iPECS eMG80/eMG800

Administration & Programming Manual

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

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Revision History

SW version	ISSUE	DATE	DESCRIPTION OF CHANGES
	1.0	Sep., 2013	Initial Release
	1.1	Dec., 2013	Changed Ericsson-LG to Ericsson-LG Enterprise
1.1.x	1.2	Feb., 2015	Update contents according to S/W integration for both eMG80 & eMG800
1.2.x	1.3	May, 2015	We updated the following features: - 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 Installation wizard
2.0.x	1.4	Jan., 2016	- Added Speed code number plan in PGM100. - IPCR announce only for incoming call. - Updated Strong password in PGM 160/161. - Updated 'Do not overwrite station name in PGM 211. - Added Attendant ring mode in PGM 257. - Added the more item 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 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 DB management by adding Comment field. - Updated Install wizard - DTMF repeat tone does not have 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 use 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 Alarm mode to send email to the address in PGM 163.

			- Added the special character to DB management. - Added Ring detection register setting in 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 Station ICR scenario (1201) to Station Data. - Changed the name from UCS Standard to UCS data. - Added MOH management in Maintenance. - Added Keyset admin password to Install Wizard.

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Table of Contents

1. Introduction 1
1.1 Manual Application 1
1.2 Manual Organization 1
1.3 S/W & H/W Terminology 2
2. System & admin information 3
2.1 System capacities 3
2.2 Slot configuration for eMG80 6
2.3 Initialization 8
2.3.1 Basic Power-Up Routine 8
2.3.2 Registration of Boards 8
2.3.3 Initial Station and CO Numbering 9
2.3.4 IP Phone Registration 9
2.3.5 Default Database 9
2.4 General Admin and Menu Structure 10
3. STATION ADMIN PROGRAMMING 11
3.1 General 11
3.1.1 LCD & Button Functions 11
3.1.2 Alphanumeric Data Entries 11
3.2 Data Entry Mode 12
3.3 Procedure for Data Entry 13
3.3.1 System ID — PGM 100 13
3.3.2 NUMBERING PLANS DATA — PGM 102 to 109 15
3.3.2.1 System IP Address Plan — PGM 102 15
3.3.2.2 Device IP Address Plan -PGM 103 17
3.3.2.3 CO Device Sequence Number -PGM 104 21
3.3.2.4 Flexible Station Numbering Plan -PGM 105 22
3.3.2.5 Flexible Numbering Plan part A to D - PGM 106 to 109 23
3.3.2.6 8-Digit Table 29
3.3.3 Station Data –PGM 110-125 30
3.3.3.1 Station Type -PGM 110 30
3.3.3.2 Station Attributes I to III - PGM 111-113 31
3.3.3.3 Station Attributes IV -PGM 114 41

3.3.3.4 Flexible button Assignment -PGM 115 46
3.3.3.5 Station Class-of-Service – PGM 116 50
3.3.3.6 CO/IP Group Access – PGM 117 52
3.3.3.7 Internal Page Zone Access – PGM 118 52
3.3.3.8 PTT (Push-To-Talk) Group Access – PGM 119 53
3.3.3.9 Preset Call Forward – PGM 120 53
3.3.3.10 Idle Line Selection – PGM 121 54
3.3.3.11 Station IP Attributes – PGM 122 55
3.3.3.12 Station Timers – PGM 123 56
3.3.3.13 Linked Station Table – PGM 124 57
3.3.3.14 ICM Tenancy Group – PGM 125 58
3.3.3.15 Station VM Attributes – PGM 127 59
3.3.3.16 Station CCR Table – PGM 128 61
3.3.3.17 LSS Label Edit – PGM 129 62
3.3.4 BOARD DATA – PGM 130 to 132 63
3.3.4.1 H.323 VoIP Attributes – PGM 130 63
3.3.4.2 T1/E1/PRI Attributes – PGM 131 66
3.3.4.3 Board Base Attributes – PGM 132 67
3.3.5 CO LINE DATA – PGM 140 to 151 69
3.3.5.1 CO Service Type – PGM 140 69
3.3.5.2 CO/IP Attributes I ~ III - PGM 141~143 69
3.3.5.3 CO/IP Ring Assignment – PGM 144 80
3.3.5.4 DID Service Attributes – PGM 145 81
3.3.5.5 DISA Service – PGM 146 82
3.3.5.6 CO Line Preset Forward Attributes – PGM 147 83
3.3.5.7 CO Additional Attributes – PGM 148 84
3.3.5.8 NA ISDN Line Attributes – PGM 150 85
3.3.5.9 ISDN CO Line Attributes – PGM 151 87
3.3.5.10 T1 Line Timers – PGM 152 89
3.3.5.11 DCOB CO Attribute – PGM 153 91
3.3.6 SYSTEM DATA –PGM 160 to 182 92
3.3.6.1 System Attributes I & II – PGM 160 to 161 92
3.3.6.2 System Password – PGM 162 102
3.3.6.3 Alarm Attributes – PGM 163 103
3.3.6.4 Attendant Assignment – PGM 164 104
3.3.6.5 Multi-cast RTP/RTCP Ports – PGM 165 104
3.3.6.6 DISA COS – PGM 166 109
3.3.6.7 DID/DISA Destination – PGM 167 110
3.3.6.8 External Control Contacts – PGM 168 111
3.3.6.9 LCD Display Mode -PGM 169 111
3.3.6.10 Button LED Flash Rate – PGM 170 113
3.3.6.11 Music Sources – PGM 171 116

3.3.6.12 PABX Access Codes – PGM 172 117
3.3.6.13 Ringing Line Preference Priority – PGM 173....117
3.3.6.14 RS-232 Port Settings – PGM 174 118
3.3.6.15 Serial Port Function Selections – PGM 175 119
3.3.6.16 Break/Make Ratio – PGM 176 121
3.3.6.17 SMDR Attributes – PGM 177 121
3.3.6.18 System Date, Time and Daylight Saving Time (DST) – PGM 178 .126
3.3.6.19 Multi Language – PGM 179 127
3.3.6.20 System Timers I to III - PGMs 180-182 127
3.3.6.21 In-Room Indication – PGM 183....132
3.3.6.22 DCOB SYS Timers – PGM 186 133
3.3.6.23 NTP Attributes – PGM 195 134
3.3.6.24 CRR Attributes – PGM 252....135
3.3.6.25 VM COS Attributes – PGM 253 136
3.3.6.26 Personal Group – PGM 260 137
3.3.6.27 Personal Group Attribute – PGM 261 138
3.3.7 STATION GROUP DATA – PGM 190 & 192..... 139
3.3.7.1 Station Group Assignment -PGM 190....140
3.3.7.2 Station Group Attributes – PGM 191....141
3.3.7.3 Pick Up Group Assignment – PGM 192....156
3.3.8 ISDN LINE & ICLID ROUTING DATA – PGM 200-206..... 157
3.3.8.1 ISDN Attributes – PGM 200....157
3.3.8.2 CLIP/COLP Table – PGM 201....158
3.3.8.3 MSN Table – PGM 202 159
3.3.8.4 ICLID Route Table – PGM 203....160
3.3.8.5 ICLID Ring Assignment – PGM 204 161
3.3.8.6 PPP Attributes – PGM 205 162
3.3.8.7 Prefix Dialing Table – PGM 206....163
3.3.9 TABLES DATA – PGM 220 to 235..... 165
3.3.9.1 LCR Assignment Tables - PGM 220 to 223 165
3.3.9.2 Toll Tables – PGM 224....171
3.3.9.3 Emergency Code Table – PGM 226 172
3.3.9.4 Authorization Codes Table – PGM 227....172
3.3.9.5 Customer Call Routing/VSF AA Table – PGM 228 173
3.3.9.6 Executive/Secretary Table – PGM 229 175
3.3.9.7 Flexible DID Conversion Table – PGM 231 176
3.3.9.8 System Speed Zone Table – PGM 232 178
3.3.9.9 Auto Ring Mode – PGM 233....179
3.3.9.10 Voice Mail Dialing Table – PGM 234 180
3.3.9.11 Registration & Fractional Module Table – PGM 235 181
3.3.9.12 Mobile Extension Table – PGM 236....182
3.3.9.13 Hot Desk Attributes – PGM 250....184

3.3.9.14 CO Call Rerouting – PGM 252....185
3.3.9.15 Digit Conversion Tables – PGM 270....186
3.3.10 NETWORKING DATA – PGM 320 to 324 188
3.3.10.1 Network Basic Attribute – PGM 320....188
3.3.10.2 Network Supplementary Attribute – PGM 321....189
3.3.10.3 Network CO LINE Attribute – PGM 322....190
3.3.10.4 NET Numbering Plan Table – PGM 324....191
3.3.10.5 Network Feature Code Table – PGM 325....193
3.3.11 TNET (Centralized Networking) – PGM 330 ~ 336.... 194
3.3.11.1 TNET Basic Attributes – PGM 330....194
3.3.11.2 TNET CM Attributes – PGM 331....195
3.3.11.3 TNET LM ATTRIBUTES – PGM 332....196
3.3.11.4 FoPSTN Attributes – PGM 333....197
3.3.11.5 TNET LM External Contact Attributes – PGM 334....198
3.3.11.6 TNET LM Music Attributes – PGM 335....199
3.3.11.7 TNET LM Alarm Attributes – PGM 336....200
3.3.12 Zone Data – PGM 436 - 441, 444.... 201
3.3.12.1 Zone Holiday Assignment – PGM 444....202
3.3.13 GREEN MODE.... 203
3.3.13.1 Green mode activation – PGM 500....203
3.3.13.2 Green mode time setting – PGM 501....204
3.3.14 INITIALIZATION — PGM 450.... 205
3.3.15 PRINT-OUT DATABASE — PGM 451.... 207
3.3.16 VIRTUAL TRACE DIP-SWITCH — PGM 452.... 209
3.3.17 VIRTUAL DIP-SWITCH — PGM 453.... 211
3.3.18 DECT ATTRIBUTES — PGM 491.... 212

4. WEB SERVICE....213
4.1 General....213
4.1.1 PC/Browser.... 213
4.1.2 Environment for LAN connection.... 213
4.1.3 Web Browser setting.... 214
4.1.4 Password Encryption.... 214
4.2 iPECS eMG80 & eMG800 Web Access & Login....215
4.3 Web Admin & Maintenance Main Page Overview....216
4.3.1 Favorite Program Groups.... 220
4.3.2 Using Function Base.... 222
4.3.3 iPECS Web Page Navigation.... 226
4.3.4 General Web Page Features.... 226

4.3.4.1 Web Page Range Entries 226
4.3.4.2 Table Check Boxes 226
4.3.4.3 Sorting Displayed Data 226
4.3.5 Install wizard 227
4.3.5.1 System Upgrade 227
4.3.5.2 Nation Code 228
4.3.5.3 Set System Time and Date 228
4.3.5.4 Set Station Number 229
4.3.5.5 Set Flexible Numbering Plan 229
4.3.5.6 Set CO Ring Assignment 230
4.3.5.7 Set License Upload 230
4.3.5.8 Set Maintenance ID & Password 231
4.3.5.9 Set IP Information 232
4.4 Web Admin Programming 233
4.4.1 System ID & Numbering Plans 233
4.4.1.1 System ID – PGM 100 234
4.4.1.2 System Overview 237
4.4.1.3 Device Port Number Change – PGM 101 239
4.4.1.4 System IP Plan - PGM 102 241
4.4.1.5 Device IP Plan - PGM 103 243
4.4.1.6 CO Device Sequence Number - PGM 104 244
4.4.1.7 Flexible Station Numbering Plan - PGM 105 245
4.4.1.8 Flexible Numbering Plan - PGM 106 ~ 109 247
4.4.1.9 8 Digit Extension Table - PGM 238 251
4.4.2 Station Data 252
4.4.2.1 Station Type - PGM 110 253
4.4.2.2 Common Attributes - PGM 111 254
4.4.2.3 Terminal Attributes - PGM 112 261
4.4.2.4 CLI Attributes - PGM 113 264
4.4.2.5 Flexible Buttons - PGM 115/129 267
4.4.2.6 Station COS - PGM 116 269
4.4.2.7 CO/IP Group Access - PGM 117 271
4.4.2.8 Internal Page Zone Access - PGM 118 272
4.4.2.9 PTT Group Access - PGM 119 274
4.4.2.10 Preset Call Forward - PGM 120 275
4.4.2.11 Station ICR Scenario - PGM 1201 276
4.4.2.12 Idle Line Selection - PGM 121 277
4.4.2.13 Station IP Attributes - PGM 122 278
4.4.2.14 Station Timers - PGM 123 279
4.4.2.15 Linked Station - PGM 124 280
4.4.2.16 Station ICM Group - PGM 125 282
4.4.2.17 Station Voice Mail Attributes – PGM 127 283

4.4.2.18 Station Personal CCR Table – PGM 128 287
4.4.2.19 Station Name Overview & Display 289
4.4.2.20 Station User Greeting 291
4.4.2.21 Station Data Copy 292
4.4.2.22 Station CTI IP Address (1st Party TAPI) 293
4.4.2.23 Station Recording Information 294
4.4.3 Board Based Data 295
4.4.3.1 H.323 VoIP Attributes - PGM 130 296
4.4.3.2 T1/PRI Attributes - PGM 131 299
4.4.3.3 Board Base Attributes - PGM 132 300
4.4.4 CO Line Data 302
4.4.4.1 Common Attributes - PGMS 140 303
4.4.4.2 Analog Attributes - PGMS 141 308
4.4.4.3 VoIP Attributes - PGMS 142 310
4.4.4.4 ISDN Attributes - PGMS 143 311
4.4.4.5 CO/IP Ring Assignment - PGM 144 313
4.4.4.6 DID Service Attributes - PGM 145 314
4.4.4.7 DISA Service Attributes - PGM 146 315
4.4.4.8 CO/IP Preset Forward Attributes - PGM 147 316
4.4.4.9 MATM Attributes - PGM 149 317
4.4.4.10 NA ISDN Line Attributes - PGM 150 319
4.4.4.11 CID/CPN Attributes - PGM 151 321
4.4.4.12 T1 CO Line Attributes - PGM 152 324
4.4.4.13 DCOB CO Line Attributes - PGM 153 326
4.4.5 System Data 327
4.4.5.1 System Attributes - PGM 160 & 161 328
4.4.5.2 System Password - PGM 162 337
4.4.5.3 Alarm Attributes - PGM 163 338
4.4.5.4 Attendant Assignment - PGM 164 340
4.4.5.5 Multi-cast IP/Port - PGM 165 341
4.4.5.6 DISA COS - PGM 166 345
4.4.5.7 DID/DISA Destination - PGM 167 346
4.4.5.8 External Control Contacts - PGM 168 347
4.4.5.9 LCD Display Mode - PGM 169 348
4.4.5.10 LED Flashing Rate - PGM 170 350
4.4.5.11 Music Sources - PGM 171 353
4.4.5.12 PBX Access Codes - PGM 172 354
4.4.5.13 Ringing Line Preference Priority - PGM 173 355
4.4.5.14 RS-232 Port Settings - PGM 174 356
4.4.5.15 Serial Port Selections - PGM 175 357
4.4.5.16 Pulse Dial (Break/Make) Ratio - PGM 176 358
4.4.5.17 SMDR Attributes - PGM 177 359

4.4.5.18 System Date & Time - PGM 178 362
4.4.5.19 System Multi Language - PGM 179 363
4.4.5.20 System Timers - PGMS 180 ~ 182 & 186 364
4.4.5.21 In-Room Indication - PGM 183 368
4.4.5.22 Web Access Authorization 369
4.4.5.23 Station Web Access Authorization 370
4.4.5.24 NTP Attributes - PGM 195 371
4.4.5.25 SNMP Attribute - PGM 196 372
4.4.5.26 Hot Desk Attributes - PGM 250 374
4.4.5.27 System Call Routing - PGM 251 375
4.4.5.28 CO Call Rerouting - PGM 252 377
4.4.5.29 VM COS Attributes – PGM 253 379
4.4.5.30 Static Route Attributes – PGM 254 380
4.4.5.31 Access Control List – PGM 255 381
4.4.5.32 Attendant Ring Mode – PGM 257 382
4.4.5.33 System Speed Dial 383
4.4.5.34 Custom Messages 384
4.4.5.35 PPTP Attributes 385
4.4.5.36 PPP Attributes – PGM 205 386

4.4.6 Station Group Data 387

4.4.6.1 Station Group Overview 388
4.4.6.2 Station Group Assignment - PGM 190 389
4.4.6.3 Station Group Attributes - PGM 191 390
4.4.6.4 Pick Up Group Overview 407
4.4.6.5 Pick Up Group - PGM 192 408
4.4.6.6 Personal Group Overview 409
4.4.6.7 Personal Group - PGM 260 410
4.4.6.8 Personal Group Attribute - PGM 261 411

4.4.7 ISDN Line & ICLID Routing Data 412

4.4.7.1 ISDN Attributes - PGM 200 413
4.4.7.2 CLIP/COLP Table - PGM 201 414
4.4.7.3 MSN Table - PGM 202 415
4.4.7.4 ICLID Route Table - PGM 203 416
4.4.7.5 ICLID Ring Assignment Table - PGM 204 417
4.4.7.6 Prefix Dialing Table - PGM 206 418
4.4.7.7 ISDN Clock Priority - PGM 207 for eMG800 420

4.4.8 SIP Data 421

4.4.8.1 SIP Common (System based) Attributes - PGM 210 422
4.4.8.2 SIP Trunk Status Overview 426
4.4.8.3 SIP CO Attributes - PGM 133 427
4.4.8.4 SIP Registration Status Overview 440
4.4.8.5 SIP UID Allocation Status Overview 441

4.4.8.6 SIP User ID Attributes – PGM 126 442
4.4.8.7 SIP Phone Attributes - PGM 211 444
4.4.8.8 SIP Phone Provisioning - PGM 212 450
4.4.8.9 Provisioning File View & Delete 453
4.4.8.10 VMEX Station Data - PGM 215 454
4.4.8.11 VMEX Connection table - PGM 216 455
4.4.9 Tables Data 456
4.4.9.1 LCR Control Attributes - PGM 220 457
4.4.9.2 LCR LDT (Leading Digit Table) - PGM 221 459
4.4.9.3 LCR DMT (Digit Modification Table) - PGM 222 461
4.4.9.4 LCR Table Initialization - PGM 223 463
4.4.9.5 Digit Conversion Table - PGM 270 464
4.4.9.6 Toll Exception Table - PGM 224 465
4.4.9.7 Emergency Code Table - PGM 226 466
4.4.9.8 COS Table 467
4.4.9.9 Authorization Codes Table - PGM 227 468
4.4.9.10 Customer Call Routing Table - PGM 228 472
4.4.9.11 Executive/Secretary Table - PGM 229 474
4.4.9.12 Flexible DID Conversion Table - PGM 231 476
4.4.9.13 System Speed Zone Table - PGM 232 478
4.4.9.14 Auto Ring Mode Table - PGM 233 479
4.4.9.15 Voice Mail Dialing Table - PGM 234 480
4.4.9.16 Registration Table - PGM 235 482
4.4.9.17 Mobile Extension Table - PGM 236 483
4.4.9.18 IPCR Agent Table - PGM 237 485
4.4.9.19 Dummy Dial-Tone Digit Table 486
4.4.9.20 Flexible Button Default Table – PGM 239 487
4.4.9.21 Preset Flexible Button Default – PGM 240 488
4.4.10 Networking Data 489
4.4.10.1 Network Basic Attributes - PGM 320 490
4.4.10.2 Network Supplementary Attributes - PGM 321 491
4.4.10.3 Net CO Line Overview 492
4.4.10.4 Network CO Line Attributes - PGM 322 493
4.4.10.5 Network Numbering Plan Table Overview 494
4.4.10.6 Network Numbering Plan - PGM 324 495
4.4.10.7 Network Feature Code Table - PGM 325 498
4.4.11 H.323 Routing Table 499
4.4.11.1 H.323 Basic Attributes -PGM 326 500
4.4.11.2 H.323 CO Group Attributes -PGM 327 501
4.4.11.3 H.323 Incoming Route table -PGM 328 504
4.4.12 T-NET Data 505
4.4.12.1 T-NET Basic Attributes -PGM 330 506

4.4.12.2 T-NET CM Attributes -PGM 331 507
4.4.12.3 T-NET LM Attributes -PGM 332 508
4.4.12.4 T-NET FoPSTN table -PGM 333 509
4.4.12.5 T-NET Control Contact -PGM 334 510
4.4.12.6 T-NET Music/Alarm -PGM 335 ~ 336 511
4.4.12.7 T-NET ISDN Clock Priority -PGM 337 for eMG800 512
4.4.13 Zone Data 513
4.4.13.1 Zone Number Overview 514
4.4.13.2 Device Zone Number – PGM 436 515
4.4.13.3 Device Zone Attributes – PGM 437 516
4.4.13.4 Access & Page Relay – PGM 438 518
4.4.13.5 Inside Zone Attributes Overview 519
4.4.13.6 Zone Attribute – PGM 439 520
4.4.13.7 Zone RTP Relay Group – PGM 440 523
4.4.13.8 Inter Zone Attribute – PGM 441 524
4.4.13.9 Zone Holiday Assignment - PGM 444 525
4.4.14 Device Login 526
4.4.14.1 Remote Device Registration – PGM 442 527
4.4.14.2 Station User Login – PGM 443 528
4.4.15 UCS Data 530
4.4.15.1 Common Attributes – PGM 445 531
4.4.15.2 UCS Standard Client Login – PGM 446 533
4.4.15.3 UCS Premium Client Login – PGM 446 535
4.4.15.4 UCS Standard Client Attributes – PGM 447 537
4.4.15.5 Administrative Message – PGM 448 538
4.4.15.6 UCS Standard Client Audio Setting – PGM 449 539
4.4.16 DECT Data 541
4.4.16.1 DECT Registration (0#) 542
4.4.16.2 DECT ATTRIBUTES - PGM 491 544
4.4.16.3 DECT Multi-zone support - PGM 491 545
4.4.17 Hotel Data 546
4.4.18 Green Mode - PGM 500 547
4.4.18.1 Green mode activation 548
4.4.18.2 Green Mode Time Setting 549
4.4.19 Initialization - PGM 450 550
4.4.19.1 Initialization Table - PGM 450 551
4.5 Maintenance 552
4.5.1 File Upload & Remote Upgrade 554
4.5.1.1 File Upload 555
4.5.1.2 Upgrade Process 556
4.5.1.3 Upgrade HTML Files 558

4.5.1.4 WTIB Base upgrade Process for eMG800 559
4.5.2 Database 560
4.5.2.1 Database Upload 560
4.5.2.2 Database management 560
4.5.3 Multi Language 561
4.5.3.1 Multi Language File Upload 561
4.5.3.2 Multi Language File Download 561
4.5.4 SMDR 562
4.5.5 File System 563
4.5.5.1 File View & Delete 563
4.5.5.2 File System Information 563
4.5.6 MOH (Music On-Hold) Management 564
4.5.6.1 MOH Delete & Download 564
4.5.6.2 MOH Upload 564
4.5.7 License Install 565
4.5.7.1 License upload 566
4.5.7.2 Temp License Activation 567
4.5.8 DECT Statistics Feature 568
4.5.9 VSF Prompt Upload 569
4.5.9.1 Prompt selection 569
4.5.9.2 Prompt Upload/Delete for eMG80 570
4.5.9.3 Individual Upload 571
4.5.10 VSF System Greeting 572
4.5.10.1 Individual Upload 572
4.5.10.2 Individual download 573
4.5.10.3 System greeting Upload 573
4.5.10.4 System greeting Download 574
4.5.11 Voice Mail Management 575
4.5.11.1 Voice Mail Delete 575
4.5.11.2 Voice Mail USB Backup 576
4.5.12 Function program 577
4.5.12.1 User Function Management Page 577
4.5.13 User Management 581
4.5.14 Trace 582
4.5.15 TDM Gain Control 583
4.5.16 IP Gain Control 584
4.5.17 Tone/ Ring Gain & Cadence Control 584
4.5.18 Appliances Control 585
4.6 Station Program (User Portal) 586

4.6.1 Station Attributes 588
4.6.2 Station Call Forward 590
4.6.3 Station ICR Scenario 591
4.6.4 Station Speed Dial 592
4.6.5 Pre-selected Message 593
4.6.6 Flex Buttons 594
4.6.7 Send Internal SMS 595
4.6.8 Station Conference Group 595
4.6.9 System Conference Group 597
4.6.10 Mobile extension Table 598
4.6.11 Attendant ring mode 598
4.7 On-Line web user guide 599
Appendix A 600
Appendix B 602
Appendix C 607

1. INTRODUCTION

1.1 Manual Application

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

1.2 Manual Organization

This manual is organized in ten (10) major sections including:

- **Section 1 Introduction**: This section introduces the content and organization of the manual.
- **Section 2 System & Admin Information**: In this section general information on System capacities, power-up routines and the system initialization process are detailed. Also, this section discusses the process for registration of IP and softphones with the eMG system.
- **Section 3 Station Administration**: This section provides details on configuring the system employing a 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.
- **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 on the web by clicking [User's guide] of 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**: 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 Station Administration.

1.3 S/W & H/W Terminology

The core system software is employed with the hardware of several iPECS systems, each with their own hardware designations. The software employs terms that may differ from the Hardware and Feature manuals as indicated in the below list.

- VSF or VSF Gateway , referring to the integrated AA/VM built into the KSU Main board and the VVMU
- CO/IP or CO/IP Line, referring to external network connections, outside Lines

2. SYSTEM & ADMIN INFORMATION

2.1 System capacities

The iPECS eMG is available in several hardware configurations based on the Main board of the KSU. Upon initialization, the software will structure a database for the maximum possible station and CO/IP Line configurations. 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. Other than the Station and CO/IP Line ports, the hardware and software capacities are the same. The capacities relative to the software are provided in the table below.

Table 2.1-1 eMG80 Software Capacities

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, 1 Channel 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 party per group
WTIB	1
DECT Phones	48
Built-in VoIP channels	8 (2 channels by default, 6 channels by license)
VVMU VoIP channels	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

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
SMDR buffer	5000
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

Table 2.1-2 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

Item	Capacity
Conference channels	148 channels/13 party per group
WTIB	3
DECT Phones	192
Built-in VoIP channels	8
VOIB128 channels	Default: 32 channel (8 channel base by license)
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
SMDR buffer	30,000
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
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

2.2 Slot configuration for eMG80

The built-in interface ports, ports of the optional Interface boards and the optional Function boards are organized into Slots. For the built-in and optional board interfaces two Slots are defined, a Slot for the Stations and a Slot for the CO/IP Lines. The Function boards use a single Slot to identify the board location. The Slots are used during the initialization routines, refer to section 2.3, to identify the installed equipment and establish the numbering for the Stations, CO/IP lines, and Function board channels. An additional Slot (Slot 18) is used by the software to identify the Conferencing channels as a virtual board.

The figure below depicts the Slot locations and Table 2.2-1 & 2.2-2 lists the Slots, the hardware designation for boards applicable for the Slot and the software reference for the type of interfaces.

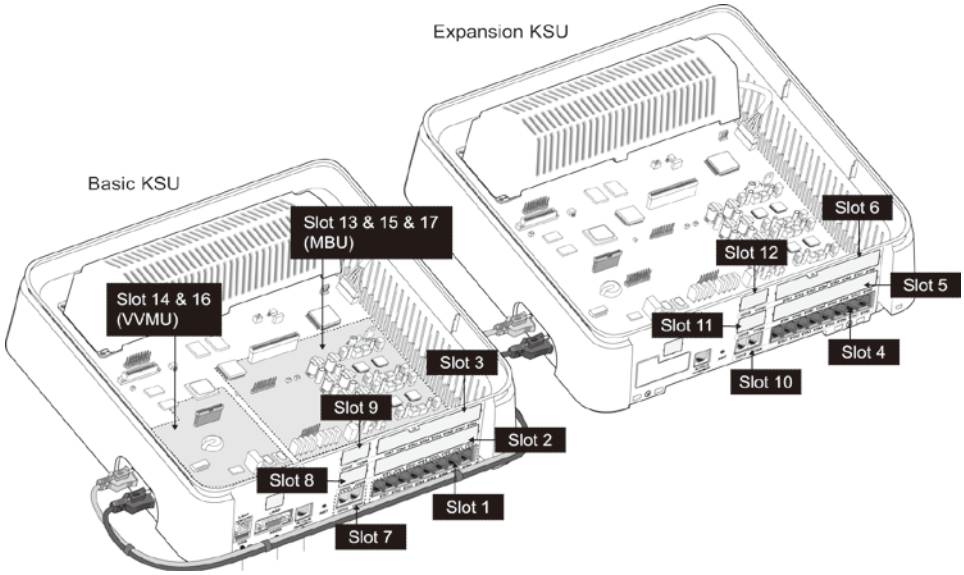


Table 2.2-1 eMG80 Slot Configuration (Standard)

Slot	KSU	H/W Reference	S/W Reference
1	KSU	Built-in KSU Station interface group KSUA and KSUI: 1-DKT & 7-Hybrid KSUAD & KSUID: 8-DKT &-4 SLT	 HYIB8 DSIB12
2	KSU	CH204 or BH104 CH408, BH208 or HYB8 CS416 or SLIB16 WTIB4	HYIB4 HYIB8 SLIB16 WTIB4
3	KSU	CH204 or BH104 CH408, BH208 or HYB8 CS416 or SLIB16 WTIB4	HYIB4 HYIB8 SLIB16 WTIB4
4	EKSU	Built-in EKSU Station interface group 8-Hybrid	 HYIB8
5	EKSU	CH204 CH408 or HYB8 CS416 or SLIB16	HYIB4 HYIB8 SLIB16

Slot	KSU	H/W Reference	S/W Reference
6	EKSU	CH204 CH408 or HYB8 CS416 or SLIB16	HYIB4 HYIB8 SLIB16
7	KSU	Built-in KSU Station interface group KSUA and KSUAD: 4-CO Line KSUI & KSUID w/PRIU: KSUI & KSUID w/BRIU2	 LCOB4 PRIB BRIB2
8	KSU	CH204 CH408 or CS416 BH104 BH208	LCOB2 LCOB4 BRIB1 BRIB2
9	KSU	CH204 CH408 or CS416 BH104 BH208	LCOB2 LCOB4 BRIB1 BRIB2
10	EKSU	Built-in EKSU Station interface group 4-CO Line	 LCOB4
11	EKSU	CH204 CH409 or CS416	LCOB2 LCOB4
12	EKSU	CH204 CH408 or CS416	LCOB2 LCOB4
13	KSU	Built-in KSU VoIP channels	VOIU
14	KSU	VVMU VoIP channels	VOIB
15	KSU	Built-in 4-port 1-Hour AA/VM	VMIU
16	KSU	VVMU 4-port, 15-hour AA/VM	VMIB
17		Miscellaneous connections	MISU
18	KSU	Virtual Slot for Conferencing channels	

2.3 Initialization

The system should be initialized before starting the configuration to assure a known starting point and automatically register installed boards. Also, if the Nation Code requires modification, the system will be initialized in the process so as 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 using the software Initialization PGM 450. Note the former must be used to change the Nation Code as detailed section 3.3.1.

2.3.1 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 configuration of the device. Once the Power-up routine is complete, the system will conduct normal operations.

2.3.2 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. 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.

2.3.3 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) 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) in sequence 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.

2.3.4 IP Phone Registration

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, it is given the next available sequence number starting at “19”, and 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 processed normally except the MAC address must be assigned in PGM 442 Remote Device Register.

2.3.5 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.

2.4 General Admin and Menu Structure

The iPECS eMG 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. Section 3 provides a description 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 affect, i.e. station, system, numbering plan, etc. Items are further grouped into “Programs” forming a multi-layered menu structure as the following list. Each of the Program groups is assigned a three digit “Program” (PGM) code used to access the group from an Admin Keyset. 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 Standard
- DECT Data
- Hotel Data
- Green Mode
- 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

3.1 General

3.1.1 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 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, confirmation tone will be received and the data stored. If a conflict exists, 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.

3.1.2 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	**#** #

3.2 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. In the left column of the chart are the LCD displays and in the right column are step-by-step instructions to modify database items.

PROCEDURE:	
STATION 100 (T) 04 SEP 01 02:49 PM	1. Press the [PGM] button. Dial '*' and '#'.
ENTER ADMIN PASSWORD	Enter the Admin password. 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.

3.3 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.

3.3.1 System ID — PGM 100

Under System ID, the country is identified using the international dial codes (NATION CODE). If the NATION code requires changing, the system must be initialized to restructure memory and create the country specific defaults, gain, frequencies and other system characteristics specific to the country and regional regulatory requirements.

To change the NATION Code on eMG:

- Set the MPB Dip-switch 1 pole 2 to the ON position,
- Follow the procedure below to modify the NATION code
- Press the reset button on the KSU, power the system Off and On, or use PGM 450 to initialize the system.
- 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, under this program the system can be programmed to select one of eight (8) Flexible Number Plans, 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)	1. 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

Table 3.3.1-1 SYSTEM ID (PGM 100)

BTN	– DISPLAY	REMARK	RANGE	DEFAULT
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	
4	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.		

Table 3.3.1-2 COUNTRY CODES

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	Malta	356
Luxembourg	352	Malaysia	60	Morocco	212
Mexico	52	Monaco	377	Nigeria	234
Netherlands	31	New Zealand	64	Pakistan	92
Norway	47	Oman	968	Paraguay	595
Panama	507	P.N.G	675	Portugal	351
Peru	51	Philippines	63	Senegal	221
Qatar	974	Saudi Arabia	966	Spain	34
Singapore	65	South Africa	27	Sweden	46
Sri Lanka	94	Swaziland	268	Tunisia	216
Switzerland	41	Thailand	66	United Kingdom	44
Turkey	90	U.A.E.	971	Y.A.R.	967
Uruguay	598	Venezuela	58		

3.3.2 NUMBERING PLANS DATA — PGM 102 to 109

3.3.2.1 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 mask must be a routable IP address 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 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 "MFIM" address in the remote device.

PROCEDURE:	
SYSTEM IP ADDRESS PLAN PRESS FLEX KEY (01-17)	1. 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.

Table 3.3.2.1-1 SYSTEM IP ADDRESS PLAN (PGM 102)

BTN	DISPLAY	DEFAULT	REMARK
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.
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.

3.3.2.2 Device IP Address Plan -PGM 103

TDM board is registered with 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, which indicates the order of registration. 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 switching to eliminate the need for IP traffic overhead, reducing overall LAN traffic.

The system normally employs IP multi-cast protocol to respond to a registration request from a gateway/board or terminal. When the device is separated from the system by a router, the system must use the IP uni-cast protocol. This is established by the “Local Device” assignment.

When disabled (Off), the system will send an IP uni-cast message to the device in response to a registration request.

PROCEDURE:	
DEVICE IP ADDRESS PLAN PRESS FLEX KEY (1-7)	1. 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
	Use the **[VOL UP]** and **[VOL DOWN]** buttons to see next/ previous IP Address. Refer to Table 3.3.2.2-1 for display information.

PROCEDURE:	
	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	LCD shows: 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 switching 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 on a common LAN with the MPB.	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

Table 3.3.2.2-1 DEVICE & STATION ADDRESS PLAN (PGM 103)

BTN	DISPLAY	FEATURE	DEFAULT
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 switching 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
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 switching 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 on 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

Table 3.3.2.2-1 DEVICE & STATION ADDRESS PLAN (PGM 103)

BTN	DISPLAY	FEATURE	DEFAULT
4–2	SET MAC ADDRESS 001-015 : B40EDCBF5606	Use Flex button 2 to enter the device's MAC address into system memory.	None
4–3	ARP (1:ON/0:OFF): OFF	Use Flex button 3 to enable/disable Direct Send mode, which employs layer 2 switching 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 switching 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	LCD shows: Line 1 Sequence Number, 2 digits MAC Address, 12 digits Line 2 "WTI4" and IP Address, 7~12 digits.	
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

Table 3.3.2.2-1 DEVICE & STATION ADDRESS PLAN (PGM 103)

BTN	DISPLAY	FEATURE	DEFAULT
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.	

3.3.2.3 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 . . .	1. Press the **[PGM]** button and dial 104.
001 002 003 004 005 006 009 007 008 013 014 . . .	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.
001 002 003 004 005 006 009 007 008 013 014 . . .	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.

3.3.2.4 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	1. Press the **[PGM]** button and dial 105.
001 002 003 004 … … … …	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.
	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 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.

3.3.2.5 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 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 eight base Numbering Plans, select the base Numbering Plan in PGM 100.

PROCEDURE:	
FLEX NUMBERING PLAN A PRESS FLEX KEY (01-24)	1. 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.	eMG80:301~335 eMG800:301~400
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	UNUSED		
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
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

Table 3.3.2.5-1 FLEXIBLE NUMBERING PLAN PART A (PGM 106)

BTN	DISPLAY	FEATURE	DEFAULT
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 request 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
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:#601~#619 eMG800:#601~#800
13	STA GRP PILOT NUMBER START #:401-440	Station group pilot numbers.	eMG80:401~440 eMG800:401~500

Table 3.3.2.5-2 FLEXIBLE NUMBERING PLAN PART B (PGM 107)

BTN	DISPLAY	FEATURE	DEFAULT
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
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
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

Table 3.3.2.5-4 FLEXIBLE NUMBERING PLAN PART D (PGM 109)

BTN	DISPLAY	FEATURE	DEFAULT
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
20	COMPANY DIRECTORY NAME ENTER NEW #:563	Code to check and change recording station subscribe name of Company Directory feature. (USA Only)	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

3.3.2.6 8-Digit Table

We can support it more 4 digits for station number. Station numbering should not conflict with numbering plan. It is consist of prefix digits and add 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)	1. 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 4 digits	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

3.3.3 Station Data –PGM 110-125

3.3.3.1 Station Type -PGM 110

Each station is assigned a type, which is 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	1. 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 Console.
	Select Flex button 1, to set the station type and, for iPECS DSS Consoles (types 2~4), Flex button 2 assigns the associated station.
100-110 F1:TY F2:ASC IPKTU	Use the dial-pad to enter desired data: 4-1. For Flex button 1 (TYPE), enter the station TYPE; refer to Table 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 3.3.3.1-1 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 3.3.3.1-2 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	

3.3.3.2 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	1. 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 handset.	0: OFF 1: ON	ON
2	100-110 CALL FWD (1:ON/0:OFF) : OFF	Enables Call Forward activation by the station.	0: OFF 1: ON	OFF

Table 3.3.3.2-1 STATION ATTRIBUTES I (PGM 111)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
3	100-110 DND (0-3) : 0(OFF)	Enables DND activation by the station.	0: OFF 1: ALL 2:ICM call only 3:CO call only	OFF
4	100-110 DATA SECURITY (1:ON/0:OFF) : OFF	Disables 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 a 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 device to receive incoming ring signals, Speaker, Headset or Both.	1: Speaker 2: Headset 3: Both	SPKR
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; this 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 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

Table 3.3.3.2-1 STATION ATTRIBUTES I (PGM 111)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
16	100-110 ACT PTT GRP ACTIVE PTT GROUP: .	A station can be assigned to a PTT group and the group 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.	eMG80:1~15 eMG800:0~32	1
18	100-100 VMIU/VMIB BOARD USE 1ST VMIU/VMIB	Assigns the VMIU or VMIB where messages for the station are stored.	Sequence no	
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 by 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
21	100-110 SERIAL DSS (1:EN/0:DIS):ENABLE	Assigns Serial DSS usage authority.	0: Disable 1: Enable	Enable
22	100-110 DLTN (00-10) DIAL TONE (00)	Each station can choose one of eleven dial tone sources	00: dial tone 01: INT music 02: EXT music 03: VSF MOH 04: SLT MOH1 05: SLT MOH2 06: SLT MOH3 07: SLT MOH4 08: SLT MOH5 09: VSF MOH2 10:VSF MOH3	dial tone
23	100-110 RBTN (00-10) RING BACK TONE (00)	Each station can choose one of eleven ring back tone sources	00: ring back tone 01: INT music 02: EXT music 03: VSF MOH 04: SLT MOH1 05: SLT MOH2 06: SLT MOH3 07: SLT MOH4 08: SLT MOH5 09: VSF MOH2 10:VSF MOH3	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(Others) 1: ON(ATD)	OFF
3	100-110 TIME RESTRICT (1:ON/0:OFF) : OFF	The system can automatically disconnect outgoing calls at expiration of the Call Restrict timer (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 CO Lines.	0: Disable 1: Enable	Enable
5	100-110 CO/IP QUEUING (1:EN/0:DIS): ENABLE	Permits the station to queue for the next available Line when an 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 CO Line button.	0: Disable 1: Enable	Disable
7	100-110 RING LINE PRE (1:EN/0:DIS) : ENABLE	Enables Ringing Line Preference 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 access to System Speed Dial bins.	0: Disable 1: Enable	Enable
9	100-110 UCD GRP SVC (1:ON/0:OFF) : OFF	When unavailable, DID/DISA calls 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/DISA calls 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 (Not presently 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 login and use resources of the system through the Hot Desk phone.	0: OFF 1: ON	OFF

Table 3.3.3.2-2 STATION ATTRIBUTES II (PGM 112)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
14	100-110 PREFER CO/GRP …..	The system will seize this CO Line or CO group number when the station dials '9' (First available CO access code).	CO # or CO Group #	..
15	100-110 SEND SLT CLI (1:ON/0:OFF) : ON	When allowed, system will send CLI 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 PGM 191-button 19 for ACD Groups.	0 ~ 9	0
17	100-110 EZ PWD LOGIN (1:ON/0:OFF	For ez ATD. Enables/disables required Auth code use.	0: OFF 1: ON	OFF
18	100-110 EMERGENCY CO …..	This field defines the CO Line or Group employed by the system to place Emergency Assistance calls.	CO #, CO Group #, Transit-out	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 UCS Client 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

Table 3.3.3.2-2 STATION ATTRIBUTES II (PGM 112)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
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 the UCS Client station number that will be used as the VMIU/VMIB back up.	station	
24	100-110 VSF BK PROM (1:ON/0:OFF) : OFF	Enables UCS Client 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
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 Listen 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

Table 3.3.3.2-3 STATION ATTRIBUTES III (PGM 113)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
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 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	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
12	100-110 ENBLOCK MODE (1:ON/0:OFF) : OFF	When On, the user-dialed digits are stored at iPECS IP or LDP Phones until 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	Messages stored in the VSF may be retrieved in either a FIFO (first-in-first-out) or LIFO (last-in-first-out) order based on this entry.	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

Table 3.3.3.2-3 STATION ATTRIBUTES III (PGM 113)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
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 Admin PGM 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 the e-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
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 use of PABX ANI Link device for E-911 support, 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 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/time stamp of VSF message.	0 : OFF 1 : ON	ON
24-4	100-110 OGM DEST NOT ASSIGNED	Assign Mail box destination. When a user dial attendant code ('0' or '9'), if it is assigned then the call will be delivered to assigned mail box destination instead of attendant. If it is not assigned then the call will be delivered to attendant.		NOT ASSIGNED

Table 3.3.3.2-3 STATION ATTRIBUTES III (PGM 113)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
24-5	100-110 VSF DEL MSG (1:ON/0:OFF) : OFF	When ON, delete VSF messages when send UMS e-mail notification.	0 : OFF 1 : ON	OFF
24-6	100-110 VM PWD CHECK (0-2) : STN&PWD	When ON, check password when a user access to the VSF messages.	0 : No Password 1 : PWD only 2: station number and Password	2: station number and Password
24-7	100-110 BARGE IN MODE (0-2) : DISABLE	Barge in permits an authorized extension to intrude into other existing outside/internal calls or to disconnect existing call forcedly. If 0, Barge In is disabled. If 1, Barge In monitors other conversation. If 2, Barge In monitor join and Forced Disconnect.	0: Disable 1: Monitor 2:Monitor&Join & Disconnect	Disable
24-8	100 – 110 SLT FLASH MODE (0-3) : FLASH TRANSFER	SLT Flash works as following option. 0: Flash Transfer – Flash detected, then the line is held and the line goes to waiting state. 1: Flash Drop - Flash detected and Line is disconnected. 2: Flash Ignore – Flash detected, but Ignored. 3: Hold Release – Flash detected, 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.	0: Transfer 1: Drop 2: Ignore 3: Hold Release	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-cause can 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 this LDT table index	No. 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 SECUTIRY	Security for VSF mail sending can be chosen.	0: No Security 1: SSL 2: TSL	No Security
24-13	100 – 110 VSF SMTP PORT (00001-65535) : 00025	When VSF mail sending, SMTP port can be program.	00001 – 65535	25

Table 3.3.3.2-3 STATION ATTRIBUTES III (PGM 113)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
24-14	100 – 110 VSF S-MAILADDR ……	When VSF mail sending, Sender Mail Address can be program.		
24-15	100 – 110 PREPAID CALL (1:ON/0:OFF) : OFF	Enable prepaid call service.	0: OFF 1: ON	OFF
24-16	100 – 110 PREPAID MONEY 000000	Prepaid Money can be entered. By Call Metering signal, pre-paid money can be calculated.	000000 - 999999	0
24-17	100 – 110 DEFAULT VM NO ….	Default VM group number 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. It is used only for South Africa. SLT gain is changed cording to this configuration.	0: Default 1: Short 2: Long 3: Far	Default (0)
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 System (2)
24-20	100 – 110 SIP COLOR RING …..	Color ring is provided from 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 station. The station with level 1 can view/access all programs in station web. The station with level 2/3 follows 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 selected device (SPEAKER/HEADSET/Both) while in the headset mode.	1~3 (SPKR/ HEADSET/ Both)	1: SPKR

3.3.3.3 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	1. 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 number of the calling party 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 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 restrict 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 a SLT or analog FAX will be 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, if set to ON.	0: OFF 1: ON	OFF
9	100-110 CLI/REDIRECT (1:RED/0:CLI) : CLI	When an incoming ISDN call is Redirected by the ISDN, 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 EXT OR ATD (1:ATD/0:EXT) : EXT	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.	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 that is corresponding to a MSN Telephone Number comes in to system, the call is basically routed to idle stations that have free MSN button that is 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 a 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 a 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
13				
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
16				
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
19				
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.	1~6 (1: N.AMERICA 2:KOREA 3:TURKIYE 4:RUSSIA 5:AUTRALIA 6:GERMANY)	1

Table 3.3.3.3-1 STATION ISDN ATTRIBUTES (PGM 114)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
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 DND tone.	0: OFF 1: ON	OFF
23	100-110 P-MSG LANG (1-6):PROMPT1 U.S	Select voice enabled preselected message for a station playing toward an incoming CO call	1~6 (1: US 2:KOREA 3:TURKIYE 4:RUSSIA 5:AUTRALIA 6:GERMANY)	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 other 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.	eMG80:1-15 eMG800:1-32	0
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

Table 3.3.3.3-1 STATION ISDN ATTRIBUTES (PGM 114)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
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	The iPECS LIP-9030 and 9040 have 8 and 12 Flexible buttons, respectively. Additional Flex buttons are available using Flex button pages. The phone can have up to 3 pages each with the 8 or 12 Flex buttons. Thus, an LIP-9030 can have 24 Flex buttons and the LIP-9040 can have 36 Flex buttons. The Navigation Up/Down button is used to scroll through the Flex buttons pages assigned.	1-3	3 PAGE
24-14	100-110 ALIGN LCD (0-2) : NOT ALIGN	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”).	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 a 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 can 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 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, small popup is displayed on the LCD of LIP-9030/9040. If it is set to OFF, top bar is displayed instead of small popup.	0: OFF 1: ON	OFF
24-20	100-110 LARGE WIN TMR (0-5) : 0	When Large popup timer is set to any value from 1 to 5 except 0, the display of large popup is disappeared after the timer expired and then the large popup information is displayed at top bar.	0-5	0
24-21	100-110 MWI LED (0-4) : ALL MWI	User can program 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	ALL MWI

Table 3.3.3.3-1 STATION ISDN ATTRIBUTES (PGM 114)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
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

3.3.3.4 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 an 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]** are 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	1. 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	Empty (unassigned) button, may be defined by the user.
2	User Program Fixed Numbering Plan	Assigns 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 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					
	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

BTN	iPECS LDP Phone					
	9030	9008	7004	7008	7016	7024
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
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}

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	

3.3.3.5 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, 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 consider a Long Distance call and appropriate restrictions are applied.

PROCEDURE:	
STATION COS ENTER STA RANGE	1. 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 allow and deny numbers.
3	The assignments in Exception Table B are monitored for allow and deny numbers.
4	The assignments in both Exception Tables A & B are monitored for allow 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 allow and deny numbers.
9	The assignments in the Exception Table E are monitored for allow and deny numbers.
10	The assignments in the Exception Table D & E are monitored for allow and deny numbers.
11	The assignments in the Exception Table A & B and D & E are monitored for allow and deny 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

3.3.3.6 CO/IP Group Access – PGM 117

Stations can be allowed or denied access to CO Lines and IP Channels by group (eMG80: 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	1. 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.

3.3.3.7 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	1. 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 announcement LED Off: station does not receive announcement.
	Press the **[Save]** button to store the Page Zone data.

3.3.3.8 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	1. Press the **[PGM]** button and dial 119.
100-110 PTT GRP ACC PRESS FLEX_KEY (01-10)	Use the dial-pad to enter a station range (Ex. 100~110). For a single station, enter the same number twice.
	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.

3.3.3.9 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 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	1. 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.

PROCEDURE:	
F1:S F2:H F3:SPD F4:ICR UNCONDITION : ….	Press Flex Button for the desired type of forward: 1. Unconditional 2. Internal Busy 3. Internal No Answer 4. External Busy 5. External No Answer 6. Transfer to Mailbox (destination must 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.

3.3.3.10 Idle Line Selection – PGM 121

When a station goes to an off-hook condition (lifts handset or presses **[SPEAKER]** button), the system normally provides 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	1. 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

3.3.3.11 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	1. 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

3.3.3.12 Station Timers – PGM 123

Certain timers can be assigned on a station basis. Available timers, description and valid inputs are given in Table 3.3.3.12-1.

PROCEDURE:	
STATION TIMERS ENTER STA RANGE	1. 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 station is assigned Call Time restriction in Station Attributes II, PGM 112, button 3	00-99 minutes	00

3.3.3.13 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	1. Press the **[PGM]** button and dial 124.
STA 110 IS LINKED PAIR PRESS FLEX KEY (1-3)	Use the dial-pad to enter 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	RANGE	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 linked station.		
3	STA 110 : SET MAC ADDR MAC: NOT ASSIGNED	Set MAC address of 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.		

3.3.3.14 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 and up to 32 for eMG800 can be defined. 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)	1. Press the **[PGM]** button and dial 125.
ICM TENANCY GRP 01 F1:ATD F2:ACCESS	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 Attendant assignment, use the dial-pad to enter the station number of the Group Attendant.
	To assign accessible ICM Tenancy groups for the group, the Flex button indicates the current Tenant group access. Press the Flex. Buttons to toggle 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:	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.	eMG80:01-15 eMG800:01-32	GROUP 1

3.3.3.15 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	1. 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 attributes can be set at PGM 253.	1-5	1
2	ADMINISTRATOR MAILBOX (1:EN/0:DIS):DISABLE	If this option is set to ON, 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. If Previous Menu, after greeting message is played, go to previous menu. If Hang Up, after greeting message is played, call is hanged up.	0: Previous 1: Hang Up	Previous menu
5	COMPANY DIR FIRST NAME ……	This field is first name of a station for Company Directory feature.	Max 12 Char	N/A
6	COMPANY DIR LAST NAME ……	This field is last name of a station for Company Directory feature.	Max 12 Char	N/A
7	USER-MSG RW/FF TIME (03-99):04 Sec	User Message Rewind / Fast Forward are supported by this time.	03-99	04
8	NOTIFY REPEAT COUNT (00-99) : 03	It is used to transfer call to attendant if retry count is over this for VM notification.	00-99	03

Table 3.3.3.15-1 STATION VM Attributes (PGM 127)

BTN	– ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
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	CASCADE MAILBOX1 ….	Message cascading i s a feature that copies messages left for the originating mailbox to another mailbox. This field is destination mail box station.	Station No.	N/A
12	CASCADE MAILBOX2 ….			
13	CASCADE MAILBOX3 ….			
14	CASCADE MAILBOX4 ….			
15	CASCADE MAILBOX5 ….			
16	CASCADE METHOD (0-2) : DISABLE	Cascade method is determined.	0:Disable 1: Copy 2: Move	Disable
17	CASCADE MESG TYPE (0-2) : NORMAL ONLY	Cascade Message Type is determined.	0:Normal Only 1: Urgent Only 2:All	Normal only
18	CASCADE APPLY TYPE (0-2) : IMMEDIATE	Cascade Apply Type is determined. Immediate: Cascade is done as soon as a message is left. After Notify Retry Count: After Notify Retry Count is over, cascade is done. After Cascade Timer: Cascade is done after cascade timer.	0:Immediate 1: After Notify Retry Count 2: After Cascade Timer	Immediate
19	CASCADE TMR(min) (000-250) : 000	Cascade Apply Timer is set.	000 ~250 (min)	0
20	MSG WAIT NOTICE (0-2) : TONE	When a user has voice mail, system can provides this as voice prompt instead of dial tone according to option based on station. Disable: System provides normal dial tone when a user goes to off hook status. Tone: System provides warning tone instead of dial tone to give indication when a user goes to off hook status. Prompt: System provides message indication as voice prompt when a user goes to off hook status.	0: OFF 1:Tone 2:Prompt	Tone

3.3.3.16 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	1. Press the **[PGM]** button and dial 128.
STATION CCR ENTER STA RANGE	Enter Station Range (Ex. 100~110).
100-110 S TA 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 – 110 CCR 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, 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 to the CCR routing. If this option is set to OFF, the following next digits are also affected to the DISA routing.	ON/OFF	OFF
13	101 – 101 * USED AS (0-3): NUMBERING PLAN	While listening User Greeting, * button working is followed by this attribute.	0 : Numbering Plan 1 : Replay Greeting 2 : Access Mail Box 3 : Leave Message	Numbering Plan
14	101 – 101 # USED AS (0-3): ACCESS MAILBOX	While listening User Greeting, # button working is followed by this attribute.	0 : Numbering Plan 1 : Replay Greeting 2 : Access Mail Box 3 : Leave Message	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 (USA Only)
14	Record VM Greeting (USA Only)

3.3.3.17 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	1. 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.

3.3.4 BOARD DATA – PGM 130 to 132

3.3.4.1 H.323 VoIP Attributes – PGM 130

The VOIP channels are 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 (uni-cast and multi-cast) as well as 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)	1. 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	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

Table 3.3.4.1-1 H.323 VOIP ATTRIBUTES (PGM 130)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
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
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 Number 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 will be 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

3.3.4.2 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, for 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)	1. Press the **[PGM]** button and dial 131 and enter 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-EI 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_DIS	STANDARD
7	CALLER NAME TYPE (1:DISP/0:FAC) : FACILIT	If the caller has a name, the Caller Name is sent to the network according to the option (FACILITY, DISPLAY). (USA only)	0:FACILITY 1:DISPLAY	FACILITY

3.3.4.3 Board Base Attributes – PGM 132

Appliances (Boards and IP Phones) can be connected to the iPECS over a managed WAN without the need to employ 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 IP address of the router 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)	1. 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 the selected devices: 0: G.711, 1: G.723.1, 2: G.729, 3: G.722 4: System Codec refer to PGM 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 assure a secure connection. To reduce bandwidth use, IPSec may be disabled.	0: OFF 1: ON	ON

Table 3.3.4.3-1 BOARD ATTRIBUTES (PGM 132)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
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
7	001-002 T38 ENABLE (1:ON/0:OFF) : OFF	T38 mode ON/OFF for FAX data transfer.	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 NAT circumstance.	0: OFF 1: ON	OFF
9	001-002 RTP FIRWALL IP 0 .0 .0 .0	Enter the Firewall IP address associated with the Remote Phone or Gateway/board if there needs Dual Broadband connection for SIP 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 be triggered.	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

3.3.5 CO LINE DATA – PGM 140 to 151

3.3.5.1 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	1. Press the **[PGM]** button and dial 140 and enter the range (Ex. 0102).
01-02 SVC TYPE PRESS FLEX KEY (1-1)	2. 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.

3.3.5.2 CO/IP Attributes I ~ III - PGM 141~143

CO/IP Attributes define various characteristics of the CO lines and IP facilities under control of the system. 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	1. 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.

PROCEDURE:	
	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 GRP NO (01-20) : 01	Each CO Line is assigned to a group; grouping should be based on the Line type and COS.	01
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 COS 4: Restricts LD calls and Exception 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 analogue 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 analogue 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 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

Table 3.3.5.2-1 CO/IP ATTRIBUTES I (PGM 141)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	DEFAULT
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 analogue CO line can be assigned to send the station number as DTMF digits for Proctor service.	OFF
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	01-02 UNUSED		
15	01-02 UNUSED		
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

Table 3.3.5.2-1 CO/IP ATTRIBUTES I (PGM 141)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	DEFAULT
22	01-02 PREPAID MONEY 0 (USED:0)	An amount can be associated with the station as 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)		
24-1	01-02 ICLID USAGE (0-2) : CLI	An incoming call can be routed to the destination based on 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	System can insert PBX code automatically if pre-configured when a user make 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	The IP Phone display can indicate the CO Line/IP channel number or a twelve (12)-character name, if assigned.	OFF
2	01-02 CO NAME ASSIGN ……	Each CO Line and the IP group can be assigned a twelve (12) character name for display purposes, see Table 3.1.2-1 for 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

Table 3.3.5.2-2 CO/IP ATTRIBUTES II (PGM 142)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	DEFAULT
6	01-02 MOH: (00-10) MUSIC 1 (01)	A held call can be connected to one (1) of three (3) 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: SLT MOH1 05: SLT MOH2 06: SLT MOH3 07: SLT MOH4 08: SLT MOH5 09: VSF MOH2 10:VSF MOH3	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		OFF
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 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.	….

Table 3.3.5.2-2 CO/IP ATTRIBUTES II (PGM 142)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	DEFAULT
17	01-02 DL TN:(00-10) DIAL TONE (00)	One of eleven dial tones can be used by the CO line. 00:DIAL TONE 01:INT MUSIC 02:EXT MUSIC 03:VSF MOH 04:SLT MOH1 05:SLT MOH2 06:SLT MOH3 07:SLT MOH4 08:SLT MOH5 09:VSF MOH2 10:VSF MOH3	dial tone
18	01-02 RB TN: (00-10) RING BACK TONE (00)	One of eleven ring back tones can be used by the CO line.	Ring back tone
19	01-02 REJECT ANONYMOUS (1:ON/0:OFF) : OFF	When REJECT ANONYMOUS “ON”, incoming call 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. System is connected to DISA call immediately, and 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, 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 caller id using the number from the CLIP/COLP Table –PGM 201- entry defined by this parameter.	None

Table 3.3.5.2-3 CO/IP ATTRIBUTES III (PGM 143)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	DEFAULT
2	01-02 CLIP TABLE IDX INDEX : NOT ASSIGNED	When a call is placed on an ISDN Line, the system will send 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 ENBLOCK SENDING (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.	eMG80 : OFF, eMG800: ON
4	01-02 TYPE OF NO(0-4) NATIONAL (2)	For outgoing calls on the ISDN Line, this parameter defines the “Type of Number Plan” provided in Calling Party Information Element of the ISDN call SETUP message. 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 assure 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 a 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 remove 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	For outgoing calls, the user’s station number may be included in the ISDN call SETUP message Sub-address field.	OFF

Table 3.3.5.2-3 CO/IP ATTRIBUTES III (PGM 143)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	DEFAULT
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
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 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 system will not send this information. If it is OGR CLI (original CLI) then system will send original CLI that is received from incoming CO line. If it is CFW CLI then system will send redirecting CLI that is CLI for call off-net call forwarded station.	NO SERVICE

Table 3.3.5.2-3 CO/IP ATTRIBUTES III (PGM 143)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	DEFAULT
20	01-02 INC CLI CHOICE (1:ORI/0:TRANSIT):TRS	Incoming CLI Choice – When ISDN setup message have two CLI (Transit Point CLI / Original CLI), by using this option, CLI can be chosen.	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
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.	0
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 start 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 caller if it’s set ON.	OFF

Table 3.3.5.2-3 CO/IP ATTRIBUTES III (PGM 143)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	DEFAULT
24-6	01-02 DISCONN. (INBAND) IGMORE (0)	When system receives 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: System wait to send 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, 1st digit “0” or “1”) and Table C	Local Call only (LD Code, 1st digit “0” or “1”) and Table C	Local Call only (LD Code, 1st digit “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

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 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)

3.3.5.3 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 on an immediate or delayed basis 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:	
CO RING ASSIGNMENT ENTER COL RANGE	1. Press the **[PGM]** button and dial 144.
01-02 PRESS KEY DAY NIGHT TIMED-R	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
	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.

3.3.5.4 DID Service Attributes – PGM 145

PSTN DID lines can be assigned the type of “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	1. Press the **[PGM]** button and dial 145.
01-02 DID ATTRIBUTES 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 start 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)	Number of digits expected from the PSTN DID circuit.	2~4	eMG80:3 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, *, #)	#***

3.3.5.5 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	1. 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.

3.3.5.6 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 also can be assigned a VMID (Voice Mail Id) to allow sending specific VM digits when a CO line forwards to an external VM group.

PROCEDURE:	
CO PRESET FWD ATT ENTER COL RANGE	1. 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	…

3.3.5.7 CO Additional Attributes – PGM 148

CID Attributes are assigned for Analog CO Line Caller Id services.

PROCEDURE:	
CO ADDITIONAL ATTR ENTER COL RANGE	1. 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 3.3.5.7-1 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	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
9	01-02 CC BLOCKING (0-2): DISABLED	It's for only Brazil R2, it blocks for collect call if double answer or with indication is selected.	0: Disabled 1: Double Answer 2: With Indicator	Disabled

Table 3.3.5.7-1 CO Additional Attributes (PGM 148)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
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 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 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 Param Set].	000-255	015

3.3.5.8 NA ISDN Line Attributes – PGM 150

To comply with the North American ISDN standards, certain attributes must be defined 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	1. 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	NI 1

Table 3.3.5.8-1 NA ISDN ATTRIBUTES (PGM 150)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
2	01-02 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 23 numeric {0-9} and International Alphabet (IA5) characters. The SPID 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 Key Telephone Service) terminal permits a user to operate those features that are specific to EKTS, as well as 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.	0: None 1: EKTS	NONE
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 user dials 1~3 digits.	0: Unknown 1: International 2: National 3: Network 4: Subscriber 5: Abbreviated	Unknown
6	01-02 TYPE FOR 4/5/6 UNKNOWN (0)	ISDN CALLED NO is made with the International format, National format, Network format, Subscriber format, or Abbreviated format when user dials 4~6 digits.	0: Unknown 1: International 2: National 3: Network 4: Subscriber 5: Abbreviated	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 user the dials 7~9 digits.	0: Unknown 1: International 2: National 3: Network 4: Subscriber 5: Abbreviated	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 user the dials more than 10 digits.	0: Unknown 1: International 2: National 3: Network 4: Subscriber 5: Abbreviated	Unknown

3.3.5.9 ISDN CO Line Attributes – PGM 151

ISDN standards require that the ISDN terminating device, in this case the iPECS eMG, include various “adjustable” timers and counters as described below.

PROCEDURE:	
COL ISDN ATT ENTER CO RANGE	1. 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 one 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 TEI ID check messages.	1~5 (seconds)	1
3	01-02 T202(1-5) (1-5) : 2 (sec)	When the terminal transmits a TEI 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 the T302 timer duration for the additional digits. At 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

3.3.5.10 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	1. 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, the pause time is defined by this entry. Not currently implemented.	1~9 (seconds)	2
2	01-02 RLS GRD (01-60) : 20 (100ms)	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
3	01-02 DT DELAY (02-50) : 10 (100ms)	The DT (Dial tone) Delay timer defines the duration that dial tone must be received for DT recognition. 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. 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

Table 3.3.5.10-1 T1 LINE TIMERS (PGM 152)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
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)	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
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

3.3.5.11 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	1. 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 routed to 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 CO line for outgoing call.	0~2 (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 line is E1/R2 (if it is N/A then it will follow PGM 145 3rd.)	00~32	0

3.3.6 SYSTEM DATA –PGM 160 to 182

3.3.6.1 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)	1. 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 ring-back tone or MOH. If MOH 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 ring-back tone or MOH. If MOH 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	CO Lines are selected by the system 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

Table 3.3.6.1-1 SYSTEM ATTRIBUTES I (PGM 160)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
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
7	HOLD PREFERENCE (1: SYS/ 0: EXC) : SYS	A single depression of the **[HOLD]** button 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 Main attendants access to all Attendant functions including System Attendant features and programming. (Except PGM 06 – Record system announcement)	0: OFF 1: ON	OFF
11	OFFNET PROMPT USAGE (1 : ON/ 0 : OFF) : OFF	When a call is routed to a destination external to the iPECS, the Off Net routing prompt can be played. Not available in US version.	0: OFF 1: ON	OFF
12	CO-TO-CO UC TMR EXTEND (1:ON/0:OFF) : OFF	When an Unsupervised Conference is established with DISA, Off-Net Fwd, etc., the Unsupervised Conference timer (PGM 182-button 5 determines 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 ACD Message 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 call, or Lost call information can be displayed by pressing Call Log Display 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 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 a CO's have "CO/IP group Authorization" set to ON in PGM141, 8th or the Stations have "Station Account" set to ON in PGM112, 19th then a valid authorization code must be entered to make an external CO call. When user fails to enter a valid Authorization code in the number of attempts assigned in this field, the station is disconnected or the Station COS is changed to COS 7. If the COS 7 WHEN AUTH FAIL, PGM 161, 17th is on then the station COS is changed to COS 7 otherwise the station is disconnected. When the station COS is changed COS 7, the user must employ COS Restore in Station User PGM 2 to return the station to the normal COS.	1 ~ 9	3
17	CONFROOM CO TEL NUMBER 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 from MPB to IP devices.	1: FTP 0: TFTP	FTP
20	TRANSFER TONE (1:RBT/0:MOH): RBT	When a CO call is transferred to a busy extension, Ring Back Tone or Music On Hold will be played to the CO Line.	0: MOH 1: RBT	RBT
21	CONF WARN TONE (1:ON/0:OFF) : ON	As new members join a conference room, the system provides warning tone to conference members.	0: OFF 1: ON	ON
22	TLS for WEB (1:ON/0:OFF) : OFF	Enables Transport Layer Security 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 dial tone, the system can provide dummy dial tone to the user.	0: OFF 1: ON	OFF
24	SYSTEM 2 ADDED ATTR PRESS FLEX KEY (01-23)	Select button 24 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 a point-to-point RTP connection (PTP) or to assure a controlled connection, RTP can be routed via 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 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, Station VM feature (PGM 127) 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 VSF mailbox 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, Warning tone is served to the [transfer to] station. This is only applied to screened transfer case.	0: OFF 1: ON	OFF
24-6	LCR DIAL TONE DETECT (1:ON/0:OFF) : OFF	If this value is set to ON, 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 LCR type is set to M13, 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, system save and provide ICM call log for IP and LDP phone.	0: OFF 1: ON	OFF
24-8	ATD PWORD USAGE (1:ON/0:OFF) : OFF	If this value is set to ON, system requests password below cases. When a user enters attendant program([PGM] + 0) in attendant keyset, When a user enters speed program in attendant keyset, When a user assigns attendant program code([PGM] + 0) to flexible button in 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 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 login 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	DISABLE
24-14	MODEM ASC CO LINE (00-74) : 00	Call is delivered to built-in modem if calls come in from 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	System checks each device by polling message periodically using this timer.	015-255	015
24-17	NUM OF CLI WAIT LIST (000-255) : 000	The number of CLI wait list 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 can allow stations in any ICM tenancy groups to call a station any in 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	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 Accessible system speed zone (System Speed Zone(232)) is displayed in {Dial by Name}.	All, Accessible System Speed Zone Only	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 Call log is not leaved.	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	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 prior to 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, 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. To provide periodic reports, this entry must be ON.	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
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

Table 3.3.6.1-2 SYSTEM ATTRIBUTES II (PGM 161)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
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 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 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	System Authorization codes are entered by the user 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 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 employ COS 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
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	UNUSED	Unused.	0: OFF 1: ON	OFF

Table 3.3.6.1-2 SYSTEM ATTRIBUTES II (PGM 161)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
21	UNUSED	Unused.	0: OFF 1: ON	OFF
22	SMS CENTER NUMBER	When the PSTN will be 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 filed is used only for KOREA.		
24-3	SMS CENTER CLI	When the CO/IP will be 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, if it is not valid IP address then 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.	0: LOCAL 1: MCIB_V	MCIB_V
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 send.	0: DISPLAY SECURITY 1: DIGIT *	DISPLAY SECURITY
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

Table 3.3.6.1-2 SYSTEM ATTRIBUTES II (PGM 161)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
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 busy, choice OHVO or Intrusion.	0: OHVO 1: INTR	OHVO
24-11	AUTO SAVE NEW MEG (1:ON/0:OFF) : OFF	If it's ON, Move current (new) message to saved message category. If it is OFF, leave it in 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 as registering devices or multicast MOH. With some multicast snoop enabled switch devices, they do not forward multicast packets if there is no IGMP query device in the network. This entity enables the IGMP query option and MPB sends IGMP query message with periodic to avoid multicast related problem.	0: OFF 1: ON	OFF
24-13	IGMP INTV_TMR(1sec) (0000~3600) : 0180	This timer defines the interval time of each IGMP query messages. 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 IGMP query is sent to. If ON is selected, query message is sent to ALL HOST group by using address 224.0.0.1. And OFF is selected, 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
24-15	IGMP QUERY GENERIC (1:ON/0:OFF) : OFF	This entity specifies a group address being queried. If ON is selected, all multicast group are queried. If OFF is selected, iPECS registering device group (239.20.19.50) is only queried. This should be ON when there is a MOH problem.	0: OFF 1: ON	OFF
24-16	UNUSED			

Table 3.3.6.1-2 SYSTEM ATTRIBUTES II (PGM 161)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
24-17	RESTRICT * AND # (1:ON/0:OFF) : OFF	If it's ON, if the first digit is * or # then the call will be prohibited.	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 apply IP-Binding with information in PGM130 (Flex 18 – Flex 24-3) / PGM133 (Media port)	0: OFF 1: ON	OFF
24-20	ACD MAILSEND WEEKLY SET N/A (0-7)	Sets day of week to send ACD statistic 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 ACD statistic data to be sent on a daily basis. (00 for no daily records, 01-23 for hour of the day)	00-23	..
24-22	ACD DEL AFTER MAILSEND (1 : ON/ 0: OFF) : OFF	Delete ACD statistic data after sending e-mail.	0: OFF 1: ON	OFF
24-23	NEW 5 WAKE UP USAGE (1:ON/0:OFF) : OFF	New Wake-Up function usage option.	0: OFF 1: ON	OFF

3.3.6.2 System Password – PGM 162

Access to the system database and maintenance functions can be protected by passwords 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)	2. Press the **[PGM]** button and dial 162.
KEYSET ADMIN PASSWORD @@@@@@@@@@@@	Press the Flex button for the desired password: For the Keyset Admin password press Flex button 1. For the Remote access password press Flex button 2. For the CID password press 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

3.3.6.3 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)	1. 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 user to get the notification before expiring Temp license.	0: OFF 1: ON	ON

3.3.6.4 Attendant Assignment – PGM 164

eMG80 is consist of 1 System attendant and 3 Main attendant. eMG800 is consist of 1 System attendant and 4 Main attendant. 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 and Station 1000 for eMG800. Main Attendants are not assigned by default.

PROCEDURE:	
ATTENDANT ASSIGNMENT 100	1. 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.

3.3.6.5 Multi-cast RTP/RTCP Ports – PGM 165

Multi-cast is employed by the system 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 it may be advantageous to define different ports for each system.

PROCEDURE:	
MULTICAST RTP/RTCP PRESS FLEX KEY (1-2)	1. 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)
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)
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)

Table 3.3.6.5-1 MULTI-CAST RTP/RTCP PORTS — (PGM 165)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
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)
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)

Table 3.3.6.5-1 MULTI-CAST RTP/RTCP PORTS — (PGM 165)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
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)
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)

3.3.6.6 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, no restrictions.

PROCEDURE:	
DISA COS (1 – 11) DAY: 07 NIGHT: 07 TIMED:07	1. 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.

3.3.6.7 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)	1. Press the **[PGM]** button and dial 167. Select ICM tenancy group (eMG80:0~15 / eMG800:0~32)
DID/DISA DESTINATION :0 PRESS FLEX KEY (1-9)	Press the **[PGM]** button and dial 167 and press Flexible button (Ex.1).
BUSY DESTINATION TONE (F1-F4)	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)
	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.

3.3.6.8 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 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, when the system is in the Night or Timed Ring mode, the contact will activate for incoming UNA calls and will 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 FLEX KEY (1-2)	1. Press the **[PGM]** button and dial 168.
EXT CONTROL CONTACT NO 1 : . . . (1-3)	Select Flex button 1~2 for the desired External Control contact.
	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.

3.3.6.9 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)	1. 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	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	12 Hour
3	LCD LANGUAGE (00-18) ENGLISH (00)	Sets the Language used in the LCD; 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.	0: use button 1 1: MM/DD WDY 2: MM DD WDY	Use button 1

Table 3.3.6.9-2 LCD LANGUAGE SELECTION

ENTRY	LANGUAGE
00	English
01	Italian
02	Finnish
03	Dutch
04	Swedish
05	Danish
06	Norwegian
07	Hebrew
08	German
09	French
10	Portuguese
11	Spanish
12	Korean
13	Estonian
14	Russian
15	Turkish
16	Polish
17	Greek
18	Arabic

3.3.6.10 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)	1. Press the **[PGM]** button and dial 170.
LED FLASHING RATE PRESS FLEX KEY (25-35)	There are 35 Flash rate entries represented by Flex buttons. 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 transfer ring flashing rate.	00-14	FLASH 120 IPM(10)
3	COL QUE RING FLASH 240 IPM FLUTTER	CO button queue call back ring flashing rate.	00-14	FLASH 240 IPM FLUTTER(6)
4	COL RCL RING FLASH 480 IPM FLUTTER	CO button recall 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 hold 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)
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)

Table 3.3.6.10-1 BUTTON LED FLASH RATE (PGM 170)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
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 ring 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 lockout.	00-14	FLASH 480 IPM FLUTTER(8)
18	DSS PRESEL MSG FLASH 30 IPM	DSS button station in 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 state.	00-14	FLASH 120 IPM(10)
21	UCD QUE RING 2 FLASH 60 IPM	CIQ Threshold # 1.	00-14	FLASH 60 IPM (3)
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)

Table 3.3.6.10-1 BUTTON LED FLASH RATE (PGM 170)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
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)
35	DSS OFF DUTY FLASH 120 IPM	DSS button station in Hunt DND.	00-14	FLASH 120 IPM (10)

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 7 &0% 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 7 &0% On)
14	480 ipm double flash (30% On-Off-On & 70% Off)

3.3.6.11 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)	1. 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 (00-10) 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: VSF MOH2 10: VSF MOH3	Music 1
2	MOH TYPE (00-10) MUSIC 1 (01)	Assigns the source for MOH	00: Hold tone 01: INT Music 02: EXT Music 03: VSF MOH 04-08: SLT MOH1-5 09: VSF MOH2 10: VSF MOH3	Music 1
3	INT MOH TYPE (00-12) ROMANCE (00)	Assigns 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	ROMANCE
4	ASGN SLT MOH (F1-F5) …. …. …. …. ….	Assign the SLIB port as a SLT MOH.	F1-F5:SLTMOH1-5	
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

3.3.6.12 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 FLEX KEY (1-4)	1. 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.

3.3.6.13 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	1. 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	COIP Incoming call	1~4	3
4	Queued CO/IP recall	1~4	4

3.3.6.14 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)	1. 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/XOFF protocol. (It is not supported)	0: OFF 1: ON	XOFF

3.3.6.15 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)	1. Press the **[PGM]** button and dial 175.
SELECT TCP NO PRESS FLEX_KEY (1-9)	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.
	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)	Defines the serial port or TCP channel used for Off-line SMDR/Statistics output.	1 ~ 7	SERIAL1
2	ADMIN DATA (1-7) SERIAL1 (1)	Defines the serial port or TCP channel used for the ADMIN Report output.	1 ~ 7	SERIAL1
3	TRAFFIC (1-7) SERIAL1 (1)	Defines the serial port or TCP channel used for the TRAFFIC report output.	1 ~ 7	SERIAL1
4	SMDI (1-7) SERIAL1 (1)	Defines 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)	Defines the serial port or TCP channel used to receive Call Information output.	1 ~ 7	SERIAL1
6	ON-LINE SMDR (1-7) SERIAL1 (1)	Defines the serial port or TCP channel used for the On-line SMDR.	1 ~ 7	SERIAL1
7	TRACE (1-7) SERIAL1 (1)	Defines the serial port or TCP channel used for the Trace output.	1 ~ 7	SERIAL1
8	DEBUG (1-7) SERIAL1 (1)	Defines the serial port or TCP channel used for the Debug output.	1 ~ 7	SERIAL1
9	ACD PACK (1-7) SERIAL 1 (1)	Defines 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)	Defines the TCP port used for Off-line SMDR/ Statistics output.	1 ~ 9999	NULL
2	ADMIN DATA (1-9999) TCP PORT(NULL)	Defines the TCP port used for the ADMIN Report output.	1 ~ 9999	NULL
3	TRAFFIC (1-9999) TCP PORT(NULL)	Defines the TCP port used for the TRAFFIC report output.	1 ~ 9999	NULL
4	SMDI (1-9999) TCP PORT(NULL)	Defines the TCP port used for the SMDI output.	1 ~ 9999	NULL
5	CALL INFO (1-9999) TCP PORT(NULL)	Defines the TCP port used to receive Call Information output.	1 ~ 9999	NULL
6	ON-LINE SMDR (1-9999) TCP PORT(NULL)	Defines the TCP port used for the On-line SMDR.	1 ~ 9999	NULL
7	TRACE (1-9999) TCP PORT(NULL)	Defines the TCP port used for the Trace output.	1 ~ 9999	NULL
8	DEBUG (1-9999) TCP PORT(NULL)	Defines the TCP port used for the Debug output.	1 ~ 9999	NULL
9	ACD PACK (1-9999) TCP PORT(NULL)	Defines the TCP port used for Unified Messages.	1 ~ 9999	NULL
10	I-SMDR (1-9999) TCP PORT(NULL)	Defines the TCP port used for I-SMDR(Interactive-SMDR)	1 ~ 9999	NULL

3.3.6.16 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:	
BREAK/MAKE RATIO (1:66/33 / 0: 60/40): 60/40	1. Press the **[PGM]** button and dial 176.
	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.

3.3.6.17 SMDR Attributes – PGM 177

Station Message Detail Recording (SMDR) is an ASCII output of details on 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 Table 3.3.6.17-1 for a description of each Attribute, LCD displays and the data entries required.

PROCEDURE:	
SMDR ATTRIBUTES PRESS FLEX KEY (01-24)	1. Press the **[PGM]** button and dial 177.
	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
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

Table 3.3.6.17-1 SMDR ATTRIBUTES (PGM 177)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
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 metering is provided by the PSTN, the cost per metering pulse can be assigned.	6 digits	000000
11	SMDR DECIMAL LOCATION (0-5) : 0	This value determines the position of the decimal in the Cost per Pulse, button 10, starting from the right most digits.	0~5	0
12	SMDR START TIMER (1sec) (000 – 250) : 000	To allow for call set-up times through the PSTN, a “Valid call timer” can be set. A call must be longer than the SMDR Start Timer for a call record to be generated 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.		

Table 3.3.6.17-1 SMDR ATTRIBUTES (PGM 177)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
15	MAIL SEND WEEKLY SET N/A (0-7)	Sets day of 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 on a daily basis (00 for no daily records, 01-23 for 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 dialed as the 1st digits, 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
23	PRINT SERIAL NO (1 : ON/0:OFF) : OFF	Print record number as part of SMDR output, 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

Table 3.3.6.17-1 SMDR ATTRIBUTES (PGM 177)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
24-4	SMDR ICM PRINT (1:ON/0:OFF) : OFF	When enabled, intercom call data is printed as part of the On-line SMDR.	0: OFF 1: ON	OFF
24-5	SMDR DISC CAUSE (1:ON/0:OFF) : OFF	When enabled, the disconnect cause is stored in Off-line SMDR data and printed as parted of the On-line SMDR.	0: OFF 1: ON	OFF
24-6	LONG TIME CALL (10min) (000-144) : 000	To monitor long time CO call, a “Long Time Call” can be set. 0 means no monitoring. If CO call duration exceeds this value, a notification will be sent to NMS server and alarm will be displayed.	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 call for SMDR.	4 digit	….
24-9	MOBILE PHONE CODE ….	It is used to distinguish mobile call for SMDR.	4 digit	….
24-10	SMTP MAIL SERVER ID ……	This field defines the user’s ID for SMTP Mail server. If user’s ID and password is assigned, SMTP Mail server will check the validation of user ID and password.	Max 40 Chars	
24-11	SMTP MAIL SERVER PWD ……	This field defines the user‘s password for SMTP Mail server. If user‘s ID and password is assigned, SMTP Mail server will check the validation of user ID and password.	Max 20 Chars	
24-12	TRANSFER CHARGE RATE (0-2): INDIVIDUAL	1. INDIVIDUAL: When a call is transferred to another station, the transferred call is charged to two stations respectively. 2. INTEGRATE XFERING: When a call is transferred to another station, the call is charged to the transferring station. 3. INTEGRATE XFERED: When a call is transferred to another station, the call is charged to the transferred station.	0: INDIVIDUAL 1: INTEGRATE XFERING 2: INTEGRATE XFERED	INDIVIDUAL

Table 3.3.6.17-1 SMDR ATTRIBUTES (PGM 177)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
24-13	ATD XSFER CHARGE RATE (0-2):INDIVIDUAL	1. INDIVIDUAL: When Attendant make outgoing call and transfer this call to another station, the transferred will follow the Transfer Charge Mode. 2. ATD CHARGING: When Attendant makes outgoing call and transfers this call to another station, the call is charged to the Attendant. 3. XFERED CHARGING: When Attendant makes outgoing call and transfers this call to another station, the call is charged to the transferred station.	0: INDIVIDUAL 1: ATD CHARGING 2: XFERED CHARGING	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)	0-2 (0:No security 1:SSL 2:TLS)	0
24-17	SMTP PORT (00001-65535) : 00025	Choose SMTP Port (It is moved to web admin PGM 160-161)	1-65535	25
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

3.3.6.18 System Date, Time and Daylight Saving Time (DST) – PGM 178

The system Date, Time and DST feature are established by this entry. 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 adjust one-hour forward and back at the DST start and end times, respectively.

PROCEDURE:	
SET TIME/DATE & DST PRESS FLEX_KEY (1 - 5)	1. 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 Button5 : 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)	Sets the system date.	MMDDYY	
3	DST ENABLE MODE (1:ON/0:OFF) : OFF	Enables DST feature for System Time.	0: OFF 1: ON	OFF
4	DST START TIME ONLY POSSIBLE BY WEBADM	The DST start time. This can be set only via WEB Admin.	See DST Table	2nd Sunday of March at 2:00 AM
5	DST END TIME ONLY POSSIBLE BY WEBADM	The DST end time. This can be set only via WEB Admin.	See DST Table	1st Sunday in Nov., at 2:00 AM

3.3.6.19 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 as well as proceeding a Hunt Group guaranteed announcement or 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)	1. 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.

3.3.6.20 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)	1. 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 to Table 3.3.6.20-3.
	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 to Table 3.3.6.20-3.
	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 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
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 not available for ACNR, the system will wait 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

Table 3.3.6.20-1 SYSTEM TIMERS I (PGM 180)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
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 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, a password check will be initiated by the system.	001~999 (minutes)	5
21	ON HOOK IDLE TMR (sec) (00-99) : 00	Phone (IP/DKTU) goes to idle after this timer when the phone receives disconnect message or signal from CO line.	00~99 (seconds)	0
22	CALL REC REPEAT TMR(sec) (000-999) : 000	If 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

Table 3.3.6.20-2 SYSTEM TIMERS II (PGM 181)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
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 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 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
9	PAGE TIME OUT TMR(sec) (000-255) : 015	Determines the maximum duration of a page after which the caller and Page Zone are 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 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 leaved in a station.	1~90 (1 sec.)	00
14	UNUSED	Unused.		
15	EMERGENCY RETRY TMR (00-99) : 00 SEC	System try to make emergency call according to the CO access rule/Prefer CO/CO group if system could not seize predefined emergency Co line within this timer.	00~99 (1 sec.)	00

Table 3.3.6.20-2 SYSTEM TIMERS II (PGM 181)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
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, system will treat the call as the answered after this timer and play the new message prompt.	1~99 (1 sec.)	10
19	SHORT MODEM TMR(1sec) (01-60) : 10	If {Short modem} of a SLT is ON, the SLT maintains the modem mode for this time.	01~60 (1 sec.)	10

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	For an internal call, the system will return a station to idle if the call remains unanswered for this duration.	000~300 (seconds)	060
5	UNSUPER CONF TMR(min) (00-99) : 10	This timer determines the duration of an “Unsupervised conference” 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
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

Table 3.3.6.20-3 SYSTEM TIMERS III (PGM 182)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
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

3.3.6.21 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)	1. 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.		

3.3.6.22 DCOB SYS Timers – PGM 186

A number of timers can be assigned to control and affect 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)	1. 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, maximum time for waiting for 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, 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

3.3.6.23 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)	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

3.3.6.24 CRR Attributes – PGM 252

System can reroute incoming call to CO. If called number matched with compare digits of Table 252, the call are routed to Rerouting number.

PROCEDURE:	
CRR ATTRIBUTES PRESS FLEX KEY (1–3)	1. 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 Max 2 digits	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 can use transit out code for CO to CO rerouting. If you chose '2' for DISA type, you can access the station number as DISA mode. Other case, you should not use this type.	N/A	

3.3.6.25 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	1. 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	This defines maximum number of voice mail message.	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 DELEVERY MSG (1 :ON /0 :OFF) : OFF	Future Delivery message 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 mark can be enabled or disabled.	0: OFF 1: ON	OFF

3.3.6.26 Personal Group – PGM 260

Several stations can share same station number. That means Personal Group is extended feature of Linked Pair.

A Personal Group is composed with a master station and several member stations.

A master station and all member stations share master station's number.

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.

PROCEDURE:	
PERSONAL GRP ASSIGN ENTER GRP NUM (01–70)	1. Press the **[PGM]** button and dial 260. And Enter Group number (eMG80:1~7 /eMG800:1~600)
PERSONAL GRP 01 F1 : MASTER STA F2 : MEM	Press Flex button 1, register Master station. Press Flex button 2, register member stations.
	Use the dial-pad to enter the desired data.
	Press the **[Save]** button to store the data entry.

3.3.6.27 Personal Group Attribute – PGM 261

In PGM 261, Personal group attribute can be set.

PROCEDURE:	
PERSONAL ATTRIBUTE ENTER GRP NUM (01–70)	1. Press the **[PGM]** button and dial 261. And Enter Group number.(eMG80:1~70 /eMG800:1~600)
PERSONAL GRP 01 PRESS FLEX KEY (1-3)	2. 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 member wake-up follow 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

3.3.7 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 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 type. 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.

3.3.7.1 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)	1. Press the **[PGM]** button and dial 190.
STATION GRP 401 F1:TYPE F2:PKUP F3:MEM	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.
	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 position of the station in the group and dial the station number. For a range, enter the first and last station number 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.	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	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.		

3.3.7.2 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)	1. 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 ATTRIBUTES — 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 1st Announcement 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	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

Table 3.3.7.2-1 STATION GROUP ATTRIBUTES — CIRCULAR & TERMINAL GROUPS (PGM 191)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
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
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 queue at intervals of the Announcement 2 Repeat Timer. **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 Announcement Repeat Timer 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 Overflow Destination.	1-4 (1:Station 2:Station group 3:VSF Announce 4:System speed)	
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 Overflow Destination after expiration of the OVERFLOW Timer.	000~600 (seconds)	180

Table 3.3.7.2-1 STATION GROUP ATTRIBUTES — CIRCULAR & TERMINAL GROUPS (PGM 191)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
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 Answer Timer, 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
13	CIRC 401 MUSIC SRC (00–10) : 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: SLT MOH1 05: SLT MOH2 06: SLT MOH3 07: SLT MOH4 08: SLT MOH5 09: VSF MOH2 10: VSF MOH3	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	….

Table 3.3.7.2-1 STATION GROUP ATTRIBUTES — CIRCULAR & TERMINAL GROUPS (PGM 191)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
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.	1-4 (1:Station 2:Station group 3:VSF Announce 4:System speed)	-
18	FORCED FWD DEST USAGE (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 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 Ring back 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 error tone and be disconnected after the VSF AA announcement, if assigned, is played.	00-99	99

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 1st Announcement 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	ACD 403 ANNC 2 TMR(1s) (000 – 999) : 000	After the 1st announcement, a 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

Table 3.3.7.2-2 STATION GROUP ATTRIBUTES — UCD/ACD GROUPS (PGM 191)

BTN	– ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
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 2nd announcement, 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 2nd announcement can be repeated to calls that remain in queue at intervals of the Announcement 2 Repeat Timer. Note repeating must be "ON" under button 6 below.	000~999 (seconds)	000
6	ACD 403 ANNC2 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 Announcement Repeat Timer 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 Overflow Destination.	1-4 (1:Station 2:Station group 3:VSF Announce 4:System speed)	
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 Overflow Destination after 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

Table 3.3.7.2-2 STATION GROUP ATTRIBUTES — UCD/ACD GROUPS (PGM 191)

BTN	– ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
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 re-order tone, while a CO/IP call will be routed to overflow destination.	0: OFF 1: ON	OFF
11	ACD 403 MUSIC SRC (00– 10) : 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: SLT MOH1 05: SLT MOH2 06: SLT MOH3 07: SLT MOH4 08: SLT MOH5 09: VSF MOH2 10: VSF MOH3	01
12	ACD 403 ACD WARN TONE (1 : ON/ 0: OFF) : OFF	An ACD supervisor can monitor agent conversations. A warning tone can be provided to the agent and connected party when the supervisor activates the monitor feature.	0: OFF 1: ON	OFF
13	ACD 403 ALTER DEST S/H/SPD (Dial 1-3)	When a call comes into the group and there are no group members available, the call will be routed to the assigned alternate destination.	1-3 (1:Station 2:Station group 3:System speed)	....
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 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 Ring back 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 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	....

Table 3.3.7.2-2 STATION GROUP ATTRIBUTES — UCD/ACD GROUPS (PGM 191)

BTN	– ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
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 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.	FLEX 1 ~ FLEX 10	
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 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, then select button 1~24 for the attribute desired.	FLEX 1 ~ FLEX 24	
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	….

Table 3.3.7.2-2 STATION GROUP ATTRIBUTES — UCD/ACD GROUPS (PGM 191)

BTN	– ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
24-4	CIQ AGENT DISPLAY (1:ON/0:OFF) : OFF	When an ACD call is in queue, the Call in queue information can be displayed on LCD of agent and supervisor telephones.	0: OFF 1: ON	OFF
24-5	FORCED FWD DEST USAGE (1:ON/0:OFF): OFF	Enables the system to redirect group calls to the Forced destination defined under button 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 #1 Announcement 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	…
24-8	CIQ #1 PAGE ZONE (00-40) : 00	Page Zone to receive CIQ #1 Announcement.	eMG80:00~15 or 00~40, eMG800:0~105	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.	eMG80:00~15 or 00~40, eMG800:0~105	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

Table 3.3.7.2-2 STATION GROUP ATTRIBUTES — UCD/ACD GROUPS (PGM 191)

BTN	– ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
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
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.	eMG80:00~15 or 00~40, eMG800:0~105	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.	1-4 (1:Station 2:Station group 3:VSF Announce 4:System speed)	-
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	OFF

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 1st Announcement 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 1st announcement, a 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	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 2nd announcement, 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 2nd announcement can be repeated to calls that remain in queue at intervals of the Announcement 2 Repeat Timer. 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 2nd announcement, 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.	1-4 (1:Station 2:Station group 3:VSF Announce 4:System speed)	
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 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 (00–10) : 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: SLTMOH1 05: SLTMOH2 06: SLTMOH3 07: SLTMOH4 08: SLTMOH5 09: VSFMOH2 10: VSFMOH3	01
11	RING 405 MAX QUE C-CNT (00-99) : 99	When the number of calls queued is reached, new calls will receive 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.	1-4 (1:Station 2:Station group 3:VSF Announce 4:System speed)	-

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 Ring back until a channel is available (ON) or bypass the announcement.	0: OFF 1: ON	ON
18	GROUP NAME ……	A Ring group name can be designated.	20 character	….
19	RING Q CALL INDI 0(OFF)1(MUTE)2(BURST):1	When a station calls a Ring Group, DSS/BLF buttons assigned for the calling station will flash and muted ring is received.	0:OFF 1: Mute 2: Burst	Mute

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, this contains the “Put Mail” dial code.	1~4	1
3	VM 407 GET MAIL INDEX (1 – 4) : 2	For external analog Voice Mail groups, an index to the Voice Mail Dial Table, which 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 expiration of the OVERFLOW TMR.	000~600 (seconds)	180
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.	1-4 (1:Station 2:Station group 3:VSF Announce 4:System speed)	-

Table 3.3.7.2-4 STATION GROUP ATTRIBUTES — EXTERNAL VM GROUPS (PGM 191)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
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.	1-4 (1:Station 2:Station group 3:VSF Announce 4:System speed)	-
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).	eMG80:00~140, eMG800:0~1200	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-VM 409 RETENSION (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 409 DIAL 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 Announcement 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	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 queue at intervals of the Announcement 2 Repeat Timer. 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 Announcement Repeat Timer 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 Overflow Destination.	1-4 (1:Station 2:Station group 3:VSF Announce 4:System speed)	
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 Overflow Destination after 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 Answer Timer, 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	A 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 Alternate Destination.	Station or Group Number	....

Table 3.3.7.2-7 STATION GROUP ATTRIBUTES — UMS GROUP (PGM 191)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
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
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.	1-4 (1:Station 2:Station group 3:VSF Announce 4:System speed)	-
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

3.3.7.3 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)	1. Press the **[PGM]** button and dial 192 and enter group number (Ex. 00). (eMG80:00~49/ eMG800:0~199)
PICKUP GRP 00 …. …. ….	Use the dial pad to enter the desired Pickup Group. The system will display the member of 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 position of the station in the group and dial the station number. For a range, enter the first and last station number in the range.
	Press the **[Save]** button to store the data entry.

3.3.8 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.

3.3.8.1 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 characteristics of the interface are defined.

PROCEDURE:	
SYSTEM ISDN ATT PRESS FLEX KEY (1-3)	1. 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 print it to serial port.	0: OFF 1: ON	OFF

3.3.8.2 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)	1. 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.

3.3.8.3 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)	1. Press the **[PGM]** button and dial 202 and enter the bin number (Ex.121). (eMG80:001~500/ eMG800:1~1500)
MSN TABLE 121 PRESS FLEX KEY (1 – 3)	Use the dial pad to enter a 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 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

3.3.8.4 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)	1. Press the **[PGM]** button and dial 203 and enter the bin number (Ex.001).
ICLID ROUTE TABLE 001 PRESS FLEX KEY (1-4)	To program 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 : NOT ASSIGNED	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 CID of caller, the Ring tone is followed this ICLID Tone.	2 digits.01~12	None

3.3.8.5 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 on an immediate or delayed basis 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)	1. Press the **[PGM]** button and dial 204 and enter the bin number (Ex.001).
PRESS KEY DAY NIGHT TIMED-R	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
	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.

3.3.8.6 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)	1. 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 ….	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 PPP ID and password.	Station number	None
2	PPP USER ID 1 likppp01	System accepts this PPP ID 1.	12 Character	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	Operator can configure PPP Server IP Address with this option. To apply this option, system must be restarted.		10.0.0.3
7	PPP CLIENT IP ADDR 10 . 0 .0 .2	Operator can configure PPP Client IP Address with this option. To apply this option, system must be restarted.		10.0.0.2

3.3.8.7 Prefix Dialing Table – PGM 206

With this table, three features can be supported.

1. Analog CO Call Charge with NPR metering.
2. SIP direct dialing with no wait inter-digit timer.
3. 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)	1. Press the **[PGM]** button and 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	2. 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). Unknown/International/National/ Network Spec/Subscriber/ Abbreviated /Reserved	0-6 (0:Unknown 1:International 2:National 3:Network Spec. 4:Subscriber 5:Abbreviated 6:Reserved)	UNKNOWN(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). Unknown/ISDN/Data Numbering/Telex/National Standard/Private /Reserved	0-6 (0:Unknonw 1:ISDN/Telephony 2:Data numbering 3:Telex 4:National standard 5:Private 6:Reserved)	UNKNOWN(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). Unknown/Local/Long Distance/ International/Mobile/reserved	0-5 (0:Unknown 1:Local 2:Long Distance 3:International 4:Mobile 5:reserved)	UNKNOWN(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.		

3.3.9 TABLES DATA – PGM 220 to 235

3.3.9.1 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 week, and assigned routes. There are four LCR Tables, LCR Control Attributes, LCR Leading Digit Table, LCR Digit Modification Table, and LCR Initialization Table.

3.3.9.1.1 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 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)	1. 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 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
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

3.3.9.1.2 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:

1. **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.
2. **Internal**: User dials outgoing call while receiving Intercom dial tone with no CO/IP access code.
3. **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)	1. Press the **[PGM]** button and dial 221 and enter LDT Table number (Ex.01).(eMG80:01~10/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
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 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 is equal to this value, this LDT table is available to the station/co line.	001-100	001

3.3.9.1.3 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 in accordance with 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 ranges for the Digit Modification Table.

PROCEDURE:	
DMT TABLE ENTER DMT BIN (00-99)	1. Press the **[PGM]** button and dial 222 and enter 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 position of the digit 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	

Table 3.3.9.1.3-1 LCR DIGIT MODIFICATION (PGM 222)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
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 out call.	000~251	
8	DMT 55 SMDR CODE	This only used for TNET with CM. This code will be send to CM when the TNET status is changed from Local survival mode to bypass mode.	4 digit	

3.3.9.1.4 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, no entries state.

PROCEDURE:	
INITIALIZE LCR DB PRESS FLEX KEY (1-6)	1. 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 INITIALIZE (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.		

3.3.9.2 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' 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, 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:

- If the appropriate Allow/Deny Table pair has no entries and COS is 2 to 4, or 8 to 9, no restrictions are applied. 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, if the number is in the Deny Table, the number will be restricted otherwise the number can be dialed without restriction.

PROCEDURE:	
TOLL EXCEPTION TABLES PRESS FLEX KEY (01-10)	1. 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.

3.3.9.3 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)	1. Press the **[PGM]** button and 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.

3.3.9.4 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 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	1. 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.	eMG80:001~360, eMG800:1~1200	
	SYSTEM AUTHORIZATION F1:SET_PWD F 2: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 F 2:NIGHT F 3:TIME	Establishes the COS associated with the System Authorization code during Day, Night and Timed Service modes.	Flex button1-3	

3.3.9.5 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 (01-70). 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.

PROCEDURE:	
CUSTOM CALL ROUTING SELECT CCR TABLE (01-70)	1. 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, 01~70. The index number 01-70 is the VSF Announcement number.

PROCEDURE:	
CCR TABLE 01 INPUT 1 : NOT ASSIGNED	2. Press a Flex button (1~13, 10=0) to assign a route for the associated CCR dialed digit. (11~13 is assigned to busy, no answer, error destinations) − Flex button 01-10 is matched with input dial digit from outside user. The flex key number 10 is matched with dial digit 0. − Flex button 11-13 is 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, user can dial only one digit. If this option is set to OFF, user can dial more than one digit. That means CCR or DISA service can be possible.
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 (eMG80:1~35 / eMG800:1~100)
10	External page
11	All Call Page
12	Route to voice mail (station group/station number)
13	Company Directory (USA Only)
14	Record VM Greeting (USA Only)
15	UCS system conference group (eMG80:100~139 / eMG800:100~259)

3.3.9.6 Executive/Secretary Table – PGM 229

Stations can be paired as Executive/Secretary pairs so that when the Executive enters DND, intercom and transferred 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)	1. Press the **[PGM]** button and 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 : . . . /. . .	Assigns 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 executive call to the secretary who is in 'T' mode. The call will be answered by 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 executive can call to higher grade executive directly when they are same group.	00-50	00

3.3.9.7 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 is 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	1. 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 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	

Table 3.3.9.7-1 FLEXIBLE DID CONVERSION (PGM 231)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
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
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 : (00-10) 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.	00-10 (00: Refer to CO Hold 01: INT Music 02: EXT Music 03: VSF MOH 04: SLT MOH1 05: SLT MOH2 06: SLT MOH3 07: SLT MOH4 08: SLT MOH5 09: VSF MOH2 10: VSF MOH3	Refer to CO Hold
9	TABLE 001 RING TONE (00-16, 0:N/A) : 00	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 (USA Only)
15	Record VM Greeting (USA Only)

3.3.9.8 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. Each zone can be assigned to apply the appropriate Station and CO Line COS for the Speed Dial number prior to dialing.

PROCEDURE:	
SYSTEM SPEED ZONE PGM ENTER BIN NO (01-10)	1. Press the **[PGM]** button and 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 the zone number, 01~10.
	Press 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	eMG80:2200~4999, eMG800:2200~9999
2	ENTER STA RANGE ZONE 1 : 100 – 239	Station range for zone.	100-239	eMG80:100~239, 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

3.3.9.9 Auto Ring Mode – PGM 233

The system can automatically select the Ring and COS Mode based on time of day and day of 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 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)	1. Press the **[PGM]** button and dial 233 and enter Dial digit (Ex.00).(eMG80:00~15/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 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: ..:..

Table 3.3.9.9-1 AUTO RING MODE ASSIGNMENT (PGM 233)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
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: ..:..

3.3.9.10 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)	1. 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 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

Table 3.3.9.10-1 VOICE MAIL DIAL (PGM 234)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
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 [DIAL DGT_1]	Code sent when the voice mail is to disconnect a call. Disconnect Mail	1: Prefix 2: Suffix Any digits	*****

3.3.9.11 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)	1. 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 maximum number of ports (channels) for the device. For a 00 entry the system will accept physical port number.	00-99	00

Table 3.3.9.11-1 MAC REGISTRATION (PGM 235)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
3	TBL 1: DEVICE ID DEVICE ID :	Enter device ID when it has multiple device ID in Board/Gateway.	0-255	0 (N/A)

3.3.9.12 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 will receive 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	1. Press the **[PGM]** button and dial 236 and enter 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: FAIL OVER	DISABLE
3	100 : ACCESS CO GRP CO GRP : 01	CO group used to call (ring) the mobile extension.	eMG80:1-21 eMG800:1~201	01

Table 3.3.9.12-1 MOBILE EXTENSION (PGM 236)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
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 is used to authorize incoming calls from the mobile.		Not assigned
6	100 : HUNT CALL ENABLE (1:ON/0:OFF) : OFF	When the paired station is a member of a hunt group (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
8	100 : NOTIFY RETRY CNT (1~9) : 3	Defines the number of attempts the system will make to complete a notification when receiving 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 station.	0: OFF 1: ON	OFF
11	100 : CALL BACK (1:ON/0:OFF) : OFF	If it is set to "ON", incoming mobile extension call will be released before answered and system places a call to mobile extension. After mobile extension answers, the dial tone is provided and mobile extension can make internal or external call.	0: OFF 1: ON	OFF
12	100 : DELAY TIMER (000-255) : 000	Mobile extension call will be placed after 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 provide flexible DID table index when DID type 2 is used.	0: OFF 1: ON	OFF

3.3.9.13 Hot Desk Attributes – PGM 250

A Hot Desk station allows a user to login 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)	1. 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

3.3.9.14 CO Call Rerouting – PGM 252

System can reroute incoming call to CO. If called number matched with compare digits of Table 252, the call are routed to Rerouting number.

PROCEDURE:	
CRR ATTRIBUTE PRESS FLEX KEY (1-3)	1. 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	
	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

3.3.9.15 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)	1. Press the **[PGM]** button and dial 270 and enter the table number (Ex. 01).(eMG80 : 1-15 / eMG800:1-32)
01 DIGIT CONVERSION ENTER BIN NO (001–200)	2. Dial Digit Conversion Table Number (01–15) and enter the bin umber (Ex.001).
01/001 DIGIT CONV. PRESS FLEX KEY (01–18)	3. 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
	4. Use the dial–pad to enter the dialed number.
	5. Press the **[Save]** button to store the data entry.

Table 3.3.9.15-1 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 to be applied when the dialed digit is dialed.	0: Unconditional 1: Follow DNT 2: Follow LCR	Unconditional
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 current ring mode is DAY.	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 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 current ring mode is TIMED.	Max. 24 digits	

Table 3.3.9.15-1 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' and day zone is 1 and 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' and day zone is 1 and 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' and day zone is 1 and 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' and day zone is 2 and 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' and day zone is 2 and 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' and day zone is 2 and 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' and day zone is 3 and 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' and day zone is 3 and 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' and day zone is 3 and 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	All
18	01/001 ARS CO ACCESS CO	If a selected path is not available for some reason (All Busy, Line Fault etc.) after digit conversion, Alternative Route Selection (ARS) will connect calls using predefined designated ARS digit in digit conversion table.	Max. 8 Digits	

3.3.10 NETWORKING DATA – PGM 320 to 324

3.3.10.1 Network Basic Attribute – PGM 320

PROCEDURE:	
NET BASIC ATTRIBUTE PRESS FLEX KEY (1-8)	1. 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 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

3.3.10.2 Network Supplementary Attribute – PGM 321

PROCEDURE:	
NET SUPPLEMENTARY ATTR PRESS FLEX KEY (1-9)	1. 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 transfer 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 call is failed or there is no answer during 3 seconds.	eMG80:1-20 eMG800:1~200	00
9	BLF SERVICE USAGE (1:ON/:OFF) :ON	Enable/disable for BLF manager function.	0: OFF 1: ON	ON

3.3.10.3 Network CO LINE Attribute – PGM 322

PROCEDURE:	
NET COL ATTRIBUTE ENTER CO RANGE	1. Press the **[PGM]** button and dial 322 and enter CO range (Ex. 0101).(eMG80 : 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

3.3.10.4 NET Numbering Plan Table – PGM 324

PROCEDURE:	
NET NUM PLAN TABLE ENTER BIN NO (000-251)	1. 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.	eMG80:2000~4999 eMG800:2000~9999	
6	DEST SYSTEM IP ADDR 0 . 0 . 0 . 0	IP Address of destination MPB system only when iPECS eMG is 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 slave system makes transit call.	0: OFF 1: ON	OFF
11	001 FIREWALL ROUTING (1:ON/0:OFF) : ON	Select IP address (Firewall IP address or Non-firewall IP address). If the destination system (VOIB) is in same VPN then 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 AUTHO CODE COS USE (0:NO/1:YES): NO	When there‘s a transit out call request from 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 out call 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 comment field to set name of network site.	Max. 12 characters	
16	001 EMERGENCY RERTE TMR (00-10) : 00	When timer is ‘0’: The reroute emergency call is not work. When timer is set ‘1’~’10’: The reroute emergency call is activated after this timer. This is only work when PGM 112-18th is transit-out CO group.	00-10	00

3.3.10.5 Network Feature Code Table – PGM 325

PROCEDURE:	
NET FEATURE CODE TBL ENTER BIN NO (01-20)	1. 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 the 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	DEFAULT
1	01 NET FEATURE CODE	Networking Feature Code programming for Networking paging call.	16 digits	
2	01 NET DEST NONE (1-6)	Select network feature type (1-6) and dial associated number. • INT PAGE ZONE (eMG80:01-35/eMG800:1-100) • EXT PAGE ZONE : (1-1) • ALL CALL PAGE ZONE : (1-3 : 1(INT), 2(EXT), 3(ALL)) • DOOR OPEN : 1~2 • Conference Room (1-9) • Call park (eMG80:01-19/eMG800:1-200)	1 : INT PAGE 2 : EXT PAGE 3 : ALL CALL PAGE 4: DOOR OPEN 5:Conference Room (1-9) 6:Call park (01-19)	N/A

3.3.11 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.

3.3.11.1 TNET Basic Attributes – PGM 330

Each MPB in a Central Control network environment must be enabled for TNET operation in order to function as part of the network.

PROCEDURE:	
TNET BASIC ATTRIBUTES PRESS FLEX KEY (1 – 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.

3.3.11.2 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, which are 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, in order to register properly.

PROCEDURE:	
TNET CM ATTRIBUTES PRESS FLEX KEY (1 – 10)	1. 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
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 will be used by the LM.	IPv4 address	
4	CM2 IP ADDRESS 0 .0 .0 .0	This field defines the IP address of the CM2 that will be used by the LM.	IPv4 address	
5	CM1 MAC ADDRESS 000000000000	This field defines the MAC address of the CM1 that will be used by the LM.		
6	CM2 MAC ADDRESS 000000000000	This field defines the MAC address of the CM2 that will be used by the LM.		
7	CM IPKTS PORT (0001 - 9999) :5588	In the TNET environment, the IP KTS protocol signaling UDP port is defined. At present this field is not used, do not change this port number.	0000-9999	5588

Table 3.3.11.2-1 TNET CM ATTRIBUTES (PGM 331)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
8	CM TOTAL PORT (000 – 999) : 011	This field defines the total number of ports the LM will request 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

3.3.11.3 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 as well as the maximum configuration of each LM. The port counts define the ports, which are allocated in the CM database for use by devices registered to the LM. The number of ports defined in the database of each LM, sees PGM 331, must be equal to or less than the ports defined in the CM for the LM, in order 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)	1. 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 000000000000	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	

Table 3.3.11.3-1 TNET LM ATTRIBUTES (PGM 332)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
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 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 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 TNET branch site.	IPv4 address	

3.3.11.4 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 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.

PROCEDURE:	
FoPSTN ATTRIBUTES PRESS FLEX KEY (1–3)	1. 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

Table 3.3.11.4-1 FAIL-OVER ATTRIBUTES (PGM 333)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
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 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 occur.	eMG80:1~20 eMG800:1~200	
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.		

3.3.11.5 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 unexpected operation.

PROCEDURE:	
TNET LM EXT CONTACT ENTER BIN NO (01-15)	1. Press the **[PGM]** button and dial 334. The range is : eMG80 : 1-15 / eMG800: 1-32
LM(01) EXT CONTACT PRESS FLEX_KEY (1-4)	Select LM number
	Select Flex button 1~4 for the desired External Control contact.
	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.

3.3.11.6 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)	1. 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 (0-3) MUSIC 1 (1)	Assigns the source for BGM.	00: Ring-back 01: Int music 02: Ext music 03: VSF MOH 04: SLTMOH1 05: SLTMOH2 06: SLTMOH3 07: SLTMOH4 08: SLTMOH5 09: VSFMOH2 10: VSFMOH3	Music 1
2	MOH TYPE (0-3) MUSIC 1 (1)	Assign the source for MOH.	00: Ring-back 01: Int music 02: Ext music 03: VSF MOH 04: SLTMOH1 05: SLTMOH2 06: SLTMOH3 07: SLTMOH4 08: SLTMOH5 09: VSFMOH2 10: VSFMOH3	Music 1
3	INT/EXT1 MUSIC (0:INT/1:EXT1): INT	Assigns the input for source 1 (Internal or External)	0: Internal 1: Ext. Music 1	Internal

3.3.11.7 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)	1. 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

3.3.12 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 to 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 level. Device settings have priority over Zone settings, while Zone settings have priority over system settings.

Generally, transport of RTP packets should be a 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 is 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 a public to the device's private address. The VoIP channels implement 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 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 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.

3.3.12.1 Zone Holiday Assignment – PGM 444

Holidays and vacation day intervals for each zone can be established to define a specified Service mode (Day, Night, and Timed) Up to 40 holidays and 5 vacation intervals can be defined.

PROCEDURE:	
ZONE HOLIDAY ASSIGNMENT ENTER BIN (01-32)	1. Press the **[PGM]** button and 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 Table 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 -3 0: DAY 1: NIGHT 2: TIMED 3: N/A	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 the holiday for the Zone as MMDD.		None

3.3.13 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.

3.3.13.1 Green mode activation – PGM 500

It is applied for SLIB, DSIB and HYIB. Regarding the exact board related to terminal, refer to iPECS eMG Hardware Description and Installation Manual.

PROCEDURE:	
GREEN MODE ACTIVATION PRESS FLEX KEY (1-4)	1. 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 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 button1-6	
4	POWER CURRENT STATE CHECK SLOT BTN (F1-F6)	Displays the current status of board power ON/OFF.	Flex button1-6	

3.3.13.2 Green mode time setting – PGM 501

It is applied for SLIB, DSIB and HYIB. Regarding the exact board related to terminal, refer to iPECS eMG Hardware Description and Installation Manual.

PROCEDURE:	
GREEN MODE TIME ENTER WEEK DAY NO (1-7)	1. Press the **[PGM]** button and 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 Table 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

3.3.14 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 of several distinct portions or the database to be initialized, returned to default.

PROCEDURE:	
INITIALIZATION PRESS FLEX KEY (01-17)	1. 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 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.

Table 3.3.14-1 INITIALIZATION DATA (PGM 450)

BTN	DISPLAY	REMARK
9	INITIALIZATION LCR DATA	It will initialize LCR attributes.
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 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	

3.3.15 PRINT-OUT DATABASE — PGM 451

The system can output all or portions of the system database in order 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)	1. 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, 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	

Table 3.3.15-1 DATABASE PRINT OUT (PGM 451)

BTN	DISPLAY	REMARK
10	DATABASE PRINT OUT LCR DATA	
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 print out can be provide in a 20 or 10 character format, 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 those are used in flexible button to display the content.
22	WORKING LCD PRINT	Print out strings those are used to activate some features.

3.3.16 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)	1. 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
10	VIRTUAL TRACE DIP SW DSP TRACE (OFF)	DSP 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
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 for output.	0: OFF 1: ON	OFF
17	VIRTUAL TRACE DIP SW DEBUG TRACE (OFF)	DEBUG Trace is enabled for output.	0: OFF 1: ON	OFF
18	VIRTUAL TRACE DIP SW IPATD TRACE (OFF)	IPATD Trace is enabled for output.	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 T RACE (OFF)	DECT Trace is enabled for output.	0: OFF 1: ON	OFF
22	VIRTUAL TRACE DIP SW HTTPXML T RACE (OFF)	HTTPXML Trace is enabled for output.	0: OFF 1: ON	OFF

3.3.17 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:	
VIRTUAL DIP SWITCH PRESS FLEX KEY (1-6)	1. Press the **[PGM]** button and dial 453.
	To enable trace, press desired Flex button 1~6. The Flex button LEDs indicates 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 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

3.3.18 DECT ATTRIBUTES — PGM 491

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)	1. 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-400H/450H/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

4. WEB SERVICE

4.1 General

The iPECS eMG incorporates a Web Server, which is employed by the system's Web Service. 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 for Maintenance such as system file upload, remote upgrade, database download and maintenance functions.

We provide On-line web user guide to a user. You can get the information about the frequent use of features by clicking [User's guide] in the login page.

The default database includes 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:

1) Operating iPECS series system
2) IP address assigned in the system and is known
3) TCP port assigned for the KSU LAN port and is known
4) iPECS eMG connected to an accessible LAN
5) iPECS eMG 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
- Firewall, requires Network Administrator to allow access.
- Remote access requires a routable IP address for the iPECS eMG Web Server. This must be assigned to the system prior to access.

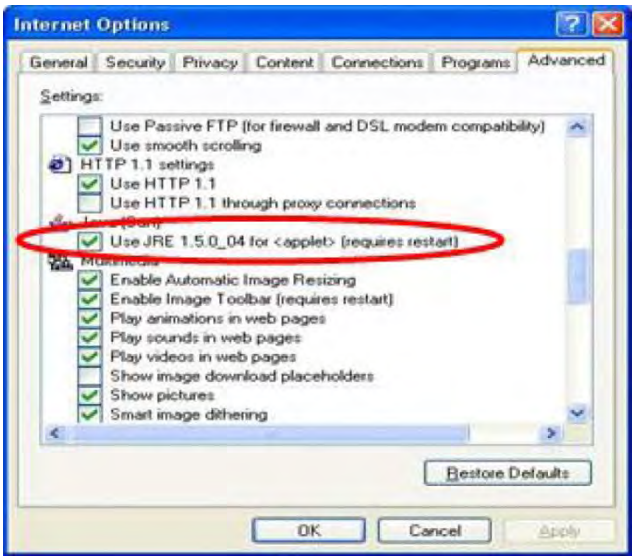
4.1.3 Web Browser setting

Web browsers may store (cache) a copy of the iPECS Web pages in a cache memory. The Web browser may use these copies to provide a “quick view”. If the Web page has been altered by data entered in Station Admin or a file upgrade, the cached copy will be out-of-date and could cause unexpected system operation. To assure proper page views and data entry, the browser should be set to eliminate the use of the cached pages. For Explorer, in “Internet Options”, enable refresh on “Every visit to the page”, for other browser, the procedure may be different.

4.1.4 Password Encryption

When enabled in PGM 162, iPECS eMG implements decryption of the password employing RC-6 block encryption. iPECS eMG employs a Sun Java Virtual Machine applet to implement AES encryption. The PC entering the Password must have a JAVA Virtual Machine and the JRE (Java Runtime Environment) Explorer option enabled to properly handle encrypted passwords. The Sun JVM is downloaded from the Java home page (www.java.com). Once downloaded, execute the downloaded file. To enable the Explorer JRE option,

1. From the Explorer menu select Internet Options-Advanced.
2. From the Advanced Internet Options check the **[Use JRE….]** Option.



3. After restarting the computer, access iPECS eMG Web Manager, section 4.2. “Applet iPECSPwd started” will display in the bottom left corner to indicate password encryption is active.

4.2 iPECS eMG80 & eMG800 Web Access & Login

In the browser 'ADDRESS' field, enter the MPB IP address (default is 10.10.10.2) and TCP port. Select GO; the Web server returns iPECS eMG Web Services Login page, Figure 4.2.1-1. The eMG Web services include the Admin and Maintenance functions and the Station Program User Portal. To access the Admin and Maintenance function, 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 & eMG800 Home 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 click the **[Login]** button to access the iPECS Admin & Maintenance Main Page, refer to Figure 4.3-1.

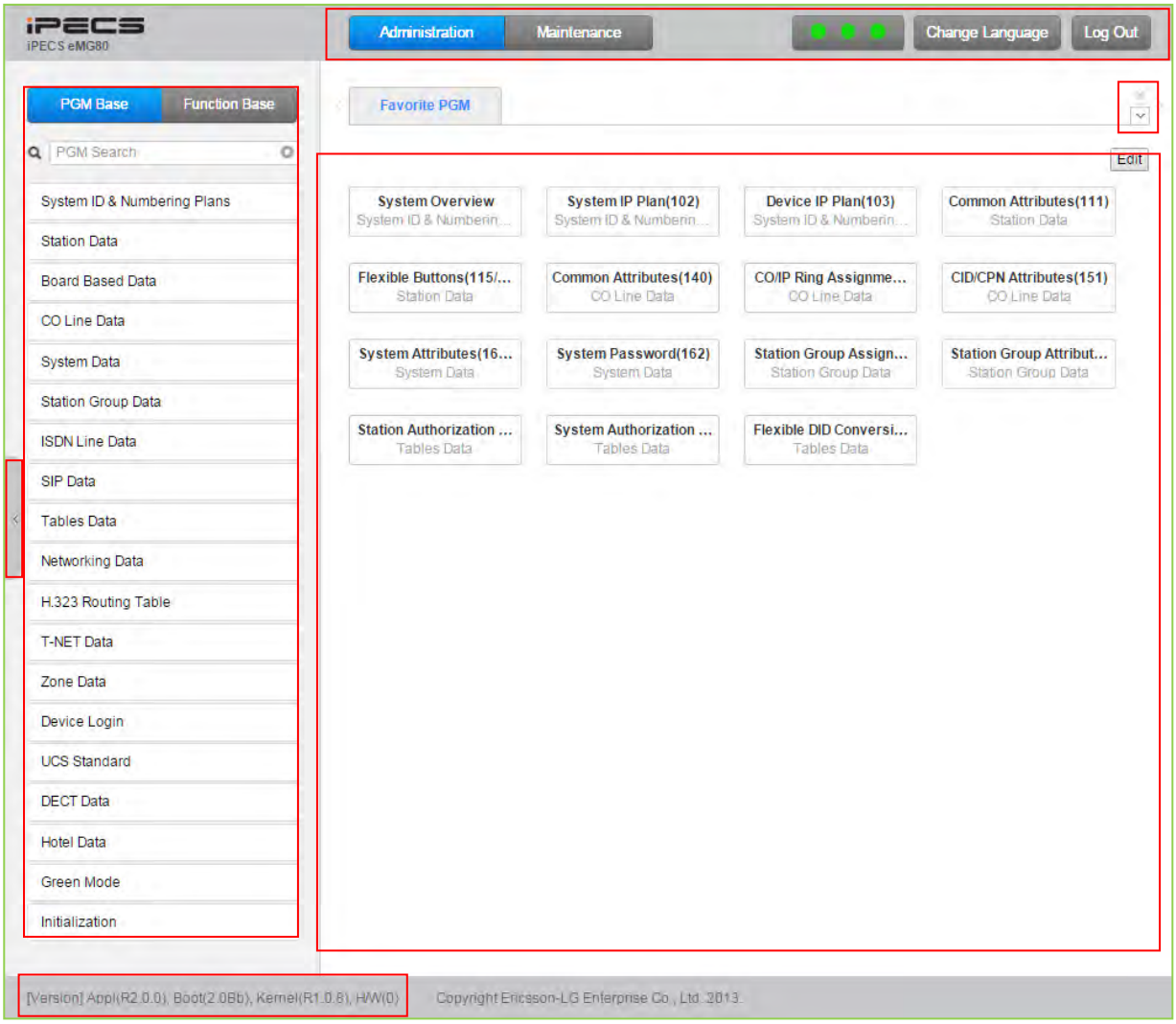


Figure 4.3-1 iPECS eMG80 & eMG800 Admin & Maintenance Main Page

The Admin & Maintenance Main Page has three sections,

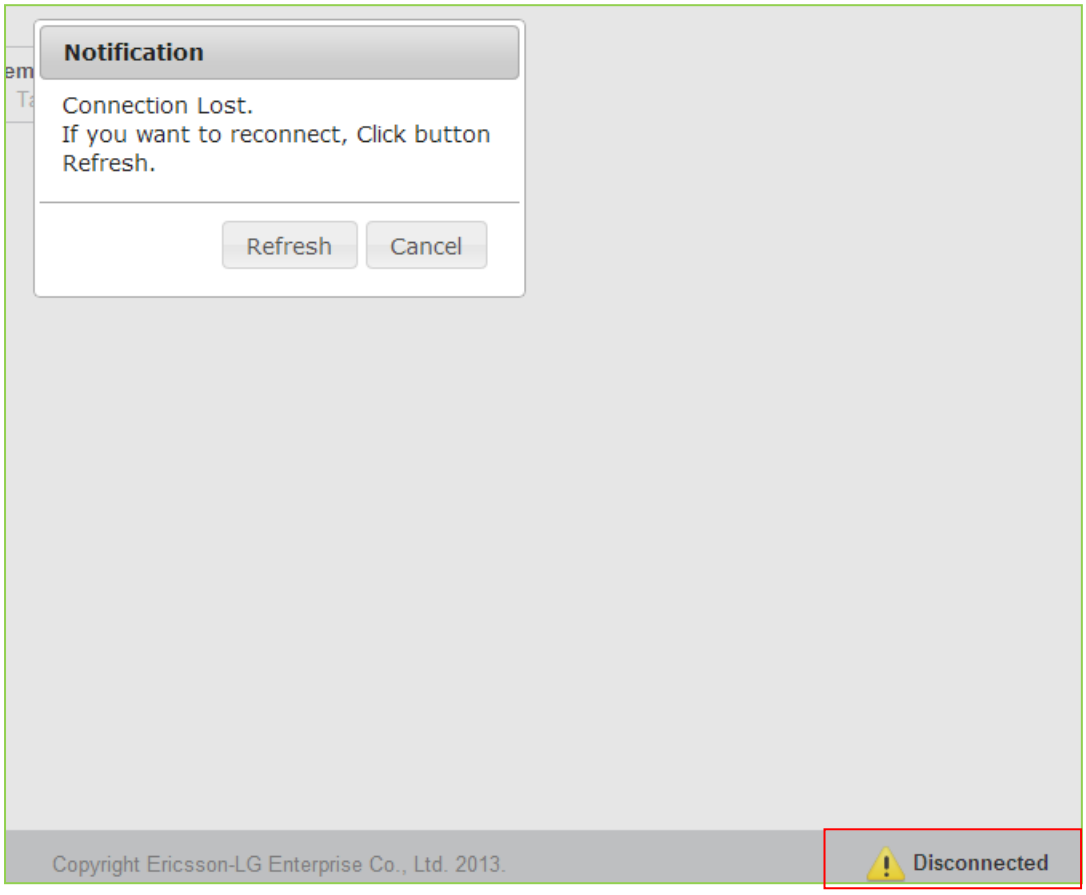
Menu bar – Upper frame
Web site directory & navigation section – Left frame
Favorite Programs and Entry section – Central frame

Items in the Menu bar are mouse-clickable for selections of:

Administration – accesses the system database.
Maintenance – permits databases to be downloaded, including all data, system speed dial, LCR, SMDR, UCP and Gateway file.
Change Language – change the desired language.
Log out – log out the web server

What is the meaning about Buttons and Text on page?

1) Hide menu by clicking the left arrow in the middle of window on left side.
2) X button at the top of the page on the right side functions whether the current tab or all tabs are closed or not.
3) button will display all PGM by click and check which PGM is using.
4) The Application, Boot, and Kernel version can find at the left side of bottom.
5) User can check the status indicator at the bottom on the right side of page by displaying the text such Disconnected or Read Only User.
   - Disconnected: discconected to Web Admin Server without working for a long time. User can connect to Web Admin Server by clicking Refresh button.
   - Read Only User: User who access to Web Admin Sever has no authority to set the function as the maintenance user and just is only for read.



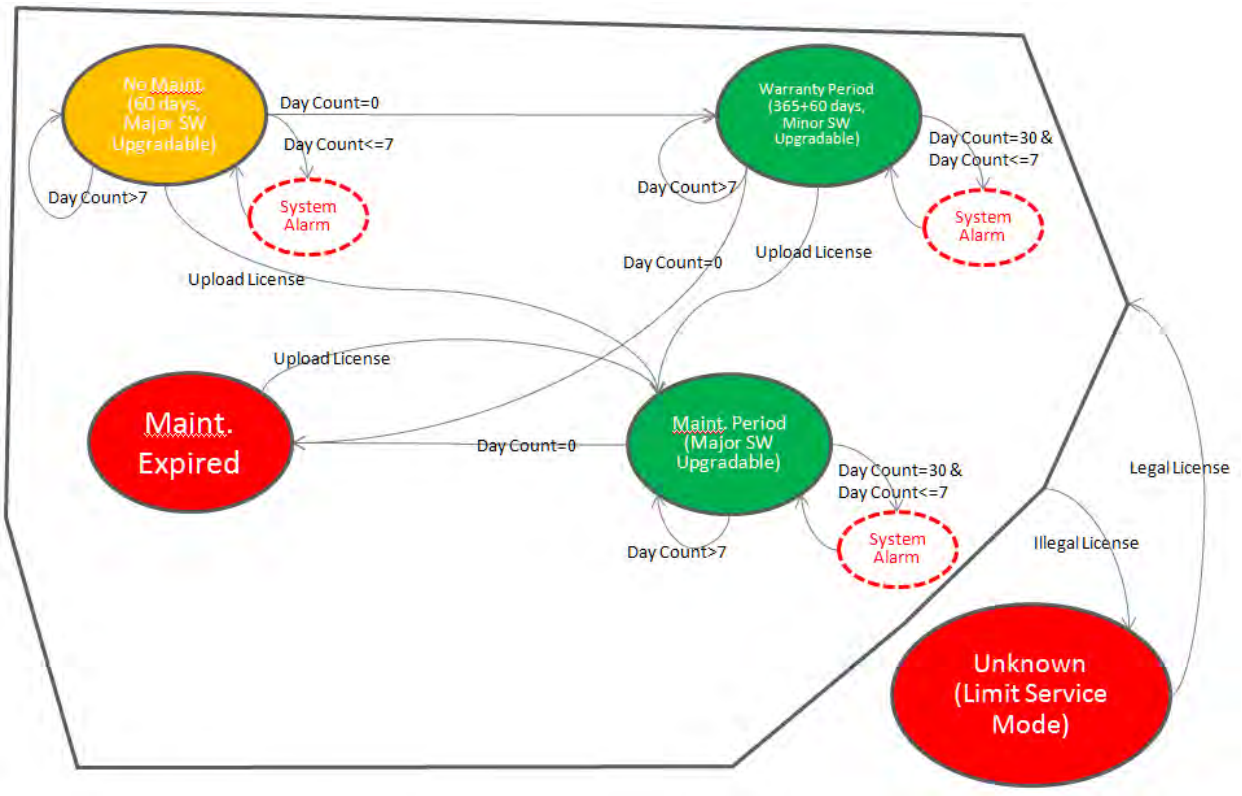
License State Display

In eMG system, a Software Maintenance license is needed in order to upgrade system software. If “No Maint. Period” or the color of SW Maint. is GREEN, system software can be upgraded. Major version upgrade is possible in “No Maint.” or “Maintenance” Period but Minor version upgrade is possible in “Warranty” Period. In other states, both upgrade and downgrade are not allowed.

- First LED : SW maintenance
- Second LED: Temp License
- Third LED: T-Net /Redundancy

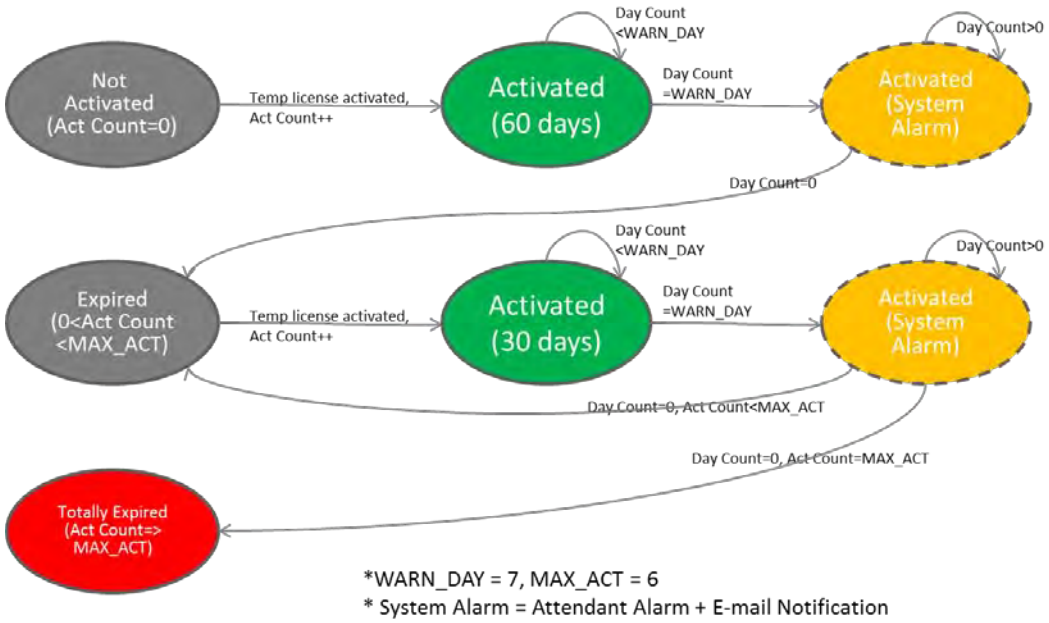
SW Maintenance State

The following figure is SW Maintenance stat for SMB. System Alarm is occurred 30 days once before expiration and for 7 days before expiration.



Temp License State

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

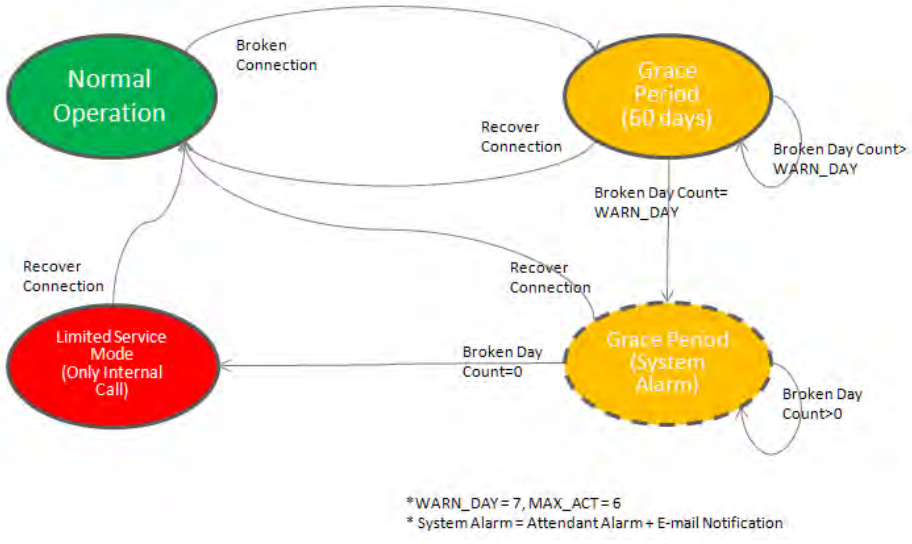


T-Net or Redundancy State

T-Net LCM license is valid for 60 days if the connection is broken. And Redundancy is valid for 60 days if eMG system is slave, active state, and the connection is broken. But the limitation is not applied in Master eMG. System Alarm is occurred from 7 days before entering “Limited Service Mode”.

- Below cases are always “Normal”.

1. TNLS license
2. Master system when redundancy



4.3.1 Favorite Program Groups

To ease access to frequently used program, the iPECS Admin Main Page displays a Favorite PGM list. 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.

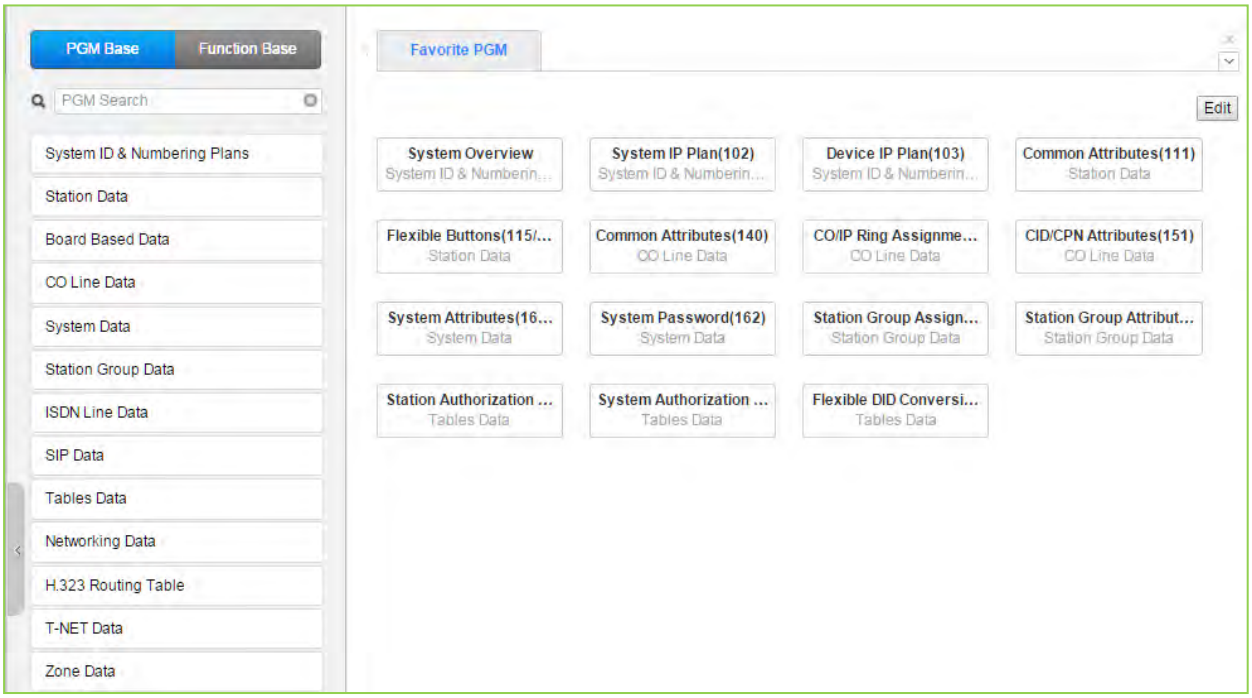


Figure 4.3.1-1 Favorite Program

To register a Favorite program, click 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.

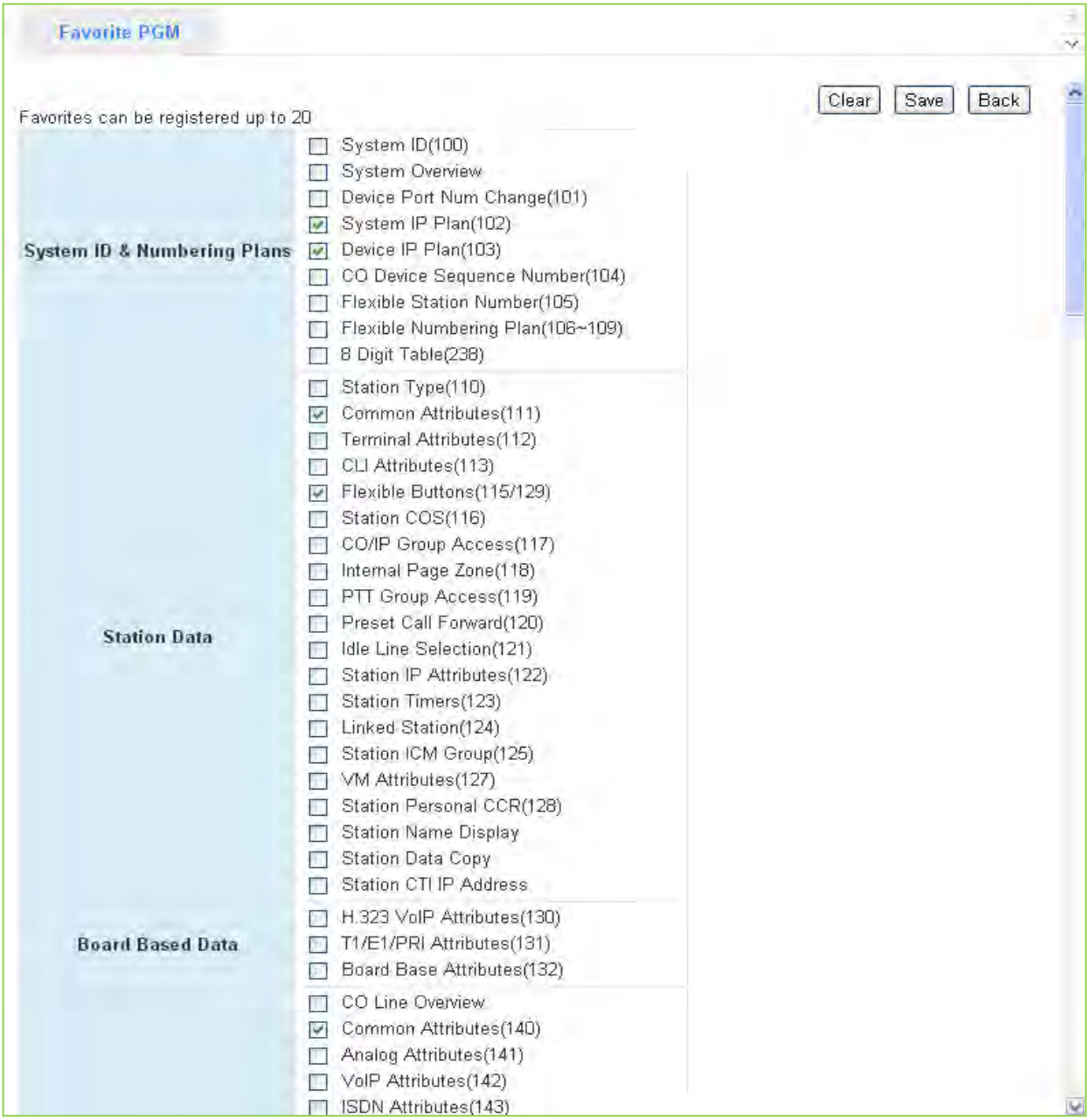


Figure 4.3.1-2 Favorite Program Groups for edit

4.3.2 Using Function Base

Function Base is designed to customize the feature or PGM by configuring the Function base so that customer can be easy to 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 Favorite function.

1) Common Function List

Generally, iPECS eMG 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.

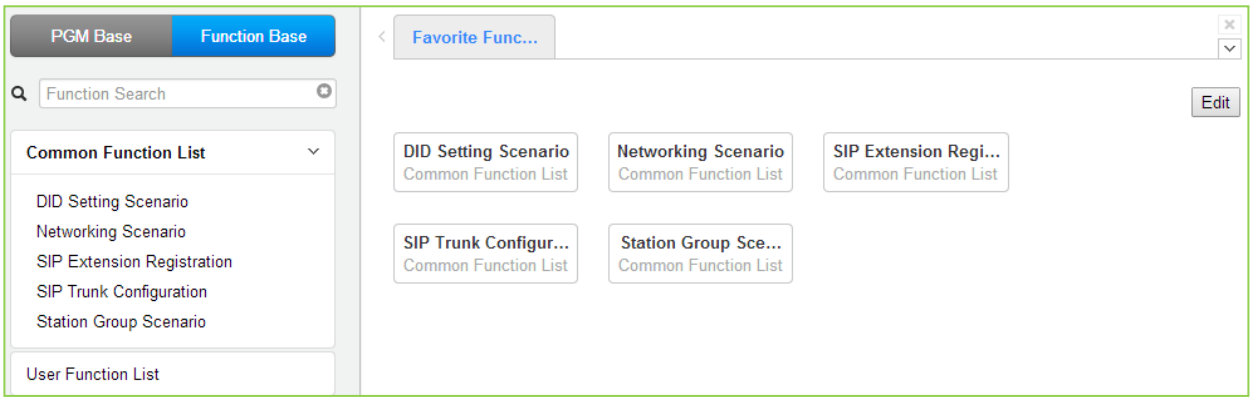


Figure 4.3.2-1 Common Function List

2) User Function List

To configure the user function list, click 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.

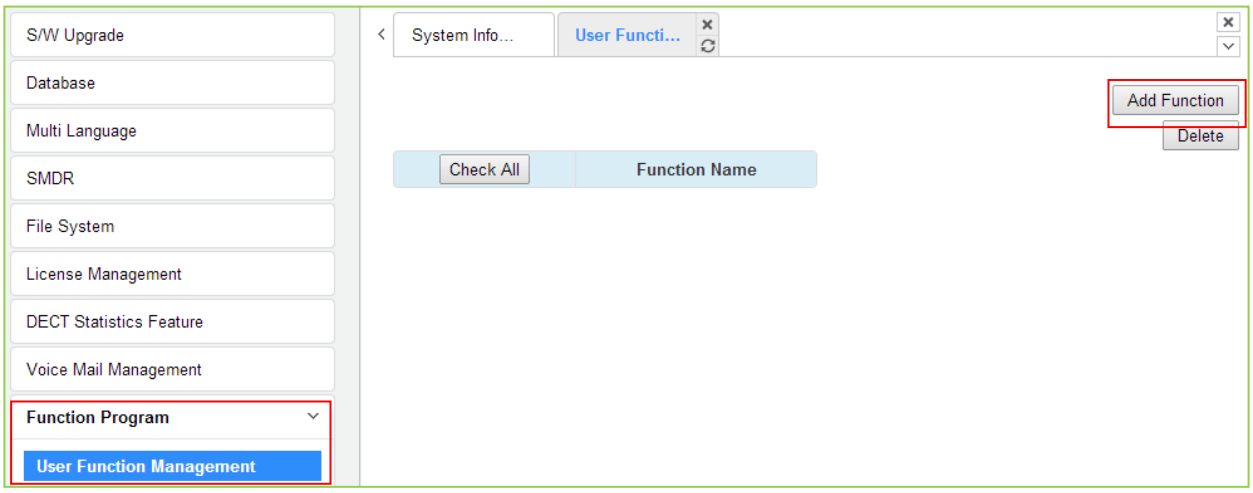
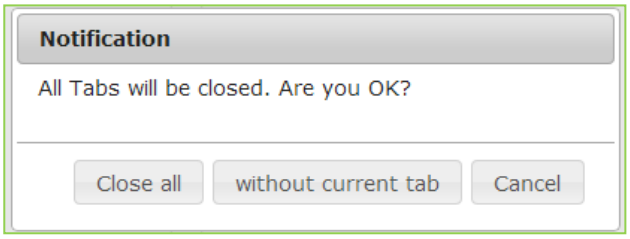


Figure 4.3.2-2 User Function Management

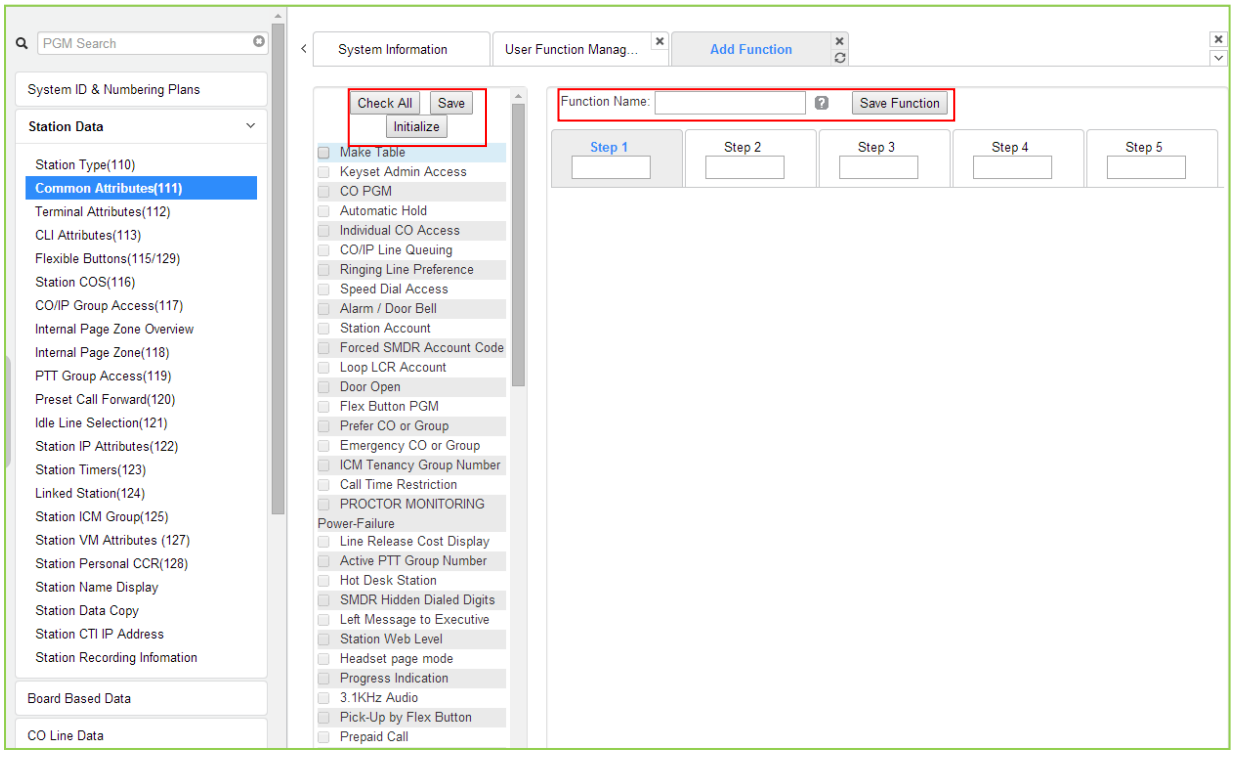
Adding Function

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

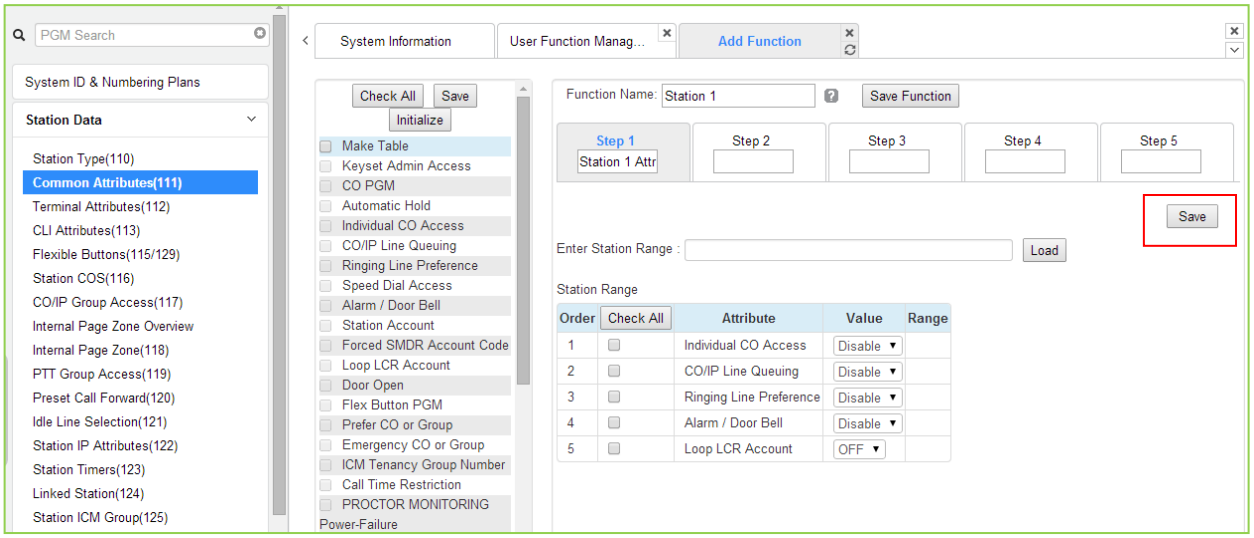
1) To enter the function name, English, Numbering, Underscore (_) and Parentheses are available. Function name has to be filled out.
2) To enter the step name, English, Numbering, and Special letters except Double quotation marks are available.
3) The step name doesn't need to be filled out, but the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



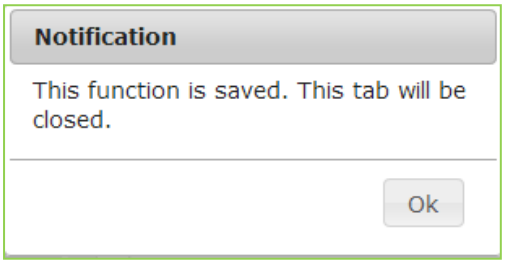
1. Click the Add Function button.
2. On the below window, click the desired PGM in the left frame. First fill out the function name and step name. To configure the step 1, click the Make table to check the desired function and then click the Save button.
   - ✓ Check All: check all functions
   - ✓ Save: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

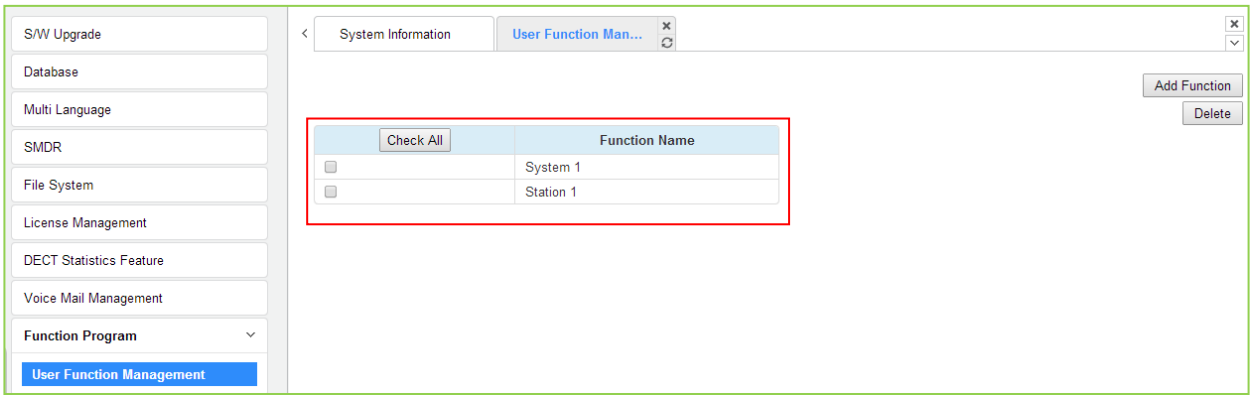


3. The selected functions are displayed and click the Save button after checking each functions. The rest steps are the same as the step 1.



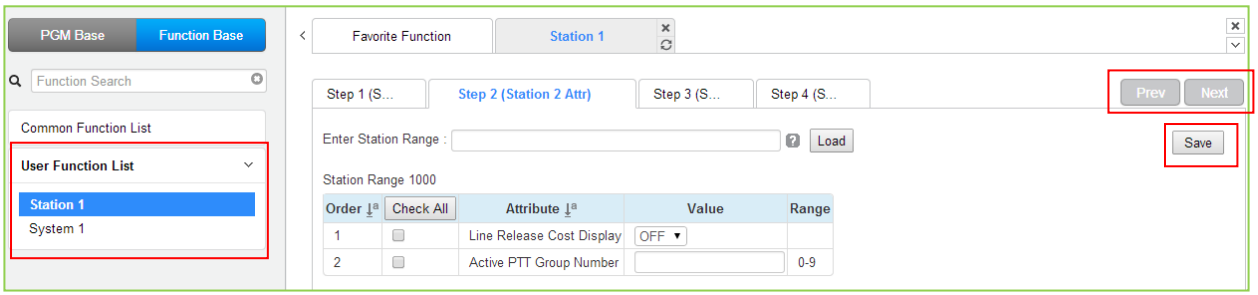
4. Finally, click the Save Function to save and then click the OK button.





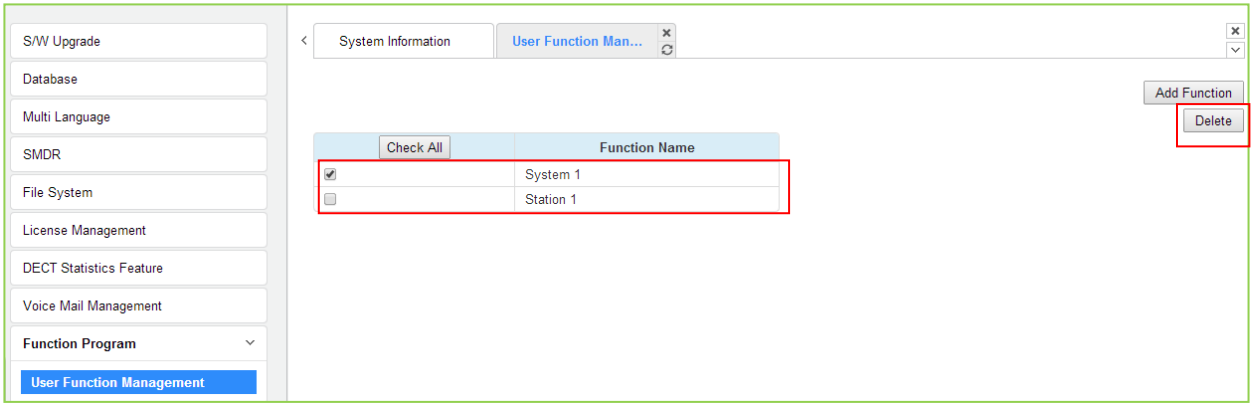
5. To check the function, click Function Base button in the left frame and User Function List and you will see the following figure.

   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 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 in 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 in the data field, either a drop-down menu will appear for entry selection or a cursor will appear in the field and the user may type in the data required. 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 eMG 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 of the Web pages for Station, CO Line and Tables Data a range of 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. To assure that only the appropriate data is changed for all entries in the range, a check box is located in front of each attribute. 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 9 pages in sequence with parameters that should be verified or commonly need modification prior to operation of the system including:

1) System Upgrade
2) Nation Code
3) System Time & Date
4) Station Number
5) Flexible Numbering Plan
6) CO Ring Assignment
7) License Upload
8) Maintenance ID & Password
9) IP Information

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.

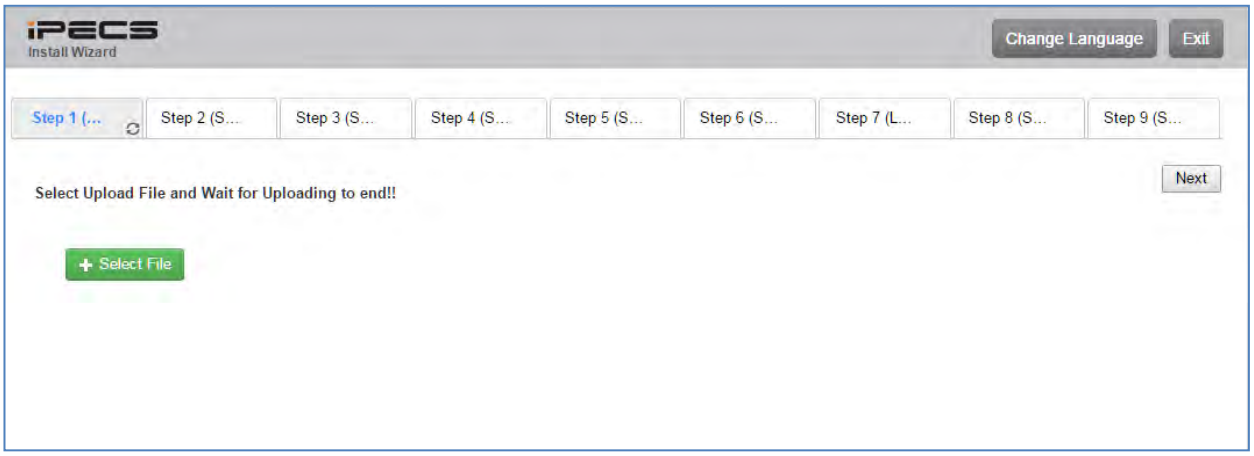


Figure 4.3.5.1-1 System upgrade

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.), as well as 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. If not, **turn SW 1 Pole 2 of KSU to ON**, change the Nation Code and save the page. If the code is changed, after saving the page the system will initialize automatically to properly set the gains, tones and numbering plan for the selected country. In addition, all other data will be initialized so, the Nation Code should be properly set prior to other programming.

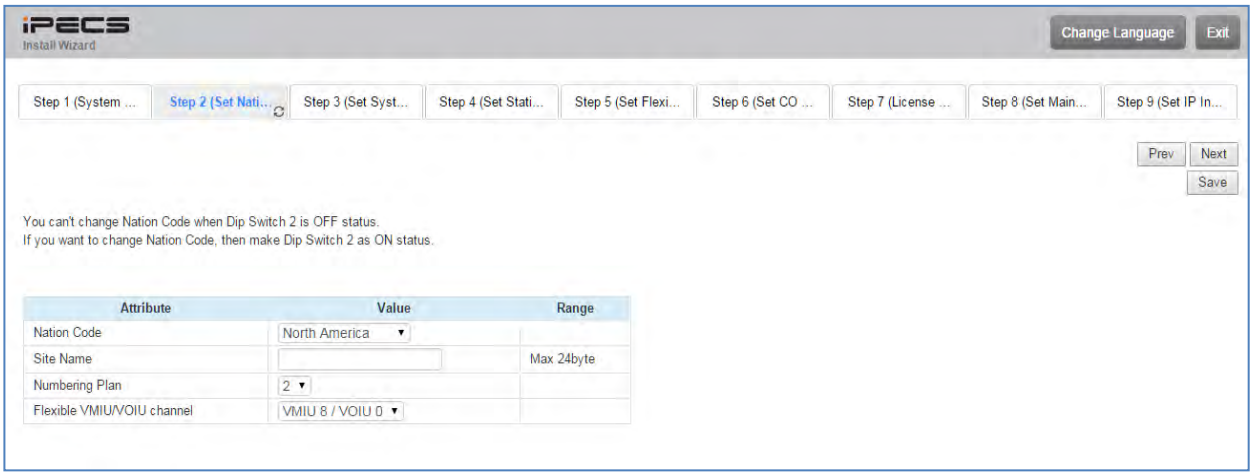


Figure 4.3.5.2-1 Set Nation Code Wizard

4.3.5.3 Set System Time and Date

You can set System time and date in this page.

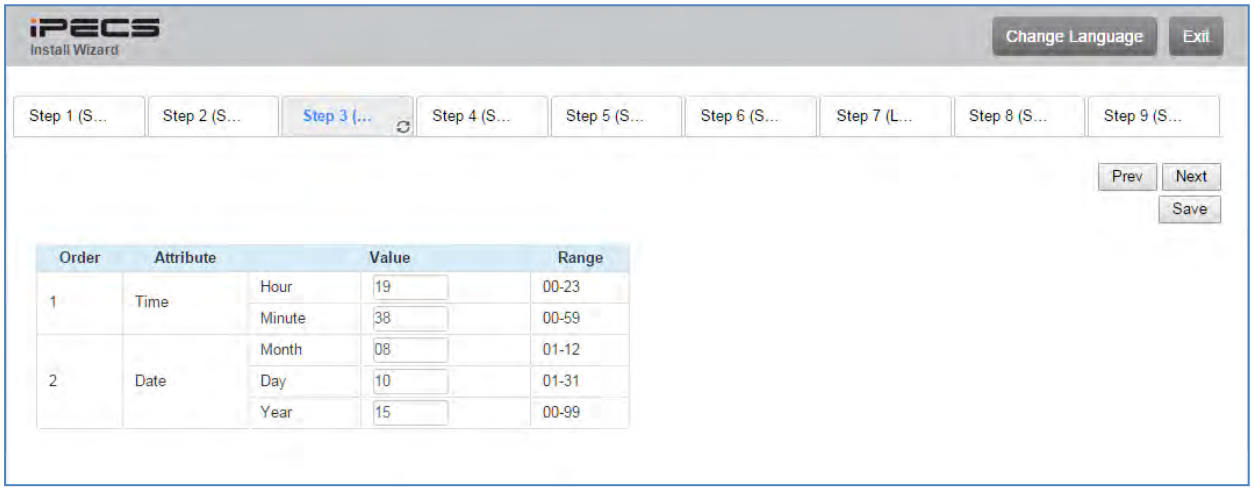


Figure 4.3.5.3-1 Set system time and date

4.3.5.4 Set Station Number

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

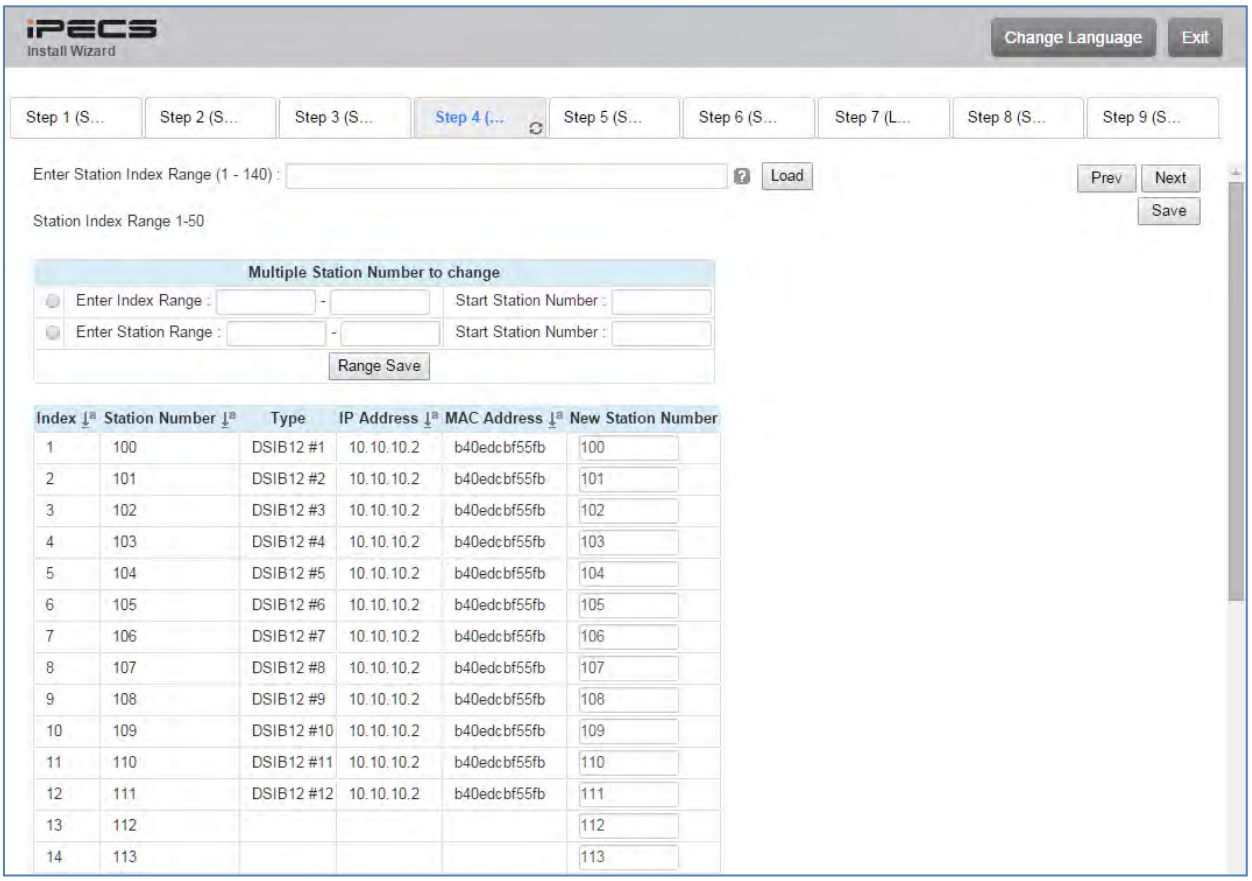


Figure 4.3.5.4-1 Set Station Number

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.

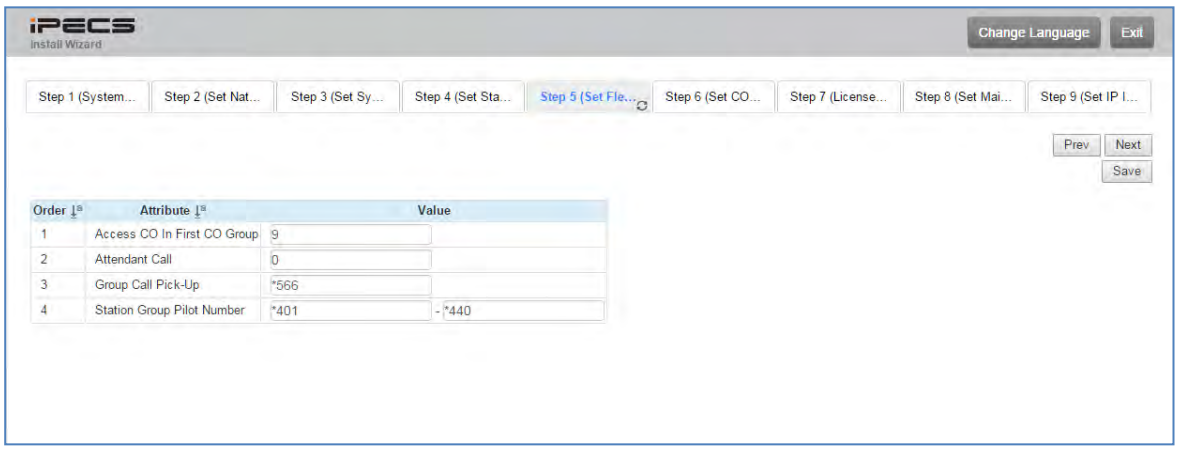


Figure 4.3.5.5-1 Set Flexible Numbering plan

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.

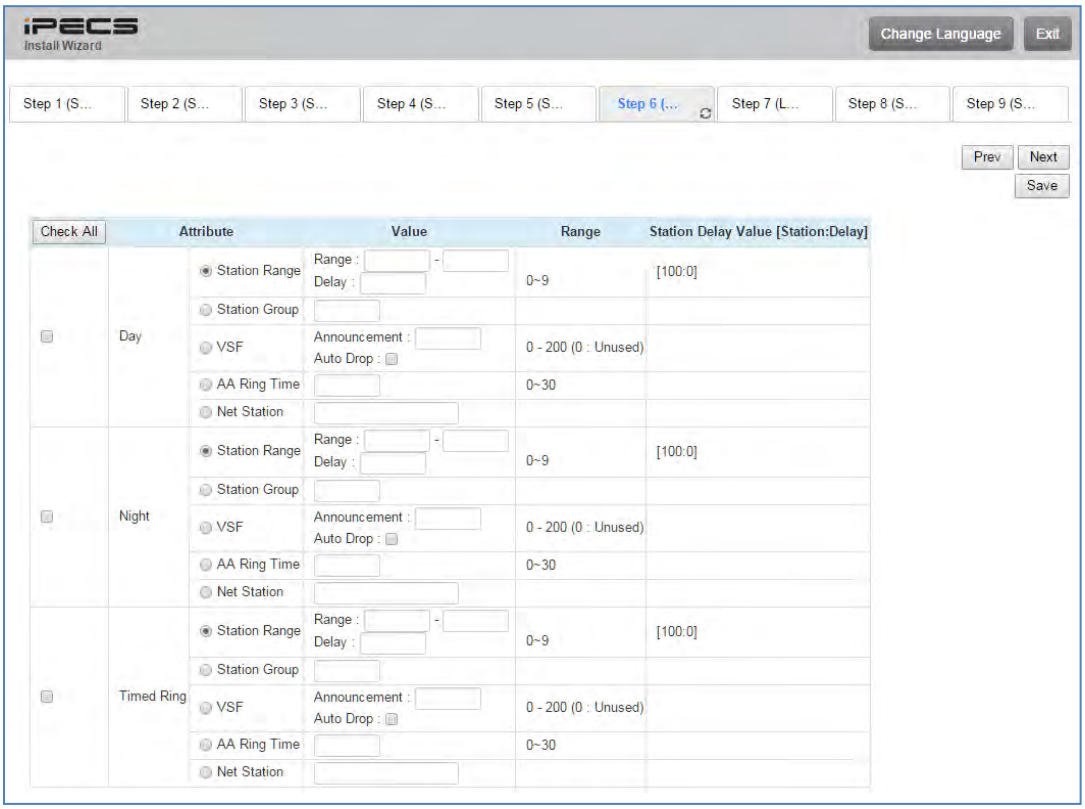


Figure 4.3.5.6-1 Set CO Ring Assignment

4.3.5.7 Set License Upload

Before License upload, make sure that the date of 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 eMG 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 license file can be shown in “System Overview” page.

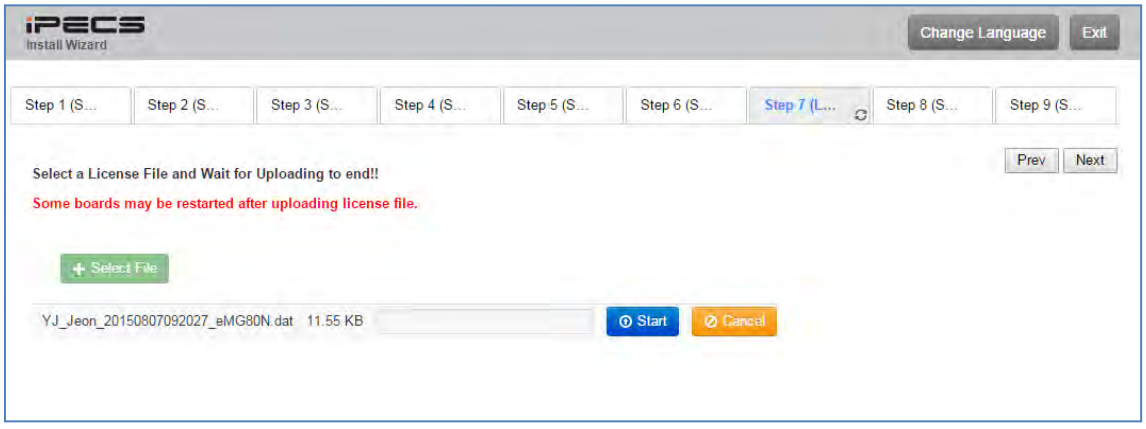


Figure 4.3.5.7-1 Set License Upload

4.3.5.8 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 the risk of admin and maintenance access by unauthorized personnel.**

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, Keyset admin password can be registered in this page.

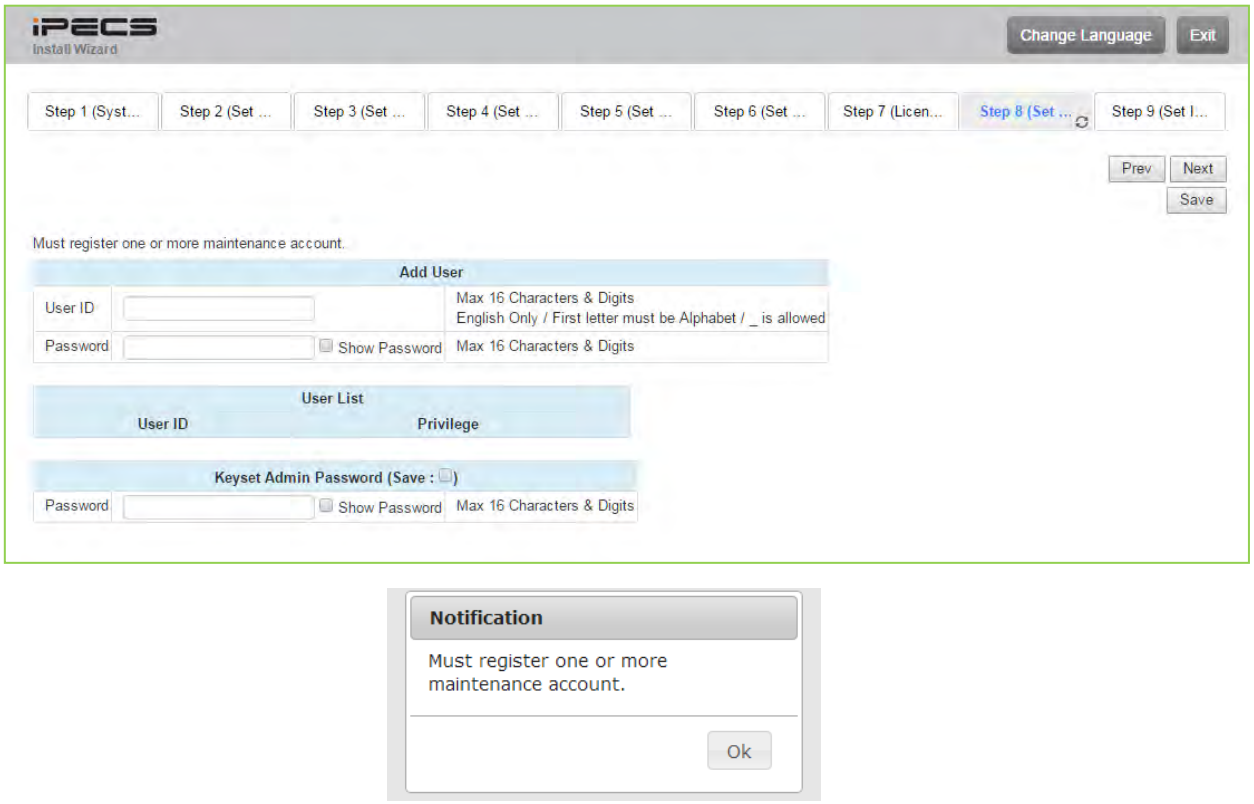


Figure 4.3.5.6-1 Set Maintenance Password

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.

4.3.5.9 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 in the system requires a system reset; the reset does not initialize data.

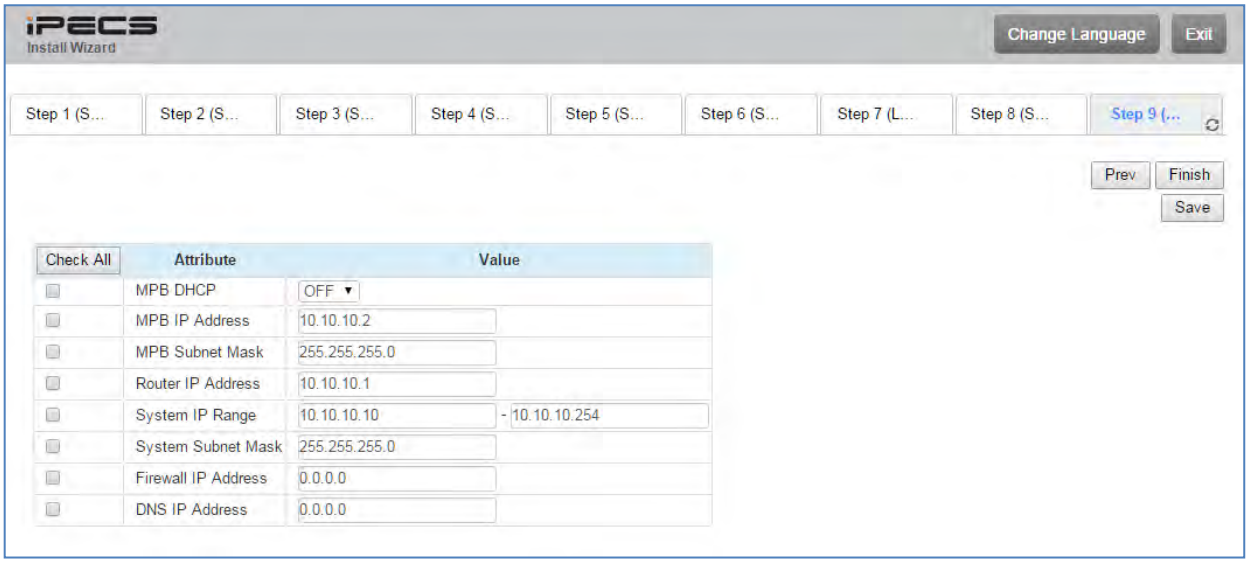


Figure 4.3.5.2-1 Set IP Information

4.4 Web Admin Programming

4.4.1 System ID & Numbering Plans

Selecting the System ID & Numbering Plans expands the Navigation page to display the available Program groups displayed in the left frame as shown in Figure 4.4.1-1.

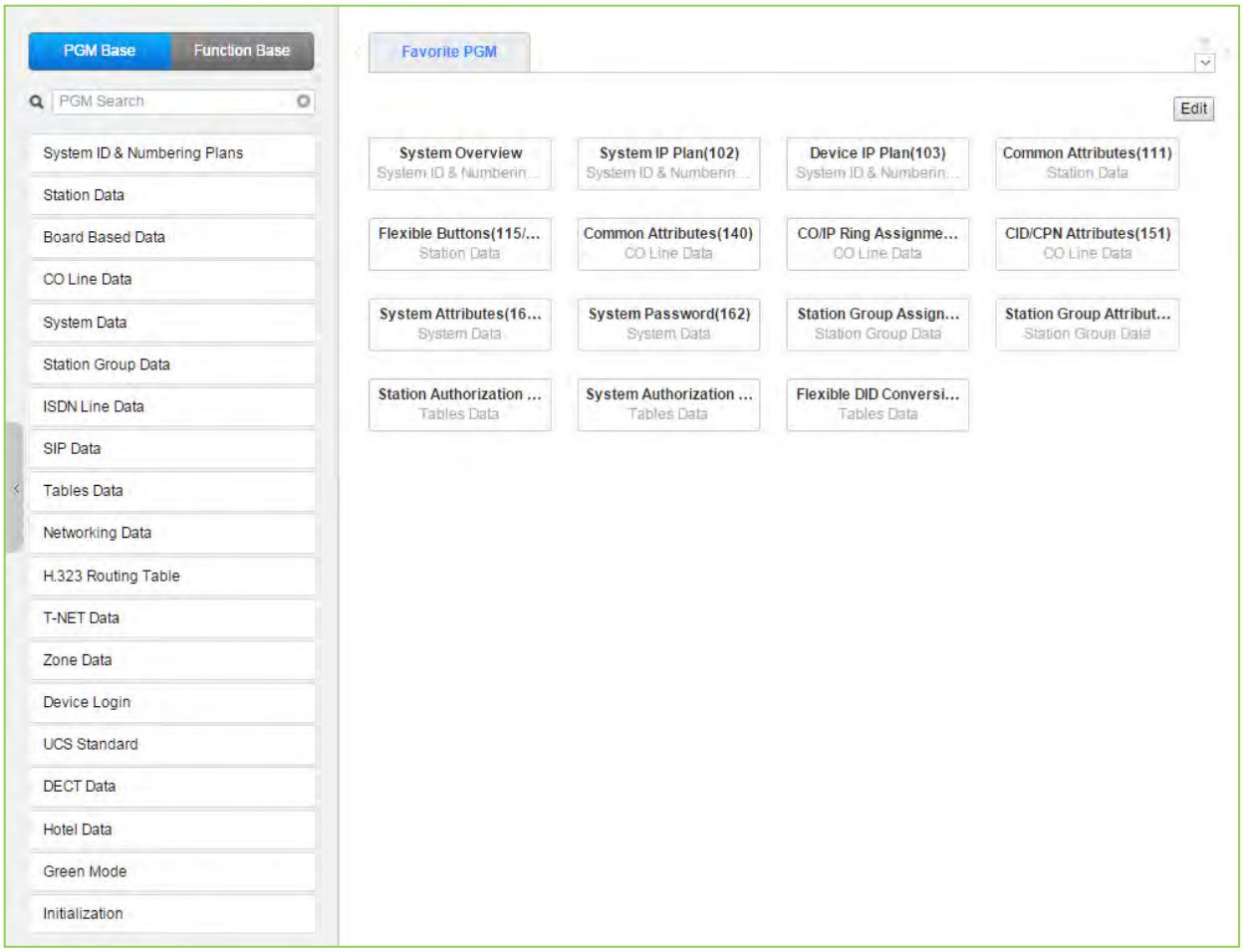


Figure 4.4.1-1 System ID & Numbering Plans sub-menu

4.4.1.1 System ID – PGM 100

Selecting System ID will display the Input Entry page, Figure 4.4.1.1-1.

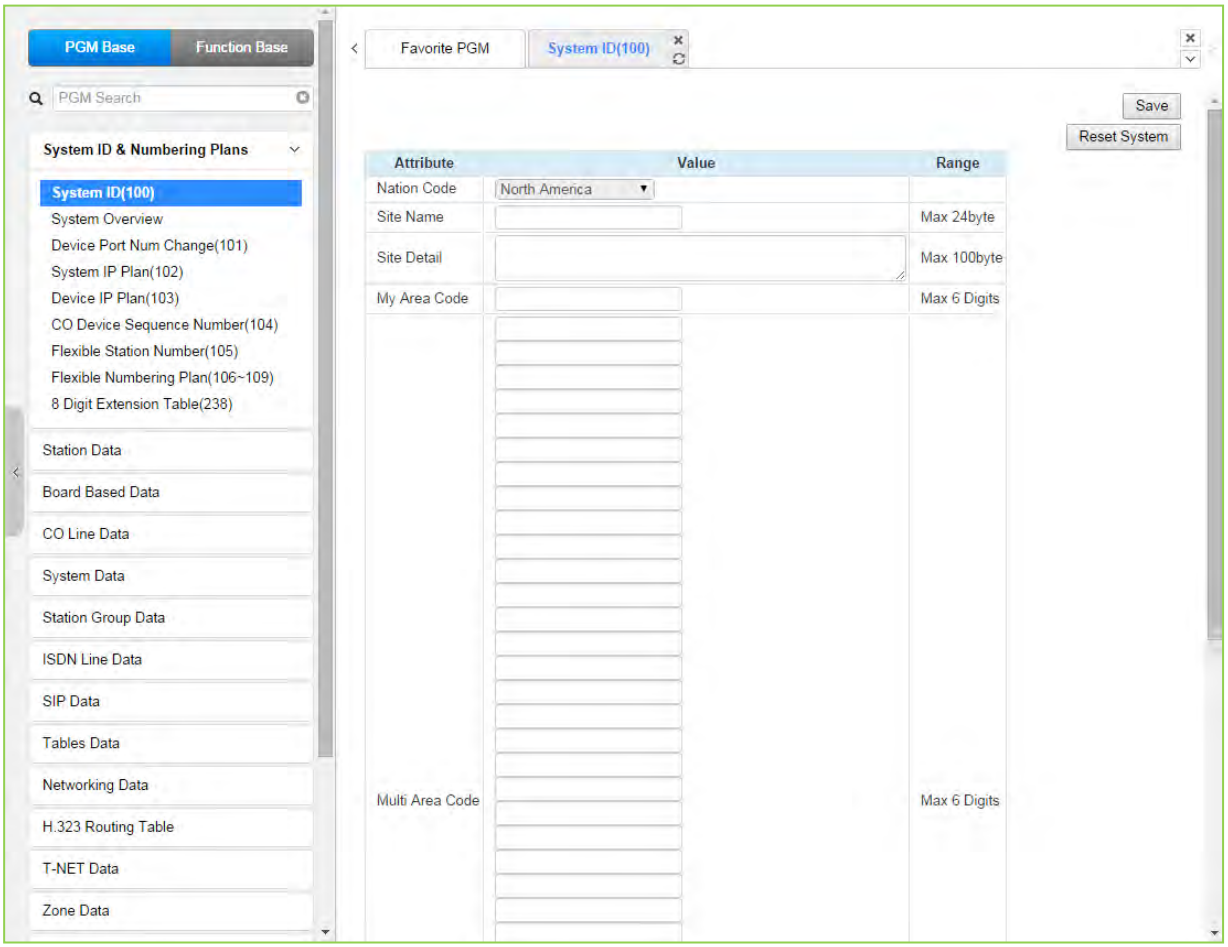


Figure 4.4.1.1-1 System ID

Under System ID, the country is identified using the international dial codes (Nation Code). A twenty-three (23) character Site Name, Site detail and the local “My Area Code” maybe defined. This information is used to 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 customer.

Note

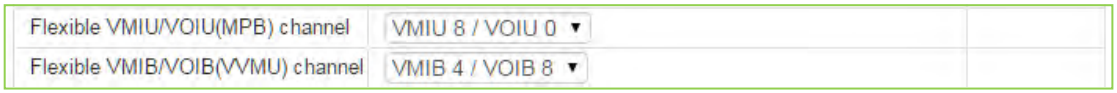
To change Nation code, Dip-switch 1 pole # 2 is ON; you cannot change the Nation code while the switch is OFF.

The rest attributes are additional options for Customer’s convenience.

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.

In case of eMG80



1. Administrator can select the channel capacity of VoIP and Voice Mail in this filed.
   - In case of VMIU8/VOIU0, the default 2 channel 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 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)

In case of eMG800

Flexible VMIU/VOIU channel

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

1) VMIU8 / VOIU0
2) VMIU8 / VOIU2
3) VMIU8 / VOIU4
4) VMIU4 / VOIU8

Speed Numbering

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

eMG80

1) Type (0): System speed (2000~4999), Station speed (000~099)
2) Type (1): System speed (200~999), Station speed (00~99)
3) Type (2): System speed (20~99), Station speed (00~19)

4) Type (3): System speed (10~99), Station speed (00~09)
5) Type (4): System speed (1~9), Station speed (0~9)

eMG800

1) Type (0): System speed (2000~9999), Station speed (000~099)
2) Type (1): System speed (2000~7999), Station speed (000~099)
3) Type (2): System speed (2000~4999), 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 (10~99), Station speed (00~09)
7) Type (6): System speed (1~9), Station speed (0~0)

The notifications is displayed ‘Speed Numbering type is successfully changed. Please refresh this page to reload Speed numbering data.” According to selecting Speed numbering type, the range of System speed dial and Station speed dial is changed.

4.4.1.2 System Overview

Selecting System Overview will display the System Overview page, Figure 4.4.1.2-1 & 4.4.1.2-2. This page displays the system capacity, the system license overview related to Application, Device ID list, and Gateway list. Note that data cannot be entered on this page. Especially, you can check the status of software license and Temp license.

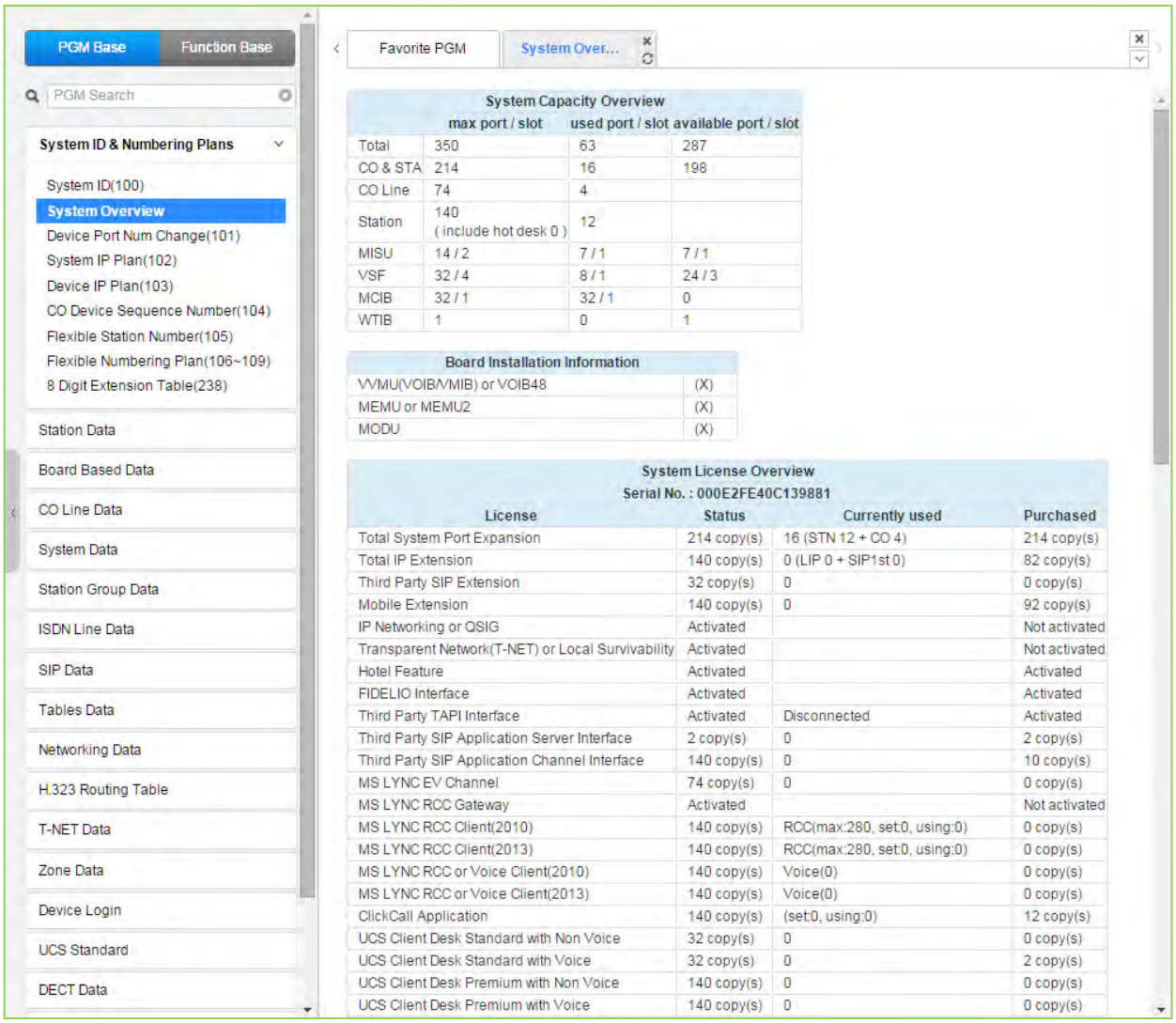


Figure 4.4.1.2-1 eMG80 System Overview

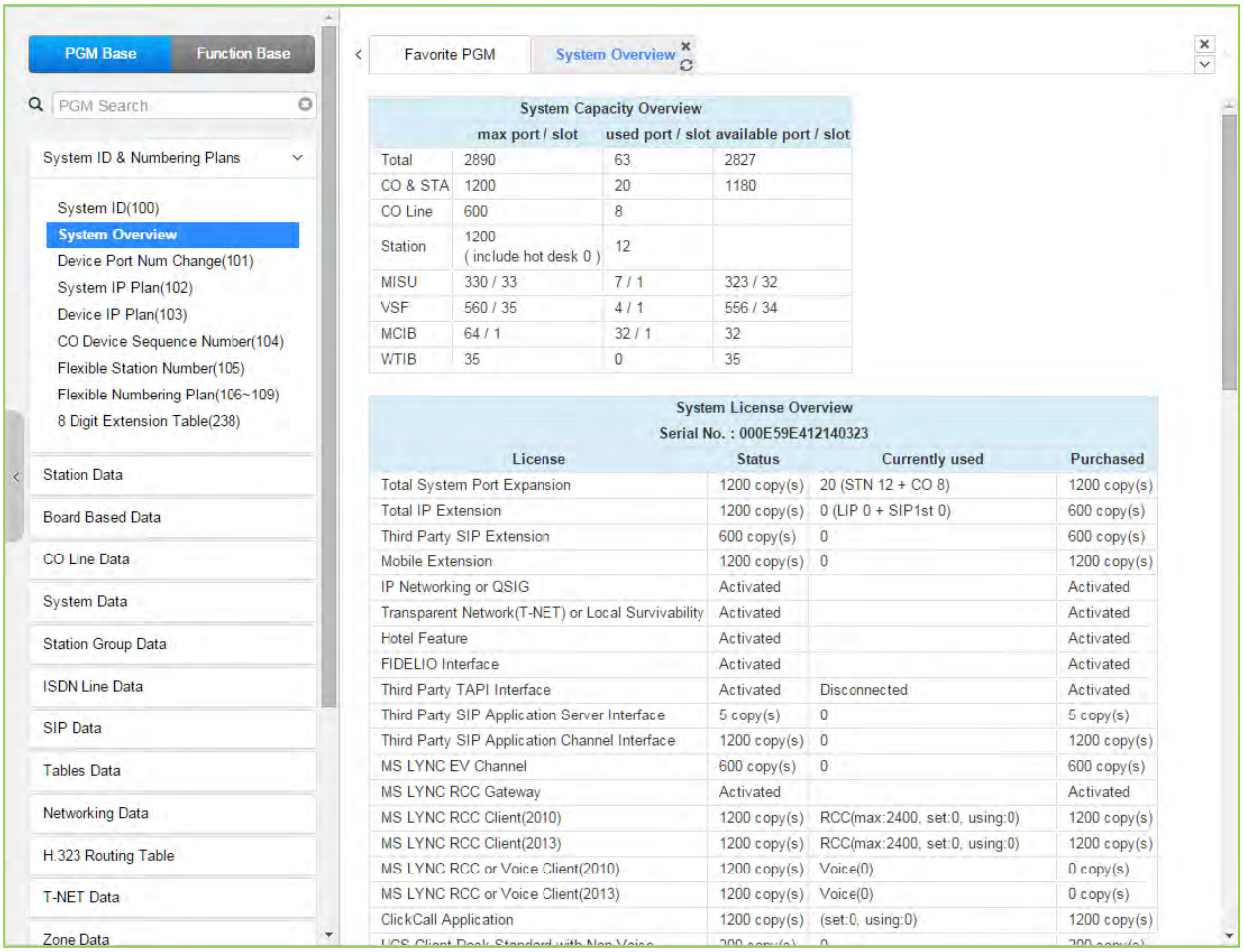


Figure 4.4.1.2-1 eMG800 System Overview

4.4.1.3 Device Port Number Change – PGM 101

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

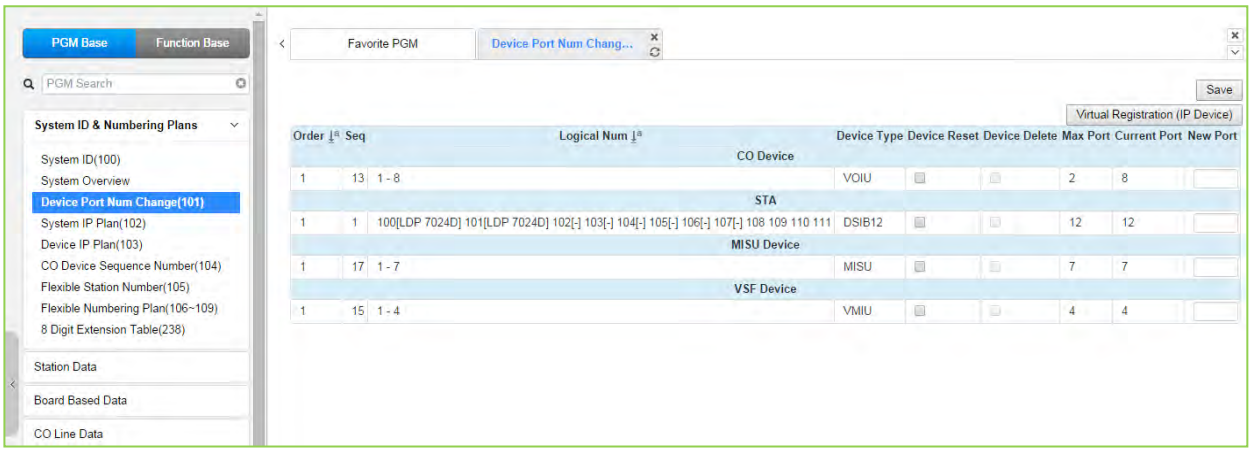


Figure 4.4.1.3-1 eMG80 Device Port Num Change

Figure 4.4.1.3-2 eMG800 Device Port Num Change

The system supports changing port count of a device or deleting devices. In this window, the Device ID, Mac address, IP address and port count of the device 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 virtual MAC address when you register Device, please check the check box in front of MAC address input field. Click **[Register]** button after finishing the desired value.

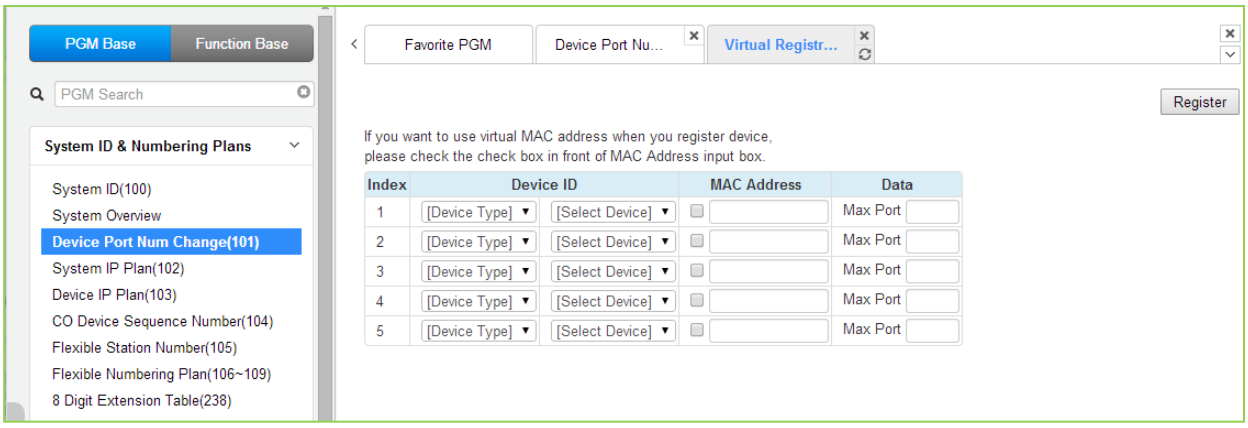


Figure 4.4.1.3-2 Virtual Registration

4.4.1.4 System IP Plan - PGM 102

Selecting System IP Plan will display the input entry page.

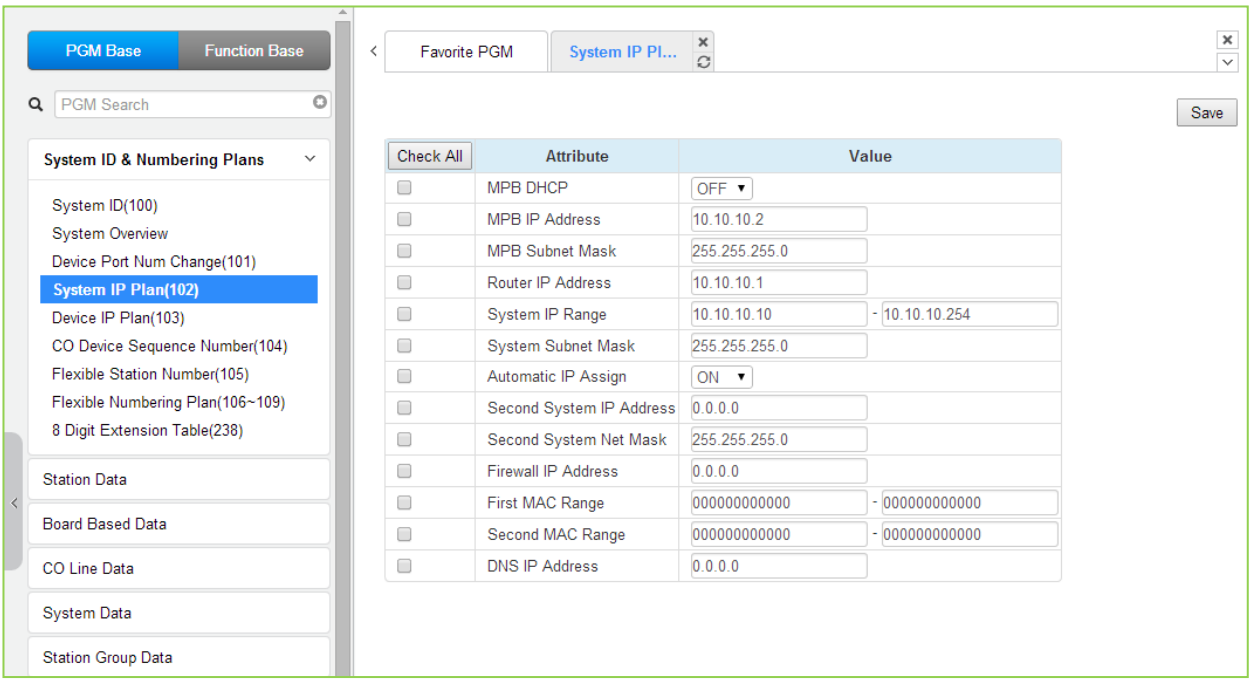


Figure 4.4.1.4-1 System IP Plan

The System IP Plan sets several IP addresses including the MPB IP address that is 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 (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 the VVMU using the System IP address range defined. These addresses are used for communications between the system and other VVMU 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 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” address in the remote device.

Table 4.4.1.4-1 SYSTEM IP ADDRESS PLAN

ATTRIBUTE	DESCRIPTION	DEFAULT
MPB DHCP	Controls the DHCP client function for the MPB in the KSU.	OFF
MPB IP Address	Public IP Address of the KSU LAN port that required for remote user and external VoIP network access. IPv4 format.	10.10.10.2
MPB Subnet Mask	Defines the system subnet for MPB IP addresses.	255.255.255.0
Router IP Address	IP Address of router for external network (WAN) access. Required for shared voice and data LAN, external VoIP and remote Web access.	10.10.10.1
System IP Range	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 eMG system.	0.0.0.0
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 in remote devices.	0.0.0.0
First MAC Range	MAC Address Range to register a device if device MAC address is included in range.	000000000000~ 000000000000
Second MAC Range	MAC Address Range to register a device if device MAC address is included in range.	000000000000~ 000000000000
DNS IP Address	IP Address of Domain Name Server, which iPECS eMG 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

4.4.1.5 Device IP Plan - PGM 103

Selecting Device IP Plan will display the input entry page.

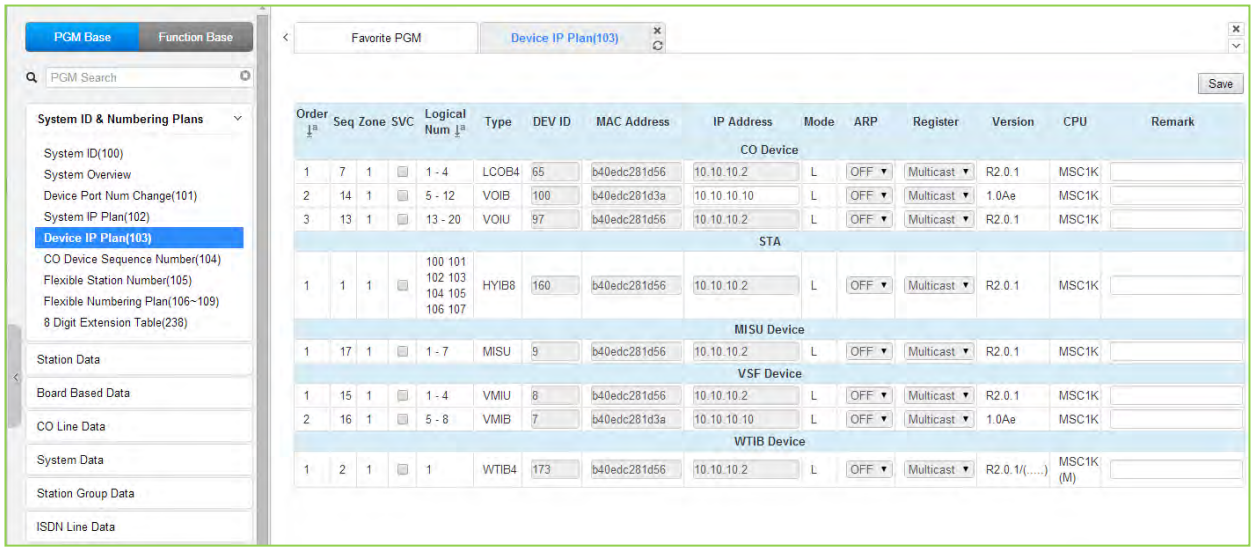


Figure 4.4.1.5-1 Device IP Plan

TDM board is registered with 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 Web page.

To register IP device:

As Gateway/board and terminals are registered to the iPECS, a slot number is assigned, which indicates the order of registration. Also, based on the type of device (CO Gateway/board, Terminal or Station board) 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 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 registration request from a Gateway/board or terminal. When the device is separated from the system by a router, the system must use the IP uni-cast protocol. This is established by the "Local Device" assignment. When disabled (Off), the system will send an IP uni-cast 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 **[Save]** button after changing Value to apply.

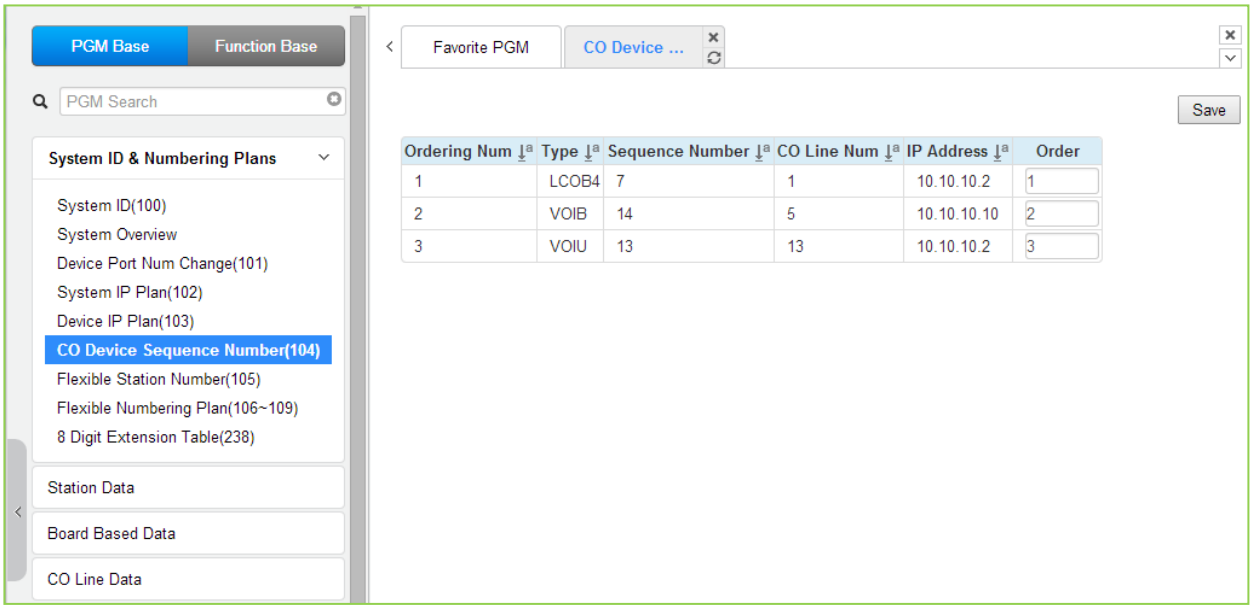


Figure 4.4.1.6-1 CO Device Sequence Number

The system configures the CO/IP Line numbers as discussed in section 2.2. Each slot is assigned the starting CO/IP Line number based on the Order Numbering. 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. This page permits changes in the Station Numbering Plan using one of three methods:

Enter Station Index Range: eMG80: 1-140 / eMG800: 1-1200

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.

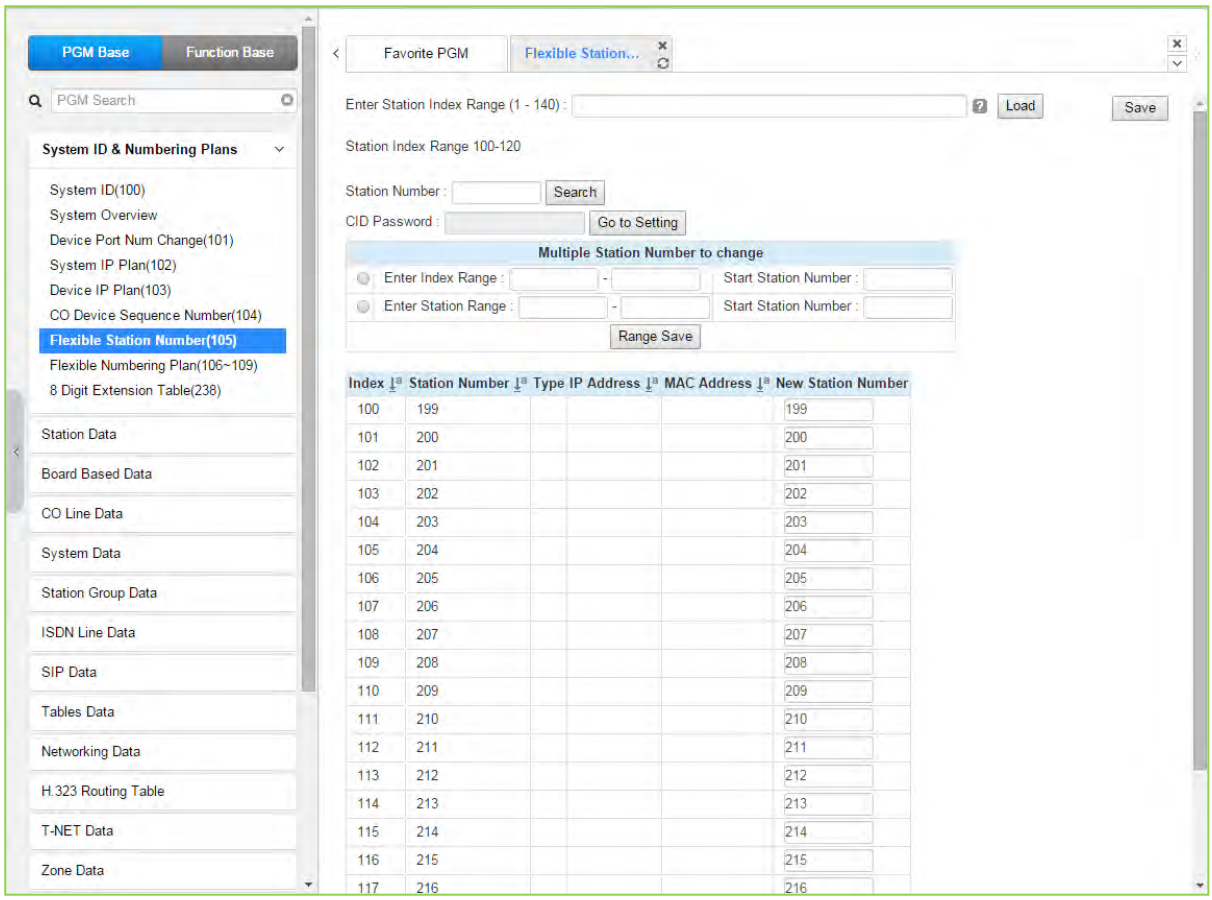


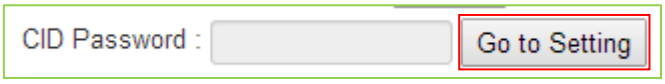
Figure 4.4.1.7-1 Flexible Station Number

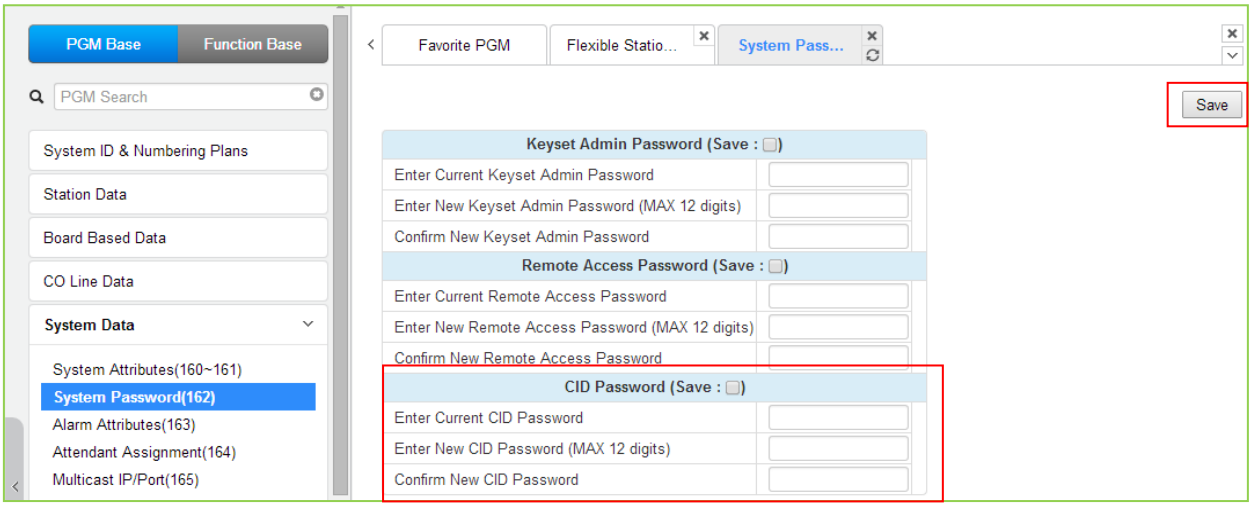
Each iPECS IP and LDP Phone and SLT is assigned a logical order number, shown as the “Index” number on the Web page, during the registration process. The station Index number is incremented from 1 as each terminal device is registered. At registration, station numbers increment sequentially with the index and are assigned starting at Station 100 for eMG80 and at

Station 1000 for eMG800. 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 to click “Go to Setting” button. After clicking it, you will move to the following PGM 162 and set the CID password, and then save CID password to mark 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 **[Save]** button after changing Value to apply.

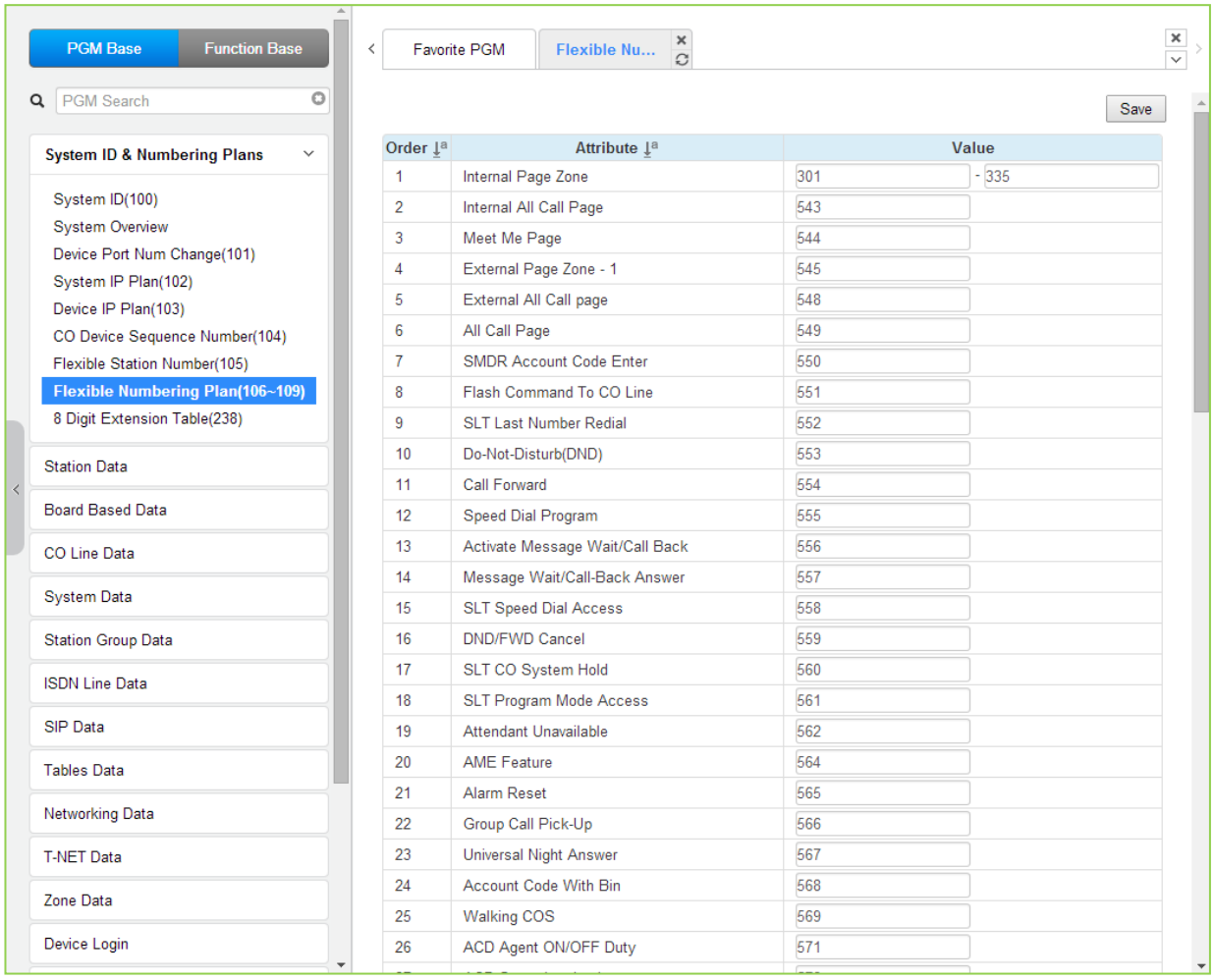


Figure 4.4.1.8-1 Flexible Number Plan

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) digit 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 under System ID section, are provided 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.	eMG80:301~335 eMG800:*301~*400
2	Internal All Call Page	Internal All Call Page access code.	*543
3	Meet Me Page	Meet-Me-Page answer code.	*544

Table 4.4.1.8-1 FLEXIBLE NUMBERING PLAN CODES

Order	ATTRIBUTE	DESCRIPTION	DEFAULT
4	External Page Zone – 1	External Page Zone 1 access code.	*545
5	External All Call Page	External All Call Page access code.	*548
6	All Call Page	All Call Page access code.	*549
7	SMDR Account Code Enter	Dial code to signify the start of an SMDR Account Code.	*550
8	Flash Command To CO Line	Dial code to generate a Flash on the active CO Line.	*551
9	SLT Last Number Redial	SLT Last number redial feature access code.	*552
10	Do-Not-Disturb (DND)	Dial code to activate Do-Not-Disturb.	*553
11	Call Forward	Code to activate Call Forward.	*554
12	Speed Dial Program	SLT Speed Dial programming access code.	*555
13	Activate Message Wait/Call Back	Code to activate Message Wait/Call Back.	*556
14	Message Wait/Call-Back Answer	Code to return Message Wait/Call Back.	*557
15	SLT Speed Dial Access	SLT Speed Dial access code.	*558
16	DND/FWD Cancel	Code to cancel DND/FWD/MSG Wait.	*559
17	SLT CO System Hold	Code to place a CO Line call on System Hold.	*560
18	SLT Program Mode Access	SLT user program access code.	*561
19	Attendant Unavailable	Code to make attendant “unavailable”.	*562
20	AME Feature	Dial code to assign an Answering Machine Emulation Flex button.	*564
21	Alarm Reset	Code to terminate an Alarm signal.	*565
22	Group Call Pick-Up	Group Call Pick-up code.	*566
23	Universal Night Answer	Universal Night Answer code.	*567
24	Account Code With Bin	Dial code for entering an Account Code.	*568
25	Walking COS	Dial code to activate Walking Class-of-Service.	*569
26	ACD Agent ON/OFF Duty	Code to toggle ACD Supervisor ON and OFF duty.	*571
27	ACD Supervisor Login	Supervisor log-in code.	*572
28	ACD Supervisor Logout	Supervisor log-out code.	*573
29	ACD Help Code	Agent & Supervisor code for Supervisor help.	*574
30	ACD Call In Queue Display	Dial code to display calls in queue.	*575
31	ACD Supervisor Status	Dial code to display group status.	*576
32	ACD Supervisor Monitor	Dial code to activate Supervisor monitor.	*577
33	ACD Reroute Queued Call Answer	Code to reroute call after answer.	*578
34	ACD Reroute Queued Call No Answer	Code to reroute call prior to answer.	*579
35	Camp-On Answer	Dial code to answer a Camped On call.	*621
36	Call Park Locations	Dial code to place/retrieve a call in a system Park Orbit.	eMG80:#601~#619 eMG800:#601~#800
37	Station Group Pilot Number	Station group pilot number.	eMG80: *401~*440 eMG800: *401~*500
38	Station User VSF Features Access	VSF feature access code.	66
39	Call Coverage Ring	Code for Call Coverage button.	*76
40	Direct Call Pick-Up	Dial code to activate Directed Call Pick-up.	*77
41	Access CO Group	Dial code to access a CO Line from a group.	89

Table 4.4.1.8-1 FLEXIBLE NUMBERING PLAN CODES

Order	ATTRIBUTE	DESCRIPTION	DEFAULT
42	Access Individual CO/IP	Dial code to access a specific CO/IP Line.	88
43	Access Held CO/IP	Dial code to access the last CO/IP Line from Hold.	8*
44	Access Held Individual CO/IP	Dial code to access a specific CO/IP Line from Hold.	8#
45	Access CO In First CO Group	Dial code to access the 1st available CO/IP Line in any accessible group.	9
46	Attendant Call	Dial code to call Main Attendant.	0
47	VM MSG Wait Enable	Dial code for external Voice mail to activate Message Wait indication.	*8
48	VM MSG Wait Cancel	Dial code for external Voice Mail to deactivate Message Wait indication.	*9
49	Door Open	Dial code to activate Door 1 contact.	#*1
50	Door Open	Dial code to activate Door 2 contact.	#*2
51	MCID Request	Dial code to activate Malicious Caller Id (Except USA version).	*0
52	Unsupervised Conf Timer Extend Code	Dial code to extend unsupervised conference time.	##
53	PTT Group Logon/Logoff	Push-To-Talk group login and logout dial code. The station must have a PTT button for proper operation.	#0
54	ACD Agent Primary Login	ACD Agent Primary Login code.	*581
55	ACD Agent Primary Logout	ACD Agent Primary Logout code.	*582
56	ACD Agent Secondary Login	ACD Agent Secondary Login Code.	*583
57	ACD Agent Secondary Logout	ACD Agent Secondary Logout Code.	*584
58	Wrap-up End	ACD Agent Wrap-up end code.	*585
59	T-NET CM LOGIN/OUT	T-NET CM Login/out code	*586
60	ENTER INTO CONF ROOM	Code for a station to enter a conference room.	*59
61	ENTER INTO CONF-GROUP	Code for a station to initiate a conference group.	*68
62	STATION ICR	Code for a station to activate ICR forward.	*587
63	PICK UP GROUP PICK-UP	Pick Up Group Call Pick-up dialing code.	*588
64	EMERGENCY PAGE	Code for emergency page.	*589
65	REMOTE MEX CONTROL	Code to control the mobile extension settings remotely.	*580
66	Agent ON/OFF Duty In ALL GRP	Code to change the state of the Agent ON/Off duty in all Station groups.	*58*
67	SLT ACNR	Dial code for an SLT to activate ACNR	*58#
68	ACD Supervisor Ring Mode	Code to check and change ACD group Ring mode by ACD group supervisor.	*570
69	Company Directory Name	Code to check and record a user's Name greeting for the Company Directory feature.	*563
70	ISDN Supplementary HOLD	ISDN Supplementary HOLD Numbering Plan Code.	*57*
71	ISDN Supplementary Conference	ISDN Supplementary Conference Numbering Plan Code (Not supported).	*57#
72	Forced Channel Seize	Code to disconnect an existing call and seize the CO/IP Line or connect to the station.	*56*
73	Override DND/Forward	Dial code to override DND or Call Forward activated by a station.	*56#

Table 4.4.1.8-1 FLEXIBLE NUMBERING PLAN CODES

Order	ATTRIBUTE	DESCRIPTION	DEFAULT
74	Cancel call back	Code to cancel a Callback request.	
75	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 DISA service activates.	*55*
76	CCR	It is used in digit conversion.	#2
77	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

4.4.1.9 8 Digit Extension Table - PGM 238

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

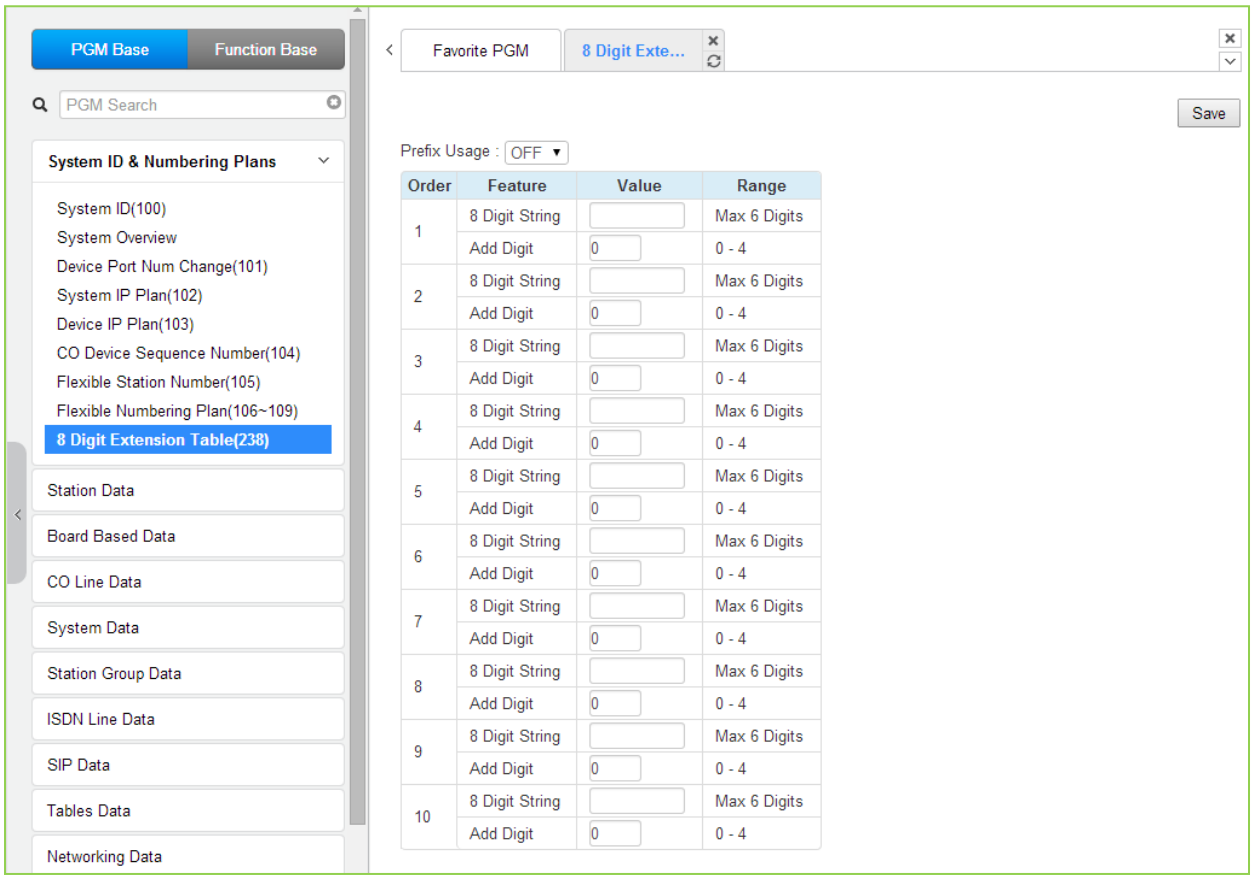


Figure 4.4.1.9-1 8 Digit Table

The iPECS eMG supports a Station Numbering Plan of up to 8 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 8 digits. Note that multiple prefixes (8 Digit Strings) can be assigned.

4.4.2 Station Data

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

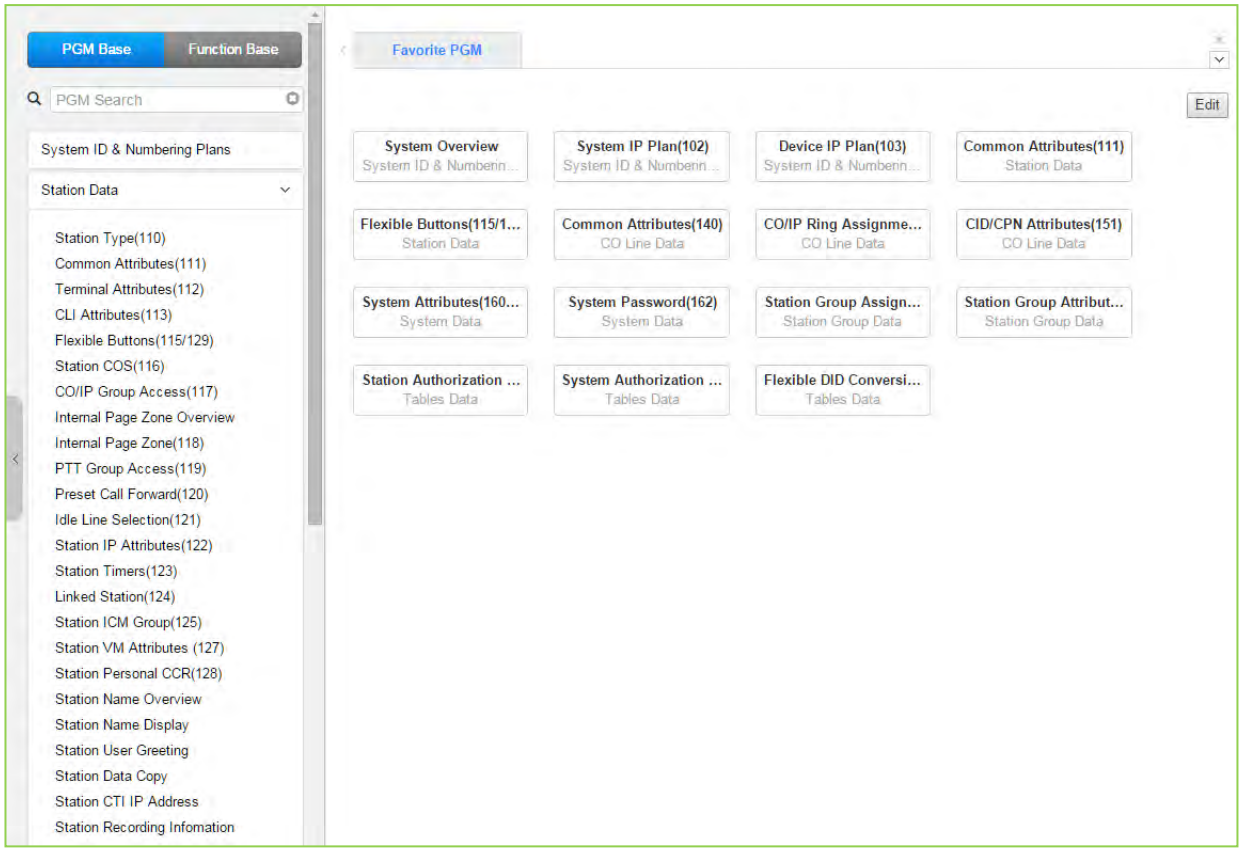


Figure 4.4.2-1 Station Data Main Page

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 **[Save]** button after changing Value to apply.

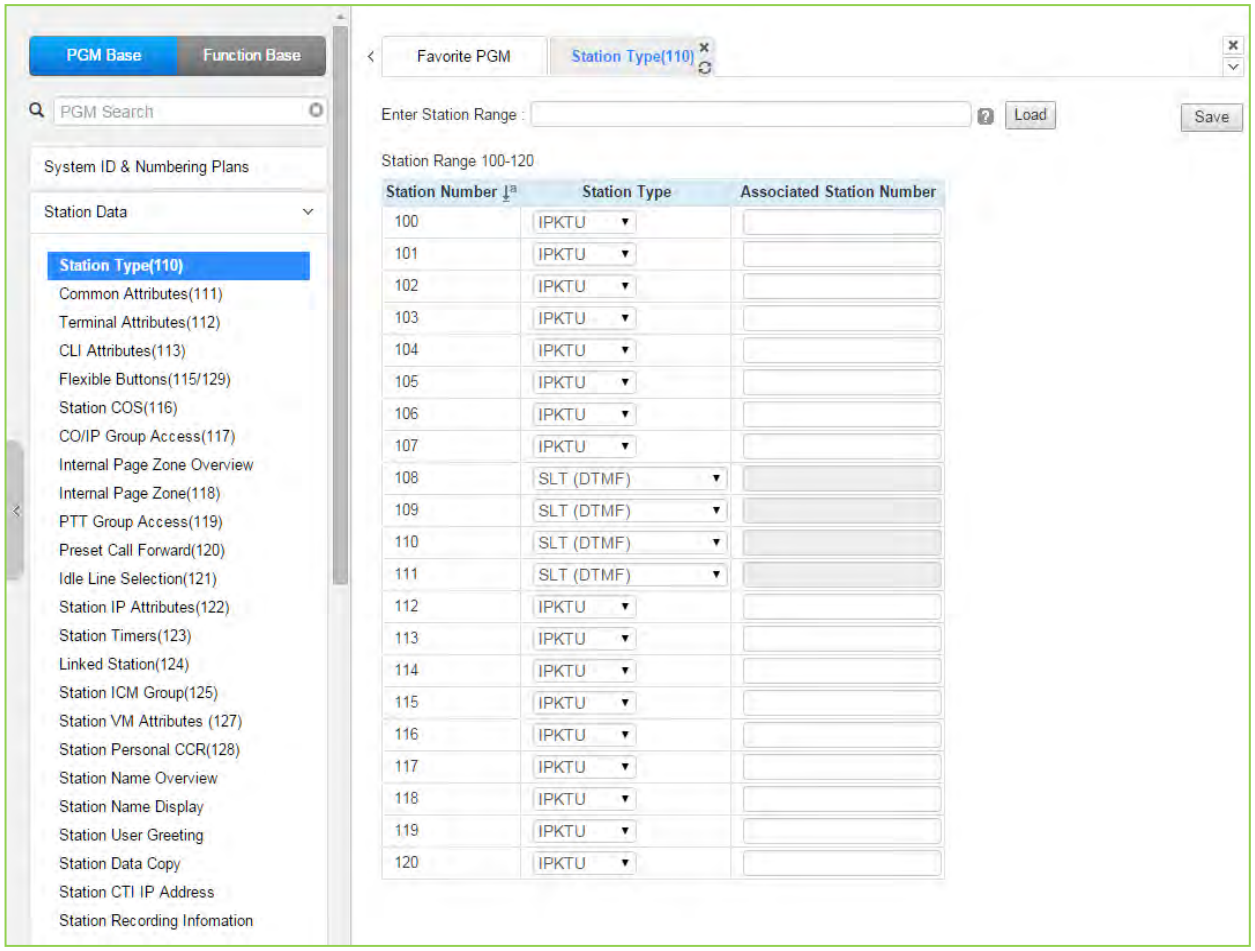


Figure 4.4.2.1-1 Station Type

Each station is assigned a type selected from the “Station Type” drop-down menu. The type is used by the system to recognize the station‘s capability and set default Flex button configurations. In addition, for standard iPECS DSS/BLF consoles, the ‘Associated Station 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 case of seleting 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 check boxes to indicate which attributes to define; data for checked attributes is stored for the entire range of stations by clicking **[Save]** Button after changing Value.

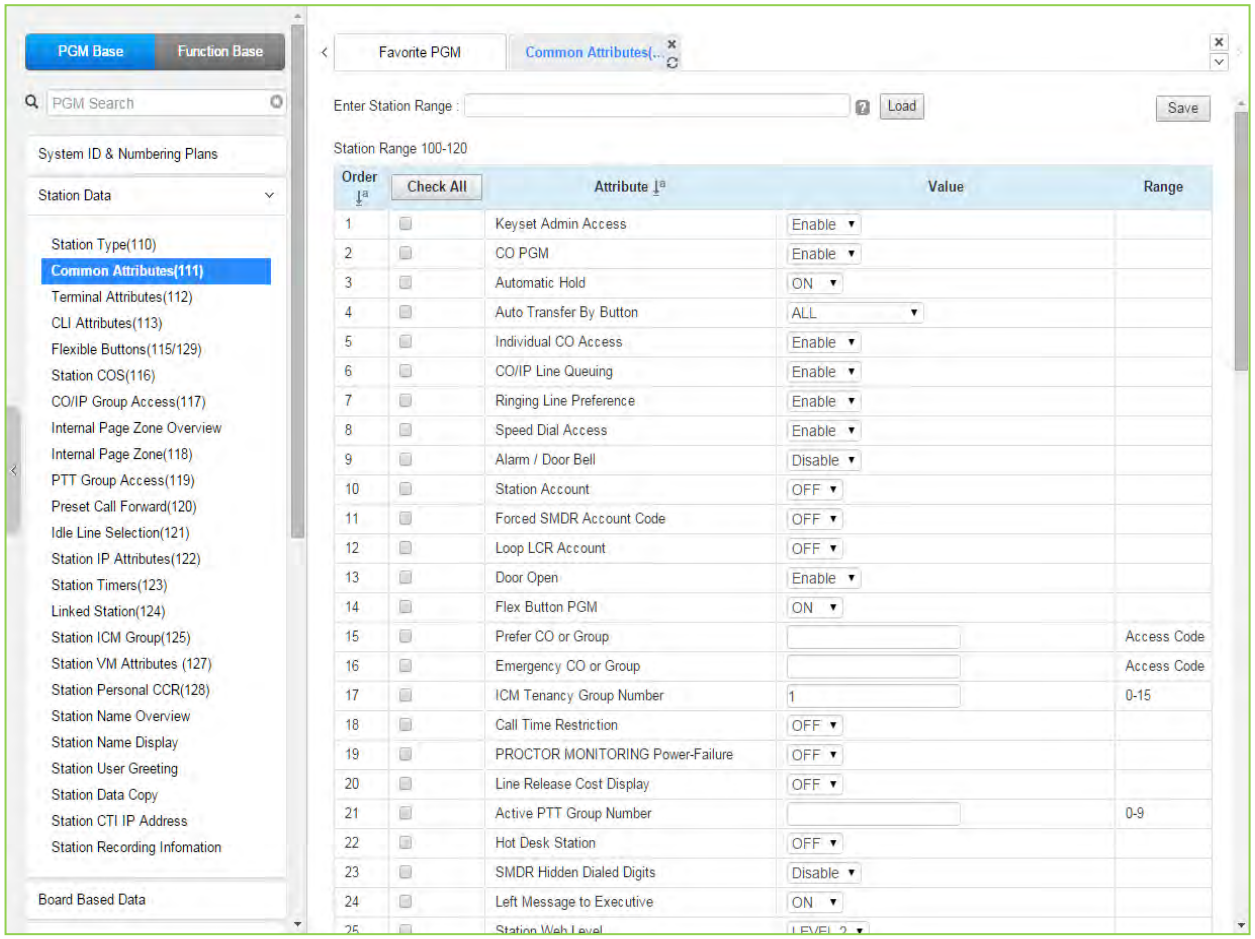


Figure 4.4.2.2-1 Common Attributes

Common Attributes define features and functions available to the station. Generally, the entry will turn the feature ON (enable) or OFF (disable). Refer to Table 4.4.2.2-1 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 press Station (DSS)/CO (Loop)/U-Loop flexible button.	OFF ALL	ALL

Table 4.4.2.2-1 Common Attributes

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
		Except CO to CO	
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
Speed Dial Access	Allows the station to access System Speed Dial bins.	Disable Enable	Enable
Alarm/Door Bell	Assigns a station to receive 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	Enables use of Door open feature by station.	Disable Enable	Enable
Flex Button PGM	The ability to assign Flexible buttons of the iPECS IP and LDP Phones can be controlled. When allowed here, the user may assign features to Flexible buttons but requires special assignments to configure CO/IP Line buttons.	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	…
Emergency CO or Group	This field defines the CO/IP Line or Group employed by the system to place Emergency Assistance calls.	CO # or CO Group #	Any CO
ICM Tenancy Group	Assigns stations to an ICM Tenancy Group.	eMG80:1~15 eMG800:0~32	1
Call Time Restriction	All outgoing calls will disconnect at expiration of the Call Restrict Timer, see System Timers section 4.4.5.20.	OFF ON	OFF
Proctor Monitoring Power-Fail	Enables use of PABX ANI Link device for E-911 support, 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 LCD of the iPECS IP or LDP Phone.	OFF ON	OFF
Active PTT Group Number	A station can be assigned to a PTT (Push-to-Talk) group and the group enabled so the station can place and receive PTT announcements for the group.	0~9	
Hot Desk Station	A station can be assigned as a Hot Desk phone. Users and agents can login and use resources of the system through the Hot Desk phone.	OFF ON	OFF
SMDR Hidden Dialed Digits	Enables hiding dialed digits in SMDR output.	Disable Enable	Disable
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

Table 4.4.2.2-1 Common Attributes

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Station Web Level	Based on this level, the user will be able to view the specified programs within the Station User Web portal. Level 1 can view all programs, Levels 2 and 3 are configured in “Station Web Authorization” under System Data. This is a Web only PGM.	LEVEL 1 ~ LEVEL 3	LEVEL 2
Headset page mode	When a page announcement is received, it is normally played over the Speaker of the iPECS IP or LDP Phone. For headset users, the page can played to the headset or both the headset and speaker.	SPKR/ HEADSET/ BOTH	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 will be allowed access to the ISDN Lines, this parameter must be “ON”	OFF ON	OFF
Pickup by flexible button	It is used to set pick up by flex button. ON: user can pick up by DSS button. OFF: Users cannot pickup by DSS button.	OFF ON	ON
Prepaid Call	Enables Pre-paid Call feature.	OFF ON	OFF
Prepaid Money (0 - 999999) & Used Prepaid Money	An amount can be associated with the station as 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	Index to SIP User ID table, PGM 126, for the station. Note PGM 126 is accessible by Web only. It is selected in “SIP user ID selection” in PGM 133. User can use different use ID for service provider.	eMG80:0~140 eMG800:0~1200	0
SIP USER TABLE INDEX2	Index to SIP User ID table, PGM 126, for the station. Note PGM 126 is accessible by Web only. It is selected in “SIP user ID selection” in PGM 133. User can use different use ID for service provider.	eMG80:0~140 eMG800:0~1200	0
SIP USER TABLE INDEX3	Index to SIP User ID table, PGM 126, for the station. Note PGM 126 is accessible by Web only. It is selected in “SIP user ID selection” in PGM 133. User can use different use ID for service provider.	eMG80:0~140 eMG800:0~1200	0
Station Web Language	Change the language of the station.	English/ Local language	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, then User can make page on speakerphone without lift handset.	OFF ON	ON
Privacy	If Privacy option is ON, then any person could not barge-in to	OFF	OFF

Table 4.4.2.2-1 Common Attributes

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
	the station and Attendant can't intrude to Station. Also, if Privacy option is ON, any person can't forcefully disconnect the station.	ON	
Call Coverage Attributes			
Call Coverage Mode	The Call Coverage feature permits an iPECS IP or LDP Phone user to receive ring 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 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 the idle state. ON: Call Coverage is implemented when a covered station is on idle or busy state.	OFF ON	ON
Call Coverage Through Mobile Ext	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	External Call Only/ External and Internal Call	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 station's "Call Cover Delay Ring" delay count'	by Originator/ by Member	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 LIP-8000E series.	Silence/ Normal Ring/ Muted(Continuous)-80XXE only/ Muted(One Burst)-80XXE only	Normal Ring
Tone/Ring Attributes			
Call Time Tone	A tone can be sent periodically indicating the elapsed time of an outgoing CO/IP call. The Elapsed Call Timer, see System Timers section 4.4.5.20, determines the period between tones.	OFF ON	OFF
Camp-on Tone	Permits camp-on tone to be sent to a station when the station receives a camp-on request.	OFF ON	ON
ICM Dial Tone Source	One of four dial tone sources can be selected for each station: Dial-tone MOH 1 MOH 2 VSF MOH	Dial Tone/ Internal music/ External music/ VSF MOH/ SLT MOH1~5/ VSF MOH2/ VSF MOH3	Dial Tone
ICM Ring Back Tone Source	One of four ring back tones can be selected for each station: Ring Back tone	Ring Back Tone/ Internal music/	Ring Back Tone

Table 4.4.2.2-1 Common Attributes

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
	MOH 1 MOH 2 VSF MOH	External music/ VSF MOH/ SLT MOH1~5/ VSF MOH2~3	
Off hook ring type	While the station is Off hook ring, the type of ring 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 System attributes
SIP color ring	Color ring is provided from assigned SIP VM (UMS). SIP extension number that is connected to SIP VM (UMS) server should be assigned.		Station number
Gain table index	Selects one of three Tables 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	Tone table can be programmed.	1-5	1
Digit conversion table	One of the 15 Digit Conversion Tables can be configured for use for this CO/IP Line.	eMG80:1-15 eMG800:1-32	
Routing Attributes			
Call Forward	Enables Call Forward to 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 for internal calls (ICM only), if desired.	OFF/ ALL/ ICM call only/ CO call only	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	Enables Delayed Prime Line (Idle Line) activation, see Idle Line Selection section 4.4.2.11, and Prime Line Delay timer section 4.4.5.20.	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: 1-10 eMG800:1-32	1

Table 4.4.2.2-1 Common Attributes

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
LDT Zone number	If the LDT Zone Number of a 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	To use click call application, it should be enabled.	Disable, Enable	Disable
MS Lync RCC service	To use MS Lync RCC, it should be enabled.	Disable, Enable	Disable
MSN Wait	When a call that is corresponding to a MSN Telephone Number comes in to system, the call is basically routed to idle stations that have free MSN button that is 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 a 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 a busy status, can receive incoming MSN Telephone Number corresponding call if it has a free(idle) corresponding MSN LOOP Button.	OFF ON	OFF
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 ring and the call is routed based on the DND treatment.	OFF ON	OFF
Voice Attributes			
Page Access	Allows station to access 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 Listen 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	Enables 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	Disable
Camp on enable	When On, a Station that is busy on a call, can receive Camp-on tones from another calling Station or CO/IP Line.	OFF ON	ON
Video Show on	When VoIP video door phone rings to a video-enabled IPKTS	OFF	OFF

Table 4.4.2.2-1 Common Attributes

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Calling (ex. IP Video Door Phone)	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. That is because system does pre-answer to the Video Door Phone even though the receiving station is on alerting state.	ON	

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

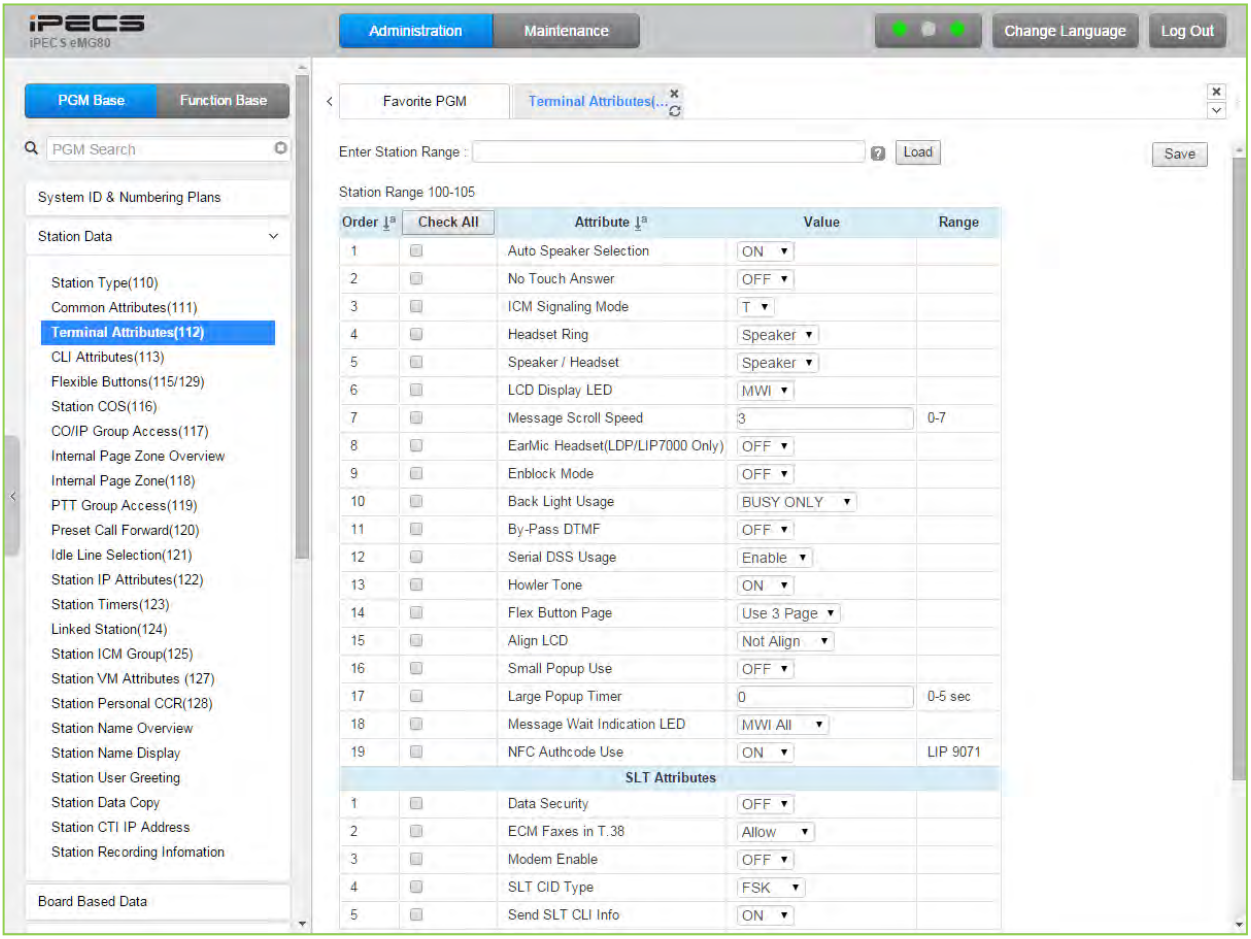


Figure 4.4.2.3-1 Terminal Attributes (PGM 112)

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 Table 4.4.2.3-1 for a description of the features and the input required.

Table 4.4.2.3-1 Terminal Attributes

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Attributes			
Auto Speak Selection	Enables **[SPEAKER]** activation when a CO/IP Line, DSS or other feature button is pressed; there is no need to lift 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	Selects device to receive incoming ring signals, Speaker, Headset or Both.	Speaker/ Headset/	Speaker

Table 4.4.2.3-1 Terminal Attributes

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
		Both	
Speaker/Headset	Selects Speakerphone or Headset mode.	Speaker/ Headset/	Speaker
LCD Display LED	The LCD LED, upper left of LCD, may be used for Intercom Call ring Indication or Message Wait Indication.	RING MWI	MWI
Message Scroll Speed	Select message scroll speed (Not used at present).	0 ~7	3
Ear & Mic Headset	Select Ear & Mic Headset mode for the iPECS IP or LDP Phone.(LDP/LIP-7000 only)	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. En-block mode is only available to iPECS IP or LDP Phones with 3-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.	Always Off/ Busy Only/ Always On	Busy Only
By Pass DTMF	When detected, DTMF from an SLT may be regenerated by CO/IP Line interface circuitry, the SLT port can by-pass detection so DTMF is not detected.	OFF ON	OFF
Serial DSS Usage	Enables an LIP-8000/LIP-9000 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	The iPECS LIP-9030 and 9040 have 8 and 12 Flexible buttons, respectively. Additional Flex buttons are available using Flex button pages. The phone can have up to 3 pages each with the 8 or 12 Flex buttons. Thus, an LIP-9030 can have 24 Flex buttons and the LIP-9040 can have 36 Flex buttons. 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 3 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”).	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. If it is set to OFF, top bar is displayed instead of small popup.	OFF ON	OFF
Large Popup Timer	When Large popup timer is set to any value from 1 to 5 except 0, the display of large popup is disappeared after the timer expired and then the large popup information is displayed at top bar.	0~5 (Sec.)	0
Message Wait Indication LED	User can program MWI (Message Wait Indication) LED according to the following type: 1. MWI All: LED is blinking about all calls and Message 2. VM MWI: blinking in case of getting Voice mail 3. CLI MWI: blinking in case of Calling Line Identification 4. SMS MWI: blinking in case of getting Short message 5. ICM MWI: blinking in case of Incomming call	MWI All, VM MWI, CLI MWI,: SMS MWI, ICM MW	MWI ALL
NFC Authorization	If this option is ON, User enters Authorization code to use NFC	OFF	ON

Table 4.4.2.3-1 Terminal Attributes

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
code Use	function for LIP-9071.	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 the dimmable lights.	OFF ON	OFF
SLT Attributes			
Data Security	Disables 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 can send it again until it is successful.	Allow, Prevent	Allow
MODEM Enable	It is used to set modem attributes.	OFF ON	OFF
SLT CID TYPE	SLT can send CID by programming options.	FSK DTMF	FSK
Send SLT CLI Info	When allowed, the system sends CLI information to the 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 – active call placed on hold and 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.	Flash xfer/ Flash Drop/ Flash Ignore/ Hold Release	FlashTransfer
SLT configuration mode	For the South African region, the SLT gain is adjusted based on the SLT Configuration Mode.	Default, Short, Long, Far	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 a 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

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

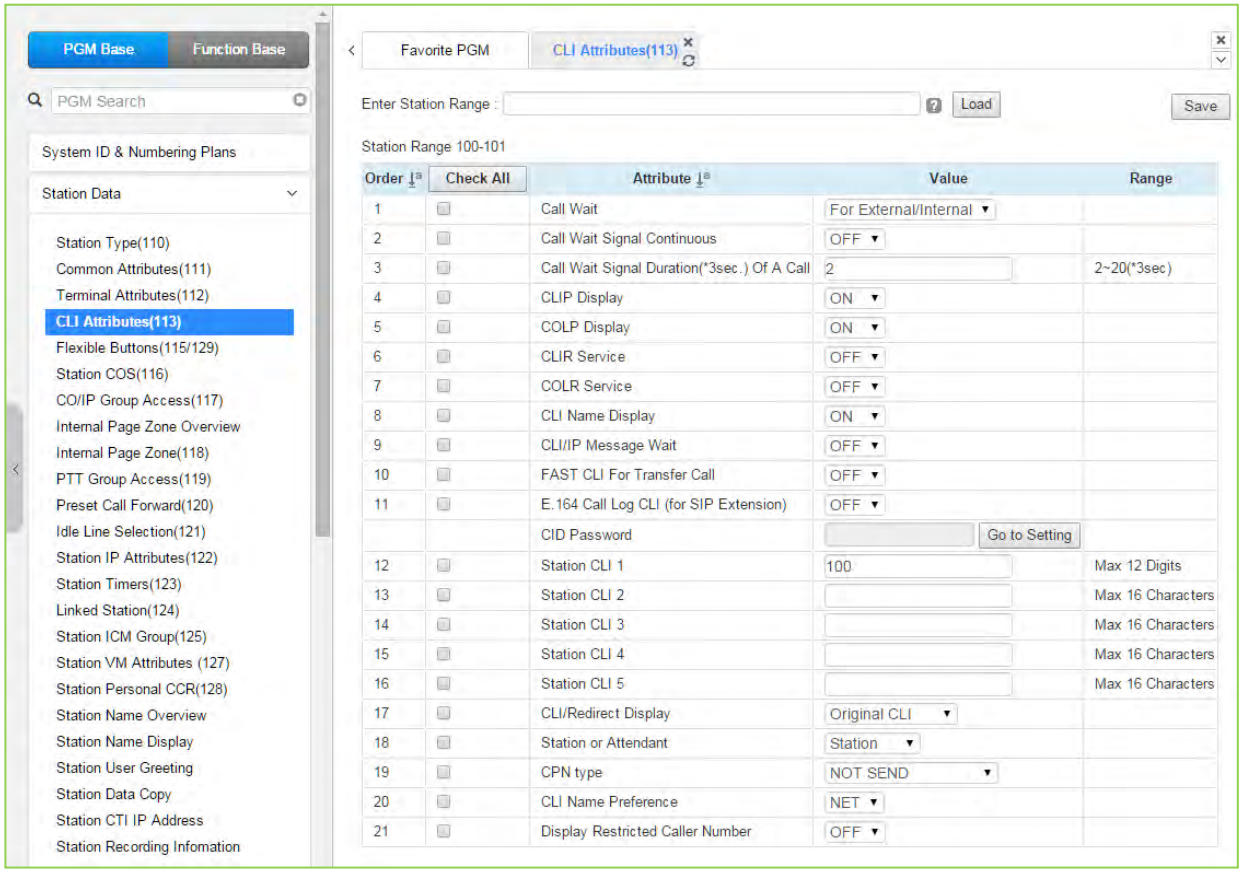


Figure 4.4.2.4-1 CLI Attributes (PGM 113)

CLI Attributes define features and functions available to the station. Generally, the entry will turn the feature ON (enable) or OFF (disable) or enter is made in the text box. Refer to Table 4.4.2.4-1 for a description of the features and the input required.

Setting CID Password directly

You can set the CID password to click “Go to Setting” button. After clicking it, you will move to the following PGM 162 and set the CID password, and then save CID password to mark 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. With Call Wait, the caller will hear Ring-back tone and the CO/IP Line LED flashes. Also, the CLI for the new incoming call displays.	OFF, For External/Internal, For External, For Internal	For External/Internal

Table 4.4.2.4-1 CLI Attributes

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Call wait signal continuous	When this filed set On, you will get the indication of Call wait signal continuously without returning to the current conversation. In case of Off, you will return to the current conversation after 1 cycle of Call wait 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 2 to 20.	2-20 (*3sec)	2
CLIP Display	CLIP (Calling Line Identification Presentation), a carrier service, sends the number of the calling party 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 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 restrict instruction to the PSTN when the station answers an ISDN call.	OFF ON	OFF
CLI Name Display	When the CLI data in the call SETUP message from the carrier matches a number in Speed Dial, the system can display the name associated with the Speed Dial bin, if set to ON.	OFF ON	ON
CLI/IP Message Wait	A log of missed calls with caller identification can be maintained for the user, 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, the CLI for the CO/IP call is sent to the SLT or DECT phone instead of transferring 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
Station CLI 1	When not restricted by CLIR or COLR, this entry is added to the number in the selected COIP/CLIP Table and sent in the ISDN call SETUP or CONNECT message in place of the station number.	12 digits	eMG80:100 eMG800:1000
Station CLI 2	When not restricted by CLIR or COLR, this entry is added to the number in the selected COIP/CLIP Table and sent in the ISDN call SETUP or CONNECT message in place of the station number.	16 characters	Related with PGM 143 – Station CLI Type

Table 4.4.2.4-1 CLI Attributes

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Station CLI 3	When not restricted by CLIR or COLR, this entry is added to the number in the selected COIP/CLIP Table and sent in the ISDN call SETUP or CONNECT message in place of the station number.	16 characters	Related with PGM 143 – Station CLI Type
Station CLI 4	When not restricted by CLIR or COLR, this entry is added to the number in the selected COIP/CLIP Table and sent in the ISDN call SETUP or CONNECT message in place of the station number.	16 characters	Related with PGM 143 – Station CLI Type
Station CLI 5	When not restricted by CLIR or COLR, this entry is added to the number in the selected COIP/CLIP Table and sent in the ISDN call SETUP or CONNECT message in place of the station number.	16 characters	Related with PGM 143 – Station CLI Type
CLI / Redirect Display	When an incoming call is Redirected in the carrier's network, the call 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 S0 interface. STATION NUMBER: Station number is sent as CPN to S0 interface. BYPASS FROM NET: Incoming CPN is sent as CPN to S0 interface.	Not send, Station number, By pass from NET	Not send
CLI Name Preference	NET: If CLI name is provided from network, then it is displayed. If CLI name is not provided from network, matched Speed name is displayed. SPD: If CLI is matched with Speed bin and it has name, then matched Speed name is displayed. If CLI is not matched or matched Speed name is not configured, CLI name from 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

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. Use the check mark to indicate which attributes to modify; data for checked attributes is stored by clicking **[Save]** button.

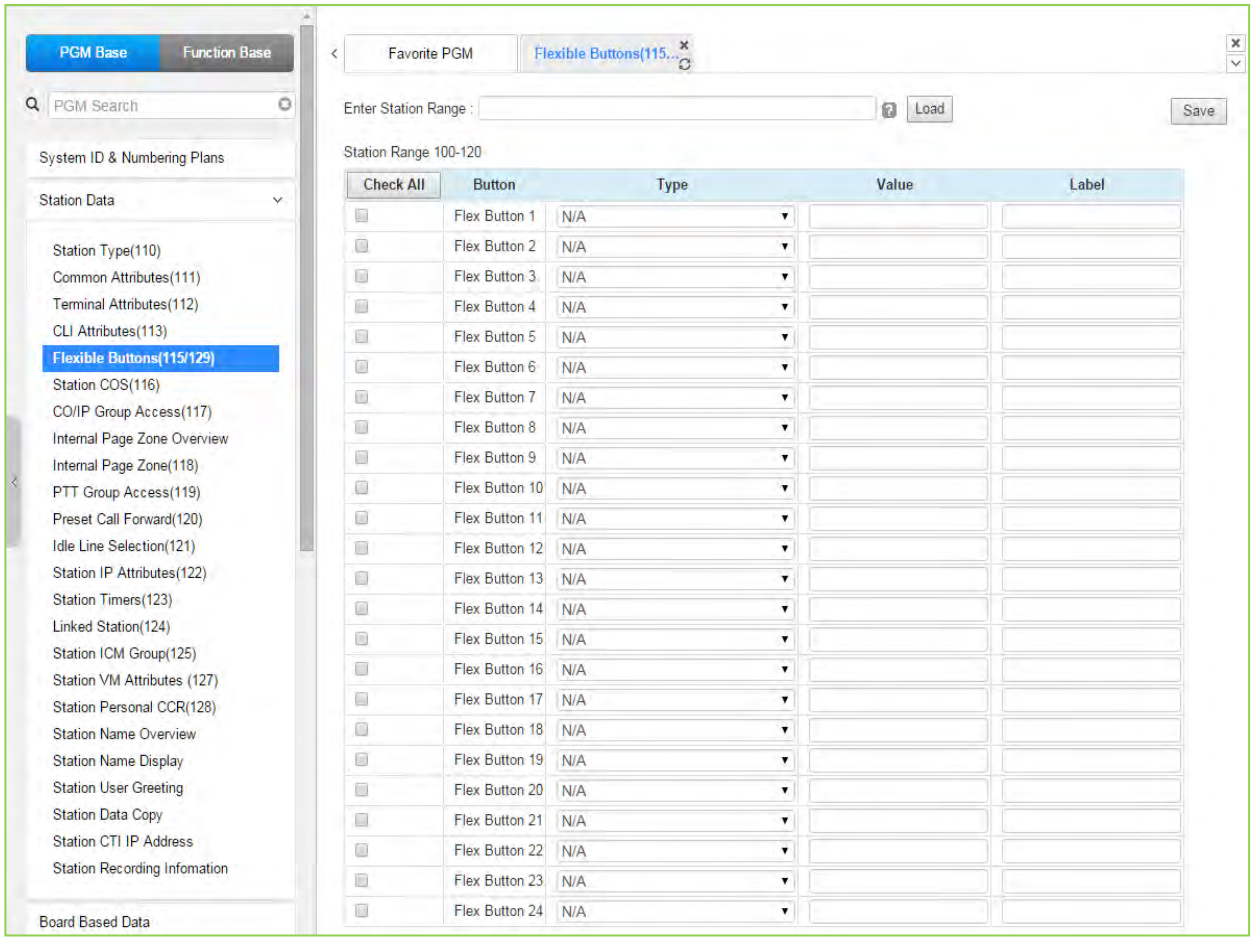


Figure 4.4.2.5-1 Flex Buttons Assignment

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 available from the drop-down menu are shown in Table 4.4.2.5-1 below. In addition, for the LIP Phone models 8040, 8050, and 9070 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	Assigns button to access a defined CO/IP line.
CO Group	Assigns button to access a free line in the CO/IP Group.
Loop	Assigns button to access a loop line.
Station Number	Assigns button as DSS/BLF for the assigned station number.

Table 4.4.2.5-1 FLEX BUTTON TYPE & VALUE

TYPE	REMARK
Programming (Numbering Plan)	Assigns button to dial a code from the Flexible Numbering Plan, see Appendix B section.
Programming (PGM)	Assigns button to perform a User Program function from the Fixed Numbering Plan, Appendix B section.
Station Speed Bin	Station Speed Dial bin.
System Speed Bin	System Speed Dial bin.
Net Station Number	Refer to section 4.4.10.6 Network Numbering Plan Table - PGM 324.
U-Loop	U-Loop button for call wait of internal & external call

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 check mark to indicate which attributes to modify; data for checked attributes is stored by clicking **[Save]** button.

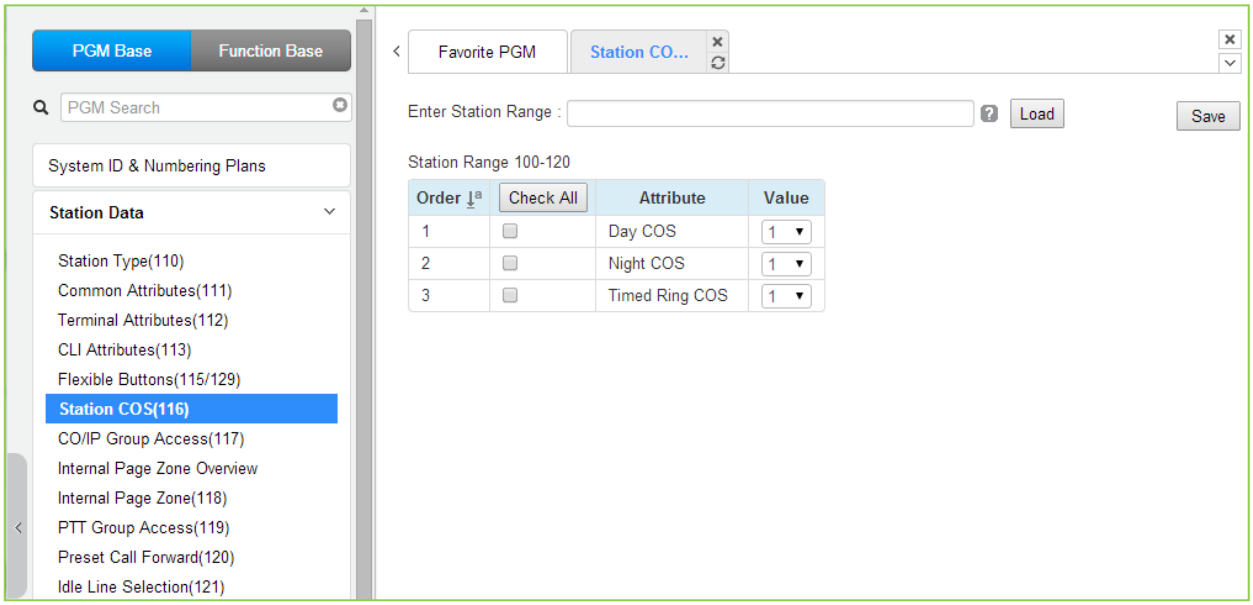


Figure 4.4.2.6-1 Station COS

In case of PGM 116 is in condition of limited service mode due to License issue, the default value is 7 for all COS type.

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 operation. As a default all stations are assigned with a Station COS of 1 for all modes, 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 4.4.2.6-2.

Long distance calls are determined by the 1st dialed digit (“0” or “1”) and the number of digits dialed. If the 1st digit dialed is a 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 4.4.5.17, the call is consider a Long Distance call and appropriate restrictions applied.

Table 4.4.2.6-1 STATION COS

STATION COS	RESTRICTIONS
1	No restrictions are placed on dialing from the station.
2	The assignments in Exception Table A are monitored for allow and deny numbers.
3	The assignments in Exception Table B are monitored for allow and deny numbers.
4	The assignments in both Exception Tables A & B are monitored for allow 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 cannot exceed the LD digit counter, default 7 digits, and further denied/allowed based on

Table 4.4.2.6-1 STATION COS

STATION COS	RESTRICTIONS
	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 allow and deny numbers.
9	The assignments in the Exception Table E are monitored for allow and deny Numbers
10	The assignments in the Exception Table D & E are monitored for allow and deny numbers.
11	The assignments in the Exception Table A & B and D & E are monitored for allow and deny numbers.

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 **[Save]** button after changing Value to apply.

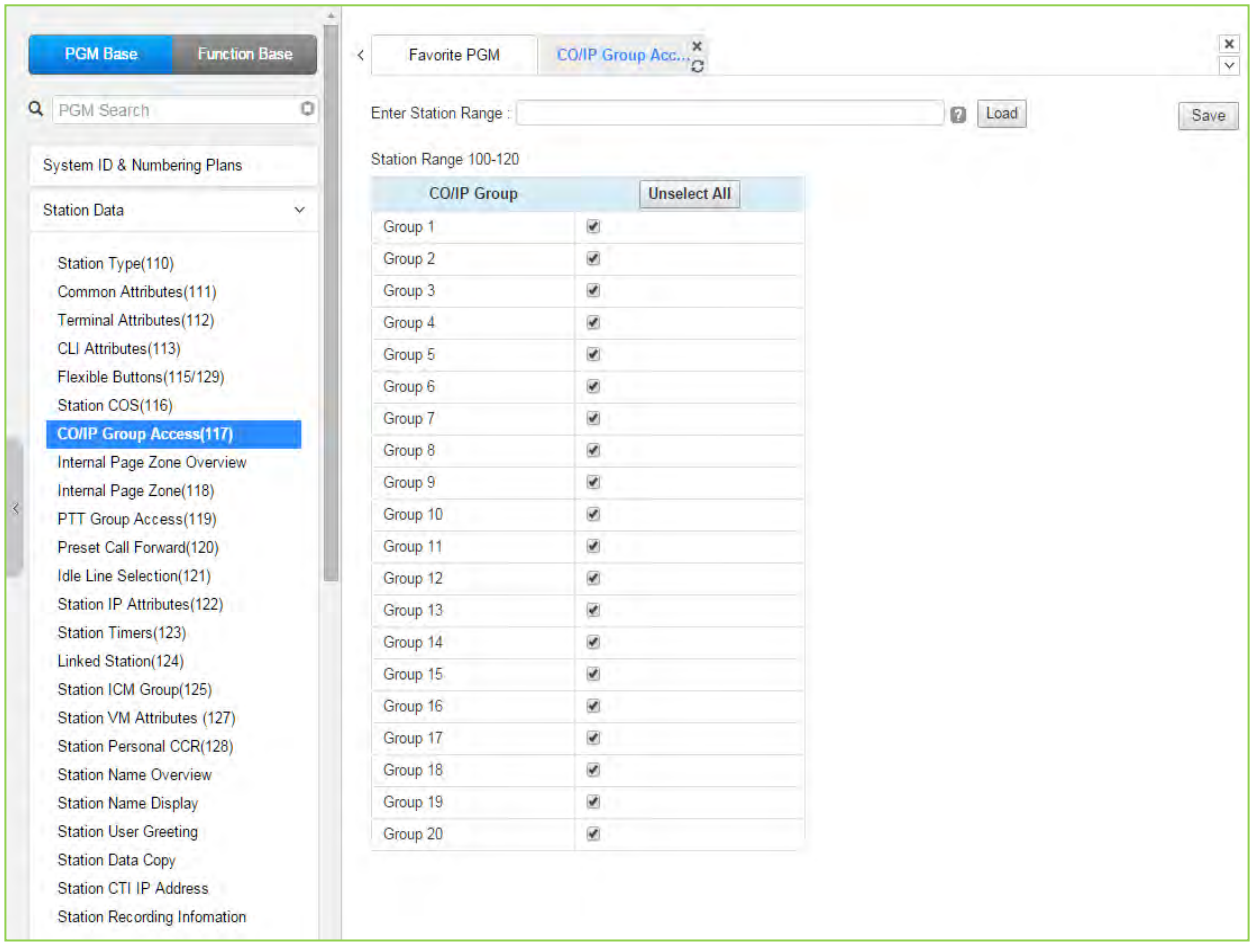


Figure 4.4.2.7-1 CO/IP Group Access

Stations can be allowed or denied access to CO Lines and IP Channels by group (eMG80: 20 & eMG800: 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 **[Save]** button after changing Value to apply.

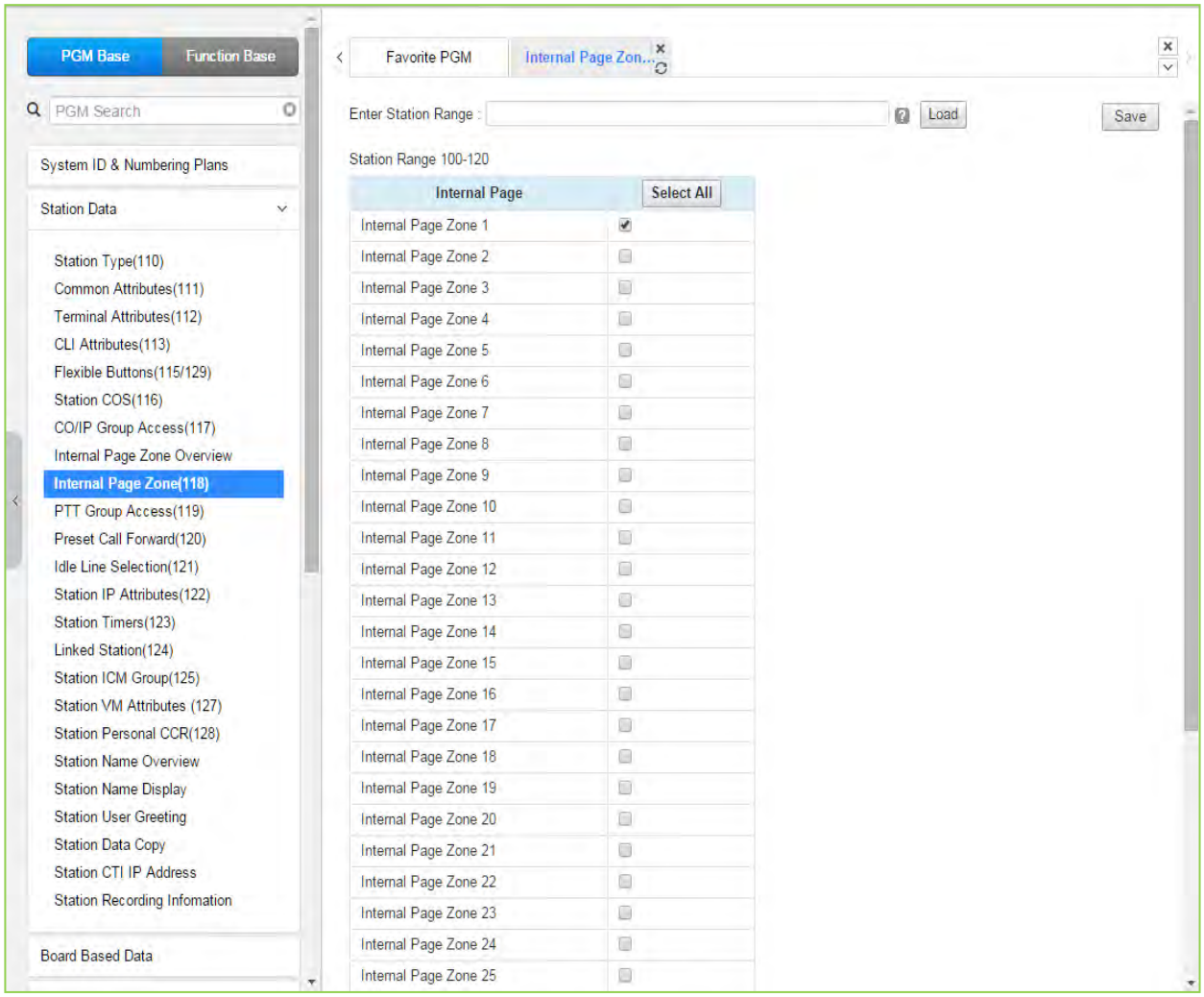


Figure 4.4.2.8-1 Internal Page Zone

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.

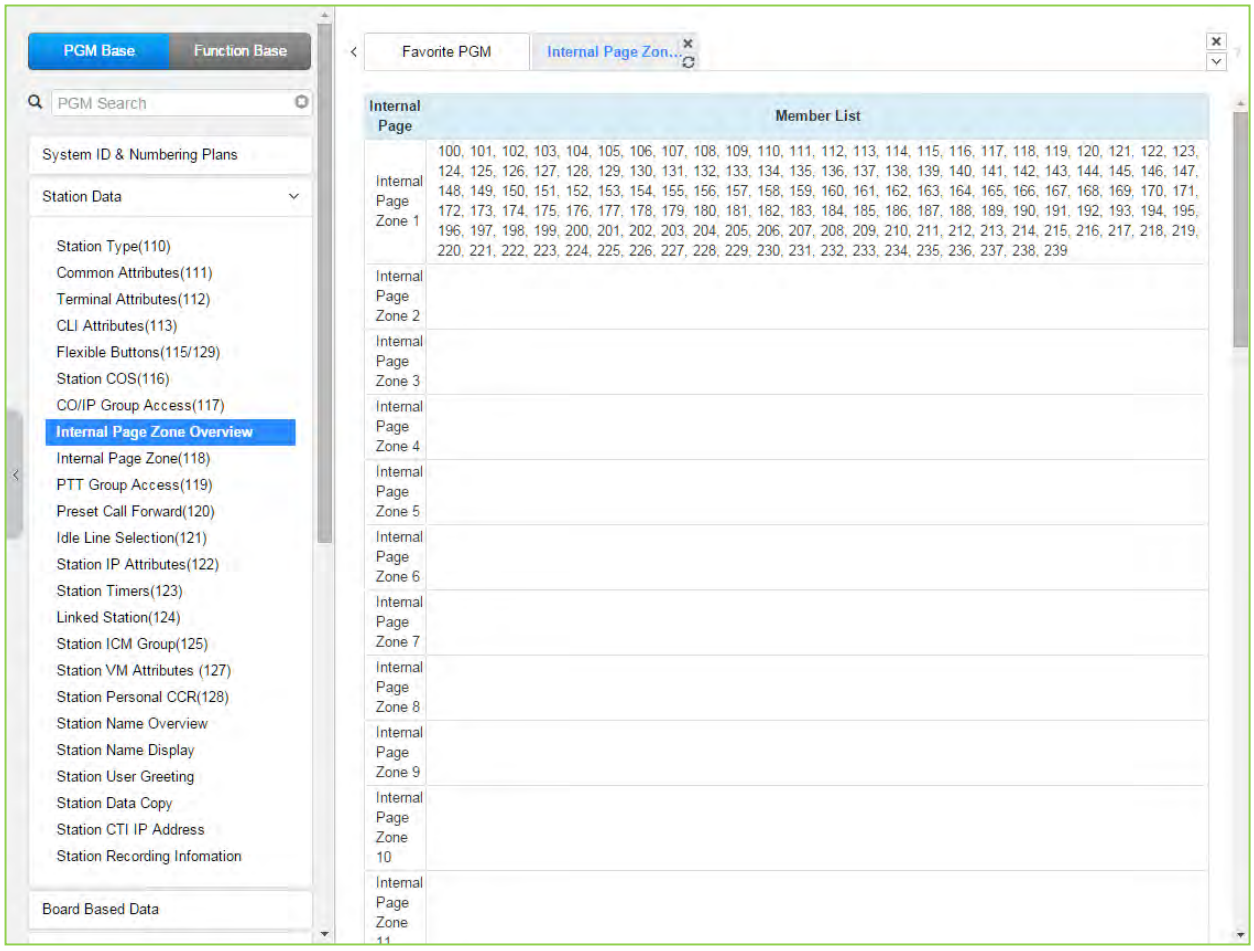


Figure 4.4.2.8-2 Internal Page Zone overview

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 **[Save]** button after changing Value to apply.

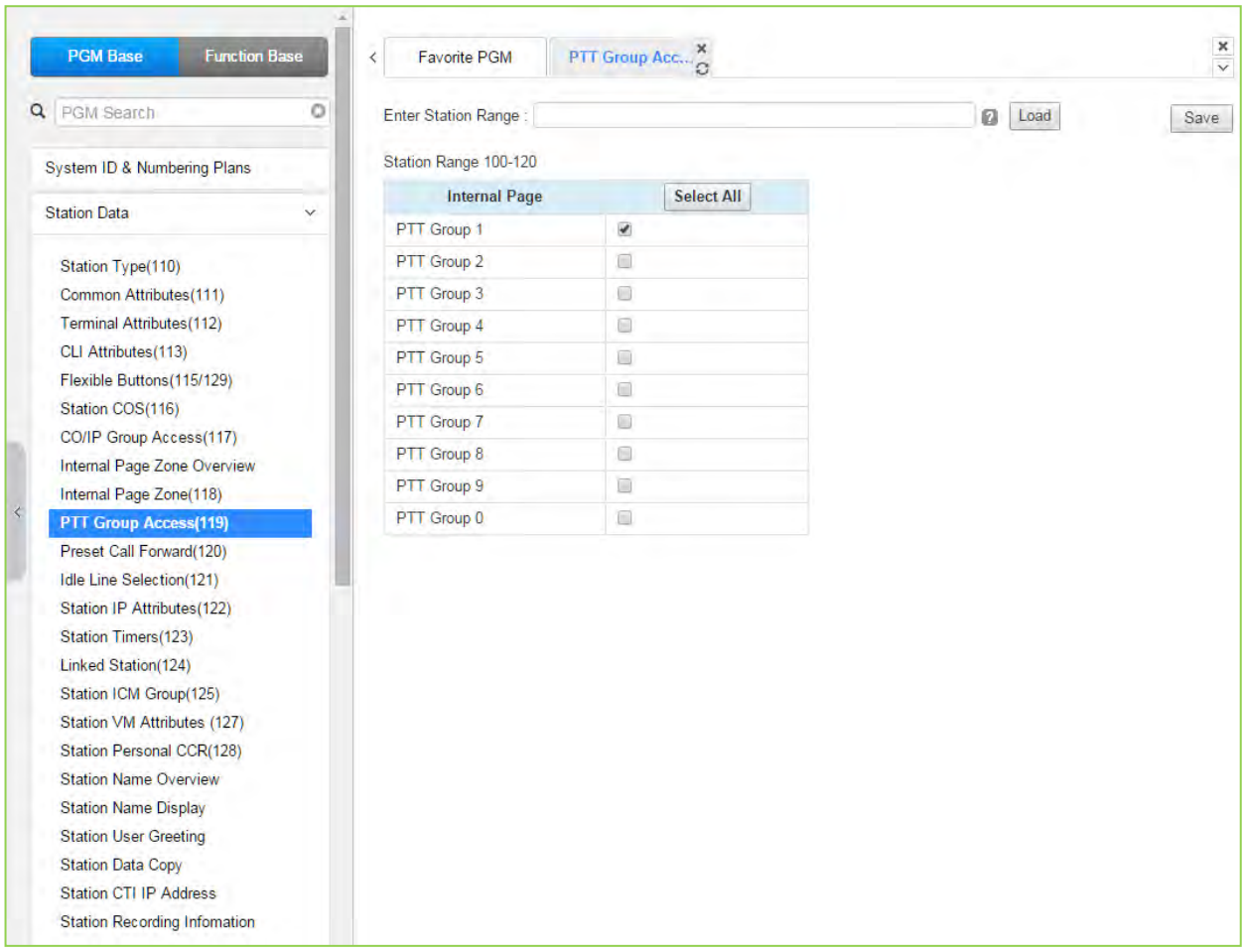


Figure 4.4.2.9-1 PTT Group Access

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 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 check mark to indicate which attributes to modify; data for checked attributes is stored by clicking **[Save]** button.

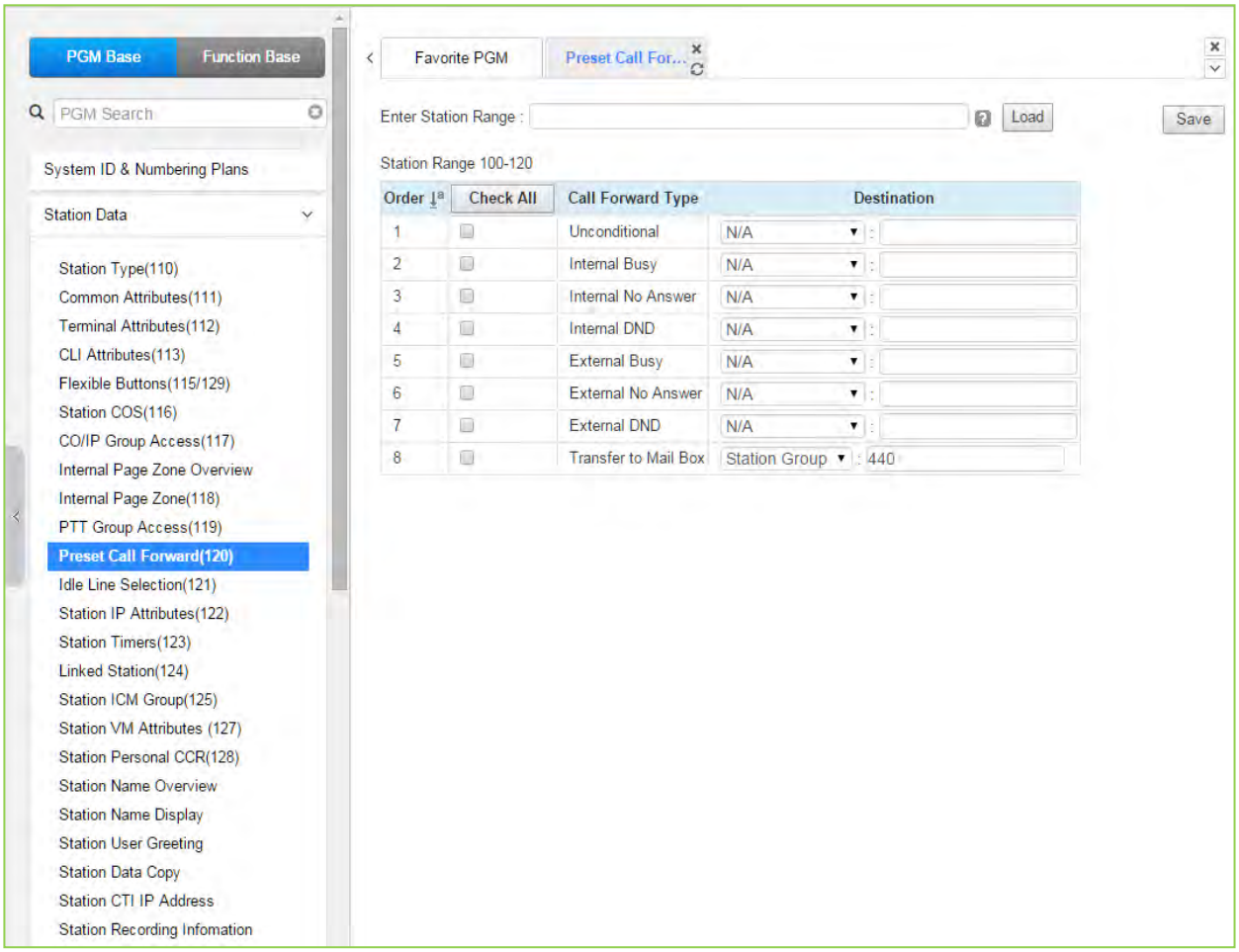


Figure 4.4.2.10-1 Preset Call Forward

Stations can be programmed so that incoming CO/IP and Intercom calls 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 Unconditional, Internal Busy, Internal No Answer, Internal DND, External Busy, External No Answer, External DND 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.

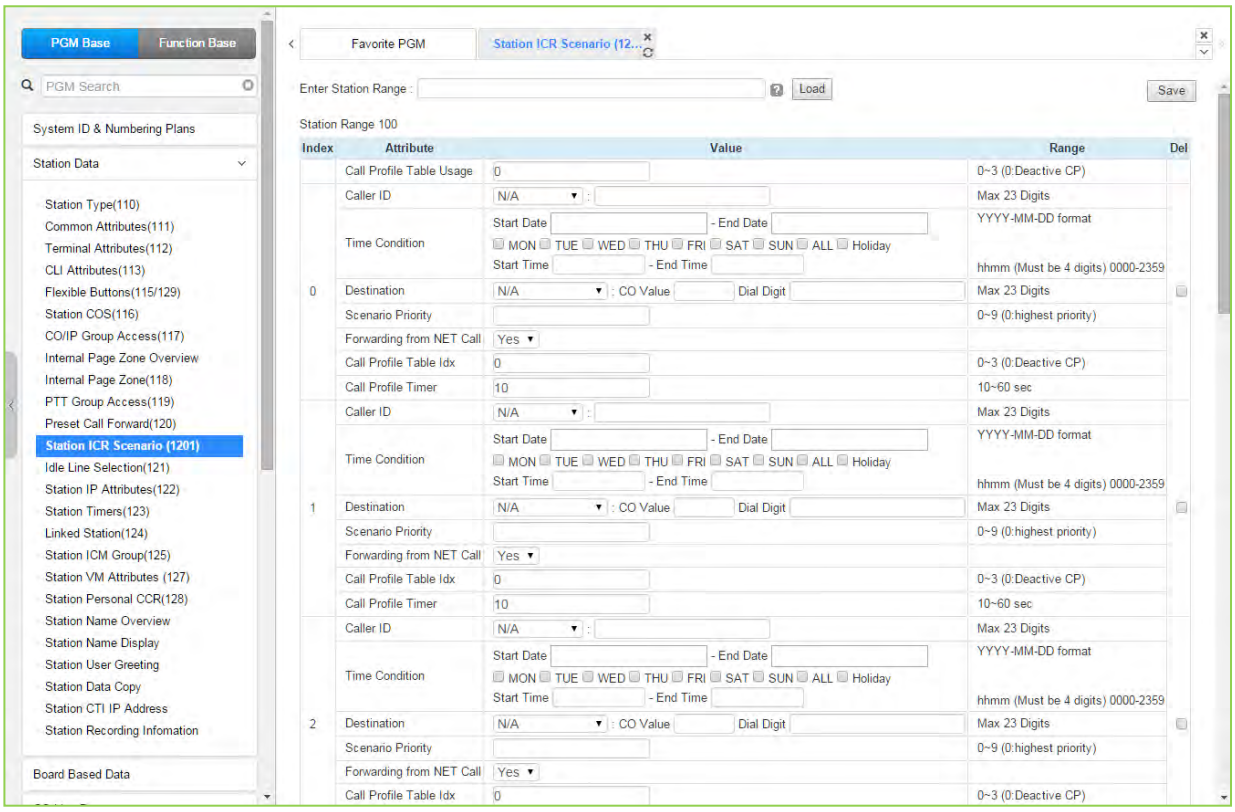


Figure 4.4.2.11-1 Station ICR Scenario

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 time of day, day of 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.

4.4.2.12 Idle Line Selection - PGM 121

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. Click **[Save]** button after changing Value to apply.

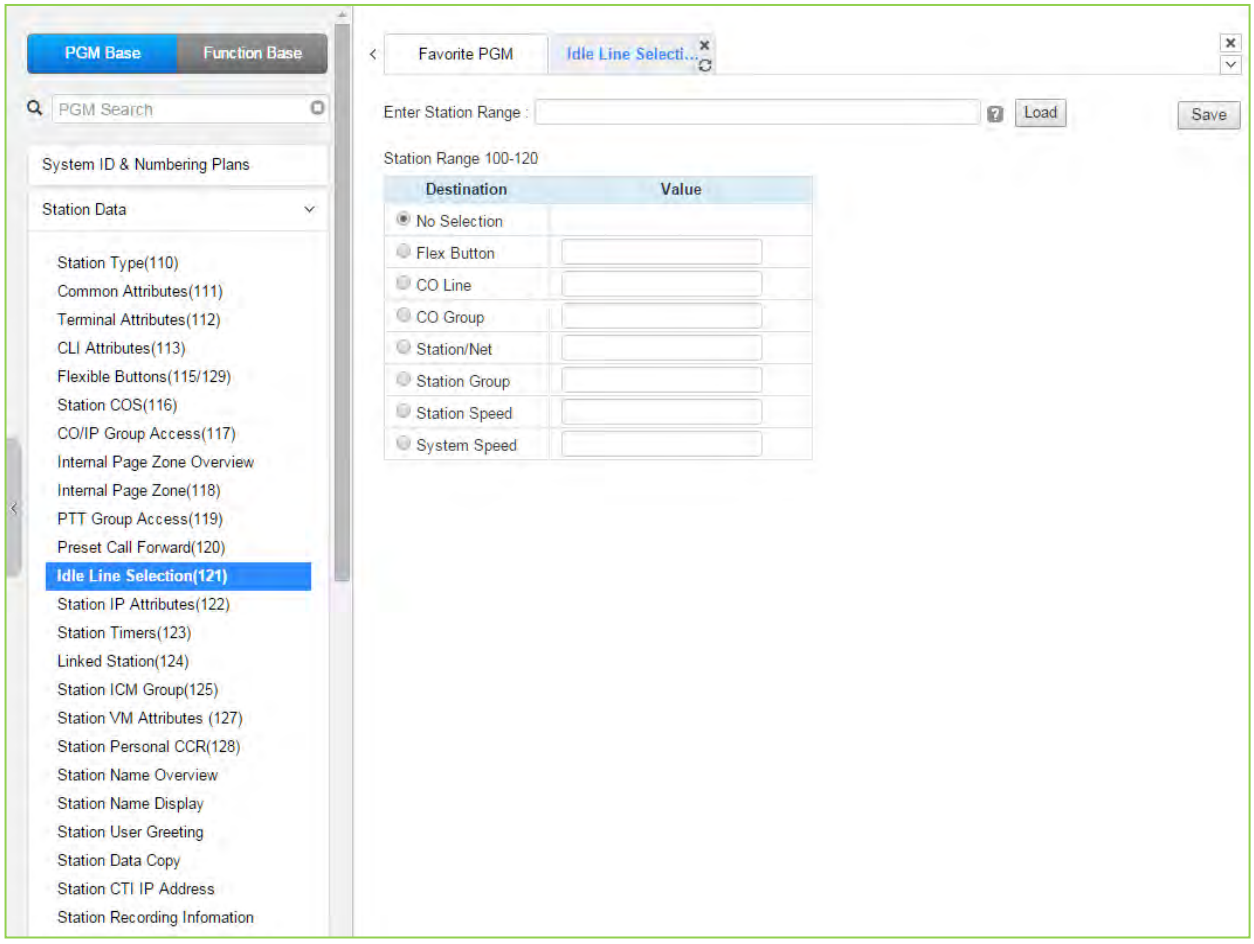


Figure 4.4.2.12-1 Idle Line Selection

When a station goes to an off-hook condition (lifts handset or presses **[SPEAKER]** button), the system normally provides 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, section 4.4.2.2.

Table 4.4.2.12-1 IDLE LINE SELECTION TYPE & VALUE

TYPE	DESCRIPTION
No Selection	Returns Intercom dial tone.
Flex Button	Flex button, activates 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	Station, calls the assigned station.
Station group	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 check mark to indicate which attributes to modify; data for checked attributes is stored by clicking **[Save]** button.

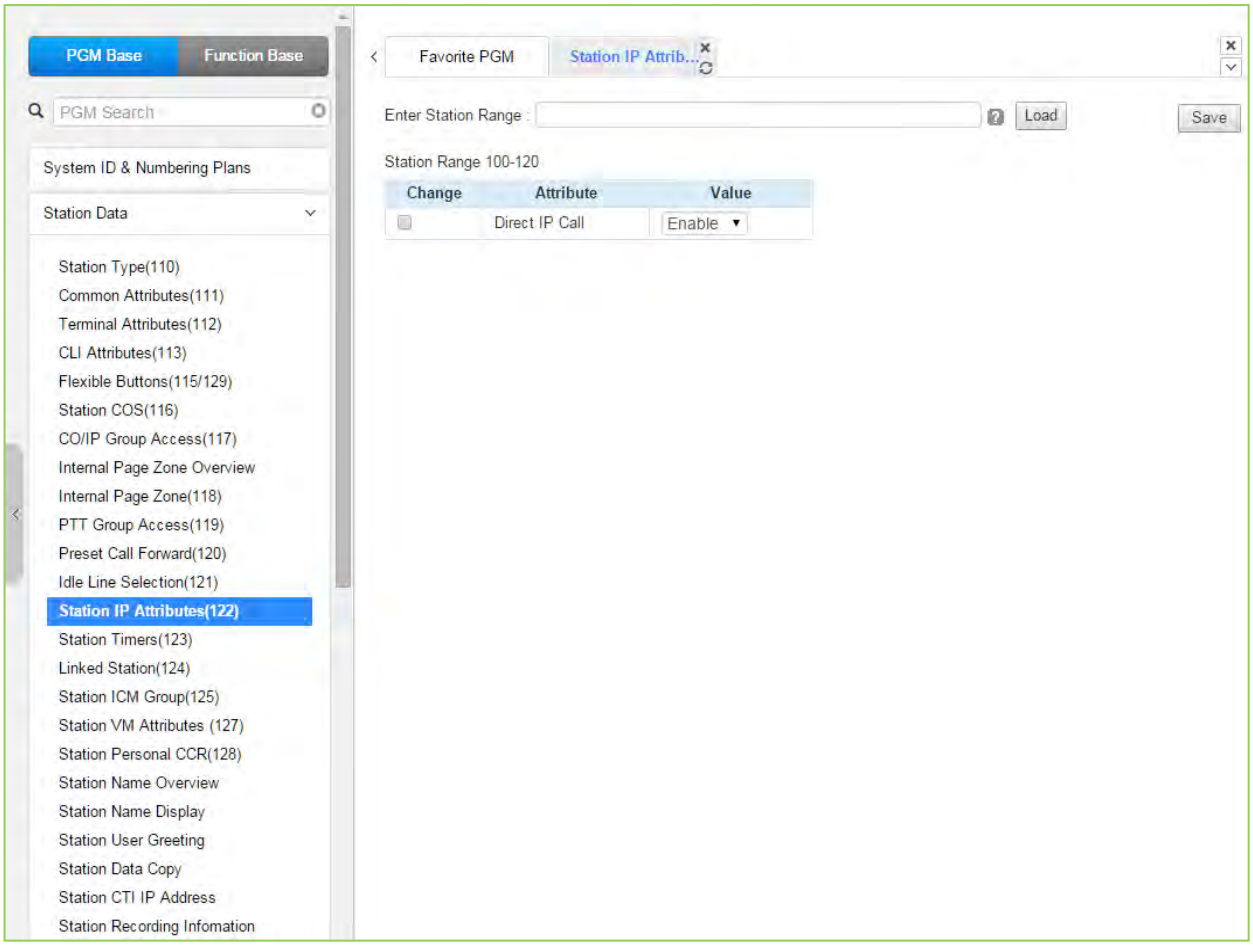


Figure 4.4.2.13-1 Station IP Attributes

Stations are allowed access to the systems 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 check mark to indicate which attributes to modify; data for checked attributes is stored by clicking **[Save]** button.

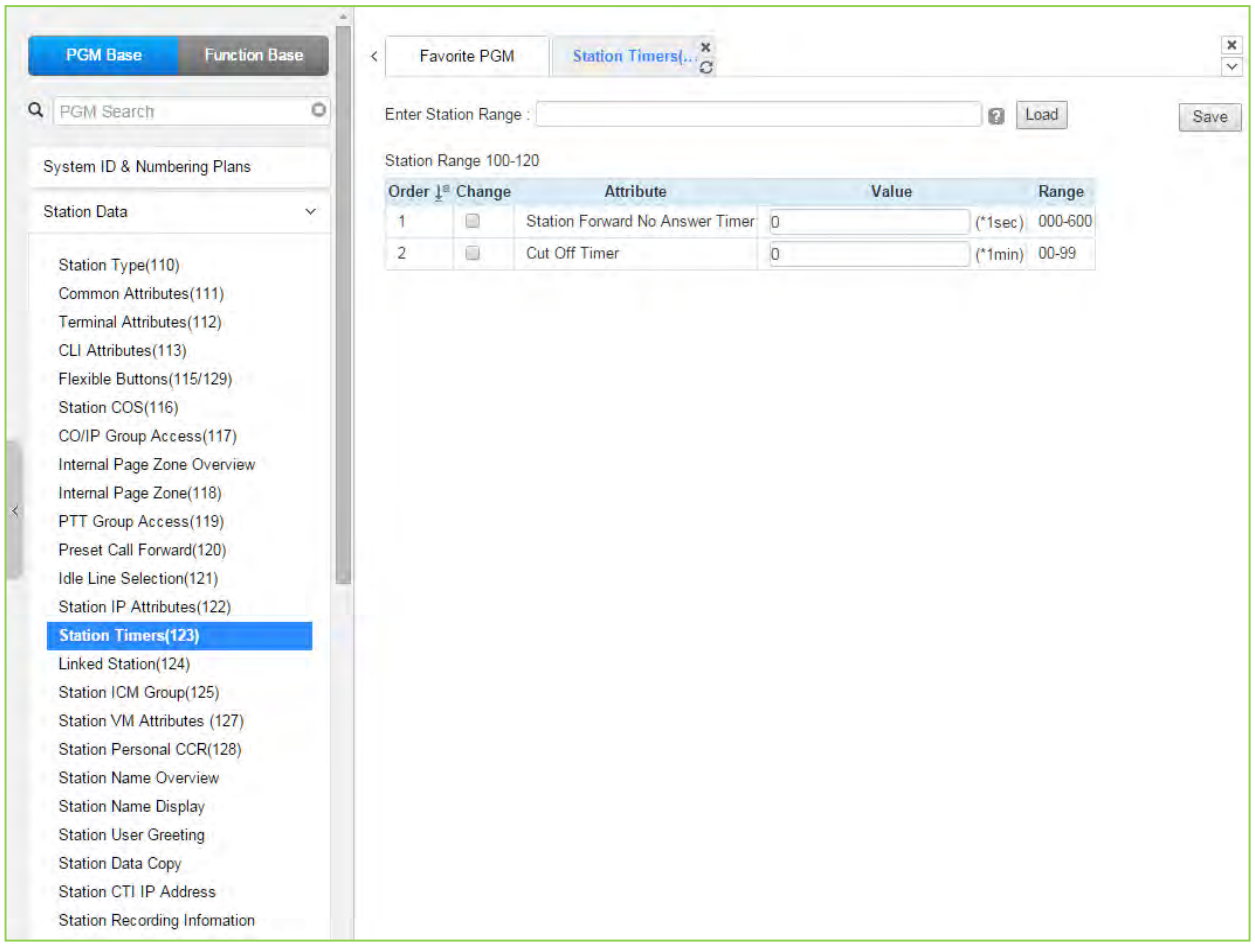


Figure 4.4.2.14-1 Station Timers

Certain timers can be assigned on a station basis. Available timers, description and valid inputs are given in Table 4.4.2.14-1.

Table 4.4.2.14-1 STATION TIMERS (PGM 123)

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Station Forward No Answer Timer	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 No answer forward timer section 4.6.1.	000-600 (seconds)	000
Cut Off Timer	Allowed length of CO/IP calls when station is assigned Call Time restriction in Common Attributes, PGM 111, button 17.	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 **[Save]** button after changing Value to apply.

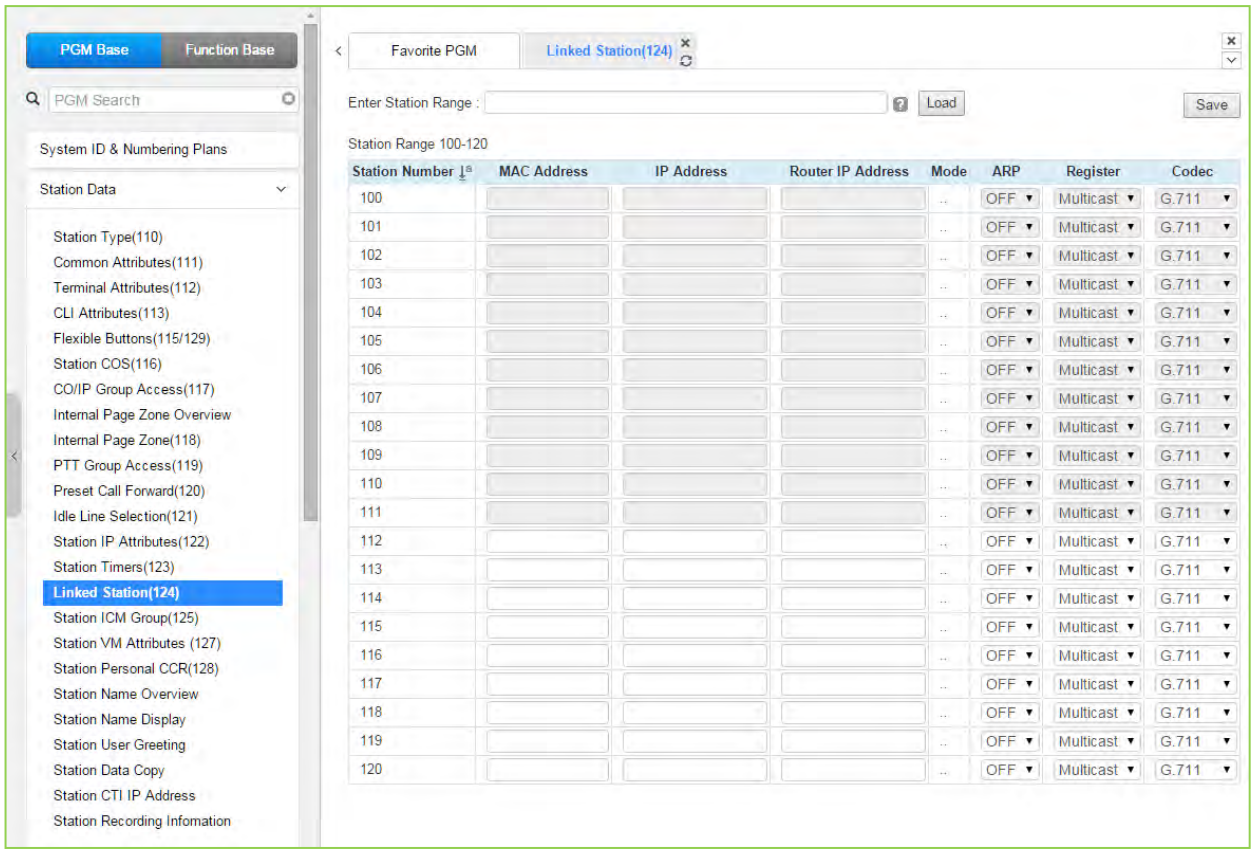


Figure 4.4.2.15-1 Linked Station Pair

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 in 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 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	Assigns the MAC address of a linked station.		
IP Address	The IP Address of the linked station.	IPv4 address	
Router IP Address	Set the Router IP address for a linked station.	IPv4 address	
Mode	Display operating mode of the station, remote or local	Remote:	L (Local)

Table 4.4.2.15-1 LINKED STATION TABLE

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
	and NAT or NAPT.	-. R/NAPT -. R/NAT -. R/NAP -. R Local remote -. LO/NAPT -. LO/NAT -. LO/NAP -. LO Local -. L/NAPT -. L/NAT -. L/NAP -. L	
ARP	If enabled, the system will directly send packets using the MAC address.	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	CODEC type.	G.711/ G.723.1/ G.729/ System, use the codec defined for the system	G.711

4.4.2.16 Station ICM Group - PGM 125

Selecting Station ICM Group displays the Station ICM Tenancy Group input page. Select ICM Group, the system will display the ICM Group Characteristics. Check the appropriate box to allow access to the group and enter the Station number of the group Attendant. Click **[Save]** button after changing Value to apply.

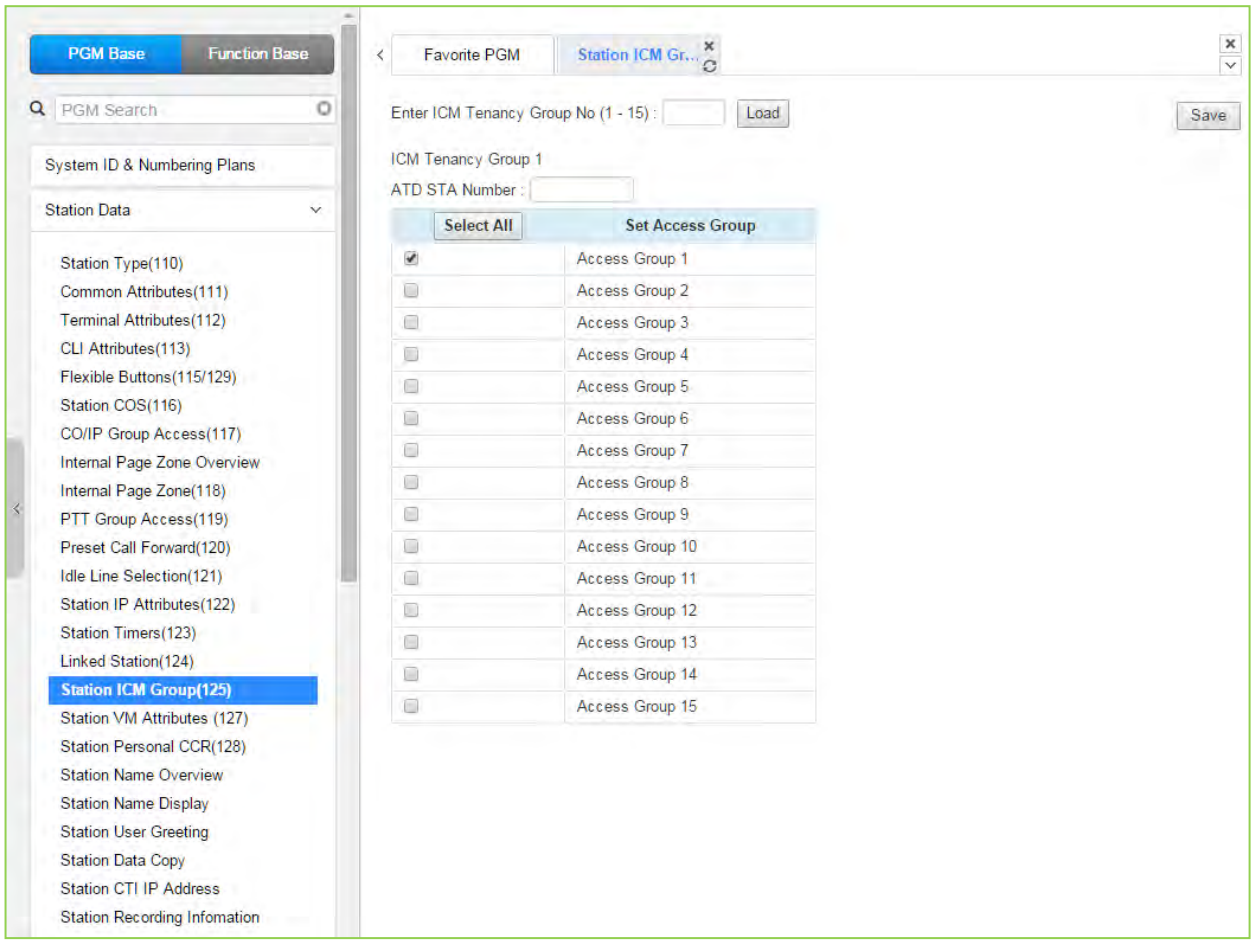


Figure 4.4.2.16-1 Station ICM Group

Stations can be assigned to an ICM group under Common Attributes section 4.4.2.2. Up to 15 Tenant groups for eMG80 and up to 32 for eMG800 can be defined. 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.

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.	eMG80:1~15 eMG800:1~32	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 check mark to indicate which attributes to modify; data for checked attributes is stored by clicking **[Save]** button.

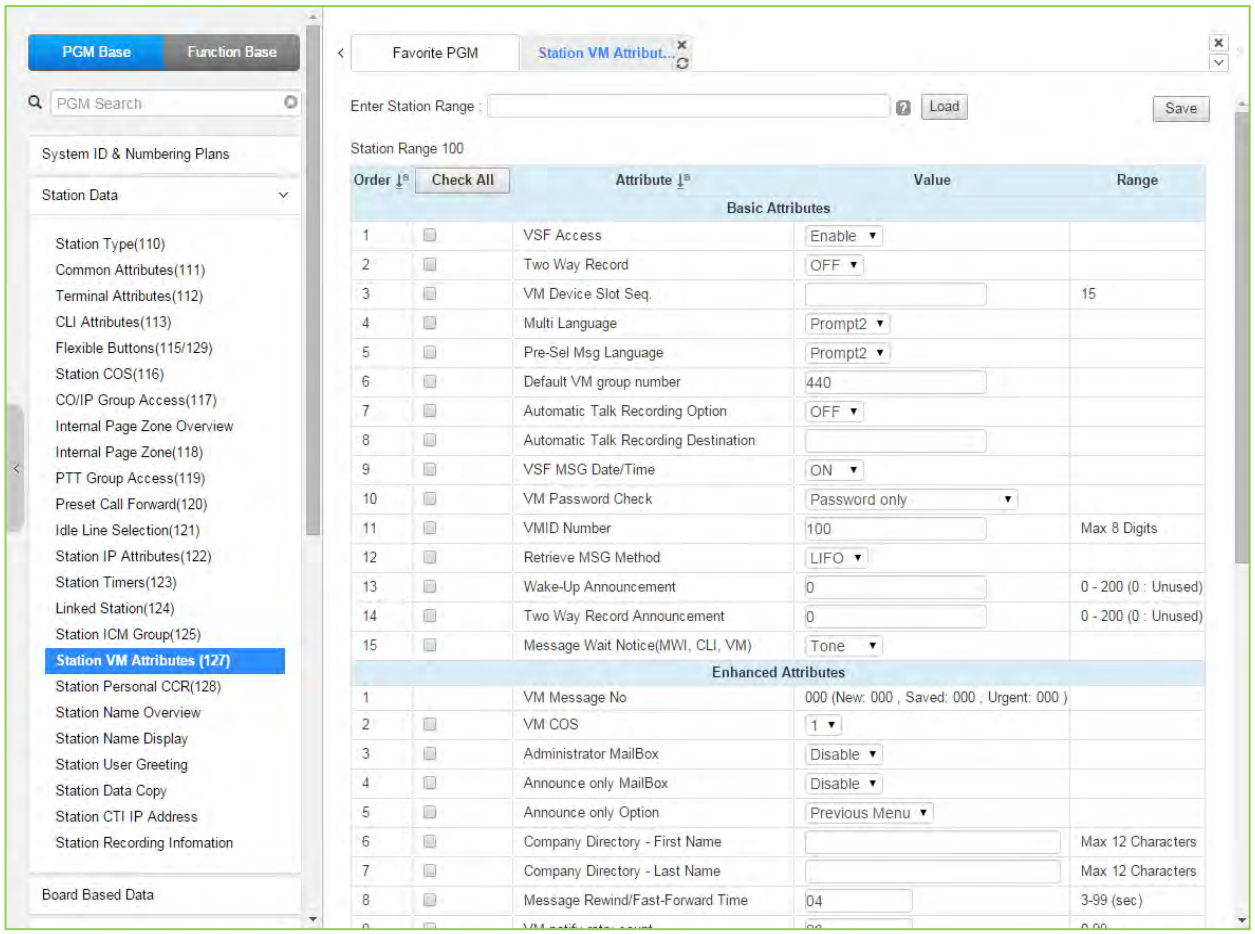


Figure 4.4.2.17-1 Station VM Attributes

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
VMIU/VMIB 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.	Prompt 1~6	Prompt 2
Pre-selected	The selected language is employed for prompts played	Prompt 1~6	Prompt 2

Table 4.4.2.17-1 STATION VM ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Message Language	to an external CO caller if the called station has activated Pre-selected Message.		
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.		
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 ON	OFF
Auto Talk Recording Destination	When Auto Call recording is defined for a station, the recording UCS Client station number is defined here.	Station	
VSF MSG Date/Time	When ON, the data/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	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.	Max. 8 digit	eMG80:100 eMG800:1000
Retrieve MSG Method	Messages stored in the VSF may be retrieved in either a FIFO (first-in-first-out) or LIFO (last-in-first-out) order based on this entry.	FIFO/ LIFO	LIFO
WAKEUP ANNC.	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, system can provides this as voice prompt instead of dial tone according to option based on station. Disable: System provides normal dial tone when a user goes to off hook status. Tone: System provides warning tone instead of dial tone to give indication when a user goes to off hook status. Prompt: System provides message indication as voice prompt when a user goes to off hook status. DECT phone do not support this feature.	Disable, Tone, Prompt	Tone
Enhanced Attributes			
VM Message No	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 determines 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	A mailbox can be configured so that the connected party	Disable	Disable

Table 4.4.2.17-1 STATION VM ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Mailbox	will hear the greeting but cannot leave a message, Announce Only. After the greeting, the call is routed based on the "Announce Only Option.	Enable	
Announce Only Option	This option determines if the caller will be disconnected or returned to the previous menu after hearing the Announce Only Mailbox greeting.	Previous Menu/ Hang Up	Previous menu
Company Directory – First Name	This field is first name of a station for Company Directory feature.	Max. 12 characters	N/A
Company Directory – Last Name	This field is last name of a station for 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. The Rewind and Fast Forward time are determined by this field.	03 - 99	04
VM Notify retry count	If the notification to the user's mobile repeatedly fails, after the retry count, the system will send the call to the Attendant to complete the notification.	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 1'st mailbox destination station.	Station No	N/A
Cascade Mailbox 2	A left message is copied or moved to 2'nd mailbox destination station.	Station No	N/A
Cascade Mailbox 3	A left message is copied or moved to 3'rd mailbox destination station.	Station No	N/A
Cascade Mailbox 4	A left message is copied or moved to 4'th mailbox destination station.	Station No	N/A
Cascade Mailbox 5	A left message is copied or moved to 5'th mailbox destination station.	Station No	N/A
Cascade Method	Cascade method is determined.	Disable / Copy / Move	Disable
Cascade Message Type	Cascade Message Type is determined.	Normal Only / Urgent Only / All	Normal only
Cascade Apply Timer	Cascade Apply Timer is set.	001 ~250 (min)	0
E-Mail notification			
[Send Mail] button : click Send mail button to send mail for notification			
SMTP Mail Server Address	This field defines the address or url of the SMTP mail server for the notification.	IP v4 addressor Mail server name	
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	No Security

Table 4.4.2.17-1 STATION VM ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
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.		
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 **[Save]** button after changing the type or value.

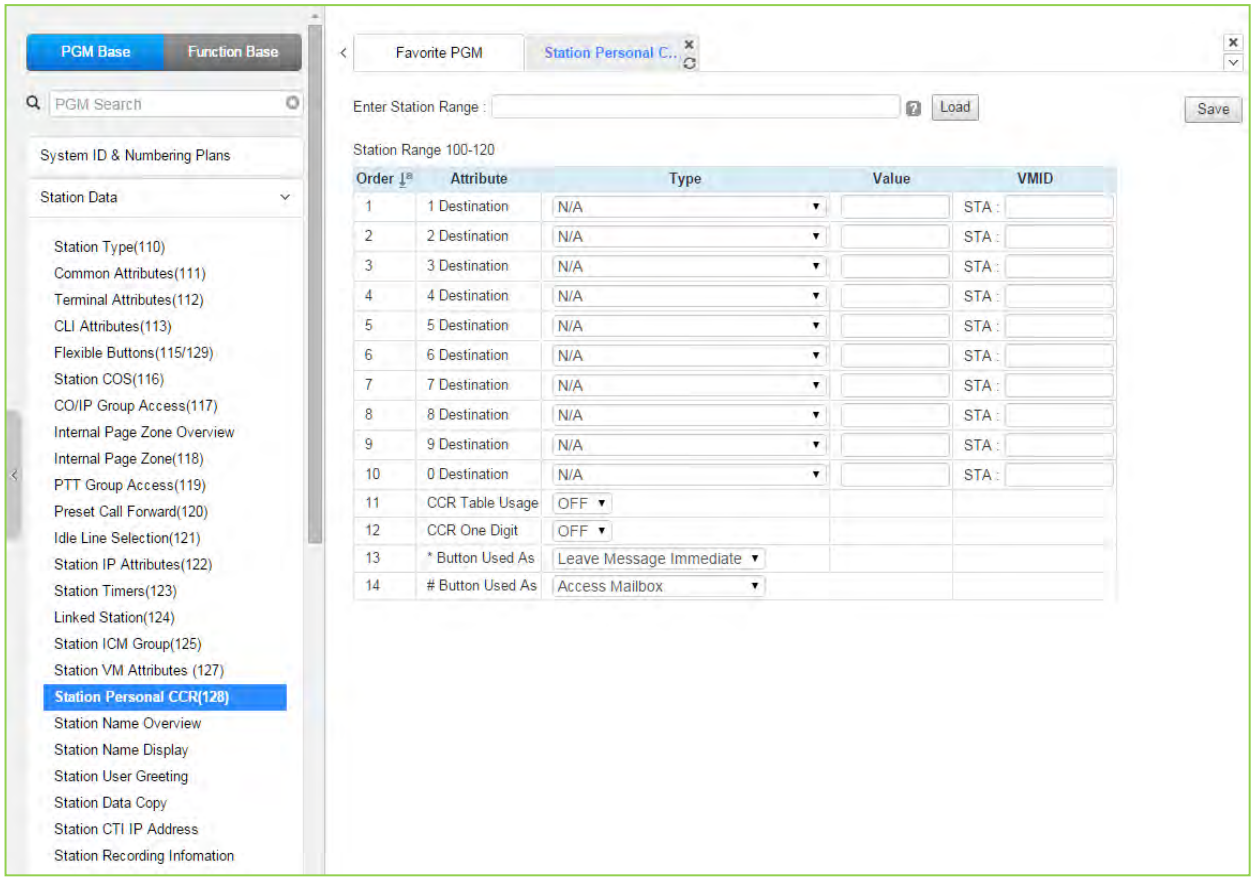


Figure 4.4.2.18-1 Station Personal CCR Table

Table 4.4.2.18-1 STATION CCR Table

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
1-0 Destination	Digit dialed by outside caller. A destination type and value can be programmed by dialed digit. 14 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, CCR table can be activated. If this option is OFF, CCR table is not available, instead of that, dialing digits by outside caller can be recognized as DISA dialing.	ON OFF	OFF
*Button Used As	* can be used as the following: • System Numbering Plan • Replay Greeting • Access Mailbox • Leave Message Immediate	Refer to Description	Leave Message Immediate

Table 4.4.2.18-1 STATION CCR Table

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
# Button Used As	# can be used as the following: • System Numbering Plan • Replay Greeting • Access Mailbox • Leave Message Immediate	System Refer to Description	Access Mailbox

Table 4.4.2.18-2 STATION 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 conference group join

4.4.2.19 Station Name Overview & Display

Selecting Station Name Overview & Display will display the Station Name input page, Figure 4.4.2.19-1 & 4.4.2.19-2. Enter a valid Station range and click **[Load]** to enter the Station Name data.

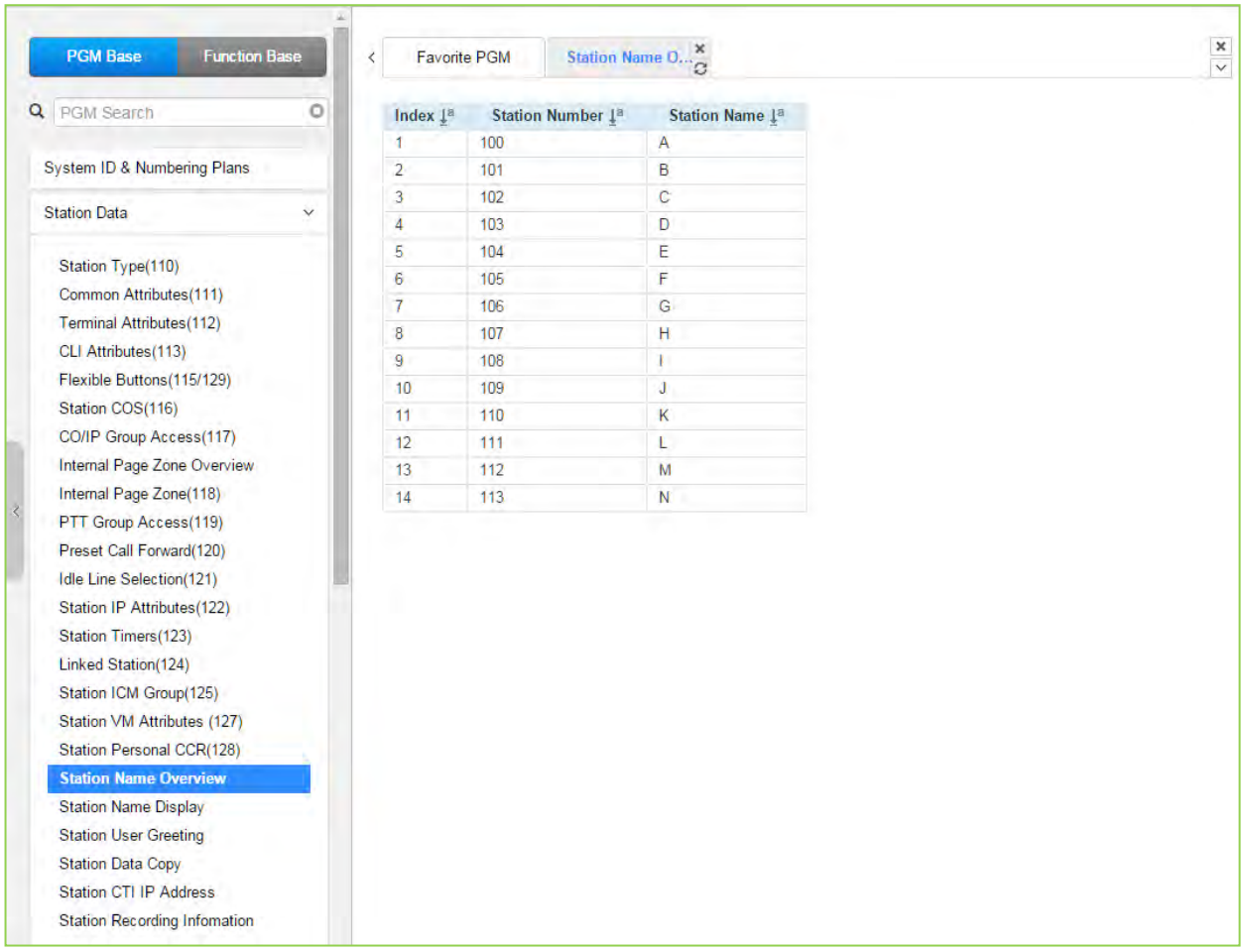


Figure 4.4.2.19-1 Station Name Overview

Each station name will be displayed if the each station has the name.

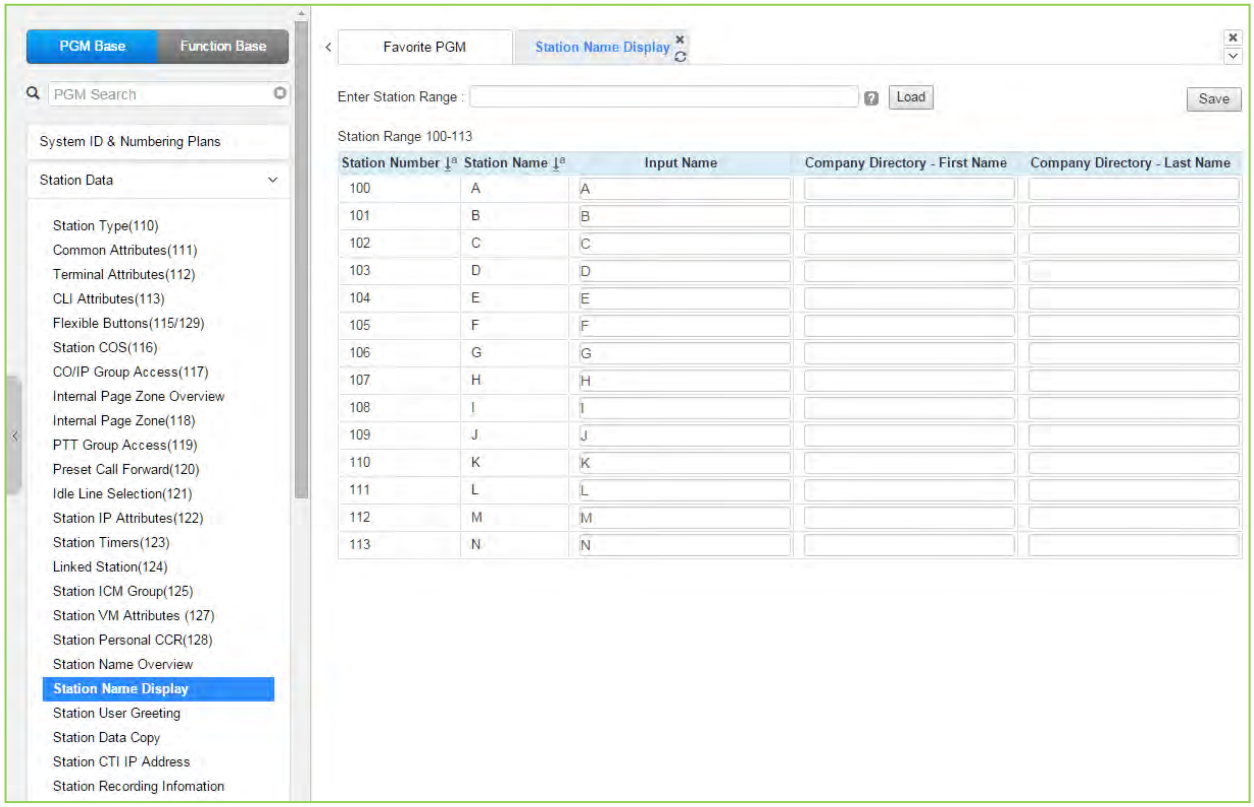


Figure 4.4.2.19-2 Station Name Display

You can fill out the Station name, Input name (up to 20 digits), company directory-First name & Last name for 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 check mark to indicate which attributes to modify; data for checked attributes is stored by clicking **[Save]** button.

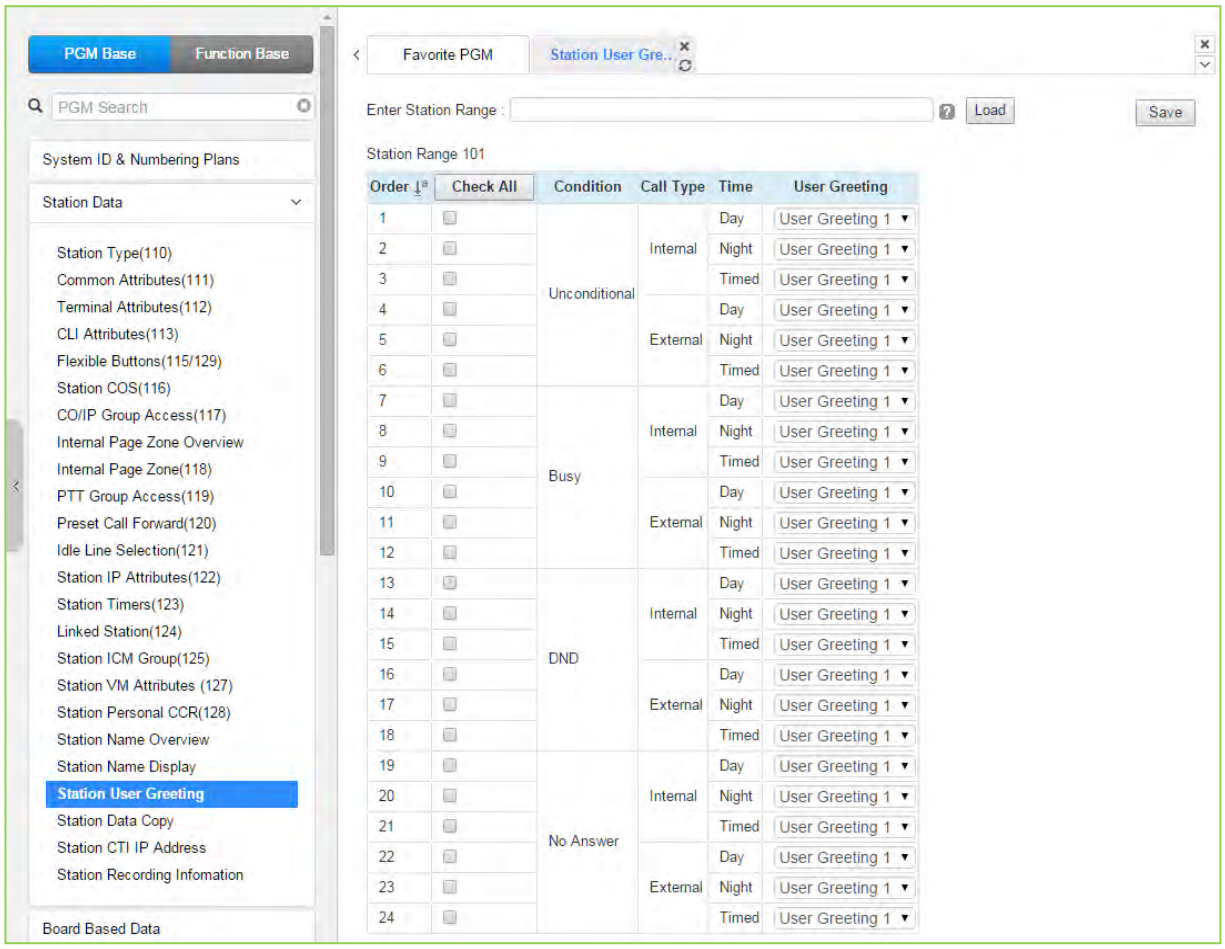


Figure 4.4.2.20-1 Station User Greeting

There are 4 User greeting for each station.

User can select multi user greeting 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.

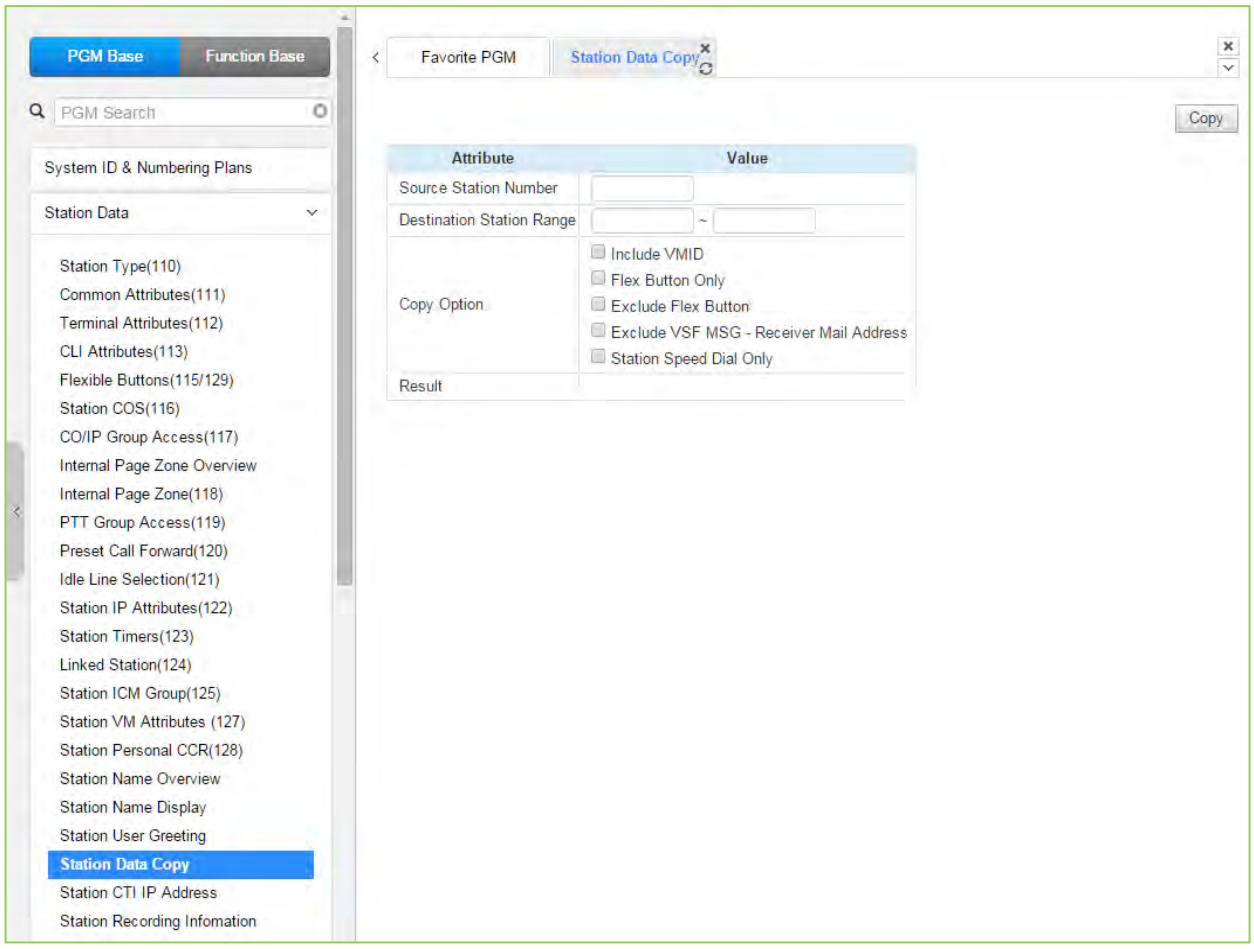


Figure 4.4.2.21-1 Station Data Copy

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 **[Save]** button after changing the type or value.

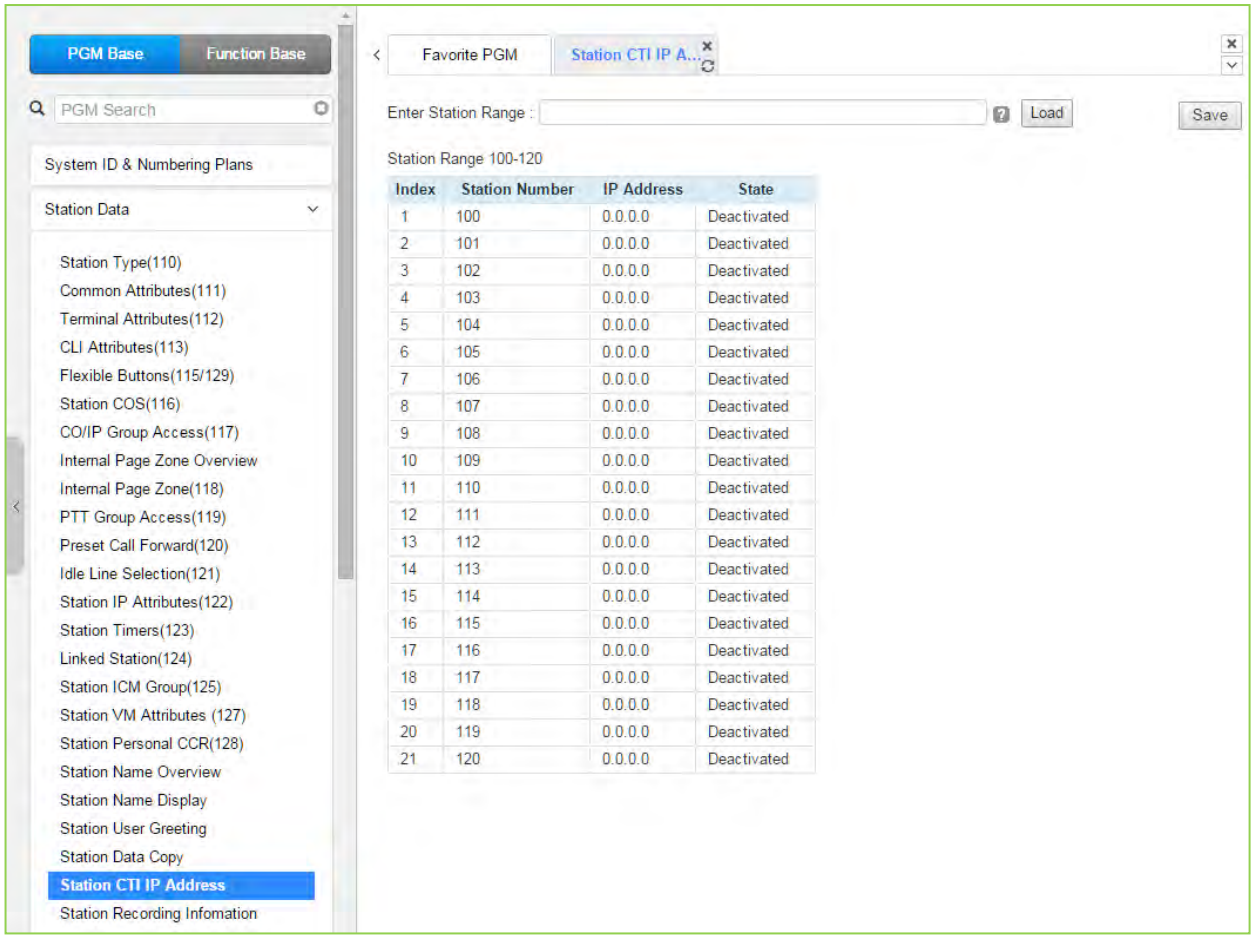


Figure 4.4.2.22-1 Station CTI IP Address

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.

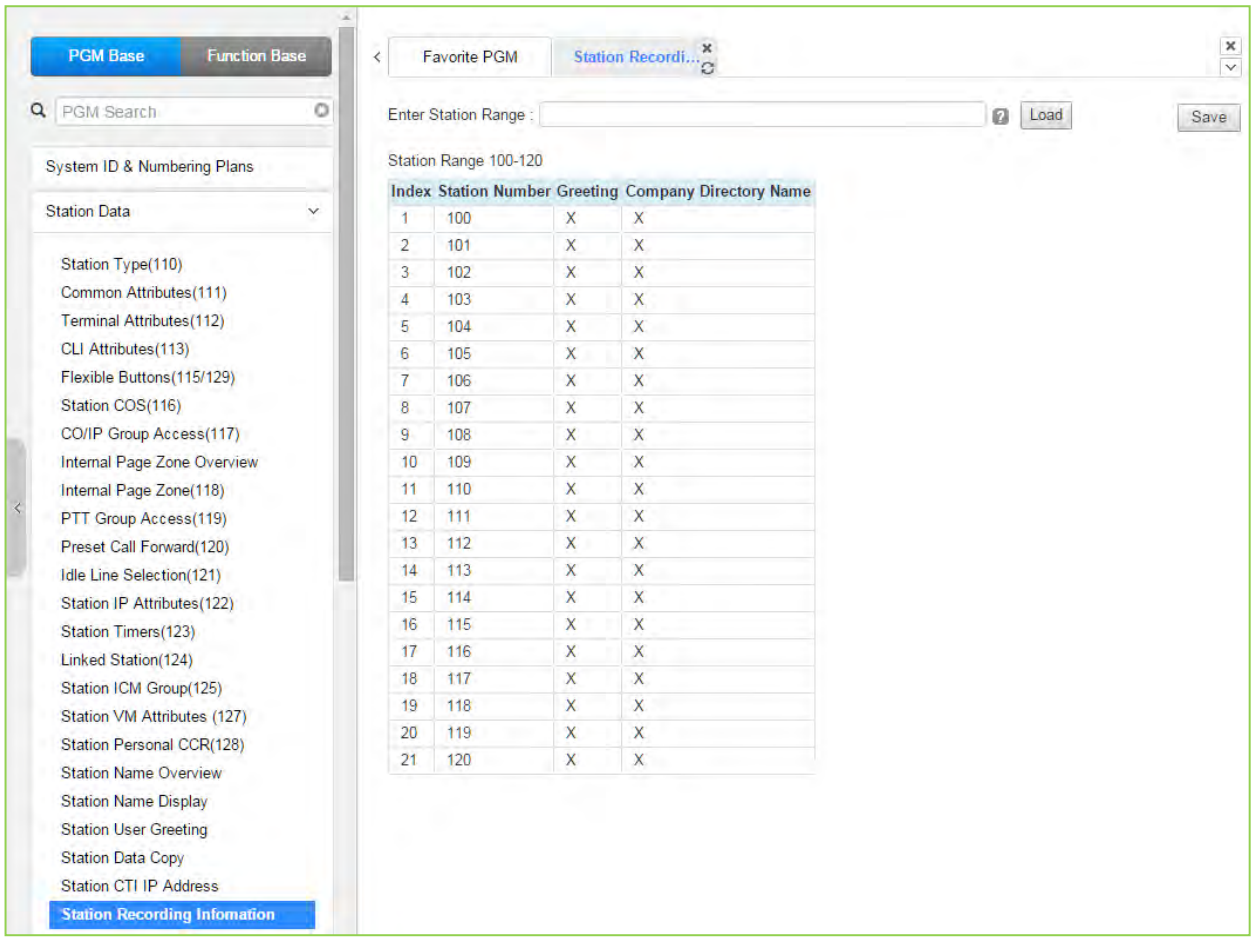


Figure 4.4.2.23-1 Station Recording Information

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)

4.4.3 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.

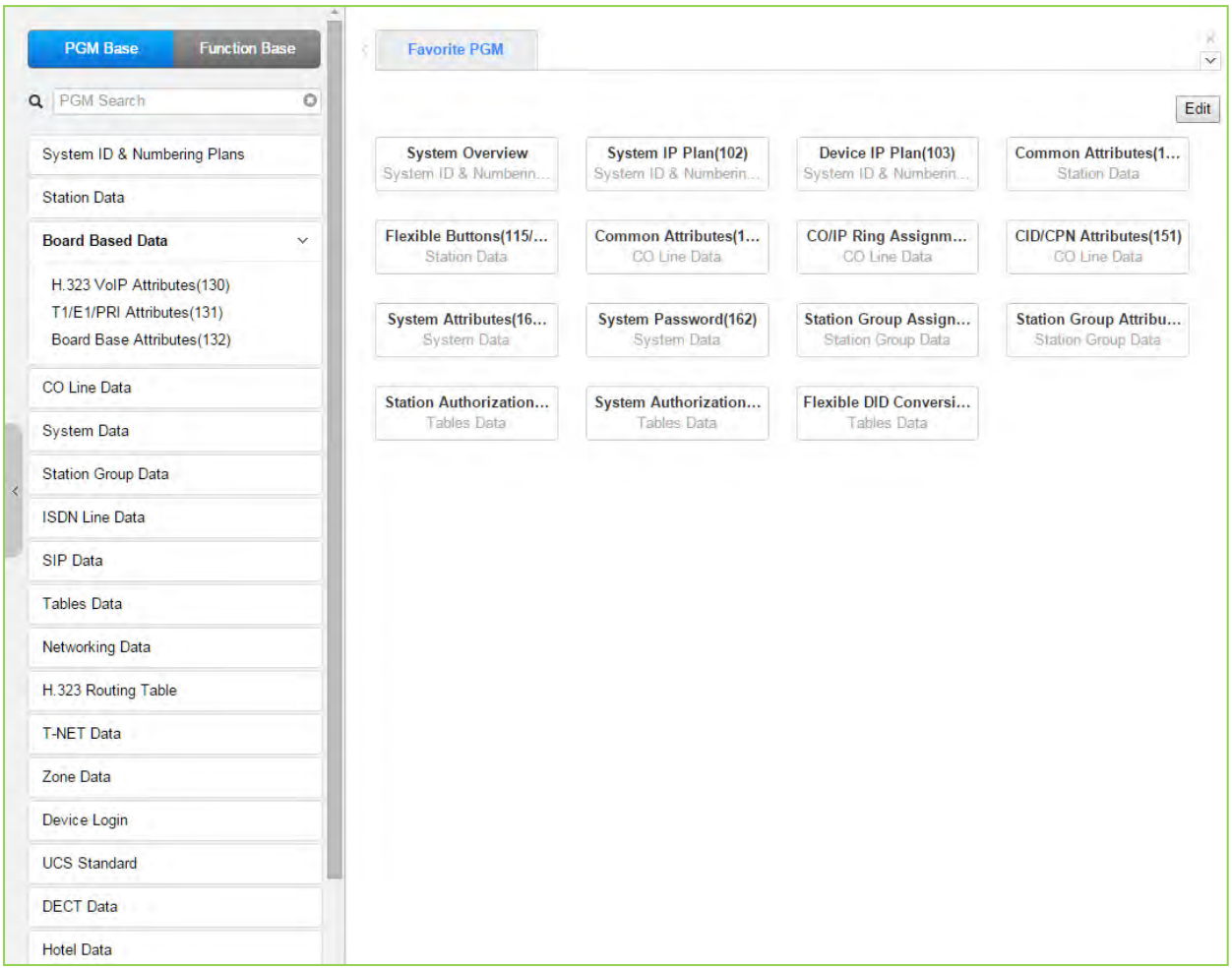


Figure 4.4.3-1 Board Based Data Main Page

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 **[Save]** button after changing Value.

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

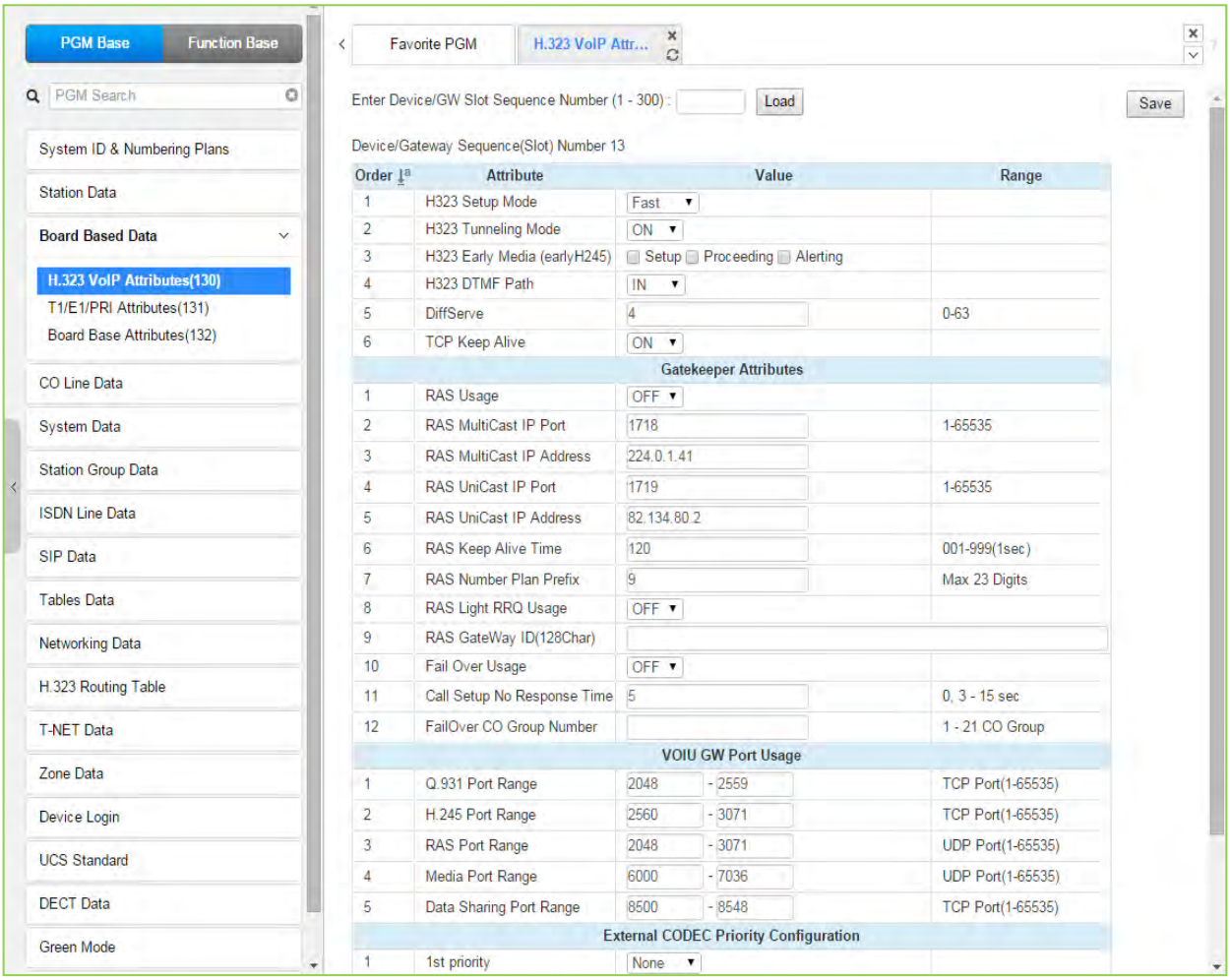


Figure 4.4.3.1-1 H.323 VoIP Attributes

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 (uni-cast and multi-cast) as well as the 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 Table 4.4.3.1-1 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 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.	Setup, Proceeding, Alerting	
H323 DTMF Path	During a call, DTMF can be sent in-band or out-of-band (H.245)	Out-band/ In-band/ 2833	IN
DIFFSERV	This parameter sets DiffServ pre-tagging for 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	Determine whether VOIB (VOIU) board will be used as a Gatekeeper.	OFF ON	OFF
RAS Multicast IP Port	Multi-cast IP Port for RAS Information of Gatekeeper.	IP Port #	1718
RAS Multi-cast IP Address	Multi-cast IP address for RAS Information of Gatekeeper.	IP Address	224.0.1.41
RAS Uni-cast IP Port	Uni-cast IP Port for RAS Information of Gatekeeper.	IP Port #	1719
RAS Uni-cast 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 VoIP channel.	001-999 (seconds)	120
RAS Number Plan Prefix	The numbering plan for Calling Number 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

Table 4.4.3.1-1 H.323 VOIP ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
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, 3-10 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.	eMG80:1-21 CO group eMG800:1~201 CO group	
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.	UDP port	eMG80:6000-7036 eMG800:6000-14400
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.729-a	none

4.4.3.2 T1/PRI Attributes - PGM 131

Selecting T1/PRI Attributes returns the T1/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/PRI data. Click **[Save]** button after changing Value.

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

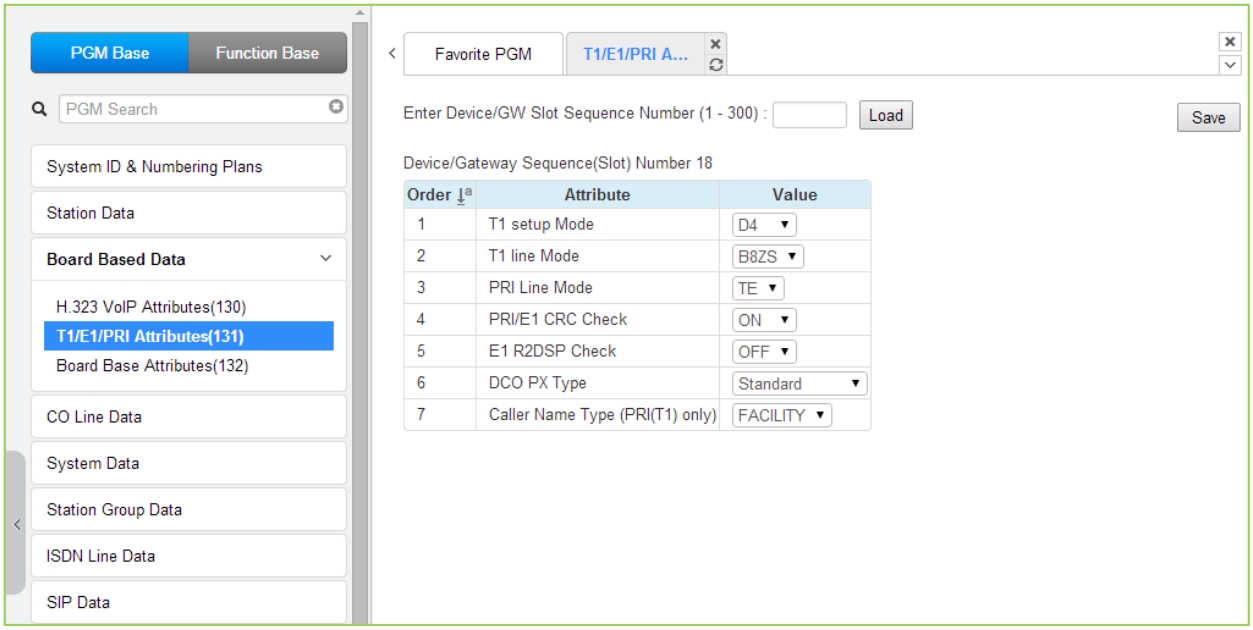


Figure 4.4.3.2-1 T1/PRI Attributes

Each T1/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 Table 4.4.3.2-1 for a description of the features and the input required.

Table 4.4.3.2-1 T1/PRI ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
T1 Setup Mode	Select T1 Setup mode D4 frame: Using In-Band Control Protocol. ESF: Using Data link 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	STANDARD
Caller Name Type(PRI(T1) only)	If the caller has a name, the Caller Name is sent to the network according to the option (FACILITY, DISPLAY). (USA only)	FACILITY, DISPLAY	FACILITY

4.4.3.3 Board Base Attributes - PGM 132

Selecting Board Base Attributes returns the Board Base Attributes data input page, Figure 4.4.3.3-1. 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 check mark to indicate which attributes to modify; data for checked attributes is stored by clicking **[Save]** button.

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

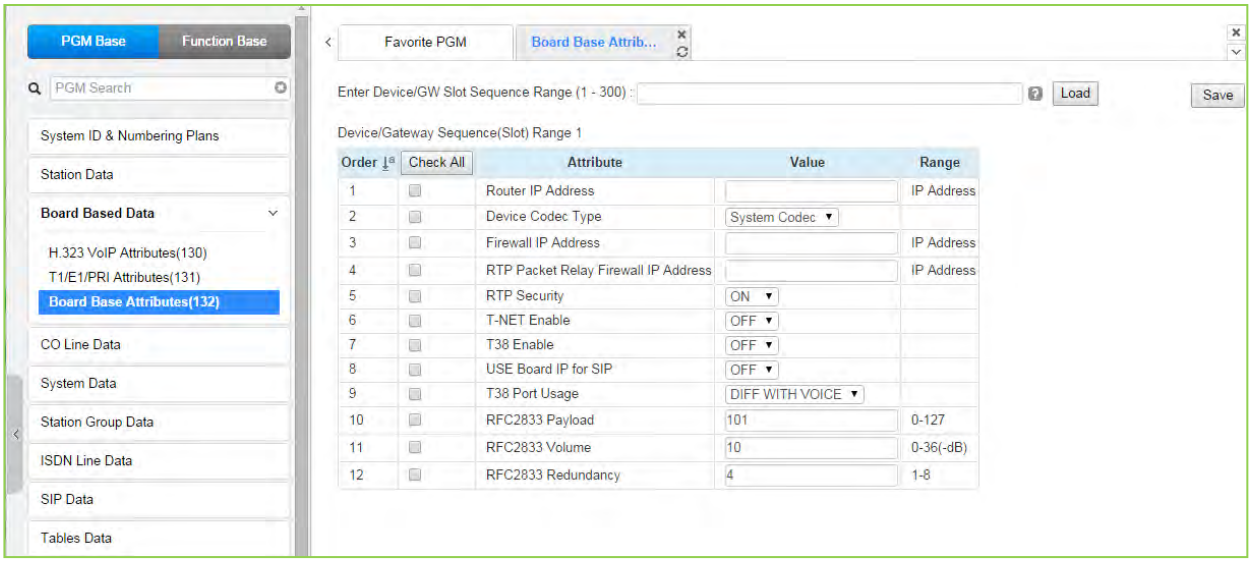


Figure 4.4.3.3-1 Board Base Attributes

Appliances (Devices and IP Phones) can be connected to the iPECS over a managed WAN without the need to employ 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 IP address of the router 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 RTP packet.

Table 4.4.3.3-1 BOARD BASE ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
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, or SYSTEM CODEC	SYSTEM CODEC

Table 4.4.3.3-1 BOARD BASE ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
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 a dual broadband connection for SIP trunks and Remote phones (using a VOIB).		0.0.0.0
RTP Security	SRTP implements AES (Advanced Encryption Standard) for packets between other devices with RTP Security enabled.	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.	OFF ON	eMG80:ON eMG800:OFF
T38 Enable	T38 mode ON/OFF for FAX data transfer between other iPECS boards.	OFF ON	OFF
USE Board IP for SIP	VOIB IP will be used for SIP Signaling in Multi NAT circumstance.	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.	DIFF WITH VOICE SAME AS VOICE NET TRIGERING	DIFF WITH 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

4.4.4 CO Line Data

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

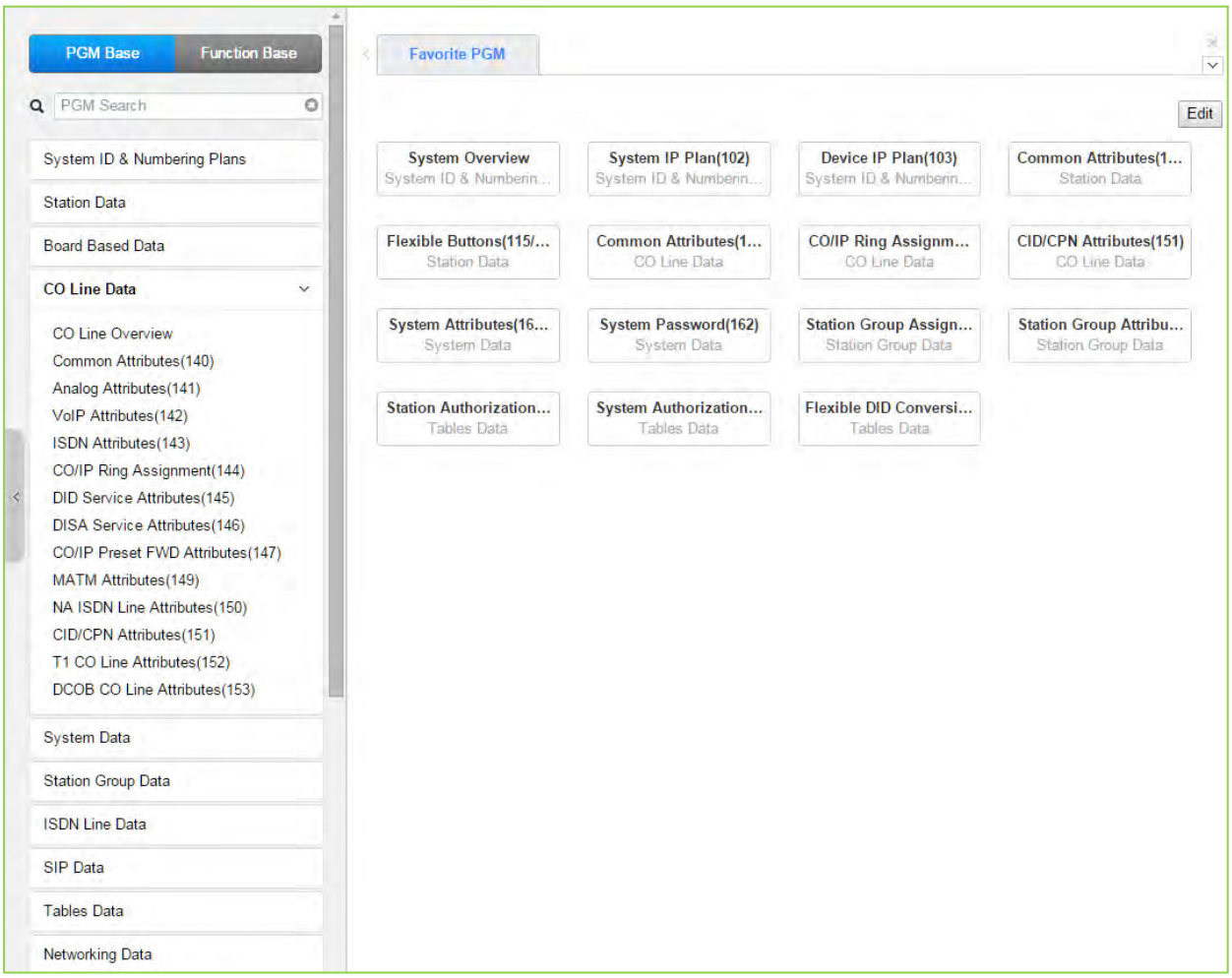


Figure 4.4.4-1 CO Line Data Main Page

4.4.4.1 Common Attributes - PGMS 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 check mark to indicate which attributes to modify; data for checked attributes is stored by clicking **[Save]** button.

Enter CO Range: eMG80 : 1-74 / eMG800: 1-600

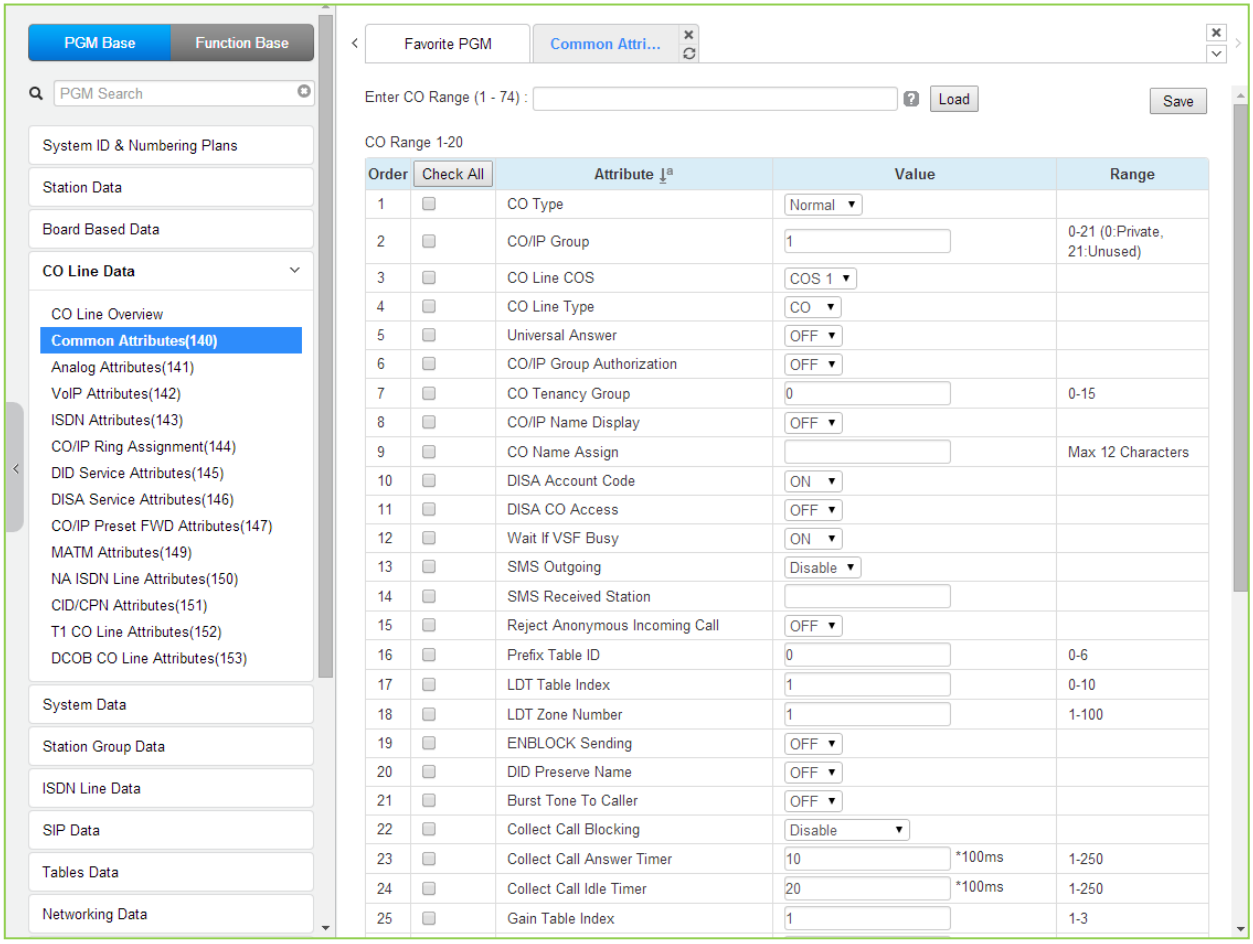


Figure 4.4.4.1-1 Common Attributes

Common Attributes define various characteristics of CO lines facilities under control of the system. Most characteristics require an On/Off setting; refer to Table 4.4.4.1-1. 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	Normal
CO/IP Group	Each CO/IP Line is assigned to a group; grouping should be based on the Line type, technology and COS.	eMG80:0-21 eMG800:0-201	1

Table 4.4.4.1-1 Common Attributes

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
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
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 call on the CO/IP line by dialing the UNA code.	OFF ON	OFF
CO/IP Group Authorization	Each CO/IP Group can be assigned to require the user 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.	eMG80:00-15 eMG800:0-32	0
CO/IP Name Display	The IP Phone display can indicate the CO line/IP channel number or the twelve (12) character name, if assigned below.	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 4.4.9.9.	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 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 means 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), 0-32(eMG800)	1
LDT Zone Number	If the LDT Zone Number of a 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

Table 4.4.4.1-1 Common Attributes

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
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
Burst Tone to Caller	Send to burst tone to caller if it's set ON.	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	Disable
Collect Call Answer Timer	These parameters determine 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 table 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.	eMG80:1-15 eMG800:1-32	1
Prepaid Call	The Pre-paid Call feature must be enabled for use by a station.	OFF ON	OFF
Prepaid Money (0-999999) & Used Prepaid Money	An amount can be associated with the station as 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 0-999999	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 Calling Name. Disable - ICLID feature is disabled CLI - ICLID feature is operated with CLI Name - ICLID feature is operated with Name	Disable, CLI, Name	CLI
PBX Code Insertion for Emergency call	System can insert PBX code automatically if pre-configured when a user make an emergency call.	Disable, PBX code1~4	Disable
Timer Attributes			
CO 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	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	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 MOH2~3	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 eMG-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 dial tone for use by the CO line.	Dial Tone/ Internal Music/ External Music/ VSF MOH/ SLT MOH1~5/ VSF MOH2~3	Dial Tone
CO Ring Back Tone Source	One of eleven sources can be defined as ring back tone for use by the CO line.	Ring Back Tone/ Internal Music/ External Music/ VSF MOH/ SLT MOH1~5/ VSF MOH2~3	Ring Back Tone
COL Ring Tone	One of twelve Ring Tones can be configure for use by this CO Line.	00-16	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

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 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) and 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 - PGMS 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 check mark to indicate which attributes to modify; data for checked attributes is stored by clicking **[Save]** button.

Enter CO Range: eMG80 : 1-74 / eMG800: 1-600

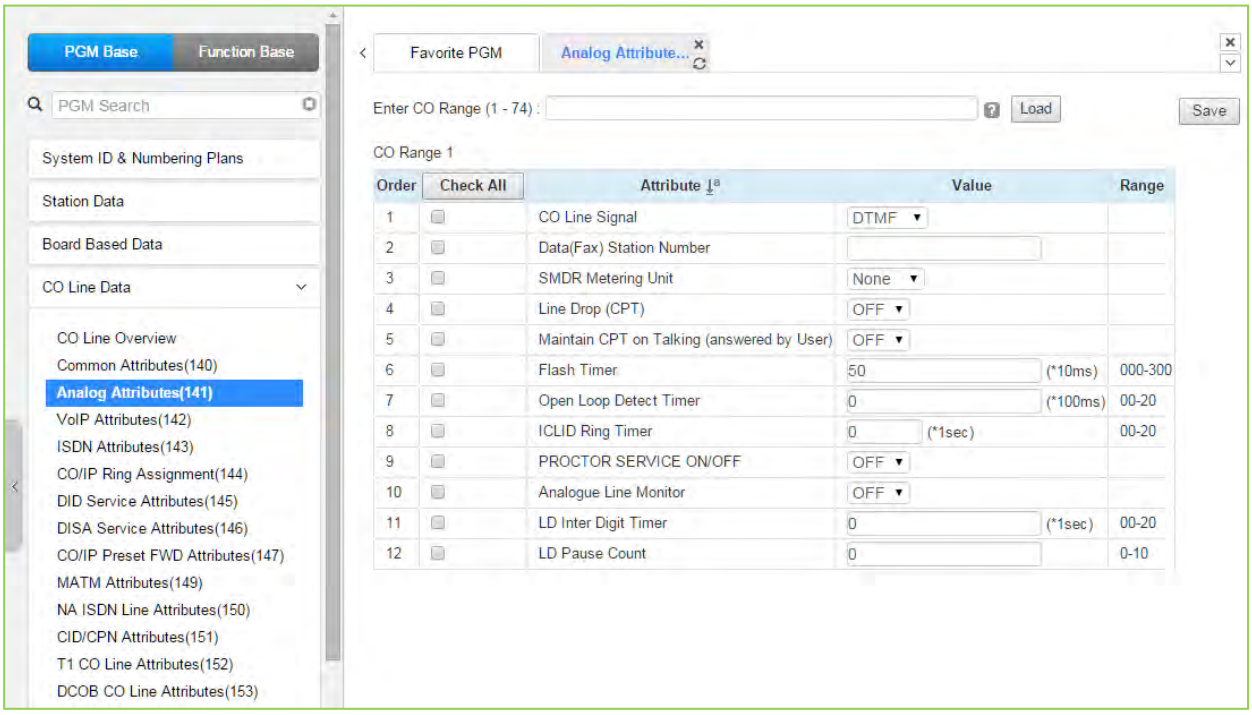


Figure 4.4.4.2-1 Analog Attributes

Analog Attributes define various characteristics of Analog CO Lines under control of the system. Most characteristics require an On/Off setting; refer to Table 4.4.4.2-1.

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 Table 4.4.4.1-2.	See Table 4.4.4.1-2	None
Line Drop (CPT)	Each CO Line can be programmed to disconnect if 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, if error tone is detected, drop the call.	OFF ON	OFF
Flash Timer	This time sets the flash time.	000-300 (*10 msec)	50
Open Loop Detect timer	This entry sets the duration of open loop that will be recognized as a “Disconnect Signal”.	00-20 (*100 msec)	04

Table 4.4.4.2-1 Analog ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
ICLID Ring Timer	When a call is received, the system may use ICLID (Incoming Caller ID) 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 call.	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 - PGMS 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 check mark to indicate which attributes to modify; data for checked attributes is stored by clicking **[Save]** button.

Enter CO Range: eMG80 : 1-74 / eMG800: 1-600

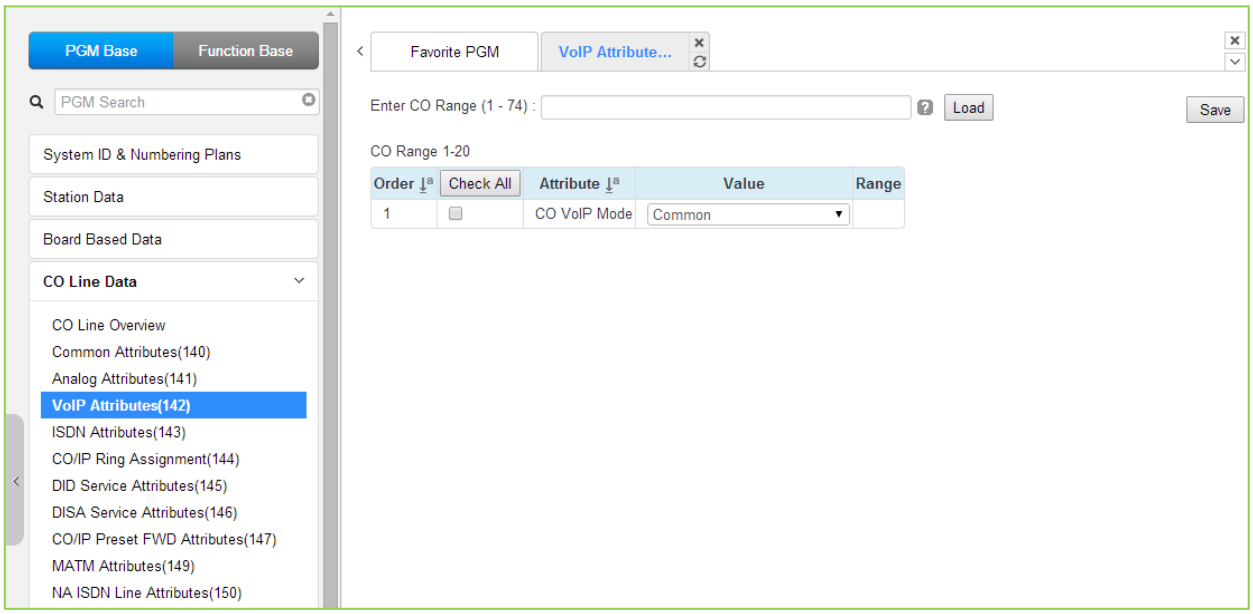


Figure 4.4.4.3-1 VoIP Attributes

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	COMMON

4.4.4.4 ISDN Attributes - PGMS 143

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

Enter CO Range: eMG80 : 1-74 / eMG800: 1-600

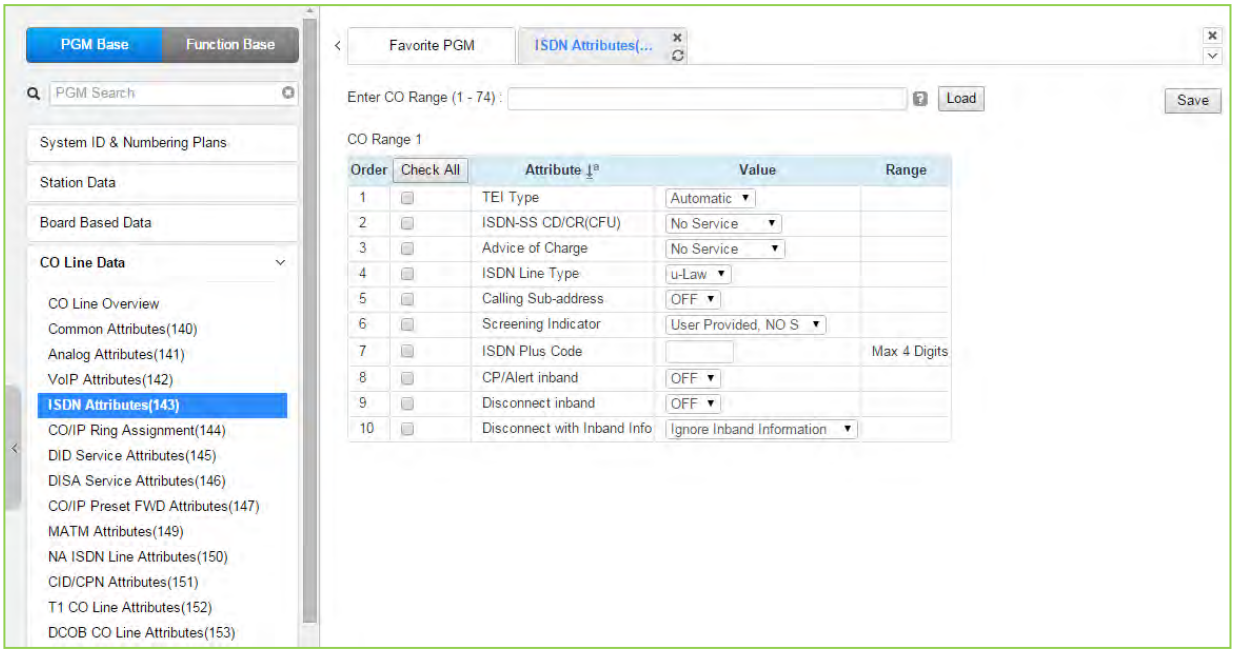


Figure 4.4.4.4-1 ISDN Attributes

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 assure 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	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	No Service
ISDN Line Type	The system will encode voice using the A-law or u-law PCM format to match the installed ISDN back	μ-Law/ A-Law	μ-Law

Table 4.4.4.4-1 ISDN ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
	bone.		
Calling Sub-address	For outgoing calls, the user's station number may be included in the ISDN call SETUP message Sub-address field.	OFF ON	OFF
Screening indicator	The ISDN Screening Indicator can be configured.	User Provided, No Service/ User Provided, Pass/ User Provided, Fail/ Network Provided.	User Provided, No Service
ISDN PLUS Code	When the incoming CLI starts with "+", this value will be inserted in 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 Disconnect message.	OFF ON	OFF
Disconnect with Inband Info	When system receives 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: System wait to send Release message till the other party is disconnected	Ignore Inband information, Bypass Inband information, Wait Release	Ignore Inband information

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 check mark to indicate which attributes to modify; data for checked attributes is stored by clicking **[Save]** button.

Enter CO Range: eMG80 : 1-74 / eMG800: 1-600

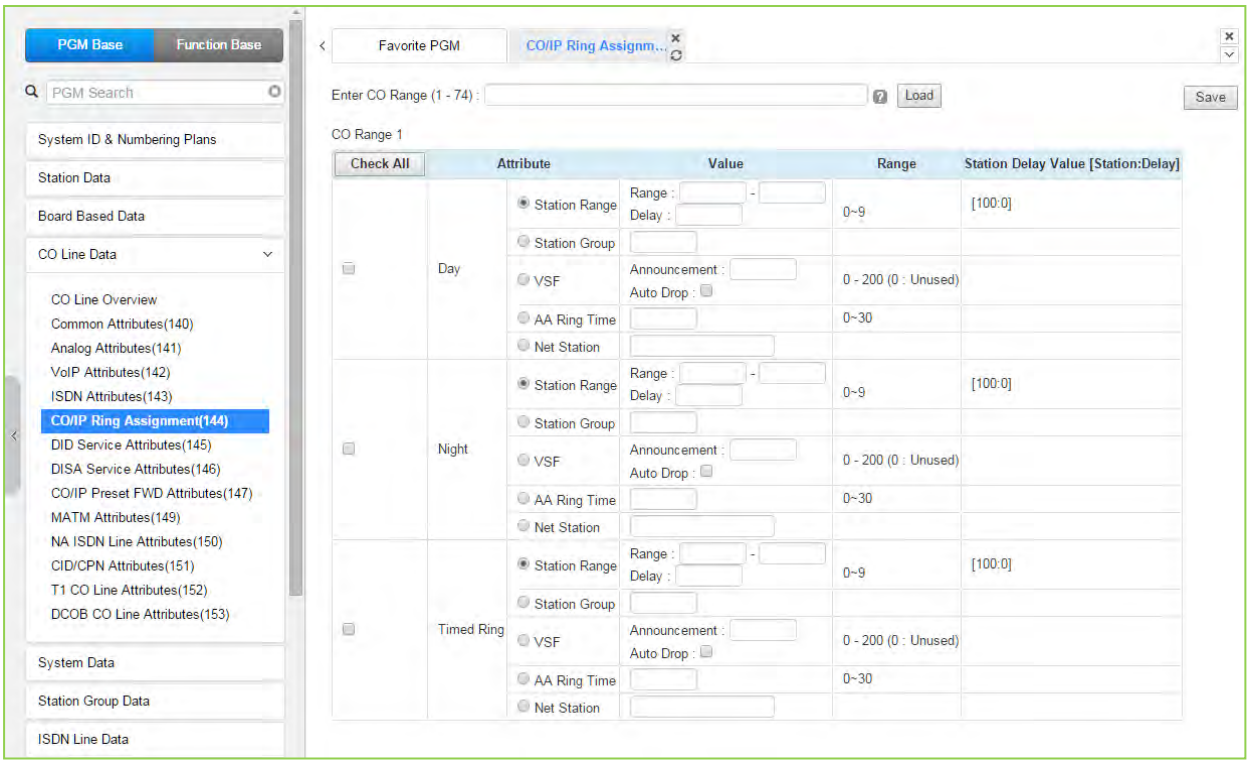


Figure 4.4.4.2-1 CO/IP Ring Assignment

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

4.4.4.6 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 **[Load]** button to enter the DID Service Attributes data. Use the check mark to indicate which attributes to modify; data for checked attributes is stored by clicking **[Save]** button.

Enter CO Range: eMG80 : 1-74 / eMG800: 1-600

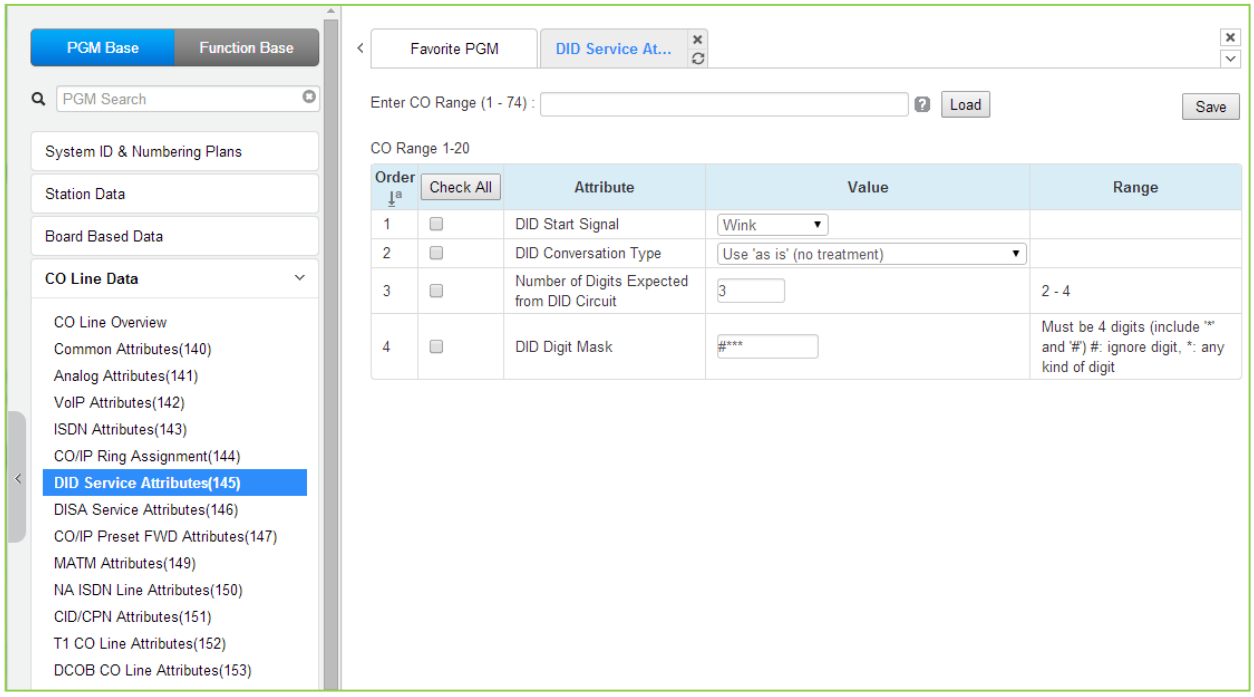


Figure 4.4.4.6-1 DID Service Attributes

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 Table 4.4.4.6-1 for additional description 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 start signaling, Immediate, Wink or Delayed for the CO/IP Line.	Immediate/ Wink/ Delayed	Wink
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 Conversion/ Use ‘as is’/ Modify using Flexible DID conversion table	Use ‘as is’
Number of Digits Expected from DID Circuit	The number of digits expected from the PSTN DID circuit.	2~4	eMG80:3 eMG800:4
DID Digit 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, *, #)	#***

4.4.4.7 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 check mark to indicate which attributes to modify; data for checked attributes is stored by clicking **[Save]** button.

Enter CO Range: eMG80 : 1-74 / eMG800: 1-600

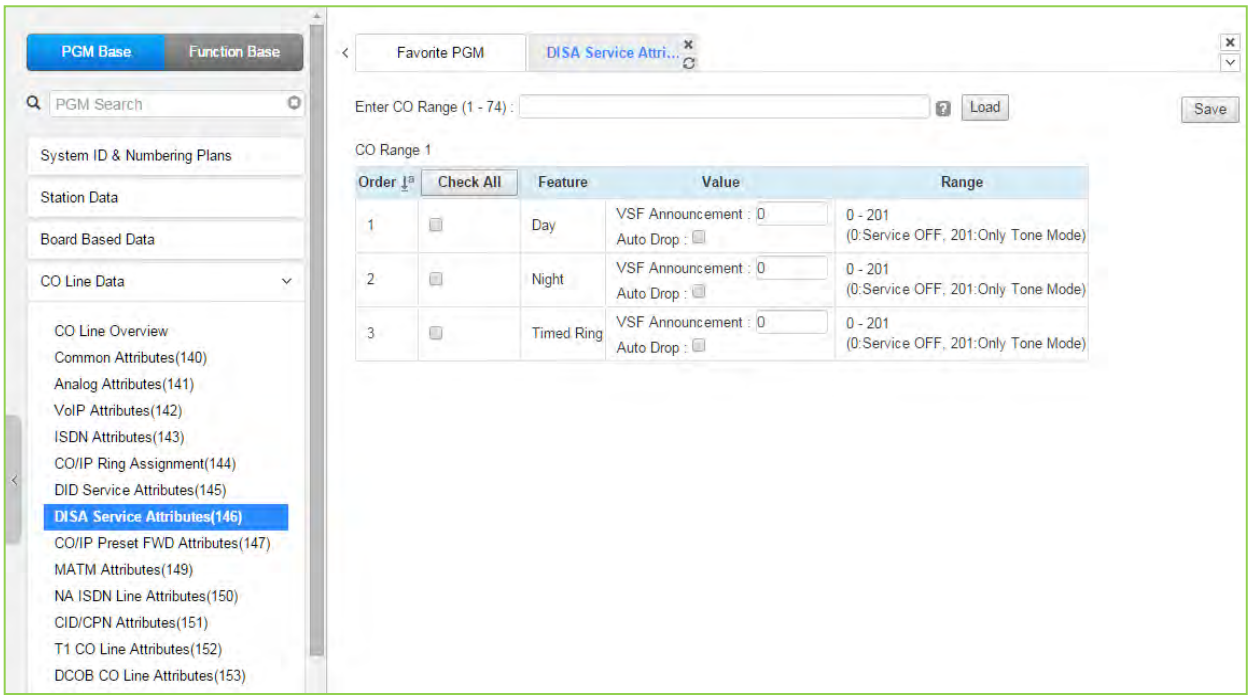


Figure 4.4.4.7-1 DISA Service Attributes

DISA Service can be enabled on CO lines based on the system operation mode (Day, Night, and Timed). DISA 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 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 check mark to indicate which attributes to modify; data for checked attributes is stored by clicking **[Save]** button.

Enter CO Range: eMG80 : 1-74 / eMG800: 1-600

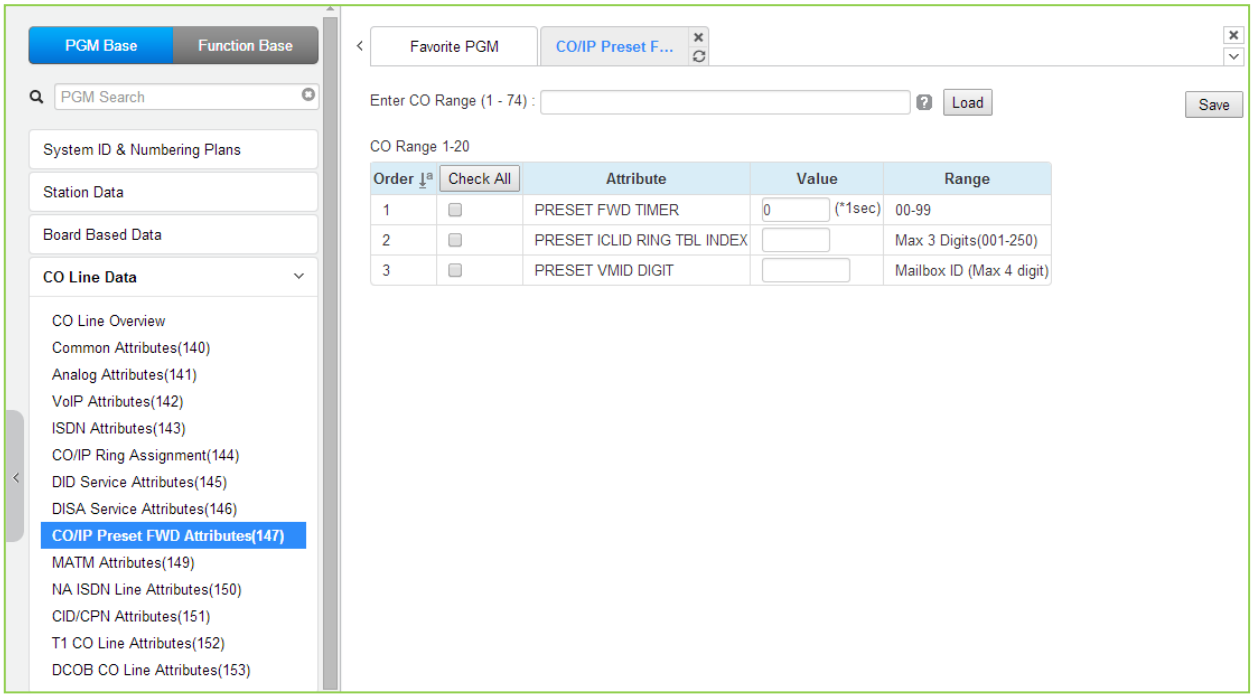


Figure 4.4.4.8-1 CO/IP Preset Forward Attributes

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 any 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 call 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 of section 4.4.7.5.	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, see section 4.4.7.5.	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 check boxes to indicate which attributes to modify; data for checked attributes is stored for the entire range of CO/IP Lines when saved. Use the check mark to indicate which attributes to modify; data for checked attributes is stored by clicking **[Save]** button. These attributes are available for Country code 82.

Enter CO Range: eMG80 : 1-74 / eMG800: 1-600

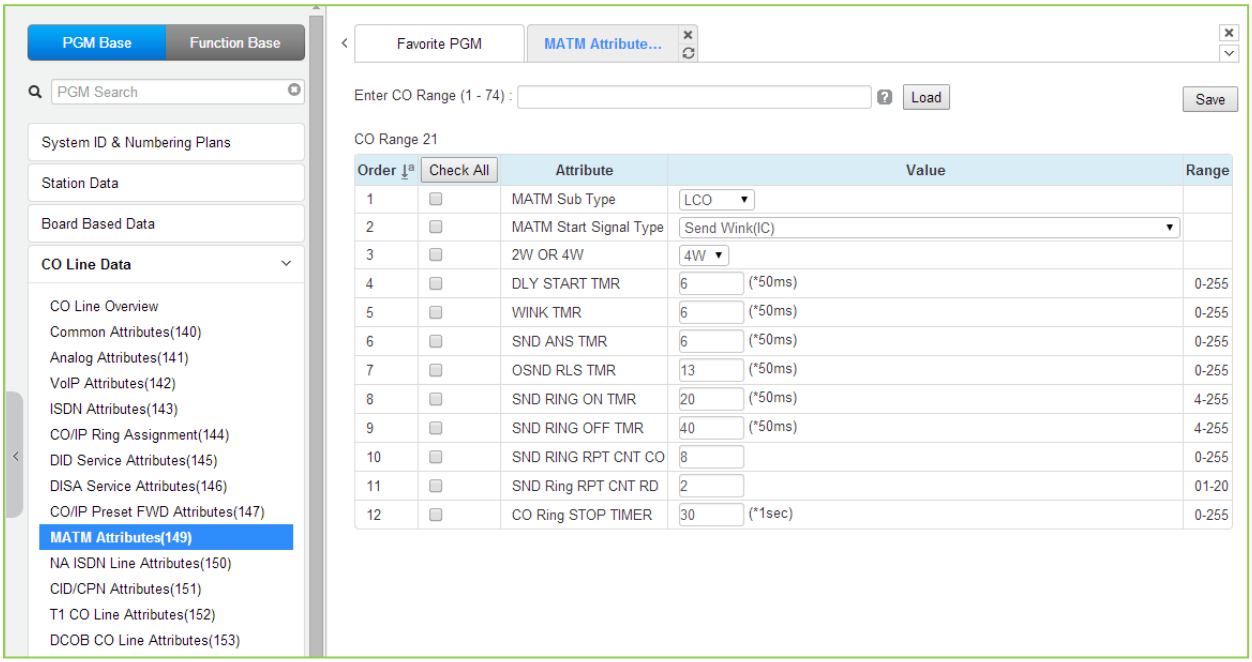


Figure 4.4.4.9-1 MATM Attributes

Table 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 national army) LDIU : LD (loop dial, only for national army) EMC = E&M continuous, EMD = E&M discontinuous)	LCO, RD, LD, EMC, EMD, Unused	LCO
MATM Start Signal Type	This is the signal type for the analog trunk. This should be set with alternate trunk type. These can be set by testing with available values.	Send Wink (IC), Wait Seize Ack(OG), Send Wink (IC) and Wait Seize Ack(OG), Send Sub Answer (IC) and Wait Sub Answer(OG), Send Wink and Send Sub Answer(IC), Wait Ack and Wait Sub Answer(OG),	Send Wink (IC)

Table 4.4.9-1 MATM ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
		Send Wink and Send Sub Answer(IC) & Wait Wink and wait sub answer(OG), Unused Type	
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	This is timer value for analog signaling.	0~255	6
Wink Timer	This is timer value for analog signaling.	0~255	6
SND ANS Timer	This is timer value for analog signaling.	0~255	6
OSND RLS Timer	This is timer value for analog signaling.	0~255	13
SND RING ON Timer	This is timer value for analog signaling.	4~255	20
SND RING OFF Timer	This is timer value for analog signaling.	4~255	40
SND RING RPT CNT CO	This is timer value for analog signaling.	0~255	8
SND RING RPT CNT RD	This is timer value for analog signaling.	01~20	2
CO Ring STOP Timer	This is 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 check mark to indicate which attributes to modify; data for checked attributes is stored by clicking **[Save]** button.

Enter CO Range: eMG80 : 1-74 / eMG800: 1-600

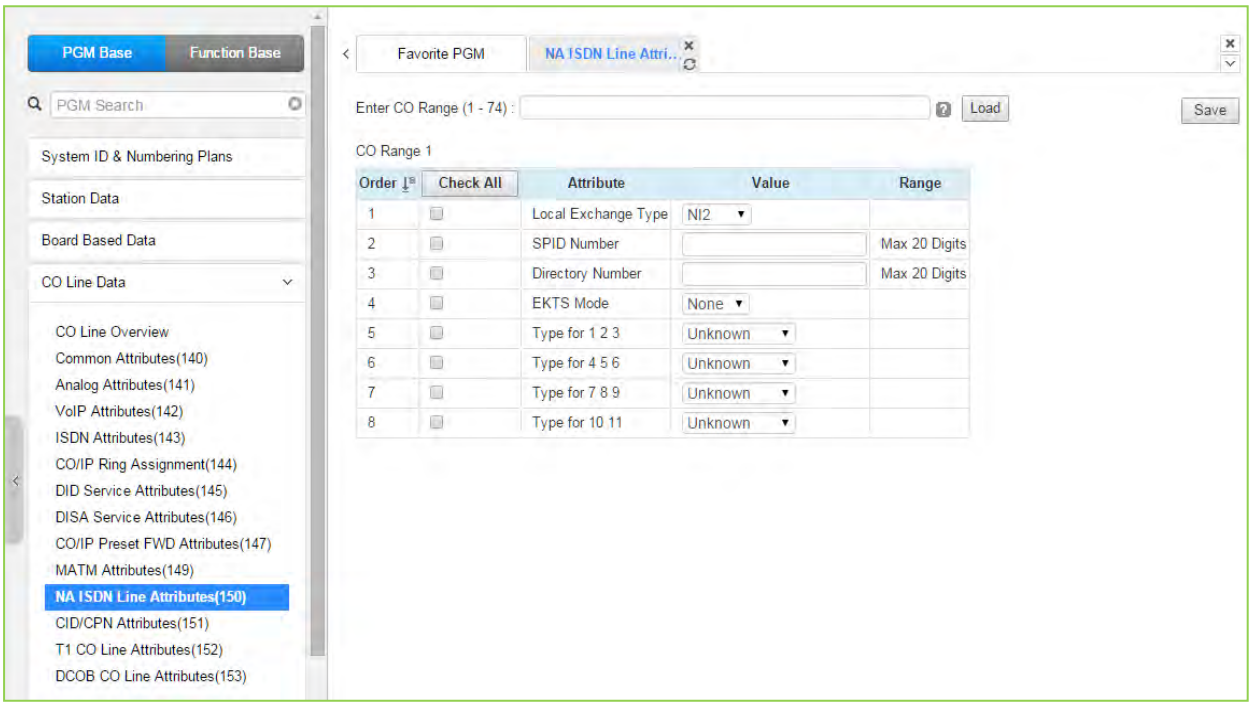


Figure 4.4.4.10-1 NA ISDN Line Attributes

To comply 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	NI 2
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	20 digits	

Table 4.4.4.10-1 NA ISDN LINE ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
	subscription parameters assigned to a TSP.		
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	
EKTS Mode	The EKTS (Electronic Key Telephone Service) terminal permits a user to operate those features that are specific to EKTS, as well as 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	Unknown
Type for 4/5/6	ISDN CALLED NO is constructed with International format, National format, Network format, Subscriber format, or Abbreviated format when the user dials 4~6 digits.	Unknown/ International/ National/ Network/ Subscriber/ Abbreviated	Unknown
Type for 7/8/9	ISDN CALLED NO is constructed with International format, National format, Network format, Subscriber format, or Abbreviated format when the user dials 7~9 digits.	Unknown/ International/ National/ Network/ Subscriber/ Abbreviated	Unknown
Type for 10/11	ISDN CALLED NO is constructed with 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	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 check mark to indicate which attributes to modify; data for checked attributes is stored by clicking **[Save]** button.

Enter CO Range: eMG80 : 1-74 / eMG800: 1-600

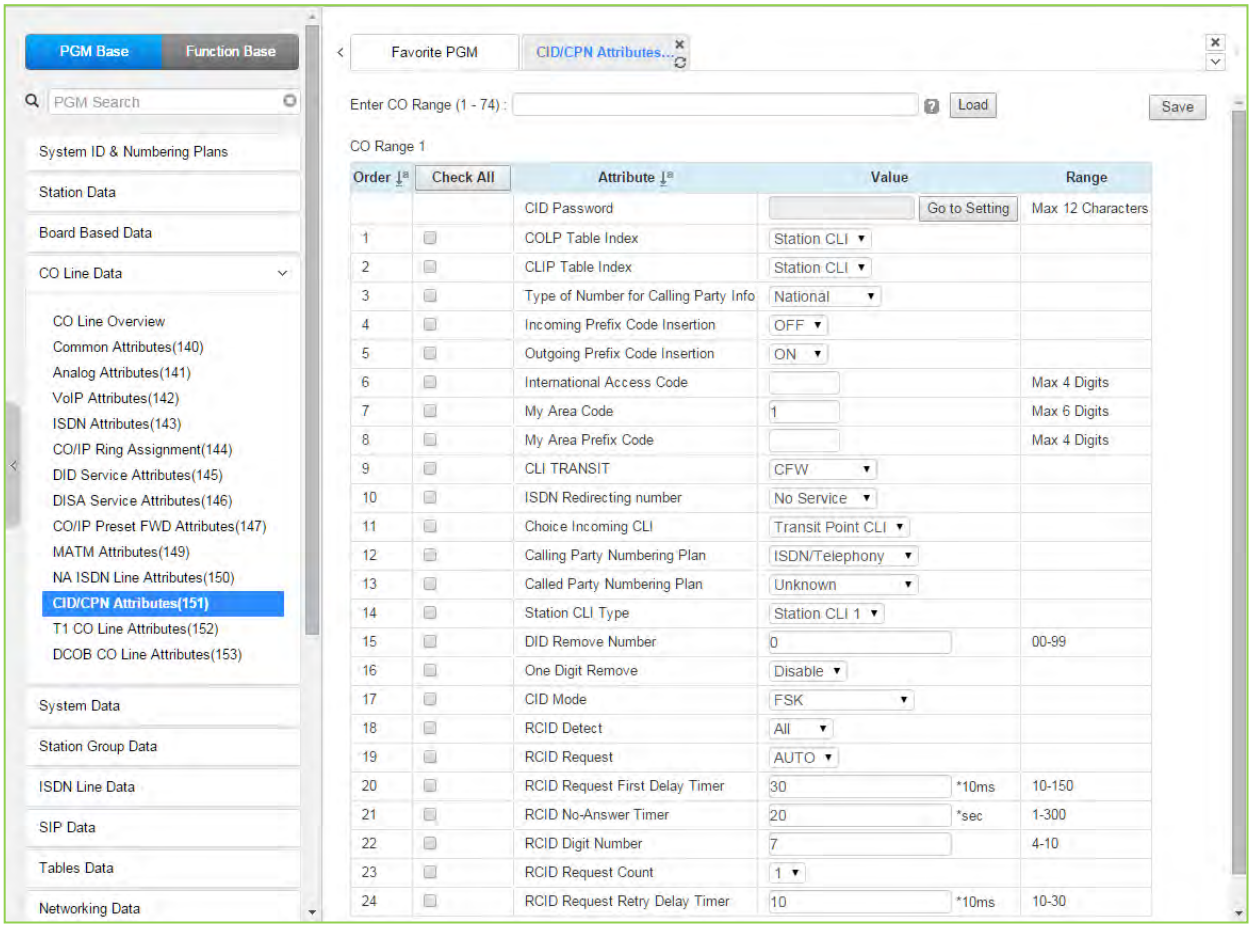


Figure 4.4.4.11-1 CID/CPN Attributes

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

Setting CID Password directly

You can set the CID password to click “Go to Setting” button. After clicking it, you will move to the following PGM 162 and set the CID password, and then save CID password to mark 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 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	N/A 0-49 Station CLI	Station CLI

Table 4.4.4.11-1 CID/CPN ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
	the caller id. For “Using Station’s COLP Attribute”, the Station CLI type entered below will be used in place of the station number.		
CLIP Table Index	When a call is placed on an ISDN Line, the system will send 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 CLIP Attribute”, the Station CLI Type entered below will be used in place of the station number.	N/A 0-49 Station CLI	Station CLI
Type of Number for Calling Party Info	For outgoing calls on an ISDN Line, this parameter defines the “Type of Number Plan” provided in Calling Party Information Element of the ISDN call SETUP message.	Unknown/ International/ National/ Unused/ Subscriber	National
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, section 4.4.2.4 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 system will not send this information. If it is configured for OGR CLI (original CLI) then system will send original CLI that is received from incoming CO line. If it is CFW CLI then system will send the redirecting CLI that is the CLI of the off-net call forwarding station.	NO SERVICE/ ORG CLI/ CFW CLI	NO SERVICE

Table 4.4.4.11-1 CID/CPN ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Choice incoming CLI	Incoming CLI Choice – When 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	Transit point CLI
Calling party numbering Plan	ISDN Calling Party Numbering Plan can be configured.	Unknown, ISDN/Telephony, Data/Numbering, Telex, National Std, Private, Reserved	ISDN/ Telephony
Called party numbering Plan	ISDN Calling Party Numbering Plan can be programmable.	Unknown, ISDN/Telephony, Data/Numbering, Telex, National Std, Private, Reserved	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 – Station 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	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

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 check mark to indicate which attributes to modify; data for checked attributes is stored by clicking **[Save]** button.

Enter CO Range: eMG80 : 1-74 / eMG800: 1-600

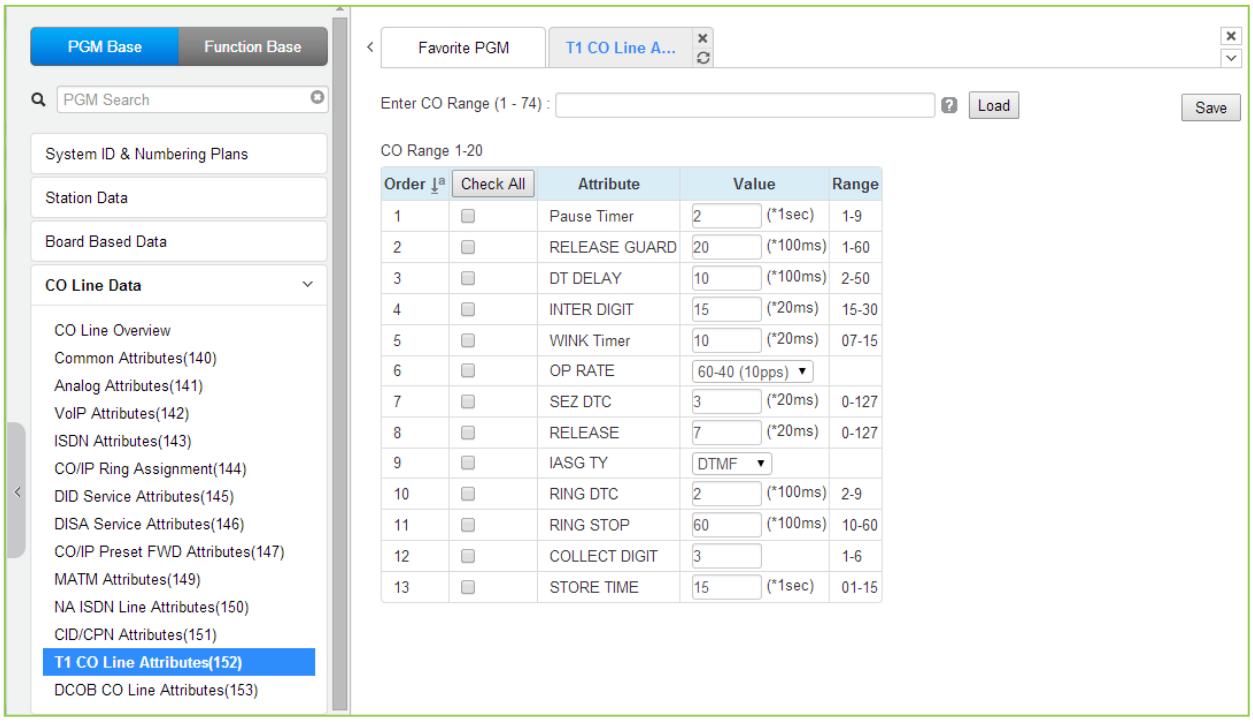


Figure 4.4.4.12-1 T1 CO Line Attributes

North American T1 standards require that the T1 terminating device, in this case iPECS eMG, 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. 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
OP RATE	For Pulse signaling, defines the duration and make/break ratio of each pulse.	60-40(10pps) 66-33(10pps) 60-40(20pps)	60-40 (10pps)

Table 4.4.4.12-1 T1 CO LINE ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
		66-33(20pps)	
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 length of 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 **[Load]** button to enter the DCOB Line Attributes data. Use the check mark to indicate which attributes to modify; data for checked attributes is stored by clicking **[Save]** button.

Enter CO Range: eMG80 : 1-74 / eMG800: 1-600

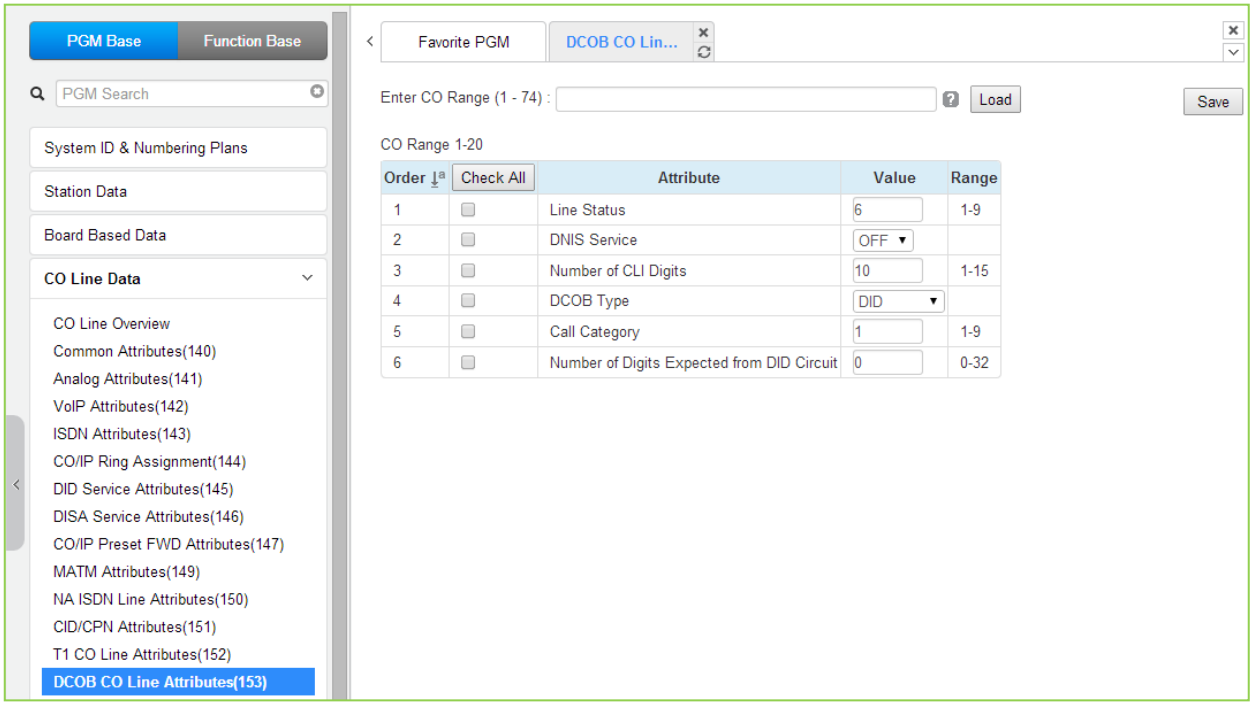


Figure 4.4.4.13-1 DCOB CO Line Attributes

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 in accordance with E1R2 specifications.	1~9	6
DNIS Service	In R2, this field determines whether 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 in accordance with 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.

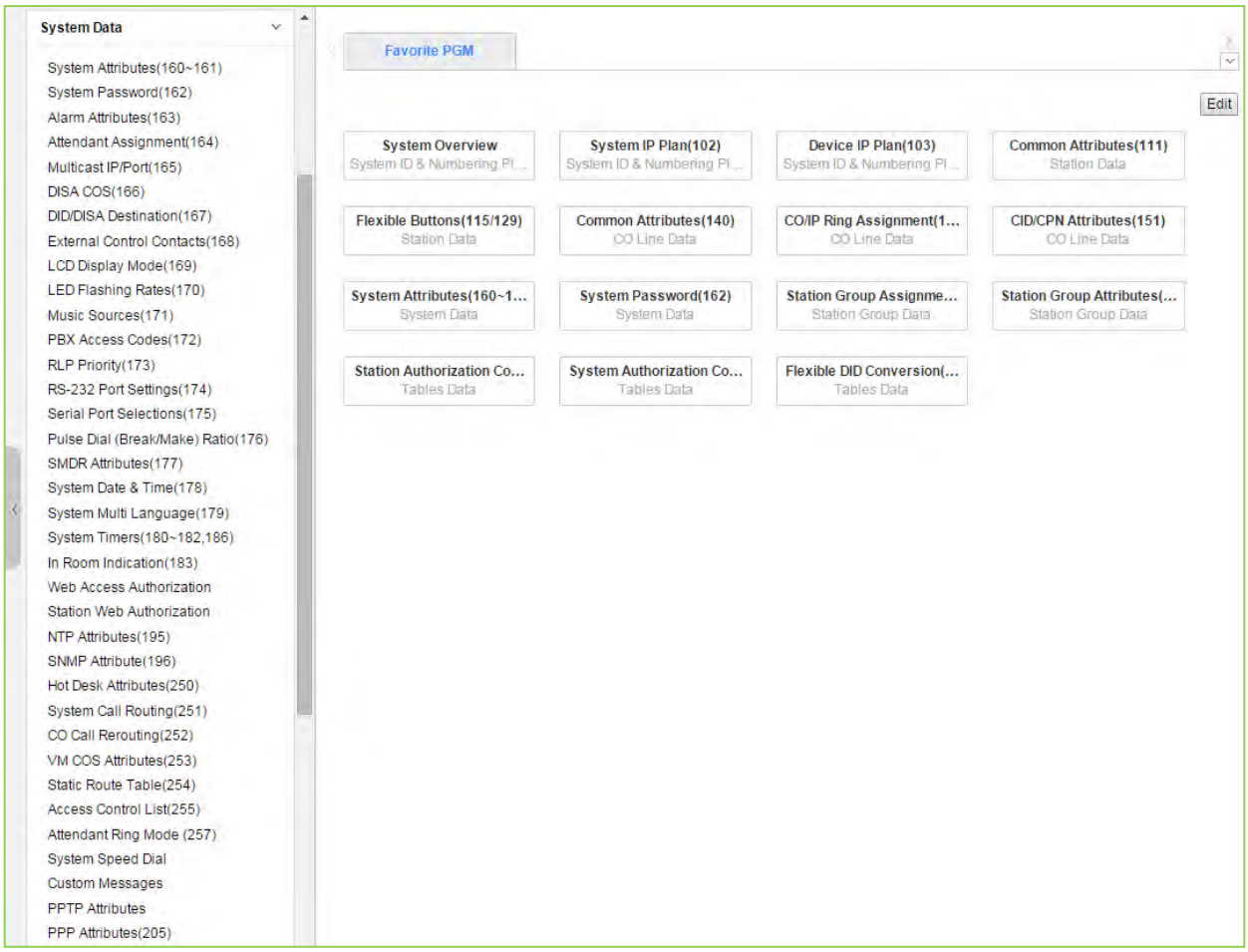


Figure 4.4.5-1 System Data Main Page

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 **[Save]** button after changing Value.

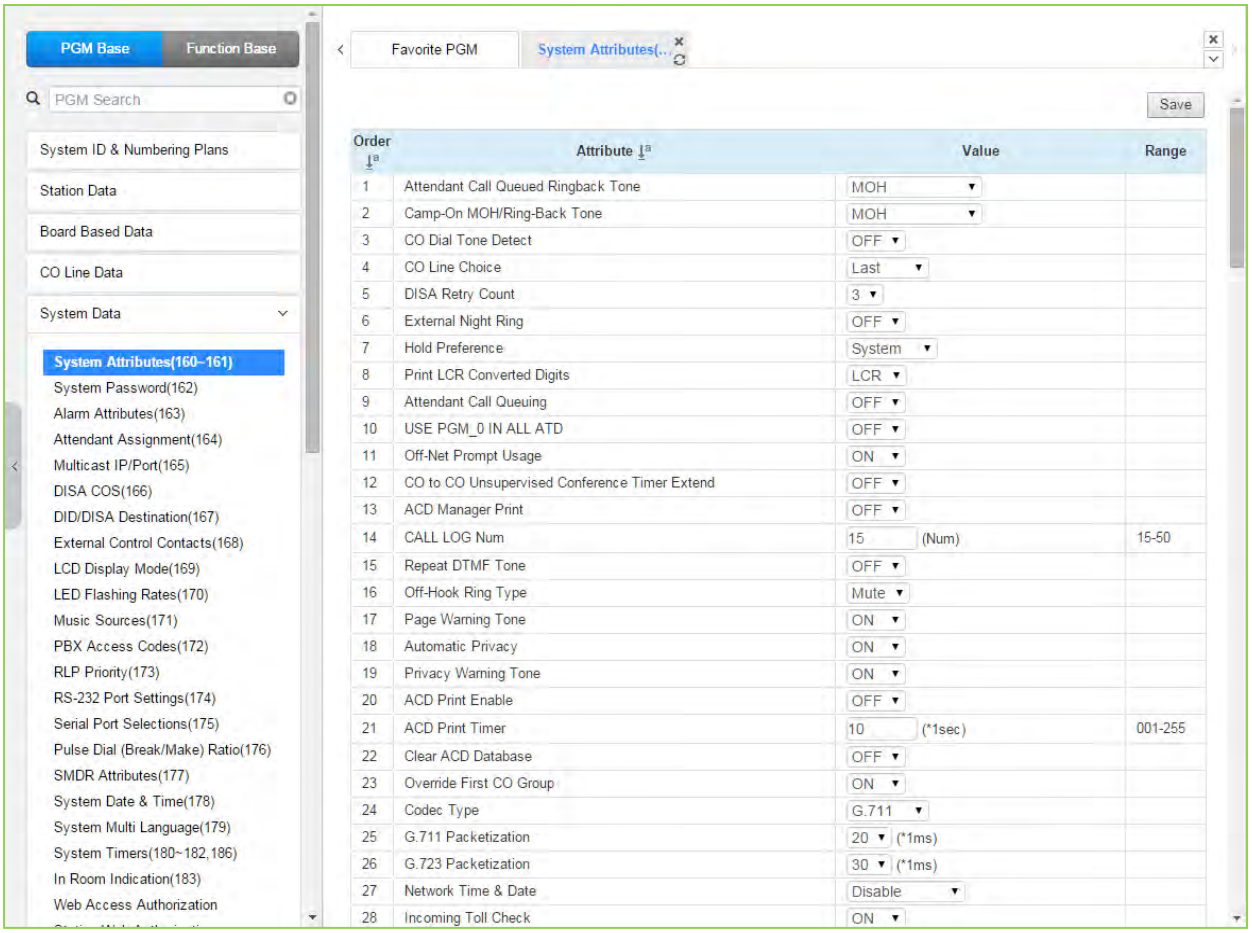


Figure 4.4.5.1-1 System Attributes

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 to click “Go to Setting” button. After clicking it, you will move to the following PGM 162 and set the CID password, and then save CID password to mark 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 calling a busy attendant, the system will provide either ring-back tone or MOH. If MOH is selected, the source must be defined in section 4.4.5.5.	MOH/ Ring-Back Tone	MOH
Camp-On MOH/Ring-Back Tone	When Camp-On is used, the calling station will receive either ring-back tone or MOH. If MOH is selected, a source must be defined in section 4.4.5.5.	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	CO Lines are selected by the system 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.	0~9	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 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	LCR
Attendant Call Queuing	The system can be configured to queue incoming calls to a busy Attendant	OFF ON	OFF
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	When a call is routed to a destination external to the iPECS, the Off Net routing prompt can be played. (Not available in US version.)	OFF ON	ON
CO to CO Unsupervised Conference Timer Extend	When an Unsupervised Conference is established with DISA, Off-Net Fwd, etc., the Unsupervised Conference timer, section 4.4.5.20, 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
CALL LOG Number	The Call Log saves the Outgoing call, Received call, or Lost call information and can be displayed by pressing Call Log Display Button. The maximum size of the Call Log per station is defined here.	15~50	15
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	OFF
Off-Hook Ring Type	Off-hook ring can be a single tone burst or muted normal ring.	MUTE/ BURST	MUTE

Table 4.4.5.1-1 SYSTEM ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Page Warning Tone	A warning tone can be sent prior to a page announcement.	OFF ON	ON
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 provide 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)	010
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	ON
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/ G723.1/ G711/ G722	G711
G711 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
G723 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 USA version.	Disable/ ISDN/ NTP	Disable
Incoming Toll Check	The system can invoke COS dialing restrictions when a user dials while connected to incoming call.	OFF ON	ON
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	80/ Disable
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	System Authorization codes are entered by the user 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