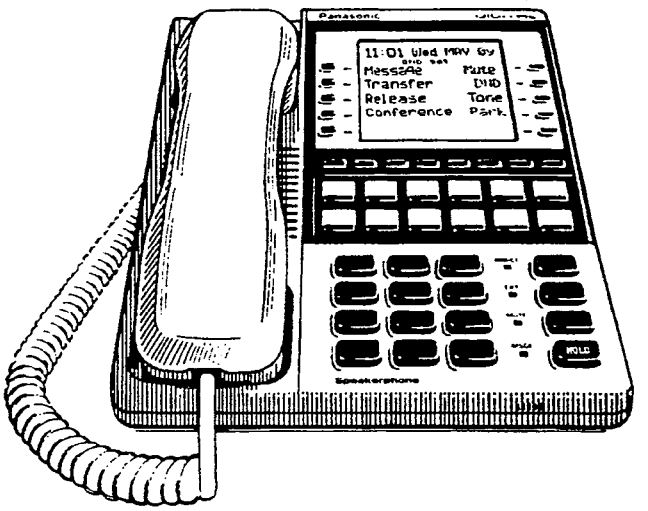
DBS
Digital Business System

Programming Guidance



Section 400

Panasonic

Chapter 1
General Program Outline

1-1 PREPARATIONS FOR PROGRAMMING

Prior to programming the system make certain you have completed the following steps.

Step 1:
Confirm the DBS system feature operations meet the end user requirements as outlined in Section 700.

Step 2:
Prepare section 450 with the end users requirements.

Step 3:
Confirm the hardware required for the end user.

Step 4:
Initialize the system to the default status. See next page for this.

Step 5:
Follow the completed section 450 to program the system.

1-2 PROGRAM STRUCTURE

The DBS program entries are divided into 10 primary groups stored under FF keys on the phone. The Flexible Function Keys listed to the right show the major programming groups. Each group contains sub groups which combine similar functions together.

Primary Program Group Keys

FF1 Key
System program settings

FF2 Key
Central Office line program settings

FF3 Key
Extension program settings

FF4 Key
Ring & Hunt group program settings

FF5 Key
Flexible key program settings for lines & features

FF6 Key
Name & Message program settings

FF7 Key
Toll restriction program settings

FF8 Key
Least cost routing program settings

FF9 Key
Copy program settings

FF10 Key
System and personal speed dial program settings

System Initialization

Before beginning to program a newly installed DBS for the first time, set the system programs to the default values by following steps 1 through 5 below:

1. Turn off the power for the Main Cabinet. (Both cabinets if a dual cabinet configuration is being used.)

2. Slide the **CPC RAM** switch to the **CLEAR** position.

3. Turn on the power for the Main Cabinet(s), then **wait until the bottom LED on the CPC card stops flashing**.

Note: The CPC-B card will take about twice as much time to initialize the memory as a CPC-A card does.

4. Slide the **CPC RAM** switch to the **RAM HOLD position.**

5. Verify the software version in the system from any display telephone by pressing the [ON/OFF], [CONF], and entering 7777.

NOTE:

This procedure must always be performed prior to programming the DBS for the first time, or in cases where it is desired to return all changed programming parameters to the default initialized values. Failure to initialize the CPC card may cause operational problems.

Software Upgrades (CPC-B Version 4.0 or newer)

Before upgrading from one software version to another, you must first enter the "New Function Reset" command (FF1 8# 1#).

For example, if you are upgrading from Version 3.0 to Version 4.0, you must enter this command. However, if you are upgrading to a point release (4.10 to 4.11), you do not need to enter the command.

NOTE:

The "New Function Reset" command erases T1 and DID programming.

Chapter 2
Requirements for programming

2-1 PREPARING PROGRAMMING DATA TABLE

Prior to programming the DBS, complete Section 450 (Programming Tables). Review the desired functionality with the end user, making any additional changes as required. If the end user has requested specific functionality you are unfamiliar with, refer to Section 700 to confirm the DBS operation prior to installation.

NOTE:

When Preparing Programming Data Table Section 450, observe the following:

Leave the default values for all programmable areas of central office lines, extensions and equipment not being connected.

Record all program modifications made in the programming tables of Section 450. Program address numbers that cannot be changed during normal system operation have notes to this effect. Program address numbers that are specially marked are available for the specified version(s) of software only.

2-2 HOW TO ACCESS PROGRAMMING MODE

From the Attendant Port

Programming can be performed from the attendant display telephone. An attendant telephone is connected to extension port 1 and has an extension number of 100, for all software versions. Programming is also possible from other extensions. See the note in "From a Non Attendant Port", Section 2-2."

To enter the program mode from the Attendant position perform the following steps:

[ON/OFF], [PROG], ##, then proceed with the FF key program desired.

NOTE:

Name settings can only be programmed from the attendant telephone, or a DSS console connected to it.

When programming an active DBS system through the Attendant position in a DBS set for only one attendant, the DBS will automatically change to the "night" mode.

From the Test Terminal Port

When programming from a telephone connected to the test terminal (CN3) of the main DBS cabinet, slide the switch on the cabinet to the test mode. This switch provides a direct connection to ports 7 and 8.

To enter the programming mode from the test terminal port, perform the following steps:

[ON/OFF], #98, 9999 (or presently used Authorization code), [PROG], ##, then proceed with the FF key program desired.

NOTE:

The #98 9999 designates this device as a programming port. Entering the authorization code a second time turns the authorization off for this port in software versions older than 3.17-CPC-A, or 2.05-CPC-B. In software versions newer than these, activating the access code at a second programming port automatically turns off the authorization at any previous port that has been activated.

From a Non Attendant Port

When programming from a display telephone other than the attendant's, press:

[ON/OFF], #98, 9999 (or presently used Authorization code), [PROG], ##, then proceed with the [FF] key program address desired.

NOTE:

The #98 9999 designates this device as a programming port. You only have to enter the authorization once. Entering the authorization code the second time turns the authorization off in software versions older than 3.17-CPC-A, or 2.05-CPC-B. In software versions newer than these, activating the access code at a second programming port automatically turns off the authorization at any previous port that has been activated.

From an RS-232C Terminal

When programming from a terminal connected to the RS-232C (SMDR) port, perform the following steps:

1. Make certain the cables are configured and connected as outlined in Section 300.

2. Make certain the DBS is in the SMDR mode by performing the following steps from the attendant port:

[ON/OFF], #93

3. Perform the following steps from the terminal :

#99, 9999

4. After the DBS responds, type: P, then press the enter key.

NOTE:

When the communication parameters are in the default settings, they should be:

parity check set to yes, 9600 baud, data length 8, 1 start bit and 1 stop bit. See program addresses [FF1], 2, 2, (1-5) for changes to these options.

From a Remote Location

When performing DBS programming changes from a remote location (using an ASCII terminal), perform the following step:

1. Access the DBS through a DISA line. Once the connection is made, press #6, 9999, P, then press enter, from the terminal.

NOTE:

A call can be transferred by any extension, if it is a digital phone, to remote programming, provided the call is placed on hold, and #6 9999 is dialed from the attendant position dial pad.

This function will only work if the attendant has no other active calls. Active calls can be determined by the appearance of flashing green LED's at the attendant position.

Remote access programming capability through DISA requires an MFR card and special DISA programming. (see [FF2] program addresses).

2-3 PROGRAMMING METHOD

Example of date/time program entries:

To set the date from extension port number 1:

Press [ON/OFF], [PROG] ("F" is displayed), # ("F#" is displayed), # ("Program Mode" is displayed on line 1, "MAIN MODE" is displayed on line 2).

Press [FF1], ("System Program" is displayed on line 1, "SELECT SUB-MODE" is displayed on line 2).

Press 1, #, ("Select Time Mode" is displayed on line 1, "1:DATE 2:TIME", is displayed on line 2).

Press 1, #, ("Date Set Mode" is displayed on line 1, "MONTH/DATE/YEAR" is displayed on line 2).

From the keypad, enter the new date in the following format:

Enter month as MM
Enter date as DD
Enter year as YY

Press # to store the program change. After pressing the [ON/OFF] key, the new date is displayed on all phones with the LCD.

NOTE:

To continue with the next program address, press the "#" key instead of the [ON/OFF] key.
While programming, be sure to confirm the changes being made on the display of the phone being used.

Software ***UPGRADES*** *from CPC-B version 2.0X to 3.0X can be done by changing EPROMS, and manually reconfiguring the programs that are not available in the 2.0X version previously used. Defaulting the CPC-B card prior to the installation of the 3.0X version IS NOT required. 2.0X version users that have utilized DID programs need to carefully review the NOTES following [FF1], 8# program addresses. Complete manual reprogramming of all features is not required.* ***Default values for each program address are denoted by an underlined example in each address section.***

2-4 DEFAULT VALUE TABLE

3-1 SYSTEM PROGRAM SETTINGS

DAY/DATE
[FF1], 1#, 1#, (MMDDYY)

To set the date to February 25, 1995, enter the Month, Day and Year as follows:

[FF1], 1#, 1#, 022595#

The correct day is automatically calculated from this information.

To reset the day/date to the default initialized value, press [FF1], 1#, 1#, [CONF], [ON/OFF].

NOTE:

The day and date are also printed on the Station Message Detail Recording (SMDR) printout. Proper LCR operation is dependent upon correct date settings. Peripheral equipment operation may depend on correct date settings.

TIME (24-HOUR FORMAT)
[FF1], 1#, 2#, (HHMM)#

To set the time to 3:28 pm, enter the hour and minutes as follows:

[FF1], 1#, 2#, 1528#

To reset the time to the default initialized value, press [FF1], 1#, 2#, [CONF], [ON/OFF].

CALL DURATION DISPLAY
[FF1], 2#, 1#, 1#, (0 OR 1)#

Telephone conversation time with an outside line is normally displayed on telephones with an LCD. The DBS can be programmed so that the call duration time is not displayed.

To set the DBS so that the call duration time is not displayed, enter:

[FF1], 2#, 1#, 1#, 0#

To set the DBS so that the call duration time is displayed, enter:

[FF1], 2#, 1#, 1#, 1#

NOTE:

Proper LCR operation is dependent upon correct time settings. Peripheral equipment operation may depend on correct time settings.

SMDR/Display Start Timer for Central Office Calls [FF1], 2#, 1#, 2#, (0 or 1)#

Conversation time for central office calls will start to display 16 seconds after the completion of dialing the number, or 16 seconds after the initial ring tone of an inbound call. The start timer can be set to 16 seconds or 30 seconds.

All incoming calls will start timing 16 seconds after the initial ring tone, even if the call duration display is not activated. To set the SMDR/display timer for 16 seconds, enter:

[FF1], 2#, 1#, 2#, 0#

To set the SMDR / display timer for 30 seconds, enter:

[FF1], 2#, 1#, 2#, 1#

SMDR/Display Start Timer for Central Office Calls [FF1], 2#, 1#, 2#, (0, 1, or 2)# (CPC-B, ver. 3.00 or newer)

Conversation time for central office calls will start to display 5 seconds after the completion of dialing the number, or 16 seconds after the initial ring tone of an inbound call, or 30 seconds after the initial ring tone of an inbound call. The start timer can be set to 5 seconds, 16 seconds, or 30 seconds.

All incoming calls will start timing 5 seconds after the initial ring tone, even if the call duration display is not activated. To set the SMDR/display timer for 5 seconds, enter:

[FF1], 2#, 1#, 2#, 0#

To set the SMDR/display timer for 16 seconds, enter:

[FF1], 2#, 1#, 2#, 1#

To set the SMDR/display timer for 30 seconds, enter:

[FF1], 2#, 1#, 2#, 2#

NOTE:

The central office call duration display is set by address [FF1], 2#, 1#, 1#. CPC-B software version 2.00 should be upgraded to version 2.03 to eliminate two intermittent potential SMDR deficiencies in recording field codes. See Technote 8 (March 1992), for complete information. CPC-B versions 3.00 or newer resolves this potential SMDR deficiency.

Least Cost Routing (LCR) Access [FF1], 2#, 1#, 3#, (0 or 1)#

Outbound calls can be automatically routed to special carriers when LCR is activated. To access a non LCR line for outbound calls, (when a "9" is dialed), enter:

[FF1], 2#, 1#, 3#, 0#

To automatically access a LCR line for outbound calls, (when a "9" is dialed), enter:

[FF1], 2#, 1#, 3#, 1#

NOTE:

All LCR options are set at address number [FF8].
The use of LCR requires cutting the jumper on the CPC card. See Section 300 for specific details on this hardware modification. Make certain to register the DBS with the FCC using the proper registration number when using LCR trunk access programming.

Override Toll Restriction With System Speed Dial (SSD) Numbers [FF1], 2#, 1#, 4#, (00-89)#

A group of SSD numbers or a single SSD number can be used, despite toll restriction (types 2-6) that may be in use for a specific area or office code. The speed dial number entry used in this program is the lowest entry number to be able to override toll restriction. All SSD numbers higher than the one entered will also override toll restriction that may be in use for a specific area or office code.

To set a group of system speed dial numbers from 56 to 89, (for example), to bypass toll restriction types 2-6, enter:

[FF1], 2#, 1#, 4#, 56#

To reset the overriding of toll restriction types 2-6 of a group of system speed dial numbers to the default initialized value, press [FF1], 2#, 1#, 4#, [CONF], [ON/OFF].

NOTE:

If a SLT uses this feature to override toll restriction, there is a 15 second delay before audio is passed to the receiver.

SSD Display Restriction [FF1],2#,1#,5#,(0 or 1)#

You have the option of displaying, on any LCD phone, the telephone number associated with SSD codes (80-89). This option also effects **REDIAL** and will display or not display accordingly when redialing one of these SSD codes. Telephone numbers associated with SSD codes (00-79), and all names associated with all SSD codes will always display.

To display the telephone number associated with SSD codes 80-89, enter:

[FF1], 2#, 1#, 5#, 0#

To withhold display of the telephone number associated with SSD codes 80-89, enter:

[FF1], 2#, 1#, 5#, 1#

NOTE:

Toll restriction for blocks of System speed dial numbers is set at address [FF1], 2#, 1#, 4#.
Display of 5 or 10 System speed dial numbers on a large display telephone is set at address [FF1], 2#, 1#, 19#.
System speed dial names are set at address [FF6], 2#, (00-89)#.
System speed dial numbers are set at address [FF10], 1#, (00-89)#.

Auto Flash Redial [FF1], 2#, 1#, 6#, (0 or 1)#

Pressing the **REDIAL** key will redial the most recently dialed number.

To deactivate the use of the redial feature, enter:

[FF1], 2#, 1#, 6#, 0#

To enable the use of the redial feature, enter:

[FF1], 2#, 1#, 6#, 1#

NOTE:

If the DBS is installed behind a PBX, this feature must be disabled. The central office line flash and the redial flash features are controlled by the same timer.
The PBX flash timer is set at address [FF1], 3#, 18#.
Central office line type is set at address [FF2], (1-64)#, 10#.

One Touch Call
[FF1], 2#, 1#, 7#, (0 or 1)#

The one-touch call feature provides dialing to an extension by pressing a single programmable key, and is enabled by both settings. This feature cannot be deactivated.

On Hook (automatic) Transfer
[FF1], 2#, 1#, 8#, (0 or 1)#

An incoming call can be automatically transferred to another extension by placing the call on hold, dialing an extension number and hanging up.

To disable automatic transferring of a call, to an internal extension, enter:

[FF1], 2#, 1#, 8#, 0#

To enable automatic transferring of a call to an internal extension, enter:

[FF1], 2#, 1#, 8#, 1#

NOTE:

To transfer a call with this feature disabled the [PROG] key must be pressed after dialing an extension, but before hanging up the handset. When this option is enabled in a CPC-B equipped system, intercom calls and central office line calls can be transferred. In systems equipped with a CPC-A card, only central office line calls can be transferred to other extensions.
Transfer recall time for attendant(s), is set at address [FF1], 3#, 4#.
Transfer recall time for extensions other than the attendant(s), is set at address [FF1], 3#, 5#.
Transfer recall time for intercom calls from the attendant(s), is set at address [FF1], 3#, 24#. This feature is found on CPC-B ver. 2.00 or newer software.
Transfer recall time for intercom calls from extensions, is set at address [FF1], 3#, 25#. This feature is found on CPC-B ver. 2.00 or newer software.
Calls transferred by an extension, that recall to the extension, and then are not answered, will transfer to extension 100.
In CPC-B ver. 2.00 and newer, up to 4 attendant positions can be designated. Addresses to be used to set these extensions are [FF1], 2#, 1#, 24-27#.
The time for this transfer procedure is set at address [FF1], 3#, 9#.
If a Voice Announce Unit (VAU model VB-43708) is used, this address must be set to the default setting as follows: [FF1], 2#, 1#, 8#, 1#.

Central Office Line Automatic Hold
[FF1], 2#, 1#, 9#, (0 or 1)#

Automatically places a central office-line that is in use on system hold, when you press a ringing line key to answer a new inbound call.

To disable the automatic hold feature for a call on an existing central office line, when a new central office line call is ringing in, enter:

[FF1], 2#, 1#, 9#, 0#

To automatically place an existing central office line call on system hold, and to answer a new inbound ringing central office call, enter:

[FF1], 2#, 1#, 9#, 1#

Non Appearing Central Office Line Hold
[FF1], 2#, 1#, 10#, (0 or 1)#

Central office line-calls to a telephone that does not have a dedicated key appearance, can be placed on either system hold or exclusive hold. Access to a second central office line while using this feature is not possible.

To enable the exclusive hold feature for central office lines that do not appear on a telephone, enter:

[FF1], 2#, 1#, 10#, 0#

To enable the system hold feature for central office lines that do not appear on a telephone, enter:

[FF1], 2#, 1#, 10#, 1#

NOTE:

This hold feature applies to Single-Line Telephones and/or digital telephones that do not have a dedicated keys for a central office line(s).

Single Line Telephone Flash Control
[FF1], 2#, 1#, 11#, (0 or 1)#

To provide differing capabilities for SLT hookflash operation, this feature can be set to retrieve DBS dial tone, or to retrieve a central office line caller that has been placed on hold from this telephone.

To activate the DBS intercom dial tone as a result of a SLT hookflash, enter:

[FF1], 2#, 1#, 11#, 0#

To retrieve a central office line caller that has been previously placed on hold at this telephone (via a hookswitch flash), enter:

[FF1], 2#, 1#, 11#, 1#

NOTE:

When this feature is set for DBS system dial tone, a call placed on hold at another telephone can be retrieved by dialing *79* and the extension number that originally placed the call on hold.

Extension Number Digits
[FF1], 2#, 1#, 12#, (0 or 1)#

When installing more than 60 telephones, you must use a **3-digit** (100-699) extension number dialing plan. For sites using fewer than 60 telephones, **2-digit** (10-69), or 3-digit extension numbers can be used.

To set the DBS for 2 digit extension number lengths, enter:

[FF1], 2#, 1#, 12#, 0##

To set the DBS for 3 digit extension number lengths, enter:

[FF1], 2#, 1#, 12#, 1##

NOTE:

This setting can adversely affect any other DBS setting that is based on extension numbers. Examples of this are program entries for DSS/BLF keys and call forwarding.
This program option requires a confirming #, at the conclusion of the programming sequence.

Alternate Attendant
[FF1], 2#, 1#, 13#, (0 or 1)#

The alternate attendant extension will have attendant features and can receive overflow intercom calls if the primary attendant extension is busy.

To enable an alternate extension, enter:

[FF1], 2#, 1#, 13#, 0#

To have no provision for an alternate attendant, enter:

[FF1], 2#, 1#, 13#, 1#

NOTE:

This feature is not available if the *"Attendant Feature Package"* is used with CPC-B 2.00 or later software.
Calls transferred by an extension, that recall to the extension, and then are not answered, will transfer to the extension set as the attendant at this address.
The time for this transfer procedure is set at address [FF1], 3#, 9#.

Attendant Intercom Calling
[FF1], 2#, 1#, 14#, (0 or 1)#

Intercom calls from an attendant telephone can be established with a ring tone, or directly by voice. After the connection is established, the attendant can change from one to the other by dialing "1".

To set attendant intercom calls to "tone" calling, enter:

[FF1], 2#, 1#, 14#, 0#

To set attendant intercom calls to "voice" calling, enter:

[FF1], 2#, 1#, 14#, 1#

NOTE:

An alert tone for voice calling is set at address [FF1], 2#, 1#, 16#.
In CPC-B software versions earlier than 2.00, if a SLT transfers a central office line call to an extension set for call forward no answer, or call forward busy, no answer, the call will not transfer if addresses [FF1], 2#, 1#, 14 & 15# are set for tone calling (0#). If this setting is required, transferring a central office line call from a SLT to an extension set as such can be completed by dialing an "8" after the extension number to which the caller is to be transferred is dialed. CPC-B software versions newer than 2.05 do not require the "8" to be dialed after the extension number is dialed. See Technotes 9 & 12 (March 1992) for complete information.
If this address is set to [FF1], 2#, 1#, 14#, 1# ("voice" calling), as opposed to ring tone, and a Voice Announce Unit (model VB-43708) is connected to the DBS, the VAU will not answer an intercom call to it unless the caller dials a "1" after the VAU extension number. See Technote 14 (March 1992) for complete information.

Extension Intercom Calling
[FF1], 2#, 1#, 15#, (0 or 1)#

Intercom calls from an extension (non attendant) telephone can be established with a ring tone or by voice. After the connection is established, the extension user can change from one to the other by dialing "1".

To set extension intercom calls to "tone" calling, enter:

[FF1], 2#, 1#, 15#, 0#

To set extension intercom calling to "voice" calling, enter:

[FF1], 2#, 1#, 15#, 1#

NOTE:

An alert tone for voice calling is set at address [FF1], 2#, 1#, 16#.
In CPC-B software versions earlier than 2.00, if a SLT transfers a central office line call to an extension set for call forward no answer, or call forward busy, no answer, the call will not transfer if addresses [FF1], 2#, 1#, 14 & 15# are set for tone calling (0#). If this setting is required, transferring a central office line call from a SLT to an extension set as such can be completed by dialing an "8" after the extension number to which the caller is to be transferred is dialed. CPC-B software versions newer than 2.05 do not require the "8" to be dialed after the extension number is dialed. See Technotes 9 & 12 (March 1992) for

If this address is set to [FF1], 2#, 1#, 15#, 1# ("voice" calling), as opposed to ring tone, and a Voice Announce Unit (model VB-43708) is connected to the DBS, the VAU will not answer an intercom call to it unless the caller dials a "1" after the VAU extension number. See Technote 14 (March 1992) for complete information.

Alert Tone for Voice Calls
[FF1], 2#, 1#, 16#, (0 or 1)#

An initial splash tone for "voice" intercom calls can be sounded for 0.5 second before the caller's audio path is connected.

Intercom calls can be set for no initial alert tone by entering:

[FF1], 2#, 1#, 16#, 0#

Intercom calls can be set for an initial alert tone by entering:

[FF1], 2#, 1#, 16#, 1#

Alert Tone for Busy Override & Off Hook Voice Announce [FF1], 2#, 1#, 17#, (0 or 1)#

If an active central office call is interrupted by another caller, on an extension set for busy override, an alert tone can precede the interruption.

To have no alert tone preceding an interruption of an active central office line call, enter:

[FF1], 2#, 1#, 17#, 0#

To provide an alert tone preceding an interruption of an active central office line call, enter:

[FF1], 2#, 1#, 17#, 1#

NOTE:

A conference call, or a conversation on a telephone which has off hook voice announce enabled, cannot be interrupted by the busy override feature.
Extensions to be interrupted, are set at address [FF3], (1-144)#, 10#.

System Installation Area Code [FF1], 2#, 1#, 18#, (0 or 1)#

When a "1" must be dialed preceding an area code to make a long distance call, this option must be set.

If long distance dialing requires the dialing of a "1" prior to the area code, enter:

[FF1], 2#, 1#, 18#, 0#

If long distance dialing does not require the dialing of a "1" prior to dialing an area code, enter:

[FF1], 2#, 1#, 18#, 1#

NOTE:

This setting must be enabled when toll restriction and/or LCR is used.
Toll restriction programming is set with [FF7] addresses.
Least cost routing programming is set with [FF8] addresses.

SSD Name Display
[FF1], 2#, 1#, 19#, (0 or 1)#

Five or ten names can be displayed on the LCD telephone directory at once. When 10 are chosen, the maximum length for each of the names is limited to 7 characters.

To set LCD directories for 5 name capability, enter:

[FF1], 2#, 1#, 19#, 0#

To set LCD directories for 10 name capability, enter:

[FF1], 2#, 1#, 19#, 1#

NOTE:

To restrict a certain block of system speed dial numbers, see address [FF1], 2#, 1#, 4#.
To enable or disable the display of System speed dial numbers see address [FF1], 2#, 1#, 5#.
To assign a name to a system speed dial number, see address [FF6], 2#, (00-89)#.
To assign a number to a system speed dial bin, see address [FF10], 1#, (00-89)#.

Voice Mail Busy Tone
[FF1], 2#, 1#, 21#, (0 or 1)#

The DBS can be set to send a busy tone or to send silence to a voice-mail port(s) at the conclusion of a call. To set the DBS to send silence at the conclusion of a voice mail call, enter:

[FF1], 2#, 1#, 21#, 0#

To set the DBS to send a busy tone at the conclusion of a voice mail call, enter:

[FF1], 2#, 1#, 21#, 1#

Transfer Ring Pattern
[FF1], 2#, 1#, 22#, (0 - 6)#
(CPC-A, ver. 3.21 or newer)

To utilize variable ring patterns for a transferred call (specifically to a modem or SLT user requiring ID of a transferred call), this option must be used.

To set the transfer ring pattern to .4 sec. on / 3.6 sec. off, enter:

[FF1], 2#, 1#, 22#, 0#

To set the transfer ring pattern to three .8 sec. on .2 sec. off bursts / 1.0 sec. off, enter:

[FF1], 2#, 1#, 22#, 1#

To set the transfer ring pattern to .8 sec. on burst / .2 sec. off, .8 sec. on / 2.2 sec. off enter:

[FF1], 2#, 1#, 22#, 2#

To set the transfer ring pattern to .8 sec. on / 2.2 sec. off, enter::

[FF1], 2#, 1#, 22#, 3#

To set the transfer ring pattern to .8 sec. on / 3.2 sec. off, enter:

[FF1], 2#, 1#, 22#, 4#

To set the transfer ring pattern to .8 sec. on / 5.2 sec. off, enter:

[FF1], 2#, 1#, 22#, 5#

To set the transfer ring pattern to .8 sec. on / 3.2 sec. off / .8 sec. on / 7.2 sec. off, enter:

[FF1], 2#, 1#, 22#, 6#

ATTENDANT OVERFLOW FOR PRIMARY ATTENDANT
[FF1], 2#, 1#, 22#, (1-15)#
(CPC-B, VER. 1.0X ONLY)

To place a limit on the number of incoming calls that can be stacked to the first attendant, a value must be placed in this program. Calls exceeding the set limit are automatically transferred to other extensions. The day and night delayed ring tables determine which extension(s) receive overflow calls.

To set the attendant overflow feature to 8 calls, for example, enter:

[FF1], 2#, 1#, 22#, 8#

NOTE:

Hold recalls, transferred recalls, and reversion calls are included in this number. Hold recalls are dependent on attendant and extension hold timers found in addresses [FF1] 3#, 2# & 3#.
Transfer recalls are dependent on attendant and extension transfer timers found in addresses [FF1] 3#, 4# & 5#.
Hunt group recalls are dependent on attendant and extension hunt group timers found in addresses [FF1] 3#, 6# & 7#.

Reversion recalls are dependent on attendant reversion timers found in program address [FF1] 3#, 2# & 10#.

The attendant telephone is not included as an overflow position in the delayed ring table(s).

ATTENDANT FEATURE PACKAGE OPTIONS (CPC-B, VER. 2.09 OR NEWER)

DELAYED RING
[FF1], 2#, 1#, 23#, (0 OR 1)#

An alternate central office line ring pattern is assigned in the delayed ringing tables.

To disallow the use of delayed ring assignments in the DBS, enter:

[FF1], 2#, 1#, 23#, 0#

To allow the use of delayed ring assignments in the DBS, enter:

[FF1], 2#, 1#, 23#, 1#

NOTE:

Delayed day ring programming is set at address [FF4], 5#.
Delayed night ring programming is set at address [FF4], 6#.

SECOND ATTENDANT POSITION
[FF1], 2#, 1#, 24#, (101-699) #

To set any DBS extension number to be the second attendant position, this option must be used.

To set extension number 103 to be attendant position 2, for example, enter:

[FF1], 2#, 1#, 24#, 103#

To reset the second attendant position to the default initialized value, press [FF1], 2#, 1#, 24#, 101#, ON/OFF.

NOTE:

To clear the second attendant position from extension number 101, set the program address [FF1], 2#, 1#, 24#, [CONF], [ON/OFF].

The only way the second attendant position can be cleared is to have a display phone installed on the port.

The extension number must be a number that is valid for the site.

Installation of Attendant feature package software involves the removal of EPROM chip 1 from the CPC-B card, and substitution of the chip with one specifically designed with the special Attendant features. Be sure the new EPROM is installed in the proper direction. See Technote 4 (September 1991), for complete information.

Third Attendant Position
[FF1], 2#, 1#, 25#, (101-699)#

To set any DBS extension number to be the third attendant, this option must be used.

To set extension 104 to be attendant position 3, for example, enter:

[FF1], 2#, 1#, 25#, 104#

To reset the third attendant position to the default initialized value, press [FF1], 2#, 1#, 25#, [CONF], [ON/OFF].

NOTE:

Installation of Attendant feature package software involves the removal of EPROM chip 1 from the CPC-B card, and substitution of the chip with one specifically designed with the special Attendant features. Be sure the new EPROM is installed in the proper direction. See Technote 4 (September 1991), for complete information.

Fourth Attendant Position
[FF1], 2#, 1#, 26#, (101-699) or (11-69)#

To set any DBS extension number to be the fourth attendant, this option must be used.

To set extension 105 to be attendant position 4, for example, enter:

[FF1], 2#, 1#, 26#, 105#

To reset the fourth extension position to the default initialized value, press [FF1], 2#, 1#, 26#, [CONF], [ON/OFF].

NOTE:

Installation of Attendant feature package software involves the removal of EPROM chip 1 from the CPC-B card, and substitution of the chip with one specifically designed with the special Attendant features. Be sure the new EPROM is installed in the proper direction. See Technote 4 (September 1991), for complete information.

Attendant Transfer Extension Position
[FF1], 2#, 1#, 27#, (101-699)#

To set any extension number to be the overflow position to which calls will flow when the attendant(s) are all busy, this option must be used.

To set extension 106, for example, to be the overflow extension for the attendant(s), enter:

[FF1], 2#, 1#, 27#, 106#

To reset the attendant overflow extension position to the default initialized value, press [FF1], 2#, 1#, 27#, [CONF], ON/OFF.

NOTE:

This extension cannot be a pilot number. Installation of Attendant feature package software involves the removal of EPROM chip 1 from the CPC-B card, and substitution of the chip with one specifically designed with the special Attendant features. Be sure the new EPROM is installed in the proper direction. See Technote 4 (September 1991), for complete information.

Attendant Override
[FF1], 2#, 1#, 28#, (0 or 1)#

To set any attendant to be able to override an existing conversation on a non attendant telephone, this option must be used.

To disable all designated attendant positions to override existing conversations on non attendant telephones, enter:

[FF1], 2#, 1#, 28#, 0#

To enable all designated attendant positions to override existing conversations on non attendant telephones, enter:

[FF1], 2#, 1#, 28#, 1#

NOTE:

Busy override splash tone is set with program address [FF1], 2#, 1#, 17#. Installation of Attendant feature package software involves the removal of EPROM chip 1 from the CPC-B card, and substitution of the chip with one specifically designed with the special Attendant features. Be sure the new EPROM is installed in the proper direction. See Technote 4 (September 1991), for complete information.

Attendant LED Alarm Indication
[FF1], 2#, 1#, 29#, (0 or 1)#

To set an FF key that has been designated as an alarm key on an attendant(s) telephone to light, this option must be used.

To disable the alarm key(s) on attendant telephones from lighting, enter:

[FF1], 2#, 1#, 29#, 0#

To enable the alarm key(s) on attendant telephones to light, enter:

[FF1], 2#, 1#, 29#, 1#

NOTE:

Installation of Attendant feature package software involves the removal of EPROM chip 1 from the CPC-B card, and substitution of the chip with one specifically designed with the special Attendant features. Be sure the new EPROM is installed in the proper direction. See Technote 4 (September 1991), for complete information.

End of Attendant Feature Package Options

Extension (BLF) Delayed Ring
[FF1], 2#, 1#, 30#, (0 or 1)#
(CPC-B, ver. 2.00 or newer)

When a ringing extension is not answered, calls can be distributed to other extensions on the basis of extension delayed ring programming.

To disable the extension delayed ring option, enter:

[FF1], 2#, 1#, 30#, 0#

To enable the extension delayed ring option, enter:

[FF1], 2#, 1#, 30#, 1#

Analog Transfer Ring Pattern
[FF1], 2#, 1#, 31#, (0-6)#
(CPC-B, ver. 2.11 or newer)

This feature is used to set the transfer ring signal pattern for devices connected to an analog extension port of the DBS. Any of seven different ring pattern can be chosen.

	Timer
0#	.5 Seconds ON / 3.5 Seconds OFF
1#	3.0 Seconds ON/ 1.0 Second OFF
2#	2.0 Seconds ON / 2.0 Seconds OFF
3#	1.0 Second ON /2.0 Seconds OFF
4#	1.0 Second ON / 3.0 Seconds OFF
5#	1.0 Second ON / 5.0 Seconds OFF
6#	1.0 Second ON / 7.0 Seconds OFF

MULTIPLE DID
[FF1], 2#, 1#, 32#, (0 OR 1)#
(CPC-B, VER. 3.00 OR NEWER)

Four digit Direct Inward Dial numbers can be set to ring at one extension port, or at multiple extension ports.

To set DID numbers to only ring at one extension, enter:

[FF1], 2#, 1#, 32#, 0#

To set DID numbers to ring at multiple extensions, enter:

[FF1], 2#, 1#, 32#, 1#

NOTE:

When this feature is set to "1", all extension ports that have a DID number assigned will simultaneously ring on an inbound Central Office call. If the setting of this feature is "0", and a DID number has been assigned to multiple extension ports, only the lowest number extension port will ring.
Also, if this feature is set to "1", and multiple extension ports have a DID number assigned, but some or all of them are call forwarded, ONLY the lowest extension port number will call forward after the call forward timer expires. The remaining extension ports will ring from the DID assignment until the call forwarding has started.
If this feature is set to "1", and multiple extension ports have a DID number assigned, and one (not the lowest port number) is call forwarded, the remaining extension ports will ring from the DID assignment until the call forwarding has started.

MULTIPLE DID/DNIS
[FF1],2#,1#,32#,(0-1)#
CPC-B, VER. 4.00 OR NEWER

This programming address controls two functions.
If only analog trunks are used, a *1* turns on multiple DID numbering. Multiple DID numbering allows the assignment of one DID number to multiple extensions. If one DID/DNIS number is assigned to multiple stations, the stations ring simultaneously when the DID or DNIS number is dialed.
If T1 trunks are used, a *1* also turns on DNIS (Dialed Number Identification Service). DNIS is available only with T1 trunks. More than one DNIS number can be assigned to a single extension.

OPTIONS

0=Off
1=On

PAGE DURATION
[FF1] 2#, 1#, 33#, (0 OR 1)#
(CPC-B, VER. 3.00 OR NEWER)

The option to set the duration that the page circuit will be active can be set for a defined or unlimited time.

To set the page duration time to unlimited, enter:

[FF1], 2#, 1#, 33#, 0#

To limit the page duration time to 60 seconds, enter:

[FF1], 2#, 1#, 33#, 1#

SLT Disa Ring Pattern
[FF1], 2#, 1#, 34#, (0 or 1)#
(CPC-B, ver. 3.00 or newer)

The ring pattern to a device that is connected to a Panasonic ringer box, and receives an inbound DISA call can be set to differing patterns. The pattern can be set to a one second on, three second off ring burst, or it can follow any of the patterns found in the normal Central Office transfer ring patterns found in [FF1], 2#, 1#, 22#.

To set the SLT DISA ring pattern to 1.0 sec, on / 3.0 sec off, enter:

[FF1], 2#, 1#, 34#, 0#

To set the SLT DISA ring pattern to be the same as the Central Office transfer ring pattern setting, enter:

[FF1], 2#, 1#, 34#, 1#

Parity Check
[FF1], 2#, 2#, 1#, (0 or 1)#

This part of the communication parameters checks for errors in the transmission of data for SMDR, application products, and local/remote programming.

To disable the parity check for all transmission of data through the SMDR port, enter:

[FF1], 2#, 2#, 1#, 0#

To set the parity check for all transmission of data through the SMDR port, enter:

[FF1], 2#, 2#, 1#, 1#

NOTE:

Be sure to properly set all communication programming addresses when modifying any single address value. Communication parameters are set with addresses that are found at [FF1], 2#, 2#, 1 through 10#.

Odd/Even Parity
[FF1], 2#, 2#, 2#, (0 or 1)#

If the parity check has been set, this option determines whether the check is based on an even count or an odd count.

To set the parity check for an odd value, enter:

[FF1], 2#, 2#, 2#, 0#

To set the parity check for an even value, enter:

[FF1], 2#, 2#, 2#, 1#

NOTE:

Be sure to properly set all communication programming addresses when modifying any single address value.

Communication parameters are set with addresses that are found at [FF1], 2#, 2#, 1 through 10#.

Data Transmission Speed (Baud Rate)
[FF1], 2#, 2#, 3#, (1-4)#

The data transmission speeds between the DBS SMDR port and peripheral equipment can be set in a range from 300 bits per second to 9600 bits per second.

To set the data transmission speed to 300 bps, enter:

[FF1], 2#, 2#, 3#, 1#

To set the data transmission speed to 1200 bps, enter:

[FF1], 2#, 2#, 3#, 2#

To set the data transmission speed to 4800 bps, enter:

[FF1], 2#, 2#, 3#, 3#

To set the data transmission speed to 9600 bps, enter:

[FF1], 2#, 2#, 3#, 4#

NOTE:

Be sure to properly set all communication programming addresses when modifying single address value.

Communication parameters are set with addresses that are found at [FF1], 2#, 2#, 1 through 10#.

Stop Bit Length
[FF1], 2#, 2#, 4#, (1-3)#

This option sets the length of the stop-bit for transmitted data.

To set the length of the stop bit data to 1 bit, enter:

[FF1], 2#, 2#, 4#, 1#

To set the length of the stop bit data to 1.5 bits, enter:

[FF1], 2#, 2#, 4#, 2#

To set the length of the stop bit data to 2 bits, enter:

[FF1], 2#, 2#, 4#, 3#

NOTES:

Be sure to properly set all communication addresses when modifying any single address value.

Communication parameters are set with addresses that are found at [FF1], 2#, 2#, 1 through 10#.

Data Length
[FF1], 2#, 2#, 5#, (1-4)#

Sets the length of the transmitted data string at 5 to 8 bits.

To set the length of the data string at 5 bits, enter:

[FF1], 2#, 2#, 5#, 1#

To set the length of the data string at 6 bits, enter:

[FF1], 2#, 2#, 5#, 2#

To set the length of the data string at 7 bits, enter:

[FF1], 2#, 2#, 5#, 3#

To set the length of the data string at 8 bits, enter:

[FF1], 2#, 2#, 5#, 4#

NOTES:

Be sure to properly set all communication addresses when modifying any single address value.

Communication parameters are set with addresses that are found at [FF1], 2#, 2#, 1 through 10#.

SMDR Printing Mode 1 Outbound & Inbound [FF1], 2#, 2#, 6#, (0 or 1)#

The SMDR printer can record data for outgoing calls only or both outbound and inbound calls.

To set the SMDR to record only outbound call information, enter:

[FF1], 2#, 2#, 6#, 0#

To set the SMDR to record inbound and outbound call information, enter:

[FF1], 2#, 2#, 6#, 1#

NOTES:

The system must be in the SMDR mode so that the printer can provide usable SMDR data. This is done by performing the following action from the attendant extension: [ON/OFF], #, 93, [ON/OFF]. All communication settings between the printer and the DBS must be matched. [FF1], 2#, 2#, 1 through 5# addresses encompass these options. Be sure to properly set all communication addresses when modifying any single address value. Communication parameters are set with addresses that are found at [FF1], 2#, 2#, 1 through 10#.
CPC-B software version 2.00 should be upgraded to version 2.05 to eliminate two intermittent potential SMDR deficiencies in recording field codes. See Technote 8 & 12 (March 1992), for complete information.

SMDR Printing Mode 2 Long-distance & local calls [FF1], 2#, 2#, 7#, (0 or 1)#

The SMDR printer can record data on long-distance calls only or on all types of outbound calls.

To record call data only on long distance calls, enter:

[FF1], 2#, 2#, 7#, 0#

To record call data on all types of outbound calls, enter:

[FF1], 2#, 2#, 7#, 1#

NOTES:

Be sure to properly set all communication programming addresses when modifying any single address value. Communication parameters are set with addresses that are found at [FF1], 2#, 2#, 1 through 10#.
CPC-B software version 2.00 should be upgraded to version 2.05 to eliminate two intermittent potential SMDR deficiencies in recording field codes. See Technotes 8 & 12 (March 1992), for complete information.

SMDR Printing Mode 3 Header Title [FF1], 2#, 2#, 8#, (0 or 1)#

Titles such as Time, Duration and CO# are printed every 60 lines if this feature is enabled.

To disable the printing of a title line on every 60th line of the SMDR report, enter:

[FF1], 2#, 2#, 8#, 0#

To set the printing of a title line on every 60th line of the SMDR report, enter:

[FF1], 2#, 2#, 8#, 1#

NOTES:

Be sure to properly set all communication addresses when modifying any single address value. Communication parameters are set with addresses that are found at [FF1], 2#, 2#, 1 through 10#. CPC-B software version 2.00 should be upgraded to version 2.05 to eliminate two intermittent potential SMDR deficiencies in recording field codes. See Technotes 8 & 12 (March 1992), for complete information.

Data Dump Mode (X ON / X OFF) [FF1], 2#, 2#, 9#, (0 or 1)#

The X-On/X-Off feature of the DBS is a "software switch" to temporarily stop the DBS from sending data out the SMDR port if the printer buffer has received more data than it can print. The ability to send a control code to the DBS can be enabled on most commercially available printers.

To disable the X-On/X-Off feature of the DBS, so that SMDR data always flows from the SMDR port, enter:

[FF1], 2#, 2#, 9#, 0#

To enable the X-On/X-Off feature of the DBS, so that SMDR data will temporarily stop flowing when the printer buffer is full, enter:

[FF1], 2#, 2#, 9#, 1#

NOTES:

Be sure to properly set all communication addresses when modifying any single address value. Communication parameters are set with addresses that are found at [FF1], 2#, 2#, 1 through 10#. CPC-B software version 2.00 should be upgraded to version 2.05 to eliminate two intermittent potential SMDR deficiencies in recording field codes. See Technotes 8 & 12 (March 1992), for complete information.

RAI Baud Rate
(CPC-B, newer than ver. 1.0X)
[FF1], 2#, 2#, 10#, (0 or 1)#

The baud rate that is used for remote programming capability can be set to 300 or 1200 baud.

To set the baud rate for remote programming capability to 300 baud, enter:

[FF1], 2#, 2#, 10#, 0#

To set the baud rate for remote programming capability to 1200 baud, enter:

[FF1], 2#, 2#, 10#, 1#

NOTES:

When a remote administration "B" card is used, either baud rate setting can be utilized. However when a remote administration "B" card is used with a dual DBS having a voice mail system connected to an analog extension port, the baud rate must be set to 300 bps. See Technote 3 (April 1991) for complete information.
When a remote administration "A" card is used, only the 300 baud rate setting can be used. Parity check, even or odd parity, and stop-bit length parameters are fixed on the CPC-B card. The use of peripheral equipment with this card necessitates that the equipment communication parameters must be able to be modified. Be sure to properly set all communication addresses when modifying any single address value. Communication parameters are set with addresses that are found at [FF1], 2#, 2#, 1 through 10#.

PBX Access Code(s)
[FF1], 2#, 3#, (1-8)#, (0-999 or 0*-99*)#

The DBS has the capability to dial 8 different PBX access codes. These codes can be one, two, or three digits in length. The purpose of this feature is so that when the DBS is installed behind a PBX or Centrex, and toll restriction has been set on the DBS, the DBS will disregard the PBX access code digit(s) as part of the dialed number.

To store "9" as the first PBX access code (for example), enter:

[FF1], 2#, 3#, 1#, 9#

To set the second PBX access code of "8" (for example), enter:

[FF1], 2#, 3#, 2#, 8#

To reset the PBX dial access code feature to the default initialized value, press [FF1], 2#, 3#, (1-8)#, [CONF]#, [ON/OFF].

NOTES:

Use [FF11] to store "*" as a wild card dialed digit. Central office line type is set with program address [FF2], (1-64)#, 10#.

The first parameter of the program code (1-8), identifies the number of the access code. The second parameter of the program code (0-999 or 0*-99*), identifies the actual code required to access the PBX or Centrex.

Automatic Pause Position For PBX Access Codes 1 Through 8 [FF1], 2#, 3#, (9-18)#, (1-3)#

To automatically insert a pause in the PBX access code dialing (and SSD, PSD codes), after the output of the first and/or second, and/or third code number, use this option. The purpose for the use of this pause is that it may take several seconds to connect with a central office telephone line.

To set a pause after automatic outpulse of the first dialed digit, (which is assumed to be "1" in this example), enter:

[FF1], 2#, 3#, 9#, 1#

To set a pause after automatic outpulse of the second dialed digit, (which is assumed to be "2" in this example), enter:

[FF1], 2#, 3#, 10#, 2#

To set a pause after automatic outpulse of the third dialed digit, (which is assumed to be "3" in this example), enter:

[FF1], 2#, 3#, 11#, 3#

To set a pause after automatic outpulse of the fourth dialed digit, (which is assumed to be "4" in this example), enter:

[FF1], 2#, 3#, 12#, 4#

To set a pause after automatic outpulse of the fifth dialed digit, (which is assumed to be "5" in this example), enter:

[FF1], 2#, 3#, 13#, 5#

To set a pause after automatic outpulse of the sixth dialed digit, (which is assumed to be "6" in this example), enter:

[FF1], 2#, 3#, 14#, 6#

To set a pause after automatic outpulse of the seventh dialed digit, (which is assumed to be "7" in this example), enter:

[FF1], 2#, 3#, 15#, 7#

To set a pause after automatic outpulse of the eighth dialed digit, (which is assumed to be "8" in this example), enter:

[FF1], 2#, 3#, 16#, 8#

To reset the automatic pause for PBX access code dialing to the default initialized value, press [FF1], 2#, 3#, [CONF]#, [ON/OFF].

NOTES:

The pause timer value is set with address [FF1], 3#, 12#.

Central office line flash timer options are set at address [FF2], (1-64)#, 13#.

Ring Patterns For UNA Terminals (M, C, & B) [FF1], 2#, 4#, 1#, (0 or 1)#

The ring pattern for the universal night answer (UNA) relay-terminals can be set for a continuous or intermittent ring burst.

To set the ring pattern for a 1 second on/ 3 second off pattern, enter:

[FF1], 2#, 4#, 1#, 0#

To set the ring pattern for a continuous ring burst, enter:

[FF1], 2#, 4#, 1#, 1#

NOTES:

When using a non central office sound source for the buzzer, select 1 second on/ 3 second off to simulate an incoming ring. See section 300, Installation Instructions, for more information on UNA.

To establish a central office line ring over external page speakers when the DBS is in the day mode, (and CPC-A software is being used) see address [FF4], 1#, 73#. To establish a central office line ring over external page speakers when the DBS is in the night mode, (and CPC-A software is being used) see address [FF4], 2#, 73#. To establish a central office line ring over external page speakers when the DBS is in the day mode, (and CPC-B software is being used) see address [FF4], 1#, 145#. To establish a central office line ring over external page speakers when the DBS is in the night mode, (and CPC-B software is being used) see address [FF4], 1#, 145#.

External Page Interface (EPI) Control For Paging Groups [FF1], 2#, 4#, (2-9)#, (0 or 1)#

To enable access to external paging groups 0 through 7, the relay(s) must be activated.

	Page Group		Page Group
2#	00	6#	04
3#	01	7#	05
4#	02	8#	06
5#	03	9#	07

To reset the external page interface to the default initialized value press, [FF1], 2#, 4#, [CONF], [ON/OFF].

Extension Class Of Service [FF1], 2#, 5#, (1-8)#, (1-20)#, (0 or 1)# (CPC-B, ver. 3.00 or newer)

Extension class of service provides a method to set defined groups of extension features to a class of service. This class of service is then assigned to an extension or group of extensions, as desired. The 20 extension features can be assigned in any order and in any amount to any of the 8 classes of service.

The 20 allowable features that can be classified into any class of service grouping are:

	Feature
1	Dial Tone On/Off (#50)
2	Head/Handset Exchange (#51)
3	BGM On/Off (#53)
4	Absence Message Set/Reset (71)
5	Call Forward Set/Reset (72)
6	Do Not Disturb (73)
7	Station Lockout (74)
8	Park Access (75)
9	Park Pick Up (76)
10	Meet Me Answer (77)
11	UNA Pickup (78)
12	Direct Pick Up (79)
13	Group Pick Up (70)
14	Tone/Voice Mode (1)
15	Message Waiting Set (2)
16	Busy Override (4)
17	Call Waiting (3)
18	Off Hook Voice Announce (5)
19	Central Office Call Queuing (2)
20	Single Line Telephone Transfer (8)

To set the extension class of service to the default initialized value, press [FF1], 2#, 5#, (1-8)#, (1-20)#, 0#, [ON/OFF].

NOTE:

The default value of this feature sets full restriction on all classes of service. The extension programming for this feature, [FF3], (001-144)#, 35#, provides for all features to be available on all extension ports. When the DBS is in the default condition, the extension programming of this feature takes precedence.

Verified Forced Account Codes [FF1], 2#, 6#, (1-100)#, (0001-9999)# (CPC-B, ver. 3.00 or newer)

There are 100 verified forced account codes available for use. A four digit account code ranging from 0001 to 9999 is checked against a list of up to 100 preset values. If the value of the code matches one of the preset values, Central Office line access is granted.

For example, to set verified forced account code 1 to a value of 8888, enter:

[FF1], 2#, 6#, 1#, 8888#

For example, to set verified forced account code 56 to a value of 5656, enter:

[FF1], 2#, 6#, 56#, 5656#

To reset the verified forced account code parameter to the default initialized value, press [FF1], 2#, 6#, (1-100)#, [CONF], [ON/OFF].

NOTES:

Forced Account codes found in earlier versions of software have been replaced by this feature. The account code feature (non forced) remains.

A verified forced account code of 0000 is invalid.

When viewing an SMDR report, the verified forced account that was used to access a Central Office line will appear starting in position 70 of the call record line.

Toll Restriction For Verified Forced Account Codes
[FF1], 2#, 6#, (1-100)#, 2#, (0-7)#
(CPC-B, ver. 3.00 or newer)

Verified forced account codes can have a toll restriction class of service assigned to them. A caller that uses a particular account code with a toll restriction class of service assigned to it would then be allowed to dial any telephone number allowed under the toll restriction class of service for the verified forced account code. The extension toll restriction class of service in this case would be overridden.

To set verified account code number 5, for example, to have a toll restriction class of "type 0", enter:

[FF1], 2#, 6#, 5#, 2#, 0#

To set verified account code number 40, for example, to have a toll restriction class of "type 1", enter:

[FF1], 2#, 6#, 40#, 2#, 1#

To set verified account code number 22, for example, to have a toll restriction class of "type 2", enter:

[FF1], 2#, 6#, 22#, 2#, 2#

To set verified account code number 100, for example, to have a toll restriction class of "type 3", enter:

[FF1], 2#, 6#, 100#, 2#, 3#

To set verified account code number 63, for example, to have a toll restriction class of "type 4", enter:

[FF1], 2#, 6#, 63#, 2#, 4#

To set verified account code number 36, for example, to have a toll restriction class of "type 5", enter:

[FF1], 2#, 6#, 36#, 2#, 5#

To set verified account code number 44, for example, to have a toll restriction class of "type 6", enter:

[FF1], 2#, 6#, 44#, 2#, 6#

To set verified account code number 61, for example, to have a toll restriction class of "type 7", enter:

[FF1], 2#, 6#, 61#, 2#, 7#

Automatic Night Mode Start Time (24 Hour Format) [FF1], 3#, 1#, (0000-2359)#

This option sets a time for the DBS to automatically switch from day to night mode.

To set a night mode start time of 8:02 pm, (for example) enter:

[FF1], 3#, 1#, 2002#

To set a night mode start time of midnight, (for example) enter:

[FF1], 3#, 1#, 0000#

To disable the automatic night mode start time, and reset it to the default initialized value press, [FF1], 3#, 1#, [CONF], [ON/OFF].

NOTE:

Automatic night start time is dependent on the accuracy of the DBS clock. See address [FF1], 1#, 2#, HHMM.

Attendant Hold Recall Timer [FF1], 3#, 2#, (0-12)#

A central office line that has been placed on hold at the attendant extension, will recall that attendant extension in the amount of time set in this feature.

	Time		Time
0#	No Recall	7#	140 Seconds
1#	20 Seconds	8#	160 Seconds
2#	40 Seconds	9#	180 Seconds
3#	60 Seconds	10#	200 Seconds
4#	80 Seconds	11#	220 Seconds
5#	100 Seconds	12#	240 Seconds
6#	120 Seconds		

Extension Hold Recall Timer
[FF1], 3#, 3#, (0-12)#

A central office line that has been placed on hold by a non-attendant extension, will recall that extension in the amount of time set in this feature.

	Time		Time
0#	No Recall	7#	140 Seconds
1#	20 Seconds	8#	160 Seconds
2#	40 Seconds	9#	180 Seconds
3#	60 Seconds	10#	200 Seconds
4#	80 Seconds	11#	220 Seconds
5#	100 Seconds	12#	240 Seconds
6#	120 Seconds		

NOTE:

When a central office line call is placed on hold at an extension, and the call is not answered, the call will recall the extension. If the call is not answered at the original holding extension, the call will transfer to the attendant extension(s).

Attendant Transfer Recall Timer
[FF1], 3#, 4#, (0-12)#

A central office line call transferred to an extension by the attendant, that is left unanswered, will recall to the attendant extension in the amount of time set in this feature.

	Time		Time
0#	No Recall	7#	140 Seconds
1#	20 Seconds	8#	160 Seconds
2#	40 Seconds	9#	180 Seconds
3#	60 Seconds	10#	200 Seconds
4#	80 Seconds	11#	220 Seconds
5#	100 Seconds	12#	240 Seconds
6#	120 Seconds		

Extension Transfer Recall Timer [FF1], 3#, 5#, (0-12)#

A central office line call transferred to another extension that is left unanswered, will recall to the transferring extension in the amount of time set in this feature.

	Time		Time
0#	No Recall	7#	140 Seconds
1#	20 Seconds	8#	160 Seconds
2#	40 Seconds	9#	180 Seconds
3#	60 Seconds	10#	200 Seconds
4#	80 Seconds	11#	220 Seconds
5#	100 Seconds	12#	240 Seconds
6#	120 Seconds		

NOTE:

When a central office line call is transferred to an extension, and the call is not answered, the call will recall to the transferring extension. If the call is not answered at the original transferring extension, the call will transfer to the attendant extension(s).

Attendant Hunt Group Recall Timer [FF1], 3#, 6#, (0-12)#

A central office line call transferred to a hunt group by the attendant, that is left unanswered, will recall to the attendant extension in the amount of time set in this feature.

	Time		Time
0#	No Recall	7#	140 Seconds
1#	20 Seconds	8#	160 Seconds
2#	40 Seconds	9#	180 Seconds
3#	60 Seconds	10#	200 Seconds
4#	80 Seconds	11#	220 Seconds
5#	100 Seconds	12#	240 Seconds
6#	120 Seconds		

Extension Hunt Group Recall Timer [FF1], 3#, 7#, (0-12)#

A central office line call transferred to a hunt group by a non attendant extension that is left unanswered, will recall to the extension in the amount of time set in this feature.

	Time		Time
0#	No Recall	7#	140 Seconds
1#	20 Seconds	8#	160 Seconds
2#	40 Seconds	9#	180 Seconds
3#	60 Seconds	10#	200 Seconds
4#	80 Seconds	11#	220 Seconds
5#	100 Seconds	12#	240 Seconds
6#	120 Seconds		

Attendant Park Hold Recall Timer
[FF1], 3#, 8#, (0-12)#

A central office line call that is parked by the attendant in any of the 10 park orbits, will recall to the attendant in the amount of time set in this feature.

	Time		Time
0#	No Recall	7#	140 Seconds
1#	20 Seconds	8#	160 Seconds
2#	40 Seconds	9#	180 Seconds
3#	60 Seconds	10#	200 Seconds
4#	80 Seconds	11#	220 Seconds
5#	100 Seconds	12#	240 Seconds
6#	120 Seconds		

Extension Park Hold Recall Timer
[FF1], 3#, 9#, (0-12)#

A central office line call that is parked by a non attendant extension in any of the 10 park orbits, will recall to the extension in the amount of time set in this feature.

	Time		Time
0#	No Recall	7#	140 Seconds
1#	20 Seconds	8#	160 Seconds
2#	40 Seconds	9#	180 Seconds
3#	60 Seconds	10#	200 Seconds
4#	80 Seconds	11#	220 Seconds
5#	100 Seconds	12#	240 Seconds
6#	120 Seconds		

Attendant Call Reversion Timer
[FF1], 3#, 10#, (0-12)#

This timer determines how long a recalling hold call will re-ring the attendant(s).

	Time		Time
0#	No Recall	7#	140 Seconds
1#	20 Seconds	8#	160 Seconds
2#	40 Seconds	9#	180 Seconds
3#	60 Seconds	10#	200 Seconds
4#	80 Seconds	11#	220 Seconds
5#	100 Seconds	12#	240 Seconds
6#	120 Seconds		

NOTES:

Extension recalls will ring at the extension for the length of time set in this option before reverting to the attendant.

This feature is not available when the DBS is in the night setting.

Unsupervised Conference Timer
[FF1], 3#, 11#, (0-15)#

The length of time a conference call can continue between 2 central office lines, after a DBS extension drops out is set with this program. At the conclusion of the timer, the conferenced central office lines will automatically disconnect. This timer also applies to outbound central office line calls made through the DISA line.

	Time		Time
0#	Delete	8#	40 Minutes
3#	5 Minutes	9#	45 Minutes
2#	10 Minutes	10#	50 Minutes
3#	15 Minutes	11#	55 Minutes
4#	20 Minutes	12#	60 Minutes
5#	25 Minutes	13#	65 Minutes
6#	30 Minutes	14#	70 Minutes
7#	35 Minutes	15#	75 Minutes

NOTES:

To allow specific central office lines to be used for unsupervised conference calls, set program address [FF2], (1-64)#, 16#. To allow specific extensions to be used for unsupervised conference calls, set address [FF3], (1-144)#, 13#.

Automatic Pause Timer
[FF1], 3#, 12#, (0-15)#

This feature is used to set the length of the pause that is automatically inserted during the dialing of the PBX access code. Each time the [REDIAL] key is pressed during the entry of PBX access code numbers, one pause time is stored. This timer also sets the pause time when a pause is inserted in a personal or system speed dial number.

	Time		Time
0#	No Pause	8#	4.0 Seconds
1#	.5 Seconds	9#	4.5 Seconds
2#	1.0 Seconds	10#	5.0 Seconds
3#	1.5 Seconds	11#	5.5 Seconds
4#	2.0 Seconds	12#	6.0 Seconds
5#	2.5 Seconds	13#	6.5 Seconds
6#	3.0 Seconds	14#	7.0 Seconds
7#	3.5 Seconds		

Central Office Line Flash Timer
[FF1], 3#, 13#, (0-10)#

This feature sets the time to release an active central office line when pressing the [FLASH] or [REDIAL] key.

	Time		Time
0#	No Flash	9#	.8 Seconds
1#	.2 Seconds	10#	.9 Seconds
2#	.3 Seconds	11#	1.5 Seconds (For future use.)
3#	.4 Seconds	12#	2.0 Seconds (For future use.)
4#	.5 Seconds	13#	2.5 Seconds (For future use.)
5#	.6 Seconds	14#	3.0 Seconds (For future use.)
8#	.7 Seconds	15#	3.5 Seconds (For future use.)

NOTE:

Single line telephones must press the hookswitch and dial "87 to activate this feature.

SLT On Hook Flash Timer
[FF1], 3#, 14#, (0-6)#

To set the central office line flash on a SLT to flash or disconnect when the hook switch is pressed, use this feature.

	No Detection	Valid Hook Flash	Disconnect
0#	<200 ms	200-500 ms	>500 ms
1#	<200 ms	200-750 ms	>750 ms
2#	<200 ms	200-1000 ms	>1000 ms
3#	<200 ms	200-1200 ms	>1200 ms
4#	<200 ms	200-1500 ms	>1500 ms
5#	<200 ms	NONE	>200 ms
6#	<200 ms	30-140 ms	>500 ms

NOTE:

After setting this timer, the DBS must be turned off to set the option.

Central Office Line Ring Cycle Detection Timer [FF1], 3#, 15#, (0-3)#

For the DBS to detect the length of time it takes for the central office to complete a full ring cycle, this detection timer must be set. If the central office has a ring cycle of 1 on and 4 off, for example, the DBS setting should be placed at 6 to account for two rings and one silent period of four second duration.

	Timer		Timer
0#	4 Seconds	2#	8 Seconds
1#	6 Seconds	3#	10 Seconds

NOTE:

If this timer is set for to short of a time period, the system will not recognize valid central office ring signals.

Inbound Ring Cycle Expansion Timer [FF1], 3#, 16#, (0-15)#

This timer expands the ring cycle to compensate for the time the DBS initially requires to detect the ring source.

	Time		Time
0#	No expansion	8#	.40 Seconds
3#	.5 Seconds	9#	.45 Seconds
2#	.10 Seconds	10#	.50 Seconds
3#	.15 Seconds	11#	.55 Seconds
4#	.20 Seconds	12#	.60 Seconds
5#	.25 Seconds	13#	.65 Seconds
6#	.30 Seconds	14#	.70 Seconds
7#	.35 Seconds	15#	.75 Seconds

NOTE:

Setting this timer for longer or shorter periods of time will cause the first audible ring cycle to be different from the source ring cycle.

Dial Pause Timer After Obtaining A Central Office Line [FF1], 3#, 17#, (0-15)#

To set a pause before the outpulse of digits after access of a central office line, use this feature.

	Time		Time
0#	1.2 Seconds	8#	8.0 Seconds
1#	1.5 Seconds	9#	9.0 Seconds
2#	2.0 Seconds	10#	10.0 Seconds
3#	3.0 Seconds	11#	11.0 Seconds
4#	4.0 Seconds	12#	12.0 Seconds
5#	5.0 Seconds	13#	13.0 Seconds
6#	6.0 Seconds	14#	14.0 Seconds
7#	7.0 Seconds	15#	15.0 Seconds

PBX Line Flash Timer [FF1], 3#, 18#, (0-10)#

The PBX flash timer sets the amount of preprogrammed time that is assigned to the [FLASH] key, for the release of a PBX line.

	Time		Time
0#	No Flash	6#	.7 Seconds
1#	.2 Seconds	7#	.8 Seconds
2#	.3 Seconds	8#	.9 Seconds
3#	.4 Seconds	9#	1.0 Seconds
4#	.5 Seconds	10#	1.1 Seconds
5#	.6 Seconds		

NOTE:

When the DBS is behind a PBX, the flash feature can be used to place a call on hold.

Call Forward/No Answer & Delayed Ring Timer [FF1], 3#, 19#, (0-15)# (CPC-B, ver 3.00 or newer)

If an extension that has been set with call forward/no answer, a call to that extension will ring for the period of time set in this feature. If the call is unanswered at the end of the timed period, the call will automatically transfer to an extension that has been designated in setting up the call forward option.

	Time		Time
0#	After 4 Seconds	8#	After 34 Seconds
1#	After 8 Seconds	9#	After 36 Seconds
2#	After 12 Seconds	10#	After 44 Seconds
3#	After 16 Seconds	11#	After 48 Seconds
4#	After 20 Seconds	12#	After 52 Seconds
5#	After 24 Seconds	13#	After 56 Seconds
6#	After 28 Seconds	14#	After 60 Seconds
7#	After 32 Seconds	15#	After 64 Seconds

Ground Start Detection Timer [FF1], 3#, 20#, (1-8)# (CPC-B, newer than ver. 1.0X)

When ground start lines are used, the DBS sends a ground signal to the central office and waits for a return signal. When a return signal is detected, the DBS starts the line connection process. If a return signal is not detected within the specified time set in this feature, the system regards the trunk as not available and sends a busy tone to the caller.

	Time		Time
1#	1 Second	5#	5 Seconds
2#	2 Second	6#	6 Seconds
3#	3 Second	7#	7 Seconds
4#	4 Second	8#	8 Seconds

NOTES:

This feature is only available with the use of a CPC-B card.

A ground-start trunk card (VB-43531) is required for ground start trunk connections. Central office line ports on this card can be configured as loop or ground start ports.

Inbound Ground Detection Timer [FF1], 3#, 21#, (0-8)# (CPC-B, newer than ver. 1.0X)

This timer determines how long a ground signal from the central office must be present in order to start the connection process. When the ground signal is detected, the line LED will turn red indicating that the trunk is in use, even though the call has not been processed.

	Time		Time
1#	1 Second	5#	5 Seconds
2#	2 Second	6#	6 Seconds
3#	3 Second	7#	7 Seconds
4#	4 Second	8#	8 Seconds

NOTES:

To activate the ground detection timer, set the parameters for the loop-start/ ground-start type to ground-start in [FF2], 21# address.

Install ground-start trunk card (VB 43531) according to the instructions in section 300.

Setting this timer for less then 3 seconds can cause false incoming calls. This is due to the possibility of the ground not being removed quickly at the end of a call.

Attendant Intercom Recall Hold Timer
[FF1], 3#, 22#, (0-12)#
(CPC-B, ver 2.00 or newer)

Calls made by an attendant(s) to another extension, that have subsequently been placed on hold by the attendant, will recall the attendant in the time designated by this timer.

	Time		Time
0#	No Recall	7#	140 Seconds
1#	20 Seconds	8#	160 Seconds
2#	40 Seconds	9#	180 Seconds
3#	60 Seconds	10#	200 Seconds
4#	80 Seconds	11#	220 Seconds
5#	100 Seconds	12#	240 Seconds
6#	120 Seconds		

Extension Intercom Hold Recall Timer
[FF1], 3#, 23#, (0-12)
(CPC-B, ver. 2.00 or newer)

Calls made by an extension to another extension, that have subsequently been placed on hold by the calling extension, will recall the calling extension in the time designated by this timer.

	Time		Time
0#	No Recall	7#	140 Seconds
1#	20 Seconds	8#	160 Seconds
2#	40 Seconds	9#	180 Seconds
3#	60 Seconds	10#	200 Seconds
4#	80 Seconds	11#	220 Seconds
5#	100 Seconds	12#	240 Seconds
6#	120 Seconds		

Attendant Intercom Transfer Recall Timer
[FF1], 3#, 24#, (0-12)
(CPC-B, ver 2.00 or newer)

A call transferred to an extension by an attendant, that has not been answered by the extension will recall the attendant in the time designated by this timer.

	Time		Time
0#	No Recall	7#	140 Seconds
1#	20 Seconds	8#	160 Seconds
2#	40 Seconds	9#	180 Seconds
3#	60 Seconds	10#	200 Seconds
4#	80 Seconds	11#	220 Seconds
5#	100 Seconds	12#	240 Seconds
6#	120 Seconds		

Extension Intercom Transfer Recall Timer
[FF1], 3#, 25#, (0-12)
(CPC-B, ver. 2.00 or newer)

A call transferred to an extension by another extension, that has not been answered will recall the calling extension in the time designated by this timer.

	Time		Time
0#	No Recall	7#	140 Seconds
1#	20 Seconds	8#	160 Seconds
2#	40 Seconds	9#	180 Seconds
3#	60 Seconds	10#	200 Seconds
4#	80 Seconds	11#	220 Seconds
5#	100 Seconds	12#	240 Seconds
6#	120 Seconds		

Central Office Delayed Ring Timer
[FF1], 3#, 26#, (0-15)#
(CPC-B, ver 3.00 or newer)

If a Central Office line has been set to ring on an extension(s), and the call is not picked up, this timer determines the amount of time it will ring there until extensions that have been set for delayed ringing on a Central Office line will begin to ring.

	Time		Time
0#	After 4 Seconds	8#	After 34 Seconds
1#	After 8 Seconds	9#	After 36 Seconds
2#	After 12 Seconds	10#	After 44 Seconds
3#	After 16 Seconds	11#	After 48 Seconds
4#	After 20 Seconds	12#	After 52 Seconds
5#	After 24 Seconds	13#	After 56 Seconds
6#	After 28 Seconds	14#	After 60 Seconds
7#	After 32 Seconds	15#	After 64 Seconds

Extension Delayed Ring Timer
[FF1], 3#, 27#, (0-15)#
(CPC-B, ver 3.00 or newer)

If an extension call is ringing at another extension, and the call is not picked up, this timer determines the amount of time it will ring there until extensions that have been set for delayed ringing for extension calls will begin to ring.

	Time		Time
0#	After 4 Seconds	8#	After 34 Seconds
1#	After 8 Seconds	9#	After 36 Seconds
2#	After 12 Seconds	10#	After 44 Seconds
3#	After 16 Seconds	11#	After 48 Seconds
4#	After 20 Seconds	12#	After 52 Seconds
5#	After 24 Seconds	13#	After 56 Seconds
6#	After 28 Seconds	14#	After 60 Seconds
7#	After 32 Seconds	15#	After 64 Seconds

Hunt Group No Answer Timer
[FF1], 3#, 28#, (0-15)#
(CPC-B, ver 3.00 or newer)

If a call has entered a hunt group, and an idle extension in the group starts to ring, but the call is not picked up, this timer determines the time that the extension will ring before the next idle extension in the hunt group starts to ring.

	Time		Time
0#	After 4 Seconds	8#	After 34 Seconds
1#	After 8 Seconds	9#	After 36 Seconds
2#	After 12 Seconds	10#	After 44 Seconds
3#	After 16 Seconds	11#	After 48 Seconds
4#	After 20 Seconds	12#	After 52 Seconds
5#	After 24 Seconds	13#	After 56 Seconds
6#	After 28 Seconds	14#	After 60 Seconds
7#	After 32 Seconds	15#	After 64 Seconds

Automatic Day Mode Start Time
[FF1], 3#, 29#, HHMM#
CPC-B, Ver. 4.00 or NEWER

Automatic Day Mode allows the DBS to go into day mode automatically.
Automatic Night Mode (FF1, 3#, 1#) allows the DBS to go into night mode automatically.

To turn automatic day mode off, enter:

FF1 3# 29# CONF key ON/OFF key#

Notes:

1. If only one of the auto modes is turned on, the NIGHT key is used to turn off the auto mode. For instance, if night mode

has been activated automatically, the attendant must press the NIGHT key to go into day mode.

2. If both auto day and auto might modes are turned on, the attendant NIGHT key cannot be used.

3. If both auto modes are set, the starting times must differ by at least one hour.

4. When one auto mode is turned on, the mode cannot be reset by the NIGHT key until 3 minutes after the auto mode is activated. (When both auto modes are set, the NIGHT key cannot be used.)

Remote Programming ID Code
[FF1], 4#, (0000-9999)#

If a remote programming ID code is set, a dumb terminal or PC can be used to program the DBS from a remote site or on site, by connecting to the RS232C interface.

To set the remote programming ID code to 0001, for example, enter:

[FF1], 4#, 0001#

To reset the remote programming ID code to the default initialized value, press [FF1], 4#, [CONF], [ON/OFF].

NOTES:

Remote programming of the DBS requires the following:

1. A central office line that is set with DISA capability.

2. Knowledge of the 4-digit DISA ID code. (See [FF1], 1# through 5# program addresses).

3. After the DBS automatically answers your inbound call on the preset DISA line with the intercom dialing tone, remote programming can begin by dialing #6 and the 4-digit remote-programming ID code.

4. An attendant or extension user can manually transfer the remote programmer into programming by putting the remote programmer on hold, dialing #6, and the 4 digit remote programming ID code.

5. The following remote operations are possible:

a) Remote programming:

Remotely setting any DBS parameter, just as would be done with on site programming.

b) Bus monitor data:

Remotely view bus monitor data., which is commonly used to troubleshoot operational problems. This may be possible in real time, depending on the buffer of the device being used.

Direct Inward System Access (DISA) ID Code [FF1], 5#, (0000-9999)#

The DISA ID code provides direct access to a DBS intercom dial tone, on an inbound central office line that is preprogrammed as a DISA line.

To set the DISA ID code to 0001, for example, enter:

[FF1], 5#, 0001#

To reset the DISA ID code to the default initialized value, press [FF1], 5#, [CONF], [ON/OFF].

NOTES:

The default setting of the DBS supplies intercom dial tone to a line defined as a DISA line. If a DISA ID code is stored in place of the default setting (via remote programming) an intercom dial tone will not be heard, but rather a DISA dial tone (fast busy tone).

The DISA dial tone is a signal to proceed with your call until you enter the stored DISA ID code. After the DISA ID code is entered, the intercom dial tone is presented. This provides the opportunity to make a DBS extension call.

To make an outbound central office line call, enter #7, dial 9 or 81-86 (to access a central office line), then dial the 4-digit DISA ID code. See [FF1], 6#, 1# and 2# addresses.

DISA Outbound Call ID Code 1 [FF1], 6#, 1#, (0000-9999)#

To provide an inbound DBS caller with access to "fresh" outbound central office dial tone, a four digit access code is required.

To set the first DISA outgoing call ID code to 0001, for example, enter:

[FF1], 6#, 1#, 0001#

To reset the first DISA outgoing call ID code to the default initialized value, press [FF1], 6#, 1#, [CONF], [ON/OFF].

DISA Outbound Call ID Code 2 [FF1], 6#, 2#, (0000-9999)#

To provide an inbound DBS caller with access to "fresh" outbound central office dial tone, a four digit access code is required.

To set the second DISA outgoing call ID code to 0002, for example, enter:

[FF1], 6#, 2#, 0002#

To reset the second DISA outgoing call ID code to the default initialized value, press [FF1], 6#, 2#, [CONF], [ON/OFF].

ID Code For System Programming
[FF1], 7#, (0000-9999)#

To perform DBS programming from an extension other than the attendant position, this option must be set. The 4-digit ID code set in this option must be used as part of the access attempt to program the DBS, when a non attendant position is used in this manner.

To set the ID code for system programming to 0001, for example, enter:

[FF1], 7#, 0001#

To reset the ID code for system programming to the default initialized value, press [FF1], 7#, [CONF], [ON/OFF].

NOTES:

Only one non attendant extension can be a programming extension at a particular time. To set a different non attendant position as the programming extension, cancel the capability of the first extension by reentering the 4-digit ID code at the original non attendant extension, then enter the same ID code at the second extension.

On CPC-A software versions later than 3.21, and CPC-B versions later than 2.00, entering the ID code for system programming at a second extension, will automatically cancel the programming capability that may have been previously set but not canceled at a different extension.

DID Reset
[FF1], 8#, 1#, (0 or 1)#
(CPC-B, ver. 3.00)

Direct Inward Dial numbers that have been set up as a part of CPC-B ver. 2.11 or older software, need to be defaulted with the use of this program after upgrading a DBS to ver. 3.00 software. Also, at any time that a default of ALL assigned DID numbers is desired, this program must be used.

To choose not to reset existing DID number assignments, enter:

[FF1], 8#, 1#, 0#

At any time a reset of all assigned DID numbers to the default value (no DID numbers assigned) is desired, enter:

[FF1], 8#, 1#, 1#

NOTE:

DID settings have to be manually configured if the DBS has a software version older than 3.00, that is being upgraded to version 3.00 or newer. Before this manual reconfiguration can be done however, the DID reset program ([FF1], 8#, 1#), must be done.

The maximum amount of DID number assignments that a DBS can have is 500. Multiple DID number assignments can be assigned to any extension port, and/or the same DID number can be assigned to multiple extension ports. Each DID assignment uses one of the 500 that are available.

DID Reset Confirmation [FF1], 8#, 2#, (0 or 1)# (CPC-B, ver. 3.00)

This is a confirmation program for the resetting of DID number assignments that can be accomplished with the use of program number [FF1], 8#, 1#.

To not reset the DID number assignments, enter:

[FF1], 8#, 2#, 0#

To reset all of the DID number assignments, enter:

[FF1], 8#, 2#, 1#

NOTE:

DID settings have to be manually configured if the DBS has a software version older than 3.00, that is being upgraded to version 3.00 or newer. Before this manual reconfiguration can be done however, the DID reset program ([FF1], 8#, 1#), must be done.

The maximum amount of DID number assignments that a DBS can have is 500. Multiple DID number assignments can be assigned to any extension port, and/or the same DID number can be assigned to multiple extension ports. Each DID assignment uses one of the 500 that are available.

DID Reset (New Function Reset) [FF1], 8#, 1#, (0 or 1)# (CPC-B, ver. 4.00)

Resets program settings stored in SRAM (Static Random Access Memory). The reset must be performed before upgrading from one software version to another. For example, if you are upgrading from Version 3.00 to Version 4.00, you need to perform the reset. However, if you are upgrading to a point release (4.10 to 4.11), you do not need to perform the reset.

Options

0=No (retain settings)
1=Yes (clear settings)

New Function Reset Confirmation [FF1], 8#, 2#, (0 or 1)# (CPC-B, ver. 4.00)

The purpose of this display is to make sure you want to reset the data. Enter "0" or "1," depending on whether you want to complete or cancel the reset.

Options

0=Do not reset
1=Reset

Note:

1. If you enter a "1," the following display appears:
CONFIRM
0: NO 1: YES

2. This command erases all T1 and DID programming.

Inbound DID Dial Numbers [FF1], 8#, 3#, (0000-9999)#, (100-699)# (CPC-B, ver. 3.00 or newer)

Direct inward dialed numbers that have been dialed by a caller need to be assigned to extension ports, so that the number dialed will ring on all extensions they are supposed to appear on. A DID number can be set to ring on multiple extensions, or only one extension.

To set DID number 4444 to ring on extension number 120, for example, enter:

[FF1], 8#, 3#, 4444#, 120#

To set DID number 6358 to ring on extension number 500, for example, enter:

[FF1], 8#, 3#, 6358#, 500#

To reset DID numbers that have been assigned to extensions to the default initialized value, press [FF1], 8#, 3#, didXXXX#, [CONF]#, [ON/OFF].

T1 PROGRAMMING OPTIONS

All parameters in this section refer to CPC-B, Verson 4.00 or newer.
The following information describes programming parameters for the T1 Interface. The descriptions of each parameter include a list of available options and the associated programming address.

NOTE:

Default options are shown underlined.

T1 System Settings

System Config.
[FF1]8#,4#,1#,1#,(0-8)#

Identifies the system size.

Options	0=DBS 40
	1=DBS 72
	2=DBS 96
	3=DBS 40 + DBS 40 (T1 must be in the slave cabinet.)
	4=DBS 72 + DBS 40 (T1 is not supported.)
	5=DBS 72 + DBS 72 (T1 must be in the slave cabinet.)
	6=DBS 96 + DBS 40
	7=DBS 96 + DBS 72
	8=DBS 96 + DBS 96

NOTE:

To apply changes to this parameter, power the system down, then back up.

CLOCK SETTINGS

The Sync Card (installed on the CPC-B) provides a method of synchronizing the DBS with the public network. This parameter determines the first clocking source for network synchronization. If the first source fails, the system will switch to the second source. The system will attempt to go back to the first source based on the value entered under the Network Re-sync Timer.
The system considers a clock source to have failed when the slip rate error counter is exceeded within a 24-hour period.
In most cases, the 1st sync source is set to "1."

1st Sync
[FF1]8#,4#,1#,2#,(1-3)#

NOTE:

For changes to this parameter to take effect, the system must be powered down, then back up again.

Options	1=T1 of the master cabinet
	2=T1 of the slave cabinet
	3=Free run (internal clocking)

2ND SYNC
[FF1]8#,4#,1#,3#,(0-3)#

Determines the source of clocking for the second sync source. The system will attempt to switch from the second source back to the first source based on the value entered under "Network Re-sync Timer."
If the second source fails and the first source is not working, the system will switch to the third source.
In most cases, a system with one T1 has the 2nd sync source set to "3." Systems with two T1s normally have the 2nd sync source set to "2."
One of the three sync sources should be set to "3" (free run). A free-run setting is needed, so the DBS T1 can provide its own clocking if the network clock fails.

Options	0=None
	1=T1 of the master cabinet
	2=T1 of the slave cabinet
	3=Free run (internal clocking)

NOTE:

For changes to this parameter to take effect, the system must be powered down, then back up again.

3RD SYNC
[FF1] 8#, 4#, 1#, 4#, (0-3)#

Determines the source of clocking for the third sync source. The third sync source is used if both the first and second source fail. The system will attempt to switch from the third source back to the first source based on the value entered under "Network Re-sync Timer."
In most cases, a system with one T1 has the 3rd sync source set to "0." Systems with two T1s normally have the 3rd sync source set to "3."
One of the three sync sources should be set to "3" (free run). A free-run setting is needed, so the DBS T1 can provide its own clocking if the network clock fails.

Options	0=None
	1=T1 of the master cabinet
	2=T1 of the slave cabinet
	3=Free run (internal clocking)

NOTE:

For changes to this parameter to take effect, the system must be powered down, then back up.

SYSTEM-WIDE TIMERS

NETWORK RE-SYNC TIMER
[FF1]8#,4#,2#,1#,(0-25)#

If one clock source fails, the system will switch to another clock source. The re-sync timer determines how often the system attempts to return to the original clock source. For example, if the first clock source (1st sync) fails, the system switches to the second source. However, the system will try to return to the first source based on the re-sync timer.
If the second source fails and the first source continues to be out-of service, the system switches to the third source. Again, the re-sync timer determines how often the system will attempt to return to the first source.

Options	0-25
	0=immediate (DBS returns to the first clock immediately.)
	1-24=hours (Determines how often the DBS attempts to return to the first clock.)
	25=no retries (DBS does not attempt to go back to the first clock.)

NOTE:

When the system attempts to go back to the first clock source, existing calls will be disconnected.

DISCON TIMER
[FF1] 8#, 4#, 2#, 2#, (0-12)#

Determines how long the DBS waits before sending a disconnect signal from the T1 to the CO. (The CO Disconnect Timer [FF2 (1-64)# 18# (0-15#)] determines how long the system waits to receive a disconnect signal from the CO.)

Options	0-15 (1)
Values	0=150ms
	1=200ms
	2=250ms
	3=300ms
	4=400ms
	5=500ms
	6=1000ms
	7=1500ms
	8=2000ms
	9=2500ms
	10=3000ms
	11=3500ms
	12=Off (DBS does not automatically send a disconnect signal.)

NOTE:

For changes to this parameter to take effect, the system must be powered down, then back up.

Guard Timer
[FF1], 8#, 4#, 2#, 3#, (0-15)#

Determines how long the system guards a T1 circuit. Guarding holds a circuit after it has been released in order to ensure that the previous call has been properly disconnected. In other words, once a call over a T1 channel has ended, the guard timer determines how much time must pass before the channel can be used for another call.

Options	0-15 (3)
Values	0=200 ms
	1=300 ms
	2=400 ms
	3=500 ms
	4=800 ms
	5=1000 ms
	6=1200 ms
	7=1400 ms
	8=1600 ms
	9=1800 ms
	10=2000 ms
	11=2200 ms
	12=2400 ms
	13=2600 ms
	14=2800 ms
	15=3000 ms

NOTE:

For changes to this parameter to take effect, the system must be powered down, then back up.

RLS ACK Timer
[FF1] 8# 4# 2# 4# (0-15)#

Determines how long the DBS waits for the CO to acknowledge a disconnect signal.

Options	0-15
Values	0=1 second
	1=2 seconds
	2=5 seconds
	3=10 seconds
	4=20 seconds
	5=30 seconds
	6=60 seconds
	7=90 seconds
	8=120 seconds
	9=240 seconds
	10=480 seconds
	11=960 seconds
	12=1080 seconds
	13=1420 seconds
	14=1920 seconds
	15=an infinite number of seconds.

Outpulse Delay
[FF1], 8#, 4#, 2#, 5#, (0-15)#

Determines how long the system waits before outpulsing dialed digits to the network.

Options	0-15
Values	0=100 ms
	1=300 ms
	2=500 ms
	3=700 ms
	4=1000 ms
	5=1200 ms
	6=1500 ms
	7=1700 ms
	8=2000 ms

Wink Timeout Timer
[FF1],8#,4#,2#,6#,(0-15)#

When wink-start signaling is used, the DBS waits for a wink-start signal from the CO when a user goes offhook. Once the DBS receives a wink start, the DBS sends a CO dial tone to the extension.
This timer determines how long the DBS waits for a wink signal once an extension goes offhook.

Options	0-15
Values	0=150 ms
	1=250 ms
	2=500 ms
	3=750 ms
	4=1000 ms
	5=1250 ms
	6=1500 ms
	7=1750 ms
	8=2000 ms
	9=2500 ms
	10=3000 ms
	11=3500 ms
	12=4000 ms
	13=4500 ms
	14=5000 ms
	15=5500 ms

Incoming Detection Timer
[FF1]8#,4#,2#,7#,(0-15)#

Once an incoming call seizes a T1 trunk, this timer determines how long the DBS waits before recognizing the seizure as an incoming call.
This parameter only applies when E&M signaling is used.

Options	0-15
Values	0=20 ms
	1=30 ms
	2=40 ms
	3=50 ms
	4=60 ms
	5=70 ms
	6=80 ms
	7=90 ms
	8=100 ms
	9=110 ms
	10=120 ms
	11=130 ms
	12=140 ms
	13=150 ms
	14=160 ms
	15=170 ms

NOTE:

For changes to this parameter to take effect, the system must be powered down, then back up.

Answer Superv
[FF1]8#,4#,2#,8#,(0-8)#

When the DBS generates a call over the T1, answer supervision is provided to determine if the call is actually answered. This timer determines how long the offhook signal from the called party must last before the DBS treats the offhook signal as an answer.

Options	0-8
Values	0=50 ms
	1=100 ms
	2=200 ms
	3=600 ms
	4=1000 ms
	5=2000 ms
	6=3000 ms
	7=4000 ms
	8=10,000 ms

IMM-GLARE TIMER
[FF1] 8#, 4#, 2#, 9#, (0-15)#

A glare is a conflict between an incoming call and an outgoing call.
When immediate-start signaling is used, this timer determines how long the system searches for an incoming call before connecting a station user to a trunk channel.
The timer begins when the station goes offhook.
If this parameter is set to "0" (non glare), the DBS does not check for glare. Therefore, if a trunk call is coming into a station that is going offhook, the station does not ring but is connected to the incoming call automatically.

Options	0-15
Values	0=The DBS does not check for glare.
	1=20 ms
	2=40 ms
	3=60 ms
	4=80 ms
	5=100 ms
	6=120 ms
	7=140 ms
	8=160 ms
	9=180 ms
	10=200 ms
	11=250 ms
	12=300 ms
	13=350 ms
	14=400 ms
	15=450 ms

WK—GLARE TIMER
[FF1] 8#, 4#, 2#, 10#, (0-15)#

A glare is a conflict between an incoming call and an outgoing call.
When wink-start signaling is used, the timer determines how long the system searches for an incoming call before connecting a station user to a trunk channel.
The timer begins when the a wink is received.
If this parameter is set to 0 (non glare) and a trunk call is coming into a station that is going offhook, the station does not ring but is connected to the incoming call automatically.

Options	0-15
Values	0=The DBS does not check for glare.
	1=20 ms
	2=40 ms
	3=60 ms
	4=80 ms
	5=100 ms
	6=120 ms
	7=140 ms
	8=160 ms
	9=180 ms
	10=200 ms
	11=250 ms
	12=300 ms
	13=350 ms
	14=400 ms
	15=450 ms

DIGITAL PAD SET (LOSS/GAIN SETTINGS) [FF1][8#][4#][3#][1-12#][1-12#][0-30#]

Adjusts the volume of connections made via the T1. In this parameter, the first "(1-12)" represents the receiving circuit type. The second "1-12" represents the sending circuit type. "0-30" represents the pad number. The volume settings are controlled by changing a pad number, which in turn changes the loss or gain of the connection. In most cases, the default pad settings do not need to be changed. If the volume level of a connection is unsatisfactory, include the receiving and sending circuit types in the command, then adjust the volume by assigning a new pad number.

Figure 1 shows the numbers used to identify each circuit type.

Figure 1. Circuit-type Numbers

Circuit Types	No.
K-TEL	1
SLT	2
DATA#	3
Analog CO Trk	4
T1 Master	5
T1 Slave	6
OPTION 1*	7
OPTION 2*	8
DTMF#	9
CONF (SCC)#	10
TONE1 (MFR1)#	11
TONE2 (MFR2)#	12

Figure 2 shows the default values for the most common T1 connections.

Figure 2. Default pad values (T1 #1 = master, T1 #2 = slave)

From	To	Setting	Value
T1 #1	K-TEL	16	-2 dB
T1 #2	K-TEL	16	-2 dB
T1 #1	SLT	16	-2 dB
T1 #2	SLT	16	-2 dB
K-TEL	T1 #1	16	-2 dB
K-TEL	T1 #2	16	-2 dB
SLT	T1 #1	16	-2 dB
SLT	T1 #2	16	-2 dB

NOTES:

#Circuit Types 3 and 9-12 are reserved for future use.

*Options 1 and 2 can be used to assign unique PAD levels to circuits that require special volume levels. For example, if an OPX station needs a higher volume level than other SLTs, the OPX station could be defined as an Option 1 circuit type.

The following table lists the adjustments provided by each pad number.

Figure 3. Pad Nos.	
Pad No.	**Level**
0	0 dB
1	+2 dB
. . .	. . .
14	+28 dB
15	+30 dB
16	-2 dB
17	-4 dB
. . .	. . .
29	-28 dB
30	-30 dB

Example

If calls to SLTs via a master T1 have low volume levels, the PAD level for connections from the master T1 to all SLTs can be changed.
By referring to Figure 2, you can see that the default pad setting for connections from the master T1 to all SLTs is 16. You can also tell by Figure 2 that the default pad value for setting 16 is -2 dB.
To raise the volume by 2 dB, you can change the pad value to 0. (As you can see from Figure 3, the dB level for value 0 is 0 dB.)
The following example shows the programming required to change the value to 0 dB:

FF1 8# 4# 3# 2# 5# 0#

2=Circuit type number for SLTs (Figure 1).
5=Circuit type number for the T1 in the master cabinet (Figure 1).
0=Pad number for 0 dB loss/gain (Figure 3).

T1 MASTER AND SLAVE SETTINGS TRUNK CONFIGURATION

TRUNK CONFIGURATION
MASTER CABINET:
[FF1] 8#, 4#, 4#, 1#, 1# (0-1)#

SLAVE CABINET:
[FF1] 8#, 4#, 5#, 1#, 1# (0-1)#

Specifies the trunk combinations used in the DBS.

NOTE:

For changes to this parameter to take effect, the system must be powered down, then back up.

Options

0=Analog only
1=T1 and analog trunks

NO. OF T1 CHANNELS
MASTER CABINET:
[FF1] 8#, 4#, 4#, 1#, 2# (0-24)#

SLAVE CABINET:
[FF1]8#,4#,5#,1#,2#(0-24)#

Determines how many T1 channels are used.
Though each T1 Interface provides 24 trunk channels, T1 trunks do not increase the overall trunk capacity of the DBS. Each T1 channel subtracts from the total number of analog trunks that can be installed. Furthermore, the number of analog trunks that can be used is always decremented in quantities of 8.
For instance, if you're installing a T1 in a DBS 96 and you only want to use 12 T1 channels, the logical number of analog trunks that would be available is 20 (32 - 12 = 20).
However, because the number of analog trunks must be decremented in quantities of 8, the actual number of analog trunks that can be used is 16:
(32 total trunks - 16 (two 8-trunk increments) = 16.)
See *Installation (Section 300)* for a list of possible T1 and analog trunk channel combinations.

NOTE:

For changes to this parameter to take effect, the system must be powered down, then back up.

Options

0-24 (0)

TRUNK SIGNALING

FRAME FORMAT
MASTER CABINET:
[FF1] 8#, 4#, 4#, 1#, 3# (0-1)#

SLAVE CABINET:
[FF1] 8#, 4#, 5#, 1#, 3# (0-1)#

Selects the framing format used by the T1. The framing format must match what is offered by the CO.

Options

0=SF (Superframe, which is also known as D4. The superframe consists of 12 frames, with each frame including 193 bits. Each frame is separated by a framing bit.)
1=ESF (Extended Super Frame. An extended super frame consists of 24 frames, thereby doubling the length of the super frame (SF) format. ESF also supports monitoring and maintenance capabilities that are not available with the SF format.)

NOTE:

For changes to this parameter to take effect, the system must be powered down, then back up.

Clear Channel
Master cabinet:
[FF1], 8#, 4#, 4#, 1#, 4# (0-1)#

SLAVE CABINET:
[FF1], 8#, 4#, 5#, 1#, 4# (0-1)#

Selects the clear channel format used by the T1. The clear channel format must match what is offered by the CO.

Options

0=AMI (AMI stands for alternate mark inversion.)
1=B8ZS (B8ZS stands for Binary 8-Zeroes Suppression.

NOTE:

For changes to this parameter to take effect, the system must be powered down, then back up again.

FAILURE MODE
MASTER CABINET:
[FF1], 8#, 4#, 4#, 1#, 5# (0-1)#

SLAVE CABINET:
[FF1], 8#, 4#, 5#, 1#, 5# (0-1)#

Determines the way the system responds to alarms.

OPTIONS

0=Mode 1 (T1 stays in operation even if errors are detected.)
1=Mode 2 (T1 shuts down if errors are detected.)

NOTE:

For changes to this parameter to take effect, the system must be powered down, then back up.

R-LOOPBACK
MASTER CABINET:
[FF1], 8#, 4#, 4#, 1#, 6# (0-1)#

SLAVE CABINET:
[FF1], 8#, 4#, 5#, 1#, 6# (0-1)#

This parameter only applies to a DBS within a private network.
If the remote loopback parameter is turned on, the DBS can receive a loopback command from another DBS.
For example, for DBS "A" to receive a loopback command from DBS "B," this parameter must be turned on at DBS "A." DBS "B" would initiate the loopback by entering the "Remote Loopback" command.

OPTIONS

0=No (The system does not respond to loopback signals.)
1=Yes (The system does respond to loopback signals.)

FLASH KEY OPERATION MASTER CABINET: [FF1 8# 4# 4# 1# 8# (0-1)#

SLAVE CABINET: [FF1] 8# 4# 5# 1# 8# (0-1)#

In the current version of DBS T1, a "switchhook flash" releases and resizes the T1 line.

OPTIONS

0=Release and reseize

AIS TRANSMISSION OPTIONS

YELL ALARM SEND MASTER CABINET: [FF1], 8#, 4#, 4#, 1#, 7# (0-1)#

SLAVE CABINET: [FF1], 8#, 4#, 5#, 1#, 7# (0-1)#

Determines whether the DBS sends a yellow alarm signal to the CO.

OPTIONS

0=No
1=Yes

RED ALARM DETECTION MASTER CABINET: [FF1], 8#, 4#, 4#, 2#, 1# (0-15)#

SLAVE CABINET: [FF1], 8#, 4#, 5#, 2#, 1# (0-15)#

The default value for this parameter is determined by network specifications. It should not be changed.
If a red alarm occurs, the *CFA LED* on the T1 card lights. Also, if the "Red Alm Relay" parameter is turned on, the alarm relay on the T1 MDF card closes.

Options	0-5
Values	0=4
	1=6
	2=8
	3=10
	4=12
	5=14

NOTE:

For changes to this parameter to take effect, the system must be powered down, then back up.

TIMERS FOR T1 LEDS

YELLOW ALARM DETECTION MASTER CABINET: [FF1], 8#, 4#, 4#, 2#, 2# (0-15)#

SLAVE CABINET: [FF1], 8#, 4#, 5#, 2#, 2# (0-15)#

Determines how long a yellow alarm signal must be on before the system detects a yellow alarm. When a yellow alarm occurs, the YEL LED on the T1 card lights. Also, if the "Yel Alm Relay" parameter is turned on, the alarm relay on the T1 MDF card closes.

Options	0-15	
Values	0=0 ms (immediate)	8=400 ms
	1=50 ms	9=450 ms
	2=100 ms	10=500 ms
	3=150 ms	11=550 ms
	4=200 ms	12=600 ms
	5=250 ms	13=650 ms
	6=300 ms	14=700 ms
	7=350 ms	15=750 ms

NOTE:

For changes to this parameter to take effect, the system must be powered down, then back up.

YELL ALARM RECOVERY
MASTER CABINET:
[FF1], 8#, 4#, 4#, 2#, 3# (0-15)#

SLAVE CABINET:
[FF1], 8#, 4#, 5#, 2#, 3# (0-15)#

Determines how long the DBS tries to recover from a yellow alarm before it re-syncs the T1 trunk.

Options	0-15	
Values	0=0 ms (immediate)	8=80 ms
	1=10 ms	9=90 ms
	2=20 ms	10=110 ms
	3=30 ms	11=120 ms
	4=40 ms	12=130 ms
	5=50 ms	13=140 ms
	6=60 ms	14=150 ms
	7=70 ms	15=160 ms

NOTE:

For changes to this parameter to take effect, the system must be powered down, then back up.

OTHER ALARMS DETECTION
MASTER CABINET:
[FF1], 8#, 4#, 4#, 2#, 4# (0-15)#

SLAVE CABINET:
[FF1], 8#, 4#, 5#, 2#, 4# (0-15)#

Determines how long an out of frame (OOF), loss of signal, sync loss, or AIS signal must be on before the system generates an alarm. If an OOF, sync loss, or AIS alarm occurs, a corresponding LED on the T1 card lights. (Sync loss alarms light the SLIP LED.) The alarm relay on the T1 MDF card will also close if the corresponding relay parameter is turned on.

Options	0-15	
Values	0=0 ms	8=2000 ms
	1=250 ms	9=2500 ms
	2=500 ms	10=3000 ms
	3=750 ms	11=3500 ms
	4=1000 ms	12=4000 ms
	5=1250 ms	13=4500 ms
	6=1500 ms	14=5000 ms
	7=1750 ms	15=5500 ms

NOTE:

For changes to this parameter to take effect, the system must be powered down, then back up.

OTHER ALARMS RECOVERY
MASTER CABINET:
[FF1], 8#, 4#, 4#, 2#, 5# (0-15)#

SLAVE CABINET:
[FF1], 8#, 4#, 5#, 2#, 5# (0-15)#

Determines how long the DBS tries to recover from an out-of-frame (OOF), Loss of Signal, Sync Loss, or AIS alarm before it resyncs the T1 trunk.

Options	0-15	
Values	0=0 ms	8=3000 ms
	1=250 ms	9=4000 ms
	2=500 ms	10=5000 ms
	3=750 ms	11=6000 ms
	4=1000 ms	12=7000 ms
	5=1500 ms	13=8000 ms
	6=2000 ms	14=9000 ms
	7=2500 ms	15=10000 ms

NOTE:

For changes to this parameter to take effect, the system must be powered down, then back up.

ERROR COUNTERS FOR T1 ALARM KEYS

The following counters determine when FF alarm keys light. FF alarm keys light when an error counter exceeds the specified number within 24 hours. FF alarm keys can indicate the following types of alarms:

Red alarms
Loss of signal alarms
Sync loss alarms
Yellow alarms
Slip alarms
Frame loss alarms

The alarm keys can be assigned to any key telephone. However, the keys only work on a non-attendant phone that has the programming authorization code (#98 9999) activated. With attendant phones, the keys work whether or not the programming authorization code is activated.

FRAMING LOSS COUNTER
MASTER CABINET:
[FF1], 8#, 4#, 4#, 3#, 1# (0-9000)#

SLAVE CABINET:
[FF1], 8#, 4#, 5#, 3#, 1# (0-9000)#

Determines how many frame losses occur before a Frame Loss Alarm key is lit.
The key lights when the counter exceeds the specified number within a 24-hour period.

OPTIONS

0-9000/24 hours (9000)

SLIP COUNTER
MASTER CABINET:
[FF1], 8#, 4#, 4#, 3#, 2# (0-9000)#

SLAVE CABINET:
[FF1], 8#, 4#, 5#, 3#, 2# (0-9000)#

Determines how many slips occur before a Slip Loss Alarm key is lit.
The key lights when the counter exceeds the specified number within a 24-hour period.
This parameter also determines the number of slips that can occur before the system switches to the next clock source. When the system switches to the next clock source, the slip error counter for the first clock source is reset.
Slips are losses of data bits due to framing errors.

OPTIONS

0-9000/24 hours (9000)

RED ALARM COUNTER
MASTER CABINET:
[FF1], 8#, 4#, 4#, 3#, 3# (0-9000)#

SLAVE CABINET:
[FF1], 8#, 4#, 5#, 3#, 3# (0-9000)#

Determines how many red alarms occur before a Red Alarm key is lit.
The key lights when the counter exceeds the specified number within a 24-hour period.

OPTIONS

0-9000/24 hours (9000)

Loss Of Signal Counter
Master cabinet:
[FF1], 8#, 4#, 4#, 3#, 4# (0-9000)#

Slave cabinet:
[FF1], 8#, 4#, 5#, 3#, 4#, (0-9000)#

Determines how many instances of signal loss occur before a Signal Loss Alarm key is lit.
The key lights when the counter exceeds the specified number within a 24-hour period.

Options

0-9000/24 hours (9000)

Sync Loss Counter
Master cabinet:
[FF1], 8#, 4#, 4#, 3#, 5# (0-9000)#

Slave cabinet:
[FF1], 8#, 4#, 5#, 3#, 5# (0-9000)#

Determines how many instances of sync loss occur before a Sync Loss Alarm key is lit.
The key lights when the counter exceeds the specified number within a 24-hour period.

Options

0-9000/24 hours (9000)

YELL ALARM COUNTER
MASTER CABINET:
[FF1], 8#, 4#, 4#, 3#, 6# (0-9000)#

SLAVE CABINET:
[FF1], 8#, 4#, 5#, 3#, 6# (0-9000)#

Determines how many yellow alarm indications occur before a Yellow Alarm key is lit. The key lights when the counter exceeds the specified number within a 24-hour period. (See instructions on programming T1 alarm keys.)

OPTIONS

0-9000/24 hours (9000)

ALARM RELAY CONTROLS

YELLOW ALARM RELAY
MASTER CABINET:
[FF1], 8#, 4#, 4#, 4#, 1# (0-1)#

SLAVE CABINET:
[FF1], 8#, 4#, 5#, 4#, 1# (0-1)#

Determines whether the system closes the alarm relay on the T1 MDF card in the event of yellow alarms.
The alarm relay can be connected to an external alarm device such as a buzzer. The external alarm device must be purchased separately; it is not provided with the DBS T1.

OPTIONS

0=Off (The alarm relay does not close.)

RED ALARM RELAY
MASTER CABINET:
[FF1], 8#, 4#, 4#, 4#, 2# (0-1)#

SLAVE CABINET:
[FF1], 8#, 4#, 5#, 4#, 2#, (0-1)#

Determines whether the system closes the alarm relay on the T1 MDF card in the event of red alarms.
The alarm relay can be connected to an external alarm device such as a buzzer. The external alarm device must be purchased separately; it is not provided with the DBS T1.
A red alarm indicates a loss of frame (OOF) or loss of signal has continued for over 2.5 seconds.

OPTIONS

0=Off (The alarm relay does not close; the alarm is not reported.)
1=On (The alarm relay closes, so the alarm is reported.)

SYNC LOSS RELAY
MASTER CABINET:
[FF1], 8#, 4#, 4#, 4#, 3# (0-1)#

SLAVE CABINET:
[FF1], 8#, 4#, 5#, 4#, 3# (0-1)#

Determines whether the system closes the alarm relay on the T MDF card in the event of sync loss alarms.
The alarm relay can be connected to an external alarm device such as a buzzer. The external alarm device must be purchased separately; it is not provided with the DBS T1.

OPTIONS

0=Off (the alarm relay does not close; the alarm is not reported.)
1=On (The alarm relay closes, so the alarm is reported.)

NOTE:

Sync-loss alarms result from clocking errors.

FRAME LOSS RELAY
MASTER CABINET:
[FF1], 8#, 4#, 4#, 4#, 4# (0-1)#

SLAVE CABINET:
[FF1], 8#, 4#, 5#, 4#, 4# (0-1)#

Determines whether the system closes the alarm relay on the T1 MDF card in the event of frame loss alarms.
The alarm relay can be connected to an external alarm device such as a buzzer. The external alarm device must be purchased separately; it is not provided with the DBS T1.

OPTIONS

0=Off (The alarm relay does not close; the alarm is not reported.)
1=On (The alarm relay closes, so the alarms is reported.)

AIS RELAY
MASTER CABINET:
[FF1], 8#, 4#, 4#, 4#, 5# (0-1)#

SLAVE CABINET:
[FF1], 8#, 4#, 5#, 4#, 5# (0-1)#

Determines whether the system closes the alarm relay on the T1 MDF card in the event of alarm indication signals.
An alarm indication signal is comprised of all 1's and is unframed.
The alarm relay can be connected to an external alarm device such as a buzzer. The external alarm device must be purchased separately; it is not provided with the DBS T1.

OPTIONS

0=Off (The alarm relay does not close; the alarm is not reported.)
1=On (The alarm relay closes, so the alarm is reported.)

RELAY RESET
MASTER CABINET:
[FF1], 8#, 4#, 4#, 4#, 6# (0-1)#

SLAVE CABINET:
[FF1], 8#, 4#, 5#, 4#, 6# (0-1)#

Determines whether the T1 alarm relay is cleared (opened) automatically or manually. If cleared automatically, the relay is opened approximately one second after the alarm condition ceases.
If cleared manually, the relay can be opened by entering the Alarm Relay Clear code.
To enter the Alarm Relay Clear code, first enter the programming authorization code (#98 9999).

OPTIONS

0=Auto
1=Manual

TRUNK SETTINGS

T1 TRUNK TYPE
[FF1], 8#, 4#, 6#, (1-64)#, 1#, (0-3_#)
CPC-B, VER. 4.00 OR NEWER

Determines what trunk type each T1 channel emulates.

OPTIONS

0=Loop start
1=Ground start 1
2=Ground start 2
3=E&M

NOTE:

For changes to this parameter to take effect, the system must be powered down, then back up.

T1 Trunk Type
[FF1], 8#, 4#, 6#, (1-64)#, 1#, (0-3)#

Determines the type of trunk signaling that each T1 channel emulates.

Options

0=Loop start
1=Ground start 1
2=Ground start 2
3=E&M

Note:

For changes to this parameter to take effect, the system must be powered down, then back up.

DID/DNIS
[FF1], 8#, 4#, 6#, (1-64)#, 2#, (0-1)#

Determines if DID and/or DNIS is provided for a trunk. DNIS is available only with T1. If DID is selected, the system uses a DID Numbers Table, which supplies 500 DID numbers. If DNIS is selected, the system uses a DNIS Numbers Table, which supplies 500 DNIS numbers.
The DID Numbers Table can be used for DID or DNIS. Therefore, if all the numbers in the DNIS Numbers Table are used, a T1 channel can be set to DID, and DNIS service can still be used.

Options

0=Not provided
1=DID
2=DNIS

NOTE:

1. The DBS only supports 4-digit DID/DNIS numbers.
2. For changes to this parameter to take effect, the system must be powered down, then back up.
3. When the central office sends a DID/DNIS call to the DBS, it first receives a wink from the DBS before sending the digits. Once the wink is received, the central office should wait at least 200 ms before sending the digits. It is the installer's responsibility to request the delay from the central office.

Outgoing Type
[FF1], 8#, 4#, 6#, (1-64)#, 3#, (0-2)#

Determines the signaling class used by T1 channels on outgoing calls.

Options

0=Immediate start
1=Wink start
2=Dial-tone start

NOTE:

For changes to this parameter to take effect, the system must be powered down, then back up.

Incoming Type
[FF1], 8#, 4#, 6#, (1-64)#, 4#, (0-1)#

Determines the signaling class used by T1 channels on incoming calls.

Options

0=Immediate start
1=Wink start

NOTE:

For changes to this parameter to take effect, the system must be powered down, then back up.

Trunk Mode
[FF1], 8#, 4#, 6#, (1-64)#, 5#, (0-1)#

Determines whether T1 channels are used as outgoing only, or bothway.

Options

0=Bothway
1=Outgoing only

NOTE:

For changes to this parameter to take effect, the system must be powered down, then back up.

Robbed Bit Set
[FF1], 8#, 4#, 6#, (1-64)#, 6#, (0-1)#

The robbed bit setting determines if ABCD signaling is used. ABCD signaling robs bits from the T1 channels and uses those bits to transmit signaling information.

Options

0=Off (ABCD signaling is not used.)
1=On (ABCD signaling is used.)

NOTE:

For changes to this parameter to take effect, the system must be powered down, then back up.

Incoming Dial
[FF1], 8#, 4#, 6#, (1-64)#, 7#, (0-1)#

Determines whether the system expects DP or DTMF digits for incoming DID or DNIS calls.

Options

0=Dial Pulse (10PPS)
1=DTMF

Note:

If "DTMF" is selected, the DBS must be equipped with an MFR card.

DT Send
[FF1], 8#, 4#, 6#, (1-64)#, 8#, (0-1)#

Transmits dial tone from the T1 channel to another DBS within a private network.

Options

0=Off
1=On

BT Send
[FF1], 8#, 4#, 6#, (1-64)#, 9#, (0-1)#

Transmits busy tone from the T1 channel to another DBS within a private network.

OPTIONS

0=Off
1=On

DT Receive
[FF1], 8#, 4#, 6#, (1-64)#, 10#, (0-1)#

Transmits dial tone from the T1 channel to DBS stations.

OPTIONS

0=Off
1=On

RBT Send
[FF1], 8#, 4#, 6#, (1-64)#, 11#, (0-1)#

Transmits ringback tone from the T1 channel to the central office or another DBS within a private network.

Options

0=Off
1=On

DNIS Number Set
[FF1], 8#, 4#, 7#, (0000-9999)# (10-69 or 100-699)#

Associates a dialed number with a station.

Options

Associates a four-digit dialed number with a station number. DNIS is available only with the T1 Interface.

NOTE:

Stations are numbered using one of two patterns: 10-69 or 100-699.

3-2 CENTRAL OFFICE LINE PROGRAM SETTINGS

Central Office Line Port Operation [FF2], (1-64)#, 1#, (0 or 1)#

To set a central office line in service, or to remove it from service, this option must be used.

To set any central office line in service, enter:

[FF2], (DBS line port number)#, 1#, 0#

To remove any central office line from service, enter:

[FF2], (DBS line port number)#, 1#, 1#

NOTES:

A steady, red LED on any FF key programmed as a line key, indicates an out-of-service line.
If a central office line is removed from service, a new caller to that line will hear a ring, but the DBS user will never be aware of the caller because ring assignments for the line will not function.

Touch-Tone/Pulse Dialing for Central Office Lines [FF2], (1-64)#, 2#, (0 or 1)#

To set a central office line for touch-tone or pulse dialing, (10 pulses per second), this option must be used.

To set any central office line for touch tone dialing, enter:

[FF2], (DBS line port number)#, 2#, 0#

To set any central office line for pulse dialing, enter:

[FF2], (DBS line port number)#, 2#, 1#

NOTES:

If a central office line port is used for a door-box adapter sensor, set the port for pulse dialing.
If the central office line port is designated as a ground start line ([FF2]-(1-64)-21), it is imperative that the 48 volt external power supply be properly connected to the terminals on the DBS backplane. *Misconnection of this power supply can result in serious damage to the DBS main cabinet.* See DBS Installation Instructions manual (section 300), and Technote 1 (March 1991), for further information.
The *flash* and *redial* features will not operate if a line has been designated as "ground start". See technote 13 (March 1992) for further information.

Pooled Central Office Line Access for Group "9"
[FF2], (1-64)#, 3#, (0 or 1)#

To place a central office line in a group so that it can be one of many that can be automatically chosen for outbound dialing, this option must be used. When dialing a "9" from an SLT or digital extension, or pressing an FF key that is set as a pooled trunk key, any available line in the group will be accessed.

To not include a central office line to be a member of the "9" access group, enter:

[FF2], (DBS line port number)#, 3#, 0#

To set any central office line to be a member of the "9" access group, enter:

[FF2], (DBS line port number)#, 3#, 1#

NOTES:

Set FF1 option "LCR Access" for "Pooled Trunk Access" call. If this option is set for "LCR Access", central office line selection will default to pooled central office line access group 9, if all lines that could be used for "LCR Access" are busy.
The line selection is made from the highest line number in the group, to the lowest line number in the group.

Pooled Central Office Line Access for Groups "81-86"
[FF2], (1-64)#, (4-9)#, (0 or 1)#

To place a central office line in a group so that it can be one of many that can be automatically chosen for outbound dialing, this option must be used. When dialing an "81, 82, 83, 84, 85 or 86" from an SLT or digital extension, or pressing an FF key that is set as a multiple central office (MCO) line key, any available line in the group will be accessed.

To set any central office line to be a member of the "81" access group, enter:

[FF2], (DBS line port number)#, 4#, 1#

To set any central office line to be a member of the "82" access group, enter:

[FF2], (DBS line port number)#, 5#, 1#

To set any central office line to be a member of the "83" access group, enter:

[FF2], (DBS line port number)#, 6#, 1#

To set any central office line to be a member of the "84" access group, enter:

[FF2], (DBS line port number)#, 7#, 1#

To set any central office line to be a member of the "85" access group, enter:

[FF2], (DBS line port number)#, 8#, 1#

To set any central office line to be a member of the "86" access group, enter:

[FF2], (DBS line port number)#, 9#, 1#

To remove any central office line from any access group (81 through 86), enter:

[FF2], (DBS line port number)#, (4-9)#, 0#

NOTES:

The same trunks may appear in more than one line access group and include access group 9.
The line selection in a particular group is made from the highest available line number to the lowest available line number.

Central Office Line Type
[FF2], (1-64)#, 10#, (1 or 2)#

Each central office line port must be identified as a regular central office line, or PBX line.

To set the central office line type to central office, enter:

[FF2], (DBS line port number)#, 10#, 1#

To set the central office line type to PBX, enter:

[FF2], (DBS line port number)#, 10#, 2#

NOTES:

Toll restriction settings can be affected by this setting.
If a central office line port is used for a door-box adapter sensor, set the port for pulse dialing.
If the central office line port is designated as a ground start line [FF2]-21#, it is imperative that the 48 volt external power supply be properly connected to the terminals on the DBS backplane.

Misconnection of this power supply can result in serious damage to the DBS main cabinet.

See DBS Installation Instructions manual (section 300), and Technote 1 (March 1991), for further information.

DISA AUTO ANSWER
[FF2], (1-64)#, 11#, (0 OR 1)#

To set a central office line(s) to automatically provide DISA tone upon connection with an inbound caller, this option must be set.

To set any central office line to provide a DISA tone when connected to a new inbound caller, enter:

[FF2], (DBS line port number)#, 11#, 1#

To set any central office line so that it does not provide a DISA tone when connected to a new inbound caller, enter:

[FF2], (DBS line port number)#, 11#, 0#

NOTES:

To set automatic DISA start and end times, see [FF2] 19#, and 20# program addresses, and the DISA code program address at [FF1], 6#.

PRIVATE CENTRAL OFFICE LINE
[FF2], (1-64)#, 12#, (001-144)#

Any extension can be set with a private central office line(s). A number of private lines can belong to one extension, but the same private line cannot be set on multiple extensions.

To set extension port 15 for central office line 12 to be a private central office line(s), enter:

[FF2], 15#, 12#, 12#

To reset any extension to the default initialized private line value, press [FF2], (DBS line port number)#, 12#, [CONF], [ON/OFF].

NOTES:

An incoming call on a private line will only ring on one extension.
Once the private line option is set, other extensions cannot make outbound calls or receive inbound calls on that line.
If the private line setting is disabled, calls cannot be made or received on that line(s) without manually reprogramming the toll restriction options of an extension(s) to which the line should now appear.
In DBS installations using the CPC-A card, the highest extension port number that can be used is 72.

Automatic Pause for PBX Line
[FF2], (1-64)#, 13#, (0 or 1)#

To set an automatic pause during dialing on a central office line defined as PBX, this option must be used.

To set the automatic pause on line 15 for example, (once line 15 is defined as a PBX), enter:

[FF2], 15#, 13#, 1#

To disable the automatic pause on line 12 for example, (once line 12 is defined as a PBX), enter:

[FF2], 12#, 13#, 0#

NOTE:

See [FF1], 3,# 12# program option, for the timer used for this pause.

Dial Tone Detection
[FF2], (1-64)#, 14#, (0 or 1)#

To define whether dialed digits will be outpulsed after dial tone has been detected, or not, this option is used.

To outpulse dialed digits only after dial tone is detected, enter:

[FF2], (DBS line port number)#, 14#, 0#

To outpulse dialed digits according to the system dial pause timer, enter:

[FF2], (DBS line port number)#, 14#, 1#

NOTE:

If this option is not set, the dialed number is outpulsed according to the system dial pause time.

Outbound DTMF Signal Duration
[FF2], (1-64)#, 15#, (1-3)#

To increase the duration of the DTMF signal when making an outbound call, use this feature.

To set the on/off duration of an outbound DTMF signal to 75 ms. on and 50 ms. off, enter:

[FF2], (DBS line port number)#, 15#, 1#

To set the on/off duration of an outbound DTMF signal to 125 ms. on and 125 ms. off, enter:

[FF2], (DBS line port number)#, 15#, 2#

To set the on/off duration of an outbound DTMF signal to 250 ms. on and 250 ms. off, enter:

[FF2], (DBS line port number)#, 15#, 3#

Unsupervised Central Office Line Conference
[FF2], (1-64)#, 16#, (0 or 1)#

To allow a central office line(s) to be able to be used in an unsupervised conference call, this feature is used.

To disable line 22, for example, so that it cannot be used in a line to line conference, enter:

[FF2], 22#, 16#, 0#

To set line 22 to be able to be used as one of the lines in a line to line conference, enter:

[FF2], 22#, 16#, 1#

NOTE:

See [FF3], 13# program address to start a conference call.
A conferenced call will be disconnected if the call goes beyond the time set in unsupervised conference timer.

Inbound Ring Signal Pattern
[FF2], (1-64)#, 17#, (0-9)#

The ring pattern of each central office line can be set in one of nine patterns to provide easy recognition of different lines.

	Time		Time
0#	Synchronize	5#	1 on / 3 off
1#	3 on / 1 off	6#	.5 on /.5 off
2#	2 on / 2 off	7#	.5 on /.5 off /.5 on/2.5 off
3#	1 on / 1 on	8#	.5 on / 3.5 off
4#	1 on / 2 off	9#	1 on / 7 off

NOTE:

There is no change in the ring pattern for transferred calls.

Central Office Line Signal Disconnect Detection Timer
[FF2], (1-64)#, 18#, (0-15)#

When a central office line call is disconnected, the central office sends a disconnect signal. The DBS needs to interpret all valid signals, so that the central office line can be disconnected from it. This feature provides this function.

	Time		Time
0#	Ignore disconnect	8#	>400 ms.
1#	> 50 ms.	9#	>450 ms.
2#	>100 ms.	10#	>500 ms.
3#	>150 ms.	11#	>550 ms.
4#	>200 ms.	12#	>600 ms.
5#	>250 ms.	13#	>650 ms.
6#	>300 ms.	14#	>700 ms.
7#	>350 ms.	15#	>750 ms.

DISA Start Time
[FF2], (1-64)#, 19#, (HHMM)#

Any central office line that is set as a DISA line, can be set to start DISA operation at a specified time.

To set a central office line that has DISA capability to start DISA operation at a certain time, enter:

[FF2], (DBS line port number)#, 19#, HHMM#.

To reset DISA start time capability to the default initialized value, press [FF2], (DBS line port number)#, 19#, [CONF], [ON/OFF].

NOTE:

The start time is set in a 24-hour format without punctuation or a space between the hour and minute.

DISA End Time
[FF2], (1-64)#, 20#, (HHMM)#

Any central office line that is set as a DISA line, can be set to stop DISA operation at a specified time.

To set a central office line that has DISA capability to stop DISA operation at a certain time, enter:

[FF2], (DBS line port number)#, 20#, HHMM#.

To reset DISA stop time capability to the default initialized value, press [FF2], (DBS line port number)#, 20#, [CONF], [ON/OFF].

NOTE:

The stop time is set in a 24-hour format without a space between the hour and minute.

Trunk Type
[FF2], (1-64)#, 21# (0-3)#

Determines whether the trunk circuit is an analog loop start, analog ground start, analog DID, or T1.

Options

0=Loop start
1=Ground start
2=DID
3=T1

NOTE:

For changes to this parameter to take effect, the system must be powered down, then back up.

Loop Start / Ground Start Line [FF2], (1-64)#, 21#, (0 or 1) (CPC-B ver 1.11 or older)

Any central office line position in the DBS can be set as either a loop-start or ground-start circuit.

To set central office line position 3, for example, as a loop start line, enter:

[FF2], 3#, 21#, 0#

To set central office line position 7, for example, as a ground start line, enter:

[FF2], 7#, 21#, 1#

NOTES:

Ground start line capability is available only with CPC-B configurations.
If a ground-start trunk(s) is enabled, [FF1], 3#, 20# and 21# program addresses must be set.
Trunk card VB 43531 is also required.
The DBS must be turned off, then turned on to set any change that is made in this program option.
If a central office line port is used for a door-box adapter sensor, set the port for pulse dialing.
If the central office line port is designated as a ground start line in this program address, it is imperative that the 48 volt external power supply be properly connected to the terminals on the DBS backplane.

Misconnection of this power supply can result in serious damage to the DBS main cabinet.

See DBS Installation Instructions manual (section 300), and Technote 1 (March 1991), for further information.
The *flash* and *redial* features will not operate if a line has been designated as "ground start". See technote 13 (March 1992) for further information.

Loop Start / Ground Start / DID Line
[FF2], (1-64)#, 21#, (0 - 2)
(CPC-B ver 2.00 or newer)

Any central office line position in the DBS can be set as either a loop-start, ground-start or DID circuit.. Loop start lines are the most common type of central office line. Ground start lines perform similarly, except they provide the most reliable connection between the Central office and DBS, in terms of positive disconnect signals and no possibility of line crashes or "glare". Direct Inward Dialing lines are beneficial in that the central office can place multiple inbound calls, with different numbers, over the same circuit. Also, these numbers can be programmed to appear on multiple DBS extensions. DID circuts can only be used for inbound calls.

To set central office line position 3, for example, as a loop start line, enter:

[FF2], 3#, 21#, 0#

To set central office line position 7, for example, as a ground start line, enter:

[FF2], 7#, 21#, 1#

To set central office line position 14, for example, as a Direct Inward Dial line, enter:

[FF2], 14#, 21#, 2#

NOTES:

Ground start line capability is available only with CPC-B configurations.

If a ground start line(s) is enabled, [FF1] 3#, 20# & 21# adresses must be set.
When a ground start card is in use, the ports on that card can be configured as either ground or loop start lines.
Trunk card VB 43531 is also required.
The DBS must be turned off, then turned on to set any change that is made in this program option.
If a central office line port is used for a door-box adapter sensor, set the port for pulse dialing.
If the central office line port is designated as a ground start line in this program address, it is imperative that the 48 volt external power supply be properly connected to the terminals on the DBS backplane.
If DID is chosen, check the [FF2] 22#, 23#, 24# & 25# adresses.
DID circuits involve the use of a dedicated DID card.

Misconnection of this power supply can result in serious damage to the DBS main cabinet.

See DBS Installation Instructions manual (section 300), and Technote 1 (March 1991), for further information.
The *flash* and *redial* features will not operate if a line has been designated as "ground start". See technote 13 (March 1992) for further information.

DID Immediate or Wink Start
[FF2], (1-64)#, 22#, (0 or 1)
(CPC-B, ver. 2.00 or newer)

After connecting with a Central office, the DBS will wait 65 milliseconds before accepting the digits of a dialed number, or can be set to wait for a "wink" signal from a central office before accepting the digits of a dialed number.

To set the DID line to immediately accept the dialed number from the central office, enter:

[FF2], (DBS DID line port number)#, 22#, 0#

To set the DID line to wait for the central office wink signal before accepting the dialed number from the central office, enter:

[FF2], (DBS DID line port number)#, 22#, 1#

Wink Start Timer
[FF2], (1-64)#, 23#, (0-15)#
(CPC-B, ver 2.00 or newer)

If "wink" signalling is used for the operation of Direct Inward Dialing line, a timer is required to be set. This timer sets the maximum time the DBS will wait before accepting the dialed digits from the central office.

	Time		Time
0#	140 ms.	8#	300 ms.
1#	160 ms.	9#	320 ms.
2#	180 ms.	10#	340 ms.
3#	200 ms.	11#	360 ms.
4#	220 ms.	12#	380 ms.
5#	240 ms.	13#	400 ms.
6#	260 ms.	14#	420 ms.
7#	280 ms.	15#	440 ms.

Time Out for Dialed DID Digits
[FF2], (1-64)#, 24#, (0-15)#
(CPC-B, ver 2.00 or newer)

Once the central office starts to send the dialed digits to the DBS over a DID line, it is necessary to be able to disconnect the line in the case of a transmission disruption. The maximum amount of time that is allowed for the transmission of the digits is set with this feature.

	Time		Time
0#	No Time Out	8#	22 Seconds
1#	15 Seconds	9#	23 Seconds
2#	16 Seconds	10#	24 Seconds
3#	17 Seconds	11#	25 Seconds
4#	18 Seconds	12#	26 Seconds
5#	19 Seconds	13#	27 Seconds
6#	20 Seconds	14#	28 Seconds
7#	21 Seconds	15#	29 Seconds

DID Interdigit Timeout
[FF2], (1-64)#, 25#, (0-15)#
(CPC-B, ver 2.00 or newer)

Once the digits begin to be outpulsed from the central office on a DID line, it is necessary to define the maximum allowable time between digits. This feature sets the maximum allowable time between the outpulsing of digits from the central office, before a central office time out is assumed.

	Time		Time
0#	30 ms.	8#	110 ms.
1#	40 ms.	9#	120 ms.
2#	50 ms.	10#	130 ms
3#	60 ms.	11#	140 ms
4#	70 ms.	12#	140 ms.
5#	80 ms.	13#	160 ms.
6#	90 ms.	14#	170 ms.
7#	100 ms.	15#	180 ms.

T1 Port Class—trunk
[FF2] (1-64)#, 26# (4-6)#

Assigns a port class to each trunk port that will access the T1. Port classes are used to assign pad levels to connections made via the T1. (Pad levels control volume.)

NOTE:

Figure 1 shows circuit-type numbers. Circuit Types 4-6 are used to assign port classes to trunks.

Figure 1. Circuit-type Numbers

Circuit Types	No.
K-TEL	1
SLT	2
DATA#	3
Analog CO Trk	4
T1 Master	5
T1 Slave	6
OPTION 1*	7
OPTION 2*	8
DTMF#	9
CONF (SCC)#	10
TONE1 (MFR1)#	11
TONE2 (MFR2)#	12

T1 Port Class - trunk (Select 1-12)
[FF2] (1-64)#, 26# (4-6)#
(CPC-B, ver. 4.00 or newer)

DBS trunks are assigned a default circuit type, based on whether they are analog or T1. The circuit type is used with digital pad settings to determine the loss/gain settings for connections to the T1 (See "Digital Pad Setting.").
The T1 Port Class parameter is provided in case a specific trunk or group of trunks needs a unique pad level.
For example, a T1 in a slave cabinet may be assigned as a "circuit type 6." However, the circuit type for the T1 trunk port could be changed to 8 (Option 2). Once the port number is changed to circuit type 8, the pad levels for circuit type 8 could be changed to provide the correct volume setting.

NOTE:

Circuit types are also provided for station ports. See Figure 1 for a definition of circuit types.

Options

This programming parameter allows you to assign circuit types 1-12 to a trunk port. However, the default circuit type for a trunk port should only be changed to circuit type 7 or 8 (Options 1 or 2).

3-3 EXTENSION PROGRAM SETTINGS

EXTENSION NUMBERS
[FF3], (1-144)#, 1#, (100-699 OR 10-69)#

The choice of 2-digit or 3-digit extension numbers are assigned in this feature.

To set extension port 3 to extension number 333, for example, enter:

[FF3], 3#, 1#, 333#

To set extension port 4 to extension number 222, for example, enter:

[FF3], 4#, 1#, 222#

To clear a DBS extension port number, press [FF3], (DBS extension port number)#, 1#, [CONF].

NOTES:

3-digit extension numbers must be used with 60 or more extensions.

See the [FF1], 12# program address to check the digit length that has been set in the DBS .

If an alternate attendant position is set, the extension numbers are as follows:

Attendant telephone 1: Extension 100 or 10.

Attendant telephone 2: Extension 101 or 11.

The default DBS extension numbers are 100 at port 1, 101 at port 2, 102 at port 3, etc.

Extension 100 cannot be assigned to a different port.

If extension 101 or 11 is deleted, the alternate attendant is canceled.

Clearing the extension port number DOES NOT retrun it to its default value. Once an extension port number is cleared, the port is inoperative until an extension number is reassigned to it.

Terminal Type
[FF3], (1-144)#, 2#, (1-38)#

Some DBS extension ports are automatically configured as to the type of equipment, when the hardware is physically installed on the port. Terminal type designations are assigned to extension hardware as follows:

1#: Single-line telephone devices will automatically configure the extension port
2#: 16 key telephone devices will automatically configure the extension port
3#: 22 key telephone devices will automatically configure the extension port
4#: 34 key telephone devices will automatically configure the extension port
5#: Future option
6#: Future option
7#: EM/24 device will automatically configure on the extension port
8#: OPX pulse device needs to be manually configured on the extension port
9#: OPX touch tone device needs to be manually configured on the extension port
10#: Voice mail (non proprietary) devices that are conected to an analog extension port need to be manually configured on the extension port
11#: DSS1 (for extension 100 or 10) needs to be manually configured on the extension port
12#: DSS2 (for extension 100 or 10) needs to be manually configured on the extension port
13#: DSS3 (for extension 101 or 11) needs to be manually configured on the extension port
14#: DSS4 (for extension 101 or 11) needs to be manually configured on the extension port
15#: Voice mail (non proprietary with OPX) needs to be manually configured on the extension port
16# to 19#: DSS consoles 1-4 need to be manually configured on the extension port.. The Attendant feature package is available with the use of CPC-B, ver. 2.00 or newer, as a special EPROM set.
20#: Future option
21# to 28#: Proprietary ACD channels will automatically configure the extension ports
29#: Future option
30#: Future option
31# to 38#: Proprietary Automated Attendant channels will automatically configure the extension ports
39# to 46#: Proprietary Voice Mail channels will automatically configure the extension ports

If DSS 1 is to be installed on extension port 2, for example, enter:

[FF3], 2#, 2#, 11#

The default initialized value of a particular extension port is based on the type of extension card that is installed in the DBS cabinet.

NOTE:

After manually setting types 11-14, or 16-19, disconnect the modular jacks from the devices and then reconnect them.

Terminal Type
[FF3], (1-144)#, 2#, (0 or 1-19)#
(CPC-B, ver. 3.00 or newer)

Some DBS extension ports are automatically configured as to the type of equipment, when the hardware is physically installed on the port. Terminal type designations are assigned to extension hardware as follows:

0#: No assignment
1#: Single-line telephone devices will automatically configure the extension port
2#: 16 key telephone devices will automatically configure the extension port
3#: 22 key telephone devices will automatically configure the extension port
4#: 34 key telephone devices will automatically configure the extension port
5#: Future option
6#: Digital SLT telephone
7#: EM/24 device will automatically configure the extension port
8#: OPX pulse device needs to be manually configured on the extension port
9#: OPX touch tone device needs to be manually configured on the extension port
10#: Voice mail (non proprietary) devices that are connected to an analog extension port need to be manually configured on the extension port
11#: DSS1 (for extension 100 or 10) needs to be manually configured on the extension port
12#: DSS2 (for extension 100 or 10) needs to be manually configured on the extension port
13#: DSS3 (for extension 101 or 11) needs to be manually configured on the extension port
14#: DSS4 (for extension 101 or 11) needs to be manually configured on the extension port
15#: Voice mail (non proprietary with OPX) needs to be manually configured on the extension port
16# to 19#: DSS consoles 1-4 need to be manually configured on the extension port. The Attendant feature package is available with the use of CPC-B, ver. 2.00 or newer, as a special EPROM set.

If DSS 1 is to be installed on extension port 2, for example, enter:

[FF3], 2#, 2#, 11#

The default initialized value of a particular extension port is based on the type of extension card that is installed in the DBS cabinet.

NOTE:

After manually setting types 11-14, or 16-19, disconnect the modular jacks from the devices and then reconnect them.

EM/24 Port Assignment
[FF3], (1-144)#, 3#, (1-144)#

Define the EM/24 extension module hardware port number, then assign an extension port number that will be used with it. The first program entry relates to the EM/24 port number, the second program entry refers to the extension port that the EM/24 works with.

To set a port for the EM/24 to work with extension port 30, for example, enter:
[FF3], 55#, 3#, 30#

To reset the use of an EM/24 on any extension port to the default initialized value, press [FF3], (DBS extension port number), 3#, [CONF], [ON/OFF]

NOTES:

When a change to the default key assignments is required on an EM/24, and CPC-B 2.0X series software prior to version 2.05 is being used, the program procedure must be done in the following order:

a. set the port that the EM/24 is on [FF3], (1-144)#, 2#.

b. Reset the EM/24 by unplugging it and reconnecting it.

c. Proceed with key programming via [FF5], (1-144)#, (1-24)#.

When programming an EM/24 with CPC-B software versions newer than 2.11, this programming order is not required. See Technote 15 (August 1992) for complete information.

After manually reprogramming an EM/24 when any version of CPC software is used, disconnect the modular jack from the device and then reconnect it.

Forced Least Cost Routing
[FF3], (1-144)#, 4#, (0 or 1)#

If an extension is set for Least Cost Routing, the user must dial "9", or press an FF key that is set for the LCR function, in order to gain access to a central office line.

To set an extension port so that the dialing of a "9", or the necessity to press an LCR key is not needed, enter:

[FF3], (DBS extension port number)#, 4#, 0#

To set an extension port so that the dialing of a "9", or the necessity to press an LCR key is needed, enter:

[FF3], (DBS extension port number)#, 4#, 1#

Forced Account Code
[FF3], (1-144)#, 5#, (0 or 1)#

DBS extensions can be set so that central office-line calls can only be made after entering an account code.

To set an extension so that an account code is not needed to make a central office line call, enter:

[FF3], (DBS extension port number)#, 5#, 0#

To set an extension so that an account code is needed to make a central office line call, enter:

[FF3], (DBS extension port number)#, 5#, 1#

Verified Forced Account Codes
[FF3], (1-144)#, 5#, (0 or 1)#
(CPC-B, ver. 3.00 or newer)

DBS extensions can be set so that central office-line calls can only be made after entering a forced account code that is verified. Verification is enabled or disabled on an extension basis.

To set an extension so that a verified forced account code is not needed to make a central office line call, enter:

[FF3], (DBS extension port number)#, 5#, 0#

To set an extension so that a verified forced account code is needed to make a central office line call, enter:

[FF3], (DBS extension port number)#, 5#, 1#

NOTE:

CPC-B versions 3.00 and newer, do not have the forced account code capability of earlier versions. All forced account codes have to be verified. The use of non forced, non verified account codes is still an option if stringent access to Central Office lines is not required.

Extension Lockout Code
[FF3], (1-144)#, 6#, (0000-9999)#

A 4-digit lockout code can be set on an extension to prevent unauthorized people from making central office line calls from the extension.

To set extension 100, with lockout code 4521, for example, enter:

[FF3], 1#, 6#, 4521#

To reset a previously locked out extension to the default initialized value, press [FF3] (DBS extension port number)#, 6#, [CONF], [ON/OFF].

Off Hook Signal
[FF3], (1-144)#, 7#, (0 or 1)#

To be notified by a tone, when a new central office line call has arrived at an extension that is currently engaged in a conversation, this option must be set.

To disable extension 100, for example, for off hook signaling, enter:

[FF3], 1#, 7#, 0#

To enable extension 100, for example, for off hook signaling, enter:

[FF3], 1#, 7#, 1#

To reset any extension ports to the default initialized value, press [FF3], port#, 7#, conf#, [ON/OFF].

NOTES:

This tone will not be sent during a conference call, while the called extension is on hold, or during a call on an central office line for which there is no line key on the telephone.

The off-hook signal volume and the off-hook signal pattern are separate settings. See program addresses [FF3], 15#, & 16#. When an off-hook tone is enabled on an extension, the extension will be excluded from any hunt group setting that may be enabled for it.

If a Voice Announce Unit (model VB-43708) is connected to the DBS off hook signalling ([FF3], (1-144)#, 7#, 1#) must be enabled on all extensions. See Technote 14 (March 1992) for complete information.

Call Waiting Notification Tone/Off Hook Voice Announce
[FF3], (1-144)#, 8#, (0 or 1)#

To send a tone from a calling extension to an extension that is in use, this option must be set. A tone is not sent however, when off hook voice announce is enabled. In the case of OHVA being used, the calling party to an extension in use can verbally override the existing conversation.

To disable the call waiting notification tone or the OHVA capability on extension 100, for example, enter:

[FF3], 1#, 8#, 0#

To enable the call waiting notification tone or the OHVA capability on extension 100, for example, enter:

[FF3], 1#, 8#, 1#

NOTE:

The call waiting notification tone cannot be sent to an extension set with an absence message, or that is on hold, or that is receiving another call or that is involved in a conference call.

Busy Override Send
[FF3], (0-144)#, 9#, (0 or 1)#

To be able to "barge into" an extension that is currently in use from another extension, this option must be enabled on the *barging* extension.

To disable the use of the busy override option from extension 100, for example, enter:

[FF3], 1#, 9#, 0#

To enable the use of the busy override option from extension 100, for example, enter:

[FF3], 1#, 9#, 1#

NOTES:

The busy override option cannot be disabled on the attendant telephones in all CPC-A software versions, and CPC-B software versions earlier than version 2.00.

The busy override option can be disabled on the attendant telephones in CPC-B software, newer than ver. 2.00 Busy override is not possible to an extension: that is not set to accept it, or is involved in a conference call.

To be able to override a busy extension, the calling extension must be in the same page group. Page group 00 is not included in this exception.

Busy Override Receive
[FF3], (1-144)#, 10#, (0 or 1)#

To allow an extension to be able to be "barged into" from another extension, this option must be enabled on the *barged* extension.

To disable extension 101, for example, from being barged into by another extension enter:

[FF3], 2#,10#, 0#

To enable extension 101, for example, to be able to be barged into by another extension enter:

[FF3], 2#,10#, 1#

NOTE:

The override tone can be set to sound during an ongoing central office call, to indicate a new call arrival.

Prime Line Pickup
[FF3], (1-144)#, 11#, (0 or 1)#

Access to an available central office line assigned to the FF1 key can be automatic by picking up the receiver.

If the FF1 key is a pooled trunk key, an available central office line is accessed in numerical order from the highest line number assigned to the key, to the lowest.

To disable prime line pickup on extension 100, for example, enter:

[FF3], 1#, 11#, 0#

To enable prime line pickup on extension 100, for example, enter:

[FF3], 1#, 11#, 1#

NOTE:

Intercom calls cannot be made with this option enabled, unless an intercom call key is assigned to another FF key.

Auto Pickup (Ringing Line Pickup)
[FF3], (1-144)#, 12#, (0 or 1)#

Picking up the receiver at a ringing extension connects the incoming central office line call, hold recall, or transferred call, if this option is enabled.

To disable auto pickup at extension 100, for example, enter:

[FF3], 1#, 12#, 0#

To enable auto pickup at extension 100, for example, enter:

[FF3], 1#, 12#, 1#

Unsupervised Conference
[FF3], (1-144)#, 13#, (0 or 1)#

To enable a DBS user to initiate a three party conference between 2 central office lines and his extension, this option must be set. Once the conference is initialized, the DBS extension user can drop out of the call by pressing either of the central office line keys used to call the other parties.

To disable extension 100, for example, to not be able to initiate a three party conference, enter:

[FF3], 1#, 13#, 0#

To enable extension 100, for example to be able to initiate a three party conference, enter:

[FF3], 1#, 13#, 1#

NOTES:

The DBS user can re-enter the conference by pressing either of the two central office line keys used to initiate the conference. The conference will automatically expire after the period of time set in the Unsupervised Conference Timer, set by the [FF1], 3#, 11# address.

See auto pause for PBX line address [FF2], 13#. Auto pause cannot be used if the conference feature is desired when the DBS is used behind a PBX.

The Central Office line program for conferencing, [FF2], 16# must also be set when conferences are allowed.

Station Message Detail Recorder (SMDR) Report
[FF3], (1-144)#, 14#, (0 or 1)#

Any extension can be removed from the SMDR report, so that call activity from that port will not be recorded.

To not include extension 100, for example, in the SMDR report, enter:

[FF3], 1#, 14#, 0#

To include extension 100, for example, in the SMDR report, enter:

[FF3], 1#, 14#, 1#

NOTES:

Check the SMDR start timer feature found at program address [FF1], 2#, 1#, 2#. Communication program options that need to be checked when this option is set include all options found under [FF1], 2#, 2#, 1-10#.

CPC-B software version 2.00 should be upgraded to version 2.05 to eliminate two intermittent potential SMDR deficiencies in recording field codes. See Technotes 8 & 12 (March 1992), for complete information.

Off Hook Signal Volume
[FF3], (1-144)#, 15#, (1-4)#

Off-hook signaling volume can be set to either of four different levels.

To set the off hook signal volume to the minimum level on extension 100, for example, enter:

[FF3], 1#, 15#, 1#

To set the off hook signal volume to the next level on extension 100, for example, enter:

[FF3], 1#, 15#, 2#

To set the off hook signal volume to the third level on extension 100, for example, enter:

[FF3], 1#, 15#, 3#

To set the off hook signal volume to the maximum level on extension 100, for example, enter:

[FF3], 1#, 15#, 4#

NOTES:

See alert tone for busy override at address [FF1], 2 #, 1#, 17#.

See off hook signal address [FF3], 7#.
See off hook signal pattern address [FF3], 16#.

Off Hook Signal Pattern
[FF3], (1-144)#, 16#, (0 or 1)#

When off hook signaling is set on an extension, the tone pattern can be sent continuously or only once.

To send a continuous tone pattern for an off hook signal to extension 100, for example, enter:

[FF3], 1#, 16#, 0#

To send a single tone pattern for an off hook signal to extension 100, for example, enter:

[FF3], 1#, 16#, 1#

NOTES:

See alert tone for busy override at address [FF1], 2 #, 1#, 17#.

See off hook signal address [FF3], 7#.
See off hook signal volume address [FF3], 15#.

PSD Name Display
[FF3], (1-144)#, 17#, (0 or 1)#

The large screen telephone can show either 5 or 10 personal speed dial names when this feature is chosen.

To choose to display 5 names on a large display telephone that is at extension 100, for example, enter:

[FF3], 1#, 17#, 0#

To choose to display 10 names on a large display telephone that is at extension 100, for example, enter:

[FF3], 1#, 17#, 1#

NOTE:

When the 10 name option is used, the maximum length of a name is 7 characters.

See address [FF6], 3#, to assign personal speed dial names to personal speed dial numbers.

See address [FF10], 2#, 1-14# to assign personal speed dial numbers to an extension.

Extension Page Group
[FF3], (1-144)#, (18-25)#, (0 or 1)#

If an extension is to be included in one or more of the eight hunt groups, this option needs to be set.

To exclude extension 100 from page group 0, for example, enter:

[FF3], 1#, 18#, 0#

To include extension 100 in page group 1, for example, enter:

[FF3], 1#, 19#, 1#

To exclude extension 100 from page group 2, for example, enter:

[FF3], 1#, 20#, 0#

To include extension 100 in page group 3, for example, enter:

[FF3], 1#, 21#, 1#

To exclude extension 100 from page group 4, for example, enter:

[FF3], 1#, 22#, 0#

To include extension 100 in page group 5, for example, enter:

[FF3], 1#, 23#, 1#

To exclude extension 100 from page group 6, for example, enter:

[FF3], 1#, 24#, 0#

To include extension 100 in page group 7, for example, enter:

[FF3], 1#, 25#, 1#

To reset page group inclusion to the default initialized value, press [FF3], (DBS extension port number)#, (18-25)#, 0#, [ON/OFF].

The following program options apply to large-screen display telephones only.

DISPLAY WHEN IDLE
[FF3], (1-144)#, 26#, (0-24)#

To display soft key options on the large display telephone (VB-43225), when the phone is in the idle mode, this option must be set.

NOTE:

To review the screen prompts associated with the options of this program, see the appendix following this section.

Display During DBS Dial Tone [FF3], (1-144)#, 27#, (0-24)#

To display soft key options on the large display telephone (VB-43225), during the time DBS dial tone is heard, this option must be set.

	LCD Menu		LCD Menu
0#	No Change	12#	Function Screen 2
1#	Main Menu	13#	Function Screen 3
2#	Personal Speed Dial	14#	Function Screen 4
3#	System Speed Dial	15#	Function Screen 5
4#	Extension Index	16#	Function Screen 6
5#	Guidance Menu 1	17#	Function Screen 7
6#	Guidance Menu 2	18#	Function Screen 8
7#	Guidance Menu 3	19#	Function Screen 9
8#	Attendant Menu 1	20#	Function Screen 10
9#	Attendant Menu 2	21#	Function Screen 11
10#	Attendant Menu 3	22#	Function Screen 12
11#	Function Screen 1	23#	Function Screen 13
		24#	Function Screen 14

NOTE:

To review the screen prompts associated with the options of this program, see the appendix following this section.

Display When Calling An Extension [FF3], (1-144)#, 28#, (0-24)#

To display soft key options on the large display telephone (VB-43225), when calling another extension, this option must be set.

	LCD Menu		LCD Menu
0#	No Change	12#	Function Screen 2
1#	Main Menu	13#	Function Screen 3
2#	Personal Speed Dial	14#	Function Screen 4
3#	System Speed Dial	15#	Function Screen 5
4#	Extension Index	16#	Function Screen 6
5#	Guidance Menu 1	17#	Function Screen 7
6#	Guidance Menu 2	18#	Function Screen 8
7#	Guidance Menu 3	19#	Function Screen 9
8#	Attendant Menu 1	20#	Function Screen 10
9#	Attendant Menu 2	21#	Function Screen 11
10#	Attendant Menu 3	22#	Function Screen 12
11#	Function Screen 1	23#	Function Screen 13
		24#	Function Screen 14

NOTE:

To review the screen prompts associated with the options of this program, see the appendix following this section.

Display When Accessing CO Dial Tone [FF3], (1-144)#, 29#, (0-24)#

To display soft key options on the large display telephone (VB-43225), when accessing a central office line, this option must be set.

	LCD Menu		LCD Menu
0#	No Change	12#	Function Screen 2
1#	Main Menu	13#	Function Screen 3
2#	Personal Speed Dial	14#	Function Screen 4
3#	System Speed Dial	15#	Function Screen 5
4#	Extension Index	16#	Function Screen 6
5#	Guidance Menu 1	17#	Function Screen 7
6#	Guidance Menu 2	18#	Function Screen 8
7#	Guidance Menu 3	19#	Function Screen 9
8#	Attendant Menu 1	20#	Function Screen 10
9#	Attendant Menu 2	21#	Function Screen 11
10#	Attendant Menu 3	22#	Function Screen 12
11#	Function Screen 1	23#	Function Screen 13
		24#	Function Screen 14

NOTE:

To review the screen prompts associated with the options of this program, see the appendix following this section.

Display When Conversing On A CO Line [FF3], (1-144)#, 30#, (0-24)#

To display soft key options on the large display telephone (VB-43225), when in conversation on central office line, this option must be set.

	LCD Menu		LCD Menu
0#	No Change	12#	Function Screen 2
1#	Main Menu	13#	Function Screen 3
2#	Personal Speed Dial	14#	Function Screen 4
3#	System Speed Dial	15#	Function Screen 5
4#	Extension Index	16#	Function Screen 6
5#	Guidance Menu 1	17#	Function Screen 7
6#	Guidance Menu 2	18#	Function Screen 8
7#	Guidance Menu 3	19#	Function Screen 9
8#	Attendant Menu 1	20#	Function Screen 10
9#	Attendant Menu 2	21#	Function Screen 11
10#	Attendant Menu 3	22#	Function Screen 12
11#	Function Screen 1	23#	Function Screen 13
		24#	Function Screen 14

NOTE:

To review the screen prompts associated with the options of this program, see the appendix following this section.

Display When Receiving A Page [FF3], (1-144)#, 31#, (0-24)#

To display soft key options on the large display telephone (VB-43225), when receiving a page, this option must be set.

	LCD Menu		LCD Menu
0#	No Change	12#	Function Screen 2
1#	Main Menu	13#	Function Screen 3
2#	Personal Speed Dial	14#	Function Screen 4
3#	System Speed Dial	15#	Function Screen 5
4#	Extension Index	16#	Function Screen 6
5#	Guidance Menu 1	17#	Function Screen 7
6#	Guidance Menu 2	18#	Function Screen 8
7#	Guidance Menu 3	19#	Function Screen 9
8#	Attendant Menu 1	20#	Function Screen 10
9#	Attendant Menu 2	21#	Function Screen 11
10#	Attendant Menu 3	22#	Function Screen 12
11#	Function Screen 1	23#	Function Screen 13
		24#	Function Screen 14

NOTE:

To review the screen prompts associated with the options of this program, see the appendix following this section.

Display After Receiving A Call Waiting Tone [FF3], (1-144)#, 32#, (0-24)#

To display soft key options on the large display telephone (VB-43225), when a receiving a call waiting tone, this option must be set.

	LCD Menu		LCD Menu
0#	No Change	12#	Function Screen 2
1#	Main Menu	13#	Function Screen 3
2#	Personal Speed Dial	14#	Function Screen 4
3#	System Speed Dial	15#	Function Screen 5
4#	Extension Index	16#	Function Screen 6
5#	Guidance Menu 1	17#	Function Screen 7
6#	Guidance Menu 2	18#	Function Screen 8
7#	Guidance Menu 3	19#	Function Screen 9
8#	Attendant Menu 1	20#	Function Screen 10
9#	Attendant Menu 2	21#	Function Screen 11
10#	Attendant Menu 3	22#	Function Screen 12
11#	Function Screen 1	23#	Function Screen 13
		24#	Function Screen 14

NOTE:

To review the screen prompts associated with the options of this program, see the appendix following this section.

Display When Dialing An Extension [FF3], (1-144)#, 33#, (0-24)#

To display soft key options on the large display telephone (VB-43225), when dialing an extension, this option must be set.

	LCD Menu		LCD Menu
0#	No Change	12#	Function Screen 2
1#	Main Menu	13#	Function Screen 3
2#	Personal Speed Dial	14#	Function Screen 4
3#	System Speed Dial	15#	Function Screen 5
4#	Extension Index	16#	Function Screen 6
5#	Guidance Menu 1	17#	Function Screen 7
6#	Guidance Menu 2	18#	Function Screen 8
7#	Guidance Menu 3	19#	Function Screen 9
8#	Attendant Menu 1	20#	Function Screen 10
9#	Attendant Menu 2	21#	Function Screen 11
10#	Attendant Menu 3	22#	Function Screen 12
11#	Function Screen 1	23#	Function Screen 13
		24#	Function Screen 14

To review the screen prompts associated with the options of this program, see the appendix following this section.

Extension Directory Display [FF3], (1-144)#, 34#, (0 or 1) (CPC-B, ver. 2.00 or newer)

The large display telephone (VB-43225) can be set to display 5 or 10 extension names after the extension menu has been displayed.

	LCD Menu		LCD Menu
0#	No Change	12#	Function Screen 2
1#	Main Menu	13#	Function Screen 3
2#	Personal Speed Dial	14#	Function Screen 4
3#	System Speed Dial	15#	Function Screen 5
4#	Extension Index	16#	Function Screen 6
5#	Guidance Menu 1	17#	Function Screen 7
6#	Guidance Menu 2	18#	Function Screen 8
7#	Guidance Menu 3	19#	Function Screen 9
8#	Attendant Menu 1	20#	Function Screen 10
9#	Attendant Menu 2	21#	Function Screen 11
10#	Attendant Menu 3	22#	Function Screen 12
11#	Function Screen 1	23#	Function Screen 13
		24#	Function Screen 14

To set an extension port to display 5 extension names, enter

[FF3], (DBS extension port number)#, 34#, 0#

To set extension port 22 for example, to display 10 extension names, enter:

FF3], 22#, 34#, 1#

Inbound DID Dial Numbers
[FF3], (1-144)#, 35#, (0000-9999)#
(CPC-B, ver. 2.00 to 3.00)

Direct inward dialed numbers that have been dialed by a caller need to be assigned to extension ports, so that the number dialed will ring on all extensions they are supposed to appear on. A DID number can be set to ring on one extension port only.

To set DID number 0000 to ring on a DBS extension port number, enter:

[FF3], (DBS extension port number)#, 35#, 0000#.

To set DID number 4444 to ring on extension port 50, for example, enter:

[FF3], 50#, 35#, 4444#

NOTE:

This feature has been moved to address [FF1], 8#, 3# in CPC-B software versions 3.00 and newer. This changes provides greater flexibility in the assignment of DID numbers.

Extension Class Of Service
[FF3], (1-144)#, 35#, (0-8)#
(CPC-B, ver. 3.00 or newer)

Once extension features have been put into one of 8 possible classes of service in address [FF1], 2#, 5#, a particular class of service has to be assigned to an extension.

To assign all extension features to a DBS extension for example, enter:

[FF3], (DBS extension port number)#, 35#, 0#

To assign class of service 4 to extension port 54, for example, enter:

[FF3], 54#, 35#, 4#

NOTE:

See programming at the [FF1], 2#, 5# address for the list of features that can be applied to a class of service.

Ringback Tone From Busy Signal
[FF3], (1-144)#, 36#, (0-2)#
(CPC-B, ver 2.00 or newer)

The ringback tone a caller hears when arriving at an extension that is busy because the same multi line key is in use by the called party, can be set in this address.

To give the calling party a ringback and busy tone, enter:

[FF3], (DBS extension port number)#, 36#, 0#

To give the calling party a busy signal, enter:

[FF3], (DBS extension port number)#, 36#, 1#

To give the calling party a ringback tone, enter:

[FF3], (DBS extension port number)#, 36#, 2#

T1 Port Class—station
[FF3], (1-144)#, 37# (1-2 or 7-8)#
(CPC-B, ver. 4.00 or newer)

Assigns a port class to each station port that will access the T1. Port classes are used to assign pad levels to connections made via the T1. (Pad levels control volume.)
By default, DBS phones are assigned a circuit type, based on whether they are KTELs or SLTs.
The circuit type is used with digital pad settings to determine the loss/gain settings for connections to the T1. (See "Digital Pad Setting."
The T1 Port Class parameter is provided in case a specific phone or group of phones needs a unique pad level.
For example, an SLT is assigned by default as "circuit type 2." However, if an SLT in a remote warehouse has inadequate volume levels, the circuit type for the SLT could be changed to 7 (Option 1). Once the SLT is changed to circuit type 7, the pad levels for circuit type 7 could be changed to provide the correct volume setting.

NOTE:

Circuit types are also provided for trunk ports. See Figure 1 for a definition of circuit types.

This programming parameter will allow you to assign circuit types 1-12 to a station port. However, it should only be changed to circuit type 7 or 8 (Option 1 or 2).

Figure 1 shows circuit-type numbers. Circuit Types 1, 2, 7, and 8 are used to assign port classes to stations.

Figure 1. Circuit-type Numbers

Circuit Types	No.
K-TEL	1
SLT	2
DATA#	3
Analog CO Trk	4
T1 Master	5
T1 Slave	6
OPTION 1*	7
OPTION 2*	8
DTMF#	9
CONF (SCC)#	10
TONE1 (MFR1)#	11
TONE2 (MFR2)#	12

Single Line Telephone Hook Flash
[FF3], (1-144)#, 38#, (0 or 1)#
(CPC-B, ver. 3.00 or newer)

To determine what type of action will occur when an SLT user hook flashes while in conversation with a caller with another caller already on hold, this feature must be set. The two possible types of action are alternately toggling between the party on hold and the party being talked to, or, conferencing the two parties together with the SLT user.

To toggle between the two parties connected to an SLT user, enter:

[FF3], (DBS extension port number)#, 38#, 0#

To conference two parties with the SLT user, enter:

[FF3], (DBS extension port number)#, 38#, 1#

Extension Ring Pattern
[FF3], (1-144)#, 39#, (0-9)#
(CPC-B, ver 3.00 or newer)

To set a distinctive extension ring pattern for central office calls that are set to ring at an extension, this feature must be set. The ring patterns for proprietary DBS phones are different than those of SLT or OPX phones. Either of ten different patterns can be set for an extension.

Digital SLT Receiving Volume
[FF3], (1-144)#, 40#, (0 or 1)#
(CPC-B, ver. 3.00 or newer)

The handset receive volume of the digital single line telephone can be set to a normal or louder than normal volume. The louder than normal setting gives a +6dB gain over the normal setting, which results in a volume level approximately twice that of the normal setting.

To set the digitial SLT handset receiving volume to the normal level, enter:

[FF3], (DBS extension port number)#, 40#, 0#

To set the digitial SLT handset receiving volume to louder than normal, enter:

[FF3], (DBS extension port number)#, 40#, 1#

	Digital Ring Pattern		Digital Ring Pattern
0#	Depends On CO Setting	5#	1 Second On/ 3 Sceonds OFF
1#	3 Seconds ON/ 1 Second OFF	6#	.5 Second ON/ .5 Second OFF
2#	2 Seconds ON/ 2Seconds OFF	7#	.5 Second ON/ .5 Second OFF, .5 Second ON/ .5 Seconds OFF, .5 Second ON /3.5 Seconds OFF
3#	1 Second ON/ 1 Second OFF	8#	.5 Second ON/ 3.5 Seconds OFF
4#	1 Second ON/ 2 Seconds OFF	9#	1 Second ON/ 7 Seconds OFF

	SLT/OPX Ring Pattern		SLT/OPX Ring Pattern
0#	Depends On SLT Transfer Ring Setting	5#	1 Second On/ 5 Sceonds OFF
1#	3 Seconds ON/ 1 Second OFF	6#	1 Second ON/ 7 Second OFF
2#	2 Seconds ON/ 2Seconds OFF	7#	.5 Second ON/3 .5 Second OFF,
3#	1 Second ON/ 2 Second OFF	8#	.5 Second ON/ 3.5 Seconds OFF
4#	1 Second ON/ 3 Seconds OFF	9#	.5 Second ON/ 3.5 Seconds OFF

Auto Set Relocation Code
[FF3], (1-144)#, 41#, (0001-9999)#
(CPC-B, ver 3.00 or newer)

This feature enables an extension to be physically moved from one position to another, and to take all features that have been applied to the extension in it's original position, to the new position without doing manual program changes. By applying an auto set relocation code to a phone, and using this code when an extension is moved, extension moving is efficient and quick.

To apply no auto set relocation code to an extension port, enter:

[FF3], (DBS extension port number)#, 41#, [CONF]

To apply an auto set relocation code of 7777 to extension port 45, for example, enter:

[FF3], 45#, 41#, 7777#

NOTES:

The auto set relocation code is applied to the original extension being moved. After the extension is plugged into the new port position, press ON/OFF, #10, (original DBS port number)#, then the (4 digit auto set relocation code number). After the process is complete, reset the phone on the new port by disconnecting the modular plug, and reconnecting it. The original port position converts to a "0" type. The transfer of phones between digital and analog ports cannot be done. The transfer of phones between analog ports, or between digital ports can be done.

PERMANENT CALL FORWARD TYPE
[FF3], (1-144)#, 42#, (0-3)#
CPC-B, VER. 3.00 OR NEWER)

An extension can be set in a permanent call forward setting. This feature is mainly for use with peripheral equipment (specifically voice mail applications), where it is desired to have an extension ring for a period of time, and then always forward to the same extension port.

To not have an extension permanently call forwarded for all calls, enter:

[FF3], (DBS extension port number)#, 42#, 0#

To turn permanent call forwarding off, enter:

[FF3], (DBS extension port number)#, 42#, 1#

To have an extension permanently call forwarded when an extension user is busy, enter:

[FF3], (DBS extension port number)#, 42#, 2#

To have an extension permanently call forwarded when an extension user does not answer, enter:

[FF3], (DBS extension port number)#, 42#, 3#

NOTE:

Permanent call forwarding can be overridden by call forwarding set at the extension level.

PERMANENT CALL FORWARD EXTENSION
[FF3], (1-144)#, 43#, (100-699)#
(CPC-B, VER 3.00 OR NEWER)

If permanent call forwarding is applied, an extension number must be set as the target of forwarded calls. This address sets the call forward target.
If permanent call forwarding is not enabled, no call forwarding extension is required. The default initialized value of this adddress would then be:

[FF3], (DBS extension port number)#, 43#, [CONF].

To set extension number 333 as the target extension of calls from source extension number 105, enter:

[FF3], 105#, 43#, 333#

ML/MCO Separation
[FF3], (001-144)# , 44#, (0 or 1)#
(CPC-B, ver. 4.00 or newer)

As of CPC-B Version 4, extensions can have MCO or ML keys. In previous versions, the keys were available on a system-wide basis. The type of key available differed with the software release. In this parameter, "(001-144)" represents the extension port number. In "0 or 1," "0" represents the MCO keys and "1" represents the ML keys. The following table shows MCL/ML availability.

Note:

1. The initial setting for all extensions (except the first attendant phone) is MCO.
2. The initial setting for the first attendant phone (port 1) is ML.

CPC Version	Type of Key
CPC-A	MCO only
CPC-B 1.0	MCO only
CPC-B 2.0 - 3.1	ML only
CPC-B 4.0 and above	MCO or ML

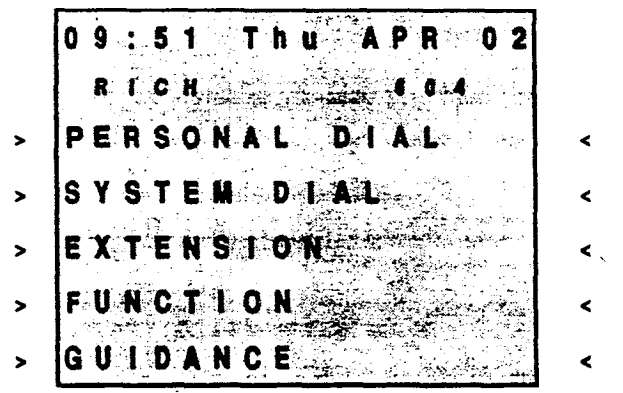
The following are the possible screen appearances of the large display telephone (VB-43225), when any of the 25 screen selections are chosen for a particular telephone condition. Some screens can not be set to display during certain telephone conditions if the prompts are not relevant to the conditions of the phone.

"No Change"

[FF3], (DBS ext. port number)#, (26-33)#, 0#

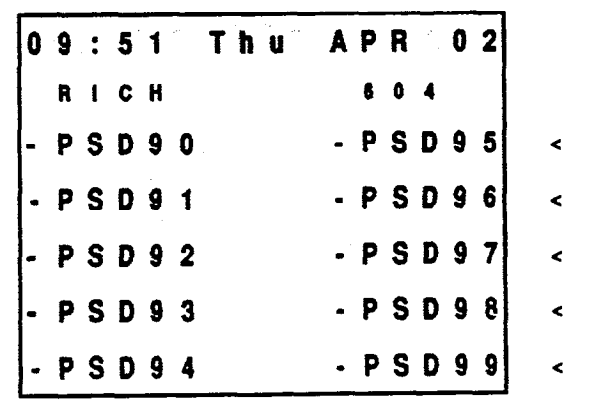
"Main Menu"

[FF3], (DBS ext. port number)#, (26-33)#, 1#



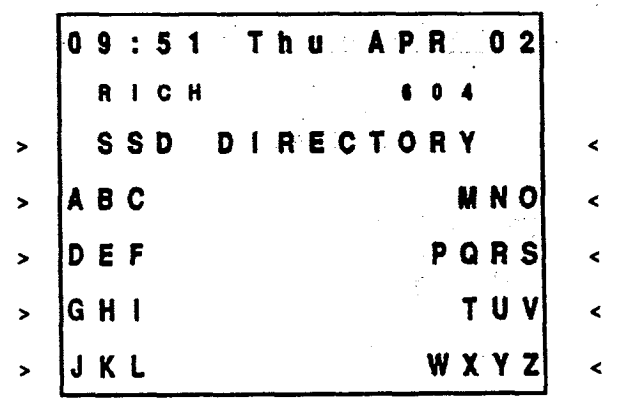
"Personal Speed Dial"

[FF3], (DBS ext. port number)#, (26-33)#, 2#



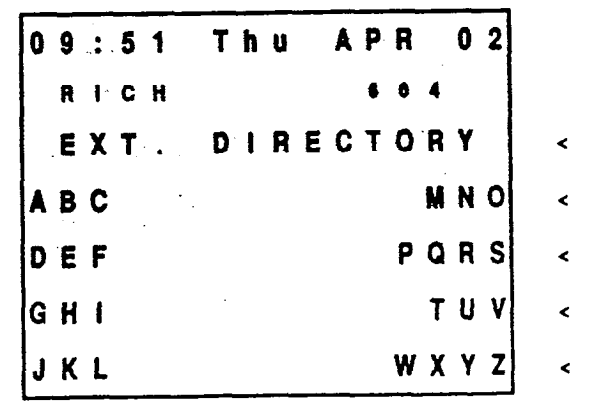
"System Speed Dial"

[FF3], (DBS ext. port number)#, (26-33)#, 3#



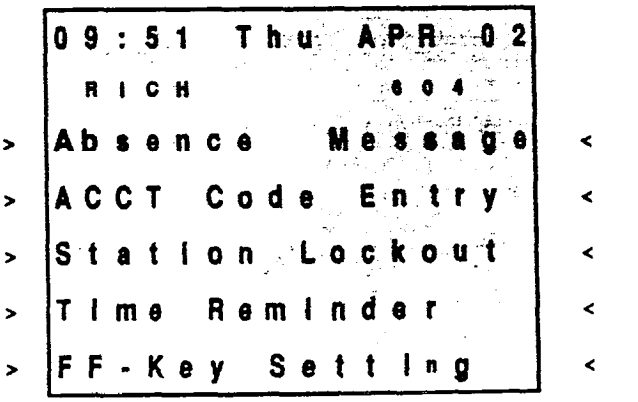
"Extension Index"

[FF3], (DBS ext. port number)#, (26-33)#, 4#



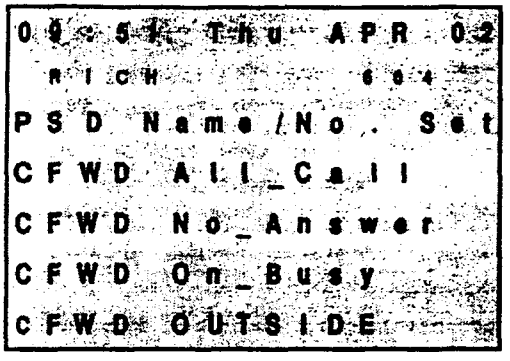
"Guidance Menu 1"

[FF3], (DBS ext. port number)#, (26-33)#, 5#



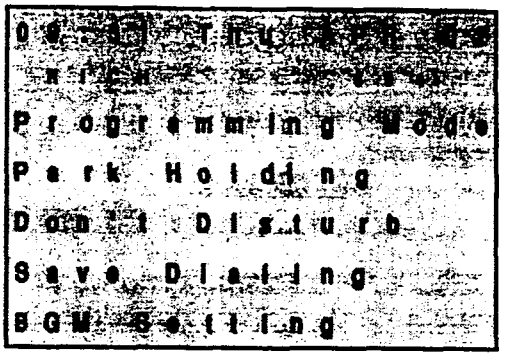
"Guidance Menu 2"

[FF3], (DBS ext. port number)#, (26-33)#, 6#



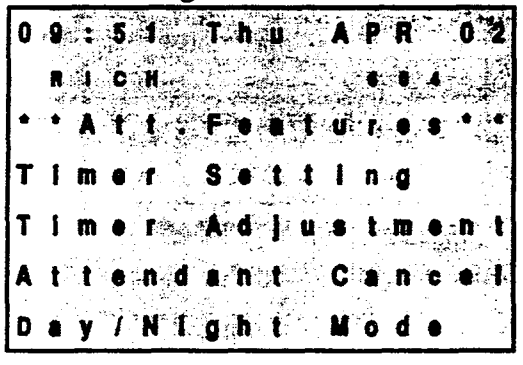
"Guidance Menu 3"

[FF3], (DBS ext. port number)#, (26-33)#, 7#



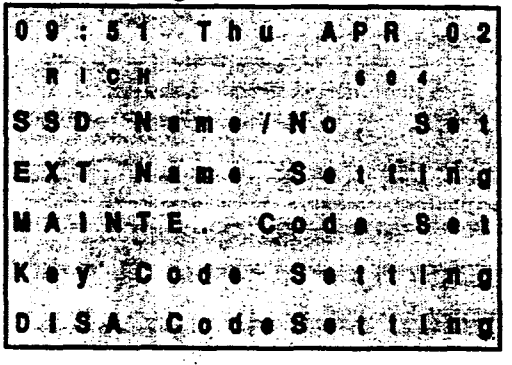
"Attendant Menu 1"

[FF3], (DBS ext. port number)#, (26-33)#, 8#
Attendant only



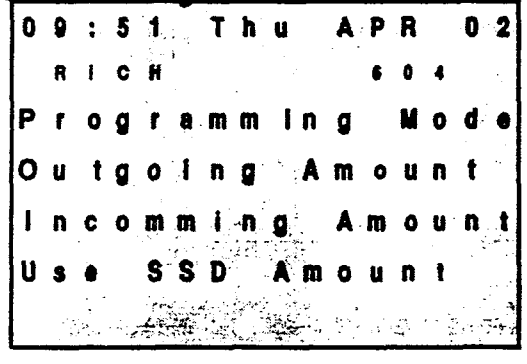
"Attendant Menu 2"

[FF3], (DBS ext. port number)#, (26-33)#, 9#
Attendant only



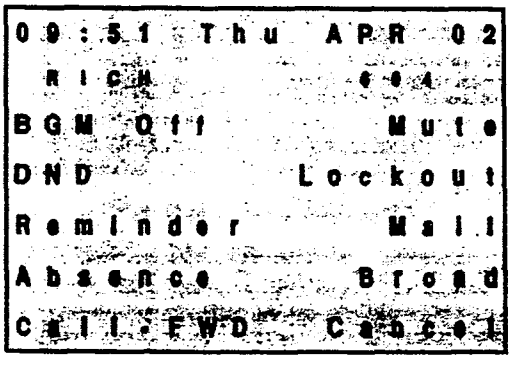
"Attendant Menu 3"

***[FF3],** (DBS ext. port number)#, (26-33)#, 10#*
Attendant only



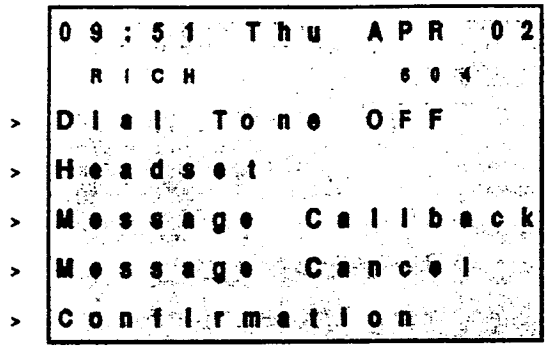
"Function Screen 1"

[FF3], (DBS ext. port number)#, (26-33)#, 11#



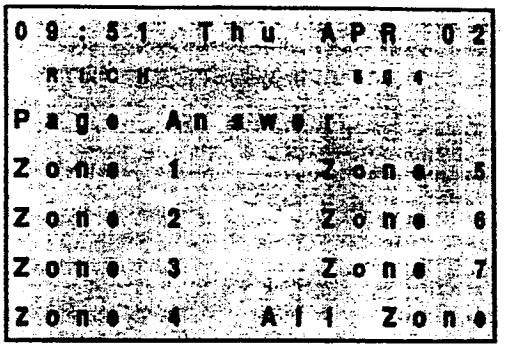
"Function Screen 2"

[FF3], (DBS ext. port number)#, (26-33)#, 12#



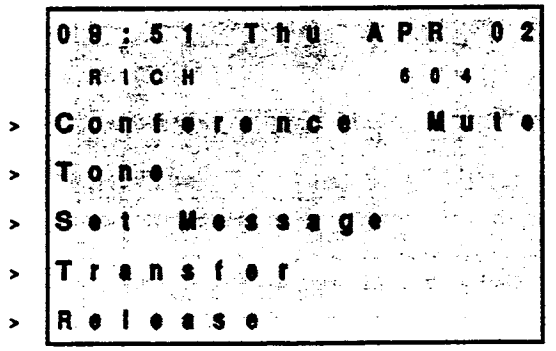
"Function Screen 3"

[FF3], (DBS ext. port number)#, (26-33)#, 13#



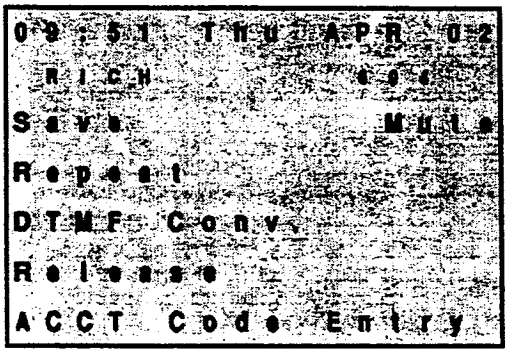
"Function Screen 4"

[FF3], (DBS ext. port number)#, (26-33)#, 14#



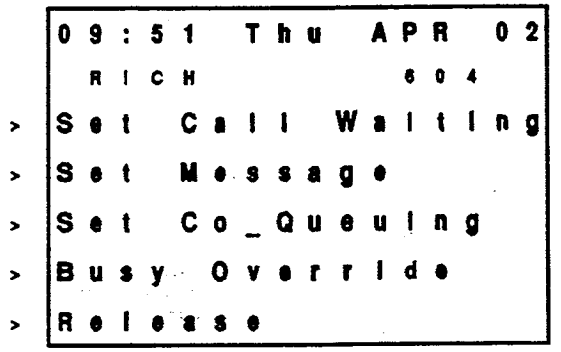
"Function Screen 5"

[FF3], (DBS ext. port number)#, (26-33)#, 15#



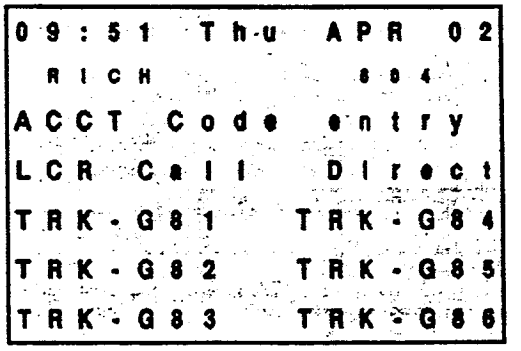
"Function Screen 6"

[FF3], (DBS ext. port number)#, (26-33)#, 16#



"Function Screen 7"

[FF3], (DBS ext. port number)#, (26-33)#, 17#



"Function Screen 8"

[FF3], (DBS ext. port number)#, (26-33)#, 18#

```
  09:51 Thu APR 02
    RICH        604
> UNA-Pick-Up          <
> Group Pick-Up        <
> Direct Pick-Up       <
> Page   Pick-Up       <
>                      <
```

"Function Screen 9"

[FF3], (DBS ext. port number)#, (26-33)#, 19#

```
  09:51 Thu APR 02
    RICH        604
> MCO-CALL      MUTE   <
> LCR-CALL      PAGE   <
> PSD-DIR       TONE   <
> SSD-DIR              <
> EXT-DIR              <
```

"Function Screen 10"

[FF3], (DBS ext. port number)#, (26-33)#, 20#

```
  09:51 Thu APR 02
    RICH        604
> Message       Mute   <
> Transfer       DND   <
> Release       Tone   <
> Conference    Park   <
>                      <
```

"Function Screen 11"

[FF3], (DBS ext. port number)#, (26-33)#, 21#

```
  09:51 Thu APR 02
    RICH        604
> Repeat     Release   <
> DTMF-Conv.    Mute   <
> ACCT Code  Entry     <
> SSD-DIR    EXT-DIR   <
> PSD-DIR              <
```

Function Screen 12"

[FF3], (DBS ext. port number)#, (26-33)#, 22#

```
  09:51 Thu APR 02
    RICH        604
> Save          Mute   <
> PSD-DIR    Release   <
> SSD-DIR   Transfer   <
> Conf.     Reminder   <
> ACCT Code Entry      <
```

"Function Screen 13"

[FF3], (DBS ext. port number)#, (26-33)#, 23#

```
  09:51 Thu APR 02
    RICH        604
> Page-Answer   Mute   <
> Headset        UNA   <
> Tone       EXT-DIR   <
>            PSD-DIR   <
>            SSD-DIR   <
```

"Function Screen 14"

[FF3], (DBS ext. port number)#, (26-33)#, 24#

	0 9 : 5 1 T h u A P R 0 2	
	R I C H 6 0 4	
>	T a l k b a c k D N D	<
>	R e l e a s e P a r k	<
>	C o n f e r e n c e	<
>	T r a n s f e r	<
>		<

"Function Screen 15"

[FF3], (DBS ext. port number)#, (26-33)#, 25#

	0 9 : 5 1 T h u A P R 0 2	
	R I C H 6 0 4	
>	H O L D I N G N O T H I N G	<
>		<
>	T R F - T O	<
>		<
>	W A I T : 0 0	<

3-4 RING & HUNT GROUP PROGRAMMING

Central Office Day Ring Assignments [FF4], 1#, (1-145)#, (1-64)#, (0 or 1)#

Central office line "day mode" ring assignments for all extensions are set with this option.

To set extension 120 not to ring on central office line 19 when the DBS is in the "day mode", for example, enter:

[FF4], 1#, 1#, 19#, 0#

To set extension 120 to ring on central office line 50 when the DBS is in the "day mode", for example, enter:

[FF4], 1#, 1#, 50#, 1#

Default initialized values for DBS extension port 1 is: [FF4], 1#, 1#, (1-64)#, 1#, [ON/OFF], and for extension port 2 is: [FF4], 1#, 2#, (1-64)#, 1#, [ON/OFF].

NOTES:

If an outbound central office call is made from an extension that is not set to ring on for any inbound central office line calls, the automatic answer option will not function. To answer inbound central office line calls, press the flashing green line key. To pick up a central office line call that is ringing at another telephone, use the Directed call pickup or Group call pickup options. Port number 145 is used to assign ringing to the external page / UNA interface. All unassigned ringing trunks will be directed to the attendant.

Central Office Day Ring Assignments for Hunt Group Pilot Numbers (CPC-B, ver. 2.00 or newer) [FF4], 1#, (151-158)#, (1-64)#, (0 or 1)#

Central office line "day mode" ring assignments for all hunt group pilot numbers are set with this option.

To set pilot number 600 (which has been assigned as the pilot number for hunt group 3, in this example) not to ring on central office line 14 when the DBS is in the "day mode", for example, enter:

[FF4], 1#, 153#, 14#, 0#

To set pilot number 500 (which has been assigned as the pilot number for hunt group 1, in this example) to ring on central office line 10 when the DBS is in the "day mode", for example, enter:

[FF4], 1#, 151#, 10#, 1#

Central Office Night Ring Assignments [FF4], 2#, (1-145)#, (1-64)#, (0 or 1)

Central office line "night mode" ring assignments for all extensions are set with this option.

To set extension 120 not to ring on central office line 19 when the DBS is in the "night mode", for example, enter:

[FF4], 2#, 21#, 19#, 0#

To set extension 120 to ring on central office line 50 when the DBS is in "night mode", for example, enter:

[FF4], 2#, 21#, 50#, 1#

Default initialized values for DBS extension port 1 is: [FF4], 2#, 1#, (1-64)#, 1#, [ON/OFF], and for extension port 2 is: [FF4], 2#, 2#, (1-64)#, 1#, [ON/OFF].

NOTES:

If an outbound central office call is made from an extension that is not set to ring on for any inbound central office line calls, the automatic answer option will not function. To answer inbound central office line calls, press the flashing green line key. To pick up a central office line call that is ringing at another telephone, use the Directed call pickup or Group call pickup options. Port number 145 is used to assign ringing to the external page / UNA interface.

Central Office Night Ring Assignments for Hunt Group Pilot Numbers (CPC-B, ver. 2.00 or newer) [FF4], 2#, (151-158)#, (1-64)#, (0 or 1)#

Central office line "night mode" ring assignments for all hunt group pilot numbers are set with this option. The address numbers 151-158 refer to hunt group numbers 1-8.

To set pilot number 300 (which has been assigned as the pilot number for hunt group 2, in this example) to ring on central office line 13 when the DBS is in the "night mode", for example, enter:

[FF4], 2#, 152#, 13#, 1#

To set pilot number 350 (which has been assigned as the pilot number for hunt group 4, in this example) not to ring on central office line 17 when the DBS is in the "night mode", for example, enter:

[FF4], 2#, 154#, 17#, 0#

To reset central office night ring assignments for pilot numbers to the default initialized value, press [FF4], 2#, 151-158#, [central office port number]#, 0#, [ON/OFF].

Terminal / Circular Hunt Groups
[FF4], 3#, (1-8)#, 1#, (0 or 1)#
(CPC-B, ver. 1.07 or older)

A maximum of 8 extensions can be put in each of 8 hunt groups. Each hunt group can be designated as a "terminal type", or "circular type".

Terminal Hunt Group Operation

The call must be transferred or a central office line set to ring at the first extension in the group in order for the terminal hunt feature to work.

If the first extension of the hunt group is busy, an incoming call will automatically access the next extension of the group.

If all the extensions in the group are busy, an internal caller will hear a busy tone, a non transferred central office line caller will hear ring tone. If additional feature options are chosen, the search will continue with an additional hunt group(s).

To use the first extension position (analog) as a pilot position, place a 2 watt 450 ohm resistor across the tip and ring. This will busy the port, and allow it to be used as a "pilot number" for the remaining extensions in the group. Direct calls to members of the hunt group will not hunt to other members of the group if the called extension is busy.

Circular Hunt Group Operation

Circular Hunting is performed when any extension in the group is ringing and left unanswered. The ringing can originate from tranferred, or extensions assigned to ring for outside lines. No pilot number is provided for this type of hunting.

The hunting will follow the next member in the hunt group until the end of the hunt group is reached. When the end of the hunt group is reached the call will then be directed back to the first member until one full circle has been completed. At this point of time the call will overflow to the next hunt group assigned.

If all the extensions in the group are busy, an internal caller will hear a busy tone, a non transferred central office line caller will hear ring tone. If additional feature options are chosen, the search will continue with an additional hunt group(s).

To set hunt group 5, for example, to terminal type, enter:

[FF4], 3#, 5#, 1#, 0#

To set hunt group 4, for example to circular type, enter:

[FF4], 3#, 4#, 1#, 1#

NOTES:

If all extensions are busy, an incoming call will wait for an available extension. If an extension within either type of hunt group is set with an absence message, with a call forward feature, or to DND, the hunt feature will skip that extension, and procede to the next extension within the group. If the first extension within either type of hunt group is set with an absence message, with a call forward feature, or to DND, the hunt feature will not work.

If a SLT hunt group member takes a central office line call, puts it on hold, and replaces the handset, additional central office line calls will not hunt to idle extensions.

Previously searched hunt groups cannot be searched again. If all members of all searched groups are busy, the call will be parked for the first group searched *only*.

Central office lines that are set to ring at extensions set to call forward to a hunt group will *not* call forward to extension types 10 and 15.

An extension that is a member of a hunt group cannot be a member of another hunt group, nor a member of a call coverage group. The off hook signaling [FF3]-16 address should be removed from members in a hunt group.

Pilot Extension Number
[FF4],3#,(1-8)#,1#,(101-699)#
(CPC-B, ver. 2.00 or newer)

A maximum of 8 extension numbers can be assigned to work as one of a maximum of 8 pilot numbers. One pilot number can be used as the lead number for each of the 8 hunt groups.

To assign extension number 255, for example, as a pilot number for the first hunt group, enter:

[FF4], 3#, 1#, 1#, 255#

To assign no extension number (and therefore no pilot number), for example, for the first hunt group, enter:

[FF4], 3#, 1#, 1#, conf,#

To assign extension number 110, for example, as a pilot number for the second hunt group, enter:

[FF4], 3#, 2#, 1#, 110#

To assign extension number 300, for example, as a pilot number for the third hunt group, enter:

[FF4], 3#, 3#, 1#, 300#

To assign extension number 699, for example, as a pilot number for the fourth hunt group, enter:

[FF4], 3#, 4#, 1#, 699#

To assign extension number 600, for example, as a pilot number for the fifth hunt group, enter:

FF4], 3#, 5#, 1#, 600#

To assign extension number 199, for example, as a pilot number for the sixth hunt group, enter:

[FF4], 3#, 6#, 1#, 199#

To assign extension number 400, for example, as a pilot number for the seventh hunt group, enter:

[FF4], 3#, 7#, 1#, 400#

To assign extension number 255, for example, as a pilot number for the eighth hunt group, enter:

[FF4], 3#, 8#, 1#, 255#

To reset the pilot extension number assignment for any hunt group, press [FF4] 3#, (hunt group number 1-8)#, 1#, [CONF], [ON/OFF].

Call Next Hunt Group
[FF4], 3#, (1-8)#, 2#, (1-8)#

If all the extensions in a particular hunt group are busy, the call can be automatically transferred to another hunt group. A call to hunt group 3 could be made to overflow to hunt group 5, if all the extensions in group 3 are busy. If all extensions in the overflow group are also busy, the call will revert back to group 3, and continue to search extensions until one becomes available.

To set hunt group 3 to overflow to hunt group 5, for example, enter:

[FF4], 3#, 3#, 2#, 5#

To set hunt group 4 not to overflow to any other hunt group, for example, enter:

[FF4], 3#, 4#, 2#, [CONF]

To reset hunt group overflow for a particular hunt group to the default initialized value, press [FF4], 3#, (hunt group number)#, 2#, [CONF], [ON/OFF].

Hunt Group Member Table
[FF4], 3#, (1-8)#, (3-10)#, (100-699)#

Use this option to insert an extension in a specific position of one of the eight hunt groups. A maximum of 8 extensions can be put into a hunt group.

To place extension number 500 in the first hunt group's first position, enter:

[FF4], 3#, 1#, 3#, 500#

	Ext #
[FF4], 3#, (1-8)#, (3)#, (100-699)# 1st member for hunt groups (1-8)	xx or xxx , #
[FF4], 3#, (1-8)#, (4)#, (100-699)# 2nd member for hunt groups (1-8)	xx or xxx , #
[FF4], 3#, (1-8)#, (5)#, (100-699)# 3rd member for hunt groups (1-8)	xx or xxx , #
[FF4], 3#, (1-8)#, (6)#, (100-699)# 4th member for hunt groups (1-8)	xx or xxx , #
[FF4], 3#, (1-8)#, (7)#, (100-699)# 5th member for hunt groups (1-8)	xx or xxx , #
[FF4], 3#, (1-8)#, (8)#, (100-699)# 6th member for hunt groups (1-8)	xx or xxx , #
[FF4], 3#, (1-8)#, (9)#, (100-699)# 7th member for hunt groups (1-8)	xx or xxx , #
[FF4], 3#, (1-8)#, (10)#, (100-699)# 8th member for hunt groups (1-8)	xx or xxx , #

To reset an extension to it's default initialized hunt group value, press: [FF4], 3# (DBS hunt group number)#, (DBS hunt group position)#, [CONF]#, [ON/OFF].

NOTES

An extension that is a member of a hunt group cannot be a member of another hunt group, nor a member of a call coverage group. The off hook signaling [FF3]-16 address should be removed from members in a hunt group.

Hunt Group Search Method
[FF4], 3#, (1-8)#, 2#, (0-2)#
(CPC-B, ver 2.00 or newer)

The type of extension search that is used once the call is connected to a hunt group can be set to terminal, distributed, or longest idle.

Terminal Hunt Group Operation

The call must be transferred or a central office line must be set to ring at the pilot number of the hunt group in order for the terminal hunt feature to work.

The hunt begins with the pilot number, and sequentially moves through the eight extensions. If all the extensions in the group are busy, the hunt for a free extension will terminate.

If the pilot number of another hunt group, or same hunt group, is specified, the search will continue with an additional hunt group(s). If not, the caller will receive a busy tone.

Distributed Hunt Group Operation

The call must be transferred or a central office line must be set to ring at the pilot number of the hunt group in order for the distributed hunt feature to work. The hunt begins at the extension after the last one to pick up the previous caller, and continues in a circular manner for successive calls.

If the pilot number of another hunt group is specified, the search will continue with an additional hunt group(s). If not, the caller will receive a busy tone.

Longest Idle Hunt Group Operation

The call can be transferred or a central office line must be set to ring at the pilot number of the hunt group in order for the longest idle hunt group feature to work.
The hunt begins at the extension in the group that has been idle for the longest period of time, and progresses through the other extensions in the same manner. If the pilot number of another hunt group is specified, the search will continue with an additional hunt group(s). If not, the caller will receive a busy tone.

To set hunt group 1, to the terminal search method, for example, enter:

[FF4], 3#, 1#, 2#, 0#

To set hunt group 2, to the distributed search method, enter:

[FF4], 3#, 2#, 2#, 1#

To set hunt group 3, to the longest idle search method, enter:

[FF4], 3#, 3#, 2#, 2#

Transfer Extension Number
[FF4], 3#, (1-8)#, 3#, (100-699)#
(CPC-B, ver. 2.00 or newer)

Once all extensions in a hunt group have been searched, the caller can be transferred to the pilot number of a different hunt group, an individual extension, the attendant, or an SLT device. This option sets the extension number that the call will be transferred to, in the event of an overflow from the hunt group.

To set extension number 600 as the overflow extension after a call has overflowed hunt group 3, for example, enter:

[FF4], 3#, 3#, 3#, 600#

To set the overflow extension from any hunt group to the default initialized value, press [FF4], 3#, (DBS hunt group number)#, 3#, 0#, [ON/OFF].

Transfer Timer
[FF4], 3#, (1-8)#, 4#, (0-32)#
(CPC-B, ver. 2.00 or newer)

To set the maximum amount of time before the caller overflows to an extension or additional hunt group, this option must be set.

	Time		Time
0#	Disabled	17#	17 Seconds
1#	1 Second	18#	18 Seconds
2#	2 Seconds	19#	19 Seconds
3#	3 Seconds	13#	13 Seconds
4	4 Seconds	20#	20 Seconds
5#	5 Seconds	21#	21 Seconds
6#	6 Seconds	22#	22 Seconds
7#	7 Seconds	23#	23 Seconds
8#	8 Seconds	24#	24 Seconds
9#	9 Seconds	25#	25 Seconds
10#	10 Seconds	26#	26 Seconds
11#	11 Seconds	27#	27 Seconds
12#	12 Seconds	28#	28 Seconds
13#	13 Seconds	29#	29 Seconds
14#	14 Seconds	30#	30 Seconds
15#	15 Seconds	31 #	31 Seconds
16#	16 Seconds	32 #	32 Seconds

To set the transfer timer for hunt group 1 to 10 seconds, for example, enter:

[FF4], 3#,1#, 4#, 10#

NOTE:

Versions older than 2.11 do not have program settings 0 or 1.

Hunt Group Extension Number
[FF4], 3#, (1-8)#, (5-12)#, (100-699)#
(CPC-B, ver. 2.00 or newer)

To assign an extension to an exact position within a hunt group, this option must be used.

To place extension 300 in hunt group 1, in the first position, for example, enter:

[FF4], 3#, 1#, 5#, 300#

To reset an extension to the default initialized DBS hunt group setting, press [FF4], 3#, (DBS hunt group number)#, (Position within hunt group)#, [CONF]#, [ON/OFF].

	Ext #
[FF4], 3#, (1-8)#, (5)#, (100-699)# 1st member for hunt groups (1-8)	xx or xxx , #
[FF4], 3#, (1-8)#, (6)#, (100-699)# 2nd member for hunt groups (1-8)	xx or xxx , #
[FF4], 3#, (1-8)#, (7)#, (100-699)# 3rd member for hunt groups (1-8)	xx or xxx , #
[FF4], 3#, (1-8)#, (8)#, (100-699)# 4th member for hunt groups (1-8)	xx or xxx , #
[FF4], 3#, (1-8)#, (9)#, (100-699)# 5th member for hunt groups (1-8)	xx or xxx , #
[FF4], 3#, (1-8)#, (10)#, (100-699)# 6th member for hunt groups (1-8)	xx or xxx , #
[FF4], 3#, (1-8)#, (11)#, (100-699)# 7th member for hunt groups (1-8)	xx or xxx , #
[FF4], 3#, (1-8)#, (12)#, (100-699)# 8th member for hunt groups (1-8)	xx or xxx , #

Call Coverage Group Member Table
[FF4], 4#, (1-16)#, (1-8)#, (100-699)#

An extension can be assigned to any position within any one of the 16 call coverage groups in the system. Each group has a maximum of 8 extensions, comprising 6 member extensions and 2 secretarial covering extensions.

To set extension 100 as the first secretary call coverage member of call coverage group 1, for example, enter:

[FF4], 4#, 1#, 1#, 100#

			Ext. #
[FF4], 4#, Coverage	(1-16)#, group #	(1)#, Secretary #1	xx or xxx , #
[FF4], 4#, Coverage	(1-16)#, group #	(2)#, Secretary #2	xx or xxx , #
[FF4], 4#, Coverage	(1-16)#, group #	(3)#, Member #1	xx or xxx , #
[FF4], 4#, Coverage	(1-16)#, group #	(4)#, Member #2	xx or xxx , #
[FF4], 4#, Coverage	(1-16)#, group #	(5)#, Member #3	xx or xxx , #
[FF4], 4#, Coverage	(1-16)#, group #	(6)#, Member #4	xx or xxx , #
[FF4], 4#, Coverage	(1-16)#, group #	(7)#, Member #5	xx or xxx , #
[FF4], 4#, Coverage	(1-16)#, group #	(8)#, Member #6	xx or xxx , #

To reset call coverage groups to the default initialized settings, press [FF4], 4#, (call coverage group)#, (position within coverage group)#, [CONF].

NOTES:

An extension can not be a member of a hunt group, as well as a member of any other call coverage group. The second covering extension becomes active only when the first covering extension is set for Do-Not-Disturb.

Central Office Delayed Day Ring Assignments
[FF4], 5#, (1-145)#, (1-64)#, (0 or 1)
(CPC-B, ver 1.07 or newer)

Central office line "day mode" delayed ring assignments for all extensions are set with this option. When inbound central office line calls are not answered in the time set in the Call-Forward/No-Answer/Delayed-Ring timer, the delayed ring assignments are utilized.

To set port 115 for no delayed ring in the day mode on line 6, for example, enter:

[FF4], 5#, 115#, 6#, 0#

To set extension 110 to delayed ring in the day mode on line 22, for example, enter:

[FF4], 5#, 110#, 22#, 1#

NOTE:

Inclusion of the first-attendant position in the delayed-ring tables, will disable the attendant-overflow feature.

If the delayed ring function is enabled and no extensions are assigned, or capable of ringing (DND, unpluged. etc...), the ringing line will automatically ring the attendant.

Central Office Delayed Day Ring Assignments for Hunt Group Pilot Numbers
[FF4], 5#, (151-158)#, (1-64)#, (0 or 1)
(CPC-B ver. 2.00 or newer)

Central office line "day mode" delayed ring assignments for pilot numbers of hunt groups are set with this option. When inbound central office line calls are not answered in the time set in the Call-Forward/No-Answer/Delayed-Ring timer, the delayed ring assignments are utilized.

To set the pilot number for hunt group 1 for no delayed ring in the day mode on line 22, for example, enter:

[FF4], 5#, 151#, 22#, 0#

To set the pilot number for hunt group 2 for delayed ring in the day mode on line 15, for example, enter:

[FF4], 5#, 152#, 15#, 1#

Central Office Delayed Night Ring Assignments
[FF4], 6#, (1-145)#, (1-64)#, (0 or 1)
(CPC-B, ver. 2.00 or newer)

Central office line "night mode" delayed ring assignments for all extensions are set with this option. When inbound central office line calls are not answered in the time set in the Call-Forward/ No-Answer/Delayed-Ring timer, the delayed ring assignments are utilized.

To set extension 120 for no delayed ring in the night mode on line 3, for example, enter:

[FF4], 6#, 120#, 3#, 0#

To set extension 400 to delayed ring in the night mode on line 20, for example, enter:

[FF4], 6#, 120#, 3#, 1#

NOTE:

Inclusion of the first-attendant position in the delayed-ring tables, will disable the attendant-overflow feature.

If the delayed ring function is enabled and no extensions are assigned, or capable of ringing (DND, unpluged. etc...), the ringing line will automatically ring the attendant.

Central Office Delayed Night Ring Assignments for Hunt Group Pilot Numbers [FF4], 6#, (151-158)#, (1-64)#, (0 or 1)# (CPC-B, ver. 2.00 or newer)

Central office line "night mode" delayed ring assignments for pilot numbers of hunt groups are set with this option. When inbound central office line calls are not answered in the time set in the Call-Forward/No-Answer/Delayed-Ring timer, the delayed ring assignments are utilized.

To set the pilot number for hunt group 4 for delayed ring in the night mode on line 28, for example, enter:

[FF4], 6#, 154#, 28#, 0#

To set the pilot number for hunt group 1 for no delayed ring in the night mode on line 10, for example, enter:

[FF4], 6#, 151#, 10#, 1#

Extension Ring Table [FF4],7#,(001-144)#,(001-144)#,(0 or 1)# (CPC-B, ver. 2.00 or newer)

Extensions th at have a DSS/BLF key assignment for other DBS extensions can be set to ring on those keys for any type of call that is directed to the other extensions. This feature allows a second extension user to answer a ringing call to an absent extension position(s) by accessing the DSS/BLF key on their phone that represents the other extension position(s). The first extension enumerated in the address is the target extension, and the second is the source extension.

To set extension port 15 not to ring for calls directed to extension port 44, enter:

[FF4], 7#, 44#, 15#, 0#

To set extension port 1 to ring for calls directed to extension port 60, enter:

[FF4], 7#, 60#, 1# 1#

Extension Delayed Ring Table
[FF4],8#,(001-144)#,(001-144)#,(0 or 1)
(CPC-B, ver. 2.00 or newer)

Extensions that have a DSS/BLF key assignment for other DBS extensions can be set to delayed ring on those keys for any type of call that is directed to the other extensions. This feature allows a second extension user to answer a ringing call on a delayed basis to an absent extension position(s) by accessing the DSS/BLF key on their phone that represents the other extension position(s).The first extension enumerated in the address is the target extension, and the second is the source extension.

To set extension port 13 not to delay ring for calls directed to extension port 44, enter:

[FF4], 8#, 44#, 13#, 0#

To set extension port 5 to delay ring calls directed to extension port 40, enter:

[FF4], 8#, 40#, 5# 1#

3-5 FLEXIBLE KEY PROGRAMMING FOR LINES & FEATURES

FF Key Assignments for Extensions [FF5], (1-144)#, (1-24)#, (Code)#

Each flexible feature key on the telephones and EM24 consoles can be programmed with a code so that pressing it will perform the function associated with the code assigned to the key.

To set extension port 120, FF key number 5, to be an Alarm key, for example, enter:

[FF5], 120#, 5#, [FF12], 4#

To set extension port 55, FF key number 10, to be a call forward/all calls key, for example, enter:

[FF5], 55#, 10#, 720#

To reset the FF extension keys to an unassigned value, (which must be done before a feature can be applied to a defaulted CO line key), press [FF5], (1-144)#, (1-24)#, [CONF], [ON/OFF].
To reset FF Extension keys to the default initialized value, press [FF5], (1-144)#, (1-24)#, (DBS CO line number that is the same as the key number on the phone)#.
When using CPC-B software later than ver. 2.00, the default values for all keys on the attendant positions default to Pooled Trunk 89 keys.

Key Code Assignments

71#	Absence Msg
[FF12], 7#	Accountant Code
[FF12], 4#	Alarm
[FF11], 1#	Answer Key
[FF12], 53#	BGM
720#	C-F/All Calls
721#	C-F/Busy,NA
722#	C-F/Busy
723#	C-F/CO Line
724#	C-F/NA (CPC-B ver 2.00 or newer)
79#	Direct Call Pickup
70#	Group Call Pickup
01-64#	CO Lines
73#	DND
[PROG], 10-69#	2 digit Extensions
[PROG], 100-699#	3 digit Extensions
[FF12], 51#	Headset
[FF12], 8#	Intercom Key
[FF12], 50#	Internal Dial Tone
89#	Stop LCR
77#	Meet Me Answer
[FF11],[FF12]#	Mute
[FF12], 52#	Night Mode
[FF12], 00-07#	Page
75#	Park Hold
81-86,89#	MCO Access
[FF11], 2#	Release
74#	Extension Lockout
[AUTO], 00-89#	SSD Key
[AUTO], 90-99#	PSD Key
[FF11], 3#	Talk Back
78#	UNA Pickup
[PROG], [PROG], xxxxxx	Any Key
[AUTO], [REDIAL]	Auto Redial to Ext.
81-86, 89	Multiple Loop (limited to 3 per extension, 12 per attendant) (CPC-B ver 2.00 or newer)

NOTES:

The default numbering scheme on extension FF keys is layed out starting from bottom left and ending at top right. All FF keys default to LCR/MCO keys.

Only the first 24 FF keys will light for CO lines that are assigned to them, the remaining keys on any extension having that many FF keys will not light if CO line assignments have been given to them.

Since the * and # keys on the dial pad are used for entering data, when the use of these symbols are required for feature codes, [FF11] provides the * and [FF12] provides the #. When entering these symbols by using the FF keys, the display will not indicate that any data was entered.

To program several telephones with the same key layout, see [FF9] programming.

FF Key Assignments for DSS Consoles

[FF5], (145-148)#, (1-72)#, (Code)# CPC-B
[FF5], (73-76)#, (1-72)#, (Code)# CPC-A

Each flexible feature key on the DSS console can be programmed with a code so that pressing it will perform the function associated with the code assigned to the key.

To set DSS console 1, FF key number 25, to be a BGM key, for example, enter:

[FF5], 145#, 25#, [FF12], 53#

To set DSS console 2, FF key number 44, to be a call forwarded all call key, for example, enter:

[FF5], 146#, 44#, 720#

To reset DSS Console 1 & 2 keys to the default initialized value, press [FF5], (145-148)#, (1-72)#, (DBS extension number)#. DSS Consoles 3 & 4 have no default values set.
To reset the DSS Console keys to an unassigned value, press [FF5], (145-148)#, (1-144)#, [CONF], [ON/OFF].

KEY CODE ASSIGNMENTS

71#	Absence Msg
[FF12], 7#	Accountant Code
[FF12], 4#	Alarm
[FF11], 1#	Answer Key
[FF12], 53#	BGM
720#	C-F/All Calls
721#	C-F/Busy.NA
722#	C-F/Busy
723#	C-F/CO Line
724#	C-F/NA (CPC-B ver 2.00 or newer)
79#	Direct Call Pickup
70#	Group Call Pickup
01-64#	CO Lines
73#	DND
[PROG], 10-69#	2 digit Extensions
[PROG], 100-699#	3 digit Extensions
[FF12], 51#	Headset
[FF12], 8#	Intercom Key
[FF12], 50#	Internal Dial Tone
89#	Stop LCR
77#	Meet Me Answer
[FF11],[FF12]#	Mute
[FF12], 52#	Night Mode
[FF12], 00-07#	Page
75#	Park Hold
81-86,89#	MCO Access
[FF11], 2#	Release
74#	Extension Lockout
[AUTO], 00-89#	SSD Key
[AUTO], 90-99#	PSD Key
[FF11], 3#	Talk Back
78#	UNA Pickup
[PROG], [PROG], xxxxxx	Any Key
[AUTO], [REDIAL]	Auto Redial to Ext.
81-86, 89	Multiple Loop (limited to 3 per extension, 12 per attendant) (CPC-B ver 2.00 or newer)

NOTES:

The default numbering scheme on extension FF keys is layed out starting from bottom left and ending at top right. All FF keys default to LCR/MCO keys.

Only the first 24 FF keys will light for CO lines that are assigned to them, the remaining keys on any extension having that many FF keys will not light if CO line assignments have been given to them.

Since the * and # keys on the dial pad are used for entering data, when the use of these symbols are required for feature codes, [FF11] provides the * and [FF12] provides the #. When entering these symbols by using the FF keys, the display will not indicate that any data was entered.

To program several telephones with the same key layout, see [FF9] programming.

Attendant Feature Package Key Assignments
[FF5], (149-152)#, (1-72)#, (Code)#

Each flexible feature key on the Attendant console can be programmed with a code so that pressing it will perform the function associated with the code assigned to the key.

To set attendant console 1, FF key number 25, to be a BGM key, for example, enter:

[FF5], 145#, 25#, [FF12], 53#

When using Attendant Feature Package software the DSS Console keys default as indicated in the appendix following this section
To reset the Attendant Console keys to an unassigned value, press [FF5], (149-152)#, (1-144)#, [CONF], [ON/OFF].

Key Code Assignments

71#	Absence Msg
[FF12], 7#	Accountant Code
[FF12], 4#	Alarm
[FF11], 1#	Answer Key
[FF12], 53#	BGM
720#	C-F/All Calls
721#	C-F/Busy,NA
722#	C-F/Busy
723#	C-F/CO Line
724#	C-F/NA **(CPC-B ver 2.00 or newer)**
79#	Direct Call Pickup
70#	Group Call Pickup
01-64#	CO Lines
73#	DND
[PROG], 10-69#	2 digit Extensions
[PROG], 100-699#	3 digit Extensions
[FF12], 51#	Headset
[FF12], 8#	Intercom Key
[FF12], 50#	Internal Dial Tone
89#	Stop LCR
77#	Meet Me Answer
[FF11],[FF12]#	Mute
[FF12], 52#	Night Mode
[FF12], 00-07#	Page
75#	Park Hold
81-86,89#	MCO Access
[FF11], 2#	Release
74#	Extension Lockout
[AUTO], 00-89#	SSD Key
[AUTO], 90-99#	PSD Key
[FF11], 3#	Talk Back
78#	UNA Pickup
[PROG], [PROG], xxxxxx	Any Key
[AUTO], [REDIAL]	Auto Redial to Ext.
81-86, 89	Multiple Loop (limited to 3 per extension, 12 per attendant)**(CPC_B ver 2.00 or newer)**

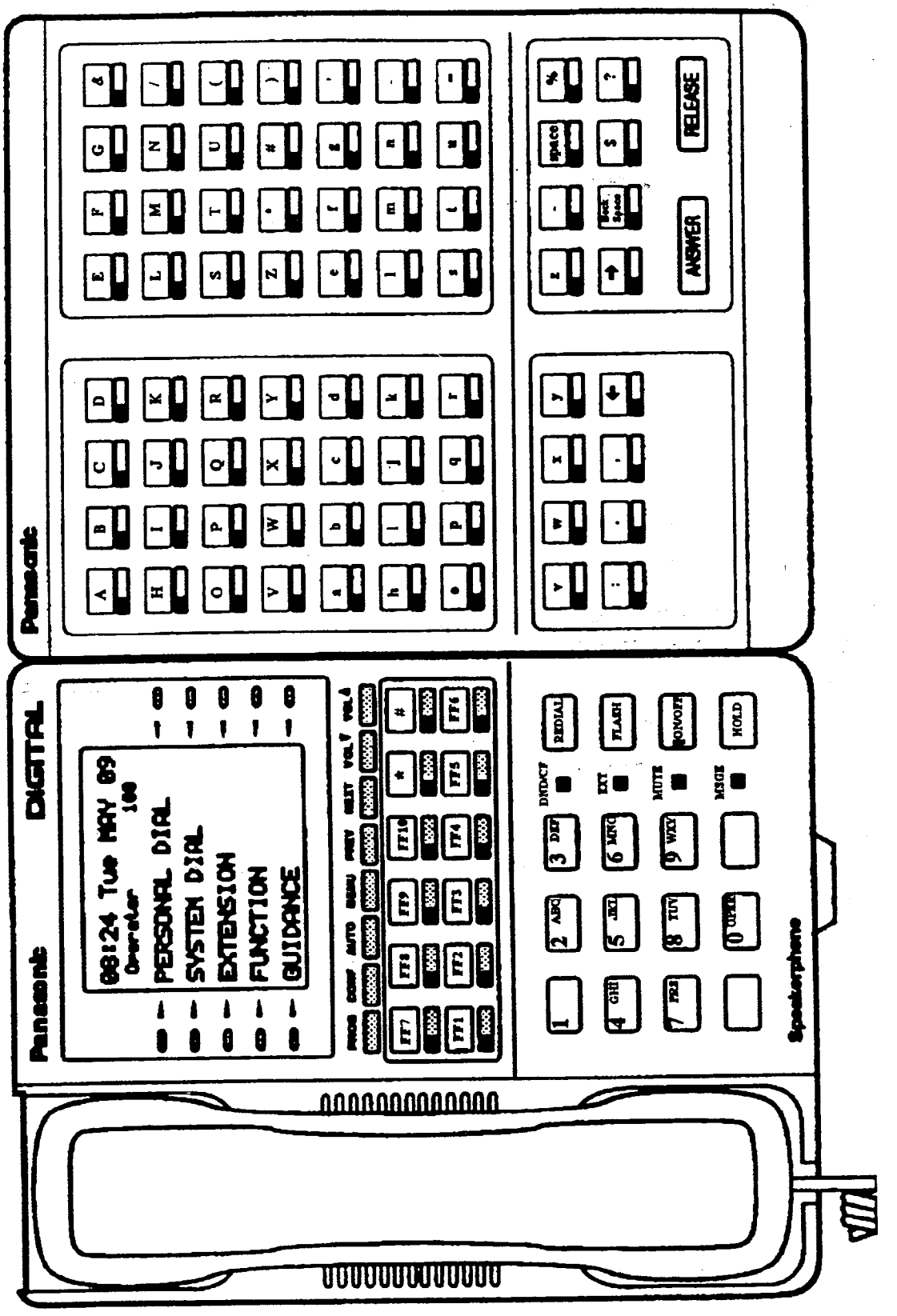
NOTES:

The default numbering scheme on attendant console FF keys is layed out starting from bottom left and ending at top right. All FF keys default to LCR/ MCO keys.

Only the first 24 FF keys will light for CO lines that are assigned to them, the remaining keys on any attendant console having that many FF keys will not light if CO line assignments have been given to them.

Since the * and # keys on the dial pad are used for entering data, when the use of these symbols are required for feature codes, [FF11] provides the * and [FF12] provides the #. When entering these symbols by using the FF keys, the display will not indicate that any data was entered.

To program several telephones with the same key layout, see [FF9] programming.



3-6 NAME AND MESSAGE PROGRAM SETTINGS

Extension Name
[FF6], 1#, (1-144)#, [CONF]#, (Name)#

Names of up to 10 characters can be assigned to each extension number. This name appears on the second line of a telephone with a display, and on the top line of a display extension that is calling.

To assign a name to extension port 40, with the characters RICH M., for example, enter:

[FF6], 1#, 40#, [CONF]#, (see appendix following this section)#

To assign a name to extension port 1, with the characters Operator, for example, enter:

[FF6], 1#, 1#, [CONF]#, (see appendix following this section)#

To reset extension names to the default initialized value, press [FF6], 1#, (1-144), [CONF]#, [ON/OFF].

NOTE:

If the "Attendant Feature Package" software is being used, the DSS Console must be initially set as type 11 in [FF3], 2# to enable the keys for programming capabilities. See the appendix following this section for key designations on the DSS Console which is used to store characters for extension names. If a DSS is not available, see section 700, in the Operating Instructions Manual, under "Attendant Telephone Features" for alternate instructions on how to store characters.

System Speed Dial Names
[FF6], 2#, (00-89)#, (Name)#

Names of up to 16 characters can be assigned to System Speed Dial numbers 00-89. The names are displayed alphabetically on large screen LCD telephones to provide confirmation of the name of the person being called when using a SSD code.

To assign the name "Panasonic" to system speed dial number 05, for example, enter:

[FF6], 2#, 05#, (see appendix following this section)#

To reset the names of system speed dial numbers to the default initialized values, press [FF2], 2#, (00-89)#, [CONF], [ON/OFF].

NOTE:

If the "Attendant Feature Package" software is being used, the DSS Console must be initially set as type 11 in [FF3] 2#, to enable the keys for programming capabilities. See the appendix following this section for key designations on the DSS Console which is used to store characters for system speed dial numbers. If a DSS is not available, see section 700, in the Operating Instructions Manual, under "Attendant Telephone Features" for alternate instructions on how to store characters.

Personal Speed Dial Names
[FF6], 3#, (1-144)#, (90-99)#, [CONF]#, (Name)#

Names of up to 16 characters can be assigned to Personal Speed Dial numbers 90-99. The names are displayed alphabetically on large screen LCD telephones to provide confirmation of the name of the person being called when using a PSD code.

To assign the name "Bill" to personal speed dial number 90, on prt 21 for example, enter:

[FF6], 3#, 021#, 90#, [CONF]#, (see appendix following this section)#

To reset the names of personal speed dial numbers to the default initialized values, press [FF6], 3#, (001-144)#, (90-99)#, [CONF], [ON/OFF].

NOTES:

If the "Attendant Feature Package" software is being used, the DSS Console must be initially set as type 11 [FF3] 2#, to enable the keys for programming capabilities.

See the appendix following this section for key designations to be used to store characters for personal speed dial numbers. If a DSS is not available, see section 700, in the Operating Instructions Manual, under "Attendant Telephone Features" for alternate instructions on how to store characters.

See Technotes 10 & 12 (March 1992) for complete information.

Absence Messages
[FF6], 4#, (5-9)#, [CONF]#, (Message)#

A message of up to 15 characters can be created so that a person calling from a display phone to an extension that is set with an absence message, can be informed of the status of the extension user.

To assign the message "Leaving at 3:00" to absence message 5, for example, enter:

[FF6], 4#, 5#, [CONF]#, (see appendix following this section)#

To assign the message "Don't Bother Me" to absence message 6, for example, enter:

[FF6], 4#, 6#, [CONF]#, (see appendix following this section)#

To assign the message "Call Later" to absence message 7, for example, enter:

[FF6], 4#, 7#, [CONF]#, (see appendix following this section)#

To assign the message "Return at 2:00" to absence message 8, for example, enter:

[FF6], 4#, 8#, [CONF]#, (see appendix following this section)#

To assign the message "In Bathroom" to absence message 9, for example, enter:

[FF6], 4#, 9#, [CONF]#, (see appendix following this section)#

To reset the absence messages to the default initialized values, press [FF6], 4#, (5-9)#, [CONF], [ON/OFF].

NOTES:

If the "Attendant Feature Package" software is being used, the DSS Console must be initially set as type 11 in [FF3] 2#, to enable the keys for programming capabilities.

See the appendix following this section for key designations to be used to store characters for absence messages.

A DSS Console must be used to set absence messages.

CO Line Names Assignment
[FF6], 5#, (1-64)#, [CONF]#, (xxxxxx)#
(CPC-B, ver. 2.00 or newer)

Central office lines can be given names of up to 6 characters to help identify the source of the call. When an inbound call rings at an extension, the top line of the LCD indicates the line name.

To set central office line 3 to "support", for example, enter:

[FF6], 5#, 3#, [CONF]#, (see appendix following this section)#

To reset central office line names to the default initialized values, press [FF6], 5#, (1-64)#, [CONF]#, [ON/OFF].

NOTES:

If the "Attendant Feature Package" software is being used, the DSS Console must be initially set as type 11 in [FF3] 2#, to enable the keys for programming capabilities.

See the appendix following this section for key designations to be used to store characters for central office line names. If a DSS is not available, see section 700, under "Attendant Telephone Features" for alternate instructions on how to store characters.

See Technotes 10 & 12 (March 1992) for complete information..

HUNT GROUP PILOT NAME ASSIGNMENT [FF6], 6#, (1-8)#, [CONF]#, (xxxxxxxxxx)# (CPC-B, VER. 2.00 OR NEWER)

Hunt group pilot numbers can be given a name of up to 11 characters to help identify the source of an inbound central office line call to the hunt group pilot name.

To set a hunt group pilot name for hunt group 1 to "support", for example, enter:

[FF6], 6#, 1#, [CONF]#, (see appendix following this section)#

To reset hunt group pilot names to the default initialized values, press [FF6], 6#, (1-8)#, [CONF]#, [ON/OFF].

NOTES:

If the "Attendant Feature Package" software is being used, the DSS Console must be initially set as type 11 in [FF3] 2#, to enable the keys for programming capabilities.

See the appendix following this section for key designations to be used to store characters for hunt group pilot names. If a DSS is not available, see section 700, under "Attendant Telephone Features" for alternate instructions on how to store characters.

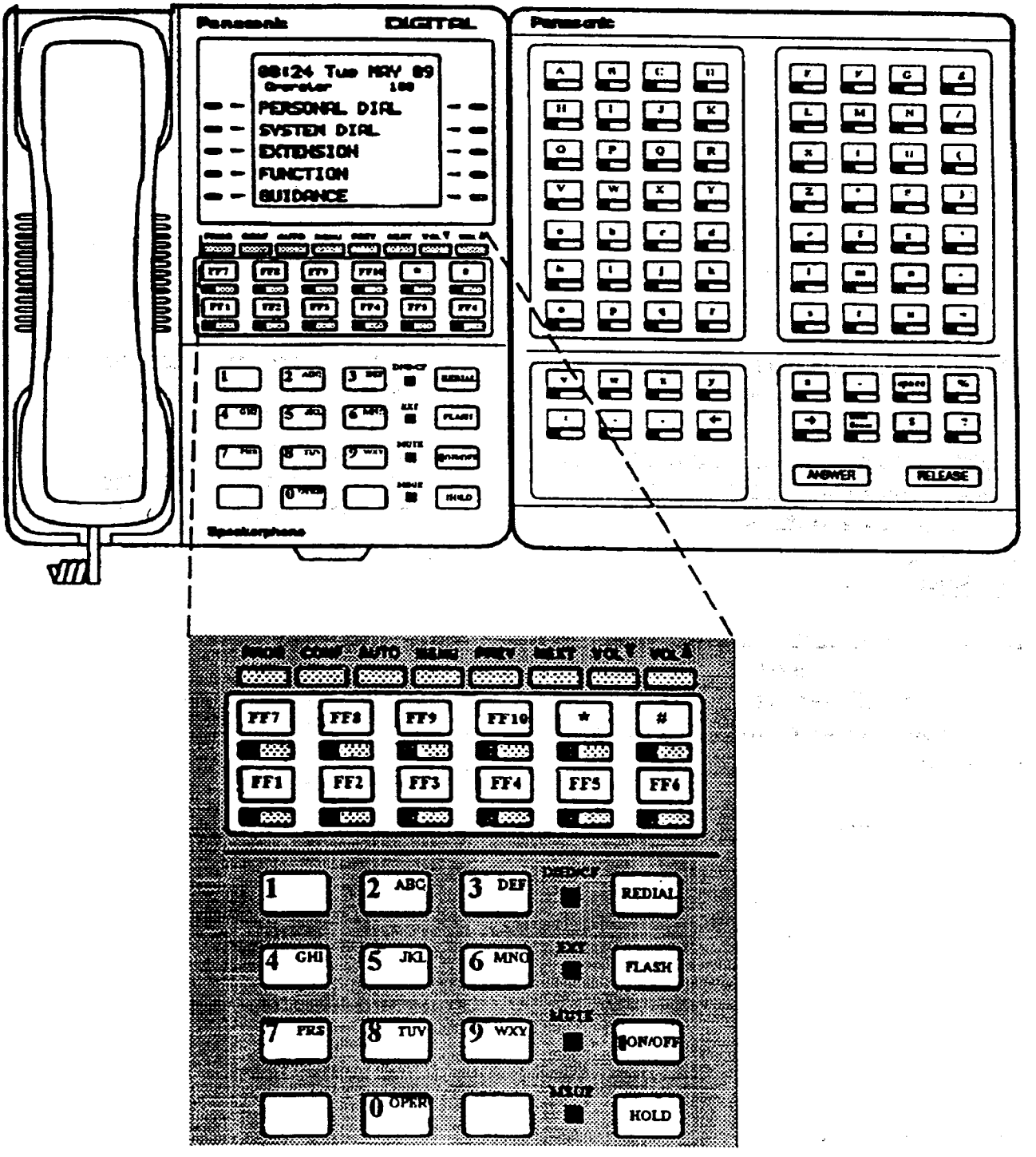
See Technotes 10 & 12 (March 1992) for complete information.

CALL WAITING/OHVA TEXT REPLY [FF6], 7#, (1-5)#, XXXXXXXXXXXXXXX (CPC-B, VER. 4.00 OR NEWER)

When a busy party receives an indication of an incoming intercom call, the busy party can respond by sending a text message back to the caller.
In this parameter, "XXXXXXXXXXXXXXX" represents a 15-character text message.
The text message can be sent after a call waiting tone, a call waiting tone followed by a text message, or an offhook voice announce.

The following table shows the default text associated with messages 1 to 5. These messages can be changed using an attendant phone or a DSS/72.

Message Number	Message Definition
1	Take A Message
2	Please Hold
3	Will Call Back
4	Transfer
5	Unavailable



3-7 TOLL RESTRICTION PROGRAM SETTINGS

CENTRAL OFFICE LINE TOLL RESTRICTION

(Overview)

There are 7 types of toll-restriction that can be used to curtail dialing of certain types of calls on a central office line. Toll restriction is effective on a line by line basis per extension, for the DBS day and night operation modes. The following is a brief description of each type.

Type 0: Full restriction of outbound dialing and inbound calls on a central office line Calls can be answered on a type 0 line when the line is assigned to ring on the restricted extension..

Type 1: Full restriction of outbound dialing on a central office line. Inbound ringing central office lines to all telephones can be answered and/or transferred by a type 1 toll restricted telephone.

Type 2: Partial restriction of outbound dialing on a central office line. 3 digit dialing of 211-911 numbers is restricted according to the program option [FF7], 1#, (4-11). Outbound dialing of system speed dial numbers is restricted according to the program option [FF1], 2#, 1#, 4#. Up to fifty 7 digit numbers that are preset in program option [FF7], 6#, are restricted (depending on the setting in [FF7], 1#, 12#). Operator calls are restricted. International calls are restricted. Toll free dialing is allowed. Inter-digit timer is set for 6 seconds. Inbound ringing central office lines to all telephones can be answered and/or transferred by a type 2 toll restricted telephone.

Type 3: Full restriction (in default condition) of all access to any area or office code. Options to allow outbound dialing to selected area codes [FF7], 2#, 3#, and selected office codes [FF7], 3#, 3# to ease full restriction. 3 digit dialing of 211-911 numbers is restricted according to the program option [FF7], 1#, (4-11). Outbound dialing of system speed dial numbers is restricted according to the program option [FF1], 2#, 1#, 4#. Outbound dialing of up to fifty preset 7 digit numbers in program option [FF7], 6#, is restricted (depending on the setting in [FF7], 1#, 13#). Four specially selected area codes [FF7], 4#, (1-4)# will restrict the first 6 digits, by tying each of these special area codes to a special office code table [FF7], 5#, (1-4)#, 000-999# of restrictions. International calls are restricted according to program option [FF7], 1#, 1#. Operator calls are restricted. Toll free dialing is allowed. Inter-digit timer is set for 6 seconds. Inbound ringing central office lines to all telephones can be answered and/or transferred by a type 3 toll restricted telephone.

Type 4: No restriction (in default condition) of all office code dialing. Full restriction (in default condition) of all area code dialing. Options to allow outbound dialing to selected area codes [FF7], 2#, 4#, and selected office codes [FF7], 3#, 4# to alter default

restrictions. 3 digit dialing of 211-911 numbers is restricted according to the program option [FF7], 1#, (4-11). Outbound dialing of system speed dial numbers is restricted according to the program option [FF1], 2#, 1#, 4#. Outbound dialing of up to fifty preset 7 digit numbers in program option [FF7], 6#, is restricted (depending on the setting in [FF7], 1#, 14#). Four specially selected area codes [FF7], 4#, (1-4)# will restrict the first 6 digits, by tying each of these special area codes to a special office code table [FF7], 5#, (1-4)#, 000-999# of restrictions. International calls are restricted according to program option [FF7], 1#, 1#. Operator calls are restricted. Inter-digit timer is set for 6 seconds. Inbound ringing central office lines to all telephones can be answered and/or transferred by a type 4 toll restricted telephone.

Type 5: No restriction (in default condition) of all area code dialing. No restriction (in default condition) of all office code dialing. Options to restrict outbound dialing to selected area codes [FF7], 2#, 5#, and selected office codes [FF7], 3#, 5# to alter default restrictions. 3 digit dialing of 211-911 numbers is restricted according to the program option [FF7], 1#, (4-11). Outbound dialing of system speed dial numbers is restricted according to the program option [FF1], 2#, 1#, 4#. Outbound dialing of up to fifty preset 7 digit numbers in program option [FF7], 6#, is restricted (depending on the setting in [FF7], 1#, 15#). Four specially selected area codes [FF7], 4#, (1-4)# will restrict the first 6 digits, by tying each of these special area codes to a special office code table [FF7], 5#, (1-4)#, 000-999# of restrictions. International calls are restricted according to program option [FF7], 1#, 1#. Operator calls are restricted. Inter-digit timer is set for 6 seconds. Inbound ringing central office lines to all telephones can be answered and/or transferred by a type 5 toll restricted telephone.

Type 6: No restriction (in default condition) of dialing to any area or office code. Options to restrict outbound dialing to selected area codes [FF7], 2#, 6#, and selected office codes [FF7], 3#, 6#. 3 digit dialing of 211-911 numbers is restricted according to the program option [FF7], 1#, (4-11). Outbound dialing of system speed dial numbers is restricted according to the program option [FF1], 2#, 1#, 4#. Outbound dialing of up to fifty preset 7 digit numbers in program option [FF7], 6#, is restricted (depending on the setting in [FF7], 1#, 16#). Four specially selected area codes [FF7], 4#, (1-4)# will restrict the first 6 digits, by tying each of these special area codes to a special office code table [FF7], 5#, (1-4)#, 000-999# of restrictions. International calls are restricted according to program option [FF7], 1#, 1#. Operator calls are restricted. Toll free dialing is allowed. Inter-digit timer is set for 6 seconds. Inbound ringing central office lines to all telephones can be answered and/or transferred by a type 6 toll restricted telephone.

Type 7: No restrictions to outbound dialing on all central office lines in the defaulted configuration.

NOTE:

For Toll Restriction types 3 through 6 operator calls are allowed in default if FF7-1#-1# is set to 1#. The Office code tables are used to restrict all 0 plus dialing, the next two digits will also be analized.

International Call For TRS Types 3-6 [FF7], 1#, 1#, (0 or 1)#

The dialing of international calls can be allowed or denied on all central office lines set with a toll restriction classes of 3-6.

To restrict dialing of international calls for central office lines set with a toll restriction classes of 3 through 6, for example, enter:

[FF7], 1#, 1#, 0#

To enable dialing of international calls for central office lines set with a toll restriction classes of 3 through 6, for example, enter:

[FF7], 1#, 1#, 1#

NOTE:

This program option is tied to the System installation office code address [FF1], 2#, 1#, 18#.

If international calls are allowed, 011 should be allowed in types 3 through 6 office code tables.

Dial Restriction During Ringing Inbound CO Line Calls On Lines Set For TRS Types 3-6 [FF7], 1#, 2#, (0 or 1)#

When a new outbound call is being placed on a central office line (with class of service 3 through 6), immediately after a call has been received on that line, this option enables toll restricion,

To restrict the use of the flash key and additional digits dialed, to make an outbound call on a line set for a toll restriction class of 3 through 6, enter:

[FF7], 1#, 2#, 0#

To allow the use of a flash key to make a new outbound call on a line set for a toll restriction class of 3 through 6, enter:

[FF7], 1#, 2#, 1#

Maximum Dialed Digits For TRS Types 3-6
[FF7], 1#, 3#, (1-15)#

The maximum number of digits that can be dialed on central office lines set with a toll restriction class of 3-6 can be limited to 15 to 29 digits, or can be unlimited.

	Digits		Digits
1#	15 Digits	9#	23 Digits
2#	16 Digits	10#	24 Digits
3#	17 Digits	11#	25 Digits
4#	18 Digits	12#	26 Digits
5#	19 Digits	13#	27 Digits
6#	20 Digits	14#	28 Digits
7#	21 Digits	15#	29 Digits
8#	22 Digits	**	No Limit

3 Digit Restrictions For TRS Types 2-6
[FF7], 1#, (4-11)#, (0 or 1)#

Special three digit numbers (211-911) can be restricted from being dialed on central office lines set for toll restriction class types 2-6.

4 #	2 1 1	8 #	6 1 1
5 #	3 1 1	9 #	7 1 1
6 #	4 1 1	1 0 #	8 1 1
7 #	5 1 1	1 1 #	9 1 1

To allow 411 to be dialed on a central office line having a toll restriction class of 2 through 6, for example, enter:

[FF7], 1#, 7#, 0#

To restrict 911 from being dialed on a central office line having a toll restriction class of 2 through 6, for example, enter:

[FF7], 1#, 11#, 1#

NOTE:

211-911 are allowed in default.

7 Digit Toll Restriction Types 2-6 [FF7], 1#, (12-16)#, (0 or 1)#

Seven digit toll restriction allows or denies the dialing of a certain 7 digit number when a toll restriction type 2 through 6 is set. Reference is made to [FF7], 6#. That address is for special 7 digit numbers. If there are any entries set in [FF7], 6#, these entries will be reviewed before the call continues to be processed.

To disable the 7 digit table for type 2 toll restriction, enter:

[FF7], 1# 12#, 0#

To enable 7 digit toll restriction for type 3, enter:

[FF7], 1# 13#, 1#

NOTE:

[FF7], 1#, (12-16)# the 12-16 refers to types 2 through 6 toll restriction.

7 digit toll restriction when enabled will look at the last seven digits dialed, area codes which are allowed may be denied access to specific telephone numbers such as NPX 555-1212.

Area Code Table For TRS Types 3-6 [FF7], 2#, (3-6)#, (000-999)#, (0 or 1)#

Area code dialing restrictions on central office lines set for toll restriction types 3-6 are set in this program option. Telephone users that access a central office line set to one of these classes of service, will be allowed or denied access to a specific area code, according to the setting in this option.

To allow dialing to area code 404 on a central office line set with a toll restriction class of service of 3, for example, enter:

[FF7], 2#, 3#, 404#, 0#

To allow dialing to area code 406 on a central office line set with a toll restriction class of service of 4, for example, enter:

[FF7], 2#, 4#, 406#, 0#

To restrict dialing to area code 212 on a central office line set with a toll restriction class of service of 5, for example, enter:

[FF7], 2#, 5#, 212#, 1#

To restrict dialing to area code 508 on a central office line set with a toll restriction class of service of 6, for example, enter:

[FF7], 2#, 6#, 508#, 1#

To reset area code toll restrictions for central office lines set as classes 3 and 4 to the default initialized value, press [FF7], 2#, (3 or 4)#, (000-999)#, 1#, [ON/OFF].
To reset area code toll restrictions for central office lines set as classes 5 and 6 to the default initialized value, press [FF7], 2#, (5 or 6)#, (000-999)#, 0#, [ON/OFF].

NOTE:

This address is tied to the system installation area code address, [FF1], 2#, 1#, 18#.

Office Code Table For TRS Types 3-6 [FF7], 3#, (3-6)#, (000-999)#, (0 or 1)#

Office code dialing restrictions on central office lines set for toll restriction types 3-6 are set in this program option. Telephone users that access a central office line set to one of these classes of service, will be allowed or denied access to a specific office code, according to the setting in this option.

To allow dialing to office code 663 on a central office line set with a toll restriction class of service of 3, for example, enter:

[FF7], 3#, 3#, 663#, 0#

To restrict dialing to office code 346 on a central office line set with a toll restriction class of service of 4, for example, enter:

[FF7], 3#, 4#, 346#, 1#

To restrict dialing to office code 261 on a central office line set with a toll restriction class of service of 5, for example, enter:

[FF7], 3#, 5#, 261#, 1#

To restrict dialing to office code 588 on a central office line set with a toll restriction class of service of 6, for example, enter:

[FF7], 3#, 6#, 588#, 1#

To reset office code toll restrictions for central office lines set as classes 3 to the default initialized value, press [FF7], 3#, 3)#, (000-999)#, 1#, [ON/OFF].
To reset office code toll restrictions for central office lines set as classes 4, 5 and 6 to the default initialized value, press [FF7], 3#, (4, 5 or 6)#, (000-999)#,0#, [ON/OFF].

NOTE:

This address is tied to the System installation area code address [FF1], 2#, 1#, 18#.

Special Area Code Table For TRS Types 3-6
[FF7], 4#, (1-4)#, (000-999)#

Four area codes can be tied to four special office code tables to allow or restrict a broad range of office codes on central office lines set with toll restriction classes of service 3 through 6. Typically, area codes such as 900 are selected as special area codes.

For example, to select area code 900 as the first "special area code" enter:

[FF7], 4#, 1#, 900#

To select area code 808 as the second "special area code", enter:

[FF7], 4#, 2#, 808#

To select area code 408 as the third "special area code" enter:

[FF7], 4#, 3#, 408#

To select area code 600 as the fourth "special area code" enter:

[FF7], 4#, 4#, 600#

To reset any of the four special area codes to the default initialized value, press [FF7], 4#, (1-4)#, [CONF], [ON/OFF].

Special Office Code Table for TRS Types 3-6

[FF7], 5#, (1-4)#, (000-999)#, (0 or 1)#

Four special office code tables are tied to four special area codes to allow or restrict a broad range of office codes for each special area code, on central office lines set with toll restriction classes of service 3-6.

Typically, office codes such as 976, 555 or other "pay for call" line services are selected as special office codes.

To select office code 976 as an office code to be restricted with the first "special area code", on a central office line set for toll restriction class 3 through 6, for example, enter:

[FF7], 5#, 1#, 976#, 1#

To select office code 555 as an allowed office code to work with the second "special area code", on a central office line set for toll restriction class 3 through 6, for example, enter:

[FF7], 5#, 2#, 555#, 0#

To select office code 976 as an office code to be restricted with the third "special area code", on a central office line set for toll restriction class 3 through 6, for example, enter:

[FF7], 5#, 3#, 976#, 1#

To select office code 444 as an office code to be allowed with the fourth "special area code", on a central office line set for toll restriction class 3 through 6, for example, enter:

[FF7], 5#, 4#, 444#, 0#

To reset special office code 1 & 2 toll restrictions for central office lines set as classes 3-6 to the default initialized value, press [FF7], 5#, (1 or 2)#, (000-999)#, 1#, [ON/OFF].

To reset special office code 3 & 4 toll restrictions for central office lines set as classes 3-6 to the default initialized value, press [FF7], 5#, (3 or 4)#, (000-999)#, 0#, [ON/OFF].

NOTE:

Special office code tables 1 and 2 are restricted as default values, special office code tables 3 and 4 are allowed as default vaules.

Default values can be changed globally in FF7 9#,13-16#.

Special 7 Digit Table For TRS Types 2-6
[FF7], 6#, (1-50)#, (0000000-9999999)#

Up to 50 preset 7 digit numbers can be restricted from being dialed behind all area codes on central office lines set for toll restriction types 2 through 6. The identification of these numbers are set in this program option. [FF7], 1#, (12-16)#, determines whether the seven digit number that is dialed is reviewed by this address.

To assign 555-1212 as the first of 50 preset numbers to be restricted from being dialed on a central office line set for toll restriction class 2 (assuming [FF7], 1#, 12# is set with 1#), for example, enter:

[FF7], 6#, 1#, 5551212#

To assign 976-1212 as the second of 50 preset numbers to be restricted from being dialed on a central office line set for toll restriction class 3 (assuming [FF7], 1#, 13# is set with 1#), for example, enter:

[FF7], 6#, 2#, 9761212#

To reset any of the 50 preset restricted 7 digit numbers to the default initialized value, press [FF7], 6#, (1-50)#, [CONF], [ON/OFF].

Day Central Office TRS Types 0-7
[FF7], 7#, (1-144)#, (1-64)#, (0-7)#

There are 7 types of toll restriction that can be used to curtail dialing of certain types of calls on a central office line, when the DBS is in the day setting. Toll restriction is effective on a line by line basis, per extension. See the overview at the beginning of this programming section for a review of each type of toll restriction.

To set toll restriction on extension port 60 (when the DBS is in the day setting) for central office line 10 to type 3, for example, enter:

[FF7], 7#, 60#, 10#, 3#

To set toll restriction on extension port 22 (when the DBS is in the day setting) for central office line 5 to type 7, for example, enter:

[FF7], 7#, 22#, 5#, 7#

To reset central office toll restriction on any line on any extension (when the DBS is in the day setting), to the default initialized value, press [FF7], 7#, (1-144)#, (1-64)#, 7#, [ON/OFF].

Day Central Office TRS Types 0-7
[FF7], 7#, (1-144)#, 65#, (0-7)#

This option provides the ability to take a single toll restriction class of service and apply it to all lines that appear on a specific extension, when the DBS is in the day setting. There are 7 types of toll restriction that can be used to curtail dialing of certain types of calls on a central office line. See the overview at the beginning of section 3-7 for a review of each type of toll restriction.

To set all lines that appear on extension port 14, when the DBS is in the day setting, to central office toll restriction class 4, for example, enter:

[FF7], 7#, 14#, 65#, 4#

To reset the toll restriction on any extension when the DBS is in the day setting, to the default initialized value, press [FF4], 7#, (1-144)#, 65#, 7#, [ON/OFF].

NOTE:

The program option outlined above has an address specifically for CPC-B software versions. To perform the same task with CPC-A software, the address is: [FF7], 7#, (1-72)#, 33#, (0-7)#.

Night Central Office TRS Types 0-7
[FF7], 8#, (1-144)#, (1-64)#, (0-7)#

There are 7 types of toll restriction that can be used to curtail dialing of certain types of calls on a central office line, when the DBS is in the night setting. Toll restriction is effective on a line by line basis, per extension. See the overview at the beginning of section 3-7 for a review of each type of toll restriction.

To set toll restriction on extension port 50, central office line 11 (when the DBS is in the night setting) to type 3, for example, enter:

[FF7], 8#, 50#, 11#, 3#

To set toll restriction on extension port 6, central office line 15 (when the DBS is in the night setting) to type 7, for example, enter:

[FF7], 8#, 6#, 15#, 7#

To reset central office toll restriction on any line on any extension when the DBS is in the night setting, to the default initialized value, press [FF7], 8#, (1-144)#, (1-64)#, 7#, [ON/OFF].

Night Central Office Table For TRS Types 0-7
[FF7], 8#, (1-144)#, 65#, (0-7)#

This option provides the ability to take a single toll restriction class of service and apply it to all lines that appear on a specific extension, when the DBS is in the night setting. There are 7 types of toll restriction that can be used to curtail dialing of certain types of calls on a central office line. See the overview at the beginning of section 3-7 for a review of each type of toll restriction.

To set all lines that appear on extension port 31, when the DBS is in the night setting, to central office toll restriction class 5, for example, enter:

[FF7], 8#, 31#, 65#, 5#

To reset the toll restriction on any extension when the DBS is in the night setting, to the default initialized value, press [FF4], 8#, (1-144)#, 65#, 7#, [ON/OFF].

NOTE:

The program option outlined above has an address specifically for CPC-B software versions. To perform the same task with CPC-A software, the address is: [FF7], 8#, (1-72)#, 33#, (0-7)#.

Area Code Table For TRS Types 3-6 (global copy)
[FF7], 9#, (1-4)#, (0 or 1)#

To allow or restrict all area codes of each area code table of each toll restriction class of service to the same setting, this program option must be used.

To allow dialing to all area codes in the table that controls central office line toll restriction class 3, enter:

[FF7], 9#, 1#, 0#

To restrict dialing to all area codes in the table that controls central office line toll restriction class 3, enter:

[FF7], 9#, 1#, 1#

To allow dialing to all area codes in the table that controls central office line toll restriction class 4, enter:

[FF7], 9#, 2#, 0#

To restrict dialing to all area codes in the table that controls central office line toll restriction class 4, enter:

[FF7], 9#, 2#, 1#

To allow dialing to all area codes in the table that controls central office line toll restriction class 5, enter:

[FF7], 9#, 3#, 0#

To restrict dialing to all area codes in the table that controls central office line toll restriction class 5, enter:

[FF7], 9#, 3#, 1#

To allow dialing to all area codes in the table that controls central office line toll restriction class 6, enter:

[FF7], 9#, 4#, 0#

To restrict dialing to all area codes in the table that controls central office line toll restriction class 6, enter:

[FF7], 9#, 4#, 1#

To reset the global area code toll restrictions for central office lines set as classes 3 and 4 to the default initialized value, press [FF7], 9#, (1 or 2)#, 1#, [ON/OFF].

To reset the global area code toll restrictions for central office lines set as classes 5 and 6 to the default initialized value, press [FF7], 9#, (3 or 4)#, 0#, [ON/OFF].

NOTE:

This program option is tied to the System installation area code address, [FF1], 2#, 1#, 18#.

FF7 9#,(1-4)# the 1-4 represents types 3-6.

Office Code Table For TRS Types 3-6 (global copy) [FF7], 9#, (5-8)#, (0 or 1)#

To allow or restrict all office codes of each office code table of each toll restriction class of service to the same setting, this program option must be used.

To allow dialing to all office codes in the table that controls central office line toll restriction class 3, enter:

[FF7], 9#, 5#, 0#

To restrict dialing to all office codes in the table that controls central office line toll restriction class 3, enter:

[FF7], 9#, 5#, 1#

To allow dialing to all office codes in the table that controls central office line toll restriction class 4, enter:

[FF7], 9#, 6#, 0#

To restrict dialing to all office codes in the table that controls central office line toll restriction class 4, enter:

[FF7], 9#, 6#, 1#

To allow dialing to all office codes in the table that controls central office line toll restriction class 5, enter:

[FF7], 9#, 7#, 0#

To restrict dialing to all office codes in the table that controls central office line toll restriction class 5, enter:

[FF7], 9#, 7#, 1#

To allow dialing to all office codes in the table that controls central office line toll restriction class 6, enter:

[FF7], 9#, 8#, 0#

To restrict dialing to all office codes in the table that controls central office line toll restriction class 6, enter:

[FF7], 9#, 8#, 1#

To reset the global office code toll restrictions for central office lines set as type 3 to the default initialized value, press [FF7], 9#, (5 or 6)#, 1#, [ON/OFF].

To reset the global office code toll restrictions for central office lines set as classes 4, 5 and 6 to the default initialized value, press [FF7], 9#, (7 or 8)#, 0#, [ON/OFF].

NOTE:

This program option is tied to the System installation area code address, [FF1], 2#, 1#, 18#.

FF7 9#,(5-8)# the 5-8 represents types 3-6.

Area & Office Code TRS Types 3-6 (global copy) [FF7], 9#, (9-12)#, (0 or 1)#

To allow or restrict all area and office codes of each toll restriction class of service to the same setting, this program option must be used.

To allow dialing to all area and office codes in the tables that control central office line toll restriction class 3, enter:

[FF7], 9#, 9#, 0#

To restrict dialing to all area and office codes in the tables that control central office line toll restriction class 3, enter:

[FF7], 9#, 9#, 1#

To allow dialing to all area and office codes in the tables that controls central office line toll restriction class 4, enter:

[FF7], 9#, 10#, 0#

To restrict dialing to all area and office codes in the tables that control central office line toll restriction class 4, enter:

[FF7], 9#, 10#, 1#

To allow dialing to all area and office codes in the tables that control central office line toll restriction class 5, enter:

[FF7], 9#, 11#, 0#

To restrict dialing to all area and office codes in the tables that control central office line toll restriction class 5, enter:

[FF7,9#,11#,1#

To allow dialing to all area and office codes in the tables that control central office line toll restriction class 6, enter:

[FF7], 9#, 12#, 0#

To restrict dialing to all area and office codes in the tables that control central office line toll restriction class 6, enter:

[FF7], 9#, 12#, 1#

To reset the global area and office code toll restrictions for central office lines set as classes 3 to the default initialized value, press [FF7], 9#, 9#, 1#, [ON/OFF]. Type 4 can not be returned to default values using this program.

To reset the global area and office code toll restrictions for central office lines set as classes 5 and 6 to the default initialized value, press [FF7], 9#, (11 or 12)#, 0#, [ON/OFF].

NOTE:

This program option is tied to the System installation area code program option, [FF1], 2#, 1#, 18#.

FF7 9#, (9-12) represents types 3-6.

Special Office Code Table For TRS Types 3-6 (global copy) [FF7], 9#, (13-16)#, (0 or 1)#

Four special office code tables that are tied to four special area codes can be globally set to allow or restrict all office codes for each special area code, on central office lines set with toll restriction classes of service 3-6.

To restrict all special office codes for the first "special area code" , enter:

[FF7], 9#, 13#, 1#

To allow all special office codes for the second "special area code" , enter:

[FF7], 9#, 14#, 0#

To restrict all special office codes for the third "special area code" , enter:

[FF7], 9#, 15#, 1#

To allow all special office codes for the fourth "special area code" , enter:

[FF7], 9#, 16#, 0#

To reset all office codes tied to special area codes 1 & 2 for central office lines set as classes 3-6 to the default initialized value, press [FF7], 9#, (13 or 14)#, 1#, [ON/OFF]. To reset all office codes tied to special area codes 3 & 4 for central office lines set as classes 3-6 to the default initialized value, press [FF7], 9#, (15 or 16)#, 0#, [ON/OFF].

NOTE:

FF7 9#, (13-16) represents special office code tables 1-4.

Default values for special office code tables	
Special office code table 1	All Denied
Special office code table 2	All Denied
Special office code table 3	All Allowed
Special office code table 4	All Allowed

3-8 LEAST COST ROUTING PROGRAM SETTINGS

LEAST COST ROUTING
(Overview)

Least cost routing is designed to route calls on central office lines that are supplied by specific carriers. By identifying a certain group of these lines along with a specific cost to place outbound calls on them during certain time periods of the day, a cost savings will accrue. Additionally, non dialed digits can be added or deleted from the prefix of the dialed string by the DBS.

Call processing flow
To determine how to route a specific number, this DBS program group uses 10 tables, each containing 1000 numbers. All tables are set up in the same manner. The tables are defined as Area Code, Office Code, 4 Special Area Code, and 4 Special Office Code tables. Each block in the table has an "xx" block connected to it. This xx area is used to store the route table number (1-15) that it's prefix is to use. The prefix is a defined 3 digit area or office code, or 3 digit special office or area code numbers. An example of an LCR table is shown below.

LCR Table
The Special Area and Special Office code tables are designed for 6 digit LCR dialing analysis. The Office code table is used for all 7 digit dialing. One plus 7 digit dialing

000	xx	001	xx	002	xx	003	xx	004	xx	005	xx	006	xx	007	xx	008	xx	009	xx
010	xx	011	xx	012	xx	013	xx	014	xx	015	xx	016	xx	017	xx	108	xx	019	xx
020	xx	021	xx	022	xx	023	xx	024	xx	025	xx	026	xx	027	xx	028	xx	029	xx
etc.	etc.	etc.	etc.	etc.	etc.	etc.	etc.	etc.	etc.	etc.	etc.	etc.	etc.	etc.	etc.	etc.	etc.	etc.	etc.
etc.	etc.	etc.	etc.	etc.	etc.	etc.	etc.	etc.	etc.	etc.	etc.	etc.	etc.	etc.	etc.	etc.	etc.	etc.	etc.
960	xx	961	xx	962	xx	963	xx	964	xx	965	xx	966	xx	967	xx	968	xx	969	xx
970	xx	971	xx	972	xx	973	xx	974	xx	975	xx	976	xx	977	xx	978	xx	979	xx
980	xx	981	xx	982	xx	983	xx	984	xx	985	xx	986	xx	987	xx	988	xx	989	xx
990	xx	991	xx	992	xx	993	xx	994	xx	995	xx	996	xx	997	xx	998	xx	999	xx

searches the Area code table, or the Special office code tables, when the DBS program address [FF1], 2#, 1#, 18#, is configured with a "1". When this program address is improperly set, the LCR may search incorrect tables.

After a specific number to be dialed has been identified in one of the tables above, the process proceeds to one of the 15 time priority route tables. If no time priority route table has been assigned to a specific 3 digit number or segment thereof, the call will exit LCR routing, and be placed on a pooled group "9" central office line. If all central office lines have been removed from the "9" pooled group the call will stop being processed, and the caller will receive a busy tone.

The 15 time priority route tables are used to determine which LCR trunk groups are selected, and the priority on which those trunk groups are used. The "lookback" capability of the DBS provides for multiple searches of the highest priority line groups before lower priority groups are searched. The highest priority line group is initially chosen to route the call. If the line is available, the LCR add and LCR delete tables associated with the central office line group are reviewed for additions or deletions to the dialed digit string. If no lines of the defined group are available, a warning tone is sent to the caller, a 2 second wait ensues, and the group is searched again. If a line is still unavailable, the second line group is accessed. This process continues until all 8 line groups in the priority are searched for an available line. In the event that all prioritized line groups are busy, caller can dial the digit 2. This procedure will enable a callback and a reservation of the first line in the group. When the DBS recalls the extension, the caller accesses a line, and the DBS will automatically redial the previously dialed number.

Time Priority Route Guide Table (0-15)

With older versions of software (CPC-A, older than 3.21, CPC-B, older than 2.11), when LCR is used behind Centrex, special precautions are needed in the Office Code table. To eliminate the need to dial a "9" before such numbers as 411, 555, 911, 800, and 0, there

Time	<------High		Priority				Low----->	
7:00 am - 7:59 am	1 #	2 #	3 #	4 #	5 #	6 #	7 #	8 #
8:00 am - 4:59 pm	9 #	10 #	11 #	12 #	13 #	14 #	15 #	16 #
5:00 pm - 7:59 pm	17 #	18 #	19 #	20 #	21 #	22 #	23 #	24 #
8:00 pm - 11:59 am	25 #	26 #	27 #	28 #	29 #	30 #	31 #	32 #
12:00 am - 6:59 am	33 #	34 #	35 #	36 #	37 #	38 #	39 #	40 #
weekend	41 #	42 #	43 #	44 #	45 #	46 #	47 #	48 #

are Office Code Table numbers that ***MUST NOT*** be assigned to a time priority route guide table. These numbers are 941, 955, 980, and 991. If Office Codes such as 941, 955, 991, and 980 are found in the locale that the DBS is installed in, it is recommended that LCR should not be used in combination with Centrex, or behind PBX applications. Further clarification of LCR operation may be found in Technote 5 (November 1991), and Appnote

Least Cost Routing (LCR) Area Codes
[FF8], 1#, (1-15)#, (000-999)#, (0 or 1)#

When an outbound central office line is accessed to make a call, in a DBS set with Least Cost Routing, the DBS searches one of 15 preprogrammed routing tables for the least expensive central office line, based on time of day and cost of the line. Toll restriction settings for the line are checked, and the number is then outpulsed.

To add 203 to route, using time priority table 1, for example, enter:

[FF8], 1#, 1#, 203#, 1#

To add 516 to route, using time priority table 2, for example, enter:

[FF8], 1#, 2#, 516#, 1#

To remove 409 from time priority table three, for example, enter:

[FF8], 1#, 3#, 409#, 0#

To remove 609 from time priority table four, for example, enter:

[FF8], 1#, 4#, 609#, 0#

To reset the LCR Area Code tables to the default initialized value, press [FF8], 1#, (1-15)#, (000-999)#, 0#, [ON/OFF].

NOTE:

The time priority route guide table option found at address: [FF8], 5#, (1-15)#, (1-48)#, (1-8)#. must be set.

Once a line has been accessed through LCR, the [FLASH] operation will not work.

All area code numbers must be pointed to a specific time priority table and enabled in order for LCR to automatically route the call.

When executing changes in this address, a "1" entry signifies addition to the table, and a "0" signifies the office code is not part of the table.

Least Cost Routing (LCR) Office Codes
[FF8], 2#, (1-15)#, (000-999)#, (0 or 1)#

When an outbound central office line is accessed to make a call, in a DBS set with Least Cost Routing, the DBS searches one of 15 time priority routing tables for the least expensive central office line, based on time of day and cost of the line. Toll restriction settings for the line are checked, and the number is then outpulsed.

To use the fifth time priority route table for a call made to office code 222, for example, enter:

[FF8], 2#, 5#, 222#, 1#

To use the sixth time route table for a call made to office code 546, for example, enter:

[FF8], 2#, 6#, 546#, 1#

To remove office code 999 from routing through the seventh time priority table, for example, enter:

[FF8], 2#, 7#, 999#, 0#

To remove office code 447 from routing through the eighth time priority table, for example, enter:

[FF8], 2#, 8#, 447#, 0#

To reset the LCR Office Code tables to the default initialized value, press [FF8], 2#, (1-15)#, (000-999)#, 0#, [ON/OFF].

NOTE:

The time priority route guide table option found at address: [FF8], 5#, (1-15)#, (1-48)#, (1-8)#. must be set.

Once a line has been accessed through LCR, the [FLASH] operation will not work.

All office code numbers must be pointed to a specific time priority table and enabled in order for LCR to automatically route the call.

When executing changes in this address, a "1" entry signifies addition to the table, and a "0" signifies the office code is not part of the table.

Special LCR Area Codes
[FF8], 3#, (1-4)#, (000-999)#

Four special area codes, designated as 1 through 4 in the address above, can be specially chosen for LCR routing, and tied to four special LCR office code tables to allow a broad range of numbers to be dialed by the least costly route.
This operation keys off the first six digits dialed, where the first three digits represent an area code, and the second three digits represent an office code.

To select area code 407 as the first "special LCR area code", to be used for LCR dialing for example, enter:

[FF8], 3#, 1#, 407#

To select area code 609 as the second "special LCR area code" to be used for LCR dialing for example, enter:

[FF8], 3#, 2#, 609#

To select area code 404 as the third "special LCR area code" to be used for LCR dialing for example, enter:

[FF8], 3#, 3#, 404#

To select area code 508 as the fourth "special LCR area code" to be used for LCR dialing for example, enter:

[FF8], 3#, 4#, 508#

To reset the special LCR area code tables to the default initialized value, press [FF8], 3#, (1-4)#, [CONF]#, [ON/OFF].

NOTE:

The time priority route guide table option found at address: [FF8], 5#, (1-15)#, (1-48)#, (1-8)#. must be set.

Once a line has been accessed through LCR, the [FLASH] operation will not work.

Special LCR Office Code Tables
[FF8], 4#, (1-4)#, (1-15)#, (000-999)#, (0 or 1)#

Four special office code tables, designated as 1 through 4 in the address above, can be tied to four special LCR area codes to allow up to 1000 office codes per special LCR area code to be dialed by the least cost routing.

This operation keys off the first six digits dialed, where the first three digits represent an area code, and the second three digits represent an office code.

To set special office code entry 1, time table 13 for office code 776 to be dialed on the least expensive route, for example, enter:

[FF8], 4#, 1#, 13#, 776#, 1#

To set special office code entry 2, time table 5 for office code 392 to be dialed on the least expensive route, for example, enter:

[FF8], 4#, 2#, 5#, 392#, 1#

To set special office code entry 3, time table 15 for office code 248 to be dialed on the least expensive route, for example, enter:

[FF8], 4#, 3#, 15#, 248#, 1#

To reset the special LCR office code tables to the default initialized value, press [FF8], 4#, (1-4)#, (1-15)#, (000-999)#, 0#, [ON/OFF].

NOTE:

When executing changes in this address, a "1" entry signifies addition to the table, and a "0" signifies the office code is not part of the table.

Time Priority Route Tables
[FF8], 5#, (1-15)#, (1-48)#, (1-8)#

Since central office line costs can vary by time of day, when least cost routing is being used outbound calls will be automatically placed on different central office line groups depending on the time of day. This option provides for this.

For example, to use time route table 1, priority 1, LCR line group 1 for outbound calls placed by the least cost routing method, enter:

[FF8], 5#, 1#, 1#, 1#

For example, to use time route table 2, priority 9, LCR line group 6 for outbound calls placed by the least cost routing method, enter:

[FF8], 5#, 2#, 9#, 6#

For example, to use time route table 15, priority 17, LCR line group 4 for outbound calls placed by the least cost routing method, enter:

[FF8], 5#, 15#, 17#, 4#

To reset any CO line group position in any time priority route table to the default initialized value, press [FF8], 5#, (1-15)#, (1-48)#, [CONF], [ON/OFF].

NOTE:

The 15 time priority route tables are each divided into 6 preset time periods, with 8 priority positions in each time period for LCR line group assignments. The six preset time periods are as follows:

1. 7:00 am to 7:59 am, positions 1-8
2. 8:00 am to 4:59 pm, positions 9-16
3. 5:00 pm to 7:59 pm, positions 17-24
4. 8:00 pm to 11:59 am, positions 25-32
5. 12:00 am to 6:59 am, positions 33-40
6. WEEKEND, positions 41-48

See feature options [FF1], 2#, 1#, 3#, (System setting for LCR), and [FF8], 6#, (LCR Trunk group table.)

See Time Priority Route Guide Tables (1-15), for priority numbers 1 through 48 on page 133.

LCR CO Line Group Tables
[FF8], 6#, (1-8)#, (1-8)#, (1-64)#

The use of LCR requires predetermined LCR line groups to be prioritized according to the cost of line(s). There are 8 groups, and each group has 8 positions for central office lines. Once the central office line priorities have been established, these LCR groups are inserted in the time priority route guide tables, so that predetermined LCR groups will be utilized during each preset time period for outbound calling.

To set up LCR group 1, position 1 with central office line 16, for example, enter:

[FF8], 6#, 1#, 1#, 16#

To set up LCR group 2, position 1 with central office line 3, for example, enter:

[FF8], 6#, 2#, 1#, 3#

To set up LCR group 3, position 2 with central office line 6, for example, enter:

[FF8], 6#, 3#, 2#, 6#

To set up LCR group 4, position 5 with central office line 64, for example, enter:

[FF8], 6#, 4#, 5#, 64#

To set up LCR group 5, position 6 with central office line 12, for example, enter:

[FF8], 6#, 5#, 6#, 12#

To set up LCR group 6, position 5 with central office line 10, for example, enter:

[FF8], 6#, 6#, 5#, 10#

To set up LCR group 7, position 1 with central office line 33, for example, enter:

[FF8], 6#, 7#, 1#, 33#

To set up LCR group 8, position 8 with central office line 60, for example, enter:

[FF8], 6#, 8#, 8#, 60#

To reset a position within an LCR central office line group to the default initialized setting, press [FF8], 6#, (1-8)#, (1-8)#, [CONF], [ON/OFF].

NOTE:

See feature options [FF1], 2#, 1#, 3#, (System setting for LCR), and [FF8], 6#, (LCR Trunk group table.)

Trunks are selected in the order they are stored in the LCR trunk groups. To lower the possibility of call glare remember to place the trunks in reverse order.

----------> Line Search Direction ---------->				
LCR Group 1	1st CO Line	2nd CO Line	3rd CO Line	to 8th CO Line
LCR Group 2	1st CO Line	2nd CO Line	3rd CO Line	to 8th CO Line
LCR Group 3	1st CO Line	2nd CO Line	3rd CO Line	to 8th CO Line
LCR Group 4	1st CO Line	2nd CO Line	3rd CO Line	to 8th CO Line
LCR Group 5	1st CO Line	2nd CO Line	3rd CO Line	to 8th CO Line
LCR Group 6	1st CO Line	2nd CO Line	3rd CO Line	to 8th CO Line
LCR Group 7	1st CO Line	2nd CO Line	3rd CO Line	to 8th CO Line
LCR Group 8	1st CO Line	2nd CO Line	3rd CO Line	to 8th CO Line

LCR Delete Tables
[FF8], 7#, (1-8)#, (Up to 16 digits)#

The first digits in the dialed string that match the digits stored in the delete table are automatically deleted before dialing the telephone number.

If LCR trunk group 1 is accessed, and the dial string is 1-212-666-1212 and 1-212 should be deleted prior to dialing for example, enter:

[FF8], 7#, 1#, 1212#

If LCR using trunk group 2 is designed to eliminate the first digit 1 in all area codes for example, enter:

[FF8], 7#, 2#, 1#

If LCR trunk group 3 is used to route calls to a specific carrier and to prevent connection to another carrier such as 10288 for example, enter:

[FF8], 7#, 3#, 10288#

If LCR trunk group 4 is used behind centrex or a PBX and a digit 9 is automatically added (dial add table) you can eliminate incorrectly dialing the digit 9 twice by deleting the 9 each time it is dialed for example, enter:

[FF8], 7#, 4#, 9#

If LCR trunk group 5 is a direct T1 access line to another facility in a different area code such as 714, and the digit string 714 should not be dialed for example, enter:

[FF8], 7#, 5#, 714#

To reset the LCR delete tables to the default initialized value, press [FF8], 7#, (1-8)#, [CONF], [ON/OFF].

NOTES:

Digit Delete Tables are matched to the LCR trunk groups. Each time one of these groups are accessed the dial delete table is checked.

LCR Add Tables
[FF8], 8#, (1-8)#, (Up to 16 digits)#

Digits in the dialed string that are needed to be outpulsed after a central office line has been seized (such as access codes), are automatically added before the dialed telephone number is outpulsed on the central office line. This option allows for the addition of digits.

If LCR line group 1 is to be accessed, and the digit string 10288 is to be added before the dialed number is outpulsed for example, enter:

[FF8], 8#, 1#, 10288#

If LCR trunk group 2 is to be accessed, and you want to add the digit 1 before all long distance numbers dialed for example, enter:

[FF8], 8#, 2#, 1#

If LCR trunk group 3 is to be accessed, and the digit 9 is to be added before the dialed number is outpulsed for example, enter:

[FF8], 8#, 3#, 9#

If LCR trunk group 4 is to be accessed, and the digit string 8 is to be added before the dialed number is outpulsed for example, enter:

[FF8], 8#, 4#, 8#

To reset the LCR add tables to the default initialized value, press [FF8], 8#, (1-8)#, [CONF], [ON/OFF].

NOTE:

If digits are being added and deleted from the same CO line group, the DBS will delete digits first, then add digits.

3-9 COPY PROGRAM SETTINGS

Central Office Line Copy
[FF9], 1#, (1-64)#, (1-64)##

To copy all the attributes of one central office line to another, this option is used. Copying must be done on a line by line basis. The first line number of this address is the source line being copied, the second line number is the target destination.

To copy the attributes of central office line port 1 to that of central office line port 5, for example, enter:

[FF9], 1#, 1#, 5##

To copy the attributes of central office line port 7 to that of central office line port 3, for example, enter:

[FF9], 1#, 7#, 3##

There is no default initialized value for this option.

NOTE:

Using this address to copy central office line attributes results in the copying of all attributes for the line except the private line attribute.
The second # after the second central office line entry is a part of the program sequence, which confirms the copy action.

Extension Copy
[FF9], 2#, (1-144)#, (1-144)#

To copy all the attributes of one extension to another, this option is used. Copying must be done on an extension by extension basis. The first extension port number of this address is the source extension being copied, the second extension port number is the target destination.

To copy the attributes of extension port 10 to that of extension port 5, for example, enter:

[FF9], 2#, 10#, 5##

To copy the attributes of extension port 70 to that of extension port 3, for example, enter:

[FF9], 2#, 70#, 3##

There is no default initialized value for this option.

NOTE:

Using this address to copy extension attributes results in the copying of all attributes including toll restriction for an extension except the extension number, telephone type, station lock-out code, and EM 24 port number (BLF port setting).

The second # after the second extension entry is a part of the program sequence, which confirms the copy action.

FF Key Copy
[FF9], 3#, (1-144)#, (1-144)##

To copy all the attributes of one extensions LED FF keys to another, this option is used. Copying must be done on an extension by extension basis. The first extension port number of this address is the FF key source extension being copied, the second extension port number is the FF key target extension port number.

To copy the LED FF key attributes of extension port 2 to that of extension port 5, for example, enter:

[FF9], 3#, 2#, 5##

To copy the LED FF key attributes of extension port 6 to that of extension port 10, for example, enter:

[FF9], 3#, 6#, 10##

There is no default initialized value for this option.

NOTE:

The exceptions to the FF key copy program are that *ONLY* the LED FF key programming can be copied. Non LED FF key settings will not be copied. The second # after the second extension entry is a part of the program sequence, which confirms the copy action.

When copying the FF keys of a phone to another that is in the default condition, the originally assigned keys must first be cleared. This is done in address [FF5], (1-144)#, (1-24)#.
A quick way to accomplish copying the same FF key settings (that are different than the default settings) is to go to the FF5 address indicated above, and clear all keys. Then copy the cleared keys to all other extensions with address [FF9], 3#. Return to the [FF5], (1-144)#, (1-24)# address and create the key configuration desired. Finally, return to [FF9], 3#, and copy those features to all extensions.

3-10 SYSTEM AND PERSONAL SPEED DIAL SETTINGS

SYSTEM SPEED DIAL NUMBERS
[FF10], 1#, (00-89)#, (UP TO 16 DIGITS)#

The storage of up to 90 speed dial numbers for use by designated DBS extension users are set in this feature option.

To set the telephone number (203) 555-1212, in system speed dial bin number 00, for example, enter:

[FF10], 1#, 00#, 2035551212#

To set the telephone number (800) 555-1212, in system speed dial bin number 64, for example, enter:

[FF10], 1#, 64#, 8005551212#

To set the telephone number (203) 555-1212, in system speed dial bin number 00, for example, enter:

[FF10], 1#, 00#, 2035551212#

To set the telephone number (404) 555-1212, in system speed dial bin number 44, for example, enter:

[FF10], 1#, 44#, 4045551212#

To reset a system speed dial bin to the default initialized value, press, [FF10], 1#, (00-89)#, [CONF], [ON/OFF].

NOTES:

System speed dial numbers will display on large display telephones in alphabetical order. A block of system speed dial numbers can be restricted from general use. To create this partition, see feature option [FF1], 2#, 1#, 4#. To restrict the display of system speed dial numbers, see [FF1], 2#, 1#, 5#. To set large display telephones to display 5 or 10 system speed dial numbers, see [FF1], 2#, 19#. To store an associated name for a system speed dial number, see [FF6], 2#, (00-89)#. If a DSS console is available for programming, it is possible to assign a central office line group as part of a system speed dial number. To make use of this capability, insert a **C** as the first character of the speed dial bin, followed by 1-6 to designate the line group number. A 9 can also be used to access the pooled line capabilty. The **C** is required for an SLT to use SSD. A **P** will insert a pause, complete the entry with the COMPLETE number as it would be dialed if manually done. The following keys perform the indicated functions for the programming of speed dial numbers:

[CONF], on the phone clears entered data
[<-], on the DSS backspaces
[BS], on the DSS backspaces
[->], on the DSS forward spaces
P, pauses
C, initiates line group access and when a line is accessed drops the 9 from the dial string.

EXAMPLE:
C1P5551212 will access line group 1, then pause, then dial 555-1212.

Personal Speed Dial Numbers
[FF10], 2#, (1-144)#, (90-99)#, (Up to 16 digits)#

The storage of up to 10 personal speed dial numbers for use by each DBS extension user are set in this feature option.

To set the telephone number (203) 555-1212 for extension port 20, in personal speed dial bin number 90, for example, enter:

[FF10], 2#, 20#, 90#, 2035551212#

To set the telephone number (800) 555-1212, for extension port 140, in personal speed dial bin number 95, for example, enter:

[FF10], 2#, 140#, 95#, 8005551212#

To reset a personal speed dial bin to the default initialized value, press, [FF10], 2#, (1-144)#, (90-99)#, [CONF], [ON/OFF].

NOTES:

Personal speed dial numbers will display on large display telephones in alphabetical order.
CPC-B software version 2.00 requires the use of a large display telephone on port 1, in order for the personal speed dial keys to function. CPC-B software newer than version 2.05, allows personal speed dial key operation with the use of any model telephone. See Technotes 10 & 12 (March 1992) for complete information.

A personal speed dial number can only be used by the extension port it is set on. To set large display telephones to display 5 or 10 personal speed dial numbers, see [FF3], (1-144)#, 17#.
To store an associated name for a personal speed dial number, see [FF6], 3#, (1-144)#, (90-99)#.
If a DSS console is available for programming, it is possible to assign a central office line group as part of a personal speed dial number. To make use of this capability, insert a **C** as the first character of the speed dial bin, followed by 1-6 to designate the line group number. A 9 can also be used to access the pooled line capabilty. The **C** is required for an SLT to use SSD. A **P** will insert a pause, complete the entry with the COMPLETE number as it would be dialed if manually done. The following keys perform the indicated functions for the programming of speed dial numbers:

[CONF], on the phone clears entered data
[<-], on the DSS backspaces
[BS], on the DSS backspaces
[->], on the DSS forward spaces
P, pauses
C, initiates line group access and when a line is accessed drops the 9 from the dial string.

EXAMPLES:
C1P5551212 will access line group 81, then pause, then dial 555-1212.

C9P12015551212, will access pooled line group 9, then pause, then dial 1 (201) 555-1212.

Preface

CPC-B - VERSIONS 1.0 and 2.0

There are now two versions of DBS CPC-B.

CPC-B, Version 2.0 (DBS III) has many new or improved features. Included in this publication are ***new programming addresses*** as well as addresses for CPC-B, Version 1.0 (Enhanced DBS).

See *DBS Programming Instructions, Section 400*, for other programming addresses.

Panasonic

Issue 1 September 1991

Addendum to the DBS Programming Instructions

Section 400B

CPC-B Versions 1.0 and 2.0

Contents

CPC-B

V1.0

DATA TABLES

Initial Settings - Data Tables, Version 1.0

FF 1 KEY

SYSTEM PROGRAMMING

V1.0

COMMON SYSTEM SETTINGS

ATTENDANT OVERFLOW FF1-2#-1#-22#-(0 or 1-15)#	
0#: No stacked calls 1#: 1 call 2#: 2 calls 3#: 3 calls 4#: 4 calls 5#: 5 calls 6#: 6 calls 7#: 7 calls 8#: 8 calls 9#: 9 calls 10#: 10 calls 11#: 11 calls 12#: 12 calls 13#: 13 calls 14#: 14 calls 15#: 15 calls	Determines the maximum number of incoming calls that can be stacked to the first attendant. The overflow calls are transferred to other stations set in the delayed-ring tables.
NOTE:	Attendant overflow is available only in CPC-B, Version 1.0. Version 2.0 does not have this feature.

DELAYED-RING CAPABILITY FF1-2#-1#-23#-(0 or 1)#	
0#: Disable 1#: Enable	If there is no answer at an extension set to ring in the extension-ring tables, the call can also ring at an extension set in the extension delayed-ring tables if the system is set up for it. This setting enables the system to program delayed-ring tables. ***See the section on Delayed-Ring Tables under FF 4 Key Ring Assignment and Hunt Groups elsewhere in this manual.***

COMMON SYSTEM SETTINGS

RAI BAUD RATE SWITCH FF1-2#-2#-10#-(0 or 1)#	
0#: 300 Baud (RAI-A or RAI-B) 1#: 1200 Baud (RAI-B)	The baud rate that serves the system's remote administration capability can be switched to either 300 or 1200 baud when the RAI B card is installed. The settings for Data Length and Stop-Bit Length are the same for both TTY and RAI. However, the No Parity Check setting is always fixed on the RAI regardless of the TTY settings.

DETECTION TIMERS

OUTBOUND GROUND DETECTION TIMER FF1-3#-20#-(0 or 1-8)#	
0#: No detection 1#: 1 second 2#: 2 seconds 3#: 3 seconds 4#: 4 seconds 5#: 5 seconds 6#: 6 seconds 7#: 7 seconds 8#: 8 seconds	The system sends a ground signal to the ground-start trunk and waits for a return ground signal from the telephone company's central office. The returning ground signal activates the detection timer and the system starts the outgoing process. If a return ground signal is not detected, the system regards the trunk as unavailable and sends a busy tone to the caller. To activate the Detection Timer, set the loop-start/ ground-start switch at ground start. Install loop-start/ground-start trunk card VB-43531.

INCOMING GROUND DETECTION TIMER FF1-3#-21#-(0 or 1-8)#	
0#: No detection 1#: 1 second 2#: 2 seconds 3#: 3 seconds 4#: 4 seconds 5#: 5 seconds 6#: 6 seconds 7#: 7 seconds 8#: 8 seconds	The time between detection of a ground signal on a ground-start trunk coming from the central office during the idle state and the start of a call process can be programmed. At the moment the ground signal is detected, the line LED on the key set will turn red indicating that the trunk is in use, even though the call has not yet been processed. To activate the Detection Timer, set the loop-start/ ground-start switch at ground-start. Install loop-start/ground/start trunk card VB-43531.

FF 2 KEY

TRUNK PROGRAMMING

V1.0

SWITCHES

LOOP-START/GROUND-START SWITCH FF2-(01-64)#-21#-(0 or 1)#	
0#: Loop-start trunk 1#: Ground-start trunk	Trunk-by-trunk switching for either the loop-start or ground-start circuit allows a flexible trunk setup between the two trunks. When the ground-start trunk is enabled, check the parameters for the Outbound Ground Detection Timer and the Inbound Ground Detection Timer. Install loop-start/ground-start trunk card VB-43531.

FF 4 KEY

RING ASSIGNMENT AND HUNT GROUPS

V1.0

DELAYED-RING TABLES

DAYTIME DELAYED-RING TABLES FF4-5#-(001-145)#-(01-64)#-(0 or 1)#	
0#: No ring signal 1#: Ring signal	Assigned extensions will ring at this table when there is no answer at the extensions assigned to the Daytime CO-Line Ring Tables. Port 145 is for Universal Night Answer (UNA)

NIGHTTIME DELAYED-RING TABLES FF4-6#-(001-145)#-(01-64)#-(0 or 1)#	
0#: No ring signal 1#: Ring signal	Assigned extensions will ring at this table when there is no answer at the extensions assigned to the Nighttime CO-Line Ring Tables. Port 145 is for Universal Night Answer (UNA)

FF 5 KEY

FLEXIBLE FEATURE KEY PROGRAMMING

V1.0

DSS/72/BLF CONSOLES

FF 5 KEY ASSIGNMENT FOR DSS/72/BLF CONSOLES FF5-(145-148)#-(01-24) or (01-72)#-CONF- Code#	
CONF: Clears data Code#: *See Section 700, DBS Programming Instructions, under "FF 5 Key Mode" for codes.*	Dedicated trunk lines (01-64) or pooled trunk lines (81-86, 89) can only be stored on the first 24 FF keys (01-24). All other codes can be stored in any of the 72 FF keys (01-72). **145:** DSS 1 for First Attendant **146:** DSS 2 for First Attendant **147:** DSS 1 for Second Attendant **148:** DSS 2 for Second Attendant

CPC-B

V2.0

DATA TABLES

Initial Settings - Data Tables, Version 2.0

Initial Settings - Data Tables, Version 2.0

Initial Settings - Data Tables, Version 2.0

Initial Settings - Data Tables, Version 2.0

MULTI-LINE KEY FEATURES

Attendants

When all the multi-line keys on the first attendant's telephone are busy, a call will transfer in sequence to the second, third and fourth attendant.
If all four attendants are busy, the call will transfer to a preset destination which must be a real extension number, such as a single-line telephone, answering machine or other single-line device. The transfer-destination extension cannot be a pilot number.

101: Second attendant 101-699/11-69#: Extension number	**SECOND ATTENDANT EXTENSION NUMBER** **FF1-2#-1#-24#-CONF-(101-699/11-69#)**
CONF: No third attendant 101-699/11-69#: Extension number	**THIRD ATTENDANT EXTENSION NUMBER** **FF1-2#-1#-25#-CONF-(101-699/11-69#)**
CONF: No fourth attendant 101-699/11-69#: Extension number	**FOURTH ATTENDANT EXTENSION NUMBER** **FF1-2#-1#-26#-CONF-(101-699/11-69#)**

MULTI-LINE KEY FEATURES

Attendants

ATTENDANT TRANSFER EXTENSION NUMBER FF1-2#-1#-27#-CONF-(101-699/11-69#)	
CONF: No extension number 101-699/11-69#: Transfer extension number	If the attendants are busy, the system will transfer the call to the attendant transfer extension number.
NOTE: The transfer extension should be a real extension. It cannot be a pilot extension number.	

ATTENDANT OVERRIDE SWITCH FF1-2#-1#-28#-(0 or 1)#	
0#: Disable 1#: Enable	If the attendant tries to override a call once the ***system*** is set for Attendant Override Disable, a busy tone will sound.

COMMON SYSTEM SETTINGS

ALM KEY LED FF1-2#-1#-29#-(0 or 1)#	
0#: Does not light 1#: Lights	The Alarm (ALM) key on the Attendant Console will either light or not light with this setting.

EXTENSION (BUSY LAMP FIELD) DELAYED-RING CAPABILITY FF1-2#-1#-30#-(0 or 1)#	
0#: No 1#: Yes	When there is no answer at the extensions set in the extension ring tables, calls are distributed to other extensions set in the extension delayed-ring tables. ***See the section on Delayed-Ring Tables under FF 4 Key Ring Assignment and Hunt Groups elsewhere in this manual.***

MULTI-LINE KEY FEATURES

Intercom Recall Timers

***Intercom**-Recall Timers are a new feature for the DBS system.*

Intercom HOLD-Recall Timers

If a held intercom call does not respond after a preset time, a recall signal will sound. The time for the begining of the signal is programmable.

The Attendant and the Extensions are each set separately.

0#: No intercom-HOLD recall 1#: 20 seconds 2#: 40 seconds 3#: 60 seconds 4#: 80 seconds 5#: 100 seconds 6#: 120 seconds 7#: 140 seconds 8#: 160 seconds 9#: 180 seconds 10#: 200 seconds 11#: 220 seconds 12#: 240 seconds	**Attendant** **INTERCOM HOLD-RECALL TIMER** **FF1-3#-22#-(0 or 1-12)#**
0#: No intercom-HOLD recall 1#: 20 seconds 2#: 40 seconds 3#: 60 seconds 4#: 80 seconds 5#: 100 seconds 6#: 120 seconds 7#: 140 seconds 8#: 160 seconds 9#: 180 seconds 10#: 200 seconds 11#: 220 seconds 12#: 240 seconds	**Extensions** **INTERCOM HOLD-RECALL TIMER** **FF1-3#-23#-(0 or 1-12)#**

FF 1 KEY

SYSTEM PROGRAMMING

V2.0

MULTI-LINE KEY FEATURES

Intercom Recall Timers

Intercom Transfer-Recall Timers

If a transferred intercom call does not respond after a preset time, a recall signal will sound. The time for the begining of the signal is programmable.

The Attendant and the Extensions are each set separately.

0#: No intercom-transfer recall 1#: 20 seconds 2#: 40 seconds 3#: 60 seconds 4#: 80 seconds 5#: 100 seconds 6#: 120 seconds 7#: 140 seconds 8#: 160 seconds 9#: 180 seconds 10#: 200 seconds 11#: 220 seconds 12#: 240 seconds	**Attendant** **INTERCOM TRANSFER-RECALL TIMER** **FF1-3#-24#-(0 or 1-12)#**
0#: No intercom-transfer recall 1#: 20 seconds 2#: 40 seconds 3#: 60 seconds 4#: 80 seconds 5#: 100 seconds 6#: 120 seconds 7#: 140 seconds 8#: 160 seconds 9#: 180 seconds 10#: 200 seconds 11#: 220 seconds 12#: 240 seconds	**Extensions** **INTERCOM TRANSFER-RECALL TIMER** **FF1-3#-25#-(0 or 1-12)#**

FF 2 KEY

TRUNK PROGRAMMING

V2.0

TRUNK CARDS

LOOP-START/GROUND-START/DIRECT-IN-DIAL TRUNK CARDS FF2-(01-64)#-21#-(0-2)#	
0#: Loop-start trunk 1#: Ground-start trunk 2#: DID trunk	There are three types of trunks: Loop-start, Ground-start and Direct-in-Dial (DID). When installing a DID trunk, check the parameters for Immediate or Wink start. Also check the parameters for the Wink-Start Timer, Dial Time Out for Digits and the DID Interdigit Dial Time Out. ***See also following pages.***

DIRECT-IN-DIAL (DID)

DID - IMMEDIATE OR WINK START FF2-(01-64)#-22#-(0 or 1)#	
0#: Wink start 1#: Immediate start	**Immediate Start** - After connecting with a distant switching system, the DBS system will wait 65 milliseconds before accepting the digits of a dialed number. **Wink Start** - The DBS system waits for a momentary signal (wink) before accepting the digits of a dialed number.

WINK-START TIMER FF2-(01-64)#-23#-(0-15)#	
0#: 140 milliseconds 1#: 160 msec 2#: 180 msec 3#: 200 msec 4#: 220 msec 5#: 240 msec 6#: 260 msec 7#: 280 msec 8#: 300 msec 9#: 200 msec 10#: 200 msec 11#: 200 msec 12#: 200 msec 13#: 200 msec 14#: 200 msec 15#: 200 msec	Maximum amount of time the system waits before accepting the digits of a dialed number.

DIRECT-IN-DIAL (DID)

DIAL TIME OUT FOR DIGITS FF2-(01-64)#-24#-(0 or 1-15)#	
0#: No time out 1#: 15 seconds 2#: 16 seconds 3#: 17 seconds 4#: 18 seconds 5#: 19 seconds 6#: 20 seconds 7#: 21 seconds 8#: 22 seconds 9#: 18 seconds 10#: 18 seconds 11#: 18 seconds 12#: 18 seconds 13#: 18 seconds 14#: 18 seconds 15#: 18 seconds	Maximum amount of time before a time-out signal, indicating an incomplete dialed number, is sent from the telephone company's central office.

DID INTERDIGIT DIAL TIME OUT FF2-(01-64)#-25#-(0-15)#	
0#: 30 milliseconds 1#: 40 msec 2#: 50 msec 3#: 60 msec 4#: 70 msec 5#: 80 msec 6#: 90 msec 7#: 100 msec 8#: 110 msec 9#: 120 msec 10#: 130 msec 11#: 140 msec 12#: 150 msec 13#: 160 msec 14#: 160 msec 15#: 160 msec	Sets the amount of time for dialing each digit before a time-out signal is sent from the telephone company's central office indicating an incomplete dialed number.

FF 3 KEY

EXTENSION PROGRAMMING

V2.0

EXTENSION PROGRAMMING

TELEPHONE TYPES FF3-(001-144)#-2#-(0 or 1-19)#	
0#: No assignment 1#: Analog telephone 2#: Digital telephone (FF 6 key) 3#: Digital telephone (FF 12 key) 4#: Digital telephone (FF 24 key) 5#: Reserved 6#: Reserved 7#: EM/24 VB-43310 8#: OPX (pulse) 9#: OPX (tone) 10#: Voice mail (AEC) 11#: DSS1 - Extension 100/10 12#: DSS2 - Extension 100/10 13#: DSS3 - Extension 101/11 14#: DSS4 - Extension 101/11 15#: Voice mail (OPX) **CPC-B, Version 2.0** 16#: First attendant console 17#: Second attendant console 18#: Third attendant console 19#: Fourth attendant console	Stores telephones in the system.

EXTENSION DIRECTORY DISPLAY FF3-(001-144)#-34#-(0 or 1)#	
0#: Displays 5 extensions 1#: Displays 10 extensions	Extension directory display on a large-screen display telephone.

DIRECT-IN-DIAL (DID)

DID DIAL OUTSIDE TELEPHONE NUMBER FF3-(001-144)#-35#-(0000-9999)#	
0000#: Default 0000-9999#: Outside telephone number	A signal is sent from the DID CO-trunk line to the DBS system and converted to a DBS extension number. The parameters represent the last four digits of the DID outside telephone number.

RINGBACK TONE WITH BUSY SIGNAL

RINGBACK TONE WITH BUSY SIGNAL FF3-(001-144)#-36#-(0-2)#	
0#: Ringback tone with busy signal 1#: Busy signal 2#: Ringback tone	Sets ringback tone on a busy Multi-Line key. A caller ringing in on a busy multi-line key will hear the tone set by this address. This tone can also be set to a Voice-Mail port.

FF 4 KEY

RING ASSIGNMENT
AND
HUNT GROUPS

V2.0

RING ASSIGNMENT AND HUNT GROUPS

In the DBS system, you can have up to eight hunt groups with a maximum of eight extensions plus a pilot extension number in each group.

The pilot extension number is not a real extension, but a receiver of incoming ring signals. Once the ring signal reaches the hunt group through the pilot number, the signal then rings at the first free extension in the group according to the hunt-group search method. ***See following page.***

INCOMING CO-LINE RING SIGNAL TO A HUNT GROUP

CO-line ring signals are set in Day Ring, Night Ring, Day Delayed-Ring and Night Delayed-Ring tables. You can set a ring signal for each hunt-group pilot number (151-158) and each CO line (01-64).

HUNT-GROUP RING TABLES

DAYTIME CO-LINE RING TABLES FF4-1#-(151-158)#-(01-64)#-(0 or 1)#	
0#: No ring signal 1#: Ring signal	Sets the hunt-group pilot numbers for daytime ring.

NIGHTTIME CO-LINE RING TABLES FF4-2#-(151-158)#-(01-64)#-(0 or 1)#	
0#: No ring signal 1#: Ring signal	Sets the hunt-group pilot numbers for nighttime ring.

HUNT-GROUP PROGRAMMING

PILOT EXTENSION NUMBER FOR A HUNT GROUP FF4-3#-(1-8)#-1#-(0 or 101-699/11-69)#	
0#: No Assignment 101-699/11-69#: Extension number	Pilot extension number in a hunt group.

HUNT-GROUP SEARCH METHODS FF4-3#-(1-8)#-2#-(0-2)#		
	There are three types of hunt groups:	
0#: Terminal 1#: Distributed 2#: Longest Idle	**Terminal**	Begins its search with the pilot number and then moves through the eight extension numbers, in sequence, before transferring after a set time to the pilot number of the next hunt group.
	Distributed	Distributes calls through the pilot number based on which extension in the group received a call in the last search. The next extension in sequence receives the new call.
	Longest Idle	Searches through the pilot number for an extension in the group which has

HUNT-GROUP PROGRAMMING

TRANSFER EXTENSION NUMBER FF4-3#-(1-8)#-3#-(0 or 100-699/10-69)#	
0#: No assignment 100-699/10-69#: Extension number	Once a ring signal ends its search in a hunt group, it can be transferred to a pilot number in another hunt group, an extension, the attendant, an answering machine or another destination.

TRANSFER TIMER FF4-3#-(1-8)#-4#-(2-32)#	
2#: 2 seconds 3-32#: 3-32 seconds	Sets the maximum amount of time before a call is transferred to another hunt group.

HUNT-GROUP EXTENSION (1-8) FF4-3#-(1-8)#-(5-12)#-(0 or 100-699/10-69)#	
0#: No assignment 100-699/10-69#: Extension number	Assigns an extension number to one of the eight places in a hunt group.

DELAYED-RING TABLES

HUNT-GROUP DAYTIME DELAYED-RING TABLES FF4-5#-(151-158)#-(01-64)#-(0 or 1)#	
0#: No ring signal 1#: Ring signal	Sets the hunt-group pilot numbers (151-158) in the daytime delayed-ring tables.

DELAYED-RING TABLES

HUNT-GROUP NIGHTTIME DELAYED-RING TABLES FF4-6#-(151-158)#-(01-64)#-(0 or 1)#	
0#: No ring signal 1#: Ring signal	Sets the hunt-group pilot numbers (151-158) in the nighttime delayed-ring tables.

EXTENSION-RING TABLES FF4-7#-(001-144)#-(001-144)#-(0 or 1)#	
0#: No ring signal 1#: Ring signal	This sets the ring on an extension-line key. The first set of port numbers (001-144) represent your telephone. The second set of port numbers (001-144) belong to the target telephone.

EXTENSION DELAYED-RING TABLES FF4-8#-(001-144)#-(001-144)#-(0 or 1)#	
0#: No ring signal 1#: Ring signal	If the set extensions on the extension-ring table do not answer, a call will also ring on extensions set in the extension delayed-ring table. The first set of port numbers (001-144) represent your telephone. The second set of port numbers (001-144) belong to the target telephone.

FF 5 KEY

FLEXIBLE FEATURE KEY PROGRAMMING

V2.0

MORE FLEXIBILITY FOR FF KEYS

FF KEY FEATURE ASSIGNMENT FOR EXTENSIONS

CONF: Clears data PROG 10-69/100-699#: EL keys 81-86, 89#: ML keys	**EXTENSION LINE (EL) AND MULTI-LINE (ML) KEYS** **FF5-(001-144)#-(01-24)#-CONF-** **(PROG 10-69/100-699#) or (81-86, 89#)** Programs Extension-Line (EL) and Multi-Line (ML) keys. Store the Multi-Line key as **81-86, 89**. There can be a maximum of 12 ML keys on the Attendant*telephone*. On other telephones, there can be up to 3 ML keys assigned to any of the 24 FF keys (01-24). *See Section 700B, Addendum to the DBS Operating Instructions under "Line Key Features" for an explanation of EL and ML keys.*
CONF: Clears data PROG PROG xxxxxx#: Any key, maximum of six digit xxxxxx#: Pre-programmed codes	**ANY KEY OR PRE-PROGRAMMED CODES** **FF5-(001-144)#-(01-24)#-CONF-** **(PROG PROG xxxxxx#) or (xxxxxx#)** **(PROG PROG xxxxxx#)** will program the ***Any Key*** feature. You can program ***any digits up to a maximum of six***. Use this feature to store, for example, code 5 for OHVA. There can be a maximum of 24 FF keys (01-24). **Note:** The LCD screen will only display up to four digits. **(xxxxxx#)** is for setting pre-programmed codes. *See Section 700, DBS Operating Instructions, under "Storing the FF Keys" for a chart of these codes. See also Section 700B, Addendum to the DBS Operating Instructions under "More Flexibility for FF Keys" for instructions on how to store CF codes plus an extension to an FF key.* **NOTE:** You cannot use the *programming mode* through the telephone to assign the **FLASH** or **CONF** features to an FF key. *See Section 700B, Addendum to the DBS Operating Instructions under "More Flexibility for FF Keys" for instructions on how to assign these features to FF keys.*

MORE FLEXIBILITY FOR FF KEYS

FF KEY ASSIGNMENT FOR DSS/72/BLF CONSOLES

145: DSS 1 for First Attendant
146: DSS 2 for First Attendant
147: DSS 1 for Second Attendant
148: DSS 2 for Second Attendant

CONF: Clears data PROG 10-69/100-699#: DSS/72/BLF keys 81-86, 89#: MCO keys	**DSS/72/BLF AND POOLED-TRUNK-LINE KEYS** **FF5-(145-148)#-(01-24) or (01-72)#-CONF-** **(PROG 10-69/100-699#) or (81-86, 89#)** Programs DSS/72/BLF and Pooled-Trunk-Line (MCO) keys. Store the MCO key as **81-86, 89** on the first 24 FF keys (01-24). All of the 72 FF keys can be used for DSS/72/BLF keys. *See Section 700B, Addendum to the DBS Operating Instructions under "Line Key Features" for an explanation of EL and ML keys.*
CONF: Clears data PROG PROG xxxxxx#: Any key, maximum of six digits xxxxxx#: Pre-programmed codes	**ANY KEY OR PRE-PROGRAMMED CODES** **FF5-(145-148)#-(01-72)#-CONF-** **(PROG PROG xxxxxx#) or (xxxxxx#)** **(PROG PROG xxxxxx#)** will program the ***Any Key*** feature. You can program ***any digits up to a maximum of six***. Use this feature to store, for example, code 5 for OHVA. There are 72 FF keys (01-72). **Note:** The LCD screen will only display up to four digits. **(xxxxxx#)** is for setting pre-programmed codes. *See Section 700, DBS Operating Instructions, under "Storing the FF Keys" for a chart of these codes. See also Section 700B, Addendum to the DBS Operating Instructions under "More Flexibility for FF Keys" for instructions on how to store CF codes plus an extension to an FF key.* **NOTE:** You cannot use the *programming mode* through the telephone to assign the **FLASH** or **CONF** features to an FF key. *See Section 700B, Addendum to the DBS Operating Instructions under "More Flexibility for FF Keys" for instructions on how to assign these features to FF keys.*

MORE FLEXIBILITY FOR FF KEYS

FF KEY ASSIGNMENT FOR ATTENDANT CONSOLES

Use with Optional Attendant Feature Package (VB-43330)

(See Attendant Console User Guide, Section 760 for FF Key Layout.)

CONF: Clears data PROG 10-69/100-699#: DSS/72/BLF keys 81-86, 89#: MCO keys	**DSS/72/BLF AND POOLED-TRUNK-LINE KEYS** **FF5-(149-152)#-(01-08) or (01-32)#-CONF-** **(PROG 10-69/100-699#) or (81-86, 89#)** Programs DSS/72/BLF and Pooled-Trunk-Line (MCO) keys on the Attendant *console*. Store the MCO keys as **81-86, 89** on the first eight FF keys (01-08) only.
CONF: Clears data PROG PROG xxxxxx#: Any key, maximum of six digits xxxxxx#: Pre-programmed codes	**ANY KEY OR PRE-PROGRAMMED CODES** **FF5-(149-152)#-(01-32)#-CONF-** **(PROG PROG xxxxxx#) or (xxxxxx#)** **(PROG PROG xxxxxx#)** will program the ***Any Key*** feature. You can program ***any digits up to a maximum of six***. Use this feature to store, for example, code 5 for OHVA. There are 32 FF keys (01-32). **Note:** The LCD screen will only display up to four digits. **(xxxxxx#)** is for setting pre-programmed codes. *See Section 700, DBS Operating Instructions, under "Storing the FF Keys" for a chart of these codes. See also Section 700B, Addendum to the DBS Operating Instructions under "More Flexibility for FF Keys" for instructions on how to store CF codes plus an extension to an FF key.* **NOTE:** You cannot use the *programming mode* through the telephone to assign the **FLASH** or **CONF** features to an FF key. *See Section 700B, Addendum to the DBS Operating Instructions under "More Flexibility for FF Keys" for instructions on how to assign these features to FF keys.*

FF 6 KEY

NAME ASSIGNMENT

V2.0

NAME ASSIGNMENT

CO-TRUNK-LINE NAME ASSIGNMENT FF6-5#-(01-64)#-CONF-(xxxxxx#)	
CONF: Clears data xxxxxx#: Name or message assignment - up to six characters	You can set CO-trunk-line name assignment in the programming mode during remote maintenance or you can set it with PCAS. Programming through a telephone set requires a 72-port Direct Selection Station (DSS/72). **Note:** The DSS/72 must be set to Telephone Types 11 for extension 100 or 13 for extension 101. ***See under FF 3 Key Extension Programming, V2.0 elsewhere in this manual.***

HUNT-GROUP PILOT NAME ASSIGNMENT FF6-6#-(1-8)#-CONF-(xxxxxxxxxx#)	
CONF: Clears data xxxxxxxxxx#: Name assignment - up to 10 characters	Assigns a name of up to 10 characters to a Hunt-Group Pilot Extension number.

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Panasonic

Issue 3 - July 1993

DBS Programming Forms and Tables

Section 450

CPC-B Versions 1.0, 2.0, 3.1, and 4.0

CPC-A Versions 3.0, 3.1, and 3.2

Preface

The new ***DBS Programming Forms and Tables***, section 450, has fewer pages, yet contains more information on how to make programming easier by using the newly-designed forms to record programmed data. How-to instructions precede each FF Key chapter.

While some forms overlap in information, every form charts a specific kind of programming. The instructions make clear who will use each form.

This manual is for software versions:

CPC-B 1.0, 2.0, 3.1, 4.0

and

CPC-A 3.0, 3.1, 3.2

All of the forms in this manual are intended to be photocopied. ***Save your originals*** and use them as copy masters.

FF1 Key - System

The FF1 Key is for system-wide programming. There are seven submodes (1# to 7#) for this key.

Time and Date, Recall and Pause timers, and DISA (Direct Inward System Access) are a few of the nearly 100 features available for programming on the FF1 Key.

Features programmed on this key affect the entire system. In contrast, the other nine FF keys affect only one extension or trunk, and are programmed on an extension-by-extension or trunk-by-trunk basis. The exception to these keys is System Speed Dial in the FF10 Key which also affects the entire system.

The programming forms and tables for the FF1 Key apply to each DBS system (single or double cabinet). The data options for most features are **0** and **1**, but some features have more than these two programming options. For example, the options for the Paging feature range from 00 to 07. Other features offer up to 15 options, such as the Automatic Pause Timer and Unsupervised Conference Talk-Time (trunk-to-trunk conferencing).

Save Your Original Forms!!!

FF1 Key - System

DBS Account Name_____ Cutover Date_____ Sheet___ of___
Account Address_____ Account Phone (Main List)_____

Address / Feature	Program Options	✔
-1#		
-1#-(MMDDYY)# Date (month/day/year)	***No entry at default*** MMDDYY: (01 to 12) (01 to 31) (00 to 99)	
-2#-(HHMM)# Time (hour/minutes)	***No entry at default*** HHMM: (0000 to 2359)	
-2#-1#		
-1#-(0 or 1)# Call duration display	0: No display ***1: display***	
-2#-(0 to 2)# SMDR timer/starting time display	***0: Starting from 5 sec.*** 1: Starting from 16 sec. 2: Starting from 30 sec.	
-3#-(0 or 1)# **See FF2-3#, FF8** Least Cost Routing (LCR)	***0: Pooled trunk access*** 1: LCR	
-4#-(00 to 89)# Toll Restriction for SSD	SSD overrides TRS 00 to 89:_____ ***TRS***	
-5#-(0 or 1)# Displays SSD during dialing	***0: Display*** 1: No display	
-6#-(0 or 1)# AUTO-FLASH-REDIAL	0: Disable ***1: Enable***	
-7#-(0 or 1)# One-touch dialing	0: Disable ***1: Enable (must be set to 1)***	
-8#-(0 or 1)# Onhook transfer	0: Disable ***1: Enable***	
-9#-(0 or 1)# Key-bank (automatic) HOLD (DSS BLF)	***0: Disable*** 1: Enable	
-10#-(0 or 1)# Non-appearance CO line hold	0: Exclusive hold ***1: System hold***	
-11#-(0 or 1)# SLT FLASH control	0: Intercom dial tone ***1: Retrieves held CO line***	
-12#-(0 or 1)## Sets number of extension digits	0: 2 digits (10 to 69) ***1: 3 digits (100 to 699)***	
-14#-(0 or 1)# Attendant intercom	0: Tone ***1: Voice***	
-15#-(0 or 1)# Extension intercom	0: Tone ***1: Voice***	

FF1 Key - System

DBS Account Name_____ Cutover Date_____ Sheet___ of___
Account Address_____ Account Phone (Main List)_____

Address / Feature	Program Options	✔
-2#-1#		
-16#-(0 or 1)# Splash (alert) tone on a voice call	0: Disable ***1: Enable***	
-17#-(0 or 1)# **See FF3-9#, 10#** Splash (alert) tone on a busy override	***0: Disable*** 1: Enable	
-18#-(0 or 1)# Area code or 1 + area code	0: Area code only ***1: 1 + area code***	
-19#-(0 or 1)# SSD name display - large display	***0: 5 names*** 1: 10 names	
-21#-(0 or 1)# Voice mail tone	***0: Silence*** 1: Busy tone	
-22#-(0 or 1 to 15)# Attendant overflow	0: No stacked calls (CPC-B Vs. 1.0)_____ ***8: 8 calls (CPC-B Version 1.0)***	
-23#-(0 or 1)# Delayed-ring capability	***0: Disable*** 1: Enable	
-24#-(101 to 69/11 to 699)# **(CPC-B Vs. 2.0)** Second attendant	***101: Second attendant*** 11 to 69/101 to 699: Extension_____	
-25#-(101 to 69/11 to 699)# **(CPC-B Vs. 2.0)** Third attendant	***No entry at default*** 11 to 69/101 to 699: Extension_____	
-26#-(101 to 69/11 to 699)# **(CPC-B Vs. 2.0)** Fourth attendant	***No entry at default*** 11 to 69/101 to 699: Extension_____	
-27#-(101 to 69/11 to 699)# **(CPC-B Vs. 2.0)** Attendant transfer extension	***No entry at default*** 11 to 69/101 to 699: Extension_____	
-28#-(0 or 1)# **(CPC-B Vs. 2.0)** Attendant override switch	0: Disable ***1: Enable***	
-29#-(0 or 1)# **(CPC-B Vs. 2.0)** Alarm LED mode	0: Does not light ***1: Lights***	
-30#-(0 or 1)# **(CPC-B Vs. 2.0)** BLF (extension) delayed ring	***0: No*** 1: Yes	
-31#-(0 to 6)# Analog port transfer ring interval	***0: 0.5 Sec ON / 3.5 Sec OFF*** 1: 3.0 Sec ON / 1.0 Sec OFF 2: 2.0 Sec ON / 2.0 Sec OFF 3: 1.0 Sec ON / 2.0 Sec OFF 4: 1.0 Sec ON / 3.0 Sec OFF 5: 1.0 Sec ON / 5.0 Sec OFF 6: 1.0 Sec ON / 7.0 Sec OFF	

FF1 Key - System

DBS Account Name_____ Cutover Date_____ Sheet___ of___
Account Address_____ Account Phone (Main List)_____

Address / Feature	Program Options	✔
-2#-1#		
-32#-(0 to 1)# (CPC-B Vs. 4.0 or higher) DID/DNIS emulation	***0: Disable*** 1: Enable	
-32#-(0 or 1)# (CPC-B Vs. 3.0 or higher) Multiple DID	***0: Disable*** 1: Enable	
-33#-(0 or 1)# Paging duration	***0: No limit*** 1: 60 seconds	
-34#-(0 or 1)# SLT DISA ringing pattern	***0: 1 Sec ON / 3 Sec OFF*** 1: Flexible (see CO TRF ringing pattern)	
-2#-2#		
-1#-(0 or 1)# SMDR TTY parity check	0: No parity check ***1: Parity check (CPC-A Vs. 3.0 and above)***	
-2#-(0 or 1)# SMDR TTY parity type	0: Odd ***1: Even***	
-3#-(0 or 1)# SMDR baud rate	1: 300 bps ***2: 1200 bps - CPC-A V 2.0*** 3: 4800 bps ***4: 9600 bps - CPC-A V 3.0, CPC-B V 1.0, 2.0***	
-4#-(0 or 1)# SMDR stop-bit length	***1: 1.0 bits*** 2: 1.5 bits 3: 2.0 bits	
-5#-(0 or 1)# SMDR data length	1: 5.0 bits (less than 90 ports) 2: 6.0 bits (less than 90 ports) 3: 7.0 bits ***4: 8.0 bits***	
-6#-(0 or 1)# **See FF3-14#** SMDR print mode 1	0: Outgoing calls only ***1: Incoming and outgoing***	
-7#-(0 or 1)# SMDR print mode 2	0: Long-distance calls only ***1: All outgoing calls***	
-8#-(0 or 1)# SMDR print mode 3	***0: TTY data only*** 1: Titles and TTY data	
-9#-(0 or 1)# Dump data mode (Xon/Xoff)	***0: No control*** 1: Control	
-10#-(0 or 1)# RAI baud rate switch (remote)	0: 300 bauds (RAI-A, RAI-B) ***1: 1200 bauds (RAI-B)***	

FF1 Key - System

DBS Account Name_____ Cutover Date_____ Sheet___ of___

Account Address_____ Account Phone (Main List)_____

Address / Feature	Program Options	✔
-2#-3#		
-1#-(Up to 3 digits)# PBX access code 1	***No entry at default*** PBX access codes: Up to 3 digits_____	
-2#-(Up to 3 digits)# PBX access code 2	***No entry at default*** PBX access codes: Up to 3 digits_____	
-3#-(Up to 3 digits)# PBX access code 3	***No entry at default*** PBX access codes: Up to 3 digits_____	
-4#-(Up to 3 digits)# PBX access code 4	***No entry at default*** PBX access codes: Up to 3 digits_____	
-5#-(Up to 3 digits)# PBX access code 5	***No entry at default*** PBX access codes: Up to 3 digits_____	
-6#-(Up to 3 digits)# PBX access code 6	***No entry at default*** CO access codes: Up to 3 digits_____	
-7#-(Up to 3 digits)# PBX access code 7	***No entry at default*** CO access codes: Up to 3 digits_____	
-8#-(Up to 3 digits)# PBX access code 8	***No entry at default*** CO access codes: Up to 3 digits_____	
-9#-(1 to 3)# **See FF2-13#** Automatic pause after dialing 1	***No entry at default*** 1: Pause - 1st digit 2: Pause - 2nd digit 3: Pause - 3rd digit	
-10#-(1 to 3)# **See FF2-13#** Automatic pause after dialing 2	***No entry at default*** 1: Pause - 1st digit 2: Pause - 2nd digit 3: Pause - 3rd digit	
-11#-(1 to 3)# **See FF2-13#** Automatic pause after dialing 3	***No entry at default*** 1: Pause - 1st digit 2: Pause - 2nd digit 3: Pause - 3rd digit	
-12#-(1 to 3)# **See FF2-13#** Automatic pause after dialing 4	***No entry at default*** 1: Pause - 1st digit 2: Pause - 2nd digit 3: Pause - 3rd digit	
-13#-(1 to 3)# **See FF2-13#** Automatic pause after dialing 5	***No entry at default*** 1: Pause - 1st digit 2: Pause - 2nd digit 3: Pause - 3rd digit	

FF1 Key - System

DBS Account Name_____ Cutover Date_____ Sheet____ of____
Account Address_____ Account Phone (Main List)_____

Address / Feature	Program Options	✔
-2#-3#		
-14#-(1 to 3)# **See FF2-13#** Automatic pause after dialing 6	***No entry at default*** 1: Pause - 1st digit 2: Pause - 2nd digit 3: Pause - 3rd digit	
-15#-(1 to 3)# **See FF2-13#** Automatic pause after dialing 7	***No entry at default*** 1: Pause - 1st digit 2: Pause - 2nd digit 3: Pause - 3rd digit	
-16#-(1 to 3)# **See FF2-13#** Automatic pause after dialing 8	***No entry at default*** 1: Pause - 1st digit 2: Pause - 2nd digit 3: Pause - 3rd digit	
-17#-(1 to 3)# **See FF2-13#** Automatic pause after dialing 9	***No entry at default*** 1: Pause - 1st digit 2: Pause - 2nd digit 3: Pause - 3rd digit	
-18#-(1 to 3)# **See FF2-13#** Automatic pause after dialing 0	***No entry at default*** 1: Pause - 1st digit 2: Pause - 2nd digit 3: Pause - 3rd digit	
-2#-4#		
-1#-(0 or 1)# **See FF4-1#, 2#** Universal Night Answer (UNA) ring pattern	***0: 3 secs on/1 sec off*** 1: Continuous	
-2#-(0 or 1)# External Page Interface (EPI) page group 00	***0: No EPI relay*** 1: EPI relay	
-3#-(0 or 1)# External Page Interface (EPI) page group 01	***0: No EPI relay*** 1: EPI relay	
-4#-(0 or 1)# External Page Interface (EPI) page group 02	***0: No EPI relay*** 1: EPI relay	
-5#-(0 or 1)# External Page Interface (EPI) page group 03	***0: No EPI relay*** 1: EPI relay	
-6#-(0 or 1)# External Page Interface (EPI) page group 04	***0: No EPI relay*** 1: EPI relay	
-7#-(0 or 1)# External Page Interface (EPI) page group 05	***0: No EPI relay*** 1: EPI relay (Not in use)	

FF1 Key - System

DBS Account Name_____ Cutover Date_____ Sheet___ of___
Account Address_____ Account Phone (Main List)_____

Address / Feature	Program Options	✔
-2#-4#		
-8#-(0 or 1)# External Page Interface (EPI) page group 06	***0: No EPI relay*** 1: EPI relay (Not in use)	
-9#-(0 or 1)# External Page Interface (EPI) page group 07	***0: No EPI relay*** 1: EPI relay (Not in use)	
-2#-5#		
-(1-8)#-(1-20)#-(0 or 1)# Class of Service setting	***0: Restricted*** 1: Not restricted	
-2#-6#		
-(1-100)#-1#-(0001-9999)# Verified Forced Account Codes	*******: No account codes are set*** (0001-9999)#	
-(1-100)#-2#-(0-7)# Verified Forced Account Code toll restriction	***0: TRS Type 0*** 1: TRS Type 1 2: TRS Type 2 3: TRS Type 3 4: TRS Type 4 5: TRS Type 5 6: TRS Type 6 7: TRS Type 7	
-3#-1#		
-(0000 to 2359)# Automatic switch to night mode (HHMM)	***No entry at default*** 0000 to 2359: Automatic	
-3#-2#		
-(0 or 1 to 12)# Attendant HOLD-recall timer	0: No recall ***1: 20 seconds*** 2: 40 seconds 3: 60 seconds 4: 80 seconds 5: 100 seconds 6: 120 seconds 7: 140 seconds 8: 160 seconds 9: 180 seconds 10: 200 seconds 11: 220 seconds 12: 240 seconds	

FF1 Key - System

DBS Account Name_____ Cutover Date_____ Sheet____ of____
Account Address_____ Account Phone (Main List)_____

Address / Feature	Program Options	✔
-3#-3#		
-(0 or 1 to 12)# Extension HOLD-recall timer	0: No recall 1: 20 seconds 2: 40 seconds 3: 60 seconds 4: 80 seconds 5: 100 seconds 6: 120 seconds ***7: 140 seconds*** 8: 160 seconds 9: 180 seconds 10: 200 seconds 11: 220 seconds 12: 240 seconds	
-3#-4#		
-(0 or 1 to 12)# Attendant transfer-recall timer	0: No recall ***1: 20 seconds*** 2: 40 seconds 3: 60 seconds 4: 80 seconds 5: 100 seconds 6: 120 seconds 7: 140 seconds 8: 160 seconds 9: 180 seconds 10: 200 seconds 11: 220 seconds 12: 240 seconds	

FF1 Key - System

DBS Account Name_____ Cutover Date_____ Sheet____ of____
Account Address_____ Account Phone (Main List)_____

Address / Feature	Program Options	✔
-3#-5#		
-(0 or 1 to 12)# Extension transfer-recall timer	0: No recall 1: 20 seconds 2: 40 seconds 3: 60 seconds 4: 80 seconds 5: 100 seconds 6: 120 seconds ***7: 140 seconds*** 8: 160 seconds 9: 180 seconds 10: 200 seconds 11: 220 seconds 12: 240 seconds	
-3#-6#		
-(0 or 1 to 12) Attendant Hunt Group recall timer	0: No recall ***1: 20 seconds*** 2: 40 seconds 3: 60 seconds 4: 80 seconds 5: 100 seconds 6: 120 seconds 7: 140 seconds 8: 160 seconds 9: 180 seconds 10: 200 seconds 11: 220 seconds 12: 240 seconds	

FF1 Key - System

DBS Account Name_____ Cutover Date_____ Sheet____ of____
Account Address_____ Account Phone (Main List)_____

Address / Feature	Program Options	✔
-3#-7#		
-(0 or 1 to 12)# Extension Hunt Group recall timer	0: No recall 1: 20 seconds 2: 40 seconds 3: 60 seconds 4: 80 seconds 5: 100 seconds 6: 120 seconds ***7: 140 seconds*** 8: 160 seconds 9: 180 seconds 10: 200 seconds 11: 220 seconds 12: 240 seconds	
-3#-8#		
-(0 or 1 to 12)# Attendant park HOLD recall timer	0: No recall 1: 20 seconds ***2: 40 seconds*** 3: 60 seconds 4: 80 seconds 5: 100 seconds 6: 120 seconds 7: 140 seconds 8: 160 seconds 9: 180 seconds 10: 200 seconds 11: 220 seconds 12: 240 seconds	

FF1 Key - System

DBS Account Name_____Cutover Date_____Sheet____of____
Account Address_____Account Phone (Main List)_____

Address / Feature	Program Options	✔
-3#-9#		
-(0 or 1 to 12)# Extension park-HOLD recall timer	0: No recall 1: 20 seconds 2: 40 seconds 3: 60 seconds 4: 80 seconds 5: 100 seconds 6: 120 seconds ***7: 140 seconds*** 8: 160 seconds 9: 180 seconds 10: 200 seconds 11: 220 seconds 12: 240 seconds	
-3#-10#		
-(0 or 1 to 12)# Attendant reversion timer	0: No recall 1: 20 seconds 2: 40 seconds 3: 60 seconds 4: 80 seconds 5: 100 seconds 6: 120 seconds 7: 140 seconds 8: 160 seconds ***9: 180 seconds*** 10: 200 seconds 11: 220 seconds 12: 240 seconds	

FF1 Key - System

DBS Account Name_____ Cutover Date_____ Sheet____ of____

Account Address_____ Account Phone (Main List)_____

Address / Feature	Program Options	✔
-3#-11#		
-(0 or 1 to 15)# **See FF2-16#, FF3-13#** Unsupervised conference talk-time	0: Disable 1: 5 minutes ***2: 10 minutes*** 3: 15 minutes 4: 20 minutes 5: 25 minutes 6: 30 minutes 7: 35 minutes 8: 40 minutes 9: 45 minutes 10: 50 minutes 11: 55 minutes 12: 60 minutes 13: 65 minutes 14: 70 minutes 15: 75 minutes	
-3#-12#		
-(0 or 1 to 15)# Automatic pause timer	0: No pause 1: 0.5 second 2: 1.0 second 3: 1.5 seconds 4: 2.0 seconds 5: 2.5 seconds 6: 3.0 seconds ***7: 3.5 seconds*** 8: 4.0 seconds 9: 4.5 seconds 10: 5.0 seconds 11: 5.0 seconds 12: 5.0 seconds 13: 5.0 seconds 14: 5.0 seconds 15: 5.0 seconds	

FF1 Key - System

DBS Account Name_____ Cutover Date_____ Sheet____ of____
Account Address_____ Account Phone (Main List)_____

Address / Feature	Program Options	✔
-3#-13#		
-(0 or 1 to 10)# **See 18#** CO line FLASH timer	0: No FLASH 1: 0.2 second 2: 0.3 second 3: 0.4 second 4: 0.5 second 5: 0.6 second 6: 0.7 second 7: 0.8 second 8: 0.9 second ***9: 1.0 second*** 10: 1.1 seconds	
-3#-14#		
-(0 or 1 to 6)# SLT onhook FLASH timer	**FLASH (F) Disconnect (D)** 0: 200-500 ms (F) Over 500 ms (D) 1: 200-750 ms (F) Over 750 ms (D) 2: 200-1000 ms (F) Over 1000 ms (D) 3: 200-1200 ms (F) Over 1200 ms (D) ***4: 200-1500 ms (F) Over 1500 ms (D)*** 5: Over 200 ms (D) 6: 30-140 ms (F) Over 500 ms (D)	
-3#-15#		
-(0 to 3)# Incoming ring timer	0: 4 seconds ***1: 8 seconds*** 2: 10 seconds 3: 12 seconds	

FF1 Key - System

DBS Account Name_____ Cutover Date_____ Sheet____ of____
Account Address_____ Account Phone (Main List)_____

Address / Feature	Program Options	✔
-3#-16#		
-(0 or 1 to 15)# Incoming ring delay timer	0: Synchronizes to incoming ring cycle 1: Expand to 50 ms 2: Expand to 100 ms 3: Expand to 150 ms 4: Expand to 200 ms 5: Expand to 250 ms 6: Expand to 300 ms ***7: Expand to 350 ms*** 8: Expand to 400 ms 9: Expand to 450 ms 10: Expand to 500 ms 11: Expand to 550 ms 12: Expand to 600 ms 13: Expand to 650 ms 14: Expand to 700 ms 15: Expand to 750 ms	
-3#-17#		
-(0 to 15)# Dial pause timer	0: 1.2 seconds ***1: 1.2 seconds*** 2: 2.0 seconds 3: 3.0 seconds 4: 4.0 seconds 5: 5.0 seconds 6: 6.0 seconds 7: 7.0 seconds 8: 8.0 seconds 9: 9.0 seconds 10: 10 seconds 11: 11 seconds 12: 12 seconds 13: 13 seconds 14: 14 seconds 15: 15 seconds	

FF1 Key - System

DBS Account Name_____ Cutover Date_____ Sheet___ of___

Account Address_____ Account Phone (Main List)_____

Address / Feature	Program Options	✔
-3#-18#		
-(0 or 1 to 10)# **See 13#** PBX-FLASH timer	0: No FLASH 1: 0.2 second 2: 0.3 second 3: 0.4 second 4: 0.5 second 5: 0.6 second 6: 0.7 second ***7: 0.8 second*** 8: 0.9 second 9: 1.0 second 10: 1.1 seconds	
-3#-19#		
-(0 to 15)# Call Forward-No Answer timer	0: Call forward after 4 seconds 1: Call forward after 8 seconds ***2: Call forward after 12 seconds*** 3: Call forward after 16 seconds 4: Call forward after 20 seconds 5: Call forward after 24 seconds 6: Call forward after 28 seconds 7: Call forward after 32 seconds 8: Call forward after 36 seconds 9: Call forward after 40 seconds 10: Call forward after 44 seconds 11: Call forward after 48 seconds 12: Call forward after 52 seconds 13: Call forward after 56 seconds 14: Call forward after 60 seconds 15: Call forward after 64 seconds	

FF1 Key - System

DBS Account Name_____ Cutover Date_____ Sheet____ of____

Account Address_____ Account Phone (Main List)_____

Address / Feature	Program Options	✔
-3#-20#		
-(0 or 1 to 8)# Outbound ground detection timer	0: No detection 1: 1 second 2: 2 seconds 3: 3 seconds ***4: 4 seconds*** 5: 5 seconds 6: 6 seconds 7: 7 seconds 8: 8 seconds	
-3#-21#		
-(0 or 1 to 8)# Incoming ground detection timer	0: No detection 1: 1 second 2: 2 seconds 3: 3 seconds ***4: 4 seconds*** 5: 5 seconds 6: 6 seconds 7: 7 seconds 8: 8 seconds	
-3#-22#		
-(0 or 1 to 12)# Attendant intercom HOLD-recall timer **(CPC-B Vs. 2.0)**	0: No intercom HOLD recall ***1: 20 seconds*** 2: 40 seconds 3: 60 seconds 4: 80 seconds 5: 100 seconds 6: 120 seconds 7: 140 seconds 8: 160 seconds 9: 180 seconds 10: 200 seconds 11: 220 seconds 12: 240 seconds	

FF1 Key - System

DBS Account Name_____ Cutover Date_____ Sheet____ of____

Account Address_____ Account Phone (Main List)_____

Address / Feature	Program Options	✔
-3#-23#		
-(0 or 1 to 12)# Extension intercom HOLD recall timer **(CPC-B Vs. 2.0)**	0: No intercom HOLD recall 1: 20 seconds 2: 40 seconds 3: 60 seconds 4: 80 seconds 5: 100 seconds 6: 120 seconds ***7: 140 seconds*** 8: 160 seconds 9: 180 seconds 10: 200 seconds 11: 220 seconds 12: 240 seconds	
-3#-24#		
-(0 or 1 to 12)# Attendant intercom transfer recall timer **(CPC-B Vs. 2.0)**	0: No intercom transfer recall ***1: 20 seconds*** 2: 40 seconds 3: 60 seconds 4: 80 seconds 5: 100 seconds 6: 120 seconds 7: 140 seconds 8: 160 seconds 9: 180 seconds 10: 200 seconds 11: 220 seconds 12: 240 seconds	

FF1 Key - System

DBS Account Name_____ Cutover Date_____ Sheet____ of____
Account Address_____ Account Phone (Main List)_____

Address / Feature	Program Options	✔
-3#-25#		
-(0 or 1 to 12)# Extension intercom transfer recall timer **(CPC-B Vs. 2.0)**	0: No intercom transfer recall 1: 20 seconds 2: 40 seconds 3: 60 seconds 4: 80 seconds 5: 100 seconds 6: 120 seconds ***7: 140 seconds*** 8: 160 seconds 9: 180 seconds 10: 200 seconds 11: 220 seconds 12: 240 seconds	
-3#-26#		
-(0 to 15)# CO delayed ringing timer **(CPC-B Vs. 3.0 or higher)**	0: CO delay ringing after 4 seconds 1: CO delay ringing after 8 seconds ***2: CO delay ringing after 12 seconds*** 3: CO delay ringing after 16 seconds 4: CO delay ringing after 20 seconds 5: CO delay ringing after 24 seconds 6: CO delay ringing after 28 seconds 7: CO delay ringing after 32 seconds 8: CO delay ringing after 36 seconds 9: CO delay ringing after 40 seconds 10: CO delay ringing after 44 seconds 11: CO delay ringing after 48 seconds 12: CO delay ringing after 52 seconds 13: CO delay ringing after 56 seconds 14: CO delay ringing after 60 seconds 15: CO delay ringing after 64 seconds	

FF1 Key - System

DBS Account Name_____ Cutover Date_____ Sheet____ of____
Account Address_____ Account Phone (Main List)_____

Address / Feature	Program Options	✔
-3#-27#		
-(0 to 15)# EXT. delayed ringing timer **(CPC-B Vs. 3.0 or higher)**	0: EXT. delay ringing after 4 seconds	
	1: EXT. delay ringing after 8 seconds	
	2: EXT. delay ringing after 12 seconds	
	3: EXT. delay ringing after 16 seconds	
	4: EXT. delay ringing after 20 seconds	
	5: EXT. delay ringing after 24 seconds	
	6: EXT. delay ringing after 28 seconds	
	7: EXT. delay ringing after 32 seconds	
	8: EXT. delay ringing after 36 seconds	
	9: EXT. delay ringing after 40 seconds	
	10: EXT. delay ringing after 44 seconds	
	11: EXT. delay ringing after 48 seconds	
	12: EXT. delay ringing after 52 seconds	
	13: EXT. delay ringing after 56 seconds	
	14: EXT. delay ringing after 60 seconds	
	15: EXT. delay ringing after 64 seconds	
-3#-28#		
-(0 to 15)# Hunt Group no answer **(CPC-B Vs. 3.0 or higher)**	0: H. Group no answer after 4 seconds	
	1: H. Group no answer after 8 seconds	
	2: H. Group no answer after 12 seconds	
	3: H. Group no answer after 16 seconds	
	4: H. Group no answer after 20 seconds	
	5: H. Group no answer after 24 seconds	
	6: H. Group no answer after 28 seconds	
	7: H. Group no answer after 32 seconds	
	8: H. Group no answer after 36 seconds	
	9: H. Group no answer after 40 seconds	
	10: H. Group no answer after 44 seconds	
	11: H. Group no answer after 48 seconds	
	12: H. Group no answer after 52 seconds	
	13: H. Group no answer after 56 seconds	
	14: H. Group no answer after 60 seconds	
	15: H. Group no answer after 64 seconds	
-3#-29#		
-(HHMM)# **(CPC-B Vs. 4.0 or higher)**	HH: Hours (00 to 23)	
	MM: Minutes (00 to 23)	

FF1 Key - System

DBS Account Name_____ Cutover Date_____ Sheet____of____

Account Address_____ Account Phone (Main List)_____

Address / Feature	Program Options	✔
-4#		
-(4 digits)# **Also used with DISA** Remote maintenance	***9999: Default*** 0000 to 9999: Stored code_____	
-5#		
-(4 digits)# **See FF2-11#, 19#, 20#** DISA ID code	***No entry at default*** 0000 to 9999: Stored code_____	
-6#-1#		
-(4 digits)# **See FF2-11#, 19#, 20#** DISA outgoing code 1	***1111: Default*** 0000 to 9999: Stored code_____	
-6#-2#		
-(4 digits)# **See FF2-11#, 19#, 20#** DISA outgoing code 2	***9999: Default*** 0000 to 9999: Stored code_____	
-7#		
-(4 digits)# System programming ID code	***9999: Default*** 0000 to 9999: Stored code_____	
-8#-1#		
-(0 or 1)# (CPC-B Vs. 3.0 or higher) DID reset	***0: No (do not reset DID numbers)*** 1: Yes (reset DID numbers)	
-(0 to 1)# (CPC-B Vs. 4.0 or higher) DID/T1 reset (6)	***0: Off*** 1: Clear	
-8#-2#		
-(0 or 1)# (CPC-B Vs. 3.0 or higher) Confirmation of DID reset	***0: No (do not reset DID numbers)*** 1: Yes (reset DID numbers)	
-(0 or 1)# (CPC-B Vs. 4.0 or higher) Confirmation of DID/T1reset	***0: No (do not reset DID/T1 numbers)*** 1: Yes (reset DID/T1 numbers)	
-8#-3#		
-(0 to 9999)#-(10 to 69 or 100 to 699)# DID Number Set **(CPC-B Vs. 3.0 or higher)**	10 to 69 100 to 699	
T1 Settings		
-8#-4#		
-1#-1#-(0 to 8)# System size **(CPC-B Vs. 4.0 or higher)**	***0: DBS 40*** 1: DBS 72 2: DBS 96 3: DBS 40 + DBS 40 (T1 must be in slave cabinet.) 4: DBS 72 + DBS 40 (T1 not supported) 5: DBS 72 + DBS 72 (T1 must be in slave cabinet.) 6: DBS 96 + DBS 40 7: DBS 96 + DBS 72 8: DBS 96 + DBS 96	

FF1 Key - System

DBS Account Name_____ Cutover Date_____ Sheet____ of____
Account Address_____ Account Phone (Main List)_____

Address / Feature	Program Options	✔
-8#-4#		
-1#-2#-(1 to 3)# Synchronization setting for the first sync source	1: T1 of the master cabinet 2: T1 of the slave cabinet ***3: Free Run (Internal clocking)***	
-1#-3#-(0 to 3)# Synchronization setting for the second sync source	***0: None*** 1: T1 of the master cabinet 2: T1 of the slave cabinet 3: Free Run (Internal clocking)	
-1#-4#-(0 to 3)# Synchronization setting for the third sync source	***0: None*** 1: T1 of the master cabinet 2: T1 of the slave cabinet 3: Free Run (Internal clocking)	
-2#-1#-(0 to 25)# Network Re-sync timer	0 to 25 hours ***(25) = No Entries***	
-2#-2#-(0 to 12)# Disconnect timer	0 to 12 ***(1) = 200 MS***	
-2#-3#-(0 to 15)# Guard timer	0 to 15 ***(3)***	
-2#-4#-(0 to 15)# Release acknowledge timer (RLS ACK Timer)	0 to 15 ***(9) = 240 seconds***	
-2#-5#-(0 to 8)# Outpulse delay timer	0 to 8 ***(2) = 500 MS***	
-2#-6#-(0 to 15)# Wink timeout timer (Wink Timeout)	0 to 15 ***(15) = 5500***	
-2#-7#-(0 to 15)# Incoming detection timer	0 to 15 ***(7) = 90 MS***	
-2#-8#-(0 to 8)# Answer supervision timer (Answer Superv)	0 to 8 ***(3) = 600 MS***	
-2#-9#-(0 to 15)# Immediate Glare timer (Imm-Glare Timer)	0 to 15 ***(3) = 60 MS***	
-2#-10#-(0 to 15)# Wink Glare timer (WK-Glare Timer)	0 to 15 ***(3) = 60 MS***	

FF1 Key - System

DBS Account Name_____ Cutover Date_____ Sheet____ of____

Account Address_____ Account Phone (Main List)_____

Address / Feature	Program Options	✔

-8#-4#

-3#-(1 to 8)#-(1 to 8)#-(0 to 30)#

Digital pad settings (Digital Pad Set)

Figure 1 shows the numbers used to identify each circuit type.

Figure 2 shows the default values for the most common T1 connections.

Figure 3 lists the adjustments provided by each pad number.

Figure 1: Circuit-type numbers

Circuit Types	No.
K-TEL	1
SLT	2
DATA	3
Analog CO Trk	4
T1 Master	5
T1 Slave	6
OPTION 1*	7
OPTION 2*	8
DTMF#	9
CONF (SCC)#	10
Tone 1 (MFR1)#	11
Tone 2 (MFR2)#	12

Circuit Type 3 & 9-12 are reserved for future use.

*Use Options 1 and 2 to assign unique PAD levels to circuits that require special volume levels.

Figure 2: Default pad values

From	To	Setting	Value
T1 #1	K-TEL	16	-2 dB
T1 #2	K-TEL	16	-2 dB
T1 #1	SLT	16	-2 dB
T1 #2	SLT	16	-2 dB
K-TEL	T1 #1	16	-2 dB
K-TEL	T1 #2	16	-2 dB
SLT	T1 #1	16	-2 dB
SLT	T1 #2	16	-2 dB

Figure 3: Pad Nos.

Pad No.	Level
0	0 dB
1	+2 dB
. . .	. . .
14	+28 dB
15	+30 dB
16	-2 dB
17	-4 dB
. . .	. . .
29	-28 dB
30	-30 dB

FF1 Key - System

DBS Account Name_____ Cutover Date_____ Sheet____of____
Account Address_____ Account Phone (Main List)_____

Address / Feature	Program Options	✔
-8#-4#		
-4#-1#-1#-(0 to 1)# (Master cabinet) -5#-1#-1#-(0 to 1)# (Slave cabinet) Trunk class	***0: Analog only*** 1: T1 and analog trunks	
-4#-1#-2#-(0 to 24)# (Master cabinet) -5#-1#-2#-(0 to 24)# (Slave cabinet) Number of channels used	0 to 24 ***(0)***	
-4#-1#-3#-(0 to 1)# (Master cabinet) -5#-1#-3#-(0 to 1)# (Slave cabinet) Frame format	0: SF (Super Frame) ***1: ESF (Extended Super Frame)***	
-4#-1#-4#-(0 to 1)# (Master cabinet) -5#-1#-4#-(0 to 1)# (Slave cabinet) Clear channel	***0: AMI (Alternate Mark Inversion)*** 1: B8ZS (Binary 8-zeros suppression)	
-4#-1#-5#-(0 to 1)# (Master cabinet) -5#-1#-5#-(0 to 1)# (Slave cabinet) Failure mode	***0: Mode 1*** 1: Mode 2	
-4#-1#-6#-(0 to 1)# (Master cabinet) -5#-1#-6#-(0 to 1)# (Slave cabinet) Remote loopback (R-Loopback)	***0: No (No system response to loopback.)*** 1: Yes (System responds to loopback.)	
-4#-1#-7#-(0 to 1)# (Master cabinet) -5#-1#-7#-(0 to 1)# (Slave cabinet) Yellow alarm send	0: Off ***1: On***	
-4#-2#-1#-(0 to 15)# (Master cabinet) -5#-2#-1#-(0 to 15)# (Slave cabinet) Red alarm detection (Red Alm Det)	0 to 5 ***(2)***	
-4#-2#-2#-(0 to 15)# (Master cabinet) -5#-2#-2#-(0 to 15)# (Slave cabinet) Yellow detection (Yel Alm Det)	0 to 15 ***(1) (1 = 15 ms)***	
-4#-2#-3#-(0 to 15)# (Master cabinet) -5#-2#-3#-(0 to 15)# (Slave cabinet) Yellow alarm recovery (Yel Alm Rec)	0 to 15 ***(1) (1 = 10ms)***	
-4#-2#-4#-(0 to 15)# (Master cabinet) -5#-2#-4#-(0 to 15)# (Slave cabinet) Other alarms detection (Other Alm Det)	0 to 15 0 to 15 ***(1) (1 = 250 ms)***	
-4#-2#-5#-(0 to 15)# (Master cabinet) -5#-2#-5#-(0 to 15)# (Slave cabinet) Other alarms recovery (Other Alm Rec)	0 to 15 ***(1) (1 = 250ms)***	
-4#-3#-1#-(0 to 9000)# (Master cabinet) -5#-3#-1#-(0 to 9000)# (Slave cabinet) Frame loss counter (Frame Count)	0 to 9000/24h ***(9000)***	
-4#-3#-2#-(0 to 9000)# (Master cabinet) -4#-3#-2#-(0 to 9000)# (Slave cabinet) Slip counter (Slip Count)	0 to 9000/24h ***(9000)***	
-4#-3#-3#-(0 to 1)# (Master cabinet) -4#-3#-3#-(0 to 1)# (Slave cabinet) Red alarm counter (Red Alm Count)	0 to 9000/24h ***(9000)***	

FF1 Key - System

DBS Account Name_____ Cutover Date_____ Sheet___ of___
Account Address_____ Account Phone (Main List)_____

Address / Feature	Program Options	✔
-8#-4#		
-4#-3#-4#-(0 to 9000)# (Master cabinet) **-5#-3#-4#-(0 to 9000)# (Slave cabinet)** Loss signal counter (Sig Loss Count)	0 to 9000/24h ***(9000)***	
-4#-3#-5#-(0 to 9000)# (Master cabinet) **-5#-3#-5#-(0 to 9000)# (Slave cabinet)** Sync loss counter (Sync Loss Count)	0 to 9000/24h ***(9000)***	
-4#-3#-6#-(0 to 9000)# (Master cabinet) **-5#-3#-6#-(0 to 9000)# (Slave cabinet)** Yellow alarm counter (Yel Alm Count)	0 to 9000/24h ***(9000)***	
-4#-4#-1#-(0 to 1)# (Master cabinet) **-5#-4#-1#-(0 to 1)# (Slave cabinet)** Yellow alarm relay (Yel Alm Relay)	***0: Off*** 1: On	
-4#-4#-2#-(0 to 1)# (Master cabinet) **-5#-4#-2#-(0 to 1)# (Slave cabinet)** Red alarm relay (Red Alm Relay)	***0: Off*** 1: On	
-4#-4#-3#-(0 to 1)# (Master cabinet) **-5#-4#-3#-(0 to 1)# (Slave cabinet)** Loss relay	***0: Off*** 1: On	
-4#-4#-4#-(0 to 1)# (Master cabinet) **-5#-4#-4#-(0 to 1)# (Slave cabinet)** Frame loss relay (Frm Loss Relay)	***0: Off*** 1: On	
-4#-4#-5#-(0 to 1)# (Master cabinet) **-5#-4#-5#-(0 to 1)# (Slave cabinet)** AIS relay	***0: Off*** 1: On	
-4#-4#-6#-(0 to 1)# (Master cabinet) **-5#-4#-6#-(0 to 1)# (Slave cabinet)** **Alarm relay reset**	***0: Timed*** 1: Manual	
-6#-(1 to 64)#-1#-(0 to 3)# **Trunk Type**	0: Loop Start (Default) 1: Ground Start 1 2: Ground Start 2 3: E&M	

FF1 Key - System

DBS Account Name_____ Cutover Date_____ Sheet___ of___
Account Address_____ Account Phone (Main List)_____

Address / Feature	Program Options	✔
-8#-4#		
-6#(1 to 64)#-2#-(0 to 2)# DID/DNIS table (DID/DNIS)	***0: Not provided*** 1: DID 2: DNIS	
-6#(1 to 64)#-3#-(0 to 2)# Outgoing type	***0: Immediate Start*** 1: Wink start 2: Dial Tone start	
-6#(1 to 64)#-4#-(0 to 1)# Incoming type	***0: Immediate Start/ringdown*** 1: Wink start	
-6#(1 to 64)#-5#-(0 to 2)# Trunk mode	***0: Bothway*** 1: Outgoing only	
-6#(1 to 64)#-6#-(0 to 1)# Robbing bit setting (Robbing bit set)	0: Off (ABCD signal not used) ***1: On (ABCD signal used)***	
-6#(1 to 64)#-7#-(0 to 1)# Incoming dialing method (Incoming Dial)	0: Dial pulse (10PPS) ***1: DTMF***	
-6#(1 to 64)#-8#-(0 to 1)# Dial tone transmission (DT Send)	***0: Off*** 1: On	
-6#(1 to 64)#-9#-(0 to 1)# Busy tone transmission (BT Send)	***0: Off*** 1: On	
-6#(1 to 64)#-10#-(0 to 1)# Dial tone generation (DT Receive)	***0: Off*** 1: On	
-6#(1 to 64)#-11#-(0 to 1)# Ringback transmission (RBT Send)	***0: Off*** 1: On	
-7#(0 to 9999)#-2#-(0 to 2)# Other alarms detection (Other Alm Det)	0 to 15 0 to 15 ***(1) (1 = 250 ms)***	
-6#(1 to 64)#-(10 to 69 or 100 to 699)# DNIS Number Setting (DNIS Number Set)	10 to 69 100 to 699	

Notes

FF2 Key - Trunks

The FF2 Key is for programming trunk lines and acts as an interface between the CO or DID trunk lines and the DBS system.

There are two programming forms for the FF2 Key:

The **Trunk Port** list is for assigned names and TelCo circuit numbers.

The **Trunk Features** list is for recording any of the 25 features that can be programmed on each trunk port.

Notes:

(1) The *Pooled Trunk Group Access* settings in the FF2 Key (Trunks' programming) are different from the *Trunk Group* settings in the FF8 Key (LCR programming):

(a) Trunk lines set in the FF2 Key are accessed by the user with access codes (9, 81 to 86).

(b) Trunk lines set in the FF8 Key are automatically selected by the system.

Save Your Original Forms!!!

FF2 Key - Trunk Ports

DBS Account Name_____ Cutover Date_____ Sheet____ of____

Account Address_____ Account Phone (Main List)_____

Trunk Ports	Telephone Number (Circuit Number)	Line Type	Name (Maximum 6 Characters)	Comments
01				
02				
03				
04				
05				
06				
07				
08				
09				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				
31				
32				

FF2 Key - Trunk Ports

DBS Account Name_____ Cutover Date_____ Sheet____ of____

Account Address_____ Account Phone (Main List)_____

Trunk Ports	Telephone Number (Circuit Number)	Line Type	Name (Maximum 6 Characters)	Comments
33				
34				
35				
36				
37				
38				
39				
40				
41				
42				
43				
44				
45				
46				
47				
48				
49				
50				
51				
52				
53				
54				
55				
56				
57				
58				
59				
60				
61				
62				
63				
64				

FF2 Key - Trunk Ports

DBS Account Name_____Cutover Date_____Sheet____of____

Account Address_____Account Phone (Main List)_____

Address / Feature	Program Options	Trunk Ports (01-64)										
-(1 to 64)#-1#-(0 or 1)# Denies trunk use	***0: In service*** 1: Out of service											
-(1 to 64)#-2#-(0 or 1)# Pulse or DTMF dial	***0: DTMF*** 1: 10pps pulse											
-(1 to 64)#-3#-(0 or 1)# Pooled trunk access, Group 9	0: No pooled trunk access ***1: Group 9***											
-(1 to 64)#-4#-(0 or 1)# Pooled trunk access, Group 81	***0: No pooled trunk access*** 1: Group 81											
-(1 to 64)#-5#-(0 or 1)# Pooled trunk access, Group 82	***0: No pooled trunk access*** 1: Group 82											
-(1 to 64)#-6#-(0 or 1)# Pooled trunk access, Group 83	***0: No pooled trunk access*** 1: Group 83											
-(1 to 64)#-7#-(0 or 1)# Pooled trunk access, Group 84	***0: No pooled trunk access*** 1: Group 84											
-(1 to 64)#-8#-(0 or 1)# Pooled trunk access, Group 85	***0: No pooled trunk access*** 1: Group 85											
-(1 to 64)#-9#-(0 or 1)# Pooled trunk access, Group 86	***0: No pooled trunk access*** 1: Group 86											
-(1 to 64)#-10#-(1 or 2)# Trunk line type	***1: CO line*** 2: PBX line											
-(1 to 64)#-11#-(0 or 1)# Enables DISA	***0: Disable*** 1: Enable											
-(1 to 64)#-12#-(1 to 144)# Private line port number	***No entry at default*** 1 to 144: Private line port											
-(1 to 64)#-13#-(0 or 1)# Automatic pause	0: No auto pause ***1: Automatic pause***											
-(1 to 64)#-14#-(0 or 1)# Dial tone detection	***0: Detects dial tone*** 1: No detection											
-(1 to 64)#-15#-(0 or 1)# DTMF signal sending time	***1: 75ms ON/50ms OFF*** 2: 125ms ON/125ms OFF 3: 250ms ON/250ms OFF											
-(1 to 64)#-16#-(1 to 3)# Unsupervised conference	***0: No trunk-to-trunk*** 1: Trunk to trunk											
-(1 to 64)#-17#-(0 or 1 to 9)# Incoming ring signal (tone pattern)	***0: Signal synchronized*** 1: 3 secs ON/1 sec OFF 2: 2 secs ON/2 secs OFF 3: 1 sec ON/1 sec OFF 4: 1 sec ON/2 secs OFF 5: 1 sec ON/3 secs OFF 6: .5 sec ON/.5 sec OFF 7: .5 sec ON/.5 sec OFF .5 sec ON/2.5 secs OFF 8: .5 sec ON/3.5 secs OFF 9: 1 sec ON/7 secs OFF											

FF2 Key - Trunk Ports

DBS Account Name_____ Cutover Date_____ Sheet____ of____

Account Address_____ Account Phone (Main List)_____

Address / Feature	Program Options	Trunk Ports (01-64)
-(1 to 64)#-18#-(0 or 1 to 15)# Trunk disconnect timer	0: No disconnect signal 1: 50 ms 2: 100 ms 3: 150 ms 4: 200 ms 5: 250 ms 6: 300 ms ***7: 350 ms*** 8: 400 ms 9: 450 ms 10: 500 ms 11: 550 ms 12: 600 ms 13: 650 ms 14: 700 ms 15: 750 ms	
-(1 to 64)#-19#-(HHMM)# DISA start timer	***No entry at default*** HHMM: (0000 to 2359)	
-(1 to 64)#-20#-(HHMM)# DISA end timer	***No entry at default*** HHMM: (0000 to 2359)	
-(1 to 64)#-21#-(0 to 2)# Loop/Ground/DID trunk cards (CPC-B Vs. 2.0)	***0: Loop-start trunk*** 1: Ground-start trunk 2: DID trunk	
-(1 to 64)#-21#-(0 to 3)# Trunk Selection	***0: Loop start*** 1: Ground start 2: DID (CPC-B Vs. 4.0 or higher) 3: T1	
-(1 to 64)#-22#-(0 or 1)# DID - Immediate/Wink start	***0: Wink start (CPC-B Vs.2)*** 1: Immediate start	
-(1 to 64)#-23#-(0 to 15)# Wink-start timer **(CPC-B Vs. 2.0)**	0: 140 ms 1: 160 ms 2: 180 ms ***3: 200 ms*** 4: 220 ms 5: 240 ms 6: 260 ms 7: 280 ms 8: 300 ms 9: 200 ms 10: 200 ms 11: 200 ms 12: 200 ms 13: 200 ms 14: 200 ms 15: 200 ms	

FF2 Key - Trunk Ports

DBS Account Name_____ Cutover Date_____ Sheet____ of____

Account Address_____ Account Phone (Main List)_____

Address / Feature	Program Options	Trunk Ports (01-64)
-(1 to 64)#-24#-(0 or 1 to 15)# DID digit dial time out **(CPC-B Vs. 2.0)** **See FF3-35#**	0: No time out 1: 15 seconds 2: 16 seconds 3: 17 seconds ***4: 18 seconds*** 5: 19 seconds 6: 20 seconds 7: 21 seconds 8: 22 seconds 9: 18 seconds 10: 18 seconds 11: 18 seconds 12: 18 seconds 13: 18 seconds 14: 18 seconds 15: 18 seconds	
-(1 to 64)#-25#-(0 to 15)# DID interdigit dial time out **(CPC-B Vs. 2.0)** **See FF3-35#**	0: 30 ms 1: 40 ms 2: 50 ms 3: 60 ms 4: 70 ms ***5: 80 ms*** 6: 90 ms 7: 100 ms 8: 110 ms 9: 120 ms 10: 130 ms 11: 140 ms 12: 150 ms 13: 160 ms 14: 160 ms 15: 160 ms	
-(1 to 64)#-26#-(4 to 6 or 13)# T1 port class - trunk **(CPC-B Vs. 4.0 or higher)**	4: Analog trunk 5: T1 #1 (Master) 6: T1 #2 (Slave) 13: Other	

FF3 Key - Extensions

The FF3 Key is for programming extensions. The 36 feature available for this key represent 36 submodes (1# to 36#).

Telephone Types, submode 2#, default automatically to data settings 1 through 7 or can be set in programming mode using data 8 through 19.

The number of buttons or keys on the telephone determine how many FF keys are available for programming. DBS telephone models come in 16-, 22-, and 34-button sets.

There are several programming forms available for extension programming:

> The **Extension Ports** form summarizes the programming on all extension ports and is for use by the installer/programmer.

The forms explained below are located at the back of this manual immediately following the FF10 Key information:

> The **Extension Summary** form is for recording features programmed on a single extension port. The salesperson or programmer and the system administrator will use this form to design a program for an extension port. Refer to the *Extension General Information* and the *Extension Programming* boxes on this form. Use a separate form for each extension port. Photocopy the original form and use only the copies.
>
> The **Summary Key Plan** or the **Key Plan** are for the Customer. Use either form as appropriate.

To copy extension features from one extension port to another extension port, use the FF9 Key.

Save Your Original Forms!!!

FF3 Key - Extensions

DBS Account Name_____ Cutover Date_____ Sheet___ of___

Account Address_____ Account Phone (Main List)_____

Address / Feature	Program Options	Extension Ports (1 to 144)					
-(1 to 144)#-1#-(100 to 699/10 to 69)# Extension numbers	No entry ***100 to 699/10 to 69: Extensions***						
-(1 to 144)#-2#-(0 or 1 to 19)# Telephone types **(CPC-B Vs. 2.0 or higher)**	0: No assignment 1: Analog telephone 2: Digital telephone (6 FF lines) 3: Digital telephone (12 FF lines) 4: Digital telephone (24 FF lines) 5: Reserved 6: D.SLT (Vs. 3.0 or higher) 7: EM/24 VB-43310 8: OPX (pulse) 9: OPX (tone) 10: Voice mail (AEC) 11: DSS1 - Extension 10/100 12: DSS2 - Extension 10/100 13: DSS3 - Extension 11/101 14: DSS4 - Extension 11/101 15: Voice mail (OPX) 16: First attendant console 17: Second attendant console 18: Third attendant console 19: Fourth attendant console						
-(1 to 144)#-3#-(001 to 144)# EM/24 console station-port number	***EM/24 not connected*** 1 to 144: Stored extensions on EM/24						
-(1 to 144)#-4#-(0 or 1)# Forced LCR restriction	***0: No LCR restriction for outside calls*** 1: Forced LCR						
-(1 to 144)#-5#-(0 or 1)# Forced verified account code	***0: Disable*** 1: Enable						
-(1 to 144)#-6#-(4 digits)## Station lockout code	***No entry at default*** 0000 to 9999: Station lockout code						
-(1 to 144)#-7#-(0 or 1)# CO line off hook signal	***1: Extension Ports 1 and 2*** ***0: Extension Ports 2 to 144***						
-(1 to 144)#-8#-(0 or 1)# Call waiting	0: No call waiting ***1: Call waiting***						
-(1 to 144)#-9#-(0 or 1)# Busy override	***0: Disable*** 1: Enable						
-(1 to 144)#-10#-(0 or 1)#(See FF1-2#-1#-17#) Busy overridden	0: Rejects ***1: Accepts***						
-(1 to 144)#-11#-(0 or 1)# Prime line preference	***0: Disable*** 1: Enable						
-(1 to 144)#-12#-(0 or 1)# Ringing line preference	0: Disable ***1: Enable***						
-(1 to 144)#-13#-(0 or 1)#(FF2-16#,FF-3#-11#) Unsupervised conference - Extension-wide	***0: Disable*** 1: Enable						
-(1 to 144)#-14#-(0 or 1)#(FF1-2#,-2#-6#) SMDR printout of incoming calls	0: Disable ***1: Enable***						

FF3 Key - Extensions

DBS Account Name_____ Cutover Date_____ Sheet____of____

Account Address_____ Account Phone (Main List)_____

Address / Feature	Program Options	Extension Ports (1 to 144)					
-(1 to 144)#-15#-(0 or 1 to 4)# CO line off-hook signal volume	0: No alert tone 1: Minimum volume ***2: Lower medium volume*** 3: Higher medium volume 4: Maximum volume						
-(1 to 144)#-16#-(0 or 1)# CO line off hook signal pattern	***0: Continuous signal*** 1: Send only one signal						
-(1 to 144)#-17#-(0 or 1)# PSD names (5 or 10 names) - large display	***0: 5 names*** 1: 10 names						
-(1 to 144)#-18#-(0 or 1)# Sets extensions to page groups 00	***0: Does not belong to page group 00*** 1: Page group 00						
-(1 to 144)#-19#-(0 or 1)# Sets extensions to page groups 01	***0: Does not belong to page group 01*** 1: Page group 01						
-(1 to 144)#-20#-(0 or 1)# Sets extensions to page groups 02	***0: Does not belong to page group 02*** 1: Page group 02						
-(1 to 144)#-21#-(0 or 1)# Sets extensions to page groups 03	***0: Does not belong to page group 03*** 1: Page group 03						
-(1 to 144)#-22#-(0 or 1)# Sets extensions to page groups 04	***0: Does not belong to page group 04*** 1: Page group 04						
-(1 to 144)#-23#-(0 or 1)# Sets extensions to page groups 05	***0: Does not belong to page group 05*** 1: Page group 05						
-(1 to 144)#-24#-(0 or 1)# Sets extensions to page groups 06	***0: Does not belong to page group 06*** 1: Page group 06						
-(1 to 144)#-25#-(0 or 1)# Sets extensions to page groups 07	***0: Does not belong to page group 07*** 1: Page group 07						
-(1 to 144)#-26#-(0 or 1 to 24)# Idle display - large-display telephone	***0: No change*** 1 to 24: See Programming Manual						
-(1 to 144)#-27#-(0 or 1 to 24)# IDT off hook display - large-display	***0: No change*** 1 to 24: See Programming Manual						
-(1 to 144)#-28#-(0 or 1 to 24)# IDT call status display - large-display	***0: No change*** 1 to 24: See Programming Manual						
-(1 to 144)#-29#-(0 or 1 to 24)# CO line call display during dialing	***0: No change*** 1 to 24: See Programming Manual						
-(1 to 144)#-30#-(0 or 1 to 24)# CO line call display after dialing	***0: No change*** 1 to 24: See Programming Manual						
-(1 to 144)#-31#-(0 or 1 to 24)# Page call display - large-display	***0: No change*** 1 to 24: See Programming Manual						
-(1 to 144)#-32#-(0 or 1 to 24)# Call waiting display - large-display	***0: No change*** 1 to 24: See Programming Manual						
-(1 to 144)#-33#-(0 or 1 to 24)# Intercom busy tone display - large-display	***0: No change*** 1 to 24: See Programming Manual						
-(1 to 144)#-34#-(0 or 1)# (CPC-B Vs. 2.0) Extension directory display - large display	***0: 5 entries*** 1: 10 entries						
-(1 to 144)#-35#-(0 or 1 to 8)# (CPC-B Vs 3.0 or higher) Extension class of service setting	***0: Default*** 1 to 8: Set to individual extension						

FF3 Key - Extensions

DBS Account Name_____ Cutover Date_____ Sheet____ of____

Account Address_____ Account Phone (Main List)_____

Address / Feature	Program Options	Extension Ports (1 to 144)
-(1 to 144)#-36#-(0 to 2)# (CPC-B Vs. 3.0) Ringback tone with busy signal	***0: Ringback tone with busy signal*** 1: Busy signal 2: Ringback tone	
-(1 to 144)#-37#-(1 to 3 or 7 to 13)# T1 port class station **(CPC-B Vs. 4.0 or higher)**	1: KTEL 2: SLT 3: DATA 7: OPT1 8: OPT2 9: DTMF 10: CONF (SCC) 11: MFR1 12: MFR2	
-(1 to 144)#-38#-(0 or 1)# (CPC-B Vs. 3.0 or higher) SLT hook flash	***0: Broker's hold*** 1: Initiate conference call	
-(1 to 144)#-39#-(0 to 9)# (CPC-B Vs. 3.0 or higher) Extension ring pattern (KTEL)	***0: Dependent on trunk setting*** 1: 3 sec ON/1 sec OFF 2: 2 sec ON/2 sec OFF 3: 1 sec ON/1 sec OFF 4: 1 sec ON/2 sec OFF 5: 1 sec ON/3 sec OFF 6: 0.5 sec ON/0.5 sec OFF 7: 0.5 sec ON/0.5 sec OFF 0.5 sec ON/2.5 sec OFF 8: 0.5 sec ON/3.5 sec OFF 9: 1 sec ON/7 sec OFF	
-(1 to 144)#-39#-(0 to 9)# (CPC-B Vs. 3.0 or higher) Extension ring pattern (SLT/OPX)	***0: Dependent on SLT transfer ring pattern in program setting*** 1: 3 sec ON/1 sec OFF 2: 2 sec ON/2 sec OFF 3: 1 sec ON/2 sec OFF 4: 1 sec ON/3 sec OFF 5: 1 sec ON/5 sec OFF 6: 1 sec ON/7 sec OFF 7: 0.5 sec ON/3.5 sec OFF 8: 0.5 sec ON/3.5 sec OFF 9: 0.5 sec ON/3.5 sec OFF	
-(1 to 144)#-40#-(0 or 1)# (CPC-B Vs. 3.0 or higher) D-SLT handset volume level	***0: Normal*** 1: Louder (+6dB Gain)	
-(1 to 144)#-41#-(0001 to 9999)# (CPC-B Vs. 3.0 or higher) Auto set relocation codes	****: No relocation codes set*** (0001 to 9999)#	
-(1 to 144)#-42#-(0 to 3)# (CPC-B Vs. 3.0 or higher) Permanent call forward	***0: Not forwarded*** 1: Busy/No answer 2: Busy 3: No answer	
-(1 to 144)#-43#-(NN(N))# (CPC-B Vs. 3.0 or higher) Permanent call forward extension	*****: No permanent call forwarding*** NN(N): Call forward extension number	
-(1 to 144)#-44#-(0 or 1)# (CPC-B Vs. 4.0 or higher) ML/MCO Separation	0: MCO keys 1: ML keys	

FF4 Key - Ring Assignment

The FF4 Key is for setting ring assignments to each trunk.

The attendant position (port 1) defaults to *ring* (data 1). All other extension ports default to *no ring* (data 0).

Ring settings are assigned for day, night, day-delayed, night-delayed, extension, and extension-delayed ring.

To assign a ring to Recall timers or to set Call Forward - No Answer, refer to the FF1 Key forms on pages 8, 9, 10, 11, 12, and 17.

There are four programming forms for recording ring-assignment information:

The **Hunt Group Tables** form and the **Call Coverage Group Extension Tables** form are summary sheets for the installer/programmer and are helpful cross-references for the Customer since the same information is also on the **Extension Summary** form and **Key Plan.**

The forms explained below are located at the back of this manual immediately following the FF10 Key information:

The **Extension Summary** form is for the salesperson and system administrator. Refer to the *Ringing Assignment* box on this form.

Note: See the *DBS Programming Guidance Manual*, Section 400, for the five (5) ring-assignment addresses.

See the *Addendum to the DBS Programming Instructions*, Section 400B, for the eleven (11) Hunt Group addresses.

Save Your Original Forms!!!

FF4 Key - Ring Assignment

DBS Account Name_____Cutover Date_____Sheet____of____
Account Address_____Account Phone (Main List)_____

❑	Day	FF4-1#-(1 to 145)#-(1 to 64)#-(0 or 1)#	See FF1-2#-4#-1#
❑	Night	FF4-2#-(1 to 145)#-(1 to 64)#-(0 or 1)#	See FF1-2#-4#-1#
❑	Day-Delayed	FF4-5#-(1 to 145)#-(1 to 64)#-(0 or 1)#	
❑	Night-Delayed	FF4-6#-(1 to 145)#-(1 to 64)#-(0 or 1)#	
❑	Extension	FF4-7#-(1 to 144)#-(1 to 144)#-(0 or 1)#	
❑	Extension-Delayed	FF4-8#-(1 to 144)#-(1 to 144)#-(0 or 1)#	

Extension port ring entries = 1	
CO Line	Extension ports (1 to 145)
01	
02	
03	
04	
05	
06	
07	
08	
09	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	
26	
27	
28	
29	
30	
31	
32	

Extension port ring entries = 1	
CO Line	Extension ports (1 to 145)
33	
34	
35	
36	
37	
38	
39	
40	
41	
42	
43	
44	
45	
46	
47	
48	
49	
50	
51	
52	
53	
54	
55	
56	
57	
58	
59	
60	
61	
62	
63	
64	

FF4 Key - Ring Assignment

DBS Account Name_____ Cutover Date_____ Sheet___ of___
Account Address_____ Account Phone (Main List)_____

Hunt-Group Tables

Hunt Group 1

Pilot Name_____
Pilot Ext/Port_____
Type_____
TRF Extension_____
TRF Timer_____

Extension 1_____
Extension 2_____
Extension 3_____
Extension 4_____
Extension 5_____
Extension 6_____
Extension 7_____
Extension 8_____

Day Delayed Ring____
Night Delayed Ring___

Hunt Group 2

Pilot Name_____
Pilot Ext/Port_____
Type_____
TRF Extension_____
TRF Timer_____

Extension 1_____
Extension 2_____
Extension 3_____
Extension 4_____
Extension 5_____
Extension 6_____
Extension 7_____
Extension 8_____

Day Delayed Ring____
Night Delayed Ring___

Hunt Group 3

Pilot Name_____
Pilot Ext/Port_____
Type_____
TRF Extension_____
TRF Timer_____

Extension 1_____
Extension 2_____
Extension 3_____
Extension 4_____
Extension 5_____
Extension 6_____
Extension 7_____
Extension 8_____

Day Delayed Ring____
Night Delayed Ring___

Hunt Group 4

Pilot Name_____
Pilot Ext/Port_____
Type_____
TRF Extension_____
TRF Timer_____

Extension 1_____
Extension 2_____
Extension 3_____
Extension 4_____
Extension 5_____
Extension 6_____
Extension 7_____
Extension 8_____

Day Delayed Ring____
Night Delayed Ring___

Hunt Group 5

Pilot Name_____
Pilot Ext/Port_____
Type_____
TRF Extension_____
TRF Timer_____

Extension 1_____
Extension 2_____
Extension 3_____
Extension 4_____
Extension 5_____
Extension 6_____
Extension 7_____
Extension 8_____

Day Delayed Ring____
Night Delayed Ring___

Hunt Group 6

Pilot Name_____
Pilot Ext/Port_____
Type_____
TRF Extension_____
TRF Timer_____

Extension 1_____
Extension 2_____
Extension 3_____
Extension 4_____
Extension 5_____
Extension 6_____
Extension 7_____
Extension 8_____

Day Delayed Ring____
Night Delayed Ring___

Hunt Group 7

Pilot Name_____
Pilot Ext/Port_____
Type_____
TRF Extension_____
TRF Timer_____

Extension 1_____
Extension 2_____
Extension 3_____
Extension 4_____
Extension 5_____
Extension 6_____
Extension 7_____
Extension 8_____

Day Delayed Ring____
Night Delayed Ring___

Hunt Group 8

Pilot Name_____
Pilot Ext/Port_____
Type_____
TRF Extension_____
TRF Timer_____

Extension 1_____
Extension 2_____
Extension 3_____
Extension 4_____
Extension 5_____
Extension 6_____
Extension 7_____
Extension 8_____

Day Delayed Ring____
Night Delayed Ring___

FF4 Key - Ring Assignment

DBS Account Name_____ Cutover Date_____ Sheet____ of____

Account Address_____ Account Phone (Main List)_____

Call Coverage Group Extension Tables

Call Coverage Group 1	Call Coverage Group 2	Call Coverage Group 3	Call Coverage Group 4
Covering Extension 1____	Covering Extension 1____	Covering Extension 1____	Covering Extension 1____
Covering Extension 2____	Covering Extension 2____	Covering Extension 2____	Covering Extension 2____
Extension 3_____	Extension 3_____	Extension 3_____	Extension 3_____
Extension 4_____	Extension 4_____	Extension 4_____	Extension 4_____
Extension 5_____	Extension 5_____	Extension 5_____	Extension 5_____
Extension 6_____	Extension 6_____	Extension 6_____	Extension 6_____
Extension 7_____	Extension 7_____	Extension 7_____	Extension 7_____
Extension 8_____	Extension 8_____	Extension 8_____	Extension 8_____

Call Coverage Group 5	Call Coverage Group 6	Call Coverage Group 7	Call Coverage Group 8
Covering Extension 1____	Covering Extension 1____	Covering Extension 1____	Covering Extension 1____
Covering Extension 2____	Covering Extension 2____	Covering Extension 2____	Covering Extension 2____
Extension 3_____	Extension 3_____	Extension 3_____	Extension 3_____
Extension 4_____	Extension 4_____	Extension 4_____	Extension 4_____
Extension 5_____	Extension 5_____	Extension 5_____	Extension 5_____
Extension 6_____	Extension 6_____	Extension 6_____	Extension 6_____
Extension 7_____	Extension 7_____	Extension 7_____	Extension 7_____
Extension 8_____	Extension 8_____	Extension 8_____	Extension 8_____

Call Coverage Group 9	Call Coverage Group 10	Call Coverage Group 11	Call Coverage Group 12
Covering Extension 1____	Covering Extension 1____	Covering Extension 1____	Covering Extension 1____
Covering Extension 2____	Covering Extension 2____	Covering Extension 2____	Covering Extension 2____
Extension 3_____	Extension 3_____	Extension 3_____	Extension 3_____
Extension 4_____	Extension 4_____	Extension 4_____	Extension 4_____
Extension 5_____	Extension 5_____	Extension 5_____	Extension 5_____
Extension 6_____	Extension 6_____	Extension 6_____	Extension 6_____
Extension 7_____	Extension 7_____	Extension 7_____	Extension 7_____
Extension 8_____	Extension 8_____	Extension 8_____	Extension 8_____

Call Coverage Group 13	Call Coverage Group 14	Call Coverage Group 15	Call Coverage Group 16
Covering Extension 1____	Covering Extension 1____	Covering Extension 1____	Covering Extension 1____
Covering Extension 2____	Covering Extension 2____	Covering Extension 2____	Covering Extension 2____
Extension 3_____	Extension 3_____	Extension 3_____	Extension 3_____
Extension 4_____	Extension 4_____	Extension 4_____	Extension 4_____
Extension 5_____	Extension 5_____	Extension 5_____	Extension 5_____
Extension 6_____	Extension 6_____	Extension 6_____	Extension 6_____
Extension 7_____	Extension 7_____	Extension 7_____	Extension 7_____
Extension 8_____	Extension 8_____	Extension 8_____	Extension 8_____

FF5 Key - Flexible Features

The FF5 Key is for setting pre-programmed feature codes to extension ports. *Remove any CO line or pooled trunk information with the CONF key before programming the FF5 features.*

In addition to the 16-, 22-, and 34-button telephones, you can also program FF5 features on the AFP (Attendant Feature Package) Console, the DSS/72, and the EM/24.

There are four programming forms for FF5 Key features. All of these forms are for the installer/programmer:

The **Extension Keys** form on page 43 and the sample form on page 44 are for recording Personal Speed Dial and Flexible Feature information for a single extension. Use one form for each extension port. Photocopy the original form and use only the copies.

The **AFP (Attendant Feature Package) Console FF Keys** form on page 45 is for recording AFP programming. The shaded areas on the form represent fixed AFP console keys. The AFP is available only on CPC-B Version 2.0.

The **DSS/72 FF Keys** form on page 46 is for recording all attendant console programming, including the AFP.

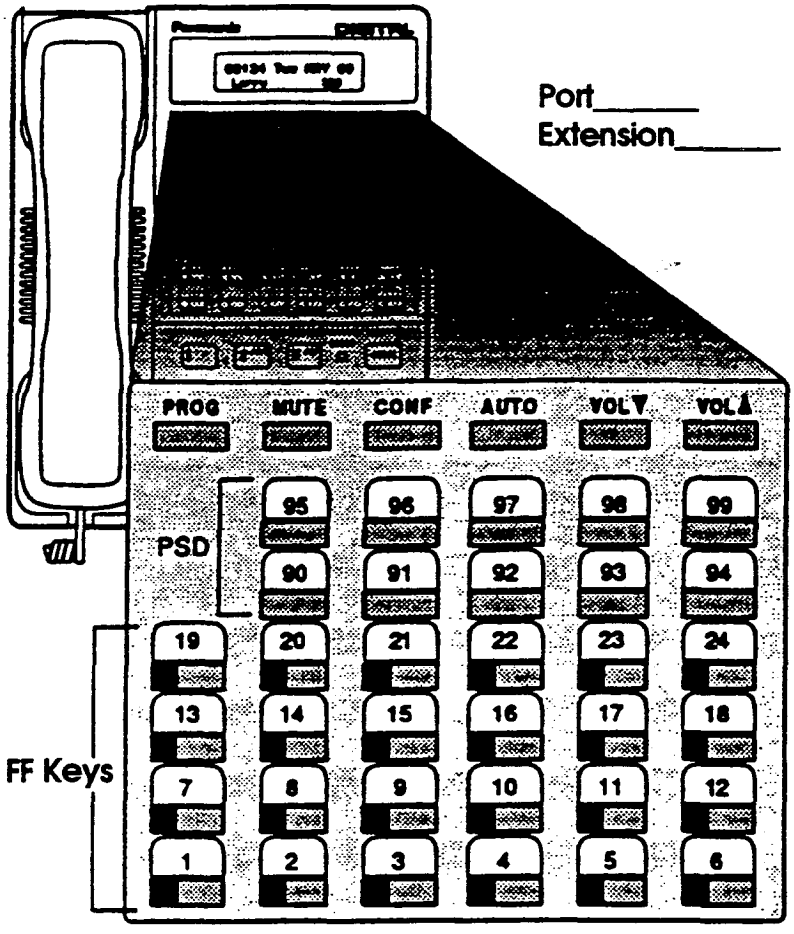
The **EM/24 FF Keys** form on page 47 is for recording trunks or extensions assigned to specific extension ports.

Save Your Original Forms!!!

FF5 Key - Flexible Features

DBS Account Name_____ Cutover Date_____ Sheet____ of____

Account Address_____ Account Phone (Main List)_____



Port_____

Extension_____

Personal Speed Dial (PSD)

FF10-2#-(1 to 144)#-(90 to 99)#-(16 digits)#

PSD CODES	Name / Number
90	
91	
92	
93	
94	
95	
96	
97	
98	
99	

Multi-Line Key Assignment

FF5-(1 to 144)#-(1 to 24)#-CONF-(81 to 86, 89)#

	Name / Number
ML1 (81)	
ML2 (82)	
ML3 (83)	
ML4 (84)	
ML5 (85)	
ML6 (86)	
ML9 (9)	

Flexible Feature Key Assignment

FF5-(1 to 144)#-(1 to 24)#-CONF-(Up to 6 digits)#

	Feature Code		Feature Code		Feature Code		Feature Code		Feature Code		Feature Code
19		20		21		22		23		24	
13		14		15		16		17		18	
7		8		9		10		11		12	
1		2		3		4		5		6	

16 Key Telephone (VB-42210, 42211, 42213) = FF Keys 1 to 6
22 Key Telephone (VB-43220, 43221, 43223, 43225) = FF Keys 1 to 12
34 Key Telephone (VB-43230, 43231, 43233) = FF Keys 1 to 24

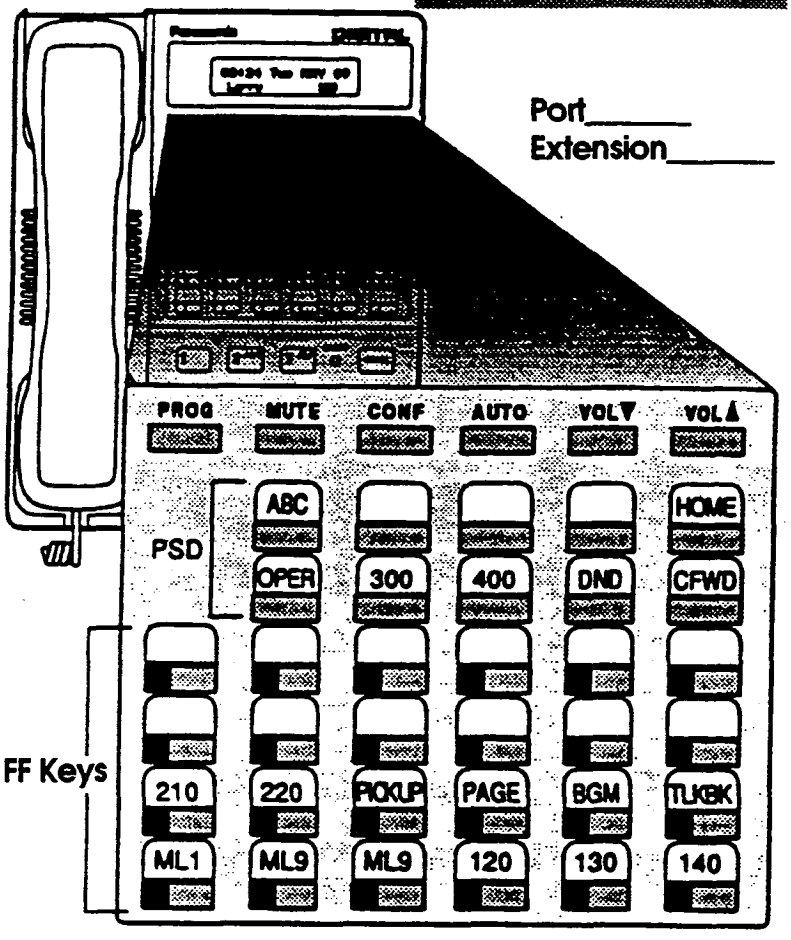
(For Feature Codes and T1 Alarm Key Assignment, See FF-Key Code Chart on Page 74)

FF5 Key - Flexible Features

DBS Account Name_____ Cutover Date_____ Sheet____ of____

Account Address_____ Account Phone (Main List)_____

(Typical Sample)



Port_____

Extension_____

Personal Speed Dial (PSD)

FF10-2#-(1 to 144)#-(90 to 99)#-(16 digits)#

PSD CODES	Name / Number	
90	*Operator*	*0*
91	*Sales*	*300*
92	*Service*	*400*
93	*Do-Not-Disturb*	*73*
94		
95	*ABC Corp.*	*C91-201-555-1234*
96		
97		
98	*Home*	*C9-555-1234*
99		

Multi-Line Key Assignment

FF5-(1 to 144)#-(1 to 24)#-CONF-(81 to 86, 89)#

	Name / Number
ML1 (81)	*1, 2, 3*
ML2 (82)	*4, 5*
ML3 (83)	*6, 7*
ML4 (84)	*8*
ML5 (85)	*14*
ML6 (86)	*15 through 22*
ML9 (9)	*4 through 13, 23*

Flexible Feature Key Assignment

FF5-(1 to 144)#-(1 to 24)#-CONF-(Up to 6 digits)#

	Feature Code		Feature Code		Feature Code		Feature Code		Feature Code		Feature Code
19		20		21		22		23		24	
13		14		15		16		17		18	
7	*DSS 210* *P210*	8	*DSS 220* *P220*	9	*Gp. Pickup* *70*	10	*All Page* *#00*	11	*BGM* *#53*	12	*Talkback* **3*
1	*ML1* *81*	2	*ML9* *89*	3	*ML9* *89*	4	*DSS 120* *P120*	5	*DSS 130* *P130*	6	*DSS 140* *P140*

16 Key Telephone (VB-42210, 42211, 42213) = FF Keys 1 to 6
22 Key Telephone (VB-43220, 43221, 43223, 43225) = FF Keys 1 to 12
34 Key Telephone (VB-43230, 43231, 43233) = FF Keys 1 to 24

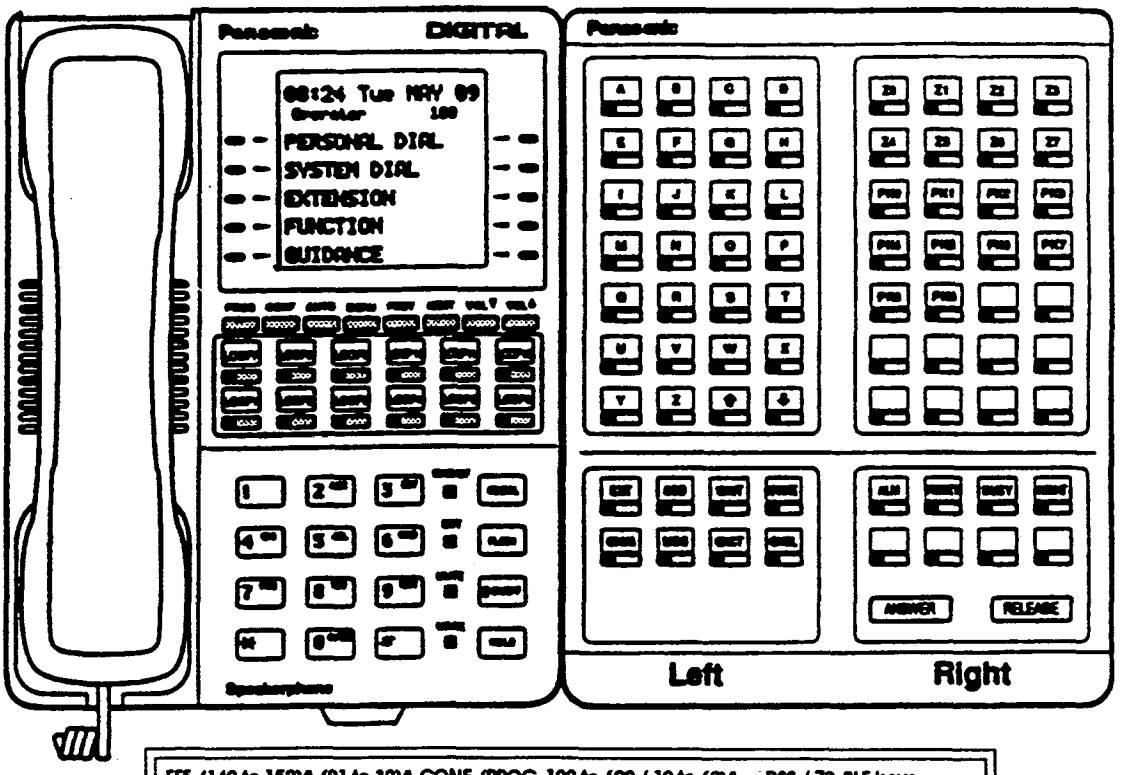
(For Feature Codes and T1 Alarm Key Assignment, See FF-Key Code Chart on Page 74)

FF5 Key - Flexible Features

DBS Account Name_____Cutover Date_____Sheet____of____
Account Address_____Account Phone (Main List)_____

This Table for

1st Attendant Console 2nd Attendant Console 3rd Attendant Console 4th Attendant Console



FF5-(149 to 152)#-(01 to 32)#-CONF-(PROG-100 to 699 / 10 to 69)# DSS / 72-BLF keys
or
(81 to 86, 89)# MCO keys
FF5-(149 to 152)#-(01 to 32)#-CONF-(PROG-PROG-Up to 6 digits)# Any key
or
(CPC-B, V.2.0) (Up to 6 digits)# Pre-programmed codes

Left Side

Key	Feature	Key	Feature	Key	Feature	Key	Feature

Right Side

Key	Feature	Key	Feature	Key	Feature	Key	Feature
29	Z0	30	Z1	31	Z2	32	Z3
25	Z4	26	Z5	27	Z6	28	Z7
21	PK0	22	PK1	23	PK2	24	PK3
17	PK4	18	PK5	19	PK6	20	PK7
13	PK8	14	PK9	15		16	
9		10		11		12	
5		6		7		8	
	ALT		PAGE		DSS		HOLD
1		2		3		4	

✻ Indicate External Page Zone with an asterisk.

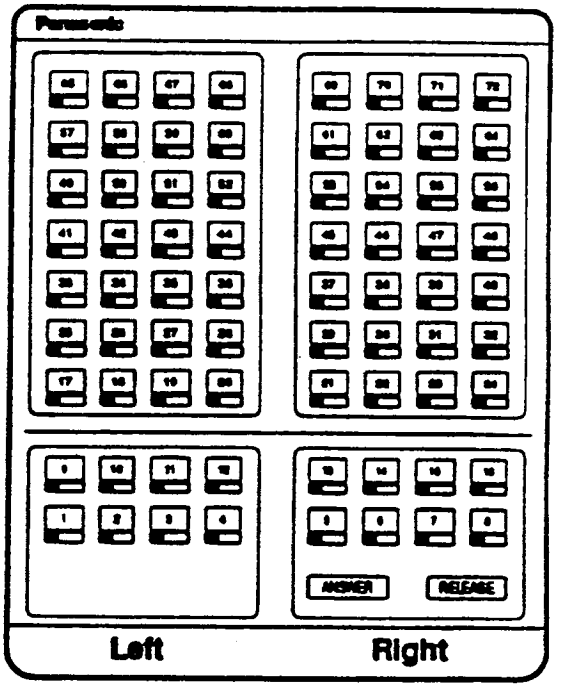
= Fixed Feature

xxx(xx) = Default for 3 digits (or 2 digits)

FF5 Key - Flexible Features

DBS Account Name_____Cutover Date_____Sheet___of___
Account Address_____Account Phone (Main List)_____

DSS/72 FF Key Assignments



Left Side

Key	Feature	Key	Feature	Key	Feature	Key	Feature
65	PAGE0	66	PAGE1	67	PAGE2	68	PAGE3
57	PARK0	58	PARK1	59	PARK2	60	PARK3
49	148 (59)	50	149 (59)	51	150 (60)	52	151 (61)
41	140 (51)	42	141 (51)	43	142 (52)	44	143 (53)
33	132 (42)	34	133 (43)	35	134 (44)	36	135 (45)
25	124 (34)	26	125 (35)	27	126 (36)	28	127 (37)
17	116 (26)	18	117 (27)	19	118 (28)	20	119 (29)
9	108 (18)	10	109 (19)	11	110 (20)	12	111 (21)
1	100 (10)	2	101 (11)	3	102 (12)	4	103 (13)

FF5-(145 to 148)#-(01 to 24)#-CONF-(PROG-100 to 699 / 10 to 69)# DSS / 72-BLF keys
or
(81 to 86, 89)# MCO keys
FF5-(145 to 148)#-(01 to 72)#-CONF-(PROG-PROG-Up to 6 digits)# Any key
or
(CPC-B, V.2.0) (Up to 6 digits)# Pre-programmed codes

Right Side

This Table for

- ❑ 1st DSS Console for 1st Attendant — Ext. Port No. _____
- ❑ 2nd DSS Console for 1st Attendant — Ext. Port No. _____
- ❑ 1st DSS Console for 2nd Attendant — Ext. Port No. _____
- ❑ 2nd DSS Console for 2nd Attendant — Ext. Port No. _____

Key	Feature	Key	Feature	Key	Feature	Key	Feature
69	PAGE4	70	PAGE5	71	PAGE6	72	NIGHT
61	PARK4	62	PARK5	63	PARK6	64	PARK7
53	152 (62)	54	153 (63)	55	154 (64)	56	155 (65)
45	144 (54)	46	145 (55)	47	146 (56)	48	147 (57)
37	136 (46)	38	137 (47)	39	138 (48)	40	139 (49)
29	128 (38)	30	129 (39)	31	130 (40)	32	131 (41)
21	120 (30)	22	121 (31)	23	122 (32)	24	123 (33)
13	112 (22)	14	113 (23)	15	114 (24)	16	115 (25)
5	104 (14)	6	105 (15)	7	106 (16)	8	107 (17)

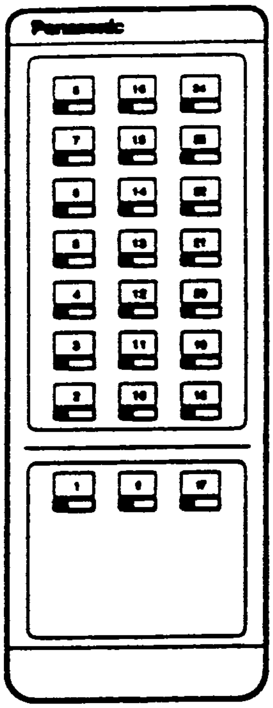
✻ Indicate External Page Zone with an asterisk.

xxx(xx) = Default for 3 digits (or 2 digits)

FF5 Key - Flexible Features

DBS Account Name____________________ Cutover Date________ Sheet____ of____
Account Address____________________ Account Phone (Main List)____________

5 EM/24 FF Keys



EM/24 FF Key Assignments

You need both the FF3 key and the FF5 key to program the EM/24 Console.

1. **Set the EM/24 to an extension port already in use**

   FF3-EM/24 Port (1 to 144)#-3#-Extension Port (1 to 144)#

2. **Set the FF keys on the EM/24**

   FF5-Extension Port (1 to 144)#-FF Keys (1 to 24)#-(Feature Code - Up to 6 digits)#

For Extension ( )

Key	Feature	Key	Feature	Key	Feature
8	TRK8	16	TRK16	24	TRK24
7	TRK7	15	TRK15	23	TRK23
6	TRK6	14	TRK14	22	TRK22
5	TRK5	13	TRK13	21	TRK21
4	TRK4	12	TRK12	20	TRK20
3	TRK3	11	TRK11	19	TRK19
2	TRK2	10	TRK10	18	TRK18
1	TRK1	9	TRK9	17	TRK17

For Extension ( )

Key	Feature	Key	Feature	Key	Feature
8	TRK8	16	TRK16	24	TRK24
7	TRK7	15	TRK15	23	TRK23
6	TRK6	14	TRK14	22	TRK22
5	TRK5	13	TRK13	21	TRK21
4	TRK4	12	TRK12	20	TRK20
3	TRK3	11	TRK11	19	TRK19
2	TRK2	10	TRK10	18	TRK18
1	TRK1	9	TRK9	17	TRK17

For Extension ( )

Key	Feature	Key	Feature	Key	Feature
8	TRK8	16	TRK16	24	TRK24
7	TRK7	15	TRK15	23	TRK23
6	TRK6	14	TRK14	22	TRK22
5	TRK5	13	TRK13	21	TRK21
4	TRK4	12	TRK12	20	TRK20
3	TRK3	11	TRK11	19	TRK19
2	TRK2	10	TRK10	18	TRK18
1	TRK1	9	TRK9	17	TRK17

For Extension ( )

Key	Feature	Key	Feature	Key	Feature
8	TRK8	16	TRK16	24	TRK24
7	TRK7	15	TRK15	23	TRK23
6	TRK6	14	TRK14	22	TRK22
5	TRK5	13	TRK13	21	TRK21
4	TRK4	12	TRK12	20	TRK20
3	TRK3	11	TRK11	19	TRK19
2	TRK2	10	TRK10	18	TRK18
1	TRK1	9	TRK9	17	TRK17

x = Default

FF6 Key - Name Assignment

The FF6 Key, in combination with the DSS/72, can create messages for absence message codes 5 to 9, and can assign names to extensions, system speed dial, personal speed dial, trunk lines, and hunt group pilot extensions.

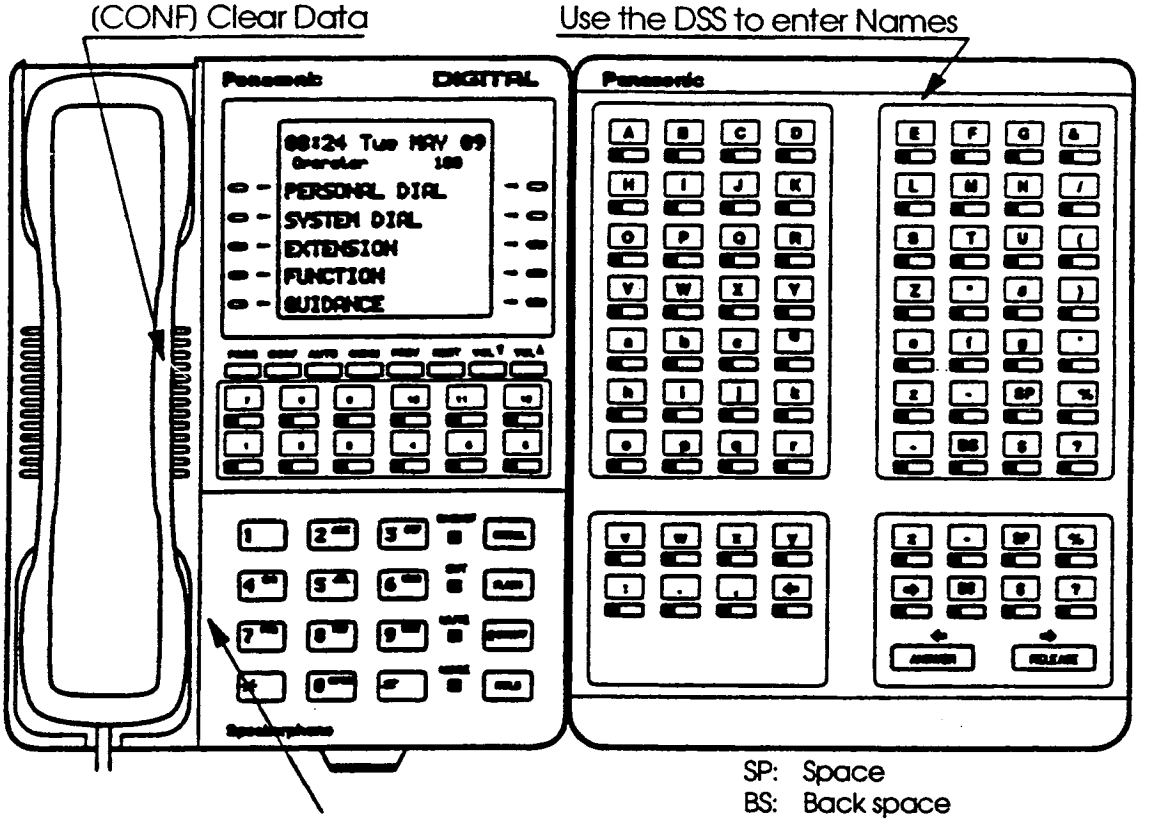
When there are several DSS units, use ***only*** the unit positioned nearest the telephone for programming.

Use the **Name Assignment** form with the **Speed Dial List**, **Key Plan**, and **Summary Key Plan**. All these forms are for the installer / programmer.

Save Your Original Forms!!!

FF6 Key - Name Assignment

DBS Account Name_____Cutover Date_____Sheet____of____
Account Address_____Account Phone (Main List)_____



SP: Space
BS: Back space
⬅: Move to left
➡: Move to right

Extension Names
FF6-1#-(1 to 144)#-(10 characters)#

Use with Key Plan or Summary Key Plan

SSD Name Assignment
FF6-2#-(00 to 89)#-(16 characters)#

A name can be stored in each System Speed Dial code (00 to 89).

Use with Speed Dial list

PSD Name Assignment
FF6-3#-(1 to 144)#-(90 to 99)#-(16 characters)#

A name can be stored in Personal Speed Dial codes (90 to 99) for each extension port (001 to 144).

Use with Speed Dial list

Absence Message
FF6-4#-(5 to 9)#-(15 characters)#

Store Absence Messages in message codes (5 to 9). Each message can be a maximum of 15 characters. Messages (0 to 4) cannot be changed.

0: In Meeting
1: At Lunch
2: Out of Office
3: Vacation
4: Another Office
5:_____
6:_____
7:_____
8:_____
9:_____

Trunk Name Assignment (CPC-B, V.2.0)
FF6-5#-(1 to 64)#-(6 characters)#

A trunk name can be a maximum of 6 characters.

Hunt Group Pilot Name Assignment (CPC-B, V.2.0)
FF6-6#-(1 to 8)#-(10 characters)#

A pilot name can be a maximum of 10 characters.

Call Waiting Text Reply (CPC-B, V3.0 or higher)
FF6-7#-(1 to 5)#-(15 characters)#

The answer can be a maximum of 15 characters.

FF7 Key - TRS

The FF7 Key is for programming toll restricted Area and Office codes. The sub-modes are (1# to 9#).

There are seven forms the installer/programmer can use to record these codes:

The **TRS System Settings** form is for submode 1#. This programming affects the entire toll restrict system.

The **TRS Area Codes / Office Codes** form is for submodes 2# and 3#. It establishes restrictions for Classes of Restriction 3 to 6.

The **TRS Special Area Code Tables** form is for submodes 4# and 5#. It is for Classes of Restriction 3 to 6. Each of the four tables can accept one thousand (1,000) office code or area code entries.

The **7-Digit Call Restrict** form is for submode 6#. Use this optional table to restrict up to fifty 7-digit numbers for Classes of Restriction 2 to 6.

The **TRS Day / Night Assignments** form is for submodes 7# and 8#. In most cases, the "all-trunk" setting is used for each extension, but exceptions can be made wherever needed. Enter trunk number and COR (0 to 7). Photocopy the original form and use a separate page for day and night.

The **TRS Block Mode** form is for submode 9#. Record default changes (deny, allow) for each COR from 3 to 6 throughout the toll restrict system.

The form explained below is located at the back of this manual immediately following the FF10 Key information:

The **Extension Summary** form is for assigning toll restrictions to each extension. Use one form for each extension port. Photocopy the original form and use only the copies. Refer to the *Toll Restriction* box on this form.

Save Your Original Forms!!!

FF7 Key - TRS

DBS Account Name_____ Cutover Date_____ Sheet____ of____

Account Address_____ Account Phone (Main List)_____

TRS System Settings

FF7-1#-(1 to 2)#-(0 or 1)#
FF7-1#-(3)#-(1 to 15)#
FF7-1#-(4 to 16)#-(0 or 1)#

Address	Feature	Program Options	Selected Option
-1#-1#	International calls	0: Restriction not determined by office code table ***1: Restriction determined by office code table***	
-1#-2#	Incoming calls	0: Disable ***1: Enable***	
-1#-3#	Maximum digits dialed	***Not restricted*** 1 to 15: 15th to 29th digit	
-1#-4#	211 dial restriction	***0: Allow*** 1: Deny	
-1#-5#	311 dial restriction	***0: Allow*** 1: Deny	
-1#-6#	411 dial restriction	***0: Allow*** 1: Deny	
-1#-7#	511 dial restriction	***0: Allow*** 1: Deny	
-1#-8#	611 dial restriction	***0: Allow*** 1: Deny	
-1#-9#	711 dial restriction	***0: Allow*** 1: Deny	
-1#-10#	811 dial restriction	***0: Allow*** 1: Deny	
-1#-11#	911 dial restriction	***0: Allow*** 1: Deny	
-1#-12#	See FF7-6# 7-digit restrict table COR Type 2	0: Allow ***1: Restrict***	
-1#-13#	See FF7-6# 7-digit restrict table COR Type 2	0: Allow ***1: Restrict***	
-1#-14#	See FF7-6# 7-digit restrict table COR Type 2	0: Allow ***1: Restrict***	
-1#-15#	See FF7-6# 7-digit restrict table COR Type 2	0: Allow ***1: Restrict***	
-1#-16#	See FF7-6# 7-digit restrict table COR Type 2	0: Allow ***1: Restrict***	

FF7 Key - TRS

DBS Account Name_____ Cutover Date_____ Sheet___ of___

Account Address_____ Account Phone (Main List)_____

Area Codes/Office Codes

Area Codes 2#-(3 to 6)#-(000 to 999)#-(0 or 1)#

Office Codes 3#-(3 to 6)#-(000 to 999)#-(0 or 1)#

Area Codes	Office Codes	COR_____ (3 to 6)
	000 to 999	

Area Codes	Office Codes	COR_____ (3 to 6)
	000 to 999	

Area Codes	Office Codes	COR_____ (3 to 6)
	000 to 999	

Area Codes	Office Codes	COR_____ (3 to 6)
	000 to 999	

Class of Restriction (COR)

FF7 Key - TRS

DBS Account Name________________________Cutover Date________Sheet____of____
Account Address________________________Account Phone (Main List)____________

Office Codes for Special Area Codes

Special Area Code 4#-(1 to 4)#-(000 to 999)#
Special Office Code 5#-(1 to 4)#-(000 to 999)#-(0 or 1)#

Special Area Code________
(000 to 999)

Table________
(1 to 4)

COR______
(3 to 6)

____ ____ ____ ____ ____ ____ ____ ____
____ ____ ____ ____ ____ ____ ____ ____
____ ____ ____ ____ ____ ____ ____ ____
____ ____ ____ ____ ____ ____ ____ ____

Special Office Codes (000 to 999)

Deny ☐
Allow ☐

Special Area Code________
(000 to 999)

Table________
(1 to 4)

COR______
(3 to 6)

____ ____ ____ ____ ____ ____ ____ ____
____ ____ ____ ____ ____ ____ ____ ____
____ ____ ____ ____ ____ ____ ____ ____
____ ____ ____ ____ ____ ____ ____ ____

Special Office Codes (000 to 999)

Deny ☐
Allow ☐

Special Area Code________
(000 to 999)

Table________
(1 to 4)

COR______
(3 to 6)

____ ____ ____ ____ ____ ____ ____ ____
____ ____ ____ ____ ____ ____ ____ ____
____ ____ ____ ____ ____ ____ ____ ____
____ ____ ____ ____ ____ ____ ____ ____

Special Office Codes (000 to 999)

Deny ☐
Allow ☐

Special Area Code________
(000 to 999)

Table________
(1 to 4)

COR______
(3 to 6)

____ ____ ____ ____ ____ ____ ____ ____
____ ____ ____ ____ ____ ____ ____ ____
____ ____ ____ ____ ____ ____ ____ ____
____ ____ ____ ____ ____ ____ ____ ____

Special Office Codes (000 to 999)

Deny ☐
Allow ☐

Class of Restriction (COR)

FF7 Key - TRS

DBS Account Name_____ Cutover Date_____ Sheet____ of____

Account Address_____ Account Phone (Main List)_____

Seven-Digit Toll Restriction

FF7-6#-(1 to 50)#-(7 Digits)# **(See FF7-1#-12#)**

COR Types (2 to 6) - FF7-1#-(12 to 16)#-(0 or 1)#

Address	Program Options* -(7 Digits)	Address	Program Options* -(7 Digits)
-6#-1#		-6#-26#	
-6#-2#		-6#-27#	
-6#-3#		-6#-28#	
-6#-4#		-6#-29#	
-6#-5#		-6#-30#	
-6#-6#		-6#-31#	
-6#-7#		-6#-32#	
-6#-8#		-6#-33#	
-6#-9#		-6#-34#	
-6#-10#		-6#-35#	
-6#-11#		-6#-36#	
-6#-12#		-6#-37#	
-6#-13#		-6#-38#	
-6#-14#		-6#-39#	
-6#-15#		-6#-40#	
-6#-16#		-6#-41#	
-6#-17#		-6#-42#	
-6#-18#		-6#-43#	
-6#-19#		-6#-44#	
-6#-20#		-6#-45#	
-6#-21#		-6#-46#	
-6#-22#		-6#-47#	
-6#-23#		-6#-48#	
-6#-24#		-6#-49#	
-6#-25#		-6#-50#	

* No entries at default

FF7 Key - TRS

DBS Account Name_____ Cutover Date_____ Sheet____ of____

Account Address_____ Account Phone (Main List)_____

TRS Day/Night Assignments

❑ DAY FF7-7#-(1 to 144)#-(1 to 64)# or (65)#-(0 to 7)#

❑ NIGHT FF7-8#-(1 to 144)#-(1 to 64)# or (65)#-(0 to 7)#

Ext Port (1 to 144)	Trunk Port (1 to 64)	All Trunks (65)	COR (0 to7)	Ext Port (1 to 144)	Trunk Port (1 to 64)	All Trunks (65)	COR (0 to7)
01				37			
02				38			
03				39			
04				40			
05				41			
06				42			
07				43			
08				44			
09				45			
10				46			
11				47			
12				48			
13				49			
14				50			
15				51			
16				52			
17				53			
18				54			
19				55			
20				56			
21				57			
22				58			
23				59			
24				60			
25				61			
26				62			
27				63			
28				64			
29				65			
30				66			
31				67			
32				68			
33				69			
34				70			
35				71			
36				72			

FF7 Key - TRS

DBS Account Name_____ Cutover Date_____ Sheet___ of___
Account Address_____ Account Phone (Main List)_____

TRS Block Mode

FF7-9#-(1 to 16)#-(0 or 1)#

Address	Feature	Program Options	Selected Option
-9#-1#	Area Code - COR 3	0: Allow ***1: Deny***	
-9#-2#	Area Code - COR 4	0: Allow ***1: Deny***	
-9#-3#	Area Code - COR 5	***0: Allow*** 1: Deny	
-9#-4#	Area Code - COR 6	***0: Allow*** 1: Deny	
-9#-5#	Office Code - COR 3	0: Allow ***1: Deny***	
-9#-6#	Office Code - COR 4	***0: Allow*** 1: Deny	
-9#-7#	Office Code - COR 5	***0: Allow*** 1: Deny	
-9#-8#	Office Code - COR 6	***0: Allow*** 1: Deny	
-9#-9#	Special Office Code - COR 3 (000 - 999)	0: Allow ***1: Deny***	
-9#-10#	Special Office Code - COR 4 (000 - 999)	0: Allow ***1: Deny***	
-9#-11#	Special Office Code - COR 5 (000 - 999)	0: Allow ***1: Deny***	
-9#-12#	Special Office Code - COR 6 (000 - 999)	0: Allow ***1: Deny***	
-9#-13#	Special Area Code/Office Code - COR 3	0: Allow ***1: Deny***	
-9#-14#	Special Area Code/Office Code - COR 4	0: Allow ***1: Deny***	
-9#-15#	Special Area Code/Office Code - COR 5	***0: Allow*** 1: Deny	
-9#-16#	Special Area Code/Office Code - COR 6	***0: Allow*** 1: Deny	

FF8 Key - LCR

The FF8 Key controls economy trunk lines for designated calling areas. The submodes are (1# to 8#).

The following forms are for the installer/programmer:

The **LCR Area Codes/Office Codes** form for submodes 1# and 2# establishes area code tables and office code tables.

The **LCR Office Codes for Special Area Codes** form is for submodes 3# and 4#. If the customer requires special area codes, set them in tables 1 to 4.

The **LCR Time Priority Tables** form for submode 5# sets up time priority tables for the trunk groups.

The **LCR Trunk Groups** form for submode 6# separates trunks into groups.

The **LCR Delete/Add Tables** form is for submodes 7# (delete) and 8# (add).

The **Delete Table** records up to 16 digits stripped from an outgoing dialed number. *Example:* delete an area code or 1+ area code.

The **Add Table** records up to 16 digits added to an outgoing dialed number. *Example:* adds a carrier's (MCI, Sprint, etc.) account number or equal access number (10xxx).

Save Your Original Forms!!!

FF8 Key - LCR

DBS Account Name_____ Cutover Date_____ Sheet____ of____

Account Address_____ Account Phone (Main List)_____

Area Codes/Office Codes (See FF1-2#-1#-3#)

Area Codes FF8-1#-(1 to 15)#-(000 to 999)#-(0 or 1)#

Office Codes FF8-2#-(1 to 15)#-(000 to 999)#-(0 or 1)#

Area Codes	Office Codes	000 to 999
Time Priority Table _____ (1 to 15)		

Area Codes	Office Codes	000 to 999
Time Priority Table _____ (1 to 15)		

Area Codes	Office Codes	000 to 999
Time Priority Table _____ (1 to 15)		

Area Codes	Office Codes	000 to 999
Time Priority Table _____ (1 to 15)		

8

LCR Area/Office Codes

DBS Account Name__________________ Cutover Date________ Sheet____ of____
Account Address__________________ Account Phone (Main List)____________

Office Codes for Special Area Code Tables

Time Priority Table_____ (1 to 15) (See FF1-2#-1#-3#)
Special Area Codes FF8-3#-(1 to 4)#-(000 to 999)#
Special Office Codes FF8-4#-(1 to 4)#-(1 to 15)#-(000 to 999)#-(0 or 1)#

Special Area Code_____Table_____(1 to 4)

Office Code Entries (000 to 999)

Special Area Code_____Table_____(1 to 4)

Office Code Entries (000 to 999)

Special Area Code_____Table_____(1 to 4)

Office Code Entries (000 to 999)

Special Area Code_____Table_____(1 to 4)

Office Code Entries (000 to 999)

FF8 Key - LCR

DBS Account Name_____ Cutover Date_____ Sheet___ of___
Account Address_____ Account Phone (Main List)_____

Time Priority Table____ (1 to 15)

Time Bands

(See FF1-2#-1#-3#)

FF8-5#-(1 to 15)#-(1 to 48)#-(1 to 8)#

See also LCR Trunk Group Table

1# - 8# — 7:00 am - 8:00 am

1#____ 2#____ 3#____ 4#____ 5#____ 6#____ 7#____ 8#____
(Trunk Groups)

9# - 16# — 8:00 am - 5:00 pm

9#____ 10#____ 11#____ 12#____ 13#____ 14#____ 15#____ 16#____
(Trunk Groups)

17# - 24# — 5:00 pm - 8:00 pm

17#____ 18#____ 19#____ 20#____ 21#____ 22#____ 23#____ 24#____
(Trunk Groups)

25# - 32# — 8:00 pm - 12:00 pm

25#____ 26#____ 27#____ 28#____ 29#____ 30#____ 31#____ 32#____
(Trunk Groups)

33# - 40# — 0:00 am - 7:00 am

33#____ 34#____ 35#____ 36#____ 37#____ 38#____ 39#____ 40#____
(Trunk Groups)

41# - 48# — WEEKEND

1#____ 42#____ 43#____ 44#____ 45#____ 46#____ 47#____ 48#____
(Trunk Groups)

High PRIORITY Low

FF8 Key - LCR

DBS Account Name_____Cutover Date_____Sheet___of___
Account Address_____Account Phone (Main List)_____

LCR Trunk Group Table
FF8-6#-(1 to 8)#-(1 to 8)#-(01 to 64)#

Group 1 (1#)

1#____2#____3#____4#____5#____6#____7#____8#____

(Order within Each Trunk Group)

Group 2 (2#)

1#____2#____3#____4#____5#____6#____7#____8#____

(Order within Each Trunk Group)

Group 3 (3#)

1#____2#____3#____4#____5#____6#____7#____8#____

(Order within Each Trunk Group)

Group 4 (4#)

1#____2#____3#____4#____5#____6#____7#____8#____

(Order within Each Trunk Group)

Group 5 (5#)

1#____2#____3#____4#____5#____6#____7#____8#____

(Order within Each Trunk Group)

Group 6 (6#)

1#____2#____3#____4#____5#____6#____7#____8#____

(Order within Each Trunk Group)

Group 7 (7#)

1#____2#____3#____4#____5#____6#____7#____8#____

(Order within Each Trunk Group)

Group 8 (8#)

1#____2#____3#____4#____5#____6#____7#____8#____

(Order within Each Trunk Group)

FF8 Key - LCR

DBS Account Name_____ Cutover Date_____ Sheet____ of____
Account Address_____ Account Phone (Main List)_____

LCR Delete/Add Tables

FF8-7#-(1 to 8)#-(Delete up to 16 digits)#

FF8-8#-(1 to 8)#-(Add up to 16 digits)

Address	Feature	Program Option*	Selected Option*
LCR Delete Table			
-7#-1#	Trunk 01 - Delete Dialing Digits	Delete up to 16 digits	
-7#-2#	Trunk 02 - Delete Dialing Digits	Delete up to 16 digits	
-7#-3#	Trunk 03 - Delete Dialing Digits	Delete up to 16 digits	
-7#-4#	Trunk 04 - Delete Dialing Digits	Delete up to 16 digits	
-7#-5#	Trunk 05 - Delete Dialing Digits	Delete up to 16 digits	
-7#-6#	Trunk 06 - Delete Dialing Digits	Delete up to 16 digits	
-7#-7#	Trunk 07 - Delete Dialing Digits	Delete up to 16 digits	
-7#-8#	Trunk 08 - Delete Dialing Digits	Delete up to 16 digits	
LCR Add Table			
-8#-1#	Trunk 01 - Add Dialing Digits	Add up to 16 digits	
-8#-2#	Trunk 02 - Add Dialing Digits	Add up to 16 digits	
-8#-3#	Trunk 03 - Add Dialing Digits	Add up to 16 digits	
-8#-4#	Trunk 04 - Add Dialing Digits	Add up to 16 digits	
-8#-5#	Trunk 05 - Add Dialing Digits	Add up to 16 digits	
-8#-6#	Trunk 06 - Add Dialing Digits	Add up to 16 digits	
-8#-7#	Trunk 07 - Add Dialing Digits	Add up to 16 digits	
-8#-8#	Trunk 08 - Add Dialing Digits	Add up to 16 digits	

*** No entries at default**

FF9 Key - Copy

The FF9 Key copies programmed data from extension to extension, trunk to trunk, or FF key to FF key. The sub-modes are 1# to 3#.

Trunks/submode 1#. **FF9-1#-(01 to 64)#-(01 to 64)##**

Trunk features can be copied to another trunk with the single exception of the Private Line feature, which cannot be copied.

Extensions/submode 2#. **FF9-2#-(1 to 144)#-(1 to 144)##**

With four exceptions, all other features can be copied to any extension in the DBS system.

The four exceptions are: extension number, telephone type, station lockout code, and the EM/24 port number (BLF).

FF Keys/submode 3#. **FF9-3#-(1 to 144)#-(1 to 144)##**

Copies only *LED* FF keys.

Save Your Original Forms!!!

FF10 Key - Speed Dial

The FF10 Key is for programming System Speed Dial (SSD) and Personal Speed Dial (PSD) numbers. There are 90 SSD codes and 10 PSD codes in the DBS system.

The **Speed Dial List** is for recording the SSD and PSD numbers.

SSD numbers are programmed by the installer/programmer or the attendant.

PSD numbers can be programmed by the station user as well as the attendant and installer/programmer. Distribute a copy of each **Speed Dial List** to every station user in the system. Photocopy the original form and use only the copies.

See instructions for the FF6 Key to assign speed dial names.

Save Your Original Forms!!!

FF10 Key - Speed Dialing

DBS Account Name_____ Cutover Date_____ Sheet___ of___

Account Address_____ Account Phone (Main List)_____

System *Speed Dial* Codes (SSD)

FF10-1#-(00 to 89)#-(16 digits)#

SSD Code	Telephone Number	Name	SSD Code	Telephone Number	Name
00			46		
02			47		
03			48		
04			49		
05			50		
06			51		
07			52		
08			53		
09			54		
10			55		
11			56		
12			57		
13			58		
14			59		
15			60		
16			61		
17			62		
18			63		
19			64		
20			65		
21			66		
22			67		
23			68		
24			69		
25			70		
26			71		
27			72		
28			73		
29			74		
30			75		
31			76		
32			77		
33			78		
34			79		
35			80		
36			81		
37			82		
38			83		
39			84		
40			85		
41			86		
42			87		
43			88		
44			89		
45					

Personal *Speed Dial* Codes (PSD)

FF10-2#-(001 to 144)#-(90 to 99)#-(16 digits)#

90		95	
91		96	
92		97	
93		98	
94		99	

Extension Summary

The Extension Summary form is for recording all the FF3, 4, 6, and 7 Key features associated with each extension port.

This form is for the installer/programmer who will eventually transcribe the information onto the **Summary Key Plan** or the **Key Plan** for sign-off by the Customer.

Save Your Original Forms!!!

Extension Summary

DBS Account Name_____ Cutover Date_____ Sheet____ of____

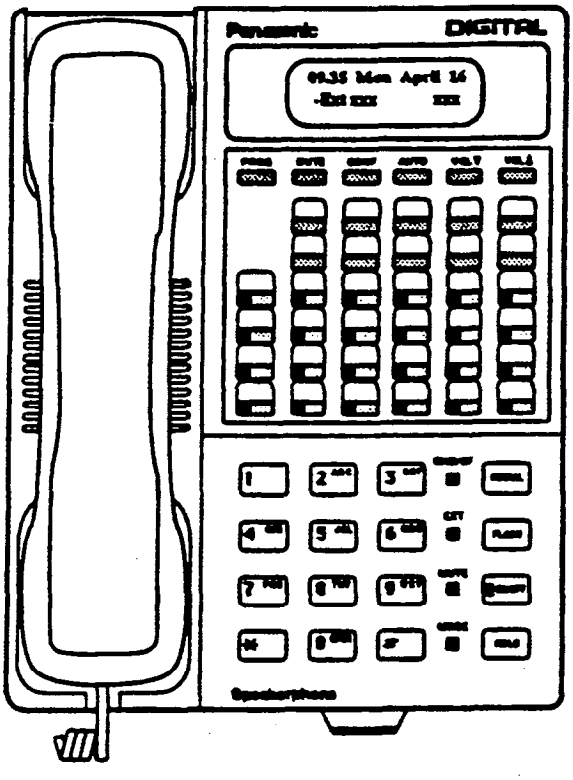
Account Address_____ Account Phone (Main List)_____

Ext. Port_____ Extension_____

(1 to 144) (100 to 699/10 to 69)

Extension General Information (FF3, 6)

Telephone Type	Keys: ☐16 ☐22 ☐34 ☐Std. ☐SP ☐DS ☐LDS ☐DSLT
Model	VB- 4 3 2 3
Name	
DID Extension	



Italic = Default

Extension Programming 1 (FF3)

Forced LCR	☐Enable ☐ ***Disable***
Forced Verified Acct Code	☐Enable ☐ ***Disable***
Station Lockout Code	☐☐☐☐
CO Off Hook Signal	☐Enable ☐ ***Disable***
Call Waiting	☐ ***Accept*** ☐Reject
Busy Override	☐Enable ☐ ***Disable***
Busy Overridden	☐ ***Accept*** ☐Reject
Prime Line Preference	☐Enable ☐ ***Disable***
Ringing Line Preference	☐ ***Enable*** ☐Disable
Unsupervised Conference	☐Enable ☐ ***Disable***
SMDR Printout	☐Yes ☐No
Off Hook Signal Volume	1, 2, 3, 4
Off Hook Signal Pattern	☐One ☐ ***Continue***
Page Group Pickup (External Paging)	00, 01, 02, 03 04, 05, 06, 07
Ringback Tone on 2nd Call	☐ ***B-RBT*** ☐ RBT ☐ BT
EXT Class of Service	0, 1, 2, 3, 4, 5, 6, 7, 8,
SLT Hook Flash	☐ ***Broker's Hold*** ☐Conf
EXT Ring Pattern	0, 1, 2, 3, 4, 5, 6, 7, 8, 9
DSLT Handset Volume	☐ ***Normal*** ☐Louder
Auto Set Relocation	☐☐☐☐
Permanent Call Forward Type	☐All ☐Busy/NA ☐Busy ☐NA
EXT Permanent Call Forward	☐☐☐

Ringing Assignment (FF4)

CO Ring Assign.	Trunks (1 to 64)
Day	
Night	
Day Delayed	
Night Delayed	

Ext. Ring Assign.	Ext. 10 to 69 (100 to 699)
Immediate	
Delayed	

Hunt Group (FF4)

Hunt Group Member	
Hunt Group Number	1 to 8
Hunt Type	T / D / L
Transfer Extension	
Pilot Extension/Name	

Call Coverage (FF4)

Coverage Member	
Coverage Group number	1 to 16
Covering Extension 1	
Covering Extension 2	

Toll Restriction Class of Restriction (FF7)

DAY	Type (0 to 7)	Trunks (1 to 64)
TRS Type		
TRS Type		
TRS Type		
TRS Type		

DAY	Type (0 to 7)	Trunks (1 to 64)
TRS Type		
TRS Type		
TRS Type		
TRS Type		

Extension Summary

DBS Account Name_____ Cutover Date_____ Sheet____ of____

Account Address_____ Account Phone (Main List)_____

(Program Sample)

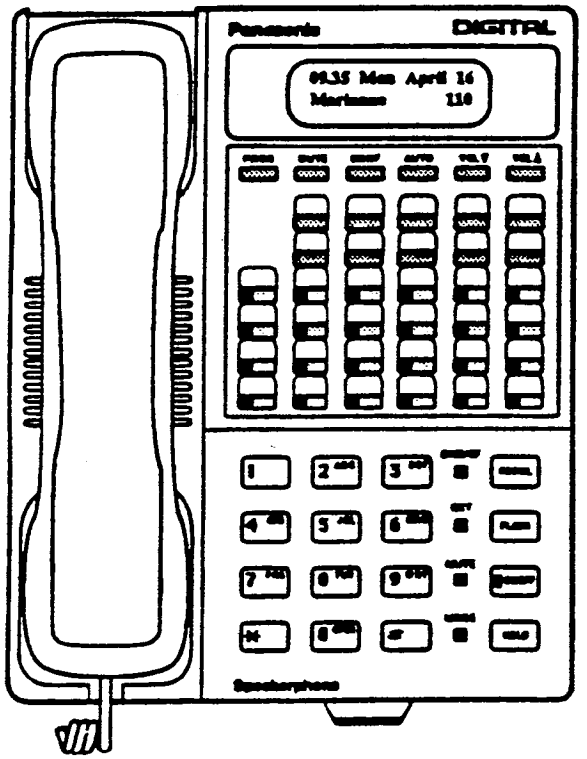
Ext. Port_____ Extension_____

(1 to 144) (100 to 699/10 to 69)

Italic = Default

Extension General Information (FF3, 6)

Telephone Type	Keys: ☐16 ☐22 ☐34 ☐Std. ☐SP ☑DS ☐LDS ☐DSLT								
Model	VB-	4	3	2	3				
Name	M	a	r	i	a	n	n	e	
DID Extension									



Extension Programming 1 (FF3)

Forced LCR	☐Enable ☑*Disable*
Forced Verified Acct Code	☐Enable ☑*Disable*
Station Lockout Code	[1] [2] [3] [4]
CO Off Hook Signal	☑Enable ☐*Disable*
Call Waiting	☑*Accept* ☐Reject
Busy Override	☑Enable ☐*Disable*
Busy Overridden	☐*Accept* ☑Reject
Prime Line Preference	☐Enable ☑*Disable*
Ringing Line Preference	☑*Enable* ☐Disable
Unsupervised Conference	☑Enable ☐*Disable*
SMDR Printout	☑Yes ☐No
Off Hook Signal Volume	1, 2, 3, ✔
Off Hook Signal Pattern	☐One ☑*Continue*
Page Group Pickup (External Paging)	✔00, ✔01, 02, 03 04, 05, 06, 07
Ringback Tone on 2nd Call	☑*B-RBT* ☐RBT ☐BT
EXT Class of Service	0, 1, 2, 3, 4, ✔5, 6, 7, 8,
SLT Hook Flash	☐*Broker's Hold* ☑Conf
EXT Ring Pattern	0, 1, 2, ✔3, 4, 5, 6, 7, 8, 9
DSLT Handset Volume	☐*Normal* ☑Louder
Auto Set Relocation	[2] [1] [3] [4]
Permanent Call Forward Type	☐All ☐Busy/NA ☐Busy ☑NA
EXT Permanent Call Forward	[1] [5] [8]

Hunt Group (FF4)

Hunt Group Member	
Hunt Group Number	*1 to 8*
Hunt Type	✔/ D / L
Transfer Extension	
Pilot Extension/Name	

Ringing Assignment (FF4)

CO Ring Assign.	Trunks (1 to 64)
Day	*4 to 9, 14*
Night	*1 to 14*
Day Delayed	*1 to 9, 14, 23*
Night Delayed	*1 to 14, 23*

Ext. Ring Assign.	Ext. 10 to 69 (100 to 699)
Immediate	*120, 130, 140*
Delayed	*210, 220*

Call Coverage (FF4)

Coverage Member	
Coverage Group number	*1 to 16*
Covering Extension 1	
Covering Extension 2	

Toll Restriction Class of Restriction (FF7)

DAY	Type (0 to 7)	Trunks (1 to 64)
TRS Type	*1*	*1 to 3, 14*
TRS Type	*7*	*4 to 13, 15 to 23*
TRS Type		
TRS Type		

DAY	Type (0 to 7)	Trunks (1 to 64)
TRS Type	*1*	*1 14*
TRS Type	*7*	*All others (15 to 23)*
TRS Type		
TRS Type		

Key Plan

The **Key Plan** is a summary of the programming on each station for the FF3, 4, 5, 6, 7, 8, 9, and 10 keys.

Programmed data is taken from the floor plan of an installation site which, along with the **Summary Key Plan**, is the only other place cable numbers are documented.

This form is used on the final walk-through of an installation or upgrade to verify the programming on each station.

Save Your Original Forms!!!

Key Plan

DBS Account Name_____ Cutover Date_____ Sheet____of____

Account Address_____ Account Phone (Main List)_____

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Key Plan

Circle or Fill in as Appropriate

Cable	Ext. No.	Ext. Port	Phone Type	Name/Department

Forced LCR Mode	Forced Verified Account	TRS COR 0 1 2 3 4 5 6 7

Lockout Code

Page Zones	Hunt Groups
0 1 2 3 4 5 6 7	1 2 3 4 5 6 7 8

SLT Hook Flash		Ext. Ring Pattern
Broker's Hold	Conference Call	

CO-Line/FF key Button Assignment

Ring Assignment	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Day																								
Night																								
Day Delayed																								
Night Delayed																								
Extension Delayed																								

Off Hook CO Signal	Call Waiting	Busy Override	Busy Overridden	Prime Line Preference	Ringing Line Preference	CO Conference Capability

Call Coverage Groups	Multi-Line Keys	SMDR Print	Headset	Mount Cord		Handset Cord		Ext. COS
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16				Std	Long Wall	Std	Long	

D-SLT Handset Volume		Auto Set Relocation Code	Permanent CFWD			Ext. Permanent CFWD
Normal	Louder		Busy	No Ans.	Busy/No Ans.	

Program Type____

Circle or Fill in as Appropriate

Cable	Ext. No.	Ext. Port	Phone Type	Name/Department

Forced LCR Mode	Forced Verified Account	TRS COR 0 1 2 3 4 5 6 7

Lockout Code

Page Zones	Hunt Groups
0 1 2 3 4 5 6 7	1 2 3 4 5 6 7 8

SLT Hook Flash		Ext. Ring Pattern
Broker's Hold	Conference Call	

CO-Line/FF key Button Assignment

Ring Assignment	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Day																								
Night																								
Day Delayed																								
Night Delayed																								
Extension Delayed																								

Off Hook CO Signal	Call Waiting	Busy Override	Busy Overridden	Prime Line Preference	Ringing Line Preference	CO Conference Capability

Call Coverage Groups	Multi-Line Keys	SMDR Print	Headset	Mount Cord		Handset Cord		Ext. COS
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16				Std	Long Wall	Std	Long	

D-SLT Handset Volume		Auto Set Relocation Code	Permanent CFWD			Ext. Permanent CFWD
Normal	Louder		Busy	No Ans.	Busy/No Ans.	

Program Type____

Summary Key Plan

The **Summary Key Plan** is a summary of the programming on the FF3, 4, 5, 6, and 7 keys for each station.

The form is for larger installations where most, but not all the details of an installation are recorded.

The floor plan, **Key Plan**, and **Summary Key Plan** are the only places where cable numbers are documented.

The **Summary Key Plan** is used by the installer/programmer and the Customer to sign off on the installation.

Save Your Original Forms!!!

DBS Account Name_____ Cutover Date_____ Sheet____ of____

Account Address_____ Account Phone (Main List)_____

Cable	Extension (1 to 144)	Ext. Port	Name/Department	Phone Type (1 to16)	Multi-Line Keys	TRS COR (1 to 7)	Hunt Groups (1 to 8)	Call Coverage Groups (1 to16)	C/F Y/N	Class of Service	Page Groups (00 to 07)	OHVA Y/N	Busy Override Y/N	Delayed Ring Trunk/Target Extension

Comments

Appendix A

Appendix A is a master list of FF key defaults. Following the master list is a *pocket-sized* version of the FF key default chart beginning on page 90.

Appendix A

FF 1 KEY - System Programming		
FF1-1#-	**Default**	**Calendar and Time**
-1#-(MMDDYY)#	-	Date (01 to 12) (01 to 31) (00 to 99)
-2#-(HHMM)#	-	Time (0000 to 2359)
FF1-2#-1#-		**Timers and Displays**
-1#-(0 or 1)#	1	Call duration display
-2#-(0 to 2)#	0	SMDR timer 5, 16 or 30 seconds
-3#-(0 or 1)#	0	Least-Cost Routing (LCR)
-4#-(00 to 89)#	-	TRS for SSD
-5#-(0 or 1)#	0	Display during SSD
-6#-(0 or 1)#	1	AUTO-FLASH REDIAL
-7#-(0 or 1)#	1	One-touch dialing
-8#-(0 or 1)#	1	On-hook transfer
-9#-(0 or 1)#	0	Key bank hold
-10#-(0 or 1)#	1	Non-appearance CO-line hold
-11#-(0 or 1)#	1	SLT FLASH control
-12#-(0 or 1)##	1	Sets number of extension -digits
-14#-(0 or 1)#	1	Attendant intercom
-15#-(0 or 1)#	1	Extension intercom
-16#-(0 or 1)#	1	Splash tone on a voice call
-17#-(0 or 1)#	0	Splash tone on a busy override
-18#-(0 or 1)#	1	Area code or 1+Area Code
-19#-(0 or 1)#	0	SSD display mode
-21#-(0 or 1)#	0	Voice-mail busy tone
-22#-(0 or 1 to 15)#	8	Attendant overflow
-23#-(0 or 1)#	0	Delayed-ring capability
-24#-(11 to 69/101 to 699)#	101	Second attendant
-25#-(11 to 69/101 to 699)#	-	Third attendant
-26#-(11 to 69/101 to 699)#	-	Fourth attendant
-27#-(11 to 69/101 to 699)#	-	Attendant transfer ext. number
-28#-(0 or 1)#	1	Attendant override switch
-29#-(0 or 1)#	1	Alarm LED mode
-30#-(0 or 1)#	0	BLF (extension) delayed ring
-31#-(0 to 6)#	0	Analog port transfer ring interval
-32#-(0 to 1)# (Vs. 4.0 or higher)	0	Multiple DID/DNIS
-32#-(0 or 1)# (Vs. 3.0 or higher)	0	Multiple DID
-33#-(0 or 1)#	0	Paging duration
-34#-(0 or 1)#	0	SLT DISA ringing pattern
FF1-2#-2#-		**SMDR and Data**
-1#-(0 or 1)#	1	SMDR parity check
-2#-(0 or 1)#	1	SMDR parity type
-3#-(1 to 4)#	(A)2 & 4(B)	SMDR baud rate
-4#-(1 to 3)#	1	SMDR stop-bit length
-5#-(1 to 4)#	4	SMDR data length
-6#-(0 or 1)#	1	SMDR printing mode 1
-7#-(0 or 1)#	1	SMDR printing mode 2 (long/local)
-8#-(0 or 1)#	0	SMDR printing mode 3 (title)

Appendix A

FF 1 KEY - System Programming

FF1-2#-2#-	Default	SMDR and Data
-9#-(0 or 1)#	0	Dump data mode (Xon/Xoff)
-10#-(0 or 1)#	1	RAI baud rate switch
FF1-2#-3#-		**PBX Access and Pauses**
-(1 to 8)#-(00 to 99) or (0k to 9k)#	-	PBX access code (00 to 99) or (0k to 9k)
-(9 to 18)#-(1 to 3)# **See FF2-13#**	-	Automatic pause after dialing (0 to 9)
FF1-2#-4#-		**UNA and EPI**
-1#-(0 or 1)# **See FF4-1#. 2#**	0	Universal Night Answer (UNA) ring pattern
-(2 to 9)#-(0 or 1)#	0	External Page Interface (EPI) groups (00 to 07)
FF1-2#-5#-		**COS**
-(1 to 8)#-(1 to 20)#-(0 or 1)#	0	Class of Service setting
FF1-2#-6#-		**Account Codes**
-(1 to 100)#-1#-(0001-9999)#	-	Verified Forced Account Codes
-(1 to 100)#-2#-(0 to 7)#	0	Verified Forced Account Code toll restriction
FF1-3#-		**System Timers/Night Switch/Conf.**
-1#-(0000 to 2359)#	-	Automatic switch to night mode
-2#-(0 or 1 to 12)#	1	Attendant HOLD-recall timer
-3#-(0 or 1 to 12)#	7	Extension HOLD-recall timer
-4#-(0 or 1 to 12)#	1	Attendant transfer-recall timer
-5#-(0 or 1 to 12)#	7	Extension transfer-recall timer
-6#-(0 or 1 to 12)#	1	Attendant Hunt-Group recall timer
-7#-(0 or 1 to 12)#	7	Extension Hunt-Group recall timer
-8#-(0 or 1 to 12)#	1	Attendant park-hold recall timer
-9#-(0 or 1 to 12)#	7	Extension park-hold recall timer
-10#-(0 or 1 to 12)#	9	Attendant reversion timer
-11#-(0 or 1 to 15)#	2	Unsupervised conference talk time
-12#-(0 or 1 to 15)#	7	Automatic pause timer
-13#-(0 or 1 to 10)#	9	CO-line FLASH timer
-14#-(0 or 1 to 6)#	4	SLT on-hook FLASH
-15#-(0 to 3)#	1	Incoming ring timer
-16#-(0 or 1 to 15)#	7	Ring signal delay timer
-17#-(0 to 15)#	1	Dial pause timer
-18#-(0 or 1 to 10)#	7	PBX FLASH timer
-19#-(0 to 15)#	2	Call forward/no answer timer
-20#-(0 or 1 to 8)#	4	Outbound ground detection timer
-21#-(0 or 1 to 8)#	4	Incoming ground detection timer
-22#-(0 or 1 to 12)#	1	Attendant intercom HOLD-recall timer

Appendix A

FF 1 KEY - System Programming		
FF1-3#-	**Default**	**System Timers/Night Switch/Conf.**
-23#-(0 or 1 to 12)#	**7**	Extension intercom HOLD-recall timer
-24#-(0 or 1 to 12)#	**1**	Attendant intercom transfer-recall timer
-25#-(0 or 1 to 12)#	**7**	Extension intercom transfer-recall timer
-26#-(0 to 15)#	**2**	CO delayed ringing timer
-27#-(0 to 15)#	**2**	EXT. delayed ringing timer
-28#-(0 to 15)#	**2**	Hunt Group no answer
-29#-(HHMM)#	-	Auto Day Mode
FF1-4#-		**Remote Maintenance Code**
-(4 digits)#	**9999**	Set four digits Also used with DISA
FF1-5#-		**DISA ID Code**
-(4 digits)#	-	Set four digits See FF2-11#, 19#, 20#
FF1-6#-		**DISA Code for Outgoing Calls**
-1#-(0000 to 9999)#	**1111**	Code 1, set four digits **See FF2-11#,19#,20#**
-2#-(0000 to 9999)#	**9999**	Code 2, set four digits **See FF2-11#,19#,20#**
FF1-7#-		**System Programming ID Code**
-(4 digits)#	**9999**	Set four digits
FF1-8#-1#		**DID**
-(0 or 1)#	**0**	DID reset
-(0 to 1)#	**0**	DID/T1 reset
FF1-8#-2#		**DID Confirm**
-(0 or 1)#	**0**	Confirmation of DID reset
FF1-8#-4#		**Sync sources/System Timers**
-1#-1#-(0 to 8)#	**0**	System size
-1#-2#-(1 to 3)#	**3**	Sync setting for first sync source
-1#-3#-(0 to 3)#	**0**	Sync setting for second sync source
-1#-4#-(0 to 3)#	**0**	Sync setting for third sync source
-2#-1#-(0 to 25)#	**25**	Network sync source recovery timer
-2#-2#-(0 to 15)#	**1**	Disconnect timer

Appendix A

FF 1 KEY - System Programming		
FF1-8#-4#	**Default**	**Sync sources/System Timers**
-2#-3#-(0 to 15)#	**3**	Guard timer
-2#-4#-(0 to 15)#	**9**	Release acknowledge timer
-2#-5#-(0 to 8)#	**2**	Outpulse delay timer
-2#-6#-(0 to 15)#	**15**	Wink signal start detection timer
-2#-7#-(0 to 15)#	**7**	Incoming Detection timer
-2#-8#-(0 to 8)#	**3**	Answer Supervision timer
-2#-9#-(0 to 15)#	**3**	Glare timer - immediate start
-2#-10#-(0 to 15)#	**3**	Glare timer - wink start
-3#-(1 to 8)#-(1 to 8)#-(0 to 30)#	**-**	Digital pads (loss/gain settings)
-4#-1#-1#-(0 to 1)#	**0**	Trunk class (Master Cabinet)
-4#-1#-2#-(0 to 24)#	**0**	Number of channels used (Master Cabinet)
-4#-1#-3#-(0 to 1)#	**1**	Frame format (Master Cabinet)
-4#-1#-4#-(0 to 1)#	**0**	Clear Channel format (Master Cabinet)
-4#-1#-5#-(0 to 1)#	**0**	Failure Mode (Master Cab)
-4#-1#-6#-(0 to 1)#	**0**	Remote loopback detection (Master Cabinet)
-4#-1#-7#-(0 to 1)#	**1**	Yellow alarm send (Master Cabinet)
-4#-2#-1#-(0 to 15)#	**1**	Red alarm detection timer (Master Cabinet)
-4#-2#-2#-(0 to 15)#	**1**	Red alarm recovery det timer (Master Cabinet)
-4#-2#-3#-(0 to 15)#	**1**	Yellow alarm detection timer (Master Cabinet)
-4#-2#-4#-(0 to 15)#	**1**	Yellow alarm recov det timer (Master Cabinet)
-4#-2#-5#-(0 to 15)#	**1**	Other alarms detection timer (Master Cabinet)
-4#-2#-6#-(0 to 15)#	**1**	Other alarms recov det timer (Master Cabinet)
-4#-3#-1#-(0 to 9000)#	**9000**	Frame loss counter (Master Cabinet)
-4#-3#-2#-(0 to 9000)#	**9000**	Slip counter (Master Cabinet)
-4#-3#-3#-(0 to 1)#	**1**	Red alarm counter (Master Cabinet)
-4#-3#-4#-(0 to 9000)#	**9000**	Loss Signal counter (Master Cabinet)
-4#-3#-5#-(0 to 9000)#	**9000**	Sync-loss counter (Master Cabinet)
-4#-3#-6#-(0 to 9000)#	**9000**	Yellow alarm counter (Master Cabinet)
-(4 or 5)#-4#-1#-(0 to 1)#	**0**	Yellow alarm relay control
-(4 or 5)#-4#-2#-(0 to 1)#	**0**	Red alarm relay control
-4#-4#-3#-(0 to 1)#	**0**	Loss relay (Master Cabinet)
-(4 or 5)#-4#-4#-(0 to 1)#	**0**	Frame loss
-(4 or 5)#-4#-5#-(0 to 1)#	**0**	AIS relay
-4#-4#-6#-(0 to 1)#	**0**	Alarm relay reset (Master Cabinet)
-5#-1#-1#-(0 to 1)#	**0**	Trunk class (Slave Cabinet)
-5#-1#-2#-(0 to 24)#	**0**	Number of channels used (Slave Cabinet)
-5#-1#-3#-(0 to 1)#	**1**	Frame format (Slave Cabinet)

Appendix A

FF 1 KEY - System Programming

FF1-8#-4#	Default	Sync sources/System Timers
-5#-1#-4#-(0 to 1)#	0	Clear channel format (Slave Cabinet)
-5#-1#-5#-(0 to 1)#	0	Failure mode (Slave Cabinet)
-5#-1#-6#-(0 to 1)#	0	Remote loopback detection (Slave Cabinet)
-5#-1#-7#-(0 to 1)#	1	Yellow alarm notification (Slave Cabinet)
-5#-2#-1#-(0 to 15)#	1	Red alarm detection timer (Slave Cabinet)
-5#-2#-2#-(0 to 15)#	1	Red alarm recovery det timer (Slave Cabinet)
-5#-2#-3#-(0 to 15)#	1	Yellow alarm detection timer (Slave Cabinet)
-5#-2#-4#-(0 to 15)#	1	Yellow alarm recov det timer (Slave Cabinet)
-5#-2#-5#-(0 to 15)#	1	Other alarms detection timer (Slave Cabinet)
-5#-2#-6#-(0 to 15)#	1	Other alarms recov det timer (Slave Cabinet)
-5#-3#-1#-(0 to 9000)#	9000	Frame loss counter (Slave Cabinet)
-5#-3#-2#-(0 to 9000)#	9000	Slip counter (Slave Cabinet)
-5#-3#-3#-(0 to 1)#	1	Red alarm notification (Slave Cabinet)
-5#-3#-4#-(0 to 9000)#	9000	Loss signal counter (Slave Cabinet)
-5#-3#-5#-(0 to 9000)#	9000	Sync-loss counter (Slave Cabinet)
-5#-3#-6#-(0 to 9000)#	9000	Yellow alarm counter (Slave Cabinet)
-5#-4#-3#-(0 to 1)#	0	Loss relay (Slave Cabinet)
-5#-4#-6#-(0 to 1)#	0	Alarm relay reset (Slave Cabinet)
-6#-(1 to 64)#-1#-(0 to 3)#	3	Trunk type
-6#-(1 to 64)#-2#-(0 to 2)#	0	DID/DNIS settings
-6#-(1 to 64)#-3#-(0 to 2)#	0	Outgoing type
-6#-(1 to 64)#-4#-(0 to 1)#	0	Incoming type
-6#-(1 to 64)#-5#-(0 to 2)#	0	Trunk mode
-6#-(1 to 64)#-6#-(0 to 1)#	1	Robbing bit setting
-6#-(1 to 64)#-7#-(0 to 1)#	1	Incoming dialing method
-6#-(1 to 64)#-8#-(0 to 1)#	0	Dial tone transmission
-6#-(1 to 64)#-9#-(0 to 1)#	0	Busy tone transmission
-6#-(1 to 64)#-10#-(0 to 1)#	0	Dial tone generation
-6#-(1 to 64)#-11#-(0 to 1)#	0	Ringback transmission
-7#-(0 to 9999)#-(10 to 69 or 100 to 699)#	-	DNIS number setting
FF1-8#-5#		**Alarm Counter**
-3#-3#-(0 to 9000)#	9000	Red alarm counter
FF1-8#-8#		**Dialing Assignment**
-7#-(0 to 9999)#-(10 to 69 or 100 to 699)#	0	DID dialing assignment

Appendix A

FF2 KEY - Trunk Programming

FF2-(01-64)#-	Default	Trunk Programming
-1#-(0 or 1)#	0	Denies trunk use
-2#-(0 or 1)#	0	Pulse or DTMF dial type
-3#-(0 or 1)#	1	Pooled-trunk-group access 9
-(4 to 9)#-(0 or 1)#	0	Pooled-trunk-group access 81 to 86
-10#-(1 or 2)#	1	Trunk type
-11#-(0 or 1)#	0	Enables DISA
-12#-(001 to 144)#	-	Private-line port number
-13#-(0 or 1)#	1	Automatic pause
-14#-(0 or 1)#	0	Dial-tone detection
-15#-(1 to 3)#	1	DTMF signal sending time
-16#-(0 or 1)#	0	Unsupervised conference (trunk capability)
-17#-(0 or 1 to 9)#	0	Incoming ring signal pattern
-18#-(0 or 1 to 15)#	7	Trunk disconnect timer
-19#-(HHMM)	-	DISA start time
-20#-(HHMM)	-	DISA end time
-21#-(0 to 2)#	0	Loop-start, ground-start or DID trunk card
-21#-(0 to 3)#	0	Trunk selection
-22#-(0 or 1)#	0	DID - Immediate or Wink start
-23#-(0 to 15)#	3	Wink-start timer
-24#-(0 or 1 to 15)#	4	Digit dial time-out
-25#-(0 to 15)#	5	DID interdigit dial time-out
-26#-(4 to 6 or 13)#	-	T1 port class - trunk

Appendix A

FF3 Key - Extension Programming

FF3-(001-144)#-	Default	Extension Port Specifications
-1#-(10 to 69/100 to 699)#	100 to 699	Extension number
-2#-(0 or 1 to 19)#	-	Telephone types
-3#-(001 to 144)#	-	EM/24 console station port number
-4#-(0 or 1)#	0	Forced LCR restriction
-5#-(0 or 1)#	0	Forced verified account code
-6#-(0000 to 9999)#	-	Station lockout code
-7#-(0 or 1)# **Ports 1 -**	1	CO-line off-hook signal for off-hook
Ports 2 to 144 -	0	voice announce
-8#-(0 or 1)#	1	Call waiting
-9#-(0 or 1)#	0	Busy override
-10#-(0 or 1)#	1	Busy overridden
-11#-(0 or 1)#	0	Prime-line pick up
-12#-(0 or 1)#	1	Automatic pickup for a ringing line
-13#-(0 or 1)#	0	Unsupervised conference (ext. capability)
-14#-(0 or 1)#	1	SMDR printout by incoming call
-15#-(0 or 1 to 4)#	2	CO off-hook signal volume
-16#-(0 or 1)#	0	CO off-hook signal pattern
-17#-(0 or 1)#	0	PSD name large-screen display (5 or 10)
-(18 to 25)#-(0 or 1)#	0	Sets extensions to page groups (00 to 07)
-26#-(0 or 1 to 24)#	0	Idle screen on the large-display phone
-27#-(0 or 1 to 24)#	0	IDT display on the large-screen phone
-28#-(0 or 1 to 24)#	0	IDT display on the large-screen phone
-29#-(0 or 1 to 24)#	0	CO-line display on display while dialing
-30#-(0 or 1 to 24)#	0	CO-line-call on large-screen after dialing
-31#-(0 or 1 to 24)#	0	Page-call display on large-screen phone
-32#-(0 or 1 to 24)#	0	Call-wait display on large-screen phone
-33#-(0 or 1 to 24)#	0	Intercom-busy-tone display on large-screen phone
-34#-(0 or 1)#	0	Extension-directory display on the large-screen phone (5 or 10 names)
-35#-(0000 to 9999)#	0000	DID outside extension number
-36#-(0 to 2)#	0	Ringback tone with busy signal
-37#-(1 to 3 or 7 to 13)#	-	T1 port class station
-38#-(0 or 1)#	0	SLT hook flash
-39#-(0 to 9)#	0	Extension ring pattern
-40#-(0 or 1)#	0	D-SLT handset volume level
-41#-(0001 to 9999)#	-	Auto set relocation codes
-42#-(0 to 3)#	0	Permanent call forward
-43#-(NN(N))	-	Permanent call forward extension
-44#-(0 or 1)#	-	ML/MCO Separation

Appendix A

FF4 KEY - Ring Assignment and Hunt Groups

FF4-1#-	Default	Incoming Ring Assignment
-(001 to 144)#-(01 to 64)#-(0 or 1)#		Daytime ring
Ports 1 & 2-	**1**	
Ports 3 to 144-	**0**	
FF4-1#-		**Hunt-Group Day Ring Tables**
-(151 to 158)#-(01 to 64)#-(0 or 1)#	**0**	Ring signal for pilot number and CO line
FF4-2#-		**Incoming CO-Line Call Table**
-(001 to 144)#-(01 to 64)#-(0 or 1)#		Nighttime ring
Ports 1 & 2-	**1**	
Ports 3 to 144-	**0**	
FF4-2#-		**Hunt-Group Night Tables**
-(151 to 158)#-(01 to 64)#-(0 or 1)#	**0**	Ring signal for pilot number and CO line
FF4-3#-(1 to 8)#-		**Hunt Groups**
-1#-(11 to 69/101 to 699)#	–	Pilot extension number
-2#-(0 to 2)#	**0**	Search method
-3#-(10 to 69/100 to 699)#	**000**	Transfer extension number
-4#-(2 to 32)#	**2**	Transfer timer
-(5 to 12)#-(11 to 69/101 to 699)#	–	Hunt-group extension numbers
FF4-4#-		**Call-Coverage Groups (16)**
-1#-(1 to 8)#-(10/69 to 100/699)#	–	First covering extension
-2#-(1 to 8)#-(10/69 to 100/699)#	–	Second covering extension
-(3 to 16)#-(1 to 8)#-(10/69 to 100/699)#	–	Other covering extensions
FF4-5#-		**Day Delayed-Ring Tables**
-(001 to 145)#-(01 to 64)#-(0 or 1)#	**0**	Daytime delayed-ring tables
FF4-5#-		**Hunt-Group Day Delayed Ring**
-151 to 158)#-(01 to 64)#-(0 or 1)#	**0**	Ring signal for pilot number and CO line

Appendix A

FF4 KEY - Ring Assignment and Hunt Groups

FF4-6#-		**Night Delayed-Ring Tables**
-(001 to 145)#-(01 to 64)#-(0 or 1)#	**0**	Night delayed-ring tables
FF4-6#-		**Hunt-Group Night-Delayed**
-(151 to 158)#-(01 to 64)#-(0 or 1)#	**0**	Signal for pilot number and CO line
FF4-7#-		**Extension Ring Tables**
-(001 to 144)#-(001 to 144)#-(0 or 1)#	**0**	Intercom ring signal
FF4-8#-		**Ext Delayed-Ring Tables**
-(001 to 144)#-(001 to 144)#-(0 or 1)#	**0**	Intercom ring signal

Reminder:

DEFAULTS	
Day/Night	**Ring**
Attendant	1
Extensions	0

Record changes to the ring default on the Extension Summary form and the Hunt group Tables form found elsewhere in this manual. An extension can only be a member of either a Hunt Group or a Coverage Group.

Appendix A

FF5 KEY - Flexible Feature Key Assignment

FF5-(001 to 144)#-	Extensions
-(01 to 24)#-CONF-(PROG-10 to 69/100 to 699)#	**EL keys**
OR	
-(01 to 24)#-CONF-(81 to 86, 89)#	**ML keys**

FF keys - (01 to 24)	Default
01 to 24	–

-(01 to 24)#-CONF-(PROG-PROG-6 digits)# **Any key**

OR *OR*

-(01 to 24)#-CONF-(6 digits)# **Pre-programmed codes**

(See FF-Key Code Chart)

FF keys - (01 to 24)	Default
01 to 24	–

Appendix A

FF5 KEY - Flexible Feature Key Assignment

FF5-(145 to 148)#- **DSS/72/BLF Consoles**

-(01 to 24)#-CONF-(81 to 86, 89)# **MCO keys**

FF keys - (01 to 24)	Default
01 to 24	–

OR

-(01 to 72)#-CONF-(PROG-10 to 69/100 to 699)# **DSS keys**

FF keys - (01 to 72)	Default
01 to 56- 57 to 64- 65 to 71- 72-	100 to 155 - Extensions 7500 to 7507 - Park hold #00 to #06 - Page zones #52 - Day/Night

-(01 to 72)#-CONF-(PROG-PROG-6 digits)# **Any key**

OR *OR*

-(01 to 72)#-CONF-(6 digits)# **Pre-programmed codes**

(See FF-Key Code Chart)

FF keys - (01 to 72)	Default
01 to 72	–

Appendix A

FF5 KEY - Flexible Feature Key Assignment

FF5-(149 to 152)#- **Attendant Consoles (4)**

-(01 to 08)#-CONF-(81 to 86, 89)# **MCO keys**

FF keys - (01 to 32)	Default
01 to 32	–

OR

-(01 to 32)#-CONF-(PROG-10 to 69/100 to 699)# **DSS keys**

FF keys - (01 to 32)	Default
01 to 12	–
13 to 14	7508 to 7509 - Park hold
15 to 16	–
17 to 20	7504 to 7507 - Park hold
21 to 24	7500 to 7503 - "
25 to 28	#04 to #07 - Page zones
29 to 32	#00 to #03 - "

-(01 to 32)#-CONF-(PROG-PROG-6 digits)# **Any key**

OR **OR**

-(01 to 32)#-CONF-(6 digits)# **Pre-programmed codes**

(See FF-Key Code Chart)

FF keys - (01 to 32)	Default
01 to 32	–

Appendix A

FF5 KEY Flexible-Feature Key Assignment

FF-KEY CODE CHART

FEATURES	PRE-PROGRAMMED CODES	FEATURES	PRE-PROGRAMMED CODES
✱ Absence Message	71	Intercom Transfer	CONF
✱ Account Code	FF12 (#) 7	Least-Cost Routing (LCR)	89
✱ Alarm	FF12 (#) 4	✱ Meet-Me Answer	77
Answer Key	FF11 (✱) 1	✱# Message Waiting (Set)	2
Attendant	0	Message Waiting (Answer)	AUTO REDIAL
✱ Background Music (BGM)	FF12 (#) 53	Message Waiting (Cancel)	AUTO FLASH
✱# Busy Override	4	Mute Key	✱ #
✱ Call Forward/All Calls	720	Night Key	FF12 (#) 52
✱ Call Forward/NoAns/Busy	721	✱ Page Groups	FF12 (#) (00 to 07)
✱ Call Forward/Busy	722	✱ Park-HOLD Key/Retrieve	75/76
Call Forward to CO Line	723	Personal Speed Dial (PSD)	AUTO (90 to 99)
✱ Call Forward/No Ans	724	✱ Pooled Trunk Access	(81 to 86, 89)
✱ Direct CO Access	88 (01 to 64)	Release Key	FF11(✱) 2
✱ Direct Pick Up	79	Save/Repeat Dial	AUTO ✱
✱ Do Not Distrub (DND)	73	Save/Repeat Store	AUTO AUTO ✱
DTMF Signal Conversion	✱ or #	✱ Station Lockout	74
Extensions (2-digits)	PROG 10 to 69	✱ System Speed Dial (SSD)	AUTO (00 to 89)
Extensions (3-digits)	PROG 100 to 699	Talk-Back Key	FF11(✱) 3
External Page Ringing	78	Trunk Ports (01 to 64)	(01 to 64)
✱ Group Pick Up	70	✱# Trunk Queuing	2
Headset Mode	FF12 (#) 51	✱ Universal Night Answer (UNA)	78
Intercom Dial Tone On/Off	FF12 (#) 50	✱# Voice Call/Tone Call	1
Intercom Key	FF12(#) 8		

✱ These features, in addition to **Call Waiting** and **Off-Hook Voice Announce**, can be stored on a One-Touch key.

✱# These features can be stored on a One-Touch key *only if* the feature code is preceded by either an **extension number** or code **88**.
For example, to store:
Busy Override - enter an **extension number** followed by code **4**.
Trunk Queuing - store as **88 (01-64)** followed by code **2**.

Also:

Station Lockout - If the feature code **74** is stored on a One-Touch key with the **four-digit ID code** (example: **741234**), the ID code will display *when the station is not locked out* by pressing **ON/OFF** and **CONF**.

Park HOLD - to park a call, press the **HOLD** key plus the **One-Touch key**.

To set T1 alarm keys: **ON/OFF-PROG-FF key-101#-HOLD**

Feature	Setting number for master KSU T1	Setting number for slave KSU T1
Out of frame abnormality	101#	121#
SLIP abnormality	102#	122#
Red alarm error abnormality	103#	123#
LOS(S) abnormality	104#	124#
SYN abnormality	105#	125#
Yellow alarm abnormality	107#	127#

Appendix A

FF6 KEY - Name Assignment

FF6-	Default	Name/Message (DSS Console)
-1#-(001 to 144)#-CONF-(10 char.)#	-	Extension name
-2#-(00 to 89)#-CONF-(16 characters)#	-	System speed dial name (00 to 89)
-3#-(001 to 144)#-(90 to 99)#-CONF -(16 characters)#	-	Personal speed dial name (90 to 99)
-4#-(5 to 9)#-CONF-(15 characters)#	-	Absence message numbers (5 to 9)
-5#-(01 to 64)#-CONF-(6 characters)#	-	CO-trunk-line name
-6#-(1 to 8)#-CONF-(10 characters)#	-	Hunt-group pilot name
-7#-(1 to 5)#-CONF-(15 characters)#	-	OHCA Answerback

FF7 KEY - Toll Restrictions

FF7-1#-	Default	Toll Restriction Setting
-1#-(0 or 1)#	**0**	TRS for international calls
-2#-(0 or 1)#	**1**	Dialing restriction/incoming calls
-3#-(1 to 15)#	-	Restriction/maximum digits dialed
-4#-(0 or 1)#	**0**	211 restriction
-5#-(0 or 1)#	**0**	311 restriction
-6#-(0 or 1)#	**0**	411 restriction
-7#-(0 or 1)#	**0**	511 restriction
-8#-(0 or 1)#	**0**	611 restriction
-9#-(0 or 1)#	**0**	711 restriction
-10#-(0 or 1)#	**0**	811 restriction
-11#-(0 or 1)#	**0**	911 restriction
-(12 to 16)#-(0 or 1)#	**1**	7-digit dial restriction/types (2 to 6)
FF7-2#-		**Area-Code Table**
-(3 to 6)#-(000 to 999)#-(0 or 1)#	-	Area code types (3 to 6)
FF7-3#-		**Office-Code Table**
-(3 to 6)#-(000 to 999)#-(0 or 1)#	-	Office-code types (3 to 6)
FF7-4#-		**Special Area Code Table**
-(1 to 4)#-(000 to 999)#	-	Special area codes (1 to 4)
FF7-5#-		**Special Office-Code Table**
-(1 to 4)#-(000 to 999)#-(0 or 1)#	-	Office codes (1 to 4)

Appendix A

FF7 KEY - Toll Restrictions

FF7-6#-	Default	7-Digit Restriction Table
-(1 to 50)#-(0000000 to 9999999)#	-	7-digit TRS codes (1 to 50)
FF7-7#-(001 to 144)#-		**Daytime TRS**
-(01 to 64)#-(0 to 7)#	7	Daytime TRS
-65#-(0 to 7)#	-	Daytime TRS (all extensions)
FF7-8#-(001 to 144)#-		**Nighttime TRS**
-(01 to 64)#-(0 to 7)#	7	Nighttime TRS
-65#-(0 to 7)#	-	Nighttime TRS (all extensions)
FF7-9#-		**Type Blocks for each Area Code**
-(1 to 4)#-(0 or 1)#	-	Type (3 to 6) Area Codes
-(5 to 8)#-(0 or 1)#	-	Type (3 to 6) Office Codes
-(9 to 12)#-(0 or 1)#	-	Type (3 to 6) Area/Office Codes
-(13 to 16)#-(0 or 1)#	-	Type (1 to 4) Special Area Codes for Office Codes

FF8 KEY - Least Cost Routing

FF8-1#-	Default	Area-Code Table
-(1 to 15)#-(000 to 999)#-(0 or 1)#	-	Time priority tables (1 to 15) LCR area codes (000 to 999)
FF8-2#-		**Office-Code Table**
-(1 to 15)#-(000 to 999)#-(0 or 1)#	-	Time priority tables (1 to 15) LCR office codes (000-999)
FF8-3#-		**Special Area-Code Table**
-(1 to 4)#-(000 to 999)#	-	Special area codes tables (1 to 4) Special area codes (000 to 999)
FF8-4#-		**Special Office-Code Table**
-(1 to 4)#-(1 to 15)#-(000 to 999)#-(0 or 1)#	-	Special office codes (1 to 4) Time-priority tables (1 to 15)
FF8-5#-		**Time-Priority Tables**
-(1 to 15)#-(1 to 48)#-(1 to 8)#	-	Time-priority tables (1 to 15) Time bands (1 to 48) LCR trunk groups (1 to 8)

Appendix A

FF8 KEY - Least Cost Routing

FF8-6#-	Default	Trunk-Group Tables
-(1 to 8)#-(1 to 8)#-(01 to 64)#	-	LCR trunk groups (1 to 8)

FF8-7#-		Dial-Delete Table (LCR)
-(1 to 8)#-(16 digits)#	-	Dial-delete tables (1 to 8)

FF8-8#-		Dial-Add Table (LCR)
-(1 to 8)#-(16 digits)#	-	Dial-add tables (1 to 8)

FF9 KEY - Copy Mode

FF9-	Default	Copy Mode
-1#-(01 to 64)#-(01 to 64)##	-	Copy trunk mode
-2#-(001 to 144)#-(001 to 144)##	-	Copy extension mode
-3#-(001 to 144)#-(001 to 144)##	-	Copy FF key mode

FF10 KEY - System Speed Dialing

FF10-	Default	Speed Dialing
-1#-(00 to 89)#-(16 digits)#	-	System speed dial -
-1#-(001 to 144)#-(90 to 99)#-(16 digits)#	-	Personal speed dial -

Pocket-Sized List of Programming Addresses

FF 1 KEY - System Programming		
FF1-1#-	**Default**	**Calendar and Time**
-1#-(MMDDYY)#	-	Date (01 to 12) (01 to 31) (00 to 99)
-2#-(HHMM)#	-	Time (0000 to 2359)
FF1-2#-1#-		**Timers and Displays**
-1#-(0 or 1)#	1	Call duration display
-2#-(0 to 2)#	0	SMDR timer 5, 16 or 30 seconds
-3#-(0 or 1)#	0	Least-Cost Routing (LCR)
-4#-(00 to 89)#	-	TRS for SSD
-5#-(0 or 1)#	0	Display during SSD
-6#-(0 or 1)#	1	AUTO-FLASH REDIAL
-7#-(0 or 1)#	1	One-touch dialing
-8#-(0 or 1)#	1	On-hook transfer
-9#-(0 or 1)#	0	Key bank hold
-10#-(0 or 1)#	1	Non-appearance CO-line hold
-11#-(0 or 1)#	1	SLT FLASH control
-12#-(0 or 1)##	1	Sets number of extension -digits
-14#-(0 or 1)#	1	Attendant intercom
-15#-(0 or 1)#	1	Extension intercom
-16#-(0 or 1)#	1	Splash tone on a voice call
-17#-(0 or 1)#	0	Splash tone on a busy override
-18#-(0 or 1)#	1	Area code or 1+Area Code
-19#-(0 or 1)#	0	SSD display mode
-21#-(0 or 1)#	0	Voice-mail busy tone
-22#-(0 or 1 to 15)#	8	Attendant overflow
-23#-(0 or 1)#	0	Delayed-ring capability
-24#-(11 to 69/101 to 699)#	101	Second attendant
-25#-(11 to 69/101 to 699)#	-	Third attendant
-26#-(11 to 69/101 to 699)#	-	Fourth attendant
-27#-(11 to 69/101 to 699)#	-	Attendant transfer ext. number
-28#-(0 or 1)#	1	Attendant override switch
-29#-(0 or 1)#	1	Alarm LED mode
-30#-(0 or 1)#	0	BLF (extension) delayed ring
-31#-(0 to 6)#	0	Analog port transfer ring interval
-32#-(0 to 1)#	0	DID/DNIS emulation
-32#-(0 or 1)#	0	Multiple DID
-33#-(0 or 1)#	0	Paging duration
-34#-(0 or 1)#	0	SLT DISA ringing pattern
FF1-2#-2#-		**SMDR and Data**
-1#-(0 or 1)#	1	SMDR parity check
-2#-(0 or 1)#	1	SMDR parity type
-3#-(1 to 4)#	(A)2 & 4(B)	SMDR baud rate
-4#-(1 to 3)#	1	SMDR stop-bit length
-5#-(1 to 4)#	4	SMDR data length
-6#-(0 or 1)#	1	SMDR printing mode 1
-7#-(0 or 1)#	1	SMDR printing mode 2 (long/local)
-8#-(0 or 1)#	0	SMDR printing mode 3 (LCR)

Pocket-Sized List of Programming Addresses

FF 1 KEY - System Programming		
FF1-2#-2#-	**Default**	**SMDR and Data**
-9#-(0 or 1)#	0	Dump data mode (Xon/Xoff)
-10#-(0 or 1)#	1	RAI baud rate switch
FF1-2#-3#-		**PBX Access and Pauses**
-(1 to 8)#-(00 to 99) or (0k to 9k)#	-	PBX access code (00 to 99) or (0k to 9k)
-(9 to 18)#-(1 to 3)# **See FF2-13#**	-	Automatic pause after dialing (0 to 9)
FF1-2#-4#-		**UNA and EPI**
-1#-(0 or 1)# **See FF4-1#. 2#**	0	Universal Night Answer (UNA) ring pattern
-(2 to 9)#-(0 or 1)#	0	External Page Interface (EPI) groups (00 to 07)
FF1-2#-5#-		**COS**
-(1 to 8)#-(1 to 20)#-(0 or 1)#	0	Class of Service setting
FF1-2#-6#-		**Account Codes**
-(1 to 100)#-1#-(0001-9999)#	-	Verified Forced Account Codes
-(1 to 100)#-2#-(0 to 7)#	0	Verified Forced Account Code toll restriction
FF1-3#-		**System Timers/Night Switch/Conf.**
-1#-(0000 to 2359)#	-	Automatic switch to night mode
-2#-(0 or 1 to 12)#	1	Attendant HOLD-recall timer
-3#-(0 or 1 to 12)#	7	Extension HOLD-recall timer
-4#-(0 or 1 to 12)#	1	Attendant transfer-recall timer
-5#-(0 or 1 to 12)#	7	Extension transfer-recall timer
-6#-(0 or 1 to 12)#	1	Attendant Hunt-Group recall timer
-7#-(0 or 1 to 12)#	7	Extension Hunt-Group recall timer
-8#-(0 or 1 to 12)#	1	Attendant park-hold recall timer
-9#-(0 or 1 to 12)#	7	Extension park-hold recall timer
-10#-(0 or 1 to 12)#	9	Attendant reversion timer
-11#-(0 or 1 to 15)#	2	Unsupervised conference talk time
-12#-(0 or 1 to 15)#	7	Automatic pause timer
-13#-(0 or 1 to 10)#	9	CO-line FLASH timer
-14#-(0 or 1 to 6)#	4	SLT on-hook FLASH
-15#-(0 to 3)#	1	Incoming ring timer
-16#-(0 or 1 to 15)#	7	Ring signal delay timer
-17#-(0 to 15)#	1	Dial pause timer
-18#-(0 or 1 to 10)#	7	PBX FLASH timer
-19#-(0 to 15)#	2	Call forward/no answer timer
-20#-(0 or 1 to 8)#	4	Outbound ground detection timer
-21#-(0 or 1 to 8)#	4	Incoming ground detection timer
-22#-(0 or 1 to 12)#	1	Attendant intercom HOLD-recall timer

Pocket-Sized List of Programming Addresses

FF 1 KEY - System Programming

FF1-3#-	Default	System Timers/Night Switch/Conf.
-23#-(0 or 1 to 12)#	7	Extension intercom HOLD-recall timer
-24#-(0 or 1 to 12)#	1	Attendant intercom transfer-recall timer
-25#-(0 or 1 to 12)#	7	Extension intercom transfer-recall timer
-26#-(0 to 15)#	2	CO delayed ringing timer
-27#-(0 to 15)#	2	EXT. delayed ringing timer
-28#-(0 to 15)#	2	Hunt Group no answer
-29#-(HHMM)#	-	Auto Day Mode
FF1-4#-		**Remote Maintenance Code**
-(4 digits)#	9999	Set four digits Also used with DISA
FF1-5#-		**DISA ID Code**
-(4 digits)#	-	Set four digits See FF2-11#, 19#, 20#
FF1-6#-		**DISA Code for Outgoing Calls**
-1#-(0000 to 9999)#	1111	Code 1, set four digits **See FF2-11#,19#,20#**
-2#-(0000 to 9999)#	9999	Code 2, set four digits **See FF2-11#,19#,20#**
FF1-7#-		**System Programming ID Code**
-(4 digits)#	9999	Set four digits
FF1-8#-1#		**DID**
-(0 or 1)#	0	DID reset
-(0 to 1)#	0	DID/T1 reset
FF1-8#-2#		**DID Confirm**
-(0 or 1)#	0	Confirmation of DID reset
FF1-8#-4#		**Sync sources/System Timers**
-1#-1#-(0 to 8)#	0	System size
-1#-2#-(1 to 3)#	3	Sync setting for first sync source
-1#-3#-(0 to 3)#	0	Sync setting for second sync source
-1#-4#-(0 to 3)#	0	Sync setting for third sync source
-2#-1#-(0 to 25)#	25	Network sync source recovery timer
-2#-2#-(0 to 15)#	1	Disconnect timer

Pocket-Sized List of Programming Addresses

FF 1 KEY - System Programming

FF1-8#-4#	Default	Sync sources/System Timers
-2#-3#-(0 to 15)#	3	Guard timer
-2#-4#-(0 to 15)#	9	Release acknowledge timer
-2#-5#-(0 to 15)#	2	Outpulse delay timer
-2#-6#-(0 to 15)#	15	Wink signal start detection timer
-2#-7#-(0 to 15)#	7	Debounce timer
-2#-8#-(0 to 15)#	11	Incoming detection timer
-2#-9#-(0 to 15)#	14	Glare timer - immediate start
-2#-10#-(0 to 15)#	14	Glare timer - wink start
-3#-3#-(0 to 9000)#	9000	Red alarm counter (Master Cabinet)
-3#-(1 to 8)#-(1 to 8)#-(0 to 30)#	-	Digital pads (loss/gain settings)
-4#-1#-1#-(0 to 1)#	0	Trunk class (Master Cabinet)
-4#-1#-2#-(0 to 24)#	0	Number of channels used (Master Cabinet)
-4#-1#-3#-(0 to 1)#	1	Framing format (Master Cabinet)
-4#-1#-4#-(0 to 1)#	0	Line coding format (Master Cabinet)
-4#-1#-5#-(0 to 1)#	0	Oper mode during alarm cond (Master Cab)
-4#-1#-6#-(0 to 1)#	0	Remote loopback detection (Master Cabinet)
-4#-1#-7#-(0 to 1)#	1	Yellow alarm notification (Master Cabinet)
-4#-2#-1#-(0 to 15)#	1	Red alarm detection timer (Master Cabinet)
-4#-2#-2#-(0 to 15)#	1	Red alarm recovery det timer (Master Cabinet)
-4#-2#-3#-(0 to 15)#	1	Yellow alarm detection timer (Master Cabinet)
-4#-2#-4#-(0 to 15)#	1	Yellow alarm recov det timer (Master Cabinet)
-4#-2#-5#-(0 to 15)#	1	Other alarms detection timer (Master Cabinet)
-4#-2#-6#-(0 to 15)#	1	Other alarms recov det timer (Master Cabinet)
-4#-3#-1#-(0 to 9000)#	9000	Frame loss counter (Master Cabinet)
-4#-3#-2#-(0 to 9000)#	9000	Slip counter (Master Cabinet)
-4#-3#-3#-(0 to 1)#	1	Red alarm notification (Master Cabinet)
-4#-3#-4#-(0 to 9000)#	9000	Signal loss counter (Master Cabinet)
-4#-3#-5#-(0 to 9000)#	9000	Sync-loss counter (Master Cabinet)
-4#-3#-6#-(0 to 9000)#	9000	Yellow alarm counter (Master Cabinet)
-(4 or 5)#-4#-1#-(0 to 1)#	0	Yellow alarm relay control
-(4 or 5)#-4#-2#-(0 to 1)#	0	Red alarm relay control
-4#-4#-3#-(0 to 1)#	0	Out of sync (Master Cabinet)
-(4 or 5)#-4#-4#-(0 to 1)#	0	Frame loss
-(4 or 5)#-4#-5#-(0 to 1)#	0	Alarm indication signal detection
-4#-4#-6#-(0 to 1)#	0	Alarm relay recovery mode (Master Cabinet)
-5#-1#-1#-(0 to 1)#	0	Trunk class (Slave Cabinet)
-5#-1#-2#-(0 to 24)#	0	Number of channels used (Slave Cabinet)
-5#-1#-3#-(0 to 1)#	1	Framing format (Slave Cabinet)

Pocket-Sized List of Programming Addresses

FF 1 KEY - System Programming

FF1-8#-4#	Default	Sync sources/System Timers
-5#-1#-4#-(0 to 1)#	0	Line coding format (Slave Cabinet)
-5#-1#-5#-(0 to 1)#	0	Oper mode during alarm cond (Slave Cabinet)
-5#-1#-6#-(0 to 1)#	0	Remote loopback detection (Slave Cabinet)
-5#-1#-7#-(0 to 1)#	1	Yellow alarm notification (Slave Cabinet)
-5#-2#-1#-(0 to 15)#	1	Red alarm detection timer (Slave Cabinet)
-5#-2#-2#-(0 to 15)#	1	Red alarm recovery det timer (Slave Cabinet)
-5#-2#-3#-(0 to 15)#	1	Yellow alarm detection timer (Slave Cabinet)
-5#-2#-4#-(0 to 15)#	1	Yellow alarm recov det timer (Slave Cabinet)
-5#-2#-5#-(0 to 15)#	1	Other alarms detection timer (Slave Cabinet)
-5#-2#-6#-(0 to 15)#	1	Other alarms recov det timer (Slave Cabinet)
-5#-3#-1#-(0 to 9000)#	9000	Frame loss counter (Slave Cabinet)
-5#-3#-2#-(0 to 9000)#	9000	Slip counter (Slave Cabinet)
-5#-3#-3#-(0 to 1)#	1	Red alarm notification (Slave Cabinet)
-5#-3#-4#-(0 to 9000)#	9000	Signal loss counter (Slave Cabinet)
-5#-3#-5#-(0 to 9000)#	9000	Sync-loss counter (Slave Cabinet)
-5#-3#-6#-(0 to 9000)#	9000	Yellow alarm counter (Slave Cabinet)
-5#-4#-3#-(0 to 1)#	0	Out of sync (Slave Cabinet)
-5#-4#-6#-(0 to 1)#	0	Alarm recovery mode (Slave Cabinet)
-6#-(1 to 64)#-1#-(0 to 3)#	3	Trunk type
-6#-(1 to 64)#-2#-(0 to 2)#	0	DID/DNIS settings
-6#-(1 to 64)#-3#-(0 to 2)#	0	Outgoing signaling class
-6#-(1 to 64)#-4#-(0 to 1)#	0	Incoming signaling class
-6#-(1 to 64)#-5#-(0 to 2)#	0	Trunk mode
-6#-(1 to 64)#-6#-(0 to 1)#	1	ABCD inband signaling
-6#-(1 to 64)#-7#-(0 to 1)#	1	Incoming dialing method
-6#-(1 to 64)#-8#-(0 to 1)#	0	Dial tone transmission
-6#-(1 to 64)#-9#-(0 to 1)#	0	Busy tone transmission
-6#-(1 to 64)#-10#-(0 to 1)#	0	Dial tone generation
-6#-(1 to 64)#-11#-(0 to 1)#	0	Ringback transmission
-7#-(0 to 9999)#-(10 to 69 or 100 to 699)#	-	DNIS dialing assignment
FF1-8#-5#		**Alarm Counter**
-3#-3#-(0 to 9000)#	9000	Red alarm counter
FF1-8#-8#		**Dialing Assignment**
-7#-(0 to 9999)#-(10 to 69 or 100 to 699)#	0	DID dialing assignment

Pocket-Sized List of Programming Addresses

FF2 KEY - Trunk Programming

FF2-(01-64)#-	Default	Trunk Programming
-1#-(0 or 1)#	0	Denies trunk use
-2#-(0 or 1)#	0	Pulse or DTMF dial type
-3#-(0 or 1)#	1	Pooled-trunk-group access 9
-(4 to 9)#-(0 or 1)#	0	Pooled-trunk-group access 81 to 86
-10#-(1 or 2)#	1	Trunk type
-11#-(0 or 1)#	0	Enables DISA
-12#-(001 to 144)#	-	Private-line port number
-13#-(0 or 1)#	1	Automatic pause
-14#-(0 or 1)#	0	Dial-tone detection
-15#-(1 to 3)#	1	DTMF signal sending time
-16#-(0 or 1)#	0	Unsupervised conference (trunk capability)
-17#-(0 or 1 to 9)#	0	Incoming ring signal pattern
-18#-(0 or 1 to 15)#	7	Trunk disconnect timer
-19#-(HHMM)	-	DISA start time
-20#-(HHMM)	-	DISA end time
-21#-(0 to 2)#	0	Loop-start, ground-start or DID trunk card
-21#-(0 to 3)#	0	Trunk selection
-22#-(0 or 1)#	0	DID - Immediate or Wink start
-23#-(0 to 15)#	3	Wink-start timer
-24#-(0 or 1 to 15)#	4	Digit dial time-out
-25#-(0 to 15)#	5	DID interdigit dial time-out
-28#-(4 to 6 or 13)#	-	T1 port class - trunk

Pocket-Sized List of Programming Addresses

FF3 Key - Extension Programming

FF3-(001-144)#-	Default	Extension Port Specifications
-1#-(10 to 69/100 to 699)#	100 to 699	Extension number
-2#-(0 or 1 to 19)#	-	Telephone types
-3#-(001 to 144)#	-	EM/24 console station port number
-4#-(0 or 1)#	0	Forced LCR restriction
-5#-(0 or 1)#	0	Forced verified account code
-6#-(0000 to 9999)#	-	Station lockout code
-7#-(0 or 1)# Ports 1 -	1	CO-line off-hook signal for off-hook voice announce
Ports 2 to 144 -	0	
-8#-(0 or 1)#	1	Call waiting
-9#-(0 or 1)#	0	Busy override
-10#-(0 or 1)#	1	Busy overridden
-11#-(0 or 1)#	0	Prime-line pick up
-12#-(0 or 1)#	1	Automatic pickup for a ringing line
-13#-(0 or 1)#	0	Unsupervised conference (ext. capability)
-14#-(0 or 1)#	1	SMDR printout by incoming call
-15#-(0 or 1 to 4)#	2	CO off-hook signal volume
-16#-(0 or 1)#	0	CO off-hook signal pattern
-17#-(0 or 1)#	0	PSD name large-screen display (5 or 10)
-(18 to 25)#-(0 or 1)#	0	Sets extensions to page groups (00 to 07)
-26#-(0 or 1 to 24)#	0	Idle screen on the large-display phone
-27#-(0 or 1 to 24)#	0	IDT display on the large-screen phone
-28#-(0 or 1 to 24)#	0	IDT display on the large-screen phone
-29#-(0 or 1 to 24)#	0	CO-line display on display while dialing
-30#-(0 or 1 to 24)#	0	CO-line-call on large-screen after dialing
-31#-(0 or 1 to 24)#	0	Page-call display on large-screen phone
-32#-(0 or 1 to 24)#	0	Call-wait display on large-screen phone
-33#-(0 or 1 to 24)#	0	Intercom-busy-tone display on large-screen phone
-34#-(0 or 1)#	0	Extension-directory display on the large-screen phone (5 or 10 names)
-35#-(0000 to 9999)#	0000	DID outside extension number
-36#-(0 to 2)#	0	Ringback tone with busy signal
-37#-(1 to 3 or 7 to 13)#	-	T1 port class station
-38#-(0 or 1)#	0	SLT hook flash
-39#-(0 to 9)#	0	Extension ring pattern
-40#-(0 or 1)#	0	D-SLT handset volume level
-41#-(0001 to 9999)#	-	Auto set relocation codes
-42#-(0 to 3)#	0	Permanent call forward
-43#-(NN[N])	-	Permanent call forward extension
-44#-(0 or 1)#	-	ML/MCO Separation

Pocket-Sized List of Programming Addresses

FF4 KEY - Ring Assignment and Hunt Groups

FF4-1#-	Default	Incoming Ring Assignment
-(001 to 144)#-(01 to 64)#-(0 or 1)#		Daytime ring
Ports 1 & 2-	1	
Ports 3 to 144-	0	
FF4-1#-		**Hunt-Group Day Ring Tables**
-(151 to 158)#-(01 to 64)#-(0 or 1)#	0	Ring signal for pilot number and CO line
FF4-2#-		**Incoming CO-Line Call Table**
-(001 to 144)#-(01 to 64)#-(0 or 1)#		Nighttime ring
Ports 1 & 2-	1	
Ports 3 to 144-	0	
FF4-2#-		**Hunt-Group Night Tables**
-(151 to 158)#-(01 to 64)#-(0 or 1)#	0	Ring signal for pilot number and CO line
FF4-3#-(1 to 8)#-		**Hunt Groups**
-1#-(11 to 69/101 to 699)#	–	Pilot extension number
-2#-(0 to 2)#	0	Search method
-3#-(10 to 69/100 to 699)#	000	Transfer extension number
-4#-(2 to 32)#	2	Transfer timer
-(5 to 12)#-(11 to 69/101 to 699)#	–	Hunt-group extension numbers
FF4-4#-		**Call-Coverage Groups (16)**
-1#-(1 to 8)#-(10/69 to 100/699)#	–	First covering extension
-2#-(1 to 8)#-(10/69 to 100/699)#	–	Second covering extension
-(3 to 16)#-(1 to 8)#-(10/69 to 100/699)#	–	Other covering extensions
FF4-5#-		**Day Delayed-Ring Tables**
-(001 to 145)#-(01 to 64)#-(0 or 1)#	0	Daytime delayed-ring tables
FF4-5#-		**Hunt-Group Day Delayed Ring**
-151 to 158)#-(01 to 64)#-(0 or 1)#	0	Ring signal for pilot number and CO line

Pocket-Sized List of Programming Addresses

FF4 KEY - Ring Assignment and Hunt Groups

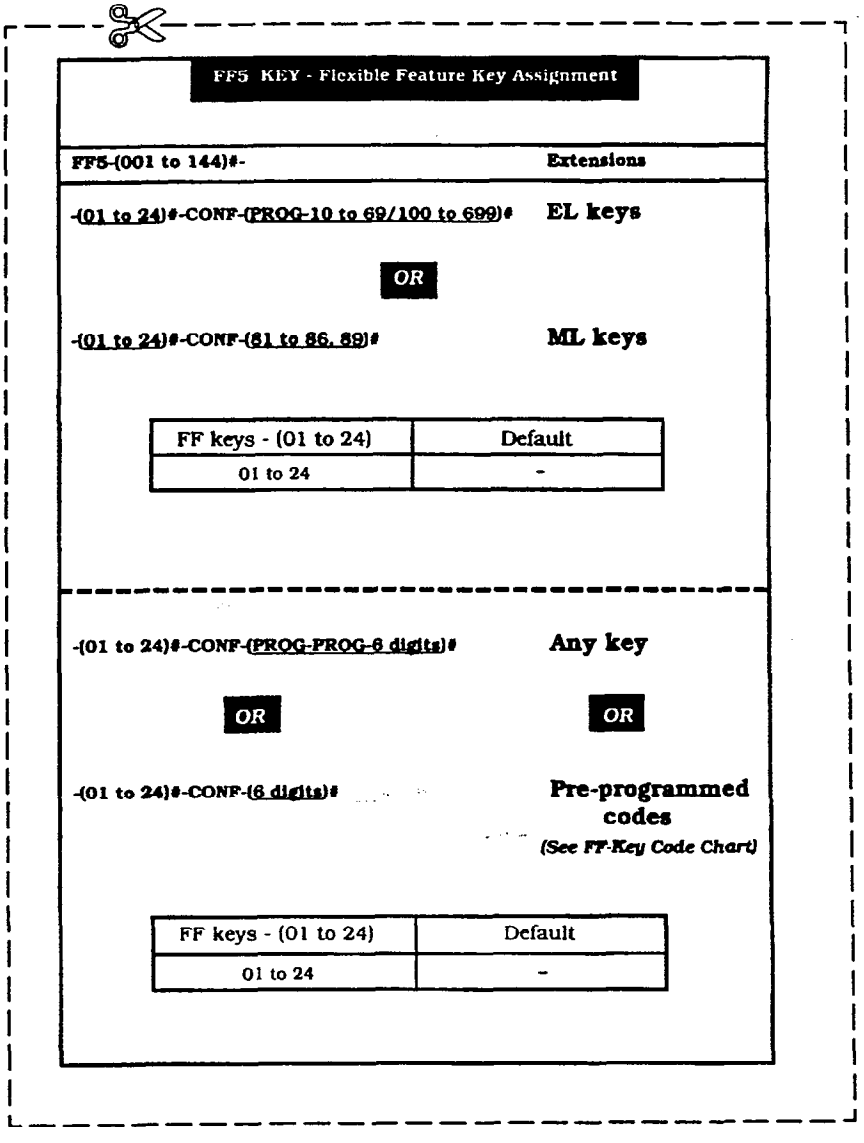
FF4-6#-		**Night Delayed-Ring Tables**
-(001 to 145)#-(01 to 64)#-(0 or 1)#	0	Night delayed-ring tables
FF4-6#-		**Hunt-Group Night-Delayed**
-(151 to 158)#-(01 to 64)#-(0 or 1)#	0	Signal for pilot number and CO line
FF4-7#-		**Extension Ring Tables**
-(001 to 144)#-(001 to 144)#-(0 or 1)#	0	Intercom ring signal
FF4-8#-		**Ext Delayed-Ring Tables**
-(001 to 144)#-(001 to 144)#-(0 or 1)#	0	Intercom ring signal

Reminder:

DEFAULTS	
Day/Night	**Ring**
Attendant	1
Extensions	0

Record changes to the ring default on the Extension Summary form and the Hunt group Tables form found elsewhere in this manual. An extension can only be a member of either a Hunt Group or a Coverage Group.

Pocket-Sized List of Programming Addresses



FF5 KEY - Flexible Feature Key Assignment

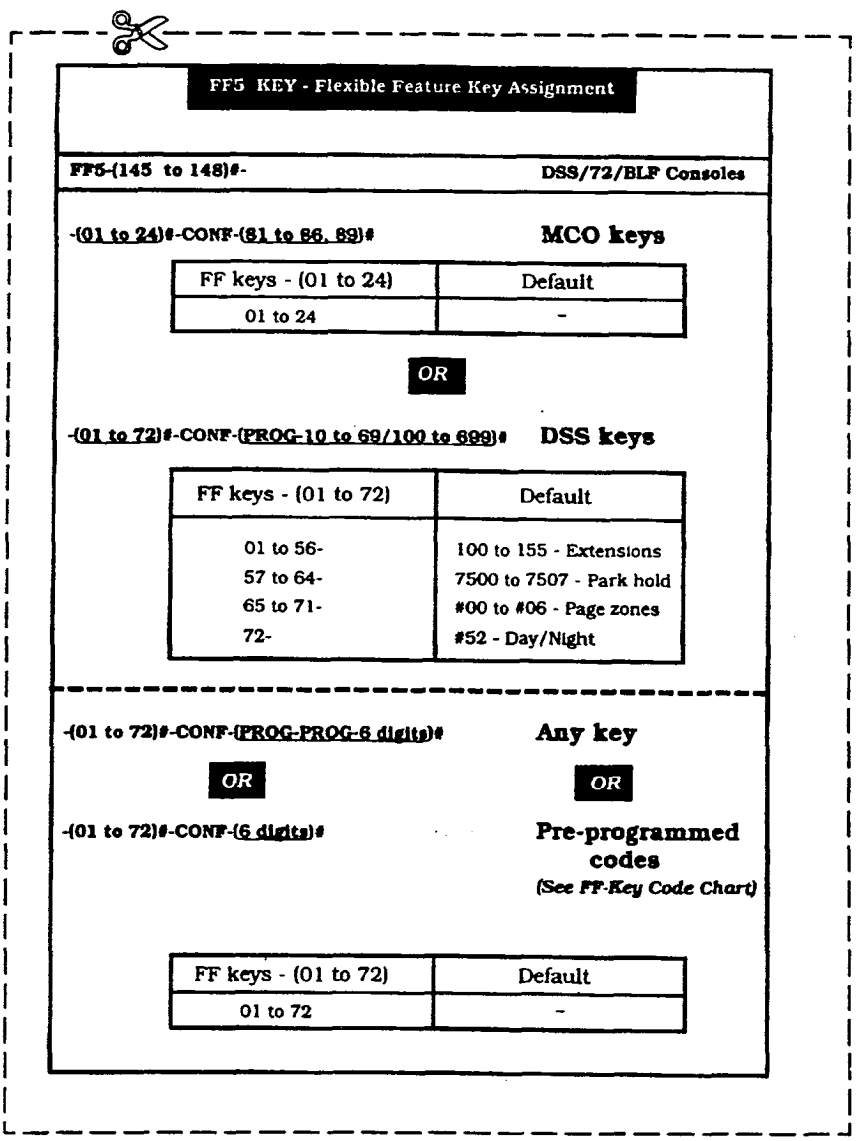
FF5-(001 to 144)#-	Extensions
-(01 to 24)#-CONF-(PROG-10 to 69/100 to 699)#	EL keys
OR	
-(01 to 24)#-CONF-(81 to 86, 89)#	ML keys

FF keys - (01 to 24)	Default
01 to 24	-

-(01 to 24)#-CONF-(PROG-PROG-6 digits)#	Any key	
OR	OR	
-(01 to 24)#-CONF-(6 digits)#	Pre-programmed codes *(See FF-Key Code Chart)*	

FF keys - (01 to 24)	Default
01 to 24	-

Pocket-Sized List of Programming Addresses



FF5 KEY - Flexible Feature Key Assignment

FF5-(145 to 148)#- **DSS/72/BLF Consoles**

-(01 to 24)#-CONF-(81 to 86, 89)# **MCO keys**

FF keys - (01 to 24)	Default
01 to 24	-

OR

-(01 to 72)#-CONF-(PROG-10 to 69/100 to 699)# **DSS keys**

FF keys - (01 to 72)	Default
01 to 56- 57 to 64- 65 to 71- 72-	100 to 155 - Extensions 7500 to 7507 - Park hold #00 to #06 - Page zones #52 - Day/Night

-(01 to 72)#-CONF-(PROG-PROG-6 digits)# **Any key**

OR **OR**

-(01 to 72)#-CONF-(6 digits)# **Pre-programmed codes**

(See FF-Key Code Chart)

FF keys - (01 to 72)	Default
01 to 72	-

Pocket-Sized List of Programming Addresses

FF5 KEY - Flexible Feature Key Assignment

FF5-(149 to 152)#- **Attendant Consoles (4)**

-(01 to 08)#-CONF-(81 to 86, 89)# **MCO keys**

FF keys - (01 to 32)	Default
01 to 32	-

OR

-(01 to 32)#-CONF-(PROG-10 to 69/100 to 699)# **DSS keys**

FF keys - (01 to 32)	Default
01 to 12	
13 to 14	7508 to 7509 Park hold
15 to 16	-
17 to 20	7504 to 7507 Park hold
21 to 24	7500 to 7503 - "
25 to 28	#04 to #07 - Page zones
29 to 32	#00 to #03 - "

-(01 to 32)#-CONF-(PROG-PROG-6 digits)# **Any key**

OR **OR**

-(01 to 32)#-CONF-(6 digits)# **Pre-programmed codes**

(See FF-Key Code Chart)

FF keys - (01 to 32)	Default
01 to 32	-

Pocket-Sized List of Programming Addresses

FF5 KEY Flexible-Feature Key Assignment

FF-KEY CODE CHART

FEATURES	PRE-PROGRAMMED CODES	FEATURES	PRE-PROGRAMMED CODES
✱ Absence Message	71	Intercom Transfer	CONF
✱ Account Code	FF12 (✱) 7	Least Cost Routing (LCR)	89
✱ Alarm	FF12 (✱) 4	✱ Meet-Me Answer	77
Answer Key	FF11 (✱) 1	✱ # Message Waiting (Set)	2
Attendant	0	Message Waiting (Answer)	AUTO REDIAL
✱ Background Music (BGM)	FF12 (✱) 53	Message Waiting (Cancel)	AUTO FLASH
✱ # Busy Override	4	Mute Key	✱ #
✱ Call Forward/All Calls	720	Night Key	FF12 (✱) 52
✱ Call Forward/NoAns/Busy	721	✱ Page Groups	FF12 (✱) (00 to 07)
✱ Call Forward/Busy	722	✱ Park-HOLD Key/Retrieve	75/76
Call Forward to CO Line	723	Personal Speed Dial (PSD)	AUTO (90 to 99)
✱ Call Forward/No Ans	724	✱ Pooled Trunk Access	(81 to 86, 89)
✱ Direct CO Access	88 (01 to 64)	Release Key	FF11(✱) 2
✱ Direct Pick Up	79	Save/Repeat Dial	AUTO ✱
✱ Do Not Distrub (DND)	73	Save/Repeat Store	AUTO AUTO ✱
DTMF Signal Conversion	✱ or #	✱ Station Lockout	74
Extensions (2-digits)	PROG 10 to 69	✱ System Speed Dial (SSD)	AUTO (00 to 89)
Extensions (3-digits)	PROG 100 to 699	Talk-Back Key	FF11(✱) 3
External Page Ringing	78	Trunk Ports (01 to 64)	(01 to 64)
✱ Group Pick Up	70	✱ # Trunk Queuing	2
Headset Mode	FF12 (✱) 51	✱ Universal Night Answer (UNA)	78
Intercom Dial Tone On/Off	FF12 (✱) 50	✱ # Voice Call/Tone Call	1
Intercom Key	FF12(✱) 8		

✱ These features, in addition to Call Waiting and Off-Hook Voice Announce, can be stored on a One-Touch key.

✱ # These features can be stored on a One-Touch key only if the feature code is preceded by either an extension number or code 88. For example, to store:
Busy Override - enter an extension number followed by code 4
Trunk Queuing - store as 88 (81-44) followed by code 2

Also:

Station Lockout - if the feature code 74 is stored on a One-Touch key with the four-digit ID code (example: 741234), the ID code will display when the station is not locked out by pressing ON/OFF and CONF

Park HOLD - to park a call, press the HOLD key plus the One-Touch key

To set T1 alarm bags: ON/OFF-PROG-FF key-1016-HOLD

Feature	Setting number for master KSU T1	Setting number for slave KSU T1
Out of frame abnormality	1018	1218
SLIP abnormality	1028	1228
Red alarm error abnormality	1038	1238
LOS/SI abnormality	1048	1248
STF abnormality	1054	1254
Yellow alarm abnormality	1078	1278

Pocket-Sized List of Programming Addresses

FF6 KEY - Name Assignment

FF6-	Default	Name/Message (DSS Console)
-1#-(001 to 144)#-CONF-(10 char.)#	-	Extension name
-2#-(00 to 89)#-CONF-(16 characters)#	-	System speed dial name (00 to 89)
-3#-(001 to 144)#-(90 to 99)#-CONF -(16 characters)#	-	Personal speed dial name (90 to 99)
-4#-(5 to 9)#-CONF-(15 characters)#	-	Absence message numbers (5 to 9)
-5#-(01 to 64)#-CONF-(6 characters)#	-	CO-trunk-line name
-6#-(1 to 8)#-CONF-(10 characters)#	-	Hunt-group pilot name
-7#-(1 to 5)#-CONF-(15 characters)#	-	OHCA Answerback

FF7 KEY - Toll Restrictions

FF7-1#-	Default	Toll Restriction Setting
-1#-(0 or 1)#	0	TRS for international calls
-2#-(0 or 1)#	1	Dialing restriction/incoming calls
-3#-(1 to 15)#	-	Restriction/maximum digits dialed
-4#-(0 or 1)#	0	211 restriction
-5#-(0 or 1)#	0	311 restriction
-6#-(0 or 1)#	0	411 restriction
-7#-(0 or 1)#	0	511 restriction
-8#-(0 or 1)#	0	611 restriction
-9#-(0 or 1)#	0	711 restriction
-10#-(0 or 1)#	0	811 restriction
-11#-(0 or 1)#	0	911 restriction
-(12 to 16)#-(0 or 1)#	1	7-digit dial restriction/types (2 to 6)

FF7-2#-		Area-Code Table
-(3 to 6)#-(000 to 999)#-(0 or 1)#	-	Area code types (3 to 6)

FF7-3#-		Office-Code Table
-(3 to 6)#-(000 to 999)#-(0 or 1)#	-	Office-code types (3 to 6)

FF7-4#-		Special Area Code Table
-(1 to 4)#-(000 to 999)#	-	Special area codes (1 to 4)

FF7-5#-		Special Office-Code Table
-(1 to 4)#-(000 to 999)#-(0 or 1)#	-	Office codes (1 to 4)

Pocket-Sized List of Programming Addresses

FF7 KEY - Toll Restrictions		
FF7-6#-	**Default**	**7-Digit Restriction Table**
-(1 to 50)#-(0000000 to 9999999)#	-	7-digit TRS codes (1 to 50)
FF7-7#-(001 to 144)#-		**Daytime TRS**
-(01 to 64)#-(0 to 7)#	7	Daytime TRS
-65#-(0 to 7)#	-	Daytime TRS (all extensions)
FF7-8#-(001 to 144)#-		**Nighttime TRS**
-(01 to 64)#-(0 to 7)#	7	Nighttime TRS
-65#-(0 to 7)#	-	Nighttime TRS (all extensions)
FF7-9#-		**Type Blocks for each Area Code**
-(1 to 4)#-(0 or 1)#	-	Type (3 to 6) Area Codes
-(5 to 8)#-(0 or 1)#	-	Type (3 to 6) Office Codes
-(9 to 12)#-(0 or 1)#	-	Type (3 to 6) Area/Office Codes
-(13 to 16)#-(0 or 1)#	-	Type (1 to 4) Special Area Codes for Office Codes

FF8 KEY - Least Cost Routing		
FF8-1#-	**Default**	**Area-Code Table**
-(1 to 15)#-(000 to 999)#-(0 or 1)#	-	Time priority tables (1 to 15) LCR area codes (000 to 999)
FF8-2#-		**Office-Code Table**
-(1 to 15)#-(000 to 999)#-(0 or 1)#	-	Time priority tables (1 to 15) LCR office codes (000-999)
FF8-3#-		**Special Area-Code Table**
-(1 to 4)#-(000 to 999)#	-	Special area codes tables (1 to 4) Special area codes (000 to 999)
FF8-4#-		**Special Office-Code Table**
-(1 to 4)#-(1 to 15)#-(000 to 999)#-(0 or 1)#	-	Special office codes (1 to 4) Time-priority tables (1 to 15)
FF8-5#-		**Time-Priority Tables**
-(1 to 15)#-(1 to 48)#-(1 to 8)#	-	Time-priority tables (1 to 15) Time bands (1 to 48) LCR trunk groups (1 to 8)

Pocket-Sized List of Programming Addresses

FF8 KEY - Least Cost Routing

FF8-6#-	Default	Trunk-Group Tables
-(1 to 8)#-(1 to 8)#-(01 to 64)#	-	LCR trunk groups (1 to 8)
FF8-7#-		**Dial-Delete Table (LCR)**
-(1 to 8)#-(16 digits)#	-	Dial-delete tables (1 to 8)
FF8-8#-		**Dial-Add Table (LCR)**
-(1 to 8)#-(16 digits)#	-	Dial-add tables (1 to 8)

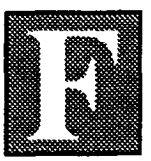
FF9 KEY - Copy Mode

FF9-	Default	Copy Mode
-1#-(01 to 64)#-(01 to 64)##	-	Copy trunk mode
-2#-(001 to 144)#-(001 to 144)##	-	Copy extension mode
-3#-(001 to 144)#-(001 to 144)##	-	Copy FF key mode

FF10 KEY - System Speed Dialing

FF10-	Default	Speed Dialing
-1#-(00 to 89)#-(16 digits)#	-	System speed dial -
-1#-(001 to 144)#-(90 to 99)#-(16 digits)#	-	Personal speed dial -

Appendix B



CC Rules and Regulations

FCC RULES AND REGULATIONS (Part 68)

In compliance with the requirements of Part 68 of the FCC Rules and Regulations for connection of Terminal equipment to the telephone network, and for your convenience, the following information is presented.

Notifying the Telephone Company

When connecting or disconnecting Terminal equipment to the telephone network, notify the telephone company of the following: connection line(s), FCC registration number, and ringer equivalence number of the registered Terminal equipment.

FCC Registration Numbers

Model Numbers	Key System	Hybrid System
VB-42010 (DBS308)	ACKUSA-61853-KF-E	ACKUSA-61855-MF-E
VB-42020 (DBS616)	ACKUSA-61854-KF-E	ACKUSA-61856-MF-E

When enabling Pooled Trunk Access, inform the telephone company or a Panasonic service center of the MF-E FCC Registration number. According to FCC rules, Pooled Trunk Access is regarded as one of the distinguishing features of a PBX as opposed to a key telephone system.

Ringer Equivalence Number (REN) 0.5 B

The REN determines the number of devices you may connect to your telephone line and still have all those devices ring when your telephone number is called. In most, but not all areas, the total RENs of all devices connected to one line should not exceed five (5.0). Contact your local telephone company to determine the maximum REN for your calling area.

Service order code	9.0F
Network address signaling code	E
Facility interface code	02LS2 (2 wire/Loop start)
Required network interface code	RT25C

B

Connection to a Party Line or Coin-Operated Telephone Line

Direct Connection to a Party Line or Coin-Operated Telephone Line Is Prohibited

If you are on a party line, please check with your local telephone company for further information.

Incidence of Harm to the Telephone Lines

Should Terminal equipment cause harm to the telephone network. the telephone company shall. where practical, notify the customer that service may be temporarily discontinued. However, where prior notice is not practical, the telephone company may temporarily discontinue service forthwith, if such action is reasonable in the circumstances. In case of un-notified temporary discontinuance of service, the telephone company shall:

(A) Promptly notify the customer of such temporary discontinuance of service.

(B) Afford the customer the opportunity to correct the situation which gave rise to the temporary discontinuance.

(C) Inform the customer of the right to bring a complaint to the Commission pursuant to the procedures set out in Part 68 of the FCC Rules and Regulations.

Compatibility of the Telephone Network and Terminal Equipment

(A) Availability of telephone information:

Technical information on interface parameters and specifications not set by FCC Rules, including the number of ringers which may be connected to a particular telephone line to permit Terminal equipment to operate in a manner compatible with telephone company communications facilities, shall be provided by the telephone company upon customer's request.

(B) Changes in telephone company communications facilities, equipment, operations and procedures:

The telephone company may make changes in its communications facilities. equipment. operations or procedures. where such action is reasonably required in the operation of its business and is not inconsistent with the rules and regulations in FCC Part 68. If such changes can be reasonably expected to render any customer's Terminal equipment incompatible with telephone company communications facilities or require modification or alteration of such Terminal equipment or otherwise materially affect its use or performance. the customer shall be given adequate notice, in writing, to allow the customer an opportunity to maintain un-interrupted service.

Hearing Aid Compatibility

This system is hearing-aid compatible.

Automatic Dialers

When Programming Emergency Numbers or Making Test Calls to Emergency Numbers:

(A) Remain on the line and briefly explain to the dispatcher the reason for the call.

(B) Program or test emergency numbers only in off-peak hours; these are usually in the early morning or late evening.

Responsibility of Grantee (Manufacturer) of Registered Equipment

The Grantee or Its Agent Shall Provide The User of The Registered Equipment with The Following Information:

(A) installation. operation and repair procedures. where applicable.

(B) Registered Terminal equipment may not be used with party lines or coin lines.

(C) When a malfunction is indicated the customer shall disconnect the registered equipment from the telephone line to determine the problem. Until the problem is corrected, disconnect all equipment.

(D) If connections other than RJ25C are needed. contact the local telephone company.

Product Safety

Please Observe the Following Guidelines to Assure the Safe Use of Your Telephone

(A) This product is an electrical device and can be hazardous if immersed in water.

(B) To avoid the risk of electrical shock. do not use this unit while in the bathtub. shower. or when wet. If you accidently drop the unit into water. unplug it first. then retrieve it by pulling the cord.

(C) The telephone should not be exposed to heat sources, direct sunlight. extreme temperatures. moisture, strong vibrations or greasy or dusty environments.

(D) Never attempt to insert wires, pins or similar objects in the vents or openings of the telephone.

(E) Never clean the telephone with benzol, paint thinner or other solvent materials.

(F) Never install telephone wiring during a lightning storm.

(G) Never install telephone jacks in a wet area unless they are specifically designed for that purpose.

(H) Never touch un-insulated telephone wires or terminals unless the telephone line has been disconnected at the network interface.

Radio Interference (Part 15)

Warning - This unit generates, uses, and can radiate radio frequency energy. And if not installed and used in accordance with the instructions manual. may cause radio interference. The Unit has been tested and found to comply with the limits for a Class A digital device pursuant to Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference when operated in a commercial environment.

B

Operation of this equipment in a residential area is likely to cause harmful interference in which case the user at his own expense will be required to take whatever measures are necessary to correct the interference.

If necessary, the user should consult the dealer or an experienced radio/television technician for additional suggestions.

The user may find the following booklet prepared by the Federal Communications Commission helpful:

Something about Interference

This booklet is available locally from FCC regional offices.

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