: Subscriber • 5: Abbreviated	Refer to description	Unknown

4.3.5.9 ISDN CO Line Attributes – PGM 151

ISDN standards require that the ISDN terminating device, the iPECS eMG, include various “adjustable” timers and counters as described below.

PROCEDURE	
COL ISDN ATT ENTER CO RANGE	Press the **[PGM]** button and dial 151.
01-02 COL ISDN ATT PRESS FLEX KEY (01-16)	Use the dial-pad to enter a CO Line range (Ex. 01-02). For a single CO Line, enter the same number twice.
	Press the desired Flex button; refer to Table 3.3.5.9-1.
	Use the dial-pad to enter desired data for the Attribute. Refer to Table 3.3.5.9-1.
	Press the **[Save]** button to store the data entry.

Table 3.3.5.9-1 ISDN CO LINE ATTRIBUTES (PGM 151)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	01-02 T200 (1- 5) (1-5) : 1 (sec)	The terminal must support a T200 timer for each data link supported.	1~5 (seconds)	1
2	01-02 T201 (1- 5) (1-5) : 1 (sec)	The minimum time between TEIID check messages.	1~5 (seconds)	1
3	01-02 T202(1-5) (1-5) : 2 (sec)	When the terminal transmits aTEI Identify Request message, it must provide one T202 timer for each logical link supported.	1~5 (seconds)	2
4	01-02 T203 (05 – 15) (05-15) : 10 (sec)	If the terminal initiates the link monitoring function, it must provide one T203 timer for each logical link supported. T203 defines the maximum time between message exchanges.	5~15 (seconds)	10
5	01-02 T204 (05 – 15) (05-15) : 10 (sec)	The T204 timer defines the minimum time between transmissions of XID messages.	5~15 (seconds)	10
6	01-02 T302 (10 – 30) (10-30) : 15 (sec)	In the Overlap dial mode, when the system receives incomplete dialing information from the ISDN, the system will wait for the T302 timer duration for the additional digits. At the time-out of this timer, the call will be disconnected.	10~30 (seconds)	15
7	01-02 T303 (01 – 10) (01-10) : 04 (sec)	T303 establishes the time Interval for a response after sending a call setup message.	1~10 (seconds)	4

Table 3.3.5.9-1 ISDN CO LINE ATTRIBUTES (PGM 151)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
8	01-02 T305 (10 – 60) (10-60) : 30 (sec)	T305 establishes the Interval for a Released signal after receiving a Disconnect message.	10~60 (seconds)	30
9	01-02 T308 (01 – 10) (01-10) : 04 (sec)	T308 establishes the Interval for a Released ACK signal after sending a release message.	1~10 (seconds)	4
10	01-02 T309 (001 – 100) (001-100) : 090 (sec)	Optional state timer.	1~100 (seconds)	90
11	01-02 T310 (10 – 60) (10-60) : 40 (sec)	Timer used in accepting Received signal.	10~60 (seconds)	40
12	01-02 N200 (1 – 5) (1-5) : 3	The terminal shall provide one N200 counter for each logical link supported. The default value of this counter shall be 3.	1~5	3
13	01-02 N201 (250 – 300) (250~300) : 260 (byte)	The N201 counter sets the maximum number of Octets in the ISDN information field.	250~300 (bytes)	260
14	01-02 N202 (1 – 5) (1-5) :3	If the terminal transmits a TEI Identify Request message (to request assignment of a TEI), the terminal shall provide one N202 counter for each logical link that it supports.	1~5	3
15	01-02 N204 (1 – 5) (1-5) : 1	The N204 counter establishes the maximum number of XID re-transmissions from the terminal.	1~5	1
16	01-02 K_VALUE (1-5) : 1	The terminal shall provide one K counter for each logical link supported.	1~5	1

4.3.5.10 T1 Line Timers – PGM 152

North American T1 standards require that the T1 terminating device, in this case, the iPECS eMG, include various “adjustable” timers and counters as described below.

PROCEDURE	
COL T1 ATT ENTER CO RANGE	Press the **[PGM]** button and dial 152.
01-02 COL T1 ATT PRESS FLEX KEY (01-13)	Use the dial-pad to enter a CO Line range (Ex. 01-02). For a single CO Line, enter the same number twice.
	Press the desired Flex button; refer to Table 3.3.5.10-1.
	Use the dial-pad to enter desired data for the Attribute. Refer to Table 3.3.5.10-1.
	Press the **[Save]** button to store the data entry.

Table 3.3.5.10-1 T1 LINE TIMERS (PGM 152)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	01-02 PAUSE (1-9) : 2 (sec)	A timed pause may be included in a Speed Dial number, in which case, this entry defines the pause time. It is not currently implemented.	1~9 (seconds)	2
2	01-02 RLS GRD (01-60) : 20 (100ms)	The release guard timer defines the time the system will maintain a Line as busy after the call has been terminated to assure the PSTN has sufficient time to ‘clear down’ the circuit and is not currently implemented.	01~60 (100 ms)	20
3	01-02 DT DELAY (02-50) : 10 (100ms)	The DT (Dial tone) Delay timer defines the duration of dial tone for DT recognition. It is not currently implemented.	02~50 (100 ms)	10
4	01-02 INTER DGT (15-30) : 15 (20ms)	The Inter Digit timer defines the duration between digit transmissions. It is not currently implemented.	15~30 (20 ms)	15
5	01-02 WINK (07-15) : 10 (20ms)	For TIE or DID Lines, the Wink timer defines the length of time the ‘wink’ (T1 TIE line circuit reversal) will last.	7~15 (20 ms)	10
6	01-02 OP RATE (0- 3) 60-40 (10pps) (0)	For Pulse signaling, defines the duration and make/break ratio of each pulse. **0: 60-40(10pps), 1: 66-33(10pps)** **2: 60-40(20pps), 3: 66-33(20pps)**	Refer to description	60-40 (10pps)
7	01-02 SEZ DTC (000-127) : 003 (20ms)	This timer defines the length of a valid ‘line seizure’ signal.	0~127 (20 ms)	3

Table 3.3.5.10-1 T1 LINE TIMERS (PGM 152)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
8	01-02 RELEASE (000-127) : 007 (20ms)	For Ground Start Lines, defines the minimum length of time ground will not be applied to the TIP side from the PSTN.	0~127 (20 ms)	7
9	01-02 IASG TY (1:DTMF/0:PULSE) : DTMF	Incoming Address Signaling Type defines the type of signaling (DTMF or Pulse) expected.	0~1	DTMF
10	01-02 RING DTC (2-9) : 2 (100ms)	The Ring DTC (detect) timer defines the minimum acceptable length of the Ring-on time during a ring cycle.	2~9 (100 ms)	2
11	01-02 RING STOP (10-60) : 60 (100ms)	The Ring Stop timer defines the maximum Ring-off time during a ring cycle.	10~60 (100 ms)	60
12	01-02 COLLECT DGT (1-6) : 3	Collect DGT (digits) defines the number of digits expected on a DID line.	1~6	3
13	01-02 STORE TIME (01~15) : 15 (1sec)	For DID lines, this timer defines the maximum delay between incoming DID digits.	1~15 (second)	15

4.3.5.11 DCOB CO Attribute – PGM 153

The DCOB Attributes defines various characteristics of the E1/PRI module when employing R2 signaling.

PROCEDURE	
DCOB COLINE ATT ENTER CO RANGE	Press the **[PGM]** button and dial 153.
01-02 DCOB CO ATT PRESS FLEX KEY (1-6)	Use the dial-pad to enter a CO Line range (Ex. 01-02). For a single CO Line, enter the same number twice.
	Press the desired Flex button; refer to Table 3.3.5.11-1.
	Use the dial-pad to enter desired data for the Attribute. Refer to Table 3.3.5.11-1.
	Press the **[Save]** button to store the data entry.

Table 3.3.5.11-1 DCOB CO ATTRIBUTE (PGM 153)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	01-02 LINE STATUS (1-9) : 6	Send Line status information to PX when a call is routed to the subscriber before the called party is ringing.	1~9	6
2	01-02 DNIS SERVICE (1:ON/0:OFF) : OFF	In R2, determine whether system will send caller information to PX or not.	0: OFF 1: ON	OFF
3	01-02 NO OF CLI DGTS (01-15) : 10	In R2, board request CLI Digit to PX.	01~15	10
4	01-02 DCOB TYPE(0-2) DID (2)	According to this type, the line can be restricted to seize the CO line for the outgoing call.	0: DID/DOD 1:DOD 2:DID	2
5	01-02 CALL CATEGORY (1-9) : 1	In R2 signaling, the category signal used by the iPECS is defined here.	1~9	1
6	01-02 DID DGT NUM (00-32) : 00	Maximum number of DID digits if the line is E1/R2 (if it is N/A, then it will follow PGM 145 3rd.)	00~32	0

4.3.6 SYSTEM DATA –PGM 160 to 182

4.3.6.1 System Attributes I &II–PGM 160 to 161

There are two (2) System Attributes programs to define settings that affect system-wide features and functions. Generally, the entry will turn the feature ON (enable) or OFF (disable).

Refer to Table 3.3.6.1-1 and Table 3.3.6.1-2 for a description of the Attributes, LCD displays, and the data entries required.

PROCEDURE	
SYSTEM ATTRIBUTES 1 PRESS FLEX KEY (01-24)	Press the **[PGM]** button and dial: - 160 for System Attributes I - 161 for System Attributes II.
	Press the Flex button for the desired Attribute. Refer to Table 3.3.6.1-1 & Table 3.3.6.1-2.
	Use the dial-pad to enter desired data for the Attribute. Refer to Table 3.3.6.1-1 to Table 3.3.6.1-2.
	Press the **[Save]** button to store the data entry.

Table 3.3.6.1-1 SYSTEM ATTRIBUTES I (PGM 160)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	ATD CALL QUE RB TONE (1:RBT/0:MOH): MOH	When calling a busy attendant, the system will provide either a ring-back tone or MOH. If it is selected, the source must be defined in PGM 171.	0: MOH 1: RB tone	MOH
2	CAMP-ON RBT/MOH (1:RBT/0:MOH) : MOH	When Camp-On is used, the calling station will receive either a ring-back tone or MOH. If it is selected, the source must be defined in PGM 171.	0: MOH 1: RB tone	MOH
3	CO DIAL TONE DETECT (1 : ON/ 0 : OFF) : OFF	The system can use dial-tone detection or a timed pause for Speed Dial numbers that contain a Pause.	0: OFF 1: ON	OFF
4	CO LINE CHOICE (0:RR/1:LAST/2:FIRST): 1	The system selects CO Lines from groups using either the LAST used, ROUND robin method, or FIRST line in the group.	0: ROUND 1: LAST 2: FIRST	LAST
5	DISA RETRY COUNT (1 –9): 3	A DISA user is allowed to retry erroneous authentication code entries. This entry sets the number of retries before the system disconnects.	1~9	3
6	EXTERNAL NIGHT RING (1 : ON/ 0 : OFF) : OFF	CO/IP calls, which are assigned UNA, can activate the Loud Bell Contact. An incoming call, received while in Night, will activate the contact.	0: OFF 1: ON	OFF

Table 3.3.6.1-1 SYSTEM ATTRIBUTES I (PGM 160)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
7	HOLD PREFERENCE (1: SYS/ 0: EXC) : SYS	A single depression of the**[HOLD]** button during CO call places the call on the preferred hold, System, or Exclusive.	0: Excl 1: System	System
8	PRINT LCR CONV DIGIT (1 : LCR/ 0 : USER) : LCR	SMDR will output the number dialed by either the system's LCR or the user.	0: User 1: LCR	LCR
9	ATD CALL QUE AVAILABLE (1:ON/0:OFF) : OFF	The system can be configured to queue incoming calls to a busy Attendant.	0: OFF 1: ON	OFF
10	USE PGM_0 IN ALL ATTD (1 : ON/ 0 : OFF) : OFF	This field allows the Main attendants access to all Attendant functions, including System Attendantfeatures and programming. (Except PGM 06 – Recordsystem announcement)	0: OFF 1: ON	OFF
11	OFFNET PROMPT USAGE (1 : ON/ 0 : OFF) : OFF	The Off-Net routing prompt can be played when a call is routed to a destination external to the iPECS. Not available in the US version.	0: OFF 1: ON	OFF
12	CO-TO-CO UC TMR EXTEND (1:ON/0:OFF) : OFF	When an UnsupervisedConference is established with DISA, Off-Net Fwd, etc., the Unsupervised Conference timer(PGM 182-button 5determines the allowed duration of the call. If enabled here, the user may dial '#' to extend the allowed duration.	0: OFF 1: ON	OFF
13	ACD MANAGER PRINT (1:ON/0:OFF) : OFF	When the optional ACDMessage events are desired, the system must be enabled to send ACD event messages.	0: OFF 1: ON	OFF
14	CALL LOG LIST NUM (15-50) : 15	The Call Log that saves the Outgoing call Received a call or Lost call information can be displayed by pressing Call LogDisplay Button. The maximum size of the Call Log per station is defined here.	15~50	15
15	REPEAT DTMF TONE (1:ON/0:OFF) : OFF	When enabled, the system will provide a DTMF repeat tone to the caller's station. It's nothing to do with PSTN.	0: OFF 1: ON	OFF

Table 3.3.6.1-1 SYSTEM ATTRIBUTES I (PGM 160)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
16	AUTH RETRY COUNT (1-9) : 3	If CO's have "CO/IP group Authorization" set to ON inPGM141, 8th or the Stationshave "Station Account" set to ONin PGM112, 19th, then a valid authorization code must be entered to make an external CO call. When the user fails to enter a valid Authorization code in the number of attempts assigned in this field, the station is disconnected, or the Station COSis changed to COS 7. If the COS 7 WHEN AUTH FAIL, PGM 161, 17th is on, then the station COS is changed to COS7. Otherwise, the station is disconnected. When the station COS is changed to COS 7, the user must employ COS Restorein Station User PGM 2 to return the station to the normal COS.	1 ~ 9	3
17	CONFROOM CO TELNUMBER CO TEL:	ISDN DID number an external party must dial to enter a Conference room. UCS Client must pre-establish the Conf Room.	8 digits	
18	MPB DIFFSERV TAG(00-63): 04	MPB Diff-Serv pre-tag value.	00-63	04
19	UPGRADE MODE (1:FTP/0:TFTP): FTP	Upgrade transfer mode fromMPB to IP devices.	1: FTP 0: TFTP	FTP
20	TRANSFER TONE (1:RBT/0:MOH): RBT	Ring BackTone or Music On Hold will be played to the CO Line when a CO call is transferred to a busy extension.	0: MOH 1: RBT	RBT
21	CONF WARN TONE (1:ON/0:OFF) : ON	As new members join a conference room, the system provides a warning tone to conference members.	0: OFF 1: ON	ON
22	TLS for WEB (1:ON/0:OFF) : OFF	Enables Transport LayerSecurity TLS for Web access.	0: OFF 1: ON	OFF
23	DUMMY DIAL TONE (1:ON/0:OFF) : OFF	When a CO/IP line does not provide a dial tone, the system can provide a dummy dial tone to the user.	0: OFF 1: ON	OFF
24	SYSTEM 2 ADDED ATTR PRESS FLEX KEY (01-23)	Select button24 to access added attributes 1~23.	FLEX 1 ~ FLEX 23	

Table 3.3.6.1-1 SYSTEM ATTRIBUTES I (PGM 160)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
24-1	SIP STA MODE (1:PTP/0:RTD): RTD	SIP phones may set-up apoint-to-point RTP connection(PTP) or to assure a controlledconnection, RTP can be routedvia a VoIP channel (RTD).	0: RTD 1: PTP	ROUTED
24-2	SYS AUTH END CODE(#) (1:ON/0:OFF) : OFF	If this value is set to ON, the end dialing digit (#) must be entered when the system Auth code is entered.	0: OFF 1: ON	OFF
24-3	STN VM FEATURE USAGE (1:ON/0:OFF) : ON	If this value is set to ON, the Station VM feature (PGM127) can be used.	0: OFF 1: ON	ON
24-4	REMOTE VM ACCESS (1:ON/0:OFF) : ON	If this value is OFF, the user cannot access their VSFmailbox via DID, DISA CO call, and so on (i.e., through CO line channel).	0: OFF 1: ON	ON
24-5	TRANSFER TONE USAGE (1:ON/0:OFF) : OFF	If this value is ON, a Warning tone is served to the [transfer to]station. It is only applied to screened transfer cases.	0: OFF 1: ON	OFF
24-6	LCR DIAL TONE DETECT (1:ON/0:OFF) : OFF	If this value is set to ON, the system first checks if the CO provides dial tone in case if analog CO is seized for LCR dialing. If there's no dial tone, the call is rerouted to Alternate DMT Index. If the LCR type is set to M13, the LCR dial tone detect option is not applied.	0: OFF 1: ON	OFF
24-7	ICM CALL LOG (1:ON/0:OFF) : OFF	If this value is set to ON, the system saves and provides ICM call log for IP and LDP phones.	0: OFF 1: ON	OFF
24-8	ATD PWORD USAGE (1:ON/0:OFF) : OFF	If this value is set to ON, the system requests the password below cases. When a user enters attendant program([PGM] + 0) in attendant keyset, When a user enters the speed program in the attendant keyset, When a user assigns attendant program code([PGM] + 0) to flexible button in the attendant keyset,	0: OFF 1: ON	OFF
24-9	PICKUP STA NAME USAGE (1:ON/0:OFF) : OFF	Name of picked up station is display when pickup internal call.	0: OFF 1: ON	OFF
24-10	DISPLAY LCR MODE (1:ON/0:OFF) : ON	Display "LCR MODE" when LCR is activated.	0: OFF 1: ON	ON

Table 3.3.6.1-1 SYSTEM ATTRIBUTES I (PGM 160)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
24-11	EASY 5 WAKE UP USAGE (1:ON/0:OFF) : OFF	If this value is set to ON, and PGM 161 – 5-Wake Up Usage is also set to ON, each station user can enter his wake up time without entering wake up type, wake up the index.	0: OFF 1: ON	OFF
24-12	WEB LOGIN ID USAGE (1:ON/0:OFF) : OFF	If this value is set to ON, Login ID should be entered to log in to the web admin.	0: OFF 1: ON	OFF
24-13	VM MEX NOTIFY OVER LCO (1:EN/0:DIS) : DISABLE	If this value is set to ON, LCO can be used for the VM notification call to MEX. **0: DISABLE, 1: ENABLE**	Refer to description	DISABLE
24-14	MODEM ASC CO LINE (00-74) : 00	The call is delivered to the built-in modem if calls come in from the assigned CO line.	00-74	0
24-15	MEET ME SOFT DISPLAY (1:ON/0:OFF) : ON	If this value is set to OFF, {MEET ME} soft button is not displayed in being paged.	0: OFF 1: ON	ON
24-16	DEV INFO REQ INTERVAL (015-255) : 015	The system checks each device by polling messages periodically using this timer.	015-255	015
24-17	NUM OF CLI WAIT LIST (000-255) : 000	The number of CLI waitlists can be the available number.	000-255	000
24-18	EMER MAIL STA . . .	When an Emergency Mailbox Station is assigned, an emergency call placed by a station is recorded automatically to the assigned mailbox.		
24-19	MSVC XML PORT (00001-65535) : 07878	The XML port used to support Web callback, call-through, and iPECS ClickCall application for MSVC (Mobile Service) must be defined.	00001~ 65535	7878
24-20	MEXT CO PASSWD (1:ON/0:OFF) : OFF	When a mobile extension places an external call using an iPECS CO/IP Line, the user may be required to enter a valid Authorization code to place the call.	OFF ON	OFF
24-21	DIAL BY NAME LIST (0:ALL/1:GRP) : OFF	The Dial by Name feature allows stations in any ICM tenancy group to call a station in the ICM Tenancy group. When desired, Dial by Name can be limited to function within allowed Tenancy calling groups, PGM 125. **All, Accessible ICM Group only**	Refer to description	ALL

Table 3.3.6.1-1 SYSTEM ATTRIBUTES I (PGM 160)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
24-22	DIAL BY SYSNAME LIST (0:ALL/1:ZONE) : OFF	If this value is set to "Accessible System Speed Zone Only," the system speed dial number of Accessiblesystemspeedzone (System Speed Zone(232)) is displayed in {Dial by Name}. **All,** **Accessible System Speed Zone Only**	Refer to description	ALL
24-23	NO CLI CALL LOG (1:ON/0:OFF) : OFF	Leave system Call log even though there is no CLI information if it is ON. Otherwise, the Call log is not left.	OFF ON	OFF

Table 3.3.6.1-2 SYSTEM ATTRIBUTES II (PGM 161)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	OFF-HOOK RING TYPE (1:MUTE/0:BURST) : MUTE	An off-hook ring can be a single-tone burst or muted normal ring.	0:BURST 1:MUTE	MUTE
2	PAGE WARN TONE (1 : ON/ 0: OFF) : ON	A warning tone can be sent before a page announcement.	0: OFF 1: ON	ON
3	AUTOMATIC PRIVACY (1 : ON/ 0: OFF) : ON	Automatic Privacy can be disabled, allowing stations to join an active CO/IP call. A warning tone can be provided. See button 4 below.	0: OFF 1: ON	ON
4	PRIVACY WARN TONE (1 : ON/ 0: OFF) : ON	If desired, a warning tone can be provided when privacy is overridden.	0: OFF 1: ON	ON
5	ACD PRINT ENABLE (1 : ON/ 0: OFF) : OFF	ACD statistics can be periodically sent to the assigned serial port., this entry must be ON to provide periodic reports.	0: OFF 1: ON	OFF
6	ACD PRINT TIMER(1sec) (001 –255) : 001	This entry defines the time, in 10-second increments, between the periodic ACD reports.	001~255 (10 sec)	010
7	CLEAR ACD DATABASE (1 : ON/ 0: OFF) : OFF	When a periodic report is sent, the ACD database can be cleared automatically if “ON.”	0: OFF 1: ON	OFF
8	OVERRIDE 1ST CO GRP (1: ON/0: OFF) : ON	When a user dials ‘9’, the system can search all CO/IP Groups for the first available CO/IP line.	0: OFF 1: ON	ON

Table 3.3.6.1-2 SYSTEM ATTRIBUTES II (PGM 161)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
9	BASE CODEC TYPE (0-3): G.711(0)	The default codec can be defined as G.711 or G.723.1 for decreased bandwidth needs. The selected codec will be used on all internal communications as well as for remote iPECS devices.	0: G.711 1: G.723.1 2:G.729 3:G.722	G.711
10	G711 PACKETIZATION(1ms) (10/20/30) : 20	The G.711 voice frame packetization time determines the interval at which voice samples are packetized and sent when the G.711 codec is used.	10/20/30	20
11	G723 PACKETIZATION(1ms) (30/60) : 030	The G.723.1 voice frame packetization time determines the interval at which voice samples are packetized and sent when the G.723.1 codec is used.	30/60	030
12	NETWORK TIME/DATE (0-2) : DISABLE	The system can use ISDN Network time or NTP to synchronize time with the ISDN or data network. To disable time sync, use OFF. ISDN sync is not available in the USA version.	0~2	DISABLE
13	INCOMING TOLL CHK (1:ON/0:OFF) : ON	The system can invoke COS dialing restrictions when a user dials while connected to the incoming call.	0: OFF 1: ON	ON
14	WEB SERVER PORT (00001-65535) : 00080	This field determines the TCP port employed to access the system WEB server.	00001~ 65535	00080
15	UNUSED			
16	OLD AUTH CODE USAGE (1:ON/0:OFF) : ON	The user enters system Authorization codes as “*” and the code (ON) or “*”+ the Auth code index and the code (OFF).	0: OFF 1: ON	ON
17	COS 7 WHEN AUTH FAIL (1:ON/0:OFF) : OFF	If a user fails to enter a valid Authorization code in the number of attempts assigned in FAC RETRY COUNT, PGM 160-button 16, the station is disconnected, or the Station COS is changed to COS 7. In the latter case, the user must employCOS Restore in Station User PGM 2 to return the station to the normal COS.	0: OFF 1: ON	OFF
18	UNIFIED MESSAGE FORMAT (1:ON/0:OFF) : OFF	System Integration Messages are sent out the defined serial or TCP channel.	0: OFF 1: ON	OFF

Table 3.3.6.1-2 SYSTEM ATTRIBUTES II (PGM 161)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
19	RECORD WARNING TONE (1:ON/0:OFF) : ON	When call recording is active, a tone can be sent to all connected parties to indicate the conversation is being recorded.	0: OFF 1: ON	ON
20/21	UNUSED	Unused.		
22	SMS CENTER NUMBER	When the PSTN is used to send SMS, the phone number of the Short Message Service Center must be entered.	23 digits	
23	SMS PROTOCOL (0-8) : NONE (0)	The Short Message Service Protocol must be selected to support SMS: • 0: No PSTN SMS support • 1: ETSI-P1 • 2: ETSI-P2 • 3: KT-LivingNet • 4: SIP-Text • 5: SIP-XML • 6: KT-IP-PBX • 7: SKN-IP-PBX • 8:KT XML	0 ~ 8	NONE
24	SYSTEM 2 ADDED ATTR PRESS FLEX KEY (1-23)	Select button 24 to access added attributes 1~23.	FLEX 1 ~ FLEX 23	
24-1	G722 PACKETIZATION(1ms) (10/20/ 30) : 20	The G.722 voice frame packetization time determines the interval at which voice samples are packetized and sent when the G.722 codec is used.	10/20/30msec	20
24-2	UNUSED	This field is used only for KOREA.		
24-3	SMS CENTER CLI	When the CO/IP is used to receive SMS, the Caller ID expected from the Short MSG Service Center must be defined.	23 digits	
24-4	TRANSIT-OUT SECURITY (1:ON/0:OFF) : ON	Check IP address for transit-out in the master system, and if it is not a valid IP address, it will be denied.	0: OFF 1: ON	ON
24-5	EMR CALL ATD NOTIFY (1:ON/0:OFF) : ON	Provide notification to attendant when user dials emergency number.	0: OFF 1: ON	ON
24-6	UNUSED	Unused.		

Table 3.3.6.1-2 SYSTEM ATTRIBUTES II (PGM 161)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
24-7	FIRST DIGIT * IN SPD DISPLAY SECURITY (0)	If it is '0', then the first '*' in speed will be used for display security. Otherwise, DTMF '*' will be sent. **0: DISPLAY SECURITY, 1: DIGIT***	Refer to description	0
24-8	STRONG PASSWORD (1:ON/0:OFF) : OFF	ON: Password in PGM162 must be longer than 8 and made by Numbers, Characters.	0: OFF 1: ON	ON
24-9	VSF SMTP PORT (00001~65535) : 00025	SMTP port of VMIU/VMIB	00001 ~65535	00025
24-10	ICM BUSY SVC (1:INTR/0:OHVO): OHVO	If ICM is busy, choose OHVO or Intrusion.	0: OHVO 1: INTR	OHVO
24-11	AUTO SAVE NEW MEG (1:ON/0:OFF) : OFF	If it's ON, Move the current (new) message to the saved message category. If it is OFF, leave it in the new message category.	0: OFF 1: ON	OFF
24-12	IGMP QUERY USAGE (1:ON/0:OFF) : OFF	Regarding PGM161 (Flex 24-12 to 15) are used when there are some problems in multicast packet forwarding like registering devices or multicast MOH. Some multicast snoop-enabled switch devices do not forward multicast packets if there is no IGMP query device in the network. This entity enables the IGMPquery option, and MPB sends an IGMP query message periodic to avoid multicast-related problems.	0: OFF 1: ON	OFF
24-13	IGMP INTV_TMR(1sec) (0000~3600) : 0180	This timer defines the interval time of each IGMP query message. With some special switches, this timer value should be modified.	0~3600 sec	180
24-14	IGMP QUERY ALL HOSTS (1:ON/0:OFF) : ON	This entity defines which destination address is used when the IGMP query is sent to. IfON is selected, the query message is sent to ALL HOST group by using address 224.0.0.1. AndOFF is selected, the query is sent to iPECS specific address by using address 239.20.19.50. This should be ON when there is a MOH problem.	0: OFF 1: ON	ON

Table 3.3.6.1-2 SYSTEM ATTRIBUTES II (PGM 161)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
24-15	IGMP QUERY GENERIC (1:ON/0:OFF) : OFF	This entity specifies a group address being queried. If ON is selected, all multicast groups are queried. If OFF is selected,iPECS registering device group (239.20.19.50) is only queried. It should be ON when there is a MOH problem.	0: OFF 1: ON	OFF
24-16	UNUSED			
24-17	RESTRICT * AND # (1:ON/0:OFF) : OFF	If the first digit is * or #, the call will be prohibited if it's ON.	0: OFF 1: ON	OFF
24-18	RESTRICT ANS DGT DISP (1:ON/0:OFF) : ON	If it’s OFF, SMDR print digits after answer.	0: OFF 1: ON	ON
24-19	IP BIND USAGE (1:ON/0:OFF) : OFF	If It’s ON, VOIU/VOIB will applyIP-Binding with information inPGM130 (Flex 18 – Flex 24-3) /PGM133 (Media port)	0: OFF 1: ON	OFF
24-20	ACD MAILSEND WEEKLYSET N/A (0-7)	Sets day of the week to send ACDstatistic data weekly. (0 for no weekly data, 1-7 for Monday through Sunday)	0-7	0
24-21	ACD MAILSEND DAILY SET ..(00-23)	Sets time-of-day for ACDstatistic data to be sent on a daily basis. (00 for no daily records, 01-23 for an hour of the day)	00-23	
24-22	ACD DEL AFTER MAILSEND (1 : ON/ 0: OFF) : OFF	Delete ACD statistic data aftersending e-mail.	0: OFF 1: ON	OFF
24-23	NEW 5 WAKE UP USAGE (1:ON/0:OFF) : OFF	New Wake-Up function usageoption.	0: OFF 1: ON	OFF

4.3.6.2 System Password – PGM 162

Passwords can protect access to the system database and maintenance functions up to twelve (12) digits. Three passwords can be defined, Keyset Admin, Remote access, and CID.

The Maintenance password has full and unlimited access to the database and maintenance functions of the system.

The User and Admin password have access to database items defined in Web Admin. Note there are no default passwords.

PROCEDURE	
SYSTEM PASSWORD PRESS FLEX KEY (1-3)	Press the **[PGM]** button and dial 162.
KEYSET ADMIN PASSWORD @@@@@@@@@@@@	Press the Flex button for the desired password: - For the Keyset Admin password, press the Flex button 1. - For the Remote access password, press the Flex button 2. - For the CID password, press the Flex button 3.
REMOTE ACCESS PASSWORD @@@@@@@@@@@@	Enter the desired password, up to 12 digits. To erase a password, press the **[SPEED]** button.
CID PASSWORD @@@@@@@@@@@@	Enter the desired password, up to 12 digits. To erase a password, press the **[SPEED]** button.
	Press the **[Save]** button to store the password entry.

Table 3.3.6.2-1 System Passwords

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	KEYSET ADMIN PASSWORD @@@@@@@@@@@@	Admin password, configurable database access in Keyset Admin.	12 digits	none
2	REMOTE ACCESS PASSWORD @@@@@@@@@@@@	Remote access password, full and unlimited access to database and maintenance functions.	12 digits	none
3	CID PASSWORD @@@@@@@@@@@@	CID password.	12 digits	none

4.3.6.3 Alarm Attributes – PGM 163

The system can monitor an external contact. This contact is most often employed as an Alarm indicator or Doorbell. The Alarm attributes define the operation of the external contact.

The Alarm Signal sent to assigned stations can be repeating or a single burst. The former is often desired. For the Doorbell, a single tone is sent each time the contact activates.

Refer to Table 3.3.6.3-1 for a description of the features, the data entries required, and LCD displays for each attribute.

PROCEDURE	
SYSTEM ALARM ATT PRESS FLEX KEY (1-8)	Press the **[PGM]** button and dial 163.
	Press the desired Flex button; refer to Table 3.3.6.3-1.
	Use the dial-pad to enter desired data for the attribute. Refer to Table 3.3.6.3-1.
	Press the **[Save]** button to store the data entry.

Table 3.3.6.3-1 ALARM ATTRIBUTES (PGM 163)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	ALARM ENABLE (1:ON/0:OFF) : OFF	This parameter enables the external contact monitoring circuitry.	0: OFF 1: ON	OFF
2	ALARM CONTACT TYPE (1:CLOSE/0:OPEN) : CLOSE	This parameter establishes the contact state that will activate the Alarm, close or open.	0: Open 1: Close	CLOSE
3	ALARM/DOORBELL MODE (1:ALARM/0:BELL): ALARM	The contact can be treated to function as a doorbell instead of an alarm.	0: Bell 1: Alarm	ALARM
4	ALARM SIGNAL MODE (1:RPT/0:ONCE) : RPT	The assigned stations will receive a Repeating signal or single burst (ONCE) of alarm tone.	0: Once 1: Repeat	RPT
5	EMER CALL NOTIFY (1:ON/0:FF) : ON	This parameter enables/disables the emergency call notification.	0: OFF 1: ON	ON
6	DCOB FAULT NOTIFY (1:ON/0:FF) : ON	This parameter enables/disables the DCOB Fault notification.	0: OFF 1: ON	ON
7	SIP REG FAULT NOTIFY (1:ON/0:FF) : ON	This parameter enables/disables the SIP Registration Fault notification.	0: OFF 1: ON	ON
8	TEMP LICENSE NOTIFY (1:ON/0:OFF) : ON	This entry enables the user to get the notification before expiring the Temp license.	0: OFF 1: ON	ON

4.3.6.4 Attendant Assignment – PGM 164

eMG80/100 is consists of 1 System attendant and 3 Main attendants. eMG800 is consists of 1 System attendant and 4 Main attendants. The System Attendant has higher priority in call handling and system management functions with access to PGM 0. As a default, the System Attendant is assigned Station 100 for eMG80/100 and Station 1000 for eMG800. Main Attendants are not assigned by default.

PROCEDURE	
ATTENDANT ASSIGNMENT 100	Press the **[PGM]** button and dial 164.
ATTENDANT ASSIGNMENT 100	Select the desired button: - Button 1: System Attendant - Button 2: Main Attendants
	Use the dial-pad to enter desired station numbers for the System and Main Attendants. Use the **[SPEED]** button to erase an entry and the **[VOL UP]**/**[VOL DOWN]** button to scroll through the Main Attendants.
	Press the **[Save]** button to store the Attendant assignment entry.

4.3.6.5 Multi-cast RTP/RTCP Ports – PGM 165

The system employs Multi-cast to send BGM, MOH, paging, and Push-To-Talk packets. Employing a single multi-cast packet reduces the overall LAN traffic. In some cases, specifically, when multiple systems are connected to the same default router, defining different ports for each system may be advantageous.

PROCEDURE	
MULTICAST RTP/RTCP PRESS FLEX KEY (1-2)	Press the **[PGM]** button and dial 165.
MULTICAST RTP PRESS FLEX_KEY (01-24)	Press Flex button 1 for RTP ports or Flex button 2 for RTCP ports.
	Press the desired Flex button; refer to Table 3.3.6.5-1. The 24 Flex buttons are used to assign ports for the first 24 RTP/RTCP functions. To assign port numbers for additional RTP/RTCP functions, use the **[VOL UP]**/ **[VOL DOWN]** buttons.
	Use the dial-pad to enter desired data for the port. Refer to Table 3.3.6.5-1.

Table 3.3.6.5-1 MULTI-CAST RTP/RTCP PORTS — (PGM 165)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	M-CAST RTP BGM INT 8100 (8101)	RTP and RTCP ports for internal BGM.	0000-9999	8100 (8101)
2	M-CAST RTP BGM EXT 1 8102 (8103)	RTP and RTCP ports for external BGM 1.	0000-9999	8102 (8103)

Table 3.3.6.5-1 MULTI-CAST RTP/RTCP PORTS — (PGM 165)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
3	M-CAST RTP BGM EXT 2 8104 (8105)	RTP and RTCP ports for external BGM 2.	0000-9999	8104 (8105)
4	M-CAST RTP I-PAGE 1 8106 (8107)	RTP and RTCP ports for Internal Page 1.	0000-9999	8106 (8107)
5	M-CAST RTP I-PAGE 2 8108 (8109)	RTP and RTCP ports for Internal Page 2.	0000-9999	8108 (8109)
6	M-CAST RTP I-PAGE 3 8110 (8111)	RTP and RTCP ports for Internal Page 3.	0000-9999	8110 (8111)
7	M-CAST RTP I-PAGE 4 8112 (8113)	RTP and RTCP ports for Internal Page 4.	0000-9999	8112 (8113)
8	M-CAST RTP I-PAGE 5 8114 (8115)	RTP and RTCP ports for Internal Page 5.	0000-9999	8114 (8115)
9	M-CAST RTP I-PAGE 6 8116 (8117)	RTP and RTCP ports for Internal Page 6.	0000-9999	8116 (8117)
10	M-CAST RTP(RTCP) I-PAGE 7 8118 (8119)	RTP and RTCP ports for Internal Page 7.	0000-9999	8118 (8119)
11	M-CAST RTP I-PAGE 8 8120 (8121)	RTP and RTCP ports for Internal Page 8.	0000-9999	8120 (8121)
12	M-CAST RTP I-PAGE 9 8122 (8123)	RTP and RTCP ports for Internal Page 9.	0000-9999	8122 (8123)
13	M-CAST RTP I-PAGE 10 8124 (8125)	RTP and RTCP ports for Internal Page 10.	0000-9999	8124 (8125)
14	M-CAST RTP I-PAGE 11 8126 (8127)	RTP and RTCP ports for Internal Page 11.	0000-9999	8126 (8127)
15	M-CAST RTP I-PAGE 12 8128 (8129)	RTP and RTCP ports for Internal Page 12.	0000-9999	8128 (8129)

Table 3.3.6.5-1 MULTI-CAST RTP/RTCP PORTS — (PGM 165)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
16	M-CAST RTP I-PAGE 13 8130 (8131)	RTP and RTCP ports for Internal Page 13.	0000-9999	8130 (8131)
17	M-CAST RTP I-PAGE 14 8132 (8133)	RTP and RTCP ports for Internal Page 14.	0000-9999	8132 (8133)
18	M-CAST RTP I-PAGE 15 8134 (8135)	RTP and RTCP ports for Internal Page 15.	0000-9999	8134 (8135)
19	M-CAST RTP I-PAGE 16 8136 (8137)	RTP and RTCP ports for Internal Page 16.	0000-9999	8136 (8137)
20	M-CAST RTP I-PAGE 17 8138 (8139)	RTP and RTCP ports for Internal Page 17.	0000-9999	8138 (8139)
21	M-CAST RTP I-PAGE 18 8140 (8141)	RTP and RTCP ports for Internal Page 18.	0000-9999	8140 (8141)
22	M-CAST RTP I-PAGE 19 8142 (8143)	RTP and RTCP ports for Internal Page 19.	0000-9999	8142 (8143)
23	M-CAST RTP I-PAGE 20 8144 (8145)	RTP and RTCP ports for Internal Page 20.	0000-9999	8144 (8145)
24	M-CAST RTP I-PAGE 21 8146 (8147)	RTP and RTCP ports for Internal Page 21.	0000-9999	8146 (8147)
25	M-CAST RTP I-PAGE 22 8148 (8149)	RTP and RTCP ports for Internal Page 22.	0000-9999	8148 (8149)
26	M-CAST RTP I-PAGE 23 8150 (8151)	RTP and RTCP ports for Internal Page 23.	0000-9999	8150 (8151)
27	M-CAST RTP I-PAGE 24 8152 (8153)	RTP and RTCP ports for Internal Page 24.	0000-9999	8152 (8153)
28	M-CAST RTP I-PAGE 25 8154 (8155)	RTP and RTCP ports for Internal Page 25.	0000-9999	8154 (8155)

Table 3.3.6.5-1 MULTI-CAST RTP/RTCP PORTS — (PGM 165)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
29	M-CAST RTP I-PAGE 26 8156 (8157)	RTP and RTCP ports for Internal Page 26.	0000-9999	8156 (8157)
30	M-CAST RTP I-PAGE 27 8158 (8159)	RTP and RTCP ports for Internal Page 27.	0000-9999	8158 (8159)
31	M-CAST RTP I-PAGE 28 8160 (8161)	RTP and RTCP ports for Internal Page 28.	0000-9999	8160 (8161)
32	M-CAST RTP I-PAGE 29 8162 (8163)	RTP and RTCP ports for Internal Page 29.	0000-9999	8162 (8163)
33	M-CAST RTP I-PAGE 30 8164 (8165)	RTP and RTCP ports for Internal Page 30.	0000-9999	8164 (8165)
34	M-CAST RTP I-PAGE 31 8166 (8167)	RTP and RTCP ports for Internal Page 31.	0000-9999	8166 (8167)
35	M-CAST RTP I-PAGE 32 8168 (8169)	RTP and RTCP ports for Internal Page 32.	0000-9999	8168 (8169)
36	M-CAST RTP I-PAGE 33 8170 (8171)	RTP and RTCP ports for Internal Page 33.	0000-9999	8170 (8171)
37	M-CAST RTP I-PAGE 34 8172 (8173)	RTP and RTCP ports for Internal Page 34.	0000-9999	8172 (8173)
38	M-CAST RTP I-PAGE 35 8174 (8175)	RTP and RTCP ports for Internal Page 35.	0000-9999	8174 (8175)
39	M-CAST RTP I-PAGE ALL 8176 (8177)	RTP and RTCP ports for Internal All Call Page.	0000-9999	8176 (8177)
40	M-CAST RTP E-PAGE 1 8178 (8179)	RTP and RTCP ports for External Page 1.	0000-9999	8178 (8179)
41	MULTICAST RTP E-PAGE 2 8180 (8181)	RTP and RTCP ports for External Page 2.	0000-9999	8180 (8181)

Table 3.3.6.5-1 MULTI-CAST RTP/RTCP PORTS — (PGM 165)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
42	M-CAST RTP E-PAGE ALL 8182 (8183)	RTP and RTCP ports for External All Call Page.	0000-9999	8182 (8183)
43	M-CAST RTP PAGE ALL 8184 (8185)	RTP and RTCP ports for All Call Page.	0000-9999	8184 (8185)
44	M-CAST RTP PTT 1 8186 (8187)	RTP and RTCP ports for PTT group 1.	0000-9999	8186 (8187)
45	M-CAST RTP PTT 2 8188 (8189)	RTP and RTCP ports for PTT group 2.	0000-9999	8188 (8189)
46	M-CAST RTP PTT 3 8190 (8191)	RTP and RTCP ports for PTT group 3.	0000-9999	8190 (8191)
47	M-CAST RTP PTT 4 8192 (8193)	RTP and RTCP ports for PTT group 4.	0000-9999	8192 (8193)
48	M-CAST RTP PTT 5 8194 (8195)	RTP and RTCP ports for PTT group 5.	0000-9999	8194 (8195)
49	M-CAST RTP PTT 6 8196 (8197)	RTP and RTCP ports for PTT group 6.	0000-9999	8196 (8197)
50	M-CAST RTP PTT 7 8198 (8199)	RTP and RTCP ports for PTT group 7.	0000-9999	8198 (8199)
51	M-CAST RTP PTT 8 8200 (8201)	RTP and RTCP ports for PTT group 8.	0000-9999	8200 (8201)
52	M-CAST RTP PTT 9 8202 (8203)	RTP and RTCP ports for PTT group 9.	0000-9999	8202 (8203)
53	M-CAST RTP PTT ALL 8204 (8205)	RTP and RTCP ports for PTT group ALL.	0000-9999	8204 (8205)
54	M-CAST RTP BGM VSF 1 8206 (8207)	RTP and RTCP ports for VSF/VMIB BGM use.	0000-9999	8206 (8207)

Table 3.3.6.5-1 MULTI-CAST RTP/RTCP PORTS — (PGM 165)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
55	M-CAST RTP SLT MOH 1 8208 (8209)	RTP and RTCP ports for SLT MOH 1 use.	0000-9999	8208 (8209)
56	M-CAST RTP SLT MOH 2 8210 (8211)	RTP and RTCP ports for SLT MOH 2 use.	0000-9999	8210 (8211)
57	M-CAST RTP SLT MOH 3 8212 (8213)	RTP and RTCP ports for SLT MOH 3 use.	0000-9999	8212 (8213)
58	M-CAST RTP SLT MOH 4 8214 (8215)	RTP and RTCP ports for SLT MOH 4 use.	0000-9999	8214 (8215)
59	M-CAST RTP SLT MOH 5 8216 (8217)	RTP and RTCP ports for SLT MOH 5 use.	0000-9999	8216 (8217)
60	M-CAST RTP VSF MOH 2 8218 (8219)	RTP and RTCP ports for VSF/VMIB MOH 2 use.	0000-9999	8218 (8219)
61	M-CAST RTP VSF MOH 3 8220 (8221)	RTP and RTCP ports for VSF/VMIB MOH 3 use.	0000-9999	8220 (8221)
62~83	M-CAST RTP VSF MOH 4-30 8222~8328 (8221~8329)	RTP and RTCP ports for VSF/VMIB MOH 4 ~ 30 use.	0000-9999	8222~8328 (8221~8329)

4.3.6.6 DISA COS – PGM 166

A DISA user is subject to the dialing restrictions assigned in the DISA Class-of-Service (COS). The restrictions applied are the same as with the corresponding Station COS levels 1~11 and interact with the CO COS in the same manner.

Assignments for DISA COS are made for the Day, Timed, and Night mode of system operation. The default for all three DISA COS modes is 1, with no restrictions.

PROCEDURE	
DISA COS (1 – 11) DAY: 07 NIGHT: 07 TIMED:07	Press the **[PGM]** button and dial 166.
	Select the desired button; - Button 1: Day mode COS - Button 2: Night mode COS - Button 3: Timed mode COS
	Use the dial-pad to enter desired DISA COS (1~11).
	Press the **[Save]** button to store the DISA COS data entry.

4.3.6.7 DID/DISA Destination – PGM 167

When a DID line, or DISA user dials an invalid/vacant or busy station number, the caller will be sent to the assigned destination that is selected according to the CO tenancy group of the DID/DISA line.

The destination is separately defined for invalid, busy, no answer, and DND conditions and can be defined as the Attendant, busy tone, Station Group, or VSF System Announcement.

Note that for calls on a DID line to a busy station, Call Wait can be assigned. Refer to PGM 113, Station Attributes III, button 9.

Also, for DID calls only, announcements (prompts) can be sent from the VSF to the caller for various conditions, busy, error, DND, No Answer, reroute busy, reroute error, reroute no answer, or Attendant Transfer.

PROCEDURE	
DID/DISA DESTINATION ENTER ICM GROUP (00-15)	Press the **[PGM]** button and dial 167. Select ICM tenancy group (eMG80/100:0~15 / eMG800:0~32)
DID/DISA DESTINATION :0 PRESS FLEXKEY (1-9)	Press the **[PGM]** button, dial 167, and press the Flexible button (Ex.1).
	Select the desired Flex button, - Button 1: Busy Destination (F1-F4) - Button 2: Error Destination (F1-F4) - Button 3: No Answer Destination (F1-F4) - Button 4: VSF Prompt Usage (F1-F5) - Button 5: Reroute Busy Destination (F1-F3) - Button 6: Reroute Error Destination (F1-F3) - Button 7: Reroute No answer Destination (F1-F3) - Button 8: DND destination (F1-F3) - Button 9: Reroute NET CO BUSY Destination (F1-F3)
BUSY DESTINATION TONE (F1-F4)	For Flex button 1~3 or 1~4, use the dial-pad to enter 1: ON or 0: OFF for the following VSF prompts. - 1: Tone - 2: Attendant - 3: Station Group number - 4: VSF Announcement For Flex button 4, select Flex button 1~5 for the desired VSF prompt and use the dial-pad to enter 1: ON or 0: OFF: - Button 1: Busy Prompt - Button 2: Error Prompt - Button 3: DND Prompt - Button 4: No Answer Prompt - Button 5: Attendant Transfer Prompt
	Press the **[Save]** button to store the destination data entry.

4.3.6.8 External Control Contacts – PGM 168

The MPBs include programmable contacts, which can be used to control external devices. Refer to Table 1.1-1 System Capacity Chart for the number of available contacts. Each contact is assigned to activate under one of several conditions. As a Loud Bell Contact (LBC), the contact will activate when the assigned station or group receives an external call. Note for LBC that when the system is in the Night or Timed Ring mode, the contact will activate for incoming UNA calls and ignore any station assignment. The contact may alternatively activate as a Door open contact when External Page Zone 1 is accessed.

PROCEDURE	
EXT CONTROL CONTACT PRESS FLEXKEY (1-2)	Press the **[PGM]** button and dial 168.
	Select Flex button 1~2 for the desired External Control contact.
EXT CONTROL CONTACT NO 1 : . . . (1-3)	Use the dial-pad to enter desired data. - 1: LBC + station number - 2: Door open - 3: External Page 1 access
	Press the **[Save]** button to store the External Contact data entry.

4.3.6.9 LCD Display Mode -PGM 169

The LCD display mode sets the time (12/24 hr.), date (day/month order), language, and day-of-week display.

Refer to Table 3.3.6.9-1 and Table 3.3.6.9-2 for a description of the modes, the data entries required, and LCD displays for each attribute.

PROCEDURE	
LCD DISPLAY MODE PRESS FLEX KEY (1-4)	Press the **[PGM]** button and dial 169.
	Select the desired Flex button; refer to Table 3.3.6.9-1.
	Use the dial-pad to enter the desired mode and language. Refer to Table 3.3.6.9-1 and Table 3.3.6.9-2.
	Press the **[Save]** button to store the LCD Display mode data entry.

Table 3.3.6.9-1 LCD DISPLAY MODE (PGM 169)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	LCD DATE MODE (1:MMDD/0:DDMM):MMDDYY	Sets the Date display as month/day or day/month. **0: DD-MM-YY, 1: MM-DD-YY**	Refer to description	MMDDYY
2	LCD TIME MODE (1:12H/0:24H):12H	Sets the Time display mode as 12 hour or 24-hour (military) time. **0: 24 Hour Mode, 1: 12 Hour Mode**	Refer to description	12 Hour
3	LCD LANGUAGE (00-18) ENGLISH (00)	Sets the Language in the LCD used. Refer to Table 3.3.6.9-2 below.	00~18	00 (English)
4	LCD WEEKDAY MODE (0-2) PGM 169 BTN 1 (0)	Sets the Day-of-Week (DoW) display mode: **0:** no DoW, see PGM 169-BTN1 **1:** display MM/DD WDY, alpha month display, overrides button 1. **2:** display MM DD WDY, numeric month display, overrides button 1.	Refer to description	Use button 1

Table 3.3.6.9-2 LCD LANGUAGE SELECTION

ENTRY	LANGUAGE	ENTRY	LANGUAGE	ENTRY	LANGUAGE	ENTRY	LANGUAGE
00	English	05	Danish	10	Portuguese	15	Turkish
01	Italian	06	Norwegian	11	Spanish	16	Polish
02	Finnish	07	Hebrew	12	Korean	17	Greek
03	Dutch	08	German	13	Estonian	18	Arabic
04	Swedish	09	French	14	Russian		

4.3.6.10 Button LED Flash Rate – PGM 170

The LED flash rate for various functions and states can be assigned any one of the system's 15 signals. The various functions and states are shown in Table 3.3.6.10-1. The 15 flash signals available in the system are shown in Table 3.3.6.10-2.

PROCEDURE	
LED FLASHING RATE PRESS FLEX_KEY (1-24)	Press the **[PGM]** button and dial 170.
LED FLASHING RATE PRESS FLEX KEY (25-35)	Flex buttons represent 35 Flash rate entries. To access entries 25 to 35, use the **[VOL UP]/[VOL DOWN]** buttons. Press the desired Flex button; refer to Table 3.3.6.10-1.
	Use the dial-pad to enter desired data for the flash rate. Refer to Table 3.3.6.10-1 and Table 3.3.6.10-2.
	Press the **[Save]** button to store the Flash Rate data entry.

Table 3.3.6.10-1 BUTTON LED FLASH RATE (PGM 170)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	COL IN RING FLASH 30 IPM	CO button Incoming ring flashing rate.	00-14	FLASH 30 IPM (2)
2	COL XFER RING FLASH 120 IPM	CO button transfers ring flashing rate.	00-14	FLASH 120 IPM(10)
3	COL QUE RING FLASH 240 IPM FLUTTER	CO button queue calls back ring flashing rate.	00-14	FLASH 240 IPM FLUTTER(6)
4	COL RCL RING FLASH 480 IPM FLUTTER	CO button recalls ring flashing rate.	00-14	FLASH 480 IPM FLUTTER(8)
5	COL I HOLD RING FLASH 30 IPM WINK	CO button I hold flashing rate.	00-14	FLASH 30 IPM WINK(12)
6	COL SYS HOLD RING FLASH 60 IPM	CO button system holds flashing rate.	00-14	FLASH 60 IPM (3)
7	COL EXC HOLD RING FLASH 120 IPM	CO button exclusive hold flashing rate.	00-14	FLASH 120 IPM(10)
8	COL OUT DISABLED FLASH 240 IPM FLUTTER	CO button out going disabled flashing rate.	00-14	FLASH 240 IPM FLUTTER(6)

Table 3.3.6.10-1 BUTTON LED FLASH RATE (PGM 170)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
9	COL IN OFFNET CFW FLASH 240 IPM FLUTTER	CO button incoming off-net call forward flashing rate.	00-14	FLASH 240 IPM FLUTTER(6)
10	COL DISA IND FLASH 240 IPM	CO button DISA indication flashing rate.	00-14	FLASH 240 IPM(5)
11	COL SUPP CW FLASH 240 IPM FLUTTER	CO button supplementary call waiting flashing rate.	00-14	FLASH 240 IPM FLUTTER(6)
12	COL SUPP HOLD FLASH 480 IPM	CO button supplementary hold flashing rate.	00-14	FLASH 480 IPM(7)
13	DSS CO RING FLASH 30 IPM	DSS button CO ring flashing rate.	00-14	FLASH 30 IPM (2)
14	DSS ALL RING FLASH 60 IPM	DSS button ICM ALL ring flashing rate.	00-14	FLASH 60 IPM (3)
15	DSS ASC RING FLASH 120 IPM	DSS button ICM rings associate device flashing rate.	00-14	FLASH 120 IPM(10)
16	DSS IN DND FLASH 60 IPM	DSS button station in DND.	00-14	FLASH 60 IPM (3)
17	DSS LOCK OUT FLASH 480 IPM FLUTTER	DSS button station in the lockout.	00-14	FLASH 480 IPM FLUTTER(8)
18	DSS PRESEL MSG FLASH 30 IPM	DSS button station in the pre-selected message.	00-14	FLASH 30 IPM (2)
19	DSS ICM HOLD FLASH 60 IPM	DSS button station on ICM hold.	00-14	FLASH 60 IPM (3)
20	DSS OTHER FLASH 120 IPM	DSS button station in other states.	00-14	FLASH 120 IPM(10)
21	UCD QUE RING 2 FLASH 60 IPM	CIQ Threshold # 1.	00-14	FLASH 60 IPM (3)

Table 3.3.6.10-1 BUTTON LED FLASH RATE (PGM 170)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
22	UCD QUE RING 6 FLASH 120 IPM	CIQ Threshold # 2.	00-14	FLASH 120 IPM(10)
23	UCD QUE RING 7-X FLASH 240 IPM	CIQ Threshold # 3.	00-14	FLASH 240 IPM(5)
24	UCD DND(OFF DUTY) FLASH 120 IPM	UCD agent is off duty (UCD DND).	00-14	FLASH 120 IPM(10)
25	UCD WARNING FLASH 120 IPM	UCD warning tone.	00-14	FLASH 120 IPM(10)
26	UCD HELP FLASH 120 IPM	UCD help request/response.	00-14	FLASH 120 IPM(10)
27	FEATURE RECORD FLASH 240 IPM	FEATURE voice record button.	00-14	FLASH 240 IPM(5)
28	FEATURE MSG WAIT FLASH 30 IPM	FEATURE message wait.	00-14	FLASH 30 IPM (2)
29	DSS OUT OF SERVICE FLASH OFF	Station in out-of-service state.	00-14	FLASH OFF (00)
30	ON DEMAND RING MODE FLASH 60 IPM	DND LED of attendant for ring mode indication (On-demand).	00-14	FLASH 60 IPM (3)
31	NIGHT RING MODE FLASH STEADY	DND LED of attendant for ring mode indication (Night).	00-14	FLASH STEADY(01)
32	TIMED RING MODE FLASH 240 IPM	DND LED of attendant for ring mode indication (TIMED).	00-14	FLASH 240 IPM(5)
33	AUTO RING MODE FLASH 480 IPM	DND LED of attendant for ring mode indication (AUTO).	00-14	FLASH 480 IPM(7)
34	PAGE HOLD BUTTON FLASH 60 IPM	HOLD LED for paging.	00-14	FLASH 60 IPM (3)

Table 3.3.6.10-1 BUTTON LED FLASH RATE (PGM 170)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
35	DSS OFF DUTY FLASH 120 IPM	DSS button station in Hunt DND.	00-14	FLASH 120 IPM (10)
36	CALLBK FLASH OFF	Message wait (call back).	00-14	FLASH OFF

Table 3.3.6.10-2 FLASH RATE TABLE (PGM 170)

Flash Rate	DESCRIPTION
00	Flash OFF
01	Steady On
02	30 ipm flash (30% On)
03	60 ipm flash (30% On)
04	60 ipm double wink (30% On-Off-On-Off & 70% On)
05	240 ipm flash (30% On)
06	240 ipm flutter (30% On-Off-On-Off-On & 70% Off)
07	480 ipm flash (30% On)
08	480 ipm flutter (30% On-Off-On-Off-On & 70% Off)
09	15 ipm flash (30% On)
10	120 ipm flash (30% On)
11	120 ipm flutter (30% On-Off-On-Off-On & 70% Off)
12	30 ipm double flash (30% On-Off-On & 70% Off)
13	480 ipm double wink (30% On-Off-On-Off & 70% On)
14	480 ipm double flash (30% On-Off-On & 70% Off)

4.3.6.11 Music Sources – PGM 171

Music inputs are provided for use as the Background Music and/or Music-On-Hold source inputs. MPBs provide for two (2) music inputs.

The first input is the internal source and the second is external. In addition, a VMIU or VMIB announcement may be recorded and played as MOH to a holding caller. And SLIB port is used as MOH to a holding caller.

PROCEDURE	
MUSIC ASSIGN PRESS FLEX KEY (1-6)	Press the **[PGM]** button and dial 171.
	Select the desired Flex button; refer to Table 3.3.6.11-1.
	Use the dial-pad to select the desired Music Source, refer to Table 3.3.6.11-1.
	To save the Music Source, press the **[Save]** button.

Table 3.3.6.11-1 MUSIC SOURCES FOR MOH & BGM (PGM 171)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	BGM TYPE (00-37) MUSIC 1 (01)	Assigns the source for BGM. • 00: No BGM • 01: INT Music • 02: EXT Music • 03: VSF MOH • 04~08: SLT MOH1~5, • 09~10: VSF MOH2~3 • 11~37: VSF MOH4~30	Refer to description	Music 1
2	MOH TYPE (00-37) MUSIC 1 (01)	Assign the source for MOH. • 00: Hold tone • 01: INT Music • 02: EXT Music • 03: VSF MOH • 04~08: SLT MOH1~5 • 09~10: VSF MOH2~3 • 11~37: VSF MOH4~30	Refer to description	Music 1
3	INT MOH TYPE (00-12) ROMANCE (00)	Assign the input for source 1. • 00: ROMANCE • 01: TURKISH MARCH • 02: GREEN SLEEVE • 03: FUR ELISE • 04: CARMEN • 05: WALTZ • 06: PAVANE • 07: SICHILIANO • 08: SONATA • 09: SPRING • 10: CAMPANELLA • 11: BADINERIE • 12: BLUE DANUBE	Refer to description	ROMANCE
4	ASGN SLT MOH (F1-F5) …. …. …. …. ….	Assign the SLIB port as a SLTMOH. • F1-F5:SLTMOH1-5	Refer to description	
5	VSF MOH2 (01-70) VSF NO (..)	A system announcement could be used for VSF MOH 2	01-70	N/A
6	VSF MOH3 (01-70) VSF NO (..)	A system announcement could be used for VSF MOH 3	01-70	N/A
7~33	VSF MOH4~30 (01-70) VSF NO (..)	A system announcement could be used for VSF MOH 4~30	01-70	N/A

4.3.6.12 PABX Access Codes – PGM 172

When the system is used “behind” a PBX/CTX, the system needs to recognize the PBX/CTX Trunk access codes to implement dialing restriction, tone detection sequences, and Flash timing.

A maximum of four (4) Trunk Access Codes of one (1) or two (2) digits can be entered.

PROCEDURE	
PABX ACCESS CODE PRESS FLEXKEY (1-4)	Press the **[PGM]** button and dial 172.
PABX ACCESS CODE 1 ..	Select the Flex button for the desired Access Code (button 1~4).
	Use the dial-pad to enter the PABX Trunk Access Code, two (2) digits 0~9. Use “*” as a wild card (any digit) entry.
	Press the **[Save]** button to store the access code data entry.

4.3.6.13 Ringing Line Preference Priority – PGM 173

When multiple calls are ringing at a station assigned Ringing Line Preference, the order of preference can be assigned based on the type of call; CO/IP Transfer (XFR), CO/IP Recall (REC), Incoming call (INC), or CO/IP Queue (QUE).

ICM calls are always assigned the lowest priority.

PROCEDURE	
XFR REC INC QUE 1 2 3 4	Press the **[PGM]** button and dial 173.
	Select the Flex button for the desired Call Type; refer to Table 3.3.6.13-1.
	Use the dial-pad to enter the priority 1~4.
	Press the **[Save]** button to store the RLP Priority data entry.

Table 3.3.6.13-1 RLP PRIORITY (PGM 173)

BTN	DESCRIPTION	RANGE	DEFAULT
1	CO/IP Transferred call	1~4	1
2	CO/IP Recall	1~4	2
3	CO/IP Incoming call	1~4	3
4	Queued CO/IP recall	1~4	4

4.3.6.14 RS-232 Port Settings – PGM 174

The system has an RS–232 serial port located on the MPB; refer to the **iPECS eMG Hardware Description and Installation Manual**. Certain characteristics of each port are programmable: baud rate, RS–232 control, and page settings. Refer to Table 3.3.6.14-1 for a description of the settings, the data entries required, and LCD displays.

PROCEDURE	
RS232 PORT SETTING PRESS FLEX KEY (1-3)	Press the **[PGM]** button and dial 174.
	Press Flex button 1 for Serial port 1 or Flex button 2 for USB COM1 port or Flex button 3 for USB COM2 port, then select a Flex button for the desired attribute (e.g., Flex button 1), refer to Table 3.3.6.14-1.
	Use the dial-pad to enter the desired Port data. Refer to Table 3.3.6.14-1.
	Press the **[Save]** button to store the Port Data entry.

Table 3.3.6.14-1 RS–232 PORT SETTINGS (PGM 174)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	SERIAL1 PORT SETTING PRESS (F1-F5)	Select a Flex button for the desired attribute.	F1-F5	
1-1	SERIAL1 BAUD RATE BAUDRATE: 115200	This entry establishes the BAUD rate for the RS-232 serial port.	1: Unused 2: 9600 3: 19200 4: 38400 5: 57600 6: 115200	115200
1-2	SERIAL1 CTS/RTS (1:ON/0:OFF): OFF	The system's RS-232 port can support Clear-to-Send (CTS), and Ready-to-Send (RTS) control leads.	0: OFF 1: ON	OFF
1-3	SERIAL1 PAGE BREAK (1:ON/0:OFF): OFF	The system can send a page break command over the serial port at the end of each page. See button 4 for page length set-up.	0: OFF 1: ON	OFF
1-4	SERIAL1 LINE PAGE (001-199) : 066	This entry is used to set the page length, the number of lines the system will send before sending the page break, see button 3 above.	001~199	66
1-5	SERIAL 1 XON/XOFF (1:ON /0:OFF):XOFF	This entry enables XON/XOFFprotocol. (It is not supported)	0: OFF 1: ON	OFF

4.3.6.15 Serial Port Function Selections – PGM 175

The system has an RS-232 serial port located on the MPB; Also, the system can employ IP over three (3) TCP channels for the output of various system information.

Each output function is assigned a Serial port or TCP channel that is used to output the information. In addition, a TCP port must be assigned when a function is defined to use a TCP channel.

The Serial port is located on the MPB; refer to the **iPECS eMG Hardware Description and Installation Manual**. Note each function can be defined to use only one output. Refer to Table 3.3.6.15-1 and Table 3.3.6.15-2 for a description of the selections, the data entries required, and LCD displays.

PROCEDURE	
PRINT PORT SELECTION PRESS FLEX_KEY (1-2)	Press the **[PGM]** button and dial 175.
	Press Flex button 1 to assign the output type for each function or Flex button 2 to assign the TCP port for the function when a TCP channel is selected for the function.
	Select the Flex button for the desired function. Refer to Table 3.3.6.15-1 or Table 3.3.6.15-2.
SELECT TCP NO PRESS FLEX_KEY (1-9)	Use the dial pad to enter the output type (Flex button 1) or TCP port (Flex button 2). For Flex button 1 the entries available are: - 1: Serial port 1 - 2: Serial port 2 - 3: TCP channel 1 - 4: TCP channel 2 - 5: TCP channel 3 - 6: USB COM1 (6) - 7: USB COM2 (7)
	Press the **[Save]** button to store the data entry.

Table 3.3.6.15-1 FUNCTION OUTPUT TYPE (PGM 175)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	OFF LINE SMDR (1-7) SERIAL1 (1)	Define the serial port or TCP channel used for Offline SMDR/Statistics output.	1 ~ 7	SERIAL1
2	ADMIN DATA (1-7) SERIAL1 (1)	Define the serial port or TCP channel used for the ADMIN Report output.	1 ~ 7	SERIAL1
3	TRAFFIC (1-7) SERIAL1 (1)	Define the serial port or TCP channel used for the TRAFFIC report output.	1 ~ 7	SERIAL1
4	SMDI (1-7) SERIAL1 (1)	Define the serial port or TCP channel used for the SMDI output.	1 ~ 7	SERIAL1

Table 3.3.6.15-1 FUNCTION OUTPUT TYPE (PGM 175)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
5	CALL INFO (1-7) SERIAL1 (1)	Define the serial port or TCP channel used to receive Call Information output.	1 ~ 7	SERIAL1
6	ON-LINE SMDR (1-7) SERIAL1 (1)	Define the serial port or TCP channel used for the Online SMDR.	1 ~ 7	SERIAL1
7	TRACE (1-7) SERIAL1 (1)	Define the serial port or TCP channel used for the trace output.	1 ~ 7	SERIAL1
8	DEBUG (1-7) SERIAL1 (1)	Define the serial port or TCP channel used for the Debug output.	1 ~ 7	SERIAL1
9	ACD PACK (1-7) SERIAL 1 (1)	Define the serial port or TCP channel used for the Unified Messages.	1 ~ 7	SERIAL1

Table 3.3.6.15-2 OUTPUT FUNCTION TCP PORT (PGM 175)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	OFF-LINE SMDR (1-9999) TCP PORT(NULL)	Define the TCP port used for Offline SMDR/ Statistics output.	1 ~ 9999	NULL
2	ADMIN DATA (1-9999) TCP PORT(NULL)	Define the TCP port used for the ADMIN Report output.	1 ~ 9999	NULL
3	TRAFFIC (1-9999) TCP PORT(NULL)	Define the TCP port used for the TRAFFIC report output.	1 ~ 9999	NULL
4	SMDI (1-9999) TCP PORT(NULL)	Define the TCP port used for the SMDI output.	1 ~ 9999	NULL
5	CALL INFO (1-9999) TCP PORT(NULL)	Define the TCP port used to receive Call Information output.	1 ~ 9999	NULL
6	ON-LINE SMDR (1-9999) TCP PORT(NULL)	Define the TCP port used for the On-line SMDR.	1 ~ 9999	NULL
7	TRACE (1-9999) TCP PORT(NULL)	Define the TCP port used for the trace output.	1 ~ 9999	NULL

Table 3.3.6.15-2 OUTPUT FUNCTION TCP PORT (PGM 175)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
8	DEBUG (1-9999) TCP PORT(NULL)	Define the TCP port used for the Debug output.	1 ~ 9999	NULL
9	ACD PACK (1-9999) TCP PORT(NULL)	Define the TCP port used for Unified Messages.	1 ~ 9999	NULL
10	I-SMDR (1-9999) TCP PORT(NULL)	Define the TCP port used for I-SMDR(Interactive-SMDR)	1 ~ 9999	NULL

4.3.6.16 Break/Make Ratio – PGM 176

For Pulse dial CO Lines, the system supports 10pps, and the percent break/make ratios of 66/33 or 60/40.

PROCEDURE	
	Press the **[PGM]** button and dial 176.
BREAK/MAKE RATIO (1:66/33 / 0: 60/40): 60/40	Dial the digit (1 or 0) for the desired Break/Make ratio: - 1: 66/33 - 0: 60/40
	To save Break/Make ratio data, press the **[Save]** button.

4.3.6.17 SMDR Attributes – PGM 177

Station Message Detail Recording (SMDR) is an ASCII output of details on incoming and outgoing calls. Various SMDR attributes can be assigned, including; output records for all calls or LD only, call cost per pulse when using call metering, etc. Refer to Table 3.3.6.17-1 for a description of each Attribute, LCD displays, and the data entries required.

PROCEDURE	
	Press the **[PGM]** button and dial 177.
SMDR ATTRIBUTES PRESS FLEX KEY (01-24)	Press the desired Flex button; refer to Table 3.3.6.17-1.
	Use the dial-pad to enter the desired data. Refer to Table 3.3.6.17-1.
	To save SMDR Attribute data, press the **[Save]** button.

Table 3.3.6.17-1 SMDR ATTRIBUTES (PGM 177)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	SMDR SAVE (1:ON/0:OFF) : OFF	The system can store all outgoing calls (ON) or only calls that exceed the SMDR Timer (OFF). The later allows PSTN call set-up times to be removed from the recorded call time. For SMDR Timer settings, refer to button 12 below.	0: OFF 1: ON	OFF

Table 3.3.6.17-1 SMDR ATTRIBUTES (PGM 177)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
2	SMDR PRINT (1 : ON/ 0: OFF) : ON	The system can output SMDR records automatically as they occur (real-time) or only when requested. When this attribute is ON, SMDR output is automatic at call completion.	0: OFF 1: ON	ON
3	RECORD TYPE (1 : LD/ 0: ALL) : LD	The system can record all outgoing calls or only long-distance calls. Long-distance calls are identified by the LD digit count and LD codes assigned in Flex button 4 and 19, respectively.	0: ALL calls 1: LD	LD
4	LD CALL DIGIT COUNT (07-15) : 07	Dialed numbers, which exceed the assigned LD digit count, are considered long-distance calls for SMDR and COS purposes.	07-15	07
5	PRINT INCOMING CALL (1 : ON/ 0: OFF) : OFF	The system can output records for incoming calls as well as outgoing calls. If enabled, incoming calls are recorded as well as outgoing calls.	0: OFF 1: ON	OFF
6	PRINT LOST CALL (1 : ON/ 0: OFF) : ON	The system can provide lost call records, records for unanswered incoming (abandoned) calls.	0: OFF 1: ON	ON
7	RECORD IN DETAIL (1 : ON/ 0: OFF) : ON	The system can output detailed call records (ON) or summary information (total number of calls, cost, and cost for each station).	0: OFF 1: ON	ON
8	HIDDEN DIALED DIGIT (0 – 9) : 0	For security purposes, digits dialed for an outgoing call can be hidden and replaced with “*.” This field defines the number of digits to hide. Button 24 below defines whether leading or trailing digits are hidden. In addition, the station must be assigned for SMDR HIDE, PGM 113 button 5.	0~9	0
9	SMDR CURRENCY UNIT …	The unit of currency used for call cost can be identified with 3 alpha characters for easy reference. Refer to Table 2.1.2-1.		-
10	COST PER PULSE 000000	When the PSTN provides metering, the cost per metering pulse can be assigned.	6 digits	000000
11	SMDR DECIMAL LOCATION (0-5) : 0	This value determines the decimal position in the Cost per Pulse, button 10, starting from the rightmost digits.	0~5	0

Table 3.3.6.17-1 SMDR ATTRIBUTES (PGM 177)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
12	SMDR START TIMER (1sec) (000 – 250) : 000	A “Valid call timer” can be set to allow for call set-up times through the PSTN. A call must be longer than the SMDR Start Timer to generate a call record if enabled under button 1 above.	000~250 seconds	000
13	SMTP IP ADDR (WEB) 0 .0 .0 . 0	SMTP Mail server IPv4 address to receive the SMDR e-mail reports.	12-digits	
14	USER MAIL ADDR(WEB) ……	User e-mail address to receive the SMDR e-mail reports, display only. To change data, use Web Admin.		
15	MAIL SEND WEEKLY SET N/A (0-7)	Sets day of the week to send SMDR data weekly (0 for no weekly data, 1-7 for Monday through Sunday)	0-7	0
16	MAIL SEND DAILY SET 00(00-23)	Sets time-of-day for SMDR data to be sent daily (00for no daily records, 01-23 for an hour of the day).	00-23	00
17	AUTO SEND MODE (1 : ON/ 0: OFF) : OFF	If the SMDR buffer is full, the system can automatically send a notification by e-mail.	0: OFF 1: ON	OFF
18	AUTO DELETE MODE (1 : ON/ 0: OFF) : OFF	Delete SMDR records after sending e-mail.	0: OFF 1: ON	OFF
19	LONG DISTANCE CODE 0	For SMDR and COS purposes, five (5) Long Distance codes of up to two (2) digits each can be assigned. If it is dialed as the 1st digit, the call is considered an LD call.	Flex button 1~5 + digits 0~9 & ‘*’ as a wild card	BTN 1: 0
20	SMDR RIN/CLI/CPN SVC_I (0:RIN/1:CLI/2:CPN):0	For incoming calls, the system will send the defined data item for “Field I.” The data item may be CLI, CPN, or Ring Service Time. Note the User dialed number is always provided for an outgoing call.	0: RING 1: CLI 2: CPN	RING time
21	MSN PRINT ON SMDR (1:ON/0:OFF) : OFF	Print MSN number Information in SMDR Record.	0: OFF 1: ON	OFF
22	SMDR RIN/CLI/CPN SVC_II (0:RN/1:CL/2:CP/3:NO):2	For incoming calls, the system will send the defined data item for “Field II.” The data item may be CLI, CPN, or Ring Service Time.	0: RING 1: CLI 2: CPN 3: None	CPN

Table 3.3.6.17-1 SMDR ATTRIBUTES (PGM 177)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
23	PRINT SERIAL NO (1: ON/0:OFF) : OFF	As part of SMDR output, the print record number will reset to 1 when SMDR capacity is reached, or SMDR records are deleted. See button 18.	0: OFF 1: ON	OFF
24	SMDR ATTRIBUTRS(2ND) PRESS FELX KEY (01-19)		01-19	
24-1	SMDR HIDE DGT 1:RIGHT/0:LEFT) : RIGHT	When “HIDDEN DIALED DIGIT” is enabled, button 8 above, this field determines if leading or trailing digits are hidden.	0: Left 1: Right	Right
24-2	SMDR INTERFACE SVC (0: OFF/1:CO/2:CO&ICM): 0	When enabled, the system stores SMDR data to send to applications, including NMS, upon request.	0: OFF 1: CO 2:CO&ICM	OFF
24-3	SMDR ICM SAVE (1:ON/0:OFF) : OFF	When enabled, intercom call data is stored as part of the SMDR data.	0: OFF 1: ON	OFF
24-4	SMDR ICM PRINT (1:ON/0:OFF) : OFF	When enabled, intercom call data is printed as part of the Online SMDR.	0: OFF 1: ON	OFF
24-5	SMDR DISC CAUSE (1:ON/0:OFF) : OFF	When enabled, the disconnect cause is stored in Offline SMDR data and printed as parted of the Online SMDR.	0: OFF 1: ON	OFF
24-6	LONG TIME CALL (10min) (000-144) : 000	To monitor long-time CO calls, a “Long Time Call” can be set. 0 means no monitoring. If CO call duration exceeds this value, a notification will be sent to the NMS server, displaying the alarm.	000 ~ 144	000
24-7	PRT LIMIT TO NET CALL (1:ON/0:OFF) : OFF	When CO call is transferred to Net transit out CO, it’s automatically deleted from SMDR.	0: OFF 1: ON	OFF
24-8	INTERNATIONAL CODE ….	It is used to distinguish international calls for SMDR.	4 digit	….
24-9	MOBILE PHONE CODE ….	It is used to distinguish mobile calls for SMDR.	4 digit	….
24-10	SMTP MAIL SERVER ID ……	This field defines the user’s ID for the SMTP Mail server. If the user’s ID and password are assigned, the SMTP Mail server will check the validation of the user ID and password.	Max 40 Chars	

Table 3.3.6.17-1 SMDR ATTRIBUTES (PGM 177)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
24-11	SMTP MAIL SERVER PWD ……	This field defines the user's password for the SMTP Mail server. If the user's ID and password are assigned, the SMTP Mail server will check the user ID and password validation.	Max 20 Chars	
24-12	TRANSFER CHARGE RATE (0-2): INDIVIDUAL	**0. INDIVIDUAL**: When a call is transferred to another station, the transferred call is charged to two stations, respectively. **1. INTEGRATE XFERING**: When a call is transferred to another station, the call is charged to the transferring station. **2. INTEGRATE XFERED:** When a call is transferred to another station, the call is charged to the transferred station.	Refer to description	INDIVIDUAL
24-13	ATD XSFER CHARGE RATE (0-2):INDIVIDUAL	**0. INDIVIDUAL:** When the Attendant makes an outgoing call and transfers this call to another station, the transferred will follow the Transfer Charge Mode. **1. ATD CHARGING:** When the Attendant makes an outgoing call and transfers this call to another station, the call is charged to the Attendant. **2. XFERED CHARGING:** When the Attendant makes an outgoing call and transfers this call to another station, the call is charged to the transferred station.	Refer to description	INDIVIDUAL
24-14	SMTP DNS ADDR (WEB)	SMTP Mail server Domain address to receive the SMDR e-mail reports.	Max 100 Chars	-
24-15	SMTP SENDER MAIL (WEB)	Program VSF mail Sender mail Address (It is moved to web admin PGM 160-161)	Max 40 Characters	-
24-16	SMTP SECURITY (0-2) : NO SECURITY	Choose SMTP Security (It is moved to web admin PGM 160-161) 0:Nosecurity, 1:SSL, 2:TLS	Refer to description	0
24-17	SMTP PORT (00001-65535) : 00025	Choose SMTP Port (It is moved to web admin PGM 160-161)	1-65535	25

Table 3.3.6.17-1 SMDR ATTRIBUTES (PGM 177)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
24-18	VSF VM DISPLAY (0:'I', 1:'V')	If the value is 'I', the call to "VSF voice mail" is displayed as 'I' in SMDR. But if the value is 'V',the call to "VSF voice mail" is displayed as 'V' in SMDR. 'I' means "incoming call". 'V' is new indication for "VSF voice mail".	0:'I' 1:'V'	0:'I'
24-19	DISPLAY N TYPE (1:ON/0:OFF) : OFF	Display 'N' in SMDR to distinguish and it is network call.	1:ON 2:OFF	OFF
24-20	OUTGOING CALL TYPE (0:ALL/1:ANSWER) : ALL	**ALL :** all of outgoing call **ANSWER :** Answered outgoing call	Refer to description	ALL
24-21	PRINT DIALED DIGIT (0:PSTN/1:USER) : PSTN	PSTN : Outgoing digits to PSTN USER : Dialed digits by user	0: PSTN 1: USER	PSTN
24-22	SMDR ICM Ring Info (1:ON/0:OFF) : OFF	When enabled, intercom call data has additional information about ringing duration. With this option disabled, cannot disfferentiate calls if they are answered or unanswered because TIME field is used for both of talking and ringing durations. With this option enabled, TIME is only for talking duration, and RING duration is presented separately as it is presented for CO call data.	0: OFF 1: ON	OFF
24-23	SMDR ICM CPN Info (1:ON/0:OFF) : OFF	When enabled, intercom call data has additional information about original dialed digits. With this option disabled, always only the last talking or ringing station is specified as called party. With this option enabled, the original dialed number is presented separately in CPN field.	0: OFF 1: ON	OFF

4.3.6.18 System Date, Time and Daylight Saving Time (DST) – PGM 178

This entry establishes the system Date, Time, and DST features.

The date and time are employed for several features and functions, including; LCR, LCD displays, SMDR outputs, Auto Ring Mode Selection, Wake-Up Alarm, etc.

If DST is enabled, the system time will be adjusted one hour forward and back at the DST start and end times, respectively.

PROCEDURE	
SET TIME/DATE & DST PRESS FLEX_KEY (1 - 5)	Press the **[PGM]** button and dial 178.
	Press the Flex button for the desired Attribute; refer to Table 3.3.6.18-1. - Button 1: Time - Button 2: Date - Button 3: DST enable mode - Button 4: DST start time - Button 5: DST end time
	Use the dial-pad to enter desired data for the Attribute Refer to Table 3.3.6.18-1.
	Press the **[Save]** button to store the data entry.

Table 3.3.6.18-1 SYSTEM TIME, DATE & DST (PGM 178)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	SET TIME TIME 00:22(HH:MM)	Sets the system time.	HH:MM	
2	SET DATE DATE: 07/24/13(MMDDYY)	Set the system date.	MMDDYY	
3	DST ENABLE MODE (1:ON/0:OFF) : OFF	Enable DST feature for System Time.	0: OFF 1: ON	OFF
4	DST START TIME ONLY POSSIBLE BY WEBADM	The DST start time. It can be set only via WEB Admin. 2ndSunday of March at2:00 AM	See DST Table	Refer to description
5	DST END TIME ONLY POSSIBLE BY WEBADM	The DST end time. It can be set only via WEB Admin. 1stSunday in Nov. at2:00 AM	See DST Table	Refer to description

4.3.6.19 Multi-Language – PGM 179

The VMIU and VMIB support multiple languages; up to six languages may be supported simultaneously.

Once the prompts are downloaded to the VMIU/VMIB, the caller receives the Language selection announcement for DISA and CCR calls and proceeds with a Hunt Group guaranteed announcement or the DID error announcement.

The language selection announcement will only affect the language prompts enabled for use.

PROCEDURE	
SET SYSTEM MULTI LANG ENTER SEQ NO (001 -300)	Press the **[PGM]** button and dial 179 (e.g., enter 015). eMG800 sequence number range is 0001-2890.
SET 015 SYS MULTI LANG PRESS FLEX KEY (1-6)	Select Flex button, - Button 1: N. AMERICA Prompt Usage - Button 2: UNKNOWN Prompt Usage - Button 3: UNKNOWN Prompt Usage - Button 4: UNKNOWN Prompt Usage - Button 5: UNKNOWN Prompt Usage - Button 6: UNKNOWN Prompt Usage
N.AMERICA Prompt Usage (1:ON/0:OFF) : OFF	Us the dial pad to enable or disable the desired language prompts.
	Press the **[Save]** button to store the data entry.

4.3.6.20 System Timers I to III - PGMs 180-182

A number of timers can be assigned to control and affect many features and functions of the system. Refer to Table 3.3.6.20-1 to Table 3.3.6.20-3 for a description of the timers and the input required.

PROCEDURE	
SYSTEM TIMER 1 PRESS FLEX KEY (01-22)	Press the **[PGM]** button and dial: - 180 for System Timers I - 181 for System Timers II - 182 for System Timers III
	Press the Flex button for the desired Timer; refer to Table 3.3.6.20-1 ~3.
	Us the dial pad to enable or disable the desired language prompts.
	Press the **[Save]** button to store the data entry.
	Use the dial-pad to enter the desired Timer data. Refer to Table 3.3.6.20-1~3.
	Press the **[Save]** button to store the Timer data entry.

Table 3.3.6.20-1 SYSTEM TIMERS I (PGM 180)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	ATD RECALL TMR(min) (00-60) : 01	Determines the amount of time the attendant receives recall, after which the system will disconnect the call.	00~60 minutes	01
2	CALL PARK TMR(sec) (000-600) : 120	Determines the amount of time before a parked call will recall the station that parked the call.	000~600 seconds	120
3	CAMP-ON RECALL TMR(sec) (000-600) : 030	When a call transfer is camped on, this timer determines the amount of time before the station receives a recall.	000~600 seconds	030
4	EX-HOLD RECALL TMR(sec) (000-600) : 060	Determines the amount of time before a call placed on exclusive hold will recall the station.	000~600 seconds	060
5	I-HOLD RECALL TMR(sec) (000-600) : 030	Determines the amount of time before a call that is recalling the station will recall before also recalling the attendant.	000~600 seconds	030
6	S-HOLD RECALL TMR(sec) (000-600) : 030	Determines the amount of time before a call placed on system hold will recall the station.	000~600 seconds	030
7	TRANS RECALL TMR(sec) (000-600) : 030	Determines the amount of time a transferred call will ring at the receiving station before recalling the station that transferred the call.	000~600 seconds	030
8	ACNR DELAY TMR(sec) (000-300) : 030	If the ACNR Pause Timer expires and no CO Line is available for ACNR recall, the delay timer sets the delay before ACNR attempts to access a CO line. The retry counter is not decremented by this action.	000~300 seconds	030

Table 3.3.6.20-1 SYSTEM TIMERS I (PGM 180)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
9	ACNR PAUSE TMR(sec) (000-300) : 030	This timer establishes the time between ACNR recall attempts.	000~300 seconds	030
10	ACNR RETRY COUNT (01-13) : 03	This counter sets the number of recall attempts for ACNR before ACNR is abandoned. (For CIS: 1-9).	1~13	03
11	ACNR TONE DTC TMR(sec) (001-300) : 030	If call progress tones are unavailable for ACNR, the system will wait for this duration after dialing before considering the called party as busy/no answer.	001~300 seconds	030
12	AUTO RELEASE TMR(sec) (000-300) : 030	If a user accesses a CO/IP path and does not take any action, the system will automatically release the CO/IP path when this timer expires.	000~300 seconds	030
13	CCR INT DGT TMR(100ms) (000-300) : 030	Inter-digit timer used with Customer Call Routing function.	000~300 100msec	030
14	CALL RESTRICT TMR(min) CHECK PGM 123-F2	Not used. Check PGM123-BTN2	00~99 minutes	00
15	CO DIAL DLY TMR(100ms) (00-99) : 05	Delay for through connection to prevent illegal dialing when CO/PBX has a slow response.	00~99 100msec	05
16	RLS GUARD TMR(100ms) (010-150) : 020	When a CO Line is returned to idle, the system will deny access for this time to assure the PSTN returns the CO circuitry to idle.	010~150 100msec	020
17	CO RING OFF TMR(100ms) (010-150) : 060	This timer sets the maximum ‘OFF’ duration of the incoming ring cycle to determine when a call has been abandoned.	010~150 100msec	060
18	CO RING ON TMR(100ms) (1-9) : 2	This timer sets the ‘ON’ time of the incoming ring cycle for the Ring Detect circuitry of the system to recognize an incoming call.	1~9 100msec	2
19	ELAPSED CALL TMR(sec) (005-900) : 180	Users can receive a periodic tone indicating the length of an outgoing call. This timer sets the time before and between the tones. Note Call Time Tone must be enabled in PGM 112-button 1.	005~900 seconds	180
20	WEB PWD GUARD TMR(min) (001-999) : 005	If no data packets are received during a Web Admin connection for the Guard time, the system will initiate a password check.	001~999 minutes	5

Table 3.3.6.20-1 SYSTEM TIMERS I (PGM 180)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
21	ON HOOK IDLE TMR (sec) (00-99) : 00	Phone (IP/DKTU) goes to idle after this timer when the phone receives a disconnect message or signal from the CO line.	00~99 seconds	0
22	CALL REC REPEAT TMR(sec) (000-999) : 000	If the record warning tone is set and this timer is set greater than 1, it works periodically when it's recorded.	000~999 seconds	0

Table 3.3.6.20-2 SYSTEM TIMERS II (PGM 181)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	FWD NO ANS TMR(sec) (000-600) : 015	When a user activates No-Answer Forward, calls will ring for this duration before the calls are forward. The Station No-Answer Forward timer PGM 123 will take precedence.	000~600 (seconds)	015
2	DID/DISA NO ANS(sec) (000-255) : 000	A DID/DISA call to a station will forward to the DID/DISA Destination assigned in PGM 167 should this timer expire before the call is answered.	000~255 (seconds)	000
3	VSF USR RECORD(sec) (000-999) : 060	This timer sets the maximum duration allowed for the User Greeting in the system's basic Voice Mail.	000~999 (seconds)	60
4	VSF VALID USER MSG(sec) (0-9) : 4	This timer sets the minimum duration allowed for a voice mail message in the system's basic VSF Voice Mail. Messages shorter than this period are not stored.	0~9 (seconds)	4
5	DOOR OPEN TMR(100ms) (00-99) : 20	This timer sets the minimum contact closure time required to activate the contact assigned as a door open contact.	00~99 (100msec.)	20
6	ICM DIAL TONE TMR(sec) (001-255) : 010	If a user goes off-hook on the Intercom and takes no action for this timer, the user will receive an error tone.	001~255 (seconds)	10
7	INTER DIGIT TMR(sec) (01-20) : 05	This timer sets the maximum allowed time between user dialed digits. At expiration, the user will receive an error tone.	01~20 (seconds)	05
8	MSG REMINDER TONE(min) (00-60) : 00	An iPECS Phone user will receive periodic reminder tones of a message waiting at intervals based on this timer.	00~60 (minutes)	00

Table 3.3.6.20-2 SYSTEM TIMERS II (PGM 181)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
9	PAGE TIME OUT TMR(sec) (000-255) : 015	Determines the maximum duration of a page after which the caller and Page Zone is released.	000~255 (seconds)	15
10	PAUSE TMR(sec) (1-9) : 3	A Timed pause of this duration is used in Speed Dial and during other automatically dialed digits sent to the PSTN.	1~9 (seconds)	3
11	SOFT AUTO RLS TMR(sec) (01-30) : 10	When a Soft Key is used on the iPECS Phone, after the expiration of this timer, the display will return to the previous display.	1~30 (seconds)	10
12	VM PAUSE TMR(100 msec) (01-90) : 30	When the system sends a “Pause” to Voice Mail using In-band signals, the Pause interval is defined by this timer. Not available in the USA.	1~90 (100msec.)	30
13	VSF CUT ERR TMR(1 SEC) (01-90) : 00	To cut error tone in VSF message that is left in a station.	1~90 (1 sec.)	00
14	UNUSED	Unused.		
15	EMERGENCY RETRY TMR (00-99) : 00 SEC	The system tries to make emergency calls according to the CO access rule/Prefer CO/CO group if the system could not seize a predefined emergency Co line within this timer.	00~99 (1 sec.)	00
16	ERROR TONE TMR(1sec) (005-180) : 030	Error Tone Timer	005~180 (1 sec.)	30
17	HOWLING TONE TMR(1sec) (000-180) : 030	Howling Tone Timer	000~180 (1 sec.)	30
18	NOTIFY PLAY DELAY(1sec) (01-99) : 10	When VM notification call uses LCO, the system will treat the call as the answered after this timer and play the new message the prompt.	1~99 (1 sec.)	10
19	SHORT MODEM TMR(1sec) (01-60) : 10	If {Short modem} of an SLT is ON, the SLT maintains the modem mode for this time.	01~60 (1 sec.)	10

Table 3.3.6.20-2 SYSTEM TIMERS II (PGM 181)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
20	BUTTON IDLE TMR(1sec) (00,10-99) : 00	When a button is pressed, an auto-idle timer is added. A button is pressed in an idle state, and it goes to a menu list state. (not calling state) In the menu list state, this auto-idle timer is applied. The button that is applied to this timer is as below. - 1. Transfer / PGM. - 2. Speed. - 3. Menu. - 4. Directory. - 5. Message. - 6. Call Log.	00,10~99 (1 sec.)	00

Table 3.3.6.20-3 SYSTEM TIMERS III (PGM 182)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	SLT HOOK BOUNCE(100ms) (01-25) : 01	This timer determines the duration the system considers an actual state change in the hook-switch and not a spurious contact bounce.	01~25 (100msec.)	01
2	SLT MAX H_FLASH(100ms) (01-25) : 07	This timer sets the maximum time an SLT user can depress the hook-switch for a Flash signal.	01~25 (100msec.)	07
3	SLT MIN H_FLASH(10ms) (000-250) : 010	This time sets the minimum time an SLT user must depress the hook-switch for a Flash signal.	000~250 (10 msec.)	010
4	STA AUTO RLS TMR(sec) (000-300) : 060	The system will return a station to idle for an internal call if the call remains unanswered for this duration.	000~300 (seconds)	060
5	UNSUPER CONF TMR(min) (00-99) : 10	This timer determines an “Unsupervised conference” duration before the station is recalled or the conference is dropped.	00~99 (minutes)	10
6	PRIME LINE TMR(sec) (01-20) : 05	This timer sets the delay (no action duration) for delayed Prime Line operation.	01~20 (seconds)	05
7	WINK SIGNAL TMR(10ms) (010-200) : 010	This timer sets the duration of the “Seize Acknowledge Signal” (Wink) sent to the PSTN on a DID line.	010~200 (10 msec.)	010

Table 3.3.6.20-3 SYSTEM TIMERS III (PGM 182)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
8	EN-BLOC I_DGT TMR(sec) (01-20) : 05	When an ISDN Line is assigned to send digits En-block, PGM 143-button 3, the system will send a dialed digit if the user dials “#” or this timer is expired.	01~20 (seconds)	05
9	DTMF DURATION TMR(10ms) (04-99) : 10	This timer establishes the duration of the DTMF tone sent on an analog CO Line.	04~99 (10 msec.)	10
10	FLEX DID TMR(100ms) (01-99): 30	The system will receive DID digits for this timer. After the timer expires, the system will use the last 2 to 4 digits received as DID digits.	01~99 (100msec.)	30
11	WAKE UP FAIL TMR (sec) (00-99): 20	Provide wake up fail indication to attendant according to this timer.	00~99 (1 sec.)	20
12	PREPAID WARN TMR (sec) (00-99): 00	Prove warning tone when run out of prepaid money if this timer is not zero.	00~99 (1 sec.)	00
13	FAX DETECT TMR (sec) (01-20): 10	It is maximum fax tone detection time to deliver FAX call to fax destination.	1~20 (1 sec.)	10
14	AUTO PAUSE TMR (sec) (000-255): 000	IPCR Mute function will be released by this auto pause released timer.	0~255 (1 sec.)	0

4.3.6.21 In-Room Indication – PGM 183

The Supervisor Station can set the In-Room Indication to all members in the same Group up to 10 bins can be programmed, and each bin has (at most) 20 members excluding the Supervisor.

PROCEDURE	
IN ROOM INDICATION ENTER BIN NO (01-10)	Press the **[PGM]** button and dial 183.
IN ROOM INDICATION F1:SUPERVISOR F2:MEM	Use the dial-pad to enter the desired bin number.
	Press the desired Flex button; refer to Table 3.3.9.6-1.
	Press the **[Save]** button to store the data entry.

Table 3.3.6.21-1 In-Room Indication (PGM 183)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	IN ROOM INDICATION SURERVISOR : STA 100	Assigns Supervisor station.		
2	STA 100 MEM 101 …. …. ….	This entry assigns stations as members.		

4.3.6.22 DCOB SYS Timers – PGM 186

A number of timers can be assigned to control and affect the operation of E1 lines using R2 signaling. Refer to Table 3.3.6.22-1 for the timer descriptions and inputs required.

PROCEDURE	
DCOB SYS ATTRIBUTES PRESS FLEX KEY (1-6)	Press the **[PGM]** button and dial 186.
	Press the Flex button for the desired Timer; refer to Table 3.3.6.22-1.
	Use the dial-pad to enter the desired Timer data. Refer to Table 3.3.6.22-1.
	Press the **[Save]** button to store the Timer data entry.

Table 3.3.6.22-1 DCOB SYSTEM TIMERS (PGM 186)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	R2 OUT MANAG TMR(sec) (01-50) : 14	In R2 signaling, the maximum time for waiting for the forward signal from PBX.	01~50 (seconds)	14
2	R2 IN MANAG TMR(sec) (01-50) : 14	In R2 signaling, maximum time for waiting for forward signal from PBX.	01~50 (seconds)	14
3	R2 DISAPPEAR TMR(sec) (01-50) : 14	In R2 signaling, the maximum time for waiting for the acknowledge of R2 signal.	01~50 (seconds)	14
4	R2 PULSE TMR(20msec) (01-30) : 07	In R2 signaling, time duration to send pulse typed R2 signal.	01~30 (20 msec)	07
5	R2 READY TMR (20msec) (000-500) : 007	Reserved for future usage for R2 timers.	000~500 (20 msec)	07
6	DIAL TONE DELAY (20msec) (01-30) : 20	Reserved for future usage for R2 timers.	01~30 (20 msec)	20

4.3.6.23 NTP Attributes – PGM 195

The system can employ the Network Time Protocol (NTP) or ISDN clock to synchronize the system time with the NTP time server or ISDN clock. The system requests the time from the NTP server at 10-minute intervals and then determines the time differential. If the system time is more 2 seconds off the NTP time, the system time is adjusted to synchronize with the NTP server time.

PROCEDURE	
NTP ATTRIBUTES PRESS FLEX KEY (1-1)	Press the **[PGM]** button and dial 195.
	Press the Flex button for the desired NTP Attribute; refer to Table 3.3.6.23-1.
	Use the dial-pad to enter the desired data. Refer to Table 3.3.6.23-1.
	Press the **[Save]** button to store the data entry.

Table 3.3.6.23-1 NTP ATTRIBUTES

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	NETWORK TIME/DATE (0-2): DISABLE(0)	Sets time synchronization for the system as : • Disable • ISDN clock • NTP NTP Attributes are set only via the Web.	0: DISABLE 1: ISDN 2: NTP	DISABLE

4.3.6.24 CRR Attributes – PGM 252

The system can reroute the incoming call to CO. If the call number is matched with compare digits of Table 252, the call is routed to the Rerouting number.

PROCEDURE	
CRR ATTRIBUTES PRESS FLEX KEY (1–3)	Press the **[PGM]** button and dial 252.
	Press the Flex button 1~3 for the desired setting. Refer to Table 3.3.6.24-1.
	For Flex button 1 enable or disable CRR. For Flex button 2, press the **[Save]** button to reset the CRR table. For Flex button 3, dial the table bin number to input data.
	For Flex button 3, Enter the bin number. Refer to Table 3.3.6.24-1.

Table 3.3.6.24-1 CRR ATTRIBUTES (PGM 252)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	ENABLE CRR (1:ON/0:OFF) : OFF	This field is used to enable or disable CO Call Rerouting.	0: OFF 1: ON	OFF
2	INIT CRR PRESS [Save] KEY	This field is used to initialize the CRR table.		
3	CRR ATTRIBUTES ENTER BIN NO(000-169)		000-169	
3-1	CRR 001 COMPARE CO GRP GRP NO (01-20) : 01	Compared Co group should be matched with incoming CO group.	01-20	01
3-2	CRR 001 RECEIVE DGTS	Incoming digit numbers should be matched with these digits. An “*” may be entered as a wild-card to indicate insertion of the compared number.	Max 12 digits	
3-3	CRR 001 CO+TEL NUMBER	This field defines the CO line, CO group, or CO access code plus telephone number.	Max 20 digits	
3-4	CRR 001 TYPE	If you chose ‘1’ for NET type, you could use transit out code for CO to CO rerouting. If you chose ‘2’ for the DISA type, you could access the station number as DISA mode. In other cases, you should not use this type.	N/A	

4.3.6.25 VM COS Attributes – PGM 253

Each Station is assigned one of the five Voice Mail Classes of Service. The VM COS attributes include user greeting length, E-Mail notifications, message retention, and optional message marking.

PROCEDURE	
ENTER PGM NUMBER	Press the **[PGM]** button and dial 253.
VM COS ATTRIBUTE ENTER COS RANGE (1-5)	Enter COS range from 1 to 5.
1-2 VM COS ATT PRESS FLEX KEY (1-8)	Press flex button 1-8 for the desired setting. Refer to Table 3.3.6.25-1. Use the dial-pad to enter the desired data. Refer to Table 3.3.6.25-1. Press the **[Save]** button to store the data entry.

Table 3.3.6.25-1 VM COS ATTRIBUTES (PGM 253)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	GREETING LENGTH (00-99) : 60	This defines maximum user greeting length.	00-99	60
2	MESSAGE LENGTH (000-600) : 000	This defines maximum user message recording time.	000-600	000
3	NUMBER OF MESSAGE (000-250) : 000	It defines the maximum number of voice mail messages.	000-250	000
4	RETENTION TIME (00-99) : 00 (DAYS)	Voice mail messages will be automatically deleted after this amount of days.	00-99	00
5	E-MAIL NOTIFICATION (0-2) : NOTI. DELETE	E-mail notification can be enabled or disabled.	0: OFF 1: Notification 2: Notification& Delete	Notification& Delete
6	FUTURE DELIVERY MSG (1 : ON /0 :OFF) : OFF	Future Delivery messages can be enabled or disabled.	0: OFF 1: ON	OFF
7	CONFIRM MSG RECEIPT (1:ON/0:OFF) : OFF	Confirm message receipt can be enabled or disabled.	0: OFF 1: ON	OFF
8	PRIVATE MSG MARK (1:ON/0:OFF) : OFF	Private message marks can be enabled or disabled.	0: OFF 1: ON	OFF

4.3.6.26 Personal Group – PGM 260

Several stations can share the same station number. That means Personal Group is an extended feature of Linked Pair. A Personal Group is composed of a master station and several member stations. A master station and all member stations share the master station's number.

By using this shared number, almost all features (Call To xxx / Call From xxx / SMDR / Message Wait…) can be activated. But, some features can be chosen by PGM 261 attribute about all station activating or individual station working. In PGM 260, Personal group master and member can be assigned. In PGM 261, the Personal group attribute can be set.

PROCEDURE	
PERSONAL GRP ASSIGN ENTER GRP NUM (01–70)	Press the **[PGM]** button and dial 260. And Enter Group number (eMG80/100:1~7 /eMG800:1~600)
PERSONAL GRP 01 F1: MASTER STA F2: MEM	Press Flex button 1, then register Master station. Press Flex button 2, then register Member stations.
	Use the dial-pad to enter the desired data.
	Press the **[Save]** button to store the data entry.

4.3.6.27 Personal Group Attribute – PGM 261

In PGM 261, the Personal group attribute can be set.

PROCEDURE	
PERSONAL ATTRIBUTE ENTER GRP NUM (01–70)	Press the **[PGM]** button and dial 261. And Enter Group number.(eMG80/100:1~70 /eMG800:1~600)
PERSONAL GRP 01 PRESS FLEX KEY (1-3)	Press the Flex button 1~4 for the desired setting. Refer to Table 3.3.6.27-1.
	Use the dial-pad to enter the desired data. Refer to Table 3.3.6.27-1.
	Press the **[Save]** button to store the data entry.

Table 3.3.6.27-1 PERSONAL GROUP ATTRIBUTES (PGM 261)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	01 USE MASTER WAKEUP (1:ON/0:OFF) : OFF	If this value is set to ON, all members wake up, followed by master wake up. If this value is set to OFF, individual wake-up is worked by each station.	0: OFF 1: ON	OFF
2	01 USE MASTER DND (1:ON/0:OFF) : OFF	If this value is set to ON, DND setting affect to Master and all member. If this value is set to OFF, individual DND is worked by each station.	0: OFF 1: ON	OFF
3	01 SET LINKED PAIR (1:ON/0:OFF) : OFF	If this value is set to ON, Master, and Member Stations are linked, and only one station can be activated.	0: OFF 1: ON	OFF

4.3.7 STATION GROUP DATA – PGM 190 & 192

Stations can be grouped so that incoming calls will search (hunt) for an idle station in the group. The system allows the assignment of three hunt processes, Circular, Terminal, and UCD. In addition, there are eight (8) functional groups available: ACD (Automatic Call Distribution) based on UCD hunt, Ring, Call Pick-Up, External Voice Mail (SLT connected), VSF-Voice Mail, iPECS Feature Server Voice Mail, Network Voice Mail, and UCS Groups. Certain types of groups can incorporate announcements, which are given to the calling party. The system's VMIU or VMIB can store up to seventy (70) announcements for use with Station Groups.

Note that a station can belong to multiple groups if the groups are all of the same types. Also, note that when a station group is assigned to a group type (Station, ACD, VM, FS VM, VSF-VM, Net VM, UCS, and Ring), the group attributes are initialized to the default values.

4.3.7.1 Station Group Assignment -PGM 190

Under Station Group Assignments, the type, members, and Pick-Up attribute are assigned to the Station Group. Note for the Net VM group. The network number must be assigned as the Net VM group member station. Refer to Table 3.3.7.1-1 for a description of the functions, the LCD displays, and data entries required.

PROCEDURE	
STATION GRP ASSIGN ENTER GRP NO(401-440)	Press the **[PGM]** button and dial 190.
	Use the dial pad to enter the desired Station Group number.
	Press the Flex button for the desired setting; refer to Table 3.3.7.1-1.
STATION GRP 401 F1:TYPE F2:PKUP F3:MEM	Use the dial pad to enter the desired Station Group data. Note for group members, enter a station or station range. For an individual station, press the desired Flex button for the station's position in the group and dial the station number. For a range, enter the first and last station numbers in the range.
	Press the **[Save]** button to store the data entry.

Table 3.3.7.1-1 STATION GROUP ASSIGNMENT (PGM 190)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	STATION GRP 401 CIRCULAR GROUP (00-10)	This entry defines the type of station group. The range is below. 00: Not Assign, 01: Circular, 02: Terminal 03: UCD/ACD, 04: RING, 05: Ext VM 06: PICK-UP, 07: VSF-VM, 08: UMS 09: NET-VM, 10:UCS Server	Refer to description	Not Assign
2	GROUP 401 PICK-UP (1:ON/0:OFF) : OFF	Stations can pick up group calls ringing at other stations in the group. This does not apply to VSF groups.	0: OFF 1: ON	OFF
3	CIRCULAR GROUP 401	This entry assigns stations as members of a station group, or for Net VM, the Network number.		

4.3.7.2 Station Group Attributes – PGM 191

Each type of group has a different set of available attributes relating to announcements, timers, overflow, etc.

Table 3.3.7.2-1 through Table 3.3.7.2-8 provides descriptions for the attributes, LCD displays, and data entries required.

The attributes for the Circular and Terminal Hunt groups are given in Table 3.3.7.2-1, and the UCD attributes include the ACD functions Table 3.3.7.2-2. In addition, there are no attributes for a group assigned as a Net VM group in PGM 190.

PROCEDURE	
STATION GRP ATT ENTER GRP NO(401-440)	Press the **[PGM]** button and dial 191.
CIRC GRP 401 PRESS FLEX KEY (01-21)	Use the dial pad to enter the desired Station Group. The system will display the type of group from the Station Group Assignment PGM 190 data (Ex. 01 Circular).
	Press the Flex button for the desired attribute; refer to Table 3.3.7.2-1 to Table 3.3.7.2-8.
	Use the dial pad to enter the desired Group Attributes data. Refer to Table 3.3.7.2-1 to Table 3.3.7.2-8.
	Press the **[Save]** button to store the data entry.

Table 3.3.7.2-1 STATION GROUP— CIRCULAR & TERMINAL GROUPS (PGM 191)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	CIRC 401 ANNC 1 TMR(1s) (000 - 999) : 015	If all stations in the group are busy when a call is offered, the call may continue to wait (queue) for an available station. If the queue period exceeds 1stAnnouncementTimer, the call may be sent to a VSFannouncement. If the timer is set to 000, the call will receive the first announcement, in full, prior to the hunt process (guaranteed announcement).	000~999 seconds	015
2	CIRC 401 ANNC 2 TMR(1s) (000 - 999) : 000	After the 1st announcement, the 2nd ANNC TMR is activated. At expiration, if the call remains queued to the group, the call is sent to the assigned 2nd VSF announcement.	000~999 seconds	000
3	CIRC 401 ANNC1 LOC VSF ANNC .. (01 – 70)	The Station Group can be assigned an announcement, which is played if the call remains queued beyond the ANNC 1 TMR duration. The announcement location is the VSF ANNC1 number. An entry of 00 indicates no announcement. Including '#' at the end of an entry instructs the system to disconnect after the announcement.	01~70	00: none

Table 3.3.7.2-1 STATION GROUP— CIRCULAR & TERMINAL GROUPS (PGM 191)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
4	CIRC 401 ANNC2 LOC VSF ANNC .. (01 – 70)	The Station Hunt Group can be assigned a 2nd announcement, which is played if the call remains queued beyond the ANNC 2 TMR duration. The announcement location is the VSF ANNC2 number. An entry of 00 indicates no announcement. Including '#' at the end of an entry instructs the system to disconnect after the announcement.	01~70	00: none
5	CIRC 401 ANNC2 RPT TMR (000 - 999) : 000.	The 2nd announcement can be repeated to calls that remain in the queue at intervals of the Announcement 2 RepeatTimer. NOTE) Repeating must be "ON" under button 6 below.	000~999 seconds	000
6	CIRC 401 ANNC 2 RPT (1: ON / 0: OFF): OFF	After the 2nd announcement, if the call remains queued to the group, the 2nd VSF announcement can be repeated at the AnnouncementRepeatTimer interval.	0: OFF 1: ON	OFF
7	CIRC 401 OVERFLOW DEST S/H/V/SPD (Dial 1-4)	A call to the group will continue to route through the group until answered or all group members have been tried. The call will remain at the last station or will pass to the assigned OverflowDestination.1:Station, 2:Station group, 3:VSF Announce, 4:System speed	Refer to description	
8	CIRC 401 OVERFLOW TMR (000 - 600) : 180	A call to a group will remain at the last station in the group or can be sent to the assigned OverflowDestination after the expiration of the OVERFLOW Timer.	000~600 seconds	180
9	CIRC 401 WRAP-UP TMR (000 - 999) : 002	After terminating any call, a Group member will be maintained in a busy state for the duration of the WRAP-UP Timer.	000~999 seconds	002
10	CIRC 401 NO ANS TMR(1s) (00 – 99) : 15	Calls to a station in the group are directed to the station. If unavailable or unanswered in the NO AnswerTimer, the call can be routed based on the assigned hunt process.	00~99 seconds	15
11	CIRC 401 PILOT HUNT (1 : ON/ 0: OFF) : ON	A circular/terminal hunt group can be set so that only calls to the pilot number (Station Group number) will hunt.	0: OFF 1: ON	ON
12	CIRC 401 RPT NO MEMBER (1 : ON/ 0: OFF) : OFF	If a call is received and no members are on duty, an ICM call will return re-order tone, while a CO/IP call will be routed to the overflow destination.	0: OFF 1: ON	OFF

Table 3.3.7.2-1 STATION GROUP— CIRCULAR & TERMINAL GROUPS (PGM 191)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
13	CIRC 401 MUSIC SRC (00–37) : 01	A Music source is assigned so that calls to the group receive audio from the source in place of ring-back tone. 00: Ring-back, 01: INT Music, 02: EXT Music, 03: VSF MOH, 04~08: SLT MOH1~4, 09~37: VSF MOH2~30	Refer to description	01
14	CIRC 401 MBR FORWARD (1 : ON/ 0: OFF) : ON	A member activating Call forward may be placed in an unavailable state for hunt group calls (ON). When OFF, group calls are sent to the member as normal.	0: OFF 1: ON	ON
15	MAILBOX MSG WAIT STA	When a group calls overflows or routes to the VM group, a station number is used to identify the Mailbox for the Circular group messages.	Station	….
16	MAILBOX PASSWORD ……	The password associated with a group Mailbox is defined here. The password is used in conjunction with the Circular group as with a normal station.	12 digits	….
17	CIRC 401 FORCED DEST S/H/V/SPD (DIAL 1-4)	When a call is delivered to the group, the system can redirect the call to the Forced destination if enabled under button 18 below.**1:Station, 2:Station group,** 3:VSF Announce, 4:System speed	Refer to description	-
18	FORCED FWD DESTUSAGE (1:ON/0:OFF): OFF	Enables the system to redirect group calls to the Forced destination defined under button 17 above.	0: OFF 1: ON	OFF
19	WAIT IF 1STANNC BUSY (1:ON/0:OFF): ON	When a call assigned to receive an announcement arrives and all channels are busy, the call may wait with Ringback until a channel is available (ON) or bypass the announcement.	0: OFF 1: ON	ON
20	GROUP NAME ……	A hunt group name can be designated.	20 character	….
21	CIRC 401 MAX QUE C-CNT (00-99) : 99	When the number of calls queued to the group match this parameter, new calls will receive an error tone and be disconnected after the VSF AA announcement, if assigned, is played.	00-99	99

Table 3.3.7.2-1 STATION GROUP— CIRCULAR & TERMINAL GROUPS (PGM 191)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
22	CIRC 401 RING TONE 00-16 (00: NA)	When a call is routed to a group, the programmed ring tone is served to the group member.	00-16	0

Table 3.3.7.2-2 STATION GROUP ATTRIBUTES — UCD/ACD GROUPS (PGM 191)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	ACD 403 ANNC 1 TMR(1s) (000 – 999) : 015	If all stations in the group are busy when a call is offered, the call may continue to wait (queue) for an available station. If the queue period exceeds this 1stAnnouncementTimer, the call may be sent to a VSF announcement. If the timer is set to 000, the call will receive the first announcement, in full, prior to the hunt process (guaranteed announcement).	000~999 seconds	015
2	ACD 403 ANNC 2 TMR(1s) (000 – 999) : 000	After the 1stannouncement, a 2ndANNC TMR is activated. At expiration, if the call remains queued to the group, the call is sent to the assigned 2ndVSF announcement.	000~999 seconds	000
3	ACD 403 ANNC1 LOC VSF ANNC .. (01–70)	Each Station Hunt Group can be assigned an announcement, which is played if the call remains queued beyond the ANNC 1 TMR duration. The announcement location is a VSF ANNC1 number. An entry of 00 indicates no announcement. Including '#' at the end of an entry instructs the system to disconnect after the announcement.	01~70	00: none
4	ACD 403 ANNC2 LOC VSF ANNC .. (01–70)	The Station Hunt Group can be assigned a 2ndannouncement, which is played if the call remains queued beyond the ANNC 2 TMR duration. The announcement location is a VSF ANNC2 number. An entry of 00 indicates no announcement. Including '#' at the end of an entry instructs the system to disconnect after the announcement.	01~70	00: none
5	ACD 403 ANNC2 RPT TMR (000 – 999) : 000	The 2ndannouncement can be repeated to calls that remain in the queue at intervals of the Announcement 2 RepeatTimer. Note repeating must be "ON" under button 6 below.	000~999 seconds	000

Table 3.3.7.2-2 STATION GROUP ATTRIBUTES — UCD/ACD GROUPS (PGM 191)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
6	ACD 403 ANNC2 RPT (1: ON / 0: OFF): OFF	After the 2ndannouncement, if the call remains queued to the group, the 2ndVSF. The announcement can be repeated at the AnnouncementRepeatTimer interval.	0: OFF 1: ON	OFF
7	ACD 403 OVERFLOW DEST S/H/V/SPD (Dial 1-4)	A call to the group will continue to route through the group until answered or all group members have been tried. The call will then queue to the group or route to the assigned OverflowDestination. 1:Station, 2:Station group 3:VSFAnnounce, 4:System speed	Refer to description	
8	ACD 403 OVERFLOW TMR (000 - 600) : 180	A call to a group will remain queued to the group or be sent to the assigned OverflowDestination after the expiration of the OVERFLOW Timer.	000~600 seconds	180
9	ACD 403 WRAP-UP TMR (000 - 999) : 002	After terminating any call, a Hunt Group member will be maintained in a busy state for the duration of the WRAP-UP Timer.	000~999 seconds	002
10	ACD 403 RPT NO MEMBER (1 : ON/ 0: OFF) : OFF	If a call is received and no members are on duty, an ICM call will return the re-order tone, while a CO/IP call will be routed to the overflow destination.	0: OFF 1: ON	OFF
11	ACD 403 MUSIC SRC (00– 37) : 01	A Music source can be assigned so that calls to the group will receive audio from the assigned source in place of ring-back tone while in Queue. • 00: Ring-back, • 01: INT Music, • 02: EXT Music, • 03: VSF MOH, • 04~08: SLT MOH1~5, • 09~37: VSFMOH2~30	Refer to description	01
12	ACD 403 ACD WARN TONE (1 : ON/ 0: OFF) : OFF	An ACD supervisor can monitor agent conversations. When the supervisor activates the monitor feature, a warning tone can be provided to the agent and connected party.	0: OFF 1: ON	OFF
13	ACD 403 ALTER DEST S/H/SPD (Dial 1-3)	When a call comes into the group and no group members are available, the call will be routed to the assigned alternate destination. 1:Station, 2:Station group, 3:System speed	Refer to description	....

Table 3.3.7.2-2 STATION GROUP ATTRIBUTES — UCD/ACD GROUPS (PGM 191)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
14	ACD 403 SP-VISOR TMR (000-999) : 030	When calls have been in queue longer than the Supervisor Timer, the ACD supervisor is notified by a display of the longest queue time.	000~999 seconds	030
15	ACD 403 SP-VISOR C-CNT (00-99) : 00	When the number of calls in the queue exceeds the Supervisor Call Counts, the ACD Supervisor is notified by a display of queued calls count.	00~99	00
16	WAIT IF 1ST ANNC BUSY (1:ON/0:OFF): ON	When a call assigned to receive an announcement arrives and all channels are busy, the call may wait with Ringback until a channel is available (ON) or bypass the announcement.	0: OFF 1: ON	ON
17	ACD 403 MAX QUE C-CNT (00-99) : 99	When the number of calls queued to the group match this parameter, new calls will receive an error tone and be disconnected after the VSF AA announcement, if assigned, is played.	00-99	99
18	ACD 403 SUPERVISOR …. …. …. ….	Any valid IP Phone can be assigned as a Supervisor, max. 5 ACD Supervisors.	Station	....
19	100 110 123 124 0 0 0 0	ACD Group members may be assigned a priority, 0-9. Members with the highest priority are sent calls ahead of lower priority members. This field is the same as PGM 112-button 16.	0~9	0
20	ACD 403 ACD_DND W_TMR (002-200) : 010	ACD agents are placed in the Wrap-up mode for the Wrap-up timer duration after call completion.	002~200 sec	010
21	ACD 403 ICLID USAGE (1:ON/0:OFF) : OFF	Within 5 seconds of a guaranteed announcement, the caller may dial digits as an ICLID. The User dialed digits are compared to the ICLID Table entries, PGM 203 for routing or, for a single dialed digit, to the ACD CCR table PGM 191 BTN 23.	0: OFF 1: ON	OFF
22	GROUP NAME ……..	An ACD group name can be designated.	20 character	..
23	ACD 403 CIQ ROUTE PRESS FLEX KEY (01-10)	CCR for ACD Calls-in-queue permits the caller to re-route the call by dialing a single digit. The destination is assigned to Flex button 1 ~ 10 for digits 1 ~ 9 & 0.	FLEX1 ~ FLEX10	

Table 3.3.7.2-2 STATION GROUP ATTRIBUTES — UCD/ACD GROUPS (PGM 191)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
23-1~ 23-10	ACD 403 CIQ ROUTE INPUT 1: NOT ASSIGNED	When an ACD call is queued, and the caller may exit this queue by entering one digit. The queued call can be routed to the station, hunt, system-speed bin, or network station. Dial 1: Enter a station number. Dial 2: Enter a hunt group number. Dial 3: Enter a system speed bin. Dial 4: Enter a network station number.	-	-
24	ACD 403 ADDED ATTR PRESS FLEX KEY (01-24)	To select an ACD group “Added Attribute,” press flex button 24 and select button 1~24 for the desired attribute.	FLEX1 ~ FLEX24	
24-1	ZAP TONE (1:ON/0:OFF) : OFF	Agents using a headset can have ACD calls connected to them automatically preceded by a tone (Zap tone).	0: OFF 1: ON	OFF
24-2	MAILBOX MSG WAIT STN ….	When an ACD call overflows or routes to the VM group, a station number is used to identify the Mailbox for the ACD group messages.	Station	….
24-3	MAILBOX PASSWORD ……	The password associated with an ACD group Mailbox is defined here. The password is used in conjunction with the ACD group as with a normal station.	12 digits	….
24-4	CIQ AGENT DISPLAY (1:ON/0:OFF) : OFF	When an ACD call is in the queue, the Call in queue information can be displayed on the LCD of agent and supervisor telephones.	0: OFF 1: ON	OFF
24-5	FORCED FWD DESTUSAGE (1:ON/0:OFF): OFF	Enables the system to redirect group calls to the Forced destination defined under buttons 24-24 below.	0: OFF 1: ON	OFF
24-6	CIQ #1 THRESHOLD (00-99) : 10	If the queued call count exceeds the threshold, the system plays the CIQ #1 Announcement (button 7 below) to the CIQ #1 Page Zone (button 8 below) after the CIQ #1Announcement Delay Timer (button 9 below). Announcements are repeated at intervals of the CIQ #1 Announcement Repeat Timer (button 10 below).	00-99	10
24-7	CIQ #1 ANNC LOC VSF ANNC .. (00-200)	VSF announcement number for the CIQ #1 Announcement.	00-200	…

Table 3.3.7.2-2 STATION GROUP ATTRIBUTES — UCD/ACD GROUPS (PGM 191)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
24-8	CIQ #1 PAGE ZONE (00-40) : 00	Page Zone to receive CIQ #1Announcement. eMG80/100:00~15 or 00~40, eMG800:0~105	Refer to description	00
24-9	CIQ #1 ANNC DELAY TMR (000-180) : 015	Delay timer for CIQ #1 Announcement.	000-180	015
24-10	CIQ #1 ANNC REPEAT TMR (000-180) : 045	Interval for repeating the CIQ #1 Announcement.	000-180	045
24-11	CIQ #2 THRESHOLD (00-99) : 20	If the queued call count exceeds the threshold, the system plays the CIQ #2 Announcement (button 12 below) to the CIQ #2 Page Zone (button 13 below) after the CIQ #2 Announcement Delay Timer (button 14 below). Announcements are repeated at intervals of the CIQ #2 Announcement Repeat Timer (button 15 below).	00-99	20
24-12	CIQ #2 ANNC LOC VSF ANNC .. (00-200)	VSF announcement number for the CIQ #2 Announcement.	00-200	…
24-13	CIQ #2 PAGE ZONE (00-40) : 00	Page Zone to receive CIQ #2 Announcement. eMG80/100:00~15 or 00~40, eMG800:0~105	Refer to description	00
24-14	CIQ #2 ANNC DELAY TMR (000-180) : 015	Delay timer for CIQ #2 Announcement.	000-180	015
24-15	CIQ #2 ANNC REPEAT TMR (000-180) : 025	Interval for repeating the CIQ #2 Announcement.	000-180	025
24-16	CIQ #3 THRESHOLD (00-99) : 30	If the queued call count exceeds the threshold, the system plays the CIQ #3 Announcement (button 17 below) to the CIQ #3 Page Zone (button 18 below) after the CIQ #3 Announcement Delay Timer (button 19 below). Announcements are repeated at intervals of the CIQ #3 Announcement Repeat Timer (button 20 below).	00-99	30

Table 3.3.7.2-2 STATION GROUP ATTRIBUTES — UCD/ACD GROUPS (PGM 191)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
24-17	CIQ #3 ANNC LOC VSF ANNC .. (00-200)	VSF announcement number for the CIQ #3 Announcement.	00-200	…
24-18	CIQ #3 PAGE ZONE (00-40) : 00	Page Zone to receive CIQ #3 Announcement. eMG80/100:00~15 or 00~40, eMG800:0~105	Refer to description	00
24-19	CIQ #3 ANNC DELAY TMR (000-180) : 015	Delay timer for CIQ #3 Announcement.	000-180	015
24-20	CIQ #3 ANNC REPEAT TMR (000-180) : 005	Interval for repeating the CIQ #3 Announcement.	000-180	005
24-21	CIQ MENT ON/OFF (1:ON/0:OFF) : OFF	If enabled, queued callers receive the CIQ message (You are # in queue) after the 1st and 2nd announcement.	0: OFF 1: ON	OFF
24-22	ACD NO ANS TMR (000-180) : 000	Calls to an agent in the group are directed to the station, if unanswered in the NO ANSWER TIMER, the call is routed to another agent.	000-180	000
24-23	ACD 403 MBR FORWARD (1 : ON/ 0: OFF) : ON	A member activating Call Forward may be placed in an unavailable state for hunt group calls (ON). When OFF, group calls are sent to the member as normal.	0: OFF 1: ON	ON
24- 24-1	ACD 403 FORCED DEST S/H/V/SPD (DIAL 1-4)	When a call is delivered to the group the system can redirect the call to the Forced destination, if enabled under button 24-5 above. **1:Station, 2:Station group** **3:VSF Announce, 4:System speed**	Refer to description	-
24- 24-2	ACD Q CALL INDI 0(OFF)1(R/LED)2(LED):0	If there are queued group calls, the queuing indication can be served to group members by Mute Ring and LED button flashing. **0:OFF, 1:RING& LED, 2: LED only**	Refer to description	OFF
25	ACD 403RING TONE 00-16 (00: NA)	When a call is routed to a group, programmed ring tone is served to the group member.	00-16	0

Table 3.3.7.2-3 STATION GROUP ATTRIBUTES — RING GROUPS (PGM 191)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	RING 405 ANNC1 TMR(1s) (000 – 999) : 015	If all stations in the group are busy when a call is offered, the call may continue to wait (queue) for an available station. If the queue period exceeds this 1stAnnouncement Timer, the call may be sent to a VSF announcement. If the timer is set to 000, the call will receive the first announcement, in full, prior to the hunt process (guaranteed announcement).	000~999 seconds	015
2	RING 405 ANNC 2 TMR(1s) (000 – 999) : 000	After the 1stannouncement, a 2ndANNC TMR is activated. At expiration, if the call remains queued to the group, the call is sent to the assigned 2nd VSF announcement.	000~999 seconds	000
3	RING 405 ANNC1 LOC VSF ANNC .. (01–70)	Each Ring Group can be assigned an announcement, which is played if the call remains queued beyond the ANNC 1 TMR duration.The announcement location is a VSF ANNC1 number. An entry of 00 indicates no announcement. Including '#' at the end of an entry instructs the system to disconnect after the announcement.	01~70	00: none
4	RING 405 ANNC2 LOC VSF ANNC .. (01–70)	The Ring Group can be assigned a 2ndannouncement, which is played if the call remains queued beyond the ANNC 2 TMR duration. The announcement location is a VSF ANNC2 number. An entry of 00 indicates no announcement. Including '#' at the end of an entry instructs the system to disconnect after the announcement.	01~70	00: none
5	RING 405 ANNC2 RPT TMR (000 – 999) : 000	The 2ndannouncement can be repeated to calls that remain in the queue at Announcement 2 Repeat Timer intervals. Note repeating must be "ON" under button 6 below.	000~999 seconds	000
6	RING 405 ANNC2 RPT (1: ON / 0: OFF): OFF	After the 2ndannouncement, if the call remains queued to the group, the 2nd VSF announcement can be repeated at the Announcement Repeat Timer interval.	0: OFF 1: ON	OFF

Table 3.3.7.2-3 STATION GROUP ATTRIBUTES — RING GROUPS (PGM 191)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
7	RING 405 OVERFLOW DEST S/H/V/SPD (Dial 1-4)	A call to the group rings at member stations until the Overflow timer expires, then the call passes to the assigned Overflow Destination.**1:Station, 2:Station group**, **3:VSF Announce, 4:System speed**	Refer to description	
8	RING 405 OVERFLOW TMR (000 - 600) : 180	A call to a ring group will continue to ring stations in the group or be sent to the assigned Overflow Destination after the expiration of the OVERFLOW Timer.	000~600 seconds	180
9	RING 405 WRAP-UP TMR (000 - 999) : 002	After terminating any call, a Ring Group member will be maintained in a busy state for the duration of the WRAP-UP Timer.	000~999 seconds	002
10	RING 405 MUSIC SRC (00–37) : 01	A Music source is assigned so that calls to the group will receive audio from the assigned source in place of ring-back tone. • 00: Ring-back • 01: Int music • 02: Ext music • 03: VSF MOH • 04~08: SLTMOH1~5 • 09~37: VSFMOH2~30	Refer to description	01
11	RING 405 MAX QUE C-CNT (00-99) : 99	When the number of calls queued is reached, new calls will receive an error tone and be disconnected after the VSF AA announcement, if assigned, is played.	00-99	99
12	RING 405 MBR FORWARD (1 : ON/ 0: OFF) : ON	A member activating Call Forward may be placed in an unavailable state for hunt group calls (ON). When OFF, group calls are sent to the member as normal.	0: OFF 1: ON	ON
13	MAILBOX MSG WAIT STA	When a group calls overflows or routes to the VM group, a station number is used to identify the Mailbox for the Ring group messages.	Station	….
14	MAILBOX PASSWORD ……	The password associated with a group Mailbox is defined here. The password is used in conjunction with the Ring group as with a normal station.	12 digits	….
15	RING 405 FORCED DEST S/H/V/SPD (DIAL 1-4)	When a call is delivered to the group, the system can redirect the call to the Forced destination if enabled under button 16 below. **1:Station, 2:Station group** **3:VSF Announce, 4:System speed**	Refer to description	-

Table 3.3.7.2-3 STATION GROUP ATTRIBUTES — RING GROUPS (PGM 191)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
16	FORCED FWD DEST USAGE (1:ON/0:OFF): OFF	Enables the system to redirect group calls to the Forced destination defined under button 15 above.	0: OFF 1: ON	OFF
17	WAIT IF 1ST ANNC BUSY (1:ON/0:OFF): ON	When a call assigned to receive an announcement arrives and all channels are busy, the call may wait with Ringback until a channel is available (ON) or bypass the announcement.	0: OFF 1: ON	ON
18	GROUP NAME ……	It can be designated a Ring group name.	20 character	….
19	RING Q CALL INDI 0(OFF)1(R/LED)2(LED):1	When a station calls a Ring Group, DSS/BLF buttons assigned for the calling station will flash, and the muted ring is received.	0:OFF 1: R/LED 2: LED	R/LED
20	RING 405RING TONE 00-16 (00: NA)	When a call is routed to a group, the group member's programmed ring tone is served.	00-16	0

Table 3.3.7.2-4 STATION GROUP ATTRIBUTES — EXTERNAL VM GROUPS (PGM 191)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	VM 407 WRAP-UP TMR (000 – 999) : 002	After terminating any call, the VM port will be maintained in a busy state for the duration of the WRAP-UP Timer.	000~999 seconds	002
2	VM 407 PUT MAIL INDEX (1 – 4) : 1	For external analog Voice Mail groups, an index to the Voice Mail Dial Table	1~4	1
3	VM 407 GET MAIL INDEX (1 – 4) : 2	An index to the Voice Mail Dial Table contains the “Get Mail” dial code?	1~4	2
4	VM 407 HUNT TYPE (1 : CIR/ 0 : TERM): TERM	The type of Hunt process applied to the SLT ports connected to the VM can be assigned as Circular or Terminal.	0: TERM 1: CIRC	TERM
5	VM 407 OVERFLOW TMR (000 - 600) : 180	A call to a group will remain queued to the group or be sent to the assigned OVERFLOW DEST after the expiration of the OVERFLOW TMR.	000~600 seconds	180

Table 3.3.7.2-4 STATION GROUP ATTRIBUTES — EXTERNAL VM GROUPS (PGM 191)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
6	VM 407 OVERFLOW DEST S/H/V/SPD (Dial 1-4)	A call to the group will continue to route through the group until answered or all group members have been tried. The call will remain at the last station or routes to the assigned OVERFLOW DEST. **1:Station, 2:Station group 3:VSFAnnounce, 4:System speed**	Refer to description	-
7	FORCED FWD DEST USAGE (1:ON/0:OFF): OFF	When a call is delivered to the group, the system can redirect the call to the Forced destination if enabled under button 8 below.	0: OFF 1: ON	OFF
8	VM 407 FORCED DEST S/H/V/SPD (DIAL 1-4)	Enables the system to redirect group calls to the Forced destination defined under button 7 above.**1:Station, 2:Station group 3:VSFAnnounce, 4:System speed**	Refer to description	-
9	GROUP NAME ……	A hunt group name can be designated.	20 character	….
10	VM 407 SERVER TYPE (0:IPCR/1:3RD) : 3RD	Server Type can set 3rd or IPCR.	0: IPCR 1: 3RD	3RD
11	VM 407 SERVER NUMBER (01-10) : . .	Sever Number can set 01 ~ 10 for 237 table.	01-10	..
12	VM 407 MEMBER TYPE (0:SIP/1:SLT) : SLT	Server Member can set SIP or SLT.	0: SIP 1: SLT	SLT
13	VM 407 SERVER CAPACITY (001-140) : 000	Maximum number of channels of SIP VM (UMS).eMG80/100:0~140,eMG800:0~1200	Refer to description	0

Table 3.3.7.2-5 STATION GROUP ATTRIBUTES — PICK-UP GROUPS (PGM 191)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	PICK UP 408 AUTO PICKUP (1 : ON/ 0: OFF) : OFF	If a Pick-Up Group member is ringing, another member of the Pick-Up Group can Pick-Up a call ringing at another member by simply going “off-hook.”	0: OFF 1: ON	OFF
2	PICK UP 408 ALL RING (1 : ON/ 0: OFF) : OFF	When a call is offered to a member of the Pick-Up Group in the Tone Ring mode, all members will ring. NOTE)Auto Pickup, Button 1 must be “ON.”	0: OFF 1: ON	OFF

Table 3.3.7.2-6 STATION GROUP ATTRIBUTES — VSF-VM GROUP (PGM 191)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	VSF-VM409RETENSION(1d) (00 – 99) : 00	When voice messages are stored in the VSF, the system will maintain (store) the message for the maximum number of days set in this program (1 to 99 days). (Not used currently)	00-99 (day)	00
2	VSF-VM 409DIAL TIME (1s) (00 – 99) : 15	This timer determines the inter-digit time employed during a VSF-VM session. If this timer expires while the VSF-VM is awaiting user input, the system will assume the remote party has disconnected and will return the channel to idle.	00-99 (seconds)	15
3	VSF-VM GROUP NAME ……	A VSF-VM group name can be designated.	20 character	….

Table 3.3.7.2-7 STATION GROUP ATTRIBUTES — UMS GROUP (PGM 191)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	UMS 410 ANNC 1 TMR(1s) (000 - 999) : 015	If all stations in the group are busy when a call is offered, the call may continue to wait (queue) for an available station. If the queue period exceeds this 1st AnnouncementTimer, the call may be sent to a VSF announcement. If the timer is set to 000, the call will receive the first announcement, in full, prior to the hunt process (guaranteed announcement).	000~999 seconds	015
2	UMS 410 ANNC 2 TMR(1s) (000 - 999) : 000	After the 1st announcement, the 2nd ANNC TMR is activated. At expiration, if the call remains queued to the group, the call is sent to the assigned 2nd VSF announcement.	000-999 seconds	000
3	UMS 410 ANNC1 LOC VSF ANNC .. (01 – 70)	The Station Group can be assigned an announcement, which is played if the call remains queued beyond the ANNC 1 TMR duration. The announcement location is the VSF ANNC1 number. An entry of 00 indicates no announcement. Including '#' at the end of an entry instructs the system to disconnect after the announcement.	01~70	00: none

Table 3.3.7.2-7 STATION GROUP ATTRIBUTES — UMS GROUP (PGM 191)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
4	UMS 410 ANNC2 LOC VSF ANNC .. (01 – 70)	The Station Hunt Group can be assigned a 2nd announcement, which is played if the call remains queued beyond the ANNC 2 TMR duration. The announcement location is the VSF ANNC2 number. An entry of 00 indicates no announcement. Including '#' at the end of an entry instructs the system to disconnect after the announcement.	01~70	00: none
5	UMS 410 ANNC2 RPT TMR (000 - 999) : 000.	The 2nd announcement can be repeated to calls that remain in the queue at intervals of the Announcement 2 RepeatTimer. Note; repeating must be "ON" under button 6 below.	000~999 seconds	000
6	UMS 410 ANNC 2 RPT (1: ON / 0: OFF): OFF	After the 2nd announcement, if the call remains queued to the group, the 2nd VSF announcement can be repeated at the AnnouncementRepeatTimer interval.	0: OFF 1: ON	OFF
7	UMS 410 OVERFLOW DEST S/H/V/SPD (Dial 1-4)	A call to the group will continue to route through the group until answered or all group members have been tried. The call will remain at the last station or routes to the assigned OverflowDestination. **1:Station, 2:Station group** **3:VSFAnnounce, 4:System speed**	Refer to description	
8	UMS 410 OVERFLOW TMR (000 - 600) : 180	A call to a group will remain at the last station in the group or can be sent to the assigned OverflowDestination after the expiration of the OVERFLOW Timer.	000~600 seconds	180
9	UMS 410 NANS TMR(1s) (00 – 99) : 15	Calls to a station in the group are directed to the station. If unavailable or unanswered in the NO AnswerTimer, the call can be routed based on the assigned hunt process.	00~99 seconds	15
10	UMS 410 PILOT HUNT (1 : ON/ 0: OFF) : ON	An FS VM group can be set so that only calls to the pilot number (station group number) will hunt.	0: OFF 1: ON	ON
11	UMS 410 ALTER DEST STA/HUNT	When a call comes into the group, and there are no group members available, the call will be routed to the assigned AlternateDestination.	Station or Group Number	....
12	UMS 410 HUNT TYPE (1 : CIRC/ 0 : TERM): CIR	When a call is offered to the group, the Hunt process can be defined for Circular or Terminal hunt group.	0: TERM 1: CIR	CIR

Table 3.3.7.2-7 STATION GROUP ATTRIBUTES — UMS GROUP (PGM 191)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
13	UMS 410 WRAP-UP TMR (002 – 999) : 002	After terminating any call, the VM port will be maintained in a busy state for the duration of the WRAP-UP Timer.	002~999 seconds	002
14	FORCED FWD DEST USAGE (1:ON/0:OFF): OFF	Enables the system to redirect group calls to the Forced destination defined under button 15 below.	0: OFF 1: ON	OFF
15	UMS 410 FORCED DEST S/H/V/SPD (DIAL 1-4)	When a call is delivered to the group, the system can redirect the call to the Forced destination if enabled under button 14 above. **1:Station, 2:Station group** **3:VSFAnnounce, 4:System speed**	Refer to description	-
16	GROUP NAME ……	A hunt group name can be designated.	20 character	….

Table 3.3.7.2-8 STATION GROUP ATTRIBUTES — UCS SERVER GROUP (PGM 191)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	UCS SVR [411] ASSIGNED UC Server 1 (01–16)	UCS Server number, this value must be set to 1.	01-16	1

4.3.7.3 Pick Up Group Assignment – PGM 192

Under Pick-Up Group Assignments, members are assigned to the Station Pick Up Group.

PROCEDURE	
PICKUP GRP ASSIGN ENTER GRP NUM(00-49)	Press the **[PGM]** button and dial 192 and enter group number (Ex. 00). (eMG80/100:00~49/ eMG800:0~199)
PICKUP GRP 00 …. …. ….	Use the dial pad to enter the desired Pickup Group. The system will display the member of the pickup group.
PICKUP GRP 00 …. …. ….	Note for group members, enter a station or station range. For an individual station, press the desired Flex button for the station's position in the group and dial the station number. For a range, enter the first and last station numbers in the range.
	Press the **[Save]** button to store the data entry.

4.3.8 ISDN LINE & ICLID ROUTING DATA – PGM 200-206

Each ISDN (Integrated Services Digital Network) Line provides digital services to the end-user. Basic Rate Lines have three (3) channels, 2 B channels, and a D channel. The 2 B channels provide 64 Kbps each, a total of 128 Kbps for “Bearer” or voice channels.

The D channel provides a 16 Kbps signaling channel. Primary Rate Lines have 23/30 64 Kbps ‘B’ channels and 1/2 64 Kbps signaling channels.

For proper operation, entries are required for various attributes in PGM 200 ~ 202 to match the ISDN circuit and services from the PSTN.

4.3.8.1 ISDN Attributes – PGM 200

ISDN attributes define several characteristics of the ISDN interface. ISDN call cost services (Advice of Charge), CLI modification, voice encoding, and other interface characteristics are defined.

PROCEDURE	
SYSTEM ISDN ATT PRESS FLEX KEY (1-3)	Press the **[PGM]** button and dial 200.
	Press the Flex button for the desired Attribute; refer to Table 3.3.8.1-1.
	Use the dial pad to enter the desired Attribute data.
	Press the **[Save]** button to store the Attribute data entry.

Table 3.3.8.1-1 ISDN LINE ATTRIBUTES (PGM 200)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	CO ATD CODE (2DGT) ..	When the system is set to send the station number with ISDN CLIP or COLP, either the station number or this ATD code will be sent based on PGM 114 button 11.	1~2 digits	
2	CLI PRINT TO SERIAL (1:ON/0:OFF) : OFF	The ISDN Calling Line Id may be included in call records output over the serial port assigned for “Call Information,” PGM 175 button 5.	0: OFF 1: ON	OFF
3	DISPLAY DID INFO (1:ON/0:OFF) : OFF	Display DID digit information on LCD and printed it to the serial port.	0: OFF 1: ON	OFF
4	Print Destination in CLI Print (1:ON/0:OFF) : OFF	If this is set to ON, the following destination number is provided with ring Information. • Station Number, Station Group, CCR, Net station, Conference room	0: OFF 1: ON	OFF

4.3.8.2 CLIP/COLP Table – PGM 201

Normally, the system will send the primary Directory Number of the ISDN Line in the ISDN call SETUP and CONNECT messages to identify the caller (CLIP) or the answering (COLP) party, respectively.

Under certain circumstances, it may be desirable to provide a secondary or DID number for the ISDN Line. In these cases, the CLIP/COLP Table may be used to define the digits sent.

The number sent is selected based on the index assigned for the ISDN Line under CO/IP Attributes III (PGM 143).

For the CLIP/COLP Table entry, the CLI Station Number (PGM 114) is sent in place of the station number. For all other CLIP/COLP Table entries, the station number is sent as a suffix to the number in the Table.

Note that this number is sent only if CLIR and COLR are disabled under the CLIR Service and COLR Service assignments in the Station ISDN Attributes (PGM 114).

PROCEDURE	
CLIP/COLP TABLE ENTRY ENTER BIN NO (00 –4 9)	Press the **[PGM]** button and dial 201, and enter the bin number (Ex.00).
CLIP/COLP TABLE 00 …….	Use the dial pad to enter the desired Bin number (00-49)
	Use the dial pad to enter the desired CLIP/COLP data, maximum 10 digits.
	Press the **[Save]** button to store the CLIP/COLP data entry.

4.3.8.3 MSN Table – PGM 202

When an ISDN Line assigned for DID operation receives an incoming call, the call will be routed to a station based on the Flexible DID Table Index in the MSN Table.

PROCEDURE	
MSN TABLE ATT ENTER BIN NO (001 – 500)	Press the **[PGM]** button and dial 202, and enter the bin number (Ex.121). (eMG80/100:001~500/ eMG800:1~1500)
MSN TABLE 121 PRESS FLEX KEY (1 – 3)	Use the dial pad to enter an MSN Table index number.
	Press the Flex button for the desired MSN Table entry; refer to Table 3.3.8.3-1.
	Use the dial pad to enter the desired Table data.
	Press the **[Save]** button to store the Table data entry.

Table 3.3.8.3-1 MSN ATTRIBUTES (PGM 202)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	MSN TABLE 121 CO RANGE … - …	CO Line number is associated with the MSN.		None
2	MSN TABLE 121 INDEX : NOT ASSIGNED	Index to the Flexible DID Table, PGM 231.	000~999	None
3	TABLE 121 TEL NUMBER ……..	Telephone Number (called number)	23 Digits	None

4.3.8.4 ICLID Route Table – PGM 203

The system can employ ICLID (Incoming Calling Line Id) to determine the routing of incoming external calls. Each CO/IP Line and ACD group may be assigned to employ ICLID routing.

The system will compare the received ICLID to entries in the ICLID Route Table and, if a match is found, will route the call to the destination indicated by the index (bin) number of PGM 204.

PROCEDURE	
ICLID ROUTE TABLE ATT ENTER BIN NO (001-250)	Press the **[PGM]** button, dial 203, and enter the bin number (Ex.001).
ICLID ROUTE TABLE 001 PRESS FLEX KEY (1-4)	To program the ICLID Route table, dial Bin No (001 – 250).
	Press the Flex button for the desired ICLID Table entry; refer to Table 3.3.8.4-1.
	Use the dial pad to enter the desired Table data
	Press the **[Save]** button to store the Table data entry.

Table 3.3.8.4-1 ICLID ROUTE INDEX (PGM 203)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	ROUTE TABLE 001 INDEX : NOTASSIGNED	Index to the ICLID Ring Assignment Table PGM 204 that determines the call routing.	001~250	Not assigned
2	TABLE 001 ICLID NUMBER ……	ICLID (Incoming Caller Id) to match for the index. If the Caller Id matches the Table entry, the index is used to select the route from PGM 204.	24-digits 0 ~ 9 & '*' and '#' as a wild-card.	None
3	TABLE 001 ICLID NAME ……..	ICLID name that is sent by the system to the destination for the ICLID routed call.	12.Character	None
4	TABLE 001 ICLID TONE ..	If the ICLID Number is matched with the CID of the caller, the Ring tone is followed this ICLID Tone.	2 digits.01~12	None

4.3.8.5 ICLID Ring Assignment – PGM 204

If the Incoming Caller ID matches an entry in the ICLID Route Table, the index from the Table is used to determine the call routing from the ICLID Ring Assignment Table.

Separate ring assignments are made for Day, Night, and Timed Ring mode for each index, 001 to 250, in this table. When assigned to ring to a VSF announcement, the call can be automatically dropped after the announcement by entering '#' after the announcement number.

When CO Lines are programmed to Ring an external AA/VM, VSF, or Feature Server Group as an Automated Attendant, the Ring signal can be immediate or delayed, allowing other stations/groups to be assigned Ring and answer prior to signaling the AA. The delay is defined in seconds from 00 to 30.

PROCEDURE	
ICLID RING ASN TBL ATT ENTER BIN NO (001-250)	Press the **[PGM]** button and dial 204, and enter the bin number (Ex.001).
	Use the dial pad to enter the Index or Bin number (001 – 250).
	Press the desired Flex button: - Button 1: Day Ring - Button 2: Night Ring - Button 3: Timed Ring
PRESS KEY DAY NIGHT TIMED-R	Use the dial pad to select the destination type: - Dial 1: Station - Dial 2: Hunt Group - Dial 3: VSF Announcement - Dial 4: AA Ring Time - Dial 5 : Net number
	Use the dial pad to enter a value for the selected destination type.
	Press the **[Save]** button to store the data entry.

4.3.8.6 PPP Attributes – PGM 205

In addition to remote access via an IP network connection, the system database may be accessed remotely via MODU.

The system will request a user id and password, which must match one of the User Ids and passwords assigned. After matching id and password are entered, the iPECS Home page is provided, and Web Admin is available, as explained in section 4.

PROCEDURE	
PPP ATTRIBUTES PRESS FLEX KEY (1-7)	Press the **[PGM]** button and dial 205.
	Press the desired Flex button; refer to Table 3.3.8.6-1.
	Used the dial pad to enter desired data. Refer to Table 3.3.8.6-1 for appropriate entries.
	Press the **[Save]** button to store the data entry.

Table 3.3.8.6-1 PPP ATTRIBUTES (PGM 205)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	PPP DEST STA ….	Suppose the incoming capability is 64 Kbps unrestricted digital, and the called party number matches the PPP destination. In that case, the system will automatically answer the call and request a PPP ID and password.	Station number	None
2	PPP USER ID 1 likppp01	System accepts this PPP ID 1.	12Character	likppp01
3	PPP PASSWORD 1 Ipkts01	The password entered is used to authorize PPP ID 1.	12 Character	Ipkts01
4	PPP USER ID 2 likppp02	System accepts this PPP ID 2.	12 Character	likppp02
5	PPP PASSWORD 2 Ipkts02	The password entered is used to authorize PPP ID 2.	12 Character	Ipkts02
6	PPP SERVER IP ADDR 10 .0 .0 .3	The operator can configure the PPP Server IP Address with this option. The system must be restarted to apply.		10.0.0.3
7	PPP CLIENT IP ADDR 10 .0 .0 .2	The operator can configure PPP Client IP Address with this option. The system must be restarted to apply.		10.0.0.2

4.3.8.7 Prefix Dialing Table – PGM 206

With this table, three features can be supported.

- CO Call charges with NPR metering.
- SIP direct dialing with no wait inter-digit timer.
- ISDN Prefix Call – ISDN en-block Dialing with Prefix Call Setup.

If first some digits (up to 8 digits) of outgoing dial number are matched with Prefix Code of each table, this table can start work. By each CO-line (PGM 142 – F20), Table ID (0-6) can be set. This table ID (PGM 142 – F20) is associated with PGM 206 – each table ID.

PROCEDURE	
PREFIX DIALING TABLES ENTER BIN NO (001-500)	Press the **[PGM]** button, dial 206, and enter the bin number (Ex.001).
PREFIX TABLE 001 PRESS FLEX KEY(01-10)	Use the dial-pad to enter the Table index number (bin).
Refer to Table 3.3.8.7-1 DISPLAY	Press the desired Flex button, refer to Table 3.3.8.7-1
	Use the dial pad to enter desired data. Refer to Table 3.3.8.7-1.
	Press the **[Save]** button to store the data entry.

Table 3.3.8.7-1 Prefix Dialing Table (PGM 206)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	001 PREFIX CODE	Enter the Prefix code. (Max 8 digits)		
2	001 TABLE ID (0 – 6) : 0	Enter Table ID (0-6). 0 means NOT used.	0-6	0
3	001 MIN DIGIT (00 – 30) : 00	Select the minimum dial digits (00-30)	00-30	00
4	001 MAX DIGIT (00 – 30) : 00	Select the minimum dial digits (00-30)	00-30	00
5	001 NUM OF TYPE(0-6) UNKNOWN(0)	Select Number of Type (0~6). • 0:Unknown • 1:International • 2:National • 3:Network Spec • 4:Subscriber • 5:Abbreviated • 6:Reserved	Refer to description	0

Table 3.3.8.7-1 Prefix Dialing Table (PGM 206)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
6	001 NUM PLAN(0-6) UNKNOWN(0)	Select Numbering Plan (0~6). • 0:Unknonw • 1:ISDN/Telephony • 2:Data numbering • 3:Telex • 4:National standard • 5:Private • 6:Reserved	Refer to description	0
7	001 SENDING COMPLETE (1:ON/0:OFF) : OFF	Select Sending Complete option. (On/Off)	0-1	OFF
8	001 CALL TYPE (0-5) UNKNOWN(0)	Call Charge Type (0~5). • 0:Unknown • 1:Local • 2:Long Distance • 3:International • 4:Mobile • 5:reserved	Refer to description	0
9	001 CALL TIMER(sec) (000 – 999) : 000	Call Charge Timer can be assigned. By this timer value Call Metering can be established.	000-999	000
10	001 CALL COST 000000	Call Cost is calculated by CALL TIMER. (ex : timer is 1 min, cost is 000020, then after 3 minute call, total call cost is calculated to 000060)	000000-999999	000000
11	001 FLAT RATE (1:ON/0:OFF) : OFF	If Flat Rate is ON, Flat Rate is applied by CALL COST per a call	0-1	OFF
12	PREFIX TABLE INIT PRESS [HOLD] TO INIT	Initialize Prefix table.		

4.3.9 TABLES DATA – PGM 220 to 235

4.3.9.1 LCR Assignment Tables - PGM 220 to 223

The LCR Tables provide a mechanism to define the database, which will route outgoing calls, particularly long-distance, using the most cost-effective route. User dialed digits are compared to table entries and modified appropriately based on time of day, day of the week, and assigned routes.

There are four LCR Tables, LCR Control Attributes, LCR Leading Digit Table, LCR Digit Modification Table, and LCR Initialization Table.

4.3.9.1.1 LCR Control Attributes - PGM 220

The LCR Control Attributes, among others items, allows access to the LCR Access Mode assignments. The LCR Access Modes define the user operations that will access the LCR feature.

The LCR Access Modes are:

MODE	DESCRIPTION
Mode 00:	LCR Disabled
Mode 01:	Loop (user dials '9' or CO/IP Group code (8xx) or presses a Loop button)
Mode 02:	Loop and Internal (user dials digits without a CO/IP Access Code prefix)
Mode 11:	Loop and Direct CO Line (user dialed CO Line Access Code or presses **{CO}** button).
Mode 12:	Loop, Direct CO Line, and Internal
Mode 13:	Loop, Direct CO Line, Internal and Direct

In addition, days of the week are grouped into zones (Day Zones), and the time of day can be set into three groups (Time Zones). Table 3.3.9.1.1-1 provides general descriptive information and input ranges.

PROCEDURE	
LCR CONTROL ATTRIBUTES PRESS FLEX KEY (1-5)	Press the **[PGM]** button and dial 220.
	Press Flex button 1~5, refer to Table 3.3.9.1.1-1.
	For LCR Access Mode and Time Zones, use the dial-pad to enter desired data and proceed to step 5). Refer to Table 3.3.9.1.1-1 for input ranges. For Day Zones, press the Flex button 1~7 to select the day of the week, Monday: Flex button 1 to Sunday: Flex button 7.
	For Day Zones, after selecting the desired day of week Flex button, use the dial pad to enter the desired zone, 1~3.
	Press the **[Save]** button to store the data entry.

Table 3.3.9.1.1-1 LCR CONTROL ATTRIBUTES (PGM 220)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	LCR ACCESS MODE (1-6) (M00) DISABLE LCR	This entry defines the effective LCR modes, the modes by which the user can access LCR.	M00: 1 M01: 2 M02: 3 M11: 4 M12: 5 M13: 6	1

Table 3.3.9.1.1-1 LCR CONTROL ATTRIBUTES (PGM 220)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
2	DAY ZN 1:1234567 2: 3: M1 T2 W3 T4 F5 SA6 SU7	For each day of the week, a Day Zone (1 to 3) is assigned. The active Day Zone is the Zone assigned to the current day of the week (Flex button 1~7).	Flex 1~7 + 1~3	Zone 1: all days of the week
3	TIME ZONE 1 1:00-24 2: . .-. . 3:. .- . .	This entry defines the hours of the day during which Time Zone 1 is active. Note hours not defined in Time Zone 2 and 3 are automatically part of Time Zone 1.	00~24	00~24
4	TIME ZONE 2 1:00-24 2: . .-. . 3:. .- . .	This entry defines the hours of the day during which Time Zone 2 is active.	00~24	00~24
5	TIME ZONE 3 1:00-24 2: . .-. . 3:. .- . .	This entry defines the hours of the day during which Time Zone 3 is active.	00~24	00~24

4.3.9.1.2 LCR Leading Digit Table — PGM 221

The Leading Digit Table is used to analyze the user-dialed digits to determine an appropriate Digit Modification Table Index. LDT Tables are provided for 32 LDT Table for iPECS-1200, 10 for the other systems.

The Table is divided into bins. The applicable LCR Access Modes (LCR Type) and the digits (up to the first 12) to be compared with the number dialed by the user are entered in the Leading Digit Table bin.

In addition, indices to the Digit Modification Table are defined for each Time Zone of each Day Zone; refer to LCR Control Attributes PGM 220.

Note the mode used to access LCR must match the LCR Type and must be within the effective LCR Access Mode assigned in PGM 220 to access the Digit Modification Table index. The allowed LCR Types are:

- **CO Line or Loop access**: User dials CO Line Access Code, CO/IP Group Access Code (8xx), Any CO Line Access Code '9', or presses a CO Line, CO/IP Group, or Loop button.
- **Internal**: User dials outgoing call while receiving Intercom dial tone with no CO/IP access code.
- **Both**: Both COL and Internal.

In addition, each Leading Digit Table bin has the option to require an authorization code entry. When the user-dialed digits match an entry in the LCR Leading Digit Table, the system will check the Authorization option for the LDT Table bin. If the Authorization option is enabled, the user must enter a valid Authorization code to place the call.

PROCEDURE	
LDT TABLE ENTER LDT TBL NO (01-10)	Press the **[PGM]** button and dial 221 and enter LDT Table number (Ex.01).(eMG80/100:01~10/eMG800:1~32)
LDT 01 TABLE ENTER LDT BIN (000)	Enter the LDT Table number (Ex.000).
000 BOTH CD: . . . . . . DMT:	The system displays the first available bin (000~249) of the Leading Digits Table. To select a different bin, use the dial pad to enter the desired bin number.
	Press the desired Flex button (1~6). Refer to Table 3.3.9.1.2-1.
	Use the dial pad to enter the desired Leading Digit Table data. Refer to Table 3.3.9.1.2-1.
	Press the **[Save]** button to store the data entry. Note, as the data is stored, the system sorts the LDT bins in ascending order to allow rapid "look-up" of data. Thus, the bin number will be changed appropriately.

Table 3.3.9.1.2-1 LCR LEADING DIGITS (PGM 221)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	LDT 01/000 : LCR TYPE LCR MODE : BOTH (3)	This entry defines the LCR modes that will apply to this Leading Digit Table bin. To apply the DMT index, the LCR Type must be part of the LCR Mode defined in PGM 220.	1: Internal 2: CO Line 3: Both	Both

Table 3.3.9.1.2-1 LCR LEADING DIGITS (PGM 221)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
2	LDT 01/000: LCR CODE	Up to 12 digits that, if matched by the user dialed digits, will access the DMT entry for the index assigned for the Day and Time zone below.	12 digits 0 ~ 9 and '*' as a wildcard	
3	LDT 01/000 : DAY 1 DMT INDEX(6DGT):	This entry defines the Digit Modification Table index (00~99) for each Time Zone for Day Zone 1. The appropriate index will be selected for the current Day and Time Zone. An entry of 6 digits (2 per Time Zone) must be entered.	00~99 3 DMT indices	
4	LDT 01/000: DAY 2 DMT INDEX(6DGT):	This entry defines the Digit Modification Table index (00~99) for each Time Zone for Day Zone 2. The appropriate index will be selected for the current Day and Time Zone. An entry of 6 digits (2 per Time Zone) must be entered.	00~99 3 DMT indices	
5	LDT 01/000: DAY 3 DMT INDEX(6DGT):	This entry defines the Digit Modification Table index (00~99) for each Time Zone for Day Zone 3. The appropriate index will be selected for the current Day and Time Zone. An entry of 6 digits (2 per Time Zone) must be entered.	00~99 3 DMT indices	
6	LDT 01/000: CHK PASSWORD (1:ON / 0:OFF) : OFF	If enabled (ON), when the dialed digits match the LDT table digits, the system will send a second dial tone to request the user input a valid Authorization code.	0: OFF 1: ON	OFF
7	LDT 01/000: ZONE NO (001-100) : 001	If the LDT Zone Number of a station/co line equals this value, this LDT table is available to the station/co line.	001-100	001

4.3.9.1.3 LCR Digit Modification Table — PGM 222

Using the index determined from the analysis of the LCR Leading Digits Table PGM 221, the dialed number is modified by the Digit Modification Table and sent over the CO/IP group assigned for the index. Digits of the dialed number can be deleted based on the "Removal Position (RP)" and "Number of Remove digits (NR)," and a digit stream can be inserted in the resulting number.

Counting from the first dialed digit, the Removal Position defines the location of the digit where removal begins and, NR defines the number of digits to remove. The "Add Digit Stream" is then inserted in the resulting number at the digit position assigned by the Add Position entry. The resulting number is then dialed over the CO/IP path assigned. If the assigned path is not available, the "Alternate DMT index" is used to determine the number and CO/IP path to be used. Table 3.3.9.1.3-1 provides the displays, descriptions, and entry range for the Digit Modification Table.

PROCEDURE	
DMT TABLE ENTER DMT BIN (00-99)	Press the **[PGM]** button, dial 222, and enter the DMT bin number (Ex.55).
55 A: . . . . . . RP01 NR00 AP01 CG01 AD ..	Using the dial pad enter the desired Digit Modification Table index.
	Press the Flex button (1~6) for the desired Table entry. Refer to Table 3.3.9.1.3-1.
	Use the dial pad to enter the desired Digit Modification Table data. Refer to Table 3.3.9.1.3-1.
	Press the **[Save]** button to store the data entry.

Table 3.3.9.1.3-1 LCR DIGIT MODIFICATION (PGM 222)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	DMT 55 ADDED DGT	This entry defines the digit stream to insert in the number after digits are removed. Digits 0~9, '*,' '#,' and special characters: • **[HOLD]**: timed Pause • **[DND]**: Dial tone detect • **[FLASH]**: Billing station number	25 digits	
2	DMT 55 REMOVAL POSITION (01-12) : 01	This entry defines the digit's position where removal is to begin, starting with the 1st dialed digit (01).	01~12	01
3	DMT 55 NUM OF REMOVE DIGITS (00-12) : 00	This entry defines the number of digits to remove starting at the “Removal Position.”	00~12	00
4	DMT 55 ADD POSITION (01-13) : 01	This entry defines the position in the number (after digits are removed) where the Add Digits are inserted.	01~13	01
5	DMT 55 CO/IP GROUP (01-21) : 01	This entry defines the CO/IP Group that the system will attempt to use for the call.	01~21	01
6	DMT 55 ALT INDEX (00-99) : . .	This entry defines an Alternate Digit Modification Table Index to use if no path is available in the assigned CO/IP Group.	00~99	
7	DMT 55 NET NUM PLAN BIN (000-251) : . . .	This entry defines the Net Number Plan Table bin that the system will attempt to use for the transit outcall.	000~251	
8	DMT 55 SMDR CODE	This is only used for TNET with CM. This code will be sent to CM when the TNET status is changed from Local survival mode to bypass mode.	4 digit	

4.3.9.1.4 LCR Table Initialize — PGM 223

The LCR Table Initialize allows global values to be assigned to the various Digit Modification Table entries. In addition, the LCR Leading Digits and LCR Digit Modification Tables can be initialized, with no entries state.

PROCEDURE	
INITIALIZE LCR DB PRESS FLEX KEY (1-6)	Press the **[PGM]** button and dial 223.
	Press the Flex button (1~6) for the desired Table entry. Refer to Table 3.3.9.1.4-1.
	Use the dial pad to enter the desired LCR data. Refer to Table 3.3.9.1.4-1.
	Press the **[Save]** button to store the data entry.

Table 3.3.9.1.4-1 LCR TABLE INITIALIZES (PGM 223)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	ENTER DMT INIT VAL(DAY1)	This entry permits the global setting of the Digit Modification Table Time Zone 1 to 3 indices for Day Zone 1.	00~99 3 DMT indices	
2	ENTER DMT INIT VAL(DAY2)	This entry permits the global setting of the Digit Modification Table Time Zone 1 to 3 indices for Day Zone 2.	00~99 3 DMT indices	
3	ENTER DMT INIT VAL(DAY3)	This entry permits the global setting of the Digit Modification Table Time Zone 1 to 3 indices for Day Zone 3.	00~99 3 DMT indices	
4	ENTER CO GRP INIT VAL . .	This entry permits the global setting of the CO/IP Group to be used for LCR calls.	01~21	
5	ENTER ALT INDEX INIT VA . .	This entry permits the global setting of the Digit Modification Alternate Index.	00~99	
6	INITIALIZE ALL LCR ?	Pressing **[Save]** will return the LCR LDT and DMT tables to the default (no entries) setting.		

4.3.9.2 Toll Tables – PGM 224

There are five Toll restriction Tables, and each has a pair of Table entries. Each pair consists of an Allow and a Deny entry. Allow and Deny entries for Table 'A' applies to Station and DISA Class of Service 2, 4, and 11.

Allow and Deny entries for Table 'B' apply to Station and DISA Class of Service 3, 4, and 11. Allow and Deny entries for Table 'C' apply to Station and DISA Class of Service 5 and 6.

Allow and Deny entries for Table 'D' apply to Station and DISA Class of Service 8, 10, and 11. Allow and Deny entries for Table 'E' apply to Station and DISA Class of Service 9, 10, and 11.

For each Table, there can be up to 50 separate Allow and Deny entries (total of 100) of up to 20 digits. Entries in the Tables can be any digit (0-9), "#" as a wild card (don't care) digit, or "*" as an end of entry digit.

Based on Table entries, stations or DISA users are allowed or denied dialing specified numbers. The following rules apply to establishing restrictions based on the Table entries:

- No restrictions are applied if the appropriate Allow/Deny Table pair has no entries and COS is 2 to 4 or 8 to 9. If the COS is 5 or 6, no Long Distance dialing is allowed.
- If entries are only made in the Allow Table, only those numbers entered can be dialed. All other dialed numbers will be restricted.
- If entries are only made in the Deny Table, only those numbers entered will be restricted, and all other numbers can be dialed.
- When there are entries in both the Allow and Deny Table pair, the number will be restricted if the number is in the Deny Table. Otherwise, the number can be dialed without restriction.

PROCEDURE	
TOLL EXCEPTION TABLES PRESS FLEXKEY (01-10)	Press the **[PGM]** button and dial 224.
ALLOW TABLE A ENTER BIN NO (01-50)	Press Flex button 1~10: - Button 1: Allow Table A - Button 2: Deny Table A - Button 3: Allow Table B - Button 4: Deny Table B - Button 5: Allow Table C - Button 6: Deny Table C - Button 7: Allow Table D - Button 8: Deny Table D - Button 9: Allow Table E - Button 10: Deny Table E
	Use the dial-pad to select a bin number (01~50).
	Use the dial-pad to enter the dialed number desired (up to 20 digits). Use "#" as a wild card to represent any digit and, at the end of an entry, dial "*" to end the entry. To delete a Toll Table entry, press the **[SPEED]** button.
	Press the **[Save]** button to store the data entry.

4.3.9.3 Emergency Code Table – PGM 226

The Emergency Code Table is used to identify emergency numbers which, when dialed, will override all COS dialing restrictions.

An Emergency Code number may be up to fifteen (15) digits in length.

PROCEDURE	
EMERGENCY SVC CALL ENTER BIN NO (01 - 10)	Press the **[PGM]** button, dial 226, and enter the bin number (Ex.01).
EMERGENCY SVC CALL BIN 01: 911	Use the dial-pad for the desired Emergency code entry, 01 ~ 10.
	Use the dial-pad to enter the Emergency code number. After entering the number dial "*," the number is displayed with an "E" indicating END of entry.
	Press the **[Save]** button to store the data entry.

4.3.9.4 Authorization Codes Table – PGM 227

Authorization codes are employed to control access to the system resources and facilities. Walking COS, CO/IP Group access, DISA callers, and certain Call Forward types may require an input of a valid Authorization code. Codes up to 12 digits may be entered into the system database.

The station has an associated Station Authorization bin, which can be assigned by the user from the user's telephone. The System Authorization codes are stored in System bins and are entered or deleted only through Admin.

PROCEDURE	
AUTHORIZATION CODE F1:STA_AUTH F2:SYS_AUTH	Press the **[PGM]** button and dial 227.
	Press Flex button 1 or 2 to select the desired entry: - Flex button 1 - Station authorization code - Flex button 2 - System Authorization code
	For Flex button 1, enter a station range, enter the same station number twice for a single station entry. Then press Flex button 1 to set the password and Flex button 2 to set the COS (Day, Night, and Timed).
	Use the dial-pad to enter the Authorization code or COS.
	Press the **[Save]** button to store the data entry.

Table 3.3.9.4-1 AUTHORIZATION CODES (PGM 227)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	AUTHORIZATION CODE ENTER STA RANGE	Authorization code for each station can be assigned up to 12 digits in length (enter STA range (Ex. 100110)).		
1-1	STATION AUTHORIZATION 100-110 :	Authorization codes for system-wide use can be assigned up to 12 digits in length.	100-239	
2	AUTHORIZATION CODE ENTER BIN NO(001-360)	Selects attribute, code or Class of Service. eMG80/100:001~360,eMG800:1~1200	Refer to description	
	SYSTEM AUTHORIZATION F1:SET_PWD F2:SET_COS	Press Flex button 1 or 2 to select the desired entry: Flex button 1 –Set Password Flex button 2 –Set class of service	Flex button1-2	
2-1	SYSTEM AUTHORIZATION 001:	A password of up to 12 digits is defined.		
2-2	SET COS : F1:DAY F2:NIGHT F3:TIME	Establish the COS associated with the System Authorization code during Day, Night, and Timed Service modes.	Flex button1-3	

4.3.9.5 Customer Call Routing/VSF AA Table – PGM 228

The system incorporates IVR (Integrated Voice Response) capabilities called CCR (Customer Call Routing). After or during a VSF AA Announcement, a caller may dial a digit to select a destination or route for the call. The CCR/VSF-AA Routing Audio Text Table defines the destination associated with digits dialed by the caller in response to the VSF AA Announcement (001-200). Up to 200 single-level Audio Text menus may be assigned or, multi-level menu structures (maximum 200 levels) can be established using one menu as a destination for the previous level.

PROCEDURE	
CUSTOM CALL ROUTING SELECT CCR TABLE (01-70)	Press the **[PGM]** button and dial 228, and select CCR table (Ex.01).
CCR TABLE 01 PRESS FLEX KEY (01-14)	Use the dial-pad to select a CCR Table index, 001~200. The index number 001-200 is the VSF Announcement number
CCR TABLE 01 INPUT 1 : NOT ASSIGNED	Press a Flex button (1~13, 10=0) to assign the associated CCR dialed digit route. (11~13 is assigned to busy, no answer, error destinations) - Flex buttons 01-10 are matched with input dial digits from the outside user. The flex key number 10 is matched with dial digit 0. - Flex button 11-13 are related with CCR re-route Busy / Error / No Answer destination – The destination type is Tone / Attendant / Hunt Group / VSF Announcement. - Flex button 14 is CCR One Digit Only option. If this option is set to ON, the user can dial only one digit. If this option is set to OFF, the user can dial more than one digit. That means CCR or DISA service can be possible. - Flex Button 15 is a Temporary Announcement Use option. - Flex Button 16 is a Temporary Announcement No setting option. In CCR announcement 3, if the Temporary Announcement Use option is ON, Temporary Announcement No is set to 5, then the temporary announcement 5 is played. The temporary announcement can be used in holiday or emergency cases. When Temporary Announcement Usage is set to ON, programmed Temp Announcement is played instead of CCR table announcement. Remote Access can also set this Temporary Announcement by using the [Remote Access to Mobile Extension] feature. After access to Mobile Extension, To turn On Temp Announcement, 8 + CCR Announcement Number. To turn Off Temp Announcement, 9 + CCR Announcement Number. - Flex Button 17 is [*] Button Used As. - Flex Button 18 is [#] Button Used As. There are 3 options available - Repeat First Annc / Repeat Current Annc / Access Voice Mail Remotely
CCR TABLE 01 INPUT 1 : ...	Use the dial-pad to enter the Type and Value for Destination. Refer to Table 3.3.9.5-1 for Type and value codes.
	Press the **[Save]** button to store the data entry.

Table 3.3.9.5-1 CCR DESTINATIONS (PGM 228)

TYPE	DESCRIPTION
01	Route to a Station
02	Route to a Hunt Group
03	Route with System Speed Dial
04	Route as PBX Transfer with System Speed Dial (Flash then dial speed dial digits)
05	Route to VSF Announcement
06	Route to VSF Announcement and disconnect
07	Route to Networked Station
08	Conference Room
09	Internal Page (eMG80/100:1~35 / eMG800:1~100)
10	External page
11	All Call Page
12	Route to voice mail (station group/station number)
13	Company Directory
14	Record VM Greeting
15	Room Type Conf Group Join (Value: system conference group number) (Value Range: eMG80/100(0 or 100~139), eMG800/UCP(0 or 100~259)
16	UCS system conference group (eMG80/100:100~139 / eMG800:100~259)

4.3.9.6 Executive/Secretary Table – PGM 229

Stations can be paired as Executive/Secretary pairs so that when the Executive enters DND, intercom, and transfers calls are automatically routed to the Secretary. An Executive may have only one Secretary; however, a Secretary can be assigned to multiple Executives. A Secretary of one pair may be the Executive of another; however, assignments that form a loop-back are not allowed. In addition, when active, the Secretary can be assigned to receive the Executive's voice messages. Refer to Station Attributes III PGM 113 button 10.

PROCEDURE	
EXEC/SEC PAIRS ENTER BIN NO (01-36)	Press the **[PGM]** button, dial 229, and enter the bin number (Ex.01).
EXEC/SEC PAIR 01 PRESS FLEX KEY(1-7)	Use the dial-pad to enter the desired Executive/Secretary pair bin.
	Press the desired Flex button; refer to Table 3.3.9.6-1.
	Press the **[Save]** button to store the data entry.

Table 3.3.9.6-1 EXECUTIVE/SECRETARY PAIRS (PGM 229)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	EXEC/SEC PAIR 01 PAIR 1 : . . . /. . .	Assign Executive/Secretary pair stations.		
2	CO CALL TO SEC (1:ON/0:OFF) : OFF	If desired, all incoming CO calls to the Exec. The call is routed to the Secretary's station regardless of the Executive's status.	0: OFF 1: ON	OFF
3	CALL EXEC IF SEC DND (1:ON/0:OFF) : OFF	If the Secretary is in DND, Executive calls can be routed back to the Executive.	0: OFF 1: ON	OFF
4	EXEC GRADE (01-12): 12	Higher (or equal) grade Executives can override the Executive/Secretary Forward feature (5th: ICM call to SEC) to call a lower grade Executive. Highest grade: 01, Lowest grade: 12.	01~12	12
5	ICM CALL TO SEC (1:ON/0:OFF) : OFF	If this option is ON, all internal calls to the executive station (except for calls from higher or same grade executive) are routed to the Secretary's station regardless of the Executive's status.8801 Default value Korea, India, Israel, Turkey, Thailand: ON Otherwise: OFF	0: OFF 1: ON	OFF
6	SEC. AUTO ANS (1:ON/0:OFF) : OFF	When the executive calls the secretary who is in 'T' mode. The call will be answered in hands-free mode if it is ON.	0: OFF 1: ON	OFF
7	EXEC GROUP (00-50) : 00	If Group is greater than 1, it works that lower grade executives can call higher grade executives directly when they are in the same group.	00-50	00

4.3.9.7 Flexible DID Conversion Table – PGM 231

When the received DID digits are converted as in PGM 230, the resulting 4 digit number may be used as an index to the Flexible DID Conversion Table. The Flexible DID Table index is used when DID Line is assigned a Conversion type 2; refer to PGM 145 Flex button 2. Based on the index from PGM 230 and the system mode (Day, Night, or Timed), a destination for the DID call was determined. The destination can be a VSF AA Announcement with CCR assigned, allowing further routing of the call, or can route using the ICLID routing tables.

PROCEDURE:	
FLEX DID CONV TABLE F1:INPUT F2:INIT F3:DEL	Press the **[PGM]** button and dial 231.
FLEX DID CONV TBL INPUT ENTER BIN NO (0000-9999)	Select Flex button 1~3: - Flex button 1: Input new data, Flex button 2: Initialize Table, Flex button 3: Delete entry Enter the bin number (Ex.0001)
TABLE BIN 001 PRESS FLEX KEY (1-9)	Use the dial pad to enter a Table index (0000~9999).
	Press the Flex button 1~9 to select the desired destination. Refer to Table 3.3.9.7-1.
	Use the dial pad to enter the desired type and value for the destination. Refer to Table 3.3.9.7-2.
	Press the **[Save]** button to store the data entry.

Table 3.3.9.7-1 FLEXIBLE DID CONVERSION (PGM 231)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	TABLE 001 NAME ……...	Name associated with the destination.	11 characters	
2	TABLE 001 DAY DEST NONE (01-15)	Destination setting for Day Ring mode.	01-15	
3	TABLE 001 NIGHT DEST NONE (01-15)	Destination setting for Night Ring mode. Table 3.3.9.7-2.	01-15	
4	TABLE 001 TIMED_R DEST NONE (01-15)	Destination setting for Timed Ring mode. Table 3.3.9.7-2.	01-15	
5	TABLE 001 REROUTE DEST NONE (01-15)	Destination setting for Reroute Dest mode. Table 3.3.9.7-2.	01-15	
6	TABLE 001 USE ICLID (1:ON/O: OFF) : OFF	A DID Conversion Table index can be assigned to employ ICLID routing, section 3.3.8.4.	0: OFF 1: ON	OFF

Table 3.3.9.7-1 FLEXIBLE DID CONVERSION (PGM 231)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
7	TABLE 001 AUTO RING TBL (00-16),16:N/A) : 00	A DID Conversion Table Index can be assigned to employ an Auto ring mode table, section 3.3.9.9.	00-16	00
8	TABLE 001 MOH : (00-37) REFER TO CO HOLD(00)	A Music source is assigned so that calls to the destination receive audio from the source in place of ring-back tone. • 00: Refer to CO Hold • 01: INT Music • 02: EXT Music • 03: VSF MOH • 04~08: SLT MOH1~5 • 09~37: VSF MOH2~30	Refer to Description	Refer to CO Hold
9	TABLE 001 RING TONE (00-16, 0:N/A) : 00	The ring tone of destination is followed this ring tone value.	2 digits. 00~16	00

Table 3.3.9.7-2 FLEXIBLE DID DESTINATION (PGM 231)

TYPE	DESCRIPTION
01	Route to a Station
02	Route to a Hunt Group
03	Route with System Speed Dial
04	Route as PBX Transfer with System Speed Dial (Flash then dial speed dial digits)
05	Route to VSF AA Announcement
06	Route to VSF AA Announcement and disconnect
07	Route to a Networking Station
08	Conference Room
09	Internal Page
10	External page
11	All Call Page
12	Voice Mail Box Group
	Voice Mail Box Station
13	ICLID Ring Assignment Table
14	Company Directory
15	Record VM Greeting
16	Room Type Conf Group Join (Value: system conference group number) (Value Range: eMG80/100(0 or 100~139), eMG800/UCP(0 or 100~259)

4.3.9.8 System Speed Zone Table – PGM 232

The System Speed Dial numbers can be grouped into zones. Only stations allowed can access numbers within a zone, allowing System Speed Dials to be partitioned. Before dialing, each zone can be assigned to apply the appropriate Station and CO Line COS for the Speed Dial number.

PROCEDURE:	
SYSTEM SPEED ZONE PGM ENTER BIN NO (01-10)	Press the **[PGM]** button, dial 232, and enter the bin number (Ex.01).
SYSTEM SPEED ZONE 1 F1:ZN F2:ST F3:TK F4:AK	Using the dial pad, enter zone number 01~10.
	Press the Flex button 1~3 for the desired zone characteristic. Refer to Table 3.3.9.8-1.
	Using the dial pad, enter the desired data as indicated in Table 3.3.9.8-1.
	Press the **[Save]** button to store the data entry.

Table 3.3.9.8-1 SPEED ZONE (PGM 232)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	ENTER NEW ZONE RANGE ZONE 1 : 2200- 4999	Speed Dial Bin range for zone.	2200-4999	eMG80/100:2200~4999, eMG800:2200~9999
2	ENTER STA RANGE ZONE 1 : 100 – 239	Station range for zone.	100-239	eMG80/100:100~239, eMG800:1000~2199
3	SPEED ZONE 1 TOLL CHK (1:ON/0:OFF) : ON	Assignment to apply toll restriction.	0: OFF 1: ON	ON
4	SPEED ZONE 1 AUTH CHK (1:ON/0:OFF) : ON	Speed Dial Authorization Check for zone.	0: OFF 1: ON	ON

4.3.9.9 Auto Ring Mode – PGM 233

The system can automatically select the Ring and COS Mode based on the time of day and day of the week. Three Ring and COS modes are supported, Day, Night, and Timed modes.

The ring assignments are as defined in CO/IP Ring Assignment - PGMs 144. The COS assignments are defined in the DISA COS - PGM 166.

The start times for Day, Night, and start and end times for timed modes are entered for each day of the week. When the Timed mode ends, the system reverts to the appropriate mode based on the Day/Night settings and the time of day.

The Attendant can override the automatic selection and select the desired system Mode (Day, Night, and Timed). A separate Auto Ring Table can be established for each ICM Tenancy Group - PGM 125 (indices 1 ~ 15) and for the system (index 00).

PROCEDURE:	
WEEKLY TIME TABLE DIAL DIGIT (00-15)	Press the **[PGM]** button and dial 233 and enter Dial digit (Ex.00).(eMG80/100:00~15/eMG800:00~32)
WEEKLY TIME TBL 0 PRESS FLEX KEY (1-7)	Use the dial-pad to enter a tenant Table index or 00 for the system (00~15).
	Press the Flex button 1~7 for the desired day of the week (Monday ~Sunday) followed by Flex button 1~3 for the desired ring mode (Day, Night, Timed), refer to Table 3.3.9.9-1.
	Use the dial pad to enter a time (military time), 0000 to 2359.
	Press the **[Save]** button to store the data entry.

Table 3.3.9.9-1 AUTO RING MODE ASSIGNMENT (PGM 233)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	MON DAY-09:00 NITE-18:00 TDS-..:.. TDE-..:..	Monday DAY/NIGHT/TIMED ring mode start times and TIMED mode end times.	0000~2359	DAY: 9:00 NITE: 18:00 TDS: ..:.. TDE: ..:..
2	TUE DAY-09:00 NITE-18:00 TDS-..:.. TDE-..:..	Tuesday DAY/NIGHT/TIMED ring mode start times and TIMED mode end times.	0000~2359	DAY: 9:00 NITE: 18:00 TDS: ..:.. TDE: ..:..
3	WED DAY-09:00 NITE-18:00 TDS-..:.. TDE-..:..	Wednesday DAY/NIGHT/TIMED ring mode start times and TIMED mode end times.	0000~2359	DAY: 9:00 NITE: 18:00 TDS: ..:.. TDE: ..:..
4	THU DAY-09:00 NITE-18:00 TDS-..:.. TDE-..:..	Thursday DAY/NIGHT/TIMED ring mode start times and TIMED mode end times.	0000~2359	DAY: 9:00 NITE: 18:00 TDS: ..:.. TDE: ..:..
5	FRI DAY-09:00 NITE-18:00 TDS-..:.. TDE-..:..	Friday DAY/NIGHT/TIMED ring mode start times and TIMED mode end times.	0000~2359	DAY: 9:00 NITE: 18:00 TDS: ..:.. TDE: ..:..
6	SAT DAY-09:00 NITE-18:00 TDS-..:.. TDE-..:..	Saturday DAY/NIGHT/TIMED ring mode start times and TIMED mode end times.	0000~2359	DAY: 9:00 NITE: 18:00 TDS: ..:.. TDE: ..:..
7	SUN DAY-09:00 NITE-18:00 TDS-..:.. TDE-..:..	Sunday DAY/NIGHT/TIMED ring mode start times and TIMED mode end times.	0000~2359	DAY: 9:00 NITE: 18:00 TDS: ..:.. TDE: ..:..

4.3.9.10 Voice Mail Dialing Table – PGM 234

When an external Voice Mail system is used that employs in-band signaling, a digit sequence must be defined for the system to signal various call characteristics to the Voice Mail system. The voice mail uses the sequences to determine appropriate announcements or further call routing. The Table permits the definition of digits as either a prefix or suffix to other digits(station number for mailbox identification). Sequences are defined for such call characteristics as Put Mail, Get Mail, No Answer call, etc.

PROCEDURE:	
VOICE MAIL DIALING TBL DIAL DIGIT (1-9)	Press the **[PGM]** button and dial 234.
	Use **the dial-pad** to enter a table entry (1~9). Refer to Table 3.3.9.10-1.
	Use the dial-pad to select Prefix or Suffix and the digit sequence, use the **[MSG/CALLBK]** button to enter a Pause, refer to Table 3.3.9.10-1.
	Press the **[Save]** button to store the data entry.

Table 3.3.9.10-1 VOICE MAIL DIAL (PGM 234)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	VOICE MAIL 1 PREFIX OR SUFFIX (1-2)	Code sent when the voice mail is to receive a call to record a message. Put Mail	1: Prefix 2: Suffix Any digits	P#
2	VOICE MAIL 2 PREFIX OR SUFFIX (1-2)	Code sent when the voice mail is to playback recorded messages. Get Mail	1: Prefix 2: Suffix Any digits	P##
3	VOICE MAIL 3 PREFIX OR SUFFIX (1-2)	Code sent when the voice mail is to receive a call while the user is busy. Busy Mail	1: Prefix 2: Suffix Any digits	P#*3P
4	VOICE MAIL 4 PREFIX OR SUFFIX (1-2)	Code sent when the voice mail is to receive a call while the user is in DND. DND Mail	1: Prefix 2: Suffix Any digits	P#*4P
5	VOICE MAIL 5 PREFIX OR SUFFIX (1-2)	Code sent when the voice mail is to receive a call when the user did not answer. No Answer Mail	1: Prefix 2: Suffix Any digits	P#*5P
6	VOICE MAIL 6 PREFIX OR SUFFIX (1-2)	Code sent when the voice mail is to receive a call when a dialing error exists. Error Mail	1: Prefix 2: Suffix Any digits	P#*6P
7	VOICE MAIL 7 PREFIX OR SUFFIX (1-2)	It is reserved.	1: Prefix 2: Suffix Any digits	
8	VOICE MAIL 8 PREFIX OR SUFFIX (1-2)	It is reserved.	1: Prefix 2: Suffix Any digits	
9	VOICE MAIL 9 DISCONNECT[DIALDGT_1]	Code sent when the voice mail is to disconnect a call. Disconnect Mail	1: Prefix 2: Suffix Any digits	*****

4.3.9.11 Registration & Fractional Module Table – PGM 235

When multiple iPECS eMG are located on the same LAN, it may be desirable to register add-on devices employing the Registration Table.

PROCEDURE:	
REGISTRATION TBL ENTER TBL NO(1-5)	Press the **[PGM]** button and dial 235, and enter Table number (Ex.1).
REG TBL 1: NO MAC INFO MAX PORT : 00, DEV ID:	Use the dial-pad to select a Table entry (1~5).
	Press the desired Flex button; refer to Table 3.3.9.11-1.
	Use the dial-pad to enter the desired data. Refer to Table 3.3.9.11-1.
	Press the **[Save]** button to store the data entry.

Table 3.3.9.11-1 MAC REGISTRATION (PGM 235)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	TBL 1: SET MAC ADDR MAC 1:	Enter the MAC address of the device to register.		
2	TBL 1: SET MAX PORT NO OF PORT: 00	Enter the maximum number of ports (channels) for the device. For a 00 entry, the system will accept a physical port number.	00-99	00
3	TBL 1: DEVICE ID DEVICE ID :	Enter device ID when it has multiple device ID in Board/Gateway.	0-255	0 (N/A)

4.3.9.12 Mobile Extension Table – PGM 236

A mobile phone can be used in conjunction with an iPECS Phone. The Mobile phone can access system resources available to the user's wired phone and receive a ring for incoming iPECS calls. The user may be allowed to enable the Mobile extension and define the mobile number. The system can be defined to employ a specific CO/IP Line Group to place calls to the Mobile phone.

The Mobile Extension Table also defines Notification of new VSF messages. When a new message is received for a user in the VSF, the system will call the assigned 'Tel Number,' notifying the user of the new message.

PROCEDURE:	
MOBILE EXTENSION TABLE ENTER STA NUMBER	Press the **[PGM]** button and dial 236, and enter the STA number (Ex.100).
100: MOBIL EXT ATTR PRESS FLEX KEY (01-14)	Use the dial-pad to enter the desired station number. Press the Flex button for the desired item; refer to Table 3.3.9.12-1. Use the dial-pad to enter the required data. Press the **[Save]** button to store the data entry.

Table 3.3.9.12-1 MOBILE EXTENSION (PGM 236)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	100 : PGM AUTHORITY (1:ON/0:OFF) : OFF	The user may be allowed to activate the mobile extension feature.	0: OFF 1: ON	OFF
2	100: USAGE DISABLE (0-2)	Mobile extension feature can be enabled, and Fail Over to Mobile extension can be included 0: DISABLE, 1: MOBILE EXT, 2: FAILOVER	Refer to description	DISABLE
3	100: ACCESS CO GRP CO GRP: 01	CO group used to call (ring) the mobile extension. eMG80/100:1-21, eMG800:1~201	Refer to description	01
4	100 : TEL NUMBER ……..	Telephone number of the Mobile extension.		Not assigned
5	TABLE 001 CLI ……	When the mobile Telephone number and CLI do not match, the CLI entered here authorizes incoming calls from the mobile.		Not assigned
6	100: HUNT CALL ENABLE (1:ON/0:OFF) : OFF	When the paired station is a hunt group member (ACD, Circular, or Terminal), group calls can be sent to the active mobile extension.	0: OFF 1: ON	OFF
7	100 : VSF NOTIFY (1:ON/0:OFF) : OFF	Enables outbound notification by the system when the VSF has unheard messages.	0: OFF 1: ON	OFF

Table 3.3.9.12-1 MOBILE EXTENSION (PGM 236)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
8	100: NOTIFY RETRY CNT (1~9) : 3	Defines the number of attempts the system will make to complete a notification when receiving a busy/no-answer.	1~9	3
9	100 : NOTIFY RETRY INT (1~3) : 3	Defines the time between notification attempts. If a notification fails, the system will retry after the timer expires.	1~3 (Minutes)	3
10	100: NOTIFY BY MY CLI (1:ON/0:OFF) : OFF	When the system sends CLI to the mobile extension, the CLI can be either the original caller's CLI or the CLI of the station.	0: OFF 1: ON	OFF
11	100 : CALL BACK (1:ON/0:OFF) : OFF	If it is set to "ON," an incoming mobile extension call will be released before it is answered, and the system places a call to a mobile extension. After the mobile extension answers, the dial tone is provided, and the mobile extension can make an internal or external call.	0: OFF 1: ON	OFF
12	100 : DELAY TIMER (000-255) : 000	A mobile extension call will be placed after the delay time.	000~255	0
13	100 : ANNOUNCE (00-200) : 00	It can be announced for remote control.	0~200	0
14	100 : SUFFIX DID TBL T (1:ON/0:OFF) : OFF	It provides flexible DID table index when DID type 2 is used.	0: OFF 1: ON	OFF

4.3.9.13 Hot Desk Attributes – PGM 250

A Hot Desk station allows a user to log in for access to the system features and resources. Once logged in, the user is provided access to system features and resources employing the database for the user's assigned station.

PROCEDURE:	
HOTDESK ATTRIBUTE PRESS FLEX KEY (1-3)	Press the **[PGM]** button and dial 250.
	Press the desired Flex button; refer to Table 3.3.9.13-1.
	Use the dial-pad to enter the appropriate data.
	Press the **[Save]** button to store the data entry.

Table 3.3.9.13-1 HOT DESK ATTRIBUTES (PGM 250)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	NO OF AGENT (000-140) 000	Assign number of hot desk agents.	0-140	000
2	VIEW AGENT RANGE N/A	View the assigned station number for agents.		
3	AUTO LOGOUT TMR (hour) (00-24) : 00	A Hot desk station will return to inactive if the logged-in user takes no action for the Auto Logout timer.	0~24 Hrs.	00

4.3.9.14 CO Call Rerouting – PGM 252

The system can reroute the incoming call to CO. If the called number is matched with compare digits of Table 252, the call is routed to the Rerouting number.

PROCEDURE:	
CRR ATTRIBUTE PRESS FLEX KEY (1-3)	Press the **[PGM]** button and dial 252.
	Press the desired Flex button; refer to Table 3.3.9.14-1.
	Use the dial-pad to enter the appropriate data.
	Press the **[Save]** button to store the data entry.

Table 3.3.9.14-1 CALL REROUTING ATTRIBUTES (PGM 252)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	ENABLE CRR (1:ON/0:OFF) : OFF	Enable CRR	0: OFF 1: ON	OFF
2	INIT CRR PRESS [Save] KEY	Initialize all data		
3	CRR ATTRIBUTES ENTER BIN NO (000-169)	If PGM 252-BTN1 is set ‘ON,’ BTN3 is available. (Ex. enter the bin number 000)	000-169	
4	CRR TABLE 000 PRESS FLEX KEY (1-4)	Press the desired Flex button, refer to Table 3.3.9.14-2	Flex button 1-4	

Table 3.3.9.14-2 CRR TABLE ATTRIBUTES (PGM 252)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	CRR 000 COMPARE CO GRP GRP NO (01-20) : 01	Enter group number for compare digits in incoming.	01-20	01
2	CRR 000 RECEIVE DGTS	Enter receive digits.		..
3	CRR 000 CO+TEL NUMBER	Enter co group (or individual co, access co) plus telephone number.		..
4	CRR 000 TYPE ...	N/A: press digit ‘0.’ NET TYPE: ‘1’ for transit out DISA TYPE: ‘2’ for using DISA	0-2	N/A

4.3.9.15 Digit Conversion Tables – PGM 270

The Digit Conversion Table index is assigned to the Station and CO line. And the digit conversion can be applied according to the Apply Time Type (Unconditional, Day/Night/Timed, or LCR Day/Time) differently. Each Table includes 200 entries of up to 16 digits; entries in the Tables can be any digit (01–15), or "*," "#." Each Index can be applied by Apply Option. (All/Station/CO line/Disable)

PROCEDURE:	
DIGIT CONVERSION TABLE ENTER TABLE NO (01–15)	Press the [PGM] button and dial 270 and enter the table number (Ex. 01).(eMG80/100 :1-15 / eMG800:1-32)
01 DIGIT CONVERSION ENTER BIN NO (001–200)	Dial Digit Conversion Table Number (01–15) and enter the bin umber (Ex.001).
01/001 DIGIT CONV. PRESS FLEX KEY (01–18)	Dial conversion Bin No (001–200). - Flex 1: Apply Time Type, Flex 2: Dialed Digit - Flex 3: Unconditional Changed Digit - Flex 4−6: Day/Night Timed Changed Digit - Flex 7−15: LCR Time (Day/Time Zone Changed Digit) - Flex 16: Ring mode table - Flex 17: Apply Option - Flex 18: ARS CO Access CO
	Use the dial–pad to enter the dialed number.
	Press the [Save] button to store the data entry.

Table 4.3.9.15-1 DIGIT CONVERSION TABLE ATTRIBUTES (PGM 270)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	01/001 APPLY T–TYPE (0–2): UNCONDITIONAL	The Apply time type is to be applied when the dialed digit is dialed.**0: Unconditional,** 1: Follow DNT, 2: Follow LCR	Refer to description	Un conditional
2	01/001 DIALED DIGIT ……..	The dialed digits	Max. 24 digits	
3	01/001 UNCOND CHANGED ……..	The dialed digits are converted to this digit stream unconditionally.	Max. 24 digits	
4	01/001 DAY CHANGED ……..	The dialed digits are converted to this digit stream when Apply Time type is 'FOLLOW DNT' and DAY's current ring mode.	Max. 24 digits	
5	01/001 NIGHT CHANGED ……..	The dialed digits are converted to this digit stream when Apply Time type is 'FOLLOW DNT,' and the current ring mode is NIGHT.	Max. 24 digits	
6	01/001 TIMED CHANGED ……..	The dialed digits are converted to this digit stream when Apply Time type is 'FOLLOW DNT,' and the current ring mode is TIMED.	Max. 24 digits	

Table 4.3.9.15-1 DIGIT CONVERSION TABLE ATTRIBUTES (PGM 270)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
7	01/001 D1/T1 CHANGED ……..	The dialed digits are converted to this digit stream when Apply Time type is 'FOLLOW LCR,' the day zone is 1, and the time zone is 1.	Max. 24 digits	
8	01/001 D1/T2 CHANGED ……..	The dialed digits are converted to this digit stream when Apply Time type is 'FOLLOW LCR,' the day zone is 1, and the time zone is 2.	Max. 24 digits	
9	01/001 D1/T3 CHANGED ……..	The dialed digits are converted to this digit stream when Apply Time type is 'FOLLOW LCR,' the day zone is 1, and the time zone is 3.	Max. 24 digits	
10	01/001 D2/T1 CHANGED ……..	The dialed digits are converted to this digit stream when Apply Time type is 'FOLLOW LCR,' the day zone is 2, and the time zone is 1.	Max. 24 digits	
11	01/001 D2/T2 CHANGED ……..	The dialed digits are converted to this digit stream when Apply Time type is 'FOLLOW LCR,' the day zone is 2, and the time zone is 2.	Max. 24 digits	
12	01/001 D2/T3 CHANGED ……..	The dialed digits are converted to this digit stream when Apply Time type is 'FOLLOW LCR,' the day zone is 2, and the time zone is 3.	Max. 24 digits	
13	01/001 D3/T1 CHANGED ……..	The dialed digits are converted to this digit stream when Apply Time type is 'FOLLOW LCR,' the day zone is 3, and the time zone is 1.	Max. 24 digits	
14	01/001 D3/T2 CHANGED ……..	The dialed digits are converted to this digit stream when Apply Time type is 'FOLLOW LCR,' the day zone is 3, and the time zone is 2.	Max. 24 digits	
15	01/001 D3/T3 CHANGED ……..	The dialed digits are converted to this digit stream when Apply Time type is 'FOLLOW LCR,' the day zone is 3, and the time zone is 3.	Max. 24 digits	
16	01/001 RING MODE TBL (00–15): 0	The dialed digits are converted according to the auto ring mode time.	00-15	0
17	01/001 APPLY OPTION (0–3): ALL	The Apply Option can be applied according to the caller. 0. All, 1. Reserved, 2. CO Line, 3. Disable	Refer to description	All

Table 4.3.9.15-1 DIGIT CONVERSION TABLE ATTRIBUTES (PGM 270)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
18	01/001 ARS CO ACCESS	Suppose a selected path is not available for some reason (All Busy, Line Fault etc.) after digit conversion. In that case, Alternative Route Selection (ARS) will connect calls using predefined designated ARS digits in the digit conversion table.	Max. 8 Digits	

4.3.10 NETWORKING DATA –PGM 320 to 324

4.3.10.1 Network Basic Attribute – PGM 320

PROCEDURE:	
NET BASIC ATTRIBUTE PRESS FLEX KEY (1-8)	Press the **[PGM]** button and dial 320.
	Press the Flex button 1~8 for the desired setting. Refer to Table 3.3.10.1-1.
	Use the dial-pad to enter the required data.
	Press the **[Save]** button to store the new data.

Table 3.3.10.1-1 NETWORK BASIC ATTRIBUTE (PGM 320)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	NET ENABLE (1:ON/:OFF) :OFF	Enable Networking function	0: OFF 1: ON	OFF
2	NET RETRY COUNT (00-99) :00	Not used.	00-99	00
3	NET CNIP ENABLE (1:ON/:OFF) :ON	The name of the calling station is sent to the called system between iPECS eMG. CNIP is displayed at called party stations display based on the programming.	0: OFF 1: ON	ON
4	NET CONP ENABLE (1:ON/:OFF) :OFF	Reserved for future usage.	0: OFF 1: ON	OFF
5	NET SIGNAL METHOD (1:FAC/:UUS) :FAC	Select the information element type for QSIG supplementary service message.	0: UUS 1: FAC	FAC
6	NET CAS ENABLE (1:ON/:OFF) :OFF	Not used.	0: OFF 1: ON	OFF
7	NET VPN ENABLE (1:ON/:OFF) :OFF	Not used.	0: OFF 1: ON	OFF
8	NET CC RETAIN MODE (1:ON/:OFF) :OFF	Not used.	0: OFF 1: ON	OFF

4.3.10.2 Network Supplementary Attribute – PGM 321

PROCEDURE:	
NET SUPPLEMENTARY ATTR PRESS FLEX KEY (1-9)	Press the **[PGM]** button and dial 321.
	Press Flex button 1~9 for the desired setting. Refer to Table 3.3.10.2-1.
	Use the dial-pad to enter the required data. Refer to Table 3.3.10.2-1.
	Press the **[Save]** button to store the new data.

Table 3.3.10.2-1 NETWORK SUPPLEMENTARY ATTRIBUTE (PGM 321)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	NET TRANSFER MODE (1:RERT/0:JOIN) :REROUT	Select type for Transfer and Call forward – Rerouting or Join	1: RERT 0: JOIN	REROUT
2	TCP PORT FOR BLF (9500-9999) :9500	TCP port for sending BLF message to BLF Manager	0000-9999	9500
3	UDP PORT FOR BLF (9500-9999) :9501	UDP port for sending BLF message to BLF Manager	0000-9999	9501
4	BLF MANAGER IP 0 .0 .0 .0	IP Address of BLF Server used only when iPECS is configured with LDK systems for Voice Networking		0.0.0.0
5	DURATION OF BLF STS (01-99) 100 mm sec : 10	Duration of BLF status message sending to BLF Server.	01-99 (msec)	10
6	MULTI CAST IP 0 .0 .0 .0	IP address of Multicast for BLF service.		0.0.0.0
7	NET TRANS FAULT RCL TMR (001-300)sec : 010	Network transfers fault recall timer to be used when no responses from other systems.	001-300 (seconds)	10
8	VOIP CALL REROUTE CO GR (00-20) : 00	SIP outgoing call is rerouted via alternative backup CO line when a call is failed, or there is no answer for 3 seconds. eMG80/100:1-20, eMG800:1~200	Refer to description	00
9	BLF SERVICE USAGE (1:ON/:OFF) : ON	Enable/disable for BLF manager function.	0: OFF 1: ON	ON

4.3.10.3 Network CO LINE Attribute – PGM 322

PROCEDURE:	
NET COL ATTRIBUTE ENTER CO RANGE	Press the **[PGM]** button and dial 322 and enter CO range (Ex.0101).(eMG80/100 : 1-74 / eMG800: 1-600)
01-01 NET COL PGM PRESS FLEX KEY (1-2)	Use the dial-pad to enter the CO Range.
	Press the Flex button 1~2 for the desired setting. Refer to Table 3.3.10.3-1.
	Use the dial-pad to enter the required data. Refer to Table 3.3.10.3-1.
	Press the **[Save]** button to store the new data.

Table 3.3.10.3-1 NETWORK BASIC ATTRIBUTE (PGM 322)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	01-01 NET CO GRP (00 – 24) : 00	Networking CO group programming for Networking call.	00-24	00
2	01-01 NET CO TYPE (0:PSTN/1:NET) : PSTN	Select network CO Line Type	0: PSTN 1: NET	PSTN

4.3.10.4 NET Numbering Plan Table – PGM 324

PROCEDURE:	
NET NUM PLAN TABLE ENTER BIN NO (000-251)	Press the **[PGM]** button and dial 324, and enter bin number (Ex.001).
001 NET NUM PLAN TBL PRESS FLEX KEY (01 – 16)	Use the dial-pad to enter the 3-digit Table index (bin) number, 000 ~ 251.
	Press the Flex button, 1~16 for the desired setting. Refer to Table 3.3.10.4-1.
	Use the dial-pad to enter the required data. Refer to Table 3.3.10.4-1.
	Press the **[Save]** button to store the new data.

Table 3.3.10.4-1 NETWORK NUMBERING PLAN (PGM 324)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	001 SYSTEM USAGE (0:NET/1:PSTN) : NET	Select system usage	0: NET 1: PSTN	NET
2	001 NUM PLAN CODE	'*' means any digits can be inserted between 0 ~ 9. The digits followed by '#' are an internal station number.	16 digits	
3	001 NUM PLAN CO GRP (00 - 24) : . .	'00' means an internal net station number	00-24	..
4	001 CPN INFORMATION PRESS FLEX KY (1-4)	Flex 1: ISDN CPN INFORMATION Flex 2: (Flex button 1- 4) • 1: 00 CPN INFORMATION 01 • 2: 00 CPN INFORMATION 02 • 3: 00 CPN INFORMATION 03 • 4: 00 CPN INFORMATION 04	16 digits	
5	001 ALT SPD BIN (2000-4999) :	Alternative Dial Number (System SPD Bin) when the networking path has a fatal problem. eMG80/100: 2000~4999, eMG800: 2000~9999	Refer to description	
6	DEST SYSTEM IP ADDR 0 . 0 . 0 . 0	IP Address of destination MPB system only when iPECS eMGis configured for Voice Networking.		0.0.0.0
7	DEST SYSTEM PORT NO (0000-9999) : 5588	Port Number of destination system for Networking.	0000-9999	5588
8	001 DIGIT REPEAT (0:NO/1:YES): NO	When the number plan code (Flex 2) is for PSTN call or transit-call, this number code can be enveloped in SETUP message or not whether if this field is set or not.	0: NO 1: YES	NO

Table 3.3.10.4-1 NETWORK NUMBERING PLAN (PGM 324)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
9	001 NET PSTN ENBLOCK (0:NO/1:YES) : NO	Choose “Transit-out Public Line” to En-block or Over-lap.	0: NO 1: YES	NO
10	001 CO ATD CODE CLI (1:ON/0:OFF) : OFF	Determine whether if Centralized ATD CLI is sent or not when the slave system makes a transit call.	0: OFF 1: ON	OFF
11	001 FIREWALL ROUTING (1:ON/0:OFF) : ON	Select the IP address (Firewall IP address or Non-firewall IP address). If the destination system (VOIB) is in the same VPN, then a Non-firewall IP address should be sent. Otherwise, the firewall IP address should be sent. • **ON**: Send firewall IP address • **OFF**: Send Non-firewall (Internal) IP address	0: OFF 1: ON	ON
12	001 AUTH CODE COS USE (0:NO/1:YES): NO	When there‘s transit out call request from the user of slave system by seizing CO line, apply COS according to the authorization code.	0: NO 1: YES	NO
13	001 SMDR DIAL HIDDEN (0:NO/1:YES): NO	Determine to display dialed digit of transit outcall or not at the slave system; it can contain authorization code.	0: NO 1: YES	NO
14	001 NET PSTN CLI (0:NET/1:PSTN): NET	NET: Send network station number for CLI PSTN: Send full CLI (e.g., 02-450-1000)	0: NET 1: PSTN	NET
15	001 SITE NAME	It is a comment field to set the name of the network site.	Max. 12 characters	
16	001 EMERGENCY RERTETMR (00-10) : 00	When the timer is ‘0’: The reroute emergency call is not working. When the timer is set ‘1’~’10’: The reroute emergency call is activated after this timer. This only works when PGM 112-18th is transit-out CO group.	00-10	00

4.3.10.5 Network Feature Code Table – PGM 325

PROCEDURE:	
NET FEATURE CODE TBL ENTER BIN NO (01-20)	Press the **[PGM]** button and dial 325, and enter the bin number (Ex.01).
01 NET FEATURE CODE TBL PRESS FLEX KEY (1-2)	Use the dial-pad to enter bin no.
	Press the Flex button 1~2 for the desired setting. Refer to Table 3.3.10.5-1.
	Use the dial-pad to enter the required data. Refer to Table 3.3.10.5-1.
	Press the **[Save]** button to store the new data.

Table 3.3.10.5-1 NETWORK FEATURE CODE TABLE (PGM 325)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE
1	01 NET FEATURE CODE	Networking Feature Code programming for Networking paging calls.	16 digits
2	01 NET DEST NONE (1-6)	Select network feature type (1-6) and dial the associated number. 1: INT PAGE ZONE : (eMG80/100:01-35/eMG800:1-100) 2: EXT PAGE ZONE : (1-1) 3: ALL CALL PAGE ZONE : 1(INT), 2(EXT), 3(ALL) 4: DOOR OPEN : 1~2 5: Conference Room : (1-9) 6: Call park : (eMG80/100:01-19/eMG800:1-200)	Refer to description

4.3.11 TNET (Centralized Networking) – PGM 330 ~ 336

In a Centralized Control TNET (Transparent Networking), remote devices may be registered to a Central MPB/MPB (CM) and to a Local MPB/MPB (LM).

In this way, the CM maintains control of the remote device. Should the WAN connection between an LM and CM fail (2-second polling error), the LM will initiate operational control of the locally registered devices.

Calls between the systems (CM & LM) can automatically shift to PSTN Modules registered with the LM for Fail-over operation. The configuration and characteristics of LMs and CM are configurable, as is Fail-over operation.

4.3.11.1 TNET Basic Attributes – PGM 330

Each MPB in a Central Control network environment must enable TNET operation to function as part of the network.

PROCEDURE:	
TNET BASIC ATTRIBUTES PRESS FLEX KEY (1 – 1)	Press the **[PGM]** button and dial 330.
TNET ENABLE (1:ON/0:OFF) : OFF	Press Flex button 1.
	Use the dial-pad to enable or disable TNET, Central Control networking.
	Press the **[Save]** button to store the new data.

4.3.11.2 TNET CM Attributes – PGM 331

Each LM (Local MPB), which is part of a Central Control Network, must be defined with the IP Address of the CM (Central MPB) as well as the LM configuration data that will be sent to the CM at the time the LM registers with the CM.

The port counts define the ports allocated in the CM database for use by devices registered to the LM. The number of ports defined in the database of each LM must be equal or less than the ports defined in the CM for the LM, see PGM 332, to register properly.

PROCEDURE:	
TNET CM ATTRIBUTES PRESS FLEX KEY (1 – 10)	Press the **[PGM]** button and dial 331.
	Press the Flex button, 1~6 for the desired setting. Refer to Table 3.3.11.2-1.
	Use the dial-pad to enter the required data. Refer to Table 3.3.11.2-1.
	Press the **[Save]** button to store the new data.

Table 3.3.11.2-1 TNET CM ATTRIBUTES (PGM 331)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	CM REGISTER REQ (1:ON/0:OFF) : ON	This field informs the LM to attempt registration with the CM. This field must be set to ON for proper registration.	0: OFF 1: ON	OFF

Table 3.3.11.2-1 TNET CM ATTRIBUTES (PGM 331)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
2	CM SERVER TYPE 0:LIK / 1:CM : LIK(0)	This field defines Central Call Manager type. The LIK is eMG/UCP even though the display is LIK.	0:LIK 1: CM	LIK
3	CM1 IP ADDRESS 0 .0 .0 .0	This field defines the IP address of the CM1 that the LM will use.	IPv4 address	
4	CM2 IP ADDRESS 0 .0 .0 .0	This field defines the IP address of the CM2 that the LM will use.	IPv4 address	
5	CM1 MAC ADDRESS 000000000000	This field defines the MAC address of the CM1 that the LM will use.		
6	CM2 MAC ADDRESS 000000000000	This field defines the MAC address of the CM2 that the LM will use.		
7	CM IPKTS PORT (0001 - 9999) :5588	In the TNET environment, the IP KTS protocol signaling the UDP port is defined. At present, this field is not used, do not change this port number.	0000-9999	5588
8	CM TOTAL PORT (000 – 999) : 011	This field defines the total number of ports the LM will request to be allocated by the CM for devices attached to the LM. This value must be equal to or less than the port count in the CM for the LM devices.	000-999	000
9	POLLING COUNT (00 – 99) : 05	This field defines the maximum polling failures an LM considers a WAN fault.	00-99	05
10	POLLING INTERVAL (00 – 99) : 02	This field defines the interval time between LM to CM polling attempts.	00-99	02

4.3.11.3 TNET LM ATTRIBUTES – PGM 332

The CM (Central MPB/MPB) must be programmed with the MAC and IP address of each LM (Local MPB) in the Centralized Control network and the maximum configuration of each LM.

The port counts define the ports allocated in the CM database for use by devices registered to the LM.

The number of ports defined in the database of each LM, seesPGM 331, must be equal to or less than the ports defined in the CM for the LM to register properly.

VoIP channels are needed to support RTP Packet relay or codec translation between other devices. The CO port count must include any VoIP channels required.

PROCEDURE:	
TNET LM ATTRIBUTES ENTER BIN NO(01-15)	Press the **[PGM]** button and dial 332.
TNET LM(01) ATTRIBUTES PRESS FLEX KEY (1- 4)	Use the dial pad to enter the bin number associated with the LM.
	Press the Flex button, 1~4 for the desired setting. Refer to Table 3.3.11.3-1.
	Use the dial-pad to enter the required data. Refer to Table 3.3.11.3-1.
	Press the **[Save]** button to store the new data.

Table 3.3.11.3-1 TNET LM ATTRIBUTES (PGM 332)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	LM(01) MAC ADDRESS 0000000000000	This field defines the MAC address of the LM that will be part of the TNET environment and is used by the CM for authorization.	MAC address	
2	LM(01) IP ADDRESS 0 .0 .0 .0	This field displays the IP address of the LM.	IPv4 address	
3	LM(01) IPKTS PORT (0001 - 9999) :5588	In the TNET environment, the IP KTS protocol signaling the UDP port is defined. At present, this field is not used, do not change this port number.	0000-9999	5588
4	LM (01) TOTAL PORT (000 – 999) : 000	This field defines the total number of ports the LM will request to be allocated by the CM for devices attached to the LM. This value must be equal to or more than the available port count in the LM.	000-999	000
5	LM (01) MULTICAST IP 239.20.19.1	This field defines the multicast IP address that could be used in the TNET branch site.	IPv4 address	

4.3.11.4 FoPSTN Attributes – PGM 333

The Fail-over function allows the systems in a Centralized Control network (TNET) environment to complete calls from system to system over a PSTN (analog or digital) line should the WAN connection to the CM fail.

A CO Gateway/Board must be registered to the LM for local control and access to CO services. Users may call others normally, and the call is routed over CO facilities to the remote CM.

When calls are directed to a DID line at the receiving system, the system will select a line from the assigned CO Group and dial the Tel Number with the station number dialed as the trailing digits.

PROCEDURE:	
FoPSTN ATTRIBUTES PRESS FLEX KEY (1–3)	Press the **[PGM]** button and dial 333.
	Press the Flex button 1~3 for the desired setting. Refer to Table 3.3.11.4-1.
	For Flex button 1 enable or disable FO. For Flex button 2, press the **[Save]** button to reset the FO table. For Flex button 3, dial the table bin number to input data.
	For Flex button 3, use the dial-pad to enter the required data. Refer to Table 3.3.11.4-1.
	Press the **[Save]** button to store the new data.

Table 3.3.11.4-1 FAIL-OVER ATTRIBUTES (PGM 333)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	ENABLE FoPSTN (1:ON/0:OFF) : ON	This field is used to enable or disable Fail-over operation from the CM or LM.	0: OFF 1: ON	OFF
2	INIT FoPSTN TABLE PRESS [Save] KEY	This field is used to initialize the FO table.		
3	FoPSTN ATTRIBUTES ENTER BIN NO(000-199)			
3-1	FoPSTN 001 NUM PLAN xxxxxxxx	Station numbers are associated with the remote system. A range can be indicated by using “*” to indicate the range.	Max 8 digits	
3-2	FoPSTN 001 CO GROUP GRP NO (00-21) : 01	This field defines the CO Group of the local system that will be used to place calls to the stations entered in the FO Numbering Plan should WAN failure occurs. eMG80/100:1~20, eMG800:1~200	Refer to description	
3-3	FoPSTN 001 TEL NUMBER xxxxxxxxxxxxxxxxxx	This field defines the telephone number the system should dial to place a call to the stations entered in the FO Numbering Plan, should Wan failure occur. An “*” may be entered as a wild-card to indicate insertion of the dialed station number.		

4.3.11.5 TNET LM External Contact Attributes – PGM 334

Each LM incorporates relay contacts, which can be employed as a Door Lock Release. The contact activates a 3rd party Door Lock Release mechanism activated by dialing the Door Unlock code at a local station. Note assigning other functions to the contact may cause an unexpected operation.

PROCEDURE:	
TNET LM EXT CONTACT ENTER BIN NO (01-15)	Press the **[PGM]** button and dial 334. The range is : eMG80/100 : 1-15 / eMG800: 1-32
	Select LM number
	Select Flex button 1~4 for the desired External Control contact.
LM(01) EXT CONTACT PRESS FLEX_KEY (1-4)	Use the dial-pad to enter desired data. - 1. LBC + station number, (ex. 150) - 2. Door Lock Release - 3. External Page 1 access - 4. External Page 2 access
	Press the **[Save]** button to store the External Contact data entry.

4.3.11.6 TNET LM Music Attributes – PGM 335

The CM does not provide BGM/MOH to an LM. The LM employs local BGM and MOH facilities, which reduces traffic load on the WAN and IP channel processors. The LM uses IP Multicast for local BGM and MOH transport.

PROCEDURE:	
TNET LM MUSIC ATTR ENTER BIN NO (01-15)	Press the **[PGM]** button and dial 335
MUSIC ASSIGN PRESS FLEX_KEY (1-3)	Select LM number
Refer to Table 3.3.11.6-1 DISPLAY	Select the desired Flex button; refer to Table 3.3.11.6-1.
	Use the dial-pad to select the desired Music Source. Refer to Table 3.3.11.6-1.
	To save the Music Source, press the **[Save]** button.

Table 3.3.11.6-1 MUSIC SOURCES FOR MOH & BGM (PGM 335)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	BGM TYPE (0-37) MUSIC 1 (1)	Assign the source for BGM. • 00: Ring-back • 01: Int music • 02: Ext music • 03: VSF MOH • 04~08: SLTMOH1~5 • 09~37: VSFMOH2~30	Refer to description	Music 1
2	MOH TYPE (0-37) MUSIC 1 (1)	Assign the source for MOH. • 00: Ring-back • 01: Int music • 02: Ext music • 03: VSF MOH • 04~08: SLTMOH1~5 • 09~37: VSFMOH2~30	Refer to description	Music 1
3	INT/EXT1 MUSIC (0:INT/1:EXT1): INT	Assigns the input for source 1 • 0: Internal • 1: Ext. Music 1	Refer to description	Internal

4.3.11.7 TNET LM Alarm Attributes – PGM 336

The LM incorporates circuitry to monitor an external contact. This contact is most often employed as an Alarm indicator or Doorbell. The Alarm attributes define the operation of the monitoring circuitry. For the Alarm, the signal to the LM stations can be repeating or a single burst. The former is often desired. For the Doorbell, a single tone is sent each time the contact activates.

PROCEDURE:	
TNET LM ALARM ATTR ENTER BIN NO (01-15)	Press the **[PGM]** button and dial 336.
LM(01) ALARM ATTR PRESS FLEX KEY (1-4)	Select LM number
	Press the desired Flex button; refer to Table 3.3.11.7-1.
	Use the dial-pad to enter desired data for the attribute. Refer to Table 3.3.11.7-1.
	Press the **[Save]** button to store the data entry.

Table 3.3.11.7-1 ALARM ATTRIBUTES (PGM 336)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	ALARM ENABLE (1:ON/0:OFF) : OFF	This parameter enables the external contact monitoring circuitry.	0: OFF 1: ON	OFF
2	ALARM CONTACT TYPE (1:CLOSE/0:OPEN) : CLOSE	This parameter establishes the contact state that will activate the Alarm, close or open.	0: Open 1: Close	CLOSE
3	ALARM/DOORBELL MODE (1:ALARM/0:BELL): ALARM	The contact can be treated to function as a doorbell instead of an alarm.	0: Bell 1: Alarm	ALARM
4	ALARM SIGNAL MODE (1:RPT/0:ONCE) : RPT	The assigned stations will receive a Repeating signal or single burst (ONCE) of alarm tone.	0: Once 1: Repeat	RPT

4.3.12 Zone Data – PGM 436 - 441, 444

Zone data is a tool employed to easily manage the characteristics of groups of devices under the control of an MPB. Often, devices are installed in groups with common characteristics. Such devices can be grouped into a Zone to define common characteristics, including Country Code, DSCP, RTP packet handling, etc. Common attributes are defined at the device, Zone, and Inter-zone levels. Device settings have priority over Zone settings, while Zone settings have priority over system settings.

Generally, the transport of RTP packets should be peer-to-peer communication over either a LAN or VPN. If iPECS devices are separated by a NAPT server or direct peer-to-peer communications are not available, packet relay must be employed to assure communication. In packet relay, RTP packets are received by a local VoIP channel (MPB or VOIB), which is under control of the MPB, and the IP address is translated from public to the device's private address.

The VoIP channels implement a secure channel using the IPSec protocol. Devices can be assigned as part of an "RTP Relay group" to use the same VoIP channels to implement the relay of RTP packets. Packet relay groups also provide for conversion of multi-cast packets from the MPB to uni-cast and back again at the group level to multi-cast. Note packet relay requires an MPB or VoIP channel to be available locally for each simultaneous call that requires packet relay. Programs 436 to 441 define device zone assignments and zone configurations. These programs are available only in Web admin. Holiday and Vacation assignments for each zone are defined in Program 444.

4.3.12.1 Zone Holiday Assignment – PGM 444

The holidays and vacation day intervals for each zone can be established to define a specified Service mode (Day, Night, and Timed) and up to 40 holidays and 5 vacation intervals.

PROCEDURE:	
ZONE HOLIDAY ASSIGNMENT ENTER BIN (01-32)	Press the **[PGM]** button, dial 444, and enter the bin number (Ex.01).
ZONE(01) HOLIDAY ATTR PRESS FLEX KEY (1-3)	Use the dial-pad to enter the bin (Zone) number (01~32).
	Press the Flex button, 1 ~ 3. For the desired setting, refer to 3.3.12.1-1.
	Use the dial pad to enter the required data. Refer to Table 3.3.12.1-1.
	Press the **[Save]** button to save any changes.

Table 3.3.12.1-1 ZONE HOLIDAY ASSIGNMENT (PGM 444)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	ZONE(01) RING MODE(0-3) TIMED-R	Enter the desired Service mode for the Holiday or Vacation. 0: DAY, 1: NIGHT, 2: TIMED, 3: N/A	Refer to description	TIMED
2	ZONE(01) VACATION ENTER BIN NO(1-5)	Assign a date range for the vacation entering the start and end dates as yymmdd - yymmdd.	12 digits	None
3	ZONE(01) HOLIDAY ENTER BIN NO(01-40)	Assign a date for a holiday for the Zone as MMDD.		None

4.3.13 GREEN MODE

The system can disable the power of a Digital Phone or SLT (Single Line Telephone) installed in the system at night or during holiday mode. The power On/Off can be controlled by Web Admin manually or automatically according to the assigned power On/Off time.

4.3.13.1 Green mode activation – PGM 500

It is applied for SLIB, DSIB, and HYIB. Regarding the exact board related to the terminal, refer to iPECS eMG Hardware Description and Installation Manual.

PROCEDURE:	
GREEN MODE ACTIVATION PRESS FLEX KEY (1-4)	Press the **[PGM]** button and dial 500.
	Press the Flex button, 1 ~ 4. For the desired setting, refer to Table 3.3.13.1-1.
	Use the dial pad to enter the required data. Refer to Table 3.3.13.1-1.
	Press the **[Save]** button to save any changes.

Table 3.3.13.1-1 GREEN MODE ACTIVATION (PGM 500)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	POWER SAVE USAGE (1:EN/0:DIS) : DISABLE	Enable or Disable power usage.	0: Disable 1: Enable	DISABLE
2	POWER ON/OFF (1:ON/0:OFF) : ON	Power ON/OFF manually all of the stations in Power Save used board.	0: OFF 1: ON	ON
3	POWER SAVE MODE PRESS SLOT BTN (F1-F6)	Enables or Disables Power Save Usage Mode of each board.	Flex button 1-6	
4	POWER CURRENT STATE CHECK SLOT BTN (F1-F6)	Display the current status of board power ON/OFF.	Flex button 1-6	

4.3.13.2 Green mode time setting – PGM 501

It is applied for SLIB, DSIB, and HYIB. Regarding the exact board related to the terminal, refer to iPECS eMG Hardware Description and Installation Manual.

PROCEDURE:	
GREEN MODE TIME ENTER WEEK DAY NO (1-7)	Press the **[PGM]** button, dial 501, and enter the day from 1 to 7 by dial pad (Ex.1).
(MON) GREEN MODE TIME F1:ON TIME F2:OFF TIME	Press the desired Flex button 1 or 2.
	Press the Flex button, 1 ~ 2. For the desired setting, refer to 3.3.13.2-1.
	Use the dial pad to enter the required data. Refer to Table 3.3.13.2-1.
	Press the **[Save]** button to save any changes.

Table 3.3.13.2-1 GREEN MODE TIME (PGM 501)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	POWER ON TIME (HH:MM) NOT ASSIGNED	Enable power on time		Not assigned
2	POWER OFFIME (HH:MM) NOT ASSIGNED	Enable power off time		Not assigned

4.3.14 INITIALIZATION — PGM 450

The system has been pre-programmed with certain features, which are based on the default database. The defaults are loaded into memory when the system is initialized. The system should always be initialized when installed, or the database is suspected of being corrupt. The system can be initialized manually during installation. Refer to the **iPECS eMG Hardware Description & Installation Manual**.

This program allows all or any distinct portions of the database to be initialized and returned to default.

PROCEDURE:	
INITIALIZATION PRESS FLEX KEY (01-17)	Press the **[PGM]** button and dial 450. Select a Flex button to initialize the desired data. Refer to Table 3.3.14-1. Press the **[Save]** button, the selected data is initialized, and a confirmation tone is received.

Table 3.3.14-1 INITIALIZATION DATA (PGM 450)

BTN	DISPLAY	REMARK
1	INITIALIZATION FLEX NUM PLAN	It will initialize numbering plan.
2	INIT STATION DATA STATION DATA(ENT STA RNG)	It will initialize station attributes for selected stations.
3	INIT COL DATA COL DATA(ENT COL RNG)	It will initialize CO line attributes for selected CO lines.
4	INIT COL DATA SYSTEM DATA	It will initialize system attributes.
5	INITIALIZATION STATION GROUP	It will initialize hunt attributes.
6	INITIALIZATION ISDN TABLES	It will initialize ISDN-related attributes. (MSN/Flexible DID, COLP, DID conversion)
7	INITIALIZATION SYSTEM TIMER	It will initialize system timer attributes.
8	INITIALIZATION TOLL TABLES	It will initialize toll tables.
9	INITIALIZATION LCR DATA	It will initialize LCR attributes.

Table 3.3.14-1 INITIALIZATION DATA (PGM 450)

BTN	DISPLAY	REMARK
10	INITIALIZATION OTHER TABLES	It will initialize miscellaneous tables. (Exec/Sec, CCR, Prefix, Authorization code, Auto ring mode, VM prefix, System SPD Zone, Multicast table, Mobile Extension)
11	INITIALIZATION FLEX BUTTON	It will initialize the flexible button and DSS/LSS.
12	INITIALIZATION NET DATA	It will initialize networking attributes.
13	INITIALIZATION ALL DATA	It will initialize all programs.
14	SYSTEM RESTART RESTART NOW	It will restart the MPB.
15	UNUSED	
16	INITIALIZATION PERSONAL GROUP	It will initialize Personal Group.
17	INITIALIZATION Default password *	It will initialize(remove) password if it is *
18	INITIALIZATION HOTEL DATA	

4.3.15 PRINT-OUT DATABASE — PGM 451

The system can output all or portions of the system database to provide a ‘hard-copy. The data is output over the appropriate Serial port (Serial 1 or Serial 2).

PROCEDURE:	
DATABASE PRINT OUT PRESS FLEX KEY (01-22)	Press the **[PGM]** button and dial 451.
	Select Flex button 1~22 to output the desired data. Refer to Table 3.3.15-1.
	For Station, Station Flex buttons, and CO/IP line data, use the dial pad to enter the desired range for stations or CO/IP lines, or for all, skip this step.
	Press the **[Save]** button. After output, a confirmation tone is heard.

Table 3.3.15-1 DATABASE PRINT OUT (PGM 451)

BTN	DISPLAY	REMARK
1	DATABASE PRINT OUT FLEX NUM PLAN	
2	DATABASE PRINT OUT IP SETTING PLAN	
3	DATABASE PRINT OUT STA DATA(ENT STA RNG)	A station range must be entered to output the Station data.
4	DATABASE PRINT OUT COL DATA(ENT COL RNG)	A CO/IP line range (01~21) must be entered to output CO/IP data.
5	DATABASE PRINT OUT SYSTEM DATA	
6	DATABASE PRINT OUT STATION GROUP	
7	DATABASE PRINT OUT ISDN TABLES	
8	DATABASE PRINT OUT SYSTEM TIMER	
9	DATABASE PRINT OUT TOLL TABLES	
10	DATABASE PRINT OUT LCR DATA	

Table 3.3.15-1 DATABASE PRINT OUT (PGM 451)

BTN	DISPLAY	REMARK
11	DATABASE PRINT OUT OTHER TABLES	
12	DATABASE PRINT OUT NATION SPECIFIC	
13	DATABASE PRINT OUT FLX BTN(ENT STA RNG)	A station range must be entered to output the Station Flex button data. Data may be output in 20 or 10 character format. See Flex button 17 below.
14	DATABASE PRINT OUT ALL DATA	
15	DATABASE PRINT OUT LCD PRINT(0-2):NORMAL 24	
16	DATABASE PRINT OUT TO QUIT PRESS [Save]	
17	STRING LENGTH (1:20/0:10): 20(CHAR)	The Station Flex button printout can be provided in a 20 or 10 character format. The default is 20 characters.
18	DATABASE PRINT OUT BOARD ATTRIBUTES	
19	DATABASE PRINT OUT NETWORKING TABLE	
20	DATABASE PRINT OUT HOTEL DATA	
21	FLEX BTN LCD PRINT STR LEN(0-1): 20	Print out strings that are used in flexible buttons to display the content.
22	WORKING LCD PRINT	Print out strings that are used to activate some features.

4.3.16 VIRTUAL TRACE DIP-SWITCH — PGM 452

The Virtual Trace Dip-switch is used to enable and disable traces for various functions as defined in Table 3.3.16-1.

PROCEDURE:	
VIRTUAL TRACE DIP SW PRESS FLEX KEY (01-22)	Press the **[PGM]** button and dial 452.
	To enable trace, press the desired trace button 1-9. The Flex button LEDs indicate trace setting, On/Off, press the desired Flex button to toggle Trace Enable, - LED on: trace enable - LED off: trace disabled.
	To enable selected trace settings, press the **[Save]** button.

Table 3.3.16-1 VIRTUAL TRACE DIP-SWITCH (PGM 452)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	VIRTUAL TRACE DIP SW CALL TRACE : (OFF)	'Call Trace' is enabled for output.	0: OFF 1: ON	OFF
2	VIRTUAL TRACE DIP SW VOIP TRACE : (OFF)	VoIP Trace is enabled for output.	0: OFF 1: ON	OFF
3	VIRTUAL TRACE DIP SW HTTP TRACE : (OFF)	HTTP Trace is enabled for output.	0: OFF 1: ON	OFF
4	VIRTUAL TRACE DIP SW MULTICAST TRACE : (OFF)	Multicast Data (normally registration data between MPB and local mode device) Trace is enabled for output.	0: OFF 1: ON	OFF
5	VIRTUAL TRACE DIP SW CTI TRACE : (OFF)	CTI Device Trace is enabled for output.	0: OFF 1: ON	OFF
6	VIRTUAL TRACE DIP SW RAW DATA-TRACE : (OFF)	Detailed Data Trace is enabled.	0: OFF 1: ON	OFF
7	VIRTUAL TRACE DIP SW MPMP TRACE: (OFF)	MPB to MPB Data Trace is enabled for output.	0: OFF 1: ON	OFF
8	VIRTUAL TRACE DIP SW CPU RE TRACE: (OFF)	CPU Redundancy Data Trace is enabled for output.It is not used.	0: OFF 1: ON	OFF
9	VIRTUAL TRACE DIP SW MISU/VMIU TRACE:(OFF)	MISU/VMIU Trace is enabled for output.	0: OFF 1: ON	OFF

Table 3.3.16-1 VIRTUAL TRACE DIP-SWITCH (PGM 452)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
10	VIRTUAL TRACE DIP SW DSP TRACE (OFF)	DSP Trace is enabled for output.	0: OFF 1: ON	OFF
11	VIRTUAL TRACE DIP SW SIP TRACE (OFF)	SIP Trace is enabled for output.	0: OFF 1: ON	OFF
12	VIRTUAL TRACE DIP SW ISDMR TRACE (OFF)	ISMDR Trace is enabled for output.	0: OFF 1: ON	OFF
13	VIRTUAL TRACE DIP SW SIP MSG TRACE (OFF)	SIP MSG Trace is enabled for output.	0: OFF 1: ON	OFF
14	VIRTUAL TRACE DIP SW FULL SIP TRACE (OFF)	FULL SIP Trace is enabled for output.	0: OFF 1: ON	OFF
15	VIRTUAL TRACE DIP SW HOTEL TRACE (OFF)	Hotel trace is enabled for output.	0: OFF 1: ON	OFF
16	VIRTUAL TRACE DIP SW SIP EXT TRACE (OFF)	SIP EXT Trace is enabled foroutput.	0: OFF 1: ON	OFF
17	VIRTUAL TRACE DIP SW DEBUG TRACE (OFF)	DEBUG Trace is enabled foroutput.	0: OFF 1: ON	OFF
18	VIRTUAL TRACE DIP SW IPATD TRACE (OFF)	IPATD Trace is enabled foroutput.	0: OFF 1: ON	OFF
19	VIRTUAL TRACE DIP SW ISDN TRACE (OFF)	ISDN Trace is enabled for output.	0: OFF 1: ON	OFF
20	VIRTUAL TRACE DIP SW SPI TRACE (OFF)	SPI Trace is enabled for output.	0: OFF 1: ON	OFF
21	VIRTUAL TRACE DIP SW DECT TRACE (OFF)	DECT Trace is enabled for output.	0: OFF 1: ON	OFF
22	VIRTUAL TRACE DIP SW HTTPXML TRACE (OFF)	HTTPXML Trace is enabled for output.	0: OFF 1: ON	OFF

4.3.17 VIRTUAL DIP-SWITCH — PGM 453

The Virtual Dip Switch is employed to change from in-band to SMDI for External Voice Mail communications and manually poll each IP KTS device.

PROCEDURE:	
	Press the **[PGM]** button and dial 453.
VIRTUAL DIP SWITCH PRESS FLEX KEY (1-6)	To enable the trace, press desired Flex button 1~6. The Flex button LEDs indicate Dip switch setting, On/Off. Press the desired Flex button to toggle setting, - LED On: enabled - LED Off: disabled
	To enable call trace, press the **[Save]** button.

Table 3.3.17-1 VIRTUAL DIP-SWITCH (PGM 453)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	VIRTUAL DIP SWITCH DEVICE POLLING: (ON)	'Device polling.' If enabled (On), the system will check each registered device, Gateway/Board, and iPECS Phone to determine if the device is alive or not.	0: OFF 1: ON	ON
2	VIRTUAL DIP SWITCH SMDI SETTING: (OFF)	SMDI setting is enabled for output.	0: OFF 1: ON	OFF
3	VIRTUAL DIP SWITCH MULTICAST LED: (OFF)	If this value is set, the LED commands from MPB will be sent to Gateway/boards and terminals in the multi-cast mode.	0: OFF 1: ON	OFF
4	VIRTUAL DIP SWITCH AUTO NEGO: (MANUAL)	This field enables the negotiation of speed between the LAN switch port and the system.	0: AUTO 1: MANUAL	MANUAL
5	VIRTUAL DIP SWITCH FULL-HALF: (FULL)	The duplex mode of LAN connections can be set according to this field.	0: FULL 1: HALF	FULL
6	VIRTUAL DIP SWITCH 10-100 TX: (100)	The speed of the Ethernet interface is established based on this field, 10 Base T or 10/ 100 Base T.	0: 100 1: 10	100

4.3.18 3.3.18 DECT ATTRIBUTES — PGM 4913

DECT Attributes define functions associated with the DECT equipment and operation. Generally, the entry will turn the feature ON (enable) or OFF (disable).

PROCEDURE:	
DECT ATTRIBUTES PRESS FLEX KEY (1-4)	Press the **[PGM]** button and dial 491.
	Press the Flex button for the desired Attribute; refer to Table 3.3.18-1.
	Use the dial pad to enter the required data.
	Press the **[Save]** button to store the data entry.

Table 3.3.18-1 DECT ATTRIBUTES (PGM 491)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	AUTO CALL RLS (1:ON/0:OFF) : OFF	If enabled, when the other party of an active internal call disconnects, GDC-450H/480H/500H returns to idle.	0: OFF 1: ON	OFF
2	BASE FAULT ALARM (1:EN/0:DIS) : DISABLE	If enabled, DECT Base station (GDC-600BE) alarms are sent to the Attendant.	0: Disable 1: Enable	Disable
3	CHAIN FAULT ALARM (1:EN/0:DIS) : DISABLE	Not used.	0: Disable 1: Enable	Disable

Thanks for using the iPECS system!

The contents of this document are subject to revision without notice due to continued progress in methodology, design, and manufacturing. Ericsson-LG Enterprise shall have no liability for any error or damage of any kind resulting from the use of this document.

iPECS is an Ericsson-LG Brand