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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.
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SAVE THESE INSTRUCTIONS

PARTNER® Advanced Communications System Installation, Programming, and Use

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Overview

1

Features

As each new version of system software is released, more valuable features become available.

Features Available with Release 2.0 or Later

- **Automatic System Answer** to help answer and route calls.
- **Direct Extension Dial** to allow callers to dial an extension or help group directly without the aid of the receptionist.
- **Line Pooling** to create up to four groups, or pools, of multiple outside lines. When users access a pool to make a call, the system selects an available line from the pool.
- **Call Coverage** for users who are unable to answer their calls but want their calls answered by another individual.
- **Caller ID Logging and Dialing** feature for users to view the names and numbers of logged calls from system telephones. Users can press the Dial option to automatically dial the caller's number.
- **SMDR Talk Time** to allow you to track on an SMDR call report the length of time that users talk on incoming outside calls.

Features Available with Release 3.0 or Later

- **Call Screening** to listen to a caller leaving a message in the user's mailbox.
- **Fax Calling Tone Detection** to automatically route incoming fax calls to a fax machine.
- **Record-a-Call** to record an active conversation in the user's mailbox. PARTNER MAIL VS Voice Messaging System (PMVS) 5.0 or later is required.
- **Unique Line Ringing** for a user to differentiate which line is ringing.
- Enhanced programmable features:
  - **Call Coverage Rings**
  - **VMS Cover Rings**
  - **VMS Hunt Delay**
  - **VMS Hunt Schedule**
- **Automatic Daylight Savings Time** to change the time one hour as Daylight Savings Time begins and ends.
- 911 Calls do not require account code entry.
- PARTNER Remote Access PC Card allows you to program the system remotely or locally from a PC and perform backup and restore functions.

NOTE You must have additional PARTNER Remote PC-Software to program the system from a PC.

Features Available with Release 4.0 or Later

- Support of the 1600 DSL module, a module that contains up to 16 lines on one line jack.
- Caller ID name and number appear on display telephones while a call is ringing.
- Newly designed carrier, requiring no cover.

Features Available with Release 5.0 or Later

- Support of the 012E module, a module that increases the maximum extension capacity to 48.
- Support of the Endeavor 362EC module, enabling PARTNER® Endeavor telephones to function with PARTNER ACS.
- Remote administration of the 1600 DSL module is available through the PARTNER ACS Remote Administration and Diagnostics PC software. For more information, see the *PARTNER ACS Remote Administration and Diagnostics R5.0 Getting Started* guide.
- With the PARTNER ACS Remote Administration and Diagnostics PC software, the content of the PC Cards that are installed in the PARTNER ACS processor module as well as the modules installed in the carrier are displayed in an inventory screen. For more information, see the *PARTNER ACS Remote Administration and Diagnostics R5.0 Getting Started* guide.
- Firmware upgrade capability of the 1600 DSL and 012E modules is available by using a Remote Access PC Card or a Backup/Restore PC Card that is configured for the firmware upgrade.

Modes of Operation

The system supports two modes of operation. The mode of operation determines how users access outside lines from their telephones:

- **Key Mode**. You access individual outside lines to make and receive calls.
- **Hybrid Mode**. *For Release 2.0 or later systems,* you can access individual outside lines as in Key mode. However, you also can create up to four groups, or *pools,* of multiple outside lines. When you access a pool to make a call, the system selects an available line from the pool. Since multiple lines are associated with the pool, you do not know which line within the pool is being used to make the call.

System mode is determined by the configuration of the processor module. The system is factory-set for Key mode. Changing to Hybrid mode requires a system programming change modifying the processor module. For more information about programming the mode of operation, see “Mode of Operation (#198)” on page 4-44.

The mode for your system must be decided upon before installation. In Key mode, no outside lines can be pooled, and, in Hybrid mode, lines can be pooled and individual lines can be assigned directly to line buttons.

Key Mode

When the system operates in Key mode, individual outside lines are assigned to users' extensions for making and receiving calls. At extensions with system telephones, each individual line (Line 1, Line 2, Line 3, etc.) assigned to the extension is represented by its own line button. You can press any of the available line buttons on a system telephone to make outside calls. (Single-line telephone users must dial 9 at intercom dial tone to make an outside call since their telephones do not have line buttons.)

With Key mode, you can easily join calls, since each line button can be labeled with a unique line number. For example, if you want to join a call on Line 2, you simply press the line button labeled "Line 2." Key mode also lets you monitor call activity by using the lights next to the line button – anyone with a line assigned to his or her extension can tell when an incoming call is ringing on that line, when a call on that line is on hold, and when that line is in use.

At installation, the system assigns outside lines to the buttons on all system telephones from left to right, starting with the bottom row of buttons. On an extension basis, you can change which lines are assigned and which buttons are used to select the lines, if desired. All extensions in a system configured for Key mode are referred to as *key extensions*.

Hybrid Mode

Hybrid mode offers you flexibility in accessing outside lines from your telephone. As in Key mode, individual lines can be assigned to system extensions. Additionally, multiple outside lines can be grouped together in *pools*. The system can have up to four pools, including a *main* pool and three *auxiliary* pools. Each pool is identified by a *pool access code* – 880, 881, 882, and 883 respectively.

Pools are represented on system telephones by *pool buttons.* Unlike line buttons, pool buttons give you access to *multiple* lines from a single button. Each auxiliary pool is associated with only *one* pool button. Since the main pool typically contains most of your company's outside lines, it is associated with *two* pool buttons. This setup allows you to place a call by using one of the main pool buttons, place that call on hold, and make another call by using the second main pool button. Or you can establish a conference call by using lines in the main pool. The main pool and each auxiliary pool can be assigned to an extension, for a maximum of five pool buttons per extension.

System telephone users can press any of the available pool buttons on their telephones, or they can enter the pool access code at intercom dial tone to make an outside call. (Single-line telephone users must dial 9 or enter the pool access code at intercom dial tone to access a pool since their telephones do not have pool buttons.) After you press a pool button or enter a pool access code, the system selects a free line from the pool for you to make the call. You can access a pool as long as there is at least one available line in the pool.

Hybrid mode allows users who have system telephones with fewer buttons to have access to multiple outside lines and various types of pools. You can make efficient use of outside lines by grouping those of a similar type or function together. For example, you can create an auxiliary pool of WATS or international lines and assign the pools to different groups of users. Additionally, individual lines can be assigned to a manager's extension so that he or she always has access to an outside line.

In Hybrid mode, extension 10 *always* operates like an extension in Key mode. This means that every outside line in the system is associated with a specific line button at extension 10.

All other extensions can be set up with access to only lines, only pools, or a combination of lines and pools:

- Those extensions that have pool buttons, even if they also have individual line buttons, are called *pooled extensions.*
- Those extensions that have only line buttons (including extension 10) are called *key extensions.* Key extensions cannot access pools.

If your system is configured for Hybrid mode, keep in mind:

- A line can be assigned to only one pool.
- Individual extensions can be restricted access to specific pools.
- Individual lines can be assigned to an extension with pool buttons as long as the lines are not part of any pool.

At installation, the system assigns all outside lines to the main pool and assigns the main pool to the two leftmost buttons on the bottom row of all system telephones, except extension 10. If desired, you can remove some of the lines from the main pool and create auxiliary pools. Then, you can assign pools and/or individual lines on a per extension basis.

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 1.0 and 1.1 systems allow up to 15 lines and up to 32 extensions; however, these maximums cannot be achieved simultaneously.

Table 1-1. Release 1.0 and 1.1 Capacities

Configuration	Maximum Lines	Maximum Extensions
Stand-alone	3 lines, 8 extensions PARTNER ACS processor module	8 extensions, 3 lines PARTNER ACS processor module
2-slot carrier	7 lines, 8 extensions Processor module, 400 module	14 extensions, 5 lines Processor module, 206 module
5-slot carrier	15 lines, 20 extensions Processor module, two 206 modules, two 400 modules	32 extensions, 11 lines Processor module, four 206 modules

- PARTNER ACS Release 2.0 or 3.0 systems allow up to 19 lines and up to 40 extensions; however, these maximums cannot be achieved simultaneously.

Table 1-2. Release 2.0 or 3.0 Capacities

Configuration	Maximum Lines	Maximum Extensions
Stand-alone	3 lines, 8 extensions PARTNER ACS processor module	8 extensions, 3 lines PARTNER ACS processor module
2-slot carrier	7 lines, 8 extensions Processor module, 400 module	16 extensions, 6 lines Processor module, 308EC module
5-slot carrier	19 lines, 8 extensions Processor module, four 400 modules	40 extensions, 15 lines Processor module, four 308EC modules

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.

- PARTNER ACS Release 4.0 or later systems allow up to 31 lines and up to 40 extensions; however, these maximums cannot be achieved simultaneously.

Table 1-3. Release 4.0 Capacities

Configuration	Maximum Lines	Maximum Extensions
Stand-alone	3 lines, 8 extensions PARTNER ACS processor module	8 extensions, 3 lines PARTNER ACS processor module
2-slot carrier	19 lines, 8 extensions Processor module, 1600 DSL module	16 extensions, 6 lines Processor module, 308EC module
5-slot carrier	31 lines, 8 extensions Processor module, 1600 DSL module, and three 400 modules	40 extensions, 15 lines Processor module, four 308EC modules

NOTE You can have only one 1600 DSL module in a system.

- PARTNER ACS Release 5.0 or later systems allow up to 31 lines and up to 48 extensions; however, these maximums cannot be achieved simultaneously.

Table 1-4. Release 5.0 or Later Capacities

Configuration	Maximum Lines	Maximum Extensions
Stand-alone		

System Components

Modular hardware design makes the system easy to install and expand. The most basic system consists of a PARTNER ACS processor module, which supports three lines and eight extensions. Using these lines and extensions, you can add optional devices and telephones to configure your system to meet your needs.

To expand the system to include more lines and extensions, simply attach additional modules and a carrier to contain them. The term “control unit” refers to the PARTNER ACS processor module and any other modules in the system.

⚠ 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 THE MODULES.

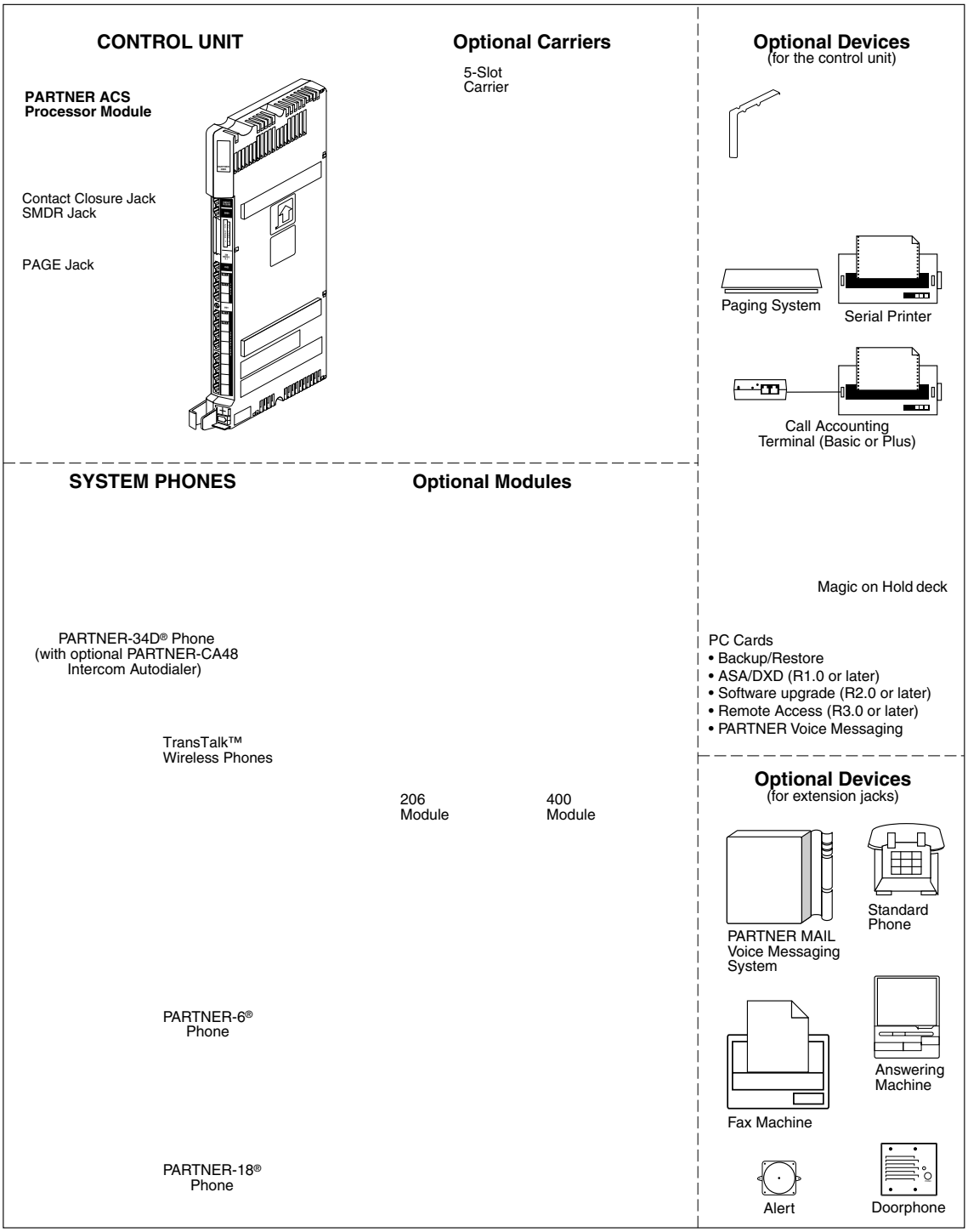

Figure 1-1. System Configurations

- If **Ring on Transfer (#119)** is Not Active and **Music-On-Hold** is Active, transferred callers hear **Music-On-Hold** until the call is answered.
- If **Music-On-Hold** is Active, users with system telephones with speakers can play **Background Music** through their telephones' speakers.
- If **Automatic System Answer** is on, callers hear **Music-On-Hold** while waiting for someone to answer the call.
- If **Direct Extension Dial** is on, callers hear ringing when the call is transferred regardless of the settings for **Music-On-Hold** and **Ring on Transfer (#119)**.
- If the operator at extension 10 uses the **Wake Up Service Button (#115)** to schedule wake up calls, the recipients hear **Music-On-Hold** when they answer their wake up calls.

Programming

To change the setting of the **Music-On-Hold** jack:

1. Press Feature 0 0 System Program System Program # 6 0 2 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.

Music-On-Hold Volume (#614)

Use this feature to select one of seven volume settings for the external music source provided through the **Music-On-Hold** jack on the processor module. This setting is system-wide.

Considerations

- Changes to the **Music-On-Hold** Volume setting have immediate effect on all calls currently receiving **Music-On-Hold** treatment.

Programming

To change the **Music-On-Hold Volume** setting:

1. Press Feature 0 0 System Program System Program # 6 1 4 at extension 10 or 11.

   The display shows the current setting.
2. Press the number of the setting on the dialpad, or press Next Data or Prev Data until the correct setting appears. (Setting ranges from 1 to 7, with 4 being the factory setting.)
3. If you want to return the volume to the default setting, press Remove.

Night Service with Auxiliary Equipment

You can set up modems, fax machines, and answering machines to receive calls automatically after hours. When **Night Service** is on, calls ring immediately at the appropriate extensions, so that no human intervention is required to transfer calls to the fax, modem, or answering machine. When **Night Service** is off, you can use the auxiliary equipment lines for normal business purposes; the lines are dedicated to auxiliary equipment *only* after hours.

By placing auxiliary equipment in the **Night Service Group**, auxiliary equipment can start sending and answering calls whenever you press the **Night Service** button at extension 10.

NOTE If you have a voice messaging system, turning **Night Service** on *also* activates **Night Service** operation of the voice messaging system.

Figure 9-15 shows a system with a fax machine and a modem connected to separate extensions. Line A is published as the fax line, and line B is published as the modem line.

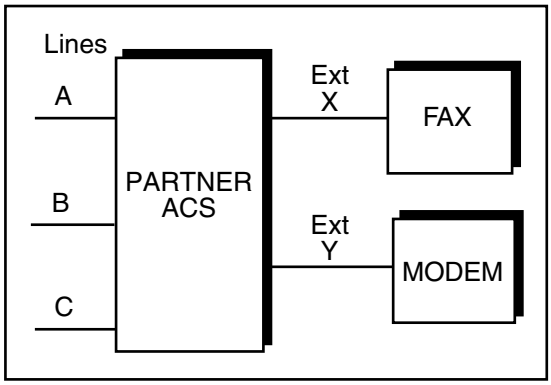

Figure 9-15. Night Service with Fax Machine and Modem

To Program

To program auxiliary equipment with **Night Service**:

1. Do one of the following:
   - If extension X and Y are key extensions, use **Line Assignment (#301)** to assign only line A to extension X (for the fax machine to cover) and only line B to extension Y (for the modem to cover).

- If extensions X and Y are pooled extensions, use **Pool Line Assignment (#207)** to remove lines A and B from all pools and **Pool Extension Assignment (#314)** to remove all pools from extensions X and Y. Also use **Line Assignment (#301)** to assign only line A to extension X (for the fax machine to cover) and only line B to extension Y (for the modem to cover).

2. Set **Line Ringing** for line A at extension X and for line B at extension Y to No Ring.

NOTE Make sure extension X and Y are not assigned as **Call Waiting (#316)** extensions, **Pickup Group Extensions (#501)**, **Calling Group Extensions (#502)**, or **Hunt Group Extensions (#505)**.

3. Assign a **Night Service Button (#503)** at extension 10.
4. Assign extensions X and Y to the **Night Service Group (#504)**.

Station Message Detail Recording (SMDR)

The **Station Message Detail Recording (SMDR)** is a *call reporting* feature that provides records of call activity. Call reporting information allows you to:

- Detect any unauthorized calls.
- Bill clients or projects.
- Bill back by department.
- Reduce telephone costs by identifying the need to change telecommunications services (like adding a WATS line for calls to a particular area code).
- Print **Caller ID** information.

Call information is recorded after each call is completed. For outgoing calls, the system records information for each call that lasts more than 10 seconds. The timing begins when you lift the handset or press Spkr to access an outside line. For incoming calls, the timing begins when the call is answered. Timing stops when the call is disconnected.

The system sends the information through a 1200-baud serial interface to either a serial printer or a call accounting device. The device connects directly to the SMDR jack on the processor module.

Considerations

- **Display Language (#303)** – specifies the language used for display messages. The call report header is printed in the same language as that specified for extension 10.
- **System Date (#101)** and **System Time (#103)** – set correctly to ensure accurate call reports.
- If a report cannot print because the printer is jammed or out of paper, the system stores up to 45 records in its memory until they can be printed. Additional calls are not recorded.

- Before including the Talk field on call reports or changing the output format to 24 digits, check the documentation shipped with the call accounting device to verify that these options are supported.
- If **SMDR Talk Time (#611)** is set to Active and **SMDR Output Format (#610)** is set to 24 digits, the combined length of the fields for a call record is greater than the 80 characters supported by most printers. If call records wrap around to the next line, reduce the font size or increase the characters-per-inch setting for the printer. If necessary, change the SMDR Output Format back to 15 digits.
- In the event of a power failure, records of any calls in progress are lost.
- Inside (intercom) calls are not recorded.
- If you place a call on hold and the caller hangs up, the call is considered complete and the record is sent to the call reporting device.
- Conference calls appear as two outside calls. (This means two records are generated on the report.)

Call Reports

A *call report* is a page of information that begins with a header. The header includes field names that describe the information in each call record. The call record is a line of information that includes the fields shown in Figure 9-16.

	DATE	TIME	NUMBER	DUR.	LINE	STN.	ACCOUNT
C	04/26/97	11:11	1028812015558014	00:01:40	08	18	
C	04/26/97	11:34	1023319085556036	00:04:28	02	32	1725
I	04/26/97	13:35	IN	00:02:12	01	10	
I	04/26/97	13:38	9085559111	00:01:22	12	15	

Figure 9-16. Sample Call Report

Each page contains up to 59 records. The report has the following fields:

- **Call Type.** “C” indicates outgoing calls; “I” indicates incoming calls.
- **Date.** The date of the call is shown in *mm/dd/yy* format, where *mm* is the month, *dd* is the day, and *yy* is the year.
- **Time.** The time of the connection is shown in *hh:mm* format, where *hh* is the hour and *mm* is the minute in 24-hour (military) time.
- **Number.** For an outgoing call, this is the dialed number or the speed dial code of a Marked **System Speed Dial number** (preceded by an “F”). This field holds a maximum of either 15 or 24 digits, depending on the setting of **SMDR Output Format (#610)**. (The Number field in Figure 9-16 is set to hold 24 digits.)

A “]” character prints as the last digit of a dialed number if the called party hangs up before the system user; a “?” prints if the number of digits dialed exceeds the digits that this field holds. If both of these conditions occur, the “]” takes precedence.

For an incoming call, “IN” appears, unless the system is set up to receive **Caller ID** information. In that case, telephone numbers of incoming calls on lines with **Caller ID** service print in this field.

- **Duration.** The duration of the call is shown in *hh:mm:ss* format, where *hh* is the hour, *mm* is the minutes, and *ss* is the seconds. This is the total time of the call, including any time the call is on hold or being handled. If an incoming call lasts less than one second, this field contains all zeroes.
- **Line Number.** This is the outside line used to make or receive the call, including a line in a pool.
- **Station (Extension).** This usually is the extension that answered or placed the call. For redirected incoming calls, the last extension on the call appears on the report:
  - For transferred incoming calls: the destination extension
  - For transferred outgoing calls: the originator extension
  - For pickup calls: the extension picking up the call
  - For forwarded calls: the extension answering the forwarded call
  - For coverage calls: the extension answering the coverage call

  If the calling party hangs up on an **Automatic System Answer** or **Direct Extension Dial** call before someone at an extension answers, this field shows 00.
- **Account Code.** This is the account code (up to 16 digits) assigned to the call. This code typically is used for charging calls to a specific client, project, or department.
- **Talk.** This is the time a user spends on an incoming outside call – from the time the user answers the call to the time the call is disconnected from the system. The talk time is shown in hh:mm:ss format, where hh is the hour, mm is the minutes, and ss is the seconds.

  If the call is answered by the **Automatic System Answer** or **Direct Extension Dial** feature, this field does not include the time the caller listens to the greeting or waits for someone to answer the call. For all other calls, the time in this field is the same as the time in the Duration field.

  This field is included on the call report only if **SMDR Talk Time (#611)** is set to Active.

Output Format

Use the following RS-232 serial transmission protocol for SMDR records:

- 1200 baud
- No parity
- 8 data bits
- 2 stop bits

The call reporting feature also supports XON/XOFF protocol, carriage returns, and line feeds.

Serial Printers

Use a 355A adapter, which converts a modular jack interface to an RS-232 25-pin connector, to connect a serial printer to the processor module. If you connect a printer, make sure the printer can receive SMDR data in the format described above (refer to the printer's instructions or contact the printer's manufacturer if you need help).

Call Accounting Devices

You can send call information to a call accounting device if you want to further analyze call activity. The device stores rate table information and processes the information into meaningful reports that can help you optimize your communications system. The primary application for call accounting devices is "accounting" or pricing of the calls.

The call accounting device connects directly to the SMDR jack on the processor module and can also print out reports that include summaries by hour, line, and extension. See the manual provided with the call accounting device for instructions on connecting it to your system.

Connecting a Device to the SMDR Jack

You can connect an SMDR printer, a PC, or a Call Accounting device connected to a serial printer or PC port to the SMDR jack on the processor module. The SMDR printer produces reports that monitor call activity.

Follow these steps to connect a device to the SMDR jack (see Figure 9-17):

1. If you are connecting a device to the SMDR jack on a Release 3.0 or later processor module, you must install a ferrite core on the SMDR cable right below the PC Card slots by doing the following (see Figure 9-18):
   a. Wrap the cable around the ferrite core once.
   b. Snap the core closed.
2. Insert one end of a D8W modular cord into the SMDR jack, the second jack on the processor module.
3. Route the cord through the processor module's wire manager.
4. Plug the other end of the cord into a 355A adapter
5. Plug the adapter into the printer's or PC's RS-232C serial port.

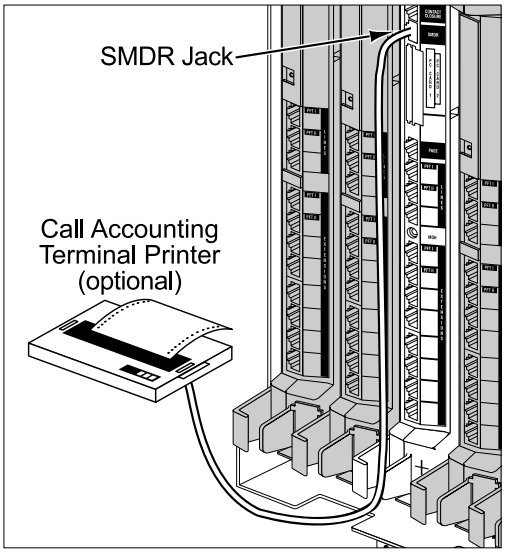

Figure 9-17. Connecting to the SMDR Jack

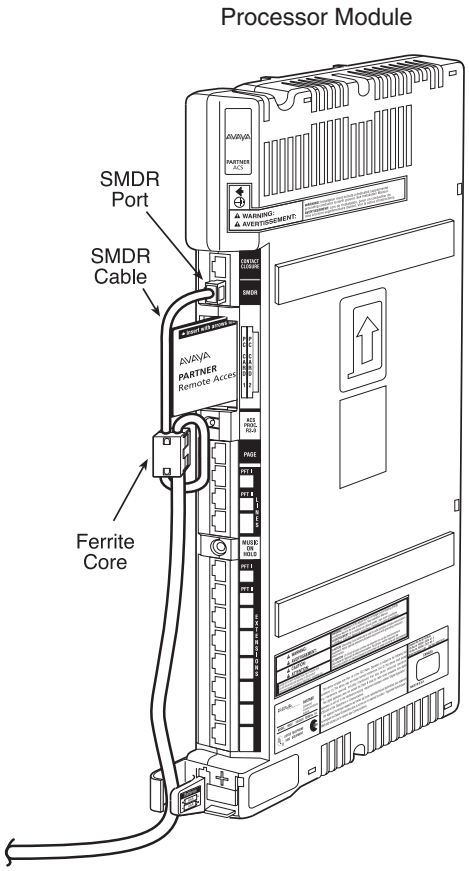

Figure 9-18. Installing the Ferrite Cord

SMDR Programming

The **Station Message Detail Recording (SMDR)** function of the system provides detailed tracking of telephone usage in a printed report. Use the following features to program the SMDR:

- **SMDR Record Type**
- **SMDR Top of Page**
- **SMDR Output Format**
- **SMDR Talk Time**

SMDR Record Type (#608)

Use this feature to specify whether all calls or outgoing calls only are to be included on call reports.

Considerations

- The date and time that appear on call reports are determined by **System Date (#101)** and **System Time (#103)**.
- The call report page header prints in the **Display Language (#303)** specified for extension 10.
- If **Account Code Entry** (optional or forced) is used to enter an account code for a call, the account code prints on the call report. If there are entries in the **Forced Account Code List (#409)**, only valid account codes and any other entered digits up to 16 print on the call report.
- Marked **System Speed Dial** numbers appear on the call report as F *nnn*, where *nnn* is the Speed Dial code.
- If you use **Caller ID**, SMDR reports include the telephone numbers of incoming calls.

Programming

To identify the type of calls to include for call reporting:

1. Press *Feature* 0 0 *System Program* *System Program* # 6 0 8 at extension 10 or 11.
2. Press *Next Data* until the appropriate value appears:
   - 1 = All Calls (outgoing and incoming; the factory setting) ✔
   - 2 = Outgoing Only
3. Select another procedure, or exit programming mode.

SMDR Top of Page (#609)

Use this feature to notify the system that the printer has been aligned to the top of a new page. Use this feature after inserting paper, clearing a jam, or to print a new header after changing **SMDR Output Format** or **SMDR Talk Time**. When this feature is used, the system prints a new call report header.

Considerations

- This procedure is skipped in the sequence of programming procedures when cycling. To use this procedure, enter the code directly.
- You can use **Display Language (#303)** to specify the language in which the call report page header should print.

Programming

To program SMDR Top of Page:

1. Make sure the paper in the printer is aligned at the top of a new page.
2. Press Feature 0 0 System Program System Program # 6 0 9.

   The system responds by printing the call report page header.
3. Select another procedure, or exit programming mode.

SMDR Output Format (#610)

Use this feature to specify whether a maximum of 15 digits or 24 digits is printed for dialed numbers in the Number field on the call report. The longer field is useful for businesses, such as law offices and hotels, that need to record many digits for outgoing calls for billing purposes.

Before changing to 24 digits, check the documentation for your call accounting device to verify that 24 digit output is supported.

Considerations

- If the output format is set to 15 digits and a "?" prints as the last digit of a dialed number on a call report (indicating that the digits dialed exceed the 15 digits the Number field can hold), you may want to change the output format to 24 digits.
- If the output format is set to 24 digits and **SMDR Talk Time (#611)** is set to Active, the combined length of the fields for a call record is greater than the 80 characters supported by most printers. If call records wrap around to the next line, reduce the font size or increase the characters-per-inch setting for the printer. If necessary, change the output format back to 15 digits.
- When you change the output format, the length of the Number field is adjusted for the next call record that prints. To print a new header, use **SMDR Top of Page (#609)**.

Programming

To change the maximum number of digits for dialed numbers that can print on call reports:

1. Press Feature 0 0 System Program System Program # 6 1 0 at extension 10 or 11.
2. Press Next Data until the appropriate value appears:
   - 1 = 15 Digits (the factory setting) ✔
   - 2 = 24 Digits
3. Select another procedure, or exit programming mode.

SMDR Talk Time (#611)—Release 2.0 or Later

Use this feature to indicate whether or not you want to include a Talk field on call reports. The Talk field records talk time for all incoming outside calls.

For **Automatic System Answer** and **Direct Extension Dial** calls, talk time does not include the time during which the greeting plays or the time that the caller spends waiting for someone to answer the call. For all other calls, talk time is the same as call duration.

Considerations

- If talk time is set to Active and **SMDR Output Format (#610)** is set to 24 digits, the combined length of the fields for call record is greater than the 80 characters supported by most printers. If call records wrap around to the next line, reduce the font size or increase the characters-per-inch setting for the printer. If necessary, change the output format back to 15 digits.
- If you use **Automatic System Answer** or **Direct Extension Dial**, you may want to set **SMDR Talk Time (#611)** to Active to print on call reports the time a user spends on an incoming outside call – from the time the user answers the call to the time the call is disconnected from the system.
- When you change this feature to Active, the next call record that prints includes talk time as the last field on the call report. To print a new header, use **SMDR Top of Page (#609)**.

Programming

To include the Talk field on call reports:

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

Voice Messaging Systems

Four voice messaging systems are compatible with your system.

- PARTNER Messaging resides in the control unit in a 2-, 4-, or 6-port configuration.
- The PARTNER MAIL VS Voice Messaging System (PMVS) resides in the control unit in 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.

NOTE

- In Release 5.0, 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.
- PARTNER Voice Messaging (PVM) does not support the full dial plan available in Release 5.0.

To Program a Voice Messaging System

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.

- Assign the PARTNER MAIL VS extensions to Hunt Group 7 using **Hunt Group Extensions (#505)** (see page 4-32).
- Set the **Transfer Return Extension (#306)** (see page 4-58) 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) (see page 8-62) on phones to allow subscribers to turn VMS Coverage on and off.
- Program **Line Coverage Extension (#208)** (see page 4-43) 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) (see page 8-66) 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 (see page 8-5) 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)** (see page 4-34) 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)** (see page 7-15) is assigned at extension 10.
- Assign appropriate **Outgoing Call Restrictions (#401)** (see page 4-24) as well as **Allowed Phone Numbers List (#407)** (see page 4-17) or **Disallowed Phone Numbers Lists (#404)** (see page 4-19) to voice messaging extensions.

Additional Voice Messaging System Programming

Following are additional features used to program the communication system for a voice messaging system. The procedures to program these tasks are provided below.

- 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.
- For PARTNER ACS R3.0 or later: 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.
  For all other PARTNER Systems: program **VMS Cover Rings (#117)** for *all* subscriber extensions.
- 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.

Automatic VMS Cover (#310)

Use this feature to automatically route an extension's unanswered intercom and transferred calls to the **Call Answer Service** of the voice messaging system after a specified number of rings (factory setting for all system extensions is three rings), so callers can leave a message.

Considerations

- Single-line telephones and system telephones without a programmed **VMS Cover** button cannot override this feature once it is assigned to an extension.
- To manually change an extension's **VMS Cover** state, program the **VMS Cover** feature on a button with lights.
- **Automatic VMS Cover** also applies to outside calls on lines assigned ownership with **Line Coverage Extension (#208)**.
- Users with **Automatic VMS Cover** turned on can activate **Do Not Disturb** to **Send All Calls** immediately to their voice mailbox.
- If an extension has **Automatic VMS Cover** and **Call Coverage** active, calls ring at the covering extension after the specified number of **Call Coverage Rings (#116)** or **(#320)**. If the covering extension does not answer, the call is routed to the voice mailbox of the extension that activated **Call Coverage** after the specified amount of **VMS Cover Rings**.
- If an extension has **Automatic VMS Cover** and **Call Forwarding** active, calls ring at the forwarding destination; they are not covered by the voice messaging system.

Programming for Automatic VMS Cover

To change the **Automatic VMS Cover** setting for an extension:

1. Press Feature 0 0 System Program System Program # 3 1 0 at extension 10 or 11.
2. Enter the number of the extension to be covered by the voice messaging system.
3. To assign or unassign **Automatic VMS Cover**, press Next Data until the appropriate value appears.
   - 1 = Assigned
   - 2 = Not Assigned (the factory setting) ✔
4. To program another extension, press Next Item or Prev Item until the extension number appears on the display. Then repeat Step 3.
5. Select another procedure, or exit programming mode.

VMS Cover Rings (321#)

Use this feature to define the number of times a call rings before it is sent to a user's voice mailbox. Use **VMS Cover Rings (#117)** for Release 2.0 or earlier systems to program the number of rings for all extensions programmed for **VMS Cover.** Use **VMS Cover Rings (#321)** for Release 3.0 and later systems to program the number of rings on a per-extension basis.

Considerations

- VMS Cover Rings also applies to lines that have been designated an owner with **Line Coverage Extension (#208)**.
- If an extension has **VMS Cover (F15)** or **Automatic VMS Cover (#310)** active, unanswered calls to that extension are routed to the voice messaging system after the specified number of **VMS Cover Rings**.

Programming For VMS Cover Rings (#117)

To change the number of times calls ring before being sent to the voice messaging system:

1. Press Feature 0 0 System Program System Program # 1 1 7 at extension 10 or 11.
2. Enter a setting (1–9; 3 is the factory setting). For example, to set **VMS Cover Rings** to 4, press Next Data or Prev Data until a display similar to the following appears:

   ```
   VMS Cover Rings
   4 Rings
   ```

3. Select another procedure, or exit programming mode.

Programming For VMS Cover Rings

To change the number of times calls ring before being sent to the voice messaging system:

1. Press Feature 0 0 System Program System Program # 3 2 1 at extension 10 or 11.
2. At the extension prompt, enter an extension number.

   The Cover Rings prompt appears:

   ```
   VMS Cover Rings XX
   3 Rings
   ```

3. Enter a setting (1–9; 3 is the factory setting), or press Next Data until the correct value appears:
4. To set **VMS Cover Rings** for another extension, press Next Item or Prev Item until the extension number appears on the display. Then repeat Step 3.
5. Select another procedure, or exit programming mode.

VMS Hunt Delay (#506)

Use this feature to determine when outside calls should be answered by the Automated Attendant of the voice messaging system. You can set the system for any number of rings, 0–6. Assigning more rings gives the operator an opportunity to answer calls before they go to the Automated Attendant.

For systems of Release 3.0 or later, **VMS Hunt Delay** is programmable on a per-line basis. In addition, you can program this feature so that calls can be handled one way during the day and a different way when the system is in **Night Service**.

Considerations

- If you do *not* subscribe to ICLID services and want immediate call handling, set this option to 0 rings.
- If you do subscribe to ICLID services and want immediate call handling, set this option to at least 2 rings. This allows the ICLID information to be detected before the call is sent to the Automated Attendant.

Programming For Release 2.0 or Earlier

To change the **VMS Hunt Delay** setting for the voice messaging system's Automated Attendant service:

1. Press Feature 0 0 System Program System Program # 5 0 6 at extension 10 or 11.
2. Press Next Data until the appropriate value appears:
   - Immediate (the factory setting) ✔
   - Delay
3. Select another procedure, or exit programming mode.

Programming For Release 3.0 or Later

To change the **VMS Hunt Delay** setting for the voice messaging system's Automated Attendant service:

1. Press Feature 0 0 System Program System Program # 5 0 6 at extension 10 or 11.
2. Select Day or Night mode by entering 1 or 2 respectively (the factory setting is 1 = Day).
3. Enter the line number.

   The current setting is displayed.
4. To set **VMS Hunt Delay**, press Next Data until the appropriate value for the number of rings appears: 0–6 (2 is the factory setting).
5. To set **VMS Hunt Delay** for another line, press Next Item or Prev Item until the line number appears on the display. Then repeat Step 4.
6. Select another procedure, or exit programming mode.

VMS Hunt Schedule (#507)

Use this feature to determine whether the outside lines assigned to **Hunt Group** 7 hunt through the **VMS Hunt Group** all the time, only during Day operation (**Night Service** is off), or only during Night operation (**Night Service** is on). This feature affects only the Automated Attendant service of the voice messaging system. For Release 3.0 and later systems, you can program **VMS Hunt Schedule** on a per-line basis.

Considerations

- You must use **Hunt Group Extensions (#505)** to assign the extensions associated with the voice messaging system hardware to **Hunt Group** 7.
- If you set the **VMS Hunt Schedule** for Day Only or Night Only, you must use **Night Service Button (#503)** to program a **Night Service Button** for extension 10.
- When the **VMS Hunt Schedule** is set to Day Only and **Night Service** is turned off (in Day mode), calls coming in on lines assigned to the hunt group are sent to the hunt group. If **Night Service** is turned on (in Night mode), incoming calls do not go to the hunt group.
- When the **VMS Hunt Schedule** is set to Night Only and **Night Service** is turned off (in Day mode), calls coming in on lines assigned to the hunt group are not sent to the hunt group. If **Night Service** is turned on (in Night mode), incoming calls go to the hunt group.

Programming For Release 2.0 or Earlier Systems

To change the **VMS Hunt Schedule** setting for the voice messaging system's Automated Attendant Service:

1. Press Feature 0 0 System Program System Program # 5 0 7 at extension 10 or 11.
2. Press Next Data until the appropriate value appears:
   - 1 = Always (the factory setting) ✔
   - 2 = Day Only
   - 3 = Night Only
3. Select another procedure, or exit programming mode.

Programming For Release 3.0 or Later

To change the **VMS Hunt Schedule** setting for the voice messaging system's Automated Attendant Service:

1. Press Feature 0 0 System Program System Program # 5 0 7 at extension 10 or 11.
2. Enter the line number.

   The current setting is displayed.
3. Press Next Data until the appropriate value appears:
   - 1 = Always (the factory setting) ✔
   - 2 = Day Only
   - 3 = Night Only
4. To set **VMS Hunt Schedule** for another line, press Next Item or Prev Item until the line number appears on the display. Then repeat Step 3.
5. Select another procedure, or exit programming mode.

Upgrading the System 10

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Upgrading the System

10

Overview

You can upgrade your system software to a new release of the PARTNER ACS by using a PCMCIA card. You also can add or replace modules and add lines, pools, and extensions.

Both old and new (introduced in system Release 4.0) 5-slot carriers are compatible with all releases of the PARTNER ACS.

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. Users at these extensions should notify the System Administrator when they see this 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.

NOTE The PARTNER ACS Release 3.0 includes a PARTNER Remote Access PC Card, which allows you to program the system remotely and perform backup and restore functions.

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 2-11.)

Using a PC Card

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

NOTE In Release 4.0 systems, using a PC card does not upgrade 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.

In Release 5.0 or later systems, a firmware upgrade can be performed on the 1600 DSL and 012E modules by using a Remote Access PC Card or a Backup/Restore PC Card that is configured for the firmware upgrade. See "Upgrading 1600 DSL and 012E Module Firmware" on page 10-6 for more information.

⚠ 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"). See Figure 10-1.

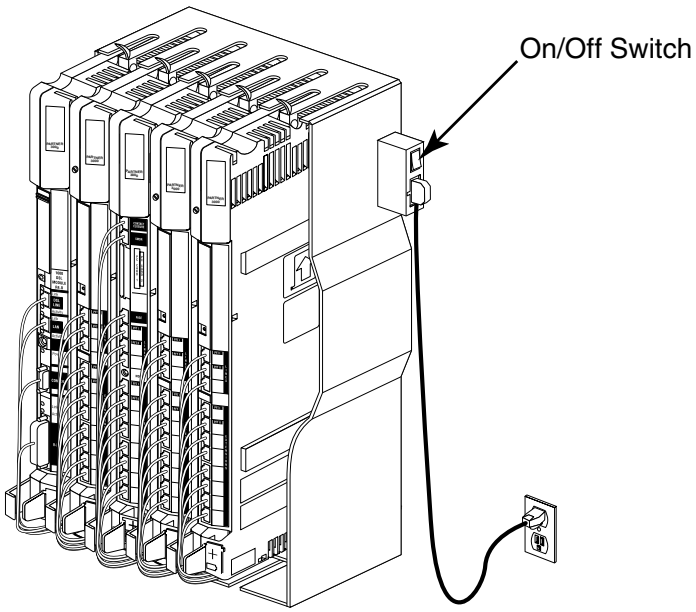

Figure 10-1. On/Off Switch on a 5-Slot Carrier

2. For all types of installations, disconnect the power cord from the wall outlet.
3. If you do not have a 5-slot carrier or have a system of Release 4.0 or later, go to Step 4. If you have a 5-slot carrier and a system of Release 3.0 or earlier:
   a. Loosen the screw on the lower front of the cover.
   b. Place one hand on the handle on the bottom front of the cover and place your other hand on the top of the cover, and gently pull the cover up and away from the carrier. Be careful not to break the tabs that attach the cover to the carrier.

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 (see Figure 10-2). When inserted properly, the PC Card projects about 1-5/8 inch (4 cm) from the module.

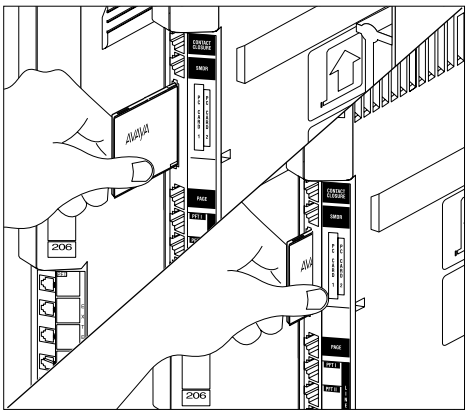

Figure 10-2. Inserting the PC Card

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 (" – ").

   While the system upgrades, the LED on the processor module flashes green and red alternately. When the upgrade has finished (in about 20 to 40 seconds), the LED becomes steady green.

   NOTE If a 1600 DSL module resides in the carrier, the module itself may take from 2 to 7 minutes to initialize.

6. Check that all green lights on the fronts of the modules are lit:

   - *If a single light is out,* power down the control unit, reseat the module and power up the control unit.
   - *If multiple lights are out,* power down the control unit, reseat 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. Follow the procedures below:
    a. If you are upgrading from Release 1.0 to Release 2.0, power down and remove the PC upgrade card.
    b. If you are upgrading to Release 3.0 or later, 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. If you have a system of Release 3.0 or earlier:
    a. Replace the cover by grasping it by its upper edges and holding it squarely over the control unit (see Figure 10-3). Place the cover over the modules and make sure it fits firmly in place.

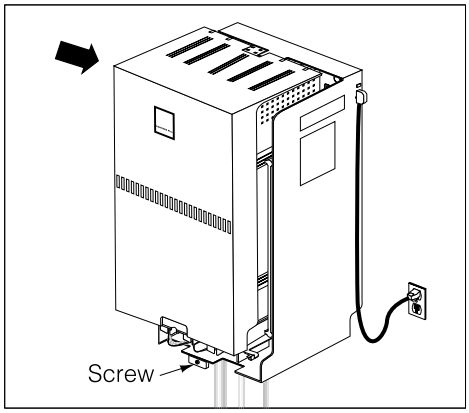

Figure 10-3. Replacing the Cover

    b. Tighten the screw on the lower front of the cover.

Upgrading 1600 DSL and 012E Module Firmware

PARTNER ACS Release 5.0 or later provides a firmware upgrade capability for the 1600 DLS and 012E modules which are equipped with programmable flash memory. The firmware to upgrade these modules can reside on either a Remote Access PC Card or on a Backup/Restore PC Card.

When configured for firmware upgrades, the Remote Access PC Card can contain system software as well as firmware upgrade software while the Backup/Restore PC Card contains just the firmware upgrade software.

The steps to perform a firmware upgrade are the same as those to upgrade the system software. See “Using a PC Card” on page 10-2.

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 after 3 to 10 seconds 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 as been completed for all modules, all power LEDs are steady green.

Adding New Modules

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

CAUTION:
Adding new modules may change line and extension assignments when the system is powered up.

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 2-5 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. For Release 3.0 and earlier systems, remove the cover:
   a. Loosen the screw on the lower front of the cover.
   b. Place one hand on the handle on the bottom front of the cover and place your other hand on the top of the cover, and gently pull the cover up and away from the carrier. Be careful not to break the tabs that attach the cover to the carrier.
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 (see Figure 10-4).

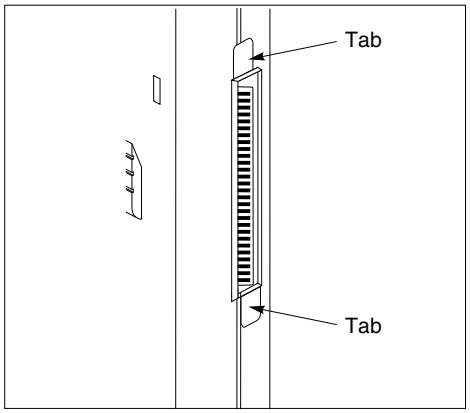

Figure 10-4. Removing the Plastic Protector

5. Before you insert the new module, make sure that all 400 (or 200) modules are installed to the right of all 012E, 308EC, or 206 modules. If you have a 1600 DSL module, it must be in the first slot on the left of the carrier (see Figure 10-5). If you need to move a module to accommodate the new one, see "Replacing Modules" on page 10-9.

NOTE PARTNER ACS Release 5.0 supports Endeavor telephones when an Endeavor 362EC module is installed in the carrier. Install the Endeavor 362EC module(s) to the right of the 1600 DSL module, if one is installed, and to the left of any 400 and 200 module.

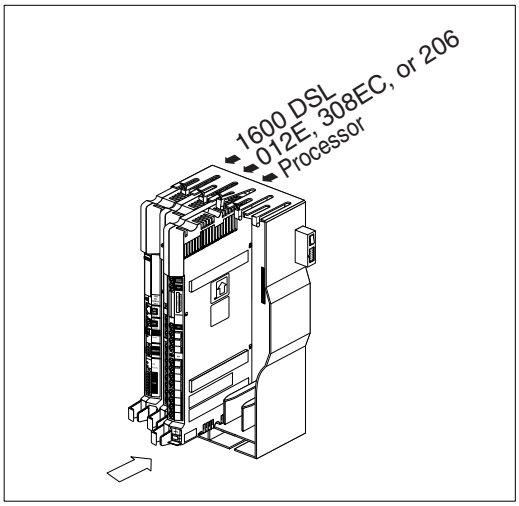

Figure 10-5. Placement of Modules

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 2-16).
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, reseat the module, and power up the control unit.
    - *If multiple lights are out,* power down the control unit, reseat 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. (For Release 3.0 and earlier systems, the cover will not fit if the modules are not seated properly.) If you have a system of Release 4.0 or later, you are finished with this procedure. If you have a system of Release 3.0 or earlier, continue with Step 12.
12. To replace the cover, grasp it by its upper edges and hold it squarely over the control unit. Place the cover over the modules and make sure it fits firmly in place.
13. Tighten the screw on the lower front of the cover.

Replacing Modules

Replacing system modules is similar to how you originally installed modules 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. Do one of the following:
   - For a stand-alone configuration, remove the screws at the top and bottom of the processor module, and remove the module from the wall. Go to Step 8.
   - For a 2-slot carrier configuration, remove the long screw at the bottom of the modules (see Figure 10-6).

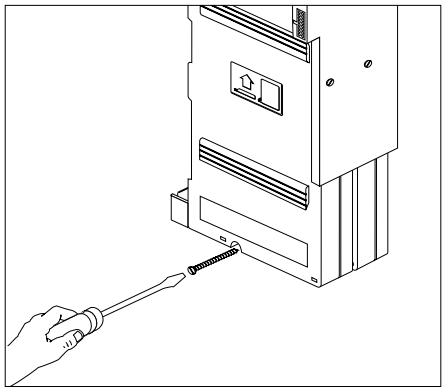

Figure 10-6. Removing the Bottom Screw

4. Remove the screws that attach the carrier to the modules (see Figure 10-7).

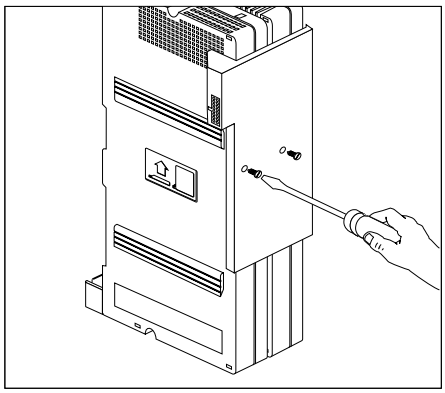

Figure 10-7. Removing the Carrier Screws

5. Pull the carrier to the right to remove it (see Figure 10-8).

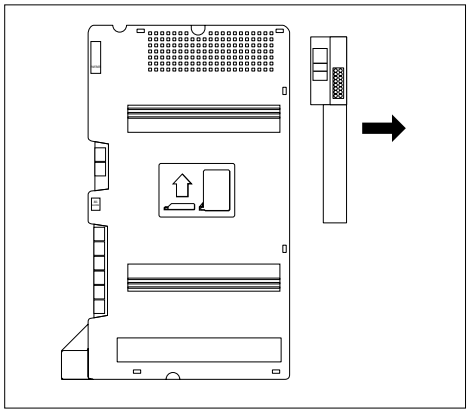

Figure 10-8. Pulling Off the Carrier

6. Slide the top module to the left to disengage its interlocking mounting tracks from the processor module.

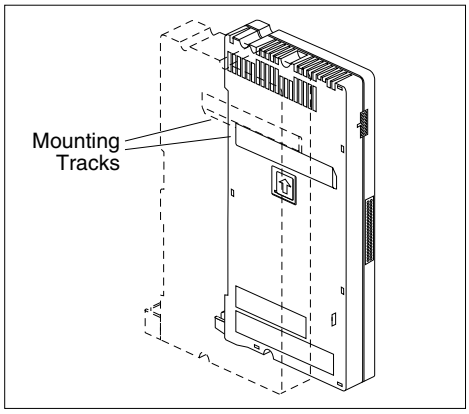

Figure 10-9. Disengaging the Mounting Tracks

If you are replacing the processor module, go to Step 7. If you are replacing the top module, continue with Step 10.

7. Mount the new module by following the steps in “Wall-Mounting a Stand-Alone Processor Module and a 2-Slot Carrier” on page 2-5; then go to Step 9.

8. Remove the screw at the top of the processor module, and remove the module from the wall (see Figure 10-10).

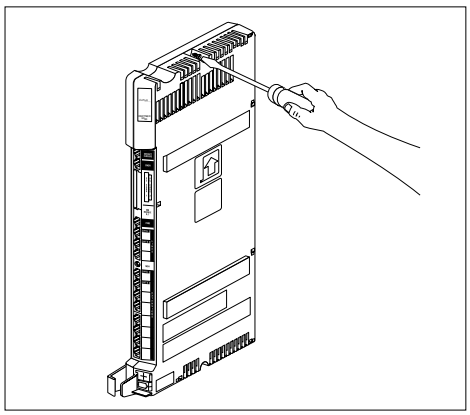

Figure 10-10. Removing the Top Screw

9. 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 2-5 and "Inserting Batteries in the Processor Module" on page 2-11 earlier in this guide.
10. 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 2-5.
11. 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 2-16.)
12. 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. If you have a system of Release 4.0 or later, go to Step 4. If you have a system of Release 3.0 or earlier:
   a. Loosen the screw on the lower front of the cover.
   b. Place one hand on the handle on the bottom front of the cover and place your other hand on the top of the cover, and gently pull the cover up and away from the carrier. Be careful not to break the tabs that attach the cover to the carrier.
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 (see Figure 10-11).

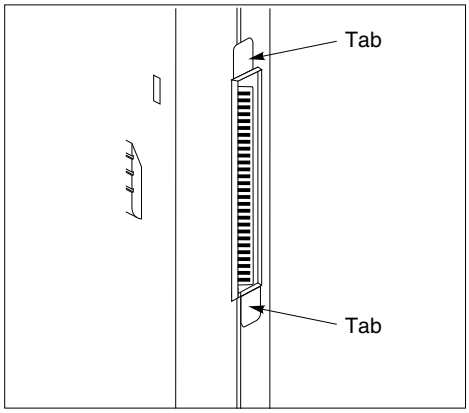

Figure 10-11. Removing the Plastic Protector

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 (see Figure 10-12).

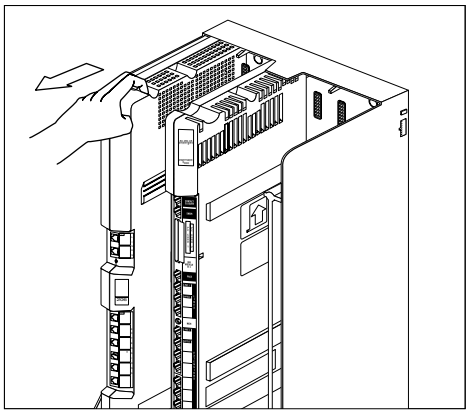

Figure 10-12. Removing the Module

7. If you are replacing a module with one of a different type, make sure 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. If you have a 1600 DSL module, it must be in the first slot on the left of the carrier.

   NOTE PARTNER ACS Release 5.0 supports Endeavor telephones when an Endeavor 362EC module is installed in the carrier. Install the Endeavor 362EC module(s) to the right of the 1600 DSL module, if one is installed, and to the left of any 400 and 200 module.

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 (see Figure 10-13). A slight click indicates the connectors are engaged.

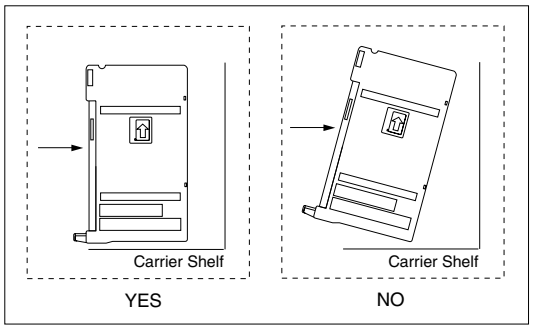

Figure 10-13. Proper Insertion of the Module

⚠ 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. (See "Connecting Lines and Extensions" on page 2-16.)
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, reseat the module, and power up the control unit.
    - *If multiple lights are out,* power down the control unit, reseat 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.
14. If you have a system of Release 3.0 or earlier:
    a. Replace the cover by grasping it by its upper edges and holding it squarely over the control unit (see Figure 10-14). Place the cover over the modules and make sure it fits firmly in place.

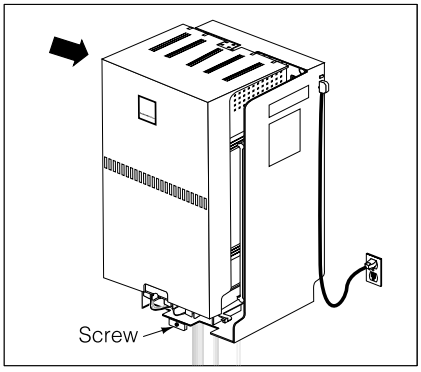

Figure 10-14. Replacing the Cover

    b. Tighten the screw on the lower front of the cover.

Changing Settings and 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.

Changing System Settings

If you are upgrading to PARTNER ACS Release 1.1 or 2.0 or later from an earlier 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 that are new in Release 2.0 or Release 3.0 (see "Features" on page 1-3).

⚠ 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 10-2.

For more information on using the PARTNER Voice Messaging PC card, see *PARTNER Voice Messaging PC Card Installation, Programming, and Use.*

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)**, **System Day (#102)**, and **System Time (#103)** to set the current date, day, and time.

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 using **Line Access Mode (#301)** are key extensions).

If you add an outside 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 an outside 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. If you wish to further adjust a new extension's settings, see "Customizing Extensions" on page 3-14.

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.

Troubleshooting 11

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Troubleshooting

11

Overview

From time to time, problems may arise with various system functions. This chapter describes some common problems and recommends solutions for them. You also can obtain help with solving problems by contacting your authorized dealer or by calling the helpline.

Customer Self Service Center on the Internet

If you can access the Internet, you can use the Customer Self Service Center to get on-line information:

- Answers to frequently asked questions
- 800 number directory

If you have a service agreement, active lease, or warranty, you can get additional on-line information:

- Feature programming tips
- Notification of changes to products
- Product documentation
- Chat service

The Internet address for the Customer Self Service Center is on the copyright page of this guide.

When You Need Help

If you have a problem with your system, you may be able to solve it by following the troubleshooting procedures in this chapter. If not, you can call for help. *If you need assistance when installing, programming, or using your system, contact your local Authorized Dealer or call the helpline. Consultation charges may apply. Outside the continental U.S., contact your local Authorized Dealer.*

If you call, have the following information ready so that the representative can better help you:

- The kind of system you have (for example, PARTNER Advanced Communications System Release 1.0). To determine the release number, press Feature 5 9 at any display telephone.
- The number of lines and extensions in your system.
- The type of telephone (system or single-line) and the model number, if applicable. System telephone model numbers are located either on the upper right-hand corner of the telephone or on the dialpad overlay.
- If you followed a troubleshooting procedure and need more help, tell the representative what you did.

System Release Status (F59)

When calling for customer support, you need to know the release level of your system. This feature enables you to determine that information at any system display telephone. A display similar to the following appears:

```
P ACS R2.0 C01
```

This message indicates that this is Release 2.0 of the PARTNER Advanced Communications System. The `C01` represents the country code.

To use this feature, press Feature 5 9 at any system display telephone. The system release message replaces the default information on the top line of the telephone display for 15 seconds.

Power Failure Operation

When power to the system is cut off, the first two lines on the processor module or the 308EC module automatically connect to the first two extensions on that module, and the first line on each 206 module connects to its first extension.

This enables you to make and answer calls during a power outage, provided you have a single-line telephone connected to any of these extensions. (During a power failure, single-line telephones can only make and receive calls – other system features are not available.)

The system can stay programmed for a minimum of 45 days and a maximum of six months after it stops receiving power, depending on the freshness of the batteries. When the batteries are drained, all of the system's programmed settings return to the factory settings. You should install fresh batteries every year.

Battery Replacement

The PARTNER ACS 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. Users at these extensions should be instructed to notify you when they see this 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. Also, the settings retained in the 1600 DSL module's flash memory become the active settings when the power is turned off and back on. If you have a Backup/Restore PC Card, do a backup before changing the batteries.

NOTE The PARTNER ACS Release 3.0 or later includes a PARTNER Remote Access PC Card, which allows you to program the system remotely or locally from a PC and perform backup and restore functions. The PARTNER Remote Access PC Card is a PCMCIA card that can also be used to upgrade previous versions of PARTNER ACS to Release 3.0 or later. You must have additional PARTNER Remote PC-Software to program the system from a PC.

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 2-11.)

Clearing a Backup-Failure Alarm

If you use **Backup Programming—Automatic (#123)** 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, you can clear the Backup-Failure Alarm by following these steps:

1. Press Feature 0 0 System Program System Program # 1 2 3.

   The current setting appears.

2. Press 3 to choose Option 3, "Backup Alarm Cleared."

   NOTE You cannot use Next Data or Prev Data in this procedure to choose Option 3.

3. Exit programming mode.

   NOTE Using Option 3 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.

System Telephone Problems

The following section discusses system telephone problems.

System Telephone Does Not Ring

Possible Cause 1: Ringer volume is set too low.

What to do: Press the volume control button while the telephone is idle and the handset is in the cradle.

- If the telephone rings increasingly louder, the problem is solved.
- If the telephone still does not ring, go to Possible Cause 2.

Possible Cause 2: The **Do Not Disturb** or **Call Forwarding** feature is turned on.

What to do: Check to see if **Do Not Disturb** or **Call Forwarding** is turned on.

- If **Do Not Disturb** or **Call Forwarding** is turned on, turn it off.
- If **Do Not Disturb** or **Call Forwarding** is not turned on, go to Possible Cause 3.

Possible Cause 3: **Line Ringing** is programmed for No Ring or Delayed Ring.

What to do: Check the **Line Ringing** setting for the extension.

- If **Line Ringing** is set for No Ring or Delayed Ring, change the setting if appropriate.
- If **Line Ringing** is set for Immediate Ring and this telephone is part of a combination extension, see “Problems with Combination Extensions” on page 11-16.
- If **Line Ringing** is set for Immediate Ring and the telephone is on an extension by itself, go to Possible Cause 4.

Possible Cause 4: Telephone is faulty.

What to do: Unplug the cord from the base of the problem telephone. Then plug the cord into a telephone that you know rings properly.

- If the replacement telephone rings properly, the problem telephone is defective. Call the helpline to arrange for a replacement.
- If the replacement telephone does not ring properly, call the helpline number listed on the front, inside cover.

System Telephone Does Not Work

Possible Cause 1: The telephone cord is plugged into the wrong jack on the bottom of system telephone.

What to do: Plug the modular telephone cord into the correct jack.

- If the telephone works properly, the problem is solved.
- If the problem remains, go to Possible Cause 2.

Possible Cause 2: Telephone needs to be reset.

What to do: Unplug the cord from the base of the telephone. With the handset hung up, plug the cord in again.

- If the telephone works properly, the problem is solved.
- If the problem remains, go to Possible Cause 3.

Possible Cause 3: The telephone cord is defective.

What to do: Unplug the cord from the base of the telephone and the wall jack. Replace the cord with a cord that you know works.

- If the telephone works, the cord is faulty. Call the helpline number listed on the front, inside cover to arrange for a replacement.
- If the telephone does not work and it is part of a combination extension, see “Problems with Combination Extensions” on page 11-16, Possible Cause 3.
- If the telephone does not work and it is not part of a combination extension, call the helpline number listed on the front, inside cover.

Possible Cause 4: The telephone is defective.

What to do: Unplug the cord from the base of the telephone. Then plug the cord into a telephone that you know works.

- If the replacement telephone works, the problem telephone is faulty. Call the helpline number listed on the front, inside cover to arrange for a replacement.
- If the replacement telephone does not work, go to Possible Cause 4.

Display Shows Only 16 Characters per Line

Possible Cause: A power outage occurred.

What to do: Unplug the modular telephone cord from the telephone and plug it in again. If the display is still incorrect, see “System Telephone Does Not Work” on page 11-6.

Display Is Incorrect

Possible Cause: Date, day, and time are not set properly.

What to do: Re-enter the date, day, and time using **System Date (#101)**, **System Day (#102)**, and **System Time (#103)**.

- If the display is correct, the problem is solved.
- If the display is still not correct, see "System Telephone Does Not Work" on page 11-6.

Display Shows "ReplaceSysBat W/Power On" or "ChgBat W/PowerOn" at Extensions 10 and 11

Possible Cause: System battery power is low.

What to do: Replace the system batteries (see "Inserting Batteries in the Processor Module" on page 2-11).

Display Does Not Show Caller ID Name/Number

Possible Cause 1: Not receiving Caller ID service from local telephone company.

What to do: Contact your local telephone company to check on Caller ID service.

- If you are not receiving Caller ID service, subscribe to it.
- If you are receiving Caller ID service, go to Possible Cause 2.

Possible Cause 2: Line connected to a module that does not support Caller ID.

What to do: Make sure lines with Caller ID service are connected to a processor, 206EC, 308EC, or 400EC module. If Caller ID lines are not connected to one of these modules, install the appropriate modules and/or make the appropriate connections.

Possible Cause 3: Someone activated **Call Coverage**.

What to do: Check the system telephone display.

- If `Coverage Call for XX` (where XX is the extension that activated the **Call Coverage**) appears, the call is a coverage call. Call Coverage displays the extension number of the person who activated the feature rather than Caller ID information.
- If `Coverage Call for XX` does not display, call the helpline number listed on the front, inside cover.

"Priv." Is Displayed Instead of Caller ID Information

Possible Cause: The caller used a star code, *67, to block Caller ID information or has instructed the telephone company to block Caller ID information.

What to do: Nothing; this is the normal operation for these conditions.

"- - - - - - - - - - - -" Is Displayed Instead of Caller ID Information

Possible Cause: The call originated outside the area for which the telephone company can provide Caller ID information.

What to do: Nothing; this is normal operation for the Caller ID service.

Some Caller ID Information Does Not Display

Possible Cause: Not all calls on Caller ID lines are displayed. This varies by local telephone company.

What to do: If Caller ID information for a large number of calls is not displayed, contact your local telephone company.

Intercom Autodialer Does Not Work Properly

Possible Cause 1: Telephone cord is plugged into wrong jack on bottom of Intercom Autodialer.

What to do: Plug the modular telephone cord into the correct jack – see "Connecting a PARTNER-CA48 Intercom Autodialer" on page 2-33 for instructions.

- If the Intercom Autodialer works properly, the problem is solved.
- If the problem remains, go to Possible Cause 2.

Possible Cause 2: Intercom Autodialer is not receiving auxiliary power.

What to do: Make sure the Intercom Autodialer is plugged into an electrical outlet.

- If the Intercom Autodialer works properly, the problem is solved.
- If the problem remains, go to Possible Cause 3.

Possible Cause 3: The cord is defective.

What to do: Unplug the cord from the base of the Intercom Autodialer and the wall jack. Replace the cord with a cord that you know works.

- If the Intercom Autodialer works, the cord is faulty. Call the helpline number listed on the front, inside cover to arrange for a replacement.

- If the problem remains, go to Possible Cause 4.

Possible Cause 4: No Auto Dial buttons are programmed on the Autodialer.

What to do: Program Auto Dial buttons. See "Auto Dialing" on page 8-5.

- If the Intercom Autodialer works properly, the problem is solved.
- If the Intercom Autodialer does not work, call the helpline number listed on the front, inside cover.

Record-a-Call Light is Always Red Steady and You Can't Record a Call

Possible Cause 1: You do not have enough ports assigned into Hunt Group 7.

What to do: You must assign four ports into Hunt Group 7. This requires PMVS Release 5 and an upgrade card which allows the increase from two to four ports.

MLC 6 Telephone Does Not Ring

Possible Cause 1: **Unique Line Ringing (#209)** has been set to a pattern other than 1 (Release 3.0 or later).

What to do: Set the ring pattern to Pattern 1. (For MLC 6 telephones, always set the ring pattern to 1.)

Single-Line Telephone Problems

Single-Line Telephone Does Not Ring

Possible Cause 1: Ringer is turned off.

What to do: Turn on the ringer.

- If the telephone rings, the problem is solved.
- If the telephone still does not ring, go to Possible Cause 2.

Possible Cause 2: **Call Forwarding** is turned on.

What to do: Check to see if **Call Forwarding** is turned on.

- If **Call Forwarding** is turned on, turn it off.
- If **Call Forwarding** is not turned on, go to Possible Cause 3.

Possible Cause 3: **Line Ringing** is programmed for No Ring or Delayed Ring.

What to do: Check the **Line Ringing** setting for the extension.

- If **Line Ringing** is set for No Ring or Delayed Ring, change the setting if appropriate.
- If **Line Ringing** is set for Immediate Ring and this telephone is part of a combination extension, see "Problems with Combination Extensions" on page 11-16.
- If **Line Ringing** is set for Immediate Ring and the telephone is on an extension by itself, go to Possible Cause 4.

Possible Cause 4: Telephone is faulty.

What to do: Unplug the problem telephone. Plug in a single-line telephone that you know rings properly.

- If the replacement telephone rings properly, the problem telephone is defective. Replace it.
- If the replacement telephone does not ring properly, call the helpline number listed on the front, inside cover.

Single-Line Telephone Rings Back after Intercom Call with No One at Other End

Possible Cause 1: The switchhook is accidentally pressed and released, causing a call to ring back.

What to do: Replace the handset carefully. If the problem is not solved, go to Possible Cause 2.

Possible Cause 2: **Automatic Line Selection** is programmed incorrectly.

What to do: If one of the telephones involved is a single-line rotary or touch-tone telephone, set its **Automatic Line Selection** to intercom first. If the problem is not solved, call the helpline number listed on the front, inside cover.

Single-Line Telephone's Message Waiting Light Does Not Light

Possible Cause 1: The telephone is part of a combination extension which includes a system telephone that has **Background Music** on.

What to do: Check to see if the system telephone has **Background Music** on. A single-line telephone's message waiting light will not light if Background Music is on at the system telephone.

- If **Background Music** is on, turn it off. If the single-line telephone's message waiting light lights properly, the problem is solved.
- If **Background Music** is not on, go to Possible Cause 2.

Possible Cause 2: The single-line telephone's message waiting light is not compatible with the system.

What to do: Only telephones with LEDs, not neon lights, support message waiting lights.

- If the telephone has a neon light, you can use it without message waiting capability.
- If the telephone has an LED message waiting light, go to Possible Cause 3.

Possible Cause 3: The single-line telephone is not connected to the proper module.

What to do: Make sure the telephone is connected to a processor, 308EC, or R3.0 or later 206 module. If the problem is not solved, call the helpline number listed on the front, inside cover.

Other Telephone Problems

Trouble Making Outside Calls

Trouble making outside calls can be one of the following situations:

- You hear a dial tone, but the dial tone continues as you try to dial.
- You hear a dial tone, which cuts off when you dial, but the line does not ring.
- You hear a busy signal as you dial.
- You hear nothing at all.

Possible Cause 1: **Forced Account Code Entry** is assigned to the extension.

What to do: Find out if **Forced Account Code Entry (#307)** is assigned to the extension. If it is, enter a valid account code.

- If you can make a call, the problem is solved.
- If **Forced Account Code Entry** is not assigned, go to Possible Cause 2.

Possible Cause 2: **Dial Mode** is set incorrectly.

What to do: Find out if you have touch-tone or rotary service. Then set the **Dial Mode (#201)** to Touch-Tone or Rotary as appropriate.

- If you can make a call, the problem is solved.
- If the **Dial Mode** is set correctly, go to Possible Cause 3.

Possible Cause 3: Someone changed the **Outgoing Call Restriction** setting for the extension.

What to do: If calls could be made without trouble before, find out if someone changed the **Outgoing Call Restriction (#401)** for the extension.

- If someone changed the **Outgoing Call Restriction** setting, verify that the change was an appropriate one.
- If no one changed the **Outgoing Call Restriction** setting, go to Possible Cause 4.

Possible Cause 4: **Station Lock** was used to lock the extension.

What to do: Use **Station Unlock** from extension 10 to unlock the extension.

- If you can make a call, the problem is solved.
- If the extension was not locked, go to Possible Cause 5.

Possible Cause 5: Local telephone company is not accurately receiving the dialing signals.

What to do: Isolate the problem. Use the telephone to make calls on different lines. Then make calls on different telephones using the same line.

- If you cannot make calls from one telephone on all lines, follow the procedure for "System Telephone Does Not Work," Possible Cause 2.
- If you cannot make calls by using different telephones, go to Possible Cause 6.

Possible Cause 6: Too many tip/ring devices are trying to dial simultaneously. (If the problem is on a system telephone, go to Possible Cause 7.)

What to do: Stay on the line and wait for dial tone, or try to call later.

- If you can make a call, you may want to increase the number of touch-tone receivers by adding a 206 (1 receiver), 400 (2 receivers), 308EC (6 receivers), 012E (10 receivers), or Endeavor 362EC (6 receivers) (if Endeavor telephones are used) module to avoid future problems. Call the helpline number listed on the front, inside cover. If you wait 30 seconds and still do not hear a dial tone, go to Possible Cause 7.

Possible Cause 7: Local telephone company line is faulty.

What to do: One at a time, unplug each outside line from each 206, 308EC, 400, 200, and Endeavor 362EC module in the control unit. Then plug each line into a single-line telephone and try to make a call.

- If the trouble occurs on the single-line telephone, try another line cord; if the trouble persists, report it to your local telephone company.
- If the trouble does not occur on the single-line telephone, the trouble is with your control unit. Call the helpline number listed on the front, inside cover.

Trouble Making Outside Calls from Pool Buttons on Pooled Extensions

Trouble making outside calls from a pool button can be one of the following situations:

- You hear nothing at all.
- You hear a dial tone, but the dial tone continues as you try to dial.

- You hear a dial tone, but the dial tone cuts off when you try to dial.
- You hear a reorder or busy signal if you try to dial a pool access code (880, 881, 882, or 883) at intercom dial tone.
- You notice that the red light next to a pool button is on steady most or all of the time, indicating that the pool is busy.

Possible Cause 1: **Forced Account Code Entry** is assigned to the extension.

What to do: Find out if **Forced Account Code Entry (#307)** is assigned to the extension. If it is, enter a valid account code.

- If you can make a call, the problem is solved.
- If **Forced Account Code Entry** is not assigned, go to Possible Cause 2.

Possible Cause 2: **Dial Mode** is set incorrectly.

What to do: Find out if you have touch-tone or rotary service. Then set the **Dial Mode (#201)** to Touch-Tone or Rotary as appropriate for all lines in the pool.

- If you can make a call, the problem is solved.
- If the **Dial Mode** is set correctly, go to Possible Cause 3.

Possible Cause 3: Someone changed the **Pool Access Restriction** setting for the extension.

What to do: If calls could be made without trouble before, find out if someone changed the **Pool Access Restriction (#315)** for the extension.

- If someone changed the **Pool Access Restriction** setting, verify that the change was an appropriate one.
- If no one changed the **Pool Access Restriction** setting, go to Possible Cause 4.

Possible Cause 4: The pool may not be assigned to the extension.

What to do: Check **Pool Extension Assignment (#314)** to see if the pool is assigned to the extension.

- If the pool is not assigned, assign it.
- If the pool is assigned, go to Possible Cause 5.

Possible Cause 5: Not enough lines are assigned to the pool to support usage.

What to do: Check **Pool Line Assignment (#207)** to see if an appropriate number of lines are assigned to the pool.

- If an appropriate number of lines are not assigned, you may need to add more lines.
- If an appropriate number of lines are assigned, go to Possible Cause 6.

Possible Cause 6: One or more local telephone company lines in the pool are faulty.

What to do: At extension 10, try to access each individual line assigned to the pool.

- If the lines accessed from individual line buttons on extension 10 are still faulty, refer to Possible Cause 7 in "Other Problems with Telephones: Trouble Making Outside Calls."
- If the problem remains, call the helpline number listed on the front, inside cover.

Calls Are Answered Automatically

A call rings once, then disappears as if it were answered.

Possible Cause 1: **Automatic System Answer** or **Direct Extension Dial** is turned on.

What to do: Check to see if **Automatic System Answer** or **Direct Extension Dial** is turned on.

- If **Automatic System Answer** or **Direct Extension Dial** is turned on, turn it off by pressing the programmed button at extension 10.
- If **Automatic System Answer** or **Direct Extension Dial** is not turned on, go to Possible Cause 2.

Possible Cause 2: An auxiliary device answers when it should not (this could occur with a fax machine, voice messaging system, answering machine, or modem).

What to do: Be sure the device is set to answer correctly. If the device answers before it should, adjust it to answer on a later ring. If the device should not answer calls at all, turn off its auto-answer feature. Refer to the device's user manual.

- For every auxiliary device connected to your system, *either* set the device itself to answer on a later ring (when the **Line Ringing** for the device's extension is set to Immediate Ring) *or* set the extension's **Line Ringing** to Delayed Ring. For a voice messaging system, check all of the settings associated with it. Refer to the documentation with your voice messaging system for complete details. If the auxiliary device no longer answers calls automatically, the problem is solved.
- If the problem remains, call the helpline number listed on the front, inside cover.

Trouble Hearing Called Party Answer

Possible Cause 1: If you are using a speakerphone, there may be environmental factors that affect the performance of the speaker or microphone.

What to do: Check to see if you are using proper speakerphone technique:

- Avoid places with high background noise.
- Avoid talking before the other person is finished speaking.
- Face the telephone and stay within two feet of it.
- Place your telephone at least six inches from the edge of your desk.

If the problem is not solved, go to Possible Cause 2.

Possible Cause 2: If the system is set for touch-tone dialing, you may have a faulty telephone or cord. See "System Telephone Does Not Work" on page 11-6. If the system is set for rotary dialing, the **Rotary Dialing Timeout** interval is too long.

What to do: Reset the interval by using **Rotary Dialing Timeout (#108)**.

- If you can hear the called party answer, the problem is solved.
- If the problem is not solved, call the helpline number listed on the front, inside cover.

Automatically Dialed Calls Beginning with Star Codes Are Misrouted

Possible Cause: The **Star Code Dial Delay** setting is not inserting a long enough pause, allowing part of the telephone number to be dialed before the second dial tone from the central office is established.

What to do: Use **Star Code Dial Delay (#410)** to increase the Star Code Dial Delay setting.

Using the Recall Feature Has No Effect

Possible Cause: **Recall Timer Duration** setting is too short.

What to do: Increase the **Recall Timer Duration (#107)** by 100 milliseconds.

- If the **Recall** feature works, the problem is solved.
- If the **Recall** feature still does not work, continue increasing the **Recall Timer Duration** by increments of 100 milliseconds until the problem is solved.

Using the Recall Feature Disconnects Call

This problem applies when the system is installed behind a PBX or Centrex system or with the local telephone company's "Call Waiting" feature.

Possible Cause: **Recall Timer Duration** setting is too long.

What to do: Decrease the **Recall Timer Duration (#107)** by 100 milliseconds.

- If the **Recall** feature works properly, the problem is solved.
- If the **Recall** feature still disconnects calls, continue decreasing the **Recall Timer Duration** by increments of 100 milliseconds until the problem is solved.

Problems with Combination Extensions

Telephone Does Not Work Properly

Possible Cause 1: Ringer equivalents are too high for the extension.

What to do: Be sure the total of the two devices' Ringer Equivalence Numbers (REN) does not exceed 2.0. If it does, unplug one of the devices.

- If the telephone works properly, the problem is the REN was too high.
- If the telephone still does not work properly, go to Possible Cause 2.

Possible Cause 2: The auxiliary device (such as a fax, answering machine, or modem) is faulty.

What to do: Remove the auxiliary device from the extension. Then plug in an auxiliary device that you know works properly.

- If the telephone works properly, the problem is the auxiliary device. Replace the auxiliary device.
- If the telephone still does not work properly, go to Possible Cause 3.

Possible Cause 3: The telephone is plugged into the wrong jack of the system telephone or the bridging adapter.

What to do: Plug the telephone into the correct jack – see "Combination Extensions" on page 9-2 for instructions.

- If the telephone works properly, the problem is solved.
- If the problem remains, go to Possible Cause 4.

Possible Cause 4: Wrong bridging adapter is used in combination extension.

What to do: First, unplug the bridging adapter from the wall jack. Then, unplug the telephone from the adapter and plug the telephone directly into the wall jack.

- If the telephone works, there is a problem with the bridging adapter. Replace the bridging adapter (use only a 267F2 bridging adapter). If the problem persists, call the helpline.
- If the telephone still does not work properly, call the helpline.

Problems with Tip/Ring Devices

Tip/Ring Device Does Not Answer

Possible Cause: A tip/ring device (such as a fax machine or answering machine) does not answer intercom calls or transferred calls because it does not recognize the distinctive ringing pattern used by the system.

What to do: Change the extension's setting for **Distinctive Ring (#308)** to Not Active, so the extension uses the same ringing for intercom and transferred calls as it does for outside calls.

- If the device works properly, the problem is solved.
- If the problem remains, call the helpline number listed on the front, inside cover.

Tip/Ring Device Does Not Dial Out Properly

Possible Cause: A tip/ring device with autodialing (such as a modem) does not recognize the intercom dial tone generated by the system.

What to do: Change the setting for **Intercom Dial Tone (#309)** for the extension to Machine, so the system generates outside line dial tone for the extension.

- If the device works properly, the problem is solved.
- If the problem remains, call the helpline number listed on the front, inside cover.

Call Records Wrap on SMDR Printout

Possible Cause: **SMDR Talk Time (#611)** is set to Active and **SMDR Output Format (#610)** is set to 24 digits, causing the combined length of the fields for a call record to be greater than the 80 characters supported by your printer.

What to do: Reduce the font size or increase the characters-per-inch setting for the printer.

- If the call records print without wrapping to the next line, the problem is solved.
- If the problem remains, change the output format back to 15 digits.

Problems with the 1600 DSL Module

Under certain circumstances, the 1600 DSL module may not function properly. This may be the fault of a circuit or programming. Prior to performing any of the steps below, make sure that you have reset the 1600 DSL module via a “cold” restart of the system to ensure that all settings you have made have been put into effect.

NOTE For the instructions in this section, you can check or change the 1600 DSL module settings by connecting your computer directly to the 1600 DSL module (see instructions packaged with the module). For Release 5.0 or later, you can also use the PARTNER ACS Remote Administration and Diagnostics PC software to remotely administer the module. To remotely administer the module, you must have the following:

- Release 5.0 or later software on the 1600 DSL module
- Release 5.0 or later software version of PARTNER ACS
- Release 5.0 or later PARTNER ACS Remote Administration and Diagnostics PC software

For more information, see the *PARTNER ACS Remote Administration and Diagnostics R5.0 Getting Started* guide.

Possible Cause 1: The connection between the 1600 DSL module and the central office is faulty.

What to do: Check the status of the module by following these steps:

1. Check the status of the SDSL port LED on the front panel of the 1600 DSL module.
   - If the LED is off, the 1600 DSL module is not detecting any signal. Check with the service provider that a signal has been tested up to the point of entrance into the customer’s building.
   - If the LED is flashing, a DSL signal has been detected, but the 1600 DSL module has not yet synced up with the signal or cannot sync up with the signal because of incorrectly set parameters or impediments on the line. Wait five minutes for the module to sync up. If the module still does not sync up, check the following settings for the gateway in the SDSL Configuration menu:
     - CPE mode; the 1600 DSL module should always be in CPE (not CO) mode.
     - Appropriate “auto negotiate” method (Auto Sense [Copper Mountain], Auto Cycle [Nokia], etc.) if you are not setting the speed manually
     - Appropriate bit order (Magnitude Sign or Sign Magnitude)
     - If you have set the speed manually, confirm with the service provider that it is also providing at least this speed, if not higher.
   - If the LED is on steady, the SDSL connection has been established successfully.

2. Check the status of the DSL connection by looking in the Reports menu on the terminal emulation program. (From the Main Menu, press “1” and then “C.”) On the second page under the SDSL interface, ONLINE should appear if the 1600 DSL module has successfully synced to the service provider’s gateway. If ENABLED appears, the module has not successfully synced with the gateway.
3. If the 1600 DSL module still does not work properly, go to Possible Cause 2.

Possible Cause 2: The data link (ATM or Frame Relay) is not established.

What to do: Follow these steps to check the data link connection.

1. Check the status of the data link. If the Data Link is established, one of the following appears on the terminal screen:
   - For ATM – SDSL ATM Interface ONLINE: Data Rate = 2320 kbps
   - For Frame Relay – SDSL Frame Relay Interface ONLINE: Data Rate = 2320 kbps

   Slower speed connections show a different speed.
2. If neither of these messages appears a short time after the SDSL light transitions from flashing to solid, the data link has *not* been established. Do the following:
   a. Verify that the data link protocol is what the service provider specified (from the Main Menu, select “5,” then “1,” and then “1”). The data link protocol appears next to the label “Current Data Link Protocol.” It is set for Frame Relay or ATM.
   b. Verify the DLCI (frame relay) or VCI/VPI settings are identical to those that the service provider provided.
   c. Verify the Encapsulation settings (Frame Relay and ATM), PCR (ATM), and Service (ATM) are those provided by the service provider.
   d. If you are running ATM as a data link protocol and the network provider has established a third PVC for OAM, create this in the ATM Configuration Menu. (From the Main Menu, press “5,” “1,” “4,” and “2.”) After performing a cold-start of the system, attempt an OAM loopback to verify the ATM connection has been established.
3. If the 1600 DSL module still does not work properly, go to Possible Cause 3.

Possible Cause 3: The voice gateway connection is not established.

What to do: Follow these steps to check the voice gateway connection.

1. Seize any of the lines assigned to the 1600 DSL module.
2. If dial tone is not received on any of the lines assigned to the 1600 DSL module, do the following:
   a. Confirm the gateway manufacturer.
   b. Confirm with the service provider which of the DLCIs (Frame Relay) or PVCs (ATM) are associated with the gateway. There will be two provided – one for voice and one for data. Make sure the correct DLCI/PVC is associated with the voice.
   c. For systems with Lucent Pathstar, verify the Router settings for the voice DLCI/PVC. Also verify the MGCP/NCS client settings that are found in the “Manage MGCP/NCS Embedded Client” section of the Main Menu.

3. If the 1600 DSL module still does not work properly, go to Possible Cause 4.

Possible Cause 4: The LAN connection is not established. The network connection of the 1600 DSL module can be checked by “standard” network troubleshooting tools. Lack of network connectivity can result in two problems: no data connectivity to the internet and/or no voice communications when a Pathstar gateway is used.

What to do: Follow these steps to check the LAN connection:

1. From the PC or PCs that are experiencing difficulty, ping the LAN interface on the 1600 DSL module. If this fails check the following:
   - IP address and netmask on the PC and 1600 DSL module. Make sure they are on the same subnet.
   - Verify that the Ethernet status/activity LEDs are lit on the PC, hub (if used), and 1600 DSL module. If the LEDs are not lit, check the type (standard or crossover) and condition of the Ethernet cables used to connect the various devices.
2. Ping the SDSL IP address (the PVC/DLCI associated with data) of the router. If this fails recheck that the address is what you programmed into the 1600 DSL module.
3. Ping the gateway address that is programmed into the 1600 DSL module router. This address is the router that is at the other “end” of the data PVC/DLCI that is situated at the ISP. If this fails, confirm the following:
   - Has the gateway been programmed into the 1600 DSL module? From the Main Menu, press “2,” “s,” and “f.” If the default value is what was provided by the service provider/ISP, press Enter.
   - Verify the address of the router and the PVC/DLCI associated with the data connection from the service provider/ISP.
4. If the customer is experiencing problems loading webpages from a browser, ping the DNS servers that the service provider/ISP has provided. If this fails, confirm with the service provider/ISP the DNS IP addresses.
5. If there is no voice when a Pathstar gateway is used, do the following:
   a. Verify the MGCP/NCS setting. There should be at least two (2) distinct addresses:
      - The “local” IP address of the voice PVC/DLCI interface on the SDSL port
      - The address of the Pathstar gateway
   b. Verify the PVC/DLCI settings that the service provider has configured for the voice connection.

Problems with Automatic Backup

Display Shows "Backup Failed:Insert Card" at Idle Extensions 10 and 11

Possible Cause: The system did not detect a valid Backup/Restore PC Card while trying to do an automatic backup.

What to do: Power down the system, insert a valid Backup/Restore PC Card in PC Card Slot 2 of the PARTNER ACS processor module, and reapply power to the system. The backup is rescheduled for the next day at 2:00 a.m.

NOTE The PARTNER ACS Release 3.0 or later includes a PARTNER Remote Access PC Card, which allows you to program the system remotely and perform backup and restore functions. The PARTNER Remote Access PC Card is a PCMCIA card that can also be used to upgrade previous versions of PARTNER ACS to a current release. You must have additional PARTNER Remote PC Software to program the system remotely. See your Avaya representative or authorized dealer.

Enter **Backup Programming—Automatic (#123)** and select Option 3 to clear the alarm display (see "Clearing a Backup-Failure Alarm" on page 11-4).

Display Shows "Backup Failed:Write Prot" at Idle Extensions 10 and 11

Possible Cause: The Backup/Restore PC Card in the PC Card slot is write-protected, and an automatic backup was attempted.

What to do: Using the end of a paper clip or another pointed object, push the write-protect tab upward to the nonprotected position (see Figure 11-1). You do not need to remove the card from the processor to slide the write-protect tab up. The backup is rescheduled for the next day at 2:00 a.m.

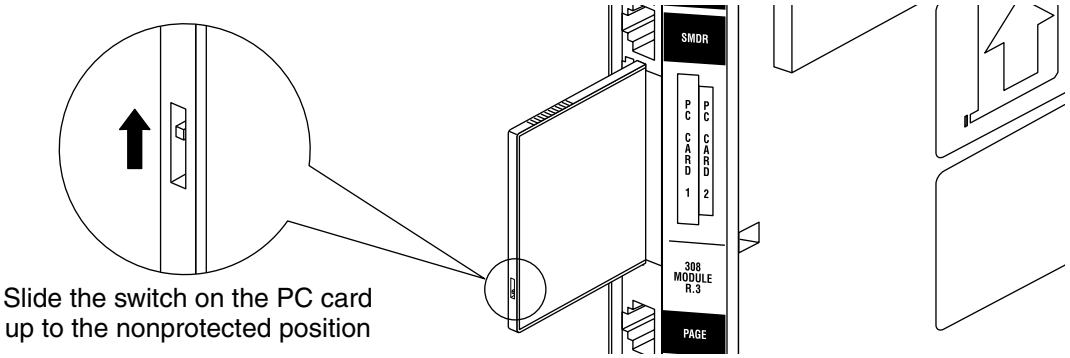

Figure 11-1. Write-Protect Tab on a Backup/Restore PC Card

Enter **Backup Programming—Automatic (#123)** and select Option 3 to clear the alarm display (see "Clearing a Backup-Failure Alarm" on page 11-4).

Display Shows "Backup Failed:Check Card" at Idle Extensions 10 and 11

Possible Cause 1: The Backup/Restore PC Card was removed while the backup was in progress.

What to do: Check to see whether the PC Card was removed. If it was not, go to Possible Cause 2. If it was, power down the system, reinsert the PC Card, and reapply power to the system. The backup is rescheduled for the next day at 2:00 a.m.

Enter **Backup Programming—Automatic (#123)** and select Option 3 to clear the alarm display (see "Clearing a Backup-Failure Alarm" on page 11-4).

Possible Cause 2: The Backup/Restore PC Card or the processor module is corrupted.

What to do: Try to do a backup using the manual backup procedure – **Backup Programming—Manual (#124)** – to test the system.

- If the backup completes successfully, the problem may be solved. An automatic backup is rescheduled for the next day at 2:00 a.m. Enter **Backup Programming—Automatic (#123)** and select Option 3 to clear the alarm display (see "Clearing a Backup-Failure Alarm" on page 11-4).
- If the backup fails, try to determine whether the problem is a corrupted PC Card or a corrupted processor module by trying the backup twice using two different Backup/Restore PC Cards:
  - If the system will not write to either PC Card, the processor module is probably corrupted; call the helpline number listed on the front, inside cover.
  - If the system writes to one of the PC Cards, the original PC Card is corrupted. See *"Obtaining Products" in the PARTNER Customer Support* document to order a new Backup/Restore PC Card.

Display Shows "Backup Failed:SystemBusy" at Idle Extensions 10 and 11

Possible Cause: Changes were being made to system programming or central telephone programming while a backup was in progress.

What to do: The backup is rescheduled for the next day at 2:00 a.m. Enter **Backup Programming—Automatic (#123)** and select Option 3 to clear the alarm display (see "Clearing a Backup-Failure Alarm" on page 11-4).

Problems with Manual Backup

Display Shows "Insert Valid Card" in System Programming Mode

Possible Cause: The system did not detect a valid Backup/Restore PC Card when you tried to do *a* manual backup by using **Backup Programming—Manual (#124)**.

What to do: Power down the system, insert a valid Backup/Restore PC Card in PC Card Slot 2 of the PARTNER ACS processor module, and reapply power to the system. Restart the procedure.

Display Shows "Card is Write Protected" in System Programming Mode

Possible Cause: You tried to do a manual backup by using **Backup Programming—Manual (#124)**, but the Backup/Restore PC Card in the PC Card slot is write-protected.

What to do: Using the end of a paper clip or another pointed object, gently push the write-protect tab upward to the nonprotected position (see Figure 11-1 on page 11-22), and try the procedure again. (You do not need to remove the card from the processor to slide the write-protect tab up.)

Display Shows "System Busy" in System Programming Mode

Possible Cause: An automatic or manual backup was in progress at the time you requested a manual backup.

What to do: Exit the procedure and retry the manual backup after a few minutes.

Display Shows "Backup Failed:Check Card" in System Programming Mode

Possible Cause 1: The Backup/Restore PC Card was removed while the backup was in progress.

What to do: Check to see whether the PC Card was removed. If it was not, go to Possible Cause 2. If it was, power down the system, reinsert the PC Card, and reapply power to the system. Restart the **Backup Programming—Manual (#124)** procedure.

Possible Cause 2: The Backup/Restore PC Card or the PARTNER ACS processor module is corrupted.

What to do: Try the backup again using the backup procedure – **Backup Programming—Manual (#124)**.

- If the backup completes successfully, the problem is solved.
- If the backup fails again, try to determine whether the problem is a corrupted PC Card or a corrupted processor module by trying the backup twice using two different Backup/Restore PC Cards:
  - If the system will not write to either PC Card, the processor module is probably corrupted; call the helpline number listed on the front, inside cover.
  - If the system writes to one of the PC Cards, the original PC Card is corrupted. See *"Obtaining Products" in the PARTNER Customer Support* document to order a new Backup/Restore PC Card.

Display Shows "Backup Failed:SystemBusy" in System Programming Mode

Possible Cause: Changes were being made to system programming or central telephone programming while a backup was in progress.

What to do: Try **Backup Programming—Manual (#124)** later when the system is idle or during nonbusiness hours.

Problems with System Restore

Display Shows "Insert Valid Card" in System Programming Mode

Possible Cause: The system did not detect a valid Backup/Restore PC Card when you tried to do a restore by using **Restore Programming (#125)**.

What to do: Power down the system, insert a valid Backup/Restore PC Card in PC Card Slot 2 of the processor module, and reapply power to the system. Restart the procedure.

Display Shows "Bad File - Try Again" in System Programming Mode

Possible Cause: You attempted a restore and the file was corrupted.

What to do: Try **Restore Programming (#125)** again with a different backup file. Remember to power down the system before you insert or remove Backup/Restore PC Cards.

Display Shows "Empty File" in System Programming Mode

Possible Cause: You selected a file named AUTO.****** or MAN.****** for the restore. The file is empty; no backups have been stored in it yet.

What to do: Try **Restore Programming (#125)** again by using a backed-up file. Remember to power down the system before you insert or remove Backup/Restore PC Cards.

Display Shows "Incompatible Versions" in System Programming Mode

Possible Cause: You attempted to restore a file that was created with an incompatible software release.

What to do: Try **Restore Programming (#125)** again by using a backup file that was created with the current software release.

Display Shows "Restore Failed – Try Again" for Two Seconds in System Programming Mode

NOTE This display indicates that all system and telephone programming has reverted to the default settings.

Possible Cause 1: The Backup/Restore PC Card was removed while the restore was in progress.

What to do: Check to see whether the PC Card was removed. If it was not, go to Possible Cause 2. If it was, power down the system, reinsert the Backup/Restore PC Card, reapply power to the system, and restart the **Restore Programming (#125)** procedure.

Possible Cause 2: The backup file is corrupted.

What to do: Retry the **Restore Programming (#125)** procedure. If you get the same result, try again by using a different backup file from the same Backup/Restore PC Card or a file from a different Backup/Restore PC Card. Remember to power down the system before you insert or remove Backup/Restore PC Cards.

System Programming Settings Reverted to Default Settings

Possible Cause: You ran the **Restore Programming (#125)** procedure, but the restore failed.

What to do: See Possible Causes 1 and 2 under "Display Shows "Restore Failed – Try Again" for Two Seconds in System Programming Mode."

Display Shows "Restore Complete," but All Calls Were Disconnected

Possible Cause: You just ran the **Restore Programming (#125)** procedure.

What to do: Nothing. This is normal behavior after a restore; the system resets itself. In the future, warn users before beginning the restore, or perform the restore during nonbusiness hours.

System Problems

Call Rings Continuously; When Answered, No One at Other End

Possible Cause: **Automatic System Answer** or **Direct Extension Dial** is used on a system that does not support far-end disconnect.

What to do: Call your local telephone company and find out whether they support far-end disconnect. If the local telephone company does not support far-end disconnect, you should not set the **Automatic System Answer Mode (#121)** to either Hold or Ring, and you should not use **Direct Extension Dial**. If the local telephone company supports far-end disconnect but the problem still occurs, call the helpline number listed on the front, inside cover.

Calls on Hold Are Disconnected

Possible Cause: **Hold Disconnect Time** setting is too short.

What to do: Change **Hold Disconnect Time (#203)** to a longer interval.

- If calls on hold no longer disconnect, the problem is solved.
- If calls on hold still get disconnected, or the **Hold Disconnect Time** was already set to the longest interval, call the helpline number listed on the front, inside cover.

An ASA/DXD Missing Card Error Message Appears

Possible Cause: You are attempting to record an **Automatic System Answer** message (I891) or a **Direct Extension Dial** (DXD) message (I892), and an ASA/DXD PC card is not installed in the processor module.

What to do: To clear the message, at extension 10, program an **Automatic System Answer (#111)** button if you used I891 to try to record the greeting or a **Direct Extension Dial (#112)** button if you used I892 to try to record the greeting. Press the programmed button to turn the feature on; then press the programmed button to turn it off again. After you turn the feature off, the error message should be cleared, and you can remove the button assignment using **(#111)** or **(#112)**.

Calls on Automatic System Answer Lines Are Disconnected

Possible Cause: **Automatic System Answer Mode** is set to **Disconnect**.

What to do: Change **Automatic System Answer Mode (#121)** from Disconnect to either Hold or Ring.

- If calls on **Automatic System Answer** lines no longer disconnect, the problem is solved.
- If calls on **Automatic System Answer** lines still get disconnected, or the **Automatic System Answer Mode** already was set to Hold or Ring, call the helpline number listed on the front, inside cover.

Call on Hold Hangs Up, but Line Does Not Disconnect

Possible Cause 1: **Hold Disconnect Time** setting is too long.

What to do: Change **Hold Disconnect Time (#203)** to a shorter interval.

- If abandoned calls on hold are disconnected, the problem is solved.
- If abandoned calls on hold still do not disconnect, or if the **Hold Disconnect Time** was already set to the shortest interval, go to Possible Cause 2.

Possible Cause 2: Local telephone company does not send a hold release signal.

What to do: Call your local telephone company and find out whether they send a hold release signal. If the local telephone company does not send a hold release signal, or if they do but the problem still occurs, call the helpline number listed on the front, inside cover.

All Calls Disconnected

Possible Cause 1: You just ran the **Restore Programming (#125)** procedure.

What to do: This is normal behavior after running **Restore Programming (#125)**; the system resets itself. In the future, warn users before beginning the restore, or perform the restore during nonbusiness hours. If you did not run **Restore Programming (#125)**, go to Possible Cause 2.

Possible Cause 2: Power was interrupted to the control unit.

What to do: Make sure the control unit's power cord is plugged securely into the wall outlet. Also make sure the on/off switch is in the "on" position ("O") if you have a five-slot carrier.

- If the green LEDs on the modules are lit and the trouble is gone, the problem is corrected.
- If the green LEDs on the modules are lit but the trouble remains, call the helpline number listed on the front, inside cover.

- If the green LEDs on the modules are out, go to Possible Cause 2 in “All Telephones Dead: No Dial Tone or Lights” below.
- If any green LEDs on the modules are flashing, call the helpline number listed on the front, inside cover.

⚠CAUTION:

The settings retained in the 1600 DSL module’s flash memory become the active settings when Restore Programming has been run or when the power is turned off and back on.

All Telephones Dead: No Dial Tone or Lights

Possible Cause 1: Control unit is not receiving power.

What to do: Make sure the control unit’s power cord is plugged securely into the wall outlet. Also make sure the on/off switch is in the “ON” position (“O”) if you have a five-slot carrier.

- If the green LEDs on the modules are lit and the trouble is gone, the problem is corrected.
- If the green LEDs on the modules are lit but the trouble remains, call the helpline number listed on the front, inside cover.
- If the green LEDs on the modules are out, go to Possible Cause 2.
- If any green LEDs on the modules are flashing, call the helpline number listed on the front, inside cover.

Possible Cause 2: The power outlet is faulty.

What to do: Test the outlet by plugging in an appliance, like a lamp or radio.

- If the appliance does not work, the outlet is faulty. If possible, plug the control unit into a different outlet. Then check the fuse box or call an electrician.
- If the appliance works, call the helpline number listed on the front, inside cover.

Multiple Telephones Dead: No Dial Tone or Lights

Possible Cause 1: The LED on one system module is out.

What to do: If the green LED on the front of a module is out, try reseating the module in the control unit.

- If the LED lights, the problem is corrected.
- If the problem remains, call the helpline number listed on the front, inside cover.

Possible Cause 2: The green LEDs on several system modules are out.

What to do: If the LEDs on the front of several system modules are out, try reseating the leftmost module of the ones with the lights out.

- If the LEDs light, the problem is corrected.
- If the problem remains, call the helpline number listed on the front, inside cover.

Poor Transmission Quality on Modem

Possible Cause: A high-speed modem is connected through an extension jack on the control unit to a standard central office telephone line; but the line quality is not sufficient to generate a clear signal when the modem transmits through the system interface.

What to do: Either connect the modem directly to the network interface jack for a line, or contact your local telephone company for information about upgrading the line quality.

- If the device works properly, the problem is solved.
- If the problem remains, call the helpline number listed on the front, inside cover.

Other Problems with System

The following procedure resets the system. Use it when you have any problems that are not covered elsewhere in this chapter. The procedure disconnects all calls in progress, but does not erase any system settings, *provided that the system batteries are installed and not low on power*.

Possible Cause: System needs a hardware reset.

What to do: Unplug the control unit's power cord from the wall. Wait 10 seconds, then plug it back in. If the problem remains, call the helpline number listed on the front, inside cover.

Cross-Reference of Features

A

Tables A-1, A-2, and A-3 show the feature codes you can dial to program those features.

Table A-1. System Programming Procedures

Code	Feature	Code	Feature
#101	System Date	#314	Pool Extension Assignment[2]
#102	System Day[1]	#315	Pool Access Restriction[2]
#103	System Time	#316	Call Waiting
#104	Number of Lines	#317	Caller ID Log Answered Calls[2]
#105	Transfer Return Rings	#318	Caller ID Call Log Line Association[2]
#107	Recall Timer Duration	#319	Caller ID Log All Calls[2]
#108	Rotary Dialing Timeout	#320	Call Coverage Rings[4]
#109	Outside Conference Denial	#321	VMS Cover Rings[4]
#110	Automatic System Answer Delay[2]	#399	Copy Settings
#111	Automatic System Answer Button[2]	#401	Outgoing Call Restriction
#112	Direct Extension Dial Delay[2]	#402	Toll Call Prefix
#113	Direct Extension Dial Button[2]	#403	System Password
#114	Outgoing Call Restriction Button	#404	Disallowed Phone Number Lists
#115	Wake Up Service Button	#405	Disallowed List Assignments
#116	Call Coverage Rings[3]	#406	Emergency Phone Number List
#117	VMS Cover Rings[1]	#407	Allowed Phone Number Lists
#119	Ring on Transfer	#408	Allowed List Assignments
#121	Automatic System Answer Mode[2]	#409	Forced Account Code List
#122	Caller ID Type	#410	Star Code Dial Delay
#123	Backup Programming – Automatic	#501	Pickup Group Extensions
#124	Backup Programming – Manual	#502	Calling Group Extensions
#125	Restore Programming	#503	Night Service Button
#126	Automatic Daylight/Standard Times[4]	#504	Night Service Group Extensions
#201	Dial Mode	#505	Hunt Group Extensions

Table A-1. System Programming Procedures—*Continued*

Code	Feature	Code	Feature
#203	Hold Disconnect Time	#505	(Group 8) Fax CNG Detection[4]
#204	Automatic System Answer Lines[2]	#506	VMS Hunt Delay
#205	Direct Extension Dial Lines[2]	#507	VMS Hunt Schedule
#206	Group Call Distribution	#601	Fax Machine Extensions
#207	Pool Line Assignment[2]	#602	Music-On-Hold
#208	Line Coverage Extension	#603	Hotline
#209	Unique Line Ringing[4]	#604	Doorphone Extension 1
#301	Line Assignment	#605	Doorphone Extension 2
#302	Line Access Restriction	#606	Doorphone Alert Extensions
#303	Display Language	#607	AA (Automated Attendant) Extensions
#304	Automatic Extension Privacy	#608	SMDR Record Type
#305	Abbreviated Ringing	#609	SMDR Top of Page
#306	Transfer Return Extension	#610	SMDR Output Format
#307	Forced Account Code Entry	#611	SMDR Talk Time[2]
#308	Distinctive Ring	#612	Contact Closure Group
#309	Intercom Dial Tone	#613	Contact Closure Operation Type
#310	Automatic VMS Cover	#614	Music-On-Hold Volume
#311	External Hotline	#728	System Reset – Programming Saved
#312	Voice Interrupt on Busy	#730	Remote Administration Password[4]
#313	Line Access Mode[2]		

1 PARTNER ACS Release 2.0 or earlier
2 PARTNER ACS Release 2.0 or later
3 PARTNER ACS Release 2.0 only
4 PARTNER ACS Release 3.0 or later

Table A-2. Dial-Code Features[1]

Dial Code	Feature	Dial Code	Feature
F01	Do Not Disturb[2]	F15	VMS Cover[2]
F02	Exclusive Hold[2]	F16	Caller ID Name Display[2]
F03	Recall	F17	Caller ID Inspect[2]
F04	Save Number Redial	F18	Voice Interrupt On Busy Talk-Back[2]
F05	Last Number Redial	F19	Background Music[2]
F06	Conference Drop[2]	F20, *XX,XX*	Call Coverage[3]
F07	Privacy[2]	F21	Station Lock
F08	Touch-Tone Enable	F22	Station Unlock[2]
F09*XX*	Message Light On	F23	Caller ID Call Logging and Dialing[2]
F10*XX*	Message Light Off	F24	Record-a-Call[2, 4]
F11,*XX*,*XX*	Call Forwarding/Call Follow-Me	F25	Call Screening[2, 4]
F12	Account Code Entry[2]	F41	Contact Closure 1
F13*XX*	Manual Signaling (beep or ring)	F42	Contact Closure 2
F13**XX*	Manual Signaling (voice signal)	F59	System Release Status[2]
F14	Voice Mailbox Transfer[2]		

1 These features can be used by the telephone user and the System Administrator.
F represents the (*Feature*) button I represents the (*Intercom*) button; XX represents a system extension number; G represents a single-digit group number; and LL represents a system line number.

2 Available only on system phones

3 PARTNER ACS Release 2.0 or later

4 PARTNER ACS Release 3.0 or later

Table A-3. Intercom Dial-Code Features[1]

Intercom Dial Code	Feature
I6*XX*	Call Pickup
I66*G*	Group Pickup
I68*LL*	Direct Line Pickup – Active Line
I70	Loudspeaker Paging
I*70	Simultaneous Paging
I7*G*	Group Calling – Ring
I*7G	Group Calling – Page
I77*G*	Group Hunting – Ring
I*77*G*	Group Hunting – Voice Signal
I8*LL*	Direct Line Pickup – Idle Line
I891	Automatic System Answer Record/Playback[2]
I892	Direct Extension Dial Record/Playback[2]

1 These features can be used by the telephone user and the System Administrator. F represents the (Feature) button I represents the (Intercom) button; XX represents a system extension number; G represents a single-digit group number; and LL represents a system line number.

2 PARTNER ACS Release 2.0 or later

Table A-4. Basic Calling and Answering Features

Activity	For…	Feature or Function	Page #
Answering calls:			
And seeing who is calling you from another extension	Display telephones	Display	6-13
And seeing who is calling you from outside	Display telephones	Display Caller ID	6-13 4-9
And transferring to another extension	All	Transfer	6-25
At another extension	All	Call Pickup	8-15
For another person or group of people	All	Call Coverage Call Forwarding/ Call Follow-Me Calling Group Extensions	8-8 8-11 4-31
If you are part of a group	All	Calling Group Extensions	4-31

Table A-4. Basic Calling and Answering Features—*Continued*

Activity	For…	Feature or Function	Page #
Waiting for you, after you hear the Call Waiting tone	All	Call Waiting	4-14
That come to your extension while you are at another extension	All	Call Forwarding/ Call Follow-Me	8-11
Conferencing and joining calls:			
Conferencing inside and outside parties where the inside parties do not share a line	All	Conference Calls	6-23
Joining calls of inside parties who share a line	All	Joining Calls	6-28
Preventing others from joining your calls	All	Automatic Extension Privacy Privacy	4-2 8-47
Dialing:			
An inside call	All	Making Calls	6-15
An outside call	All	Making Calls	6-15
An inside or outside number with one touch		Auto Dialing	8-5
An Account Code, for billing to a project or client, during or before a call	All	Account Code Entry	8-2
By entering a 3-digit code for a party that people in your company call often	All	System Speed Dial	4-56 and 8-57
By entering a 2-digit code for a party you call often (telephones with 10 or fewer buttons)	All	Personal Speed Dial	8-55
Outside of normal office hours	All	Night Service Group Extensions	4-35
A number you dialed before	All	Last Number Redial Save Number Redial	8-51 8-52
A voice mail box	System telephones	Voice Mailbox Transfer	8-66
Paging:			
Several people at your company who have speakerphones	All	Simultaneous Paging	8-46
Over your company's loudspeaker system	All	Loudspeaker Paging	8-44
Prevent or allow voice-announced calls from coming in over your speakerphone	System telephones	Voice Interrupt On Busy	4-61
Putting a call on hold:			
At your own extension, so that you can pick it up	All	Hold	6-21

Table A-4. Basic Calling and Answering Features—*Continued*

Activity	For…	Feature or Function	Page #
At your own extension, so that you or someone who shares a line can pick it up	All	Hold	6-21
At your own extension, so that anyone can pick it up after you page them	All	Call Park	8-14
At your own extension, so that only you can pick it up	System telephones	Exclusive Hold	8-33
Using the system from an outside telephone:			
To program the system from a location outside the system	N/A	Remote Administration Password	4-50
To receive calls that come to your system extension	N/A	Call Forwarding/ Call Follow-Me	8-11
Leaving messages:			
Let a co-worker with a system telephone know that you wish to speak with him or her, without calling	System telephones	Manual Signaling	8-41
Receiving messages:			
Turn off Message light	All telephones with Message Waiting lights	Message Light Off	8-43

Table A-5. Call Coverage Features

Activity…	For…	Feature Name	Page #…
Covering calls:			
As a member of a group	All	Call Coverage	8-8
And you want to adjust the number of times calls ring before going to coverage	All	Call Coverage Rings	4-7
***Having your calls covered*:**			
Occasionally	All	Call Forwarding/ Call Follow-Me	8-11
By voice mail	All	Automatic VMS Cover VMS Cover	9-42 8-62
Regularly	All	Call Coverage	8-8

Table A-6. Calling Privileges and Restrictions Features

Activity…	For…	Feature Name	Page #…
Preventing people from making calls:			
To your extension	All except operators	Privacy Do Not Disturb	8-47 8-32
To outside numbers	System Managers only	Disallowed Phone Number Lists Disallowed List Assignments Outgoing Call Restriction	4-19 4-22 4-24
To toll numbers	System Managers only	Disallowed Phone Number Lists Outgoing Call Restrictions	4-19 4-24
To certain numbers or area codes	System Managers only	Disallowed Phone Number Lists	4-19
Outside of normal business hours	System Managers only	Night Service Group Extensions	4-35
Allowing calls:			
To certain numbers or area codes	System Managers only	Allowed Phone Number Lists Allowed List Assignments System Speed Dial	4-17 4-19 4-56
Outside of normal business hours	System Managers only	Night Service Group Extensions	4-35

Table A-6. Calling Privileges and Restrictions Features—*Continued*

Activity…	For…	Feature Name	Page #…
Other calling privileges:			
To enter your password for off-hours calls	All	Night Service Group Extensions System Password	4-35 4-54

Table A-7. System Manager Features

Activity…	For…	Feature or Function	Page #…
Customizing your system:			
To set the system-wide time	System Managers only	System Date System Day System Time	3-8 3-8 3-8
Set up account codes so that calls can be billed or tracked to a specific client or project	N/A	Forced Account Code Entry Forced Account Code List	4-29 4-30
Set up which line is selected when a user lifts the handset or presses the Speaker button	All telephones	Automatic Line Selection	5-2
Set up a single-line telephone so that it dials a specific inside extension or outside number as soon as someone lifts the handset	For single-line telephones only	External Hotline Hotline	4-27 4-38
Adjust the ringing options at an extension	All	Abbreviated Ringing Distinctive Ring	4-2 4-26
Adjust the system dial tone to accommodate a voice messaging system or modem	N/A	Intercom Dial Tone	4-39
Control what a caller hears while waiting for the system (during transfer, while on hold, or during other operations where the caller must wait)	N/A	Music-On-Hold	9-29
Change the language used (English, Canadian French, or Latin American Spanish) at an extension's display; the language chosen for extension 10 becomes the language for the Station Message Detail Recording (SMDR) reports.	Display telephones	Display Language	4-26

Table A-7. System Manager Features—*Continued*

Activity…	For…	Feature or Function	Page #…
Monitoring Messages:			
Change the extension information that appears on display telephones that have messages	N/A	Extension Name Display	5-4
Set up voice messaging system to take calls	N/A	Voice Messaging Systems	9-40
Set up extensions to receive messages from a fax machine that has a delivery for them	N/A	Fax Machines	9-15
Set up Calling Groups to receive messages from co-workers	N/A	Calling Group Extensions	4-31
Obtaining reports:			
Obtain a report on incoming and outgoing calls, including account codes, if programmed	N/A	Station Message Detail Recording	9-32
Get a report on the way the system is programmed	N/A	Station Message Detail Recording	9-32
Troubleshooting:			
Find out what to do when callers on hold are being disconnected	N/A	Calls on Hold are Disconnected	11-27
Make your system more secure from toll fraud	N/A	Dialing Restrictions and Permissions	4-17

Table A-8. Customizing Your Telephone

Activity…	For…	Feature or Section	Page #…
Using the line buttons on your telephone	All	Buttons and Indicators	6-1
Using the display to screen incoming calls	Display telephones	Caller ID Inspect Caller ID Name Display	8-18 8-26

Special Characters

B

You can add special characters for System Speed Dial numbers, Personal Speed Dial numbers, and Auto Dial numbers (see Table B-1).

Table B-1. Special Characters

Function	Button	Display	Description
Pause	Hold	P	Inserts a 1.5-second pause in the dialing sequence to wait for a response, such as a dial tone or computer voice message.
Recall	Spkr	R	Sends a timed switchhook flash needed to alert the system on the other end (such as a PBX or Centrex system), and to use some local telephone company custom calling features (such as Call Waiting). Use Recall only as the first entry in an Auto Dial or Speed Dial number.
Stop	Mic/HFAI	S	Stops the dialing sequence until the Auto Dial button or Speed Dial number is used again (for example, so the user can enter additional digits, such as a credit card number or password). To continue, press the Auto Dial button or Feature and the two- or three-digit Speed Dial code. (Stop cannot be programmed from an MLC-6 or a TransTalk 9000-series phone, since it has no Mic/HFAI button.)
Touch-Tone Enable	Transfr	T	Sends touch tones over a rotary line, to electronic equipment such as answering machines and bank computers.

Special characters cannot be used when dialing a number manually.

Examples

- **Pause:** To call an answering machine at 555-0529, wait 4.5 seconds; then dial ③②① to retrieve messages, enter ⑤⑤⑤⓪⑤②⑨ Hold Hold Hold ③②①.
- **Recall/Centrex Feature Button:** The following entry shows how to program an Auto Dial button with a Centrex feature you use while on a call, for which the feature access code is `*32`. This example includes a Recall signal to send a switchhook flash to the Centrex system when you are already on a call. (You can store a Recall signal by pressing Spkr, but only if it is the first character stored.) It also includes a 1.5-second pause (which you insert by pressing Hold) to allow time to get a new Centrex dial tone: Spkr Hold ⑧③②.
- **Stop:** Your local bank-by-phone service requires that you enter a password before the account number. To program a Personal Speed Dial number or an Auto Dial button to call the bank at 555-7898, include a stop for manually entering the password, and continue with the account number (679 88), enter ⑤⑤⑤⑦⑧⑨⑧ Mic/HFAI ⑥⑦⑨⑧⑧.
- **Touch-Tone Enable:** Your system is connected to rotary lines but you want to call an answering machine at 555-3454 to retrieve messages. Since the machine requires touch tones, enter ⑤⑤⑤③④⑤④ Transfr. All digits pressed during the rest of the call are sent as touch tones.
- **On/Off Centrex Feature Button:** To include both the activation and deactivation codes for a Centrex feature on the same button, press Mic/HFAI to include a stop between the two codes. For instance, if the code to activate a Centrex feature is ⑧③⓪ and the code to deactivate the feature is ⑧③①, store ⑧③⓪ Mic/HFAI ⑧③① on the Auto Dial button.

  The first time you press the Auto Dial button, only the number before the stop is dialed (to activate the feature). When you press the button again, the rest of the stored number is dialed (to deactivate the feature).
- **Number Outside a PBX or Centrex System**: To store a number that dials out of a PBX or Centrex system, include a dial-out code in the Speed Dial number. This entry, to dial the number 201 555-4321, includes a dial-out code, a 1.5-second pause, and a toll call prefix of 1 for direct dialing (which may not be required for your dialing area): ⑨ Hold ①②⓪①⑤⑤⑤ ④③②①.

Speed Dial Form

C

Speed Dial Form

This appendix contains a Speed Dial Form to be photocopied and handed out to system users. It provides space for System and Personal Speed Dial numbers. For instructions on programming and using System and Personal Speed Dial numbers, see “System Speed Dial” on page 4-56, “System Speed Dial” on page 8-57, and “Personal Speed Dial” on page 8-55.

We suggest that you fill in a *photocopy* of the form, leaving the blank original in the book, in case you need to distribute revisions in the future.

To dial:

- On a system telephone, press Intercom + Code.
- On a single-line telephone, press # + Code while receiving intercom dial tone.

Table C-1. PARTNER ACS System Speed Dial numbers

Code	Name/Company *	Telephone Number	Code	Name/Company *	Telephone Number
600			637		
601			638		
602			639		
603			640		
604			641		
605			642		
606			643		
607			644		
608			645		
609			646		
610			647		
611			648		
612			649		
613			650		
614			651		
615			652		
616			653		
617			654		
618			655		
619			656		
620			657		
621			658		
622			659		
623			660		
624			661		
625			662		
626			663		
627			664		
628			665		
629			666		
630			667		
631			668		
632			669		
633			670		
634			671		
635			672		
636			673		

Table C-1. PARTNER ACS System Speed Dial numbers—*Continued*

Code	Name/Company *	Telephone Number	Code	Name/Company *	Telephone Number
674			687		
675			688		
676			689		
677			690		
678			691		
678			692		
680			693		
681			694		
682			695		
683			696		
684			697		
685			698		
686			699		

Table C-2. PARTNER ACS Personal Speed Dial numbers

Code	Name/Company *	Telephone Number	Code	Name/Company *	Telephone Number
80			90		
81			91		
82			92		
83			93		
84			94		
85			95		
86			96		
87			97		
88			98		
89			99		

Programming Mixed Telephone Types

D

Overview

This appendix provides information about programming from a PARTNER-34D telephone to MLS telephones and from an MLS-34D telephone to PARTNER telephones. In these situations, be aware that the button that you press at extension 10 or 11 (the programming extension) is likely to be in a different location than the button on the telephone to which the programming applies (the target telephone). If you are programming from a PARTNER-18D or MLS-18D telephone, the button locations are the same.

You can use the illustrations in this appendix to facilitate programming from one telephone type to the other. Figure D-1 shows the buttons on the PARTNER-34D Programming Overlay and the relative location of those buttons on each MLS telephone. Figure D-2 shows the buttons on the MLS-34D Programming Overlay and the relative location of those buttons on each PARTNER telephone. (The letters on the PARTNER-34D Overlay in Figure D-1 are printed on the Overlay. To help you program from an MLS-34D telephone, you may want to write the letters shown on the MLS-34D Overlay in Figure D-2 on your overlay.)

If you want to program features on specific buttons at target telephones, you should:

1. Look at the figure with the overlay that matches the telephone at your programming extension.
2. Find the location of the button in the picture of the target telephone.
3. Note the letter associated with that particular button.
4. Find the letter in the picture of the Programming Overlay.
5. Press that button on the programming extension.

For example, if you are using a PARTNER-34D telephone at extension 10 and you want to program Do Not Disturb on the top leftmost button of an MLS-18D telephone, refer to Figure D-1, find the top, leftmost button on the MLS-18D telephone, and press the button labeled M on the PARTNER-34D Programming Overlay.

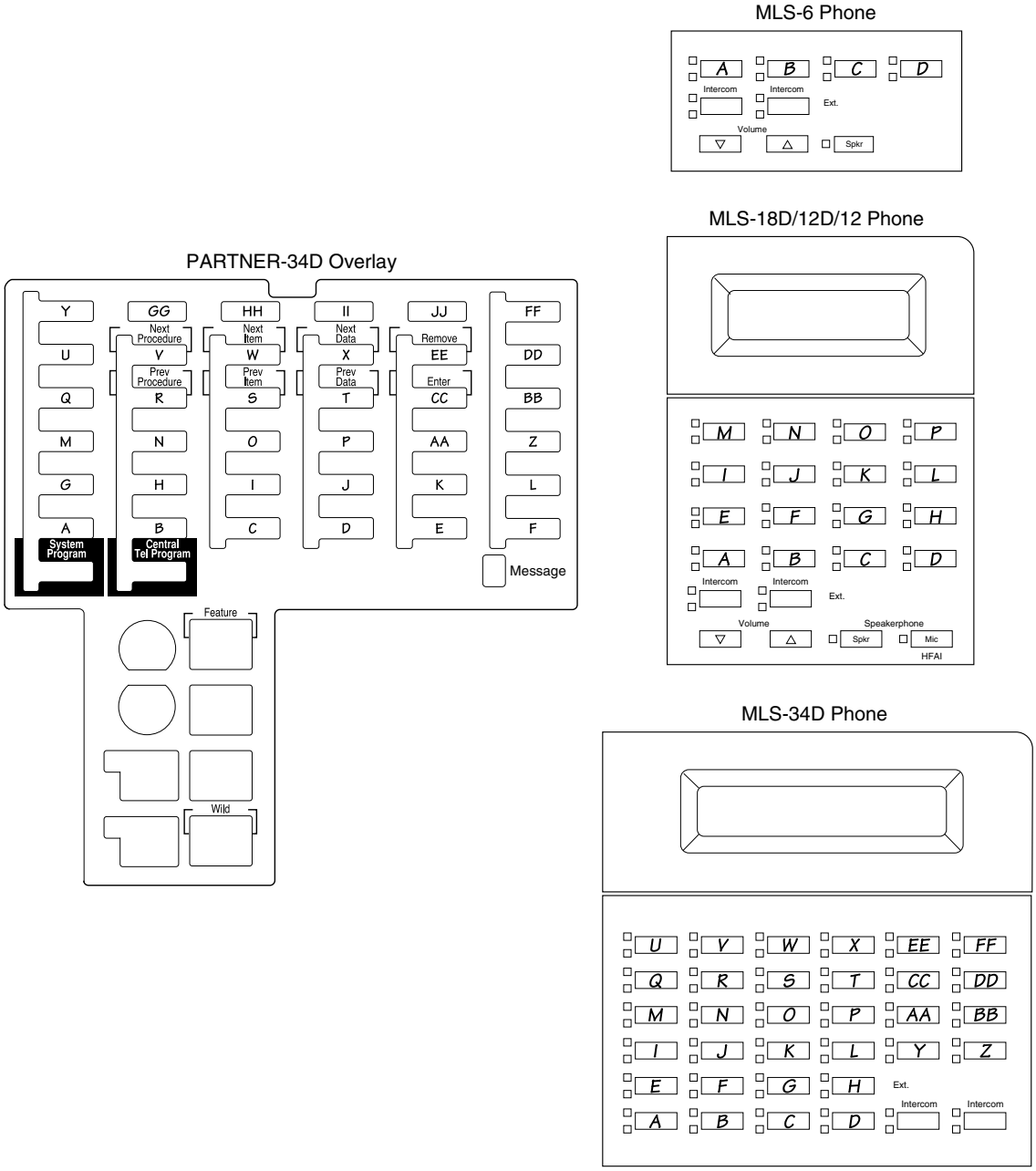

Figure D-1. Programming from a PARTNER 34-D Telephone

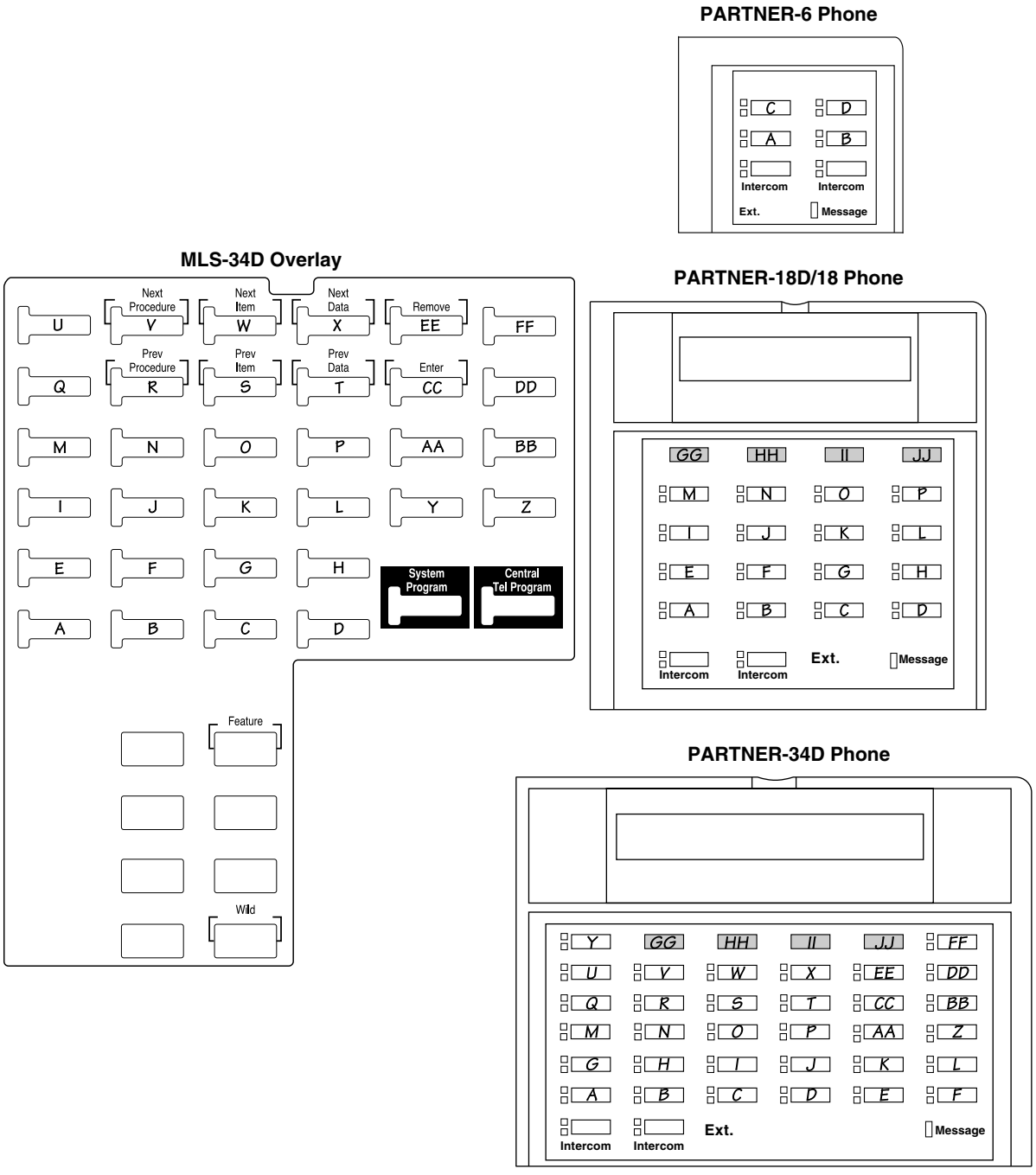

Figure D-2. Programming from an MLS-34D Telephone

Flow Charts

E

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 Dat*e)
- **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)

NOTES

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

Icon Description

✔ = Factory setting

= Button with lights required

= Button with lights recommended

2.0 = PARTNER ACS Revision 2.0 or later

3.0 = PARTNER ACS Revision 3.0 or later

System Flow Chart—System

System Date
Dial #101
Dial the date (MMDDYY)

System Day 2.0 or earlier
Dial #102
Dial 1=Sun ✔
2=Mon 3-Tue, 4=Wed, 5=Thur, 6=Fri, 7=Sat

System Time
Dial #103
Dial the time (HHMM-24 hr. military time)

Number of Lines
Dial #104
Dial two digits (01-31) (R 4.0), or
Dial two digits (01-19) (Prior to R 4.0), for # of outside lines assigned to every extension. 3 per ACS processor & 308EC module. 2 per 206 or 200 module ✔. 4 per 400 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)

Transfer Return Rings
Dial #105
Dial 1 digit (0-9) for # of rings before call returns.
0-9 rings
4 rings ✔

Recall Timer Durations
Dial #107
Dial two digits (01-80) to set length of a switchook flash ✔=18 (450 msec)

Rotary Dialing Timeout
Dial #108
Dial 1=4 secs
2=8 secs ✔
3=12 secs

Outside Conference Denial
Dial #109
Dial 1=Allowed ✔
2=Disallowed

Automatic System Answer Delay 2.0
Dial #110
Dial a ring delay number (0-9)
2 rings ✔

Automatic System Answer Button 2.0
Dial #111
Dial 1=Assigned
2=Not Assigned ✔
3=Select Button then press a programmable button

Direct Extension Dial Delay 2.0
Dial #112
Dial a ring delay number (0-9),
2 rings ✔
0 rings=answered immediately

Direct Extension Dial Button 2.0
Dial #113
Dial 1=Assigned,
2=Not Assigned ✔
3=Select Button then press a programmable button

Outgoing Call Restriction Button
Dial #114
Dial 1=Assigned
2=Not Assigned ✔
3=Select Button then press a programmable button

Wake Up Service Button
Dial #115
Dial 1=Assigned
2=Not Assigned ✔
3=Select Button then press a programmable button

Call Coverage Rings 2.0 only
Dial #116
Dial 1-9
2 ✔

VMS Cover Rings
Dial #117
Dial 1-9
3 ✔

Ring On Transfer
Dial #119
Dial 1= Active ✔
2=Not Active

Automatic System Answer Mode
Dial #121
Dial 1=Hold ✔
2=Disconnect
3=Ring

Caller ID Type
Dial #122
Dial 1=USA ✔
2=Singapore

Backup Programming Automatic
Dial #123
Dial 1=Active
2=Not Active ✔
3=Backup Alarm Cleared

Backup Programming—Manual
Dial #124
Press Enter to begin the backup

Restore Programming
Dial #125
Dial 1= MAN.mmddyy ✔
2=AUTO.mmddyy
Press Enter to begin the restore

Automatic Daylight/ Standard Times 3.0
Dial #126
Dial 1=Active ✔
2=Not Active

Mode of Operation
Press Feature 00 System Program
System Program #198
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 #728

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 2.0

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 2.0

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 2.0

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 3.0

Dial (#) (2) (0) (9)

Dial a system line #

Dial 1 ✔
2-8

System Flow Chart—Extensions

Line Assignment

Dial #301

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 programable 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.

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 #302

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 #303

Dial a system extension #

Dial 1=English ✔

2=Spanish

3=French

Press (Next Item) to program another extension

Automatic Extension Privacy

Dial #304

Dial a system extension #

Dial 1=Assigned

2=Not Assigned ✔

Press (Next Item) to program another extension

Abbreviated Ringing

Dial #305

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 #306

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 #307

Dial a system extension #

Dial 1=Assigned

2=Not Assigned ✔

Press (Next Item) to program another extension

Distinctive Ringing

Dial #308

Dial a system extension #

Dial 1=Active

2=Not Active ✔

Press (Next Item) to program another extension

Intercom Dial Tone

Dial #309

Dial a system extension #

Dial 1=Regular ✔

2=Machine

Press (Next Item) to program another extension

Automatic VMS Cover

Dial #310

Dial a system extension #

Dial 1=Assigned

2=Not Assigned ✔

Press (Next Item) to program another extension

External Hotline

Dial #311

Dial a system extension #

Dial 1=Assigned

2=Not Assigned ✔

Press (Next Item) to program another extension

Voice Interrupt On Busy

Dial #312

Dial a system extension #

Dial 1=Assigned

2=Not Assigned ✔

Press (Next Item) to program another extension

System Flow Chart—Extensions (*Continued)*

Line Access Mode 2.0
Dial #131
Dial a system extension #
Dial 1=Pooled ✔ all extensions except 10
2=Key ✔ extension 10 only
Press (Next Item) to program another extension

Pool Extension Assignment 2.0
Dial #134
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 2.0
Dial #135
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 #136
Dial a system extension #
Dial 1=Assigned
2=Not Assigned ✔
Press (Next Item) to program another extension

Caller ID Log Answered Calls 2.0
Dial #137
Dial a system extension #
Dial 1=Active
2=Not Active ✔
Press (Next Item) to program another extension

Caller ID Log Line Association 2.0
Dial #138
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 2.0
Dial #139
Dial a system extension #

Call Coverage Rings 3.0
Dial #320
Dial one digit (1-9) for the # of rings before the call is sent to the covering extension 2 rings ✔

For Centralized Telephone Programming, see following pages

VMS Cover Rings 3.0
Dial #321
Dial one digit (1-9) for the # of rings before the call is sent to the voice messaging 3 rings ✔

Copy Settings
Dial #399
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 #501
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 #502
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 #503
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 #504
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 #505
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 #506
Release 2.0 and earlier:
Dial 1=Immediate ✔
2=Delayed
Release 3.0 and later:
Dial 1=Day
2=Night
Dial line number
Dial 0-6
2 ✔

VMS Hunt Schedule
Dial #507
Release 2.0 and earlier:
Dial 1=Always ✔
2=Day Only
3=Night Only
Release 3.0 and later:
Dial line number
Dial 1=Always ✔
2=Day Only
3=Night Only
Dial 0-6
2 ✔

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 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 (#)(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

Music-On-Hold Volume
Dial (#)(6)(1)(4)
Dial 1= +
2= +
3= +
4= + ✔
5= +
6= +
7= +

Remote Administration Password 3.0
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

2.0 = PARTNER ACS Revision 2.0 or later

3.0 = PARTNER ACS Revision 3.0 or later

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 (see "Special Dialing 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 (see "Special Dialing 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 2.0
Press a programmable button
Press (Feature) 1 2

Background Music
Press a programmable button
Press (Feature) 1 9

Call Coverage 2.0
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 3.0
Press a programmable button with lights
Press (Feature) 2 5

Caller ID Call Logging & Dialing 2.0
Press a programmable button with lights
Press (Feature) 2 3

Caller ID Inspect 2.0
Press a programmable button with lights
Press (Feature) 1 7

Caller ID Name Display 2.0
Press a programmable button with lights
Press (Feature) 1 6

Conference Drop
Press a programmable button
Press (Feature) 0 6

Centralized 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 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)

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)

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)

Voice Mailbox Transfer
Press a programmable button
Press (Feature) (1) (4)

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 numbers, 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
2.0	= PARTNER ACS Revision 2.0 or later
3.0	= PARTNER ACS Revision 3.0 or later

Extension Telephone Programming Flow Chart

Account Code Entry
Press a programmable button
Press (Feature) (1) (2)

Extension Name Display
Press (Intercom)
Enter the character codes for the name
(See table "Valid Character Entries")

Personal Speed Dial Numbers
Press (Feature)
Dial a two-digit code (80-99)
Dial the phone number – up to 28 digits including special functions (see "Special Dialing Functions")

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 (see"Special Dialing 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)

Background Music
Press a programmable button
Press (Feature) (1) (9)

Call Coverage 2.0
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 with lights
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

Caller ID Call Logging & Dialing 2.0
Press a programmable button with lights
Press (Feature) (2) (3)

Caller ID Inspect 2.0
Press a programmable button with lights
Press (Feature) (1) (7)

Caller ID Name Display 2.0
Press a programmable button with lights
Press (Feature) (1) (6)

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 3.0
Press a programmable button
Press Feature 2 4

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
Press Feature 1 8

Voice Mailbox Transfer
Press a programmable button
Press Feature 1 4

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