



PARTNER[®]
Communications System
Release 3
Installation and Use

Notice

Every effort was made to ensure that the information in this book was complete and accurate at the time of printing. However, information is subject to change.

Federal Communications Commission (FCC) Interference Notice

For important FCC interference, registration, and repair information, see Appendix E of this book.

Canadian Emissions Requirements

This digital apparatus does not exceed the Class B limits for radio noise emissions from digital apparatus set out in the Radio Interference Regulations of the Canadian Department of Communications.

Le present appareil numerique n'emet pas de bruits radioelectriques depassant les limites applicables aux appareils numeriques de la classe B prescrites dans le Reglement sur le brouillage radioelectrique edicte par le minstere des Communications du Canada.

Security

As a customer of new telecommunications equipment, you should be aware of the significant and growing problem of theft of long distance services by third parties, known commonly as "toll fraud." It is particularly important that you understand and take appropriate steps to deal with this crime because under applicable tariffs, you will be responsible for payment of associated toll charges. AT&T can not be responsible for such charges and will not make any allowance or give any credit resulting from toll fraud.

Toll fraud can occur despite the preventive efforts of network providers and equipment manufacturers. Toll fraud is a potential risk for every customer with telecommunications equipment having one or more of the following features: (1) remote access, (2) automated attendant, (3) voice mail, (4) remote administration and maintenance, and (5) call forwarding (remote). This is not a product or design defect, but a risk associated with equipment having one or more of the features described above. If your new telecommunications equipment possesses any of these features, please consult the relevant portion of your documentation for further details and specific procedures to reduce the risk of toll fraud or contact your AT&T dealer for further details.

Trademarks

MLS-18D, MLS-12D, MLS-12, MLS-6, and SYSTIMAX are trademarks of AT&T. PARTNER, MERLIN, and Magic on Hold are registered trademarks of AT&T.

Warranty

AT&T provides a limited warranty to this product. Refer to "AT&T Limited Warranty and Limitation of Liability" in Appendix D of this book.

Ordering Information

The order number for this book is 518-455-112. To order additional books, call 1 800 432-6600 in the continental U.S. and 1 800 255-1242 in Canada. For more information on how to order this and other system reference materials, see "Reference Materials" in the section entitled "About This Guide." For information on ordering replacement parts, accessories, and other compatible equipment, refer to "Product Ordering Information" in Appendix D.

Support Telephone Number

In the continental U.S., AT&T provides a toll-free customer helpline 24 hours a day. Call the AT&T Helpline at **1 800 628-2888** if you need assistance when installing or using your system.

Outside the continental U.S., contact your local AT&T Authorized Dealer.

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About This Guide

Purpose

This guide explains how to set up and use the PARTNER® Communications System. It is intended for the person who will install and manage the system.


Terminology

Throughout this guide, the PARTNER Communications System is referred to simply as the *system*. In addition, this guide refers to AT&T telephones specifically designed to work with the system as *system phones*. System phones include the MLS-18D™, MLS-12D™, MLS-12™, MLS-6™, and MLC-6 model telephones. You can also use industry-standard telephones with the system, which are referred to as *standard phones* in this guide.

How to Use This Guide

- If you are a new user, read Chapters 1 and 3 to familiarize yourself with the system's features and to learn about system phones.
- If you are installing the system for the first time, read Chapters 1 through 3 and Appendix C, which will give you an overview of the system components, and instructions for installing and customizing them. If you are installing auxiliary devices, also see Chapter 4.
- If you need to change factory settings, see Chapter 2, "Customizing Your System" and Chapter 5 "Feature Reference" or the Customization Quick Reference at the back of this guide.
- If you are adding equipment to an existing system, see Appendix C, "Installation" and Chapter 4, "Using Auxiliary Equipment."
- Once you are experienced with the system, use the Table of Contents or Index to locate the information you need.

Product Safety Statements

Product safety statements are identified in this guide by a .



CAUTION:

Indicates the presence of a hazard that will or can cause minor personal injury or property damage if the hazard is not avoided.



WARNING:

Indicates the presence of a hazard that can cause severe or fatal personal injury if the hazard is not avoided.

Reference Materials

In addition to this guide, the following materials are available to help you use the system effectively (order numbers are in parentheses):

- *Quick Reference for Use with MLS-Series Telephones* (518-455-152) contains basic instructions for using system phones.
- *MLC-6 Cordless Telephone: Installation and Troubleshooting* (999-506-143) explains how to install and use the MLC-6 cordless telephone.
- *MLC-6 Cordless Telephone Quick Reference: Display and Controls* (999-506-146) contains basic instructions for using the MLC-6 cordless telephone.

To order these materials, call the AT&T Customer Information Center:

In the continental U.S.: 1 800 432-6600

Outside the continental U.S.: 1 800 255-1242

Some of these materials are also available in Spanish and French. For more information, contact the AT&T Customer Information Center or your local AT&T Authorized Dealer.

How to Comment on This Guide

A feedback form is located at the end of this guide, after the appendixes. If the feedback form is missing, send your comments and recommendations for changes to A. Sherwood, AT&T, 99 Jefferson Road (Room 2A-25), Parsippany, NJ 07054 (FAX 1 201 887-6898).

Overview

1

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Important Safety Instructions

Always follow these basic safety precautions when using the system:

1. Read and understand all instructions.
2. Follow all warnings and instructions marked on the product.
3. **DO NOT** block or cover the ventilation slots and openings. They prevent the product from overheating. **DO NOT** place the product in a separate enclosure unless proper ventilation is provided.
4. Never spill liquid on the product or drop objects into the ventilation slots and openings. Doing so may result in serious damage to the components.
5. Repair or service must be performed by a qualified repair person. There are no customer-serviceable components inside.
6. The product is provided with a three-wire grounding type receptacle and/or plug. This is a safety feature. **DO NOT** defeat the safety purpose of the grounding type receptacle and/or plug. **DO NOT** staple or otherwise attach the AC power supply cord (if applicable) to building surfaces.
7. **DO NOT** place this product on an unstable cart, stand, or table.
8. **DO NOT** use the product near water or in a wet or damp place (such as a wet basement).

SAVE THESE INSTRUCTIONS

Features and Capabilities

Your system is easy to install, set up, and use. It can handle up to four outside telephone lines and up to 12 extensions. In addition, the system offers many features that help you manage phone calling:

- MLS- and MLC-model phones—some with displays showing date, time, and other messages and all with access to multiple telephone lines.
- Easy operation of basic call handling capabilities including transfer, conference, and hold.
- Intercom (inside) calling to other system extensions using an Intercom button and an extension's two-digit number. (Extension numbers also can be stored on programmable buttons for one-touch intercom calling.)
- Speed dialing of frequently called numbers by dialing a code or pressing a single button, as well as one-touch access to frequently-used calling features such as Last Number Redial and Privacy.
- Group paging over system phone speakers to make general announcements to all system extensions.
- Direct connection of industry-standard phones, answering machines, modems, and fax machines so you do not have to buy extra lines or adapters to connect equipment.
- Special phone applications including doorphones, internal hot line phones, and emergency phones.
- Control of phone use and bills by restricting the kinds of calls people can make.
- Music or tones on hold support so callers can hear music or a repeating tone while they are on hold.
- Power failure operation with standard phones, allowing you to make and receive calls on specific lines during a power failure.

System Components

Interchangeable parts make it easy to install or expand the system. Figure 1-1 shows system components. A brief description of each component follows.

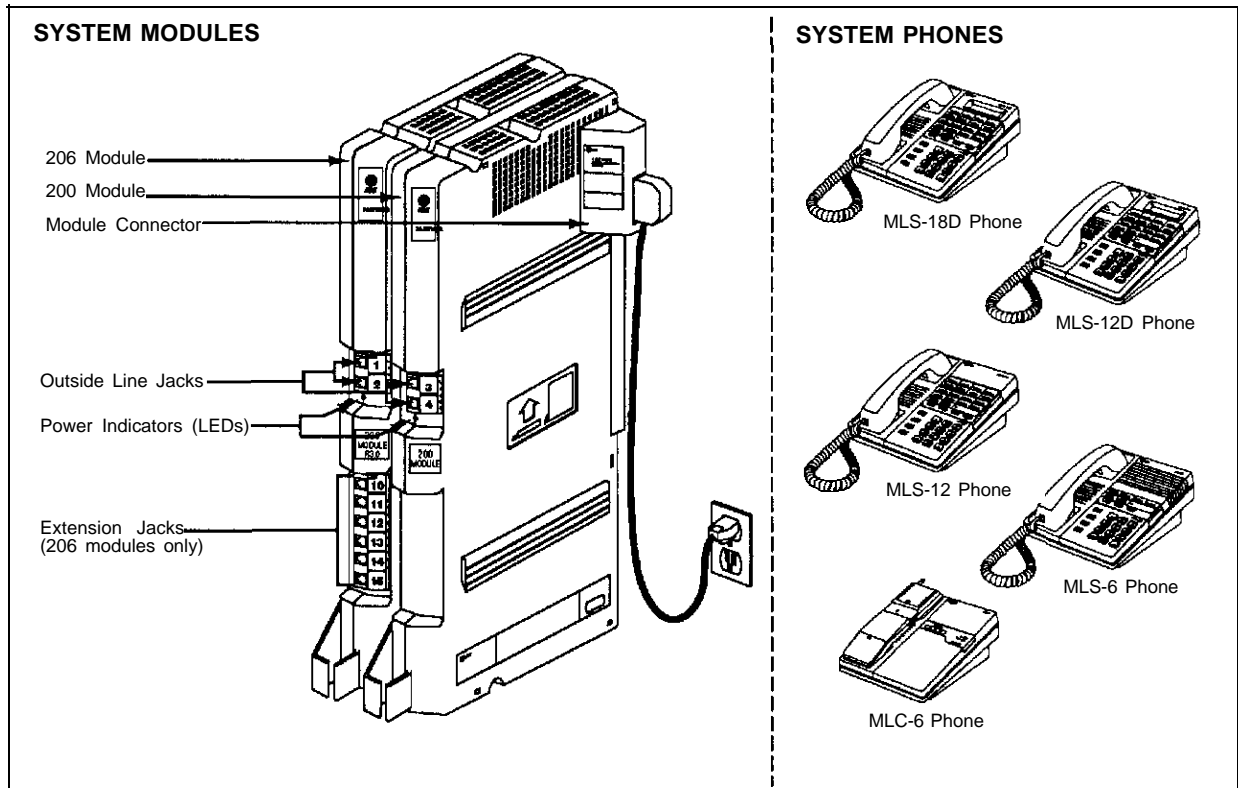


Figure 1-1. System Components

System Modules

- **206 Module.** Each 206 module has jacks to connect a maximum of two outside lines and six extensions. (Extension jacks can connect phones or other devices such as fax machines, answering machines, and modems.) A system can have one or two 206 modules. With two 206 modules, you can connect up to four outside lines and 12 extensions.
- **200 Module.** This module is similar to the 206 module, without extension jacks. It has two outside line jacks, which allow you to add lines when you do not need more extensions. The system can have one 200 module in combination with a 206 module. This combination provides up to four outside lines and six extensions.
- **Module Connector.** This connector is needed only if you have two modules. It joins the modules together so that all the lines and extensions are connected.

System Phones

System phones are specifically designed to work with the system. They have several buttons in common: four line buttons, two intercom buttons, volume control buttons, and the [*Feature*], [*Conf*], [*Transfer*], and [*Hold*] buttons. Some models have four *calling feature* buttons (to access the Privacy, Last Number Redial, Recall, and Conference Drop features with the touch of one button) and eight *Auto Dial* buttons, on which frequently-used outside phone numbers or extension numbers can be stored.

If the phone has a display, indicated by a “D” in the model name, users will receive feedback when making calls and changing system options (see “Display” in Chapter 5.) Table 1-1 summarizes system phone features.

Table 1-1. System Phones

	MLS-18D	MLS-12D	MLS-12	MLS-6	MLC-6
Calling Feature Buttons	✓	✓	✓	—	—
Programmable Auto Dial Buttons	✓	✓	✓	—	—
Display	✓	✓	—	—	—
Speaker	✓	✓	✓	✓	—
Microphone	✓	✓	✓	—	—

Auxiliary Equipment

Many industry-standard, single-line telecommunications devices will work with your system, all without expensive adapters or additional phone lines:

- Touch-tone, rotary, and cordless phones, such as those you might have in your home (referred to hereafter as standard phones)
- Fax machines
- Answering machines
- Modems
- Credit card scanners

In addition, you can connect the following devices to your system:

- **Loudspeaker paging systems** allow you to broadcast messages over a large area, by connecting the paging system to a line jack on a system module. The system supports all AT&T paging systems.
- **Music-on-Hold systems** allow you to play recorded music to callers while they are on hold. (Alternatively, the system supports a Tones on Hold feature. For more information, see “Music/Tones On Hold” in Chapter 5.)
- **Extra alerts** are strobes, lights, chimes, horns, or bells that light or ring when calls come in. They can connect to either an extension jack or a line jack. AT&T offers several compatible alerts.

-
- **Doorphones** allow visitors to ring a specific extension (or all system extensions) by pressing a button on the doorphone; the person who answers a doorphone call can then speak with the visitor at the doorphone. The system supports the AT&T PARTNER Doorphone, which can be installed indoors or outdoors.
 - **In-Range Out-of-Building (IROB) protectors** are required to prevent electrical surges from damaging your system when phones are installed in another building, but on the same continuous property. The system supports the AT&T IROB protector, which provides coverage over a distance of 1,000 feet (305 meters) for system phones and 3,000 feet (915 meters) for standard phones.
 - **Off-Premises Range Extender (OPRE)** allows you to connect a standard touch-tone phone beyond 3000 feet (915 meters) in another building on the same continuous property. It also allows you to use a special circuit from your local phone company to provide off-premises station capability.
 - **Repertory dialers** allow you to store frequently used numbers for one-touch dialing. If a user needs many speed dial numbers, a repertory dialer can be combined on an extension with a system or standard phone.
 - **Headsets** allow users to hold private, hands-free conversations. A headset is a combination earphone and microphone worn on the head, useful for receptionists, salespeople, or others who may want to have their hands free while talking on the phone.
 - **Specialty handsets** are designed for those individuals who need greater functionality than that provided by the handsets on system phones and standard phones. For example, an amplified handset is available for the MLS-18D system phone for hard-of-hearing users.

These devices can be ordered through AT&T—see “Product Ordering Information” in Appendix D. Refer to the manufacturer’s instructions packaged with the device for installation and usage information. In addition, Appendix C provides general guidelines for installation.

Combination Extensions

You can connect a standard device on an extension by itself, or have it share an extension with another piece of equipment. An extension with two devices connected to it is called a *combination extension*. Examples of useful combination extensions include:

- System phone plus standard phone for power failure backup on extensions 10 and 16
- System phone plus answering machine
- System phone plus fax machine for phone use when the fax is idle
- System phone plus headset for hands free operation
- System phone plus external alert (such as a bell or chime) to notify users of incoming calls in noisy areas, such as a warehouse

See “Combination Extensions” in Appendix C and Chapter 3 for guidelines on installing and using combination extensions.

Customizing Your System

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After installation is completed, your system is operational and ready to go. However, you may want to customize it to meet the requirements of your business.

When the system is first installed, it uses factory settings that reflect the most common usage. However, you can change the option settings. There are two types of options: *system options* and *telephone options*. Both are discussed in this chapter. Option names are shown in **boldface** type, so you can look up the name in Chapter 5 to find out more about it.

System Options

System options define how the system modules work with the telephones and other devices connected to them. These options affect *all* system extensions. Some of the system options you may need to change after the system is installed include:

- **System Date (#101)** sets the month and day that appear on system display phones.
- **System Time (#103)** sets the time of day that appears on system display phones.
- **Dial Mode (#201)** identified whether lines in your system are rotary or touch-tone.
- **Music/Tones On Hold (#602)** specifies whether or not Music On Hold or Tones On Hold is activated.
- **System Speed Dialing** lets users dial outside numbers by pressing three buttons: [*Feature*] (or [*#*] on a standard phone) plus a two-digit code. The system can have up to 60 System Speed Dial numbers.

This list does not include all system options available to you, only those that are most commonly changed. For information about all options, refer to Chapter 5 or the inside back cover of this guide.

Telephone Options

Telephone options let you further customize *individual* extensions in the system. For example, you can define how the phone at an extension will ring and you can store phone numbers on programmable buttons on system phones. Telephone options to consider are:

- **Automatic Line Selection** allows you to select the sequence of lines through which the system searches to find a free line when the user makes a call. (For extensions with standard phones, set Automatic Line Selection to "intercom first." This enables the user at the standard phone to access system features, including intercom calling.) If you are changing Automatic Line Selection plus one or more other options for an extension, you must set Automatic Line Selection first.
- **Line Ringing** specifies whether or not the line rings at the extension.
- **Outgoing Call Restriction (#401)** specifies the types of calls that can be made from the extension.
- **Automatic Extension Privacy (#304)** assigned to an extension to which an auxiliary device such as a fax machine or modem is connected, prevents users from interrupting calls to this extension. You can also use this option to have Privacy on MLS-6 and MLC-6 phones, which do not have Privacy buttons.
- **Doorphone/Internal Hot Line Phone/Emergency Phone (#604)** specifies whether or not a special phone application is installed at an extension.
- **Auto Dialing** lets you store phone numbers or extension numbers on the eight programmable buttons on the top two rows of MLS-18D, MLS-12D, and MLS-12 phones for one-touch dialing. These buttons are *Auto Dial buttons*. An extension number stored on a button is an *intercom Auto Dial number*, and an outside phone number stored on a button is an *outside Auto Dial number*. (You can also set up an Auto Dial button for **Group Paging**.)

This list does not include all telephone options available to you, only those that are most commonly changed. For information about all options, refer to Chapter 5 or the inside back cover of this guide.

Changing Option Settings

System option settings and telephone option settings (except for Auto Dial buttons) can be changed only from extension 10 using an MLS-model phone. Users with MLS-18D, MLS-12D, and MLS-12 phones also can store numbers on Auto Dial buttons at *their own* phones; instructions are provided on the *Quick Reference Card*. If you plan to set up Auto Dial buttons for system extensions from extension 10, make sure the phone at extension 10 is as large as the largest phone in the system.

NOTE:

You can change settings any time, even when you are on a call. This allows you to change settings while talking to the AT&T Helpline.

Keep in mind the following general guidelines when changing option settings. Detailed procedures for changing each option are provided in Chapter 5.

- To change settings, you press [*Feature*] [*0*] [*0*]. At this point, the phone beeps and the light next to [*Spkr*] is green flutter. Then press left [*Intercom*] twice. The light next to left [*Intercom*] is green steady.
- Some options are identified by # and a three-digit code (for example, **System Date** is **#101**). To change these options, press [*#*] and the three digit code assigned to the option. The Message light, located above the dial pad on the right side of the phone, indicates the current setting for the option you have chosen. If you change a setting, the Message light also changes to reflect the new setting.
- When you are done changing option settings, you can either press [*Feature*] [*0*] [*0*] or lift the handset off-hook, then place it back in the cradle.

PBX or Centrex Services Support

This section applies *only* if you use PBX or Centrex services with your system.

PBX services are provided by a private telephone switch; Centrex services are provided by your local telephone company from a Central Office (CO) outside your premises. These services include the PBX or Centrex lines connected to your system modules and some set of features—such as hold, conference, or transfer—that are available on those lines. PBX or Centrex services may be offered in your area under a different name. For specific Centrex features to be available to you, your company must subscribe to those features. For specific information on using PBX or Centrex services, see the documentation provided with the service.

The options you should consider when setting up your system to work effectively behind a PBX or Centrex system are listed below.

- To set up your equipment to work properly with PBX or Centrex services, set **Recall Timer Duration (#107)** to match the setting used by your PBX or Centrex system (usually “18” or 450 msec. for a PBX system; “32” or 800 msec. for a Centrex system).
- For extensions with standard phones, set **Automatic Line Selection** to “intercom first.” This enables standard phones to access equipment features, including intercom calling.
- When you store numbers outside the PBX or Centrex system for **System Speed Dialing** or **Auto Dialing**, include the PBX or Centrex system dial-out code (if any), followed by a pause, in the stored number.

NOTE:

If you want to assign dialing restrictions to specific extensions, use the PBX or Centrex dialing restrictions. Refer to the PBX or Centrex documentation for more information.

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Learning About Telephones

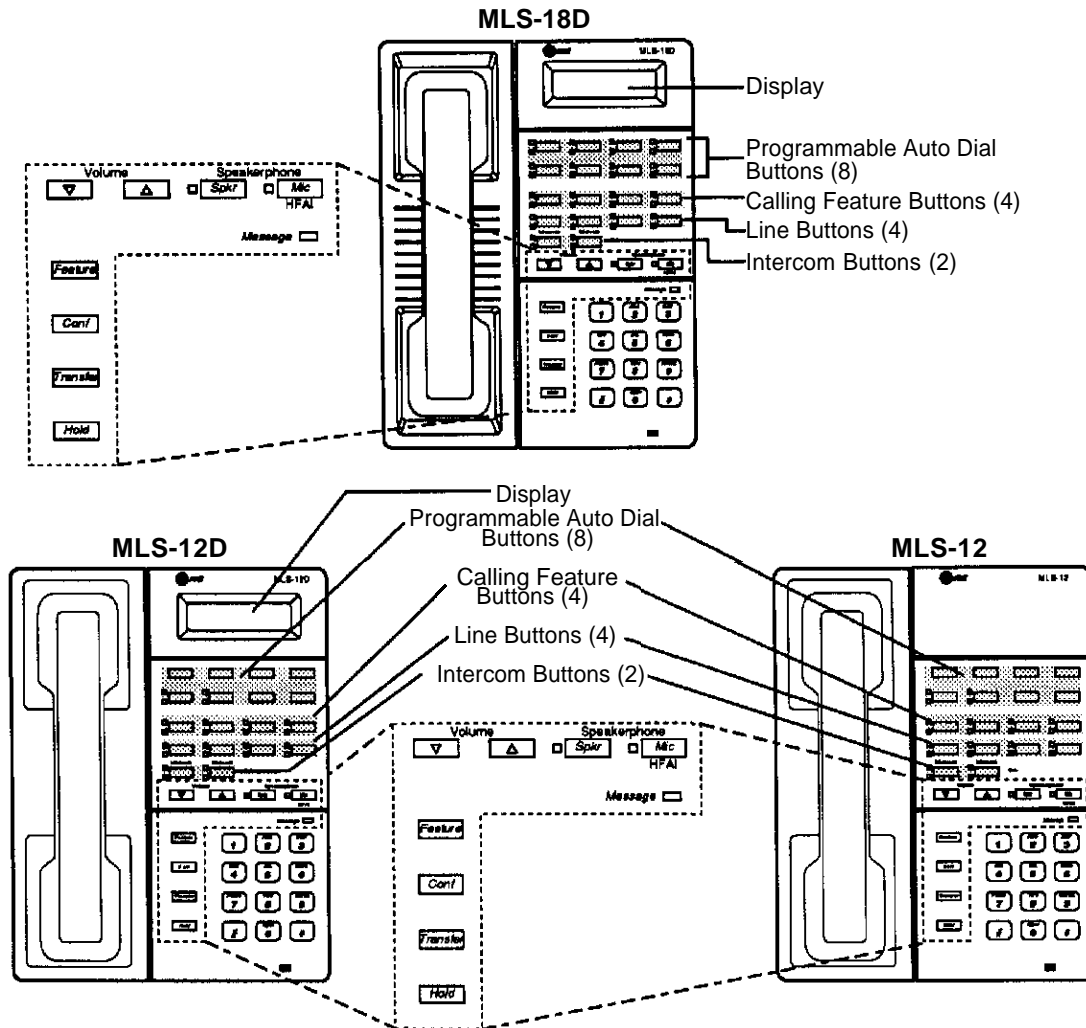
3

This chapter explains how system and standard phones work with the system, as well as combination extensions where more than one phone or auxiliary device is installed. System phones are described first, followed by standard phones on page 3-7 and combination extensions on 3-9.

System Telephones

System phones have some buttons and indicators in common. The following pages explain where they are and how they work.

Buttons and Indicators



The following buttons and displays appear on system phones:

Display. (MLS-18D and MLS-12D only) Shows date and time when phone is idle, number dialed when placing an outside or inside call, extension number calling you or transferring a call to you, and duration while a call is in progress. (To adjust the MLS-18D display contrast, see **Volume Control Buttons.**)

Programmable Auto Dial Buttons. (MLS-18D, MLS-12D, and MLS-12 only) Store outside or inside numbers for one-touch access.

Line Buttons. Press to make or answer outside calls. Lights next to each button show the status of the line (see “Lights” later in this chapter).

Intercom Buttons. Press either button to make (or answer) a call to (or from) another extension in the system.

Calling Feature Buttons. (MLS-18D, MLS-12D, and MLS-12 only) Press to use calling features with one touch—from left to right, there are buttons for the Privacy, Last Number Redial, Recall, and Conference Drop features.

Other Buttons and Indicators (shown in exploded views)

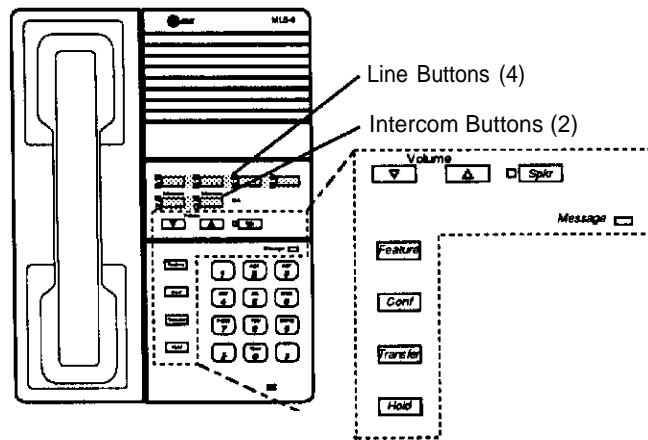
Feature (labeled “Feat” on MLC-6). Press to change option settings or to use a System Speed Dial number. (On an MLS-6 or MLC-6 phone, use with two-digit code to access Last Number Redial, Recall, and Conference Drop features.)

Conf. Press to add other parties to your call.

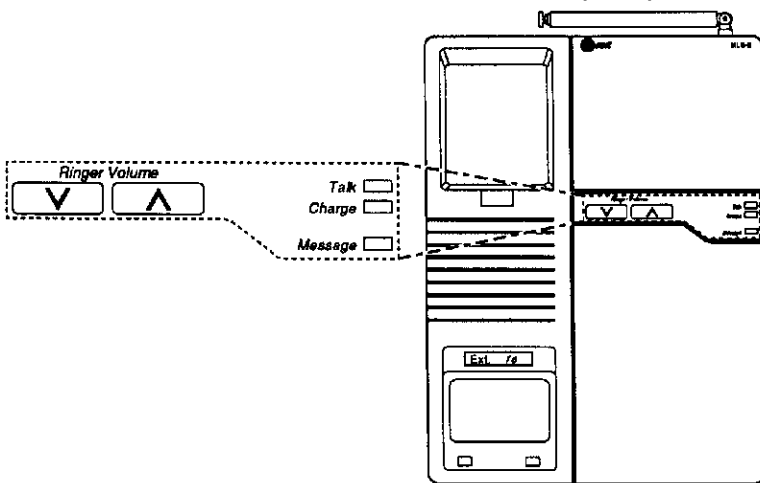
Transfer (labeled “Trans” on MLC-6). Press to transfer a call to another extension.

Hold. Press to put a call on hold.

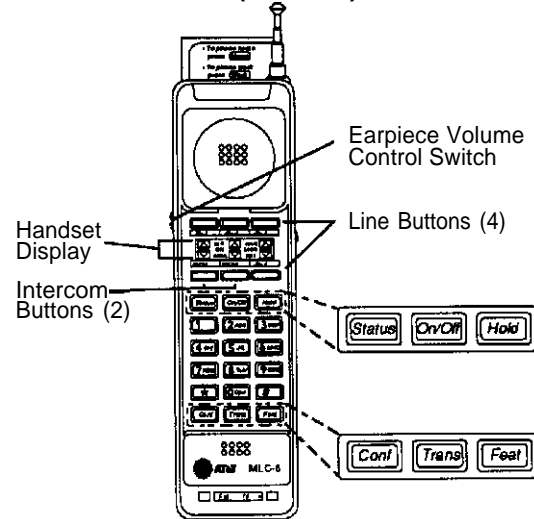
MLS-6



MLC-6 (Base)



MLC-6 (Handset)



Spkr (all models except MLC-6). Press to turn on and off speaker and microphone (if available), so you can dial or have a conversation without lifting the handset. The light next to this button shows when the speaker is turned on.

Mic (MLS-18D, MLS-12D, and MLS-12 only). Press to turn the microphone on and off. The light next to this button shows when the microphone is turned on. Leave on to use Hands-Free Answer on Intercom (HFAI) feature.

Message Light. When changing option settings at extension 10, shows current setting.

Volume Control Buttons (all models except MLC-6). Press ▼ to decrease or ▲ to increase the volume as follows:

- To adjust ringer volume, press ▼ or ▲ while the phone is idle and the handset is in the cradle.
- To adjust speaker volume, press ▼ or ▲ while listening to a call through the speaker.
- To adjust handset volume, press ▼ or ▲ while listening through the handset.

To adjust the display contrast on the MLS-18D phone, press [∗] and then ▼ to decrease the brightness or ▲ to increase the brightness, while the phone is idle and the handset is in the cradle.

On/Off Button (MLC-6 Handset). Turns the handset on and off. (You must turn the handset on to make calls.)

Status Button (MLC-6 Handset). Quickly updates the display on the MLC-6 handset.

Earpiece Volume Control Switch (MLC-6 Handset). To adjust handset volume, slide switch up (high) or down (low).

Talk Indicator (MLC-6 Base). Lights when the handset is lifted and turned on.

Charge Indicator (MLC-6 Base). Lights when the handset is placed on the base and the handset batteries are charging.







Ringer Volume Control (MLC-6 Base). To adjust ringer volume, press ▼ or ▲ while the phone is idle.

Lights

Each line button, each calling feature button, and some Auto Dial buttons have a green light and a red light. The meaning of these lights varies, depending on whether a button is used to access an outside line, a calling feature, or an intercom Auto Dial number.

Table 3-1 shows the meanings of the various light patterns for each possible button assignment.

Table 3-1. Light Patterns for System Phones

Light Pattern	Line Button	Calling Feature Button	Intercom Auto Dial Button
Steady On 	Line is busy. Green means your phone is busy; red means someone at another extension is busy on the line.	Green means feature is on	Red means the extension is busy (making or answering a call).
Off  (steady off)	Line is idle (not being used).	Feature is off	Extension is idle (not being used).
Flash  (long on, long off)	A call is ringing on the line. Green flash means a call is ringing at your extension. Red flash means a call is ringing on the line, but not at your extension.	—	—
Alternating Red/Green Flash  (red on, green on, red on, green on)	Appears at both extensions in a joined call and at each extension connected in a conference call.	—	—
Wink  (long on, short off)	A call on the line is on hold. Green wink means the call is on hold at your extension. Red wink means the call is on hold at another extension. (Anyone who has the line can retrieve the call.)	—	—
Flutter  (short on, short off)	Green flutter means a conference call on your line is on hold.	—	—

Ringling Patterns

You can tell what kind of call you are receiving by the way your system phone rings:

- An outside call will *ring . . . ring . . . ring*.
- An intercom call will *ring BEEP . . . ring BEEP . . . ring BEEP*. If you have a system display phone, the caller's extension number will show on the display.
- A transferred call, or a call on hold that is ringing back, will *ring BEEP BEEP . . . ring BEEP BEEP . . . ring BEEP BEEP*.

NOTE:

If you use the system with PBX or Centrex lines, the PBX/Centrex distinctive ringing patterns are not passed to phones. Phones use the ringing patterns described here instead.

Dial Tones

You will encounter two different dial tones when making calls:

- **Outside dial tone** is generated by your local phone company and indicates that you can make an outside call.
- **Intercom dial tone** is generated by the system and indicates that you can make an inside, or *intercom*, call.

It is important that you recognize the difference between the two types of dial tones. The best way to do this is to listen to each one and compare them. To hear an outside dial tone, lift the handset of the system phone and press a line button. To hear an intercom dial tone, press [*Intercom*].

Using the Speaker and Microphone

Every MLS-model phone has a speaker, which you can turn on by pressing [*Spkr*]. When the light next to [*Spkr*] is on, the speaker is on.

MLS-18D, MLS-12D, MLS-12 phones also have a microphone. On these phones, pressing [*Spkr*] turns on *both* the speaker *and* the microphone. In addition, you can turn just the microphone on and off by pressing [*Mic*]. When the light next to [*Mic*] is on, the microphone is on.

If you prefer to dial and conduct calls without lifting the handset, you can use the speaker and the microphone instead:

- To make a call without lifting the handset, press [*Spkr*] to get dial tone. (Alternatively, press an idle line or intercom button, which automatically turns on the [*Spkr*], and [*Mic*], if available.) Dial the number and you will hear the call ringing. When the other party answers, you can talk without lifting the handset. On MLS-6 phones (which have no microphone), you must lift the handset to talk when the other party answers.
- To turn off the microphone when you are using the speaker, press [*Mic*]. This will *mute* your voice so the other party cannot hear you.

-
- If you are already on a call (on an MLS-18D, MLS-12D, or MLS-12 phone), you can switch from the handset to the speaker and microphone by pressing [*Spkr*] and hanging up the handset. Conversely, if you are using the speaker and microphone and want to switch to the handset, lift the handset and the speaker and microphone will turn off.

Hands-Free Answer on Intercom (HFAI)

Use the *Hands-Free Answer on Intercom (HFAI)* feature to answer voice-sigaled calls without lifting the handset. A *voice-sigaled* call is a type of intercom call that lets a caller signal your extension using their voice instead of your phone's ringer. When you receive a voice-sigaled intercom call, your phone beeps to indicate that your speaker has been turned on automatically, and you hear the caller's voice over your phone's speaker. If the microphone on your phone is left on all the time, you can simply start talking when you hear the caller, without lifting the handset.

NOTE:

Since MLS-6 phones do not have microphones, users must lift the handset to answer voice-sigaled intercom calls to these phones.

Any user in the system can make a voice-sigaled intercom call to a system phone by pressing [***] and then dialing an extension number. (You can make a voice-sigaled call *from* either a system phone or a standard phone. However, if you try to make a voice-sigaled call *to* a standard phone or an MLC-6 phone, it will ring.)

Speakerphone Performance Tips

The speaker on your MLS-18D, MLS-12D, or MLS-12 phone has a sensitive sound-activated switch. Room acoustics and background noise can affect the proper operation of the speaker. To ensure that your speaker works effectively, follow these guidelines:

- Avoid placing your phone in areas with high background noise caused by loud voices, radios, heaters, air conditioning fans, printers, copiers, typewriters, or other noisy office equipment.
- When talking, always face your phone and stay within two feet of it.
- Avoid talking before the other person is finished speaking. When you both talk at the same time, only one person's voice comes through.
- If you have difficulty hearing the other person, increase the speaker volume. If the difficulty persists, lift the handset to continue the conversation.
- Avoid rustling papers near the microphone (lower right corner of your phone).
- Do not use your speaker to make announcements over a loudspeaker paging system connected to your system.

Standard Telephones

In addition to system phones, you can connect industry-standard touch-tone or rotary dial telephones—and even some feature phones with built-in calling features—directly to the system. You can also combine standard phones on the same extension with system phones or other devices, without using expensive adapters or connectors.

Standard phones can do many of the things that system phones can do, and you can save money by using them in certain situations when a system phone is not needed. Follow these guidelines when using standard phones:

- Use standard phones as power failure backups. System phones will not work without power. In the event of a power failure, standard phones at extensions 10 and 16 can connect to lines 1 and 3, respectively, for continued operation. You can connect standard phones in combination with system phones at power failure extensions, or you can simply keep spare standard phones at those extensions to serve as replacements in case of a power failure.
- Set Automatic Line Selection for standard phones to “intercom first.” This enables a user at a standard phone extension to access system features, including intercom calling. (See “Automatic Line Selection” in Chapter 5 for instructions.)
- To use a system calling feature, press [#] followed by its dial code. (Instructions for using these features on standard phones are included in Chapter 5, “Feature Reference.”)
- To use a System Speed Dial number, press [#] followed by its two-digit code when you hear intercom dial tone. (For details, see “System Speed Dialing” in Chapter 5.)
- Use the switchhook (or Recall or Flash button, if available) on a standard phone to place calls on hold, transfer a call, or set up a conference call. (For details, see “Using the Switchhook” later in this chapter, or “Hold,” “Transfer,” and “Conference” in Chapter 5.)

Ringling Patterns

You can tell what kind of call you are receiving by the way your standard phone rings:

- An outside call will *ring . . . ring . . . ring*.
- An intercom call will *ring-ring . . . ring-ring . . . ring-ring*.
- A transferred call, or a call on hold that is ringing back, will *ring-ring-ring . . . ring-ring-ring . . . ring-ring-ring*.

NOTE:

If you use the system with PBX or Centrex lines, the PBX/Centrex distinctive ringing patterns are not passed to phones. Phones use the ringing patterns described here instead.

Dial Tones

You will encounter two different dial tones when making calls:

- **Outside dial tone** is generated by your local phone company and indicates that you can make an outside call.
- **Intercom dial tone** is generated by the system and indicates that you can make an inside, or *intercom*, call.

It is important that you recognize the difference between the two types of dial tones. The best way to do this is to listen to each one and compare them. To hear the difference between the two dial tones, lift the handset. The dial tone you hear (assuming the phone has been changed to select intercom first, as recommended in this guide) is an intercom dial tone. To hear outside dial tone, press [9].

Using the Switchhook

Some of the call handling instructions in Chapter 5 direct you to “rapidly press and release the switchhook.” Pressing the switchhook for 1/4 to 1 second sends a signal over the line called a *switchhook flash*. However, do not press the switchhook *too* quickly. If you press the switchhook and nothing happens, try again and press it a *little* longer.

NOTE:

If your phone has a button labeled “Recall” or “Flash,” use that button instead of pressing the switchhook. For more information, see “Recall” in Chapter 5.

Limitations

Because standard phones do not have line buttons or dedicated function buttons, basic call handling procedures are sometimes different from those on system phones. In addition, the following limitations apply to a standard phone:

- You cannot change option settings.
- Because there are no line buttons on standard phones, users cannot manually select a line. You can make outside calls only on automatically selected lines (for information on Automatic Line Selection, see Chapter 5).
- If a standard phone is in use, there is no indication of a second call and inside callers will hear a busy tone.
- You can make a voice-signaled intercom call *from* a standard phone, but if users try to make a voice-signaled call *to* a standard phone, it will ring.
- Users cannot access the Conference Drop or Privacy features.
- Users cannot receive a group page.

Feature Phones

A *feature phone* is a standard phone that has feature buttons in addition to the regular 12-key dial pad. For example, there are feature phones that have programmable auto dial buttons, last number redial buttons, hold buttons, and built-in speakers. Even though some feature phones have buttons like those provided on system phones, they may not work. Refer to the feature phone's documentation for more information on what these phones can do.

Combination Extensions

A *combination extension* is an extension with two devices connected to it—either two standard devices, or a system phone and a standard device (but *not* two system phones). (Appendix C provides instructions for installing a combination extension.)

Using the telephones in a combination extension is fairly simple. The main thing to understand is that the two telephones share a single extension in the same way that several home telephones share a single line. A system phone works like it always does and a standard phone works like it always does when connected to the system. *Only one phone or device can be used at a time*, unless you want to join the two on a single call (the same way two people can pick up the same call on different telephones at home). For example:

- Both phones share the same extension number.
- Both phones share the same *voicepath*; that is, when either phone is busy, the extension is busy.
- Calls ring at both phones. If you prefer not to hear both phones ringing, turn off the standard phone's ringer.
- If you make a voice-signaled intercom call to a combination extension with a system phone, the system phone will receive the voice signal; the standard phone will not ring.
- The lights on the system phone show what the standard phone is doing as well as what the system phone is doing. For an explanation of light patterns, see "Lights" at the beginning of this chapter.
- You can handle a call on the standard phone by pressing buttons on the system phone. For example, you can use the system phone to select a specific outside line, and conduct the call on the standard phone. Or, if you are on a call using the standard telephone, you can put that call on hold by pressing [*Hold*] on the system phone. To do this, it is not necessary to lift the handset of the system phone. (Held calls cannot be retrieved from a standard phone in a combination extension.)
- While you are on a call on a standard phone, you can activate calling features from the system phone

-
- If Privacy is active at a combination extension, no other extension can join a call in progress at either the system phone or the standard device connected to it. (However, a phone can interrupt a call on the other phone or standard device at that same extension. For example, if a system phone and modem are combined at an extension, picking up the handset of the system phone could interrupt a modem transmission.)
 - The PARTNER headset is a tip/ring device (equivalent to a standard phone) and can be used in combination with a phone.

Using Auxiliary Equipment

4

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There are a variety of ways to set up auxiliary equipment—the setup you choose depends upon your needs and the number of devices you have. This chapter presents the most common setups.

This chapter does not cover how to physically connect the equipment, or how to change system option settings. System option names are shown in **boldface** type; for more information on a specific option, refer to the option name in Chapter 5. You should also refer to Appendix C for installation guidelines and to the manufacturer's documentation for complete details on the equipment you connect.

Fax Machines

This section presents several ways that you can set up fax machines to work with your system. "Using Fax Machines" explains how to transfer calls and use the Notify feature on an AT&T fax machine. The illustrations on the following pages show how to set up fax machines in various configurations, change system option settings to work with them effectively, and use fax machines with the setup being discussed.

Using Fax Machines

Transferring a Call to the Fax Machine

There are two situations in which you would want to transfer a call to your fax machine:

- You might answer an outside call and hear a fax machine signaling. (A fax signal is a single beep sequence—*beep . . . beep . . . beep*). If you hear this, you should transfer the call immediately to the fax extension.

-
- You might be on a call and the person to whom you are speaking has a fax machine connected to his or her phone and wants to fax you something. You can receive the fax by transferring the call to the fax extension. Tell the other party to wait until the fax tone sounds before pressing the fax machine's Start button.

To transfer the call to the fax extension:

- On a system phone, press [*Transfer*] and dial the fax machine's extension number or press an intercom Auto Dial button set up for the fax machine. When the fax machine answers, hang up.
- On a standard phone, rapidly press and release the switchhook to place the call on hold, then dial the fax extension number and hang up.

Using the Fax Machine's Notify Feature

Some AT&T fax machines (like the AT&T 5300, 5350, 9025 Plus, and 9035 Plus) have a feature called *Notify*. After such a machine receives a fax call, it automatically dials a number and plays a recorded message, such as, "You have just received a fax." If you need to know exactly when a fax comes in, or if your fax machine is located in an isolated part of your building, you can use Notify in one of two ways:

- Set up the fax machine to make a ringing or voice-signaled call to another extension. (Include [***] plus the extension number for a voice-signaled call.)
- Set up the fax machine to group page all system phones (by dialing [***] [*Z*]) and then play the recorded message.

For the above examples, set up the fax machine extension's **Automatic Line Selection** for "intercom first," followed by whatever outside lines you want to assign to it. If the machine has an auto dial feature, include a 9 and a pause before each auto dial number. When manually making a call, dial [*9*] to get an outside line.

Setting Up Fax Machines

There are many ways to set up fax machines. The following configurations are basic and easy to use:

- Fax machine with its own fax line. Good for light or moderate fax traffic. This basic setup uses a published fax number.
- Fax machine line saver. Good for light fax traffic, with no need for a published fax number.
- Fax and telephone combination. Lets you receive both voice and fax calls on the same line (but not at the same time).

Fax Machine with its Own Fax Line

The fax machine setup shown in Figure 4-1 is good for light or moderate fax traffic. The fax machine has its own line (line 4), the number of which is published as the fax number. (The fax line can be used by other phones when all other lines are busy.) The fax machine is connected to its own extension (extension X).

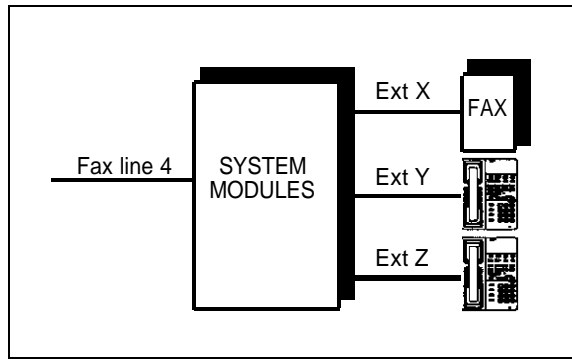


Figure 4-1. Fax Machine with its Own Line

To Use

The fax machine automatically answers all calls that come in on the fax line. If a call comes in on another line, you can transfer it to the fax extension. (See "Transferring a Call to the Fax Machine" earlier in this chapter.)

When you send a fax, the system automatically selects the fax line.

To Set Up

1. Set **Automatic Extension Privacy (#304)** for extension X to Assigned.
2. Set **Line Ringing** for line 4 on extension X to Ring. On all other extensions, set line 4 to No Ring.
3. Set **Automatic Line Selection** for extension X to select line 4 first. On all other extensions, set Automatic Line Selection to select line 4 last, or exclude line 4 from the Automatic Line Selection sequence if the other extensions should not use it to make outgoing calls.

Fax Machine Line Saver

If you do not use your fax machine enough to justify paying for its own outside line, you can put the machine on its own extension (shown in Figure 4-2). With this setup, you must transfer calls to the machine manually.

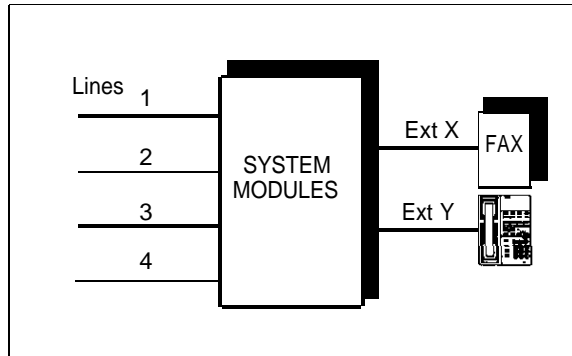


Figure 4-2. Fax Line Saver Setup

To Use

When a person at a system extension (for example, extension Y) answers a call and hears a fax machine signaling on the other end, the person can transfer the call to extension X—the fax extension. (See “Transferring a Call to the Fax Machine” earlier in this chapter.)

To send a fax transmission with this setup, simply lift the handset on the fax machine—an outside line will be selected automatically.

To Set Up

1. Set **Automatic Extension Privacy (#304)** for extension X to Assigned.
2. Set **Line Ringing** for all lines on extension X to No Ring.
3. Set **Automatic Line Selection** for extension X to the order in which you want the fax machine to select outside lines.

Fax and Telephone Combination

If you want to connect a fax machine but cannot spare an extra extension, or if your fax machine does not have a built-in telephone, you can connect a telephone and a fax machine to a single extension (Figure 4-3). (See "Combination Extensions" in Appendix C for information on connecting two devices on one extension.)

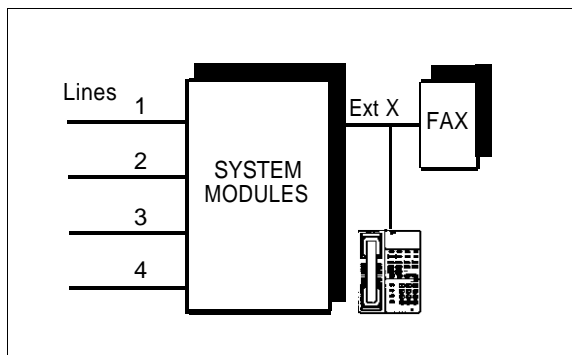


Figure 4-3. Fax and Telephone Combination

To Use

When anyone in the system hears a fax call coming in, they can transfer the call to extension X, the fax extension. If the fax machine is not set up to automatically answer a call, you must press the fax machine's Start button. (See "Transferring a Call to the Fax Machine" earlier in this chapter.)

To send a fax, simply lift the handset on the fax machine. Or, if your fax machine does not have a built-in telephone, use the phone to dial the call. An outside line will be selected automatically.

When the fax machine is idle, you can use the phone at the extension to make or receive calls.

To Set Up

1. Set **Automatic Extension Privacy (#304)** for extension X to Assigned.
2. Set **Line Ringing** and **Automatic Line Selection** for all lines at extension X as desired. The fax machine will use the same settings as the phone.
3. Set up the fax machine to answer calls automatically. Refer to the fax machine's documentation for instructions.

Answering Machines

You can use an answering machine to answer calls at night when no one is around, or during business hours when no one can get to the phone. If you have an AT&T answering machine with the Call Intercept feature, you can pick up a call that has been answered by the answering machine by joining the call from any system phone. When you do so, the system sends the answering machine a signal that makes it hang up.

The following are ways you can connect answering machines to your system:

- Single answering machine. This basic setup covers all the lines in the system. Anyone on the system can call the machine to retrieve messages.
- Multiple answering machines. If you get too many calls for one machine to cover, you can connect two or more machines to cover all calls.
- Personal answering machine. An answering machine can share an extension with a phone to answer calls to the extension.

Single Answering Machine

The single answering machine setup (Figure 4-4) serves the entire system. The answering machine is connected to its own extension, and covers all the lines in the system, one at a time.

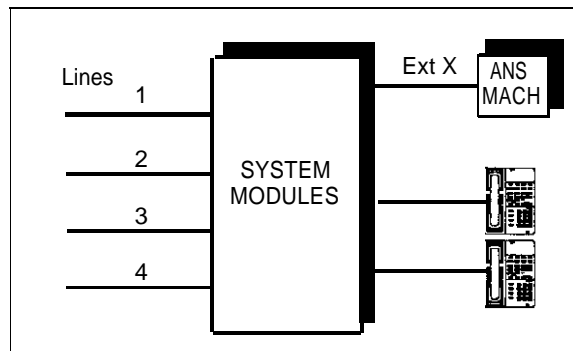


Figure 4-4. Single Answering Machine

To Use

- Go to the machine and manually play back messages.
- From any system extension, make an intercom call to the answering machine extension. When the machine answers, dial its message retrieval code.
- From outside the system, call in on any line that the machine covers. When the machine answers, dial its message retrieval code. If someone else answers, ask to be transferred to the answering machine's extension.

To Set Up

1. Set **Line Ringing** for all lines assigned to extension X to Ring.
2. Adjust the answering machine to answer according to your needs. For example, set the machine at 4 rings during the day so someone has a chance to pick up the call.

Multiple Answering Machines

If a single answering machine cannot handle all your calls, you can set up two or more machines (Figure 4-5) so that a call does not go unanswered. If the answering machine is busy, a second call will be answered. A setup such as this might be used by a movie theater to announce show times to people calling for information.

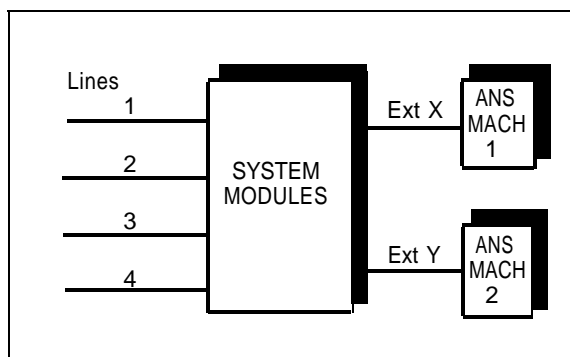


Figure 4-5. Multiple Answering Machines

To Use

- Go to the machine and manually play back messages.
- From any system extension, make an intercom call to the answering machine extension. When the machine answers, dial its message retrieval code.
- From outside the system, call in on any line that the machine covers. When the machine answers, dial its message retrieval code. If someone else answers, ask to be transferred to the answering machine's extension. Note, however, that when calling in from outside, you can only retrieve messages from the first machine that answers.

To Set Up

1. For extensions X and Y, set **Line Ringing** for all lines to Ring.
2. Adjust both answering machines to answer on a different number of rings (so they do not both try to pick up the same call). For example, set answering machine 1 to 4 rings and answering machine 2 to 6 rings.

If you cannot adjust the number of rings, you may want to set answering machine 1 to answer lines 1 and 2, and answering machine 2 to answer lines 3 and 4. To do so, set lines 1 and 2 to Ring at extension X and lines 3 and 4 to Ring at extension Y.

Personal Answering Machine

A personal answering machine (Figure 4-6) is used to answer all the calls that ring on the lines at a certain extension. It is useful for the following situations:

- When you do not want to dedicate an extension to an answering machine
- When an extension receives a lot of calls

NOTE:

If you have an answering machine and a phone on the same extension, the answering machine will only be able to answer calls when the phone is idle. See “Combination Extensions” in Appendix C for information on connecting two devices on one extension.

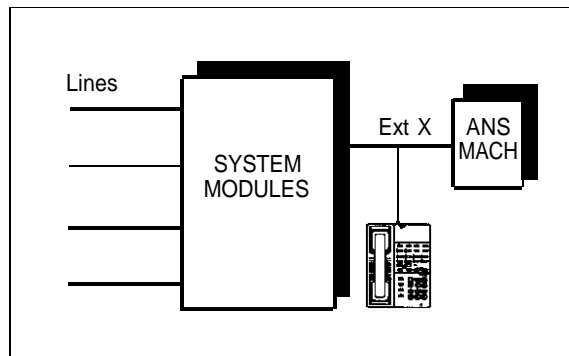


Figure 4-6. Personal Answering Machine

To Use

- Go to the machine and manually play back messages.
- From any system extension, make an intercom call to the answering machine extension. When the machine answers, dial its message retrieval code.
- From outside the system, call in and have someone transfer you to the extension. When the machine answers, dial the message retrieval code. Or, call in when no one will answer before the answering machine does.

To Set Up

1. Set **Line Ringing** for all lines at extension X to the desired ring (Ring or No Ring).
2. Adjust the answering machine to answer on the third or fourth ring so that it does not answer calls before someone else can.

Modems

A modem allows you to connect terminals or PCs to the system. The modem connects directly to an extension jack and has access to any line available to that extension.

NOTE:

If you connect a high-speed modem to an extension jack, you may experience some degradation of efficiency and throughput, depending on the quality of the outside lines connected to the system. To solve the problem, either connect modems directly to the network interface jacks, or contact your local telephone company for information about upgrading line quality.

Stand-Alone Modem for Placing Calls Only

A modem and a terminal allow you to dial out and connect to computer bulletin boards and other data services. This setup, which lets you dial out but not receive calls, is shown in Figure 4-7. Note that the telephone is optional, and can be used if you want the terminal to share an extension with a phone. (See “Combination Extensions” in Appendix C for information on connecting two devices on one extension.)

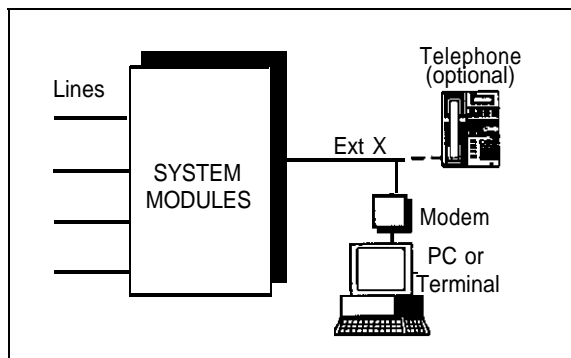


Figure 4-7. Stand-Alone Modem for Placing Calls Only

To Use

Follow the modem manufacturer's instructions.

To Set Up

1. Set **Automatic Extension Privacy (#304)** for extension X to Assigned.
2. If the modem will only dial outside the system, set **Automatic Line Selection** for extension X to outside lines first. If you will also use the modem for calls within the system, set **Automatic Line Selection** to intercom first, and include a 9 in the modem's dialing sequence for outside calls.
3. Set **Line Ringing** to No Ring.
4. Set up the modem so it will not answer incoming calls. Refer to the device's documentation for instructions.

Send and Receive Modem

If you need to place *and* receive calls with the modem, use the setup shown in Figure 4-8. This setup makes line 4 the primary modem line, but keeps the line available for users at other extensions when all other lines are busy.

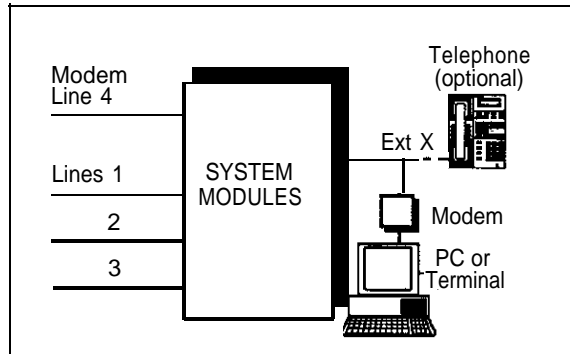


Figure 4-8. Send and Receive Modem

To Use

Calls on the modem line (line 4) ring only at extension X. Likewise, line 4 is the *last* line selected by other extensions in the system, so the modem line is unavailable for the modem *only* when *all other lines in the system are being used*.

To Set Up

1. Set **Automatic Extension Privacy (#304)** for extension X to Assigned.
2. Set **Line Ringing** for line 4 on extension X to Ring.
3. Set **Automatic Line Selection** for extension X to select line 4 first; for all other extensions set Automatic Line Selection to select line 4 last. That way, the modem line is used for outgoing voice calls only when all other lines are busy.
4. Set up the modem so it will answer incoming calls. Refer to the device's documentation for instructions.

Credit Card Scanners

Many retail businesses and restaurants use credit card scanners to get instant approval of credit card purchases. The system allows your credit card scanners to share the lines in your system. You can install a credit card scanner on an extension by itself, or combine it with a system phone or a standard phone on the same extension (Figure 4-9). (See “Combination Extensions” in Appendix C for information on connecting two devices on one extension.)

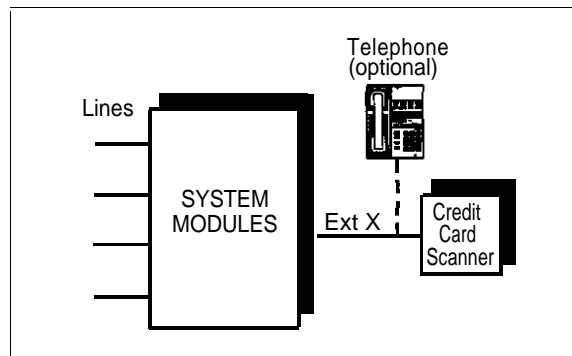


Figure 4-9. Credit Card Scanner

To Use

When you make a call on the credit card scanner, an outside line is selected automatically. If you combine the credit card scanner with a system phone or a standard phone, you cannot use the phone while the credit card scanner is operating.

To Set Up

1. Set **Automatic Extension Privacy (#304)** for extension X to Assigned.
2. Set **Automatic Line Selection** for extension X to outside lines first.

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Overview

This chapter provides reference information for all system features, including system and telephone options, calling features, and general call-handling topics. Features are listed in alphabetical order. If applicable, system and telephone options also include the procedure code (# and three-digit number) in the heading.

Each feature includes the following information, if applicable:

- Description
- Related Features
- Considerations
- Valid Entries (✓ = factory setting)
- Changing Settings
- Using

See Chapter 2 for a review of the methods and buttons you use to change option settings.

All of the instructions in this chapter assume that system phones select outside lines first and standard phones select intercom first (as determined by each extension's setting for **Automatic Line Selection**).

Abbreviated Ringing (#305)

Description

This telephone option turns Abbreviated Ringing on or off at a specified extension. When a user is on a call and Abbreviated Ringing is on, an incoming call rings only once. The green light next to the line button flashes until the call is answered or the caller hangs up. Turning this option On prevents incoming calls from distracting users when they are busy on another call. To allow calls to ring repeatedly, set Abbreviated Ringing to Off.

Considerations

- Abbreviated Ringing works for both outside calls *and* intercom calls.
- You may want to turn Abbreviated Ringing Off for receptionists and others who handle many calls quickly, so they have an audible reminder of incoming calls.
- This option applies only to system phones.

Valid Entries

- 1 = On (incoming calls ring once) ✓
- 2 = Off (incoming calls ring repeatedly)

Changing Settings

To change the Abbreviated Ringing setting for an extension, follow these steps from extension 10:

1. Press [*Feature*] [*0*] [*0*].
*The phone beeps once, and the light next to [*Spkr*] is green flutter.*
2. Press left [*Intercom*] twice.
*The light next to left [*Intercom*] is green steady.*
3. Press [*#*] [*3*] [*0*] [*5*].
4. Dial the two-digit number of the extension (10–21) you want to change.
The Message light is red steady if Abbreviated Ringing is On, red flash if it is Off.
5. Press [*1*] to turn on Abbreviated Ringing, or press [*2*] to turn off Abbreviated Ringing.
The Message light changes to show the new setting.
6. If you make a mistake or want to change the setting for another extension, begin again at Step 3.
7. When you are finished, press [*#*] and a three-digit code for another option or press [*Feature*] [*0*] [*0*].

Answering Calls

Description

This section describes how users can answer calls ringing at their extensions.

Related Features

A user can join a call in progress at another extension, as long as Privacy is not on for that extension. See **Joining Calls** and **Privacy** for more information.

How to Answer Calls

System Phone

If you are using an MLC-6 phone, make sure the handset is turned on before using the following instructions.

- When the telephone is ringing, lift the handset.
You are connected to the incoming call. If more than one line is ringing, you are connected to the line that has been ringing longest. If the call is an intercom call and you have a display phone, the caller's extension number briefly appears on your display.
- To answer a call on a specific line:
 1. Press the button for the line you want to answer.
 2. Lift the handset or press [*Spkr*].
You are connected to the call.
- To answer a call when you are already on a call:
 1. Press [*Hold*].
The call you are on is placed on hold.
 2. Press the button for the new call.
You are connected to the new call.
 3. To return to the first call, put the second call on hold and press the line button for the first call.
- To answer a voice-sigaled call (phone beeps and you hear the caller's voice):
 - If the microphone is on, you can speak after the beep.
 - If the microphone is not on, press [*Mic*] or lift the handset.

Standard Phone

When the telephone is ringing, lift the handset.
You are connected to the incoming call.

Auto Dialing

Description

This telephone option lets MLS-18D, MLS-12D, and MLS-12 system phone users store outside numbers or extension numbers on any of the eight programmable Auto Dial buttons on the top two rows of their phones. Users can then dial the number with a touch of the button.

Related Features

- You can include special functions, such as pause, in an outside phone number. See **Special Dialing Functions**.
- You can set up an Auto Dial button to page all system extensions. See **Group Paging**.

Considerations

- Auto Dialing is not available on MLS-6, MLC-6, or standard phones.
- If you store an extension number on an Auto Dial button with lights, the lights show calling activity at the extension. See “Lights” in Chapter 3.
- When storing emergency numbers and/or making test calls to those numbers, you should: 1) Remain on the line and briefly explain to the dispatcher the reason for the call before hanging up. 2) Perform such activities in the off-peak hours, such as early morning or late evening.
- For PBX or Centrex systems that require a dial-out code to make calls outside the PBX or Centrex system, include the dial-out code and a pause on the Auto Dial button when storing an outside number.

Changing Settings at the User’s Phone

To store (or remove) an Auto Dial number directly at a user’s MLS-18D, MLS-12D, or MLS-12 phone:

1. Press [*Feature*] [*0*] [*0*].
 2. Press the button on which you want the Auto Dial number stored (or removed).
 3. To store an Auto Dial number, dial the number (up to 20 digits including special functions). For example:
 - For an outside phone number, dial the phone number. For example, to store 555-2398, press [*5*] [*5*] [*5*] [*2*] [*3*] [*9*] [*8*].
 - For an extension number, press left [*Intercom*] and the two-digit extension number (10–21). Include a [***] before the extension number to voice-signal the extension. For example, to set up a button to voice signal extension 20, press left [*Intercom*] [***] [*2*] [*0*].
- To remove the number from a button, press [*Mic*] instead of dialing a number.
4. To store (or remove) another Auto Dial number, begin again at Step 2.
 5. When you are finished, press [*Feature*] [*0*] [*0*].

Changing Settings From Extension 10

To store (or remove) an Auto Dial number remotely from extension 10:

1. Press [*Feature*] [*0*] [*0*].
2. Press left [*Intercom*] twice.
3. Press right [*Intercom*].
4. Dial the two-digit number of the extension (11–21) for which the number will be stored (or removed).
Extension 10 now functions as if it were the extension for which the number will be stored (or removed).
5. Press the button on which you want the Auto Dial number stored (or removed.)
6. To store the Auto Dial number, dial the number (up to 20 digits including special functions). For example:
 - For an outside phone number, dial the phone number. For example, to store 555-2398, press [*5*] [*5*] [*5*] [*2*] [*3*] [*9*] [*8*].
 - For an extension number, press left [*Intercom*] and the two-digit extension number (11–21). Include a [***] before the extension number to voice-signal the extension. For example, to set up a button to voice signal extension 20, press left [*Intercom*] [***] [*2*] [*0*].To remove the number from a button, press [*Mic*] instead of dialing a number.
7. To store (or remove) another number for the same extension, repeat steps 5 and 6. To store a number for a different extension, begin again at Step 3.
8. When you are finished, press [*Feature*] [*0*] [*0*].

Using

1. You can lift the handset or press [*Spkr*], but you do not have to do so.
2. If you want to call on a specific line, press the desired line button.
3. Press the Auto Dial button on which the number is stored.
The system automatically selects a line for an outside number (if you did not specify one), turns on the speaker (if the handset is in the cradle), and dials the Auto Dial number. If you have a display phone, the number being dialed will display on your phone.

Automatic Extension Privacy (#304)

Description

This telephone option assigns or removes Automatic Extension Privacy at a specified extension. When Automatic Extension Privacy is assigned, it prevents users from joining active calls at that extension. This option typically is assigned to extensions with fax machines, modems, and credit card scanners, which make and receive data calls that should not be interrupted.

Considerations

- If you want to be able to intercept calls to an auxiliary device—such as an answering machine—make sure Automatic Extension Privacy is Not Assigned for that extension.
- To have Privacy on an MLS-6, MLC-6, standard phone, or other device (such as a fax or modem), you must use this feature.

Valid Entries

- 1 = Assigned
- 2 = Not Assigned ✓

Changing Settings

To change the Automatic Extension Privacy setting for an extension, follow these steps from extension 10:

1. Press [*Feature*] [*0*] [*0*].
*The phone beeps once, and the light next to [*Spkr*] is green flutter.*
2. Press left [*Intercom*] twice.
*The light next to left [*Intercom*] is green steady.*
3. Press [*#*] [*3*] [*0*] [*4*].
4. Dial the two-digit number of the extension (10–21) you want to change.
The Message light is red steady if Automatic Extension Privacy is Assigned, red flash if it is Not Assigned.
5. Press [*1*] to assign Automatic Extension Privacy, or press [*2*] to unassign Automatic Extension Privacy.
The Message light changes to show the new setting.
6. If you make a mistake or want to change the setting for another extension, begin again at Step 3.
7. When you are finished, press [*#*] and a three-digit code for another option or press [*Feature*] [*0*] [*0*].

Automatic Line Selection

Description

This telephone option determines the line a user is connected to after lifting the handset to make a call. When the user lifts the handset, the system searches through the lines and connects the user to the first available one. The factory setting for the order of the search is outside lines 1 through 4, then intercom. This means if all outside lines are busy, the user will hear the intercom dial tone after lifting the handset.

For system phones, change this setting only if you want to change the order of the lines to which a user is automatically connected. For example, a telemarketing firm with WATS service on line 4 to reduce telephone expenses can set Automatic Line Selection for all telemarketers' extensions to "4, 1, 2, 3, intercom." This way the WATS line would be selected first.

For standard phones, you must set up the extension to select intercom first so the user at the extension can place intercom calls and access system features. For example, the setting for a standard phone used only for calling employees or making local calls on line 1, would be set to "intercom, 1."

Considerations

- If you want to change Automatic Line Selection for an extension and you are changing more than one option for that extension, you must change Automatic Line Selection first.
- For any phone used mainly to call other extensions, set up the extension to select intercom first.
- If your system has less than four outside lines, you must change Automatic Line Selection to include only the lines connected to the system.
- For combination extensions, the order of line selection for both devices (including a standard device) follows the Automatic Line Selection setting for the extension.
- For standard phones on PBX or Centrex systems, set this option to intercom first so users can place intercom calls and access equipment features. When users lift the handsets on standard phones, they hear intercom dial tone. To access a PBX or Centrex line, they must dial [9].

Valid Entries

Outside lines 1, 2, 3, 4, Intercom ✓
Any outside line(s) and/or intercom in any order

Changing Settings

To change the order in which the system searches for an available line for an extension, follow these steps from extension 10:

1. Press [*Feature*] [*0*] [*0*].
*The phone beeps once, and the light next to [*Spkr*] is green flutter.*
2. Press left [*Intercom*] twice.
*The light next to left [*Intercom*] is green steady.*
3. Press right [*Intercom*].
4. Dial the two-digit number of the extension (10–21) you want 10 change.
5. Press [***] [***].
6. Press left [*Intercom*] (to select intercom) and the line buttons in the order you want them to be searched.
7. When your sequence is complete, press [***] [***].
8. If you want to correct a mistake, or change the line order for another extension, begin again at Step 3.
9. When you are finished, press [*Feature*] [*0*] [*0*].

Conference Calls

Description

This section explains how to set up conference calls. A conference call connects up to three parties (including the conference originator) in a single call. Users can connect both outside and inside parties in a conference call, *but the call cannot include more than two outside parties.*

Related Features

- During the conference call, any inside party can exit the call at any time simply by hanging up. However, if an outside party hangs up during a conference call, the callers that remain in the conference may hear a dial tone. Use **Conference Drop** to remove the last-added party from a conference call.
- Users can use **System Speed Dialing** or **Auto Dialing** to add parties to the conference.
- If the conference originator puts the call on **Hold**, other parties can continue to talk. Other inside parties cannot put the call on Hold.
- If you are using the system behind a PBX or Centrex system, the PBX or Centrex system may include a conference calling feature that lets you connect multiple callers *on a single PBX or Centrex line*. The number of callers you can connect depends on your PBX or Centrex system. For more information on such features, see the documentation for your PBX or Centrex system. (When your Centrex or PBX documentation tells you to use a switchhook flash, use the **Recall** feature instead.)

Considerations

- Do not add a busy or ringing outside call to a conference; if you do, all callers hear the busy or ringing signal. If you hear a busy signal or the party does not answer, reconnect with the held party by pressing the line button.
- Users cannot join a conference call; the originator must add each party to the conference.
- Conference calls cannot be transferred.
- When the originator hangs up, the conference is disconnected.

Using

System Phone

1. Set up the call to the first party. (You can call the party, pick up the call from hold, or answer an incoming call.)
You are connected with the first party.
2. Press [*Conf*].
The first party is now on hold.
3. To add an outside party, press a line button and dial the outside number. If the number is busy or does not answer, press the line button of the held call to reconnect to the first party.

To add an inside party, press an intercom button and dial the two-digit extension number and wait until the party answers. If the extension is busy or does not answer, press the intercom button of the held call to reconnect to the first party.
4. Press [*Conf*] again to add the second party to the call.
You are now connected with both parties.

Standard Phone

1. Set up the call to the first party. (You can call the party, pick up the call from hold, or answer an incoming call.)
You are connected with the first party.
2. Press the switchhook down once rapidly.
The first party is now on hold. You hear the intercom dial tone.
3. To add an outside party, dial [*2*] plus the outside number. If the number is busy or does not answer, hang up and the first party rings back.

To add an inside party, dial the two-digit extension number. If the extension is busy or does not answer, press the switchhook down once rapidly and you will be reconnected with the first party.
4. When the second party answers, press the switchhook down once rapidly.
You are now connected with both parties.

Conference Drop

Description

This calling feature drops the last party added to a conference call, without disconnecting the other parties. An inside party can exit a conference call at any time simply by hanging up. If the conference originator hangs up, the conference call is disconnected.

Related Features

For instructions on setting up conference calls on system and standard phones, see **Conference Calls**.

Using

System Phone

On MLS-18D, MLS-12D, and MLS-12 phones, press [*Drop*].
The last-added party is dropped from the conference.

On MLS-6 and MLC-6 phones, press [*Feature*] [*0*] [*6*].
The last-added party is dropped from the conference.

Standard Phone

Press the switchhook down once rapidly.
The last-added party is dropped from the conference.

Dial Mode (#201)

Description

This system option identifies incoming lines as touch-tone or rotary. You should check with your local phone company if you are not sure which type of line is being provided to you.

Valid Entries

- 1 = Touch-Tone lines ✓
- 2 = Rotary lines

Changing Settings

To change the Dial Mode setting for the system, follow these steps from extension 10:

1. Press [*Feature*] [*0*] [*0*].
*The phone beeps once, and the light next to [*Spkr*] is green flutter.*
2. Press left [*Intercom*] twice.
*The light next to [*Intercom*] is green steady.*
3. Press [*#*] [*2*] [*0*] [*1*].
The Message light is red steady if the current setting is Touch-Tone lines, red flash if the current setting is Rotary lines.
4. Press [*1*] to select Touch-Tone lines, [*2*] to select Rotary lines.
The Message light changes to show the new setting.
5. If you make a mistake, begin again at Step 3.
6. When you are finished, press [*#*] and a three-digit code for another option or press [*Feature*] [*0*] [*0*].

Display

Description

MLS-18D and MLS-12D phones have a 2-line, 16-character (per line) display area on the top-right corner, for feedback when making or receiving calls and changing system options. Specifically, the display shows:

- Current month, day, and time when the phone is idle
- Number dialed when making calls
- Duration of incoming or outgoing calls
- Number of the extension calling when receiving an intercom call or transferred call
- Dialed digits when changing system options and previously stored numbers when setting up Auto Dial buttons.

Considerations

- The current month, day, and time are the default display.
- Most messages display for approximately 15 seconds. (Exceptions include the default display, call timer, and feedback when changing system options.)
- The call timer displays the time a user is active on a call. It starts when the handset is lifted out of the cradle and stops when either the handset is placed back in the cradle or the call is placed on hold. When a user retrieves a held call, the timer resets to zero.
- The call timer replaces the current time of day display on MLS-12D phones. The MLS-18D phone displays the call timer in addition to the default display.
- The display contrast on the MLS-18D phone can be adjusted by pressing [*] and then using the “up” volume control button to increase the brightness or the “down” volume control button to decrease the brightness. Adjust the contrast while the phone is idle and the handset is in the cradle.

Doorphone/Internal Hot Line Phone/Emergency Phone (#604)

Description

This telephone option assigns an extension as one of the following:

- **Doorphone.** A doorphone is an auxiliary device that usually is installed near an entrance for screening visitors. When a person presses the doorphone button, a predetermined alert extension is signaled.
- **Internal Hot Line Phone.** When a person lifts the handset of an internal hot line phone, a predetermined alert extension is signaled. An internal hot line phone should be a standard phone; the alert extension can be any type of phone.
- **Emergency Phone.** When a person lifts the handset of an emergency phone, a predetermined outside number is dialed automatically. The emergency phone number might be, for example, the fire department, police, or a poison control center. An emergency phone should be a standard phone.

After you assign an extension with this option, you must also set up the alert extension(s) and/or store the outside emergency phone number(s) on the *top, leftmost* Auto Dial button. See “Changing Settings” on the next page.

Related Features

Make sure there are no call restrictions assigned to an emergency phone. See **Outgoing Call Restriction (#401)**.

Considerations

- Use this option for all three phone applications. The system differentiates the applications by the phone connected to the extension and the number stored on the Auto Dial button.
- Each doorphone and internal hot line phone can ring a specific alert extension or all system extensions.
- If an alert extension is a system phone, the signal will be a distinctive *ping-pong* sound to distinguish it from other calls. If an alert extension is a standard phone, the phone will receive normal intercom ring.
- Doorphones and internal hot line phones can have the same alert extensions.
- You cannot assign a doorphone, internal hot line phone, or emergency phone to extensions 10 and 16. You can assign a doorphone, internal hot line phone, or emergency phone to extension 15, provided Music On Hold is not activated.
- You can assign these special phone applications on up to 10 extensions (9 if Music On Hold is activated).

Valid Entries

Extensions 11–14, 17–21, and 15 if it is not activated for Music On Hold

5-14 Doorphone/Internal Hot Line Phone/Emergency Phone (#604)

- 1 = Assigned
2 = Not Assigned ✓

Changing Settings

To assign a doorphone, internal hot line phone, or emergency phone extension, follow these steps from extension 10:

1. Press [*Feature*] [*0*] [*0*].
*The phone beeps once, and the light next to [*Spkr*] is green flutter.*
2. Press left [*Intercom*] twice.
*The light next to left [*Intercom*] is green steady.*
3. Press [*#*] [*6*] [*0*] [*4*].
4. Dial the two-digit number of the extension you want to assign (see Valid Entries on the previous page).
The Message light is red steady if Doorphone/Internal Hot Line Phone/Emergency Phone is Assigned, red flash if it is Not Assigned.
5. Press [*1*] to assign Doorphone/Internal Hot Line Phone/Emergency Phone, or press [*2*] to unassign Doorphone/Internal Hot Line Phone/Emergency Phone.
The Message light changes to show the new setting.
6. If you make a mistake or want to change the setting for another extension, begin again at Step 3.
7. When you are finished, press [*Feature*] [*0*] [*0*], and then follow the instructions below.

To store the extension number of the alert extensions to ring when the doorphone button is pressed or when the internal hot line phone's handset is picked up, or the outside number to dial when the emergency phone's handset is picked up, follow these steps from extension 10:

1. Press [*Feature*] [*0*] [*0*].
2. Press left [*Intercom*] twice.
3. Press right [*Intercom*].
4. Dial the two-digit extension number assigned to the doorphone, internal hot line phone, or emergency phone.
5. Press the *leftmost* programmable Auto Dial button on the *upper* row of Auto Dial buttons.
6. To store an alert extension number or an outside emergency phone number:
 - For an alert extension number, press left [*Intercom*] and the two-digit extension number. Press left [*Intercom*] and [*7*] to alert all system extensions.
 - For an outside emergency number, dial the phone number (up to 20 digits). For example, to store 555-2398, press [*5*] [*5*] [*5*] [*2*] [*3*] [*9*] [*8*].
7. To store an alert extension number or outside emergency phone number for a different extension, begin again at Step 3.
8. When you are finished, press [*Feature*] [*0*] [*0*].

Group Paging

Description

This telephone option lets users simultaneously page all system extensions with MLS-18D, MLS-12D, MLS-12, and MLS-6 phones. When paging, the caller hears a beep and begins speaking; the caller's voice is then heard on the speakers of all idle MLS-18D, MLS-12D, MLS-12, and MLS-6 phones.

Considerations

- You can use this option manually, or you can store it on an Auto Dial button.
- MLC-6 and standard phones will not receive group-page announcements.
- If a user leaves the microphone on for hands-free answer on intercom (HFAI), the microphone is turned off when that phone receives a group page; the user must lift the handset or press [*Mic*] to answer the page. After a group page, the microphone is turned on again.

Changing Settings

To store (or remove) the group page option remotely from extension 10:

1. Press [*Feature*] [*0*] [*0*].
2. Press left [*Intercom*] twice.
3. Press right [*Intercom*].
4. Dial the two-digit number of the extension (11–21) for which you want the option stored (or removed).
5. Press the Auto Dial button on which you want the option stored (or removed).
6. To store the option, press [*Intercom*] [***] [*Z*].
To remove the option, press [*Mic*].
7. Press [*Feature*] [*0*] [*0*].

Using

System Phone

To use when stored on a button, lift the handset and press the Auto Dial button.

To use manually:

1. Lift the handset and press [*Intercom*].
2. Dial [***] [*Z*].
3. After the beep, start talking.

Standard Phone

1. Lift the handset.
2. Dial [***] [*Z*].
3. After the beep, start talking.

Hold

Description

This section explains how to place and retrieve calls on hold. Users can make and receive calls on another line while a call is on hold.

Related Features

Callers on hold will hear Music or Tones On Hold, if either is activated. See **Music/Tones on Hold (#602)**.

Considerations

- Only one party on an intercom call can put the call on hold. If both parties try to put the call on hold, the call will be disconnected.
- If you are using the system behind a PBX or Centrex system, the PBX or Centrex system may include a call hold feature that lets you place a call on hold and place another call *on the same line*. For more information, see the documentation for your PBX or Centrex system. (When your Centrex or PBX documentation tells you to use a switchhook flash, use the **Recall** feature instead.)

Using

System Phone

To place a call on hold, press [*Hold*].
The green light next to the line button winks.

To retrieve a call on hold:

1. Press the line button on which the call is held.
2. If the handset is in the cradle, lift it up or press [*Spkr*].
You are reconnected with the held call. The light next to the line button changes from winking to steady green.

Standard Phone

To place a call on hold, press the switchhook down once rapidly.
You hear the intercom dial tone. The call is on hold. (Do not hang up the handset while the call is on hold. If you hang up the handset, the phone will ring. Answering will reconnect you with the held call.)

To retrieve a call on hold at the extension:

1. Hang up or press the switchhook.
The call rings back.
2. Lift the handset.
You are reconnected with the held call.

Hold Disconnect Time (#203)

Description

This system option lets you change the hold disconnect time. When a caller on hold hangs up, the local telephone company may send a special signal to the system to free the line. There are two possible signals: a long signal (450 milliseconds) used by most telephone companies, or a short signal (50 milliseconds) used by a few telephone companies. The length of the signal is called the *hold disconnect time*.

Considerations

- Use this procedure only if abandoned calls on hold do not disconnect within a minute.
- If you put a line on hold and the call does not disconnect within a minute after the caller hangs up, use this procedure to change the hold disconnect time to Short. If the hold disconnect time set to Short has no effect, change it back to Long.
- If the telephone company does not send a signal, the hold disconnect time should be set to Long. Users will have to disconnect held calls manually by taking the call off hold and hanging up.

Valid Entries

- 1 = Long (450 msec.) ✓
- 2 = Short (50 msec.)

Changing Settings

To change the hold disconnect time, follow these steps from extension 10:

1. Press [*Feature*] [*0*] [*0*].
*The phone beeps once, and the light next to [*Spkr*] is green flutter.*
2. Press left [*Intercom*] twice.
*The light next to left [*Intercom*] is green steady.*
3. Press [*#*] [*2*] [*0*] [*3*].
The Message light is red steady if the current setting is Long, red flash if the current setting is Short.
4. Press [*1*] to select Long, [*2*] to select Short.
The Message light changes to show the new setting.
5. If you make a mistake, begin again at Step 3.
6. When you are finished, press [*#*] and a three-digit code for another option or press [*Feature*] [*0*] [*0*].

Joining Calls

Description

Joining is adding yourself to an outside call in progress, the same way you do on a home telephone by picking up an extension. (This is different from conferencing, in which the originator “pulls you into” the call.) Only one other system extension can join a call on an outside line (for a total of one outside and two inside parties).

Related Features

- **Automatic Extension Privacy (#304)** prevents other extensions from joining calls on a specific extension. This is especially useful for answering machines, fax machines, modems, and credit card scanners, because trying to join a call on one of these devices could interfere with its operation.
- Any user with an MLS-18D, MLS-12D, or MLS-12 phone can use **Privacy** to prevent other extensions from joining a call at their extension.

Considerations

- You cannot join an intercom call or a conference call.
- You cannot put a joined call on hold.
- This feature is not available on standard phones.

How to Join a Call

System Phone

A steady red light at a line button indicates a call is in progress. Press the line button on which the call is being conducted and lift the handset or press [*Spkr*]. *The red and green lights alternately flash. You are now joined with the call.*

You can tell when someone has joined your call when the lights next to the line button change to alternately flashing red and green.

Last Number Redial

Description

This calling feature dials the last outside number manually dialed (maximum 20 digits per phone number). This feature is useful for *immediately* redialing a busy number.

Considerations

You cannot redial numbers dialed using an Auto Dial button or a System Speed Dial code.

Using

System Phone

On MLS-18D, MLS-12D, and MLS-12 phones:

1. If you want, lift the handset.
2. Press [*Last Num*].

On MLS-6 and MLC-6 phones:

1. If you want, lift the handset.
2. Press [*Feature*] [*0*] [*5*].

Standard Phone

1. Lift the handset.
You hear the intercom dial tone.
2. Dial [*#*] [*0*] [*5*].

Line Ringing

Description

This telephone option lets you specify which outside lines will ring on each extension. The factory setting is that all outside lines will ring on all extensions. Change this setting if you want any lines on an extension not to ring. No Ring is useful for all extensions except 10 when a receptionist answers all calls, or for phones with no regular users, such as in a conference room.

Considerations

- If an extension is set to No Ring, that extension will have to press the line button with the flashing red light to answer the call.
- Transferred calls will ring at an extension (even on lines set to No Ring).
- If you want to use a standard phone to answer calls, make sure the extension is set to Ring.

Valid Entries

Ring ✓
No Ring

Programming

To change which outside lines ring at an extension, follow these steps from extension 10:

1. Press [*Feature*] [*0*] [*0*].
*The phone beeps once, and the light next to [*Spkr*] is green flutter.*
2. Press left [*Intercom*] twice.
*The light next to left [*Intercom*] is green steady.*
3. Press right [*Intercom*].
4. Dial the two-digit number of the extension (10–21) you want to change.
The light next to each line button is green steady if the setting is Ring, green flutter if the setting is No Ring.
5. To change the setting for any lines at that extension, simply press the line button until the green light shows the proper setting.
6. To change the setting for another extension, begin again at Step 3.
7. When you are finished, press [*Feature*] [*0*] [*0*].

Making Calls

Description

A user can make an outside call by dialing an outside phone number or an intercom call by dialing an extension number. An intercom call is a call between two extensions without using an outside line. There are also several ways to *speed dial* a number—see “Related Features” below.

Related Features

- You can store an outside number or an extension number on an Auto Dial button, so users can dial the number with a single touch. To store Auto Dial numbers, see **Auto Dialing**.
- You can program outside numbers for the entire system, so that a user can dial a number by pressing [*Feature*] (or [#] on a standard phone) plus a two-digit code (20–79). For more information, see **System Speed Dialing**.
- If a user lifts the handset before pressing a line button, the system automatically selects the first available outside line or the intercom. (The order in which the system makes a selection is determined by the **Automatic Line Selection** for the extension.)
- If dialing restrictions have been selected for an extension, the system may prevent a user at that extension from placing certain types of calls. For example, if an extension is restricted to allow incoming calls only, the user will not be able to dial out at all. See **Outgoing Call Restriction (#401)** for more information.
- A user can page all system extensions with MLS-18D, MLS-12D, MLS-12, and MLS-6 phones simultaneously. See **Group Paging**.

How to Make an Outside Call

The following instructions assume that system phones are set (using **Automatic Line Selection**) to automatically select outside lines first, and standard phones are set to select intercom first. This means that when a user with a system phone lifts the handset, the user will hear outside dial tone; but when a user with a standard phone lifts the handset, the user will hear intercom dial tone.

System Phone

If you are using an MLC-6 phone, make sure the handset is turned on before using the following instructions. Also, the MLC-6 phone has no speaker, so you must use the handset to make a call.

1. Lift the handset or press [*Spkr*]. To call on a specific line, press an idle (unlit) line button and then lift the handset.
The light next to the line button is steady green; you hear outside dial tone.
2. Dial the phone number or System Speed Dial code, or press an outside Auto Dial button.
On a system display phone, the dialed number appears on the display.

If you are using a PBX or Centrex line, you may also need to use a dial-out code (usually 9) before you dial a number outside the PBX or Centrex system.

Standard Phone

1. Lift the handset.
You hear intercom dial tone.
2. Dial [9] to get an outside line.
You hear outside dial tone.
3. Dial the phone number.

If you are using a PBX or Centrex line, you may also need to use a dial-out code (usually 9) before you dial a number outside the PBX or Centrex system.

How to Make an Intercom Call

System Phone

1. You can lift the handset or press [Spkr] before dialing.
2. Press an idle [Intercom] button.
You hear intercom dial tone, and the light next to the [Intercom] button is steady green.
3. Ring or voice-signal the extension:
 - To ring the extension, dial the two-digit extension number or press an intercom Auto Dial button.
 - To voice-signal a system phone at the extension, dial [*] plus the two-digit extension number or press an intercom Auto Dial button programmed for voice signaling. When you hear a beep, start talking.
Your voice is heard on the other extension's speaker. If someone is using the phone at the other extension (or that extension is an MLC-6 phone or a standard phone), it will ring instead.

Standard Phone

1. Lift the handset.
You hear intercom dial tone.
2. Ring or voice-signal the extension:
 - To ring the extension, dial the two-digit extension number.
 - To voice-signal a system phone at the extension, dial [*] plus the two-digit extension number. When you hear a beep, start talking.
Your voice is heard on the other extension's speaker. If someone is using the phone at the other extension (or that extension is an MLC-6 phone or a standard phone), it will ring instead.

Music/Tones On Hold (#602)

Description

This system option lets you activate one of the following features:

- **Tones On Hold.** Provides a repeating tone to callers on hold to let them know they are still on hold. To activate this feature, which does not require the addition of an auxiliary device, select Tones On Hold.
- **Music On Hold.** Provides music or taped messages to callers on hold. To activate this feature, you must connect an audio source, such as AT&T's Magic on Hold®, and select Music On Hold.

Considerations

- If Music/Tones On Hold is Not Active, callers on hold hear silence.
- If either Tones On Hold or Music On Hold is active, transferred callers or parties in a conference call also hear tones or music until the call is answered.
- If you choose Music On Hold, the following considerations apply:
 - Users of equipment that rebroadcasts copyrighted music or other material may be required to obtain a license from a third party such as ASCAP or BMI. AT&T's Magic on Hold does not require you to obtain such a license.
 - Music On Hold requires use of extension jack 15 and special hardware for installation. See "Connecting a Music On Hold Device" in Appendix C for installation instructions.
 - A Music On Hold device cannot share extension jack 15 with a phone.
 - If the Music On Hold audio source develops trouble (such as a bad tape), you can quickly turn it off by changing this option setting to Not Active or Tones On Hold until you are able to solve the problem.
 - To deactivate Music On Hold, refer to the instructions in Appendix C.

Valid Entries

- 1 = Tones On Hold ✓
- 2 = Not Active
- 3 = Music On Hold

Changing Settings

To change the Music/Tones On Hold setting, follow these steps from extension 10:

1. Press [*Feature*] [*0*] [*0*].
*The phone beeps once, and the light next to [*Spkr*] is green flutter.*
2. Press left [*Intercom*] twice.
*The light next to left [*Intercom*] is green steady.*

-
3. Press [#] [6] [0] [2].
The Message light is red steady if the current setting is Tones On Hold, red wink if it is Music On Hold, or red flash if it is Not Active.
 4. Press [1] to select Tones On Hold, [2] to deactivate Music and Tones On Hold, or [3] to select Music On Hold.
The Message light changes to show the new setting.
 5. If you make a mistake, begin again at Step 3.
 6. When you are finished, press [#] and a three-digit code for another option or press [*Feature*] [0] [0].

Outgoing Call Restriction (#401)

Description

This telephone option restricts calling on all lines at a specified extension. The factory setting is that all extensions are unrestricted, so change the setting only for the extensions you want to restrict.

Related Features

Use **Toll Call Prefix** to indicate whether or not a user must dial a 0 or 1 before the area code when making long-distance calls.

Considerations

- Inside Only is useful for phones in reception areas or other public rooms where you want to prevent anyone using the phone from making outside calls. It is also useful for prohibiting calls from warehouse extensions, or from extensions that should be used only for receiving orders.
- While dialing restrictions are very effective, absolute protection against misuse cannot be guaranteed. System phones give you more protection against misuse than standard phones. Therefore, we strongly recommend that you install system phones where restricting phone use is important.
- If the system is connected to a PBX or Centrex system and a dial-out code (usually 9) is needed to place calls outside the PBX or Centrex system, the system will not be able to prevent toll calls for extensions restricted to Local Only, since the PBX or Centrex system cannot distinguish between toll and local calls. If your PBX or Centrex system includes dialing restrictions, use those instead of Outgoing Call Restriction (#401). If you have PBX or Centrex dialing restrictions on a line and also use Outgoing Call Restriction (#401), both the PBX or Centrex system and this restriction may apply.

Valid Entries

- 1 = No Restriction (can make toll, local, and intercom calls) ✓
- 2 = Inside (intercom) Only
- 3 = Local (intercom and local) Only

Changing Settings

To restrict calling on available lines at an extension, follow these steps from extension 10:

1. Press [*Feature*] [*0*] [*0*].
*The phone beeps once, and the light next to [*Spkr*] is green flutter.*
2. Press left [*Intercom*] twice.
*The light next to left [*Intercom*] is green steady.*
3. Press [*#*] [*4*] [*0*] [*1*].

-
4. Dial the two-digit number of the extension (10–21) you want to change.
The Message light is red steady if the current setting is No Restriction, red flash if it is Inside Only, or red wink if it is Local Only.
 5. Press [1] for No Restriction, [2] for Inside Only, or [3] for Local Only.
 6. If you make a mistake or want to change the setting for another extension, begin again at Step 3.
 7. When you are finished, press [#] and a three-digit code for another option or press [Feature] [0] [0].

Privacy

Description

This calling feature lets users with MLS-18D, MLS-12D, and MLS-12 phones press the calling feature button, [*Privacy*], to turn Privacy on and off, preventing other users from joining calls at the user's extension.

Related Procedures

- If **Automatic Extension Privacy (#304)** is assigned for an extension, that extension normally will be private. However, if a user sometimes needs to have other co-workers join conversations, the user can press [*Privacy*] to turn Privacy on and off as needed.
- To have Privacy on MLS-6, MLC-6, or standard phones, or other devices (such as a fax or modem), you must use **Automatic Extension Privacy (#304)**.

Considerations

- When Privacy is on, the light next to [*Privacy*] at the extension is also on, indicating that others *cannot* join calls.
- This feature can be turned on and off at any time, even during a call.

Using

Press [*Privacy*] to turn the feature on; press it again to turn the feature off. *Use the button like a switch—when the light is on, Privacy is on.*

Recall

Description

This calling feature causes the system to send a timed switchhook flash over the telephone line, to “recall” a new dial tone or to access a PBX, Centrex, or local phone company custom calling feature.

Related Features

- If users have trouble with Recall, use **Recall Timer Duration (#107)** to adjust the length of the Recall signal. Your local phone company can tell you the correct setting—for most Centrex systems, the correct setting is 800 msec. (or “32”); for most PBX systems, the correct setting is 450 msec. (or “18”).
- You can press [*Spkr*] to insert a Recall signal in an Auto Dial or Speed Dial number, provided it is the first character in the stored number. (For examples, see **Special Dialing Functions.**)

Considerations

- Using Recall on an intercom call disconnects the call.
- Whenever your PBX or Centrex documentation tells you to press the switchhook when you are on a call, use the Recall feature instead. If you are already on a call, most PBX or Centrex systems require that you press the switchhook to get a new dial tone, then dial a feature access code to access a specific PBX or Centrex service.

Using

To access a PBX, Centrex, or local phone company custom calling feature (such as Call Waiting) while active on an outside line:

System Phone

On an MLS-18D, MLS-12D, and MLS-12 phone:

1. Press [*Recall*].
2. Enter the access code for the PBX, Centrex, or local phone company custom calling feature (if required).
3. To return to your original call, press [*Recall*] again.

On an MLS-6 and MLC-6 phone:

1. Dial [*Feature*] [*0*] [*3*].
2. Enter the access code for the PBX, Centrex, or local phone company custom calling feature (if required).
3. To return to your original call, dial [*Feature*] [*0*] [*3*] again.

Standard Phone

1. Press and release the switchhook (or press a Recall or Flash button on a standard feature phone that has one).
You hear the intercom dial tone.
2. Dial [#] [0] [3].
3. Enter the access code for the PBX, Centrex, or local phone company custom calling feature (if required).
4. To return to your original call, press and release the switchhook again (or press a Recall or Flash button on a standard feature phone that has one), then dial [#] [0] [3] again.

Recall Timer Duration (#107)

Description

This system option lets you change the length of the timed signal, or *switchhook flash*, generated by the system Recall feature (as well as by the Recall function used in Auto Dial or System Speed Dial numbers). Recall sends this timed signal over the phone line to the local telephone company or PBX to which the system is connected. Typically you use the Recall feature to access a PBX, Centrex, or local phone company custom calling feature (such as Call Waiting).

You should only change the factory setting under two conditions:

- If using the system Recall feature has no effect, lengthen the time.
- If your system is connected to a PBX or Centrex system and using the system Recall feature drops calls, shorten the time. (The setting typically used for PBX systems is "18" (or 450 msec.); for Centrex systems, it is "32" (or 800 msec.).)

Valid Entries

01 through 80 (25 to 2000 msec. in 25 msec. increments)
18 (450 msec.) ✓

Programming

To change the duration of the timed signal, follow these steps from extension 10:

1. Press [*Feature*] [*0*] [*0*].
*The phone beeps once, and the light next to [*Spkr*] is green flutter.*
2. Press left [*Intercom*] twice.
*The light next to left [*Intercom*] is green steady.*
3. Press [*#*] [*1*] [*0*] [*7*].
4. Enter the setting number you want. For example, press [*3*] [*2*] to change to 800 msec.
5. If you make a mistake, begin again at Step 3.
6. When you are finished, press [*#*] and a three-digit code for another option or press [*Feature*] [*0*] [*0*].

Special Dialing Functions

Description

Special functions may be needed for System Speed Dial numbers and Auto Dial numbers. Functions you can use are:

Function	Button	Display	Description
Pause	[<u>Hold</u>]	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	[<u>Spkr</u>]	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 a local phone company custom calling feature (such as Call Waiting). Use Recall only as the first entry in an Auto Dial or Speed Dial number.
Stop	[<u>Mic</u>]	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 press [<u>Feature</u>] and the two-digit Speed Dial code. (Stop cannot be used on an MLS-6 or MLC-6 phone, since it has no [<u>Mic</u>] button.)
Touch-Tone Enable	[<u>Transfer</u>]	T	Sends touch tones over a rotary line to electronic equipment such as answering machines and bank computers.

Examples

- **Pause.** To call an answering machine at 555-0529, wait 4.5 seconds, then dial 321 to retrieve messages, enter [5] [5] [5] [0] [5] [2] [9] [Hold] [Hold] [Hold] [3] [2] [1].
- **Recall:** To use a favorite Centrex/PBX feature, you have to send a timed switchhook flash, a pause, and then dial the feature. To do so, enter [Spkr] [Hold] [*] [3] [8].
- **Stop:** Your local bank-by-phone service requires that you enter a password before an account number. To set up an Auto Dial button to call the bank at 555-7898, stop so you can enter a password, and continue with the account number 6798, enter [5] [5] [5] [7] [8] [9] [8] [Mic] [6] [7] [9] [8]. To use, press the Auto Dial button. The system dials 555-7898 and stops. Enter your password and press the Auto Dial button again. The system dials 6798.
- **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 [5] [5] [5] [3] [4] [5] [4] [Transfer]. All digits pressed during the rest of the call are sent as touch tones.

System Date (#101)

Description

This system option sets the month, day, and year. The system displays only the month and day on display phones when the phone is idle. (Although the year is not displayed, it is required to account for leap year.)

Changing Settings

To change the System Date, follow these steps from extension 10:

1. Press [*Feature*] [*0*] [*0*].
*The phone beeps once, and the light next to [*Spkr*] is green flutter.*
2. Press left [*Intercom*] twice.
*The light next to left [*Intercom*] is green steady.*
3. Press [*#*] [*1*] [*0*] [*1*].
4. Enter today's date in the form MMDDYY. Include leading zeroes for single-digit months or days. For example, to enter March 4, 1993, press [*0*] [*3*] [*0*] [*4*] [*0*] [*3*].
5. When you are finished, press [*#*] and a three-digit code for another option or press [*Feature*] [*0*] [*0*].

System Reset—System Options Saved (#728)

Description

This system option resets the system while retaining the current settings. Reset the system only when it fails to function correctly after a power failure or down period.

Considerations

- The system reset begins immediately and takes only a few seconds.
- Resetting the system disconnects all active calls.
- You cannot interrupt the reset process or use any telephones in the system during the reset process.
- After a system reset, the backlit display on MLS-18D phones is changed to the default setting. See “Buttons and Indicators” in Chapter 3 for instructions on adjusting the contrast.

Using

To reset the system, follow these steps from extension 10:

1. Press [*Feature*] [*0*] [*0*].
*The phone beeps once, and the light next to [*Spkr*] is green flutter.*
2. Press left [*Intercom*] twice.
*The light next to left [*Intercom*] is green steady.*
3. Press [*#*] [*7*] [*2*] [*8*].

When the reset is completed, the current date and time appear on the display and the system is ready for use. If a power failure has occurred, the time may not be correct; change it using **System Time (#103)**.

System Speed Dialing

Description

This feature lets you store a list of up to 60 frequently-dialed phone numbers for the system. Anyone on the system can then dial a System Speed Dial number by pressing [*Feature*] (or [#] at intercom dial tone on a standard phone) and the two-digit code from 20–79.

Related Features

- System speed dialing, which lets users dial a number by pressing three buttons, is different from **Auto Dialing**, which lets users dial a number by pressing a single button.
- When entering a phone number, you can include special functions as well as digits—see **Special Dialing Functions** for more information.

Considerations

- System Speed Dial numbers can be stored only from extension 10, but can be used from any extension.
- Appendix A provides a form on which to list the System Speed Dial numbers. You can distribute a filled-in copy of that form to all users, to ensure that they know what System Speed Dial numbers are available.
- If the system is connected to a PBX or Centrex system and a dial-out code (usually 9) is needed to place calls outside the PBX or Centrex system, include the dial-out code and a pause in System Speed Dial numbers that must dial out of the PBX or Centrex system.

Changing Settings

To store System Speed Dial numbers, follow these steps from extension 10:

1. Press [*Feature*] [*0*] [*0*].
2. Assign a two-digit code to the phone number by pressing [*Feature*] and a System Speed Dial code from 20 through 79.
*If you have a display phone and a number is already assigned to the code, the number appears in the display. To replace the existing number, enter the new number, then go to Step 4. To save the existing number, press [*Feature*] and dial a different Speed Dial code.*
3. Enter the phone number (up to 20 digits including special functions).
4. To store another System Speed Dial number, begin again at Step 2.
5. When you are finished, press [*Feature*] [*0*] [*0*].

To remove System Speed Dial numbers, follow these steps from extension 10:

1. Press [*Feature*] [*0*] [*0*].
2. Press [*Feature*] and the phone number's System Speed Dial code from 20 through 79.
3. Press [*Mic*].
4. To remove another System Speed Dial number, begin again at Step 2.
5. When you are finished, press [*Feature*] [*0*] [*0*].

Using

System Phone

1. You can lift the handset or press [*Spkr*] before dialing.
2. If you want to call on a specific line, press the line button.
3. Press [*Feature*] and dial the two-digit System Speed Dial code (20–79).
If you did not specify an outside line, the system automatically selects one, turns on the speaker if the handset is in the cradle, and dials the number. The number being dialed shows on a display phone.

Standard Phone

1. Lift the handset.
You hear the intercom dial tone.
2. Press [*#*] and dial the two-digit System Speed Dial code (20–79).
The system automatically selects an outside line and dials the number.

System Time (#103)

Description

This system option sets the time that appears on system display phones.

Considerations

- Enter the time in 24-hour notation using HHMM format. In this scheme, the hours of the day are 0000 (12 midnight) to 2359 (11:59 p.m.). Since each time must have four digits, use leading zeroes when necessary. For example, to set the time to 9:00 a.m., enter [0] [9] [0] [0]. To set the time to 4:45 p.m., enter [1] [6] [4] [5].
- The time appears on system display phones as a.m. or p.m. (not in 24-hour notation).

Changing Settings

To change the System Time, follow these steps from extension 10:

1. Press [Feature] [0] [0].
The phone beeps once, and the light next to [Spkr] is green flutter.
2. Press left [Intercom] twice.
The light next to left [Intercom] is green steady.
3. Press [#] [1] [0] [3].
4. Enter a new time in HHMM 24-hour format. For example, to set the time to 2:15 p.m., press [1] [4] [1] [5].
This time will appear on a system display phone as 2:15 p.
5. When you are finished, press [#] and a three-digit code for another option or press [Feature] [0] [0].

Toll Call Prefix (#402)

Description

This system option indicates whether users must dial a 0 (for operator-assisted calls) or 1 (for direct-dial calls) before an area code when making toll (long distance) calls, *or* just the area code and number. This option should be set to reflect the dialing patterns of your local phone company.

Related Features

This option enables the system to distinguish between local and toll calls, and only applies if **Outgoing Call Restriction (#401)** for an extension is set to 3 (Local Only).

Considerations

If you are required by your local phone company to dial 1 before a long distance number, this option should be set to 1; otherwise, set this option to 2.

Valid Entries

- 1 = 0 or 1 required before Area Code and Number ✓
- 2 = Area Code and Number Only

Changing Settings

To change the Toll Call Prefix setting, follow these steps from extension 10:

1. Press [*Feature*] [*0*] [*0*].
*The phone beeps once, and the light next to [*Spkr*] is green flutter.*
2. Press left [*Intercom*] twice.
*The light next to left [*Intercom*] is green steady.*
3. Press [*#*] [*4*] [*0*] [*2*].
The Message light is red steady if the system is set to recognize long distance calls when users dial 0 or 1 followed by the area code and number. If the light is red flash, the system is set to recognize long distance numbers as the area code and number only.
4. Press [*1*] to indicate that long distance calls on your system begin with 0 or 1, followed by the area code and number, or press [*2*] to indicate that long distance calls are dialed simply by dialing the area code and number.
5. When you are finished, press [*#*] and a three-digit code for another option or press [*Feature*] [*0*] [*0*].

Transferring Calls

Description

This section explains how to transfer calls. Transferring a call lets users “pass” a call from one extension to another. Users can transfer only outside calls to other system extensions.

Related Features

- To transfer calls to an extension with a single touch, program the extension number onto an Auto Dial button—see **Auto Dialing** for more information.
- Transferred callers will hear Music or Tones On Hold if either is activated. See **Music/Tones On Hold (#602)**.

Considerations

- When you press [*Transfer*] on a system phone, the call is put on hold and its associated light winks green.
- When you transfer a call from a system display phone, the number you are transferring the call to briefly appears on the display.
- On a system phone, a transferred call will ring with an intercom ring (ring BEEP) until the originator hangs up, then it will change to a transfer ring (ring BEEP BEEP). On a standard phone, a transferred call rings with an intercom ring (ring ring) until the originator hangs up, then it changes to a transfer ring (ring ring ring).
- If you are using the system behind a PBX or Centrex system, the PBX or Centrex system may include a call transfer feature that lets you transfer a call to another Centrex extension, so that the line the call came in on is free to place and receive other calls. This feature uses the [*Recall*] button, not the [*Transfer*] button. However, to use Centrex transfer, you must be able to dial the extension directly using the Centrex extension number; if a Centrex line is shared by several extensions, you will not be able to use Centrex transfer to direct the call to a specific extension. For more information, see the documentation for your PBX or Centrex system.

How to Transfer a Call

System Phone

- To pass a call to another extension:
 1. While active on the call, press [*Transfer*].
The call is put on hold and you hear intercom dial tone.
 2. Dial the extension number to which you want the call transferred.
 3. When someone answers, announce the call, then hang up.
If no one answers or the call is refused, press the line button next to the winking green light to reconnect to the caller.

If you do not wish to announce the call, hang up as soon as you hear ringing (in Step 2 above).

-
- To make a voice-signaled transfer:
If the extension where you want to transfer the call has a system phone and you want to signal the user over the phone's speaker, in Step 2 of the previous procedure press [***] plus the two-digit extension number.
Your voice is heard through the speaker of the system phone.
 - To transfer a call with one button touch:
While on a call, press the Auto Dial button for the extension to which you want to transfer the call. (There is no need to press [*Transfer*] or [*Hold*]; this takes the place of Steps 1 and 2 of the previous procedure.)
*For an extension that has a system phone, you can store [***] plus the extension number on the Auto Dial button, to let you voice-signal calls over the phone's speaker when you transfer them.*

Standard Phone

- To pass a call to another extension:
 1. While on a call, press the switchhook down once rapidly.
You hear the intercom dial tone.
 2. Dial the extension number to which you want the call transferred.
 3. When someone answers, announce the call, then hang up.
If no one answers or the call is refused, press the switchhook again to reconnect to the caller.

If you do not wish to announce the call, hang up as soon as you hear ringing (in Step 2 above).
- To make a voice-signaled transfer:
If the extension where you want to transfer the call has a system phone and you want to announce the call over the phone's speaker, in Step 2 above press [***] plus the two-digit extension number.
Your voice is heard through the speaker of the system phone.

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When You Need Help

If you have a problem with your system, you may be able to solve it yourself by following the appropriate troubleshooting procedures described in this chapter. If not, you can call for help: **in the continental U.S., call the Helpline at 1 800 628-2888; outside the continental U.S., call your AT&T 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 Release 3)
- The number of lines and extensions in your system
- The type of phone (system or standard) and the model number, if applicable. (System phone model numbers are located on the upper right-hand corner of the phone—MLS-18D, MLS-12D, MLS-12, MLS-6, or MLC-6.)
- If you followed a troubleshooting procedure, tell the representative what you did.

Power Failure Operation

When power to the system is cut off, the first line on each 206 module automatically connects to the first extension on the module. This allows you to make and answer calls during a power outage, provided you have a standard phone connected to one of these extensions. (During a power failure, only standard phones can make and receive calls—other system features are not available.)

The system can retain option settings for approximately four days after it stops receiving power. After four days elapse, all of the system's settings return to the factory settings.

Problems and Solutions

This section describes various difficulties that might occur, possible causes for the difficulty, and procedures you can follow to try to solve the problem. Option names are shown in **boldface** type; for more information on a specific option, refer to the option name in Chapter 5.

All Phones Dead: No Dial Tone or Lights

Possible Cause 1: System module(s) is not receiving power.

What to do: Make sure the system module's power cord is plugged securely into the wall outlet.

- If the green LEDs on the modules are ON and the trouble is gone, the problem is corrected.
- If the green LEDs on the modules are ON but the trouble remains, or if the lights are FLASHING, call the AT&T Helpline.*
- If the green LEDs on the modules are OFF, go to Possible Cause 2.

Possible Cause 2: The power outlet may be 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 206 module into a different outlet. Then check the fuse box or call an electrician.
- If the appliance works, call the AT&T Helpline.*

Multiple Phones Dead: No Dial Tone or Lights

Possible Cause: One system module is not working.

What to do: Check the LEDs on the front of the system modules. If a single green LED is out, power down the system, then try reseating the module. Refer to Appendix C for instructions.

- If the LED lights, the problem is corrected.
- If the problem remains, call the AT&T Helpline.*

Trouble Making Outside Calls

Trouble making outside calls could be one of the following:

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

* In the continental U.S., help is available at 1 800 628-2888. Outside the continental U.S., call your local AT&T Authorized Dealer.

Possible Cause 1: Dial Mode is set incorrectly.

What to do: Find out if you have touch-tone or rotary service and check the **Dial Mode (#201)** setting.

- If it is set incorrectly, change it, and then try to make a call. If you can make a call, the problem is solved.
- If the Dial Mode is already set correctly, go to Possible Cause 2.

Possible Cause 2: Someone may have changed the Outgoing Call Restriction setting.

What to do: Find out if you were able to make a call without any trouble before and check the **Outgoing Call Restriction (#401)** setting to make sure it was not changed.

- If it is set incorrectly, change it, and then try to make a call. If you can make a call, the problem is solved.
- If the Outgoing Call Restriction is already set correctly, go to Possible Cause 3.

Possible Cause 3: Local phone 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 phones using the same line.

- If you cannot make calls from one phone on all lines, follow the procedure for "Other Problems with Phones," Possible Cause 2.
- If you cannot make calls using different phones, go to Possible Cause 4.

Possible Cause 4: Too many standard devices trying to dial simultaneously. (If the problem is on a system phone, go to Possible Cause 5.)

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

- If you can make a call, you may want to expand system capacity to avoid future problems. Call the AT&T Helpline.*
- If you wait 30 seconds and still do not hear a dial tone, go to Possible Cause 5.

Possible Cause 5: Local phone company line is faulty.

What to do: One at a time, unplug each outside line from the system module(s). Then plug each line into a standard telephone and try to make a call.

- If the trouble appears on the standard phone, try another line cord; if the trouble persists, report it to your local phone company.
- If the trouble does not appear on the standard phone, the trouble is with your system module(s). Call the AT&T Helpline.*

* In the continental U.S., help is available at 1 800 628-2888. Outside the continental U.S., call your local AT&T Authorized Dealer.

Phone Does Not Ring

Possible Cause 1: Volume set too low (system phone) or turned off (standard phone).

What to do: Press the volume control button to increase ringer volume, or turn ringer on.

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

Possible Cause 2: Phone's Line Ringing may be set to No Ring.

What to do: Check to see if the phone's **Line Ringing** is set to No Ring.

- If Line Ringing is set for No Ring, change it if necessary.
- If Line Ringing is set to Ring, the phone may be faulty. Follow the procedure for "Other Problems with Phones."

Calls Are Answered Automatically

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

Possible Cause: An auxiliary device answers when it should not (could occur with a fax machine, 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 its auto-answer feature off. Refer to the device's user manual.

- If the auxiliary device no longer answers calls automatically, then the problem is solved.
- If the problem remains, call the AT&T Helpline.*

Trouble Hearing Called Party

Possible Cause: If you are using a speakerphone, the volume may be too low or there may be environmental factors that affect the performance of the speaker or microphone (for example, too much background noise).

What to do: Try increasing the speakerphone volume. Also see "Speakerphone Performance Tips" in Chapter 3 for suggestions on the proper use of the speakerphone.

- If the problem remains, call the AT&T Helpline.*

* In the continental U.S., help is available at 1 800 628-2888. Outside the continental U.S., call your local AT&T Authorized Dealer.

Using the Recall Feature Has No Effect

Possible Cause: Recall Timer Duration is set 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.
- If the problem remains, call the AT&T Helpline.*

Using the Recall Feature Disconnects Call

This problem can occur when the system is installed behind a PBX or Centrex system or with a local phone company's custom calling feature such as "Call Waiting."

Possible Cause: Recall Timer Duration is set 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.
- If the problem remains, call the AT&T Helpline.*

Phone Rings Back after Intercom Call with No One at Other End

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

What to do: Always replace the handset carefully.

- If the problem remains, go to Possible Cause 2.

Possible Cause 2: Automatic Line selection is set incorrectly.

What to do: If one of the phones involved is a standard phone, set its **Automatic Line Selection** to intercom first.

- If the problem remains, call the AT&T Helpline.*

* In the continental U.S., help is available at 1 800 628-2888. Outside the continental U.S., call your local AT&T Authorized Dealer.

Combination Extension Problem: Phone Does Not Ring Properly

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

What to do: If this is a combination extension (two devices), be sure the total of the devices' Ringer Equivalence Numbers (REN) does not exceed 2.0. If it does, unplug one of the devices.

- If the ringer functions properly, the problem is with the auxiliary device; the system is okay.
- If trouble remains, go to Possible Cause 2.

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

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

- If the ringer functions properly, the problem is with the auxiliary device; the system is okay.
- If the trouble remains, go to Possible Cause 3.

Possible Cause 3: Bad adapter or auxiliary device.

What to do: Check the combination extension:

If you are using a direct connection to connect the devices, make sure the standard device is plugged into the correct jack on the bottom of the phone. See "Combination Extensions" in Appendix C for instructions.

If you are using a bridging adapter to connect the devices, first make sure the standard device is plugged into the correct jack on the adapter. See "Combination Extensions" in Appendix C for instructions. If the extension still does not work properly, unplug the adapter from the wall jack. Unplug the phone's cord from the adapter and plug it into the jack.

- If the phone works, there is a problem with the auxiliary device attached to the bridging adapter. Replace the auxiliary device. If the problem persists, call the AT&T Helpline.*
- If the phone does not work, call the AT&T Helpline.*

* In the continental U.S., help is available at 1 800 628-2888. Outside the continental U.S., call your local AT&T Authorized Dealer.

Call on Hold Hangs Up, but Line Does Not Disconnect

Possible Cause 1: Hold Disconnect Time is set incorrectly—too long.

What to do: Change **Hold Disconnect Time (#203)** from Long to Short.

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

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

What to do: Call your local phone company and find out whether they send a hold release signal. (If not, you may be able to order this service.)

- If the local phone company does not send a hold release signal, or if they do but the problem still occurs, call the AT&T Helpline.*

Calls on Hold Are Disconnected

Possible Cause: Hold Disconnect Time is set incorrectly—too short.

What to do: Change **Hold Disconnect Time (#203)** from Short to Long.

- 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 Long, call the AT&T Helpline.*

Incorrect Date and Time Appear on Phone Display

Possible Cause: Date and time are not set properly.

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

- If the display works, the problem is solved.
- If the display still does not work, follow the procedure for “Problem with Phone Display.”

Problem with Phone Display

Possible Cause: Power outage may have caused the display to show strange characters or nothing at all.

What to do: Lift the handset, dial some digits, then replace the handset in the cradle. If the display still does not work, unplug the phone from the wall jack and plug it back in.

- If the display works, the problem is solved.
- If the display still does not work, see “Other Problems with Phones.”

* In the continental U.S., help is available at 1 800 628-2888. Outside the continental U.S., call your local AT&T Authorized Dealer.

System Phone in Combination Extension Does Not Work

Possible Cause 1: Standard device is plugged into the wrong jack.

What to do: Check the combination extension:

If you are using a direct connection to connect the devices, make sure the standard device is plugged into the correct jack on the bottom of the phone—see “Combination Extensions” in Appendix C for instructions.

- If the system phone works properly, the problem is solved.
- If the phone still does not work, call the AT&T Helpline.*

If you are using a bridging adapter to connect the devices, make sure the standard device is plugged into the correct jack—see “Combination Extensions” in Appendix C for instructions.

- If the system phone works properly, the problem is solved.
- If the phone still does not work, go to Possible Cause 2.

Possible Cause 2: Wrong cord and bridging adapter used to connect the standard phone.

What to do: First, unplug the bridging adapter from the wall jack. Then, unplug the system phone from the adapter and plug it into the wall jack.

- If the system phone works properly, either the cord or the adapter must be replaced. (Use a D4BU telephone cord and an AT&T 267F2 bridging adapter.) Call the AT&T Helpline* for details.

Poor Transmission Quality on Modem

Possible Cause: A high-speed modem is connected, through an extension jack on a system module, 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 line quality.

- If the device works properly, the problem is solved.
- If the problem remains, call the AT&T Helpline.*

No Music On Hold

Possible Cause 1: Music on Hold coupler is not connected to extension port 15.

What to do: Connect the Music on Hold coupler to extension port 15. See Appendix C for instructions.

- If the device works properly, the problem is solved.
- If the device still does not work, go to Possible Cause 2.

* In the continental U.S., help is available at 1 800 628-2888. Outside the continental U.S., call your local AT&T Authorized Dealer.

Possible Cause 2: **Music/Tones On Hold (#602)** is not set correctly or the volume on the Music on Hold coupler or on the device is too low.

What to do: Check to make sure that **Music/Tones On Hold (#602)** is set to Music On Hold. If it is set correctly, turn up the volume on the Music on Hold coupler or on the device.

- If the device works properly, the problem is solved.
- If the device still does not work, call the AT&T Helpline.*

Other Problems with Phones

Possible Cause 1: Phone needs to be reset.

What to do: Unplug the cord from the base of the problem phone and (with the handset hung up) plug the cord in again.

- If the problem remains, go to Possible Cause 2.

Possible Cause 2: The telephone may be defective.

What to do: Unplug the cord from the base of the problem phone and plug it into a phone that works.

- If the other phone works, the old phone was faulty. Call the AT&T Helpline* to arrange for a replacement.
- If the other phone does not work, go to Possible Cause 3.

Possible Cause 3: The telephone cord may be defective.

What to do: Unplug the cord from the base of the phone and the wall jack. Replace it with a cord that works.

- If the phone works, the cord is faulty. Call the AT&T Helpline* to arrange for a replacement.
- If the phone does not work and it is part of a combination extension, see "Combination Extension Problem: Phone Does Not Ring Properly," Possible Cause 3.
- If the phone does not work and it is not part of a combination extension, call the AT&T Helpline.*

Other Problems with System

What to do: Unplug the system module's power cord from the wall. Wait 10 seconds, then plug it back in. This procedure resets the system. Use it when you have any problems that are not covered elsewhere in this chapter. This procedure will disconnect all calls in progress, but will not erase any system settings.

- If the problem is not solved, call the AT&T Helpline.*

* In the continental U.S., help is available at 1 800 628-2888. Outside the continental U.S., call your local AT&T Authorized Dealer.

System Speed Dial Numbers and System Extensions Form



The form in this appendix provides space on which to write System Speed Dial numbers and system extension numbers. We recommend that you fill out this form and then photocopy and distribute it to system users for their reference.

For information on how to store a System Speed Dial number, see "System Speed Dialing" in Chapter 5.

SYSTEM SPEED DIAL NUMBERS

To Dial System Speed Dial numbers: On system phones, press [*Feature*] + 2-digit code On standard phones, press [#] + 2-digit code while receiving intercom dial tone.

CODE	Name/Company	Telephone Number	CODE	Name/Company	Telephone Number	CODE	Name/Company	Telephone Number
20			40			60		
21			41			61		
22			42			62		
23			43			63		
24			44			64		
25			45			65		
26			46			66		
27			47			67		
28			48			68		
29			49			69		
30			50			70		
31			51			71		
32			52			72		
33			53			73		
34			54			74		
35			55			75		
36			56			76		
37			57			77		
38			58			78		
39			59			79		

SystemSpeed Dial numbers are programmed by the System Manager (report problems and suggested revisions to your System Manager).

SYSTEM EXTENSIONS

To call another extension: On system phones, press [*Intercom*] + Ext. On standard phones, dial Ext while receiving intercom dial tone.

EXT	NAME	EXT	NAME
▲ 10		16	
11		17	
12		18	
13		19	
14		20	
15		21	

▲ System Manager's extension.

Specifications

B

Capacities	System	206 Module	Extension Jack
	<ul style="list-style-type: none"> ■ 4 outside lines via line jacks on two 206 modules or one 206 and one 200 combination ■ 12 extensions via extension jacks on two 206 modules ■ 1 Music On Hold device via Music On Hold coupler to ext. jack 15 ■ 10 special application phones via 10 ext. jacks 	<ul style="list-style-type: none"> ■ 2 outside lines ■ 6 extensions <p>200 Module</p> <ul style="list-style-type: none"> 2 outside lines 	<ul style="list-style-type: none"> ■ Maximum 2 devices per extension jack, total REN on jack not to exceed 2.0* (System phone REN: 0.0 (zero)) ■ No more than one system phone per jack
Dimensions and Weights (approx.)	<ul style="list-style-type: none"> ■ 206 module ■ 200 module ■ Two modules ■ MLS-18D phone ■ MLS-12D phone ■ MLS-12 phone ■ MLS-6 phone ■ MLC-6 phone 	<ul style="list-style-type: none"> 11"(D) x 17"(H) x 1.5"(W) or 27.9 x 43.2 x 3.8 cm 11"(D) x 17"(H) x 1.5"(W) or 27.9 x 43.2 x 3.8 cm 12"(D) x 17"(H) x 5"(W) or 30.0 x 43.2 x 12.7 cm 9.5"(D) x 5"(H) x 6.75"(W) or 24.1 x 12.7 x 17.1 cm 9.5"(D) x 5"(H) x 6.75"(W) or 24.1 x 12.7 x 17.1 cm 9.5"(D) x 5"(H) x 6.75"(W) or 24.1 x 12.7 x 17.1 cm 9.5"(D) x 5"(H) x 6.75"(W) or 24.1 x 12.7 x 17.1 cm 9.4"(D) x 3.4"(H) x 7"(W) or 23.9 x 8.6 x 17.8 cm 	<ul style="list-style-type: none"> 4.5 lbs or 2.0 kgs 4.0 lbs or 1.8 kgs 10.5 lbs or 4.8 kgs 2.8 lbs or 1.3 kgs 2.8 lbs or 1.3 kgs 2.7 lbs or 1.2 kgs 2.7 lbs or 1.2 kgs 2.8 lbs or 1.3 kgs
Switch Fabric	■ Full digital, nonblocking		
Electrical Specifications	<ul style="list-style-type: none"> ■ 1 Amp per 206 module; .25 Amp per 200 module On a PARTNER 220V System: 0.6 Amp per 206 module; .25 Amp per 200 module ■ 65 Watts per 206 module; 10 Watts per 200 module ■ Dissipation of power: 30W/206 module and 20W/200 module during normal operation ■ 225 BTUs/hour per 206 module; 35 BTUs per 200 module ■ 4-day memory backup (96 hours) 		
Extension Jack Specifications	<ul style="list-style-type: none"> ■ Ringing voltage: +5VDC, -140 VDC peak to peak; trapezoidal wave shaping On a PARTNER 220V System: +5VDC, -150 VDC peak to peak ■ 35- to 38-Volt talk battery ■ Ringing frequency: 20 Hz 		
Proc. Module Specifications	■ 80C321 microcontroller with 8K RAM and 64K ROM		
Music on Hold Coupler Specifications	<ul style="list-style-type: none"> ■ Electrical interfaces: one 657 jack to extension port one RCA phono jack to audio source ■ 600 Ohm input on RCA jack ranging from 1mV to 4V 		

* The two devices combined on an extension jack can be a system phone with a standard device, or two standard devices; DO NOT connect two system phones to the same extension jack. If a device lists two RENs, use the higher number when adding up RENs.

Environmental Requirements	<ul style="list-style-type: none"> ■ Mount on a wall or sturdy, level surface at least 2 feet (0.6 meters) from the floor. For ventilation, wall mounting is required for 2-module systems (strongly recommended for 1-module systems) ■ Locate within 5 feet (1.5 meters) of the network interface jacks and an electrical outlet not controlled by a switch, using supplied 7-foot (2.1-meter) cords ■ Operating temperature 32° to + 104°F (0° to + 40°C), not in direct sunlight ■ Humidity 15%–90%, noncondensing ■ For proper ventilation and easy replacement of modules, provide at least 6 inches (2.34cm) clearance at the top and sides and 2 feet (0.6 meters) at the front and bottom of the system module(s). ■ Locate in an area free of excess moisture, corrosive gases, dust, and chemicals
Electrical Requirements	<ul style="list-style-type: none"> ■ 90–130 VAC, 50–60 Hz, 3-prong outlet separate ground, separately fused at 15 Amps On a PARTNER 220V System: 180–264 VAC, fused at 10 Amps ■ Outlet must not be controlled by an on/off switch ■ Grounding to comply with Underwriters Laboratories (UL) 1459: <ul style="list-style-type: none"> A. An insulated grounding conductor that is not smaller in size and equivalent in insulation material and thickness to the grounded and ungrounded branch circuit supply conductors, except that it is green with or without one or more yellow stripes, is to be installed as part of the circuit that supplies the product or system. B. The grounding conductor mentioned in item A is to be connected to ground at the service equipment. C. The attachment-plug receptacles in the vicinity of the product or system are all to be of a grounding type, and the grounding conductors serving these receptacles are to be connected to earth ground at the service equipment.
Requirements for Out-of-Building Extensions	<p>Installation of a telephone or other standard (tip/ring) device in another building on continuous property requires the following:</p> <ul style="list-style-type: none"> ■ MLS-model phone: two AT&T IROB protectors, plus carbon block protection or gas tube protection ■ Standard device: one AT&T IROB protector or one AT&T OPRE, plus carbon block protection or gas tube protection
Wiring	<ul style="list-style-type: none"> ■ MLS-model phones: AT&T SYSTIMAX™ or at least 2-pair (4-wire) star (“home run” not “loop”) ■ Other standard telecommunications equipment (single-line phones, fax machines, answering machines, etc.): 1-pair (2-wire) mounting cords (AT&T D2R mounting cords recommended) ■ Bridging adapter: AT&T 267F2 ■ Range: 1,000 feet (305 meters) for MLS-model phones; 3,000 feet (915 meters) for standard devices; or 17,000 feet (5,182 meters) for a standard touch-tone phone with an AT&T OPRE
Safety Requirements	<p>U.S.: Meets UL 1459 Issue 2 Canada Meets CSA C22.2, 225</p>
Government Approvals and Local Phone Company Information	<p>U.S.: FCC Part 68 FCC registration number (U.S.): AS5 USA-61630-KF-E FCC Part 15 Class B REN (outside line jack): 0.9A per line jack</p> <p>Canada: DOC CP01, Issue 7 DOC registration number (Canada): 230 3756 DOC CS03, Issues 6 & 7 Load Number = 7</p> <p>Jack type: RJ11C Loop start lines</p>

Installation

C

Overview

This appendix explains how to install the system. It begins with instructions for checking the system wiring in your building, then shows an illustration of the components you need to install the system, and lists general guidelines to consider before installation. Next, it provides step-by-step instructions for connecting and testing the components for initial installation and upgrades.

Safety Instructions for Installation Personnel

1. Install the product to meet all the environmental and electrical requirements listed in Appendix B.
2. DO NOT install equipment during a lightning storm.
3. DO NOT install telephone jacks in a wet location unless the jack is specifically designed for wet locations.
4. Never touch uninsulated telephone wires or terminals unless the telephone line has been disconnected at the network interface.
5. Use caution when installing or modifying telephone lines.

⚠ CAUTION:
This equipment is for installation on all AT&T PARTNER Communications Systems only.

⚠ WARNING:
Installation of this equipment for In-Range Out-Of-Building (IROB) conditions requires the use of ITW Model 503A1 IROB protectors.

Before You Start

Before installing any equipment, be sure the correct system wiring is in place. This includes wiring to connect outside lines from the local telephone company to system modules, and wiring connecting the telephones and other equipment to system modules. To have an AT&T service technician install and customize your system or change existing wiring, call 1 800 247-7000 (in the continental U.S. only) or call your local AT&T Authorized Dealer.

Check for Outside Lines

Make sure the local telephone company has installed the outside lines for the system. Each outside line must be connected through an RJ11 network interface jack. These jacks are ordinary modular wall jacks and should be labeled with the telephone number for each outside line (see Figure C-1). If there are no network interface jacks, call your local phone company. If two numbers are assigned to one RJ14 jack, have the phone company split the lines so that each line has its own RJ11 jack,* or use a 267C two-line adapter.

The network interface jacks must be within 5 feet (1.5 meters) of the system module(s). If they are not, arrange for the local phone company to move them, or for a qualified telephone installer to do the wiring. This requires special expertise and tools. To arrange for AT&T service, call 1 800 247-7000 (in the continental U.S. only) or call your local AT&T Authorized Dealer.

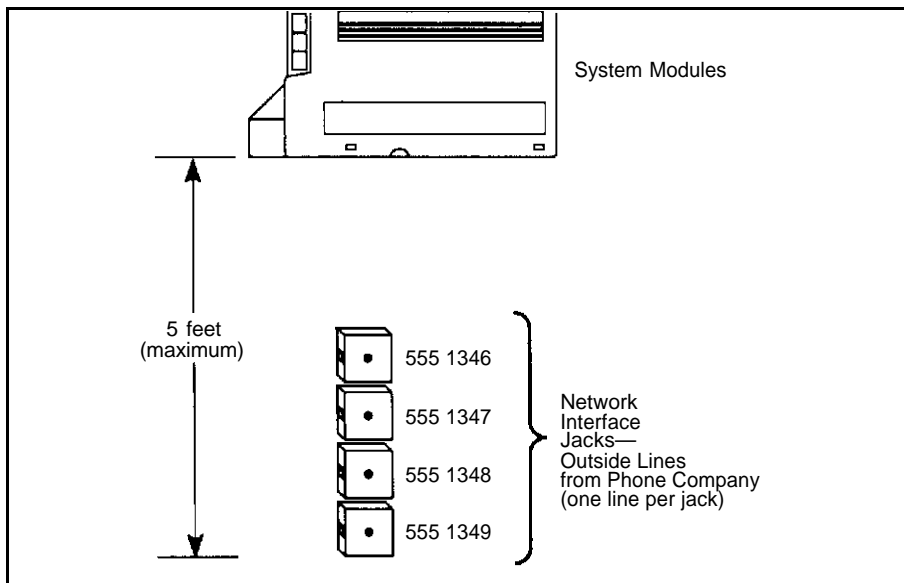


Figure C-1. Network Interface Jacks

* An RJ11 network interlace is a technical term for a modular plug when only one line comes into it. An RJ14 network interface is a technical term for the same modular plug when two lines come into it.

Check for Inside Wiring

Inside wiring (also called “building wiring”) enables you to connect phones and other equipment to the system modules. If the building is already wired, the following section tells you whether or not the wiring will work. If the building is not wired, you can have it professionally wired or wire it yourself. See “If There Is No Wiring” later in this chapter for additional information.

If There Is Wiring

Inside wiring consists of wiring runs—one for each extension. A typical wiring run starts with a wall jack near the system module(s). Then the wiring itself runs inside the wall to the extension location where it ends in another wall jack. Since the wiring is hidden, all you see are the wall jacks at both ends (Figure C-2).

A series of jacks—one for each extension—should be near the system module(s). Each jack is the start of a separate wiring run and should be labeled with either the extension or wiring run number. The wall jacks placed throughout the building (the ends of the wiring runs) should also be labeled with the extension or wiring run number.

The system works with many types of existing wiring. It requires at least 2-pair (4-wire) wiring in a “home run” or “star” (not loop) setup. If you do not know if the existing wiring is acceptable, test it as follows (Figure C-2):

- 1 Plug a 206 module into an electrical outlet not controlled by a switch.
- 2 Plug one end of a phone cord into an extension jack on the 206 module.
- 3 Plug the other end into a wiring run jack.
- 4 Plug a system phone (MLS-18D, MLS-12D, MLS-12, or MLS-6) into the wall jack at the end of that wiring run.
- 5 Press [*Intercom*] and lift the handset. If you hear a dial tone, the wiring is acceptable. If you do not hear a dial tone, read the next section.

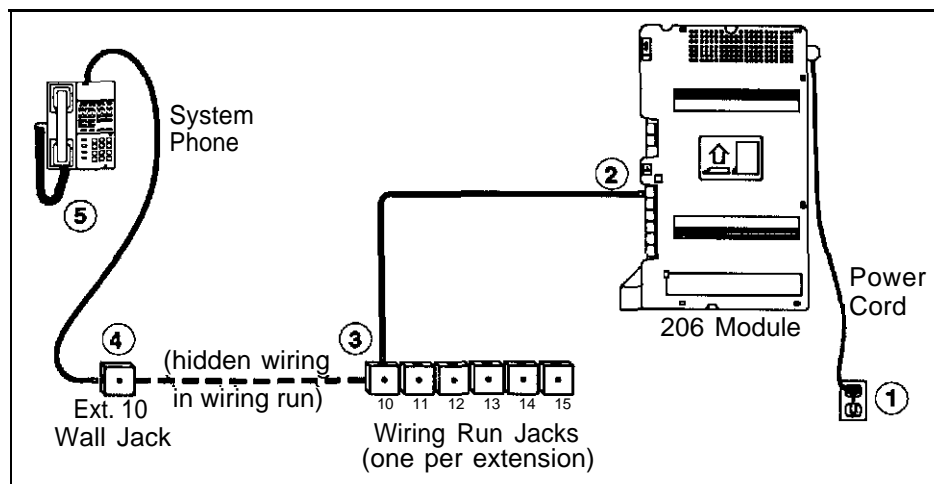


Figure C-2. Testing Inside Wiring

If There Is No Wiring

If there is no inside wiring, or the existing wiring is not acceptable, you may be able to install your own wiring. The type of wiring you use depends on how far the extension is from the system module(s). For extensions that are within:

- 14 feet (4.3 meters): use the telephone cords included with the system.
- 100 feet (30.1 meters): use the Extension Wiring Kit (see Table D-1 in Appendix D).
- 1,000 feet (304.1 meters): use DIW 4 twisted-pair wire or call AT&T at 1 800 247-7000 (in the continental U.S. only) or your local AT&T Authorized Dealer.

IMPORTANT:

If you need to run the wire inside walls, through ceilings, or under carpets, call 1 800 247-7000 (in the continental U.S. only) or your local AT&T Authorized Dealer to arrange for AT&T installation to ensure that the installation meets local building codes.

Required Parts

You will have up to three types of system component packages; Figure C-3 shows the contents of each package in the area marked by a dashed line. Check your packages to be sure you have the parts shown here (if not, call the appropriate support telephone number as instructed on the inside front cover).

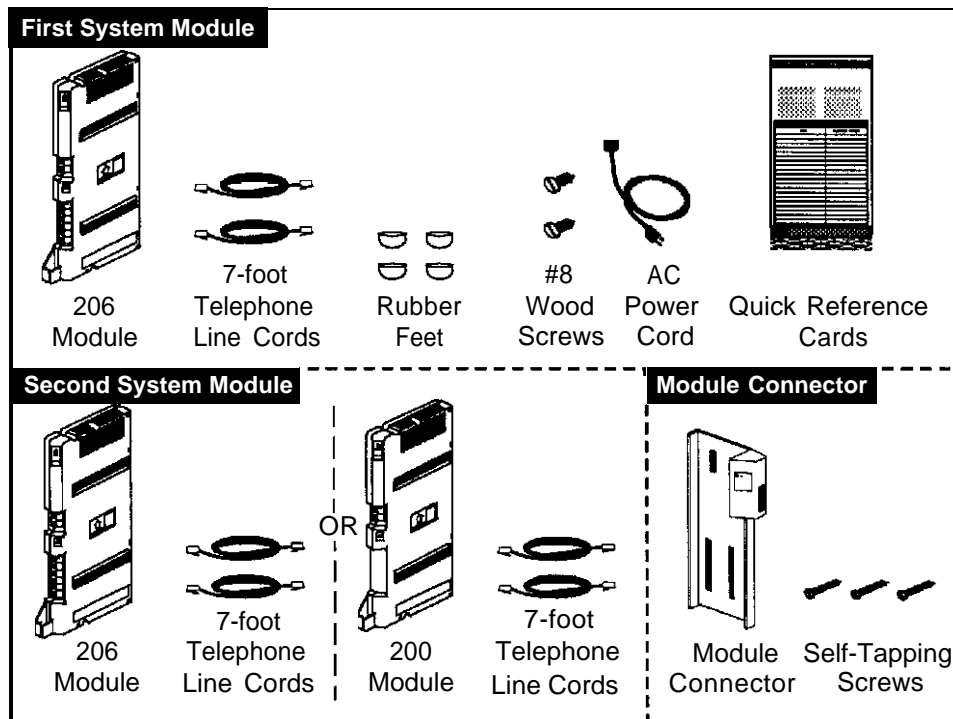


Figure C-3. Required Parts

Two #8 screws—for mounting the system on a wooden surface—are included with the system. If you are mounting the system on wallboard, metal, or masonry, use the proper fasteners for the wall type and weight of the system (approximately 11 lbs. or 5 kg.). Purchase them at any hardware store. You will also need a screwdriver to mount the system.

You will need a standard touch-tone or rotary phone for testing the installation. In addition, if you need modular telephone cords for connecting the extension jacks on the system modules to the modular connecting blocks for extensions in the equipment room, or short telephone cords for wall mounting MLS-model phones, order them before installation. Refer to “Product Ordering Information” in Appendix D for ordering instructions.

Installation Guidelines

System Modules

- The first module *must* be a 206 module.
- The second module can be a 206 module (for 2 additional lines and 6 additional extensions) or a 200 module (for 2 additional lines only). If you add a Release 3 206 module to an existing system, you must install it in the leftmost slot in order to have access to Release 3 system features.
- If your system has only one module, you can install it on a wall or on a flat sturdy surface above the floor (such as on a table or desk). *Wall mounting is recommended.*
- If your system has two modules, you *must* mount it on a wall.

Telephones and Devices

You can connect the following telephones and devices to the system:

- **MLS- and MLC-Model Phones.** System phones require at least two-pair wiring and are compatible with AT&T 4-pair SYSTIMAX™ wiring.
- **Industry-Standard Devices.** Industry-standard devices (including standard phones) require one-pair mounting cords; AT&T D2R mounting cords are recommended.
 - **Standard Phones.** Connect standard phones to the system for:
 - **Power Failure Operation.** During a power failure, system phones will not work because they require power to operate. However, if you connect standard phones to extensions 10 and 16, users can place and answer outside calls on lines 1 and 3, respectively. You can connect a standard phone either alone or combined with a system phone. (If you combine a standard phone and a system phone on one extension, you may want to turn off the standard phone's ringer during normal use.)
 - **Internal Hot Line Phone.** A standard phone, rather than a system phone, should be used as an internal hot line phone; but, any type of phone can be used as an alert extension. Do not connect an internal hot line phone to extension 10 or 16 to keep them available for power failure use.

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- **Emergency Phone.** A standard phone, rather than a system phone, should be used as an emergency phone. Do not connect an emergency phone to extension 10 or 16 to keep them available for power failure use.
 - **Auxiliary Equipment.** There are a variety of ways to set up fax machines, modems, answering machines, and credit card scanners to work with the system. See Chapter 4 for advice on setting up this equipment. To connect a telephone and a standard device on the same extension, see “Combination Extensions” later in this appendix.
 - **In-Range Out-of-Building (IROB) Protectors.** Whenever phones are installed in another building, but on the same continuous property, you must install AT&T IROB 503A1 protectors, which provide coverage over a distance of 3,000 feet (915 meters) for standard phones and 1,000 feet (305 meters) for system phones. System phones require one protector in the building where the system modules are installed and a second in the building where the phone is installed. Standard phones require one protector.
 - **Off-Premises Range Extender (OPRE)** allows you to connect a standard touch-tone phone beyond 3000 feet (915 meters) in another building on the same continuous property. It also allows you to use a special circuit from your local phone company to provide off-premises station capability.

Limitations for Standard Devices

You can connect a standard device to your system, regardless of the manufacturer. However, the following limitations apply:

- It must be industry standard and non-proprietary. That is, it cannot be made specifically for use on a particular telephone system. (For example, you cannot connect an AT&T MERLIN® phone because it is designed for use on a MERLIN system.)
- Its Ringer Equivalence Number (REN*) cannot be greater than 2.0. (The REN is shown on a label on the device, usually on the bottom.)

In addition to industry-standard equipment, you can connect a variety of other devices—see Chapter 1. Follow the instructions provided with the equipment for installation and use.

Combination Extensions

You can connect a standard device (such as a standard phone or an answering machine) on an extension by itself, or so that it shares an extension with another piece of equipment (either another standard device or a system phone). An extension with two devices connected to it is called a *combination extension*. You cannot install two system phones on the same extension, and the combined REN (Ringer Equivalence Number) of two devices on one extension cannot exceed 2.0. (The REN for a system phone is 0.0.)

* REN is a measure of the power it takes to ring a phone. A typical home phone line can handle 4.0-5.0 RENs; each extension jack in your system can handle 2.0 RENs.

If your system phone has a built-in auxiliary jack, you can connect a standard device directly to the phone—see “Using A Direct Connection” below. If your system phone does not provide a built-in auxiliary jack or if you want to connect two standard devices together, you must use an AT&T 267F2 bridging adapter to combine the two devices on one extension—see “Using a Bridging Adapter” below.

NOTE:

A Music On Hold device *cannot* share an extension with a phone.

Using A Direct Connection

Figure C-4 shows how to connect a standard device directly to a system phone, using the phone's built-in auxiliary jack.

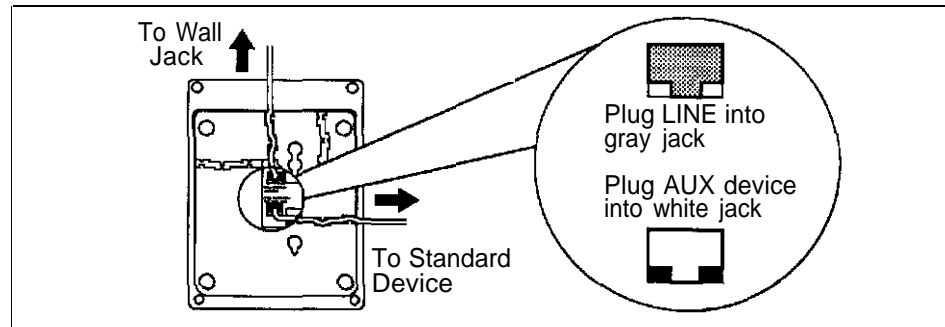


Figure C-4. Combination Extension Using Direct Connection

Using a Bridging Adapter

Figure C-5 shows how to connect a system phone and a standard device or two standard devices together using the AT&T 267F2 bridging adapter.

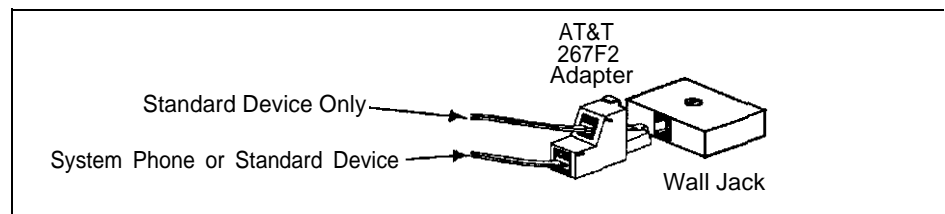


Figure C-5. Combination Extension Using Bridging Adapter

Installation Procedures

Before installing the system, be sure you read the safety instructions on page C-1. To prevent damage to the system or installation location, the environmental and electrical conditions must meet the specifications in Appendix B.



WARNING:

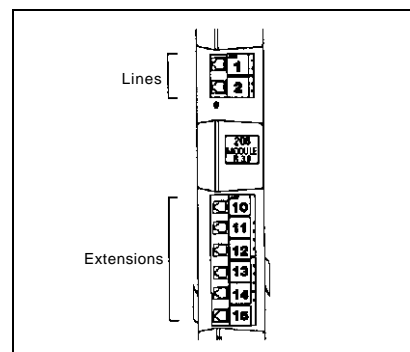
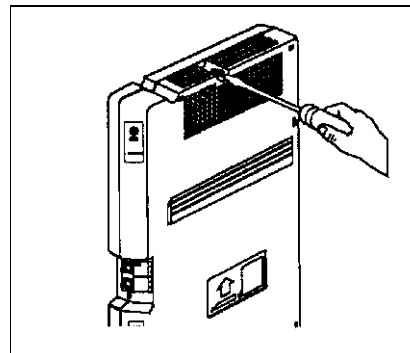
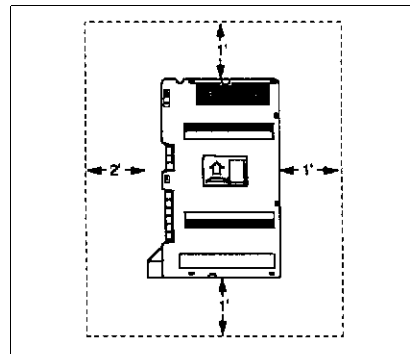
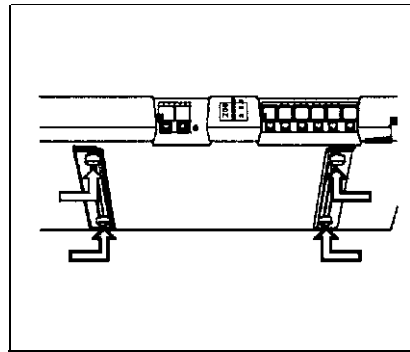
There are no customer-serviceable components inside the system modules. There are hazardous voltages within that can cause severe or fatal personal injury. DO NOT OPEN THE MODULES.

Installing the First System Module (206 only)

IMPORTANT:

If you are adding a Release 3 206 module to an existing system, you must install it as the first module in order to have access to Release 3 system features.

- 1**
 - A) Attach the 4 rubber feet to the mounting tracks on the bottom side of the module.
 - B) If you are wall mounting, go to Step 2.
If you are table mounting the 206 module, place it flat on the surface with the rubber feet down—the module should not slide easily—then go to Step 4.
- 2**
 - A) Hold the 206 module in place on the wall with the line and extension jacks facing left.
 - B) Leave at least 1 foot (0.3 meters) clearance at the top, bottom, and back, and at least 2 feet (0.6 meters) at the front. This allows you to access the jacks and slide a second module onto the first, and ensures adequate ventilation.
- 3**
 - A) Insert the screws into the screw holes at the top and bottom of the module.
 - B) Tighten the screws until the rubber feet are snug against the wall. *There must be a 3/8" (1 cm.) gap between the wall and the rest of the module.* Do not overtighten—the module will warp and fail to operate.
- 4**
 - A) Label the line and extension jacks as shown.
 - B) If you are installing a 2-module system, go to Step 1 of the next section, "Installing a Second Module;" otherwise, go to Step 5 of "Installing a Second Module" to power up the system.



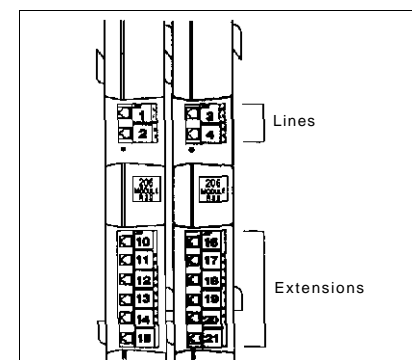
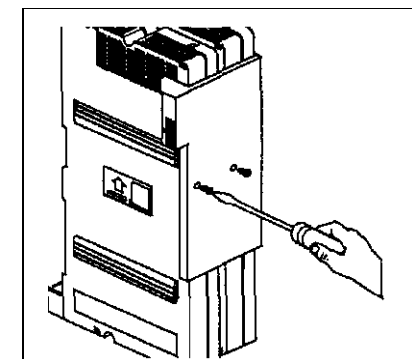
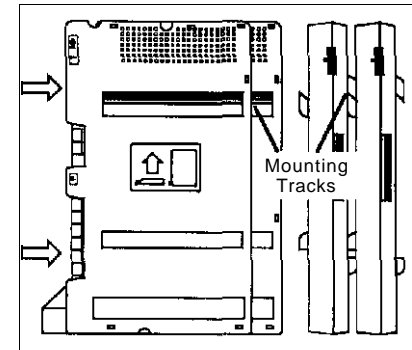
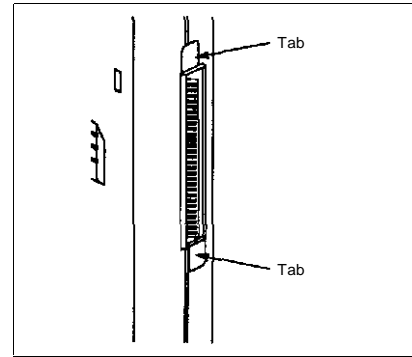
Installing a Second Module

You can install either a 206 or 200 module as the second module, using the following steps.

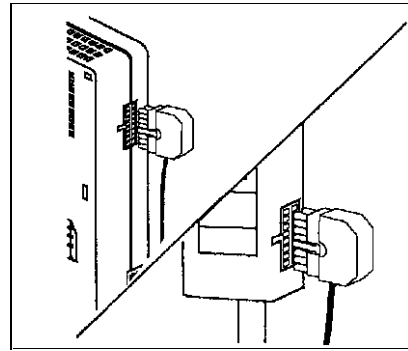
IMPORTANT:

If you are adding a Release 3 206 module to an existing system, you must install it as the first module in order to have access to Release 3 system features.

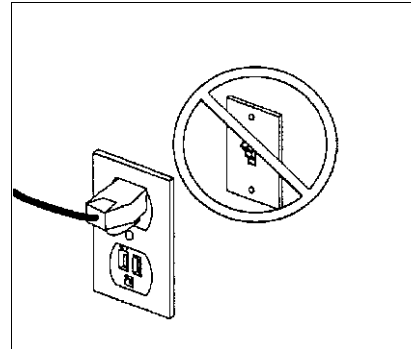
- 1** Remove the plastic protector (if present) from the connector on the right side of the mounted 206 module: grasp the tabs on the ends of the protector and lift.
- 2** Slide the second module onto the first module, making sure the upper pairs of mounting tracks interlock, as shown in the side view.
- 3**
 - A) Attach the module connector to the top right side of the two modules by aligning the connector carefully and then pushing firmly until the connector snaps into place.
 - B) Fasten the connector to the modules using two of the self-tapping screws included with the connector. (If lost, these screws are #4 panhead, sheet metal screws, 9/16" (1.4 cm.) long.)
- 4** Label the line and extensions jacks as shown. (If your second module is a 200 module, you will have lines 1–4 but only extensions 10–15.)



- 5** A) To connect the AC power cord: on a 2-module system, connect it to the module connector; otherwise, connect it to the 206 system module. Press firmly until it clicks as it locks into place.
- B) To power up the system, plug the other end of the power cord into a properly grounded three-prong wall outlet *not controlled by a switch*.
- On a PARTNER 220V system, move the on/off switch to the "on" position ("I").



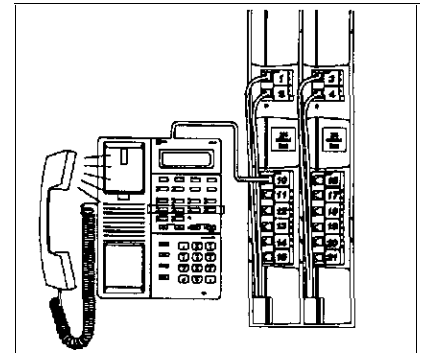
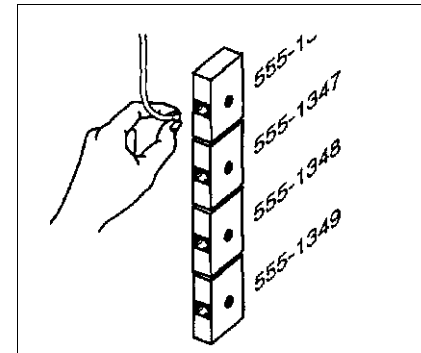
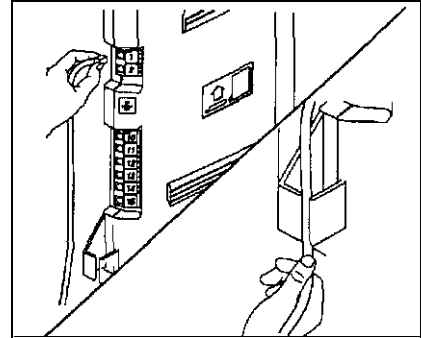
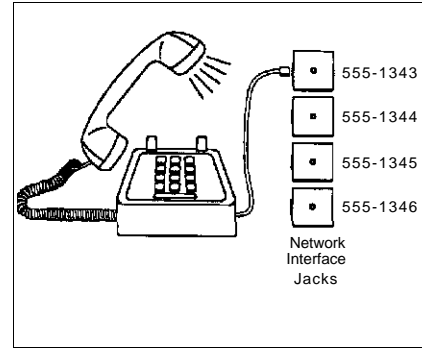
- 6** Check the green LEDs on the fronts of the module(s). If the lights are lit, you can go on to the next section. If not, see "All Phones Dead: No Dial Tone or Lights" in Chapter 6, "Troubleshooting."



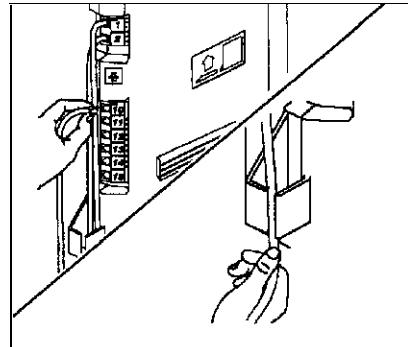
Connecting Lines and Extensions

Before continuing, be sure the extension wiring is complete—refer to “Check for Inside Wiring” earlier in this appendix for instructions. If the wiring is complete, follow the steps below.

- 1**
 - A) Test for dial tone at the network interface jacks (where the lines from the local telephone company end) before connecting outside lines to the system modules. For the test, connect a standard phone to the first network interface jack.
 - B) Lift the handset and listen for dial tone. (If you do not hear dial tone, contact your local phone company and ask a representative to check the service before continuing.)
 - C) Repeat for each network interface jack.
- 2**
 - A) Connect line cords to the line jacks on the module(s), starting with the top line jack on the first system module.
 - B) Continue connecting line cords in numerical order.
 - C) Route each cord through the hook on the lower front of the module.
 - D) Leave at least 2 feet (0.6 meters) of slack in the cords (for future maintenance so you can easily reconnect cords after replacing system modules).
- 3**
 - A) Connect the free end of each line cord to the appropriate network interface jack.
- 4**
 - A) Test the lines—plug a system phone into extension 10. Press the line buttons for each outside line and listen for dial tone.
 - B) Repeat for extension 16, if you have a 2-module system.



-
- 5**
- A) Connect modular telephone cords to 206 module extension jacks, starting at the top extension jack on the first module.
 - B) Route each cord through the hook on the lower front of the module.
 - C) Leave at least 2 feet (0.6 meters) of slack in the cords (for future maintenance so you can easily reconnect cords after replacing system modules).
 - D) Connect the free end of each modular telephone cord to the modular connecting blocks for system extensions.

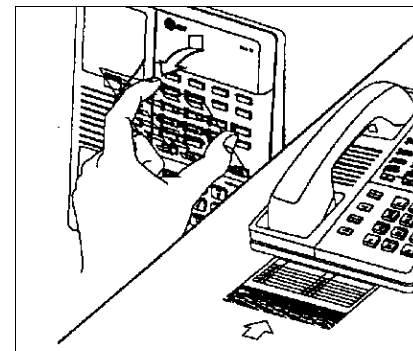
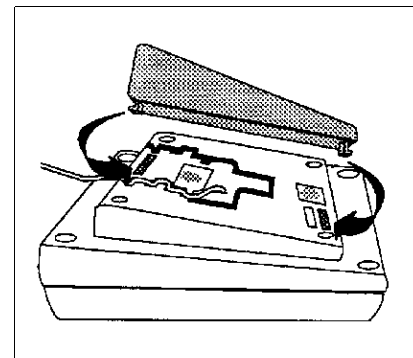
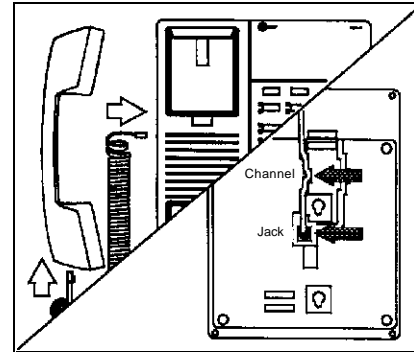


Assembling System Phones

You can either desk mount or wall mount a system phone. If the system phone is manufactured with a *separate* stand, you can use the stand to either wall mount the phone or raise the angle of the phone when desk mounting. Alternatively, some system phones—such as the MLS-18D—are manufactured with a *fixed* stand. Any instructions below for installing the stand do not apply to the MLS-18D phone. (Wall mounting is not recommended for display phones.)

Desk Mounting

- 1
 - A) Plug one end of the handset cord into the jack on the handset and the other end into the small jack on the left side of the base.
 - B) Plug one end of the phone cord into the jack on the bottom of the phone. If the phone has multiple jacks, plug the cord into the GRAY jack.
 - C) Push the cord into place along the channel on the bottom of the phone, so the phone sits flat without wobbling.
 - D) If you want to raise the angle of the phone, go to Step 2; if not—or if you have an MLS-18D phone—go to Step 3.
- 2
 - A) To install the telephone stand, gently place the phone upside down, with the low end of the phone to your right.
 - B) Insert the tab on the narrow end of the stand into the right slot on the bottom of the phone.
 - C) Insert the other tab into the left slot, pushing the stand down and slightly inward until the tab locks into place.
- 3
 - A) Turn the phone over so it is right side up.
 - B) Remove the plastic cover from the phone. Label the button sheet to show any programmed lines or button features, then place it on the phone so the holes on the sheet fit over the buttons. Carefully replace the plastic cover.
 - C) Slide the *Quick Reference* card under the telephone.

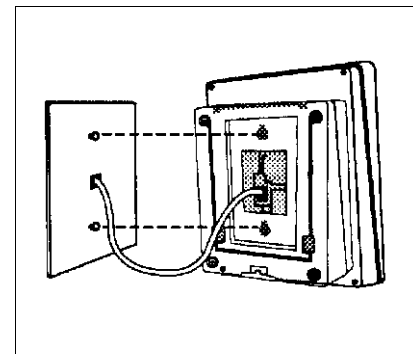
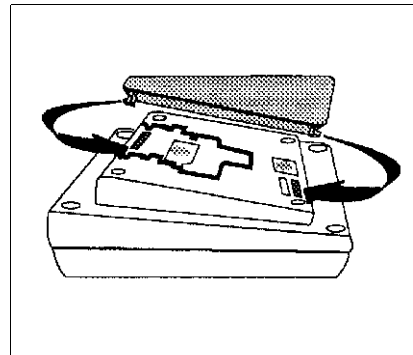
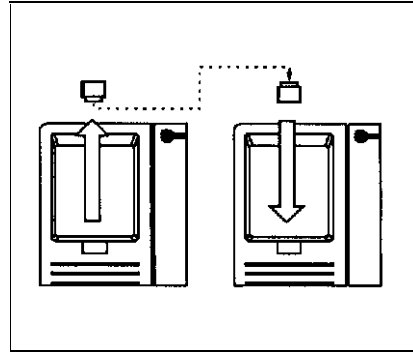


Wall Mounting

If you wall mount a display phone, the display may be difficult to read, so desk mounting is recommended. (Wall mounting instructions apply to *corded* MLS-model phones only. To wall mount an MLC-6 phone, follow the instructions in the booklet provided with the phone.)

Wall Mounting Phones with Separate Stands

- 1** Reverse the plastic hook that sits in the earpiece part of the handset cradle.
- 2**
 - A) To install the telephone stand, gently place the phone upside down with the low end of the phone to your right.
 - B) Insert the tab on the narrow end of the stand into the left slot on the base of the phone.
 - C) Insert the other tab into the right slot, pushing the stand down and slightly inward until the tab locks into place.
- 3**
 - A) Insert the phone cord through the center of the stand and plug it into the jack on the base of the phone, then plug the other end into the modular wall jack.
 - B) Mount the phone on the wall plate using the screw keyholes on the base of the stand. For proper mounting, the wall plate must be an AT&T 630B connecting block.
 - C) Connect the handset cord as described in "Desk Mounting," Step 1A, and label the button sheet as in Step 3B of that procedure.



Wall Mounting Phones with Fixed Stands

Make sure the telephone cord is unplugged from the bottom of the phone before proceeding.

- 1**
 - A) Reverse the plastic hook that sits in the earpiece part of the handset cradle.
 - B) Gently place the phone upside down.

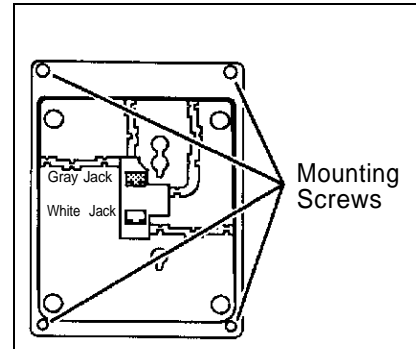
- 2** A) Unscrew the phone's four mounting screws and lift the base of the phone off the top.



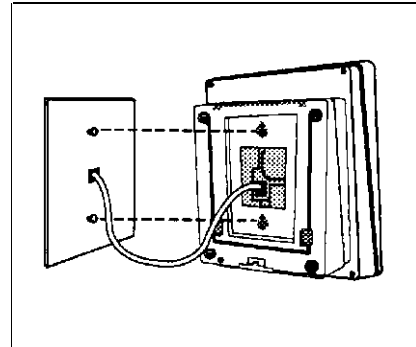
CAUTION:

Do not touch electrical circuitry. To do so will expose you to a risk of electrical shock and possibly damage the equipment.

- B) Rotate the base of the phone 180 degrees (so the phone can be mounted parallel to the wall) and then place the base back on the top.
- C) Replace the four mounting screws.



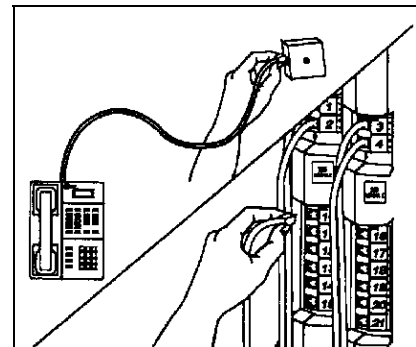
- 3** A) Insert the phone cord through the center of the stand and plug it into the WHITE jack on the bottom of the phone. Plug the other end into the modular wall jack.
- B) Mount the phone on the wall plate using the screw keyholes on the base of the stand. For proper mounting, the wall plate must be an AT&T 630B connecting block.
- C) Connect the handset cord as described in "Desk Mounting," Step 1A, and label the button sheet as in Step 3B of that procedure.



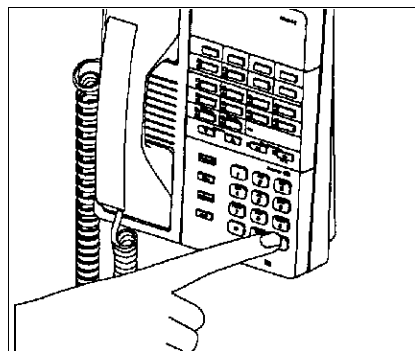
Connecting and Testing Telephones

- 1** To connect a phone, plug the modular telephone mounting cord into a modular wall jack or directly into a 206 module extension jack. (If you are connecting a standard phone and its mounting cord is loose, try an AT&T D2R mounting cord instead.)

To install two phones (or other devices) on a single extension jack, see "Combination Extensions" earlier in this appendix.



- 2** A) Test the telephone for proper operation—to test the power and lights on a system phone, press and hold the [#] button for five seconds.
- B) Before releasing the [#] button, lift the handset. All lights should light, the ringer should sound, and (on the MLS-18D or MLS-12D phones only) a test pattern should appear on the display. (If not, call the appropriate support telephone number as instructed on the inside front cover.)
- C) Replace the handset; the phone is now in normal operating mode.



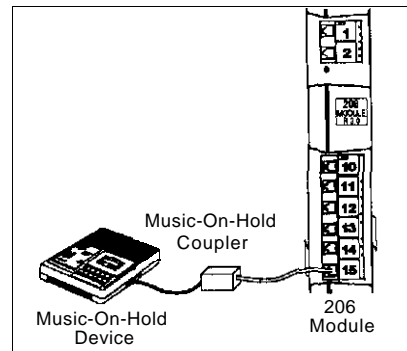
Connecting a Music On Hold Device

Only steps for connection to the 206 module are provided here. Refer to "Music/Tones On Hold (#602)" in Chapter 5 and the device's instructions for additional information on installing and using it.

NOTE:

If you use equipment that rebroadcasts music or other copyrighted materials. You may be required to obtain a license from a third party such as ASCAP or BMI. Or you can purchase a Magic On Hold device from AT&T, which does not require you to obtain such a license.

- 1**
 - A) Insert one end of an audio cord with an RCA phono plug into the RCA phono jack on the PARTNER Music On Hold coupler.
 - B) Insert the other end of the audio cord into the RCA phono jack on the Music On Hold device.
- 2**
 - A) Insert one end of a modular cord into the modular jack on the PARTNER Music On Hold coupler.
 - B) Insert the other end of the modular cord into extension jack 15 on the 206 system module and then route the cord as you did for line and extension cords.
- 3**
 - A) Set the coupler's volume to the lowest setting. Use a flathead screwdriver to turn the volume control counterclockwise until it stops.
 - B) Place a call on hold and listen while adjusting the volume, clockwise. If you do not hear music at any setting, make sure "Music On Hold" is set for "Music/Tones On Hold (#602)" in Chapter 5.



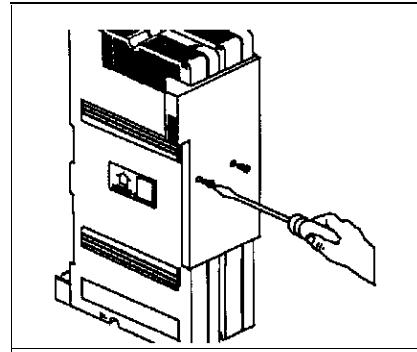
Removing a Music On Hold Device

Use the following procedure to remove a Music On Hold device and deactivate the Music On Hold feature *before* connecting a phone to extension 15:

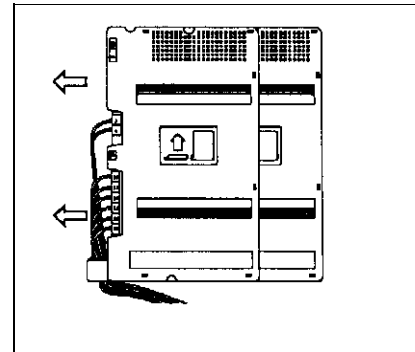
- 1** Unplug the modular cord from extension jack 15 to disconnect the Music On Hold coupler and device.
- 2** Refer to "Music/Tones On Hold (#602) in Chapter 5 to change the system option setting to either "Tones On Hold" or "Not Active."
- 3** Refer to Step 5 of "Connecting Lines and Extensions" earlier in this appendix to connect a phone to extension 15.

Replacing System Modules

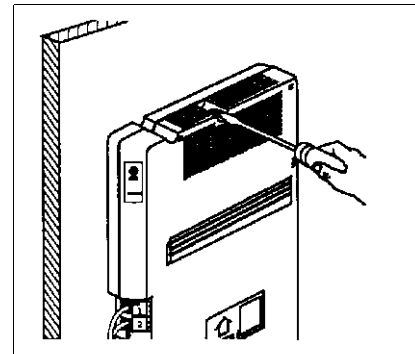
- 1**
 - A) To power down the system, unplug the AC power cord.
On a PARTNER 220V system, move the on/off switch to the "off" position ("O").
 - B) If you have a 1-module system, simply replace the module. Place the new module on a flat surface with the rubber feet down, so it does not slide easily. Go to Step 5B.
If you have a 2-module system, remove the screws on the connector. Pull the connector off the module.



- 2** Slide off the module furthest from the wall—without detaching the line and phone cords. If you are replacing the module furthest from the wall, go to Step 4; if you are replacing the one closest to the wall, go to Step 3.

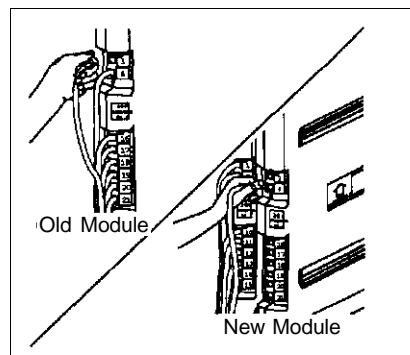


- 3**
 - A) Remove the screws used to mount the module on the wall.
 - B) Remount the new module as described in Steps 2 and 3 on page C-8.



- 4**
 - A) Reinstall the second module and connector, as instructed in Steps 1 through 3 on page C-9.
 - B) Label the line and extension jacks on the new module.

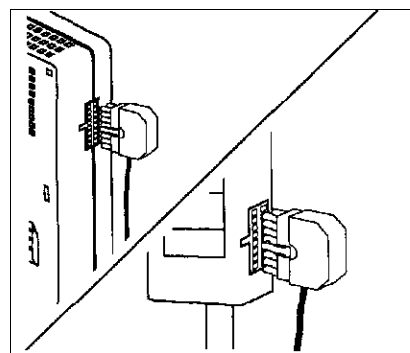
- 5**
- A) Remove the first line cord of the old module and connect it to the first line jack on the new module.
 - B) Repeat for the other lines and extensions, one at a time. (We suggest the “one-at-a-time” approach because it’s too easy to lose track of the wires if you unplug several at once.)



- 6**
- A) Connect the AC power cord to the 206 module on a system with one module, or to the module connector on a system with two modules. Press firmly until it clicks into place. (If you also unplugged the cord from the wall outlet, plug it back in now.)

On a PARTNER 220V system, move the on/off switch to the “on” position (“I”).

- B) After replacing the modules and connecting power, check the green LEDs on the fronts of the module(s). If the lights are lit, the system is operational. If not, see “All Phones Dead: No Dial Tone or Lights” in Chapter 6, “Troubleshooting.”



Maintenance, Repair, and Ordering Information

D

Maintenance

Your system is designed to provide trouble-free performance without any special maintenance procedures. To prevent accidental damage:

- Keep the system modules in an area free of dust, smoke, and moisture, and do not block the air vents by placing objects on top of the system modules.
- Do not place telephones near a heating duct, radiator, or other heat source, and do not drop or expose them to excessive shock or vibration.
- Unplug the telephone if its cord is damaged, if liquid is spilled into it, or if its housing becomes cracked or otherwise damaged.
- To clean your telephone, wipe the outside housing with a soft, dust-free cloth. If absolutely necessary, you may use a cloth *slightly* dampened with a mild soap and water solution. Dry quickly with a soft cloth.



CAUTION:

Your telephone contains sensitive electronic parts. Never submerge it in any kind of liquid, and never use detergents, alcohols, solvents, abrasive cleaners, or an excessive amount of water when cleaning the housing and faceplate. To do so could result in irreparable damage.

Repair Information

Outside the continental U.S., contact your local AT&T Authorized Dealer for warranty and repair information applicable to your system.

In Warranty Repairs

If you purchased or leased your system directly from an AT&T, AT&T will repair it free of charge during the one-year warranty period. Simply call the Helpline and ask for service.

Business-Day service is standard during the warranty period for both the 206 modules and system phones. Business-Day service is performed during normal business hours. However, if you need 24-hour service protection during the warranty period on the 206 modules in case there is a major system failure, you can purchase an Around-the-Clock service contract from your local AT&T sales office (1 800 247-7000 in the U.S. only). (Around-the-clock service is not available for phones.)

If you purchased or leased your system through an AT&T Authorized Dealer, contact your dealer for repairs.

Post-Warranty Repairs

If you purchased your system from AT&T and you have a post-warranty service contract, AT&T service is provided under the terms of that contract.

To significantly reduce unexpected repair costs after the warranty period, you can purchase a post-warranty service contract from AT&T. If you do not have a contract, AT&T service is provided on a time-and-materials basis by calling the Helpline. A contract provides to you, within the applicable coverage period and response times, service calls with no charge for parts and labor on covered repairs. Both Business-Day and Around-the-Clock coverages of varying lengths are available. To order a post-warranty service contract, call 1 800 247-7000 (in the continental U.S. only).

If you leased your system from AT&T, Business-Day service is included in your lease. To upgrade to Around-the-Clock service, call 1 800 247-7000 (in the continental U.S. only).

If you purchased or leased your system through an AT&T Authorized Dealer, contact your dealer for repairs.

AT&T Limited Warranty and Limitation of Liability

AT&T warrants to you, the customer, that your system will be in good working order on the date AT&T or its authorized reseller delivers or installs the system, whichever is later ("Warranty Date"). If you notify AT&T or its authorized reseller within one year of the Warranty Date that your system is not in good working order, AT&T will without charge to you repair or replace, at its option, the system components that are not in good working order. Repair or replacement parts may be new or refurbished and will be provided on an exchange basis. If AT&T determines that your system cannot be repaired or replaced, AT&T will remove the system and, at your option, refund the purchase price of your system or apply the purchase price towards the purchase of another AT&T system.

If you purchased your system directly from AT&T, AT&T will perform warranty repair in accordance with the terms and conditions of the specific type of AT&T maintenance coverage you selected. A written explanation of AT&T's types of maintenance coverage may be obtained from AT&T by calling 1 800 247-7000 (in the continental U.S. only). If you purchased your system from an AT&T authorized reseller, contact your reseller for the details of the maintenance plan applicable to your system.

This AT&T limited warranty covers damage to the system caused by power surges.

Unless otherwise expressly agreed to in a written agreement signed by AT&T, AT&T will not be responsible under this limited warranty for damages resulting from:

- Failure to follow AT&T's installation, operation, or maintenance instructions;
- Unauthorized system modification, movement, or alteration;
- Unauthorized use of common carrier communication services accessed through the system;
- Abuse, misuse, or negligent acts or omissions of the customer and persons under the customer's control; or
- Acts of third parties and acts of God.

AT&T's obligation to repair, replace, or refund as set forth above is your exclusive remedy.

Except as specifically set forth above, AT&T, its affiliates, suppliers, and dealers make no warranties, express or implied, and specifically disclaim any warranties of merchantability or fitness for a particular purpose.

Limitation of Liability

Except as provided below, the liability of AT&T and its affiliates and suppliers for any claims, losses, damages, or expenses from any cause whatsoever (including acts or omissions of third parties), regardless of the form of action, whether in contract, tort, or otherwise, shall not exceed the lesser of: (1) the direct damages proven; or (2) the repair cost, replacement cost, license fee, annual rental charge, or purchase price, as the case may be, of the equipment that directly gives rise to the claim. Except as provided below, AT&T and its affiliates and suppliers shall not be liable for any incidental, special, reliance, consequential, or indirect loss or damage incurred in connection with the equipment. As used in this paragraph, consequential damages include, but are not limited to, the following: lost profits, lost revenues, and losses arising out of unauthorized use (or charges for such use) of common carrier telecommunications services or facilities accessed through or connected to the equipment. For personal injury caused by AT&T's negligence, AT&T's liability shall be limited to proven damages to person. No action or proceeding against AT&T or its affiliates or suppliers may be commenced more than twelve (12) months after the cause of action accrues. THIS PARAGRAPH SHALL SURVIVE FAILURE OF AN EXCLUSIVE REMEDY.

Product Ordering Information

Ordering additional telephones and modules, accessories, and replacement parts for your system is convenient. Table D-1 (on the next page) shows where you can buy system components in the continental United States.

To take full advantage of your system, the sources shown below can also provide you with the optional equipment you might want for your system, such as AT&T fax machines, answering machines, standard phones, modems, paging systems, headsets, bells, lights, strobes, and music-on-hold systems.

You can obtain most items from more than one source, either directly from AT&T or from authorized dealers. Sources in the United States are:

- **AT&T Catalog Sales.** This source is AT&T's national phone/mail sales center in Cincinnati. A Catalog Associate will place your order, including AT&T installation if you need it. Or you can charge your order on a VISA, Mastercard, or American Express card. The Catalog Associate can also give you sales advice and mail you AT&T's "Sourcebook" catalog of systems, telephones, and accessories. Call 1 800 451-2100.
- **AT&T Sales Offices.** Sales offices to serve the small business customer are located throughout the country. To contact the office closest to you, call 1 800 247-7000. A representative will place your order, including AT&T installation if you want it.
- **AT&T Authorized Dealers.** You can also buy most items from one of AT&T's Authorized Dealers. To find the dealer nearest you, call 1 800 247-1212.
- **AT&T PhoneCenter Stores.** Your local PhoneCenter Store carries most items. To locate the nearest store, call 1 800 222-3111 or see your local white pages under "AT&T PhoneCenter Store."
- **AT&T National Parts Sales Center.** This national sales center, located in Denver, stocks replacement parts for the system module(s) and telephones. Telephone orders can be placed by calling 1 800 222-PART.

In Canada, order these items from AT&T Canada:

Eastern Canada and Ottawa:	1 514 335-7200
Ontario:	1 416 756-5236
Central and Western Canada:	1 800 561-5165

To use Table D-1, first locate the item you want. A triangle (▲) indicates where you can obtain it.

Table D-1. Sources of Additional Equipment and Replacement Parts (U.S.)

	SOURCE (U.S.)				
	AT&T Catalog Sales (Sourcebook) (800) 451-2100	AT&T Sales Office (800) 247-7000	AT&T PhoneCenter Store *	AT&T Authorized Dealer **	AT&T National Parts Sales Center (800) 222-PART
System Modules and Wiring:					
206 module Includes 206 module, two 7-foot line cords, and installation instructions	▲	▲	▲	▲	▲
200 module Includes 200 module, two 7-foot line cords, and installation instructions	▲	▲	▲	▲	▲
Module connector	▲	▲	▲	▲	▲
AC power cord				▲	▲
Line cord (D2R) Connects system modules to network interface (clear color). Specify length: 7 (standard length), 14, or 25 foot	▲			▲	▲
Extension Wiring Kit Wire (100 feet), clips, tie wraps, and labels—enough for wiring one extension	▲		▲	▲	▲
267F2 bridging adapter Connects two devices to one extension	▲		▲	▲	▲
In-Range Out-of-Building (IROB) protector 503A1 See "Requirements for Out-of-Building Extensions" in Appendix B.		▲	▲	▲	▲
Off-Premises Range Extender (OPRE) 112A See "Requirements for Out-of-Building Extensions" in Appendix B		▲		▲	▲
Z300A Electromagnetic Interference (EMI) filter Includes filter, 7-foot line cord, and installation instructions		▲		▲	▲
267C line adapter (do not use at extension jacks) Splits two outside lines from an RJ14 network interface jack so each line has its own modular plug	▲		▲	▲	
Music-On-Hold Coupler Required to connect Music-On-Hold device to 206 module	▲	▲		▲	
System Telephones and Accessories:					
MLS-18D corded telephone, black or white	▲	▲	▲	▲	
MLS-12D corded telephone, black or white	▲	▲	▲	▲	
MLS-12 corded telephone, black or white	▲	▲	▲	▲	
MLS-6 corded telephone, black or white	▲	▲	▲	▲	
MLC-6 cordless telephone, black or white	▲	▲	▲	▲	
Telephone stand, black or white	▲			▲	▲
Button label package (specify telephone model) 12 labels with clear plastic cover	▲			▲	▲
Handset (K2S1), black or white Standard for MLS-model phones	▲			▲	▲
Amplified handset (K6S), black or white Optional for hard-of-hearing users with MLS-18D phones	▲	▲		▲	▲
Handset cord, 9 foot, black or white, coiled Connects handset to telephone	▲		▲	▲	▲
Telephone mounting cord (D4BU) Connects phone to wall jack, jack panel, or to 206 module extension jack. Specify length: 2, 7, or 14 foot	▲		▲	▲	▲
Modular telephone extension cord—8-connector Extends the D4BU mounting cords Specify length: 14, 25, 50, 75, or 100 foot	▲			▲	
* To locate the AT&T PhoneCenter Store nearest you, see the listing in your local telephone directory's white pages (under AT&T), or call 1 800 222-3111 (in the continental U.S. only)					
** To locate the nearest AT&T Authorized Dealer, call 1 800 247-1212 (in the continental U.S. only).					

FCC Information



Federal Communications Commission (FCC) Interference Information

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of FCC rules. These limits are designed to provide reasonable protection against harmful interference in a commercial or residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manuals, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment on and off, the user is encouraged to try to correct the interference by one or more of the following measures:

- Where it can be done safely, re-orient the television or radio antenna.
- To the extent possible, relocate the television, radio, or other receiver with respect to the telephone equipment.
- Plug the telephone equipment into an AC outlet that is not on the same circuit as the one used by the radio or television.

NOTE:

References to FCC regulations in this appendix are not applicable outside of the continental U.S. The PARTNER 220V System is suitable for use in commercial environments only.

FCC Notification and Repair Information

This equipment is registered with the FCC in accordance with Part 68 of its rules. In compliance with those rules, you are advised of the following:

- **Means of Connection:** Connection to the telephone network shall be through a standard network interface jack USOC RJ11C. These USOC jacks must be ordered from your Telephone Company.

This equipment may not be used with party lines or coin telephone lines.

- **Notification to the Telephone Companies:** Before connecting this equipment, you or your equipment supplier must notify your local telephone company's business office of the following:
 - The telephone number(s) you will be using with this equipment.
 - The appropriate registration number and ringer equivalence number (REN), which can be found on the right hand side of the control unit.
 - The facility interface code, which is 02LS2.

You must also notify your local telephone company if and when this equipment is permanently disconnected from the line(s).

- **Repair Instructions:** If you experience trouble because your equipment is malfunctioning, the FCC requires that you disconnect the equipment from the network until the problem has been corrected. Repairs to this equipment can only be made by the manufacturer, its authorized agents, or by others who may be authorized by the FCC. In the event repairs are needed on this equipment, please contact the AT&T Helpline at 1 800 628-2888. For warranty information, see Appendix D.
- **Rights of the Local Telephone Company:** If this equipment causes harm to the telephone network, the local telephone company may discontinue your service temporarily. If possible, they will notify you in advance. But if advance notice is not practical, you will be notified as soon as possible. You will also be advised of your right to file a complaint with the FCC.

Your local telephone company may make changes in its facilities, equipment, operations, or procedures that affect the proper functioning of this equipment. If they do, you will be notified in advance to give you an opportunity to maintain uninterrupted telephone service.

- **Hearing Aid Compatibility:** The custom telephones for this system are compatible with inductively coupled hearing aids as prescribed by the FCC.

DOC Notification and Repair Information

The Canadian Department of Communications (DOC) label identifies certified equipment. This certification means that the equipment meets certain telecommunications network protective, operational, and safety requirements. The DOC does not guarantee the equipment will operate to the user's satisfaction.

Before installing this equipment, users should ensure that it is permissible to connect it to the facilities of the local telecommunications company. The equipment must also be installed using an acceptable method of connection. In some cases, the company's inside wiring for single-line individual service may be extended by means of a certified connector assembly (telephone extension cord). The customer should be aware that compliance with the above conditions may not prevent degradation of service in some situations.

Repairs to certified equipment should be made by an authorized Canadian maintenance facility designated by the supplier. Any repairs or alterations made by the user to this equipment, or any equipment malfunctions, may give the telecommunications company cause to request the user to disconnect the equipment.

Users should ensure for their own protection that the electrical ground connections of the power utility, telephone lines, and internal metallic water pipe system, if present, are connected. This precaution may be particularly important in rural areas.



CAUTION:

Users should not attempt to make such connections themselves, but should contact the appropriate electrical inspection authority or electrician, as appropriate.

To prevent overloading, the Load Number (LN) assigned to each terminal device denotes the percentage of the total load to be connected to a telephone loop used by the device. The termination on a loop may consist of any combination of devices subject only to the requirement that the total of the Load Numbers of all the devices does not exceed 100.

DOC Certification No: 230 3756A

CSA Certification No: LR 60486

Load No: 7

Renseignements sur la notification du ministère des Communications du Canada et la réparation

L'étiquette du ministère des Communications du Canada identifie le matériel homologué. Cette étiquette certifie que le matériel est conforme à certaines normes de protection, d'exploitation et de sécurité des réseaux de télécommunications. Le Ministère n'assure toutefois pas que le matériel fonctionnera à la satisfaction de l'utilisateur.

Avant d'installer ce matériel, l'utilisateur doit s'assurer qu'il est permis de le raccorder aux installations de l'entreprise locale de télécommunication. Le matériel doit également être installé en suivant une méthode acceptée de peuvent être prolongés au moyen d'un dispositif homologué de raccordement. Dans certains cas, les fils intérieurs de l'entreprise utilisés pour un service individuel à ligne unique peuvent être prolongés au moyen d'un dispositif homologué de raccordement (cordon prolongateur téléphonique interne). L'abonné ne doit pas oublier qu'il est possible que la conformité aux conditions énoncées ci-dessus n'empêchent pas la dégradation du service dans certaines situations. Actuellement, les entreprises de télécommunication ne permettent pas que l'on raccorde leur matériel à des jacks d'abonné, sauf dans les cas précis prévus pas les tarifs particuliers de ces entreprises.

Les réparations de matériel homologué doivent être effectuées par un centre d'entretien canadien autorisé désigné par le fournisseur. La compagnie de télécommunications peut demander à l'utilisateur de débrancher un appareil à la suite de réparations ou de modifications effectuées par l'utilisateur ou à cause de mauvais fonctionnement.

Pour sa propre protection, l'utilisateur doit s'assurer que tous les fils de mise à la terre de la source d'énergie électrique, des lignes téléphoniques et des canalisations d'eau métalliques, s'il y en a, sont raccordés ensemble. Cette précaution est particulièrement importante dans les régions rurales.



AVERTISSEMENT:

L'utilisateur ne doit pas tenter de faire ces raccordements lui-même; il doit avoir recours à un service d'inspection des installations électriques, ou à un electricien, selon le cas.

L'indice de charge (IC) assigné à chaque dispositif terminal indique, pour éviter toute surcharge, le pourcentage de la charge totale qui peut être raccordée à un circuit téléphonique boucié utilisé par ce dispositif. La terminaison du circuit boucié peut être constituée de n'importe quelle combinaison de dispositifs, pourvu que la somme des indices de charge de l'ensemble des dispositifs ne dépasse pas 100.

No d'homologation: 230 3756A
No de certification CSA: LR 60486
L'indice de charge: 7

Glossary

A

Auto Dial button

A customizable button on an MLS-18D, MLS-12D, and MLS-12 system phone that lets you dial a series of digits simply by pressing that button. An Auto Dial button can be used to store an outside phone number or an extension number so that it can be dialed with one touch.

Auxiliary equipment

Telecommunications devices (other than system phones) that can be connected to the system modules. Examples include standard phones, fax machines, and answering machines.

C

Calling feature buttons

Buttons on MLS-18D, MLS-12D, and MLS-12 system phones used to access the Privacy, Last Number Redial, Recall, and Conference Drop features.

Combination extension

An extension that has two devices connected to it. Combination extensions can connect two standard devices or a standard device and a system phone, but not two system phones.

E

Extension

An endpoint (numbered 10–21) in the system that connects telephones or standard devices, which can be dialed using the [Intercom] button plus the 2-digit extension number.

Extension jack

The location on 206 system modules that allows you to connect phones (or other auxiliary equipment) to the system modules.

Extension number

The number assigned to each extension jack. Extension numbers run consecutively from 10 through 21 and are used for intercom calling.

F

Feature phone

An industry-standard phone that includes programmable buttons or other built-in features.

I

Industry-standard device

A telephone or other telecommunications device that can be connected directly to the public telephone network. See *also* Standard phone and Proprietary device.

Intercom button

Two buttons on system phones used to make intercom calls.

Intercom Auto Dial button

A button that is customizable to ring or voice signal another extension whenever the button is pressed. The button can be used to call the extension or to transfer a call to the extension with one touch; the lights next to the button show calling activity for the extension.

Intercom call

A call that is made to another system extension.

L

Line buttons

Buttons on system phones used to make and answer outside calls. Lights next to each button show the status of the line.

Line jack

The location on 206 and 200 system modules that allows you to connect outside lines to the system.

Line number

The number assigned to each line jack. Line numbers run consecutively from 01 through 04.

M

Music On Hold device

Equipment that lets you play recorded music to callers who are placed on hold. A Music On Hold device connects to extension jack 15 on the 206 system module via a Music On Hold coupler.

N

Network interface jack

A jack, generally located in your equipment room, that provides access to an outside line coming into your building from your local telephone company. A telephone cord from the network interface jack to a line jack on a 206 or 200 system module connects the outside line to your system.

P

Proprietary device

A telephone or other device that is designed to work with a specific system, and requires a special interface to connect to the public telephone network. For example, MLS- and MLC-model phones are proprietary devices that can be used only with the system modules described in this guide. *See also* Industry-standard device.

R

Ringer Equivalence Number (REN)

A measure of the power it takes to ring a phone or other telecommunications device, usually shown on a label on the bottom of the device.

S

Speed dialing

A feature that lets a user dial a telephone number quickly by dialing a 2-digit code.

Standard phone

An industry-standard touch-tone or rotary phone such as you might have in your home. *See also* Industry-standard device and Feature phone.

System

The AT&T PARTNER system modules and MLS- and MLC-model phones that you purchased, plus all other telecommunications devices connected to the system modules.

System manager

The person in your company who is responsible for managing your system.

System modules

The AT&T hardware components that connect lines coming into your building to the extensions in your system, and which provide system features.

System options

Customizable settings that define how the system modules work with the telephones and other devices connected to them. These options affect all extensions.

System phones

The AT&T phones that are specifically designed for use with PARTNER systems. Models include the MLS-18D, MLS-12D, MLS-12, MLS-6, and MLC-6 phones.

T

Telephone options

Customizable settings that define how individual telephones work.

200 module

The AT&T hardware component that contains jacks for connecting up to two outside lines to your system.

206 module

The AT&T hardware component that contains jacks for connecting up to two outside lines and up to six extensions to your system.

V

Voice signaled call

An intercom call to an idle system phone in which the caller's voice is heard through the phone's speaker.

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CHANGING FACTORY SETTINGS

AT EXTENSION 10:

- PRESS [*Feature*] [*Q*] [*Q*].
- PRESS left [*Intercom*] twice.
- Follow the boxed instructions below for the option (or options) you want to change.
Repeat boxed instructions to correct a mistake.
- PRESS [*Feature*] [*Q*] [*Q*] again when you are done.

OPTIONS THAT AFFECT ALL EXTENSIONS

OPTIONS THAT AFFECT AN INDIVIDUAL EXTENSION

NOTE: If you are changing more than one setting for an extension, you must set Automatic Line Selection first.

SYSTEM DATE (p. 5-33)
Dial #101
Dial the data in MMDDYY form

SYSTEM TIME (p. 5-37)
DIAL #103
DIAL the time in HHMM 24-hour military format

RECALL TIMER DURATION
DIAL #107 (p. 5-31)
DIAL two digits to set the length of a switchhook flash (01-80) (where 01 = 25 msec.)
18 = 450 msec. ✓
NOTE: If behind PBX, set to 18. If behind Centrex, set to 32.

DIAL MODE (p. 5-12)
DIAL #201
DIAL 1 = Touch-Tone ✓ (red steady)
2 = Rotary (red flashing)

HOLD DISCONNECT TIME (p. 5-18)
DIAL #203
DIAL 1 = Long-450 msec. (red steady) ✓
2 = Short-50 msec. (red flashing)

TOLL CALL PREFIX (p. 5-38)
DIAL #402
DIAL 1 = 0/1 plus Area Code and Number (red steady) ✓
2 = Area Code and Number only (red flashing)

MUSIC/TONES ON HOLD (p. 5-24)
DIAL #602
DIAL 1 = Tones On Hold (red steady) ✓
2 = Not Active (red flashing)
3 = Music On Hold (red wink)

✓ = Factory Setting

AUTOMATIC LINE SELECTION (p. 5-7)
PRESS right [*Intercom*]
DIAL the extension number (10-21)
PRESS [*] [*]
PRESS the line/intercom buttons in the desired order
PRESS [±] [±]
Repeat above steps to change another extension

LINE RINGING (p. 5-21)
PRESS right [*Intercom*]
DIAL the extension number (10-21)
PRESS each line button until the desired setting displays:
• Ring (green steady) ✓
• No ring (green flutter)
Repeat above steps to change another extension

AUTOMATIC EXTENSION PRIVACY (p. 5-6)
DIAL #340
DIAL the extension number (10-21)
DIAL 1 = Assigned (red steady)
2 = Not Assigned (red flashing) ✓

ABBREVIATED RINGING (p. 5-2)
DIAL #305
DIAL the extension number (10-21)
DIAL 1 = On-1 ring ✓ (red steady)
2 = Off-repeated ringing (red flashing)
Repeat above steps to change another extension

OUTGOING CALL RESTRICTION (p. 5-26)
DIAL #401
DIAL the extension number (10-21)
DIAL 1 = No Restriction ✓ (red steady)
2 = Inside (intercom) Only (red flashing)
3 = Local (intercom and local) Only (red winking)
Repeat above steps to change another extension

SYSTEM SPEED DIAL NUMBERS (p. 5-35)

AT EXTENSION 10:

- TO STORE** PRESS [*Feature*] [*Q*] [*Q*]
PRESS [*Feature*] followed by a 2-digit code (20-79) ←
DIAL telephone number up to 20 digits including special functions (see box below)
(To store another number, repeat last two steps)
PRESS [*Feature*] [*Q*] [*Q*] when you are done
- TO REMOVE** PRESS [*Feature*] [*Q*] [*Q*]
PRESS [*Feature*] followed by the 2-digit code (20-79) ←
PRESS [*Mic*]
(To remove another number, repeat last two steps)
PRESS [*Feature*] [*Q*] [*Q*] when you are done

ONE-TOUCH AUTO DIAL NUMBERS (p. 5-4)

- TO STORE REMOTELY FROM EXTENSION 10** PRESS [*Feature*] [*Q*] [*Q*]
PRESS left [*Intercom*] twice
PRESS right [*Intercom*]
DIAL the extension number for which the Auto Dial number is to be stored
PRESS an Auto Dial button ←
DIAL an extension number, or an outside phone number up to 20 digits including special function (see box below). (To set up an Auto Dial button for group paging, press [*Intercom*] [*] [Z].)
(To store another number, repeat last two steps)
PRESS [*Feature*] [*Q*] [*Q*] when you are done
- TO STORE DIRECTLY AT A USER'S PHONE** PRESS [*Feature*] [*Q*] [*Q*]
PRESS an Auto Dial button ←
DIAL an extension number, or an outside phone number up to 20 digits including special functions (see box below). (To set up an Auto Dial button for group paging, press [*Intercom*] [*] [Z].)
(To store another number, repeat last two steps)
PRESS [*Feature*] [*Q*] [*Q*] when you are done
- TO REMOVE** PRESS [*Feature*] [*Q*] [*Q*]
PRESS the Auto Dial button ←
PRESS [*Mic*]
(To remove another number, repeat last two steps)
PRESS [*Feature*] [*Q*] [*Q*] when you are done

STORING SPECIAL FUNCTIONS IN A SPEED DIAL OR AUTO DIAL NUMBER (p. 5-32)

To insert a:	Press:	To insert a:	Press:
Pause	[<i>Hold</i>]	Stop	[<i>Mic</i>]
Recall	[<i>Sokr</i>]	Touch-Tone Enable	[<i>Transfer</i>]

DOORPHONE/HOT LINE PHONE/EMERGENCY PHONE (#604) (p. 5-14)

- To assign doorphone, hot line phone or emergency phone extension:
DIAL #604
DIAL the extension number
DIAL 1 = Assigned
2 = Not Assigned
PRESS [*Feature*] [*Q*] [*Q*]

To store alert extension or emergency phone number
PRESS [*Feature*] [*Q*] [*Q*]
PRESS left [*Intercom*] twice
- PRESS right [*Intercom*]
DIAL the 2-digit extension number assigned to the doorphone, hot line phone, or emergency phone
PRESS the *leftmost* programmable Auto Dial button on the *upper* row of Auto Dial buttons
PRESS left [*Intercom*] and dial 2-digit extension number to alert that extension or [Z] to alert all extensions
OR
DIAL the emergency phone number (up to 20 digits)
PRESS [*Feature*] [*Q*] [*Q*]

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