The Business Telephone Specialists

# GDS-600

Digital Telephone System
ISDN Digital Telephone System

*System Programming*
*V3.1.10*

## Notification

Notification is hereby given that Auto Telecom Company Ltd. reserves the right to modify, change, update or revise this document from time to time as required without the prior obligation to notify any person, company or organization. Further, Auto Telecom makes no warranty or representation, either express or implied, with respect to merchantability, or fitness of its products for a particular purpose.

## IMPORTANT SAFETY INSTRUCTIONS

**Installation Safety Precautions**:

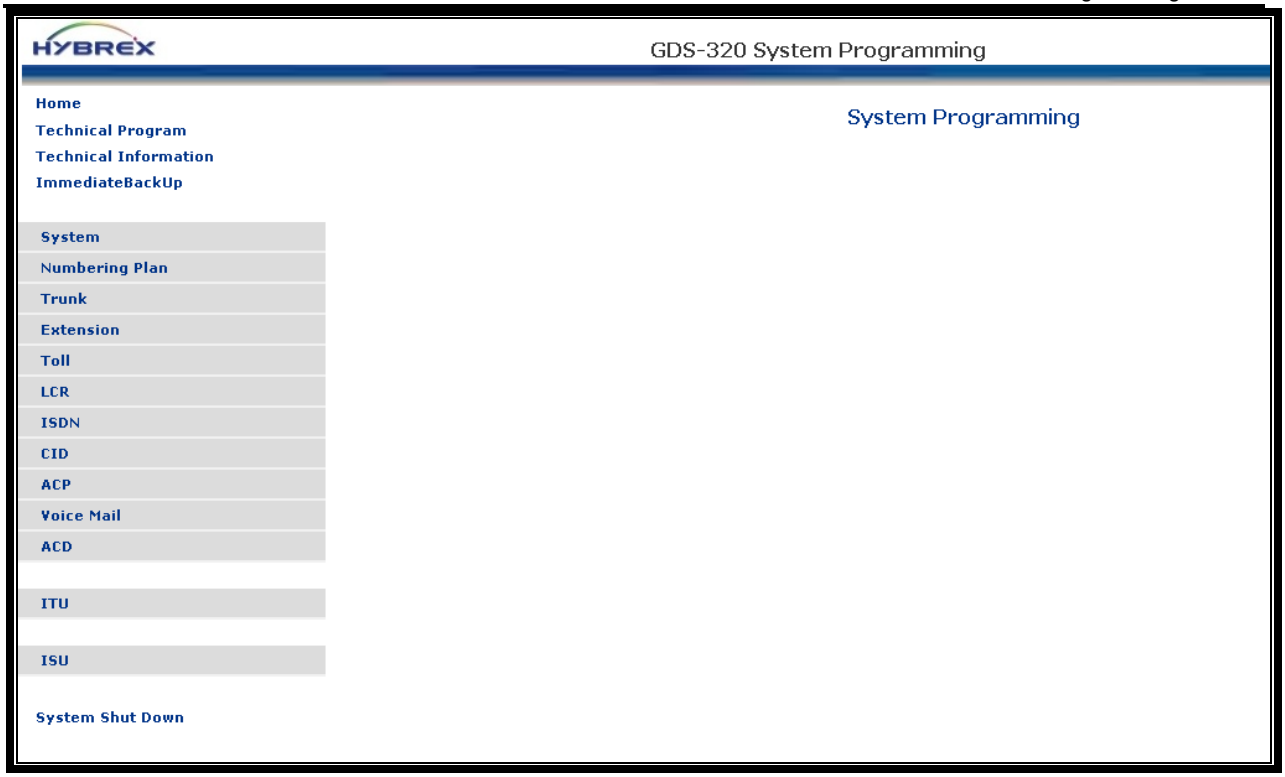
1. Never install telephone wiring during a lightning storm.
2. Never install telephone jacks in wet locations unless the jack is specifically designed for wet locations.
3. Never touch un-insulated telephone wires or terminals unless the telephone line has been disconnected at the network interface.
4. Use caution when installing or modifying telephone lines.

The ***HYBREX*** GDS-600 utilizes a 3 pin grounding power supply cord. This cord is not to be attached to any building surfaces. When using your telephone equipment, basic safety precautions should always be followed to reduce the risk of fire, electric shock and injury to persons, including the following:

1. Read and understand all instructions.
2. Follow all warnings and instruction marked on the product.
3. Unplug this product from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.
4. Do not use this product near water, for example, near a bath tub, wash bowl, kitchen sink, or laundry tub, in a wet basement, or near a swimming pool.
5. Do not place this product on an unstable cart, stand, or table. The product may fall, causing serious damage to the product.
6. Slots and openings in the cabinet and the back or bottom are provided for ventilation, to protect it from overheating, these openings must not be blocked or covered. The openings should never be blocked by placing the product on the bed, sofa, rug, or other similar surface. This product should never be placed near or over a radiator or heat register. This product should not be placed in a built-in installation unless proper ventilation is provided.
7. This product should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supply to your home or office, consult your dealer or local power company.
8. The socket-outlet shall be installed near the equipment and shall be easily accessible.
9. This product is equipped with a three wire grounding type plug, this plug will only fit into a grounding type power outlet. This is a safety feature. If you are unable to insert the plug into the outlet, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the grounding type plug.
10. Do not allow anything to rest on the power cord. Do not locate this product where persons walking on it will damage the cord.
11. Do not overload wall outlets and extension cords as this can result in the risk of fire or electric shock.
12. Never push objects of any kind into this product through cabinet slots as they may touch dangerous voltage points or short out parts that could result in a risk of fire or electric shock. Never spill liquid of any kind on the product.
13. To reduce the risk of electric shock, do not disassemble this product, but take it to a qualified service man when some service or repair work is required. Opening or removing covers may expose you to dangerous voltages or other risks. Incorrect reassembly can cause electric shock when the appliance is subsequently used.
14. Unplug this product from the wall outlet and refer servicing to qualified service personnel under the following conditions:
    A. When the power supply cord or plug is damaged or frayed.
    B. If liquid has been spilled into the product.
    C. If the product has been exposed to rain or water.
    D. If the product does not operate normally by following the operating instructions. Adjust only those control, that are covered by the operating instructions because improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the product to normal operation.
    E. If the product has been dropped or the cabinet has been damaged.
    F. If the product exhibits a distinct change in performance.
15. Avoid using a telephone (other than a cordless type) during an electrical storm. There may be a remote risk of electric shock from lightning.
16. Do not use the telephone to report a gas leak in the vicinity of the leak.

# HYBREX GDS-600
## ISDN Digital Telephone System
## General Description - Installation - Programming Manual

### Table of Contents


HYBREX
GDS-320 System Programming
Home
Technical Program
Technical Information
ImmediateBackUp
System
Numbering Plan
Trunk
Extension
Toll
LCR
ISDN
CID
ACP
Voice Mail
ACD
ITU
ISU
System Shut Down
System Programming

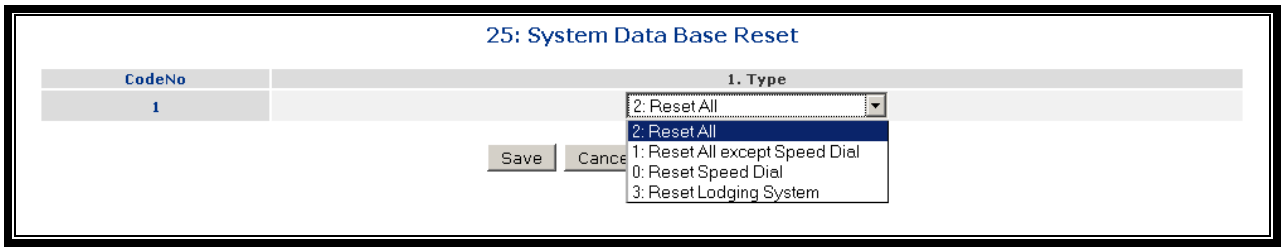
## Programming Information

This document contains the system forms required to program the GDS-600 and an explanation of the parameters.

***New Systems***

We recommend that all new systems have the system memory reset before system programming takes place. This ensures that any extraneous information that may be present in system memory is erased and that the system database will not be corrupt.

To Reset System Memory (Refer to Program Mode 25).




**If the system is a hotel installation then it is highly recommended that after system reset is performed then the Reset Lodging System be performed. This will set Analogue phones to Guest phones and set permanent Call Forward Busy and No Answer to VMU for each extension saving a lot of programming time.**

**Once the system is set to Default then you should perform an immediate backup. If this is not done and the system is switched off within the next hour it may revert to previous programming settings or introduce corruption to the programming database.**

**It is strongly recommended that you ALWAYS do an immediate backup before switching off a GDS system. If you do not it is highly likely that you will lose some or all of your setup changes. During programming it is advisable to regularly do an immediate backup for security of data.**

**You may now begin system programming.**

***Basic Programming Commands:***

**Note:**
Keys listed between [ ] indicate the default keys shown on a telephone set.
***See illustration Programming Overlay on the next page.***

These commands are active while in the system programming mode

[F4]{PRG} Moves to the Top Level Programming Mode Display (does not save information entered into any field unless [SAVE] is pressed first).

[F3]{SAVE} Commits the data that is showing on the LCD display into the system database.

[DSS 1]{PREV} Moves to the previous section of any multiple part form.

[DSS 2]{NEXT} Moves to the next section in any multiple part form.

[DSS 3]{LEFT} Moves the programming cursor to the left.

[DSS 4]{RIGHT} Moves the programming cursor to the right.

[DND/CN]{DON'T CARE} Enters a Wild Card (don't care) into Account Codes or Toll control entries. LCD will display d (lower case letter "d") to indicate don't care entry.

[HOLD]{PAUSE} Inserts a Pause when programming a Speed Dial Entry or for Voice Mail Programming. LCD will display p (lower case "p") to indicate a Pause entry.

[TRF/FL]{FLASH} Enters a FLASH command as part of a Speed Dial Entry. LCD will display F (upper case "F") to indicate a Flash command. Clears a digit during other entries (Passwords, etc).

[MSG]{P->T} Enters a command to convert from pulse dialing to DTMF dialing into a Speed Dial Entry. LCD will display T (upper case "T") to indicate a tone conversion command.

[MIC/AT]{CHANGE} CHANGE key. Depending on form, it will cycle through available Programming parameters.

[TRF/FL]{CLR DIGIT} Enters a FLASH command as part of a speed dial number. Clears a digit during other entries (Passwords, etc).

[SPK]{EXIT} Exits Programming. Returns telephone to normal idle mode.

[REDIAL]{CLR ALL} Clears all digits on an entry such as speed dial or account codes.

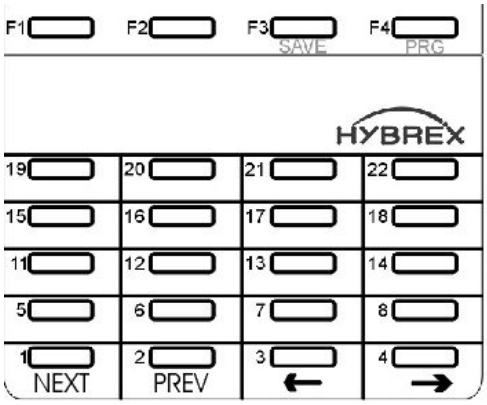
***Alphanumeric Entry:***

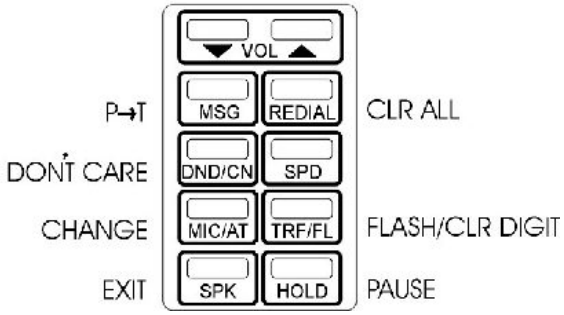
The following table indicates the capabilities of the name programming functions if they are selected on the system. System Speed Dial, Personal Speed Dial, Stations, CO Lines and Sensors may be programmed with names.

| | | | |
|---|---|---|---|
| Key 1 = | (Blank Space) – 1 | Key 2 = | A - B - C – 2 |
| Key 3 = | D – E - F – 3 | Key 4 = | G - H - I – 4 |
| Key 5 = | J – K - L – 5 | Key 6 = | M - N - O – 6 |
| Key 7 = | P - Q - R - S – 7 | Key 8 = | T - U - V – 8 |
| Key 9 = | W - X - Y - Z – 9 | Key 0 = | (Period). : & – 0 |
| Key # = | ( ) $ # | Key * = (Dash) | / ! * |
| DSS Key 1 = | Backspace Cursor (Left) | DSS Key 2 = | Cursor Forward |

If an entry is made that is not within valid system parameters, the HYBREX system will not accept the entry when [SAVE] is pressed. The Speaker on the programming set will return a busy tone and the LCD Display will place the programming cursor under the offending entry. You may make corrections and press [SAVE] again. If multiple errors are made, the system will continue to return you to the illegal entries as others are corrected.

It is not necessary to re-enter existing information on a multi-item form. You need enter only the information that is to be changed. You may move the cursor to the left or right in order to access only the specific entry that you want to change. You may press [SAVE] without regard for the placement of the cursor on the LCD display.

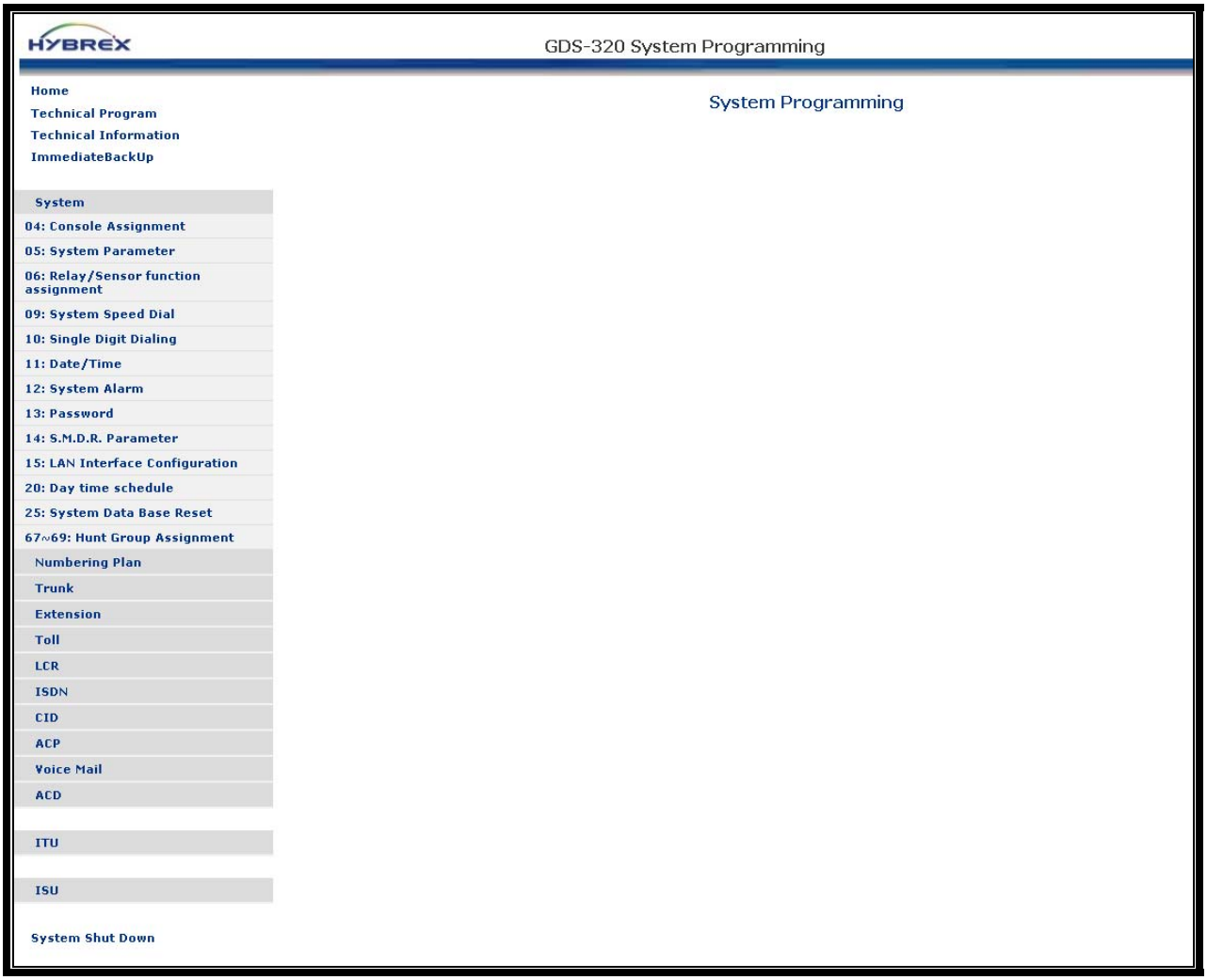


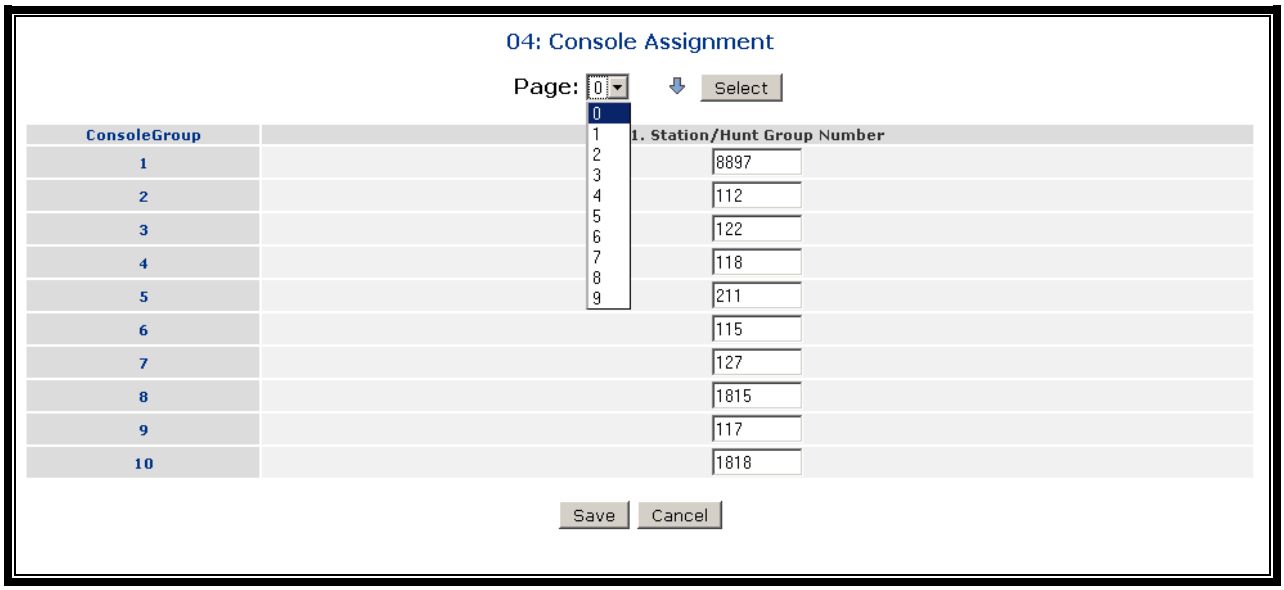
# System Programming - System

The Category “System” includes the following system programming modes:

- Mode 04: Console Assignment
- Mode 05: System Parameters
- Mode 06: Relay/Sensor Function Assignment
- Mode 09: System Speed Dial
- Mode 10: Single Digit Dialling
- Mode 11: Date/Time
- Mode 12: System Alarm
- Mode 13: Password
- Mode 14: S.M.D.R. Parameters
- Mode 15: LAN Interface Configuration
- Mode 20: Day / Night Time Schedule
- Mode 25: System Data Base Reset
- Mode 67~69: Hunt Group Assignment



## Program 04-gp-IP : Console Assignment

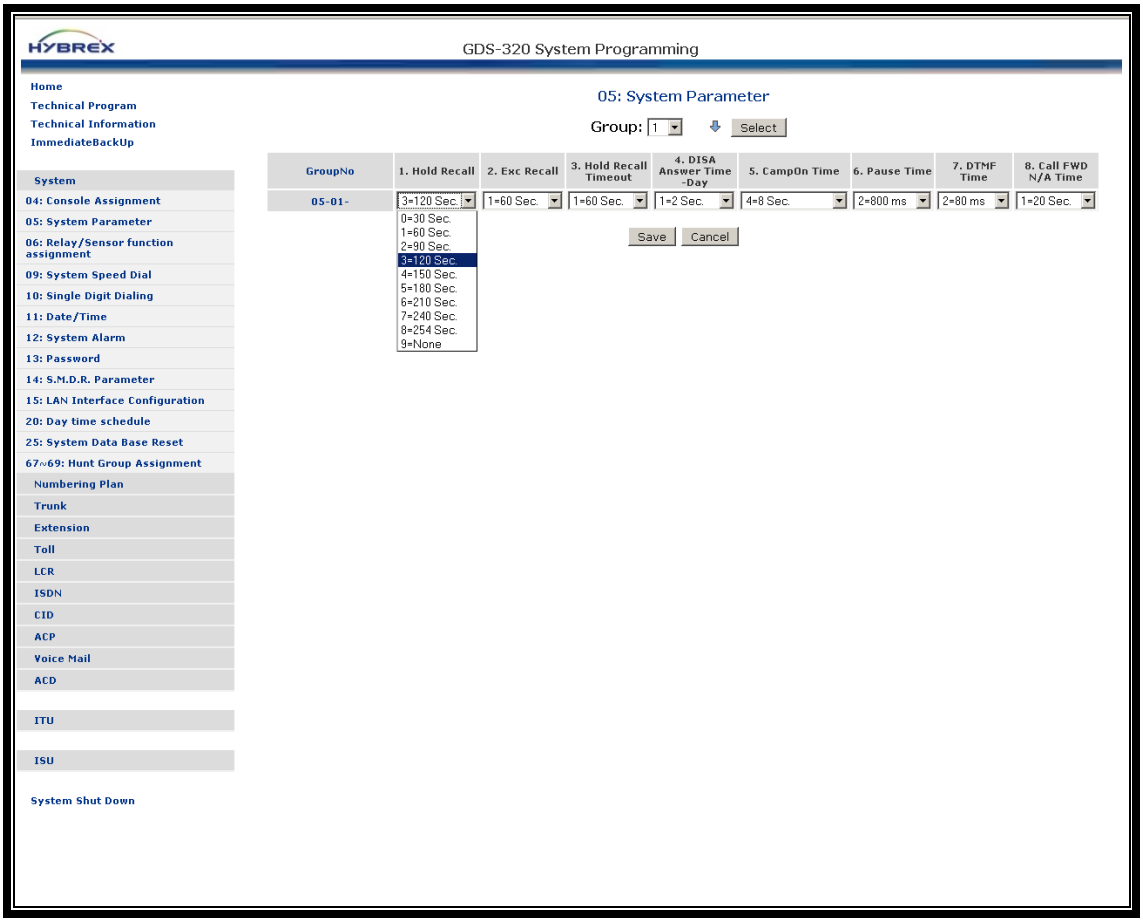



| | |
|---|---|
| 04-gp-IP Console 111 | gp = Station group (01-16)(01-99) IP = 01<br>Assigned station number or pilot number of hunting group |

**General:**
This program permits the selection of the consoles in each station group.

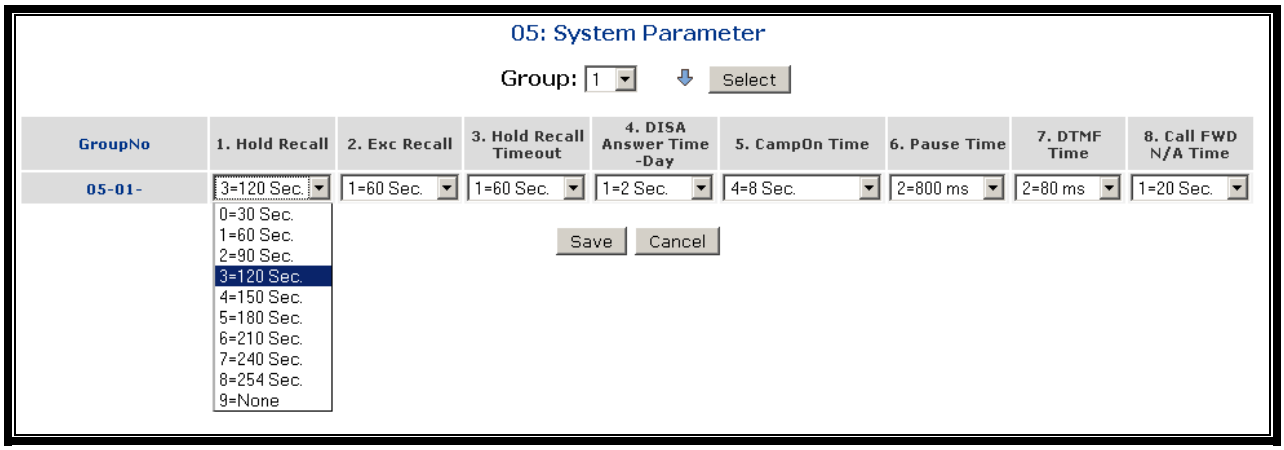
**Description:**
1. There are 16 console groups available for the MPU2
2. There are 99 Console groups available for the MPU4/MPU8.
3. Assign either a station or the pilot number of a hunting group as the console(s).
4. The first assigned station is the master console if a pilot number is assigned here.
5. Stations assigned as consoles will receive calls made by internal stations dialling 9/0, be able to program System Speed dials, record voice messages for AA and ACD operation, access hotel features and extra Programming modes from the Web Browser.

# Program 05 : System Parameter




Each parameter in mode 05 contains a drop down menu which in most cases will give all options and timing table details with out needing to refer to the manual.

## Program 05-01-IP : System Timing Parameters – 01




| Item Pointer | Display Data | Programming Data Description | Timing Table | Default |
|---|---|---|---|---|
| 01 | 0-9 | Hold Recall Time | A | 1=60 Sec. |
| 02 | 0-9 | Exclusive Hold Recall Time | A | 1=60 Sec. |
| 03 | 0-9 | Hold Recall Timeout | A | 1=60 Sec. |
| 04 | 0-9 | DISA Access Delay Time - Day | C | 1=2 Sec. |
| 05 | 0-9 | Busy Remind Cycle Time | C | 4=8 Sec. |
| 06 | 0-9 | Pause Time | D | 2=800 Ms. |
| 07 | 0-9 | DTMF Generation Time | E | 2=83 Ms. |
| 08 | 0-9 | Call Forward No Answer TRF. Time | | 1=20 Sec. |

**Description:**

**01. Hold recall time:**

This parameter sets the time duration from when Hold is initiated to when the held call starts to ring (recall) the station.
After a pre-determined recall time (see 05-01-03: Hold Recall Timeout), if the station still does not answer, the hold call will automatically transfer to the Console.

**02. Exclusive Hold recall time:**

This parameter sets the time duration from when Exclusive hold is initiated to when the held call starts to recall the station.
After a pre-determined recall time (see 05-01-03: Hold Recall Timeout), if the station still does not answer, the held call will recall to the Console in addition to the holding station.

**03. Hold Recall Timeout:**

This parameter sets the time between a call recalling to a holding or transferring station and then recalling to the console if unanswered.

See timing table Grade A for parameters of these 3 features.

**04. DISA Access Delay Time - Day:**

This parameter sets the time duration that a DISA trunk will ring prior to connection with return dial tone or VSC message during Day time setting. (Stations can answer during this time.)

0 = Automatic connection, no ring to the stations.
1-8 = Automatic connection after 2-254 seconds ringing.

See timing table grade C for parameters for this feature. See Mode 05-03-05 for Night Delay time

**05. Busy Remind Cycle Time (Off-Hook Ringing):**

This parameter selects the length of time an incoming trunk call rings the system before a busy ring assigned station is reminded of the call. A muted, one-second ring will be given to the station through the speaker to indicate the call. The tone will be repeated every busy remind time interval.
This parameter also sets the timing for the SLT Camp-On feature (see Mode 05-08-03 to extend timing for SLT Camp on tone) and the camp on tone for key stations.

See timing table Grade C for parameters of this feature.

**06. Pause Time:**

This parameter sets the system pause time duration for speed dial entry, trunk access time and voice mail call forwarding tone delay.

See timing table Grade D for parameters of this feature.

**07. DTMF Generation Time:**

This parameter permits the selection of DTMF Generation output time. The generation time may need to be lengthened to access some Voice Mail or answering machines.

See timing table Grade E for parameters of this feature.

**08. Call Forward No Answer Transfer Time:**

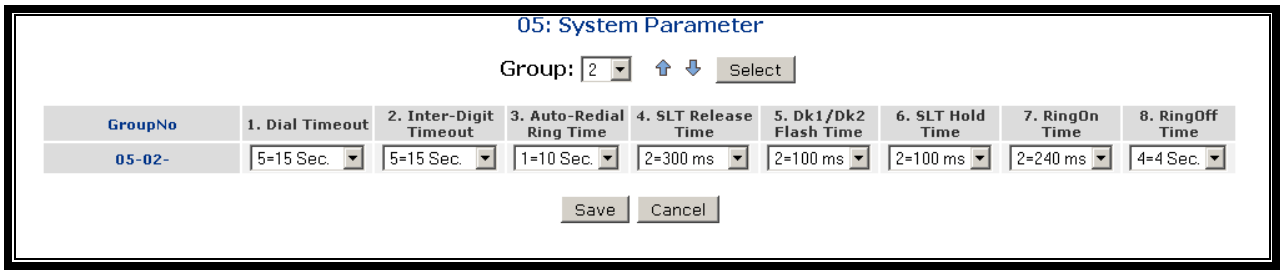
This parameter sets the duration between calling a station that has set call forward no answer, and the transfer of the call to the station to which it has been forwarded.

0 = 10 sec. 1 = 20 sec. 2 = 30 sec. ..... 9 = 100 sec.

**TIMING TABLE**

| Grade | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | Unit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| A | 30 | 60 | 90 | 120 | 150 | 180 | 210 | 240 | 253 | - | Sec. |
| C | 0 | 2 | 4 | 6 | 8 | 15 | 30 | 60 | 120 | 254 | Sec. |
| D | 400 | 600 | 800 | 1000 | 1200 | 1400 | 1600 | 1800 | 2000 | 2200 | ms. |
| E | 48 | 64 | 80 | 100 | 114 | 132 | 156 | 164 | 180 | 196 | ms. |

## Program 05-02-IP : System Timing Parameters – 02




| Item Pointer | Display Data | Programming Data Description | Timing Table | Default |
|---|---|---|---|---|
| 01 | 0-9 | SLT Dial Tone Timeout | C | 5=15 Sec. |
| 02 | 0-9 | SLT Inter-Digit Timeout | C | 5=15 Sec. |
| 03 | 0-9 | Auto Redial Ringing Time | | 1=10 Sec. |
| 04 | 0-9 | SLT Release Signal | J | 1=200 ms. |
| 05 | 0-9 | Flash Time - Key Phone | B | 2=100 ms. |
| 06 | 0-9 | SLT Hold Signal | I | 2=100 ms. |
| 07 | 0-9 | Ring On Time | G | 2=240 ms. |
| 08 | 0-9 | Ring Off Time | F | 4=4 Sec. |

**Description:**

**01. SLT Dial Tone Timeout:**

This parameter is for Single Line Telephones. If a key is not pressed before the assigned time period expires when Dial Tone is given, a Busy Tone will be heard.

**02. SLT Inter-Digit Timeout:**

This parameter is for Single Line Telephones. If the interval between digits dialled exceeds the assigned time period, a Busy Tone will be given.

See timing table Grade C for parameters of these features.

**03. Auto Redial Ringing Time – PSTN lines:**

This parameter is the time duration for which the system will redial the telephone number automatically and then hang up during Auto Redial on PSTN lines. ISDN lines will hang up immediately if the called number is busy.

1 = 10 sec. 2 = 20 sec. ..... 9 = 90 sec.

| **Off Hook** | Auto-Redial Pause Time (Program 05-05-08), Y seconds | **Off Hook** |
|---|---|---|
| **Auto-Redial Ringing Timer** | On Hook | **Auto-Redial Ringing Timer** |

**04. SLT Release Signal:**

This parameter is the time duration of depressing the hook switch of an SLT that the system will see as a hang up, the system will take it as a hold signal if less than this time but longer than the SLT hook flash time.

0 = 104 ms 1 = 208 ms 2=304 ms 3 = 400 ms 4 =608 ms

5 = 800 ms 6 = 1008 ms 7 =1200 ms 8 = 1408 ms 9 = 1600 ms

**05. Exchange Line Flash Time - Key Phone & Analogue Phone:**

This parameter permits the selection of Flash time for Key stations when pressing the **[TRF/FL]** key or an analogue phone which presses flash and then dials 800 while connected to an outside line. After dialling 800 the flash signal will be sent to the exchange line and the analogue phone will reconnect to the exchange line.

See timing table Grade B for parameters of this feature.

**06. SLT Hold Signal:**

This parameter permits the selection of the Flash time from a single line telephone that the system will see as a Hold signal if the time is greater than the hold signal but less than the SLT release time.

See timing table **Grade I** for parameters of this feature.

| DURING CONVERSATION | HOOK PRESSED-Period B | HOOK RELEASED |
|---|---|---|
| | Period **B <** SLT Release Time | **Hold** |

| DURING CONVERSATION | HOOK PRESSED-Period B | HOOK RELEASED |
|---|---|---|
| | Period **B >** SLT Release Time | **Hang Up** |

**07. Ring On Time:**

This parameter allows the system to identify Ring On Time Interval from the Exchange.
See timing table Grade G for parameters of this feature.

**08. Ring Off Time:**

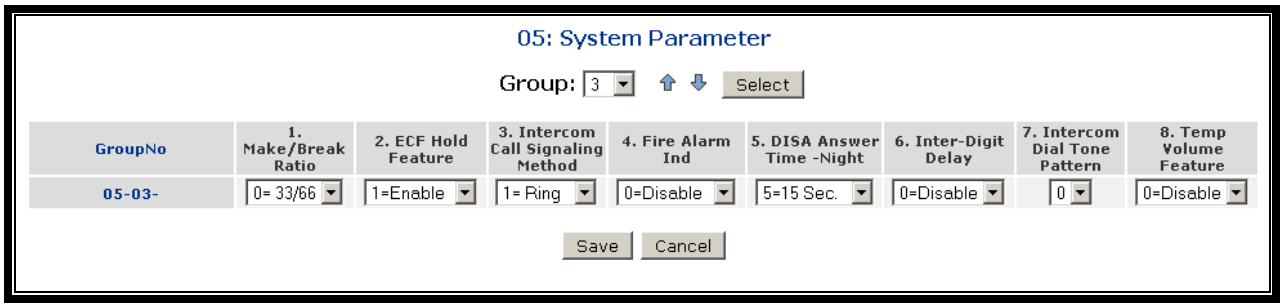
This parameter allows the system to identify Ring Off Time Interval from the Exchange

See timing table Grade F for parameters of this feature.

**TIMING TABLE**

| Grade | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | Unit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | |
| B | 60 | 80 | 100 | 120 | 140 | 160 | 180 | 200 | 300 | 600 | ms. |
| C | 0 | 2 | 4 | 6 | 8 | 15 | 30 | 60 | 120 | 254 | Sec. |
| F | 2 | 2 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | Sec. |
| G | 80 | 160 | 240 | 360 | 440 | 560 | 640 | 760 | 840 | 960 | ms. |
| I | 60 | 80 | 100 | 200 | 300 | 400 | 500 | 600 | 700 | 800 | ms. |
| J | 100 | 200 | 300 | 400 | 600 | 800 | 1000 | 1200 | 1400 | 1600 | ms. |

## Program 05-03-IP : System Timing Parameters – 03




| Item Pointer | Display Data | Programming Data Description | | Default |
|---|---|---|---|---|
| 01 | 0-1 | Make / Break Ratio | | 0=33/66 |
| 02 | 0-1 | ECF Hold Feature | | 0=Disable |
| 03 | 0-1 | Intercom Call Signalling Method | | 1=Ring |
| 04 | 0- | Fire Alarm Notification | | 0=Disable |
| 05 | 0-9 | DISA Answer Delay Time - Night | C | 0=0 |
| 06 | 0-9 | Inter Digit Delay | | 0=None |
| 07 | 0-1 | Intercom Dial Tone Pattern/Stutter Dial Tone | MW | 0=Steady |
| 08 | 0-9 | Temporary Volume Feature | | 0=Disable |

**Description:**

**01. Make/Break Ratio:**

This parameter permits the selection of a Make/Break Ratio for Dial Pulse signalling.

0 = 33/66 1 = 40/60

**02. ECF Hold Feature:**

This parameter when enabled allows the receiving party of an External Call Forward from the system to place that call on hold within the Call Forwarding system (press *) and receive system dial tone to facilitate further call handling or to transfer the inwards caller to an extension within the system or make an enquiry call and return to the external caller.

0 = Disable 1 = Enable

**03. Intercom Call Signalling Method:**

This parameter selects the Intercom calling method. The user can still override this selection by dialling 3 after initiating an intercom call. Individual stations can be set to automatic microphone switch-on in mode 46-st-03 and thus override the system wide ring method.

0 = Voice Signalling. 1 = Ring Signalling.

**04. Fire Alarm Notification:**

This parameter selects a system speed dial the system will call when the Fire Alarm is triggered.

**05. DISA Access Delay Time - Night:**

This parameter sets the time duration that a DISA trunk will ring prior to connection with return dial tone or VSC message during Night time setting. (Stations can answer during this time.)

0 = Automatic connection, no ring to the stations.
1-8 = Automatic connection after 2-254 seconds ringing.

See timing table grade C for parameters for this feature. See Mode 05-01-04 for Day Delay time

**06. Inter Digit Delay:**

This parameter will delay the response of the system when dialling an intercom call to allow time to dial another digit that may change the destination. For example mode 05-03-06 is set to 5 and the system numbering has room 111 (floor 1 room 11) and Room 1111 (floor 11 room 11) and single digit dialling for 1 to the restaurant If an extension dials 1 the system will still wait to give them time to dial 111 or 1111 but if no more digits are dialled the call will go to the bar.

0 = No delay 1 = 1 sec. 2 = 2 sec. ……. 8 = 8 sec. 9 = 9 sec.

**07. Intercom Dial Tone Pattern/Stutter Dial Tone MW:**

This parameter assigns the pattern of intercom dial tone. If the parameter is set to 1 or 2 then analogue phones will receive the special DND tone if call forward or DND has been set for that extension. Item 2 is particularly designed for use when there is a Voice Mail system connected to the system as some Voice mail units have problems with the broken dial tone. Setting 6 will provide a Stutter dial tone to extensions that have a Message Wait set to them and do not have any other type of MW notification. Stutter Dial tone and other types of notification can be used simultaneously in the system. **If Stutter dial tone is enabled then it is particularly important that SLT ports such as faxes and eftpos machines are set to NOT receive Message Wait in mode 46-st-02.**

| Setting | Intercom | DND | CFD | MW | Call Forward |
|---|---|---|---|---|---|
| 0 | Steady | SP. | SP. | Steady | SP. |
| 1 | Interrupted | SP. | SP. | Interrupted | SP. |
| 2 | Steady | Steady | Steady | Steady | Steady |
| 3 | Interrupted | Interrupted | Interrupted | Interrupted | Interrupted |
| 4 | Steady | SP. | SP. | Interrupted | SP. |
| 5 | Interrupted | SP. | SP. | Steady | SP. |
| 6 | Steady | Steady | Steady | Interrupted | Steady |
| 7 | Interrupted | Interrupted | Interrupted | Steady | Interrupted |

MW: Message Waiting. DND: Do not disturb. CFW: Call Forward.

**08. Temporary volume feature:**

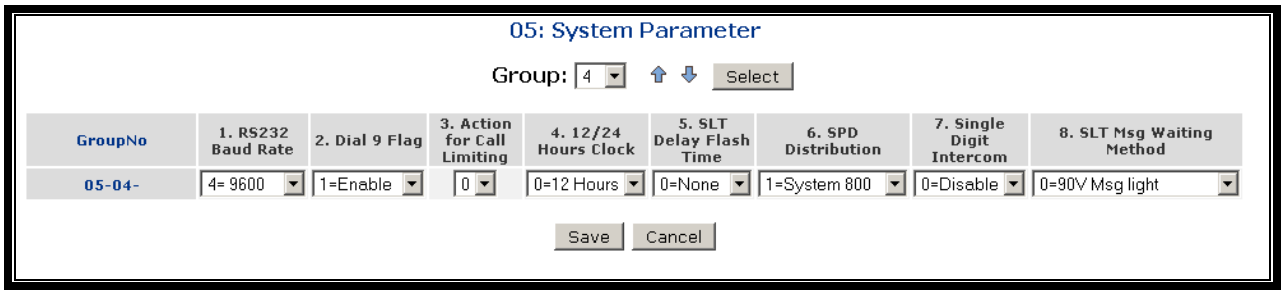
If this parameter is enabled than any changes made during a call will revert to handset default settings at the end of the call. If left disabled then settings made during a call will be permanent from that time.

0 = Disable 1 = Enable

**TIMING TABLE**

| Grade | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | Unit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| C | 0 | 2 | 4 | 6 | 8 | 15 | 30 | 60 | 120 | 254 | Sec. |

## Program 05-04-IP : System Timing Parameters – 04




| Item Pointer | Display Data | Programming Data Description | Default |
|---|---|---|---|
| 01 | 0-7 | RS232 Baud Rate | 4=9600 |
| 02 | 0-1 | Dial 9 Flag | 1=Enable |
| 03 | 0-8 | Action for Call Duration Limiting | 0=Warning |
| 04 | 0-1 | 12/24 Hours Clock | 0=12 Hours |
| 05 | 0-9 | Flash Delay Time | 0=None |
| 06 | 0-4 | Speed Dialling Distribution | 1=400 Sets(GDS160) |
| 07 | 0-1 | Single Digit Intercom | 0=Disable |
| 08 | 0-4 | Message Waiting Method - Analogue Phones | 0=90V DC |

**Description:**

**01. RS232 Baud Rate:**

This parameter sets the baud rate for the RS232 port on G2-MSU card. This RS232 port can be used for SMDR, CTI signalling, MODEM for remote programming purpose (MPU RS232 port only).

0 = 1200 1 = 2400 2 = 3600 3 = 4800 4 = 9600 5 = 19200 6 = 38400 7 = 56000 (bps)

**Caution:** High baud rate settings could cause low system performance for other applications.

**02. Dial 9 Flag:**

This parameter sets if a station can access an outgoing line by dialling 9. If this parameter is disabled the station can still access an outgoing line by pressing a line key.

0 = Can not access dial 9 feature 1 = Can access dial 9 feature

**03. Action for Call Duration Limiting:**

This parameter decides what action will be taken if a station has limit call duration enabled in Mode 40-nnnn-03. Settings 0 to 3 are for outgoing calls only. The outside party will also hear the warning tone.

l 0 & 5 = Continuous Warning Tone after Timeout.
1 & 6 = 1 second Warning Tone for each cycle of Limit Call Duration
2 & 7 = At 10 seconds before Timeout, 1 second Warning Tone,
At 5 seconds before timeout, continuous Warning Tone,
At timeout the line is released.

3 & 8 = At 1 minute before timeout, 1 second warning tone,
At 30 seconds before timeout, continuous warning tone
At timeout the line is released.

**Related System Programming Mode: 05-04-03, 40-st-03**

**04. 12/24 Hours Clock:**

0 = 12 Hours Clock 1 = 24 Hours Clock

**05. SLT Flash Delay Time:**

This parameter if enabled will prevent the system from recognising a Flash signal from an SLT for the period of time set here. This allows a Decadic dial phone to dial out even though the SLT hold signal would normally be triggered by the Decadic Make/Break pulses.

0 = No delay 1 = 1 sec 2 = 2 sec 3 = 3 sec…….9 = 9 sec.

**06. Speed Dialling Distribution:**

This parameter sets the number of speed dial numbers allocated to the system speed dial. Adding extra numbers to system Speed Dial reduces the number of personal Speed Dial numbers shared between individual stations.

| | | | |
|---|---|---|---|
| 0 = System 200 | : Individual 1800/900 | 1 = System 400 | : Individual 1600/800 |
| 2 = System 600 | : Individual 1400/ 700 | 3 = System 800 | : Individual 1200/ 400 |
| 4 = System 1000 | : Individual 1000/0000 | 5 = System 1200 | : Individual 800/000 |
| 6 = System 1400 | :Individual 600/000 | 7 = System 1600 | : Individual 400/000 |
| 8 = System 1800 | :Individual 200/000 | 9 = System 2000 | : Individual 000/000 |

**Numbers after backslash indicate sets available with name feature enabled.**

**07. Single Digit Intercom:**

Single digit intercom allows the stations to call up to 5 other stations by dialling one digit only (1 to 5). This feature is for the Hotel / Motel Environment. Up to eight different groups may be programmed. If a group is not programmed with any entries then stations which are in the same number station group will be able to make intercom calls without dialling the room to room dialling prefix (6).

0 = Disable 1 = Enable

**08. Message Waiting Method for Analogue Phones:**

90V DC will operate industry standard neon light message waiting phones.

If the setting is Ring, the analogue phone will receive 30 seconds intercom ringing every 5 minutes until the station answers.

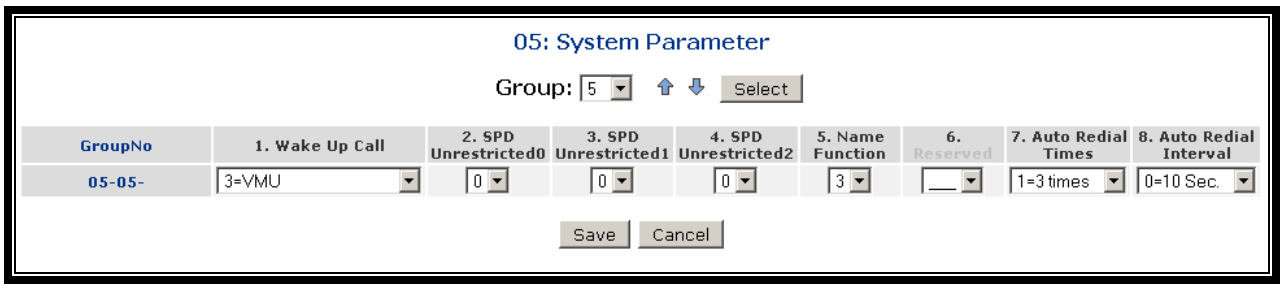
If the setting is 250 ms. Ring, the analogue phone will receive two 250-ms. ring burst every 5 minutes. This is for use with the special telephones to turn on message lamp.

If polarity reversal is used then the DC voltage polarity will be reversed when a message is set and will revert to normal when the message is cleared.

For Stutter Dial Tone MW see Mode 05-03-07. Stutter Dial tone can be used in conjunction with any of these settings.

0 = 90V DC 1= Ring 3 = Two 250 ms. Ring 4 = Polarity reversal

## Program 05-05-IP : System Timing Parameters – 05




| Item Pointer | Display Data | Programming Data Description | Default |
|---|---|---|---|
| 01 | 0-3 | Morning Call Type | 1=Music |
| 02 | 0-1 | Speed Dial Unrestricted-1 | 0=0 |
| 03 | 0-5 | Speed Dial Unrestricted-2 | 0=0 |
| 04 | 0-9 | Speed dial Unrestricted-3 | 0=0 |
| 05 | 0-7 | Name Feature for Extensions, Trunks, Speed dials | 0=Disable |
| 06 | 0-1 | Reserved | 0= |
| 07 | 0-9 | Auto Redial Times | 1=3 Times |
| 08 | 0-9 | Auto Redial Pause Time | 0=10 Sec. |

**Description:**

**01. Morning Call:**

This parameter is for the Hotel/Motel environment to decide what an extension will hear upon receiving a wake up call.

| | | |
|---|---|---|
| 0 = Chimes | 1 = SLT Music Port | 2 = Interrupted Tone |
| 3 = VMU | 4 = Cabinet 1 Ex-Music | 5 = Cabinet 2 Ex-Music |
| 6 = Cabinet 3 Ex-Music | 7 = Cabinet 4 Ex-Music | |

Each station can be set in Mode 44-st-08 to decide whether to hear Background Music or DND tone.

**02. 03, 04. Speed Dial Unrestricted 1, 2, 3:**

If 02, 03, 04 settings are A, B, C then the speed dial codes from 100 to ABC0 are not toll restricted. For example if the settings are 1 and 1 then Speed dials up to 110 can be used by stations whether they conflict with toll restrictions or not. Individual stations can be restricted from using this feature in Mode 45-st-07.
If 02, 03, 04, settings are set to 0, 0, 0 then all speed dial codes are toll restricted if the station using the speed dial is restricted.

**05. Name Function:**

This parameter enables the naming feature for trunks, extensions and speed dials.

| ***Features \ Values*** | ***0*** | ***1*** | ***2*** | ***3*** | ***5*** | ***7*** |
|---|---|---|---|---|---|---|
| Display Name instead of number for Extension | | V | | V | V | V |
| Directory Dial for Speed Dial | | | V | V | | V |
| Directory Dial for Extension | | | | | V | V |

V: The feature is enabled.

Note 1: When any of the above features are enabled the total number of speed dial sets will be reduced. See Mode 05-04-06.
Note 2: For setting name for Extension/Speed dial/Trunk, Please refer to programming modes 21 / 09 /35.
Note 3: For setting “Directory Dial” key, Please refer to mode 07.

**06. Dial Tone Detection:**

If setting is enable, then the system will send out the dialling signals after the system detects the Dial Tone which is sent from the exchange, if dial tone is not detected by the system then dialling signals will not be sent out. If setting is disable, then the system will send out dialling signals whether Dial Tone is detected or not.

0 = Disable 1 = Enable

**07. Auto Redial Times:**

This parameter is to set the number of auto redial times that the system will attempt.

0 = 0 times 1 = 3 times 2 = 6 times 3 = 10 times 4 = 20 times

5 = 30 times 6 = 40 times 7 = 50 times 8 = 60 times 9 = 70 times.

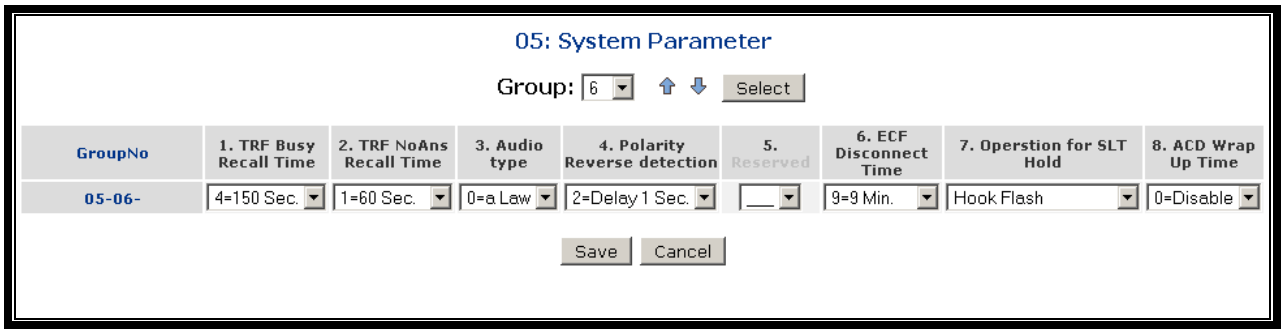
**08. Auto Redial Pause Time:**

This parameter is the time duration between the system hanging up an auto redial attempt and starting to redial automatically.

0 = 10 Sec. 1 = 20 Sec. 2 = 30 Sec. ..... 9 = 100 Sec.

| Off Hook | **Auto-Redial Pause Time (Program 05-05-08), Y seconds** | Off Hook |
|---|---|---|
| Auto-Redial Ringing Timer | **On Hook** | Auto-Redial Ringing Timer |

## Program 05-06-IP : System Timing Parameters – 06




| Item Pointer | Display Data | Programming Data Description | Timing Table | Default |
|---|---|---|---|---|
| 01 | 0-9 | TRF Busy Recall Timeout | A | 1=60 Sec. |
| 02 | 0-9 | TRF Idle Recall Timeout | A | 0=30 |
| 03 | 0-1 | ISDN PRI/BRI and T1/E1 Audio | | 0=a law |
| 04 | 0-9 | Polarity Reversal – Incoming Calls | | 1=Enable |
| 05 | 0- | Reserved | | 0= |
| 06 | 0-9 | Unsupervised Conference And ECF Time Setting | | 3=3 Min. |
| 07 | 0-1 | SLT Hold Method | | 0=Hook Flash |
| 08 | 0-2 | ACD Wrap Up Time | | 0=Disable |

**Description:**

**01. Transfer Busy Recall Timeout:**

This parameter sets the time duration between transferring a call to a busy party and automatic transfer back to the transferring party when the called party is busy.

**02. Transfer Idle Recall Timeout:**

This parameter sets the time duration between transferring a call to a station and automatic transfer back to the transferring party when the called party does not answer.

See timing table Grade A for parameters of these 2 features.

**03. ISDN PRI/BRI and T1/E1 Audio**

This parameter sets ISDN PRI/BRI and T1/E1 Audio type. DO NOT MODIFY FROM THE DEFAULT FOR YOUR COUNTRY.

0 = a law 1 = u law

**04. Polarity Reversal – Incoming Calls:**

This parameter is to enable the Polarity Reversal detection feature for incoming caller hang up detection in Australia and some European countries on PSTN CO lines. Polarity Reversal will need to be enabled at the exchange for this feature to operate. When reversal is enabled the system will hang up the exchange line when the incoming caller hangs up and the exchange sends a reversal to the system. If a VMU card is fitted and DISA Busy Tone Detect is enabled then this feature will probably not be needed.
This parameter is only for incoming call clear down. See Mode 14-01-08 SMDR settings for polarity reversal on outgoing calls.

0 = Disable 1 = Enable for 1 polarity reverse signal
2-9 = Delay for 1-8 Seconds and then detect Polarity Reverse Signal

**05. Reserved:**

**06. Unsupervised Conference and ECF Time Setting:**

This parameter sets the time that the system will allow an Unsupervised Conference or External Call Forward to continue before sending a warning tone to the parties and then disconnecting the call. If reversal supervision is used this setting should be 0.

0 = No Limit (detect PR only)
1 = 1 Min. 2 = 2 Min. 3 = 3 Min. 4 = 4 Min. …….. 9 = 9 Min.

**07. SLT Hold Method:**

This parameter selects the operation from an SLT that will place a call on hold within the system. The default is a single Hook Flash.

0 = Hook Flash 1 = Hook Flash [7] 2 = Hook Flash [Tone 1] [7]

**08. ACD Wrap Up Time:**

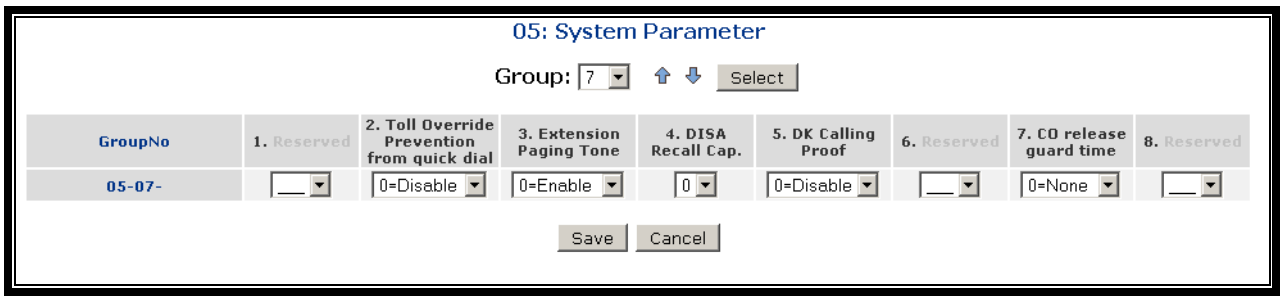
The ACD Wrap up timer provides an interval of time after an ACD Agent hangs up from an ACD call before they are presented with the next call.

0 = Disable 1 = 10 Secs. 2 = 20 Secs. …….. 9 = 90 Secs.

**TIMING TABLE**

| Grade | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | unit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| A | 30 | 60 | 90 | 120 | 150 | 180 | 210 | 240 | 254 | ∞ | sec. |

## Program 05-07-IP : System Timing Parameters – 07




| Item Pointer | Display Data | Programming Data Description | Timing Table | Default |
|---|---|---|---|---|
| 01 | 0-1 | Reserved | | 0= |
| 02 | 0-1 | Toll Override Prevention from quick dial | | 0=Disable |
| 03 | 0- | Extension Paging Tone | | 0=Enable |
| 04 | 0-7 | DISA Transfer To Console - No Dialling | | 0=Enable |
| 05 | 0-1 | Key Phone Toll Override Prevention | | 0=Disable |
| 06 | 0-9 | Reserved | | 0= |
| 07 | 0-9 | CO Release Guard time | | 0=0 Secs. |
| 08 | 0- | Reserved | | 0= |

**Description:**

**01. Reserved:**

**02. Toll Override Prevention from quick dial:**

To protect toll override control when a Key Phone selects a trunk and quickly dials one digit and overriding the toll control. If enabled then after selecting a trunk the first digit dialled will be delayed one pause interval.

0 = Disable 1 = Enable

**03. Extension Paging Tone:**

This parameter will enable / Disable the Intercom paging tone to all handsets for Paging

0 = Disable 1 = Enable

**04. DISA Recall To Console - No Dialling:**

If this function is activated, when a DISA call is answered but the caller does not dial any digits or a station number the system will recall the Operator after the assigned DISA Transfer Time no Dialling (Mode 05-08-07). If this function is disabled the call will be disconnected after Transfer Time No Dialling elapses.

0 = Recall To Operator 1 = No Recall To Operator

| Value | No dialing after the first voice announcement of VSC. | The VSC has already announced that the called station is busy or no answer. | The VSC has already announced the null number or the dialed number that has not been received completely. |
|---|---|---|---|
| 0 | * | * | * |
| 1 | V | * | * |
| 2 | * | V | * |
| 3 | V | V | * |
| 4 | * | * | V |
| 5 | V | * | V |
| 6 | * | V | V |
| 7 | V | V | V |
| Note | "*"= Transfer the incoming call to console.<br><br>"V"= System will announce the VSC function 6 to the incoming call if time for no dialing exceeds the mode 05-08-07. And then, System will release the outgoing call if time for no dialing exceeds the mode 05-08-07 again. | "*"= See Mode 46-ST-04.<br><br>"V"= See Mode 46-ST-04. If it is no recall to console, System will announce the VSC function 6 to the incoming call if time for no dialing exceeds the mode 05-08-07. And then, System will release the outgoing call if time for no dialing exceeds the mode 05-08-07 again. | "*"= System will transfer the incoming call to console if time for no dialing exceeds the mode 05-08-07.<br>"V"= System will announce the VSC function 6 to the incoming call if time for no dialing exceeds the mode 05-08-07. And then, System will release the outgoing call if time for no dialing exceeds the mode 05-08-07 again. |

**05. Toll Restriction Override Prevention:**

If the setting is Disable, after accessing a line a user will be able to use a DTMF generator directly to the network rather than the DTMF signal generated within the KSU. The result of this is that Toll restrictions can be over-ridden.
If setting is Enable, then no audio will be sent from the handset until 3 digits are received by the KSU from the key station dial pad preventing Toll restrictions being overridden. This parameter will be automatically disabled on any lines that are set to Pulse dial.

0 = Disable 1 = Enable

**06. Reserved:**

**07. CO Release Guard Time:**

This parameter is also used to insert a pause between a line being released and being able to be re-selected for outward dialling.

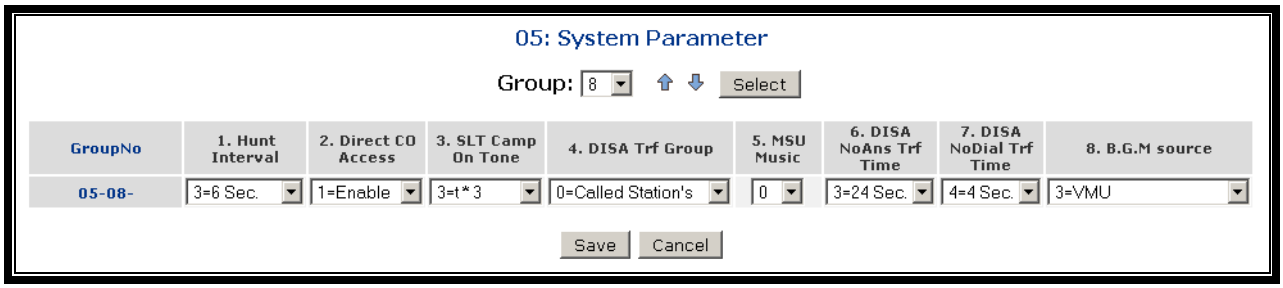
See timing table grade K for parameters for this feature.

**08. Reserved**

**TIMING TABLE**

| Grade | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | unit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| K | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | sec. |

## Program 05-08-IP : System Timing Parameters – 08




| Item Pointer | Display Data | Programming Data Description | Timing Table | Default |
|---|---|---|---|---|
| 01 | 0-9 | Ring Hunt Time Setting | C | 0=0 Sec. |
| 02 | 0-1 | DSS/LCR Access to Other Trunk Group | | 0=Enable |
| 03 | 0-9 | SLT Camp on Tone | | 0=Disable |
| 04 | 0-1 | DISA Transfer Group (No Answer) | | 0=Station Group |
| 05 | 0-8 | MSU Music | | 0= |
| 06 | 0-9 | DISA Transfer Time No Answer or Busy | | 1=16 Sec. |
| 07 | 0-9 | DISA Transfer Time No Dialling | | 4=4 Sec. |
| 08 | 0-1 | Background Music source selection | | 0=Melody IC |

**Description:**

**01. Ring Hunt Time Setting:**

If setting is n, then when an incoming call rings the first assigned extension in the Hunt group and that extension is busy, after n seconds the call will ring the second of the Hunt Group extensions. If the 2nd extension is busy the call will go to the 3rd extension immediately. All stations that have been passed by the ring assignment will receive off hook busy remind. Up to 16 stations can be in the ring hunt group. If the setting is 0 then only the first ring assigned station will ring. This setting is system wide and will be over ridden by settings for each Hunt Group

See timing table C for parameters of this feature.

**02. DSS/LCR Access to Other Trunk Group :**

This feature enables or disables the ability of stations to access a CO line not in their own group. It needs to be enabled if Mode 74 System Extend parameter is used or if LCR needs to access trunk groups other than the one allocated to the station.

0 = Enable. 1 = Disable

**03. SLT Camp On Tone:**

This feature enables a tone to indicate call waiting for a busy Analogue phone and sets the interval between tones. The interval between tones will be the Off Hook Busy Remind Interval (t) x by the setting in this parameter. Off Hook Busy Remind Time is set in Mode 05-01-05.

0 = Disable 1 = t x 1 2 = t x 2 ..... 9 = t x 9

**04. DISA Transfer Group:**

This parameter decides to which group an unsuccessful DISA call will be transferred if the called station has transfer enabled in Mode 46-st-04.

0 = Console for the Called Station's group (Mode 41-st-01)
1 = Console for the Incoming Trunk's group (Mode 36-gp)

**05. MSU Music:**

This parameter relates to the MSU2 with on board Melody chip and selects which MSU2 Tune will be used for BGM.

**06. DISA Transfer Time No Answer:**

An incoming call is answered by DISA voice message and transferred to the called extension. If the called extension does not answer after this time duration the voice card will announce the status of the station (no answer). or if the station is busy will announce the status (busy) after the time set in Mode 05-10-04 or individual station settings in mode 78-st-08 and then retry the station the number of times set in Mode 05-11-06 and depending on the settings for individual stations in Mode 46-st-04 will transfer the call to the console of the group specified in Mode 05-08-04, transfer the call to the console only or disconnect the call.

0 = 8 Seconds 1 = 16 Seconds 2 = 24 Seconds .... 9 = 80 Seconds

**07. DISA Transfer Time No Dialling:**

This parameter sets the time that a DISA call will wait after the voice message is completed before transferring to the console if no digits are dialled by the caller. Do not set this to less than about 3 seconds for normal operation.

0 = 0 Seconds 1 = 1 Second 2 = 2 Seconds .... 9 = 9 Seconds

**08. Background Music source selection:**

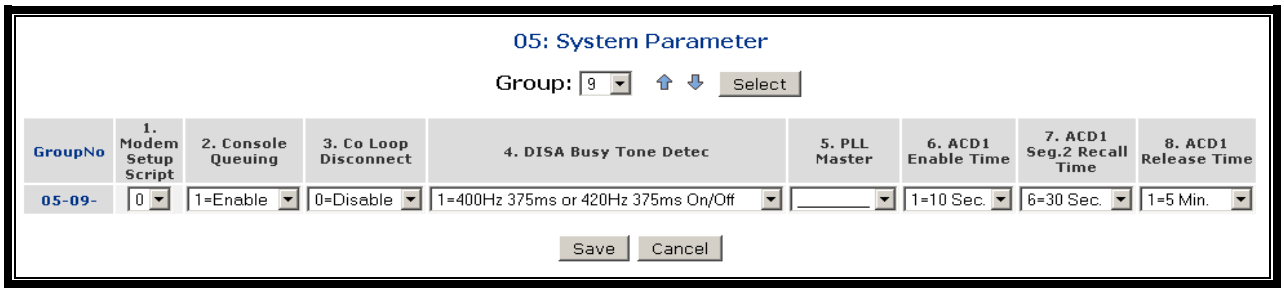
This parameter sets the Music Source for the Internal Background Music. Music on Hold Source for trunks is set in Mode 35 for each trunk individually.

| **Setting** | **Music Source** |
|---|---|
| 0 | Chimes |
| 1 | SLT Music port |
| 2 | Interrupted Tone |
| 3 | VMU |
| 4 | MSU Cabinet 1 |
| 5 | MSU Cabinet 2 |
| 6 | MSU Cabinet 3 |
| 7 | MSU Cabinet 4 |
| 8 | MSU Cabinet 5 |
| 9 | MSU Cabinet 6 |
| 10 | MSU Cabinet 7 |
| 11 | MSU Cabinet 8 |

**TIMING TABLE**

| Grade | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | unit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| C | 0 | 2 | 4 | 6 | 8 | 15 | 30 | 60 | 120 | 254 | sec. |

## Program 05-09-IP : System Timing Parameters – 09




| Item Pointer | Display Data | Programming Data Description | Timing Table | Default |
|---|---|---|---|---|
| 01 | 0- | Modem Set Up script | | 0=No |
| 02 | 0-1 | Busy Console Queuing (Intercom Calls) | | 0=Disable |
| 03 | 0-9 | Clear Forward - Loop Disconnect Detection | | 0=Disable |
| 04 | 0-9 | DISA Busy Tone Detection | | 0=Disable |
| 05 | 0-2 | Master Clock setting | | 0=None |
| 06 | 0-9 | ACD-1 Enable Time | O | 0=5 Sec |
| 07 | 0-9 | ACD-1 Segment 2 Recall Time | J | 0=Disable |
| 08 | 0-9 | ACD-1 Release Time | P | 0=No Release |

**Description:**

**01. Modem set up Script**

The system will send these commands to Modems connected to the RS232 port of the MPU card to enable operation with Remote Programming by Modem. After setting perform an immediate backup restart the system. (with the Modem RS232 connected). The Modem if connected to a system analogue extension must have it's port set to be a Modem port in Mode 21.

= 0 send "ATZ", "ATS0=1", and "AT&W" = 1 send "ATZ", "ATS0=1", "AT&U2", and "AT&W"
= 2 send "ATZ" and "ATS0=1" = 3 send "ATS0=1"

**02. Console Queuing:**

This feature enables the busy console(s) to have an intercom call(s) queued to it (them). If the station dials the operator (by 0 or 9) and all consoles are busy, the system will put this call in the queue to wait for a free Console. The calling station will hear RBT and the Consoles will receive the Busy Remind Signal. The first operator to go on-hook will receive the call.

0 = Disable 1 = Enable

**03. Clear Forward Signal Detection - Loop Disconnect**

This feature enables loop disconnection as a Clear Forward Signal.

0= Do not detect this signal.
1= The Loop Disconnecting Signal > 80 ms. (> 80 ms. For A01X version)
2= The Loop Disconnecting Signal > 130 ms. (> 160 ms. For A01X version)
3= The Loop Disconnecting Signal > 180 ms. (> 240 ms. For A01X version)
4= The Loop Disconnecting Signal > 230 ms. (> 320 ms. For A01X version)
5= The Loop Disconnecting Signal > 810 ms. (> 400 ms. For A01X version)
6= The Loop Disconnecting Signal > 860 ms. (> 480 ms. For A01X version)
7= The Loop Disconnecting Signal > 910 ms. (> 560 ms. For A01X version)
8= The Loop Disconnecting Signal > 960 ms. (> 640 ms. For A01X version)
9= The Loop Disconnecting Signal > 1010 ms. (> 720 ms. For A01X version)

**04. DISA Busy Tone Detection:**

This feature allows the system to recognize busy tone from the exchange line during DISA and ACD operation for clearing down the call.

| | | |
|---|---|---|
| 0 = Disable | **1 = Australia (400 Hz 375ms/420hz 500ms)** | 2 = 420Hz 500 or 100ms |
| 3 = 420Hz 250ms | 4 = 400Hz 500ms | 5 = 420Hz 200ms |
| 6 = | 7 = . 480+620Hz 250 or 500ms | 8 = 420+620Hz 250 or 500ms |
| 9 = 460Hz 700ms | 10 = 420+ 460 + 480Hz 250 or 340ms | 11 = 426Hz 200ms on/off 600 ms On/Off |

**05. Master Clock setting:**

This setting selects which Cabinet will be the Master Clock for the system. Used principally in Multi Cabinet systems with Multiple Primary Rate cards. Also In a GDS320 with BRA cards in the first cabinet it is necessary to lock the system sync to cabinet 2. This can prevent noise problems if the BRA that the system is locked to goes faulty or is disconnected causing a loss of system sync.

0 = Disable 1 Cabinet 1 2 = Cabinet 2 3 = Cabinet 3 …….. 8 = Cabinet 8

**06. ACD-1 Enable Time:**

This parameter is to set the time duration before the system answers an incoming call when the CO lines are set to ACD-1 operation, if a VMU card is fitted. The incoming call will show as a normal ring signal on the DSS key and can be answered by the operator at any time even while the voice message is playing to the caller.

See timing table Grade N for settings for this parameter.

**07. ACD-1 Segment 2 Recall Time:**

This parameter sets the time an ACD-1 call which has been answered by the VMU ACD-1 greeting message will stay on hold in the operator queue before the system will play the second part of the ACD-1 message to apologize for the continuing delay. The call back time for the second message starts at 5 seconds and increases in 5 second increments. The message will be played to the caller every time the recall time is reached until answered by the operator or the caller hangs up. During second message playing the caller has the option of dialling 1 to exit the queue and going to a virtual mailbox to leave a message. See mode 33-03 to set mailbox destination.

See timing table Grade O for settings for this parameter.

**08. ACD-1 Release Time:**

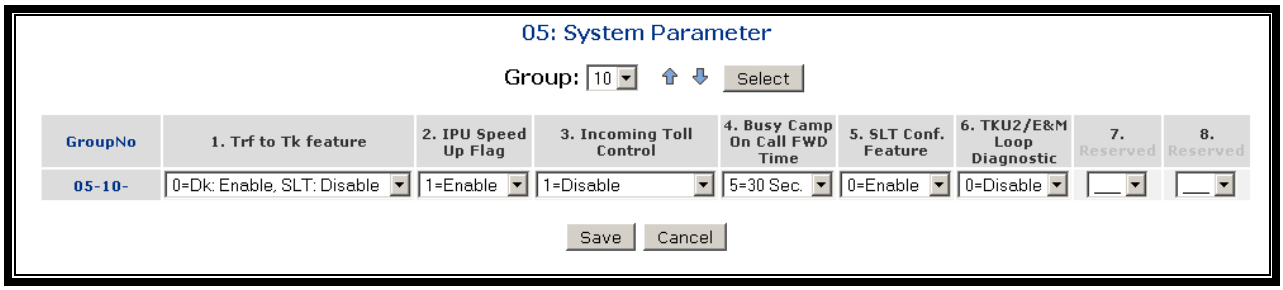
This parameter sets the time at which the system will release the incoming caller during ACD-1 operation when an operator has not answered it. The system will play a warning message to the caller before releasing the call. If reversal on idle or busy tone detect is used for incoming call clear down on PSTN or ISDN lines are used then this parameter may be disabled.

See Timing table Grade P for settings for this parameter

**TIMING TABLE**

| Grade | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | unit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| N | 5 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | sec. |
| O | Dis | 5 | 10 | 15 | 20 | 25 | 30 | 40 | 50 | 60 | sec. |
| P | Dis | 5 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 | Min. |

## Program 05-10-IP : System Timing Parameters – 10




| Item Pointer | Display Data | Programming Data Description | Default |
|---|---|---|---|
| 01 | 0- | Trunk To Trunk Transfer | 0=Enable |
| 02 | 0- | IPU Speed Up Flag | 1=Enable |
| 03 | 0- | Incoming Toll Control | 1=Disable |
| 04 | 0- | Busy Camp On Call Forward Time | 0=Disable |
| 05 | 0- | SLT Conference feature | 0=Enable |
| 06 | 0- | TKU2 Loop Diagnostic | 0=Disable |
| 07 | 0- | Reserved | 0= |
| 08 | 0- | Reserved | 0= |

**Description:**

**01. Trunk to Trunk Transfer:**

This parameter disables the ability to set up a Trunk to Trunk transfer for A Digital phone, an SLT or both.

0 = DK Enable SLT Disable  1 = DK Disable SLT Disable
2 = DK Enable SLT Enable  3 = DK Disable SLT Enable

**02. IPU Speed Up flag:**

This parameter is not likely to be used in Australia. It applies only to the MBU version installed in the system. As all systems have the newer buffered MBU this parameter is enabled in default. Systems with older versions of software may have to be upgraded to late versions of software if a system is installed with a large number of SLT cards and one or two digital cards in one cabinet. The symptom will be slow operation of the Digital phones connected to the digital card(s). An alternative to upgrading the software is to replace the STU card with an STU-2 card. Please note that this only applies to very old systems with STU cards.

**03. Incoming Toll Control:**

This parameter enables / disables the Toll restrictions on incoming calls. If Toll restrictions are in use and an extension dials a restricted digit during an incoming call the call may be cut off.

0 = Enable  1 = Disable  2 = Pass first 3 digits.

**04. Busy Camp On Call Forward time:**

This parameter sets a timer for stations that are call forwarded to another destination. At default if the station is busy and is called the caller will be CFW immediately to the destination. This timer when enabled will allow the call to be camped on to the busy station for a period of time before going on to the CFW destination. Individual extension settings can be varied in Mode 78-st-08.

0 = disable 1 = 10 secs 2 = 20 secs …. 9 = 90 secs.

**05. SLT Conference Feature:**

This parameter enables/disables the ability of all SLT's to initiate a conference.

0 = Enable 1 = Disable

**06. TKU2 Loop Diagnostic:**

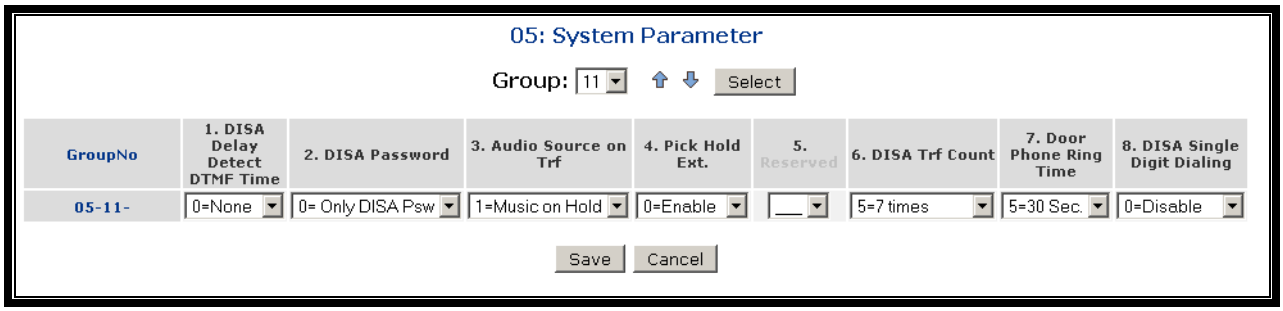
This parameter enables the system to check lines on the TKU2 and lock them out if loop is not present.

0 = Disable 1 = Enable

**07. Reserved**

**08. Reserved:**

## Program 05-11-IP : System Timing Parameters – 11




| Item Pointer | Display Data | Programming Data Description | Timing Table | Default |
|---|---|---|---|---|
| 01 | 0- | DISA Delay Detect DTMF Time | | 0=None |
| 02 | 0-1 | DISA Password – 1 / 900 Sets | | 0=1 |
| 03 | 0-2 | Select Music on Hold or Ring Back Tone | | 1=MOH |
| 04 | 0- | Pickup Held Ext Call. | | 0=Enable |
| 05 | 0- | Reserved | | 0= |
| 06 | 0-9 | DISA Re-check Times To Busy Console | | 0=2 Times |
| 07 | 0-9 | Door Phone Ringing Time | | 5=30 Sec. |
| 08 | 0-8 | DISA Single Digit Dialling | | 0=Disable |

**Description:**

**01. DISA Delay Detect DTMF Time:**

This parameter will delay DRMF detection for a period of time as selected to prevent inadvertent wrong detection of tones and subsequent incorrect DISA destination.

0 = None 1 = 1 Sec 2 = 2 sec ……. 9 = 9 sec.

**02. Number of DISA Passwords:**

This parameter when enabled will increase the number of DISA passwords from 1 to 1 + 100 to 900. At the default setting of 0 the DISA password will be set in mode 13-02. If the parameter is set to 1, 100 passwords are available and they will be the same as the forced account codes numbers (001-100). If the parameter is set to 2, 200 passwords are available and they will be the same as the forced account codes numbers (001-200) etc up to 1 + 900 passwords. Forced account codes are set in Mode 17-(00-48).

0 = 1 password 1 = 1 + 100 Passwords 2 = 2 + 200 Passwords ……. 9 = 1 + 900 Passwords

**03. Select Music on Hold or Ring Back Tone:**

This parameter selects what the incoming caller will hear during Ring Transfer and Hold Recall conditions.

0 = Ring Back Tone 1 = Music On Hold 2 = Silence

**04. Pick Up Held Ext Call:**

This parameter can prevent the pick up command from picking up held calls of another phone.

0 = Enable 1 = Disable

**05: Reserved:**

**06. DISA Re-check Times To Station/Console:**

This function sets the number of times that an unsuccessful DISA call will attempt to retry a station and or transfer to a console after the ringing time set in Mode 05-08-06, depending on the setting for individual stations in Mode 46-st-04. If polarity reversal or DISA Busy Tone Detect is in use or Lines are ISDN set this parameter to 9 and the call will continue to retry until the caller hangs up.

0 = 2 times 1 = 3 times 2 = 4 times ..... 8= 10 times
9 = Infinite times

**07. Door Phone Ringing Time:**

This parameter sets the time that Door Phone ring assigned stations will ring when the Door Phone button is pressed.

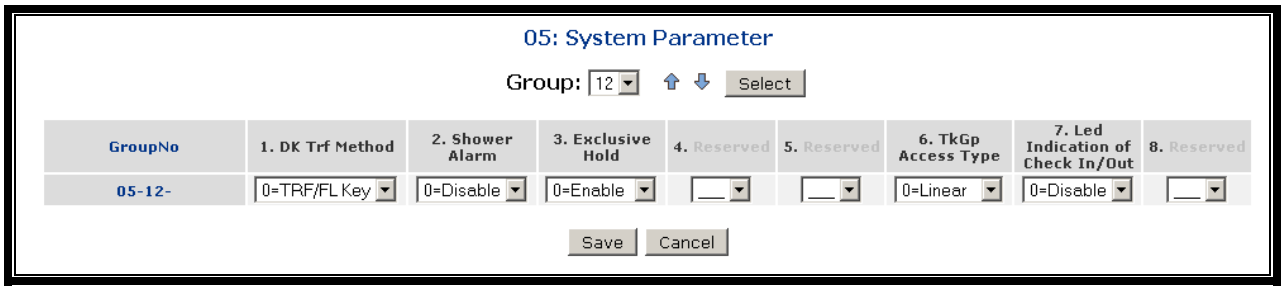
0 = 5 Sec. 1 = 10 Sec. 2 = 15 Sec. 3 = 20 Sec .....9 = 50 Sec.

**08. DISA Single Digit Dialling:**

This feature allows a DISA caller to dial stations by 1 digit (1-5) using the settings in Mode 10-gp-IP to set which station will be dialled by each digit. Different SDI groups can be allocated to individual trunks in Mode 37-tk-07

0 = Disable 1 = Dial the Stations in Group 1
2 = Dial the stations in Group 2 3 = Dial the Stations in Group 3
..... 8 = Dial the stations in Group 8

## Program 05-12-IP : System Timing Parameters – 12




| Item Pointer | Display Data | Programming Data Description | Timing Table | Default |
|---|---|---|---|---|
| 01 | 0-1 | Call Transfer Method – Key Telephone | | 0=Key Phone |
| 02 | 0- | Shower Alarm | | 0=Disable |
| 03 | 0-1 | Exclusive hold capability | | 0=Yes |
| 04 | 0-9 | Reserved | | 0= |
| 05 | 0-7 | Reserved | | 0= |
| 06 | 0-1 | Linear/Circular Trunk group access | | 0=Linear |
| 07 | 0-9 | LED indication of Check in / Check out on DSS console | | 0=Disable |
| 08 | 0-1 | Reserved | | 0= |

**Description:**

**01. Call Transfer Method – Key Telephone:**

This parameter allows users to use the same call transfer method as single line telephones on digital key telephones. Enabling this parameter will allow a digital extension to transfer a call by hanging up rather than having to press TRF/FL.. To set Trunk Transfer method for external Call transfer see Mod 05-10-

0= Use Key Phone's call transfer method. 1= Use single line telephone's call transfer method.

**02. Shower Alarm:**

The shower alarm is widely used in European hotels as a safety feature. In the shower will be an emergency button and pushing it will short the output of the SLT port which activates an alarm on Admin phones.

0 = Disable 1 = Enable.

**03. Exclusive Hold Capability:**

If this parameter is enabled all stations can use the Exclusive Hold Function. If the parameter is disabled no stations will be able to place calls on Exclusive hold.

0 = Enabled 1 = Disabled

**04. Reserved:**

**05. Reserved:**

**06. Linear/Circular Trunk Group Access:**

If this parameter is set to 0 then line selection will be the first available trunk in the users dial (9-0) group. If the parameter is set to 1 then the lines will be selected in a Circular fashion till all lines have been used and then the selection will start again. Do **NOT** use Circular with PSTN lines unless there is a very good reason as call collision will result.

0 = Linear 1 = Circular.

**07. LED indication of Check in / Check out:**

This parameter disables or enables the LED indication for Check in/Check out features for the DSS consoles and DSS Keys. For customers who do not like the flashing lights continuously then the Console can be programmed with Function key 38 which will allow the temporary display of room status.

0 = Disable 1= Enable

**The LED indications are as follows:**

**Red and slow flash:** If the Reception has checked out an extension, the LED for extension will slow flash red.

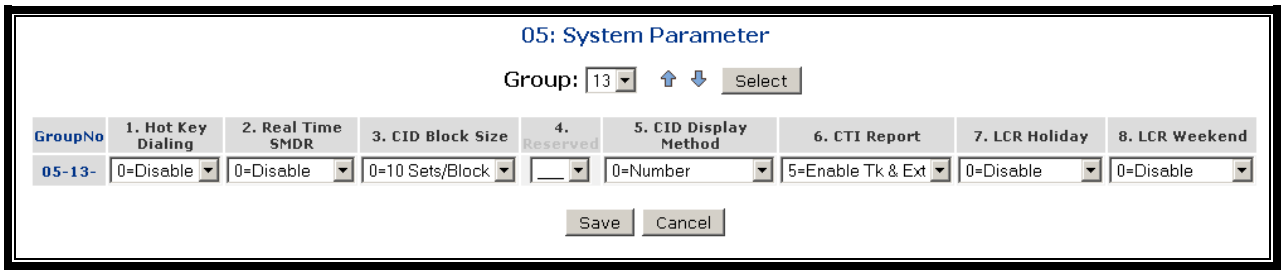
**Green:** When the checked out extension's room has been cleaned by the cleaner(maid), they can dial [776] from the phone and hang up. The LED for that extension will go Green. This means the room is ready for a new guest.

**Red:** The room is checked in and the phone is in use.

**Off:** The room is checked in and idle.

**08. Reserved:**

## Program 05-13-IP : System Timing Parameters – 13




| Item Pointer | Display Data | Programming Data Description | Timing Table | Default |
|---|---|---|---|---|
| 01 | 0-1 | Intercom Hot Key Dialling | | 0=No |
| 02 | 0-1 | Immediate SMDR output | | 0=Disable |
| 03 | 0-1 | Caller ID Buffer Block Size | | 0=10 Sets |
| 04 | 0- | Reserved | | 0= |
| 05 | 0-1 | Display CO CLI Name (CLI – FSK MDMF mode) | | 0= Display number |
| 06 | 0-1 | CTI-Trunk / Extension Status Report | | 0= Disable |
| 07 | 0-7 | Least Cost Routing (LCR) – Weekly Holiday 1 | | 0= None |
| 08 | 0-7 | Least Cost Routing (LCR) – Weekly Holiday 2 | | 0= None |

**Description:**

**01. Intercom Hot Key Dialling:**

This parameter when enabled allows Digital stations to make an intercom call On Hook without having to lift the handset or press the **SPK** key.

0 = Disable 1= Enable

**02. Immediate SMDR output**

This parameter when enabled will send out the SMDR details immediately after each digit is dialed. This feature is for external software to know immediately who is dialing out or who is ringing into the system. In an application like an Internet café, when the customer dials out, the system will send out the SMDR information immediately. The external software will start to count the cost at the beginning of the call. If the credit is 1 hour and time expires, the external software could cut the connection by sending commands back to the KSU.

0 = Disable 1= Enable

**03. Caller ID Buffer Block Size**

This sets the block size of the Caller ID buffer: This allows extensions to check the CID of missed calls and to call back missed callers using Smart Redial if required. If a CLI Status key is programmed on the phone it will flash when new calls are received and not answered and the user can check and review Missed and Received calls using the Function key and the Up/Down volume keys.

| 05-13-03 | Memory Block Size | Max. Memory blocks |
|---|---|---|
| 0 | 10 sets | 40 |
| 1 | 20 sets | 20 |
| 2 | 30 sets | 13 |
| 3 | 40 sets | 10 |

**Refer to Mode 83 to allocate blocks to extensions.**

**05. Display CO CLI Name (CLI – FSK MDMF mode only)**

Enabling this parameter will allow LCD digital phones to display the CLI name under FSK MDMF mode. If the setting is name and number and the user has set Mode 50-st-03 to 1 and the user has a DK2-21 then the LCD display will show Name and number of incoming call plus the caller ID of the caller over all 4 lines of the LCD display.

0= Display CO CLI number 1= Display CO CLI Name 5 = Display Name and Number.

**06. CTI-Trunk / Extension Status Report**

Enabling this parameter will output the trunk and extension status reports for CTI applications.

0= Disable 4= Enable extension status report (mode 50-st-04 also needs to be enabled.)
5= Enable extension status report and trunk status report (mode 50-st-04 also needs to be enabled.)

**07. Least Cost Routing – Weekly Holiday 1:**

This parameter sets weekly holiday 1 for the Least Cost Routing feature.

0 = No weekly holiday, 1= Monday, 2= Tuesday …. 7= Sunday

**Related system programming: 05-13-07. 05-13-08, 75, 76, 77, 78-st-01, 78-st-02**

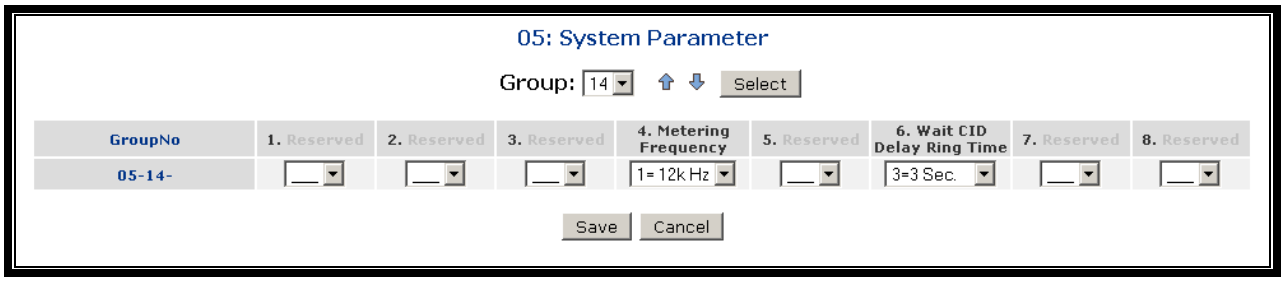
**08. Least Cost Routing – Weekly Holiday 2:**

This parameter set the weekly holiday 2 for Least Cost Routing feature.

0 = No weekly weekend, 1= Monday, 2= Tuesday …. 7= Sunday

**Related system programming: 05-13-07. 05-13-08, 75, 76, 77, 78-st-01, 78-st-02**

## Program 05-14-IP : System Timing Parameters – 14




| Item Pointer | Display Data | Programming Data Description | Timing Table | Default |
|---|---|---|---|---|
| 01 | 0- | Reserved | | 0= |
| 02 | 0- | Reserved | | 0= |
| 03 | 0- | Reserved | | 0= |
| 04 | 0-1 | MDC (Meter Pulse) Detection Frequency | | 1=12KHz |
| 05 | 0- | Reserved | | 0= |
| 06 | 0- | Wait CID Delay Ring Time | | 0=No delay |
| 07 | 0- | Reserved | | 0= |
| 08 | 0- | Reserved | | 0= |

**Description:**

**01. Reserved:**

**02. Reserved:**

**03. Reserved:**

**04. MDC (Metering Pulses) Detection Frequency:**

This parameter selects the detection frequency of the MDC card for PSTN trunks.

0= 16KHz 1= 12KHz

**05. Reserved:**

**06. Delay Ringing for Incoming CLI presentation:**

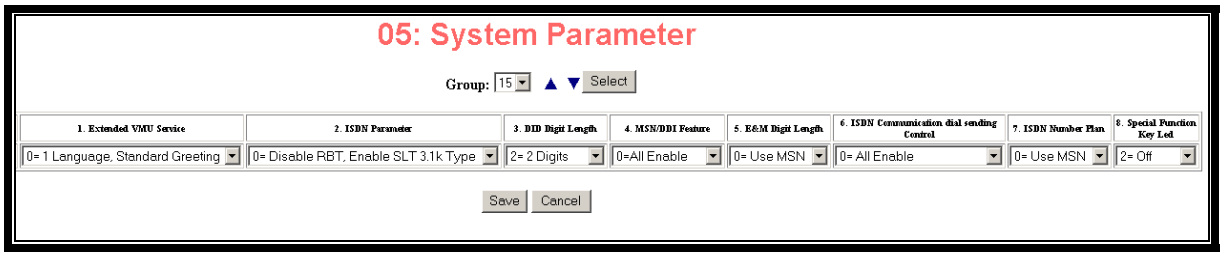
This parameter will delay ringing to the service extensions until the Caller ID information is completely received. For most countries, the Caller ID information (FSK type) is sent between the first ring and the 2nd ring by the Central Office. To receive CID information on DISA transferred calls it is necessary to enable this parameter.

0= No delay 1~9= Delay 1~9 seconds.

**07. Reserved:**

**08. Reserved:**

## Program 05-15-IP : System Timing Parameters – 15




| Item Pointer | Display Data | Programming Data Description | Timing Table | Default |
|---|---|---|---|---|
| 01 | 0-7 | Extended VMU Service | | 0=disable/enable |
| 02 | 0-3 | ISDN RBT Feature and 3.1K Audio Enable | | 0=enable |
| 03 | 0-8 | DID Digit Length | | 2=2 digits |
| 04 | 0-3 | MSN / DDI Feature Enable | | 0=day/night |
| 05 | 0-15 | E&M digit length | | 0=Use MSN |
| 06 | 0-3 | ISDN Communication Dial Sending Control | | 0=All Enable |
| 07 | 0-15 | ISDN Number Plan | | 0=Use MSN |
| 08 | 0-2 | Special Function Key LED & Backlight Control | | 0=Flash/on |

**Description:**

**01. Extended VMU Service:**

This parameter selects the Language and standard or extended service message for the G2-VMU card.

1 = 1 Language, standard greeting  2 = 2 Language, standard greeting
3 = 1 Language, extended greeting  4 = 2 Language, extended greeting

**02. ISDN RBT and 3.1K Audio:**

In some markets the Central Office requires that the system provide Ring Back Tone to the incoming caller rather than the Exchange providing it. This is not relevant in Australia but at least one carrier in New Zealand uses this method. This parameter also enables the use of 3.1K audio for SLT phones

0 = Disable RBT Enable 3.1K Audio  1 = Enable RBT – Enable 3.1K Audio
2 = Disable RBT Disable 3.1K Audio  3 = Enable RBT – Disable 3.1K Audio

**03. DID Digit Length:**

Analogue DID and ISDN E1 use this Parameter. Neither of these methods is currently used in Australia.

1 = 1 digit  2 = 2 digits …….>

**04. MSN / DDI Feature:**

This parameter enables disables the use of the DDI destinations allocated in mode 72 for either Day or Night operation or both. This system wide setting can be overridden by the settings in mode 48-st-05 for individual stations.

0 = enable day/night  1 = night enable  2 = day enable  3 = Disable

**05. E & M Digit Length:**

Sets the length of digits expected for the E & M feature.

0 = Use MSN length  1 = 1 digit  2 = 2 digits  ……  14 = 14 digits  15 = Ext num.

**06. ISDN Communication Dial Sending Control :**

This parameter controls the ability of ISDN lines to operate for incoming or outgoing calls or both as required.

0 = All enable  1 = Incoming call disable
2 = Outgoing call disable  3 = All disable

**07. ISDN Number Plan:**

This parameter selects whether DID calls will follow the assignment in Mode 72 (follow MSN) or sets the number of digits sent by the exchange if the user wants to take advantage of the simplified allocating of DID numbers to extensions afforded by the use of Mode 26.

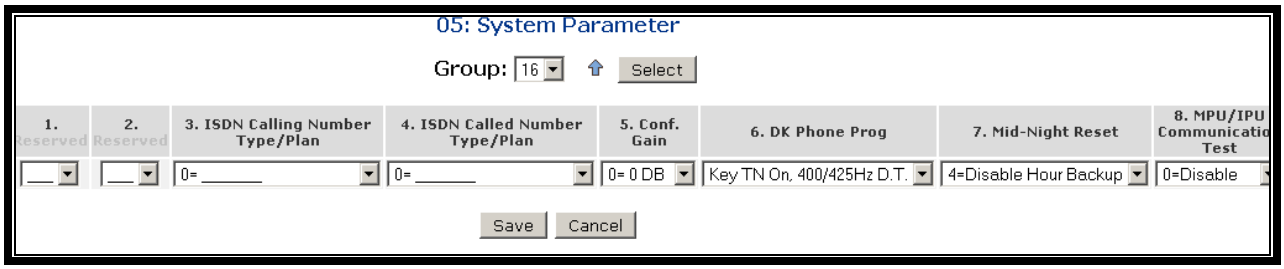
0 = Follow MSN  1 = 1 Digit  2 = 2 digits  ……  14 = 14 digits  15 = Ext num

**08. Special Function Key LED & Backlight control:**

This parameter enables/disables the Flashing DND/CN key when the system is placed in Night Service and controls the switching of the DK phone Backlight..

| | | |
|---|---|---|
| 0 = Flash/backlight on | 1 = Steady/backlight on | 2 = Off/backlight 0n |
| 4 = Flash/backlight 5 sec | 5 = Steady/backlight 5 sec. | 6 = Off/Backlight 5 secs |
| 8 = Flash/backlight 10 sec. | 9 = Steady/backlight 10 sec. | 10 = Off/backlight 10 sec. |
| 12= Flash/backlight 15 sec. | 13 = Steady/backlight 15 sec. | 14 = Off/backlight 15 sec. |

## Program 05-16-IP : System Timing Parameters – 16




| Item Pointer | Display Data | Programming Data Description | Timing Table | Default |
|---|---|---|---|---|
| 01 | 0-1 | Reserved | | 0= |
| 02 | 0- | Reserved | | 0= |
| 03 | 0-6 | ISDN Calling Number Type/Plan | | 0=Disable |
| 04 | 0-6 | ISDN Called Number Type/Plan | | 0=Disable |
| 05 | 0-3 | Conference Gain | | 0=0db |
| 06 | 0- | DK Phone Dial Tone | | 0= |
| 07 | 0-1 | Midnight Reset | | 0=No |
| 08 | 0-3 | MPU / IPU Communication Test | | 0=Disable |

**Description:**

**01. Reserved:**

**02. Reserved:**

**03. ISDN Calling Number Type/Plan :**

This parameter enables ISDN outgoing calls to be set for requirements in some market places to enable calls to be successfully integrated with local requirements. There is no need to modify for Australian conditions currently.

**04. ISDN Called Number Type/Plan:**

This parameter enables ISDN incoming calls to be set for requirements in some market places to enable calls to be successfully integrated with local requirements. There is no need to modify for Australian conditions currently.

**05. Conference Gain:**

This parameter allows gain to be boosted for Conference calls or externally Call Forwarded calls where poor line performance may adversely affect Conference call performance.

0 = 0db 1 = 3db 2 = 6db 3 = 9db

**06. DK Phone Dial Tone:**

This parameter enables the programming of different dial tones on DK telephones to suit different market requirements. This will NOT work unless the phones have the correct firmware version installed. DK2 should be V029 or later and DK6 should be V34 or later. It is possible that enabling this feature on older firmware phones Will cause undesirable operation.
The dial tones that are shown with 2 frequencies will be those 2 frequencies mixed together to produce a modulated dial tone. Type 7 will produce a dial tone very similar to Australian standard dial tone.

1 = Key tone on - 500Hz DT 2 = Key Tone off - 500Hz DT 3 = Key Tone on – 350Hz DT
4 = Key Tone off – 350Hz DT 5 = Key Tone on – 350/440Hz DT 6 = Key Tone off – 350/440Hz
7 = Key Tone on – 400/425Hz DT 8 = Key Tone off – 400/425Hz DT

**07. Midnight Reset and set Backup Time:**

This parameter enables the midnight reset feature. This will halt the system at Midnight, clear all operations and reset all Ram and restart the system.

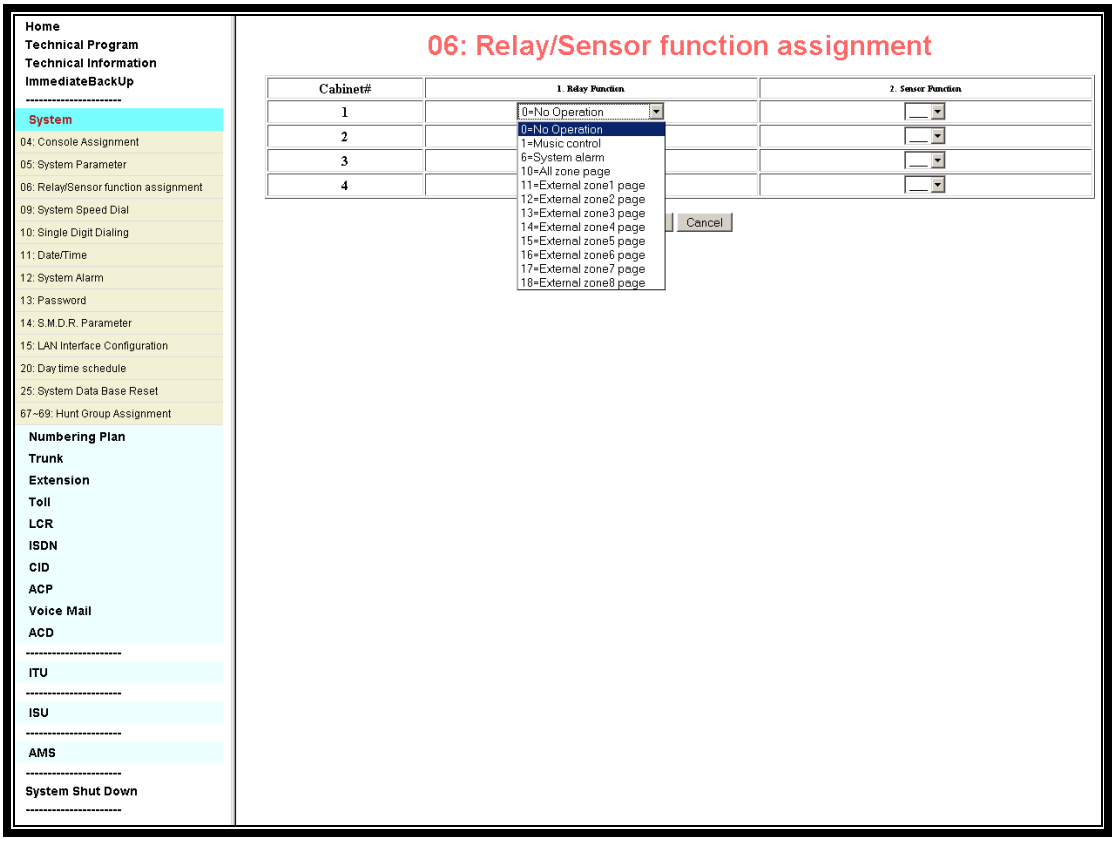
The Backup time relates to the background backup performed by the GDS. Options are every hour and once a day. It is recommended that the once a day setting is used but it is then important that when any programming is done that an immediate backup is preformed by the programmer.

0 = Disable reset 1 = Enable reset 3 = Timer 4 = Disable Hourly backup

**08. MPU / IPU Communication Test:**

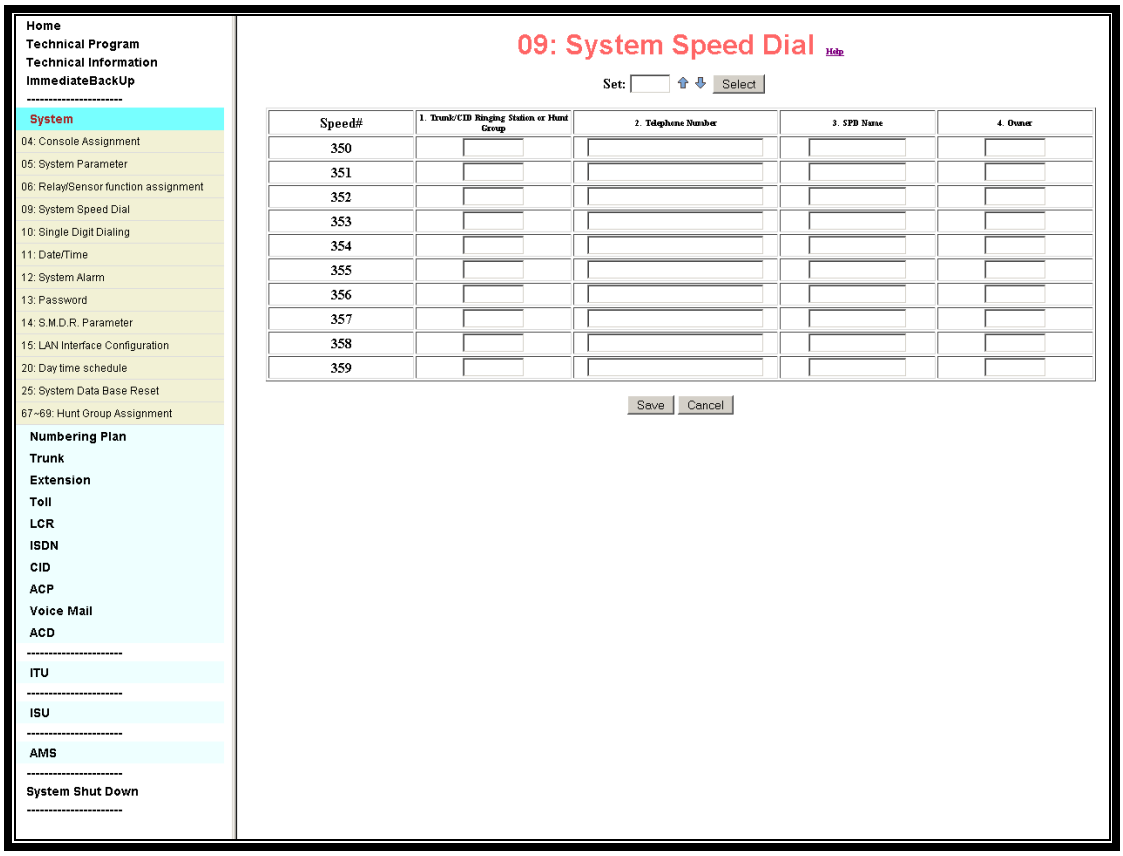
## This parameter is only to be used by engineering staff

## Program 06 : Relay/Sensor Function Assignment




Each Relay can be assigned various operations as shown in the table, There is 1 relay on the MSU in each cabinet.

## Program 09-nnn-DP : System Speed Dial




**General:**

This program permits the assignment of up to 1900 (GDS 160) sets of system speed dialling codes.

**Description:**

| | | |
|---|---|---|
| nnn | = 100-1999 | = Speed dial code, up to 1900 sets in total. |
| DP | = 01-30 | = Digit Pointer for telephone number.<br>30 digits per speed dial code. |
| tt | = 801-864 | = Pre-assigned CO line number. |

**Trunk /CID Ringing Station or Hunt Group:**

This CO line or is the dedicated outgoing line for the speed dial code. If the user presses a speed dial code without selecting a CO line first, the system will select this CO Line automatically. If no CO line is assigned, the system will select an available CO line according to the assigned Dial 9/0 group (Program 41-nnnn-04). A line may also be selected directly by the user.
After enabling the system name feature (05-05-05), item 4 in this Mode can set the owner of this speed dial set, if this item is set then only this Extension or Hunt Group can use this Speed dial

**Telephone Number:**

30 digits maximum may be entered in each memory.
In addition to the digits 1 to 0, *, # the following can also be stored: Pause, Flash, Pulse to DTMF. Each function occupies one digit.

"Pause" is represented by the **[HOLD]** key. -- P
"Flash" is represented by the **[TRF/FL]** key. -- F
"Pulse to DTMF" is represented by the **{P->T}** key. -- T

i) Pause:
During dial procedures on PSTN lines, the dialling will wait for a programmable period (Program 05-01-06).
During dial procedures on ISDN lines, the dialling will wait for the called party to answer the call.

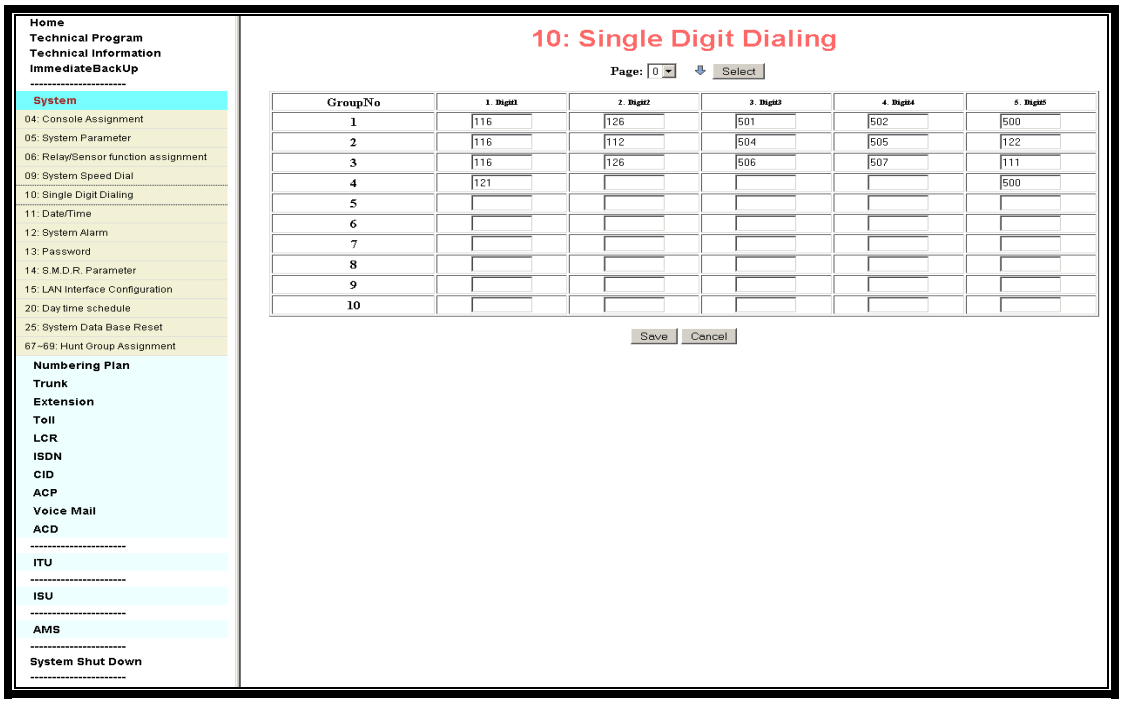
**For example,**
Store 29611356ppp506 in speed dial and use this speed dial on ISDN line to dial out. System will dial DTMF after the called party answers the call (it could be an auto attendant or a voice mail) and send '506' using DTMF code.

ii) Flash : This will make a loop disconnection of a pre-assigned duration.
(Refer program mode 05-02-05).

iii) Pulse to DTMF : If the dialled signal is "pulse", it will change to "DTMF".

**Note:** Pressing **{Don't Care}** will erase the digit which the cursor is on.
Pressing **[REDIAL]** will erase all the assigned digits.

## Program 10-GP-IP : Intercom or DISA Single Digit Assignment




**General:**

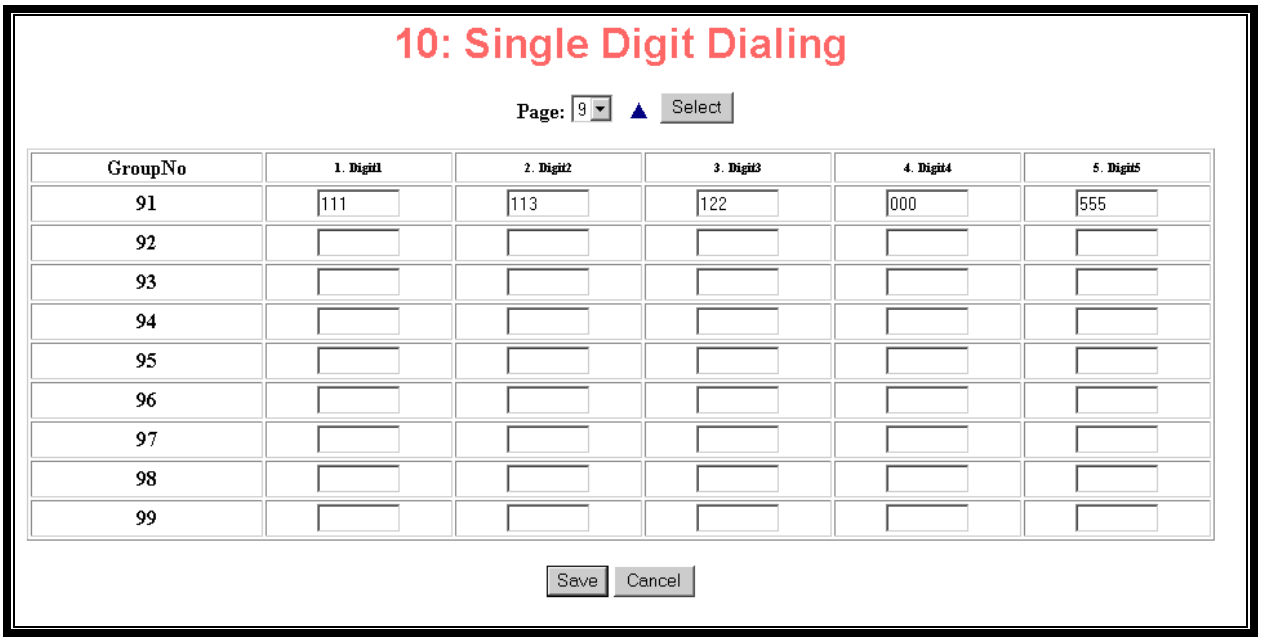
This program permits the stations in one or more station groups to call a specific station by dialling one digit only. The settings in this Mode are used by DISA Single Digit Dialling (see Mode 05-11-08 to enable).

**Description:**
**Single Digit Intercom.**

When single digit dialling is enabled then the Station to station call pre-fix digit (6) must be dialled to call another extension.
If a particular group has no entries programmed, the stations in the same number station group will not have single digit dialling and will not have to use the station to station prefix.

**Single Digit DISA.**

When single digit dialling is enabled and a group (1-8) selected in Mode 05-11-08 then DISA callers will be able to dial the stations in the group selected by dialling the digits 1 to 5. The digit 1 will call the first station in the group, 2 will dial the second station in the group and so on up to digit 5. The caller can also dial 6 and then dial a full extension number to call other extensions or dial (0 or 9) to call the operator.
If a position is left programmed to 0 then station numbers starting with the digit, which corresponds, to this position can be dialled in full.
Individual Digit Single Digit dialling must be enabled in Mode 27 for SD DISA to work.
Mode 37-tk-07 will allow tenanting of single digit DISA calls for individual trunks to use different Single digit DISA Groups.
Multi Level Single Digit DISA can be achieved by using various levels of Mode 10 in conjunction with Virtual extensions linked to Virtual mailboxes programmed as script messaging. For details see the GDS VMU V1.12 or later programming guide.



10: Single Digit Dialing

Page: 9 Select

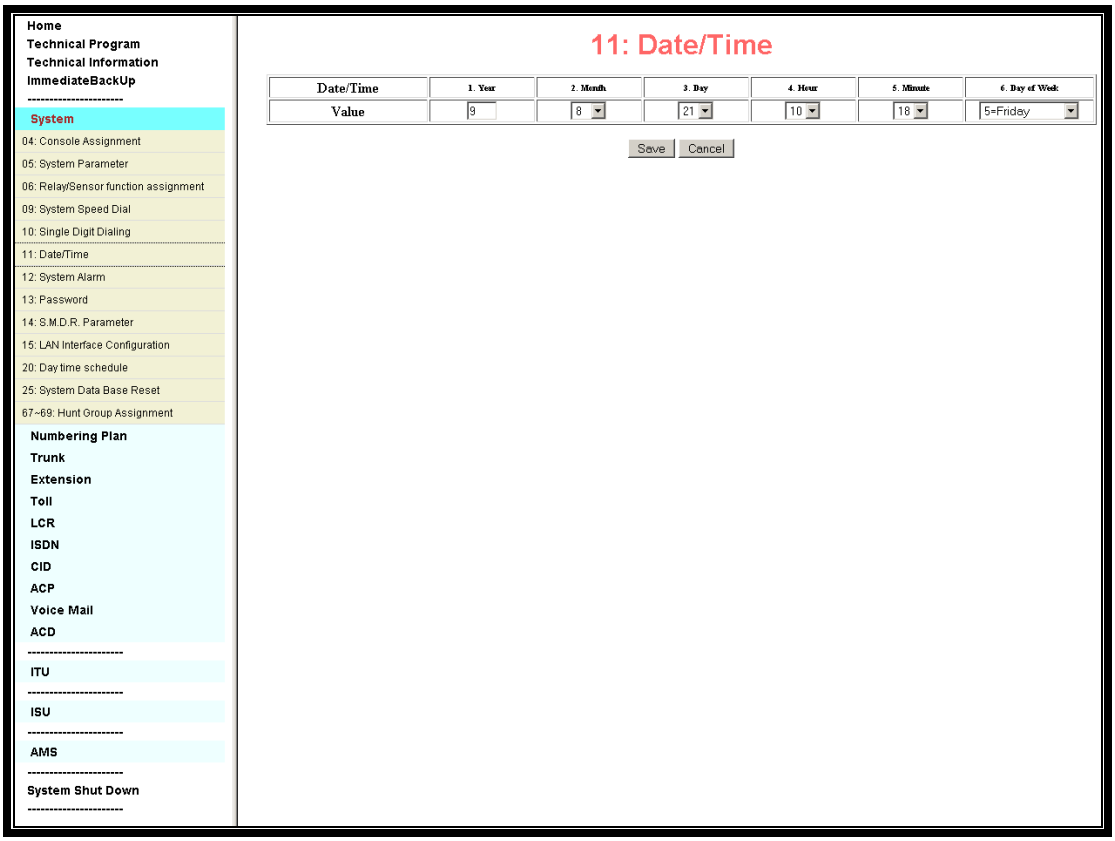
| GroupNo | 1. Digit1 | 2. Digit2 | 3. Digit3 | 4. Digit4 | 5. Digit5 |
|---|---|---|---|---|---|
| 91 | 111 | 113 | 122 | 000 | 555 |
| 92 | | | | | |
| 93 | | | | | |
| 94 | | | | | |
| 95 | | | | | |
| 96 | | | | | |
| 97 | | | | | |
| 98 | | | | | |
| 99 | | | | | |

Save Cancel

In the above example an incoming DISA caller who dials 1 will call station 111, dialling 2 will call station 113, 3 will call Station 122. Dialling 4 will allow the caller to dial the full extension number of any extension, which starts with 4. e.g. 44. 555 has been assigned as a Hunt Group Pilot number so a DISA caller dialling 5 will call the Station hunting group which has 555 as it's pilot Number. Pilot numbers and Hunt Group members are Mode 67-69.
Before any digit can be recognised as single digit for DISA it must be set in Mode 27.

The various levels of Single Digit DISA can be used in conjunction with VMU Script menus to produce a multi level voice mail menu. For details refer to the G2-VMU Voice Mail Guide for GDS manual v1.12.

## Program 11-IP : Date and Time Setting



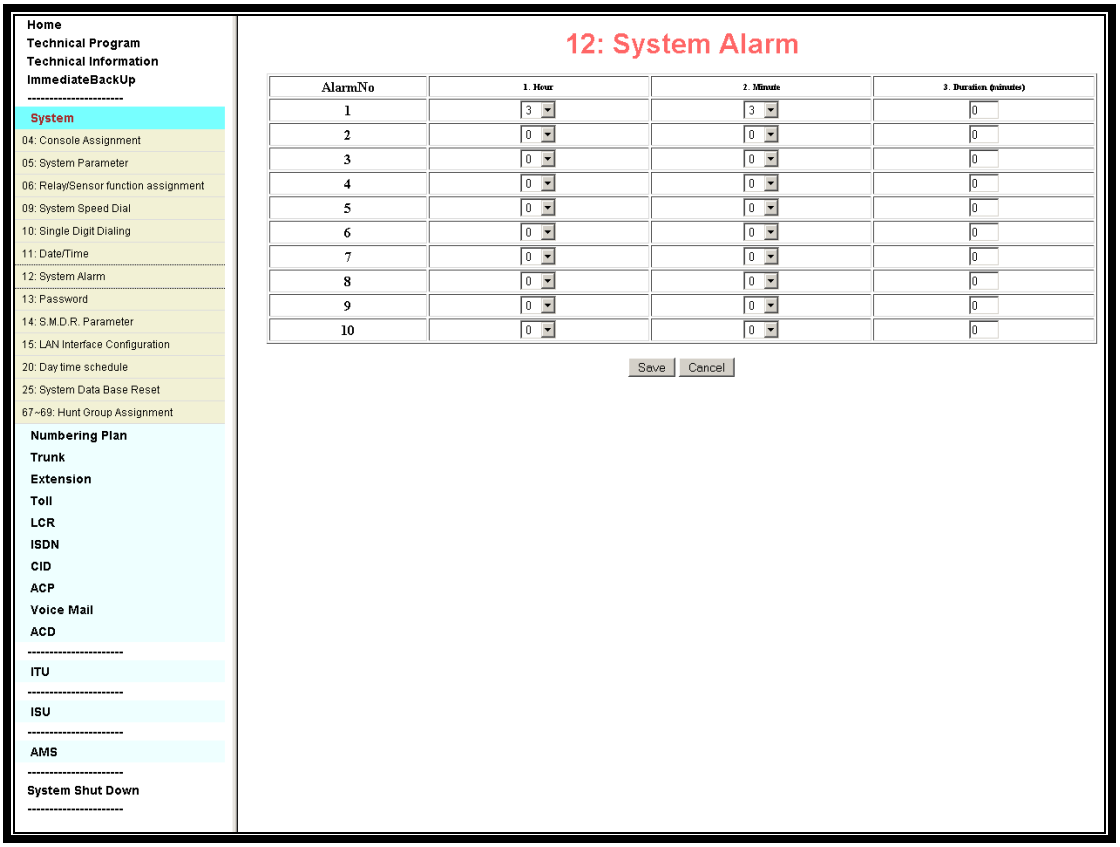

**General:**

This program permits the setting of system Date & Time.

**Description:**

The Date & Time will be held during a power failure on the GDS-600. The settings are held on the MSU of Cabinet 1.

# Program 12-nn : System Alarm Clock




| Location Pointer | Display Data | Programming Data Description |
|---|---|---|
| hh | 00-23 | Hour. |
| mm | 00-59 | Minute. |
| dd | 00-99 | Duration. |

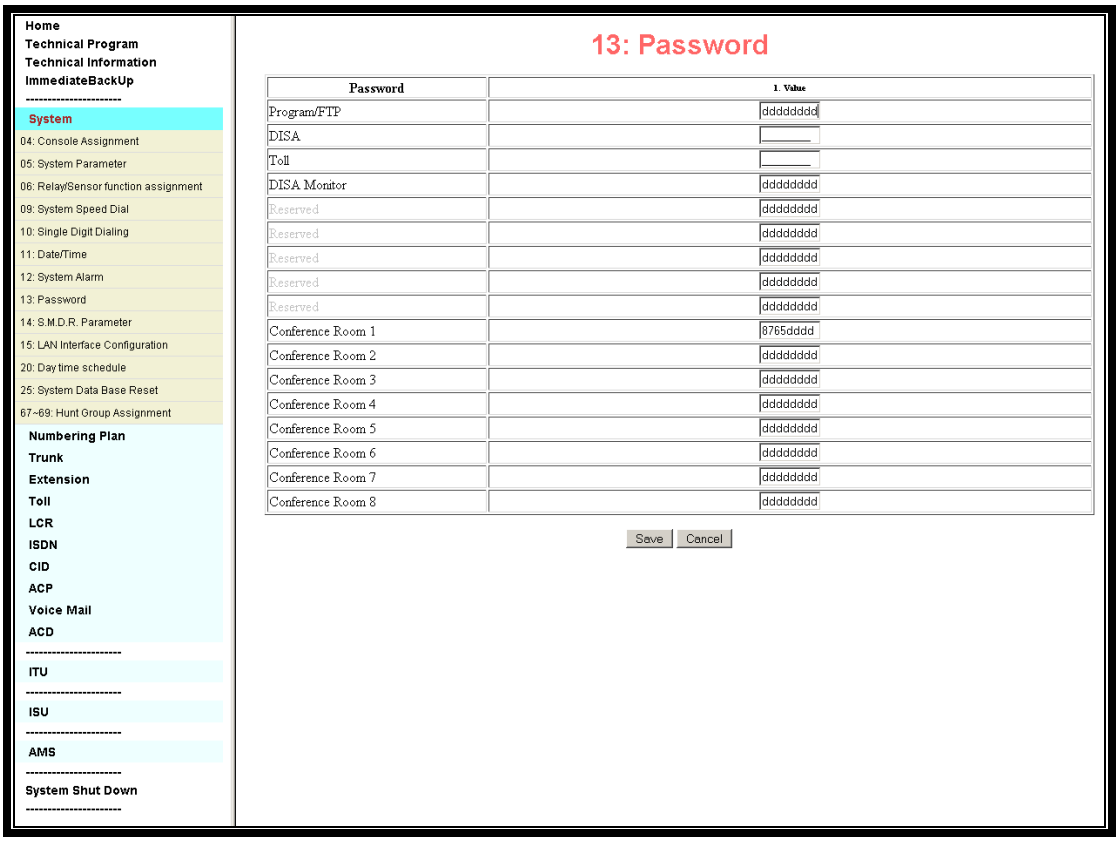
**General:**

This program permits the assignment of 10 time schedules for alarm clock purposes.

**Description:**

When the assigned time is reached, Background music will be broadcast over all Key telephones, which are idle. The time duration for alarm clock music is programmable (00 to 99 minutes.).

# Program 13-nn : Password




**General:**

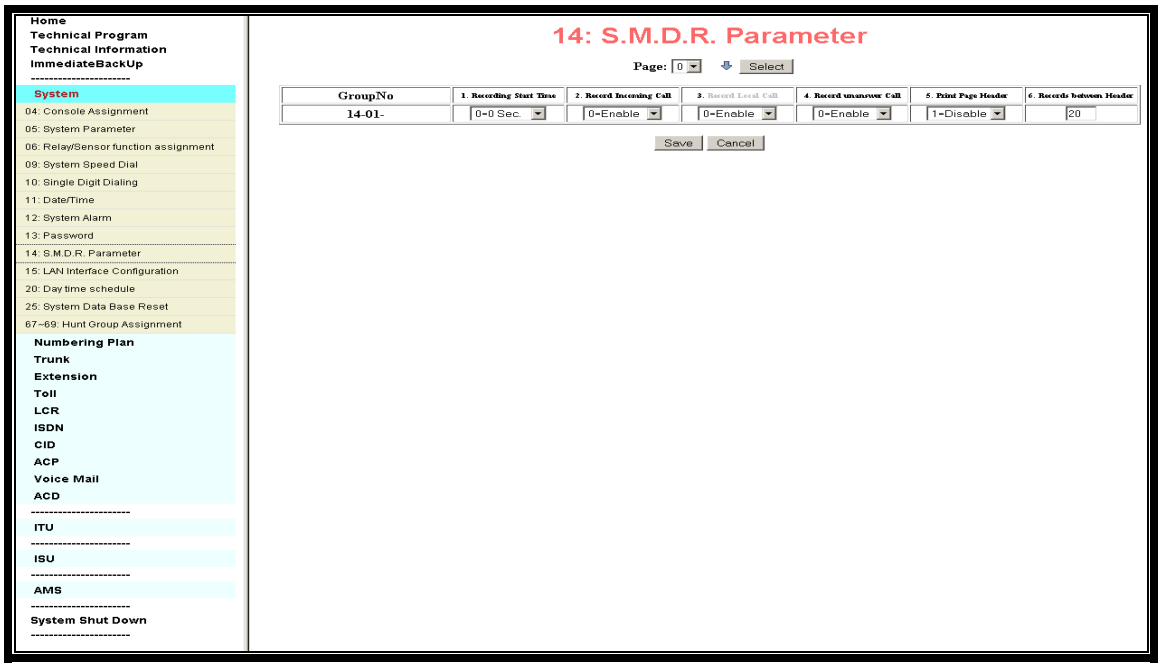
This program permits the assignment of 17 different passwords in the system.

**Description:**

The password length is from 1 to 8 digits. All unused digit positions must have **'d'** entered in them.
Password No. 1 = Programming Password. System Default is None.
Password No. 2 = DISA Password. System Default is 3472.
Password No. 3 = Toll Free. System Default is 8655.
Password No. 4 = DISA Monitor Password.
Password No. 5 = Reserved.
Password No. 6 = Reserved.
Password No. 7 = Reserved.
Password No. 8 = Reserved.
Password No. 9 = Reserved.
Password No. 10 to 17 = Conference room passwords.

Conference rooms are to allow a scheduled conference to be joined by invited parties who call into the system via DISA, enter the Conference room code set in Mode 22 - FCN 123, enter the conference number 1 – 8 and then enter the Conference password. If the caller is the first to enter the Conference they will hear MOH until a second party joins the conference. Users joining the conference will cause an intrusion tone to be heard by all members currently in the conference.

## Program 14-01-IP : SMDR Specifications




| Item Pointer | Display Data | Programming Data Description | |
|---|---|---|---|
| 0-01 | 0-9 | Call Duration Start Time | 0=00 Sec. |
| 0-02 | 0/1 | Record Incoming Call | 0=Record |
| 0-03 | 0/1 | Record Local Call | 0=Record |
| 0-04 | 0/1 | Record Incoming Call No Answer | 0=Record |
| 0-05 | 0/1 | Print out the Title | 0=Yes |
| 0-06 | 00-99 | Number of records between titles | 21=21 |

**Description:**

**0-01. Call duration start time:**

This parameter assigns the start time for the Call duration timer.

| | | | |
|---|---|---|---|
| 0 = 00 seconds | 1 = 05 seconds | 2 = 10 seconds | 3 = 15 seconds |
| 4 = 20 seconds | ..... | 9 = 45 seconds | |

**0-02. Record Incoming Calls:**

This parameter decides whether incoming calls will be recorded.

0 = Record 1 = Do not Record

**0-03. Record Local Calls:**

The system decides which are local calls by the toll access code set in Mode 05-03-05.

**0-04. Record Incoming Calls No Answer:**

This parameter decides whether unanswered incoming calls will be recorded.

0 = Record 1 = Do not Record

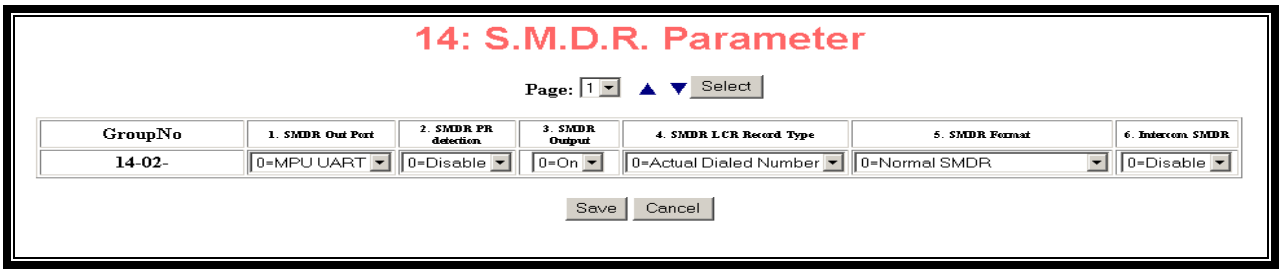
**0-05. Print out the Title:**

This parameter decides whether the system will output the description of each column.

0 = Print out the Title. 1 = Do not print out the Title.

**0-06. Number of records between the Title:**

This parameter permits the assignment of the number of records between each Title. If the Number = 00, The whole SMDR feature will be disabled.




| Item Pointer | Display Data | Programming Data Description | |
|---|---|---|---|
| 1-01 | 0-9 | Assign SMDR output port | 0= MPU RS232 |
| 1-02 | 0-1 | Polarity Reversal | 0=Off |
| 1-03 | 0-1 | SMDR Flow Control | 0=ON |
| 1-04 | 0-1 | SMDR Display Digits | 0=After LCR Digits |
| 1-05 | 0-4 | SMDR Format | 0=Normal |
| 1-06 | 0-1 | Intercom SMDR | 0=Off |

**Description:**

**1-01. Assign SMDR output port:**

This parameter permits the assignment of the RS232 port as the SMDR output.

0 = G2-MPU RS232 1 = G2-MSU in the first cabinet)

2 = G2-MSU in the 2nd cabinet 3 = Use LAN port of G2-MPU

**1-02. Polarity Reversal enable:**

If reversal is disabled, the system will start the call timer after accessing a CO line.
If reversal is enabled, the system will start the call timer after the called party answers.

0= Not Detect P.R. 1= Detect P.R.

**1-03. SMDR Flow Control:**

This parameter switches the flow control for SMDR output.

0 = On 1 = Off

**1-04. LCR - SMDR Display Method:**

This parameter permits to display all LCR dialled digits or just display the original dialled digits.

0= After LCR Digits 1 = Actual Dialled number

**1.05. SMDR Format**

This parameter selects the SMDR format that the system will present to the RS232 port. Options are Normal which means that details of each call will be presented to the RS232 output at the conclusion of the call PMS which means that the external PC package will be in 2 way communication with the system and can control parameters of the system. The PMS uses the Fidelio protocol.

PMS with no metering is identical to normal PMS but will not present any calls to the external package for which there are no meter pulses recorded.

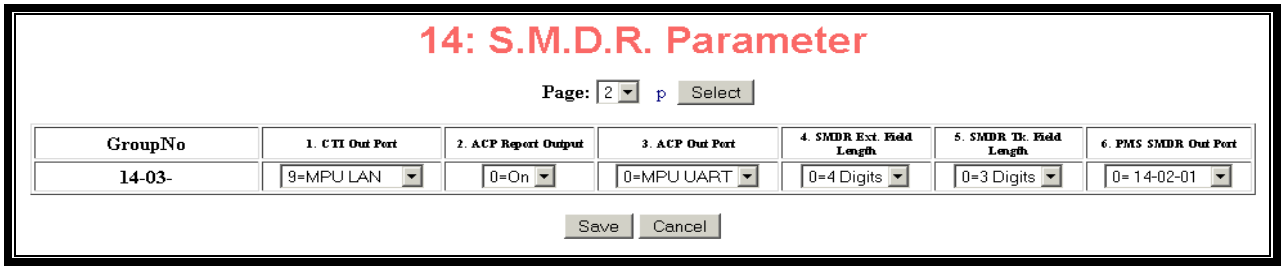
Hospitality Call Accounting is an improvement of the old Mini Call Accounting feature where all control and charging and printout is contained in the GDS operating system.

0 = Normal
2 = PMS with no meter pulse calls disabled

1 = PMS
4 = Hospitality Call accounting

### 1-06. Intercom SMDR:

This parameter when enabled will send details of all intercom calls to the SMDR output along with the normal external call accounting details.




| Item Pointer | Display Data | Programming Data Description | |
|---|---|---|---|
| 2-01 | 0-9 | CTI Output port | 0= MPU RS232 |
| 2-02 | 0-1 | ACP Report Output | 0=MPU RS232 |
| 2-03 | 0-9 | ACP Output Port | 0=Off |
| 2-04 | 0-4 | SMDR Extension Field Length | 0=4 Digits |
| 2-05 | 0-5 | SMDR Trunk Field Length | 0=3 Digits |
| 2-06 | 0- | PMS SMDR Output Port | 0=14-02-01 |

**Description:**

**2-01. CTI output port:**

This parameter permits the assignment of the RS232 port for the CTI output.
0 = G2-MPU RS232 1 = Use G2-MSU in the first cabinet
2 = G2-MSU in the 2nd cabinet 9 = Use LAN port of G2-MPU

**2-02. ACP Report Output:**

This parameter switches the flow control for the ACP report output.
0 = On 1 = Off

**2-03. ACP Output Port:**

This parameter permits the assignment of the RS232 port for the CTI output.
0 = G2-MPU RS232 1 = Use G2-MSU in the first cabinet
2 = G2-MSU in the 2nd cabinet 9 = Use LAN port of G2-MPU

**2-04. SMDR Extension Field Length:**

This parameter sets the length of the extension field in the SMDR output.
0 = 4 1 = 5 2 = 6 3 = 7 4 = 8

**2-05. SMDR Trunk Field Length:**

This parameter sets the length of the trunk field in the SMDR output.
0 = 3 1 = 4 2 = 5 3 = 6 4 = 7 5 = 8

**2-06. PMS SMDR Output Port:**

This parameter sets The Port that will be used for SMDR Output for the PMS function.

***SMDR OUTPUT DATA FORMAT***

| ST. | TK | S | TELEPHONE NUMBER | Account | MM/DD | START | DURATION | RING | UNIT |
|---|---|---|---|---|---|---|---|---|---|
| 112 | 801 | | 001188629645752 | 12345678 | 10/02 | 08:35 | 00:02'35" | | |
| 115 | 802 | | Incoming | 87654321 | 10/02 | 08:45 | 00:10'20" | 00'10" | |
| 000 | 803 | | Incoming no answer | | 10/02 | 12:00 | | 00'35" | |
| 112 | 804 | | 001188629645752 | FAC:01 | 10/02 | 12:10 | 00:02'00" | | |
| 112 | 803 | X | FAC or PSW error | | 10/02 | 12:30 | | | |
| 112 | 805 | X | 001 | | 10/02 | 12:35 | 00:00'05" | | |
| 121 | 801 | # | 0294150100 | | 10/02 | 14:15 | 00:00'55" | | |
| 117 | 801 | * | 0294150100 | | 10/02 | 14:15 | 00:03'10" | | |
| D3 | 805 | | 0418220212 | | 10/02 | 21:01 | 00:02'30" | | |
| D-03 | D | | << D I S A OFF >> | | 10/02 | 21:00 | 00:02'40" | | |
| 112 | 802 | | DDI Num: 94150112 | | 10/02 | 08:45 | 00:10'20" | 00'10" | |
| | 803 | | CLI NoAns:294176288 | | 10/02 | 12:00 | 00:00'00" | 00'35" | |
| 111 | 805 | | CLI Num: 294150100 | | 10/02 | 12:35 | 00:00'05" | 00'05" | |
| | 805 | | DDI NoAns:94150112 | | 10/02 | 12:37 | 00:00'00" | 00'27" | |

**TITLE DESCRIPTION:**

| | |
|---|---|
| ST = Station No. | : 1 to 8 digits, D = DISA |
| TK = Trunk No. | : 801 to 864, |
| S = Status | : # = Hold, * = Answered the hold, X = Cut off by toll restrictions. |
| Telephone Number | : First 24 digits |
| Account | : 8 digits in total |
| MM/DD | : Month/Day |
| Begin_Time hh:mm | : The start time of accessing the trunk line. |
| Duration_Tm hh:mm:ss | : Time duration of the call. |
| Ring_Tm mm:ss | : Incoming ring time. |
| Unit 00000 | : Meter Pulse Count |

**CASE EXPLANATION:**

**CASE 1:** October 2, 08:35 A.M., Station 112 made a call (telephone No. is 00116495256611) through line 1. The call lasted 2 minutes and 35 seconds, Account code No. 12345678 was entered for the call and 12-meter pulses were recorded.

**CASE 2:** October 2, 08:45 A.M., An incoming call on line 2, rang for 10 seconds, station 115 answered the call and stored an Account No. 87654321.

**CASE 3:** October 2, 12:00 P.M., An incoming call through line 3, rang for 35 seconds, no one answered and the call was abandoned.

**CASE 4:** October 2, 12:10 P.M., Station 112 made a Long Distance call through line 4 by Forced Account Code 1 and 23 meter pulses were recorded.

**CASE 5:** October 2, 12:30 P.M., Station 112 made a call by Forced Account Code but was denied because of a wrong code.

**CASE 6:** October 2, 12:35 P.M., Station 116 made a call, which was restricted.

**CASE 7:** Line 1 was used by station 121 for 55 seconds then put on hold. One meter pulse was recorded against this station for its section of the call.

**CASE 8:** The held line 1 was answered by station 117 and he occupied the line for 3 minutes and 10 seconds. Four meter pulses were recorded against this station for its section of the call.

**CASE 9:** Incoming Line 3, using the DISA function, made an outside call 0418220212 on line 5. The Duration time is for line 5. 3 meter pulses were recorded for this call.

**CASE 10:** DISA is completed. The Duration time is for line 3.

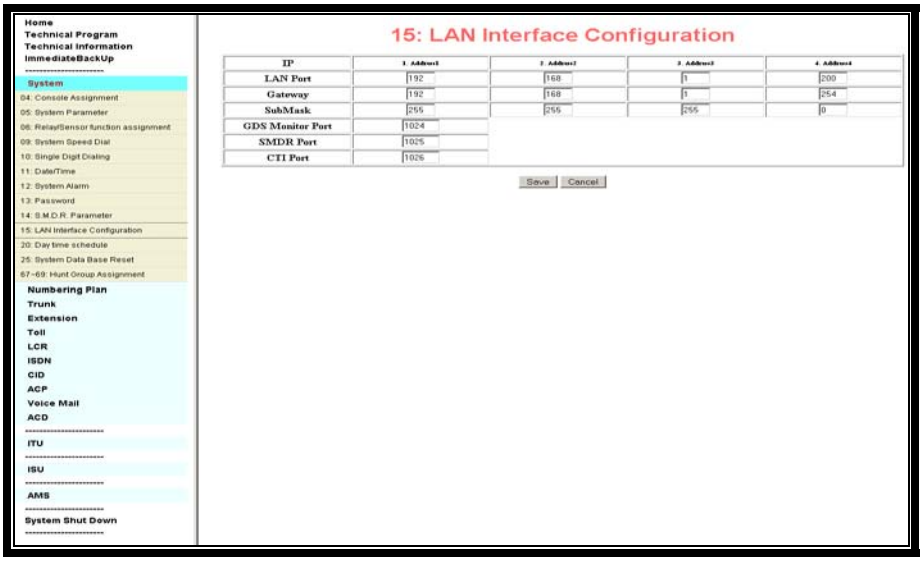
**CASE 11:** Incoming call on an ISDN system. The number displayed is the Indial number dialled by the calling party. The system can be programmed on a station by station basis to select whether calls to that station will display the Indial number dialled or the CLI information of the incoming caller

**CASE 12:** An incoming call rang for 35 seconds and no one answered. The CLI number of the calling station is displayed.

**CASE 13:** An incoming call on line 5 (ISDN) was answered by station 111. The SMDR displayed the CLI number (294150100) of the calling party. The system can be programmed on a station by station basis to select whether calls to that station will display the Indial number dialled or the CLI information of the incoming caller. The number 94150100 is the pilot number of the Indial group.

**CASE 14:** An incoming call rang for 27 seconds and no one answered. The Indial number the calling station dialled is displayed.

## Program 15 : LAN Interface Configuration




**Description:**
LAN Port: To assign the TCP/IP IP address of the GDS 600.
Gateway: To set IP address of the gateway to go to the Internet.
Submask: To set IP subnet mask.
SMTP: To assign the SMTP IP address to send e-mail by GDS 600. (future)

**WHY WOULD YOU CHANGE THE IP ADDRESS**
Today's computer networks communicate using IP (Internet Protocol) addresses. This address allows one device to find another device and then talk between them. On a network each computer or device must have a separate IP address to prevent conflicts. The GDS system uses an external PC for programming, upgrading software and in case of a problem can provide maintenance files that will enable our engineers to debug the system. So each GDS system will need to be connected to a PC at some time in it's life to enable it to be set up to the customers needs. The default IP address for the GDS is 10.10.10.5 with a gateway address of 10.10.10.1 that is often not going to work with the way the customers network is set up. The average small office network uses a system called DHCP (Dynamic Host Configuration Protocol), which is a system that allocates an IP address within a specified range to each PC every time the PC logs on to the network. Using the ATA office as an example the network is a simple Windows based Peer to Peer network which does not have a server as such and is mostly used to share printers, a software package and the internet connection. The Internet connection is ADSL, which has a DSL modem connected to a D-Link Router that is the gateway and DHCP server for the network. The D-Link router has an IP address of 192.168.1.254 and this is the gateway address of the network. The DHCP server allocates IP addresses in the range 192.168.1.1 to 192.168.1.250 starting at 192.168.1.1. So the first computer that logs on will be allocated an IP address of 192.168.1.1, the next PC 192.168.1.2 etc. We have only at the most 30 computers so to prevent Conflicts we have allocated the GDS system in the ATA office as 192.168.1.200 and the VOIP card as 192.168.1.100. This network is isolated from the Internet by the D-Link router so even if there were 100 other internal networks programmed with exactly the same IP addresses there will be no conflict between them. If the customers network has a fixed IP address on the Internet then it will normally be possible to program the GDS from anywhere on the Internet. Even this will not cause a conflict with the similar IP addresses as the external programmer will type in the fixed IP address of the customer and then a Port number that will need to be programmed into the customers router and then pointed at the IP address of the GDS. Because the average small router contains a hardware firewall the GDS is normally safe from hackers gaining access. If the Router does not contain a firewall then a software firewall is HIGHLY recommended. A remote enabled GDS should have a password assigned for security from intrusion.

## Changing the IP Address

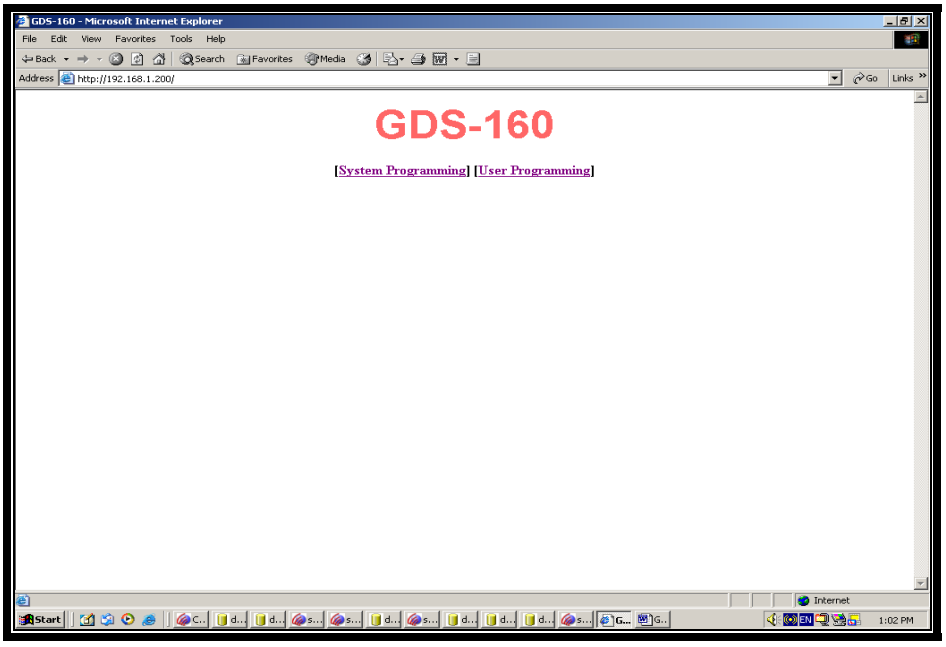
The default IP address of The GDS MPU2 is 10.10.10.5 and the default Gateway address is 10.10.10.1.
It is most important that if you change the IP address to a different range then you MUST change the Gateway address to an address in the same range. For example if you change the IP address to 192.168.1.200 then the gateway address must be changed to 192.168.1.X . Normally x will be a number from 1 to 254 in most small networks. Because the subnet mask is 255.255.255.0 then the first three settings of the IP address are significant in setting the gateway. Normally the IT department of your customer will allocate an IP address to program into the MPU2 and will also advise the gateway address of the customers network. It will most likely be the IP address of the customer's router. Because the IP address of the MPU2 is fixed by programming it cannot be set to use DHCP IP allocation so the IP address allocated must be in an area that is not likely to be allocated by the DHCP server to a PC or other device which is set to receive an IP address automatically on logging in to the network. If the customers network is capable of providing an external connection to the GDS then it is even more Important that the IP address is fixed within the network.

When the IP address is changed the system must be powered down and restarted to recognize the new IP address. This must be done correctly to ensure that the new IP address is saved.

1. Set new IP address in Mode 15-01 – press SAVE
2. Set new Gateway address in Mode 15-02 – press SAVE
3. Set new Subnet mask in mode 15-03 (this will normally not be required but check with the customers IT section). Press SAVE
4. Press SPK to exit programming
5. Press SAVE to activate immediate backup. If you do not do this then on power down the system will revert to the old IP address.
6. Wait till the system has restarted after the immediate backup (about 1 minute).
7. Switch off the system, wait 10 seconds and switch back on again.

## Connecting to the GDS from the network PC's

Once all this is completed you should be able to address the GDS from any PC on the network. Use Internet Explorer or Mozilla Firefox and clear the address line and type the IP address allocated to the GDS and press Go



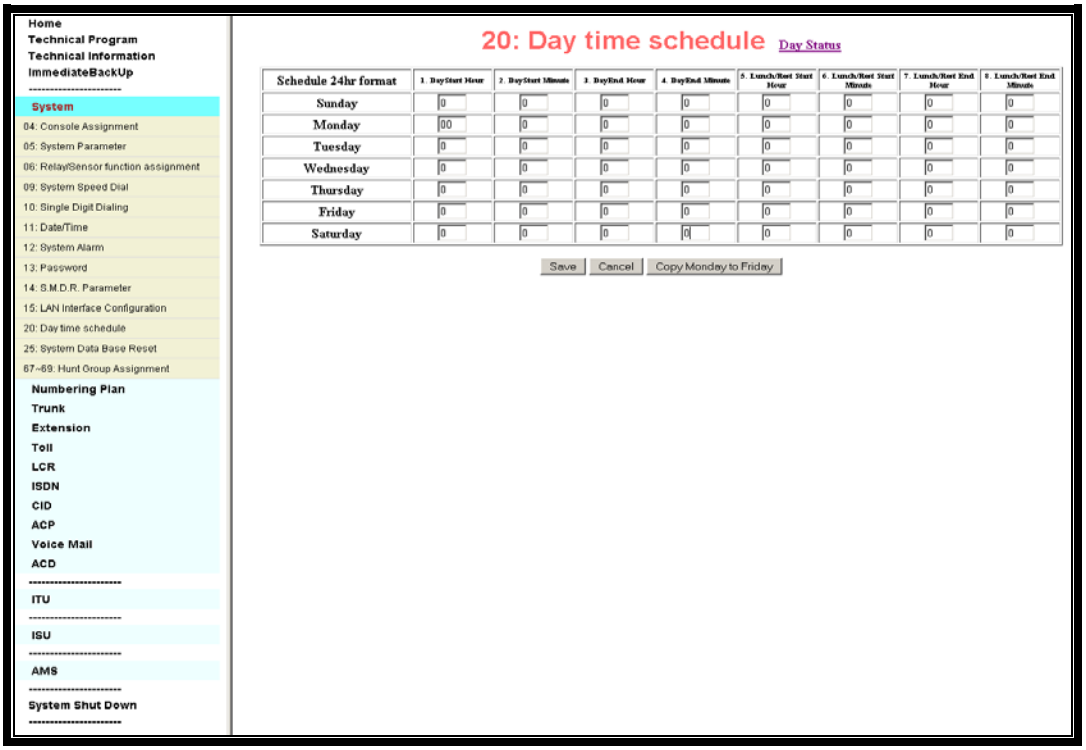

Other browsers should also work fine with the GDS but have not been tested by ATA. As Firefox and Internet Explorer are by far the most popular browsers we have concentrated on their use.

## Connecting to the GDS from a Laptop Computer

The first requirement is that the laptop has a network card connection and that a crossover cable is available. Once the hardware issues are resolved then the next issue is whether the computer has network components installed. If the PC has never been connected to a network previously then they may not be. To install the network components may require the use of the Setup disk of the Windows operating system installed on the PC (only older versions of Windows). Once networking components are installed then it will be necessary to change the IP address of the PC to the same range as the IP address of the GDS computer before they can communicate. Taking the default setting of the GDS as 10.10.10.5 then it will be necessary to change the IP address of the PC to 10.10.10.X
X can be any number other than 5 as if you set the laptop to 5 then it will conflict with the 5 already allocated to the GDS system. It is not within the scope of this manual to instruct users in how to set up a computer and change IP addresses etc. Any technician who is not familiar with these procedures should seriously consider some sort of IT course to prepare them for the converging future of the Communication and IT industries fast approaching.

The PC requires JAVA to be installed to talk to the GDS correctly. If the opening screens of the GDS are displayed Ok and then the left hand side Menu stays blank then the most likely reason is no JAVA on the PC. Not all versions of Windows have JAVA although the one that is most likely NOT to have JAVA is XP. JAVA is available from www.sun.com as a free plug in for computers that require it.
It is possible that if your Laptop has Windows XP Home installed rather than XP Professional you may have problems with this version also on a network and the GDS.

## Program 20-nn- : Set Day Time / Lunch Time Schedule




**General:**

This program assigns daytime from Sunday to Saturday for automatic night switching and sets lunchtime to allow the VSU to play a different message for this period.

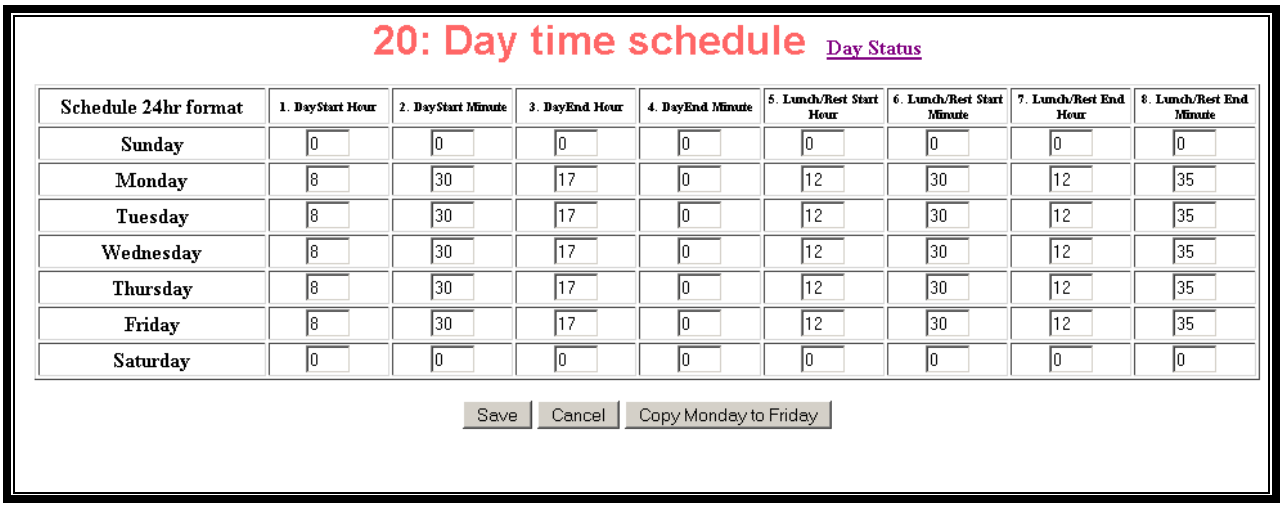
**Description:**

The system is capable of switching automatically between day / lunch break / night settings using the time parameters set in this Mode. To change from manual to automatic night switching the console presses **[PRG] /[TRF/FL]** / *****. Pressing ***** toggles between the 2 modes.

If a Function key has been set to function 52 then pressing this key will change from Day to night mode by one touch but will not change between Automatic and Manual switching.

00 = Sunday
01 = Monday
02 = Tuesday
03 = Wednesday
04 = Thursday
05 = Friday
06 = Saturday

Example



20: Day time schedule Day Status

| Schedule 24hr format | 1. DayStart Hour | 2. DayStart Minute | 3. DayEnd Hour | 4. DayEnd Minute | 5. Lunch/Rest Start Hour | 6. Lunch/Rest Start Minute | 7. Lunch/Rest End Hour | 8. Lunch/Rest End Minute |
|---|---|---|---|---|---|---|---|---|
| Sunday | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Monday | 8 | 30 | 17 | 0 | 12 | 30 | 12 | 35 |
| Tuesday | 8 | 30 | 17 | 0 | 12 | 30 | 12 | 35 |
| Wednesday | 8 | 30 | 17 | 0 | 12 | 30 | 12 | 35 |
| Thursday | 8 | 30 | 17 | 0 | 12 | 30 | 12 | 35 |
| Friday | 8 | 30 | 17 | 0 | 12 | 30 | 12 | 35 |
| Saturday | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

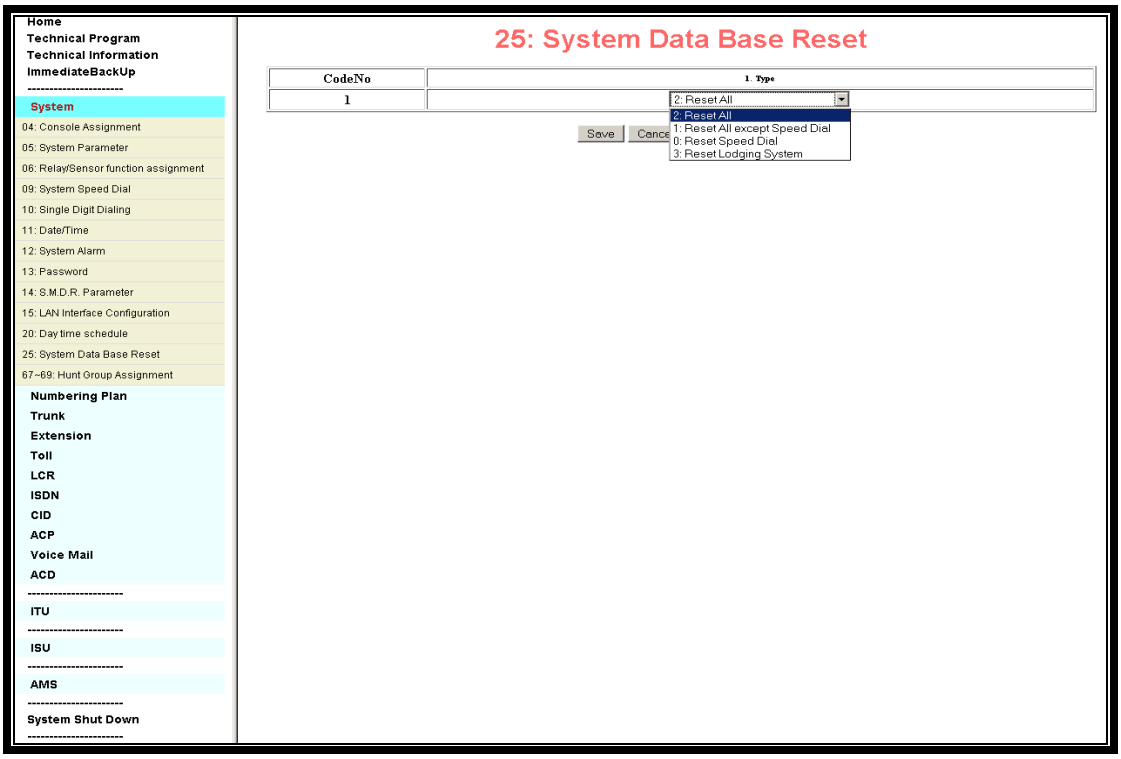
Save Cancel Copy Monday to Friday

In this example from Monday to Friday the system will switch from Night to Day setting at 0830, switch to Lunch setting at 1230 and back to Day setting at 1235 and back to Night setting at 1700. On Saturday and Sunday the system will stay in Night service until Monday at 0830.

During Lunch Mode the system will change to night ring assignment and Auto Attendant or ACD settings but will play a different Lunch time message.

From E61e software the Day/Night/Lunch status will be able to be reviewed and changed from the web browser as shown above.

## Program 25 : Reset Data to System Default




**Description:**

This program resets all data to System Default. All new systems must be reset to default before any programming in case corruption has been caused during handling or shipping. It will also be sometimes necessary to reset to default after a software upgrade is installed.

Reset all = The system data will be totally reset to system default.

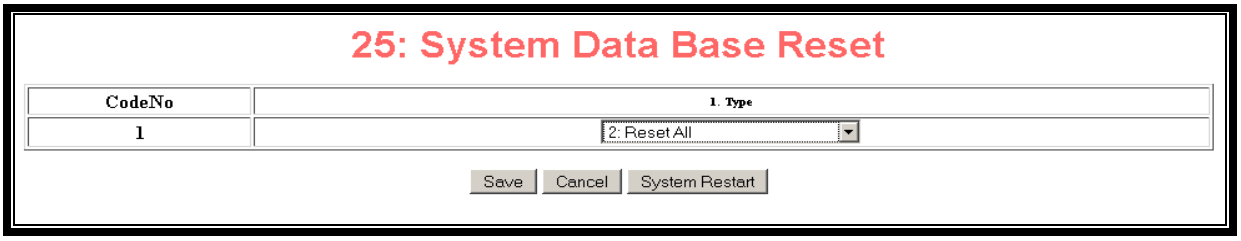
Reset all except system Speed Dial = System data will be reset to system default except System Speed Dials.

Reset Speed Dial = All System Speed Dials will be reset but system programming will be left intact.

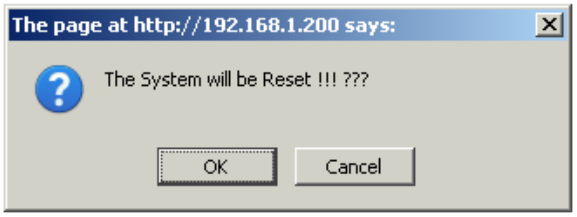
Reset Lodging System.. This parameter resets the System to default, sets all extensions in mode 50-st-08 to be Guest phones and sets Mode 46-st-07 and Mode 78-st-04 to call forward to Voice Mail.

**WARNING**: All user-defined data will be lost in some settings .

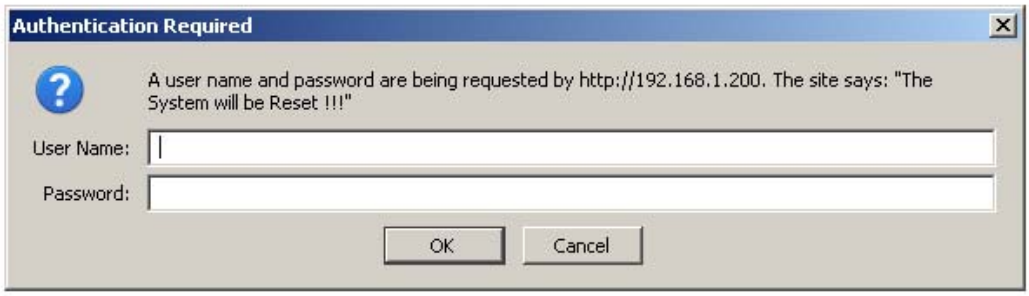
## Remote Restart of GDS System




Some versions of software from E61 allow the system to be restarted from the Web Browser as shown. Pressing System restart will bring up the next dialogue box. Don't be concerned that it will reset the system it is only a restart procedure.

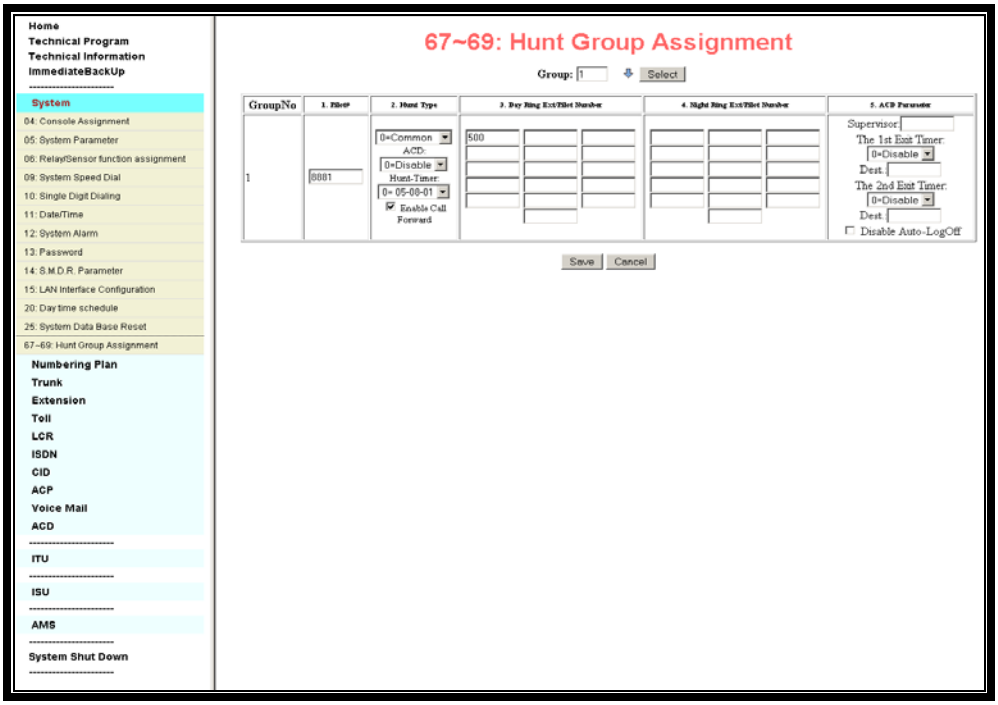


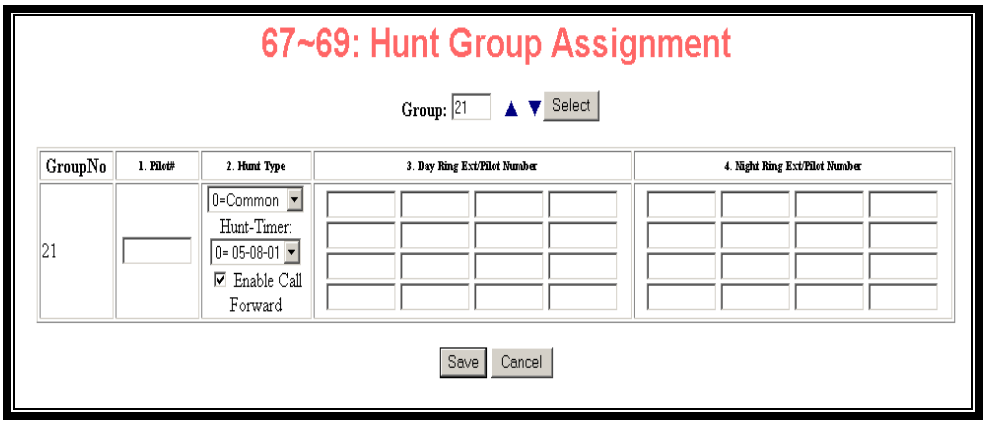

Press OK and the next dialogue box will be displayed. The User name is lower case "Hybrex" and the password is system password as per mode 13. It is absolutely vital that any system that is accessible from the Internet or from the customers network has password enable to prevent disasters.




Once the system restart has taken place the Web connection will need to be re-estabilished.

## Program 67~69 : Hunt Group




**Description:**

From 050 software the first 20 Hunt Groups are also ACD groups with additional ACD parameters. From Hunt group 21 the groups return to the traditional GDS Hunt Group format. For full details of ACD programming refer to the ACD Programming Manual.

**01. Hunting Group Pilot Number:**

There are 100 Hunt Groups available in the GDS-160 and 255 in the GDS320. Each Hunt Group is assigned a Pilot Number in this Mode. The pilot number can be any valid unused number which does not conflict with any other numbering in use.

Hunt group pilots can be assigned to ring from Single Digit DISA.

**02. Hunting Group Ringing Method:**

Assign one of 5 ringing methods for each hunting group. Common, Linear, Circular, Hunt and Private. Hunt ring has 2 options SR and MR. If SR is set then the incoming call will stop ringing a station when the time comes to Hunt to the next station in the group. If MR is selected the first station will continue to ring when the call Hunts to the second station etc.
Once Ring Type is set here then ringing this pilot number will access the stations in the group according to the ringing method selected and the order in which they are programmed. Each Hunt Group can be from 1 to 16 stations in the GDS-600.

If **Common Ring** is enabled then calling the pilot number will always ring all available stations which are programmed simultaneously.

If **Linear Ring** is enabled then calling the pilot number will always call the first available station in the order in which they are programmed.

If **Circular Ring** is enabled then the stations will be called one after the other for each succeeding call until all have taken a call and the Ring will revert to the beginning of the Ring assignment and then repeat the process.

If **Hunt Ring (SR)** is enabled then the stations will Ring the first assigned station and after the Hunt timer will stop ringing this station and start ringing the next assigned station after each cycle of the Hunt timer is reached.

If **Hunt Ring (MR)** is enabled then the stations will Ring from the first assigned and will add another station after each cycle of the Hunt timer is reached.

If **Private Ring** is enabled then calling the pilot number will always ring all available stations which are programmed simultaneously but the member stations will be able to call forward Hunt calls out of the group.

If **ACD** is enabled either by calls or time on calls then Ring type must be set to either Hunt (SR) or Hunt (MR).

From Software version E61E ACD groups can be set to Common Audible to allow the use of ACD2 groups and ACD2 individual messages to tenant operator overflow calls (ACD-!)

Stations can remove themselves from receiving Hunt group calls by using the DND key but this will also prevent them from receiving direct calls.
If ACD is enabled then and ACD Agent key or code can allow Agents to log in or out of each group individually.
It is still possible to call each station in the Hunting group directly by dialling it's own individual station number.
If a station in a Hunt Group has set call forward to a station or another Hunt Group (for instance Voice Mail Group) then only direct calls to the station will be forwarded unless the Hunt type is private or the CFW button is ticked for that group. If Hunt calls come to the station and the CFW button is un-ticked and it is call forwarded it will still ring for the call .

**02A. Hunt Timer:**

If the Hunt group ring type is Hunt Ring then this timer allows each hunt group to set it's own Hunt time. In default each Hunt Group will use the system wide setting of 05-08-01 which has a default of 2 secs.

**02B. Enable Call forward:**

This parameter sets whether calls that enter the Hunt Group via the Pilot number will follow the Call Forward of Member stations of the Hunt Group. Direct calls to a Station that is also a member of a Hunt Group will follow the Call Forward settings of that station but calls which reach the station via the Hunt Group have the option of forward or not forward on a group by group basis.

**03. Day Members:**

In this parameter is set the stations that are members of the Hunt Group for Day time operation. The members can be extension numbers or Pilot numbers. The maximum number of members per Hunt group is 16. If more than 16 members are required then 15 can be programmed in the first group and the last entry can be the Pilot

of another group. This way a larger number of stations can be programmed to Ring or be called from one pilot number.
Moving from one pilot group to another can also provide more complex ring assignments to meet customer requirements. For example Hunt group 888 could be set to Common audible with members 111 and 889. Hunt group 889 could be Ring Hunt with a Hunt timer of 6 seconds and members 500 (a virtual extension – See Mode 21 to program virtuals) and 890, another pilot number. Hunt group 890 could be a Common Audible group with 10 extensions as members. When Group 888 is rung then Stn 111 will ring immediately as will group 889. Because the first member of 889 is a virtual and that virtual has not been given a Voice Mail box then it will phantom ring which means it will be not be seen as having any effect. When the Hunt timer elapses pilot 890 will ring which will cause all 10 members of Group 890 to ring simultaneously. The virtual extension has been used only as a delaying factor and no other purpose in this case.
If the customer wants all of this to happen and then after a further period of time have the call go to Voice Mail then we would add 891 as the last member of Group 890 and then create Group 891 as a Hunt ring group with virtual members 501 and 502 and a Hunt timer to suit the customers needs. Virtual 501 can be a normal virtual but 502 could be given a mailbox (see Mode 31) and once the call reaches this point would answer with the personal greeting and take a message.
If ACD is enabled up to 4 groups can be chained together in an ACD group to give a total of 61 Agents in an ACD group. ACD groups are chained together by inserting the pilot number of the next group into the Previous ACD group. A chain of Hunt Groups in an ACD configuration will follow the settings for the ACD group set in the first group.

**04. Night Members:**

In this parameter is set the stations that are members of the Hunt Group for Night time operation. The members can be extension numbers or Pilot numbers. See the details of Day time operation for details of programming.

**05. ACD Settings:**

**05A. Supervisor:**

The Supervisor is the station(s) that control ACD operation if the group is used for this feature. If the entry is a Hunt Group then the members of that Hunt Group can Log In / Out as Supervisors for the group.

**05b. First Exit Timer and Destination:**

The first exit timer sets the time that a call will stay in an ACD group before playing the second ACD message then moving to the destination specified here. Normally that destination will be the Hunt Groups own number and the call will then be returned into the Hunt Group without losing position and will continue waiting to be answered. Every time the First exit timer elapses the second ACD message will be played to the Agent but they will stay in the queue and will continue to receive this message until the second timer elapses.

**05c. Second Exit timer and destination**

The second exit timer sets the time that a call will stay in the ACD group before playing the third ACD message then moving to the destination specified here. That destination can be the Hunt Groups own number and the call will then be returned into the Hunt Group without losing position and will continue waiting to be answered. Every time the First exit timer elapses the second ACD message will be played to the Agent but they will stay in the queue and will continue to receive that message until once again this timer elapses and the caller receives the Third message again. Alternatively the destination could be to an entirely different destination such as another Hunt Group or reception or a virtual mailbox. Once the call leaves the group from here it will have no further contact with this group or its messages.

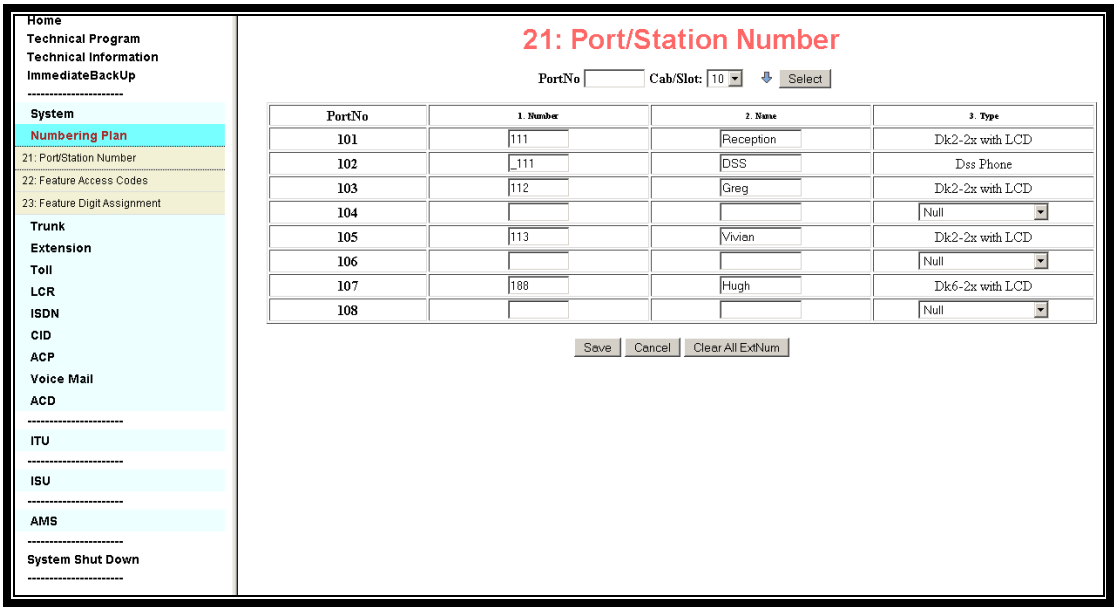
**05d. Disable Auto Log Out Feature**

This parameter enables/disables the Auto Log Out feature for extensions who do not answer an ACD call before the Hunt time elapses and the call passes to the next extension.

# System Programming – Numbering Plan

The Category “Numbering Plan” includes below system programming modes:

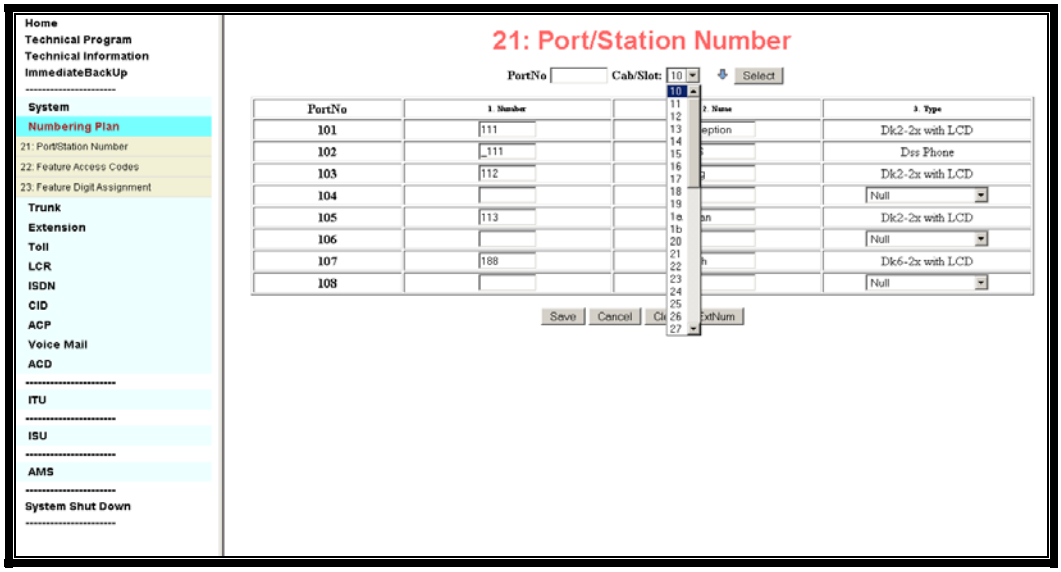
Mode 21: Port Number
Mode 22: Function Number
Mode 23: Special Digit Feature



## Program 21-csn-IP : Port Specifications

**This is to assign the extension number for the physical port of the system.**
**csn for the Port No means:**

**c: The cabinet number.**
**s: The slot number in the cabinet.**
**0 = the 1st slot 1=the 2nd slot 3=the 3rd slot ….. 9=the 10th slot**
**a~b= reserved for PIU.**
**n: The port number (1 to 8) in each slot.**




**csn** = Position Number on Card (11-68)
In the GDS-600, the port number consists of 3 digits
01~08: station ports on the 1st extension slot. 11~18: station ports on the 2nd extension slot.
21~28: station ports on the 3rd extension slot. 31~38: station ports on the 4th extension slot.
41~48: station ports on the 5th extension slot. 51~58: station ports on the 6th extension slot.
61~68: station ports on the 7th extension slot. 71~78: station ports on the 8th extension slot.
81~88: station ports on the 9th extension slot. 91~98: station ports on the 10th extension slot.
1a1~1a8 Virtual ports on the 10th(Virtual) slot 1b1~1b8 Virtual ports on the 11th(Virtual) slot

| Slot on MBU | STU 1 | STU2 | STU3 | STU4 | STU5 | STU6 | STU7 | STU8 | STU9 | STU10 |
|---|---|---|---|---|---|---|---|---|---|---|
| S=Card no. | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| N=Port No. | 1~8 | 1~8 | 1~8 | 1~8 | 1~8 | 1~8 | 1~8 | 1~8 | 1~8 | 1~8 |
| CSN | C01~C08 | C11~C18 | C21~C28 | C31~C38 | C41~C48 | C51~C58 | C61~C68 | C71~C78 | C81~C88 | C91~C98 |

The 11th and 12th Virtual slots can be used as virtual stations unless a 30 channel PRI is installed in the cabinet in which case the virtual ports will be used for channels 17 to 30 of the PRI card

**01. Station number:**

Use this setting to assign station numbers for the Flexible Numbering Plan. A station number can be 1 to 8 digits in length. Careful planning will allow the use of different extensions with different digit lengths. Use of the Interdigit timeout (05-03-06) will allow station numbers to have different digit lengths but with the same starting digit.

**02. Name**

Each extension can be named and on a Digital extension with LCD the name will be displayed on the LCD when the phone is idle. If the system is using PMS then the names of guests will be under the control of the PMS package.

The system can recognise each individual type of Digital extension and the information will be displayed against the station.

**03. Equipment Type - Digital**

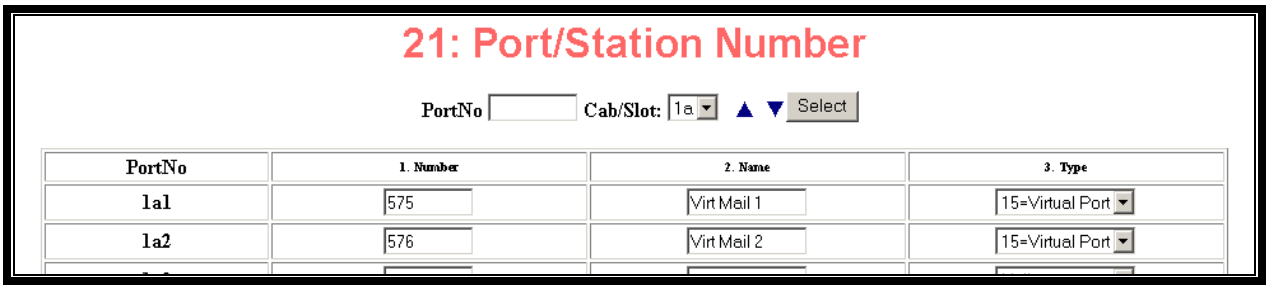
The system will automatically recognise many of the equipment types that are connected to the system and will display them in the third column of the web interface. SLT ports can be modified by the user manually for special applications such as Voice mail ports or External music sources.

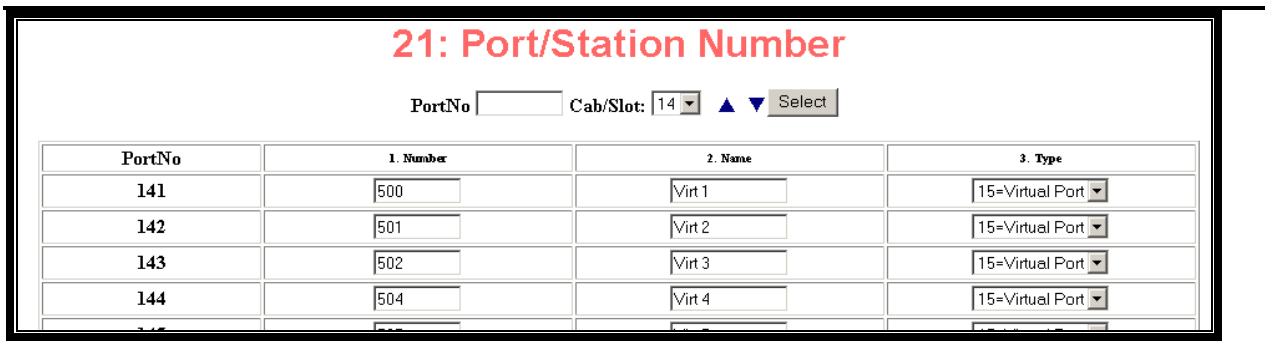
**03a. DSS Consoles**

A DSS console will be recognized by the system and the Station number will be displayed as _112 for example. To assign the DSS console(s) to be controlled by a particular station, enter that Station number with the Underscore first. EG: _111 means this DSS console will be controlled by Station 111. In extension programming the DSS port will always be displayed with the underscore to differentiate between the DSS port(s) and the controlling station port.

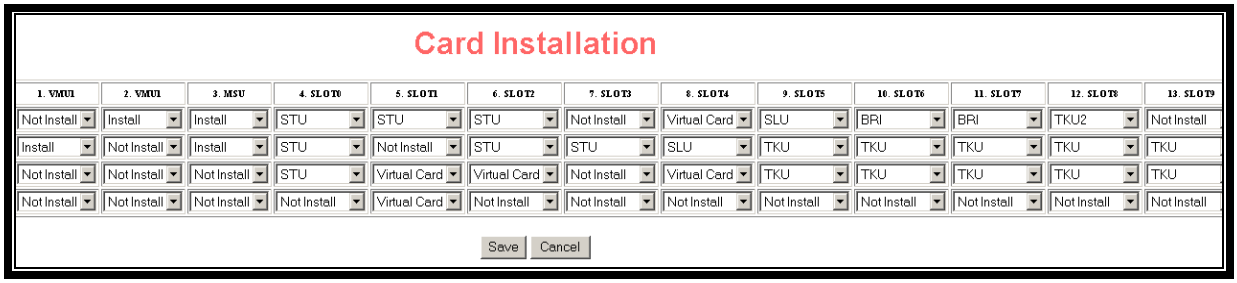
**03b. Virtual Ports/Extensions.**

An unused port can be allocated as a Virtual port with an extension number that can be used for some special types of programming. A virtual port can be assigned a mailbox which can be used for taking system messages after hours as an example. A virtual port can also be assigned a DSS button in Mode 07. Any slot that does not have a card installed can be allocated as a virtual Card (See Card Installation) and then allocated extension numbers for virtual use. If the GDS system is a single cabinet installation it is still possible to install virtual cards in virtual slots in the virtual second cabinet without it being installed. If the system has no PRI card installed the Slots 1a (shown below) and 1b are available to create virtual extensions. When the PRI card has the maximum number of channels used then this allocation will be reduced or totally removed depending on channel numbers. It is not necessary to install a virtual card for these slots before creating virtual numbers. Virtual extensions created in these slots unused by the PRI card are limited in usage compared to a virtual created in a real spare slot. The Virtuals created in a real slot will have all the attributes and station specifications available to a real extensions in modes 40-50 etc and can be Call Forwarded by the Web Browser whereas those created from the spare PRI ports are limited to being delay stations in Hunt Groups and can be Virtual Mailboxes.



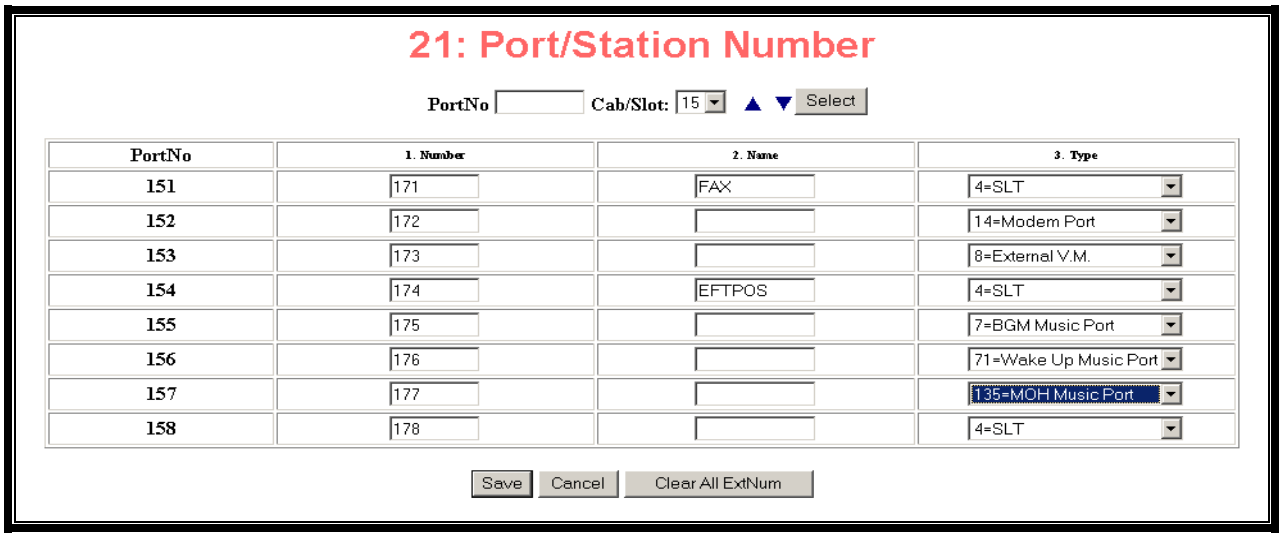



To create a virtual card in the Web browser, access Technical Programming and then Card Installation. In this example we have created a Virtual card in slot 4 of Cabinet 1 plus 2 cards in slots 1 and 2 of cabinet 3. In practice it is probably best to create the virtual slot in the last available slot in a system that actually uses the second cabinet to make certain that a real card is unlikely to be installed into the slot later. As this system shown is a GDS 320 with 3 cabinets only installed then the ideal solution is to have all Virtuals in (virtual) cabinet 4.




**04. Equipment Types – Analogue – Dual Porting**

The following example shows the options available to set Analogue ports




Analogue ports can be assigned as Voice Mail ports to enable the system to send DTMF tones identifying a call forwarded calls originating station. A voice Mail port will receive inband DTMF tones from call forwarded stations identifying the mailbox to which the call is intended. Mode 24 can be used to tailor the Inband Protocol to external devices. This parameter is used only when an external Voice Mail device is used not for the internal Hybrex unit.

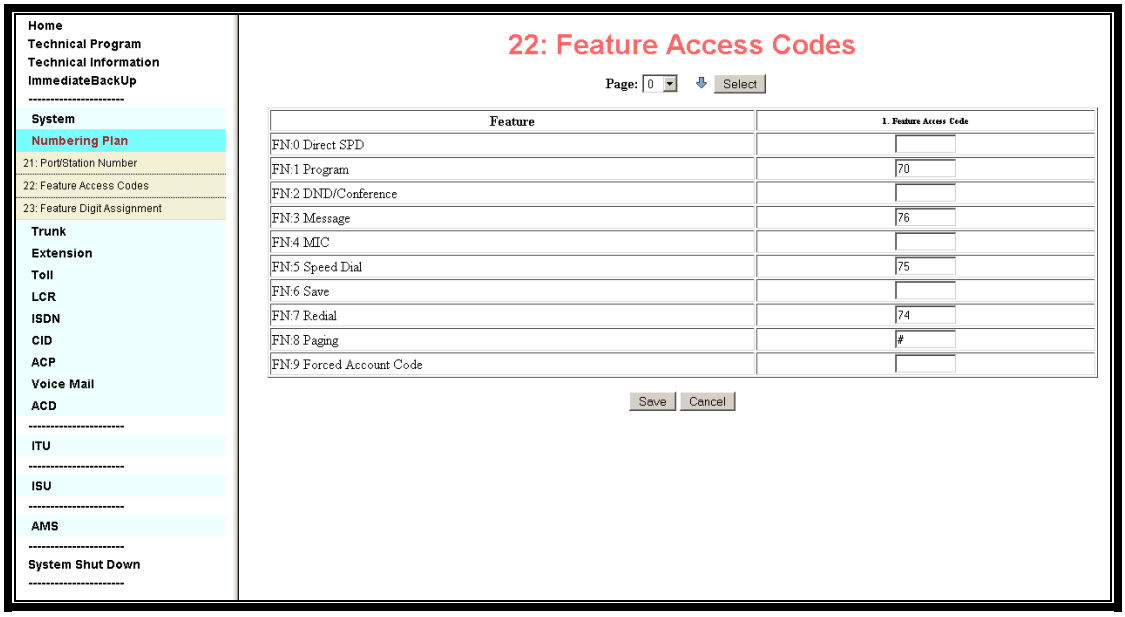
Analogue ports can also be used as external Music sources for Music On Hold, Background music, or wake up music port. This allows the system to have multiple MOH sources for tenanted systems or special applications. If an analogue port is used in this way it is important that a Line Isolating device is used between the Music source not only for safety but to prevent an excessive amount of current being drawn from the circuit of the SLT port. The maximum current must be no more than 10ma to prevent long term damage to the Analogue circuit of the SLU-M card.

The modem port setting relates to using a Modem to remotely program the GDS system. The Modem should be connected to an analogue port and that port should then be set to be a modem port. Remote programming through an Analogue Port will not work without this being enabled.

An SLT port can be Dual ported with a Digital phone. This means that the digital and analogue ports will both be assigned the same station number and when rung will both ring until one or the other answers. A call on either can be placed on hold and picked up by the other using normal hold procedures. To assign a Dual port the Station number of the Digital port is assigned to the Analogue port to be paired with the underscore used in front of the number similar to pairing a DSS console to a Digital phone.

## Program 22 : Function Number Assignment

This is to assign the special dialled number for the function codes in program 07. Each Function code in mode 07 can be allocated to a DSS button and pressing that button will activate the function. Mode 22 allows the programming of an equivalent code for each function that can be used by all extensions both digital and analogue to activate the function. These codes must be assigned with care paying particular regard to the possibility of numbering scheme clashes. In practice it is safest to work in the 7xxxx range for this feature allocation taking note of existing codes and modifying as necessary.

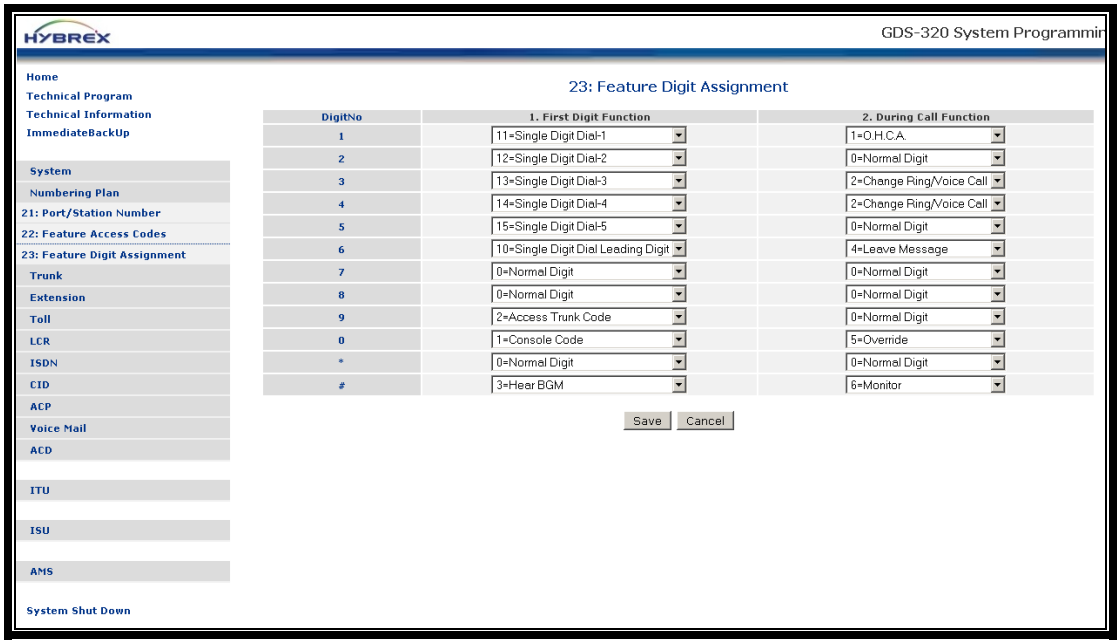


| ff Code | Function |
|---|---|
| 00 | One Touch DSS Speed Dial |
| 01 | Program |
| 02 | **D**o **N**ot **D**isturb/Conference |
| 03 | **M**essage **W**aiting/**P**ulse-**T**one |
| 04 | Microphone/**AUTO** answer |
| 05 | Speed **D**ial |
| 06 | **SAVE** |
| 07 | **R**edial |
| 08 | Reserved |
| 09 | **F**orced **A**ccount **C**ode |
| 10 | Voice Set up |
| 11 | User Speed Dial Set up |
| 12 | Console User Speed Dial Set up |
| 13 | Console System Speed Dial |
| 14 | **S**ecurity **C**ode **S**et up |
| 15 | **Help List** |
| 16 | **T**emporary **S**ecurity **C**ode |
| 17 | **Check In** |
| 18 | **Check Out** |
| 19 | Charge Inquire |
| 20 | All Paging (Internal) |
| 21 | All Paging (External) |
| 22 | All Paging (Internal/External) |
| 23 | Zone Paging (Internal) |
| 24 | 1A2 Emulation Privacy |
| 25 | Voice Mail Transfer |
| 26 | Swap (Call Split) |
| 27 | Answer Machine Emulation |
| 28 | Mobile Office Login |
| 29 | SLT Leave Message |
| 30 | Exclusive Hold |
| 31 | Compel Release |
| 32 | CLI History |
| 33 | Pickup |
| 34 | Voice Mail On Line Record |
| 35 | Pickup Own Group |
| 36 | Pickup All Groups |
| 37 | Pickup Group |
| 38 | Check Room Status |
| 39 | Hunt Group Log In/Out |
| 40 | ACD Wrap Up |
| 41 | ACD Help |
| 42 | ACD Agent Monitor |
| 43 | ACD Agent Log On/Off |
| 44 | ACD Supervisor Log On/Off |
| 45 | Reserved |
| 46 | Toll Password |
| 47 | Alarm Assign |
| 48 | User Alarm |
| 49 | Console- Set up Alarm |
| 50 | Console- Set up System Time |
| 51 | Message Select |
| 52 | Day / Night |
| 53 | Call Forward |
| 54 | Forward Busy[*3] |
| 55 | Forward No Answer[*3] |
| 56 | Meet me Page |
| 57 | Shift Key |
| 58 | Meter Rate Setting[*3] |
| 59 | Hotel/Motel Function |
| 60 | Door Phone |
| 61 | Reserved |
| 62 | Directory key (for name search) |
| 63 | Pre-dial key |
| 64 | Extra Trunk Group |
| 65 | Reserved |
| 66 | Reserved |
| 67 | Reserved |
| 68 | Room Monitor |
| 69 | Reserved |
| 70 | Unlock SMDR |
| 71 | Reserved |
| 72 | Monitor Extension |
| 73 | Headset/Handset |
| 74 | Clean Room Status |
| 75 | Stop Alarm |
| 76 | Reserved |
| 77 | Personal Mail Box |
| 78 | System mail box |
| 79 | Call Park |
| 80 | Home Node Identifier |
| 81 | Node 1 Access Code |
| 82 | Node 2 Access Code |
| 83 | Node 3 Access Code |
| 84 | Node 4 Access Code |
| 85 | Node 5 Access Code |
| 86 | Node 6 Access Code |
| 87 | Node 7 Access Code |
| 88 | Node 8 Access Code |
| 89 | Node 9 Access Code |
| 90 | Park No# 0 |
| 91 | Park No# 1 |
| 92 | Park No# 2 |
| 93 | Park No# 3 |
| 94 | Park No# 4 |
| 95 | Park No# 5 |
| 96 | Park No# 6 |
| 97 | Park No# 7 |
| 98 | Park No# 8 |
| 99 | Park No# 9 |
| 100 | Reserved |
| 101 | Reserved |
| 102 | Reserved |
| 103 | Reserved |
| 104 | Reserved |
| 105 | [Hotel *] (Room status change) |
| 106 | [Hotel 0] Wake Up Call History |
| 107 | [Hotel 5] Print Room Charge |
| 108 | [Hotel 7] List used/available records |
| 109 | [Hotel 8] List total telephone charges |
| 110 | [Hotel 9] Set Credit Limit |
| 111 | ACD Group 1 Agent Log On/Off |
| 112 | ACD Group 2 Agent Log On/Off |
| 113 | ACD Group 3 Agent Log On/Off |
| 114 | ACD Group 4 Agent Log On/Off |
| 115 | ACD Group 5 Agent Log On/Off |
| 116 | ACD Group1 Supervisor Log On/Off |
| 117 | ACD Group2 Supervisor Log On/Off |
| 118 | ACD Group3 Supervisor Log On/Off |
| 119 | ACD Group4 Supervisor Log On/Off |
| 120 | ACD Group5 Supervisor Log On/Off |
| 121 | Volume Up |
| 122 | Volume Down |
| 123 | Conference Room |
| 124 | Conference Meeting |
| 125 | Emergency Door Open |
| 126 | Mail Box Group |
| 127 | Restart ITU/ISU Web Server |

Set up

# Program 23 : Special Digit Feature

This is to assign the function for the first dialled digit after lifting the handset or the dialled digit during a call.

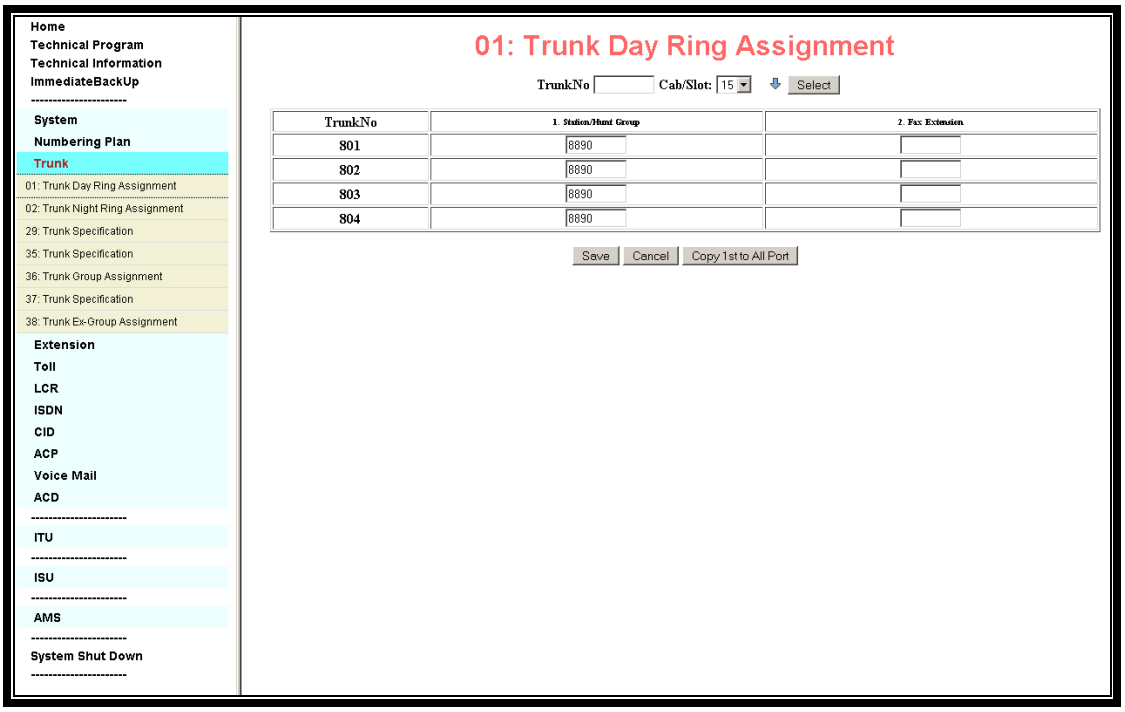



This Mode allows the operation of keys to be modified from system default. The only change that is recommended here is to change dial 9/0 under to suit the customer. The operation of many keys can be changed if needed but remember that this could make the user guide instructions useless requiring the writing of special user guides to suit the customer.

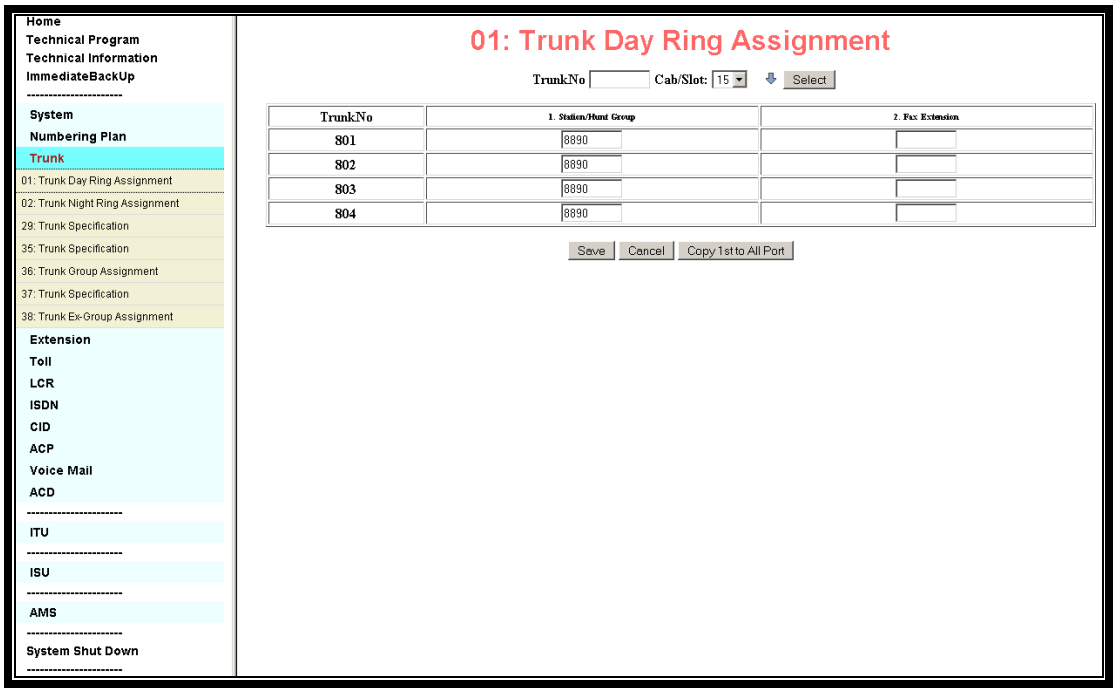
# System Programming - Trunk

The “Trunk” Category includes the following system programming modes:

Mode 01: Trunk Day Ring Assignment
Mode 02: Trunk Night Ring Assignment
Mode 29: Trunk Specifications
Mode 35: Trunk Specifications
Mode 36: Trunk Group Assignment
Mode 37: Trunk Specifications
Mode 38: Trunk Ex-Group Assignment



## Program 01-tk-IP : Day Ringing And Ringing Line Preference Assignment




**General:**

This program assigns each incoming line to ring the programmed station or Hunt group. The ringing methods are assigned by the characteristics of the assigned Hunt group and can be any combination of LINEAR (ring the first available station), CIRCULAR (Ring the next station following the last station who just answered an incoming call), HUNT (Ring the first assigned station for a set period of time (program mode 05-08-01) then if no answer ring the next ring assigned station then the next etc.) or COMMON AUDIBLE (All stations will ring simultaneously). The default setting is Hunt Group 888 and the default of Hunt Group 8 is the first 16 stations in the system.

**Description:**

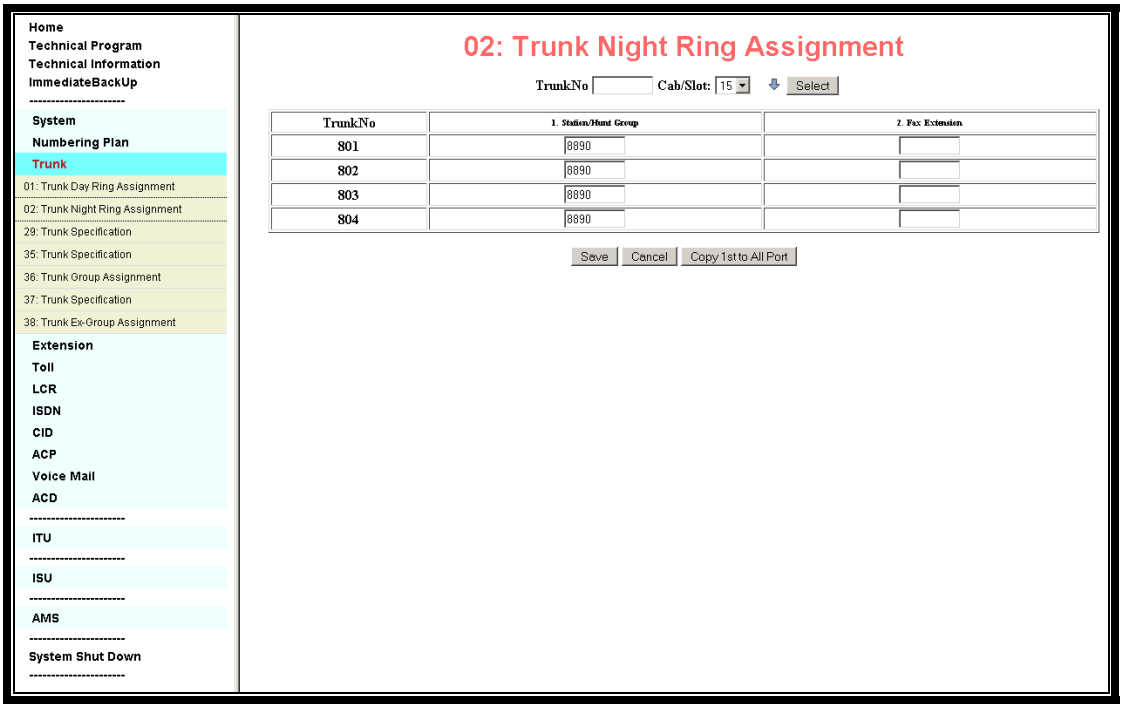
Either a single station or a Hunt Group pilot can be programmed. Many different combinations can be programmed for ring type after a Pilot number is assigned. If the default pilot number of 888 is assigned and mode 888 is a Common Audible Hunt group with one (or more) stations assigned plus the pilot (889) of a second Hunt group programmed as the last assigned number then the call will ring the station(s) in group 888 but also move on to Group 889 which could be a Hunt Group set to Hunt with a timer of 10 seconds and the first entry as a Virtual Extension (See Mode 21 to create a virtual extension) and the second as another pilot (890) and then Group 890 could be a common audible Group with several more stations assigned. When an incoming call is received this will that it will ring at the member(s) of the first Hunt Group for 10 seconds and then the members of the third Hunt Group will start to ring also. A ring assignment could be programmed through many Hunt Groups, all different, in sequence each one adding more stations to the ring assignment.

The Fax assignment is related to the Fax Server of the G2-AMS and will be explained in detail once the G2-AMS is released.

OR

Is used as a fax destination where the DUET feature is enabled (29-tk-06)

# Program 02-tk-IP : Night Ringing And Ringing Line Preference Assignment




**General:**

This program assigns each incoming line to ring the programmed station or Hunt group. The ringing methods are assigned by the characteristics of the assigned Hunt group and can be any combination of LINEAR (ring the first available station), CIRCULAR (Ring the next station following the last station who just answered an incoming call), HUNT (Ring the first assigned station for a set period of time (program mode 05-08-01) then if no answer ring the next ring assigned station then the next etc.) or COMMON AUDIBLE (All stations will ring simultaneously). The default setting is Hunt Group 888 and the default of Hunt Group 8 is the first 16 stations in the system.

**Description:**

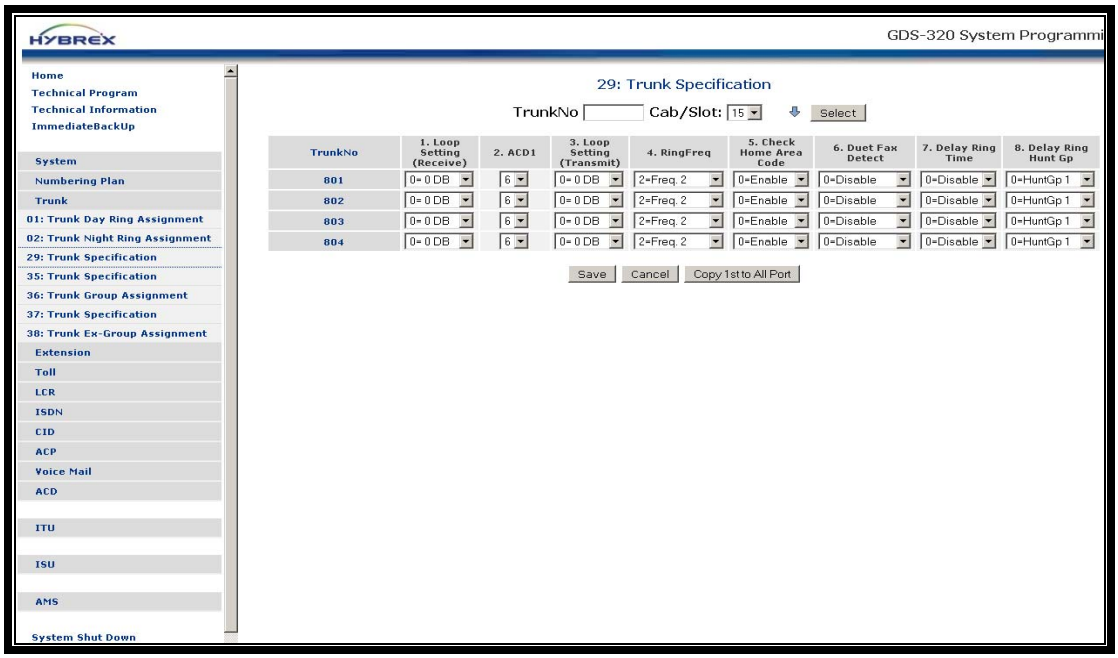
Either a single station or a Hunt Group pilot can be programmed. Many different combinations can be programmed for ring type after a Pilot number is assigned. If the default pilot number of 888 is assigned and mode 888 is a Common Audible Hunt group with one (or more) stations assigned plus the pilot (889) of a second Hunt group programmed as the last assigned number then the call will ring the station(s) in group 888 but also move on to Group 889 which could be a Hunt Group set to Hunt with a timer of 10 seconds and the first entry as a Virtual Extension (See Mode 21 to create a virtual extension) and the second as another pilot (890) and then Group 890 could be a common audible Group with several more stations assigned. When an incoming call is received this will that it will ring at the member(s) of the first Hunt Group for 10 seconds and then the members of the third Hunt Group will start to ring also. A ring assignment could be programmed through many Hunt Groups, all different, in sequence each one adding more stations to the ring assignment.

The Fax assignment is related to the Fax Server of the G2-AMS and will be explained in detail once the G2-AMS is released.

OR

Is used as a fax destination where the DUET feature is enabled (29-tk-06)

## Program 29-tk-IP : Trunk Specifications – 2




**Description:**

**01. CO Line Loop Resistance - Receive:**

This parameter can adjust the system's analogue TKU interface on Receive Audio to adapt to different CO loop resistance. This is particularly useful for long PSTN lines where audio levels may drop too low.

0 = 0db (default), 1 = 1db 2 = 2db …….. 9 = 9db

**02. ACD-1 Function Enable:**

This parameter enables or disables the ACD-1 function for each trunk individually and is able to select whether ACD-1 operates in Day or Night or Both Modes.

0 = Day Time - Disable ACD function, Night Time - Disable ACD function
1 = Day Time - Disable ACD function, Night Time - Enable ACD function*1
2 = Day Time - Disable ACD function, Night Time - Enable ACD function*2
3 = Day Time - Enable ACD function*1, Night Time - Disable ACD function
4 = Day Time - Enable ACD function*1, Night Time - Enable ACD function*1
5 = Day Time - Enable ACD function*1, Night Time - Enable ACD function*2
6 = Day Time - Enable ACD function*2, Night Time - Disable ACD function
7 = Day Time - Enable ACD function*2, Night Time - Enable ACD function*1
8 = Day Time - Enable ACD function*2, Night Time - Enable ACD function*2

*1: Enable ACD-1 function only when all ring assigned stations are busy.
*2: Enable ACD-1 function when the timer is reached even if the ring assigned stations are idle.

On 040x and later versions of software the caller can exit the ACD-1 queue by dialling 1 or 2 during the second segment ACD message. This will exit the caller to the mailbox programmed in Mode 33-03 or 33-07 which can be virtual Mailboxes with DSS indication on multiple phones.

**03. CO Line Loop Resistance - Transmit**

This parameter can adjust the system's analogue TKU interface on Transmit Audio to adapt to different CO loop resistance. This is particularly useful for long PSTN lines where audio levels may drop too low.

0 = 0db (default), 1 = 1db 2 = 2db …….. 9 = 9db

**04. Set Ring Frequency (DK handsets):**

This feature allows each trunk to ring at DK handsets with its own individual ring frequency and override the frequency set by the user for all calls.

0 = As per the key phone's ring setting.
1~8 = Use the ringing frequency 1~8 of key phone as the trunk's ring.

**05. Check Home Area Code:**

This parameter checks whether the home area code will be used to correct the CID of the incoming call. Home Area Code is used on PSTN and ISDN calls to present a valid CID number for the smart redial feature. VOIP trunks will normally not require this feature and indeed may produce unexpected results depending on the leading digit of CID compared to the Home area code programmed.

0 = Enable 1 = Disable

**06. Duet Fax Detect:**

This parameter will detect the different ring cadences for PSTN lines that have 2 numbers on the one line usually to allow the use of fax and phone on the same line. The Fax extension for a trunk is allocated in Mode 01/02

0 = Disable 1 = Australian Duet 2 = New Zealand Faxability

**07. CO Delayed Ring Timer to Hunting Group:**

This parameter allows to set the delayed ring time for an incoming call to the hunting group. If the stations in the Ringing Line Preference Assignment (mode 01/02) do not answer the incoming call within below timing, the call will be overflow to the pre-assigned hunting group (mode 29-TK-08).

0 = Disable 1 = 8 sec. 2 = 16 sec. 3 = 24 sec. 4 = 32 sec. 5 = 40 sec.
6 = 48 sec. 7 = 56 sec. 8 = 64 sec. 9 = 72 sec.

**Related System Programming Mode:** 29-Tk-07, 29-Tk-08, 67, 68, 69

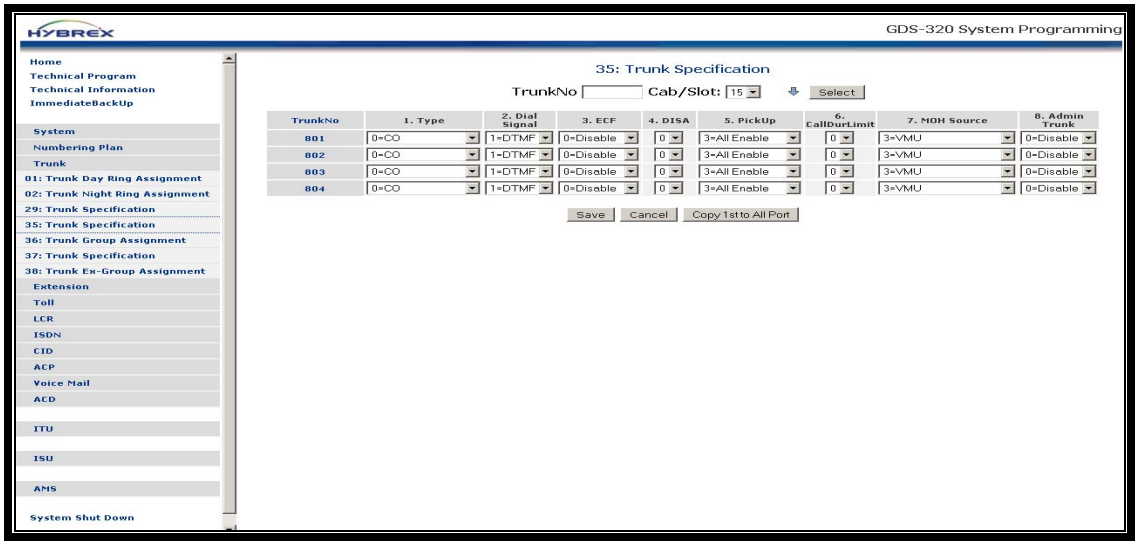
**08. CO Delayed Ring Overflow Hunting Group:**

This parameter allows to set the pre-assigned overflow Hunting Group for an incoming call. If the stations in the Ringing Line Preference Assignment (mode 01/02) do not answer the incoming call within the pre-assigned timing (mode 29-TK-07), the call will be overflow to the pre-assigned hunting group.

0 = Overflow to Hunting Group 1
1 = Overflow to Hunting Group 2
2 = Overflow to Hunting Group 3
……
9 = Overflow to Hunting Group 10

**Related System Programming Mode:** 29-Tk-07, 29-Tk-08, 67, 68, 69

## Program 35-tk-IP : Trunk Specifications – 1




**Description:**

**01. Trunk Type:**

0 = Normal CO.
1 = CO with Polarity Reverse

**02. Trunk Signal:**

0 = Pulse = Trunk dialling signal is Dial Pulse.
1 = DTMF = Trunk dialling signal is DTMF.

**03. External Call Forward - ECF:**

0 = No ECF.
1 = ECF to system speed dial 101
2 = ECF to system speed dial 102
3 = ECF to system speed dial 103
4 = ECF to system speed dial 104
5 = ECF to system speed dial 105
6 = ECF to system speed dial 106
7 = ECF to system speed dial 107
8 = ECF to system speed dial 108

**04. DISA/ECF (Direct Inward System Access/External Call Forward):**

| | |
|---|---|
| **0** = Day - Disable | Night - Disable |
| **1** = Day - Disable | Night - DISA Enable |
| **2** = Day - DISA Enable | Night - Disable |
| **3** = Day - DISA Enable | Night - DISA Enable |
| **4** = Day - Disable | Night - ECF Enable |
| **5** = Day - ECF Enable | Night - Disable |
| **6** = Day - ECF Enable | Night - ECF Enable |
| **7** = Day - DISA Enable | Night - ECF Enable |
| **8** = Day - ECF Enable | Night - DISA Enable |

**05. Pick Up:**

| | |
|---|---|
| 0 = Day - can not | Night - can not |
| 1 = Day - can not | Night - can |
| 2 = Day - can | Night - can not |
| 3 = Day - can | Night - can |

Can = An incoming call on this line can be answered by non-ringing stations.
Cannot = An incoming call on this line can not be answered by non-ringing stations.
This feature is to assign "Private Lines" in conjunction with the programming of dial 9 groups, or to prevent incoming calls being answered by users other than the ring assigned stations.

**06. Limit Call Duration:**

This parameter allows the length of calls to be limited on a trunk by trunk basis. This is particularly useful where a GSM router is connected to a trunk to allow the use of plans that provide free intra network mobile calls to be made on mobile phones. These plans often limit the length of free calls before charging is re-introduced.
(See Mode 05-04-03 to set call limiting action)

| | | | | | |
|---|---|---|---|---|---|
| 0 = No limit | 1 = 3 min. | 2 = 5 min. | 3 = 10 min. | 4 = 15 min. | 5 = 20 min. |
| 6 = 30 min. | 7 = 40 min. | 8 = 50 min. | 9 = 60 min. | | |

**07. Music On Hold Source:**

Each Trunk can be programmed individually for a Music Source for MOH. The options are

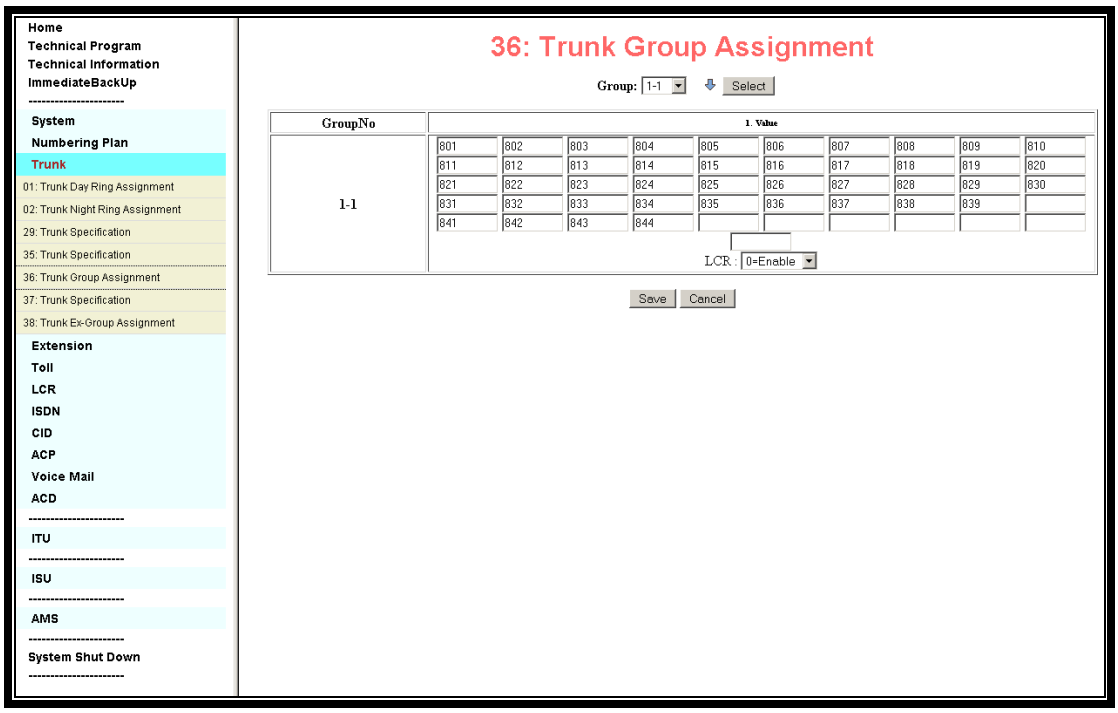
| | | | |
|---|---|---|---|
| 0 = Chimes | 1 = SLT Music port | 2 = Interrupted Tone | 3 = VMU |
| 4 = Cabinet 1 MSU | 5 = Cabinet 2 MSU | 6 = Cabinet 3 MSU | 7 = Cabinet 4 MSU |

Background Music source is set in Mode 05-08-08.

**08. Administration Trunk:**

Administration trunks are trunks that cannot be transferred to guest phones. The most common applications for admin trunks are 1800 numbers that can be set to only be used by administration phones.

## Program 36-gp-tk : Trunk Group Assignments




**Description:**

In the data-setting area, the trunk number (801-899) means that the trunk is included in the specified group. If trunks are PSTN then always set outgoing calls to start from the highest fitted trunk and program in descending order to the lowest trunk fitted. This will prevent call collision particularly in systems with SLT'S using PSTN trunks. If a trunk is not in a Stations Dial 9/0 group then the station cannot dial out on that trunk

Version 040x software and later allows each trunk group to be programmed to ignore LCR programming and dial out unaltered by LCR settings. This will be useful where systems have Trunk Groups that contain Tie lines or VOIP trunks selected manually for dialling.

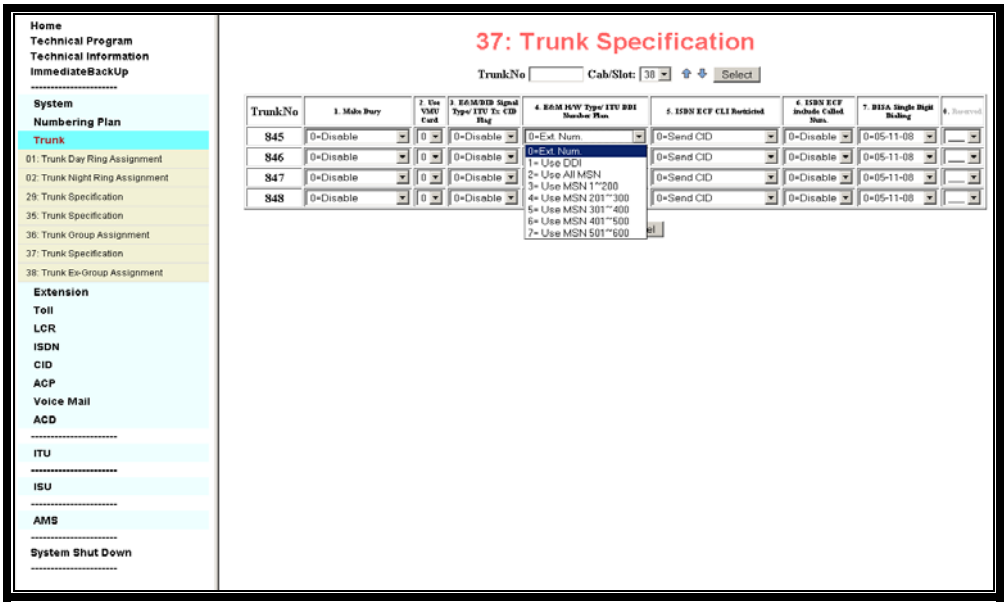
There are 64 (230 in GDS320) trunks maximum in a trunk group.

There are 8 (20 in GDS320) Dial 9/0 groups in Mode 36. If more than 8 are required then the groups in Mode 38 can add another 8 (20) Dial 9/0 groups. See mode 41-st-04 for programming details.

This parameter will work with the following features:
. Dial 9 or 0 access to trunk group. This is set in Mode 23
. Tenant service.

**Related System Programming Mode: 36, 38, 41-ST-04, 46-ST-01,23**

# Program 37-tk : Trunk Specifications




**Description:**

**01. Lock out CO Lines:**

This feature is used when the user does not want to use the trunk or to remove a problem line. When the trunk is set to BUSY OUT, the LCD display on the phone will display " Access denied " when that line button is pressed.

0 = Line is unlocked
1 = Busy for Outgoing calls
2 = Busy for Incoming and Outgoing calls (set loop on)
3 = Busy for Incoming and Outgoing calls (set line LED on)

**02. Assign VMU card To CO Lines:**

This feature assigns which VMU card to use with this trunk. Multiple VMU cards will allow different messages on different trunks.

0 = No VMU is assigned.
1/2 = The 1st / 2nd VMU card in the 1st cabinet.
3/4 = The 1st / 2nd VMU card in the 2nd cabinet.
…….
15/16 = The 1st / 2nd VMU card in the 8th cabinet.

**03. E&M/DID Signal Type/ITU TX CID Ring:**

The E & M card is not released in Australia

**04. E&M H/W Type /ITU DDI Number Plan:**

The E & M card is not released in Australia. The ITU DDI Number plan setting options will only be displayed if the trunk selected is a VOIP trunk via an ITU card. This parameter decides the destination of calls on that trunk which contain DDI information.

| | | | |
|---|---|---|---|
| 0 = Ext Num. | 1 = DDI Table | 2 = All MSN | 3 = 1 to 200 |
| 4 = 201 to 300 | 5 = 301 to 400 | 6 = 401 to 500 | 7 = 501 to 600 |

**05. ISDN ECF CLI:**

This parameter sets what the system will send as Caller ID to the Exchange on a trunk that is the outgoing one for External Call Forward. Australian exchanges will not pass on the CID of the incoming trunk to the ECF recipient.

0= Send Incoming call CID, 1 = Mode 71-01 2 = Mode 71-02 …… 8 = Mode 71-08 9 = Restrict

**06. ISDN ECF include Called Num:**

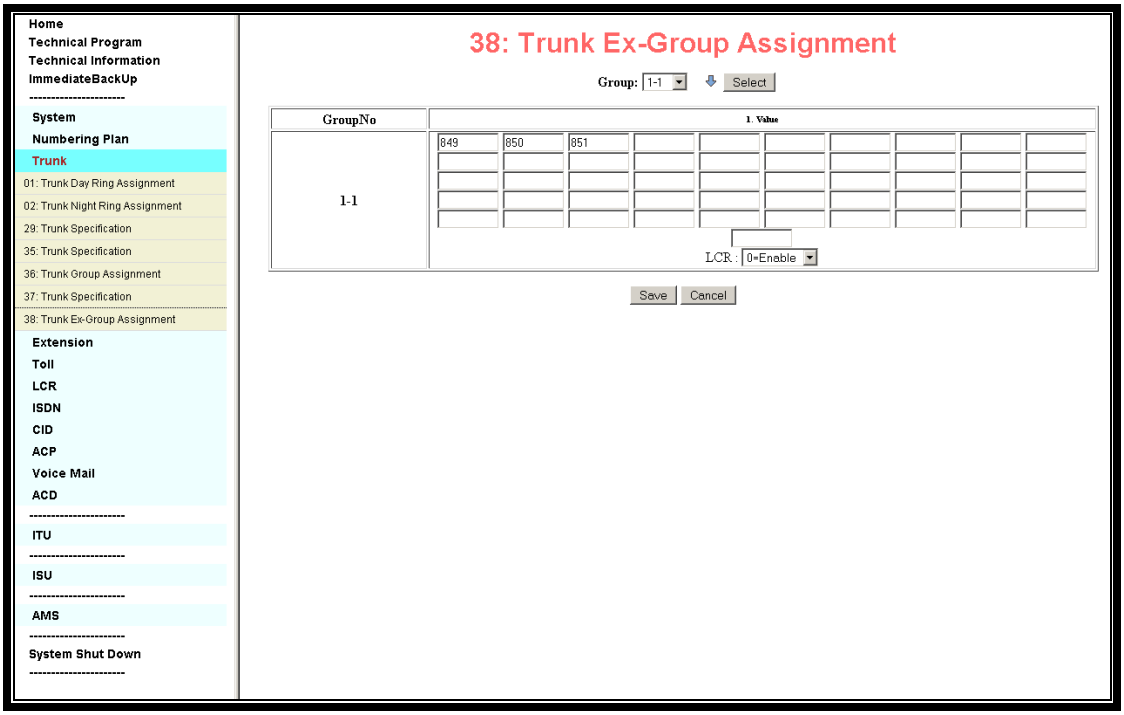
This parameter will not work on the Australian network

**07. DISA Single Digit Dialling:**

This parameter allows different trunks to use different Single digit dialling destination groups. This will allow multiple companies to use Single Digit Dialling on the same system with different dialling destinations.

| | | |
|---|---|---|
| 0 = Use Mode 05-11-08 setting | 1 = Mode 10 Gp 1 | 2 = Mode 10 Gp 2 |
| 3 = Mode 10 Gp 3 | …… | 8 = Mode 10 Gp 8 |

# Program 38-gp-tk : Extra (Dial 87) Trunk Group Assignments




**General:**

This program permits each trunk line to be assigned to different Trunk groups which can be accessed by dialling [87]. There are 8 (20 in GDS320) groups in total. This group will be available to a station in addition to it's dial 9 group. Always set outgoing calls to start from the highest fitted trunk and program in descending order to the lowest trunk fitted when trunks are PSTN. This will prevent call collision particularly in systems with SLT'S.

**Description:**

This program is different from Program Mode 36-gp-tk. This program is used for dialling [87] to access a Trunk Line.

Once a dial [87] group has been programmed it will need to be assigned to the stations that are to use it in Mode 46-Stn-01.

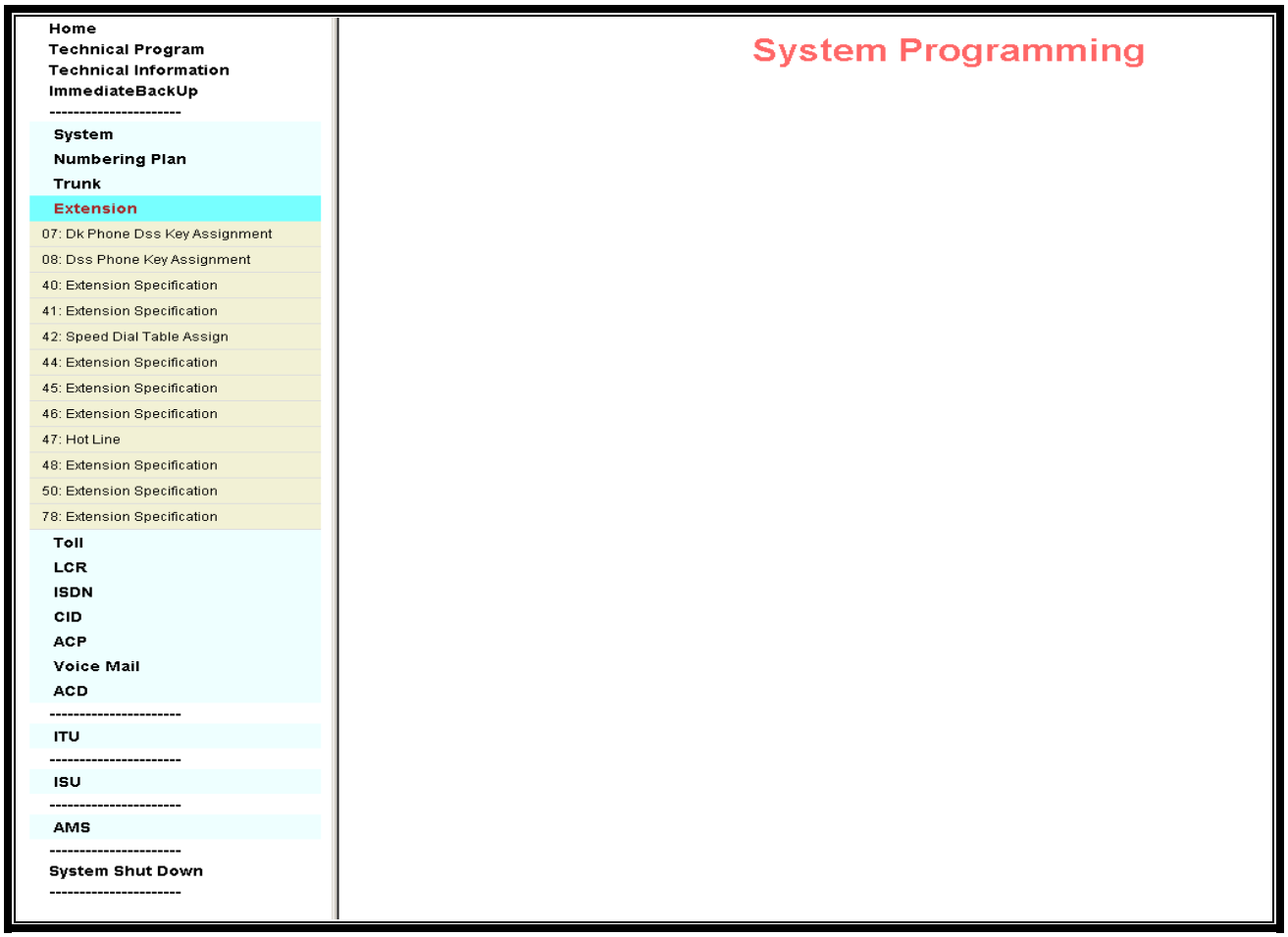
Dial 87 groups can be re-assigned as dial 9 groups for systems that require up to 16 tenants. See mode 41-st-04 to assign.

**Related System Programming Mode: 36, 38, 41-ST-04, 46-ST-01**

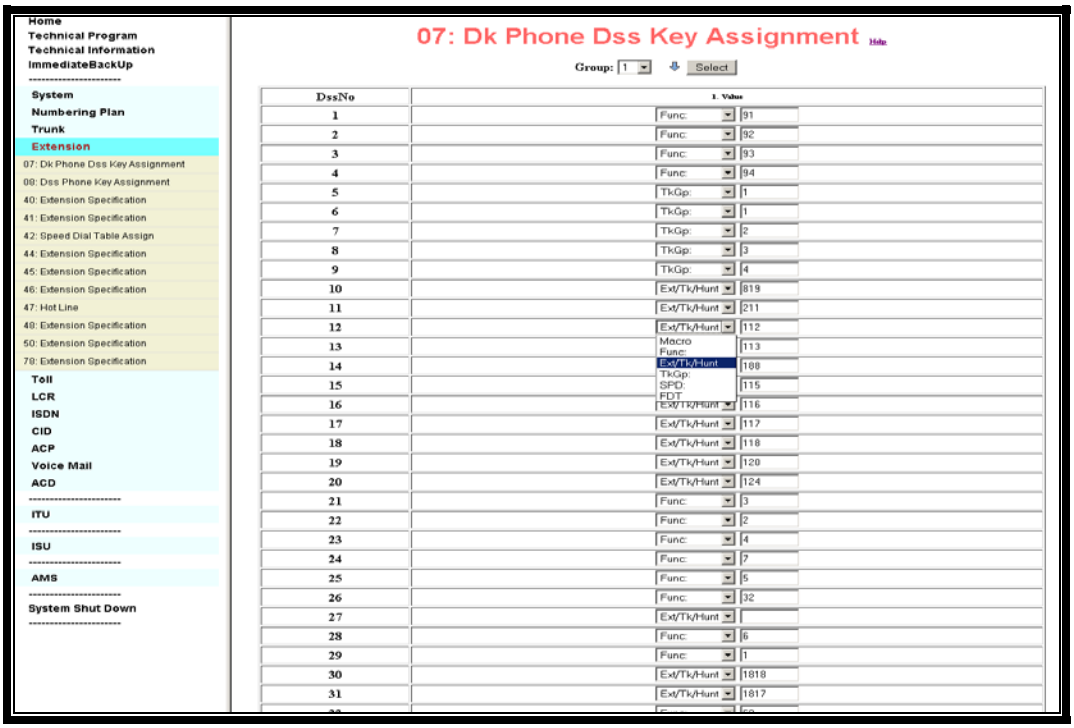
# System Programming - Extension

The Category “Extension” includes the following system programming modes:

- Mode 07: DK Phone DSS Key Assignment
- Mode 08: DSS Phone Key Assignment
- Mode 40: Extension Specifications
- Mode 41: Extension Specifications
- Mode 42: Speed Dial Table Assignment
- Mode 43: Extension Specifications
- Mode 44: Extension Specifications
- Mode 45: Extension Specifications
- Mode 46: Extension Specifications
- Mode 47: Hot Line
- Mode 48: Extension Specifications
- Mode 50: Extension Specifications
- Mode 78: Extension Specifications



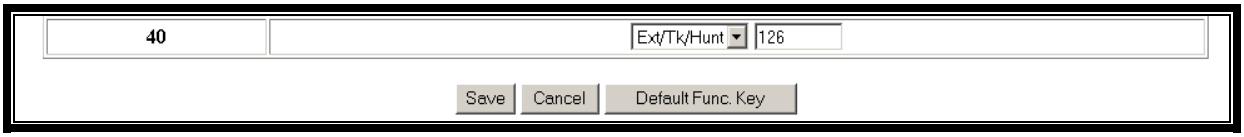
# Program 07-gp-IP : Flexible Key Group Assignment




**Description:**

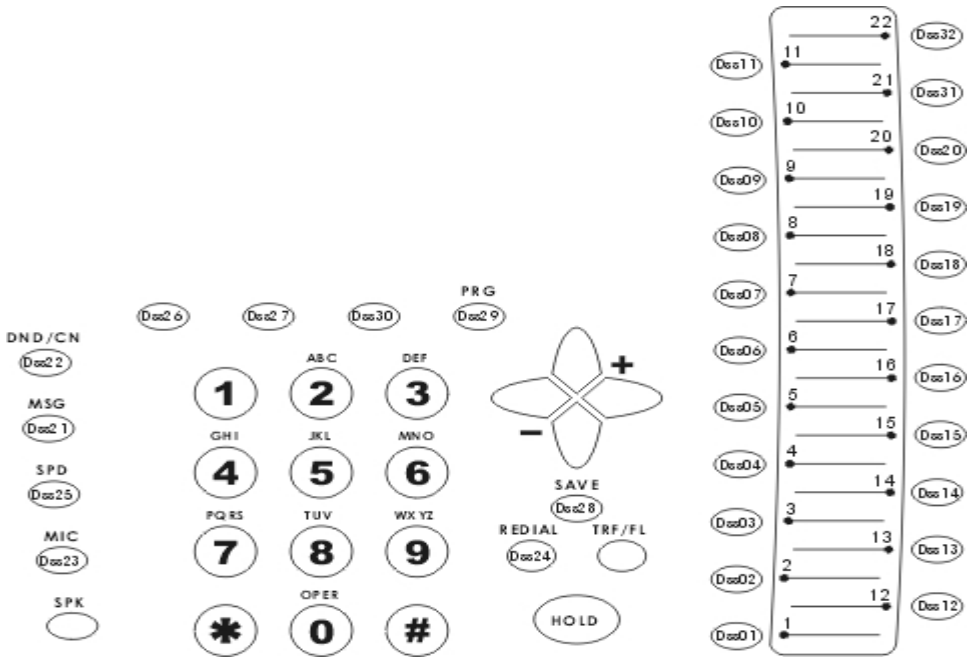
There are a total of 50 Soft key plans available in the GDS from version 040x software. Previous versions of software have only 8 plans. Soft key plans once programmed here are then allocated to each station in Mode 41-st-02. The default soft key plan for all stations is Plan 1. Each station can be assigned 2 soft key plans and by using a shift key programmed into the first assigned plan can switch to the second plan and back to the first by pressing the Shift key. The Shift key needs only to be programmed into the first assigned plan as it will overwrite what ever is written into the same position on plan 2.

Each key can be assigned as either a **Trunk**, a **Trunk Group**, a **Station**, a **Pilot Number**, a **Speed Dial** or a **Function**. Keys 12 to 20 can be additionally assigned to **Macro** keys. A **Macro** key is a key which is able to be assigned as a string of up to 5 commands to operate more complex operations that cannot be performed by a single function key. From software version 061 the FDT or **Flashing Direct Termination** key has been added to give functionality for Hotels to treat intercom calls in the same way as trunk calls or to give a Boss/Secretary type appearance. When an extension is programmed as an **FDT** rather than Ext/Trunk/Hunt it will indicate while ringing exactly as an incoming trunk.
To program a new softkey plan first go to the bottom of the page on the new plan and click the default Function key button to set default functions keys before programming the plan.




There are currently 127 Functions available to be used. Refer to the table on the following pages for details.

DK2 Key Layout



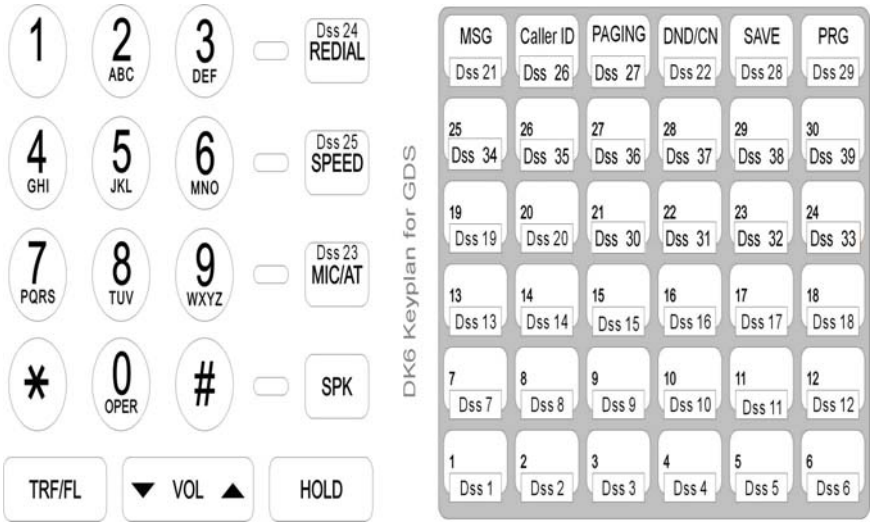

**On the DK2-3 phone the function keys (21-29) will follow the same numbering scheme as the DK6 phone on a G1E. Connecting a DK2 on a softkey plan designed for a DK6 will still allow all function keys to work as per the markings on the phone. When programming a new softkey plan for a DK2/3 it will be necessary to program all function keys as if for a DK6 and that will then translate correctly to the DK2/3. The keys entries 1 to 22 will line up with buttons 1 to 22 on a DK2 phone.**

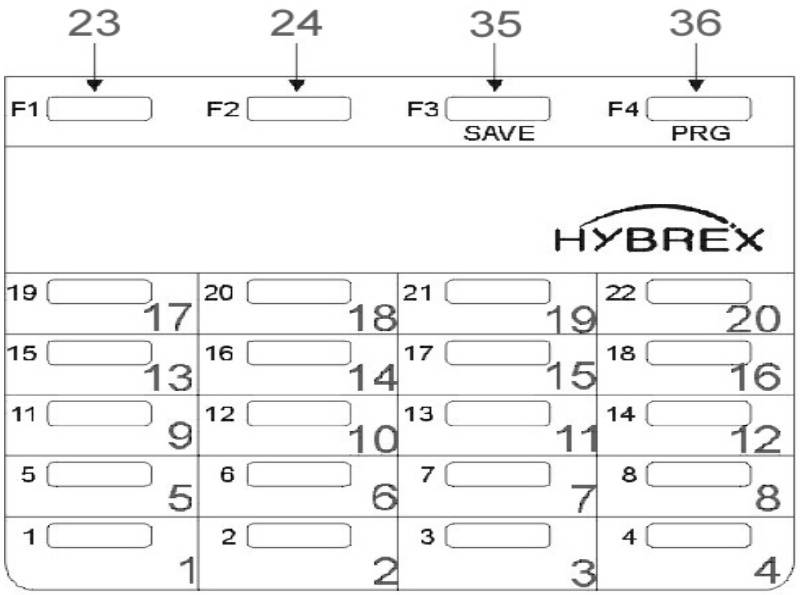
From Version 040x software the user can program their own DSS buttons as a user function. If there are less than 50 Digital phones then each can be assigned a group and then the ability to change the DSS key assignment is set in mode 45-st-02. If there are more than 50 digital stations then it is possible to only allow some stations to program their own DSS keys leaving others locked to a pre-programmed plan.

From version 041D and W0be software the GDS will fully support the DK6 phone.

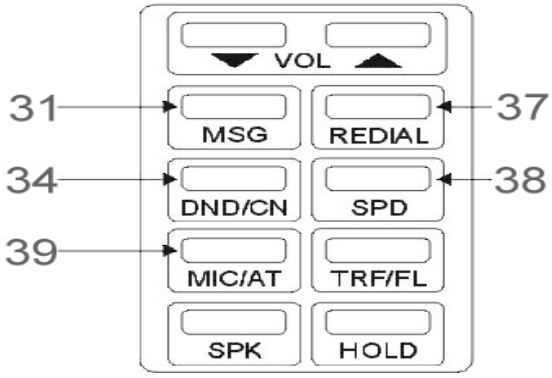
To program a **Macro** key it must first be assigned as a **Macro** key here then Mode 45-st-02 is enabled and the user can program a Macro using the following procedure PRG DSS [Command] [Command] [command] [command] [Command] DSS. Unlike earlier systems the Key must be a Macro only it cannot be dual function. If after the **Macro** key is programmed the station is set back to disable in Mode 45-st-02 then the **Macro** key is permanently locked into the softkey plan. For this reason extensions with Macro keys should be allocated an individual soft key plan

Accessing the HELP function will open a new window with the option to display the functions available either in Alphabetical listings or in Numerical order.


1
2 ABC
3 DEF
Dss 24 REDIAL
4 GHI
5 JKL
6 MNO
Dss 25 SPEED
7 PQRS
8 TUV
9 WXYZ
Dss 23 MIC/AT
*
0 OPER
#
SPK
TRF/FL
VOL
HOLD
DK6 Keyplan for GDS
MSG Dss 21
Caller ID Dss 26
PAGING Dss 27
DND/CN Dss 22
SAVE Dss 28
PRG Dss 29
25 Dss 34
26 Dss 35
27 Dss 36
28 Dss 37
29 Dss 38
30 Dss 39
19 Dss 19
20 Dss 20
21 Dss 30
22 Dss 31
23 Dss 32
24 Dss 33
13 Dss 13
14 Dss 14
15 Dss 15
16 Dss 16
17 Dss 17
18 Dss 18
7 Dss 7
8 Dss 8
9 Dss 9
10 Dss 10
11 Dss 11
12 Dss 12
1 Dss 1
2 Dss 2
3 Dss 3
4 Dss 4
5 Dss 5
6 Dss 6

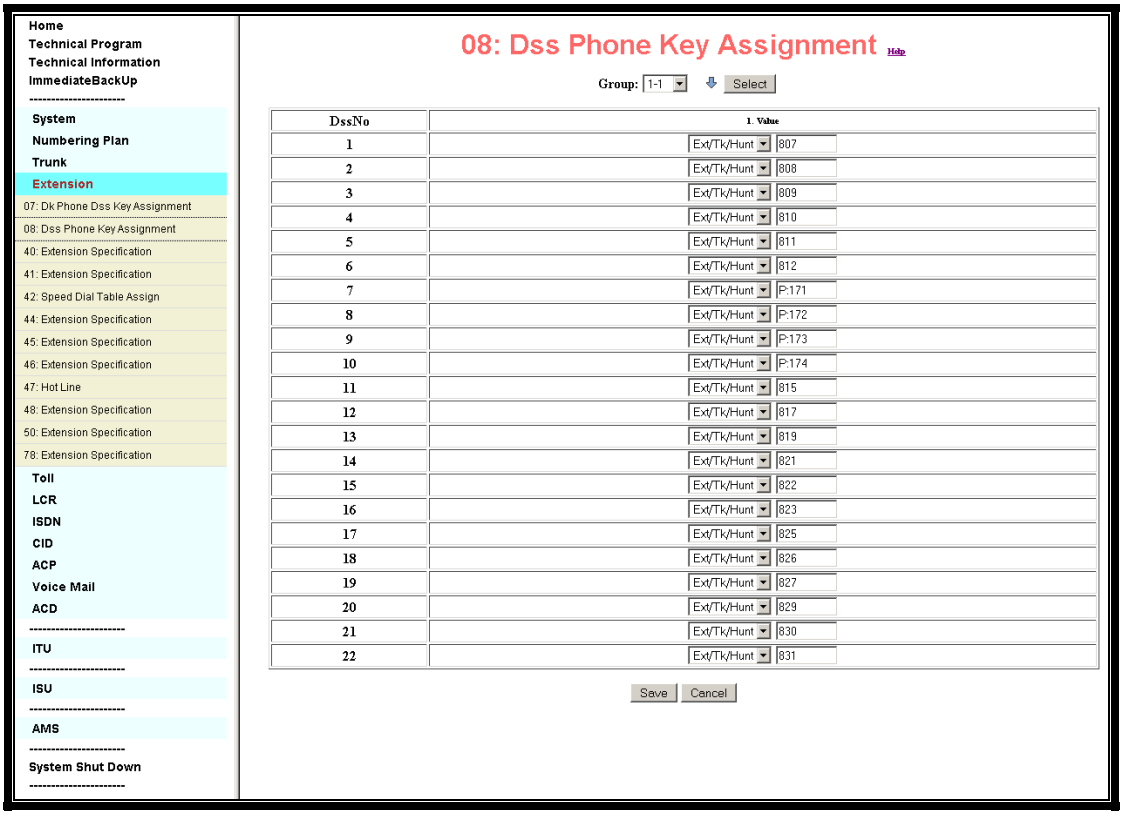



Note :
DSS Key Positions Shown are for DK1 on G1E / G1E+ ONLY



| | | | | | |
|---|---|---|---|---|---|
| FN0: | Direct SPD | FN44: | ACD Supervisor Log On/Off | FN88: | Node8 Access Code |
| FN1: | Program | FN45: | VMU Schedule | FN89: | Node9 Access Code |
| FN2: | DND/Conference | FN46: | Toll PSW. | FN90: | Park No#0 |
| FN3: | Message | FN47: | Alarm Assign | FN91: | Park No#1 |
| FN4: | MIC | FN48: | User Alarm | FN92: | Park No#2 |
| FN5: | Speed Dial | FN49: | Console User Alarm | FN93: | Park No#3 |
| FN6: | Save | FN50: | Date/Time | FN94: | Park No#4 |
| FN7: | Redial | FN51: | Message Select | FN95: | Park No#5 |
| FN8: | Paging | FN52: | Day/Night | FN96: | Park No#6 |
| FN9: | Forced Account Code | FN53: | CFwd | FN97: | Park No#7 |
| FN10: | Volume Level Setup | FN54: | CFwd Busy | FN98: | Park No#8 |
| FN11: | Personal Speed Dial Setup | FN55: | CFwd Noanswer | FN99: | Park No#9 |
| FN12: | Console User Speed Setup | FN56: | Answer Paging | FN100: | Reserved |
| FN13: | Console System Speed Setup | FN57: | Shift | FN101: | Reserved |
| FN14: | Security Setup | FN58: | Metering Rate | FN102: | Reserved |
| FN15: | SLT CO Flash Code | FN59: | Hotel | FN103: | Reserved |
| FN16: | Temporary Security | FN60: | Door Phone | FN104: | Reserved |
| FN17: | Check In | FN61: | Clear Personal Setting | FN105: | [Hotel-*] Room Status Change |
| FN18: | Check Out | FN62: | SPD. Directory | FN106: | [Hotel-0] Wake Up Call History Print/Clear |
| FN19: | Charge Inquire | FN63: | ISDN Predial | FN107: | [Hotel-5] Print Room Charge |
| FN20: | All Int. Paging | FN64: | Extra-Trunk Gp. | FN108: | [Hotel-7] List Used / Available Call Records |
| FN21: | All Ext. Paging | FN65: | Reserved | FN109: | [Hotel-8] List Total Telephone Charges (All Rooms) |
| FN22: | All Int.&Ext. Paging | FN66: | Reserved | FN110: | [Hotel-9] Set Credit Limit |
| FN23: | Int. Zone Paging | FN67: | Reserved | FN111: | ACD Group1 Agent Log On/Off |
| FN24: | 1A2 Emulation Privacy | FN68: | Room Monitor | FN112: | ACD Group2 Agent Log On/Off |
| FN25: | V.M. Transfer | FN69: | Auto find TK | FN113: | ACD Group3 Agent Log On/Off |
| FN26: | Split | FN70: | Lock/Unlock SMDR | FN114: | ACD Group4 Agent Log On/Off |
| FN27: | Answer Machine Emulation | FN71: | Minibar | FN115: | ACD Group5 Agent Log On/Off |
| FN28: | Mobil Office Login | FN72: | Monitor Extension | FN116: | ACD Group1 Supervisor Log On/Off |
| FN29: | SLT Leave Message | FN73: | Headset/Handset switching | FN117: | ACD Group2 Supervisor Log On/Off |
| FN30: | Ex-Hold | FN74: | Clean Room | FN118: | ACD Group3 Supervisor Log On/Off |
| FN31: | Compel Release | FN75: | Stop Alarm | FN119: | ACD Group4 Supervisor Log On/Off |
| FN32: | CID History | FN76: | SLT key in Account code | FN120: | ACD Group5 Supervisor Log On/Off |
| FN33: | Pickup | FN77: | Personal Mail Box | FN121: | Volume Up |
| FN34: | Live Call Recording | FN78: | System Voice Mail | FN122: | Volume Down |
| FN35: | Pickup Own Gp. | FN79: | Call Park | FN123: | Conference Room |
| FN36: | Pickup All Gp. | FN80: | Home Node Identifier | FN124: | Conference Meeting |
| FN37: | Pickup Gp: | FN81: | Node1 Access Code | FN125: | Emergency Door Open |
| FN38: | Check Room Status | FN82: | Node2 Access Code | FN126: | Mail Box Group |
| FN39: | Hunt Group LogIn/Out | FN83: | Node3 Access Code | FN127: | Restart ITU/ISU Web Server |
| FN40: | ACD Wrap Up | FN84: | Node4 Access Code | | |
| FN41: | ACD Help | FN85: | Node5 Access Code | | |
| FN42: | ACD Agent Monitor | FN86: | Node6 Access Code | | |
| FN43: | ACD Agent Log On/Off | FN87: | Node7 Access Code | | |

# Program 08-gp-IP : Flexible DSS Console Key Group Assignment

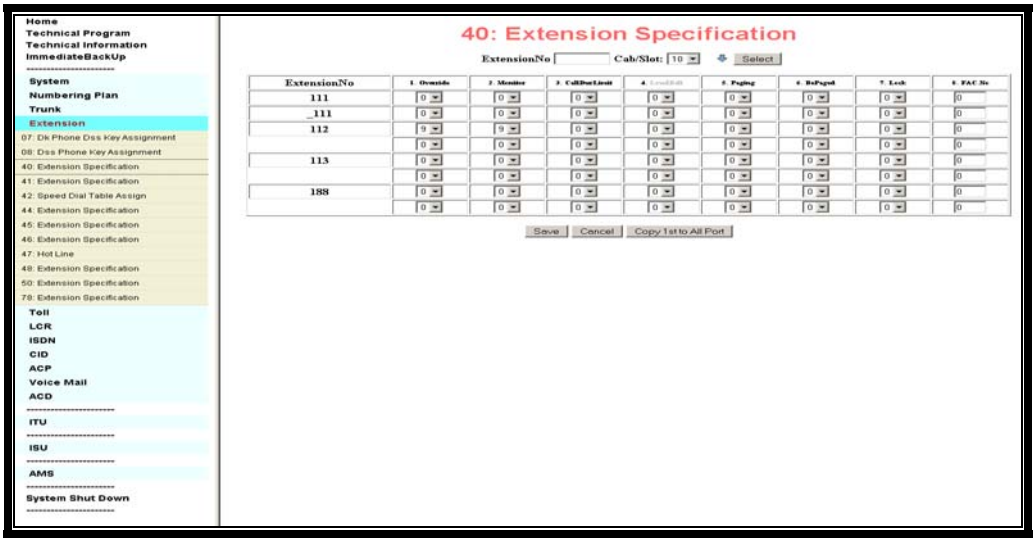



**Description:**

There are a total of 20 Soft key plans available in the GDS for DSS consoles on 040 software and 8 on 002 software. Soft key plans once programmed here are then allocated to each DSS in Mode 41-st-02. The default soft key plan for all stations is Plan 1
Each soft key plan is divided into 3 sections each of 22 keys.
Each key can be assigned as either a **Trunk**, a **Trunk Group**, a **Station**, a **Pilot Number**, a **Speed Dial** or a **Function**. The DSS Console cannot have **Macro** keys

There are currently 127 Functions available to be used. Refer to the table in Mode 07 on the previous page for details.

## Program 40-st-IP : Station Class of Service – 1




**Description:**

**01. Override Level:**

Higher level stations can override lower level stations, equal levels may override each other.

0 = Disable 1 = Lowest level 9 = Highest level
d = Allow to rob other used trunk for Emergency Calls (U01Gx version only)
When the extension (40-ST-01=d) tries to access a trunk and all “Dial 9” trunks are busy, then the system will search and drop the busy trunk used by the extension with the lowest override level (< 9) in mode 40-ST-01. The system reserves the trunk for this extension (40-ST-01=d) to make an emergency call. System will not access the busy trunk that is being used by the highest override level extensions (40-ST-01=9 or “d”).

**02. Monitor Level and Forced Handsfree Answerback:**

If a station is busy and this feature is enabled then the busy station can be silent monitored for supervision etc. From E61g software if the station is idle and set to intercom ring signal and it is called by a higher level station pressing the monitor code will switch to voice call PLUS turn on the MIC key for Handsfree answerback. Higher level stations can monitor lower level stations, equal levels can not monitor each other.

0 = Disable 1 = Lowest level 9 = Highest level

**03: Limit call duration:**

A Busy Tone will interrupt conversation. A warning tone will be given 10 seconds before the end of the timed duration. (Mode 05-04-03 to set call limiting action)

0 = No limit 1 = 3 min. 2 = 5 min. 3 = 10 min. 4 = 15 min. 5 = 20 min.
6 = 30 min. 7 = 40 min. 8 = 50 min. 9 = 60 min.

**Related System Programming Mode: 05-04-03, 40-st-03**

**04. Station Loud Bell (Future):**

**05. Access Paging:**

0 = The "All Page" signal can be broadcast by this station.
1 = The "All Page" signal cannot be broadcast by this station.

**06. Be Paged:**

0 = The "All Page" signal can be received by this station.
1 = The "All Page" signal cannot be received by this station.

**07. Security code status:**

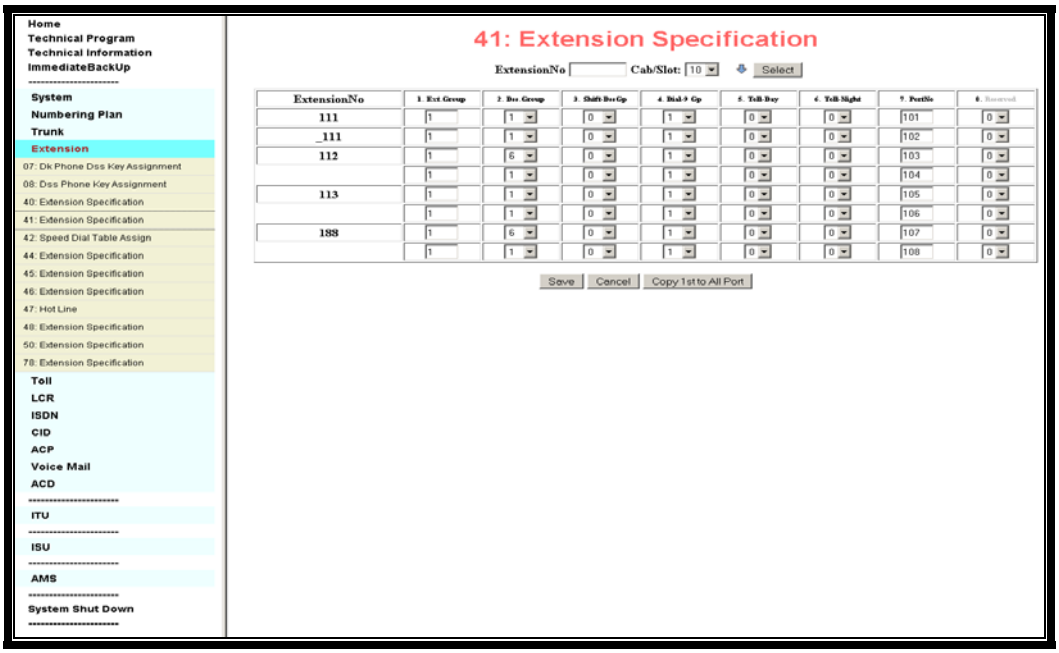
0 = the station is unlocked. (Can make outgoing calls.)
1 = the station is locked. (Cannot make outgoing calls.)
2 = The station is unlocked and cannot use the Lock function.
3 = The Station is Locked and cannot use the Lock function.

If a phone becomes locked accidentally or the user forgets their lock code, this parameter will unlock the phone. There is no way of finding what the lock code was. If the user has a habit of locking their phone accidentally disable the feature for that extension here.

**08. Forced account code:**

There are 600/1000 forced account codes that can be used on the system. Each user can be allocated use of one or all of these. If a station has a Forced Account Code 001-600/999, the user can key **[PRG][4]** and the force account code to override toll restrictions for one call only.
If the setting is from 01-48 then the station can use this Account Code ONLY. If the setting is 0 then the station can use any one or all Account Codes.
Refer to Mode 17: Create Forced Account Code

## Program 41-st-IP : Station Specifications




**Description:**

**01. Station group:**

This parameter will work with the following features:

- Call Pickup Group.
- Single Digit Intercom Group
- Paging Group

**02. Flexible key pattern group assignments (key phone):**

This parameter assigns stations to one of 8/50 flexible key pattern groups.

0 = Disable 1-50 = Soft Key Plan 1 to 50

See Mode 07: Flexible key group assignment to write soft key plans.

**03. Shift Key Group for KeyPhone:**

Each station can have access to a second soft key group accessed by the **[SHIFT]** key (refer to mode 07). The shift key must be programmed in the first group assigned to the station. When the shift key is used to access the second group then it will light red and override the function assigned to it in the second group.

0 = Disable 1-50 = Soft Key Plan 1 to 50

See Mode 07: Flexible key group assignment to write soft key plans.

**04. Dial 9 trunk group:**

When a station selects a trunk line by dialling 9/0, the system finds an available trunk according to the dial 9/0 group assignment. If a trunk is not in a stations assigned dial 9/0 group then the station will not be able to make outgoing calls on that trunk.

0= use “Dial [87] trunk group” as “Dial 9 trunk group”. (see mode 46-ST-01).
That is, Dial 9 can access the “Dial [87] trunk group”. Using this setting can extend Dial 9 trunk groups from 8 to 16.
1= TK group 1  2 = TK group 2  ……..  8= TK group 8

**Related System Programming Mode: 36, 38, 41-ST-04, 46-ST-01**

**05. Toll plan - Day:**

This parameter assigns the toll plan to be used by the station in day mode.

Refer to Mode 18 and Mode 51-59 / 61-66 for Toll plan details.

**06. Toll plan - Night:**

This parameter assigns the toll plan to be used by the station in night mode.

Refer to Mode 18 and Mode 51-59 / 61-66 for Toll plan details.

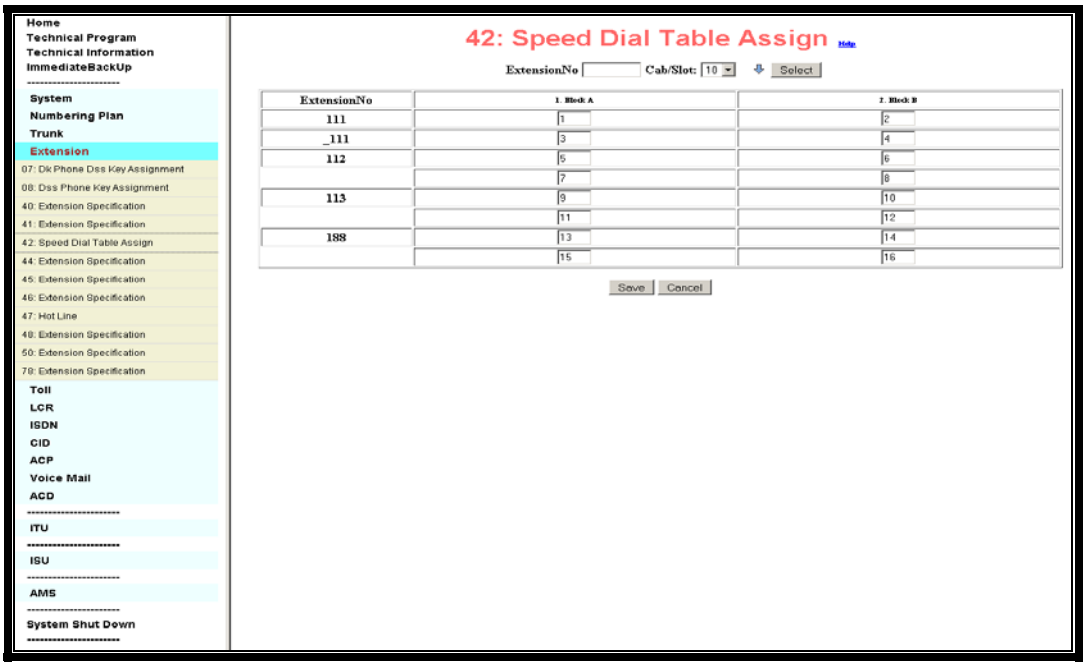
**07. Port number:**

This is for checking only, the system will automatically show the correct port number. It is not possible for the user to change or remove this parameter.

In the GDS-600, the port number consists of 3 digits. The first digit is the cabinet number followed by the Numbers below

| **Slot on MBU** | **STU 1** | **STU2** | **STU3** | **STU4** | **STU5** | **TKU1/ STU6** | **TKU2/ STU7** | **TKU3/ STU8** | **TKU4/ STU9** | **TKU5/ STU10** |
|---|---|---|---|---|---|---|---|---|---|---|
| C=Card No. | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| N=Port No. | 1~8 | 1~8 | 1~8 | 1~8 | 1~8 | 1~8 | 1~8 | 1~8 | 1~8 | 1~8 |

## Program 42-st-IP : Register Memory Block for Individual Speed Dial




**Block a**: Block 1 of Individual Speed Dial Codes (00-09 or DSS11~DSS20)
**Block b:** Block 2 of Individual Speed Dial Codes (DSS1-10)

**General:**

This program divides sets of **Individual Speed Dial** into blocks for use by Stations.

**Description:**

- If in program **05-04-06,** the Individual Speed Dial Codes are assigned:
  4**00** sets**,** the maximum blocks in this program are **120** blocks.
  **600** sets, the maximum blocks in this program are **80** blocks.
  **800** sets**,** the maximum blocks in this program are 4**0** blocks.
- Each block has 10 sets of Individual Speed Dial.
- Each set has up to 30 digits.
- Speed Dial Codes 00~09 shares the same memory block with DSS11~DSS20.
- Each Station can use up to 2 blocks (20 sets of Individual Speed Dial.)

## Example:

| | |
|---|---|
| 42-1**3**-IP SPD-T<br>**01 02** | **13**: Station No. ( 2-4 digits )<br>**01 02**: Station 553 can use block **01** and **02** for Individual Speed Dial (20 sets) |
| 42-**15**-IP SPD-T<br>**04 00** | **15**: Station No. ( 2-4 digits )<br>**04 00**: Station 105 can use block **04** (10 sets) for Individual Speed Dial (00-09 or DSS11~20), **00** : for no block. |

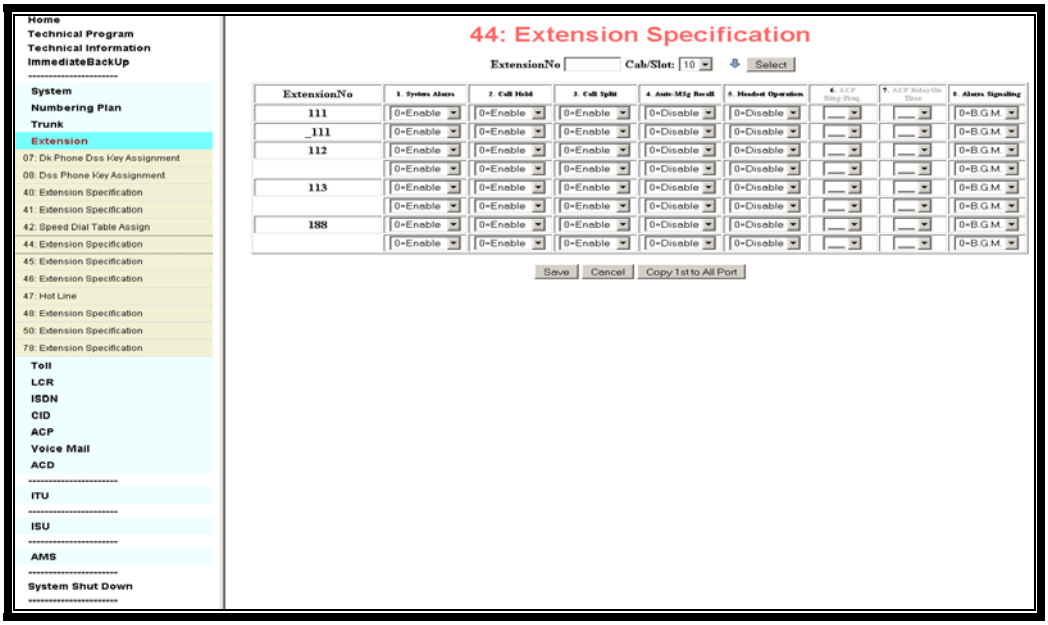
| | |
|---|---|
| 42-18-IP SPD-T<br>**00 03** | **18**: Station No. ( 2-4 digits )<br>**00 03**: Station 550 can use block **03** for Individual Speed Dial (DSS 1-10) |

* Refer to **Keyphone Operation**, **G.04** for the programming of Individual Speed Dial.
* Be sure to program these parameters before programming speed dial on key phones.

If problems are encountered with stations not being able to program speed dial numbers, check this parameter to be sure that speed dial locations are available to the station. If the station card was fitted at the time of system initialisation then the blocks will have been allocated automatically.

## Program 43-st-IP : Extension Specifications - future

## Program 44-st-IP : Station Class of Service – 2




**Description:**

**01. System Alarm:**

If the setting is disable, the station will not receive system alarm clock signals.

0 = The "System Alarm" signal will be received on this station.
1 = The "System Alarm" signal will not be received on this station.

**02. Hold feature:**

If the setting is disabled, the station will not be able to place calls on hold.

0 = Hold function allowed
1 = Hold function not allowed

**03. Call Split:**

If the setting is disabled, the station will not be able to activate call-splitting function. When activated and the station presses hook flash after placing a call on hold the call will not be retrieved. Dialling 9 (or 0) or 72 will retrieve the held call.

0 = Call Split Enabled  1 = Call Split Disabled

**Related System Programming Mode: 07(code 26), 44-st-03**

**04. Auto message recall:**

When Station A leaves a message to a busy Station B after the busy Station B hangs up this feature will allow the system to call the Station A that left the message. When Station A lifts the handset the system will then ring Station B.

0 = Disable 1 = Enable (default)

**05. Headset feature:**

The user can then use the **[SPK]** key to go on or off hook. The user will overwrite this programming mode if they use **[SPK 775]** to switch between handset and headset mode.

0 = Disable 1 = Enable

**06. Reserved:**

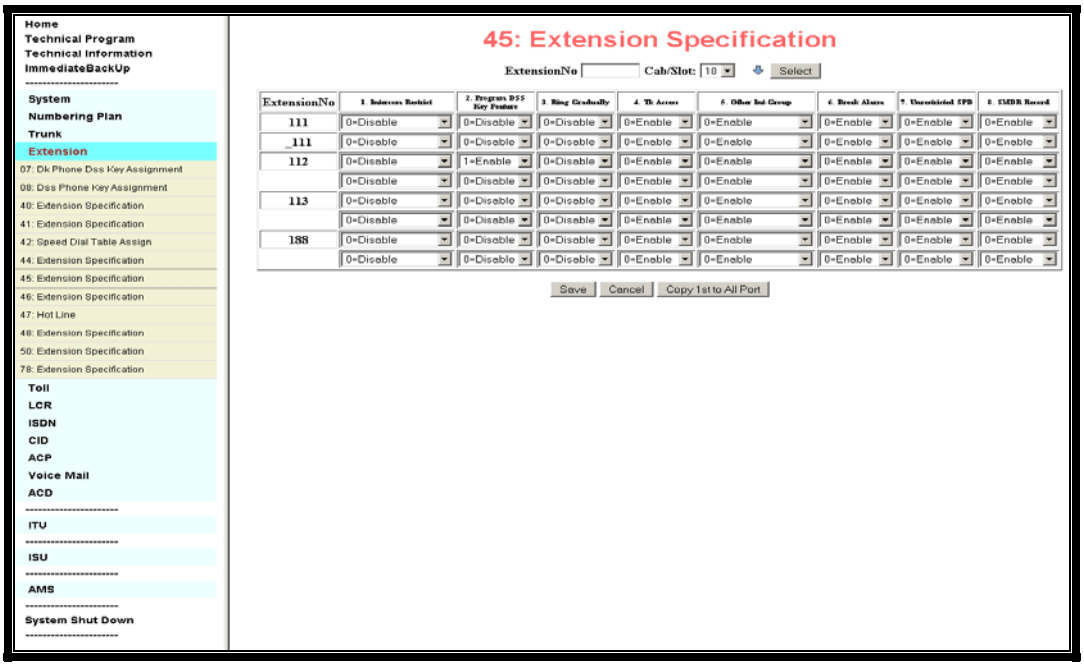
**07. Reserved:**

**08. Station Alarm Signal:**

This parameter decides what the station will hear when a station alarm or Morning Call is activated.

0 = Back Ground Music 1 = Busy tone

## Program 45-st-IP : Station Class of Service – 3




**Description:**

**01. Intercom Call Limitation:**

If this setting is enabled, the station cannot make an intercom call by dialling a station number. Under this condition, the Key Phone still can press a Flexible Key to make an intercom call or the Key Station or Analogue phones can call a station using the "Single Digit" feature.

0 = Disable 1 = Enable

**02. Program DSS Key feature:**

On systems with software that has 50 soft key plans it is possible for individual stations to program their own DSS keys. If there are 50 or less Digital phones then each can be allocated its own soft key plan and this parameter can be enabled to allow them to set keys to suit. The user presses PROG SAVE to set their own DSS keys.

0 = Disable 1 = Enable

**03. Ring Volume Up Gradually:**

This parameter if enabled will allow the user to set Ring Volume increase automatically the longer the Ring time the louder the ring will become.

0 = Disable 1 = Enable

**04. Allow Trunk Access:**

If this function is disabled then the station will be unable to access any trunks for incoming or outgoing calls.

0 = Enable 1 = Disable

**05. Intercom Calls to Different Station Groups:**

If this function is disabled then stations will not be able to make intercom calls outside their own station group (Mode 41-st-01). This parameter is for use in tenancy arrangements where each company wish's to remain totally separate although some stations can still be allowed this function, for instance a shared Receptionist.

0 = Enable 1 = Disable

**06. Receive Break Alarm:**

If this parameter is disabled then the station will not receive the Break Alarm signal if one has been programmed in Mode 39.

0 = Enabled 1 = Disable

**07. Allow Unrestricted Speed Dial Access:**

If this parameter is disabled then the station will not be able to access any of the Speed Dial numbers which have been unrestricted in Mode 05-05-03/04 if they conflict with the stations toll restrictions.

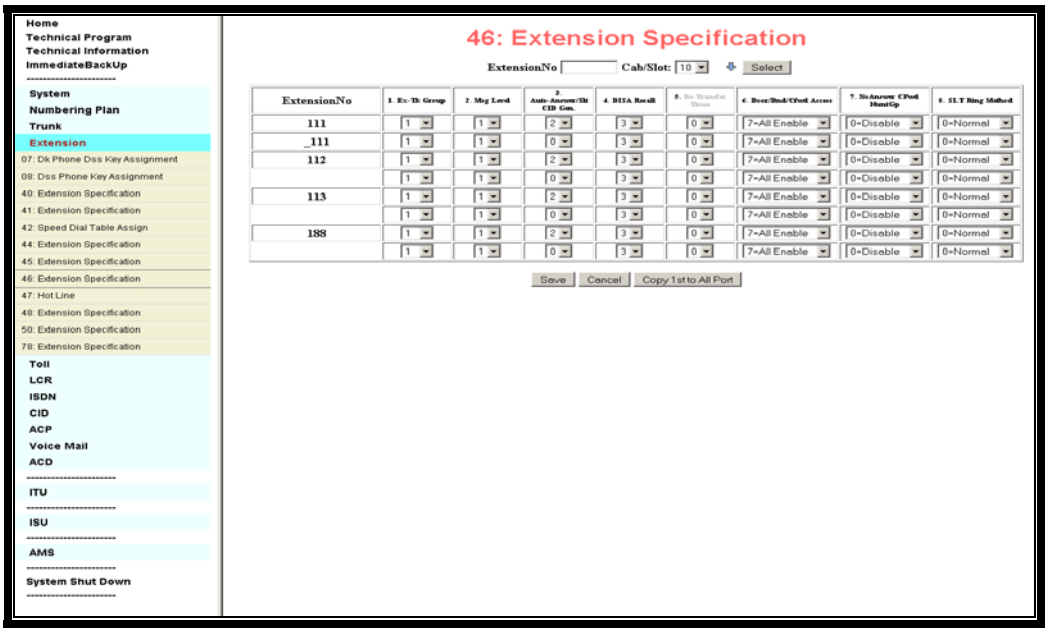
0 = Enabled 1 = Disable

**08. Record Station's SMDR Data:**

Mode 45-St-08 can disable SMDR output completely for individual stations or can limit the number of digits of the telephone record sent to the SMDR output. This will send enough digits to allow a call accounting package to calculate the cost the call but protect the privacy of the caller.

0= Enable SMDR output 1= Disable SMDR output
2~9 = Enable SMDR output but only output Telephone number 4~18 digits

## Program 46-st-IP : Station Class of Service – 4




**Description:**

**01. Dial [87] Trunk Group:**

If this setting is from 1 to 8, after the station dials [87] (or dials [9]), the system will automatically search for a free line that is assigned in group 1 to 8 in Program Mode 38.

If the setting is 0, then no dial 87 group is available to this station.

**Related System Programming Mode: 36, 38, 41-ST-04, 46-ST-01**

**02. Message Waiting Level:**

The Stations assigned higher levels can leave message for stations with the same or lower levels. Ten levels (0-9) are available (9=highest level, 0=lowest level).

9 = Can do Message Waiting to Stations assigned level 0-9;
8 = Can do Message Waiting to Stations assigned level 1-8;
……
1 = Can do Message Waiting to Stations assigned level 1;
0 = Cannot do Message Waiting (lowest level) and cannot receive a message.

**03. Automatic Answer Capability (KeyPhone):**

This parameter if enabled will automatically switch on the microphone of a Digital station if it receives an intercom call. This setting is independent of whether the system is set to voice or ring signalling.

0 = No 1 = MIC permanently on. 2 = MIC will switch on for Intercom calls

**04. DISA Recall Capability:**

If this parameter is enabled then when a DISA call rings an extension but the station is busy or does not answer (depending on setting) after the voice message announcing the status of the station is heard then the system will recall the operator after the assigned DISA transfer time. Using settings 1 to 3 the called station will continue to ring until the console answers the call. Using Settings 5 to 8 the call will ring the station for 1 cycle (Mode 05-08-06) and then camp on to the console only and cease to ring the called station. If the parameter is set to 0 then the call will stay at the station until answered or terminated. 4 is particularly useful for Fax machines connected to an SLT port and assigned an Indial number. To prevent a second fax call recalling to the console this should be set to on for Fax machines

0 = No Recall to Operator 1 = Recall to Operator/No Answer
2 = Recall to Operator/Busy 3 = Recall to Operator/No Answer or Busy
5 = Recall to Operator/no Answer 6 = Recall to Operator/Busy
7 = Recall to Operator/No Answer or Busy
4 = ISDN Indial calls ringing a busy station will receive busy signal.

**05. Reserved:**

**06. Door Unlock/DND/CFWD Access:**

| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|---|---|
| Door Unlock | Disallow | Allow | Disallow | Allow | Disallow | Allow | Disallow | Allow |
| DND | Disallow | Disallow | Allow | Allow | Disallow | Disallow | Allow | Allow |
| CFWD | Disallow | Disallow | Disallow | Disallow | Allow | Allow | Allow | Allow |

This parameter allows or disallows the station from accessing the Door Unlock, Do Not Disturb and Call Forward features as per the table.

**07. Permanent Call Forward Group No Answer:**

This parameter sets the Permanent Call Forward No Answer destination Hunt Group for the Station. If the Station user sets a Call Forward manually then it will override this setting but after canceling the manual Call forward then this setting will be enabled again.

0 = Disable 1~9 = CFW no answer / busy to hunt group 1~9, VMU

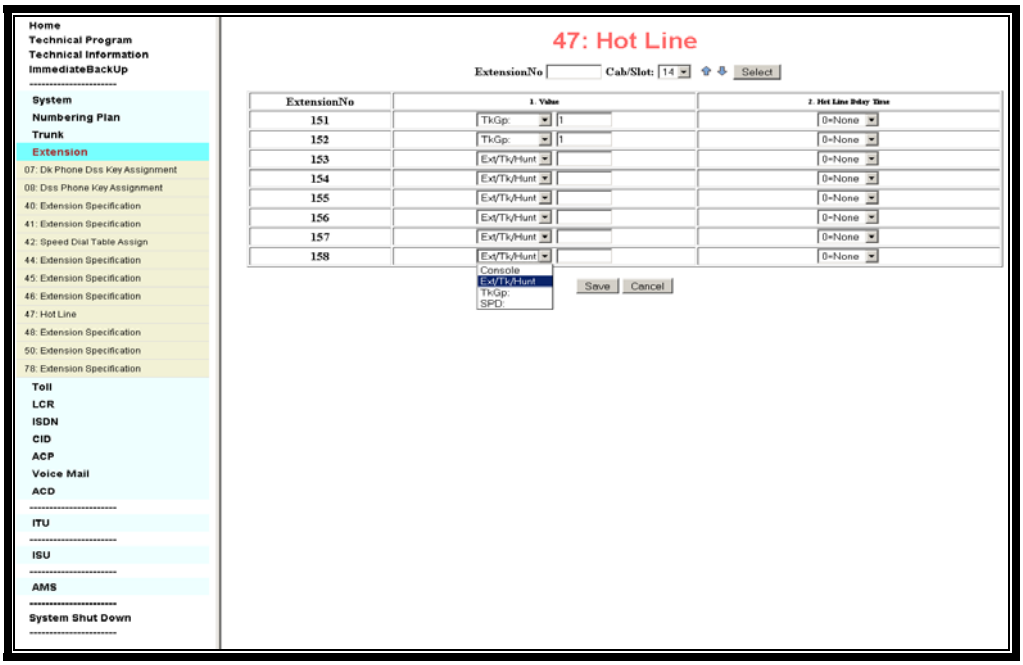
**Related System Programming Mode: 46-st-07, 68**

**08. Single Line Telephone Ring Cadence:**

This parameter allows the different ringing type for the single line telephone. This feature is for some Voice Mails, Answer Machines, …. cannot access the different rings for intercom or incoming CO.

0 = Variable ring for intercom and incoming CO 1 = Fix to external ring cadence
2 = Fix to internal ring cadence

## Program 47-st-IP : Hot Line Assignment




**Description:**

This feature allows a user to lift the handset and directly call a specific outside party through System Speed Dial or an Intercom Extension or a Trunk or a trunk group without dialling any digits. On later versions of software a delay can be programmed to a Hot Line to allow the user to make another choice before the Hot Line is activated.

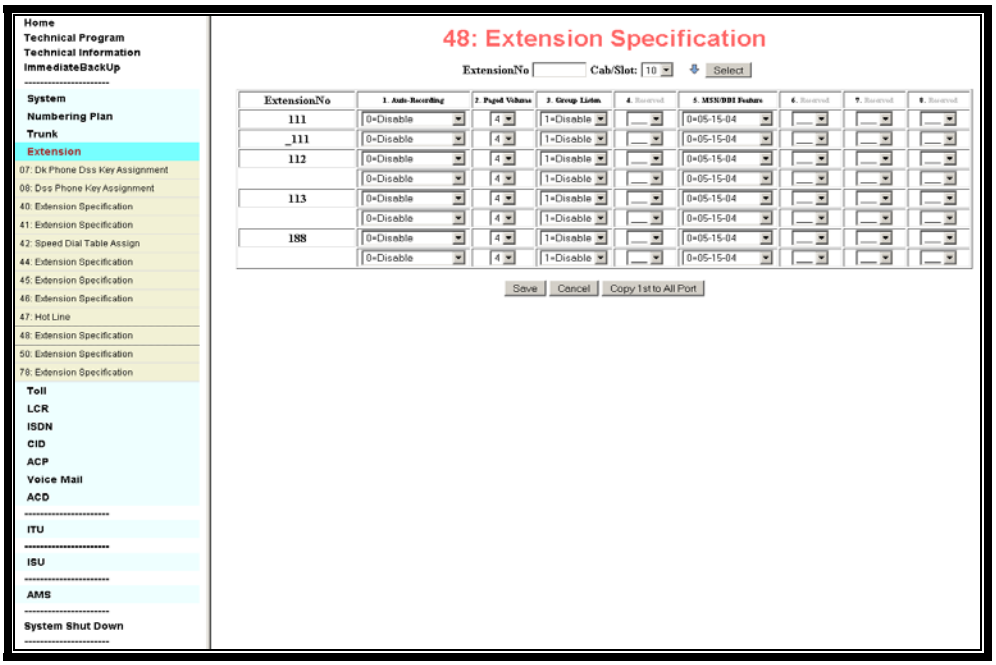
* Pressing **[SPK]** on a Keyphone also allows the Hot line to be over-ridden.

1. Enter a System Speed Dial Number or a Trunk Group for an outgoing call or a Station Number or Hunt group number for an Intercom call.

The Hot Line is the recommended method of connecting a Fax machine to the system. Use a spare analogue port and make the Fax extension a Hot Line to an unused Speed Dial number, a trunk or a trunk group and. If using a Speed dial do not program any number into the Speed Dial but selecting a specific trunk is recommended.. When the fax goes off line it will select the Fax line and then wait for the Fax to dial the number required. Or the user can hot line to a trunk group number or a specific trunk

Or the extension can use this feature to access a CO Line directly when lifting the handset. The user will overwrite this programming mode if they use **[SPK][771]** to switch between hot line and normal mode.

## Program 48-st-IP : Extension Specification




**Description:**

**01. Auto Recording:**

This parameter enables automatic recording of calls to a Voice Mail unit.

0 = Disable 1 = Record All 2 = Record Incoming 3 = Record Outgoing

**02. Page Volume:**

This parameter allows the paging volume to be adjusted for individual extensions so that an all page signal can be lowered where it is intrusive or raised where the environment is noisy.

**03. Group Listen Feature:**

This parameter enables/disables the Group Listen feature for individual handsets.

0 = Enable 1 = Disable

**04. Reserved**

**05. MSN/DDI Feature**

This parameter sets the extension to use MSN/DDI numbers for day/night/both / none.

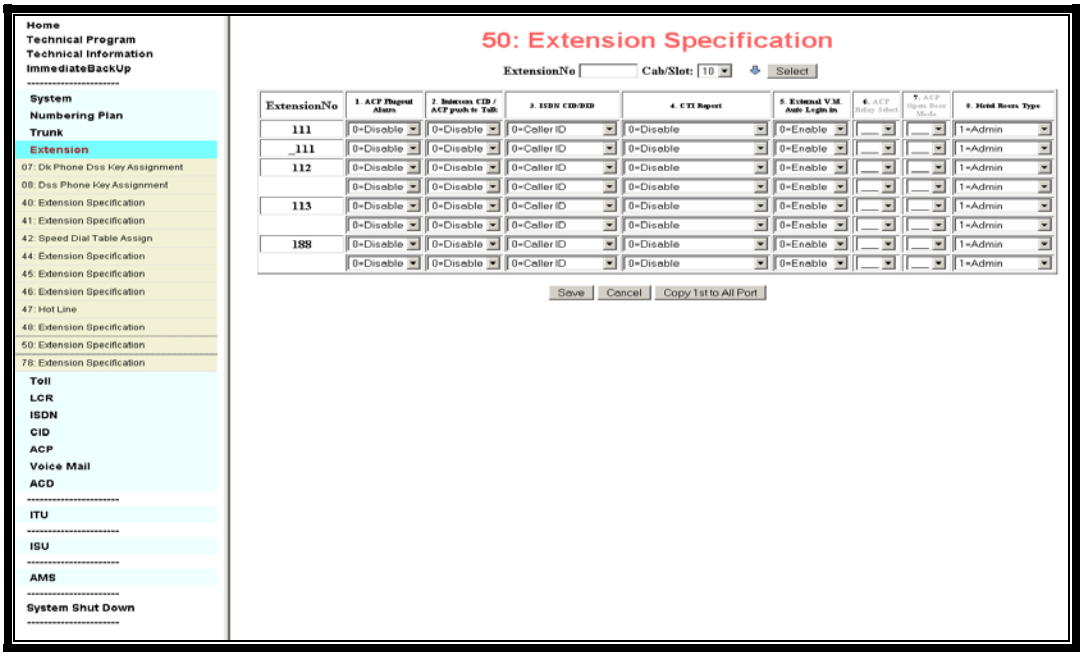
0 = Follow 05-15-04 1 = Night Enable 2 – Day Enable
3 = Day/Night

**06. Reserved**

**07. Reserved**

**08. Reserved**

## Program 50-st-IP : Station Class of Service – 5




**Description:**

**01. ACP Case Alarm:**

Enabling this parameter will cause the system to alert (ring) all extensions if the ACP is disconnected or the case opened.

0 = Disable 1 = Enable

Note: Dial [777] on console to stop this signal.

**02. Intercom CID:**

This enables system to send internal CLIP(Caller ID) signals to the single line telephone

0 = Disable CLIP 1 = Enable

**03. ISDN Incoming Call Display Type:**

This parameter selects what will be displayed on the screen of an LCD phone when an incoming ISDN call is received, either the CLI number or the ISDN Indial number. This will also select what will be displayed on the SMDR output for incoming ISDN calls. This setting also allows the naming of Indial's or CLI numbers using System Speed Dial Name / numbers. If this setting is a 1 then when an incoming ISDN call with CLI or an Indial number rings, the GDS-600 will search the System Speed dials and if this number is entered then the name associated with it will be displayed on the screen. The Indial number is entered as the standard 7/8digit number without area code. Mode 84 Home Area code must be programmed for this parameter to work correctly. On 040 software with a DK2-21 phone if this parameter is enabled then the CID will also be displayed on line 4 of the LCD.

0 = CLI / Name 1 = ISDN Indial Number / Name

**04. CTI-Extension Status Report:**

Enabling this parameter will output the extension status report for CTI applications

0 = Disable 1 = Enable

**05. Voice Mail Auto Login for Intercom Calls:**

Disabling this parameter will prevent the system from sending the leading digit information of the extension when calling directly to an external Voice Mail. The main use is to allow the operator to transfer a call to the voice mail and directly into a users mail box.

0 = Enable 1 = Disable

**06. Reserved:**

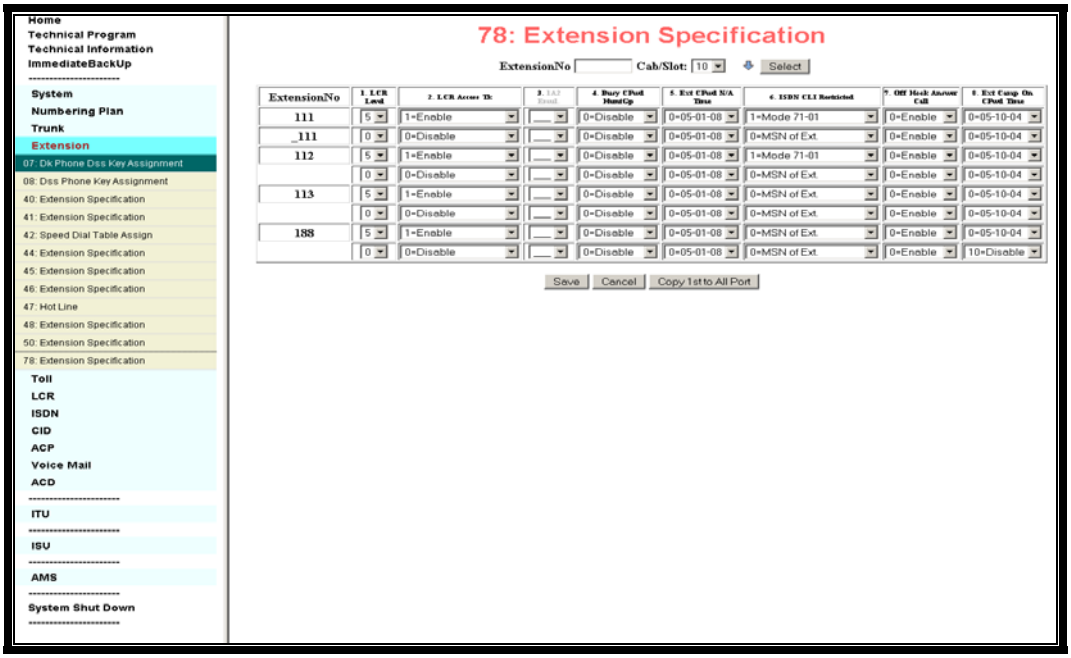
**07. Reserved:**

**08. Hotel Room Type and Emergency Call:**

This parameter sets the extension in a Hotel environment to be either an Administration phone or a Guest room phone. The major difference will be the Voice Mail operation. Refer to the Hotel Manual for full details.
The Emergency Call Feature if enabled will track any calls made to the number programmed in Mode 59-01 and if a call is made to this number which is usually set to Emergency Services numbers then the Operator group will be notified.

0 = Guest 1 = Admin 2 = Emergency Call Feature

## Program 78-st-IP : Station Class of Service – 6




**Description:**

**01. LCR Routing Level**

This parameter assigns the LCR routing level for each station.

0 = Disable LCR.
1 = Use the 1st priority trunk group only.
2 = Use the 1st and the 2nd priority trunk groups only.
3 = Use the 1st~3rd priority trunk groups only.
4 = Use the 1st~4th priority trunk groups.
5 = Use the 1st~4th priority trunk groups. If there are no available trunks in the 1st~4th priority trunk groups the system will allow this station to dial normally.

**Related system Programming: 05-13-07. 05-13-08, 75, 76, 77, 78-st-01, 78-st-02**

**02. LCR – Direct Access a Trunk**

This parameter allows the station to select a trunk directly when LCR is enabled.

0 = Not allowed to access a trunk directly (need to dial 9 (or 0) first).
1 = Allow to access a trunk by pressing TK DSS. System will assign any pre-assigned idle trunk.
2 = Allow this station to access a trunk directly (by pressing line key button). System will assign a dedicated idle trunk for this extension. Stations having this facility enabled can only, access trunks, which are in their own trunk group set in 41-STN-04. LCR Routing will still apply for the calls but if the LCR route(mode 76) has the trunk group set to 0 which means use station trunk group.

Related system Programming: 05-13-07. 05-13-08, 75, 76, 77, 78-st-01, 78-st-02

**03. Reserved**

**04. Busy Call Forward Hunt Group:**

This parameter sets the Permanent Call Forward Busy destination Hunt Group for the Station. If the Station user sets a Call Forward manually then it will override this setting but after canceling the manual Call forward then this setting will be enabled again.

0 = Disable 1~9 = CFW Busy to hunt group 1~9 or VMU = VMU

**05. Call Forward No Answer Timer:**

Each Station can set their Call Forward No Answer Timer individually on the GDS web browser. The setting on the Web Browser can also be altered here by the programmer.

0 = 05-01-08 1 = 10 secs. 2 = 20 Secs. …… 9 = 90 secs.

**06. ISDN CLIP Restriction:**

In default the system will send the extensions DID (MSN) number to the CO Line as programmed in Mode 72. The exchange will then pass this information to the called party. Some customers do not want this preferring only the GDN to be shown. This parameter either disables the sending of CLIP completely or the substitution of a different number. See mode 71 to program alternative numbers.

0 = Ext MSN 1 = Mode 71-01 2 = Mode 71-02 ……. 8 = Mode 71-08
9 = Restrict CLIP 10 = Mode 71-01 + MSN 11 = Ext Num 13 = Mode 71-01 + Ext Num
15 = Mode 71-02 + Ext Num

**07. Hot Line Delay Timer:**

This parameter delays the activation of Hot Line operation to allow the extension to make another choice before the Hot Line action occurs. If the extension is an SLT this will allow the user to lift the handset and make an intercom call or some other action and prevent the Hot Line action from taking place. The delay time is set in mode 47 for each Hot Line setting and that time will be displayed also in this parameter

**08. Busy Extension Call Forward Camp On Time:**

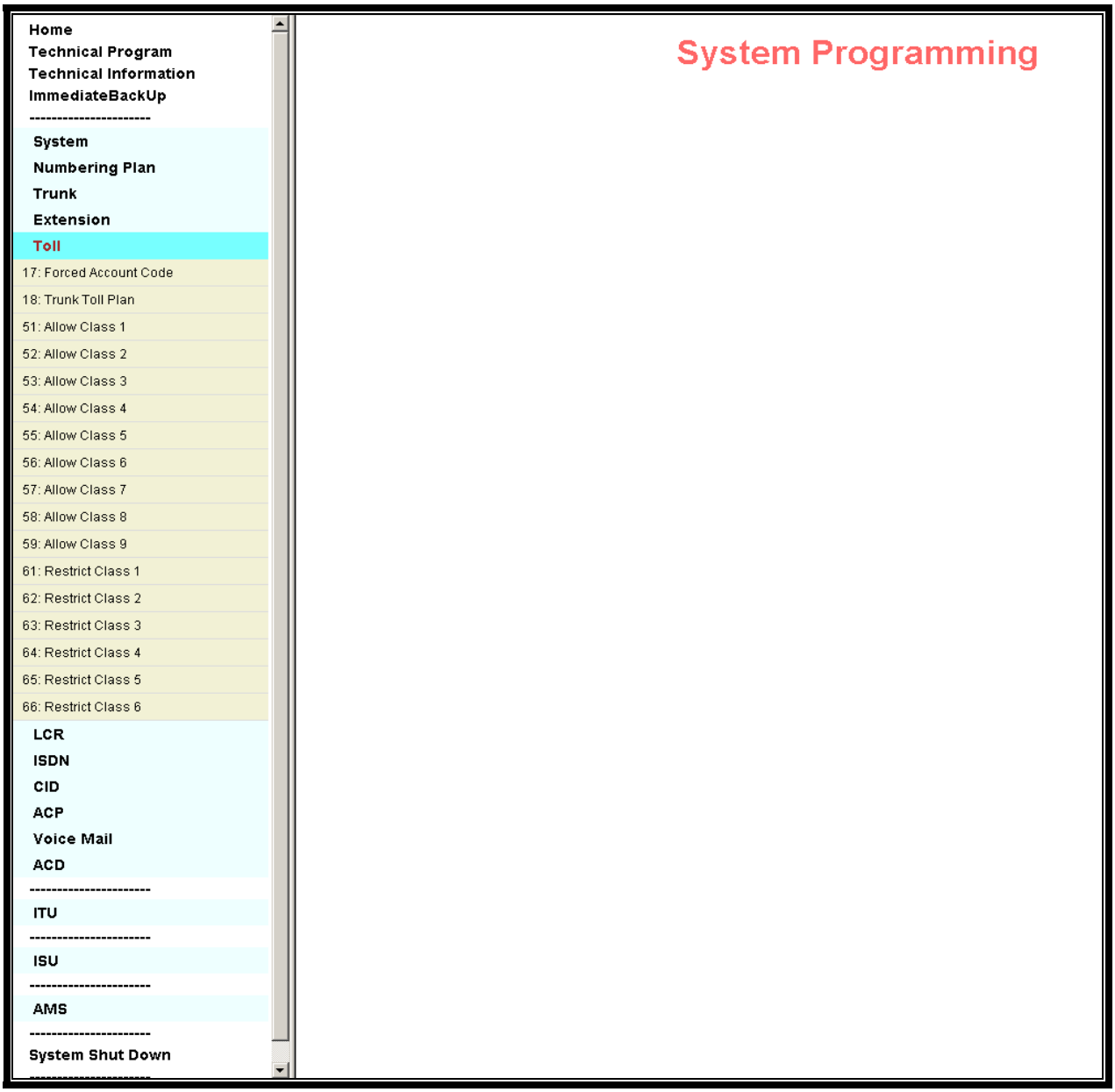
If this parameter is enabled then a call that arrives at a Busy station that is Call Forwarded will not immediately Call Forward but will wait at the station until the time elapses. System wide time is set in 05-10-04.

0 = 05-10-04 1 = 5 secs. 2 = 10 secs. …. 9 = 70 secs. 10 = Disable

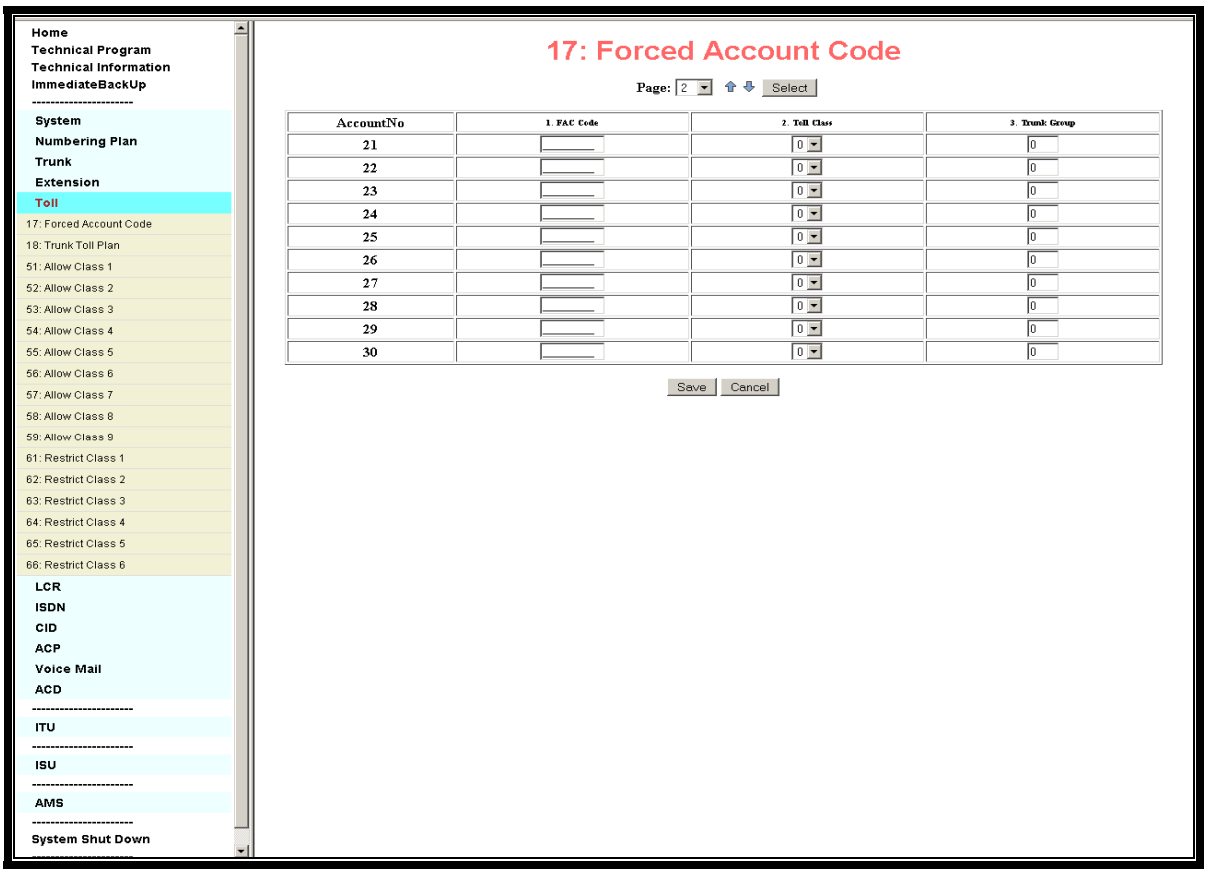
## System Programming – Toll restrictions

The Category “Toll” includes below system programming modes:

Mode 17: Force Account Code
Mode 18: Trunk Toll Plan
Mode 51~59: Allow Class 1~9
Mode 61~66: Restrict Class 1~6



# Program 17-nn : Forced Account Code




**Description:**

This program creates 600 Forced Account codes.
The forced account code will temporarily override a station's toll restrictions. The Toll level after using an FAC can be set differently for each FAC code.
600 (1000 in GDS320) codes of up to 8 digits maximum are allowed. If the system is fitted with a call accounting output the entry for a call made using a forced account code will display the code used in the account code column. The actual numbers of the code will not be displayed for security reasons, the reading will show FAC:XXX. XXX is the forced account code number 001 to 600.

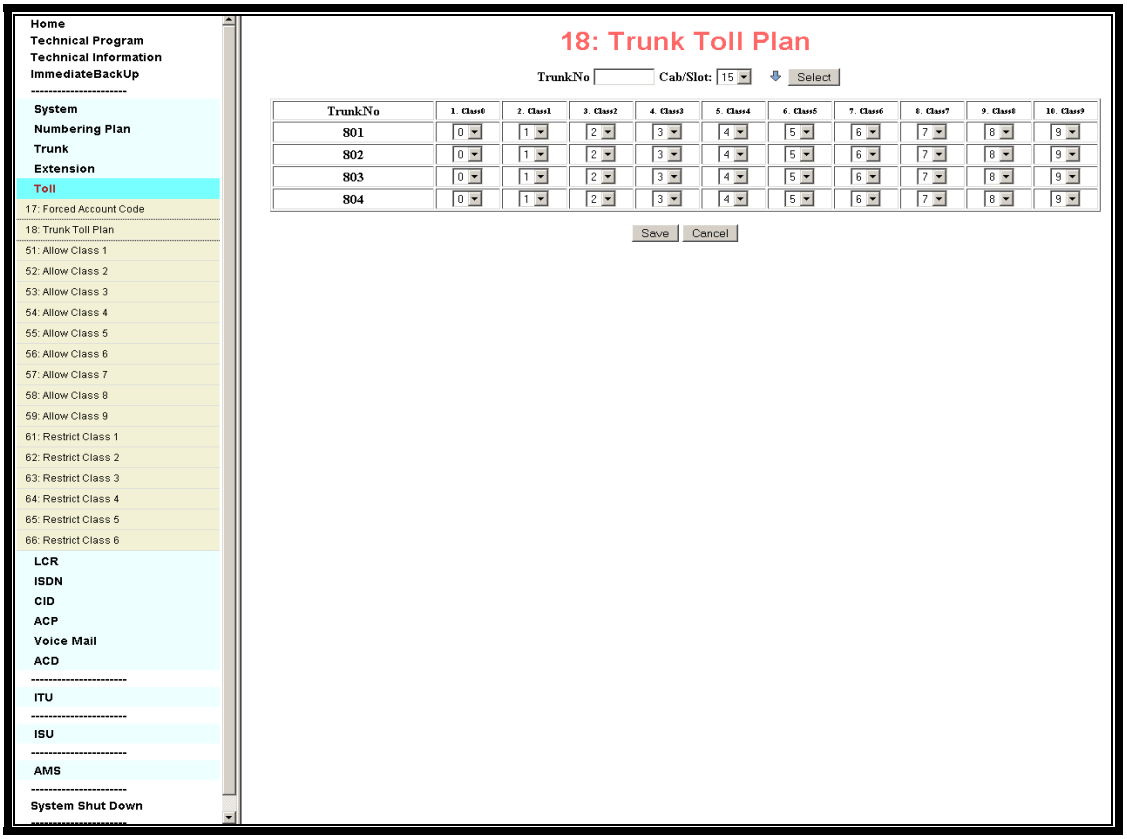
The Forced Account Code will not be displayed on the screen of Executive phones when it is entered.

Digit "d" is keyed in by **{Don't care}** button and means " Any digit " ("don't care").

Forced account codes can be used as the code to unlock an ACP phone and allow access through the ACP controlled door.

The Forced Account Codes may also be used as DISA passwords to allow call accounting to show which user was making an external call using DISA from outside the system. In the GDS-600, Forced Account Codes 001 to 600 can be used for this purpose. This feature will need to be enabled in Mode 05-11-02.

# Program 18-nn-TK : Assign Toll Plans To Trunk Lines




**Description:**

This Mode assigns Toll Plans to trunk lines. The Toll plans are to be written in Modes 51 to 59 and 61 to 66.

10 toll plans can be used.

Each Toll Plan assigns each trunk line a Toll Class. It is possible to allow a toll class to have different restriction level on a line by line basis.

Example 1: Mode 18-00 is set to 0000dddddd. Any station in the system which is set to toll class 0 will be unrestricted on lines 1 to 4 but will be unable to dial out on lines 5 to 10.

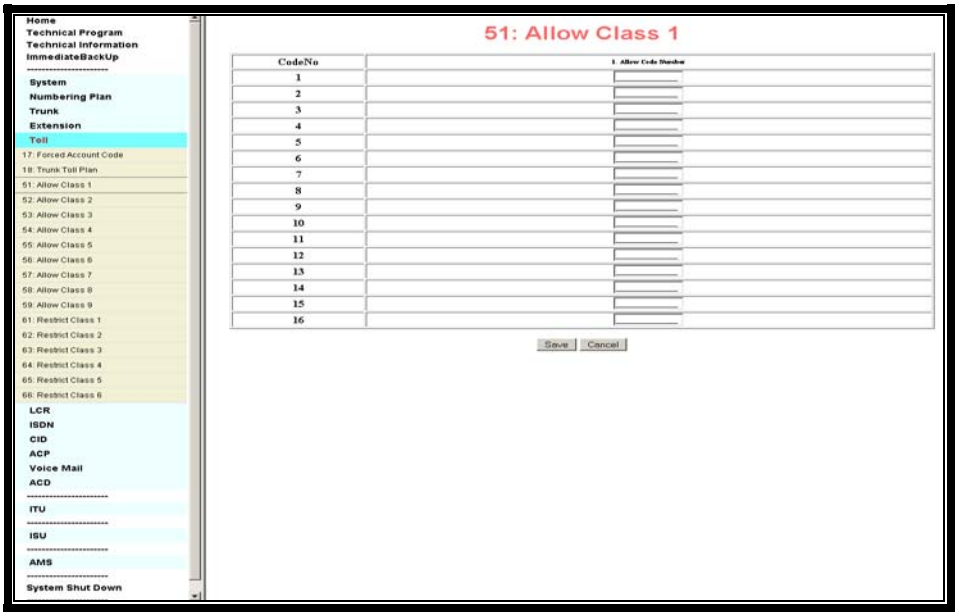
Example 2: Mode 18-01 is set to 111100dddd. Any station in the system which is set to toll class 1 will be restricted by toll class 1 on lines 1 to 4, will be unrestricted on lines 5 and 6 but will be unable to dial out on lines 7 and 10.

To assign toll plans to stations, see Program **41-st-05, 41-st-06**.

***Toll Classes:***

| Class | Function | Prog. Mode |
|---|---|---|
| **0** | Unrestricted | Default |
| **1** | Use Mode 51 for the Unrestricted numbers. Use Mode 61 for the Restricted numbers | Mode **51,61** |
| **2** | Use Mode 52 for the Unrestricted numbers. Use Mode 62 for the Restricted numbers | Mode **52,62** |
| **3** | Use Mode 53 for the Unrestricted numbers. Use Mode 63 for the Restricted numbers | Mode **53,63** |
| **4** | Use Mode 54 for the Unrestricted numbers. Use Mode 64 for the Restricted numbers | Mode **54,64** |
| **5** | Use Mode 55 for the Unrestricted numbers. Use Mode 65 for the Restricted numbers | Mode **55,65** |
| **6** | Use Mode 56 for the Unrestricted numbers. Use Mode 66 for the Restricted numbers | Mode **56,66** |
| **7** | Use Mode 57 for the Unrestricted numbers. | Mode **57** |
| **8** | Use Mode 58 for the Unrestricted numbers. | Mode **58** |
| **9** | Use Mode 59 for the Unrestricted numbers. | Mode **59** |
| ***** | Use Mode 51-56 for unrestricted numbers. Use Mode 61-66 for all restricted numbers | |
| **D** | **Cannot access the trunk line.** | |

# Program (51 to 59)-code-IP : Toll Plans – Allowed Digits – Class 1 to 9




**Description:**

This program sets allowed exception numbers for Toll Class 1. These Modes should be read in conjunction with Modes 61 to 66.

There are 16 codes for each Toll Class and each code contains up to 12 digits

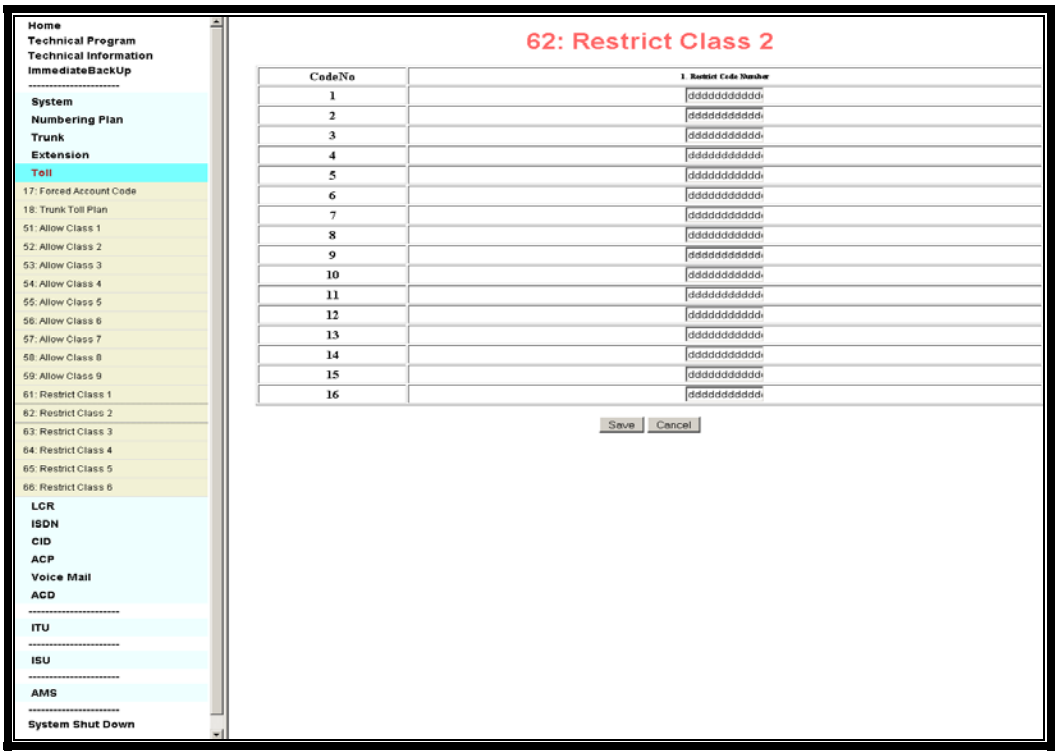
In default any station allocated to Toll Plans 1 to 6 will be able to dial unrestricted until the associated Modes are programmed.

Allowed entries in this Mode are 0 to 9, d and d = Don't care and means that any digit can be dialled in this position. -_ = No digit is allowed to be dialled beyond this position. If a digit is allowed as the beginning of a number then the entry should be filled with don't care's to the end of the line or the caller will not be able to dial the full number.

Modes 51 to 56 are used in conjunction with Modes 61 to 66 and Modes 57 to 59 are used independently.

**Note 1:** Default numbers in Mode 61, 62, 63, 65, 66 are: dddddddd
**Note 2:** Default numbers in Mode 51, 52, 53, 55, 56, 57, 58, 59 are:----------
**Note 3:** d: Don't care: any digit is allowed in this position.
**Note 4:** _: The system does not allow any digits dialled after this symbol.

## Program (61 to 66)-code-IP : Toll Plans – Restricted Digits – Class 1 to 6




**Description:**
This program sets Restricted numbers for Toll Class 1. These Modes should be read in conjunction with Modes 51 to 56.

There are 16 codes for each Toll Class and each code contains up to 8 digits
In default any station allocated to Toll Plans 1 to 6 will be able to dial unrestricted until the associated Modes are programmed.

Allowed entries in this Mode are 0 to 9, d and _. d = Don't care and means that any digit can be dialled in this position. _ = no digit is allowed to be dialled beyond this position. If a digit is allowed as the beginning of a number then the entry should be filled with don't care's to the end of the line or the caller will not be able to dial the full number.

Modes 51 to 56 are used in conjunction with Modes 61 to 66 and Modes 57 to 59 are used independently and do not have an associated restriction table.

In Default stations which are allocated Toll Plans 0 to 6 are able to dial any numbers.
When a station is allocated Toll Plans 7 to 9 they can dial no digits until the plans are programmed.

Mode 51 and 61 combine to produce Toll Plan 1, Mode 52 and 62 combine to produce Toll Plan 2 and so on up to Mode 56 and 66 for Toll Plan 6. Toll Plans 7, 8 and 9 are associated with Mode 57, 58 and 59.

The principle of these Toll Plans up to Plan 6 is to deny unwanted digits in Mode 61 to 66 and then allow any exceptions for these digits in Mode 51 to 56. If 0ddddddd is entered in Mode 61 and 04ddddddddddd is entered in Mode 51 then a station allocated to Toll Plan 1 will be able to dial any local number plus 04 anything (Australian Digital Mobile phones). Any other number beginning with 0 will be disallowed.

**This example is based on the Australian network for the city of Sydney (area code 02, local calls start with the digits 8 and 9) where an 8 digit local numbering scheme is in place and allows local calls plus mobiles (04x)**

Set Mode 41-11-05/06 = 7

When this mode is set and Mode 57 is still at default then station 11 will be totally restricted.

Set Mode 57 to the following,

Mode 57-01 = 8ddddddddddd
Mode 57-02 = 9ddddddddddd

Station 11 will now be only able to dial numbers beginning with 8 and 9 .
To allow mobiles program Mode 51 to the following.

Mode 57-03 = 04ddddddddddd

**Example 2: All calls except ISD and 19 numbers.**

Set Mode 41-11-05/06 = 1

When this mode is set and Mode 51 and 61are still at default then station 11 will be unrestricted.

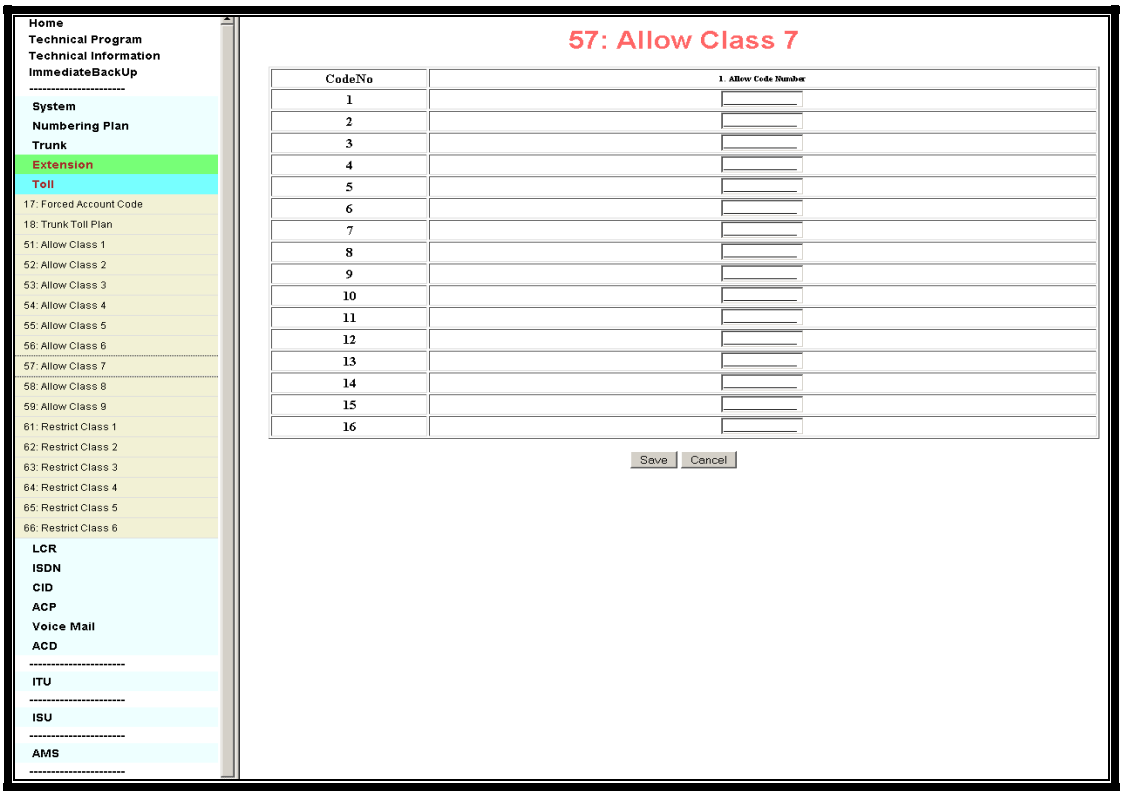
Set Mode 61 to the following,

Mode 61-01 = 00ddddddddddd
Mode 61-02 =19ddddddddddd

Station 11 will now be able to dial numbers beginning with digits 1 to 9 and 0 but not 00 or 19.
To allow mobiles (04X) free calls (1800xxxxxx) and directory assistance (12dddd) program Mode 51 to the following.

Mode 52-01 = 1800ddddddddd
Mode 52-02 = 04ddddddddddd
Mode 52-03 = 12ddddddddddd

## Program (57 & 58)-code-IP : Allow Class 7 and 8

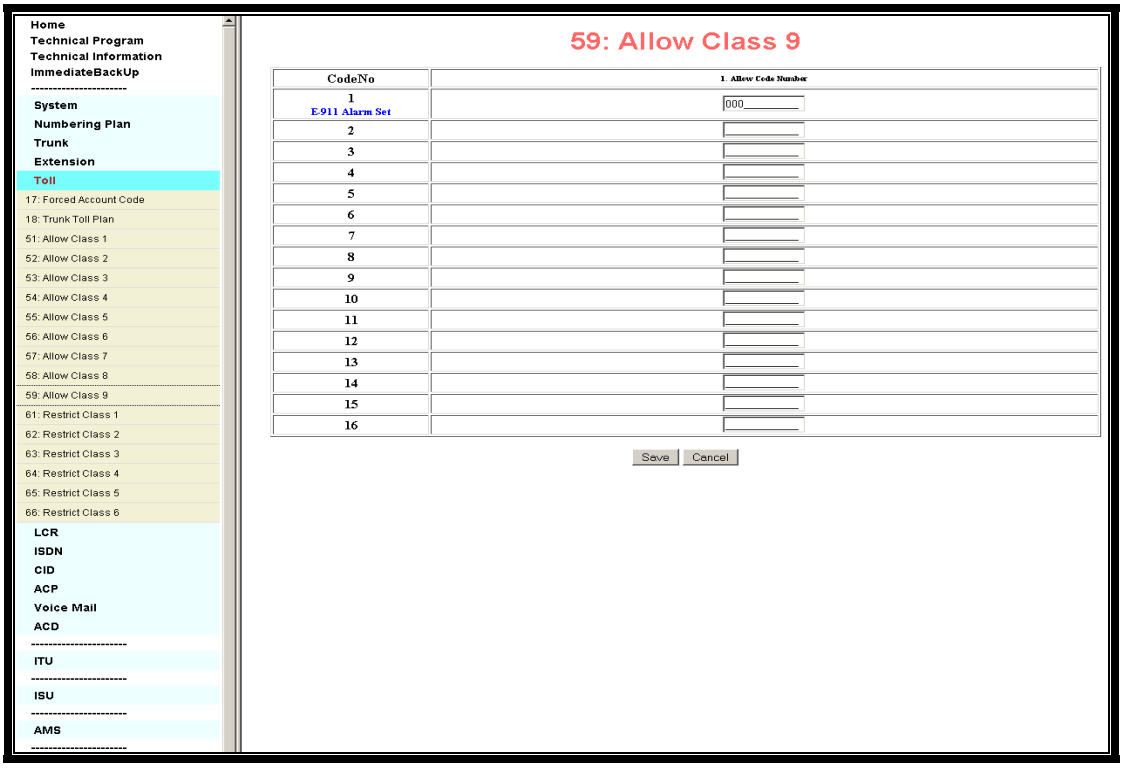



**Description:**
These programs mode 57 and 58 set allowed numbers for Toll Class 7 and 8.

Any station allocated to Class of service 7 or 8 will initially be totally barred from outgoing calls excepting any numbers in Mode 59, Common Permitted Code.

Any numbers that the station should be able to be dialed must be allocated in these modes. Up to 16 numbers can be programmed and each number can contain up to 12 Digits. Any digits not used must be filled with ddddd to the end of the line otherwise the dialling will be barred from the last digit entered.

# Program 59 -code-IP : Common Permitted Code - Allow Class 9




**Description:**
This programs allocates Common Permitted numbers that can be dialled by any station regardless of Class of Service. Locked phones can also dial any number programmed in this mode. This feature is designed particularly to allow the dialling of Emergency numbers from any phone, any time

Any numbers that the station should be able to be dialed must be allocated in these modes. Up to 16 numbers can be programmed and each number can contain up to 12 Digits. Any digits not used must be filled with ddddd to the end of the line otherwise the dialling will be barred from the last digit entered.

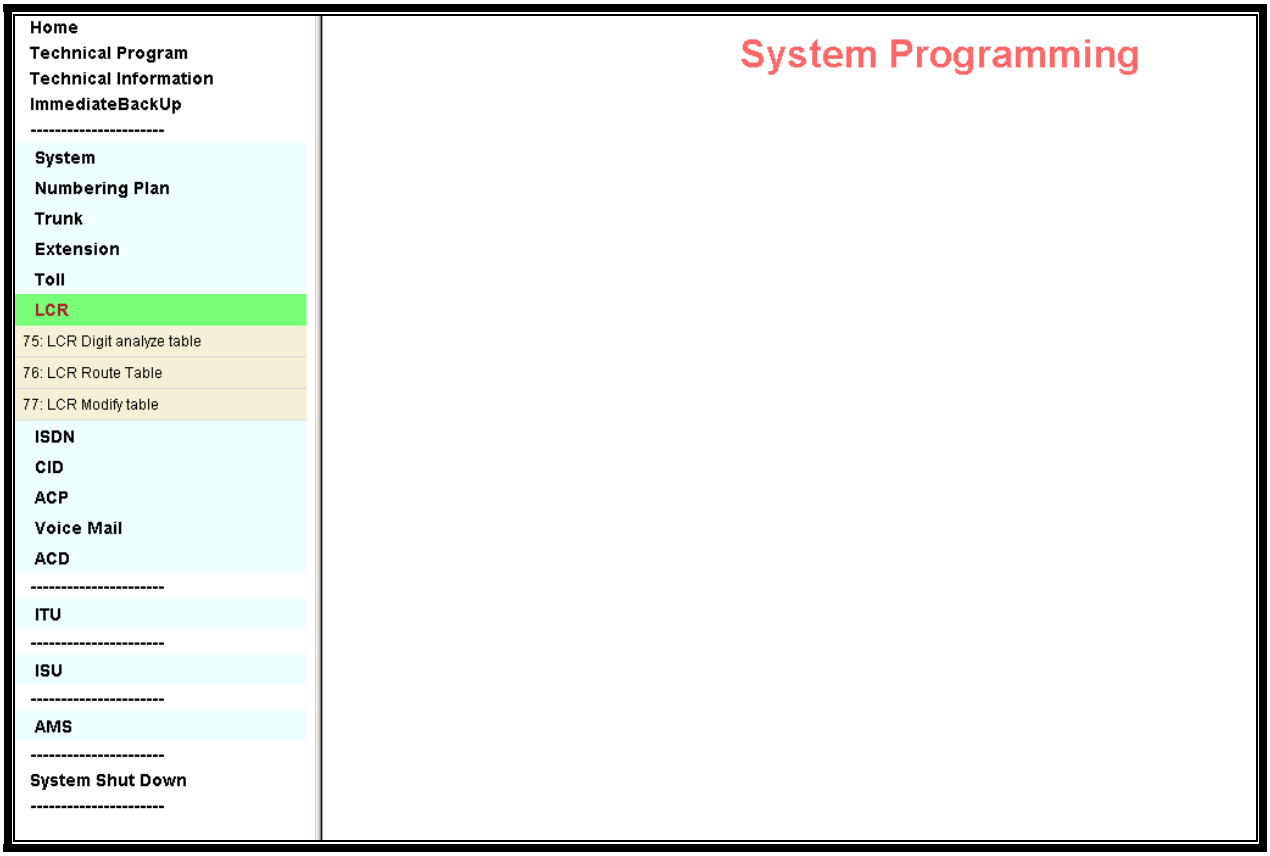
The number that is entered in the first position is also the number that will activate the emergency dialling feature designed particularly for Hotel operation. When any room dials 000 in the case of the above the system will not only dial the emergency services but will also call the console and play a message to the emergency services giving the room number and the address of the hotel in case the guest is not able to complete the emergency call. The message will stop playing once the hotel management picks up the call and is able to guide emergency services to the Guest requiring assistance.

For hotels with international guests the LCR feature can be enabled to detect international emergency codes and substitute the correct code and activate this feature.

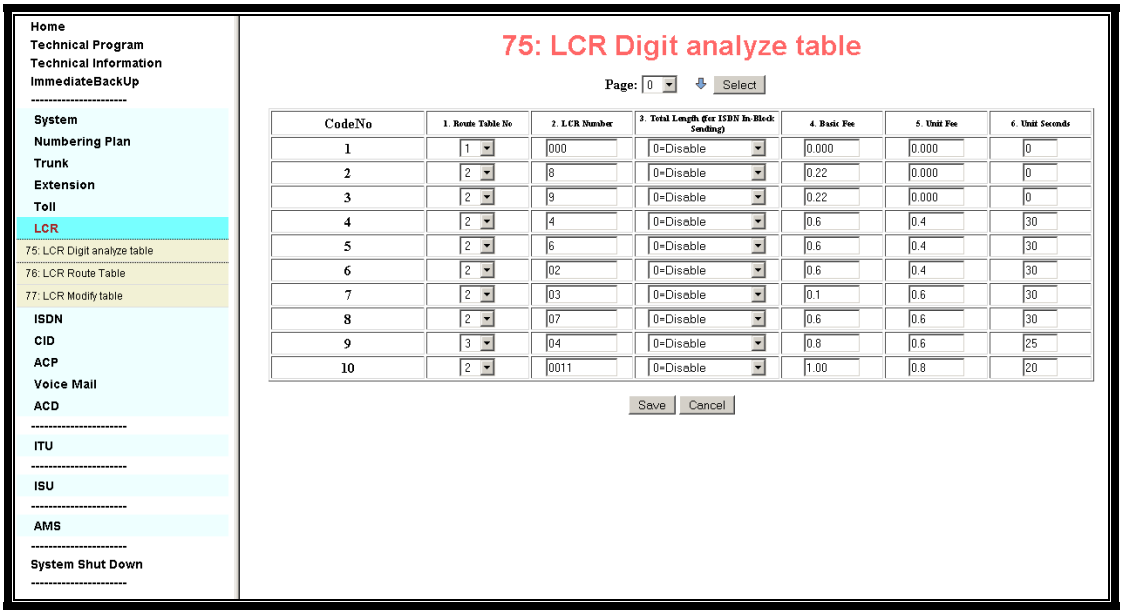
# System Programming - LCR

The Category “LCR” includes below system programming modes:

Mode 75: LCR Digit Analyse Table
Mode 76: LCR Route Table
Mode 77: LCR Modify Table



# Program 75-Num-IP : LCR - Analysis Table




**Description:**

This program checks to see if a dialled number is to be modified or re-routed. The above example is the first page of the programming for a Sydney (02) based GDS system.

On 040 and later software this table is also used to set charges for time based Hospitality Call Accounting. See the Hotel manual for details of Hospitality Call accounting program and use. The above example been programmed for the time based call charging as an example not an accurate representation.

500 specific dialled numbers can be assigned.

20 routing tables can be used (Mode 76).

Each specific dialled number can be assigned to a routing table

99 modification tables are available to add or delete leading digits for the actual dialled number.

The dialed digits could be 0~9, *, #. ‘d’ is a wildcard. ‘-‘ means no digit.

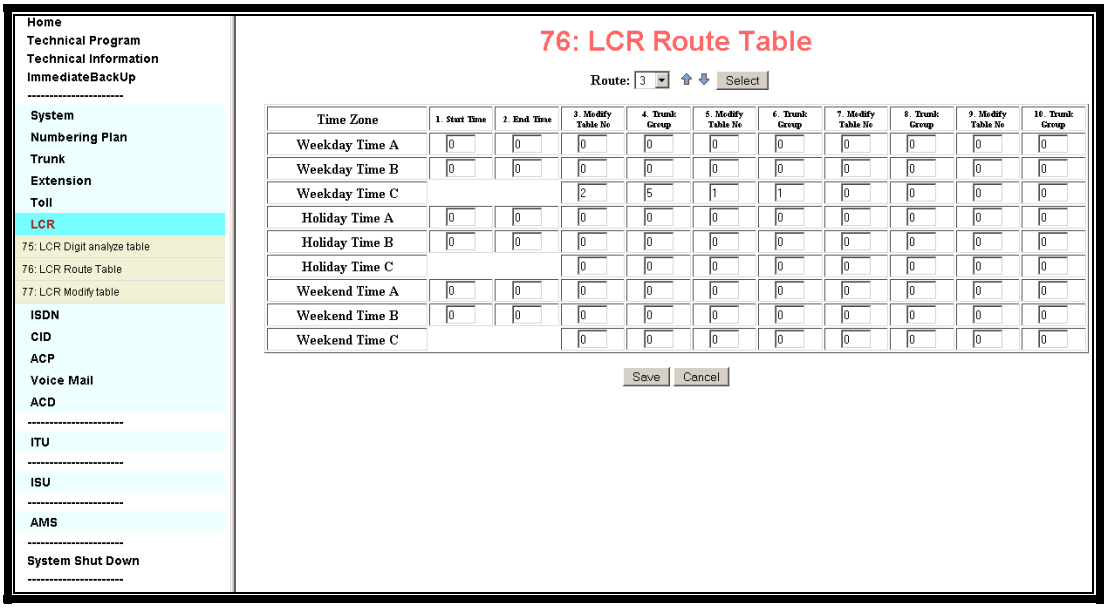
Unlike the smaller Hybrex systems it is not necessary to enter the Don’t Care symbols after each entry in the LCR number column.

The total length for ISDN In Block sending is not required with any of the Australian carriers currently but is used with at least 1 New Zealand carrier.

When LCR programming is complete the programmer can then enable stations to use LCR in Mode 78-st-01.

**Related system Programming: 05-13-07. 05-13-08, 75, 76, 77, 78-st-01, 78-st-02**

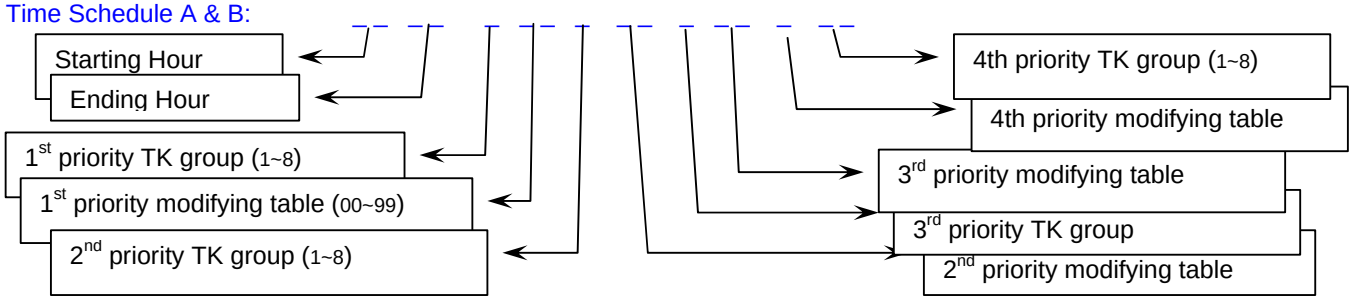
## Program 76-Num-Tm : LCR – Routing Table




**Description:**

This program assigns different time schedules, the priority to select different trunk groups and the modify tables to be applied to the numbers.
20 routing tables can be used.
3 time schedules can be assigned for each routing table.
4 priority trunk groups can be assigned for each routing table. (If there is no trunk group assigned here, the system will use the extensions Dial 9 trunk group instead.)
4 modifying tables can be assigned for each route table.
If the time of day or day of week is not relevant which is the case with most carriers In Australia then only Weekday time C needs to be programmed to achieve 24 hours a day 7 days a week LCR from the system. Check that mode 05-13-07/08 = 0 to ensure weekends work as well.

Time Schedule A & B:

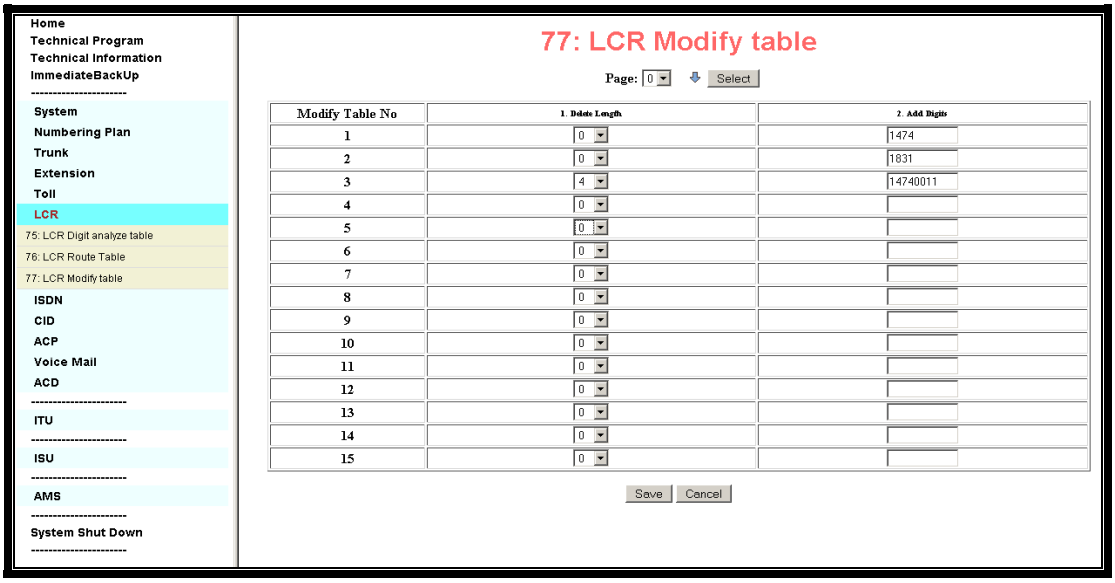



Time schedule C does not have the Starting/Ending hour setting. Only priority trunk groups and modifying tables need to be assigned.

The example shown above is for a Mobile phone number where only one GSM Router is fitted. The trunk group 2 contains the GSM router trunk only and priority 2 has been set to use trunk group 1 with its carrier as the next cheapest alternative if the GSM Router is already in use.

**Related system Programming: 05-13-07. 05-13-08, 36, 41-ST-04, 75, 76, 77, 78-st-01, 78-st-02**

# Program 77-Num : LCR – Modifying Table




**Description:**

This program designs the rules for changing the dialled number to the routed number.
The system will delete the first nn digits and then added the assigned digits in the front of the dialed numbers.
The added digits could be 0~9, *, #, p, T.
D = the wildcards.
_ = Extension Number (for LCR Extension Billing).
p = Pause.
T = Chain next modifying table with current one for long digit strings.
Modify table 3 shown above is for when deleting numbers such as 0015 and replacing with the standard 0011 as reqired by virtually all carriers except Telstra.

**Note: LCR Extension Billing.**

Newer versions have added a way of inserting the Extension Number into the dialled string of digits inserted by the LCR tables. There are no known ways of utilizing this in standard Australian network setup but some VOIP setups may find it useful.

For example if the carrier access code is 1346 and system inserts this before numbers dialled to route the calls to this carrier. Below setting in mode 77 is able to add the extension number into the dialed string of digits inserted by the LCR tables.

77. = 00 1346_ddddd Where _ = Extension Number

Dialling 907884234033 from extension 201 using the above rule would result in 134620107884234033 being sent to the Line.

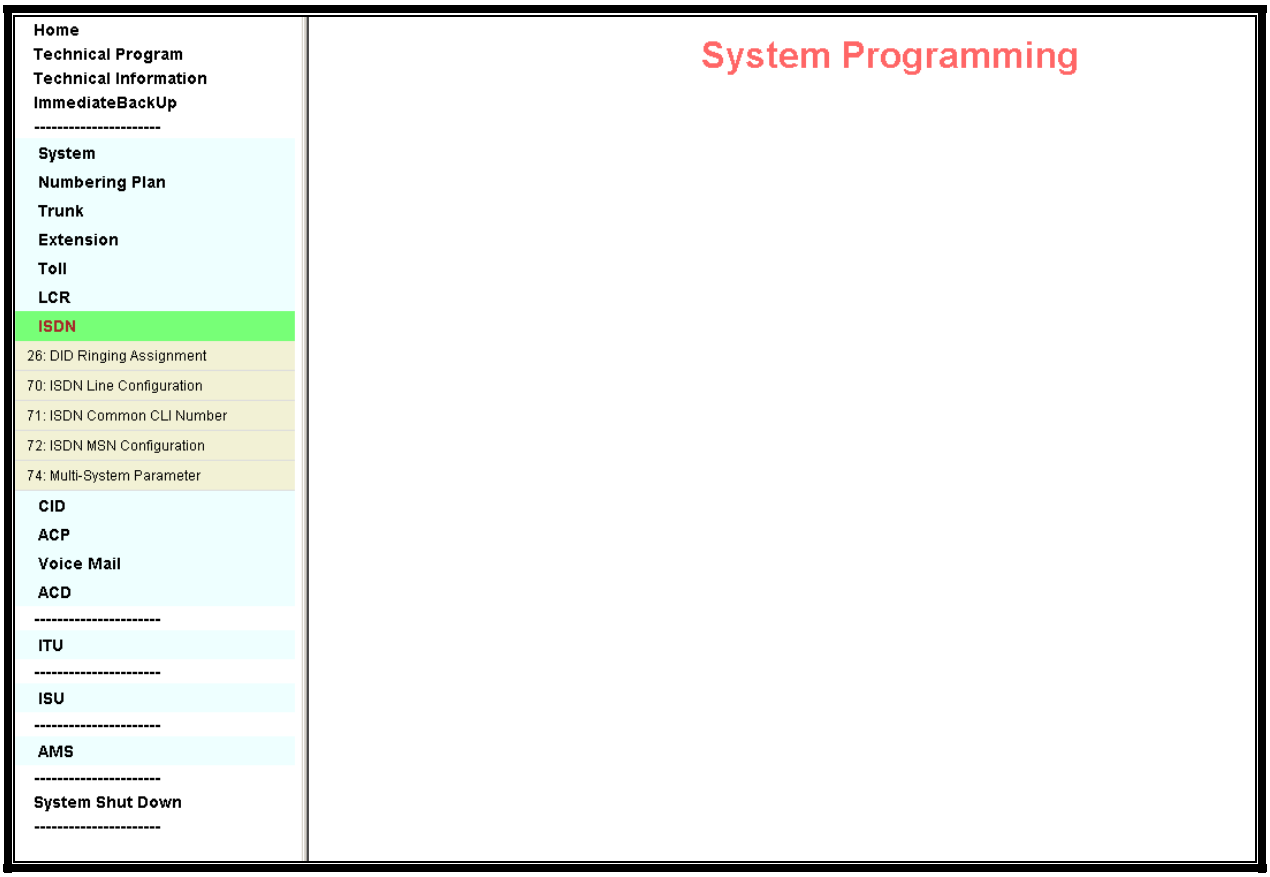
Dialling 907884234033 from extension 223 using the above rule would result in 134622307884234033 being sent to the Line.

**Related system Programming: 05-13-07. 05-13-08, 75, 76, 77, 78-st-01, 78-st-02**

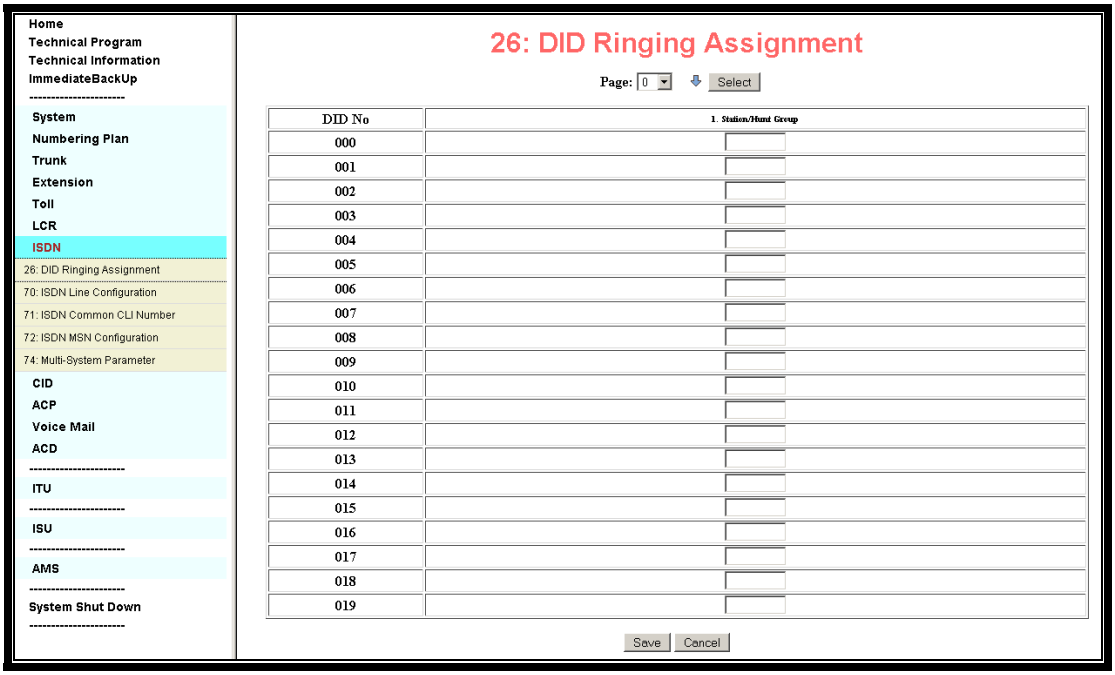
# System Programming - ISDN

The Category “ISDN” includes below system programming modes:

- Mode 26: DDI Ring Assignment
- Mode 70: ISDN Line Configuration
- Mode 72: ISDN MSN Configuration
- Mode 74: System Extend Parameter



# Program 26 : DDI Ringing Assignment




DDI is not currently used in the Australia/New Zealand market

From 050i software this Program Mode can be used to save time and effort when programming Indial numbers and assigning to extensions. On the GDS160 up to 100 DID numbers can be assigned and on the GDS320 up to 1000 numbers can be assigned.

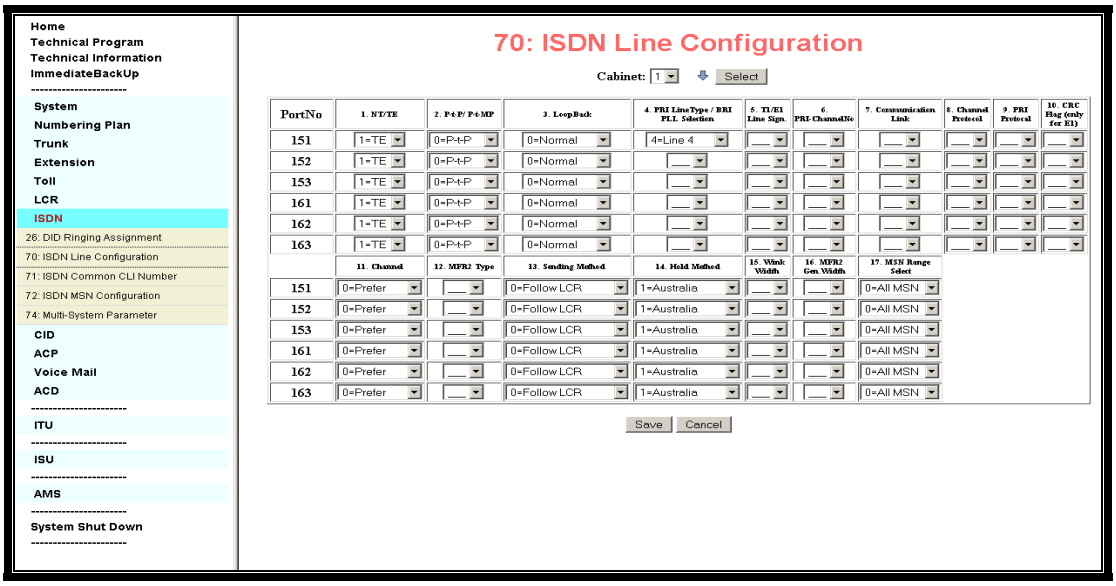
On the GDS160 the last 2 digits of the number sent by the Telco will be used and on the GDS320 the last 3 will be used.

Mode 05-15-07 will need to be set to the number of digits sent by the local Telco which in the case of Telstra as an example will be 8.

Programming an indial number against an extension in Mode 72 requires the programming of an 8 to 10 digit number for each DID assignment and then entering the extension number. In contrast Mode 26 will allow the user to select a DID number, either 2 or 3 digits and place an extension number against this saving 8 to 10 keystrokes per entry.

In the GDS160 only 100 DID numbers can be assigned in mode 26 so to utilize a full 150 DID numbers that the GDS 160 is capable of will mean utilizing Mode 72 instead of Mode 26.

## Program 70-Cd-IP : ISDN(BRI/PRI) Interface Specifications Program




**Description:**

**For ISDN BRI:**

**01. NT/TE:**

Item 1 selects whether the connection is an S" or "T" interface for the ISDN port on G2-SIU card. A "T" interface can be connected to the "NT" interface of an ISDN line. This is the standard method of connection of a basic rate from the Central Office to the GDS system. An "S" interface can connect two ISDN devices to the output of an unused Basic Rate port to connect ISDN devices as extensions of the GDS system.

**02. Point to Point / Point to Multi Point.**

This parameter selects whether the Basic Rate is Point to Point or Point to Multi point. A point to Point connection is where the Basic Rate is connected to the NT1 and then to 1 device only. Point to Multi Point is where there are 2 or more devices connected from the NT1 in an S bus configuration. The GDS system default is all Basic Rate connections are set Point to Point. Telstra policy is that extended features on Basic rates such as Easycall features will only be provided on Point to Point connections. The GDS system is not to be operated in Point to Multi Point. There are 2 issues to consider, one being that a multi Cabinet situation will have sync problems with Point To Multi Point and the New ISDN chips replacing the old V1.4 chips require Point to Point.

**03. Loopback:**

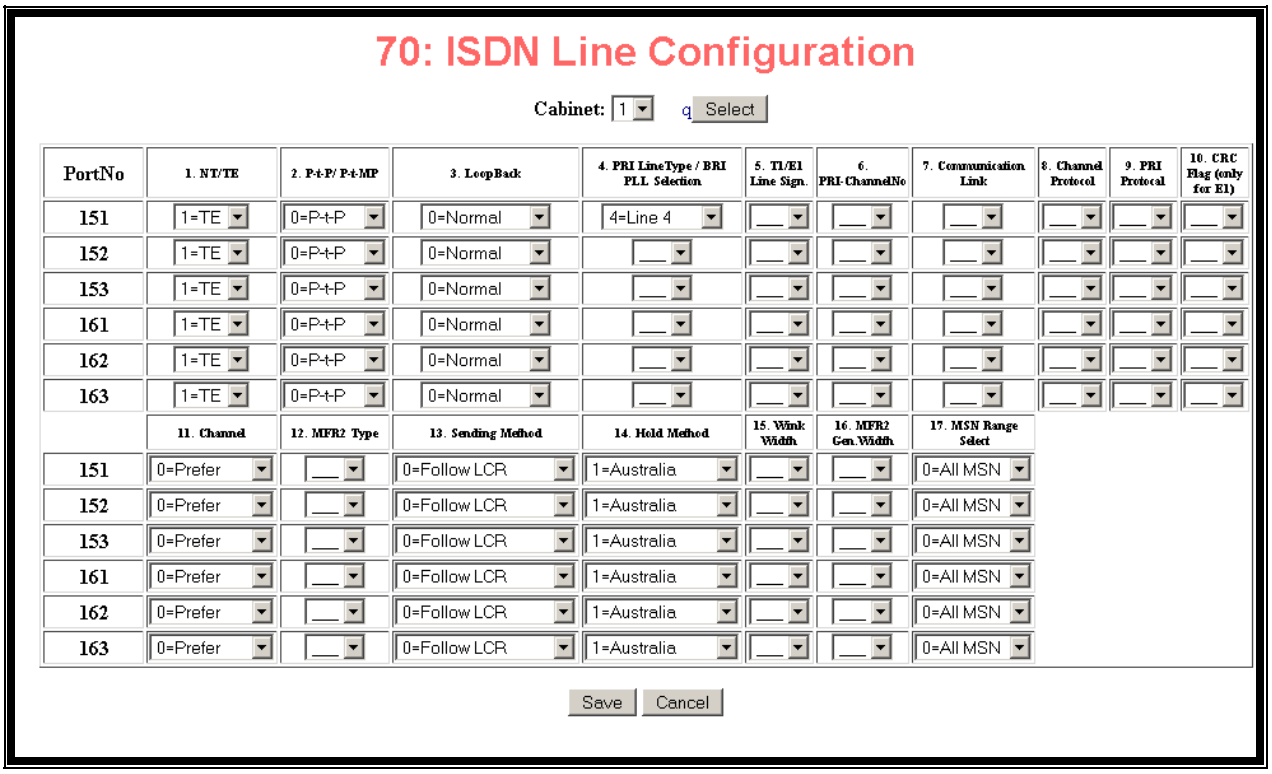
Loopback is ONLY for test purposes and should not be touched.

**04. PRI Line Type / BRA PLL Selection:**

This parameter selects which BRA will be used to provide the system sync signal. Auto is the preferred setting. For a GDS 320 it may be necessary to set Mode 05-09-05 as well. Multi cabinet systems with BRA's in different cabinet are very sensitive to this setting. It is best to set the Sync in this mode to a BRA in the last fitted SIU crad in the system where the system is a GDS320.

**11. Channel:**

The default setting of prefer should not be touched.
All other settings are not relevant to a Basic rate connection.



70: ISDN Line Configuration

Cabinet: 1 Select

| PortNo | 1. NT/TE | 2. P-t-P/ P-t-MP | 3. LoopBack | 4. PRI LineType / BRI PLL Selection | 5. T1/E1 Line Sign. | 6. PRI-ChannelNo | 7. Communication Link | 8. Channel Protocol | 9. PRI Protocol | 10. CRC Flag (only for E1) |
|---|---|---|---|---|---|---|---|---|---|---|
| 151 | 1=TE | 0=P-t-P | 0=Normal | 4=Line 4 | | | | | | |
| 152 | 1=TE | 0=P-t-P | 0=Normal | | | | | | | |
| 153 | 1=TE | 0=P-t-P | 0=Normal | | | | | | | |
| 161 | 1=TE | 0=P-t-P | 0=Normal | | | | | | | |
| 162 | 1=TE | 0=P-t-P | 0=Normal | | | | | | | |
| 163 | 1=TE | 0=P-t-P | 0=Normal | | | | | | | |

| | 11. Channel | 12. MFR2 Type | 13. Sending Method | 14. Hold Method | 15. Wink Width | 16. MFR2 Gen.Width | 17. MSN Range Select |
|---|---|---|---|---|---|---|---|
| 151 | 0=Prefer | | 0=Follow LCR | 1=Australia | | | 0=All MSN |
| 152 | 0=Prefer | | 0=Follow LCR | 1=Australia | | | 0=All MSN |
| 153 | 0=Prefer | | 0=Follow LCR | 1=Australia | | | 0=All MSN |
| 161 | 0=Prefer | | 0=Follow LCR | 1=Australia | | | 0=All MSN |
| 162 | 0=Prefer | | 0=Follow LCR | 1=Australia | | | 0=All MSN |
| 163 | 0=Prefer | | 0=Follow LCR | 1=Australia | | | 0=All MSN |

Save Cancel

**ISDN PRI:**

**01. NT/TE:**

This sets the system to be either TE (Terminal Equipment) NT (Network Termination. The default of TE is the correct setting for an ETSI PRI

**02. P t P / P t MP:**

Not relevant to a PRI card

**03. Loopback:**

Loopback is ONLY for test purposes and should not be touched.

**04. Line Type:**

The default setting of 6 = PRI/E1 is correct for an ETSI PRI connection

**05. T1-E1 Line Signalling:**

The type of signaling to the exchange. DTMF is not relevant for ETSI PRI

**06. PIU Channel number:**

The default setting is 30 channels. It is important that this is set to the actual number of channels provided on the PRI connection. While it may initially appear to work OK unexpected results can happen once the PRI becomes busy.

**07. Communication link:**

2 GDS systems can be connected in a network configuration using E1 cards. Set this to enable on each system for interconnection of systems.

**08. Channel Protocol:**

This is for different uses of the PRI card for linking systems etc. Leave at CCITT for ETSI PRI. Some of the optional protocols are still under development.

**09. PRI Protocol:**

N2/ETSI is for the ETSI protocol (up to 30 channels) and 5ESS is for the AT&T 24 Channel protocol.

**10. CRC Flag (only for E1):**

Leave at default of on.

**11. Channel:**

The default setting of prefer should suit most applications but the is the first setting to try if problems are encountered. Setting to Exclusive will help with some carriers.

**12. MFR2 Type:**

Leave at default of CCITT.

**13. Sending Method:**

This parameter sets the dial out method to be employed by the PRI card.

0 = Follow LCR  1 = In-Block Sending  2 = Overlap Sending

**14. Hold Method:**

This parameter enables the ISDN hold Function for the Australian and New Zealand markets.

0 = Disable  1 = Australia  2 = New Zealand

**15. Wink Width:**

This parameter is for T1 operation. Not used in Australia

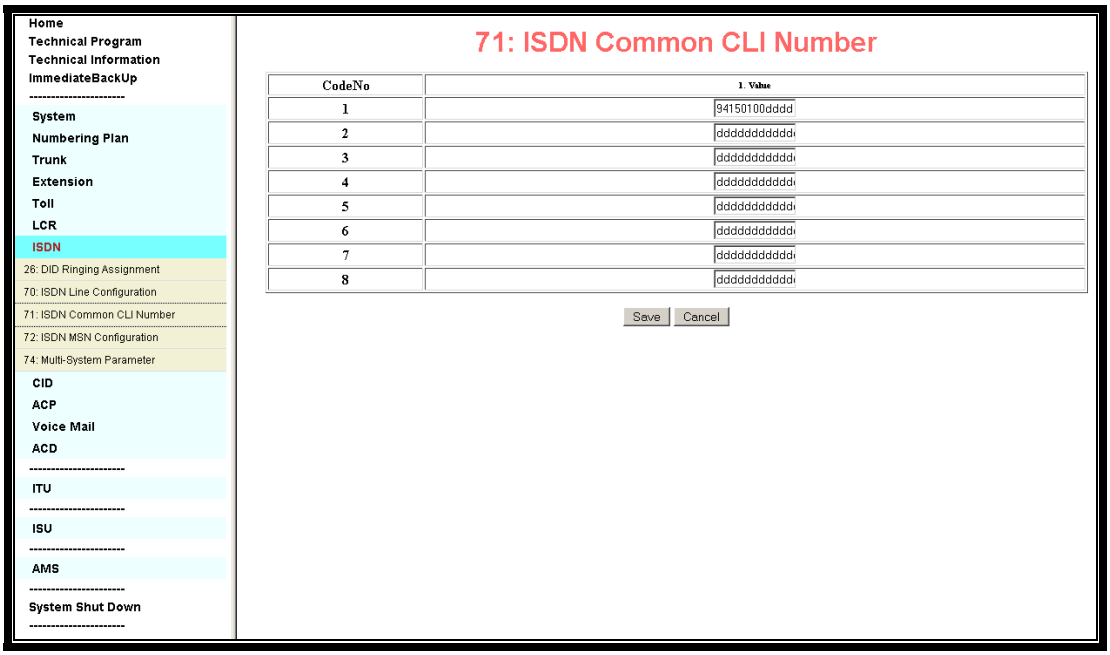
**16. MFR2 Gen Width:**

This parameter is for T1 operation. Not used in Australia

**17. MSN range Select:**

This parameter allows the allocation of multiple Indial ranges on one system. The GDS320 is able to program up to 600 Indial numbers to extensions and this parameter allows them to be allocated to different ISDN channels

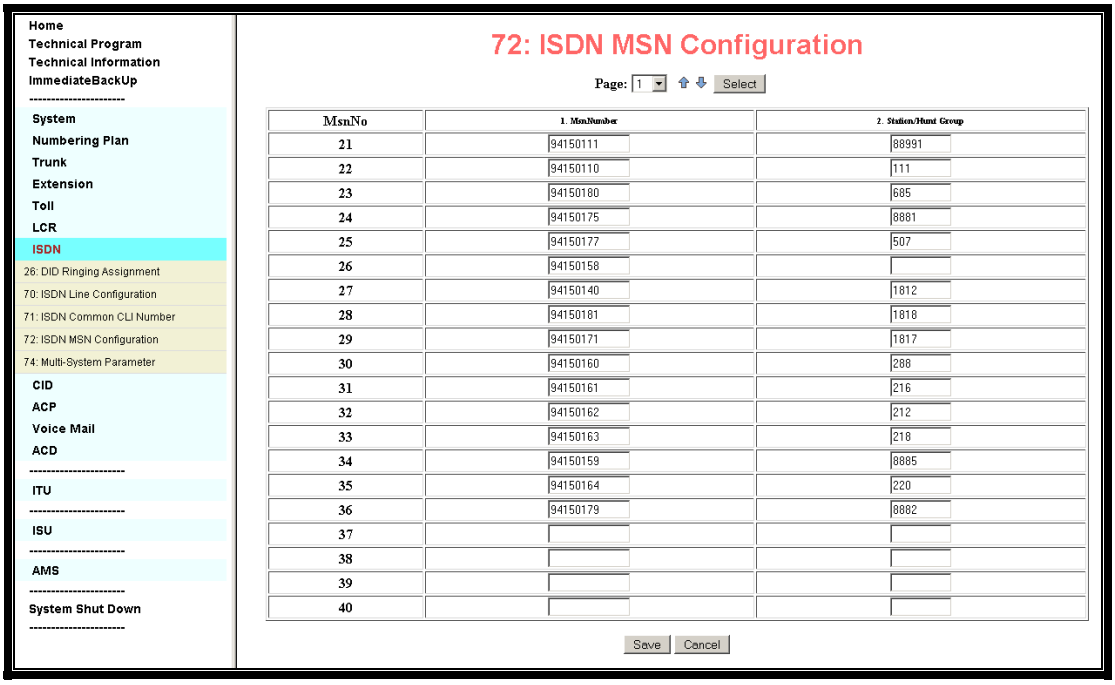
## Program 71-St : ISDN CLIP PRESENTATION




- If an ISDN MSN or DID number is assigned for a station in Mode 72 and this station is used to make an external call, the Central Office will receive that ISDN DID number from this station in default. Mode 71 allows the allocation of another number to be sent to the exchange rather than the DID number. This number must be a valid number in the customers allocated number range and individual extensions can be programmed in Mode 78-st-06 to decide which number they send to the Exchange. The number to be sent is programmed in Mode 71 above and then allocated in Mode 78-st-06.

- In the above example any station assigned to Group 1 in Mode 78-st-06 will sent 94150100 instead of its own assigned DID number.

# Program 72-St : ISDN MSN/DDI Ring Assignment

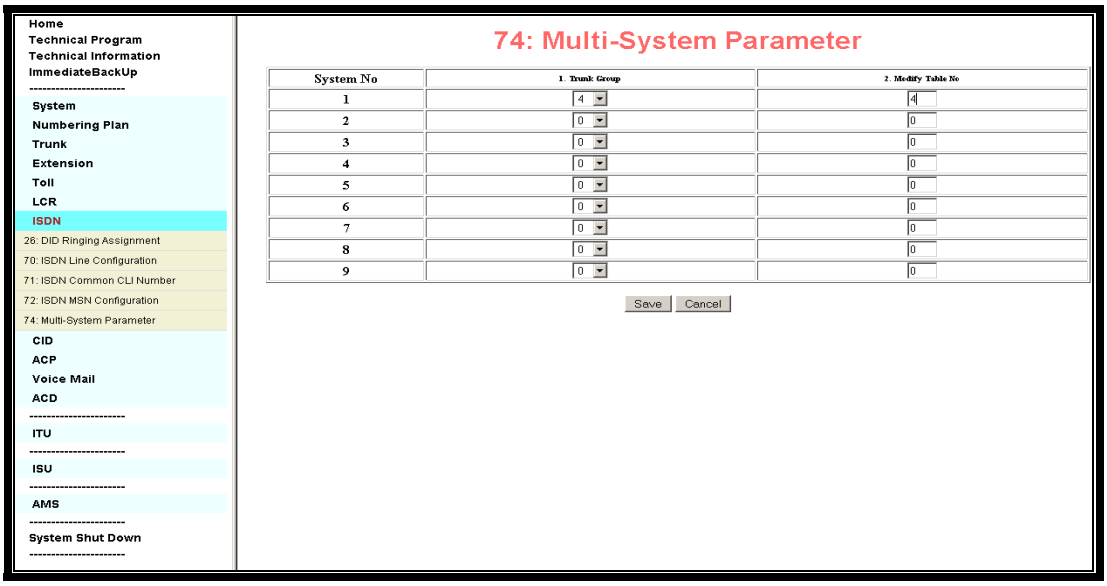



**Description:**

To assign an ISDN MSN/DID number to a Station or Hunt group.

- Each incoming ISDN MSN or DID number can ring a station or a hunting group.
- If an ISDN MSN or DID number is assigned for a station in this mode and this station is used to make an external call, the Central Office will receive the ISDN CLI number from this station in default. This can be changed or deleted by using the settings in Mode 71 and Mode 78-st-06.
- A DID number can only be assigned once but a Station or Hunt Group can be assigned multiple DID numbers.
- A Maximum of 12 digits can be assigned.

## Program 74 : System Extend Parameter




**Description:**

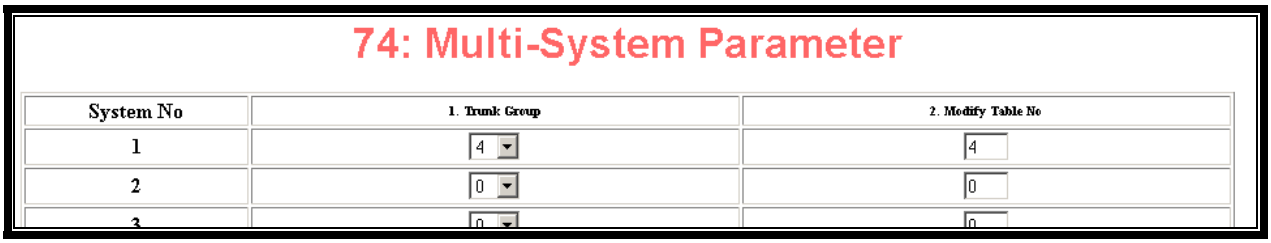
This Mode allows the modification and rerouting of a number dependant on the digits dialled by the user. Associated parameters are Mode 36 to assign trunk groups, mode 22-(80-89) to assign access digits to other systems and Mode 77 to modify digits for dialling.

Example 1
2 GDS systems are linked by an E1 card in each system or by VOIP using ITU cards.

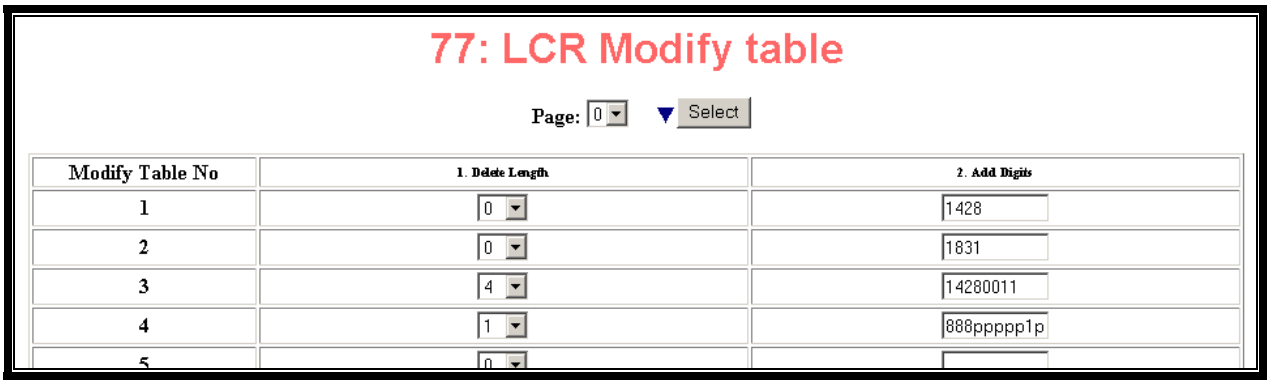
In system 1 the E1/ITU trunks are assigned to number 2 dial 9 group
In Mode 22 Function 81 is set to 2.

Example 2 using VOIP and DISA

Two systems are linked by VOIP with a VIU and a VMU installed in each system.
The first system VIU card has an access code of 888# and the second system has an access code of 777#
In both systems the 3 VIU trunks are programmed to Trunk Group 2 and are set to DISA and immediate answer.
In both systems the extensions are numbered between 100 and 200
In both systems Mode 22-81 is set to 2 as the access code for system 1



Set Mode 77 –04 as follows in system 2 and system 1 will be the same except the add digits table will be 777#pppp to call system 2



77: LCR Modify table

Page: 0 Select

| Modify Table No | 1. Delete Length | 2. Add Digits |
|---|---|---|
| 1 | 0 | 1428 |
| 2 | 0 | 1831 |
| 3 | 4 | 14280011 |
| 4 | 1 | 888ppppp1p |
| 5 | 0 | |

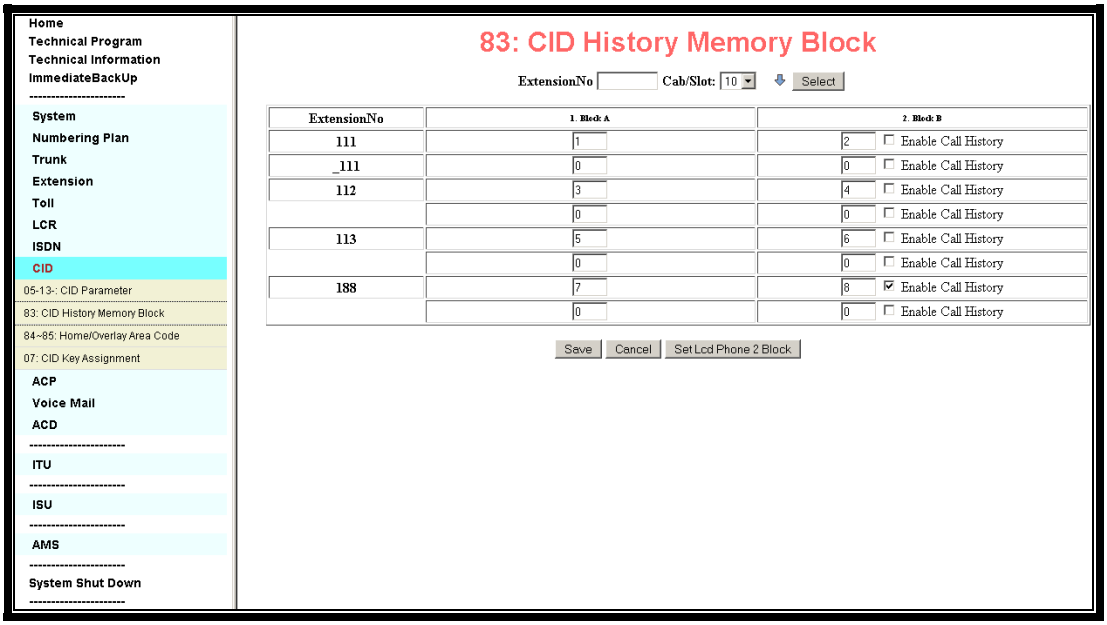
When an extension in System 2 wants to call an extension in system 1 they just dial 2 followed by the extension number required. The system will select a line from TK group 2 and will delete the first digit (2) dial 888# pause for the programmed interval while the DISA answers and then dial the extension number which will be detected by the VMU and the extension will be called.
If there are more than 2 systems linked this way then each should be given its own system access code and multiple modify tables will need to be used, one for each system to call the correct VOIP access code.

System Programming - CID

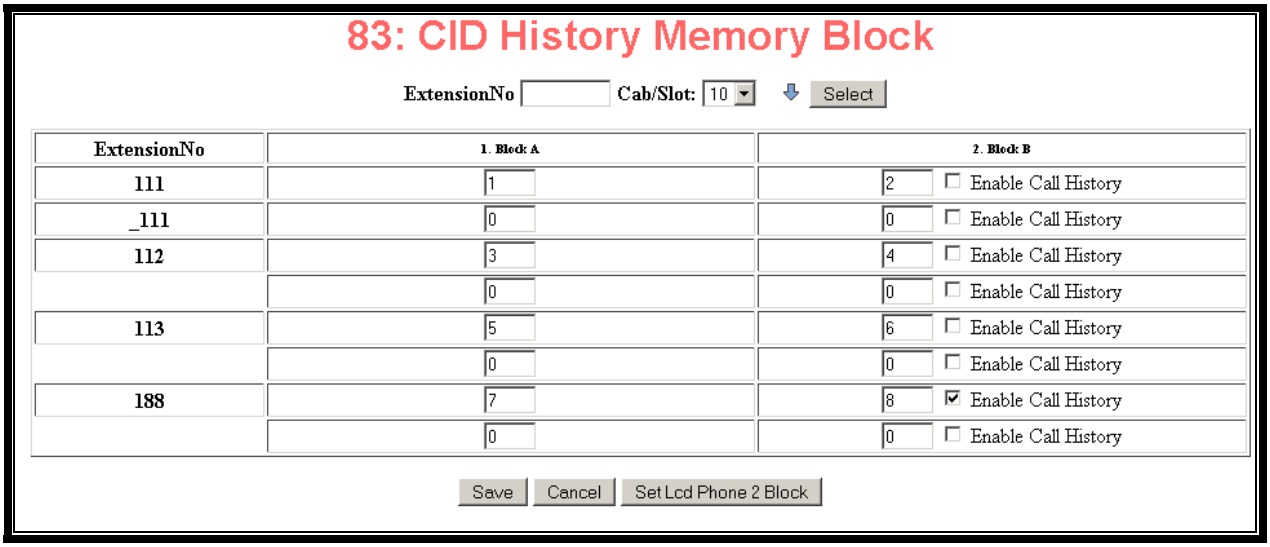
The Category “CID” includes below system programming modes:

Mode 83: CID History Memory Block

Mode 84~85: Home/Overlay Area Code



## Program 83-st-IP : Register Memory Block for CLI history buffer




**b1/b2**: Block 1/2 of CLI buffer for each extension

**General:**

This program divides sets of **CLI history buffer** into blocks for use by extension. These blocks can be used as CID memory and Dial out memory. If enable Call History is enabled then pressing redial will give access to a buffer of previously dialled calls from this extension.

**Description:**

- In program **05-13-03,** the Individual CLI history buffers are assigned:

| 05-13-03 | Memory Block Size | Max. Memory blocks |
|---|---|---|
| 0 | 10 sets/Block | 40 Blocks |
| 1 | 20 sets/Block | 20 Blocks |
| 2 | 30 sets/Block | 13 Blocks |
| 3 | 40 sets/Block | 10 Blocks |

- Each station can use up to 2 blocks.
- The next assigned block must be null or continuous after the first assigned block number for each extension. That means if the first assigned block number is “n” then the next assigned block must be “0 = null” or “n+1”.

**Example**:

Mode 05-13-03=0

| | |
|---|---|
| 83-**13**-IP CLI-T<br>**01 02** | **13**: Station No. ( 2-4 digits )<br>**01 02**: Station 13 can use block **01** and **02** for CLI history buffer and it could store 20 sets (=10 + 10). |

Mode 05-13-03=1

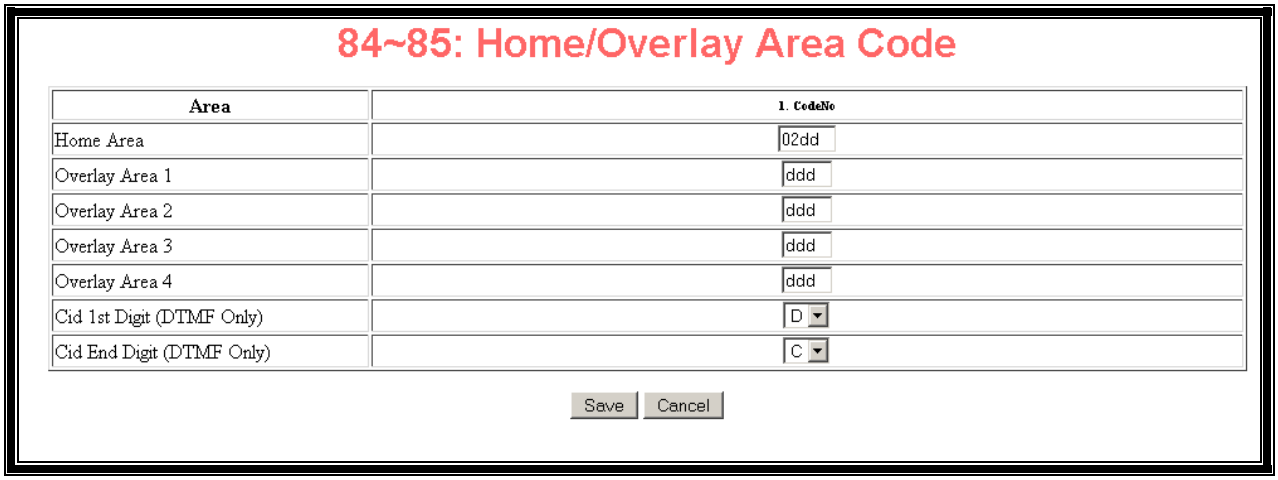
| | |
|---|---|
| 83-**15**-IP CLI-T<br>**04 00** | **15**: Station No. ( 2-4 digits )<br>**04 00**: Station 15 can use block **04** (20 sets) for CLI history buffer. **00**: for no block. |

Mode 05-13-03=3

| | |
|---|---|
| 83-18-IP CLI-T<br>**03 00** | **18**: Station No. ( 2-4 digits )<br>**03 00**: Station 18 can use block **03** for CLI history buffer and it could store 40 sets, **00**: for no block. |

**Related System Programming Mode: 05-13-03, 83**

## Program 84-IP : Home Area Code




**Description:**

This program assigns the home area code for the CID redial feature.
The area code can be a maximum of 4 digits.
The home area code should include the toll access code prefix.

***Example:***

**GDS-600 is located in Sydney.**
Toll access code in Sydney is '0'
Sydney area code is '2'
Set mode 84 to '02dd.

- When ISDN rings in to GDS system, the received number is 294150100. If you have set mode 84 as above, system will delete '2' and display 94150100 and dial this number for smart redial.
- When an analog PSTN line rings in to the G2 system, the received number is 0294176288. If you have set mode 84 as above, system will delete "02" and display 94176288 and dial this number for smart redial.
- When an ISDN line rings in to G2 system, the received number is 380710001. If you have set mode 84 as above, the system will add "0" and display 0380710001 and dial this number for smart redial.
- When an analog PSTN line rings in to G2 system, the received number is 0322489202. If you have set mode 84 as above, system will display 0322489202 and will dial this number for smart redial.
- If you set 'ddd' in mode 84, system will dial back the original received number direct.

## Program 85-nn-IP : Overlay Area Code

**General:**

Some larger cities in the United States have exhausted an entire area code. Instead of separating portions and assigning unique area codes to different geographic regions, the telco has instead introduced an overlay area code. This program assigns 5 sets of overlay area code for CID redial feature.

**Description:**

- The overlay area code is 3-digit format.
- 5 sets of overlay area code can be assigned for the CID redial feature.

## Program 86-nnn-IP : Office Code Redial Pattern

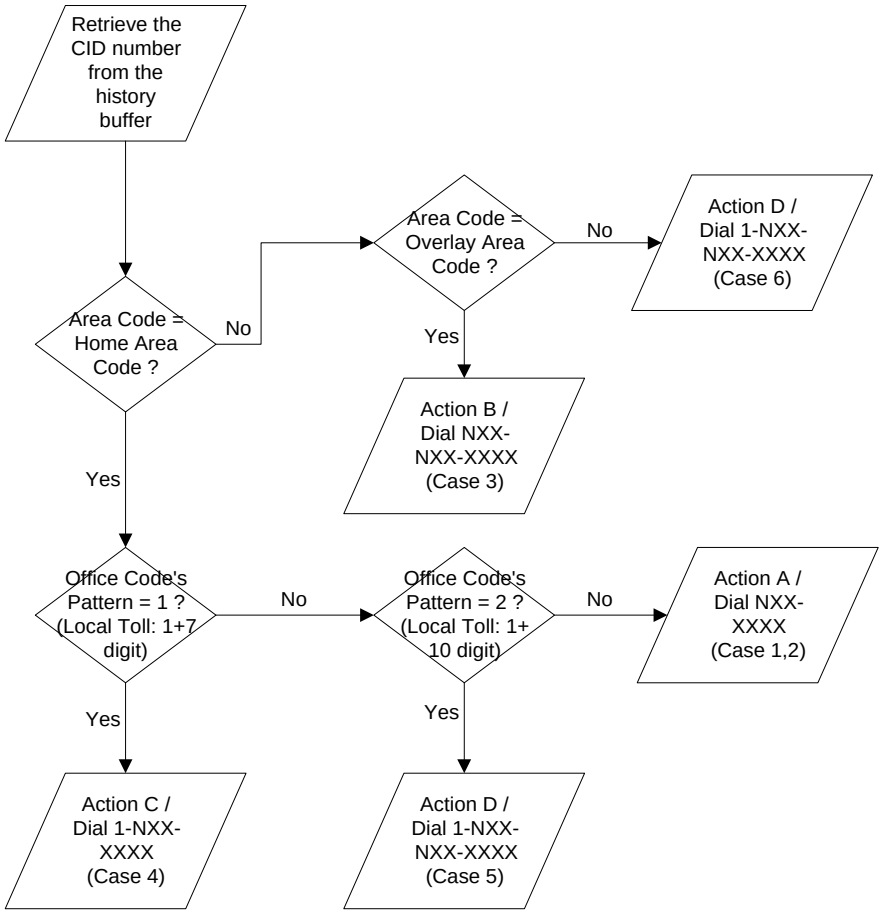
**General:**

This program assigns the redial pattern for different office codes.

**Description:**

0 = Redial pattern is NXX-XXXX (Local call: 7 Digit)
1 = Redial pattern is 1-NXX-XXXX (Local Toll: 1 + 7 Digit)
2 = Redial pattern is 1-NXX-NXX-XXXX (Local Toll: 1 + 10 Digit)

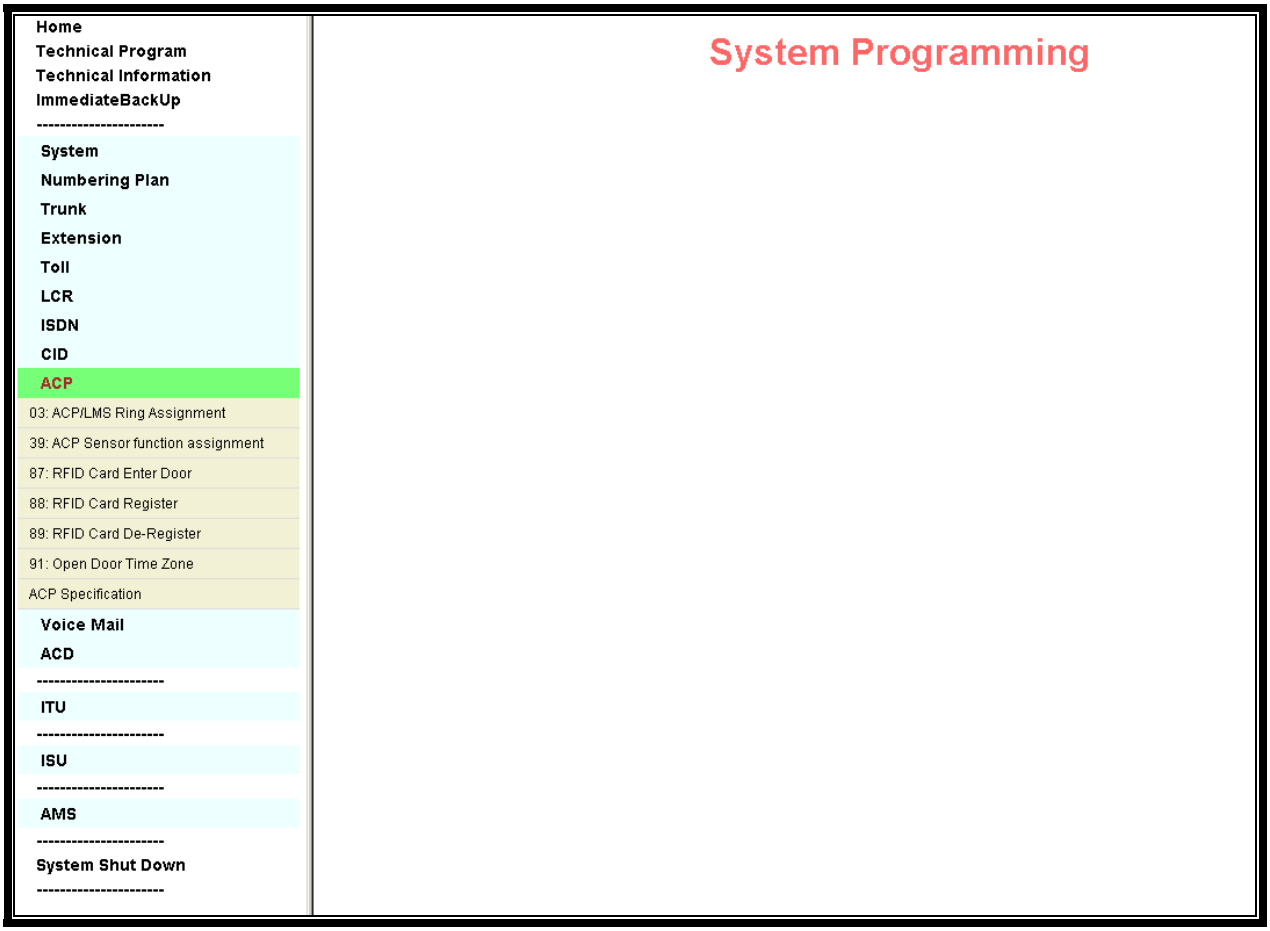
# CID Redial Feature for USA Market



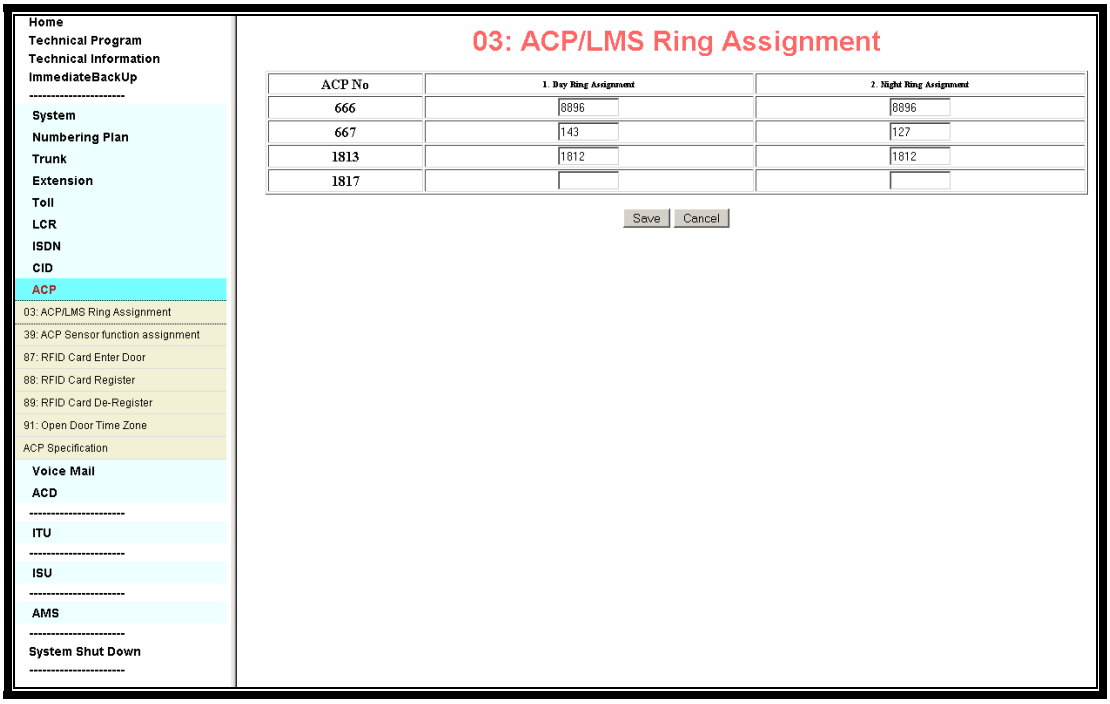
# System Programming - ACP

The Category “ACP” includes below system programming modes:

Mode 03: ACP/LMS Ring Assignment
Mode 39: ACP Sensor Function Assignment
Mode 87: RFID Card Enter Door Assignment
Mode 88: RFID Card Register
Mode 89: RFID Card De-Register
Mode 91: Open Door Time Zone
Mode M01: ACP Specification



# Program 03-01-IP : Door Phone Ringing Assignment




**General:**

This program assigns the ACP / LMS phone to ring the programmed stations or the hunting group for day time and night time..

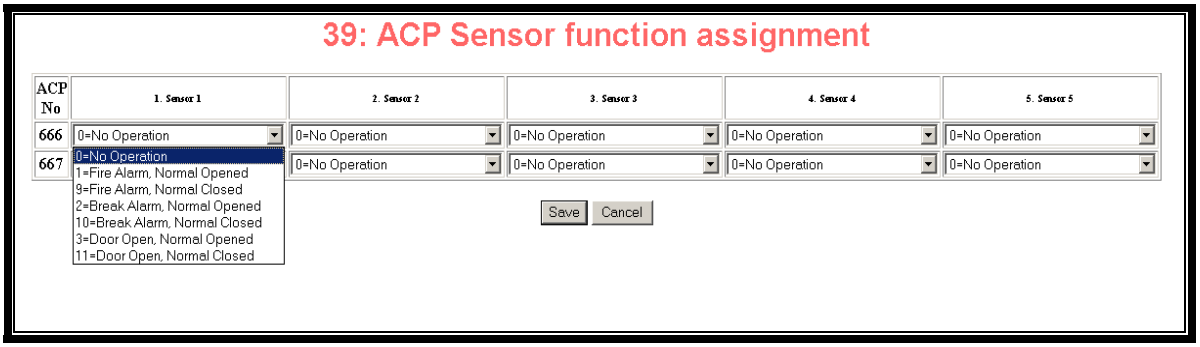
**Description:**

1. A station or a hunting group can be assigned to ring for the ACP / LMS phone.

2. Door phone ringing time is set in Mode 05-11-07.

3. Door phone Ringing frequency is set in Mode 05-03-08.

## Program 39-IP : Sensor Assignments




**General:**

This program assigns the functions for the sensors of ACP / LMS phone.

**Description:**

The sensor can be used for Fire Alarm, Break alarm or a Door Open indication. The switching from the device can be from a normally open switch or a normally closed switch.

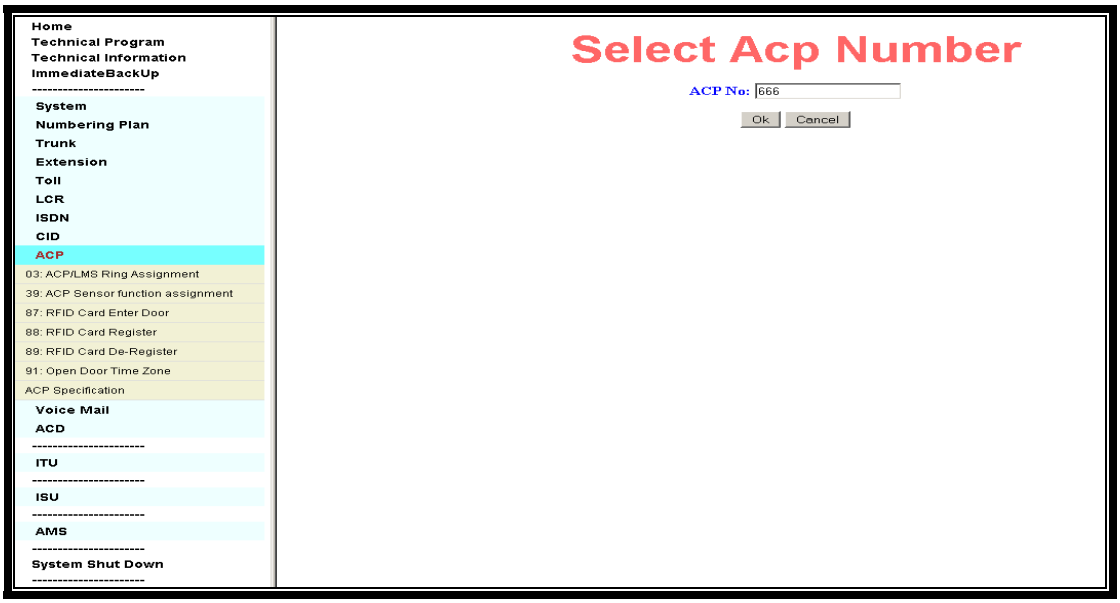
The SENSOR options are

1 = Fire alarm, normally opened
2 = Fire Alarm, normally closed
3 = Break alarm, normally opened
4 = Break Alarm, normally closed
5 = Door open, normally opened
6 = Door open, normally closed

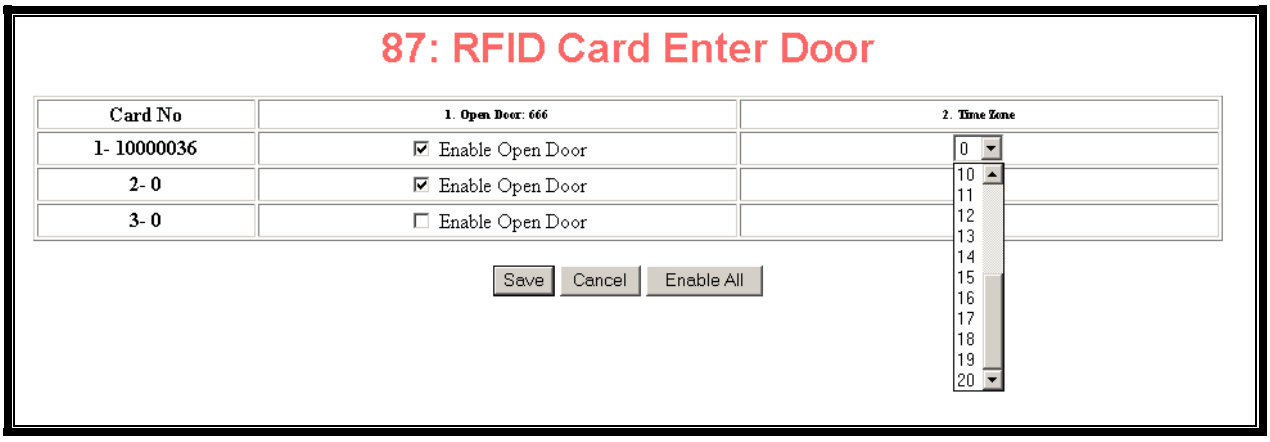
# Program 87-CN-IP : RFID Card Enter Door

**General:**
This program assigns which Key cards can be used on which ACP port to unlock a door.

**Description:**
Before a key card can be used to operate a door relay it must be enabled in this program mode. A key card can be enabled to unlock more than one door if multiple ACP's are fitted.




To select the desired ACP to program the allowed proximity cards to open the door.




To enable (click 'on') the desired proximity card to open the door card and select the time zone to allow that card to enter if time lock function has been selected.

## Program 88-DP : REGISTER KEY CARD

**General:**
This program registers key cards use. The GDS160 can register 200 cards and the GDS320/640 up to 1000.

**Description:**
Before a key card can be used with an ACP it must first be registered to it. Once the key card is registered then it will be necessary to proceed to mode 87 to allow the key card to open the door relay associated with the ACP.

To register a key card enter the station number of the ACP and then click [SAVE]


Place the Key Card over the Speaker position on the ACP and when the ACP beeps remove the Key card.


If the registration is OK, the browser will display the following message.

## Program 89 : DELETE KEY CARD

**General:**

This program assigns allows the De-registration of the key cards from a system.

**Description:**

Select the designed key card number and click ‘on’ to de-register. And then click [SAVE].


After the key card has been deleted, the browser will display the following message.

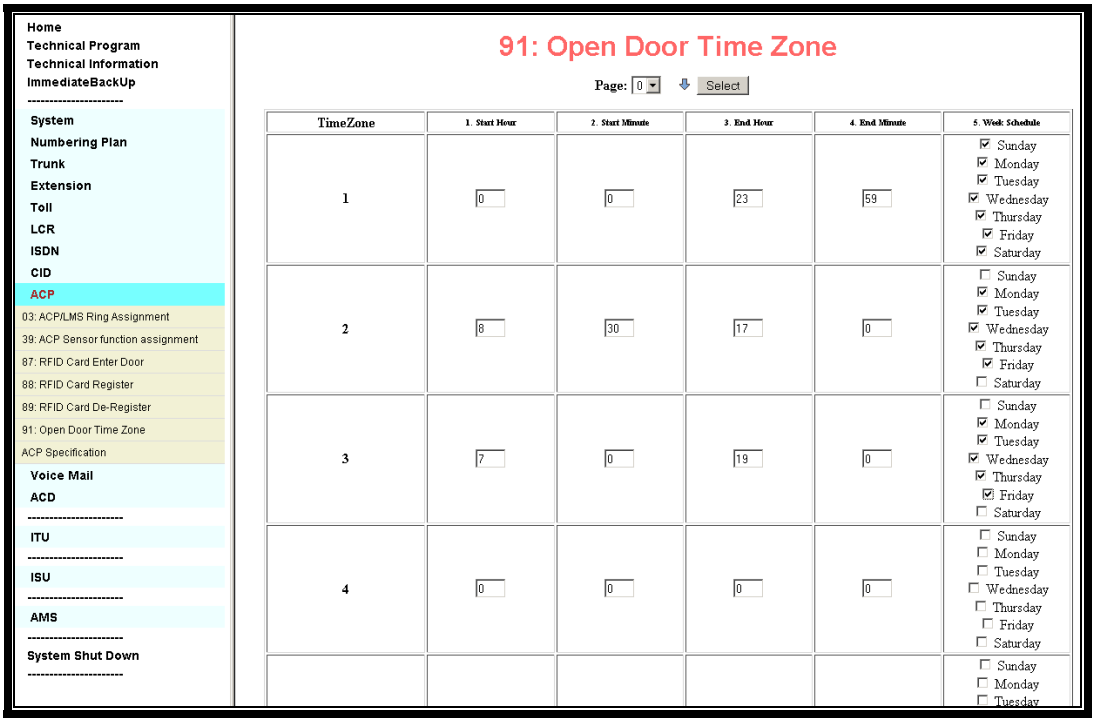
## Program 91-TM : ACP TIME LOCK – Assign Time

**General:**

This program assigns different time schedules for ACP time lock. Cards assigned in a programmed period can be used to open the ACP door.

**Description:**

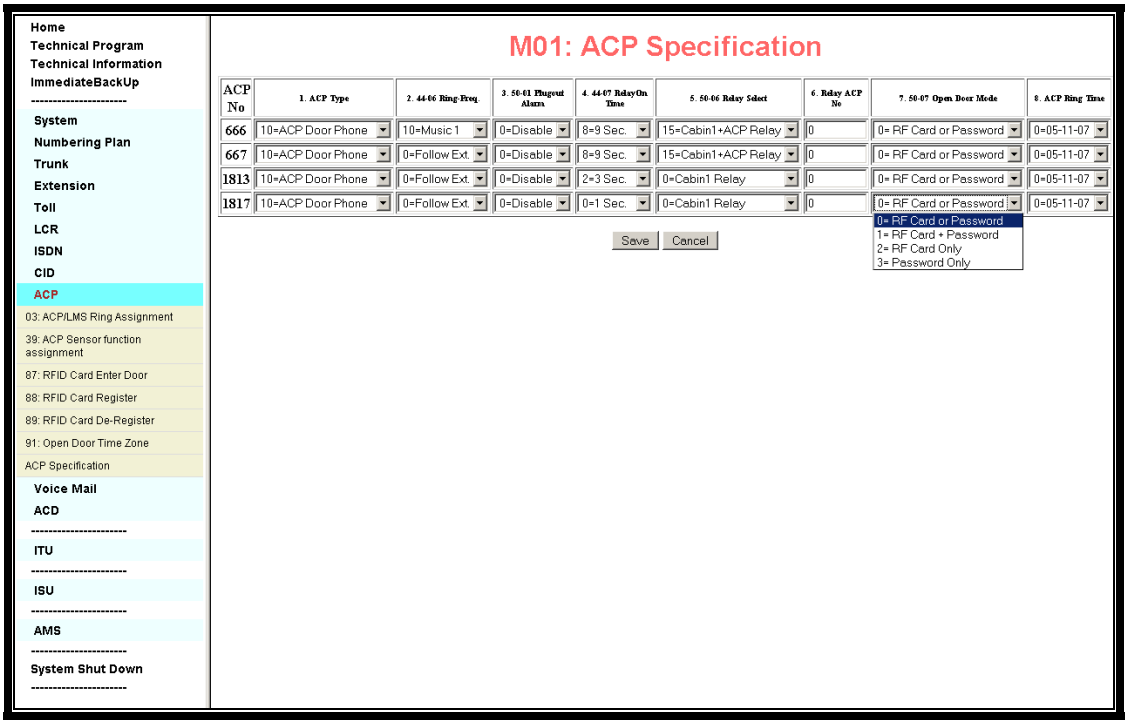
The starting time and the finishing time for each time zone can be programmed and then each time zone can be programmed to allow access on individual days or not . There are 20 time schedules which can be assigned.




This example contains 3 time zones which are

1. 7 Days a week 24 hours a day.
2. Monday to Friday 8:30 am to 5 Pm
3. Monday to Friday 7:00 Am to 7 Pm

# Program M01 : ACP Specification




| Item Pointer | Display Data | Programming Data Description | Default |
|---|---|---|---|
| 01 | 0-1 | ACP type | 10=ACP Door phone |
| 02 | 0-1 | ACP Ring frequency | 0=44-st-06 |
| 03 | 0-1 | Plug out Alarm | 0=Disable |
| 04 | 0-1 | Relay On Time | 0=1 Sec. |
| 05 | 0-1 | Relay select | 0=Cab 1 Relay |
| 06 | 0-1 | Relay ACP No | 0=RF Card /Password |
| 07 | 0-1 | Open Door Mode | 0= RF Card /Password |
| 08 | 0-1 | ACP ring Time | 0=05-11-07 |

**Description:**

**01. ACP type:**

This parameter selects whether the extension will be a Door Phone/ACP or whether it will be a wall mounted hands free phone that can make external calls.

10 = ACP Door Phone 12 = Wall Mount phone

**02. ACP ring frequency:**

This parameter selects the ring frequency of the ACP when called

0 = Follow ext setting. 1 –8 = Frequency 1 – 8 9 = BGM

**03. Plug Out alarm:**

Each ACP has a case tamper alarm for security purposes. If the case is disturbed and this parameter is enabled then the alarm will notify the Console in case of any operation.

0 = Disable 1 = Enable

**04. Relay On Time:**

This parameter sets the time interval that the relay will remain switched on when operated to allow access through the door controlled by the ACP.

0 = 1 sec 1 = 2 Secs. 2 = 3 Secs. …… 9 = 10 secs.

**05. Relay Select:**

In low security situations the relay in the ACP can be used to open the door but where security is an issue then the relays on the system MSU's can be used instead.

0 = Cab 1 relay 2 = Cab 2 relay 8 = ACP relay

**06. Relay ACP Number:**

Future versions of the ACP will have additional relays which can be selected for various options.

0 =

**07. Open Door mode:**

This parameter selects the door opening method for the programmed ACP. Four methods can be chosen.

0 = RF Proximity card or password 1 = RF Proximity card and password
2 = RF Proximity card only 3 = Password only

**08. ACP ring Time:**

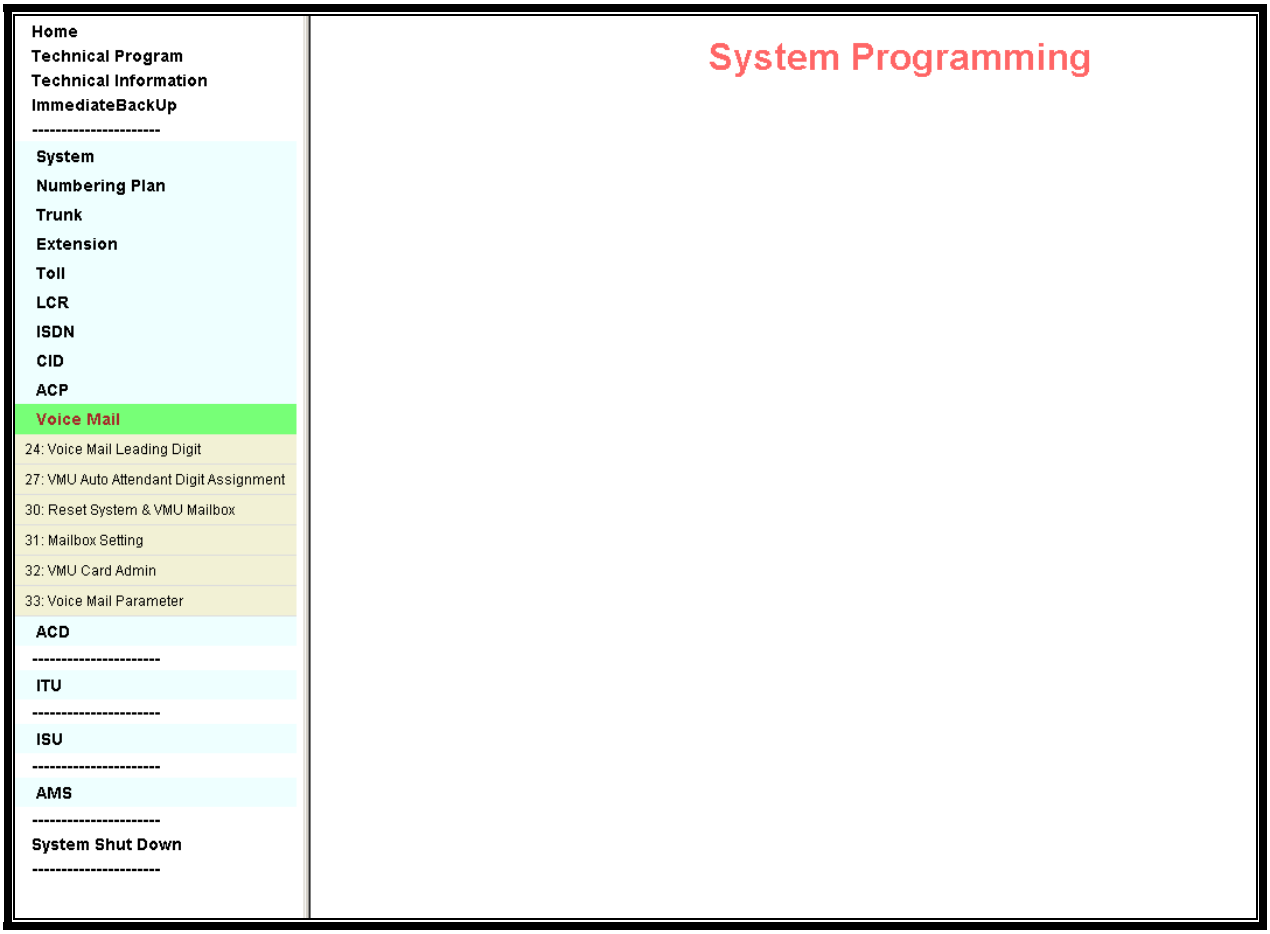
.
This parameter selects the ringing time individually for each ACP. In default the ACP's will follow the system wide ring time set in Mode 05-11-07.

0 = 05-11-07 1 = 30 secs. 2 = 45 secs. ……. 7 = 120 secs.

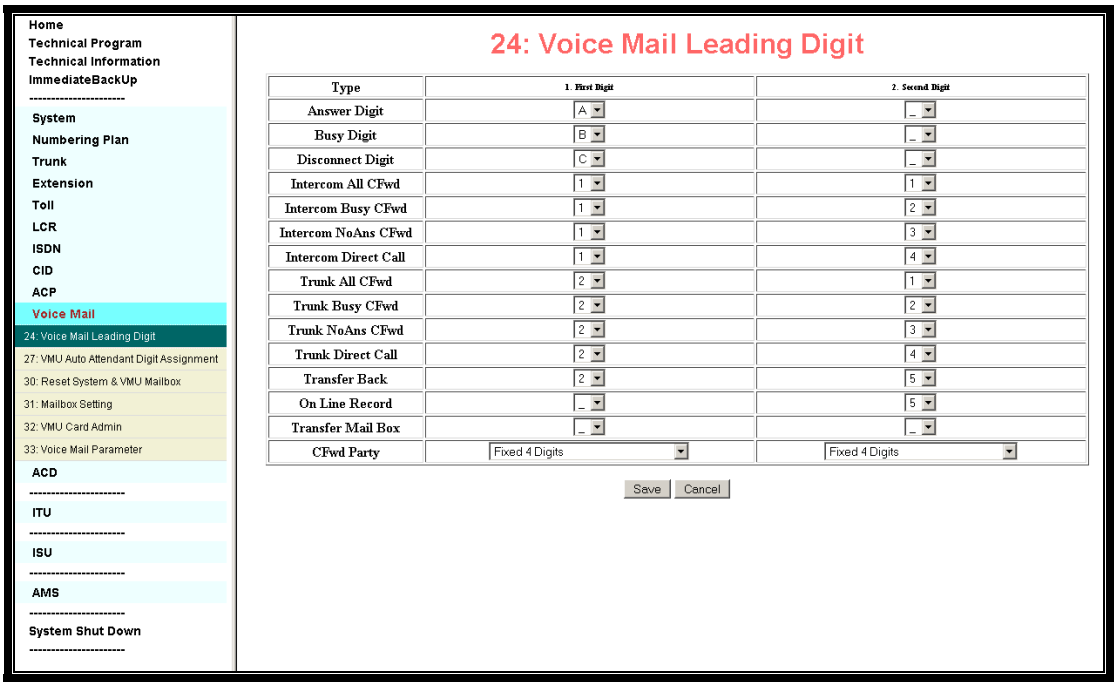
# System Programming – Voice Mail

The Category “Voice Mail” includes below system programming modes:

Mode 24: Voice Mail Leading Digits
Mode 27: VMU Header Digit Definition
Mode 30: Reset System and VMU Mailboxes
Mode 31: Mailbox Setting
Mode 32: VMU Card Password
Mode 33: Voice Mail Parameters



# Program 24 : Voice Mail Leading Digit




**Description:**

This parameter sets the specifications for communicating with an external voice mail device connected to Analogue ports of the system using In band DTMF protocol. The default settings of the GDS are identical to the Enhanced protocol settings of the G1/G2 Hybrex systems and will integrate with the Vocal voice mail using standard Australian protocol as supplied from the distributor to suit Hybrex equipment.
This Mode can tailor the GDS to integrate with many other Voice Mail systems but the wide variety of protocols available makes this too comprehensive a subject to cover in this manual.

**Default Protocol**
The default protocol for external VM integration is identical to the enhanced protocol as used in all earlier Hybrex systems and is detailed below. The system has been tested and used extensively with the Vocal range of Voicemail units and this is the recommended unit to use.

| | | |
|---|---|---|
| ***Internal Call*** | Call Forward - All Calls (Ext) | C11 + STB + STA |
| | Call Forward - Busy (Ext) | C12 + STB + STA |
| | Call Forward - No Answer (Ext) | C13 + STB + STA |
| | Direct Call From Extension | C14 + STA + STA |
| | Record Call From Extension | C15 + STA + STA |
| ***Incoming CO Line and ISDN Indial*** | | |
| | Call Forward - All Calls (CO) | C21 + STB + TRK |
| | Call Forward - Busy (CO) | C22 + STB + TRK |
| | Call Forward - No Answer (CO) | C23 + STB + TRK |
| | Direct Call from Trunk | C24 + TRK + TRK |
| | Transfer Back to Voice Mail | C25 + STB + TRK |

**Definition:**

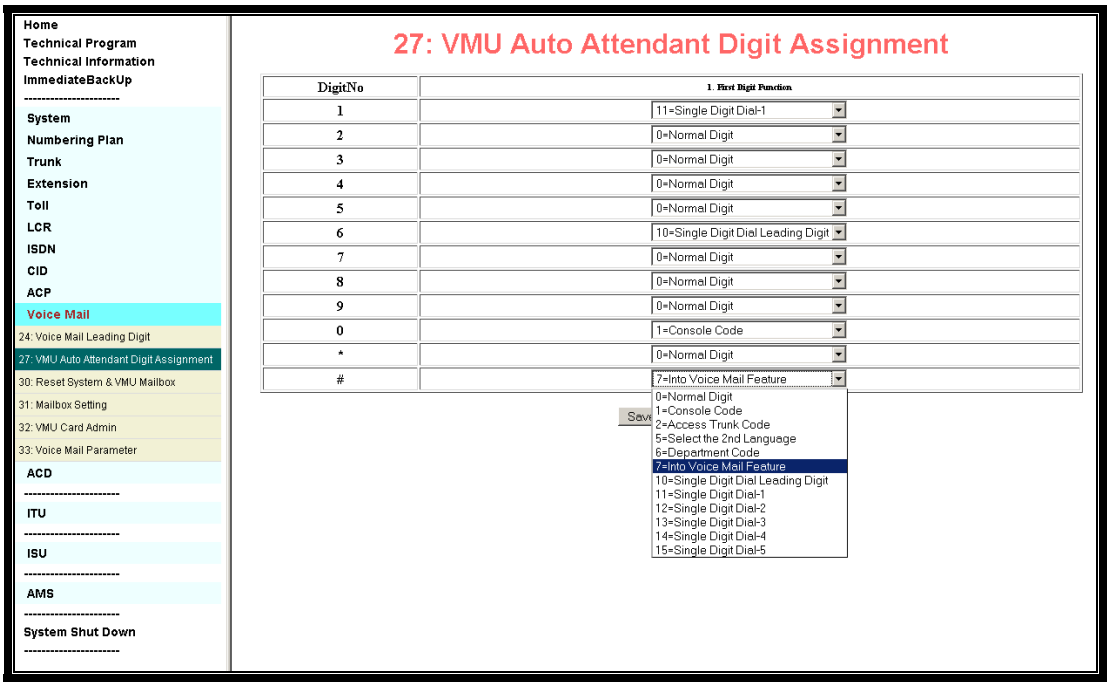
1. CNM - 2 Digits N: Forward Type 1-9 ( 1 Digit )
   M: Leading Digit Type 1-9 ( 1 Digit )
2. STA: Calling Station Number ( 2 - 4 Digits )
3. STB: Called Station Number( 2 - 4 Digits )
4. TRK: Incoming Trunk Number ( 2 Digits )

The station number will always be 4 digits. The number will be padded out with leading 0's
**Example:** C21 + STB + TRK -> Trunk number = 02, STB = 234 - DTMF --> 2 1 0 0 0 2 0 2 3 4
**Answer Digit** When a called station answers the System will play **[DTMF A]**.
**Busy Digit.** When a called station is busy the system will play **[DTMF B]**.
**Disconnect Digit.** The system will play **[DTMF C]** when an inside station disconnects or when a V/M is connected to a TK which receives polarity reversal or Loop Disconnect.
These 3 functions will considerably speed up the operation of the V/M as it will not have to wait to listen to tones to see what is happening with calls.

**Answering Machine Operation (Call Screening)**

When activated this function allows the caller to set call forward to the Voice Mail as usual but then monitor calls to the Voice Mail from their key phone (on hook) and if they wish can lift the handset and take the call back from the Voice Mail. To enable the user presses **[SPK] [7][7][3][1]** and to disable presses **[SPK] [7][7][3][0]**. A Function key can be programmed to activate this function.

# Program 27 : VMU Auto Attendant Digit Assignment

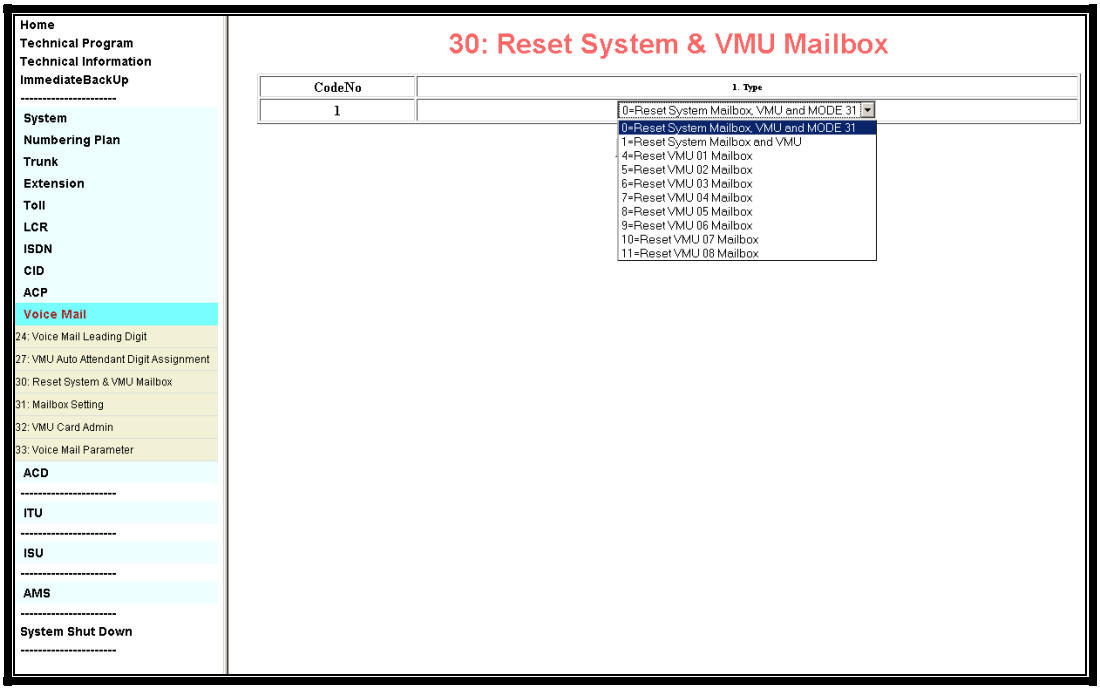



**Description:**

This parameter sets the dialling actions on a DISA call.. It is in this mode that digits can be allocated to different actions, for instance Single Digit or dial a full number or access an outside line etc.

If Single Digit DISA is to be used the digits 1 to 5 must be enabled as single digit dialling here.

# Program 30 : Reset System & VMU Mailboxes

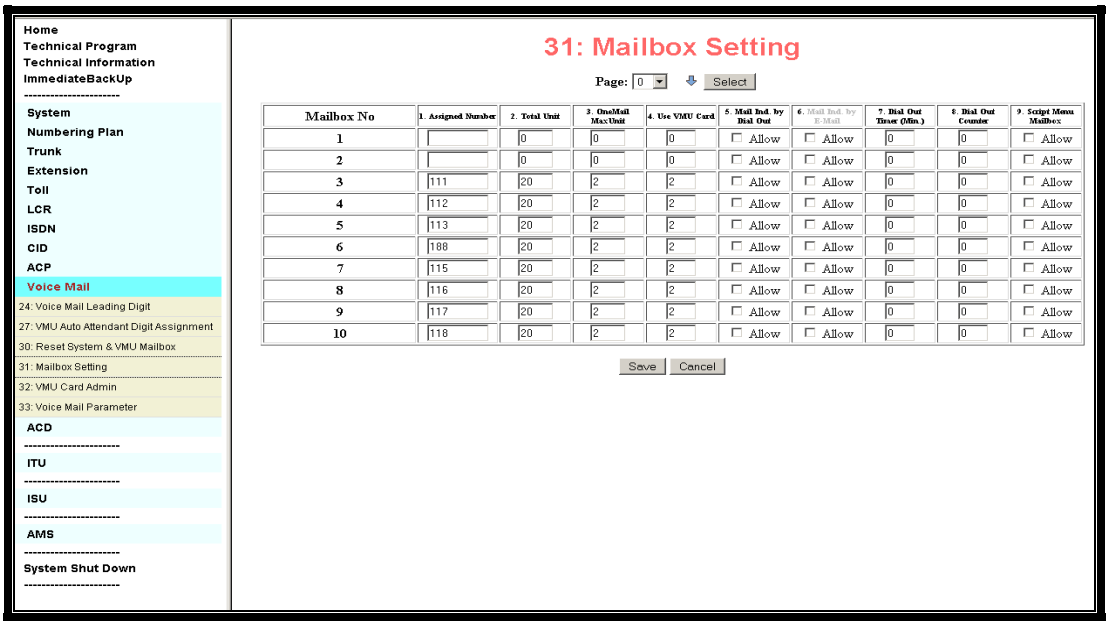



**Description:**

This parameter is used to default the VMU cards installed in the system. All cards can be defaulted individually or all together.

A new card or a new installation should have the VMU defaulted here before any programming is attempted.

# Program 31 : Mailbox Setting




**Description:**

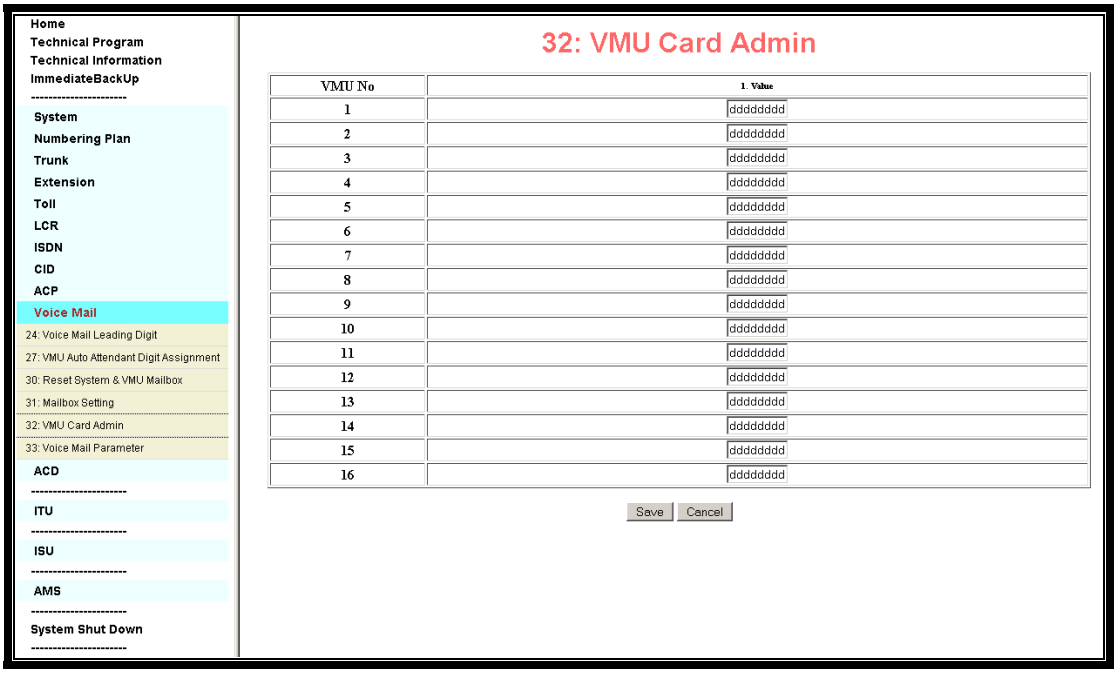
Mode 31 allocates mailboxes to extensions.
Each extension can be allocated a particular number of blocks which will decide how long the stations recording time can be. The maximum length of a message can be fixed and the extension can be allocated to use a specific VMU card for recording messages.
To allocate a VMU for specific trunk service see mode 37-tk-02.
Each extension can be enabled for external notification of new messages and a timer can be set for the time between attempts at notification and how many times the system will attempt to deliver the notification to the user. Once enabled an extension can turn on or off the external notification setting and set or change the number for the system to call. This is done from the user menu when the handset dials 86 to access Voice Mail.
The script menu mailbox setting is for the use of menu trees for DISA calls. For details read the GDS VMU manual V 1.2

**Memory Capacity & Hours of Storage**

The following table is an indication of capacity of different CF cards or memory capacity with different Audio Compression rates. All GDS VMU units are now the 1G Memory only.

| CF Card | G2-VMU (64 kbps) | | | | G2-VMU (32kbps) | | | |
|---|---|---|---|---|---|---|---|---|
| | Total Unit | 1 Unit Duration (sec) | Duration (min) | Duration (hour) | Total Unit | 1 Unit Duration (sec) | Duration (min) | Duration (hour) |
| 32M | 49 | 30 | 24.5 | 0.41 | 98 | 30 | 49 | 0.82 |
| 64M | 185 | 30 | 92.5 | 1.54 | 370 | 30 | 185 | 3.08 |
| 128M | 458 | 30 | 229 | 3.82 | 915 | 30 | 457.5 | 7.63 |
| 256M | 1000 | 30 | 500 | 8.33 | 1000 | 60 | 1000 | 16.67 |
| 1G | 1000 | 120 | 2000 | 33.33 | N/A | N/A | N/A | N/A |

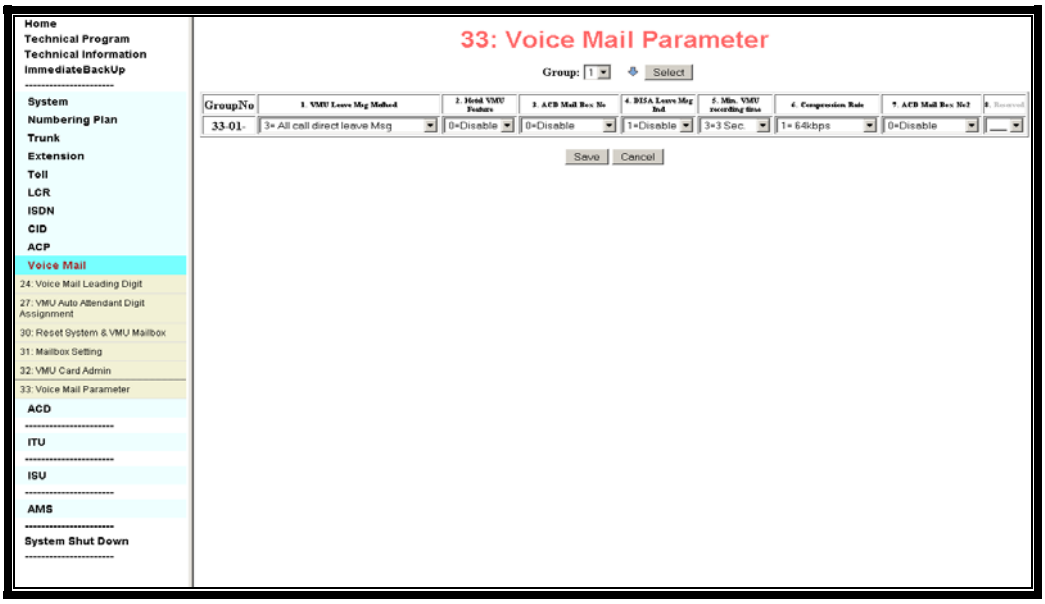
# Program 32 : VMU Card Admin




**Description:**

Each VMU can be assigned its own password for access control to VMU functions.

## Program 33 : Voice Mail Parameters




| Item Pointer | Display Data | Programming Data Description | Default |
|---|---|---|---|
| 01 | 0-1 | VMU Leave Message Method | 3=All Direct |
| 02 | 0-1 | Hotel VMU Feature | 0=Disable |
| 03 | 0-1 | ACD Mailbox Number 1 | 0=Disable |
| 04 | 0-1 | DISA Leave Message Indicator | 0=Disable |
| 05 | 0-1 | Minimum VMU Recording Time | 0=Disable |
| 06 | 0-1 | Compression rate | 0=24 KBPS |
| 07 | 0-1 | ACD Mailbox Number 2 | 0=Disable |
| 08 | 0-1 | Reserved | 0= |

**Description:**

**01. VMU Leave Message Method :**

This parameter sets the options that will be given to a caller who is directed to a mailbox on an incoming call. The default setting of 3 will allow the caller to hear the personal greeting and the beep and then leave a message in the mail box.

0 = Press # to leave message
1 = Intercom Call Leave message direct
2 = External Calls Leave message direct
3 = All Calls Leave message direct

**02. Hotel VMU Feature:**

This parameter enables the Hotel Voice Mail feature. When enabled Administration phones will have normal Voice Mail features and Guest phones will have a simpler list of features designed to be used by guests with no knowledge of Voice Mail use. Extensions are set to be Guest or Admin in Mode 50-st-08

0 = Disable
1 = Enable

**03. ACD Mailbox Number 1 :**

Callers who are answered by an ACD message and then are still Queued when the second message is played can be given the option of dialling 1 to go to a mailbox and leave a message. This message can be to a mailbox that is already allocated to a normal extension or can be to a virtual mailbox which can have a DSS key on multiple stations for message notification and retrieval. There is also the option of dialling 2 to go to a different mailbox (Mode 33-07).

0 = Disable 1 – 9 = Mailbox 1 - 9 as allocated in mode 31

**04. DISA Leave Message Indicator:**

When a caller is answered by DISA and dials a number and that call is unsuccessful either Busy or No Answer and the extension has not set a CFW to VM the caller can be offered the option of leaving a message for the station or just hearing the normal options of revert to console or dial another number.

0 = Disable 1 = Enable

**05. Minimum VMU Recording Time:**

Some callers will after hearing a personal greeting and then the Beep hang up after a short period. This will then leave a short message usually of silence followed by the sound of a handset being replaced. This parameter will allow messages that do not reach a certain length to be not saved.

0 = Disable 1 = 1 secs 2 = 2 secs 3 = 3 Secs …… 9 = 9 secs

**06. Compression rate:**

There are 2 different voice quality settings available. The default is 24 KBPS which is a compromise giving lower voice quality but longer record time. The higher compression ratio will give a much improved voice quality at the expense of recording time. See mode 31 for comparative settings for each mode. If the VMU is a VMU2 with 1Gb Flash storage then only 64Kbps is available

0 = 24 KBPS 1 = 64 KBPS

**07. ACD Mailbox Number 2**

Callers who are answered by an ACD message and then are still Queued when the second message is played can be given the option of dialling 2 to go to a mailbox and leave a message. This message can be to a mailbox that is already allocated to a normal extension or can be to a virtual mailbox which can have a DSS key on multiple stations for message notification and retrieval. There is also the option of dialling 1 to go to a different mailbox (Mode 33-03).

0 = Disable 1 – 9 = Mailbox 1 - 9 as allocated in mode 31

**08. Reserved:**

## Incoming Calls

RINGING ASSIGNMENT

| | |
|---|---|
| 01-tk-stn | Day Ringing And Ringing Line Preference Assignment |
| 02-tk-stn | Night Ringing And Ringing Line Preference Assignment |
| 05-01-05 | Busy Reminder Tone Interval (Off-Hook Ringing / Busy - Camp-On) |
| 05-02-07 | Ring On Timer (Minimum ring to be detected) |
| 05-02-08 | Ring Off Timer (Time to hold signal during silent period) |
| 05-08-01 | CO Hunt Interval |
| 20-nn | Day/Night Service Schedule |
| 67-69 | Day/Night Ring Type |

## Outgoing Calls

DIAL '9'

| | |
|---|---|
| 05-04-02 | Dial '9' Enable/Disable |
| 36-grp-tk | Dial '9' Group Assignment |
| 41-stn-04 | Stations Dial '9' Group Assignment |

PABX OUTGOING CODE

| | |
|---|---|
| 22-9/0 | Code for outside line in PABX (If trunk/trunks are served by PABX) |

TRUNK SPECIFICATIONS

| | |
|---|---|
| 05-01-06 | Pause Time Duration (For Speed Dial Pauses) |
| 05-01-07 | DTMF Generation Time |
| 05-02-05 | Flash Time to CO (For Special CO Features or Centrex) |
| 05-02-07 | Ring On Time (Minimum ring signal detected) |
| 05-02-08 | Ring Off Time (Time to hold signal during silent period) |
| 05-03-01 | Make/Break Ratio |
| 29-tk-01 | Trunk Level – Receive |
| 29-tk-03 | Trunk Level - Transmit |
| 35-trk-01 | Trunk Type (PABX/CO) |
| 35-trk-02 | Trunk Signaling Type (dial pulse/DTMF) |

SPEED DIAL

| | |
|---|---|
| 05-01-06 | Pause Duration for Speed Dial pauses |
| 05-03-02 | Automatic Trunk Search for Speed Dial, Auto Redial, Saved Redial |
| 05-04-06 | Speed Dial Distribution |
| 05-05-03/04 | Speed Dial Unrestricted System Wide |
| 09-spd-xx | System Speed Dial Locations |
| 42-stn-01/02 | Register Memory Block for Personal Speed Dial |
| 45-st-07 | Speed Dial Unrestricted per Station |

AUTO-REDIAL

| | |
|---|---|
| 05-02-03 | Auto-Redial Off Hook (wait for answer) Timer |
| 05-03-02 | Automatic Trunk Search |
| 05-05-07 | Auto-Redial Attempts (Quantity) |
| 05-05-08 | Auto-Redial Time (Inter-Call) between attempts |

## Intercom Calls

### INTERCOM CALL SIGNALING

| | |
|---|---|
| 05-03-03 | Intercom call signaling to electronic telephone sets |
| 46-st-03 | Station Microphone switching. |
| 05-04-07 | Intercom Single Digit Dialing |
| 41-stn-01 | Station Group Assignment |

### STEP CALL

| | |
|---|---|
| 05-07-01 | Intercom Step Call Type |
| 41-stn-01 | Station Group Assignment |

### DIAL TONE PATTERN

| | |
|---|---|
| 05-03-07 | SLT Dial Tone Pattern Options |
| 05-16-07 | Digital Phone Dial Tone Settings |

### DIRECT STATION SELECT

| | |
|---|---|
| 07-grp-key | Flexible Key Group Assignment – Digital Phone |
| 08-grp-key | Flexible Key Group Assignment – DSS Console |
| 41-stn-02 | Digital Phone Flexible Key Group Assignment |

### DIAL 0 (CALL OPERATOR)

| | |
|---|---|
| 23-9-1 | Dial 9 Allocation |
| 23-0-1 | Dial 0 Allocation |
| 44-stn-04 | Manual Line |

### INTERCOM DIALING RESTRICTION

| | |
|---|---|
| 45-stn-01 | Intercom Dialing Restriction |

## Busy/During Conversation

### HOLD AND HOLD RECALL

| | |
|---|---|
| 05-01-01 | Hold Recall Timer (Time until station is warned of hold call) |
| 05-01-02 | Exclusive Hold Recall Timer (Same operation as hold recall) |
| 05-01-03 | Hold Recall Time out (Time before call is rerouted to Operator - After Hold Recall Timer has expired.) |
| 05-06-01 | TRF Busy Recall Timer |
| 05-06-02 | TRF Idle Recall Timer |
| 05-07-04 | DISA Recall Capability |
| 05-12-03 | System ability to place call on Exclusive Hold |
| 44-stn-02 | Station ability to hold a call |

### BUSY REMIND / CAMP-ON

| | |
|---|---|
| 05-01-05 | Busy Reminder Interval (Time between notifications) |
| 05-08-03 | SLT Camp On timer |

### CALL SPLIT

| | |
|---|---|
| 44-stn-03 | Call Split |

### TRANSFER

| | |
|---|---|
| 05-06-01 | Transfer Recall Timer Blind transfer (Camp-On / Busy) |
| 05-06-02 | Transfer Recall Timer blind transfer (No Answer) |
| 05-08-06 | DISA No Answer Recall (To Message) Timer |

05-08-07 DISA Transfer Time (No Digits Dialed)

MESSAGE WAITING LEVEL

46-stn-02 Message Waiting Level

OVERRIDE

40-stn-01 Override Level

## DISA

05-01-04 DISA Access Delay Time - Day
05-03-05 DISA Access Delay Time - Night
05-07-04 DISA Recall Capability
05-08-04 DISA Operator Recall Location ( No Answer)
05-08-06 DISA No Answer Recall Timer
05-08-07 DISA Transfer Timer - No digits dialed
05-11-06 DISA Transfer Count - Console busy
05-11-02 DISA Password - Optional extra passwords
05-11-05 DISA Special Digit Acceptance
35-tk-04 DISA / External Call Forward Status

DISA SINGLE DIGIT DIALING

05-04-07 Intercom Single Digit Dialing Enable
05-11-08 DISA Single Digit Dialing
10-grp-stn Single Digit Dialing Assignment
20-nn Day/Night Service Schedule
37-tk-07 DISA Single Digit Dialing per Trunk

AUTOMATED ATTENDANT - VOICE SERVICE UNIT

46-stn-04 DISA Recall Capability (No Answer/Busy)

## Night Service

02 Night Ringing And Ringing Line Preference Assignment
09-spd-nn System Speed Dial 101~109 for ECF
20-nn Day/Night Service Schedule
35-tk-03 External Call Forward Location (Speed Dial Assignment)
35-tk-04 DISA/ECF, Day/Night Status

## Group Assignments

CONSOLE ASSIGNMENT

04-grp-stn Assign Stations to be consoles by group

FLEXIBLE KEY GROUP ASSIGNMENTS

07-grp-key Key Group Layout Assignment
41-stn-02 Assign stations to Key Groups

DIAL '9' TRUNK GROUPS

36-grp-trk Assign trunks to groups for Dial '9'
41-stn-04 Assign stations a Dial '9' group

DIAL '87' TRUNK GROUPS

38-grp-trk Assign trunks to groups for Dial '87'
46-stn-01 Assign stations a Dial '87' group

GROUP ASSIGNMENT FOR STATIONS (PAGE ZONE, PICK UP, SINGLE DIGIT)

| | |
|---|---|
| 41-stn-01 | Assign stations to station groups |

## Call Control

TOLL RESTRICTION

| | |
|---|---|
| 05-05-03 | Set a portion of system speed dial for no restriction (Hundreds) |
| 05-05-04 | Set a portion of system speed dial for no restriction (Tens) |
| 05-03-05 | Toll Access Code (Usually a '1') for SMDR only |
| 18-pln-trk | Assigning Toll Class by Toll Plan/Trunk used |
| 41-stn-05 | Station Day Toll Plan Assignment |
| 41-stn-06 | Station Night Toll Plan Assignment |
| 45-st-07 | System Speed Dial Unrestricted per Station |
| 51~59 | Allowed (Exception) Tables for Toll classes 1~9 |
| 61~66 | Restrict (Deny) Tables for Toll classes 1~6 |

FORCED ACCOUNT CODES

| | |
|---|---|
| 17-nn | Creating Account Codes |
| 40-stn-08 | Assigning Account Codes to Stations |

CALL LIMIT

| | |
|---|---|
| 05-04-03 | Call Limit Type |
| 40-stn-03 | Call Limit Duration (Class of Service - per station) |

PASSWORDS

| | |
|---|---|
| 13-01 | System Programming Password (default=none) |
| 13-02 | DISA Password (for using a trunk on DISA call) |
| 13-03 | Toll Override Password |
| 13-04 | Password for Monitoring over DISA (default=none) |
| 13-(10-17) | Conference Room Passwords |

STATION LOCK/UNLOCK

| | |
|---|---|
| 40-stn-07 | Station Lock/Unlock Status |

BUSY OUT A TRUNK

| | |
|---|---|
| 37-tk-x | Taking a trunk out of service |

INTERCOM DIALING RESTRICTIONS

| | |
|---|---|
| 45-stn-01 | Restrict station to station intercom dialing |

## System Clock

DATE AND TIME SETUP

| | |
|---|---|
| 05-04-04 | 12/24 hour time format |
| 11- | Set the system time |
| 20-nn | Day/Night schedule Definition |

SYSTEM ALARM

| | |
|---|---|
| 12-nn | System Alarm Clock |
| 44-stn-01 | Stations to include (notify) in system alarms |

WAKE UP CALLS

| | |
|---|---|
| 05-05-01 | Wake up signaling type |

## Station Numbering

21-cn Station number and Name (extension) Assignment

## Single Line Telephone

05-02-01 Dial Tone Timeout
05-02-02 Inter digit Timeout
05-02-04 Hook switch Disconnect Timer
05-02-06 Minimum Flash Timer (used to recognize a hook switch flash for hold)
05-04-08 Message Waiting Status Setup
05-06-07 Single Line Telephone Hold Procedure
05-07-02 Toll fraud Protection (Calling Proof)
05-08-03 SLT Busy Remind Tone Timer
05-08-05 SLT Feature Programming Access Code

## Miscellaneous

MONITOR

40-stn-02 Station Monitor Level

PAGING

40-stn-05 Station Paging Access
40-stn-06 Receive Page Over Speaker
41-stn-01 Station Page Group

CALL FORWARD NO ANSWER TRANSFER TIME

05-01-08 Call Forward-No Answer Timer

HOT LINE

09-spd-nn System Speed dial number for Hot Line use
47-stn-xx Hot Line destination for a station and Delay Timer

## Optional Services

DOOR PHONE, ACP & DOOR SWITCH

03-01-ext Stations to ring upon Door Phone Activation
M01-acp-01 ACP Type
M01-acp-02 ACP Ring Frequency
M01-acp-03 Plug out Alarm
M01-acp-04 ACP Relay On Time
M01-acp-05 Relay Assignment (for door phone latch release)
M01-acp-07 Door Open Mode
M01-acp-08 ACP Ring Time

## External Voice Mail Integration

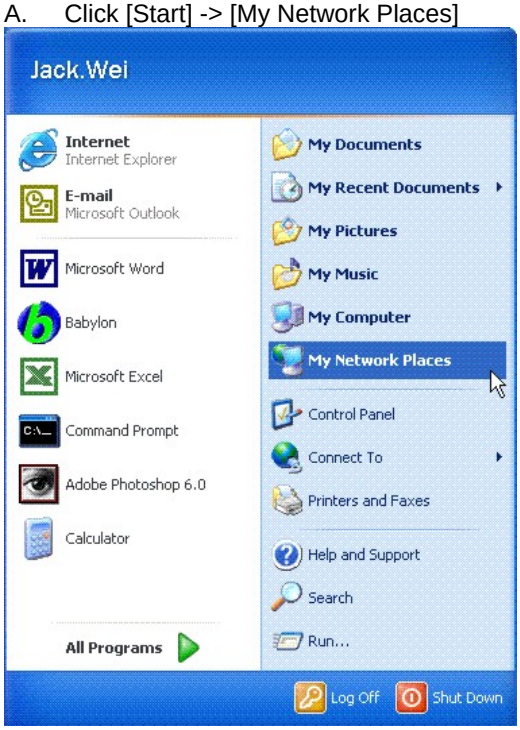
01 Day Ringing Assignment
02 Night Ringing Assignment
05-02-04 Single Line Telephone Release (Disconnect) Timer
05-02-06 Single Line Telephone Minimum Flash Timer
05-06-07 Single Line Telephone Hold Procedure
24 Voice mail Leading Digits

# Appendix A

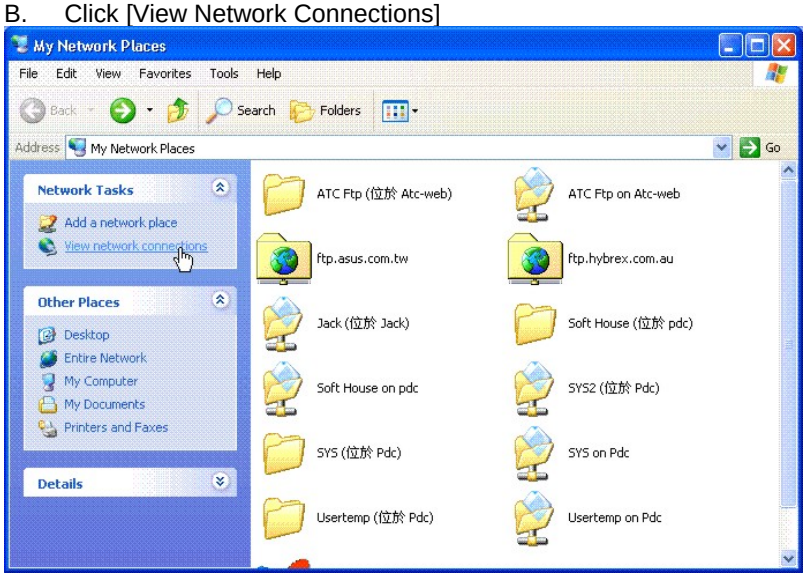
## MPU Software Upgrade

**G2-MPU2**

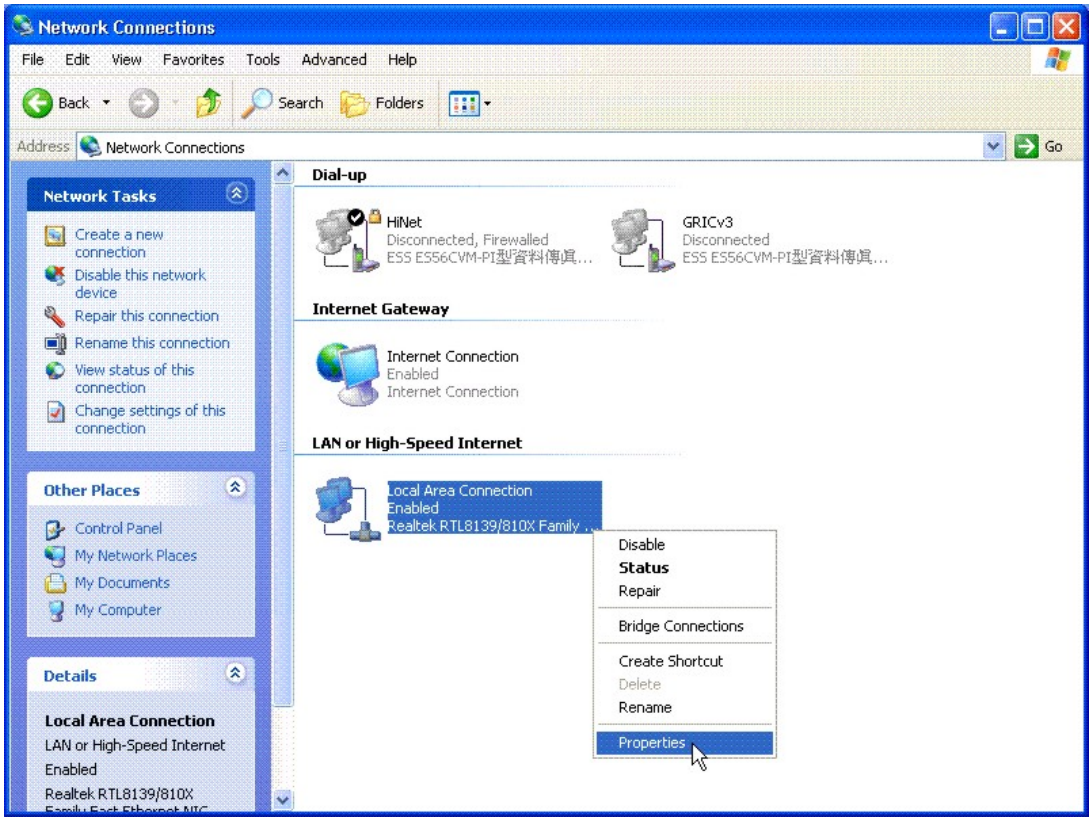
1. The factory default TCP/IP address is 10.10.10.5
2. Use straight Ethernet cable to connect the TCP/IP LAN port of the MPU2 to a LAN or use a cross-over Ethernet cable to connect the G2-MPU2 to a PC LAN card direct.
3. Program the TCP/IP environment on the PC as below. (Below is the example for Windows XP Professional.)
   A. Click [Start] -> [My Network Places]



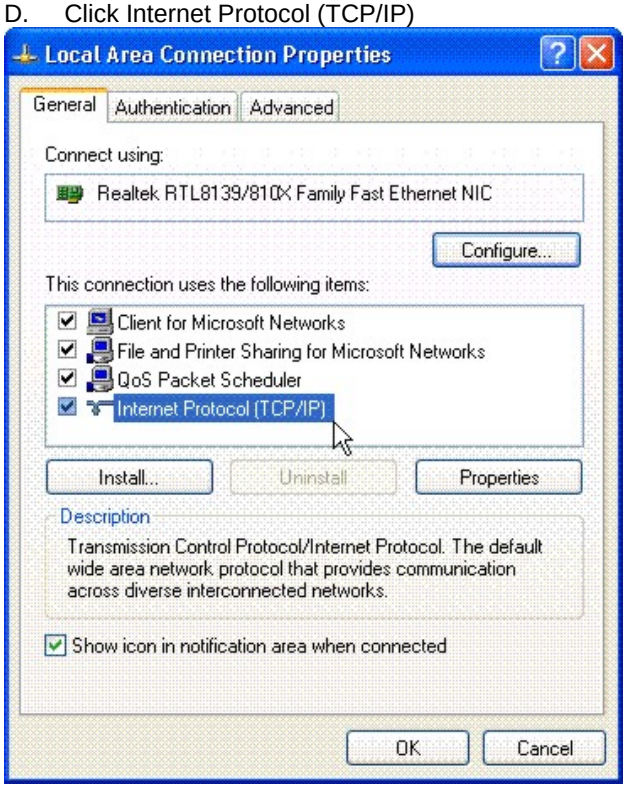

   B. Click [View Network Connections]



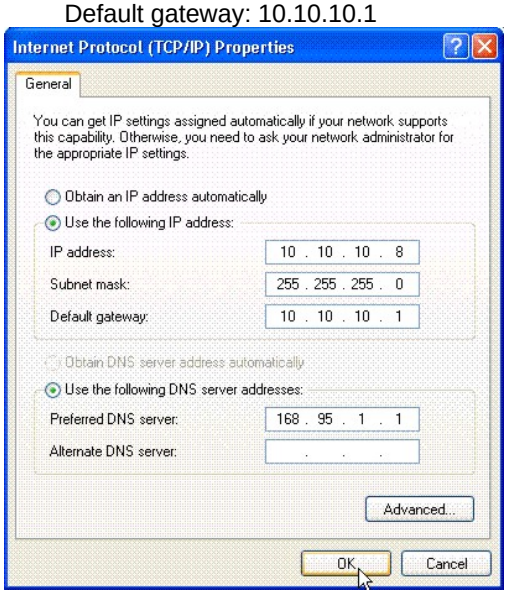
C. Use right button of mouse to click [LAN]. And then click [Properties].




D. Click Internet Protocol (TCP/IP)

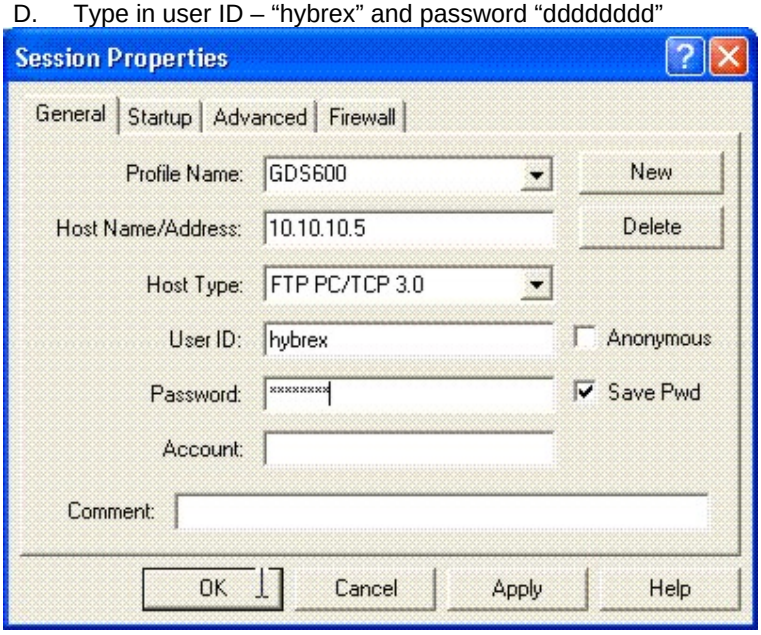


E. Use the following IP address setting (suggested).
IP Address: 10.10.10.8
Subnet Mask: 255.255.255.0
Default gateway: 10.10.10.1

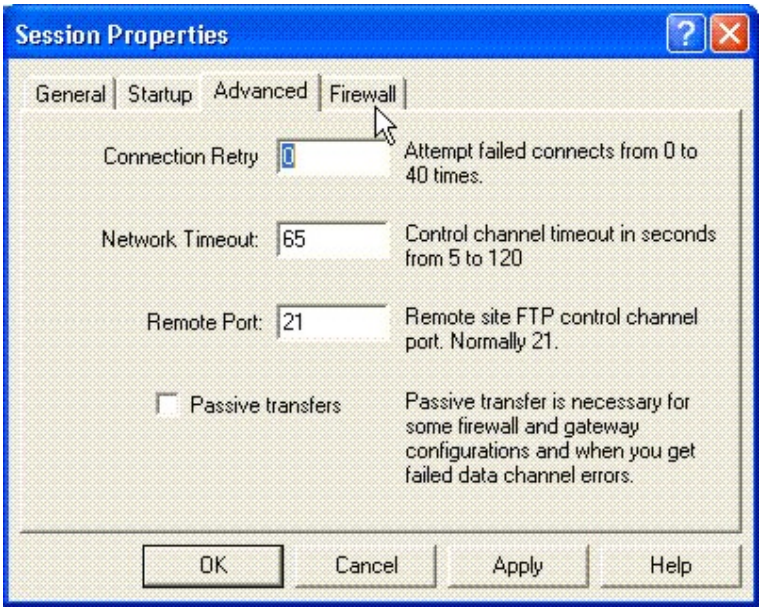



F. Click [OK] to complete the setting. If necessary, restart the PC to let new IP work properly.

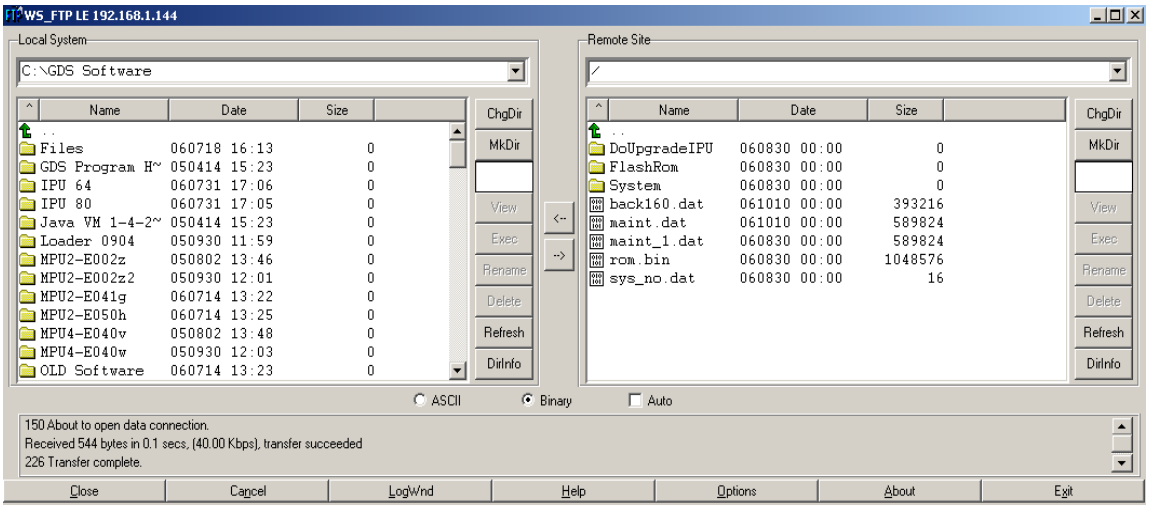
4. Use an FTP program like WS-FTP to connect to GDS600 FTP server.
   A. Name Profile Name
   B. Configure Host Address to IP: 10.10.10.5
   C. Configure Host Type: FTP TCP/IP 3.0
   D. Type in user ID – “hybrex” and password “ddddddd”



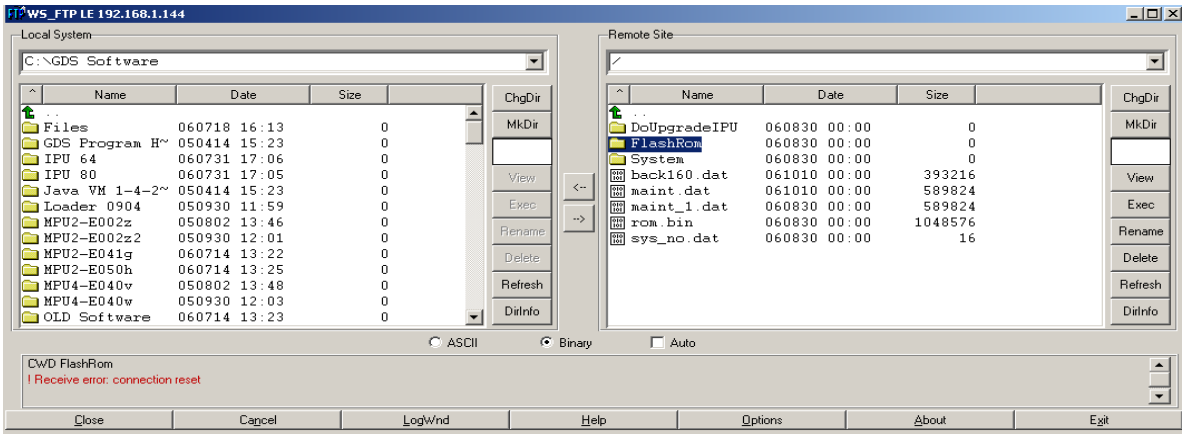
5. Configure FTP transfer not to use the “Passive transfer”



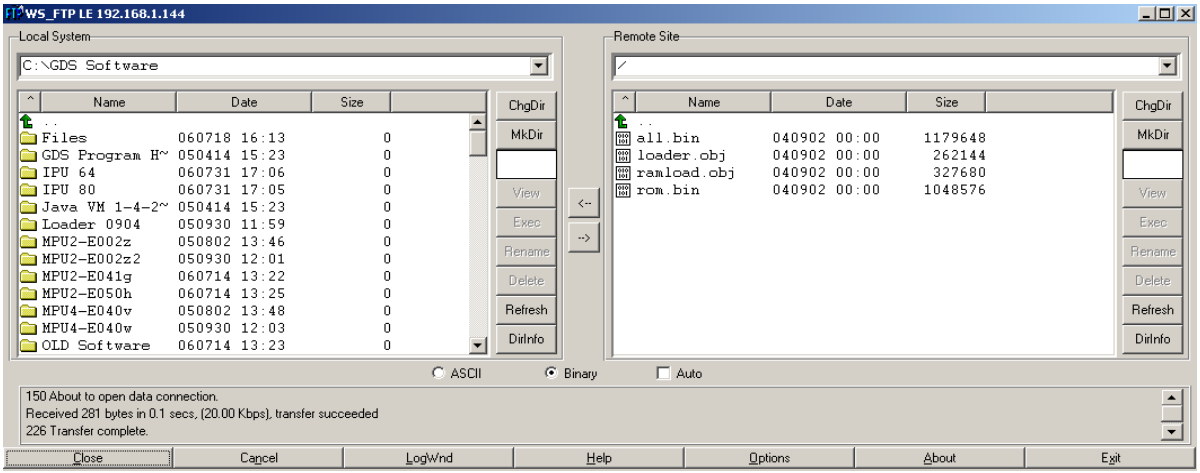

6. Click OK to make the connection and you will see the same information for the Remote Site as below.



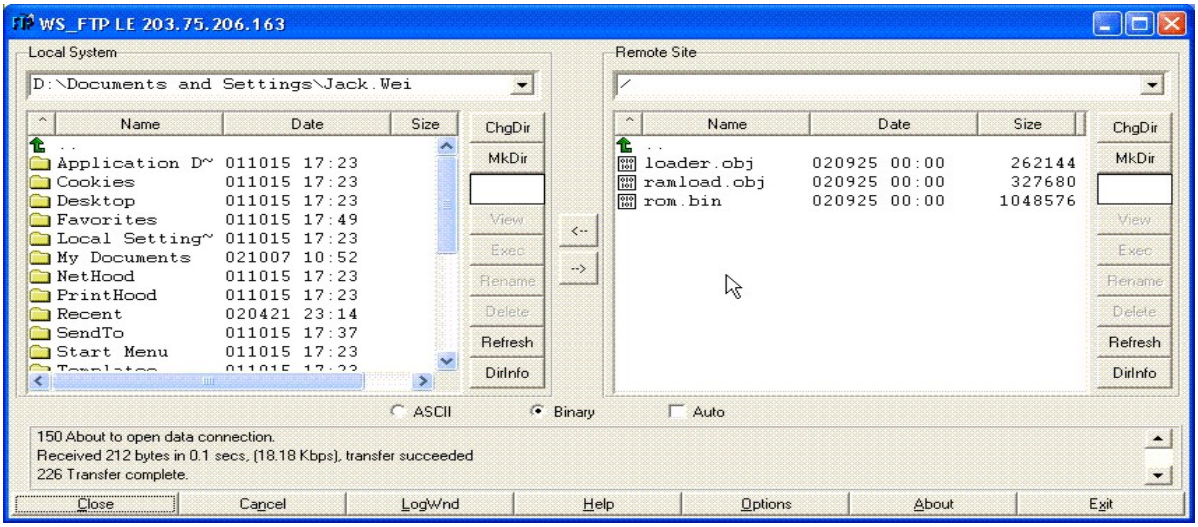
7. Click FlashRom folder and it will get the failed message as below. Click [Close] and [Connect] button again.



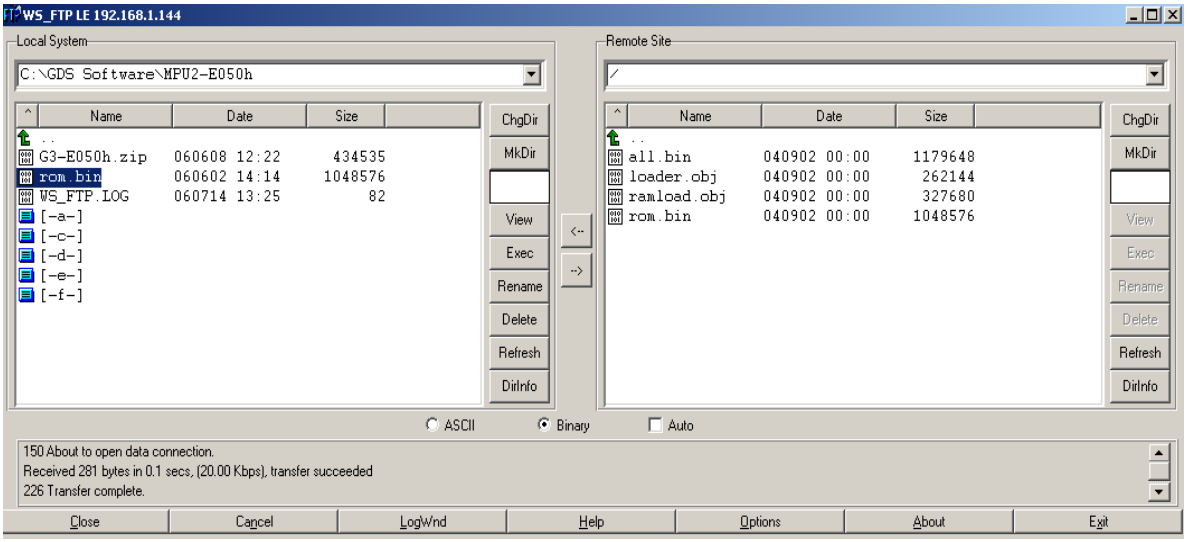

8. Login GDS 600 FTP server again and it will get the correct folder as below.



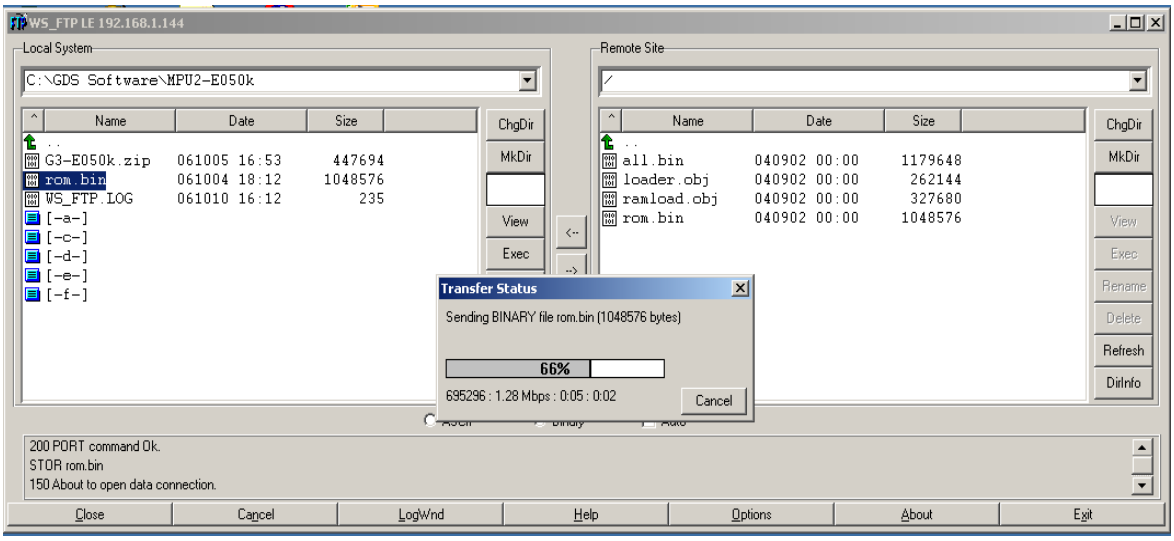

9. If you receive the following screen with only 3 files shown in the remote site then it is likely that you will need to upgrade the loader before proceeding. Abort the connection and Contact Tech Support.



10. Click the folder in the local system for the upgrade software “rom.bin” or “rom1.bin” or rom2.bin” of G2-MPU2.




11. Select “rom.bin” and click -> to transfer the software to G2-MPU2.




12. After the download is completed. System will restart automatically.

DO NOT CLOSE WS-FTP OR SHUT DOWN THE GDS SYSTEM UNTIL IT RESTARTS AUTOMATICALLY. DOING SO MAY RENDER THE GDS INOPERABLE.

# Appendix B

# PC Upgrade process for GDS IPU

**Procedures for upgrading GDS software via PC:**

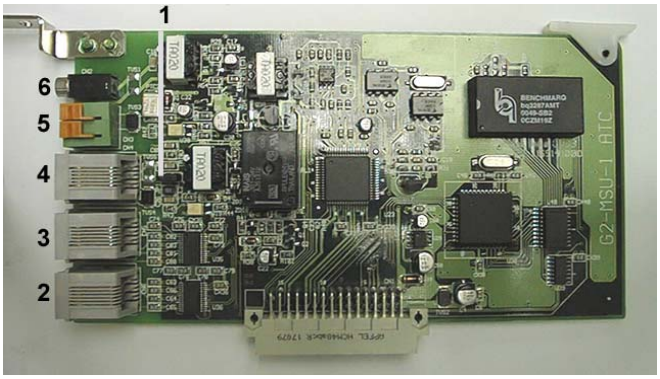
***Hardware/Software requirements*** **–**

1. **Personal Computer**
2. **6 Wire Line cord and RJ to DB9 Adapter**
3. **Winloader.EXE (G1-Programming Software – Windows Version)**

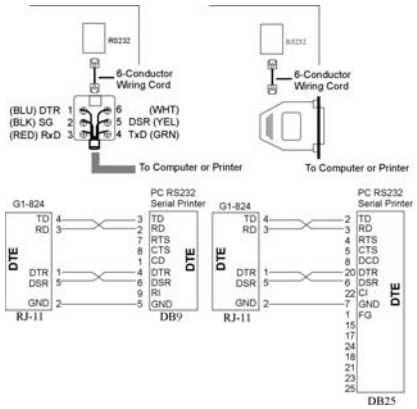
***Operation*** **–**

**Start Winloader.**

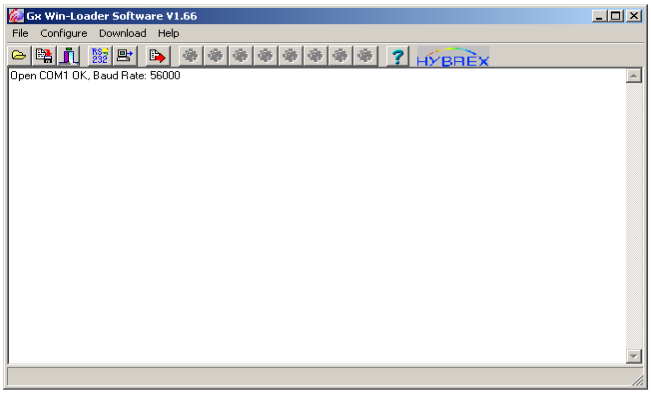
**Connect the RS232 cable from GDS MSU card to PC using RJ-11 to DB9 Female connector to PC COM port.**



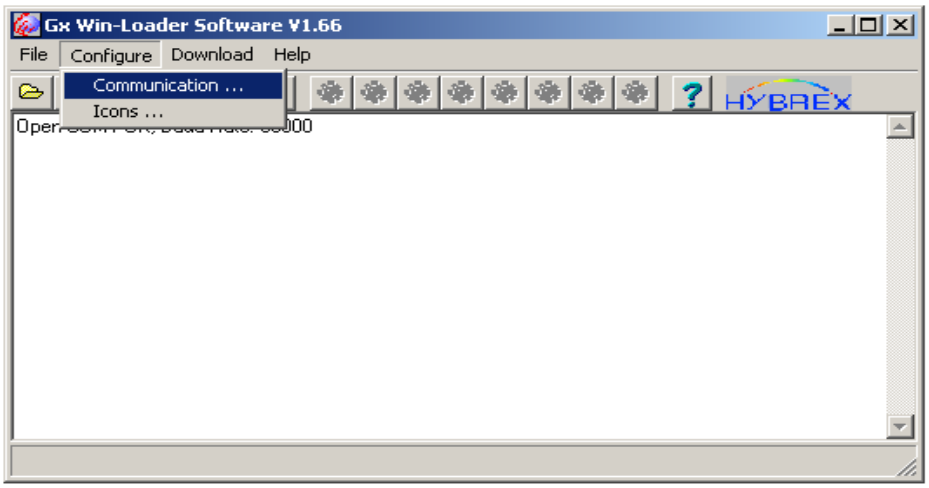

**3. RS232 connector for upgrade procedure**



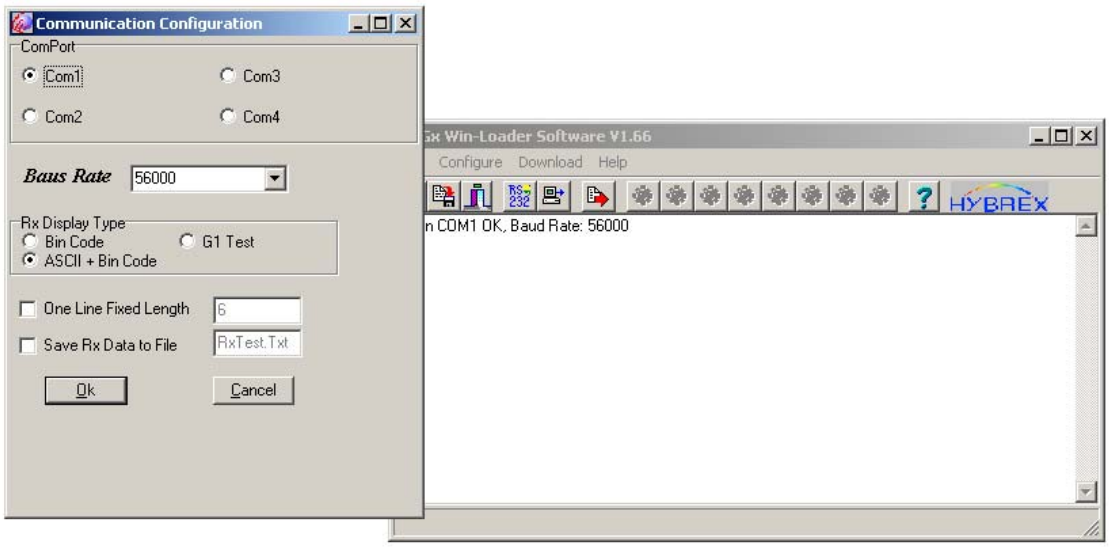
**Open Winloader and Check settings are correct for Com Port and 56000 Baud Rate**



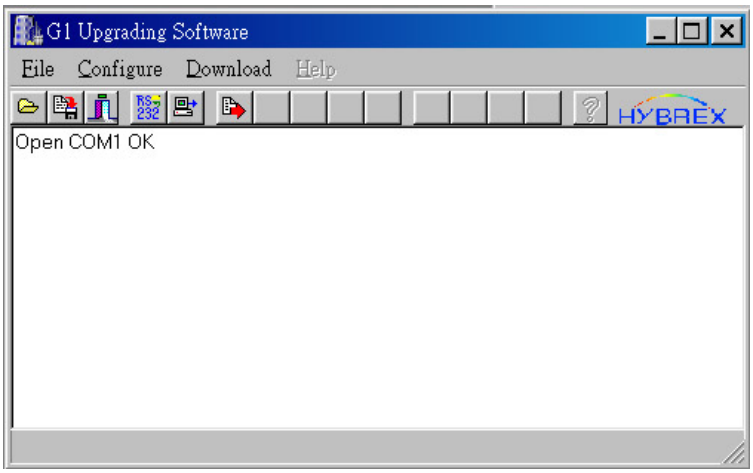

**If Baud rate or  Com port are incorrect press configure and Communications.**



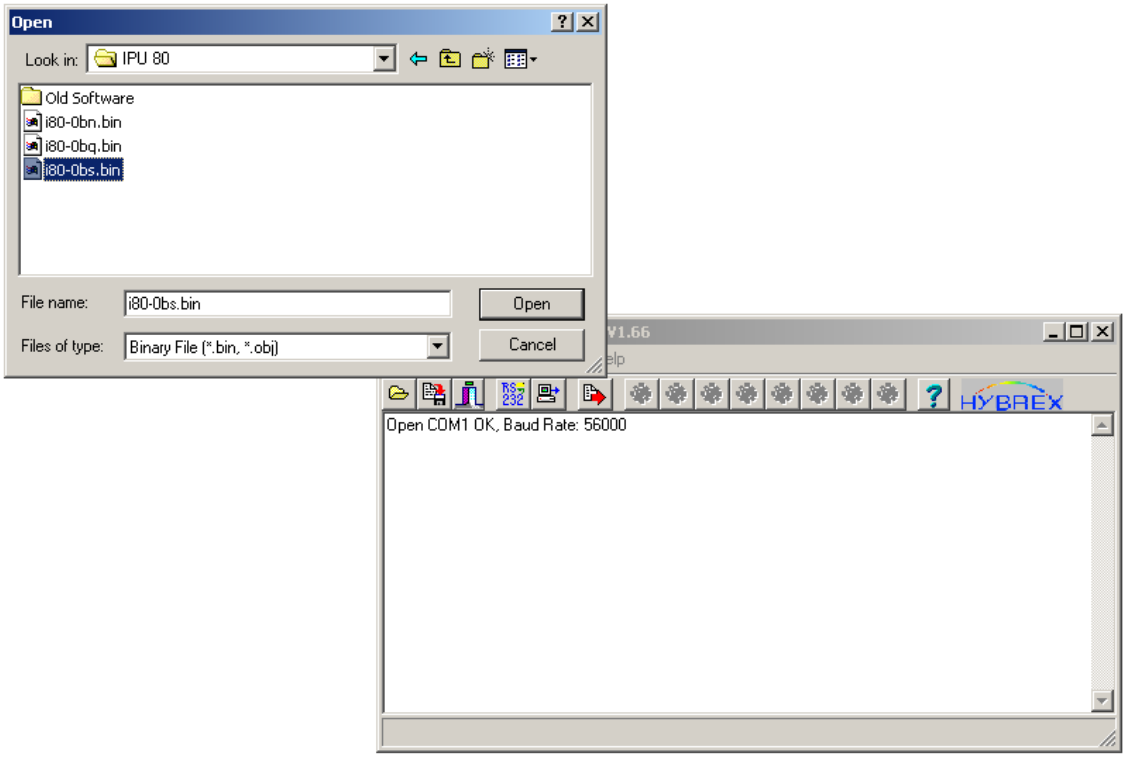

**Select 56000  baud rate and select the COM port. Press [OK].**



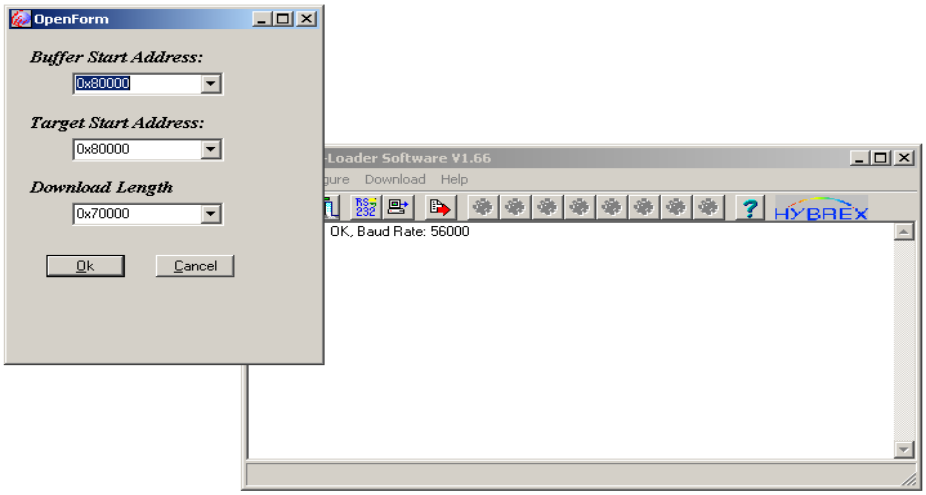
**the display will show:**



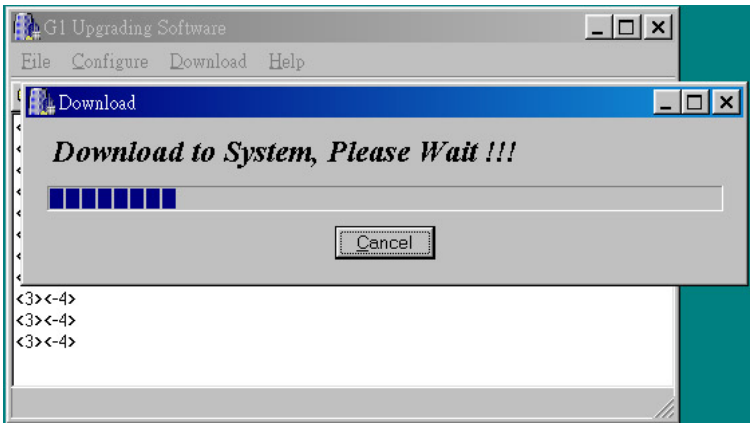

**Select [File]->[Open] to load the upgrade software version from disk.**



**Select the address of software. (Use default; there is no need to change these settings). The system will select automatically. Click OK**



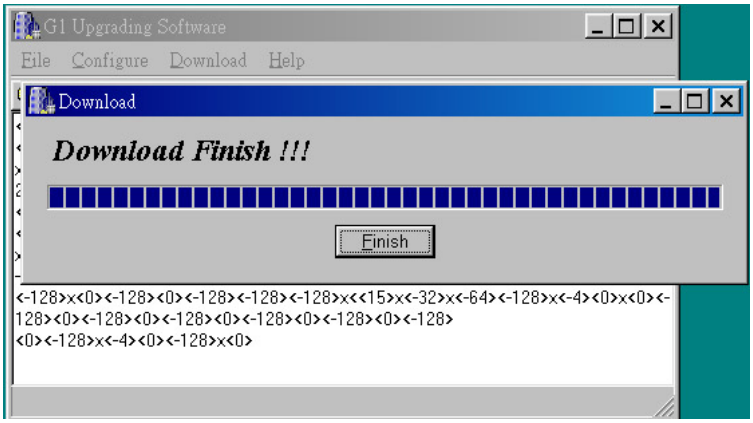

**Power on system or if system is on press the reset button on the IPU**
**Select [Download] to start the upgrade.**




**9.**

**11.**

**Upgrade Successful, press [Finish] to exit Winloader.exe and disconnect the cable.**

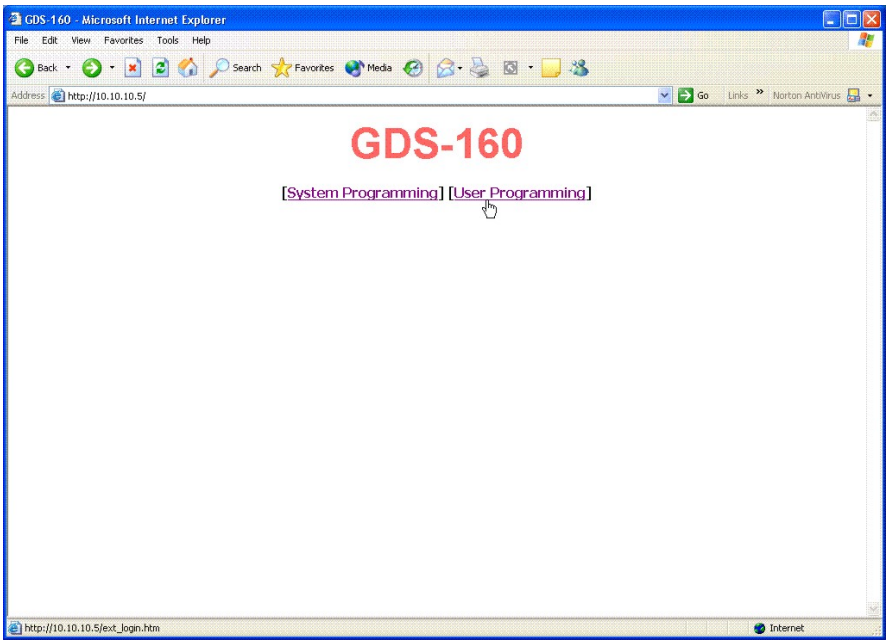



**If you leave the cable connected and the program open the GDS will not restart if for some reason you turn it off and back on again.**

# Appendix C

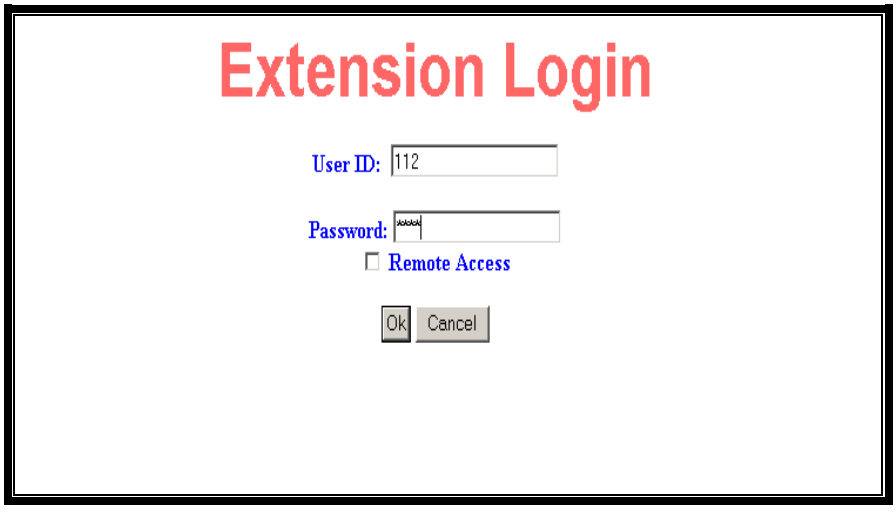
## User Programming for G2-MPU

Use Web Browser and type http://10.10.10.5 or the IP address of the system if not at default and then press [Enter].



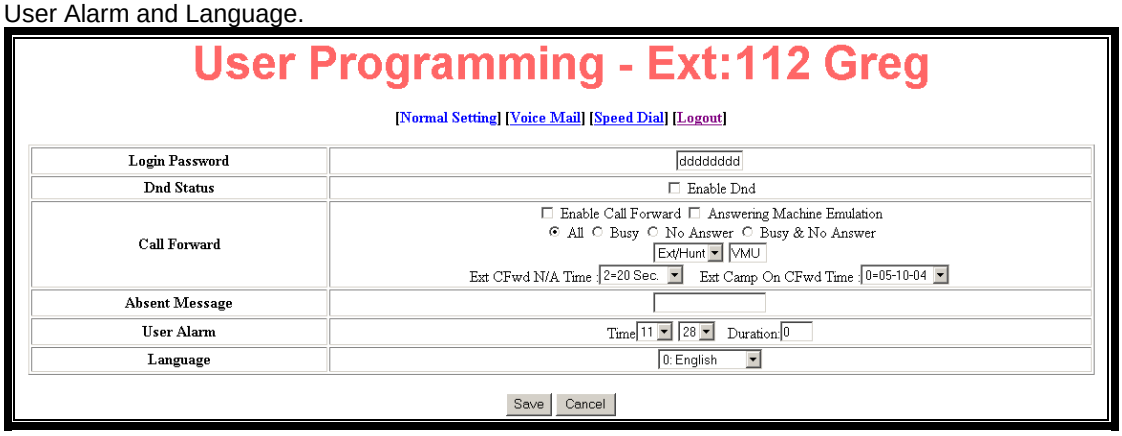

Click [User Programming] and then click [OK].

Enter your extension number as the User ID and Password. And then click [OK]

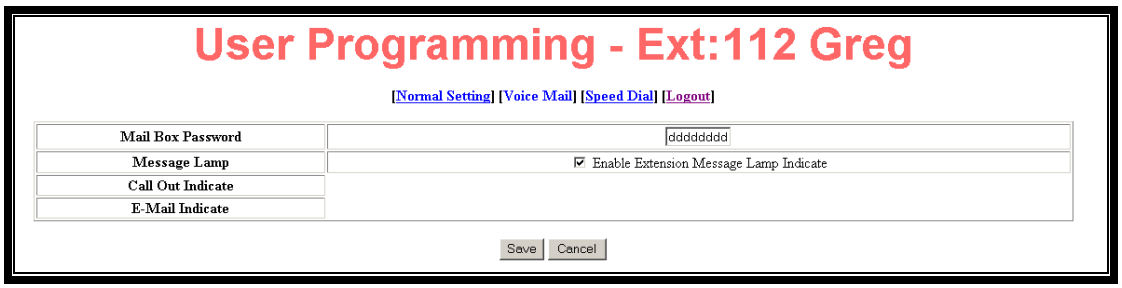


Once logged in as a non console user the extension has 3 different option screens.

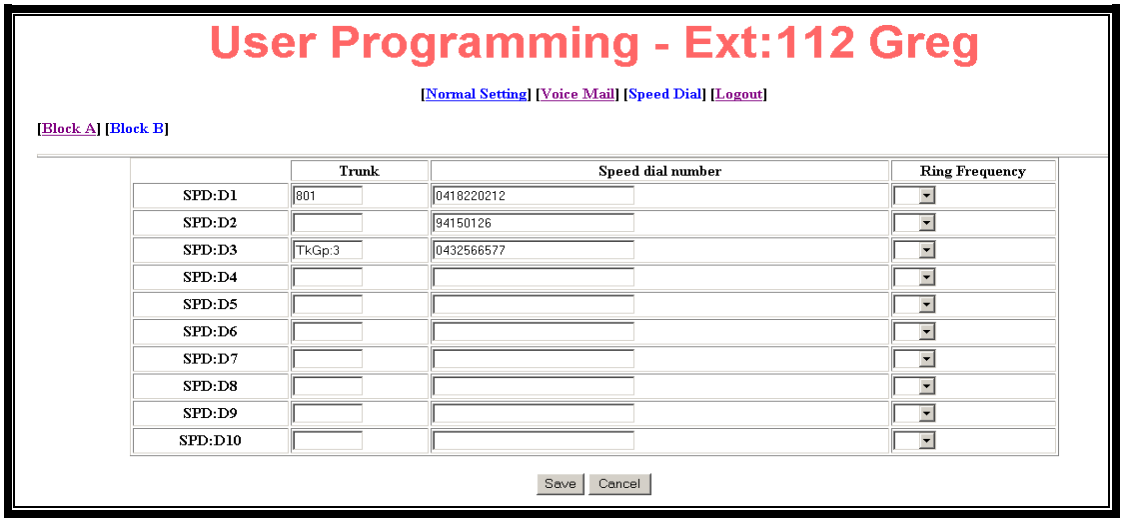
Normal settings  allows the user to set passwords, Call Forward and timers, DND, Absent message, User Alarm and Language.




If the Extension is allocated a Mailbox them Mailbox settings are available.

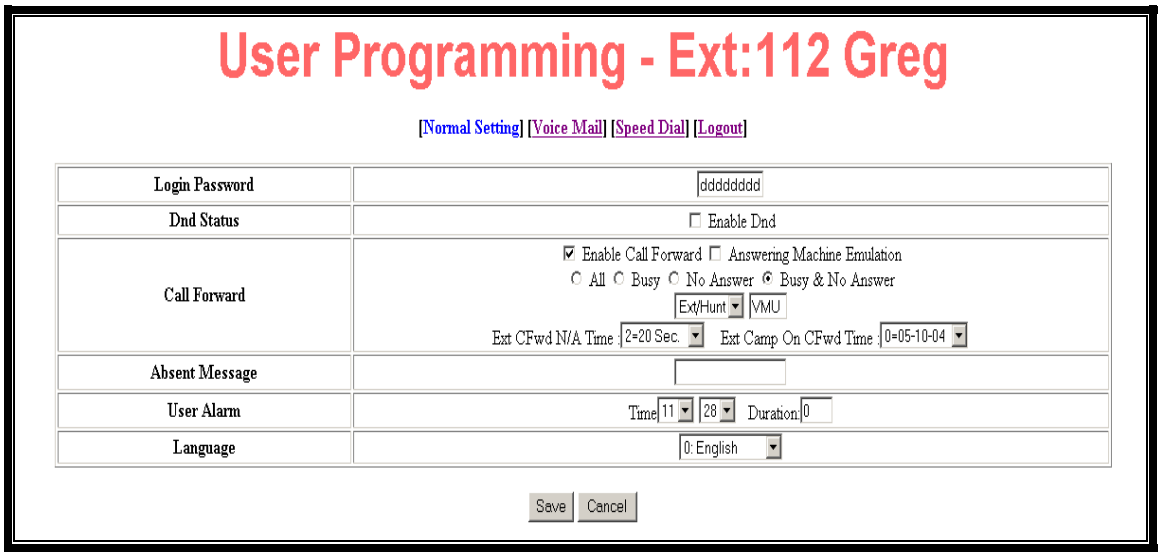



Users can program Personal Speed Dials for Numerical and One touch DSS Speed Dials.

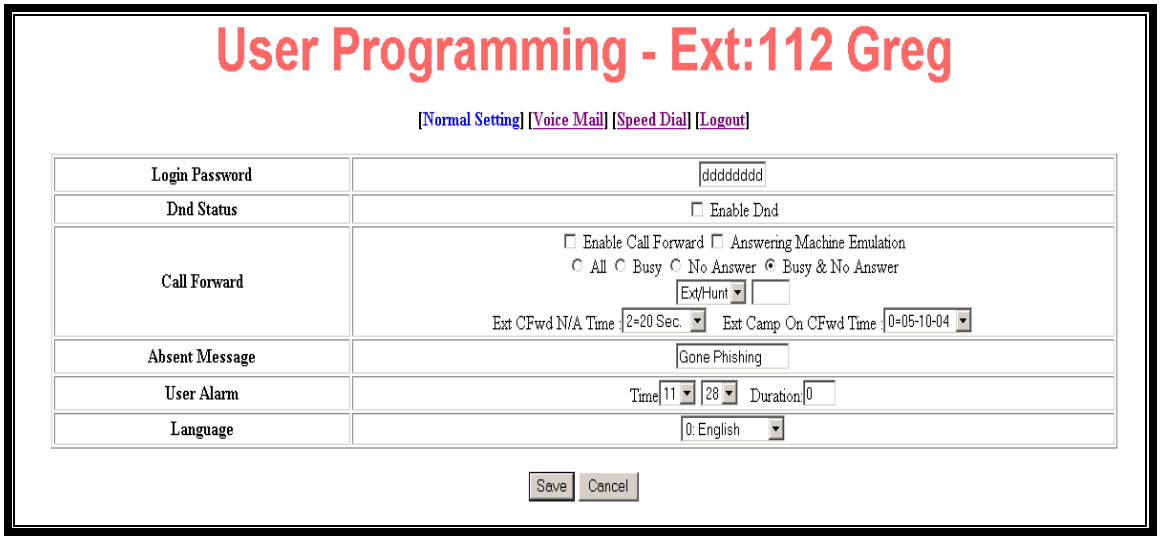


**To program personal settings:**

Call Forward

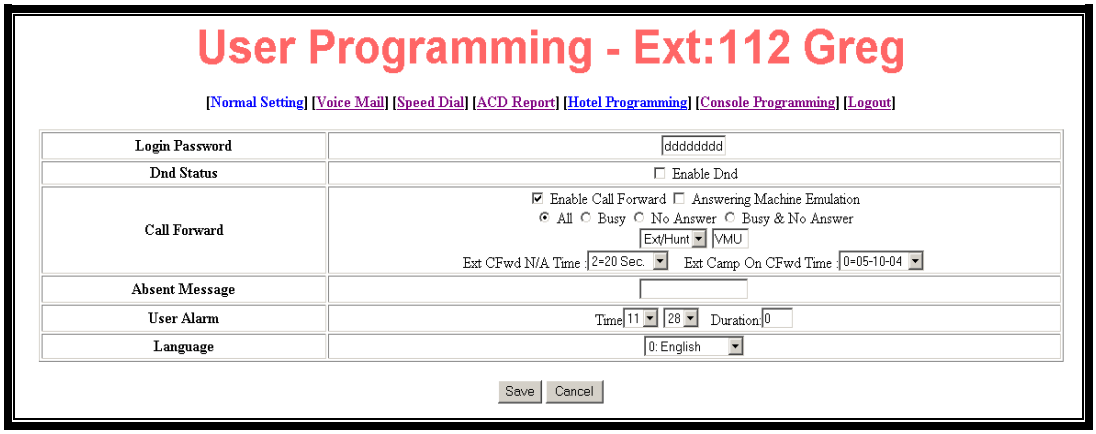



Absent Message



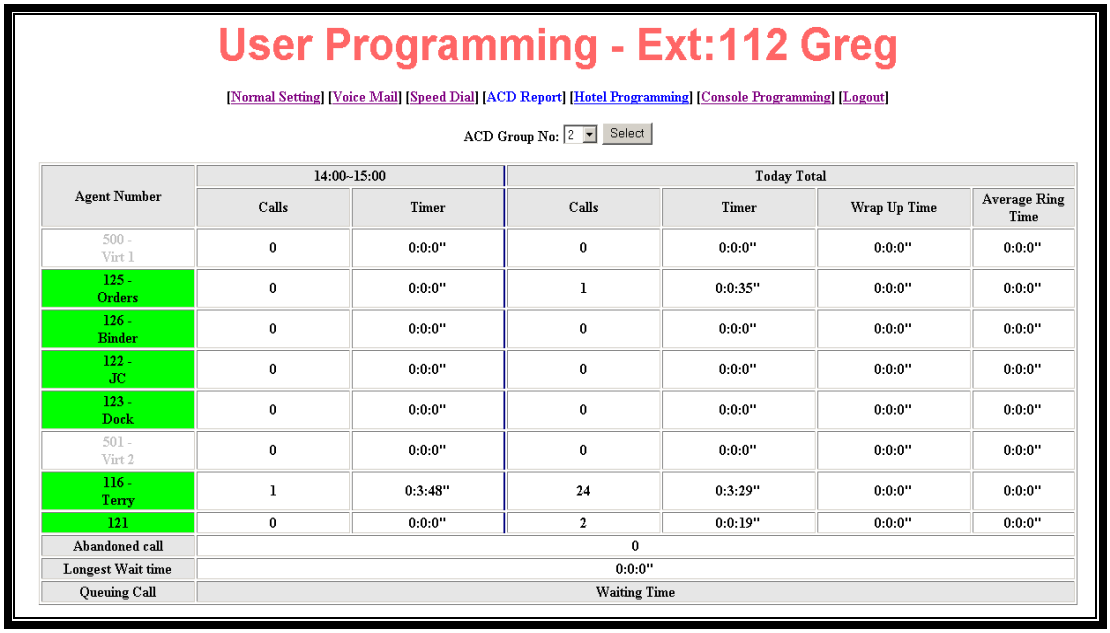
## Console User Programming

Extensions assigned as consoles will have additional facilities available to them in User programming. Additional facilities are ACD Report, Hotel Facilities and Console programming



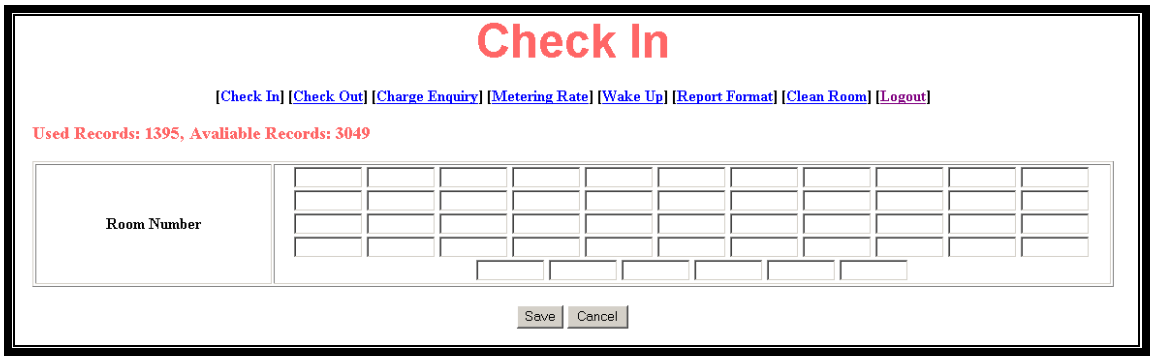

### ACD Report

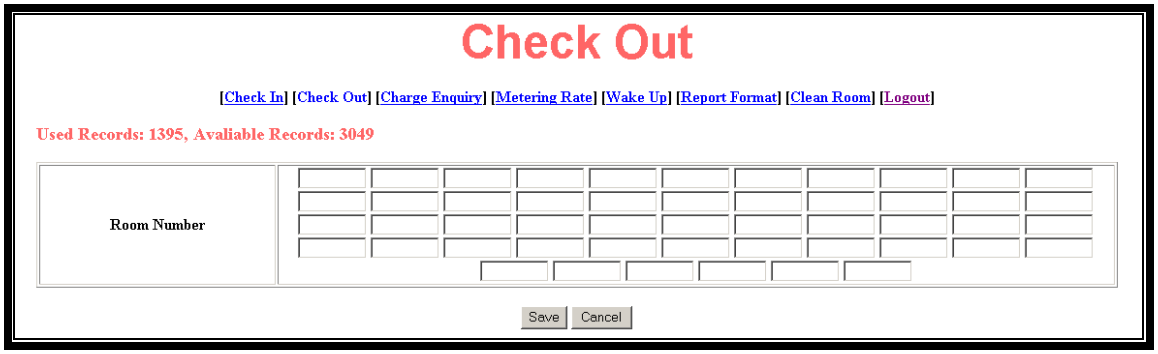
If ACD is in use in the system then ACD statistics are available from the Web Browser as below. Statistics are updated every 10 seconds

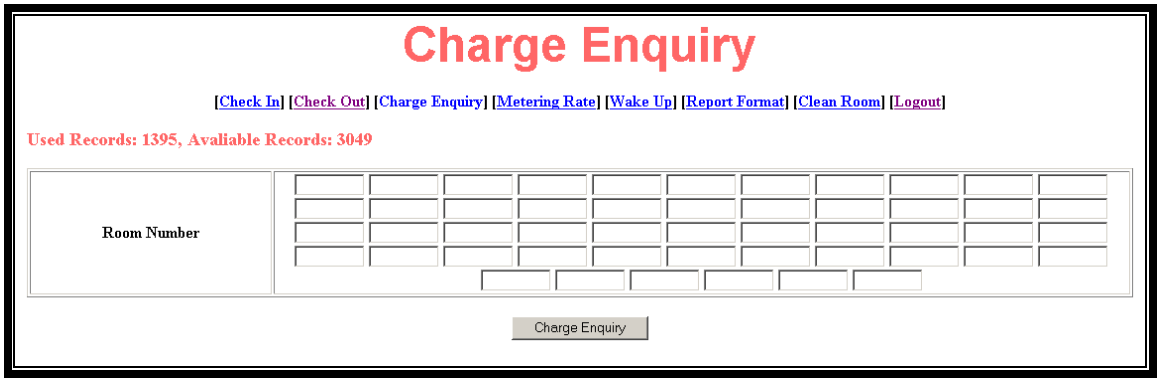



| Agent Number | 14:00~15:00 | | Today Total | | | |
|---|---|---|---|---|---|---|
| | Calls | Timer | Calls | Timer | Wrap Up Time | Average Ring Time |
| 500 - Virt 1 | 0 | 0:0:0" | 0 | 0:0:0" | 0:0:0" | 0:0:0" |
| 125 - Orders | 0 | 0:0:0" | 1 | 0:0:35" | 0:0:0" | 0:0:0" |
| 126 - Binder | 0 | 0:0:0" | 0 | 0:0:0" | 0:0:0" | 0:0:0" |
| 122 - JC | 0 | 0:0:0" | 0 | 0:0:0" | 0:0:0" | 0:0:0" |
| 123 - Dock | 0 | 0:0:0" | 0 | 0:0:0" | 0:0:0" | 0:0:0" |
| 501 - Virt 2 | 0 | 0:0:0" | 0 | 0:0:0" | 0:0:0" | 0:0:0" |
| 116 - Terry | 1 | 0:3:48" | 24 | 0:3:29" | 0:0:0" | 0:0:0" |
| 121 | 0 | 0:0:0" | 2 | 0:0:19" | 0:0:0" | 0:0:0" |
| Abandoned call | 0 | | | | | |
| Longest Wait time | 0:0:0" | | | | | |
| Queuing Call | Waiting Time | | | | | |

## Hotel Programming Screens



# Metering Rate

[Check In] [Check Out] [Charge Enquiry] [Metering Rate] [Wake Up] [Report Format] [Clean Room] [Logout]

| | Metering Rate | Multiplier |
|---|---|---|
| Metering Rate - 0 | 0 | |
| Metering Rate - 1 | 0 | 0=0.001 |
| Metering Rate - 2 | 0 | |
| ISDN Metering Rate - 0 | 0 | |
| ISDN Metering Rate - 1 | 0 | 0=0.001 |
| ISDN Metering Rate - 2 | 0 | |

Save Cancel

# Wake Up

[Check In] [Check Out] [Charge Enquiry] [Metering Rate] [Wake Up] [Report Format] [Clean Room] [Logout]

Used Records: 1395, Avaliable Records: 3049

| | |
|---|---|
| Room Number | |
| Wake Up Time | 0 0 Cancel Wake Up |

Save Cancel

# Report Format

[Check In] [Check Out] [Charge Enquiry] [Metering Rate] [Wake Up] [Report Format] [Clean Room] [Logout]

| | |
|---|---|
| Report Header | Hotel ATA |
| Page Lines | 45 |
| Shower Alarm Name | Panic Alarm |

Save Cancel

# Clean Room

[Check In] [Check Out] [Charge Enquiry] [Metering Rate] [Wake Up] [Report Format] [Clean Room] [Logout]

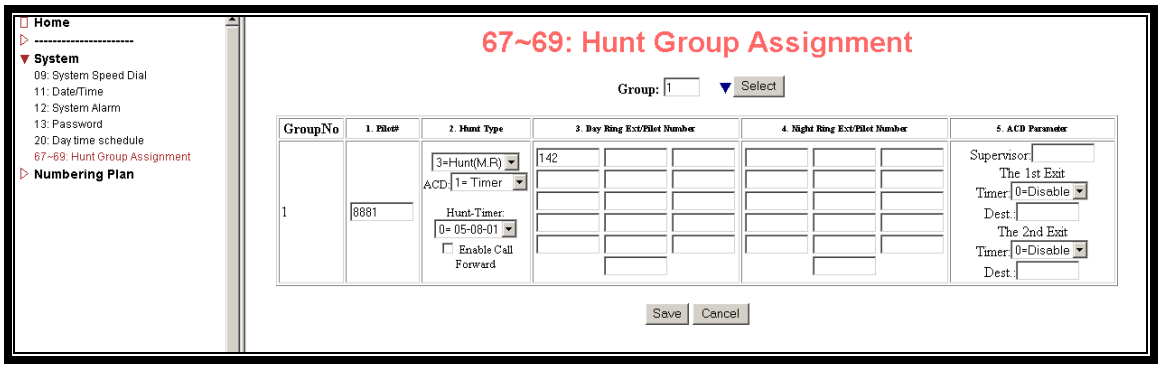
Used Records: 1395, Avaliable Records: 3049

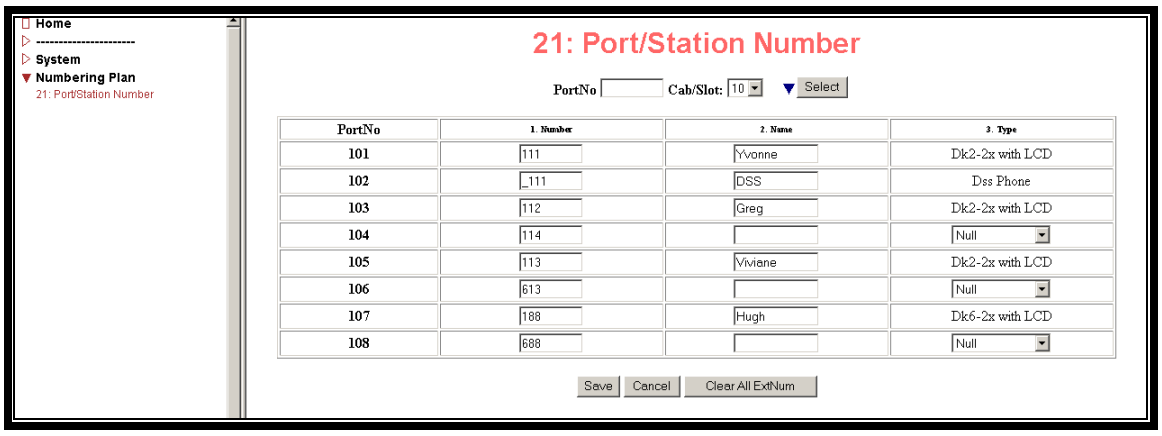
| | |
|---|---|
| Room Number | |

Save Cancel

**Console Programming**

Console phones are able to access parts of system programming to do certain features.
A console can change station names, change date and time, add or remove members from Hunt Groups, set System alarms, change conference passwords. Set Day/Night switching times and program System Speed Dials. Not all of the parameters displayed are able to be changed by the Console. For example if the Console accesses the Numbering plan they will only be able to change station numbers. Any attempt to change station numbers or clear all numbers will be ignored by the system.

**AUTO TELECOM COMPANY LIMITED**
6F, 1, LANE 16, SEC. 2, SHIH CHUAN ROAD
PAN CHIAO CITY, TAIPEI, TAIWAN
http://www.hybrex.com

**AUTO TELECOM (AUSTRALIA) PTY.LTD.**
Unit 7, 3 Gibbes Street, Chatswood, NSW 2067

 P/N: