



PARTNER[®]
Advanced Communications System
Quick Reference Guide

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This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio-frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at his own expense. This system is Class B compliant in some configurations. For additional FCC information, see the PARTNER Customer Support Document.

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Important Safety Instructions

The following list provides basic safety precautions that should always be followed when using your telephone equipment.

1. Read and understand all instructions.
2. Follow all warnings and instructions marked on the product.
3. Unplug all telephone connections before cleaning. DO NOT use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.
4. This product should be serviced by (or taken to) a qualified repair center when service or repair work is required.
5. DO NOT use this product near water, for example, in a wet basement location.
6. DO NOT place this product on an unstable cart, stand or table.
7. Never push objects of any kind into slots or openings as they may touch dangerous voltage points or short out parts that could result in a risk of fire or electric shock. Never spill liquid of any kind on the product.

8. DO NOT use the telephone to report a gas leak in the vicinity of the leak.



CAUTION:

DO NOT block or cover the ventilation slots or openings; they prevent the product from overheating. DO NOT place the product in a separate enclosure unless proper ventilation is provided. DO NOT place the product flat on a surface. The control unit must be wall-mounted.

SAVE THESE INSTRUCTIONS

Contents

1 Getting Acquainted

Welcome	7
System Overview	7
System Capacity	9
System Components	9

2 Installing Your System

Overview	13
Evaluating the Environment	14
Installing the Control Unit	14
Connecting Lines and Extensions	23
Connecting the Loudspeaker Paging System	25
Installing the Cover	27
Installing Telephones	27
Connecting Auxiliary Equipment	28

3 Setting Up Your System

Overview	29
System Programming Basics	30
Setting the Date and Time	37
Administering the Loudspeaker Paging System	38
Assigning Lines	39
Customizing Extensions	40
Changing Settings to Support PBX or Centrex Services	42
Emergency Phone Number List (#406)	43
Voice Messaging Systems	44

4 Programming System Features

Overview	47
System Speed Dial	47
Dialing Restrictions and Permissions	48
Groups of Extensions	55

5 Programming Telephone Features

Overview	57
Automatic Line Selection	58
Extension Name Display	59
Line Ringing	61

6 Maintaining Your System

Overview	63
Backup and Restore	64
Battery Replacement	69
Using a PC Card	70
Upgrading 1600 DSL and 012E Module Firmware	73
Upgrading T1 Module Firmware	74
Adding New Modules	75
Replacing Modules	77
Changing System Settings	82
Adding Lines, Pools, and Extensions	83

7 If Something Doesn't Work

Overview	87
Your Release Number	87
Clearing a Backup-Failure Alarm	88
012E Module Power Management	89
Telephone Problems	90
Calling Problems	92
System Problems	94
T1 Module Problems	95
1600 DSL Module Problems	96
Tip/Ring Device Problems	97

8 System Programming Flow Charts

1 Getting Acquainted

Welcome

This quick reference is designed to help you program the PARTNER® Advanced Communications System (ACS) Release 7.0. It provides procedures for customizing your system after it is initially installed and for programming everyday tasks you perform in order to manage your system.

Prior to using this guide, you should become familiar with the *PARTNER Advanced Communications System Installation, Programming, and Use* guide, which describes the system in detail and provides procedures for programming all of the system's features and capabilities.

This chapter provides a system overview that describes the capacities, modes of operation, components, and auxiliary equipment of the system.

System Overview

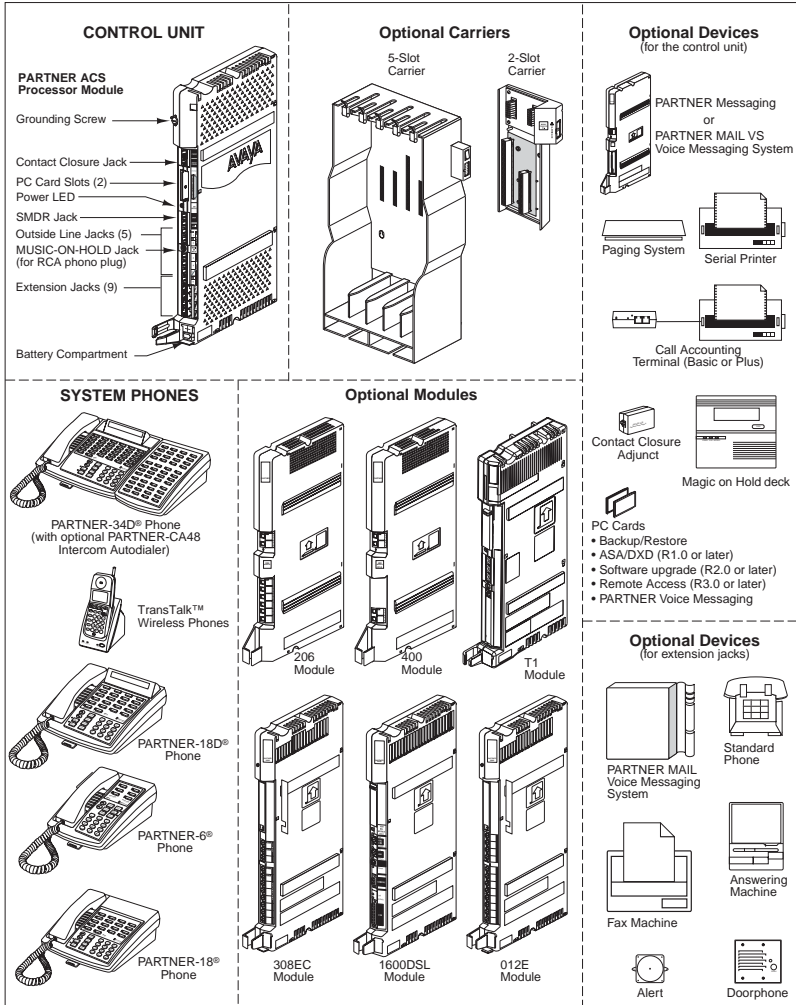
The PARTNER ACS is located on a company's premises and is available in three configurations:

- Stand-alone processor module
- 2-slot carrier (processor module and one line and extension module)
- 5-slot carrier (processor module and up to four line and extension modules)

NOTE ► *You also can have a PARTNER Messaging or PARTNER MAIL VS module for voice messaging in the 2-slot or 5-slot carriers. This takes the place of a line and extension module.*

Using these lines and extensions, you can add various devices and telephones to configure your system to meet your business needs (see the figure, “[System Configurations](#),” that follows). For detailed information about PARTNER ACS hardware, see the *PARTNER Advanced Communications System Installation, Programming, and Use* guide.

System Configurations



System Capacity


The PARTNER ACS release you have, the carrier you use, and the combination of modules installed, determine the number of available lines and extensions. PARTNER ACS Release 7.0 allows up to 31 lines and up to 48 extensions. However, these maximums cannot be achieved simultaneously.

NOTE ► *If you want to install a PARTNER Messaging or PARTNER MAIL VS module, keep in mind that the module uses one of the slots in the carrier, which reduces the system line and extension capacity.*

System Components

The system components include the processor module, the optional line and extension modules, and the telephones. See the *PARTNER Advanced Communications System Release 7.0 Installation, Programming, and Use* guide for more details.

System Components

System Components	Description
Processor Module	<p>Provides the software intelligence that controls the system's features. It has jacks for five outside lines and nine enhanced tip/ring extensions. The processor also has two PCMCIA slots for ASA/DXD, PARTNER Voice Mail Release 3.0, or Remote Administration cards. The module has a grounding screw and jacks for the following:</p> <ul style="list-style-type: none"> • Music-On-Hold audio source • Two Contact Closures • A call reporting device, such as an SMDR printer <p>NOTE </p> <p><i>If you have a loudspeaker paging system, connect it to one of the line jacks on a module in the PARTNER system. If the loudspeaker paging system requires a "dry contact relay," connect the system to line jack 5.</i></p>
Line and Extension Modules	<p>Installed in a carrier, these modules provide additional outside line jacks and/or extension jacks. The 2-slot carrier configuration can hold two modules. The 5-slot carrier configuration can hold five modules. For more information about the line and extension modules, see the <i>PARTNER Advanced Communications System Release 7.0 Installation, Programming, and Use</i> guide.</p>
Telephones	<p>The PARTNER-34D, PARTNER-18D, PARTNER-18, and PARTNER-6 telephones and the PARTNER CA48 Call Assistant Intercom Autodialer are products specifically designed to work with the system. You can also use the MLS-series, TransTalk[®] 9000-series, industry-standard single-line rotary or touch-tone telephones with the system. PARTNER Endeavor telephones are supported when an Endeavor 362EC module is installed in the carrier.</p>

Auxiliary Equipment

The following table provides a list of other equipment that is available for use with the system. See the *PARTNER Advanced Communications System Release 7.0 Installation, Programming, and Use guide* for more details.

- Voice Messaging Systems
- Answering Machine
- Modems
- Doorphones
- Music-On-Hold Systems
- Speakerphones
- Specialty Handsets
- Off-Premises Range Extender (OPRE)
- Electromagnetic Interference (EMI) Filters
- Fax Machines
- Credit Card Scanners
- Contact Closure Adjunct
- Loudspeaker Paging System
- Extra Alerts
- Headsets
- PCMCIA Cards
- In-Range Out-of-Building (IROB) Protectors

2 Installing Your System

Overview

This chapter explains how to install the PARTNER Advanced Communications System (ACS) Release 7.0.

The installation of the PARTNER ACS involves the following:

- Evaluating the environmental requirements
- Installing the control unit
- Connecting lines and extensions
- Connecting the loudspeaker paging system (if used))
- Installing telephones
- Connecting auxiliary equipment
- Installing the cover

If your company already has modular jacks for all outside lines and extensions, you may be able to use the existing wiring to install the system hardware and connect telephones to the system yourself.

Evaluating the Environment

Before you begin the physical installation of the system, you must check that all environmental factors are within the acceptable ranges. See the *PARTNER Advanced Communications System Release 7.0 Installation, Programming, and Use* guide for more details.

Installing the Control Unit

The stand-alone processor module or a carrier and its modules are referred to as the control unit. The control unit must always be wall-mounted.

**WARNING:**

*There are no customer-serviceable components inside the system modules or carrier. There are hazardous voltages within that can cause severe or fatal personal injury. **DO NOT OPEN MODULES.***

To install the control unit, you must do the following:

- Wall-mount the control unit.
- Label the jacks.
- Ground the system.
- Insert the batteries into the processor module.
- Initialize the system.
- Check the LEDs on the modules.
- Install the cover.

Wall-Mounting a Stand-Alone Processor Module and a 2-Slot Carrier

Install the processor module within 5 feet (1.5 meters) of a properly grounded wall outlet (not controlled by a switch) and the network interface jacks.

Follow these steps to wall-mount the module(s):

- 1 Using the enclosed template, mark the screw locations on the wall.
- 2 Hold the processor module against the wall with the line and extension jacks facing left. Leave at least 1 foot (0.3 meter) clearance at the top, front, and right side, and at least 2 feet (0.6 meter) at the bottom and left side.
- 3 Insert a #8 sheet metal screw into the screw hole at the top of the processor module.
- 4 If you are installing a second module, go to Step 5. If you are *not* installing a second module (stand-alone configuration):
 - a Insert another #8 sheet metal screw into the screw hole at the bottom of the module.
 - b Tighten the screws until the mounting tracks are snug against the wall. There must be a 3/8 inch (1 cm) gap between the wall and the rest of the module. Do not overtighten the screws or the module will warp and fail to operate.
 - c Go to the next procedure, "[Labeling Jacks](#)," on page 18.
- 5 Remove the clear plastic protectors from the connectors on the right side of the wall-mounted PARTNER ACS processor module and the module to be added by grasping the tabs on the ends of the protector and lifting.
- 6 Slide the second module onto the PARTNER ACS processor module, making sure the mounting tracks interlock.
- 7 Attach the 2-slot carrier to the top right side of the two modules, properly engaging the connectors on the modules to the carrier.
- 8 Fasten the carrier to the modules by using the two #4 screws included with the carrier.
- 9 Insert the 3-1/2 inch #8 screw into the bottom of the modules. Tighten it until the mounting tracks of the PARTNER ACS processor module are flush against the wall. Do not overtighten or the module will warp. Then go to the next procedure, "[Labeling Jacks](#)," on page 18.

Wall-Mounting a 5-Slot Carrier and Modules

Install the 5-slot carrier within 5 feet (1.5 meters) of a properly grounded wall outlet (not controlled by a switch) and the network interface jacks. When you mount the carrier on the wall, leave at least 1 foot (0.3 meter) of clearance at the top and sides and 2 feet (0.6 meter) at the front and bottom to ensure proper ventilation.

NOTE ► *The location of each module within the carrier is important; place the modules as instructed in the following procedure.*

Follow these steps to wall-mount the 5-slot carrier and modules:

- 1 Using the enclosed template, mark the screw locations on the wall. If you are mounting the carrier on plywood, start four #12 screws supplied with the carrier, leaving the screw heads extending approximately 1/4 inch (0.64 cm) from the wall. If you are mounting on drywall, use wall anchors, which must be purchased separately.
- 2 Before installing any modules, make sure the clear, plastic protector has been removed from the connector area on the rear of each module. To remove the protector, grasp the tabs on the ends of the protector and lift.
- 3 Insert the PARTNER ACS processor module in the center slot of the carrier.
- 4 In the other slots, from left to right, first install the T1 module (if used) or 1600 DSL module (if used), then the 012E, 308EC, or 206 modules, followed by the 400 or 200 modules and/or a PARTNER Messaging or PARTNER MAIL VS module. Align the module carefully in the appropriate slot. For proper engagement of the connectors, the module must be inserted straight into the carrier. Once the module is properly seated, firmly push the center of the module until the connectors on the module lock into place. A slight click indicates the connectors are engaged.

NOTES ►

- *If you use a T1 module, it must be in the first slot on the left. The 012E, 308EC, and 206 modules must be to the left of any 400 and 200 modules. Only one T1 module is supported.*
- *If you use a 1600 DSL module, it must be in the first slot on the left. The 012E, 308EC, and 206 modules must be to the left of any 400 and 200 modules. Only one DSL module is supported.*
- *PARTNER ACS Release 7.0 supports either one T1 module or one 1600 DSL module.*
- *PARTNER ACS Release 7.0 supports Endeavor telephones and the Endeavor 362EC module. Install the Endeavor 362EC module(s) to the right of the T1 module or 1600 DSL module, if one is installed, and to the left of all 400 and 200 modules.*
- *In Release 7.0, the system extension maximum is 48. However, in some configurations, the 012E module and/or the PARTNER Messaging module will physically permit more than 48 stations to be installed in the 5-slot carrier. In these configurations, only station ports and voice messaging ports up to 48 will function. Station ports and voice messaging ports above 48 will not function with ETR or T/R telephones because they are outside the PARTNER ACS dial plan.*

**CAUTION:**

Do not force the module. Use the carrier shelf as a reference and do not tilt, slant, or rotate the module. If the module does not insert easily, remove it, clear any obstruction, and reinsert it.

Labeling Jacks

After you have mounted the control unit on the wall, you must label the line and extension jacks. The line jacks are on the top of the modules, and the extension jacks on the bottom.

Follow these steps to label the line and extension jacks:

- 1 Label the line jacks on the processor module, beginning with “1” at the top line jack.
- 2 Do one of the following:
 - For a 2-slot carrier, label the line jacks on the other module.
 - For a 5-slot carrier, label the line jacks on the other modules by starting with the leftmost module and ending with the rightmost module.

- NOTE** ►
- *Although a T1 module has only one line jack, it supports up to 16 lines. Therefore, the line jacks on the module to the right of a T1 module in a 5-slot carrier are numbered starting with “22.”*
 - *Although a 1600 DSL module has only one line jack, it supports up to 16 lines. Therefore, the line jacks on the module to the right of a 1600 DSL module in a 5-slot carrier are numbered starting with “22.”*

- 3 Label the extension jacks on the processor module, beginning with “10” at the topmost extension jack.
- 4 Do one of the following:
 - For a 2-slot carrier, label the extension jacks on the other module.
 - For a 5-slot carrier, label the extension jacks on the other modules by starting with the leftmost module and ending with the rightmost module.

Grounding the System

You ground the system by running a solid copper wire from the processor module to an appropriate earth ground. Follow these steps to ground the system:

- 1 Attach one end of a #12 AWG or #14 AWG solid copper wire to the grounding screw on the processor module. The length of the wire must not exceed 35 feet (7.6 meters).
- 2 Route the wire through the wire manager on the front of the module.
- 3 Attach the other end of the wire to the approved earth ground, such as building steel or a cold water pipe.

Inserting Batteries in the Processor Module

The processor module uses two AAA-size standard alkaline batteries to guard against the loss of system programming in case of a power failure. These batteries retain the system programming for 45 days to six months, depending on the freshness of the batteries. You should replace the batteries every year.

NOTE ► *The configuration of the 1600 DSL module is not backed up to the PCMCIA card. Instead, the configuration is retained in the flash memory of the 1600 DSL module.*



CAUTION:

Batteries and battery cover are packaged in a separate box. If you are replacing batteries, the old batteries must be removed with the power on or the system's memory will be lost.

Follow these steps to insert the batteries:

- 1 Locate the battery compartment at the bottom of the PARTNER ACS processor module, below the extension jacks.
- 2 Push gently on the battery icon (the locking latch) and slide the battery icon up to cover the plus icon; this unlocks the battery assembly.
- 3 Remove the battery assembly by gently pulling the tab at the bottom of the battery compartment cover.

- 4 Insert two new AAA-size standard alkaline batteries into the metal battery clips by pushing them straight in, placing the negative (–) end of one battery into the bottom clip and the positive (+) end of the other battery into the top clip.
- 5 With the locking latch in the unlocked position (battery icon and “minus” icon visible), slide the battery assembly into the processor module along the battery guides on the inside of the battery compartment. Push the battery assembly in far enough that the edges of the assembly slip behind the plastic housing of the processor module.
- 6 Pressing lightly on the battery icon on the front of the battery assembly, slide the locking latch downward to secure the assembly in place. The “plus” icon and the battery icon should now be visible on the front of the battery assembly.

Initializing the System

Before you initialize the system, you may insert any of the supported PC cards: Backup/Restore card, Automatic System Answer/Direct Extension Dial (ASA/DXD) card, PARTNER Voice Messaging Basics card, and PARTNER Remote Access PC Card.

NOTE ► *You must power down the system before you insert or remove a PC Card.*

Follow these steps to initialize a system:

- 1 If you have a PC Card, perform the following steps:
 - a If your PC Card comes with a write-protect tab, verify that the write-protect tab on the PC Card is not in the write-protected position. If it is, use a paperclip or another pointed object to push the write-protect tab on the end of the PC Card upward to the nonprotected position.
 - b To insert the PC Card, hold it with the label facing to the right, and slide it gently into one of the PC Card slots on the processor module. When inserted properly, the PC Card projects about 1-5/8" (4 cm) from the module.
- 2 If you have a 5-slot carrier, make sure the carrier's On/Off switch is at the Off ("O") position.
- 3 Press the power cord firmly into the power jack on the carrier or the stand-alone processor module until the cord locks into place.
- 4 Plug the other end of the power cord into a properly grounded three-prong wall outlet that is not controlled by a switch.
- 5 If you have a 5-slot carrier, move the On/Off switch to the On ("—") position.



CAUTION:

The power cord should hang straight down from the connector for the entire length of the module or carrier. Do not install the power cord at an angle to the case or with a loop in it.

- NOTE** ►
- *If your system has a 1600 DSL module, initialization of the line and extension ports may take up to 40 seconds. The initialization of the 1600 DSL module itself may take from 2 to 7 minutes*
 - *If your system has a T1 module, initialization may take up to one minute.*

Checking the LEDs

After you power up your system, check the green lights on the fronts of the modules:

- If a single light is out, power down the control unit, reseal the module, and then power up the carrier.
- If multiple lights are out, power down the carrier, reseal either both modules (2-slot carrier) or the leftmost module that has a light out (5-slot carrier), and then power up the carrier.

If the lights are still out, see the “Customer Support Document” on the accompanying compact disc for information about whom you should contact.

Connecting Lines and Extensions

- NOTES** ▶
- If extensions are not wired to any modular jacks, call a qualified service technician.
 - Residential (Class B) PARTNER ACS users must connect a Wurth Elektronik's part number 74271142 or equivalent to each extension jack on the PACS processor module.

If the PARTNER system has a T1 module, you must perform the following steps before connecting the lines and extensions:

- 1 Install the PARTNER ACS R7.0 PC Administration application on your PC.
- 2 Connect to the PARTNER system via PARTNER ACS R7.0 PC Administration, and back up and retrieve the translations from the PARTNER system to the PC.
- 3 Program the PARTNER system (for example, assign lines/pools, configure the T1 settings, and program extensions) via PARTNER ACS R7.0 PC Administration.
- 4 Restore the new translations you created to the PARTNER system via PARTNER ACS R7.0 PC Administration.

See the *PARTNER ACS R7.0 PC Administration Getting Started Guide* to install and start the PARTNER ACS R7.0 PC Administration application. See “Initial Configuration” in the PARTNER ACS R7.0 PC Administration online help for more information on setting up the T1 module.

Use the following procedure to connect lines and extensions:

- 1 Test for a dial tone at the network interface jacks before connecting outside lines to the control unit. For the test, connect a tip/ring telephone to a network interface jack.
 - a Lift the handset and listen for a dial tone. (If there is no dial tone, contact your local telephone company.)
 - b Repeat for each network interface jack.
- 2 Connect line cords to the line jacks on the modules. Start at the top with the line jacks on the processor module, and then move to the leftmost module. Fill each module before moving to the next module to the right.

- 3** Route each cord through the wire manager on the front of the module.
- 4** Connect the free end of each line cord to the appropriate network interface jack.
- 5** Test the lines by plugging a system telephone into extension jack 10. Press the line button for each outside line and listen for a dial tone.
- 6** Test the extensions by doing the following:
 - Plug a system telephone into the first extension jack on each module.
 - Press the line button on the telephone for each outside line and listen for a dial tone.
- 7** Connect modular telephone cords to the extension jacks, starting at the top extension jack on the processor module. When that module is full, move to the leftmost module. Fill each module before moving on to the next module to the right. Note that extension 10 and extension 11 have system administration privileges.
- 8** Route each cord through the wire manager on the front of the module.
- 9** Connect the free end of each modular telephone cord to the modular wall jacks for system extensions.
- 10** Gather the line and extension cords hanging below the wire managers of the first two modules, and twist-tie or wire-wrap them. Repeat for the remaining cords. For the 5-slot carrier, place each bundle of wires in the indentations cut out of the bottom edge of the carrier.

Connecting the Loudspeaker Paging System

Perform the steps in this section if you have a loudspeaker paging system.

Loudspeaker paging systems allow you to broadcast a message over a large area. The PARTNER system supports all Avaya paging systems, including the entire PagePac line. The PARTNER system also supports most paging systems from other manufacturers when the paging systems are connected using a paging interface device.

NOTE ► *If you connect a loudspeaker paging system from another manufacturer, a paging interface may be required.*

Follow these steps to connect a loudspeaker paging system to the PARTNER system:

- 1 Insert the modular plug from the loudspeaker paging system into an available line jack on a PARTNER module. A loudspeaker paging system can be connected to a line jack on the following PARTNER modules:
 - PARTNER ACS R7.0 processor module
 - 308EC module
 - 400E module, 400EC module
 - 200e module
 - 206 module, 206E module, 206EC module
 - 362EC module

NOTE ►

- *It is recommended that you connect the loudspeaker paging system to the highest numbered line jack in your PARTNER system to help prevent any future conflict with your line assignments. When you connect a loudspeaker paging system to a line jack on the PARTNER system, that line is “unavailable.” For example, suppose your system has four lines, and you connect your loudspeaker paging system to line jack 4. (The lines are connected to Line jack 1, Line jack 2, Line jack 3 and Line jack 5.) When you administer the lines, the PARTNER system will label these four lines as Line 1, Line 2, Line 3, and Line 5. Line 4 is unavailable.*
- *If the loudspeaker paging system requires a “dry contact relay,” you must connect the loudspeaker paging system to line jack 5 on the PARTNER ACS R7.0 processor module.*

2 Route the cord through the processor module’s wire manager.

3 Connect the other end of the cord to the paging system.

Installing the Cover

If you have a 5-slot carrier, it is important to install the cover to keep the modules dust-free and properly seated and the system working efficiently.

Perform the following steps to install the cover for the 5-slot carrier:

- 1 Position the carrier cover over the modules so that the openings on the top of the carrier cover align correctly with the tabs at the top of the installed 5-slot carrier and modules.
- 2 Rotate the carrier cover into position so that it aligns correctly with the thumb screw opening on the bottom of the carrier.
- 3 Tighten the thumb screw. *To ensure proper alignment and safe operation, tighten the thumb screw securely.*

Installing Telephones

After you have installed the control unit and have connected the line and extension cords, you are ready to install the telephones. Installing the telephones includes assembling, connecting, and testing the telephones. As desired, you also can connect an Intercom Autodialer to system telephones at operator extensions. See the *PARTNER Advanced Communications System Release 7.0 Installation, Programming, and Use* guide and the documentation that comes with the telephone.

Connecting Auxiliary Equipment

You can connect many types of telecommunications devices to your system without expensive adapters or additional telephone lines—for example, answering machines, credit card scanners, and fax machines. Many tip/ring, single-line devices work with the system regardless of the manufacturer. See the *PARTNER Advanced Communications System Release 7.0 Installation, Programming, and Use* guide for further details about connecting auxiliary equipment, including voice messaging systems.

3 Setting Up Your System

Overview

This chapter explains the basics of programming and the programming of features involved in the setup of the system, including the programming of a voice messaging system. Refer to the *PARTNER Advanced Communications System Release 7.0 Installation, Programming, and Use* guide for more detailed programming information.

You can program a PARTNER system in either of the following ways:

- from a system display phone at extension 10 or 11
- from a PC that is running PARTNER ACS R7.0 PC Administration software and is connected to the PARTNER system. With the PARTNER ACS R7.0 PC Administration software, you can administer and maintain the PARTNER system from your PC.

NOTE ► *If the PARTNER system has a T1 module, you must use the PARTNER ACS R7.0 PC Administration software to configure the T1 module and its lines and use the All Lines Busy feature.*

The remainder of this guide describes how to program the PARTNER system from a system display phone at extension 10 or 11. If you want to program the PARTNER system using the PARTNER ACS R7.0 PC Administration application, see the *PARTNER ACS R7.0 PC Administration Getting Started Guide* to install and use the PARTNER ACS R7.0 PC Administration application.

System Programming Basics

After the control unit is installed, you set up the system by using a combination of the following two types of programming. Use the *System Planning Guide* when programming.

- **System Programming** allows you to customize the system to meet the needs of your business. When the system is first installed, it uses factory settings that reflect the most commonly used options. You can change system settings as needed.

You can perform System Programming from extension 10 or extension 11. Because an extension cannot be in programming mode and handle calls at the same time, you should use extension 11 for programming. By doing so, you can program without disrupting call handling at extension 10.

- **Telephone Programming** allows telephones to be customized to meet individual users' needs. There are two types of Telephone Programming, depending from where you program.
 - Centralized Telephone Programming—programming individual telephones from extension 10 or 11.
 - Extension Programming—programming an individual system telephone from the extension to which it is connected.

NOTES

- *With the PARTNER ACS R7.0 PC Administration software, you can perform system programming and telephone programming, enabling you to administer and maintain the PARTNER system from your PC.*
- *If the PARTNER system has a T1 module, you must use the PARTNER ACS R7.0 PC Administration software to configure the T1 module.*

You need a system display telephone for System and Centralized Telephone Programming. If you have any 34-button telephones in the system, you must use a 34-button display telephone to program since an 18-button telephone *cannot* be used to program a 34-button telephone. Also, if your system has both PARTNER and MLS telephones, you should use a PARTNER display telephone at the programming extension.

Endeavor telephones are supported in PARTNER ACS Release 7.0 when an Endeavor 362EC module is installed in the carrier. The Endeavor telephones are programmed the same as PARTNER-34D, -18D, -18, and -6 telephones and have the same button layouts.

- NOTES** ►
- *PARTNER ACS Release 3.0 through Release 6.0 included a PCMCIA Remote Access PC Card, which, among other things, was used to upgrade the existing software to the latest version. PARTNER ACS R7.0 does not support the Remote Access PC Card for upgrades. However, you can still use the Remote Access PC Card:*
 - *as a storage/backup device for saving your system settings, which can be used to restore the system in case these settings are lost for any reason.*
 - *for remote access to the PARTNER ACS via a local or remote personal computer. This requires a modem and additional software that must reside on your PC.*
 - *If you are installing a voice messaging system with the PARTNER ACS, you must assign the voicemail ports to Hunt Group 7 to avoid having the voicemail ports answering all calls immediately. See your voice messaging system documentation (such as the PARTNER Messaging Installation, Programming, and Troubleshooting Online Guide or the PARTNER Messaging System Manager's Quick Reference) for more information.*

Programming Overlays

To do System Programming, you place a Programming Overlay over the dialpad of the system display telephone at extension 10 or 11. (Overlays are provided with the system documentation.)

You use the following special buttons while programming:

- **Next Procedure** and **Prev Procedure** cycle forward and backward through the programming procedures. You can use these buttons to select a procedure.
(If a procedure instructs you to press **Next Procedure** + **Prev Procedure**, pressing these buttons one after the other enables you to repeat the current programming procedure.)
- **Next Item** and **Prev Item** cycle forward and backward through a procedure's parameters. A parameter is typically an outside line, a pool, an extension, or a telephone list entry.
- **Next Data** and **Prev Data** cycle forward and backward through the valid entries. These buttons work only for fixed data, such as a line or extension number. They do not work for variable data such as date, time, password, telephone numbers, or doorphone assignments.
- **Remove** returns the current setting to the factory setting. When you are programming Line Assignment (#301), pressing **Remove** removes lines from an extension; when you are programming Pool Extension Assignment (#314), pressing **Remove** removes pools from an extension.
- **Enter** ends an entry of variable length, such as a telephone number in an Allowed Phone Number List.
- **System Program** starts the System Programming process.
- **Central Tel Program** starts the Centralized Telephone Programming process (to customize individual telephones centrally from extension 10 or 11).
- **Feature**, when followed by **0 0**, enters or exits programming mode.
- **Wild** enters a "wildcard" (a character that matches any digit dialed) in telephone numbers in Allowed Phone Number Lists (#407), Disallowed Phone Number Lists (#404), and the Forced Account Code List (#409).

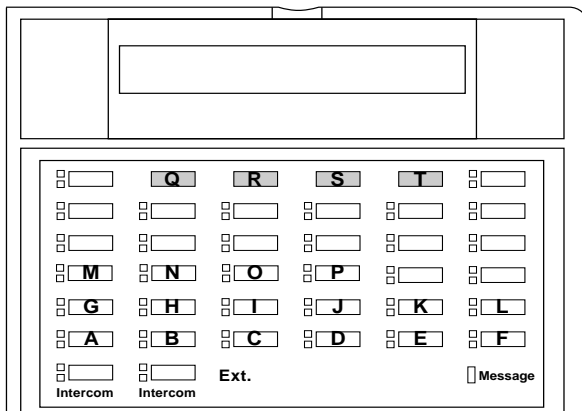
Button Locations

When you program from a PARTNER telephone at extension 10 or 11, the button you press on the telephone at the programming extension may be in a different location on the telephone being programmed. The following figure shows the relative location of buttons on each PARTNER telephone.

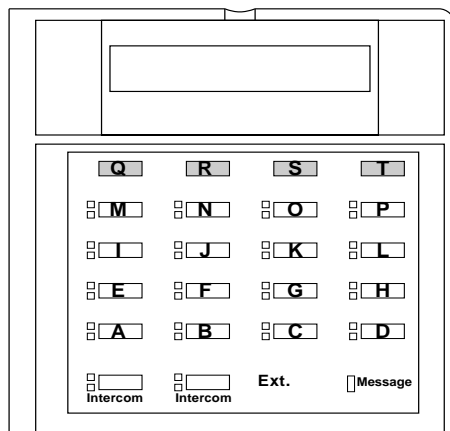
For example, the button labeled E on the PARTNER-34D telephone in the figure is in the bottom row. The equivalent button on the PARTNER-18D telephone is in the leftmost position of the second row from the bottom. If your system has a mix of PARTNER and MLS telephones, see Appendix D of the *PARTNER Advanced Communications System Release 7.0 Installation, Programming and Use* guide for information about programming from a PARTNER to an MLS telephone or from an MLS to a PARTNER telephone.

Button Locations on PARTNER Telephones

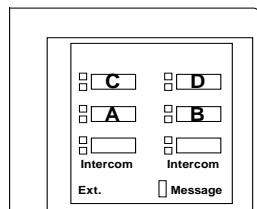
PARTNER-34D Phone



PARTNER-18D/18 Phone



PARTNER-6 Phone



Programming Mode

When you are ready to program a system or telephone feature, you must enter programming mode. Follow these steps to enter programming mode.

- 1 Place the Programming Overlay over the dialpad of the system display telephone at extension 10 or 11.
- 2 To enter programming mode, press **(Feature) 0 0**.
- 3 Press **(System Program)**.
- 4 Press **(System Program)** again.
- 5 Specify a programming procedure in one of two ways:
 - **Direct Method:** Dial the code for that procedure. System Programming procedures in this guide are identified by a # and a three-digit code (for example, System Date is #101). This method is best when you are using only a few procedures during a programming session and you know the codes.
 - **Cycle Method:** Cycle through the procedures in numerical order. Press **(Next Procedure)** and **(Prev Procedure)** to cycle forward and backward through the programming procedures. This method is best when you are using multiple procedures during a programming session, or if you do not know the codes.
- 6 To exit programming mode, you can press **(Feature) 0 0**. Or you can lift the handset and then place it back in the cradle.

Changing Programming Type

When you are in programming mode, you can move between System Programming and Centralized Telephone Programming. To change to Centralized Telephone Programming when you are in System Programming, press **(Central Tel Program)**. To move back to System Programming when you are in Centralized Telephone Programming, press **(Central Tel Program)**, then **(System Program)**.

Using Centralized Telephone Programming

Use Centralized Telephone Programming from extension 10 or 11 to program features or store telephone numbers for individual extensions. All features that can be programmed at an extension can also be programmed by using Centralized Telephone Programming. Most features also can be programmed on a system telephone at the user's extension, except for the following:

- Automatic Line Selection, Line Ringing, and Call Screening (F25) always must be programmed by using Centralized Telephone Programming.
- If an extension has a single-line telephone, you must program all features for the extension by using Centralized Telephone Programming.
- If an extension has a non-display system telephone, you must use Centralized Telephone Programming to program Extension Name Display for the extension.

To program a telephone from extension 10 or 11, follow these steps:

- 1 Place the Programming Overlay over the dialpad of the system display telephone at extension 10 or 11.
- 2 Press **Feature** **0** **0**.
- 3 Press **System Program**.
- 4 Press **System Program** again.
- 5 Press **Central Tel Program**.
- 6 Dial the extension number of the telephone to be programmed.

The green lights next to buttons on which lines or pools are assigned show the current Line Ringing settings. The remaining buttons can be programmed with telephone numbers, extension numbers, or system features.

- 7 Program the features that must use Centralized Telephone Programming.
- 8 To change the settings for another extension, press **Central Tel Program** then dial the new extension number.
- 9 To exit programming mode, you can press **Feature** **0** **0**, or lift the handset and place it back in the cradle.

Setting the Date and Time

After supplying power to the control unit, use the following procedures to set the system clock:

- System Date (#101) to set the month, day, and year
- System Time (#103) to set the hour and minutes
- Automatic Daylight/Standard Times (#126) to automatically update the system clock

System Date (#101)

Use this feature to set the month, day, and year. The system displays only the month and day on display telephones when the telephone is idle; the month, day, and year print on SMDR call reports.

To change the System Date:

- 1 Press **Feature** **0** **0** **System Program** **System Program** **#** **1** **0** **1** at extension 10 or 11.
- 2 Enter today's date in the form "mmddy" (month, day, and year), including leading zeros for single-digit months or days. For example, to enter May 26, 2001, press **0** **4** **2** **6** **0** **1**.
- 3 Select another procedure, or exit programming mode.

System Time (#103)

Use this feature to set the time that appears on system display telephones. Enter the time in 24-hour notation. In this scheme, the hours of the day are 0000 (12 midnight) to 2359 (11:59 p.m.). Since each time must have four digits, use leading zeros when necessary.

To change the System Time:

- 1 Press **Feature** **0** **0** **System Program** **System Program** **#** **1** **0** **3** at extension 10 or 11.
- 2 Enter a new time in 24-hour notation. For example, to set the time to 2:15 p.m., press **1** **4** **1** **5**.

- 3 Select another procedure, or exit programming mode.

Automatic Daylight/Standard Times (#126)

This feature is turned on by default and automatically updates the system clock for annual Daylight Savings Time and Standard Time changes. If you are in an area that does not have daylight savings time, use the procedure below to turn off this feature.

To change the status of Automatic Daylight/Standard Time:

- 1 Press **Feature** **0** **0** **System Program** **System Program** **#** **1** **2** **6** at extension 10 or 11.
- 2 Press **Next Data** until the appropriate value appears:
 - 1 = Active (the factory setting) ✓
 - 2 = Not Active
- 3 Select another procedure, or exit programming mode.

Administering the Loudspeaker Paging System

Use the feature Loudspeaker Paging Line (#617) to specify the line jack to which you connected the loudspeaker paging system. Refer to the PARTNER Advanced Communications System Installation, Programming, and Use guide for more detail.

Assigning Lines

Use the feature Number of Lines (#104) to determine in Key mode the number of outside lines that are automatically assigned to all system extensions, or to determine in Hybrid mode the number of lines assigned to the main pool. After you use the Number of Lines feature, you can use other features to refine the assignment of lines.

Line assignment is also based upon whether an extension is a Key or Pooled extension. Refine the line assignment accordingly after you use the Number of Lines feature.

**CAUTION:**

Do not use Number of Lines (#104) after initial setup.

Refer to the *PARTNER Advanced Communications System Installation, Programming, and Use* guide for more detail.

Customizing Extensions

Use the following features to customize an extension:

- Coverage features
 - Line Coverage Extension (#208), to identify an extension as the “owner” of a specific outside line. A user at the extension can activate Call Coverage or VMS Cover for the specified line.
 - Call Coverage Rings (#320), to specify the number of times a call should ring at the owner’s extension before it is sent to the covering extension, or VMS Cover Rings (#321) to specify the number of times a call should ring at the owner’s extension before it is sent to the owner’s voice mailbox.
- Caller ID Call Log Line Association (#318), to select the lines to associate with extensions for logging unanswered calls. Users can view the Caller ID information for unanswered calls on the telephone’s display panel and autodial the numbers of the unanswered calls.
- Caller ID Log Answered Calls (#317), to program extensions to log all answered Caller ID calls so calls can be viewed in the Caller ID Log.
- Caller ID Log All Calls (#319), to program one extension to log all answered Caller ID calls and all unanswered Caller ID calls received at any extension on specific lines.
- Display Language (#303), to specify the language (English, French, or Spanish) for messages that appear on a system display telephone.
- Automatic Extension Privacy (#304), to prevent other extensions with the same line from joining a call at the extension. Also use this feature for extensions connected to a modem, fax, or any device whose function can be disrupted by someone trying to join a call the device is on.
- Forced Account Code features
 - Forced Account Code Entry (#307), to prevent the extension from making an outside call until a required account code is entered.
 - Forced Account Code List (#409), to create a list of valid account codes; this ensures that only authorized users with valid account codes can make outside calls.

- Call Waiting (#316), to identify tip/ring telephone extensions that can receive the system (not the local telephone company) call-waiting tone for a second incoming call when active on a call.
- Remote Call Forwarding (#322), to allow the extension to forward all intercom, transferred, and outside calls to an outside telephone number. (This outside number must be programmed to a Personal Speed Dial code for the extension.)
- Outgoing Call Restriction (#401), to prevent the extension from making certain types of outgoing calls on all system lines.
- Disallowed/Allowed List features
 - Disallowed List Assignments (#405), to assign one or more Disallowed Phone Number Lists to the extension.
 - Disallowed Phone Number Lists (#404), to create the lists of outside numbers that extensions cannot dial.
 - Allowed List Assignments (#408), to assign one or more Allowed Phone Number Lists to the extension.
 - Allowed Phone Number Lists (#407), to create the lists of outside numbers that otherwise-restricted extensions can dial.
- Pickup Group Extensions (#501), Calling Group Extensions (#502), Night Service Group Extensions (#504), and Hunt Group Extensions (#505), to place the extension in any of these groups.
- Fax Machine Extensions (#601), Doorphone Extension (#604 and #605), Doorphone Alert Extensions (#606), AA Extensions (#607), External Hotline (#311), or Hotline (#603), to identify the extension as one of these equipment types.

Copy Settings (#399)

Set up your system by programming one extension for each type of telephone in the system. Then use Copy Settings (#399) to program other telephones of the same type. For example, you can program one PARTNER-18D telephone and then copy its settings to any other extensions that have PARTNER-18D or PARTNER-18 telephones.

Changing Settings to Support PBX or Centrex Services

You may need to change some or all of the following features if you want your system to work behind a PBX or Centrex system.

Consider the following when setting up your system to work effectively behind a PBX or Centrex system:

- Recall setting
- Dialing restrictions
- Speed Dial and Auto-Dial numbers

Recall Setting

Set the Recall Timer Duration (#107) to match the setting used by your PBX or Centrex system (usually 800 msec, or "32"). This setting affects the length of a Recall signal sent by the control unit to access PBX or Centrex services.

Dialing Restrictions

Outgoing Call Restriction (#401) is a PARTNER system restriction intended to limit an extension's dialing to "inside calls only" (using the *Intercom* buttons on system telephones) or to "inside and local calls only" (allowing calls within the PBX or Centrex system and local calls outside the PBX or Centrex system). However, if users in your PBX or Centrex system use a dial-out code (9 on most PBX or Centrex systems) before dialing numbers outside the PBX or Centrex system, the PARTNER system cannot prevent toll calls for extensions restricted to "inside and local calls only" (unless you use Disallowed Phone Number Lists (#404) to prevent dialing to specific classes of numbers). The Star Code Dial (toll fraud prevention) functionality may not behave properly behind a PBX due to

- the use of both # and *
- variable length access codes

If your PBX or Centrex system includes dialing restrictions, use those instead of the PARTNER system restrictions. If you have PBX or Centrex dialing restrictions on a line and also program PARTNER system restrictions, both the

PBX or Centrex system and PARTNER system restrictions apply. However, PARTNER system dialing permissions do not override PBX or Centrex system restrictions.

Speed Dial and Auto Dial Numbers

When you program numbers outside the PBX or Centrex system as Speed Dial and Auto Dial numbers, include the PBX or Centrex system dial-out code (9 on most systems), followed by one or more pauses, in the stored number.

Emergency Phone Number List (#406)

Use this feature to create a list of up to 10 telephone numbers that all users can dial regardless of dialing restrictions, provided they have access to an outside line. Typical list entries include fire, police, and emergency services numbers.

You can use Emergency List entries to override numbers that would otherwise be disallowed. For example, if you created Disallowed List entries to prevent calls to area code 201, but you want to allow calls to a specific number in that area code (such as the number of a manager who is on call after hours), put the number in the Emergency List.

Each telephone number can include up to 12 digits. Enter the telephone number exactly as you would dial it, including any toll prefixes.

To create an Emergency Phone Number List:

- 1 Press **Feature** **0** **0** **System Program** **System Program** **#** **4** **0** **6** at extension 10 or 11.
- 2 Select a list entry (01–10).
- 3 Enter the telephone number.
- 4 To save the telephone number in memory, you must press **Enter**.

5 Do one of the following:

- To enter other telephone numbers, press **(Next Item)** to select a different list entry and repeat Steps 3 and 4.
- To change the telephone number you just entered, press **(Remove)** and repeat Steps 3 and 4.
- To delete the telephone number you just entered, press **(Remove)**.

6 Select another procedure, or exit programming mode.

Voice Messaging Systems

Four voice messaging systems are compatible with your system.

- PARTNER Messaging is a module that sits in the PARTNER two-slot or five-slot carrier and can have a 2-, 4-, or 6-port configuration.
- The PARTNER MAIL VS Voice Messaging System (PMVS) is a module that sits in the PARTNER two-slot or five-slot carrier and can have a 2- or 4-port configuration.
- PARTNER Voice Messaging (PVM) PC Card (2-port configuration only)
- The PARTNER MAIL System (2, 4 or 6-port configuration) is an auxiliary device that connects to the system through extension jacks.

NOTES

- *The system extension maximum is 48. However, in some configurations, the 012E module and/or the PARTNER Messaging module will physically permit more than 48 stations to be installed in the 5-slot carrier. In these configurations, only station ports and voice messaging ports up to 48 will function. Station ports and voice messaging ports above 48 will not function with ETR or T/R telephones because they are outside the PARTNER ACS dial plan.*
- *Some older messaging systems may not recognize the full dial plan available in Release 7.0.*

Programming for Voice Messaging Systems

PARTNER Messaging requires programming for both the communications system and PARTNER Messaging. Some features must first be programmed on the communications system. Then PARTNER Messaging programming is performed, followed by additional communications system programming. See the *PARTNER Messaging Installation, Programming, and Troubleshooting Online Guide* or the *PARTNER Messaging System Manager's Quick Reference* for the programming required to use PARTNER Messaging with your PARTNER ACS.

To program any of the other three voice messaging systems, perform the following tasks. See the *PARTNER Advanced Communications System Release 7.0 Installation, Programming, and Use* guide for the procedures to program these tasks.

- Assign the PARTNER MAIL VS extensions to Hunt Group 7 using Hunt Group Extensions (#505).
- Set the Transfer Return Extension (#306) for each of the messaging system extensions to extension 10 (or other extension of your choosing). This ensures that unanswered calls transferred by the messaging system to extensions that do not have VMS Coverage return to the extension you designate as the Transfer Return Extension.
- Program a VMS Cover button (Feature 15) on phones to allow subscribers to turn VMS Coverage on and off.
- Program Line Coverage Extension (#208) to determine which subscriber's mailbox should receive unanswered calls that come in on the specified line.
- Program a Voice Mailbox Transfer button (Feature 14) at extension 10 so that the operator can transfer calls directly to an extension's mailbox without first ringing its telephone. (This is useful when the operator knows that the subscriber is not available to answer the call.)
- Program an Auto Dial button for the VMS Hunt Group (left intercom 777) on phones for one-touch dialing to the messaging system.
- Use Group Call Distribution (#206 option 1) to assign outside lines that require Automated Attendant Service to Hunt Group 7 (the VMS hunt group).

- If Automated Attendant Service will be used at night, make sure a Night Service Button (#503) is assigned at extension 10.
- Assign appropriate Outgoing Call Restrictions (#401) as well as Allowed Phone Numbers List (#407) or Disallowed Phone Numbers Lists (#404) to voice messaging extensions.

Additional Voice Messaging System Programming

Following are additional features used to program the communication system for a voice messaging system. See Chapter 9, “Using Auxiliary Equipment” in the *PARTNER Advanced Communications System Release 7.0 Installation, Programming, and Use* guide for the procedures to program these tasks.

- Program Automatic VMS Cover (#310) to automatically route an extension’s unanswered calls to the voice messaging system’s Call Answer Service after a specified number of rings so the caller can leave a message.
- Program VMS Cover Rings (#321) individually for subscriber extensions to determine how many times the extension should ring before the call is sent to the messaging system to be answered.
- If Automated Attendant Service will be used, set the VMS Hunt Delay (#506) to meet your business’s needs.
- If Automated Attendant Service will be used, set the VMS Hunt Schedule (#507) to meet your business’s needs.

4 Programming System Features

Overview

This chapter describes the programming of a few of the most commonly used system-wide features:

- System Speed Dial
- Dialing Restrictions and Permissions
- Groups of Extensions

A table listing all the system-wide features (designated by a # code) appears later in this chapter.

System Speed Dial

Program a list of up to 100 frequently-dialed numbers for the system by using System Speed Dial. After you have programmed the numbers, anyone on the system can dial a System Speed Dial number by pressing *Feature* (or *#* at intercom dial tone on a single-line telephone) and the three-digit code, from 600 through 699, for that number. You can *mark* System Speed Dial numbers to override dialing restrictions.

A System Speed Dial number can be up to 28 characters in length and can consist of the digits 0–9, ***, *#*, and the special dialing characters. You assign the number to one of the codes 600 through 699.

To program System Speed Dial numbers:

- 1 Press **Feature** **00** at extension 10 or 11.
- 2 Select a three-digit code by pressing **Feature** and dialing three digits between 600 and 699.
- 3 Enter the number. For example, to program 555-4757, press **5554757**.

NOTE ► To mark the System Speed Dial number to override dialing restrictions, precede the number by a *****. For example, to mark the number 555-1001, press ***55551001**.

- 4 Continue programming System Speed Dial numbers:
 - To program another System Speed Dial number, start from Step 2.
 - To program over an existing number, enter the new number after selecting the three-digit code.
 - To remove a System Speed Dial number, enter the number's three-digit code and press **Mic/HFAI** once.
- 5 Press **Feature** **00** to exit programming mode.

Dialing Restrictions and Permissions

You can restrict outside calling from an extension by using these various features:

- Allowed Phone Number Lists
- Allowed List Assignments
- Disallowed Phone Number Lists
- Disallowed List Assignments
- Line Access Restriction
- Outgoing Call Restriction

**SECURITY ALERT:**

While procedures that restrict dialing are very effective, absolute protection against misuse cannot be guaranteed. System telephones give you more protection against such misuse than single-line telephones. Therefore, you should install system telephones where restricting telephone use is important.

Allowed Phone Number Lists (#407)

Use this feature to specify telephone numbers that users can dial regardless of other dialing restrictions, as long as they have access to an outside line. For example, if you restrict an entire category of calls through Disallowed Phone Number Lists (#404), you can permit calls to a specific number in that category by placing that number on an Allowed Phone Number List.

You can create up to eight Allowed Phone Number Lists of up to 10 telephone numbers each. An Allowed Phone Number can be up to 12 digits long and may include 0–9, (#), (*), and (Hold) (the wildcard character, displayed as !).

**SECURITY ALERT:**

If you are restricting an extension from placing long-distance calls, do not place numbers beginning with a “0” on an Allowed Phone Number List for the extension. Once a user is active on an operator-assisted call, the user can avoid dialing restrictions by asking the operator to dial restricted numbers.

To create a list of Allowed Phone Numbers:

- 1 Press **Feature** (0) (0) **System Program** (System Program) (#) (4) (0) (7) at extension 10 or 11.
- 2 At the **List Number:** prompt, enter a list number (1–8).
- 3 At the **Entry:** prompt, select a list entry (01–10).
- 4 At the **Data-** - - - - - prompt, enter the first telephone number.
- 5 To save the telephone number in memory, press **Enter**.

6 Do one of the following:

- To change the telephone number you just entered, press **Remove** and repeat Steps 4 and 5.
- To delete the telephone number you just entered, press **Remove**.
- To add other telephone numbers to this list, press **Next Item** and repeat Steps 4 and 5.
- To create another list, press **Next Procedure** + **Prev Procedure** and go to Step 2.

7 Select another procedure by using **Next Procedure** + **Prev Procedure**, or exit programming mode.

Allowed List Assignments (#408)

Use this feature to assign up to eight Allowed Phone Number Lists to a specific extension. You must use Allowed Phone Number Lists (#407) to create the lists of allowed telephone numbers *before* you use this procedure.

To assign Allowed Phone Number Lists to an extension:

- 1 Press **Feature** **0** **0** **System Program** **System Program** **#** **4** **0** **8** at extension 10 or 11.
- 2 Enter the number of the extension to be programmed.
- 3 Enter the list number (1–8).
- 4 To assign or unassign the list, press **Next Data** until the appropriate value appears.
 - 1 = Assigned to extension
 - 2 = Not Assigned to extension (the factory setting) ✓
- 5 Do one of the following:
 - To assign or unassign another list to this extension, press **Next Item** until the list number appears on the display. Then repeat Step 4.
 - To program another extension, press **Next Procedure** + **Prev Procedure** and begin at Step 2.
- 6 Select another procedure, or exit programming mode.

Disallowed Phone Number Lists (#404)

Use this feature to specify telephone numbers that users cannot dial. For example, you may want to prevent calls to a specific telephone number or to categories of numbers, such as international numbers.

You can create up to eight Disallowed Phone Number Lists of up to 10 telephone numbers each. A Disallowed Phone Number can be up to 12 digits long and may include 0–9, (#), (*), and (Hold) (the wildcard character, displayed as !).

To create a list of Disallowed Phone Numbers:

- 1 Press **Feature** (0) (0) **System Program** (System Program) (#) (4) (0) (4) at extension 10 or 11.
- 2 At the **List Number:** prompt, enter a list number (1–8).
- 3 At the **Entry:** prompt, select a list entry (01–10).
- 4 At the **Data-** - - - - - prompt, enter the first telephone number.
- 5 To save the telephone number in memory, press **Enter**.
- 6 Do one of the following:
 - To add other telephone numbers to this list, press **Next Item** to select a different list entry and repeat Steps 4 and 5.
 - To change the telephone number you just entered, press **Remove** and repeat Steps 4 and 5.
 - To delete the telephone number you just entered, press **Remove**.
 - To create another list, press **Next Procedure** + **Prev Procedure** and repeat from Step 2.
- 7 Select another procedure by using **Next Procedure** + **Prev Procedure**, or exit programming mode.

Disallowed List Assignments (#405)

Use this feature to assign up to eight Disallowed Phone Number Lists to specific extensions.

You must use Disallowed Phone Number Lists (#404) to create the lists of disallowed telephone numbers *before* you use this procedure.

To assign Disallowed Phone Number Lists to an extension:

- 1 Press **Feature** **0** **0** **System Program** **System Program** **#** **4** **0** **5** at extension 10 or 11.
- 2 Enter the number of the extension to be programmed.
- 3 Enter the list number (1–8).
- 4 To assign or unassign the list, press **Next Data** until the appropriate value appears.
 - 1 = Assigned to extension
 - 2 = Not Assigned to extension (the factory setting) ✓
- 5 Do one of the following:
 - To assign or unassign another list for this extension, press **Next Item** or **Prev Item** until the list number appears on the display. Then repeat Step 4.
 - To program another extension, press **Next Procedure** + **Prev Procedure**, and begin at Step 2.
- 6 Select another procedure, or exit programming mode.

Line Access Restriction (#302)

Use this feature to restrict an extension from receiving and/or making outside calls on a specific line. For example, you may want a secretary to answer calls on a manager's line, but not to make any outgoing calls on the line; in this case you can assign the manager's line to the secretary's extension and restrict it to In Only. Line Access Restriction is useful for phones in "non-secure" areas such as reception areas and patient rooms.

You can use Line Access Restriction to restrict an extension from accessing the Loudspeaker Paging Line.

This procedure is the most extreme way to restrict dialing. For example, an extension with a line set to In Only or No Access cannot select the line to dial out—even for numbers on the Emergency Phone Number List (#406).

To restrict an extension from making calls on a specific line:

- 1 Press **Feature** **0** **0** **System Program** **System Program** **#** **3** **0** **2** at extension 10 or 11.
- 2 At the **Extension:** prompt, enter the extension number to be programmed.
- 3 At the **Line:** prompt, enter the line number to be restricted at this extension.
The current restriction appears.
- 4 To change the line restriction for this extension, press **Next Data** until the appropriate value appears.
 - 1 = No Restriction
(calls permitted on that line; this is the factory setting) ✓
 - 2 = Out Only
(can only make outside calls, not receive them, on that line)
 - 3 = In Only
(can only receive calls, not make them, on that line)
 - 4 = No Access (cannot receive or make calls, but can join calls, receive transferred calls, or pick up calls on hold on that line)
- 5 Do one of the following:
 - To restrict another line at this extension, press **Next Item** or **Prev Item** until the line number shows on the display. Repeat Step 4.
 - To restrict another extension, press **Next Procedure** + **Prev Procedure** and begin at Step 2.
- 6 Select another procedure, or exit programming mode.

Outgoing Call Restriction (#401)

Use this feature to specify the types of outgoing calls that can be made on all lines at an extension.

To identify the types of outgoing calls that can be made on all lines at an extension:

- 1 Press **Feature** **0** **0** **System Program** **System Program** **#** **4** **0** **1** at extension 10 or 11.
- 2 At the **Extension:** prompt, enter the number of the extension to be programmed.
- 3 To change the type of call restriction, press **Next Data** until the appropriate value appears:
 - 1 = No Restriction (can make toll, local, and intercom calls; this is the factory setting.) ✓
 - 2 = Inside (intercom) Only
 - 3 = Local (intercom and local) Only
- 4 To program another extension, press **Next Item** or **Prev Item** until the extension number shows on the display. Repeat Step 3.
- 5 Select another procedure, or exit programming mode.

Groups of Extensions

Placing extensions into groups allows users to help each other in answering calls. You can set up the groups shown in the following table.

Groups of Extensions

Group...	Description...
Calling Group # 502	Group of extensions that can be called at the same time. Any user in the system can ring or page the entire Calling Group; the first extension to pick up the call is connected to the caller. This can be a useful feature for sales pools.
Hunt Group # 505	Group of extensions among which calls are automatically distributed. A Hunt Group lets you off-load calls from a single user. You can assign user extensions to Hunt Groups 1 through 6. Use Hunt Group 7 for voice messaging extensions and Hunt Group 8 for fax calls. This can be useful for customer service groups.
Night Service Group # 504	Group of extensions that can receive calls after hours. When Night Service is on and a call comes in, all extensions in the Night Service Group ring immediately, regardless of normal Line Ringing settings.
Pickup Group # 501	Group of extensions that can be picked up by other users. When a call rings at a Pickup Group extension, any other user in the system can answer the call by dialing the Pickup Group code. This can be useful when users need to answer calls on lines or pools not assigned to their telephones.
Group Call Distribution # 206	Group extensions that receive outside calls. Outside calls ring directly into a Hunt Group instead of being answered and transferred to the receptionist.

5 Programming Telephone Features

Overview

As the System Administrator, you should program telephones at individual extensions with certain features. There are two types of telephone programming:

- Centralized Telephone Programming—programming individual telephones from extension 10 or 11.
- Extension Programming—programming an individual system telephone from the extension to which it is connected.

Use Centralized Telephone Programming to program the Required Telephone Programming features presented in this chapter. The required features include:

- Automatic Line Selection
- Extension Name Display
- Line Ringing

Automatic Line Selection

This feature determines the line or pool a user is connected to after lifting the handset or turning on the speaker to make a call. The system looks for lines or pools in the order specified by Automatic Line Selection and selects the first available line or pool.

At key extensions, with Automatic Line Selection at its factory setting, the system first searches to find an idle outside line in numerical order (starting with the lowest line number). If all outside lines are busy, the system searches for an idle intercom line. This order can be changed, however, to accommodate your business needs. For example, a telemarketing firm with a WATS line (line 5) to reduce telephone expenses would set Automatic Line Selection for all telemarketers' extensions to "05, 01, 02, 03, 04, Intercom." This way the WATS line is selected first.

At pooled extensions, with Automatic Line Selection at its factory setting, the system first searches to find an available line in the main pool (pool 880 button 1, then button 2). If all outside lines in the pool are busy, the system selects an idle intercom line. However, you can change the order to accommodate a different automatic line selection. For example, your boss prefers her individual line (line 15) to be selected when she lifts the handset; then she wants auxiliary pool 881 to be selected, which is used for making international calls. To do this, set Automatic Line Selection to "15, 881, Intercom."

If a single-line telephone user intends to place intercom calls and access system features, Automatic Line Selection for his or her extension should be set to intercom first for proper operation.

To program Automatic Line Selection for an extension:

- 1 Press **Feature** **0** **0** **System Program** **System Program** **Central Tel Program** at extension 10 or 11.
- 2 Enter the number of the extension to be programmed for Automatic Line Selection.
- 3 Press ***** *****.

- 4 Press the line, pool, or **Intercom** buttons in the desired order. The valid entries for Automatic Line Selection depend upon the type of extension:
 - Key Extension: Outside system lines, Left Intercom (the factory setting) ✓
 - Pooled Extension: Pool 880 button 1, button 2, Left Intercom, Right Intercom (the factory setting), Pools 881-883, individual lines
- 5 To exit Automatic Line Selection, press **(*) (*)**.
- 6 Press **Central Tel Program** and enter a new extension number, or exit programming mode.

Extension Name Display

You can assign a name to an extension: up to 20 characters long on PARTNER telephones or up to 12 characters long on MLS telephones. Then, when that extension is used to make an intercom, group, or transferred call, the name appears on the system display telephone receiving the call. Similarly, users receiving a transfer return call see the name of the person assigned to the extension that did not answer the transferred call. The following table shows the valid character entries for Extension Name Display.

Valid Character Entries

Letters		Numbers
A = 21	N = 62	blank = 11
B = 22	O = 63	0 = 00
C = 23	P = 71	1 = 10
D = 31	Q = 72	2 = 20
E = 32	R = 73	3 = 30
F = 33	S = 74	4 = 40
G = 41	T = 81	5 = 50
H = 42	U = 82	6 = 60
I = 43	V = 83	7 = 70

Valid Character Entries—Continued

Letters		Numbers
J = 51	W = 91	8 = 80
K = 52	X = 92	9 = 90
L = 53	Y = 93	
M = 61	Z = 94	

To assign a name to an extension:

- 1 Press **Feature** **0** **0** **System Program** **System Program** **Central Tel Program** at extension 10 or 11.
- 2 Enter the number of the extension to be programmed.
- 3 Press left **Intercom**.
- 4 Enter the two-digit code for each character you want to enter. For example, the name “Ed” is **3** **2** **3** **1**.
- 5 If you make a mistake, press **Mic/HFAI** to clear the display. Repeat Step 4 to enter the correct name.
- 6 Program a button for this extension or exit programming mode.

Line Ringing

This feature determines how each outside line or pool assigned to an extension rings. You can specify Immediate Ring, Delayed Ring (telephone rings after a 20-second delay), or No Ring.

Delayed Ring is useful for backup coverage on shared lines or pools, such as for secretaries who cover each other's lines. No Ring is useful for all extensions except 10 when an operator answers all calls, or for telephones with no regular users, such as those in conference rooms.

To change the way outside lines or pools ring at an extension:

- 1 Press **Feature** **0** **0** **System Program** **System Program** **Central Tel Program** at extension 10 or 11.
- 2 Enter the number of the extension to be programmed for Line Ringing. The green lights next to the line or pool buttons show the current Line Ringing settings for all lines or pools assigned to the extension. (If a line or pool is not assigned to a button, the green light next to that button is off.) The following ringing options can be shown by the green light next to the line or pool button:
 - Immediate Ring — on steady
 - Delayed Ring — flashes slowly
 - No Ring — flutters quickly
 - Immediate Ring is the factory setting for lines; No Ring is the factory setting for pools.
- 3 Press the line or pool button until the button light shows the correct setting (the setting for the currently selected line or pool also appears on the display).
- 4 Continue programming, or exit programming mode.

6 Maintaining Your System

Overview

Once you have set up your system, you will need to maintain it. For example, changes in your business may require additional lines or extensions. And to prepare for emergencies such as power failures, you will want to back up all your customized feature settings so you can restore the system quickly.

Backup and Restore

You should back up the system programming periodically especially if you are changing the processor module or upgrading the system, or before and after any major programming changes. You can back up the programming to either the internal memory of the PARTNER ACS R7.0 processor module or a Backup/Restore PC Card. You can back up the programming automatically or manually. Occasionally you may have to restore programming from the backed-up file. The PARTNER system will automatically restore the most current backup file if it detects that the battery backup translation has been corrupted.

- NOTES** ►
- *If you make any changes to the system programming, PARTNER ACS R7.0 will automatically back up the system programming to the internal memory of the processor at 3 A.M. the next morning.*
 - *If you have a PARTNER Remote Access PC Card, which allows you to program the system and perform backup and restore functions remotely or locally with a PC, you can also back up programming to this card. Backing up programming to a PC Card or a PC (via PARTNER ACS R7.0 PC Administration software) enables you to maintain a “removable” backup.*
 - *Using a PC card does not back up the configuration of the 1600 DSL module. This configuration is retained in the flash memory of the 1600 DSL module, not on the PC card. When the system resets, the configuration in the flash memory of the 1600 DSL module becomes the active configuration for that module.*

Backup Programming—Automatic (#123)

Use this feature to set up the automatic backup of all programming (except the system date, and time). When Backup Programming—Automatic is set to Active Internal or Active PC Card, the information is backed up at 2:00 a.m. on the next day to either the internal memory of the processor module or a Backup/Restore PC Card. From that point onward, the information is backed up at 2:00 a.m. on the first day of each month to either the internal memory of the processor module or a Backup/Restore PC Card. Active Internal scheduled backups and system initiated backups are stored in the same file.

If Backup Programming—Automatic is Active Internal or Active PC Card and an automatic backup fails, a Backup-Failure Alarm message appears (instead of the system date and time) on the top line of the telephone display at idle Extensions 10 and 11.

See [Chapter 7, “If Something Doesn’t Work”](#) for an explanation of these messages and suggested corrective actions, and for the procedure for clearing the Backup-Failure Alarm message.

To change the setting for Backup Programming—Automatic:

- 1 If you want to back up to a PC Card, check that only one Backup/Restore PC Card is in the processor module.
- 2 Press **Feature** **0** **0** **System Program** **System Program** **#** **1** **2** **3** at extension 10 or 11.
- 3 To change the setting, press **Next Data** or **Prev Data** until the setting you want appears, or press **Remove** to return the setting to the factory setting. The possible settings are:
 - 1 = Active Internal
 - 2 = Active PC Card
 - 3 = Not Active (the factory setting) ✓
 - 4 = Backup Alarm Cleared
- 4 Exit programming mode.

For information about using Option 4, Backup Alarm Cleared, see [“Clearing a Backup-Failure Alarm” on page 88](#).

Backup Programming—Manual (#124)

Use this feature to manually back up all the programming (except the system date and time) to either the internal memory of the processor module or a Backup/Restore PC Card.

To begin a manual backup of system settings:

- 1 If you want to back up to a PC Card, verify that only one Backup/Restore Card is in the processor module.
- 2 Press **Feature** **0** **0** **System Program** **System Program** **#** **1** **2** **4** at extension 10 or 11.

The current setting appears.

- 3 To change the setting, press **Next Data** or **Prev Data** until the setting you want appears, or press **Remove** to return to the factory setting. The possible settings are:

- 1 = Internal Memory ✓
- 2 = PC Card

If there is a problem, a message appears (see [Chapter 7, “If Something Doesn’t Work”](#) for explanations and corrective actions).

If there is no problem, press **Enter** to begin the backup.

- 4 Press **Enter**.

A status message is displayed indicating that a backup is in progress, and within 30 seconds, a message appears indicating the result.

If the backup failed, an error message appears (see [Chapter 7, “If Something Doesn’t Work,”](#) for explanations and corrective actions).

- Backup Failed:Check Card
- Backup Failed:SystemBusy
- Backup Failed:Insert Valid Card

- 5 Exit programming mode.

Restore Programming (#125)

Use this feature to reinstate your system and telephone programming (except the System Day and System Time) to the settings saved on the processor module or a PC Card at the last system backup (manual or automatic). You should restore the system settings if your system settings become corrupted, if you make changes and decide you would rather use the former settings, or if you replace your processor module and want to retain the system settings you had on the previous processor module. A successful restore takes about five seconds.

NOTE ► *When a restore completes successfully, the Restore Complete message appears for two seconds at idle extensions 10 and 11. Then a System Reset—Programming Saved (#728) occurs, disconnecting any calls in progress. You should warn users before beginning a restore, or do the restore during nonbusiness hours.*

To initiate a restore:

- 1 If you want to restore from a PC Card, verify that only one Backup/Restore Card is in the processor module. If you do not have a PC Card installed, see the *PARTNER PC Card Installation Instructions* that came with your PC Card.
- 2 Press `(Feature) (0) (0) (System Program) (System Program) (#) (1) (2) (5)` at extension 10 or 11.
- 3 Choose the backup file you want to use for the restore:
 - 1 Internal Man.mmddyy, where “mmddyy” represents the date of the manual backup to the internal memory of the processor module
 - 2 PC Card Man.mmddyy, where “mmddyy” represents the date of the manual backup on the PC Card
 - 3 Internal AUTO.mmddyy, where “mmddyy” represents the date of the automatic backup to the internal memory of the processor module
 - 4 PC Card AUTO.mmddyy, where “mmddyy” represents the date of the automatic backup on the PC Card

NOTE ► *If the Backup/Restore PC Card is fresh from the factory, and no backups have been recorded on it yet, the filenames are PC CARD MAN.***** and PC CARD AUTO.***** , respectively. (These file names are also used for the internal flash memory files.) You cannot use these files for a restore; they generate the error message Empty File after you press **Enter** in Step 4.*

4 Press **Enter** to start the restore.

If the system detects an error before beginning the restore, the bottom line of the display shows one of the following messages:

- Insert Card OR Insert Valid Card
- Bad File OR Bad File-Try Again
- Incompat Version OR Incompatible Versions
- Empty File

If the system does not detect an error, the restore begins. One of the following occurs:

- When the restore has completed successfully, the bottom line of the display shows Restore Complete for two seconds. All calls in progress are disconnected, and then the system resets itself. You are no longer in System Programming mode.
- If the restore is not successful, the display shows Restore Failed or Restore Failed-Try Again for two seconds. All calls in progress are disconnected and all of the system and telephone programming settings revert to the factory settings. You are no longer in System Programming mode. Try the restore again.

Battery Replacement

The processor module uses two user-replaceable AAA alkaline batteries. These batteries provide enough power to retain the system programming settings during a power failure for 45 days to six months, depending on the freshness of the batteries. When battery power is getting low, the system displays a `ChgBat W/PowerOn` or `ReplaceSysBat W/Power On` message on the top line of display telephones at extensions 10 and 11 in place of the default day/date/time message. You should replace the batteries within 45 days of seeing the message.

NOTE ► *The message may flicker on and off as the batteries approach the low-power threshold.*



CAUTION:

Do not turn off the power or remove the processor module before replacing the batteries! If you do, all settings for system and telephone programming revert to the factory settings. If you have a Backup/Restore PC Card, do a backup before changing the batteries.

Change the batteries in the processor module every year, even if the system has not yet displayed the `ReplaceSysBat W/Power On` message. Choose good quality alkaline batteries. (See [“Inserting Batteries in the Processor Module” on page 19.](#))

Using a PC Card

Follow these steps to upgrade your system's software with a PC card:

 **CAUTION:**

Before starting, verify that you have batteries installed in the processor module by viewing the display of the telephone at extension 10.

- 1 If you have a 5-slot carrier, move the carrier's On/Off switch to the "Off" position ("O").
- 2 For all types of installations, disconnect the power cord from the wall outlet.
- 3 If you do not have a 5-slot carrier, go to Step 4.

If you have a 5-slot carrier:

- a Loosen the thumb screw at the bottom of the carrier cover.
- b Rotate the carrier cover to disengage the tabs at the top of the modules from the openings on the top of the carrier cover.

 **CAUTION:**

Remove all other PC Cards from the processor before initiating an upgrade.

- 4 To insert the PC Card, hold it with the label facing to the right, and slide it gently into either PC Card slot on the processor module. When inserted properly, the PC Card projects about 1-5/8 inch (4 cm) from the module.

- 5 Power up the system:
 - a Reconnect the power cord.

 **CAUTION:**

The power cord should hang straight down from the connector, flush against the plastic case. Do not install the power cord at an angle to the case or with a loop in it.

- b If you have a 5-slot carrier, move the carrier's On/Off switch to the "On" position ("—").

The LEDs on the processor module (center slot) will alternate red/green while the upgrade is being performed. When the upgrade is finished, the LED will appear steady green.

- 6 Make sure each module has a green LED in the same horizontal area, and that they all appear steady green. This indicates that each module is powered up.

- NOTES** ►
- *PARTNER ACS Release 7.0 provides a firmware upgrade capability for the 1600 DSL module. If you are performing a firmware upgrade of this module, see ["Upgrading 1600 DSL and 012E Module Firmware"](#) on page 73 for a description of how the LEDs appear during the upgrade.*
 - *PARTNER ACS Release 7.0 provides a firmware upgrade capability for the 012E module. If you are performing a firmware upgrade of this module, see ["Upgrading 1600 DSL and 012E Module Firmware"](#) on page 73 for a description of how the LEDs appear during the upgrade.*
 - *If a single light is out, power down the control unit, reseal the module and power up the control unit.*
 - *If multiple lights are out, power down the control unit, reseal the leftmost module that has a light out, and power up the control unit.*
 - *If the lights are still out, call for support as instructed on the inside front cover of this guide.*

- 7** Do not remove the PC card. The card automatically converts to a backup/restore and remote access card. If you removed other PC cards, PVM or ASA/DXD, for example, power down the system and reinstall the PC cards after the upgrade is complete.
- 8** If you have a 2-slot carrier or a stand-alone configuration, you are finished with this procedure. If you have a 5-slot carrier, continue with Step 9.
- 9** Make sure all modules are seated properly.
- 10** Perform the following steps to replace the cover for the 5-slot carrier:
 - a** Position the carrier cover over the modules so that the openings on the top of the carrier cover align correctly with the tabs at the top of the installed 5-slot carrier and modules.
 - b** Rotate the carrier cover into position so that it aligns correctly with the thumb screw opening on the bottom of the carrier.
 - c** Tighten the thumb screw. *To ensure proper alignment and safe operation, tighten the thumb screw securely.*

Upgrading 1600 DSL and 012E Module Firmware

PARTNER ACS Release 7.0 provides a firmware upgrade capability for the 1600 DSL module, which is equipped with programmable flash memory. The firmware to upgrade this module resides on a Backup/Restore PC Card.

PARTNER ACS Release 7.0 provides a firmware upgrade capability for the 012E module, which is equipped with programmable flash memory. The firmware to upgrade this module resides on a Backup/Restore PC Card.

The steps to perform a firmware upgrade are the same as those to upgrade the system software. See [“Using a PC Card” on page 70](#).

Check the LEDs

While a 1600 DSL or 012E module is undergoing a firmware upgrade, the power LEDs appear as follows:

- The power LED on the 1600 DSL and/or the 012E module is initially steady green for 10 to 20 seconds, then flashes for another 5 to 10 seconds.
- The LED on the processor module flashes green while the firmware upgrade is in progress.
- The LEDs on other modules residing in the carrier that are not being upgraded are off.

NOTE ► *Some modules do not display the LED off during a firmware upgrade of other modules. The power LED on the 1600 DSL module is steady green and the power LED on the PARTNER Messaging module is steady amber while firmware is upgraded on other modules.*

The firmware upgrade process occurs for one module at a time. After successful completion of the upgrade for one module, the system resets and begins the firmware upgrade of the next module, if required. The firmware upgrades begin with modules in the left-most slot to the right-most slot of the carrier. Once a successful firmware upgrade has been completed for all modules, all power LEDs are steady green.

Upgrading T1 Module Firmware

PARTNER ACS Release 7.0 provides a firmware upgrade capability for the T1 module, which is equipped with programmable flash memory. The firmware to upgrade this module can reside on a Backup/Restore PC Card.

The steps to perform a firmware upgrade are the same as those to upgrade the system software. See [“Using a PC Card” on page 70](#).

Once a successful firmware upgrade has been completed, all power LEDs are steady green.

The T1 module may take up to a minute to initialize.

Adding New Modules

Adding new modules to an existing 5-slot carrier is very similar to installing the control unit.

NOTE ► *Use these instructions if you are adding modules to an existing 5-slot carrier. If you are upgrading from a stand-alone PARTNER ACS processor module to a 2-slot carrier, see [“Wall-Mounting a Stand-Alone Processor Module and a 2-Slot Carrier” on page 14](#) for instructions.*

**CAUTION:**

Before starting, verify that you have batteries installed in the processor module by viewing the display of the telephone at extension 10.

Follow these steps to add a module to an existing 5-slot carrier:

- 1 Move the On/Off switch to the “Off” position (“O”).
- 2 Remove the power cord from the wall outlet.
- 3 Perform the following steps to remove the cover:
 - a Loosen the thumb screw at the bottom of the carrier cover.
 - b Rotate the carrier cover to disengage the tabs at the top of the modules from the openings on the top of the carrier cover.
- 4 Before installing a module, remove the clear, plastic protector from the connector area on the rear of the module by grasping the tabs on the ends of the protector and lifting.

- 5 Before you insert the new module, make sure that the T1 module (if used) or 1600 DSL module (if used) is in the leftmost slot and that all 400 (or 200) modules are installed to the right of all 012E, 308EC, or 206 modules. If you need to move a module to accommodate the new one, see [“Replacing Modules” on page 77](#).

NOTE ► *PARTNER ACS Release 7.0 or later supports Endeavor telephones when an Endeavor 362EC module is installed in the carrier. Install the Endeavor 362EC module(s) to the right of the T1 module (if installed) or the 1600 DSL module (if one is installed) and to the left of all 400 and 200 modules.*

- 6 Push slowly but firmly in the center of the module until the module locks into place and is attached to the rear of the carrier. Do not force the module. If the module does not insert easily, remove it, clear any obstruction, and reinsert it.
- 7 Connect line and/or extension jack cords to the new module (see [“Connecting Lines and Extensions” on page 23](#)).
- 8 Reconnect the power cord to the wall outlet.

**CAUTION:**

The power cord should hang straight down from the connector, flush against the plastic case. Do not install the power cord at an angle to the case or with a loop in it.

- 9 Move the On/Off switch to the “On” position (“—”).
- 10 Check that all green lights on the fronts of the modules are lit:
 - *If a single light is out*, power down the control unit, reseal the module, and power up the control unit.
 - *If multiple lights are out*, power down the control unit, reseal the leftmost module that has a light out, and power up the control unit.
 - *If the lights are still out*, call for support as instructed on the inside front cover of this guide.
- 11 Make sure all modules are seated properly. (The cover will not fit if the modules are not seated properly.)

- 12 Perform the following steps to replace the cover:
 - a Position the carrier cover over the modules so that the openings on the top of the carrier cover align correctly with the tabs at the top of the installed 5-slot carrier and modules.
 - b Rotate the carrier cover into position so that it aligns correctly with the thumb screw opening on the bottom of the carrier.
 - c Tighten the thumb screw. *To ensure proper alignment and safe operation, tighten the thumb screw securely.*

Replacing Modules

Replacing system modules is similar to how the modules were installed into the control unit. The procedure varies slightly between the stand-alone/2-slot carrier configuration and the 5-slot carrier configuration.

Replacing Modules in a Stand-Alone or 2-Slot Carrier Configuration

**CAUTION:**

Before starting, verify that you have batteries installed in the processor module by viewing the display of the telephone at extension 10.

To replace a module or modules in a stand-alone or 2-slot carrier configuration:

- 1 Remove the power cord from the wall outlet.
- 2 Check the slack in the wires. If there is not enough slack to remove the module without pulling the line and extension cords free, label and disconnect the wires before continuing.
- 3 For a stand-alone configuration:
 - a Remove the screws at the top and bottom of the processor module, and remove the module from the wall.
 - b Mount the new module by following the steps in [“Wall-Mounting a Stand-Alone Processor Module and a 2-Slot Carrier”](#) on page 14; then go to Step 9.

- 4 For a 2-slot carrier configuration, do the following:
 - a Remove the long screw at the bottom of the modules.
 - b Remove the screws that attach the carrier to the modules.
 - c Pull the carrier to the right to remove it.
 - d Slide the top module to the left to disengage its interlocking mounting tracks from the processor module.

If you are replacing the processor module, go to Step e. If you are replacing the top module, continue with Step g.
 - e Remove the screw at the top of the processor module, and remove the module from the wall.
 - f Mount the new PARTNER ACS processor module by following the instructions in [“Wall-Mounting a Stand-Alone Processor Module and a 2-Slot Carrier” on page 14](#) and [“Inserting Batteries in the Processor Module” on page 19](#).
 - g Mount or remount the top module by following the steps in [“Wall-Mounting a Stand-Alone Processor Module and a 2-Slot Carrier” on page 14](#).
- 5 Connect the line and extension cords one at a time, making sure to place the correct cords into their corresponding jacks on the new module. (See [“Connecting Lines and Extensions” on page 23](#).)
- 6 Reconnect the power cord.

**CAUTION:**

The power cord should hang straight down from the connector, flush against the plastic case. Do not install the power cord at an angle to the case or with a loop in it.

Replacing Modules in a 5-Slot Carrier

Replacing a module in a 5-slot carrier involves many of the steps used in installing the modules.



CAUTION:

Before starting, verify that you have batteries installed in the processor module by viewing the display of the telephone at extension 10.

Follow these steps to replace a module in a 5-slot carrier:

- 1 Move the On/Off switch to the “Off” position (“O”).
- 2 Remove the power cord from the wall outlet.
- 3 Perform the following steps to remove the cover:
 - a Loosen the thumb screw at the bottom of the carrier cover.
 - b Rotate the carrier cover to disengage the tabs at the top of the modules from the openings on the top of the carrier cover.
- 4 Before installing a module, remove the clear, plastic protector from the connector area on the rear of the module by grasping the tabs on the ends of the protector and lifting.
- 5 Check the slack in the wires. If there is not enough slack to remove the module without pulling the line and extension cords free, label and disconnect the wires.
- 6 Place one hand on top of the module. With the other hand, grip the plastic bracket on the bottom front of the module, and pull out the old module.

- 7 If you are replacing a module with one of a different type, make sure that the T1 module (if used) or the 1600 DSL module (if used) is in the leftmost slot, that all 400 (or 200) modules are installed to the right of all 012E, 308EC, or 206 modules, and that the processor module remains in the center slot.

NOTES ►

- *The T1 module is assigned 16 lines, even though it has only one line jack. If you have a T1 module in a 5-slot carrier, label the line jacks on the module after the T1 module to begin with “22.”*
- *The 1600 DSL module is assigned 16 lines, even though it has only one line jack. If you have a 1600 DSL module in a 5-slot carrier, label the line jacks on the module after the 1600 DSL module to begin with “22.”*
- *PARTNER ACS Release 7.0 supports Endeavor telephones when an Endeavor 362EC module is installed in the carrier. Install the Endeavor 362EC module(s) to the right of the T1 module (if installed) or the 1600 DSL module (if installed) and to the left of all 400 and 200 modules.*

- 8 To insert the replacement, once the module is properly seated, firmly push the center of the module until the connectors on the module lock into place, and the module is attached to the rear of the carrier. For proper engagement of the connectors, the module must be inserted straight into the carrier. A slight click indicates the connectors are engaged.

**CAUTION:**

Do not force the module. Use the carrier shelf as a reference and do not tilt, slant or rotate the module. If the module does not insert easily, remove it, clear any obstruction, and reinsert it.

- 9 Connect the line and extension cords one at a time, making sure to place the correct cords into their corresponding jacks on the new module.

- 10 Reconnect the power cord.

**CAUTION:**

The power cord should hang straight down from the connector, flush against the plastic case. Do not install the power cord at an angle to the case or with a loop in it.

- 11 Move the carrier's On/Off switch to the "On" position ("—").
- 12 Check that all green lights on the fronts of the modules are lit:
- *If a single light is out*, power down the control unit, reseal the module, and power up the control unit.
 - *If multiple lights are out*, power down the control unit, reseal the leftmost module that has a light out, and power up the control unit.
 - *If the lights are still out*, call for support as instructed on the inside front cover of this guide.
- 13 Make sure all modules are seated properly. (The cover will not fit if the modules are not seated properly.)
- 14 Perform the following steps to replace the cover:
- a Position the carrier cover over the modules so that the openings on the top of the carrier cover align correctly with the tabs at the top of the installed 5-slot carrier and modules.
 - b Rotate the carrier cover into position so that it aligns correctly with the thumb screw opening on the bottom of the carrier.
 - c Tighten the thumb screw. *To ensure proper alignment and safe operation, tighten the thumb screw securely.*

Changing System Settings

If you are upgrading PARTNER ACS Release 7.0 to a newer release by using the PC Card upgrade, all of your system programming settings are converted to work with the new release. However, you may want to consider some additional programming for the features.

 **CAUTION:**

Remove all other PC Cards from the processor before initiating an upgrade.

For more information on using the PC Card Software Upgrade, see [“Using a PC Card” on page 70](#).

Changing the System Clock

You may need to change the system clock for daylight savings time, after a prolonged power failure, or after a system reset. Use System Date (#101) and System Time (#103) to set the current date, day, and time.

Adding Lines, Pools, and Extensions

As your business grows or changes, so do your needs for your PARTNER ACS. As you upgrade to newer releases, you must program for new features. As you expand, you can add lines, pools, and extensions to your system.

NOTE ► *If you replace a module with a different type, be sure you check the telephone and line connections and verify system and telephone programming. In many cases, you may need to rearrange the connections and/or change telephone or system programming.*

Adding New Lines

How you add new lines to the system depends upon the type of extension you are adding them to.

Key Extensions

You can add individual lines to pooled extensions or add new lines to key extensions (all extensions in Key mode; in Hybrid mode, extension 10 and any extensions set to Key by using Line Access Mode (#301) are key extensions.)

If you add a line to your system, you may need to adjust some line settings:

- **Dial Mode (#201)** if the new line is a rotary line
- **Line Assignment (#301)** to assign the line to specific extensions
- **Line Ringing** (Centralized Telephone Programming) to specify when the line starts ringing at each extension that has the line
- **Line Access Restriction (#302)** to limit an extension's access to the line

- The system automatically assigns the new line as the last line in the Automatic Line Selection sequence. If you want to change the order, use **Automatic Line Selection**.

NOTE ► *Do not use Number of Lines (#104) if you add lines to the system after initial setup because it changes Line Assignment (#301), Line Access Restriction (#302), Automatic Line Selection, and Line Ringing for existing lines back to factory settings. To add a new line without affecting other settings, use Line Assignment (#301).*

Pooled Extensions

You can add new lines to existing pools if your system is configured for Hybrid mode. To assign a new line to a pooled extension as an individual line, use the features in “Key Extensions” above.

If you add a line to your system for use in an existing pool, use Dial Mode (#201) if the new line is a rotary line and Pool Line Assignment (#207) to add the line to an existing pool.

NOTE ► *Do not use Number of Lines (#104) if you add lines to the system after initial setup because it changes Pool Line Assignment (#207), Pool Extension Assignment (#314), Pool Access Restriction (#315), Automatic Line Selection, and Line Ringing for existing pools back to factory settings. Additionally, it changes Line Assignment (#301), Line Access Restriction (#302), Automatic Line Selection, and Line Ringing for individual lines back to factory settings. To change pool assignments without affecting other settings, use Pool Line Assignment (#207) and Pool Extension Assignment (#314).*

Adding New Pools

You can create new pools if your system is operating in Hybrid mode. If you add outside lines for use in a new pool, you may need to use the following features:

- **Dial Mode (#201)** if the new lines are rotary lines
- **Pool Line Assignment (#207)** to assign lines to the new pool
- **Pool Extension Assignment (#314)** to assign the new pool to specific extensions
- **Line Ringing** to specify when the new pool starts ringing at each extension that has the pool
- **Pool Access Restriction (#315)** to limit an extension's access to all the lines in the new pool
- **Automatic Line Selection** to add the new pool to the extension's Automatic Line Selection sequence

Adding New Extensions

If you add an extension to your system, you can probably use Copy Settings (#399) to copy the settings of an existing extension.

Swapping Extensions

If a user changes location but wants to keep the same extension number, you can make the change easily by changing the connection at the control unit.

For example, if the users at extensions 29 and 32 switch offices, you can disconnect the modular plugs from those extension jacks in the control unit. Then reconnect the plug from 32 into extension jack 29 and the plug from 29 into extension jack 32. Now the users can take their respective telephones to their new locations, keep the same extension numbers, and retain the telephones' programmed settings.

NOTE ► *In some cases, some system parameters may also need to be changed, i.e., pool extension assignments, when swapping extensions.*

7 If Something Doesn't Work

Overview

This chapter gives you some tips for fixing common problems fast.

Your Release Number

The software version you have installed on your processor partly determines what your system can do. Before you call the Helpline, identify your software version or release:

From a system phone with an LED display, press *Feature* **5** **9**.

A display similar to the following appears for 15 seconds (your release number follows the R., the country code follows the C0).

```
P ACS R7.0 C0X
```

Clearing a Backup-Failure Alarm

If you use Backup Programming—Automatic (#123) or system initiated backups, and the automatic backup fails, a Backup-Failure Alarm message appears (instead of the default day/date/time message) on the top line of the telephone display at idle extensions 10 and 11.

After correcting the problem that caused the failure, clear the Backup-Failure Alarm by following these steps:

- 1 Press **Feature** **00** **System Program** **System Program** **#** **1** **2** **3**.
- 2 Press **4** to choose Option 4, "Backup Alarm Cleared."
- 3 Exit programming mode.

- NOTES** ►
- You cannot use **Next Data** or **Prev Data** in this procedure to choose Option 4.
 - Using Option 4 to clear a Backup-Failure Alarm does not change the setting for Backup Programming—Automatic (#123). It remains either Active or Not Active.

012E Module Power Management

The power supply used in the 012E module is adequate to power the 12 ETR ports under normal conditions. However, if too many large PARTNER telephones (such as the PARTNER-34D) are off-hook with speakerphone volume set to high levels, the power supply could be overloaded. Power management of the 012E module eliminates the power supply overload.

When a power threshold is exceeded, all telephones connected to the 012E module will appear as follows:

- LED display dims to a minimal level
- Speakerphone volume is decreased

To clear this condition, place one of the telephones connected to the 012E module on-hook. The LED display and speakerphone volume on all telephones return to normal. If this power management event occurs frequently, you should consider moving some telephones to available ports on other modules.

Telephone Problems

Telephone Problems

Problem...	Check this...
Telephone doesn't ring	<p>Ringer volume may be too low.</p> <p>Do Not Disturb or Call Forwarding may be turned on.</p> <p>Line Ringing may not be set to Immediate.</p> <p>Telephone may be faulty; switch telephones and try again.</p> <p>If MLC 6 telephone, is Unique Line Ringing (#209) set to a pattern other than 1?</p>
Display shows only 16 characters per line	Possible power outage; unplug the modular telephone cord and replug.
Display time and date aren't right	Is your system's clock correct? Use System Date (#101) and System Time (#103) to set the date and time.
Caller ID doesn't work	<p>Are you subscribed to Caller ID?</p> <p>Is the line connected to a module that supports Caller ID?</p> <p>Did someone activate Call Coverage? If so, their extension number will appear.</p>
Telephone Doesn't Work	<p>Is the telephone cord plugged into the right jack on the bottom of the telephone?</p> <p>Telephone may need to be reset; unplug the cord, and with the handset hung up, replug.</p> <p>Telephone cord may be defective; switch cords and try again.</p> <p>Telephone may be defective; switch telephones and try again.</p> <p>There may be a problem with the control unit; switch to a different port and try again.</p>

Telephone Problems—Continued

Problem...	Check this...
Intercom Autodialer doesn't work	<p>Is the telephone cord plugged into the right jack of the DSS?</p> <p>Is the Intercom Autodialer plugged into an electric outlet?</p> <p>Telephone cord may be defective; switch cords and try again.</p>
Can't record a call	<p>Two calls may already be recording.</p> <p>You may not have enough ports for Hunt Group 7.</p> <p>Make sure you have a four-port mail system.</p> <p>You may not have enough ports programmed in Hunt Group 7.</p>
Standard phone message waiting light doesn't light	<p>Telephone may be part of a combination extension that includes a system telephone with Background Music on; turn it off.</p> <p>The message waiting light may not be compatible with the system; only phones with LEDs, not neon lights, support message waiting lights. Or, the telephone may not be connected to the proper module.</p>

Calling Problems

Calling Problems

Problem...	Check this...
Can't make outside calls	<p>Is Forced Account Code Entry assigned to this extension?</p> <p>Is your dial mode (touch-tone or rotary) incorrect? Use Dial Mode (#201) to reset it.</p> <p>Has someone changed the Outgoing Call Restriction for the extension?</p> <p>Did someone lock the extension with Station Lock? Use Station Unlock from extension 10 or 11 to unlock it.</p> <p>Local telephone company may not be receiving signals accurately. If problem is on just one telephone, see "Telephone Doesn't Work" on page 90.</p> <p>Too many tip/ring devices may be trying to dial at once.</p> <p>Local telephone company line may be faulty; unplug each line from its module and test it by using a single-line telephone:</p> <ul style="list-style-type: none"> • If the trouble doesn't occur on the single-line telephone, the problem is in your control unit. • If the trouble occurs on the single-line telephone, switch the line cord and try again. If this doesn't work, call the telephone company.
Can't make outside calls from pool buttons on pooled extensions	<p>Is Forced Account Code Entry assigned to this extension?</p> <p>Is your dial mode (touch-tone or rotary) incorrect? Use Dial Mode (#201) to reset it.</p> <p>Has someone changed the Pool Access Restriction for the extension?</p> <p>Pool may not be assigned to the extension.</p> <p>There may not be enough lines assigned to the pool to support the usage.</p> <p>One or more local telephone company lines may be faulty; test each line from extension 10.</p>

Calling Problems—Continued

Problem...	Check this...
Calls are answered automatically	<p>If Automatic System Answer and/or Direct Extension Dial is turned on, turn it off.</p> <p>If an auxiliary device (fax, modem, voice messaging system, answering machine) answers when it should not; either:</p> <ul style="list-style-type: none"> • Check the device and adjust it to answer on a later ring or turn off auto-answer. • Set the extension's Line Ringing to Delayed Ring.
Auxiliary device doesn't answer	<p>Device may not recognize the system ringing pattern:</p> <ul style="list-style-type: none"> • Change the extension's ring pattern by using Distinctive Ring (#308). • Change the setting for Intercom Dial Tone (#309) to Machine; the system will generate an outside dial tone for the extension.
Trouble hearing the person you called	<p>If you are using a speakerphone, try using the handset.</p> <p>If you have touch-tone dialing, you may have a faulty telephone or cord.</p> <p>If you have rotary dialing, the Rotary Dialing Timeout (#108) interval is too long; reset it.</p>
Automatically dialed calls beginning with star codes are misdialed	<p>Setting may not be inserting a long enough pause; use Star Code Dial Delay (#410) to increase setting.</p>
Recall feature isn't working	<p>Increase Recall Timer Duration (#107) by 100 milliseconds. If using the feature disconnects the call, decrease Recall Timer Duration by 100 milliseconds.</p>

System Problems

System Problems

Problem...	Check this...
Call rings continuously, but no one at other end	You may be using Automatic System Answer or Direct Extension Dial on a system that doesn't support far end disconnect; call your local telephone company and find out if they support it.
Calls on hold are disconnected	Hold Disconnect Time (#203) setting may be too short.
Calls on Automatic System Answer lines are disconnected	Automatic System Answer Mode (#121) may be set to Disconnect; change it to Hold or Ring.
Call on Hold hangs up, but line doesn't disconnect	Hold Disconnect Time (#203) may be too long; try resetting it. Local telephone company does not send a hold release signal; you may need the help of our hotline.
All calls are disconnected	You may have run the Restore Programming feature; the system resets itself. In the future, warn users of restores. Power may have been interrupted to the control unit; check the power cord, the on/off switch, and the green LEDs on the modules.
All telephones dead; no dial tone or lights	Power may have been interrupted to the control unit; check the power cord, the on/off switch, and the green LEDs on the modules. Power outlet may be faulty; test the outlet with an appliance like a lamp.
Multiple telephones dead; no dial tone or lights	LED on one system module may be out; try reseating the module in the control unit. LEDs on several modules may be out; try reseating the leftmost module of the ones with lights out.

T1 Module Problems

Refer to the PARTNER ACS R7.0 PC Administration online help.

1600 DSL Module Problems

1600 DSL Module Problems

Problem...	Check this...
The connection between the 1600 DSL module and the service provider's gateway is not working.	<p>The 1600 DSL module and the gateway used by the service provider are not communicating properly. Either something is faulty in the 1600 DSL module, or the configuration of the module does not match the configuration needed by the service provider's gateway. Check the connection between the 1600 DSL module and the service provider's gateway in the following order:</p> <ol style="list-style-type: none">1 Check the status of the module by looking at the SDSL port LED or by looking at the Reports menu in the terminal emulation program.2 Check the data link connection (Frame Relay or ATM).3 Check the voice gateway connection.4 Check the LAN connection. <p>For more detailed instructions, see the <i>PARTNER Advanced Communications System Release 7.0 Installation, Programming, and Use</i> guide.</p>

Tip/Ring Device Problems

Tip/Ring Device Problems

Problem...	Check this...
Tip/ring device does not answer	Device does not recognize the distinctive ringing pattern used by the system. Set Distinctive Ring (#308) for that extension to Not Active.
Tip/ring device does not dial out properly	Device does not recognize the intercom dial tone generated by the system. Change the setting for Intercom Dial Tone (#309) for that extension to Machine.
Call records wrap on SMDR printout	SMDR Talk Time (#611) is set to Active and SMDR Output Format (#610) is set to 24 digits; the length of the fields is greater than the 80 characters supported by the printer. Reduce the font size, or increase the characters-per-inch setting for the printer.

8 System Programming Flow Charts

System Programming Flow Chart—How to Use

To use the following sets of Flow Charts, follow these instructions first:

Place the Programming Overlay on the dial pad of the system display phone at extension 10 or 11.

- **To Start System Programming:**

- Press *Feature* *0* *0*
- Press *System Program* *System Program*

- **To End System Programming:**

- Press *Feature* *0* *0*

- **To Use a Specific Procedure:**

- Dial *#* and a three-digit procedure code.
(Example: *# 1 0 1* for *System Date*)

- **To Cycle through System Programming Procedures:**




- Press *Next Procedure* or *Prev Procedure*

- **To Cycle Through Available Settings:**

- Press *Next Data* or *Prev Data*

- **To Return to Factory Setting:**

- Press *Remove*

Icon Description	
	= Factory setting
	= Button with lights required
	= Button with lights recommended

Procedures #399, #609, and #728—shown in dashed boxes—are skipped when cycling
Procedures # 207, #313, #314, and #315—shown in square dotted boxes—are for pools

System Flow Chart—System

System Date
 Dial # 1 0 1
 Dial the date (MMDDYY)

System Time
 Dial # 1 0 3
 Dial the time (HHMM-24 hr. military time)

Number of Lines
 Dial # 1 0 4
 Dial two digits (01–31) (R4 or later) or, Dial two digits (01–19 (Prior R4), for # of outside lines assigned to every extension. 3 per ACS processor & 308EC module. 16 for T1/DSL module. 2 per 206 or 200 module ✓. 4 per 400EC module ✓.

WARNING
 Do not use Number of Lines (#104) after initial setup. In Key mode, the Number of lines procedure will change Line Assignment (#301), Line Access Restriction (#302), Automatic Line Selection and Line Ringing to factory settings.
 To change line assignments without affecting other settings, use Line Assignment (#301).
 In Hybrid mode, the Number of Lines procedure will change Pool Line Assignment (#207), Pool Extension Assignment (#314), and Pool Access Restriction (#315). Additionally, it changes Line Assignment (#301), Line Access Restriction (#302), Automatic Line Selection and Line Ringing. To change pool assignments without affecting other settings, use Pool Line Assignment (#207) and Pool Extension Assignment (#314).

Automatic System Answer Button
 Dial # 1 1 1
 Dial 1=Assigned,
 2=Not Assigned ✓
 3=Select Button then press a programmable button

Transfer Return Rings
 Dial # 1 0 5
 Dial 1 digit (0–9) for # of rings before call returns.
 0–9 rings
 4 rings ✓
 0 rings=no return

Recall Timer Durations
 Dial # 1 0 7
 Dial two digits (01–80) to set length of a switchhook flash ✓=18 (450 msec)

Rotary Dialing Timeout
 Dial # 1 0 8
 Dial 1=4 secs
 2=8 secs ✓
 3=12 secs

Outside Conference Denial
 Dial # 1 0 9
 Dial 1=Allowed ✓
 2=Disallowed

Automatic System Answer Delay
 Dial # 1 1 0
 Dial a ring delay number (0–9)
 2 rings ✓

Direct Extension Dial Delay
 Dial # 1 1 2
 Dial a ring delay number (0–9)
 2 rings ✓,
 0 rings=answered immediately

Direct Extension Dial Button
 Dial # 1 1 3
 Dial 1=Assigned
 2=Not Assigned ✓
 3=Select Button then press a programmable button

Outgoing Call Restriction Button ☀
 Dial # 1 1 4
 Dial 1=Assigned
 2=Not Assigned ✓
 3=Select Button then press a programmable button

Wake Up Service Button ☀
 Dial # 1 1 5
 Dial 1=Assigned
 2=Not Assigned ✓
 3=Select Button then press a programmable button

Ring On Transfer
 Dial # 1 1 9
 Dial 1=Active ✓
 2=Not Active

Automatic System Answer Mode
 Dial # 1 2 1
 Dial 1=Hold ✓
 2=Disconnect
 3=Ring

Caller ID Type
 Dial # 1 2 2
 Dial 1=USA ✓
 2=Singapore

Backup Programming Automatic
 Dial # 1 2 3
 Dial 1=Active Internal
 2=Active PC Card
 3=Not Active ✓

Backup Programming—Manual
 Dial # 1 2 4
 Dial 1=Internal Memory
 2=PC Card
 Press (Enter) to begin the backup

Restore Programming
 Dial # 1 2 5
 Dial 1=Internal Man.mmddyy ✓
 2=PC Card Man.mmddyy
 3=Internal AUTO.mmddyy
 2=PC Card AUTO.mmddyy
 Press (Enter) to begin the restore

Automatic Daylight/Standard Times
 Dial # 1 2 6
 Dial 1=Active ✓

System Flow Chart—System (Continued)

Hold Reminder Tone

Dial # 1 2 7

Dial 0=Not Active

- 1=10 seconds
- 2=20 seconds
- 3=30 seconds
- 4=45 seconds
- 5=60 seconds ✓
- 6=90 seconds
- 7=120 seconds
- 8=150 seconds
- 9=180 seconds

Mode of Operation

Press # 1 9 8

Enter the system password

Dial 1=Key (factory setting) ✓

2=Hybrid

System Reset—Programming Saved

IMPORTANT: Using this procedure disconnects any active calls but retains system settings. Use it only if the system fails to function correctly after a power failure or down period. Dial # 7 2 8.

System Flow Chart—System Speed Dial Numbers

To program a number:

Press **Feature** **0 0** to enter programming mode

Press **Feature** ←

Dial a three-digit code (600–699)

Dial the telephone number—up to 28 digits including special characters. To “mark” it (to override restrictions), dial ***** before the telephone #.

To program another number, or to change a number, repeat: _____

Press **Next Procedure** **Prev Procedure**, enter a new extension # and repeat above steps

Press **Feature** **0 0** to exit programming mode

To remove a number:

Press **Feature** **0 0** to enter programming mode

Press **Feature** ←

Dial the System Speed Dial number’s code (600-699)

Press **Mic/HFAI**

To remove another number, repeat: _____

Press **Feature** **0 0** to exit programming mode

System Flow Chart—Lines

Dial Mode

Dial **# 2 0 1**

Dial a system line number

Dial 1=Touch-Tone ✓
2=Rotary

Press **Next Item** to program another line

Hold Disconnect Time

Dial **# 2 0 3**

Dial a system line #

Dial 00=No Detection,
01=50 msec, 02=100 msec, 03=150 msec,
04=200 msec, 05=250 msec, 06=300 msec,
07=350 msec, 08=400 msec, 09=450 msec ✓
10=500 msec, 11=550 msec, 12=600 msec.

Press **Next Item** to program another line

Automatic System Answer Lines

Dial **# 2 0 4**

Dial a system line #

Dial 1=Assigned
2=Not Assigned ✓

Press **Next Item** to program another line

Direct Extension Dial Lines

Dial **# 2 0 5**

Dial a system line #

Dial 1=Assigned
2=Not Assigned ✓

Press **Next Item** to program another line

Group Call Distribution

Dial **# 2 0 6**

Dial a group number (1–6, 7 for VMS)

Dial a system line #

Dial 1=Assigned
2=Not Assigned ✓
3=VMS Line Cover
(only for Hunt Group 7)

Press **Next Item** to program another line

Pool Line Assignment

Dial **# 2 0 7**

Dial a system line #

Dial 1=No Pool
2=Main Pool 880 ✓
3=Pool 881
4=Pool 882
5=Pool 883

Press **Next Item** to program another line

Line Coverage Extension

Dial **# 2 0 8**

Dial a system line #, then a system extension #, no line owned by an extension ✓

Press **Next Item** to program another line

Press **Remove** to unassign ownership

Unique Line Ringing

Dial **# 2 0 9**

Dial a system line #

Dial 1 ✓
2–8

System Flow Chart—Extensions

Line Assignment

Dial **# 3 0 1**

Dial a system extension #

To remove all existing line assignments, press **(Remove)** before selecting a line

Dial a line number

Dial 1=Assigned ✓

2=Not Assigned

3=Select Button then press a programmable button (to assign the line to that button). If you use option 3 after a line has been assigned, the line moves from the old button to the new button you select.

Dial a line number

Press **(Next Item)** to program another line for this extension

To program another extension:

Press **(Next Procedure)** **(Prev Procedure)**, enter a new extension # and repeat above steps

Line Access Restriction

Dial **# 3 0 2**

Dial a system extension #

Dial a system line #

Dial 1=No Restriction ✓, 2=Outgoing Only, 3=Incoming Only, 4=No Access (line appears on button, but you can use line only to pick up a transferred or held call)

To program another extension:

Press **(Next Procedure)** **(Prev Procedure)**, enter a new extension number and repeat above steps

Display Language

Dial **# 3 0 3**

Dial a system extension #

Dial 1=English ✓

2=Spanish

3=French

Press **(Next Item)** to program another extension

Automatic Extension Privacy

Dial **# 3 0 4**

Dial a system extension #

Dial 1=Assigned

2=Not Assigned ✓

Press **(Next Item)** to program another extension

Abbreviated Ringing

Dial **# 3 0 5**

Dial a system extension #

Dial 1=Active (1 ring) ✓

2=Not Active (repeated ringing)

Press **(Next Item)** to program another extension

Transfer Return Extension

Dial **# 3 0 6**

Dial a system extension #

Dial # of extension (10–57) to which call should return if not answered, Extension transferring call ✓

Press **(Next Item)** to program another extension

Forced Account Code Entry

Dial **# 3 0 7**

Dial a system extension #

Dial 1=Assigned

2=Not Assigned ✓

Press **(Next Item)** to program another extension

Distinctive Ringing

Dial **# 3 0 8**

Dial a system extension #

Dial 1=Active

2=Not Active ✓

Press **(Next Item)** to program another extension

Intercom Dial Tone

Dial **# 3 0 9**

Dial a system extension #

Dial 1=Regular ✓

2=Machine

Press **(Next Item)** to program another extension

Automatic VMS Cover

Dial **# 3 1 0**

Dial a system extension #

Dial 1=Assigned

2=Not Assigned ✓

Press **(Next Item)** to program another extension

System Flow Chart—Extensions (Continued)

External Hotline

Dial **# 3 1 1**
Dial a system extension #
Dial 1=Assigned
2=Not Assigned ✓
Press **(Next Item)** to program another extension

Voice Interrupt On Busy

Dial **# 3 1 2**
Dial a system extension #
Dial 1=Assigned
2=Not Assigned ✓

Line Access Mode

Dial **# 3 1 3**
Dial a system extension #
Dial 1=Pooled ✓ all extensions except 10
2=Key ✓ extension 10 only

Pool Extension Assignment

Dial **# 3 1 4**
Dial a system extension # to remove existing pool assignments, press **(Remove)** before selecting a line
Dial a pool access code (880, 881, 882, or 883)
Dial 1=Assigned ✓ 880
2=Not Assigned ✓ 881,882,883
3=Select Button then press a programmable button (auxiliary pools only)
Press **(Next Procedure)** **(Prev Procedure)** to enter a new extension # & repeat above steps

Pool Access Restriction

Dial **# 3 1 5**
Dial a system extension #
Dial a pool number (880, 881, 882, or 883)
Dial 1=No Restriction ✓
2=Outgoing Only
3=Incoming Only
4=No Access
Press **(Next Item)** to program another pool

To program another extension:

Press **(Next Procedure)** **(Prev Procedure)** to enter a new extension # & repeat above steps

Call Waiting

Dial **# 3 1 6**
Dial a system extension #
Dial 1=Assigned
2=Not Assigned ✓

Caller ID Log Answered Calls

Dial **# 3 1 7**
Dial a system extension #
Dial 1=Active
2=Not Active ✓

Caller ID Log Line Association

Dial **# 3 1 8**
Dial a system extension #
Dial a system line #
Press **(Next Item)** to program another extension

To associate another extension:

Press **(Next Procedure)** **(Prev Procedure)**, enter a new extension # and repeat above steps

Caller ID Log All Calls

Dial **# 3 1 9**
Dial a system extension #

Call Coverage Rings

Dial **# 3 2 0**
Dial one digit (1–9) for the # of rings before the call is sent to the covering extension
2 rings ✓

VMS Cover Rings

Dial **# 3 2 1**
Dial one digit (1–9) for the # of rings before the call is sent to the voice messaging
3 rings ✓

Remote Call Forwarding

Dial **# 3 2 2**
Dial a system extension #
Dial 1=Assigned
2=Not Assigned ✓
Press **(Next Item)** to program another extension

Copy Settings

Dial **# 3 9 9**
Dial a source extension #
Dial target extension #s

System Flow Chart—Dialing Restrictions and Permissions

Outgoing Call Restriction

Dial **# 4 0 1**

Dial a system extension #

- Dial 1=No Restriction ✓
2=Inside Only (intercom)
3=Local Only (intercom and local)

Press **(Next Item)** to program another extension

Toll Call Prefix

Dial **# 4 0 2**

- Dial 1=0/1 plus Area Code and # ✓
2=Area Code and # only

System Password

Dial **# 4 0 3**

Dial four digits to set the password

Disallowed Phone Number Lists

Dial **# 4 0 4**

- Dial a list # (1–8)
Dial a list entry (01–10)

To add entry:

Dial the telephone # (up to 12 digits)

Press **(Enter)**

Press **(Remove)** to remove a list entry

Press **(Next Item)** to program another list entry

To program another list:

Press **(Next Procedure)** **(Prev Procedure)** to enter a new list # & repeat above steps

Disallowed List Assignments

Dial **# 4 0 5**

- Dial a system extension #
Dial a list # (1–8)
Dial 1=Assigned
2=Not Assigned ✓

Press **(Next Item)** to program another list

To program another extension:

Press **(Next Procedure)** **(Prev Procedure)** to enter a new extension # & repeat above steps

Emergency Phone Number Lists

Dial **# 4 0 6**

Dial a list # (01–10)

To add entry:

Dial the telephone # (up to 12 digits)

Press **(Enter)**

Press **(Remove)** to remove a list entry

Press **(Next Item)** to program another list entry

Allowed Phone Number Lists

Dial **# 4 0 7**

- Dial a list # (1–8)
Dial a list entry (01–10)

To add entry:

Dial the telephone # (up to 12 digits)

Press **(Enter)**

Press **(Remove)** to remove a list entry

Press **(Next Item)** to program another list entry

To program another list:

Press **(Next Procedure)** **(Prev Procedure)** to enter a new list # & repeat above steps

Allowed List Assignments

Dial **# 4 0 8**

- Dial a system extension #
Dial a list # (1–8)
Dial 1=Assigned
2=Not Assigned ✓

Press **(Next Item)** to program another list

To program another extension:

Press **(Next Procedure)** **(Prev Procedure)** to enter a new extension # & repeat above steps

Forced Account Code List

Dial **# 4 0 9**

Dial a list # (01–99)

To add entry:

Dial the account code (up to 6 digits)

Press **(Enter)**

Press **(Remove)** to remove a list entry

Press **(Next Item)** to program another list

Star Code Dial Delay

Dial **# 4 1 0**

Dial 0=0 Seconds Delay ✓

- 1=1 Second Delay
2=2 Seconds Delay
3=3 Seconds Delay
4=4 Seconds Delay
5=5 Seconds Delay
6= Not Active

System Flow Chart—Groups


Pickup Group Extension

Dial # 5 0 1
Dial a group # (1–4)
Dial an extension # (10–57)
Dial 1=Assigned to group
2=Not Assigned to group ✓
Press *(Next Item)* to program another extension

Calling Group Extensions

Dial # 5 0 2
Dial a group # (1–4)
Dial an extension # (10–57)
Dial 1=Assigned to group
2=Not Assigned to group ✓
Press *(Next Item)* to program another extension

Night Service Button

Dial # 5 0 3 
Dial 1=Assigned
2=Not Assigned ✓
3=Select button then press a programmable button (to assign Night Service to that button)
If you use option 3 after a Night Service button has been assigned, the Night Service button moves from the old button to the new button you select

Night Service Group Extensions

Dial # 5 0 4
Dial a system extension #
Dial 1=Assigned to group
2=Not Assigned to group ✓
Press *(Next Item)* to program another extension

Hunt Group Extensions

Dial # 5 0 5
Dial a group # 1–6, 7 for VMS, 8 for fax detection (R. 3.0)
Dial a system extension # (10–57)
Dial 1=Assigned to group
2=Not Assigned to group ✓
Press *(Next Item)* to program another extension

VMS Hunt Delay

Dial # 5 0 6
Dial 1=Day
2=Night
Dial line number
Dial 0–6
2 ✓

VMS Hunt Schedule

Dial # 5 0 7
Dial line number
Dial 1=Always ✓
2=Day Only
3=Night Only

System Flow Chart—Auxiliary Equipment

Fax Machine Extensions

Dial # 6 0 1

Dial a system extension #

Dial 1=Assigned

2=Not Assigned ✓

Press Next Item to program another extension

Music-On-Hold

Dial # 6 0 2

Dial 1=Active ✓

2=Not Active

Hotline

Dial # 6 0 3

Dial the hotline extension # (not ext. 10, 11, or the first two extensions of any 206 or 308EC modules)

Dial the alerted extension number (not the hotline) or 7 0 to paging system

To remove the hotline and alert:

Press Remove

Doorphone 1 Extension

Dial # 6 0 4

Dial any extension # (except 10, 11, or the first two extensions of any 206 or 308EC modules)

To remove the doorphone extension:

Press Remove

Doorphone 2 Extension

Dial # 6 0 5

Dial any extension (except 10, 11, or the first two extensions of any 206 or 308EC modules)

To remove the doorphone extension:

Press Remove

Doorphone Alert Extension

Dial # 6 0 6

Dial any extension # (except a doorphone extension)

Dial 1=Not an alert ✓

2=Doorphone 1 alert

3=Doorphone 2 alert

4=Doorphones 1 & 2

Press Next Item to identify another extension (up to 48 alert extensions per doorphone)

Automated Attendant Extensions

Dial # 6 0 7

Dial a system extension #

Dial 1=Assigned

2=Not Assigned ✓

Press Next Item to program another extension.

SMDR Record Type

Dial # 6 0 8

Dial 1=All calls ✓

2=Outgoing calls only

SMDR Top Of Page

Dial # 6 0 9

SMDR Output Format

Dial # 6 1 0

Dial 1=15 digits ✓

2=24 digits

SMDR Talk Time

2.0

Dial # 6 1 1

Dial 1=Active

2=Not Active ✓

Contact Closure Group

Dial # 6 1 2

Dial a group # (1 or 2)

Dial an extension # (10–57)

Dial 1=Assigned to group

2=Not Assigned to group ✓

Contact Closure Operation Type

Dial # 6 1 3

Dial a Contact Closure (1 or 2)








Dial 1=1-Second On

2=3-Seconds On ✓

3=5-Seconds On

4=Toggle

System Flow Chart—Auxiliary Equipment (Continued)

Music-On-Hold Volume
Dial # 6 1 4
Dial 1= 
2= 
3= 
4=  ✓
5= 
6= 
7= 

Application Programming Interface (API)
Dial # 6 1 5
Dial 1=API On ✓
2=API Off

Application Programming Interface (API) Internal Monitor
Dial # 6 1 6
Dial 1=All Calls
2=External Calls ✓

Loudspeaker Paging Line
Dial # 6 1 7
Dial the line number of the jack to which the loudspeaker paging system is connected

Remote Administration Password
Dial # 7 3 0
No Password (8 dashes display)
Active password (up to 8 alphanumeric characters)
Password can only be changed at Extension 10 or 11

Centralized Telephone Programming Flow Chart—How to Use

To use the Centralized Telephone Programming Flow Chart, follow these instructions first:

Place the Programming Overlay on the dialpad of the system display phone at extension 10 or 11.

- **To Enter Programming Mode:**

— Press *Feature* *0* *0*

— Press *System Program* *System Program* *Central Tel Program*

— Dial the extension number to be programmed. Buttons on to which lines or pools are assigned light up to show the current Line Ringing setting; remaining buttons can be programmed with Auto Dial number or features

- **To Program Another Feature at the Same Extension:**

— After you program one feature, continue with the instructions in the box for the next feature

- **To Change Setting for Another Extension**

— Press *Central Tel Program*

— Dial the new extension's number

- **To Erase a Feature or Auto Dial Button:**


— Press the programmed button


— Press *Mic/HFAI*


- **To End Programming Mode:**

— Press *Feature* *0* *0*

Icon Description

 = Factory setting

 = Button with lights required

 = Button with lights recommended

Centralized Telephone Programming Flow Chart

NOTE:

Program **Automatic Line Selection** or **Extension Name Display** first...*then* **Line Ringing**.

Automatic Line Selection

Press **(*) (*)**

Press the line/pool/intercom buttons in the desired order

Press **(*) (*)**

Key Extension: Outside lines **(Intercom)** ✓

Pooled Extension: Pool 880 button 1, button 2, **(Intercom)**, right **(Intercom)** ✓

Pools 881-883, individual lines

OR

Extension Name Display

Press **(Intercom)**

Enter the character codes for the name (See table "Valid Character Entries")

THEN

Line Ringing

Press each line or pool button until the desired ringing option appears in the display

- Immediate ring (green steady) ✓ Lines
- No ring (green fast flutter) ✓ Pools
- Delayed ring—starts ringing after 20 seconds (green slow flashing)

Personal Speed Dial Numbers

Press **(Feature)**

Dial a two-digit code (80–99)

Dial the phone number—up to 28 digits including special functions

Auto Dial Numbers—Outside and Inside

Press a programmable button

To program an outside number:

Dial the phone number—up to 28 digits including special functions

To program an extension number:

Press **(Intercom)**

Dial the extension number (to ring the extension) or

(*) plus the extension number (to voice-signal the extension)

Account Code Entry

Press a programmable button

Press **(Feature)** **(1)** **(2)**

Background Music

Press a programmable button

Press **(Feature)** **(1)** **(9)**

Call Coverage

Press a programmable button

Press **(Feature)** **(2)** **(0)**

Dial (optional) two-digit **originating** extension number

Dial (optional) two-digit **destination** extension number

Call Forwarding/Call Follow-Me

Press a programmable button

Press **(Feature)** **(1)** **(1)**

Dial (optional) two-digit **originating** extension number

Dial (optional) two-digit **destination** extension number

Call Pickup

Press a programmable button

Press **(Intercom)** **(6)**

Dial the two-digit extension number

Call Screening

Press a programmable button with lights

Press **(Feature)** **(2)** **(5)**

Caller ID Call Logging & Dialing

Press a programmable button with lights

Press **(Feature)** **(2)** **(3)**

Caller ID Inspect

Press a programmable button with lights

Press **(Feature)** **(1)** **(7)**

Caller ID Name Display

Press a programmable button with lights

Press **(Feature)** **(1)** **(6)**

Cell Phone Connect

Press a programmable button


Press **(Feature)** **(1)** **(1)**


Dial two-digit **originating** extension number

Dial **(*)** plus two-digit **destination** Personal Speed Dial Number

Centralized Telephone Programming Flow Chart—Continued


Conference Drop
Press a programmable button
Press **Feature** 0 6

Contact Closure 1
Press **Feature**
Press a programmable button
Press **Feature** 4 1 

Contact Closure 2
Press a programmable button
Press **Feature** 4 2 

Direct Line Pickup—Active Line
Press a programmable button
Press **Intercom** 6 8

Direct Line Pickup—Idle Line
Press a programmable button with lights
Press **Intercom** 8

Do Not Disturb
Press a programmable button with lights
Press **Feature** 0 1 

Exclusive Hold
Press a programmable button
Press **Feature** 0 2


Group Calling—Ring/Page
For ringing group:
Press a programmable button
Press **Intercom** 7
Dial a Calling Group number (1–4)
For paging group:
Press a programmable button
Press **Intercom** * 7
Dial a Calling Group number (1–4)

Group Hunting—Ring/Voice Signal
For ringing the first available extension:
Press a programmable button
Press **Intercom** 7 7
Dial a Hunt Group number (1–7)
For voice signaling the first available extension:
Press a programmable button
Press **Intercom** * 7 7
Dial a Hunt Group number (1–6)

Group Pickup
Press a programmable button
Press **Intercom** 6 6
Dial a Pickup Group number (1–4)

Last Number Redial
Press a programmable button
Press **Feature** 0 5

Loudspeaker Paging
Press a programmable button
Press **Intercom** 7 0

Record-A-Call
Press a programmable button with lights
Press **Feature** 2 4 

Manual Signaling
Press a programmable button
Press **Feature** 1 3
Dial a two-digit extension number (to ring extension) or Dial * (to ring extension) plus the two-digit extension number (to voice-signal the extension)


Message Light Off
Press a programmable button
Press **Feature** 1 0
Dial (optional) two-digit extension number

Message Light On
Press a programmable button
Press **Feature** 0 9
Dial (optional) two-digit extension number

Privacy
Press a programmable button with lights
Press **Feature** 0 7 

Recall
Press a programmable button with lights
Press **Feature** 0 3 

Voice Mailbox Transfer
Press a programmable button
Press **Feature** 1 4

Remote Call Forwarding
Press a programmable button
Press **Feature** 1 1
Dial two-digit **originating** extension number
Dial two-digit **destination** Personal Speed Dial Number 


Save Number Redial
Press a programmable button
Press **Feature** 0 4

Simultaneous Paging
Press a programmable button
Press **Intercom** * 7 0

Station Lock
Press a programmable button
Press **Feature** 2 1 

Station Unlock
Press a programmable button
Press **Feature** 2 2

Touch-Tone Enable
Press a programmable button
Press **Feature** 0 8

VMS Cover
Press a programmable button
Press **Feature** 1 5 

Voice Interrupt On Busy Talk-Back
Press a programmable button with lights
Press **Feature** 1 8 

Extension Telephone Programming Flow Chart—How to Use

To use the Extension Telephone Programming Flow Chart, follow these instructions first:

To Program at an extension, use the following procedure:

- **To Start programming:**

- Press **Feature** **0** **0**

- The green light next to buttons on which lines or pools are assigned for the extension show the current Line Ringing settings. You can program the remaining buttons with telephone number, extension numbers, or system features.

- **To assign a name to the extension, press **Intercom**, and then enter the character codes.**

- **To Erase the current programming from a button, press the button, then press **Mic/HFAI**:**


- Press the programmed button


- Press **Mic/HFAI**


- **To End Programming Mode:**

- Press **Feature** **0** **0**

Icon Description

 = Factory setting

 = Button with lights required

 = Button with lights recommended

Extension Telephone Programming Flow Chart

Account Code Entry

Press a programmable button

Press **Feature** **1** **2**



Background Music

Press a programmable button

Press **Feature** **1** **9**



Caller ID Inspect

Press a programmable button with lights

Press **Feature** **1** **7**



Extension Name Display

Press **Intercom**

Enter the character codes for the name
(See table "Valid Character Entries")

Call Coverage

Press a programmable button

Press **Feature** **2** **0**

Dial (optional) two-digit **originating** extension number

Dial (optional) two-digit **destination** extension number



Caller ID Name Display

Press a programmable button with lights

Press **Feature** **1** **6**

Personal Speed Dial Numbers

Press **Feature**

Dial a two-digit code (80–99)

Dial the phone number—up to 28 digits including special functions

Call Forwarding/Call Follow-Me

Press a programmable button with lights

Press **Feature** **1** **1**

Dial (optional) two-digit **originating** extension number

Dial (optional) two-digit **destination** extension number



Cell Phone Connect

Press a programmable button

Press **Feature** **1** **1**

Dial two-digit **originating** extension number

Dial ***** plus two-digit **destination**

Personal Speed Dial Number



Auto Dial Numbers—Outside and Inside

Press **Feature** **0** **0**

Press a programmable button

To program an outside number:

Dial the phone number—up to 28 digits including special functions

To program an extension number:

Press **Intercom**

Dial the extension number (to ring the extension) or ***** plus the extension number (to voice-signal the extension)

Call Pickup

Press a programmable button

Press **Intercom** **6**

Dial the two-digit extension number

Caller ID Call Logging & Dialing

Press a programmable button with lights

Press **Feature** **2** **3**




Conference Drop

Press a programmable button

Press **Feature** **0** **6**

Extension Telephone Programming Flow Chart—Continued

Contact Closure 1

Press *Feature*
Press a programmable button
Press *Feature* 4 1 

Contact Closure 2

Press a programmable button
Press *Feature* 4 2 


Direct Line Pickup— Active Line

Press a programmable button
Press *Intercom* 6 8

Direct Line Pickup— Idle Line

Press a programmable button
with lights
Press *Intercom* 8

Do Not Disturb

Press a programmable button
with lights
Press *Feature* 0 1 

Exclusive Hold

Press a programmable button
Press *Feature* 0 2

Group Calling—Ring/Page

For ringing group:
Press a programmable button
Press *Intercom* 7

Dial a Calling Group number (1–4)

For paging group:

Press a programmable button
Press *Intercom* * 7

Dial a Calling Group number (1–4)

Group Hunting—Ring/Voice Signal

For ringing the first available extension:

Press a programmable button
Press *Intercom* 7 7

Dial a Hunt Group number (1–7)

For paging the first available extension:

Press a programmable button
Press *Intercom* * 7 7

Dial a Hunt Group number (1–6)

Group Pickup

Press a programmable button
Press *Intercom* 6 6
Dial a Pickup Group number (1–4)

Last Number Redial

Press a programmable button
Press *Feature* 0 5

Loudspeaker Paging

Press a programmable button
Press *Intercom* 7 0

Manual Signaling

Press a programmable button
Press *Feature* 1 3
Dial a two-digit extension
number (to ring extension) or
Dial * plus the two-digit
extension number (to
voice-signal the extension)


Message Light Off

Press a programmable button
Press *Feature* 1 0
Dial (optional) two-digit extension
number


Message Light On

Press a programmable button
Press *Feature* 0 9
Dial (optional) two-digit extension
number

Privacy

Press a programmable button
with lights
Press *Feature* 0 7 


Recall

Press a programmable button
with lights
Press *Feature* 0 3 

Record-A-Call

Press a programmable
button with lights
Press *Feature* 2 4 

Remote Call Forwarding

Press a programmable button
Press *Feature* 1 1
Dial two-digit **originating**
extension number
Dial two-digit **destination**
Personal Speed Dial Number 

Save Number Redial

Press a programmable button
Press *Feature* 0 4

Simultaneous Paging

Press a programmable button
Press *Intercom* * 7 0

Station Lock

Press a programmable button
Press *Feature* 2 1 

Station Unlock

Press a programmable button
Press *Feature* 2 2

Extension Telephone Programming Flow Chart—Continued

Touch-Tone Enable

Press a programmable button

Press *Feature* 0 8

VMS Cover

Press a programmable button

Press *Feature* 1 5

Voice Interrupt On Busy

Talk-Back

Press a programmable button

Press *Feature* 1 8

Voice Mailbox Transfer

Press a programmable button

Press *Feature* 1 4

