Lucent Technologies
Bell Labs Innovations

MERLIN LEGEND®
Communications System
Releases 3.1and 4.0
Analog Multiline Telephones
User's Guide

Contents

Pull-Out Card
Remove this and use it to keep track of speed dial codes, group numbers,
and other information about your phone and system.

⚠ Security Alert
Your Responsibility for Your System's Security

Toll fraud, the unauthorized use of your telecommunications system by an unauthorized party (for example, persons other than your company's employees, agents, subcontractors, or persons working on your company's behalf) can result in substantial additional charges for your telecommunications services. You are responsible for the security of your system. There may be a risk of toll fraud associated with your telecommunications system. Your system administrator should read all installation, instruction, and system administration documents provided with this product to fully understand the features that can introduce the risk of toll fraud and the steps that can be taken to reduce that risk. Lucent Technologies does not warrant that this product is immune from or will prevent unauthorized use of common-carrier telecommunication services or facilities accessed through or connected to it. Lucent Technologies will not be responsible for any charges that result from such unauthorized use.

Your Analog Multiline Telephone

Display Timekeeping Buttons: BIS-22D*

Time/Timer

Set
Set alarm. Select time, day, or date.
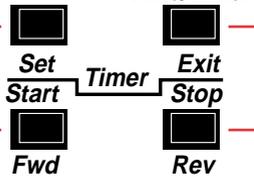
Exit
Stop setting clock, alarm, or date.

Set / Start — Timer — Exit / Stop

Start and **Fwd**
Turn on alarm. Set time, day, or date forward.

Fwd / Rev

Stop and **Rev**
Turn off alarm. Set time, day, or date backward.

Note:
This guide covers the BIS display and non-display phones, as well as the MLC-5 cordless telephone. The picture shows the BIS-34D. For more information on timekeeping, see **Alarm Clock, Timer, & Calendar**, p. 10, and **Reminders**, p. 19. For more information on the MLC-5, see the owner's guide.

Display Timekeeping Buttons: BIS-34D*

Contrast Control (BIS-34D only)

OTHER Jack*
Located on the underside of the phone. (See **Headsets**, p. 5.)

Note:
The operation of the **Recall**, **Transfer**, **Conference**, **Drop**, and **Hold** buttons and features may vary depending on how your system is set up. See your system manager for details.

Display
Display phones only: Display area shows call information, clock/calendar, reminders, and messages.

Line Buttons
Outside, **Pool**, **SA**, and **ICOM** buttons (see p. 2); blank line buttons can be programmed with features, and one should be programmed as a **Feature** button (see p. 9).
BIS-34D has 34 line buttons.
BIS-22 and 22D have 22 line buttons.
BIS-10 has 10 line buttons.
MLC-5 has 5 line buttons.

T/P Switch
Move to **P** to program or **T** to test. Center position for normal operation.

Dialpad

Ringing Volume Control

Fixed-Feature Buttons

| Conference | | Transfer | |
| Drop | | Hold | |
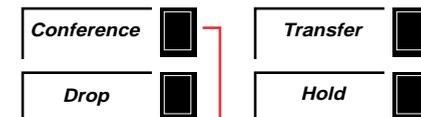
Transfer
Send a call to another phone (see p. 6).

Hold
Put a call on hold (see p. 6).

Conference*
Add a person to conference (see p. 6).

Drop*
Press **Drop** and a line button to drop a person from a conference (see p. 6).

Speakerphone Volume Control*

Fixed-Feature Buttons*

| Recall | Message | HFAI | Mic | Spkrphone |
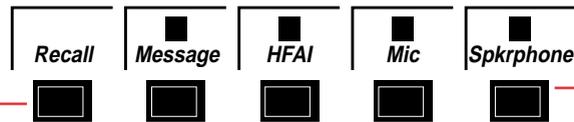
Recall*
Disconnect without hanging up (see p. 18).

Message*
Light indicates a waiting message. Press to read messages (display phones) or call the operator (see pp. 7–8).

HFAI*
(Hands Free Answer on Intercom) Press before calls come in to answer voice-announced calls without the handset.

Mic/Microphone*
Turn the speakerphone microphone on/off so that you can/cannot be heard by the caller.

Spkrphone*
Press to turn the speakerphone on/off for hands-free conversation during a call or when a call rings. Press to hang up the speakerphone call. Microphone goes on when you turn on the speakerphone.

* Not available on MLC-5.

1

Understanding Your Telephone

Line Buttons

All Telephones

NNN-XXXX Make/receive outside calls only.

Telephones with **ICOM** Buttons

ICOM Ring Make/receive inside ringing calls and receive inside voice-announced calls.

ICOM Voice Make inside voice-announced calls and receive inside ringing and voice-announced calls.

ICOM Originate Only Make (not receive) inside calls only.

Note:
MLC-5 cordless telephones can make but not receive voice-announced calls.

Telephones with System Access (**SA**) Buttons

SA buttons give you access to inside or outside lines for making and/or receiving calls. To make an outside call on an **SA** button, first dial the dial-out code (usually **9**) that your system manager supplies. No dial-out code is necessary when you call another extension.

SA Ring Make/receive inside/outside ringing calls and receive inside voice-announced calls.

SA Voice Make/receive outside calls; receive inside ringing and voice-announced calls; make inside voice-announced calls.

SA Originate Only Make (not receive) inside and outside calls.

Shared SA SSA Make/answer calls for co-workers or join conversations. Line is shared with another co-worker(s). One person has an **SA** button that is shared with one or more others who have **SSA** buttons corresponding to it. See **Rings** for information about how calls ring at these buttons.

Pool Make/receive outside calls only. Use the dial-out code supplied by your system manager.

Line Button Lights

Light		Meaning
■	Steady red (not for MLC-5)	The line you are using or will use when you lift the handset or press the **Spkrphone** button.
▣	Steady green (red on MLC-5)	The line is in use, or the feature programmed onto the line button is on.
☼	Flashing green	An incoming call is ringing on this line button or a call you transferred is returning to this line button (see p. 6).
☼	Fast-flashing green (red on MLC-5)	You have put a call on hold on this line button.
⊡	Slow-flashing green (red on MLC-5)	Someone else has put a call on hold on this line button.

Tones

Tone		Meaning
▬▬▬▬	Dial tone (steady)	You can make a call.
▬ ▬ ▬	Busy (slow repeating tone)	The phone you are calling is busy.
▬▬▬▬	Fast busy (fast repeating tone)	No lines are available.
▬ ▬ ▬	Error (alternating high-low tones)	You dialed a number or used a feature incorrectly.
▬▬ ▬	Confirmation (double break in dial tone followed by steady tone)	You used a feature correctly.
◆◆◆◆◆	Callback (5 short beeps)	This call is receiving Callback treatment (see p. 13).
◆◆	Call Waiting (1 or 2 beeps)	You have an inside (1 beep) or an outside (2 beeps) call waiting (see p. 13).

Rings

The table below helps you identify the different types of ringing. You can also personalize ringing at your telephone or adjust ring timing for the line buttons where calls arrive. **Programming Buttons & Settings**, p. 20, tells you how to change the settings. Listed below are your options:

- **Personalized Ring*.** Allows you to give calls ringing at your phone one of 8 distinctive rings.
- **Abbreviated Ring.** When you are on a call and another call arrives at your phone, you can use this feature to give the second call a short ring.
- **Immediate Ring.** Calls ring immediately on line buttons set this way.
- **Delay Ring.** This setting causes calls to ring at your phone after a delay. If your calls are being covered, this allows time for another person to answer a call before you do.
- **No Ring.** Calls do not ring (except for returning transferred and Callback calls). Calls on lines set for No Ring do not receive coverage (p. 14).
- **Send Ring.** Usually, when a call comes in on an **SA** button, it rings there immediately and rings at corresponding **SSA** buttons after a delay, giving the person with the **SA** button time to answer before the call is picked up by someone with a corresponding **SSA** button. When busy on another call, the person with the **SA** button can use the Send Ring setting to make calls arriving at other **SA** buttons ring *immediately* on corresponding **SSA** buttons instead of after a delay.

* On MLC-5, must be programmed by system manager.

Ring		Meaning
▬▬▬▬	1 long ring	Inside call
▬ ▬▬▬	1 short ring and 1 long ring	Outside call
▬ ▬ ▬▬	2 short rings and 1 long ring	Outside call transferred, returning transferred call, or returning Callback call (see p. 13)

> ⚠ **CAUTION:**
> To clean your phone, unplug it from the wall jack and use a *slightly* dampened cloth. To prevent permanent damage, do not immerse the phone in water or any liquid, and do not use liquid or aerosol cleaners directly on the telephone.

Feature Finder

This table shows where to look for information about performing specific telephone activities. Any features that do not have detailed instructions can be used by following the directions in **Using Features** (p. 9) or programmed by following the instructions in **Programming Buttons & Settings** (p. 20).

Calling	
If you want to …	**Then**
Dial numbers with the touch of a button.	See **Auto Dial**, p. 12.
Program codes for numbers you dial often (BIS-10 and MLC-5 only).	See **Personal Speed Dial**, p. 17.
Quickly dial numbers your company has programmed.	See **System Speed Dial**, p. 19.
Make a voice-announced call to 1 or more co-workers.	See **Line Buttons**, p. 2, and **Paging**, p. 16.
Broadcast over the company's loudspeaker system.	See **Paging**, p. 16.
Make a call after office hours.	See **Night Service**, p. 16.
Make and answer calls with no hands (BIS phones only).	See **HFAI** button, p. 1. For information about headsets, see p. 5, **Auto Answer All**, p. 11, and **Voice Announce**, p. 19.
Automatically redial a number you dialed before.	See **Last Number Dial**, p. 16, and **Saved Number Dial**, p. 19.
Connect to an extension or outside line when it's free.	See **Callback & Line Request**, p. 13.
Enter an account code before or during a call.	See **Account Codes**, p. 10.
Make a call from another extension, using your own calling privileges.	See **Authorization Codes**, p. 11.
Disconnect the call you're on without hanging up.	See **Recall**, p. 18.
Set up a conference with as many as 4 others.	See **Conference**, p. 6.
Transfer a call.	See **Transfer**, p. 6, and **Park & Pickup**, p. 17.
Know if someone is calling you when all your other lines are in use.	See **Call Waiting**, p. 13.
Reach a voice mailbox without calling the person.	See **Direct Voice Mail**, p. 14.
Put a call on hold.	See **Hold**, p. 6.
Customizing Your Phone	
Program a feature on an unused line button.	See **Programming Buttons & Settings**, p. 20.
Adjust volume of the speaker or ringer.	See **Ringing** or **Speakerphone Volume**, p. 1.
Give your phone its own distinctive ring.	See **Rings**, p. 2.
Delay or remove the ring from an outside, **SA**, or **ICOM** line button.	See **Rings**, p. 2, and **Coverage**, p. 14.

Feature Finder

Covering Calls	
If you want to ...	**Then**
Have a co-worker answer your calls. Answer all of a co-worker's calls from your telephone. Stop your calls from being covered by others.	See **Coverage**, p. 14, and **Line Buttons**, p. 2.
Stop your outside calls from going to your company's voice mail system (or send calls to voice mail).	See **Coverage**, p. 14.
Forward your calls to another telephone. Answer your calls from another extension.	See **Forward & Follow Me**, p. 15.
Answer a call ringing at a co-worker's extension. Answer a call on a line that's not on your phone.	See **Pickup**, p. 18.
Put a call on hold at a busy extension until your co-worker is ready for it or complete a transfer to an extension that doesn't answer.	If your phone system doesn't have voice mail, try **Camp-On**, p. 14.
Hold a call when you're trying to transfer it or when your co-worker doesn't answer; page your co-worker while the call waits.	See **Park & Pickup**, p. 17.
Messaging	
Let a co-worker know you called. Find out if you have a voice mail message, fax, or other message. Signal a co-worker to contact you. Choose a message to leave for co-workers who have display phones.	See **Messaging**, pp. 7–8.
Reach a voice mailbox without calling the person.	See **Direct Voice Mail**, p. 14.
Privacy	
Prevent interruptions by blocking calls to your phone.	See **Do Not Disturb**, p. 15.
Prevent co-workers from joining your calls.	See **Privacy**, p. 18.
Prevent others on a call from hearing you speak to someone in your office.	See **Mic/Microphone**, p. 1.
Receive or not receive voice-announced calls.	See **Voice Announce**, p. 19.
Timekeeping	
Remind yourself of appointments. Change the time, day, or date on your display (display phones only). Time calls or meetings (display phones only).	See **Alarm Clock, Timer, & Calendar**, p. 10, and **Reminders**, p. 19.

Headsets*

Headsets are designed for hands-free telephone use and consist of several components, depending upon whether manual or one-touch operation is used. Any of the AT&T headpieces work in either mode. For information on telephone features for headsets, see **Auto Answer All**, p. 11, and **Voice Announce**, p. 19.

Note: A calling group agent using a headset must press the **Headset Hang Up** button to complete a call in order to update the supervisor's **Agent** button.

Headpieces

- **Mirage®.** Receiver fits over either ear. Not for noisy environments.
- **StarSet®.** Eartip fits in ear canal.
- **Supra® Monaural.** Adjustable headband and soft ear cushion.
- **Supra Monaural Noise-Canceling (NC).** Same as above with noise-canceling microphone that reduces background noise transmission by up to 75%.
- **Supra Binaural.** Sound in both ears.
- **Supra Binaural Noise-Canceling (NC).** Same as above with noise-canceling microphone on flexible boom; features windscreen and reduces background noise transmission by up to 75%.

Manual Operation

Choose manual operation when a headset is used occasionally. You must pick up the handset to answer a call and replace it to hang up. The manual headset consists of the headpiece, a modular base unit, and the telephone. The headpiece plugs into the modular base unit, and the modular base unit connects to the telephone through the handset jack on the side of the telephone. The telephone handset is plugged into the modular base unit.

Headpiece →

Modular Base Unit

Handset Jack
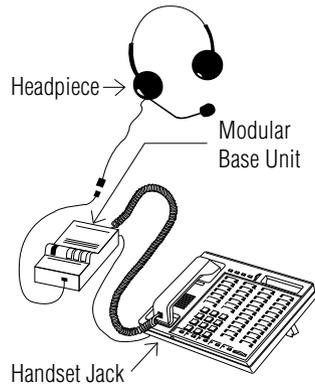
One-Touch Operation

One-touch operation allows you to simply touch a button to answer a call and touch a button again to hang up. Use one of the headpieces along with a plug prong base unit, an adapter (502C), and the telephone. The headpiece connects to the plug prong base unit, which in turn connects to the adapter. The adapter plugs into the OTHER jack on the underside of the telephone. Use a programmed **Auto Answer All** button (p. 11) to turn headset operation on or off.

OTHER Jack (underside)

502C Adapter

Plug Prong Base Unit

Headpiece →
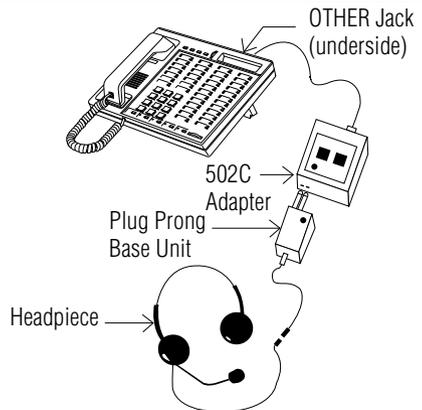
* Not available for MLC-5.

Call Handling

Making & Answering Calls

First, review pp. 1–2 to find out about the buttons, lights, tones, and rings on your telephone. If you have a headset, see p. 5. In this guide, instructions for using features may not include all the possible ways you can make a call.

To make a call, lift the handset or press **Spkrphone** button. The line button with the steady red light is automatically selected for you. To make a call on a specific line (for example, an **SA** or **ICOM** line for a voice-announced call), select an unlit line button and press it before lifting the handset or pressing the **Spkrphone** button. When using a headset (see p. 5), select a line button first.

To answer a ringing or voice-announced call, lift the handset, press the **Spkrphone** button, or use the headset.

To make or answer a call on an MLC-5 cordless telephone:

Before making a call, extend the antennas on the base unit and handset. To make a call or when a call is ringing, press the **On/Off** button. To make a call, press a line button if one is not already lit. (You can make but not receive voice-announced calls.) Dial the number or speak to the caller who is ringing you. To disconnect the call, press the **On/Off** button or place the handset in the base unit.

Conference*

A conference call can have up to 3 inside participants, including yourself and up to 2 outside participants.

1. Dial the first outside number or extension. Announce the call.
2. Press the **Conference** button to put the call on hold.
3. Select an **ICOM**, **SA**, or numbered line button.
4. Dial the next number or extension.
5. Announce the call and press **Conference**.
6. Repeat Steps 2–5 for each participant.
   - Press the **Drop** button and line button to drop any participant added.
   - Press the **Hold** button to temporarily leave the conference. Then press any participant's line button to rejoin the conference.
7. To end the conference, hang up.

⚠ **SECURITY ALERT:**
If the system selects an **SA Voice** button when you add a conference participant, you hear a beep instead of ringing after you dial the extension. If the call is not answered and you press the **Conference** button to complete the call, your conversation with other conference participants is broadcast on the extension's speakerphone. To prevent this, be sure to drop an unanswered extension that you've called on an **SA Voice** button.

Hold

When you have a call or conference on hold, your phone beeps once each minute.

1. Press the **Hold** button to put a call on hold. Do *not* press the **Drop** button to end a conference while the call is on hold.
2. To return to the call or conference, press the flashing **ICOM**, **SA**, or line button that is holding the call.

Transfer

To transfer:
1. Press the **Transfer** button. The system selects an **ICOM** or **SA** button and puts the call on hold.
2. Dial the extension or outside number.
3. Announce the call if desired.
4. Press the **Transfer** button and hang up. To cancel the transfer or return to the call on hold, press the flashing **ICOM**, **SA**, or line button.

To one-touch manual transfer:
1. Press the programmed **Auto Dial** button (p. 12) for the number where you want to transfer the call.
2. Announce the call.
3. Press the **Transfer** button and hang up. To cancel the transfer or return to the call on hold, press the flashing button.

To one-touch auto transfer if available:
Press the programmed **Auto Dial** button.

*Not available on MLC-5.

Messaging

Your phone system has several features that allow you to leave messages for others in your office. If you use Leave Message or Posted Messages, the person(s) for whom you are leaving a message must have a display phone. If you wish to leave a message for a person who does not have a display telephone, use voice mail and the Direct Voice Mail feature, p. 14, if available, or ask the system operator to take a message for the person. Here are some guidelines for different messaging features:

- **Leave Message.** This feature simply lets a co-worker know you have called. The message shows your name and the date and time of your call. If you leave one message and then another, the second message replaces the first.
- **Posted Messages.** If you post a message at your telephone, inside callers with display phones see the posted message you have selected. As many as 20 messages may be available for posting.

When a message is waiting for you, your red Message light is lit. The descriptions below explain how to read, cancel, and delete messages you have sent or received.

If your company has voice mail, ask your system manager for details about using the voice mail system. For information about having your phone covered by the voice mail system, see **Coverage**, p. 14.

If you frequently communicate with a small number of people (for example, as a receptionist for a few co-workers), there are two features you can use, both of which require programming on a button. These are Signaling and Notify, described on the next page.

Leaving Messages

To program:
See **Programming Buttons & Settings**, p. 20.

To leave a message at a busy or unanswered extension you are calling:

- Press the **Leave Message** button you have programmed,
  OR
  Press the programmed **Feature** button and dial **25**.
- To leave a voice mail message (if your company has such a system) press the programmed **Feature** button and dial **56** (see **Direct Voice Mail**, p. 14, for details).

A screen display confirms that the message has been sent, or it alerts you that the message box is full or the message can't be sent (for example, because the called person has no phone display).

To leave a message without calling:

1. Press the programmed **Feature** button and dial **53**.
2. Dial the extension.

To cancel a message:

1. Press the programmed **Feature** button and dial ✱**53**.
2. Dial the extension.

Receiving Messages

When your red Message light is on, you have a message from the operator, a co-worker, or a fax machine or voice mail system (if available).

If you have a nondisplay phone, call your system operator for the message or ask your system manager how to retrieve a voice mail message.

If you have a display phone, press the programmed buttons or press the programmed **Feature** button and dial the feature codes for the following features:

- Next Message to read more messages (code **28**)
- Return Call to call your co-worker or voice mail (code **27**)
- Scroll to see more of a long message while reading a message (code **29**)
- Delete Message (code **26**). You can have up to 10 messages; if there are 10, no more are accepted.

Each message is displayed, most recent first, with the extension or name of the caller. An unread message is marked with a ✱ symbol.

To turn off your Message light, delete all messages (display phone) or press the programmed **Feature** button and dial **54**.

Messaging

Posting Messages

To program:

See **Programming Buttons & Settings**, p. 20.

To post messages, you must program a **Posted Messages** button. You can use posted messages whether or not you have a display phone. A posted message appears on the display of any inside caller who tries to reach you as long as that person has a display phone. There may be as many as 20 messages available to you for posting. Message 1 is always *DO NOT DISTURB* *; 9 other messages, listed below, come with the system, but these can be changed by your system manager. The remaining 10 messages are created by your system manager, whom you should ask for details.

Code	Message	Code	Message
01	DO NOT DISTURB	06	IN CONFERENCE
02	OUT TO LUNCH	07	WITH A CLIENT
03	AT HOME	08	WITH A CUSTOMER
04	OUT SICK	09	AWAY FROM DESK
05	IN A MEETING	10	OUT ALL DAY

To post a message:

Press the programmed **Posted Messages** button and dial the 2-digit code for the message (01–20).

To cancel a posted message:

Press the programmed **Posted Messages** button and dial **00**.

* If you use the Do Not Disturb feature (p. 15) and have a programmed **Posted Messages** button, the appropriate message is posted. When you turn off the Do Not Disturb feature, the posted message is canceled, too. However, posting or canceling the message does not activate or deactivate the feature.

Signaling & Notify

To program:

See **Programming Buttons & Settings**, p. 20.

Signaling. Program a button that will cause a co-worker's phone to beep. The other person can then call you in response to the beep. You must program a different line button for each extension you wish to contact. To beep the recipient's phone, just press the button, and the other phone beeps for as long as you hold down the button. A programmed **Signaling** button also acts as an **Auto Dial** button (see p. 12). To dial the extension, lift the handset or press the **Spkrphone** button; then press the **Signaling** button.

Notify. This feature simply lights a line button on the recipient's phone, providing a silent message light that alerts the other party to call you. To use this feature, you must program a **Notify Send** button (labeled, for example, **Notify Mary**) on your phone and the recipient must program a **Notify Receive** button (labeled, for example, **Call Jim**) on his or her phone. Communication is one-way only, and buttons must be programmed for each extension you notify.

Using Features

There are two ways to activate a feature:

- Directly, by pressing a programmed **Feature** button, as explained below
- By pressing a line button you programmed with the feature (see **Programming Buttons & Settings**, p. 20)

Feature Button

To program a line button to be used as your **Feature** *button:*

1. Label a button as **Feature**.
2. Slide the T/P switch to **P**.
3. Press the button you labeled.
4. Dial ✱**20**.
5. Slide the T/P switch to center.

To use a feature you have not programmed on a button:

1. Press the programmed **Feature** button.
2. Dial the feature code (see the **Feature Codes** list below).

Feature Codes

Account Code	82 + code + **#**	Messaging continued	
Authorization Code	80 + code + **#**	delete message♦	26
Callback	55	next message♦	28
Call Waiting		return call♦	27
pick up call waiting call ■	87	scroll♦	29
Camp-On	57	turn off Message light	
Direct Voice Mail •	56	(manually)	54
Follow Me	34 + extension	Paging loudspeaker	9 + line number + zone
Forward		Personal Speed Dial ■	code (01–24)
inside	33 + extension	Pickup	
outside	33 + dial-out code + number + **#**	group	88
		inside	9 + extension
Forward and Follow Me		outside	9 + line number
cancel from all extensions ■	✱ 34 ✱	Privacy	
		off	✱ 31
cancel from one extension ■	✱ 34 + extension	on	31
cancel from your phone	33 + your extension	Reminders	
Last Number Dial	84	set reminder	81 + time + 2 or 7
Messaging		cancel reminder	✱ 81
cancel message ■	✱ 53 + extension	System Speed Dial	code (600–729)
leave message	25		
leave message without calling ■	53 + extension		

♦ Display phones only.
■ Available only by using feature code.
• Release 3.0 and later systems only.

Often-Used Features

Account Codes

To program:

See **Programming Buttons & Settings**, p. 20.

In some companies you enter an account code before or during a call to indicate client billing information. You may be *required* to enter an account code for all outside calls, or an account code may be optional for incoming and outgoing calls. Check with your system manager for account code operation and account codes.

You can program a button for this feature and label it **Acct**. See also **Auto Dial** (p. 12) to program an account code on an outside **Auto Dial** button.

To enter an account code:

1. Press the button you have programmed,

   OR

   Press the programmed **Feature** button and dial **82.**

2. Dial the account code and **#**.

3. Lift the handset or press the **Spkrphone** button to make a call. (If necessary, press an outside line, **Pool**, or **SA** button.)

4. Dial the number (including the dial-out code, if required).

To enter or change an account code during a call (the other party cannot hear your entry), follow Steps 1 and 2. If you enter an account code for an incoming call before it arrives, you cannot change that code during the call.

Alarm Clock, Timer, & Calendar

These features work on display phones only. To set an alarm on a nondisplay phone, see **Reminders**, p. 19. When you activate the alarm, your phone beeps every day at the set time until you cancel the alarm. When an alarm is set, a bell appears on your display to remind you. The 60-minute timer allows you to track calls, meetings, or other events.

To set the alarm:

1. Press the **Set** button.

2. Press the **Fwd** button and press the **Set** button again.

3. Press the **Fwd** or **Rev** button until the setting you want appears; press the **Set** button again.

4. Press the **Fwd** or **Rev** button until the setting you want appears.

5. Press the **Exit** button.

To cancel the alarm:

1. Press the **Set** button.

2. Press the **Fwd** and **Exit** buttons.

To set the timer:

1. Press the **Time/Timer** button.

2. Press the **Start** button to reset the timer.

3. When finished timing, press the **Stop** button.

4. Press the **Time/Timer** button to return to the normal display.

To reset the time, day, or date:

1. Press the **Set** button repeatedly until the time, day, or date is selected.

2. Press the **Fwd** or **Rev** button to change the item.

3. Repeat Steps 1 and 2 to reset another item.

4. Press the **Exit** button.

Often-Used Features

Authorization Codes

To program:

See **Programming Buttons & Settings**, p. 20.

This feature is useful at companies where there are telephones in public areas that are restricted from making some calls.

If your system manager has given you an authorization code, you can pick up someone else's telephone, enter your authorization code, and make an outside call with your own calling privileges. You must activate the feature and enter your code for each call you make, even when you are adding people to a conference. It is not necessary to use your authorization code for inside calls. Using an authorization code does not affect the button assignments on your own phone or the phone where you enter the code.

⚠ Security Alert

Compromise of authorization codes could lead to toll fraud or unauthorized charges.

Memorize your authorization code, and do not share it with anyone.

The way you activate the Authorization Code feature depends upon the type of telephone you are using to make the call.

- *If the telephone has a programmed* **Authorization Code** *button*, press it. The system selects a line and automatically activates the **Spkrphone** button (an available line button is selected for you); then continue with Step 3 below.
- *On an MLX display telephone*, press the **Feature** button, then select *AuthCode* [*Auth*] from the display or dial **80**; then continue with Step 3 below.

To enter an authorization code at any type of phone (except a QCC):

1. Lift the handset or press the **Spkrphone** button. (You may first select an **ICOM**, **SA**, or **SSA** button.)
2. Dial **#80**.
3. Dial your authorization code, followed by **#**.
4. Dial the dial-out code (usually a **9**) for an outside call and then dial the phone number.
5. To make another call, repeat Steps 1–4.

Auto Answer All*

To program:

See **Programming Buttons & Settings**, p. 20.

To answer calls using a headset or other device, you must program an **Auto Answer All** button on your phone. You must also have a headset adapter or General-Purpose Adapter (GPA). In addition, you must turn Voice Announce off (p. 19). (For more information about headsets, see p. 5.) Using this feature permits one-touch headset operation.

To use:

1. If using a GPA, switch it to **Auto**.
2. Press the programmed **Auto Answer All** button. Calls are answered automatically by your headset or other device.
3. To resume using your handset, press the **Auto Answer All** button again.

* Not available on MLC-5.

Often-Used Features

Auto Dial

This feature must be programmed on a line button; it dials an inside or outside number. Use inside **Auto Dial** buttons to:

- Dial other extensions or groups.
- Page groups (see **Paging**, p. 16).

Use outside **Auto Dial** buttons to:

- Dial outside phone numbers (with dial-out codes but without account codes).
- Enter account codes automatically (when programming, include **#** at the end).
- Dial long-distance access codes.
- Dial emergency contact numbers.

Note that you can also use other features to automate dialing: Last Number Dial (p. 16), Personal Speed Dial (BIS-10 and MLC-5 only, p. 17), Saved Number Dial (p. 19), and System Speed Dial (p. 19). When programming Auto Dial, use the **Special Characters** table on p. 20, if necessary. Include the complete dialing sequence for the call.

To program on a button:

1. Label a button.
2. Slide the T/P switch to **P**.
3. Press the labeled button.
4. Dial **✳22** for an inside number,
   OR
   Dial **✳21** for an outside number.
5. Dial the extension, group page number, or outside line (with dial-out code).
6. Repeat Steps 1 and 3–5 to program additional buttons.
7. Slide the T/P switch to center.

To use an **Auto Dial** *button:* *

1. To make a ringing call, press the programmed **Auto Dial** button,
   OR
   To make an inside voice-announced call, press an **ICOM Voice** or **SA Voice** button and then press the inside **Auto Dial** button.
2. The call is dialed automatically. If it's a voice-announced call, talk after the beep.

* MLC-5 users must press the **On/Off** button before making a call.

Often-Used Features

Callback & Line Request*

To program:

See **Programming Buttons & Settings**, p. 20.

Your system has two features that you can use when an outside line or extension is busy. These features give you access to the line or extension when it becomes available.

On phones with **SA** buttons, use Callback to reach:

• Busy outside lines on **Pool** or **SA** buttons, when you dial the dial-out code and hear the fast busy signal.
• Busy extensions, when you dial and hear the busy signal.

On phones with **ICOM** buttons, use:

• Line Request to reach a busy outside line when you lift the handset or press the **Spkrphone** button and do not hear dial tone.
• Callback for busy extensions

To use Callback when you hear the busy (extension) or fast busy (outside line) signal:

1. Press the button you have programmed, **OR** Press the programmed **Feature** button and dial **55**.
2. If you are trying to rach an outside line, dial the outside telephone number.
3. After you hear 5 short beeps, hang up. When the line or extension is free, you hear 3 rings.
4. Lift the handset or press the **Spkrphone** button. You hear dial tone, and the system dials the call.

* Line Request not available on MLC-5.

To cancel a Callback request:

1. Press the same line button you pressed when you tried to make the call.
2. Lift the handset and press the **Drop** button.
3. Press the same line button again.

To use Line Request:*

1. When outside lines are busy, hang up and press the line button you want to use. Do not lift the handset or press the **Spkrphone** button.
2. When a line is available, the phone beeps. Lift the handset or press the **Spkrphone** button.
3. Dial the outside number.

Call Waiting

If Call Waiting is on, you hear a call-waiting tone when a call comes in and your lines are in use. This feature works only on **SA** and **ICOM** buttons, not on line buttons labeled with phone numbers. When a call is waiting, you hear a single beep (inside call) or 2 beeps (outside call).

To complete a call and answer a waiting call:

1. When you hear the call-waiting tone, hang up.
2. When the phone rings, lift the handset or press the **Spkrphone** button.

To put a call on hold and pick up a waiting call:

1. Press the **Hold** button.
2. Press an **ICOM Originate Only** or **SA Originate Only** button. (You must have one of these buttons available to pick up the call.)
3. Press the programmed **Feature** button and dial **87**.
4. To return to the call on hold, press the button with the fast-flashing green light.

To turn Call Waiting on or off:

1. Slide the T/P switch to **P**.
2. Press any **ICOM** or **SA** button.
3. Dial ✱**11** to turn Call Waiting on, **OR**

   Dial ✱✱**11** to turn Call Waiting off.
4. Slide the T/P switch to center.

Often-Used Features

Camp-On

To program:
See **Programming Buttons & Settings**, p. 20. Use this feature to hold a call at a busy extension. The call rings when the extension is available.

To camp on a busy extension so the call will ring at the extension when your co-worker is available:
1. Press the **Feature** button.
2. Dial **57**.

NOTE:
Do not use the Camp-On feature if your system is equipped with a voice-mail system.

Coverage

To program:
See **Programming Buttons & Settings**, p. 20.

Coverage allows calls to your extension to ring elsewhere, so that they can be handled by someone else. If your system has voice mail, your calls can also be covered that way. There are three types of coverage:
- **Primary Coverage.** If your calls are covered this way, they ring immediately at the covering phone.
- **Secondary Coverage.** The covering phone rings after a delay of 2 rings, giving you a chance to answer first.
- **Group Coverage.** Calls for a group of people (coverage group) may be covered by one or more people. Your system manager can tell you how this works at your office.

Covering phones are programmed with **Cover** buttons used to answer calls for others. Delay Ring on the covering phone can add a longer delay before your calls ring there. If line buttons on your phone are set to No Ring, however, calls on those lines are not covered. (See **Rings**, p. 2.)

To control coverage of inside calls, use a programmable setting: Coverage Inside On allows all your inside calls to ring elsewhere; Coverage Inside Off turns inside coverage off.

You can also program buttons for these Coverage features:

- Use a **Coverage VMS** button to prevent or allow coverage of your outside calls by a voice mail system. These calls may still be covered by a person at another extension.
- Use a **Coverage Off** button to turn off or on all coverage of your calls.

Direct Voice Mail

To program:
See **Programming Buttons & Settings**, p. 20.

Direct Voice Mail allows an inside caller to call directly or transfer a call directly to another user's voice mail. You can also use the feature *after* you have dialed the extension; just do Step 1 below.

To call directly to another user's voice mail or transfer a call directly to another user's voice mail:
1. Press the programmed **Direct Voice Mail** button, **OR**
   Press the programmed **Feature** button and dial **56**.
2. Dial the extension whose voice mail you want to call or transfer a call to; you can use a programmed **Auto Dial** button (p. 12).

Note: If you are transferring a call to an extension that does not have voice mail, you hear an error tone and the call returns to you after a time interval.

Often-Used Features

Do Not Disturb

Must be programmed on a button. To program:
See **Programming Buttons & Settings**, p. 20.

This feature prevents calls from ringing at your extension, although outside calls cause the green lights at line buttons to flash. If you have coverage, your calls are covered. If you have a programmed **Posted Messages** button (p. 8), inside callers with display phones see *Do Not Disturb* when they attempt to call you. A system operator or the person providing individual coverage for you can still call you. Callback calls and returning transfers ring at your phone.

To use:
Press the programmed button to turn on or off. When the feature is on, the green light is on.

Forward & Follow Me

To program:
See **Programming Buttons & Settings**, p. 20.

Forward and Follow Me both send your calls to another phone when you are busy and need your calls covered or when you are not working at your own desk. Turn either feature off from your extension or the one you are visiting.

- If you want your calls handled at another extension or at an outside number, turn on Forward from your extension.
- If you are working away from your own phone, turn on Follow Me at the phone where you are.

If Delayed Call Forwarding is turned on through centralized telephone programming, calls ring at the forwarding extension for the programmed number of rings (0–9) before being forwarded. To change the Delayed Call Forwarding setting, contact your system manager.

To forward calls to another extension:
1. Press the button you have programmed,
   OR
   Press the programmed **Feature** button and dial **33**.
2. Dial the extension.

To forward calls to an outside number (if enabled):
1. Press the button you have programmed,
   OR
   Press the programmed **Feature** button and dial **33**.
2. Dial the dial-out code, outside number, and **#**.

To set up Follow Me and receive calls at another extension:
1. Press the programmed **Feature** button and dial **34**.
2. Dial your extension.

To cancel Forward and Follow Me:
- To cancel forwarding or following of your own calls: at your extension, press the programmed **Feature** button, dial **33** and your extension.
- To cancel all extensions forwarded or followed to yours: at your extension, press the programmed **Feature** button, dial **∗34∗**.
- To cancel one extension forwarded or followed to yours: at your extension, press the programmed **Feature** button, dial **∗34** and that extension.

Often-Used Features

Last Number Dial

To program:

See **Programming Buttons & Settings**, p. 20.

This feature automatically redials the last number you called. You should program **Last Number Dial** on a button.

To use:

1. Press the same type of line button used to place the first call (for example, **ICOM** or **SA**).
2. Press the **Last Number Dial** button,
   OR
   Press the programmed **Feature** button and dial **84**.

Night Service

Your company may use Night Service to treat calls differently after hours. If Night Service is on, you may not be able to make outside calls, or you may need a password to do so. See your system manager for a password and/or emergency numbers you can dial without a password.

*To make an outside call and override Night Service:**

1. Press the **Hold** button and dial the password.
2. Lift the handset or press the **Spkrphone** button and dial the call.

* You cannot override Night Service on an MLC-5.

Paging*

To program:

See **Programming Buttons & Settings**, p. 20.

You can page an individual at his or her phone by using an **ICOM Voice** or **SA Voice** button (see **Line Buttons**, p. 2). Or you may be able to page all speakerphones or groups of speakerphones, depending upon how your system is set up. If your company has a loudspeaker paging system, use it to page the whole company or just people in a certain paging zone.

To program or use Speakerphone Paging, check with your system manager for Group Paging or Page All numbers, then:

1. Press any **ICOM** or **SA** button and lift the handset.
2. Dial the Group Paging or Page All number,
   OR
   Press the button you programmed for Group Paging or Page All.
3. After the beep, make the announcement and hang up.

Ask your system manager whether Loudspeaker Paging is available and if there is a list of paging zones. To use:

1. Press any **ICOM** or **SA** button and lift the handset.
2. Press the programmed **Feature** button.
3. Dial **9**, the loudspeaker line number, and zone (if necessary).
4. Make the announcement and hang up.

To use when a button is programmed:

1. Lift the handset and press the programmed button.
2. Dial the zone, if necessary.
3. Make the announcement and hang up.

* MLC-5 users can make but not receive speakerphone paging calls. To make loudspeaker paging broadcasts, MLC-5 users must have a programmed **Loudspeaker Paging** button. MLC-5 users cannot be in paging groups.

Often-Used Features

Park & Pickup

To program:
See **Programming Buttons & Settings**, p. 20.

Park puts a call on a special kind of hold so that it can be answered from any phone in the system. While a call is parked, use Paging to summon the co-worker who should answer. The person picks up the call using Pickup (p. 18) and dialing your extension.

To use Park and Paging:

1. Park the call.
   - Press the **Park** button you programmed, **OR**
   - Press the **Transfer** button, dial your extension, and press **Transfer** again.
2. Set up the page.
   - *For Speakerphone Paging:*
     a) Press the appropriate **Group Page** or **Page All** button,
        OR
        Press any **ICOM** or **SA** button and dial the Group Page or Page All extension.
     b) Announce the call and give your extension.

   - *For Loudspeaker Paging:*
     a) Press the programmed **Loudspeaker Paging** button,
        OR
        Press the programmed **Feature** button, dial **9** and the loudspeaker paging number. If necessary, dial the zone.
     b) Announce the call and give your extension.
3. Hang up.

To pick up a parked call:

1. Lift the handset.
2. Press the programmed **Pickup** button,
   OR
   Press the programmed **Feature** button and dial **9**.
3. Dial the extension where the call is parked.

Personal Speed Dial

For BIS-10 and MLC-5. Use **Auto Dial** (p. 12) for other phones.

Use this feature to program 2-digit codes that you can dial in place of frequently used numbers. Include the complete dialing sequence and press and release the **Hold** button to enter a dialing pause. You can program up to 24 numbers using 2-digit codes. You cannot program an account code together with a phone number in a Personal Speed Dial code.

To program Personal Speed Dial codes:

1. Slide the T/P switch to **P**.
2. Dial **#** and the 2-digit code (01–24); then dial **✳21**.
3. Dial the phone number. Dial entire sequence, including dial-out code. If you need special characters, see p. 20.
4. Repeat Steps 2 and 3 for additional codes.
5. Slide the T/P switch to center.

To use:

1. Select the line button.
2. Press the programmed **Feature** button.
3. Dial the 2-digit code (01–24).

Often-Used Features

Pickup

Pickup lets you pick up calls that are not ringing at your phone. Using Pickup, you can answer a parked call (see **Park & Pickup**, p. 17), a call ringing at a specific extension, or a call ringing on a specific line. If you are part of a Pickup group, you can pick up a call ringing anywhere in the group. Program a general **Pickup** button that activates the feature or a specific **Pickup** button to take a group call (example: **Pickup Sales**) or a call at a specific line or extension (example: **Pickup Maria**).

Ask your system manager if you are a member of a Pickup group and get the Pickup group number.

To program:

1. Label a button.
2. Slide the T/P switch to **P**.
3. Press the labeled button.
4. Dial ✱**9**; if the button is for a specific line or extension, dial it,
   OR
   For Group Pickup, dial ✱**88**.
5. Slide the T/P switch to center.

To use:

- Press the programmed button or press the programmed **Feature** button and dial **9**. For a line or extension that is not programmed on the button, dial the extension or line number.
- For Group Pickup, press programmed button or press the **Feature** button and dial **88**.

Privacy

To program:

See **Programming Buttons & Settings**, p. 20.

Privacy prevents co-workers who share a line with you from joining your calls. Turn the feature on before or during a call; it remains on until you turn it off. A call on hold is not protected by Privacy. You should program Privacy on a button so that you will have a green light to remind you when the feature is on.

Recall*

The Recall feature is activated by pressing the **Recall** button on your telephone. It allows you to disconnect from one call and get a new inside or outside dial tone for a new call, without hanging up. In some systems, the **Recall** button allows you to use certain system features, such as Transfer or Hold. Recall works on inside and outside lines on **ICOM**, **SA**, or personal line buttons, but it is not available for all types of outside lines. Ask your system manager how Recall works on your company's telephone system.

* MLC-5 users can use the Recall feature by programming a **Recall** button. See p. 20.

Often-Used Features

Reminders

To program:

See **Programming Buttons & Settings**, p. 20.

This feature works only for nondisplay telephones. Display telephone users should use the display's alarm clock (pp. 1 and 10). The Reminders feature allows you to set a time when your phone will ring like an alarm clock. Once your phone rings as an alarm, the reminder is canceled. You can set only one alarm at a time, and it must be for the day you set it.

To set a reminder:

1. Press the **Reminder Set** button you have programmed,
   OR
   Press the programmed **Feature** button and dial **81**.
2. Dial a 4-digit time from 0100 to 1259.
3. Dial **2** (letter **A** on dialpad) for a.m. or **7** (letter **P** on dialpad) for p.m.

To cancel a reminder:

Press the **Reminder Set** button you have programmed,
OR
Press the programmed **Feature** button and dial **✳81**.

Saved Number Dial

Must be programmed on a button. To program:

See **Programming Buttons & Settings**, p. 20.

Use this feature to redial a busy or unavailable number that you want to try later.

To use:

1. Before hanging up, press the programmed **Saved Number Dial** button.
2. Press the same type of button used to place the call (for example, **ICOM**, **Pool**, or **SA**).
3. To redial, press the programmed **Saved Number Dial** button.

System Speed Dial

To program:

See **Programming Buttons & Settings**, p. 20.

Your system manager creates System Speed Dial codes (600–729) for numbers that people in your company dial often. You can dial these directly by pressing the programmed **Feature** button and dialing the code, or program often-used codes on line buttons.

Voice Announce

To program:

See **Programming Buttons & Settings**, p. 20.

Make voice-announced calls from **ICOM Voice** or **SA Voice** buttons on your phone (see **Line Buttons**, p. 2) or use Paging (p. 16). The Voice Announce feature allows you to prevent voice announcements and paging calls from interrupting you. Instead, the calls ring. Voice Announce is a setting that you can turn on or off without programming a button for it. If you have programmed your phone for Auto Answer All (p. 11) or if you have a data station at your extension, you must turn Voice Announce off.

Programming Buttons & Settings

If you use a feature often, you can program it onto an unused line button for easy access. If you use a feature occasionally, see **Using Features**, p. 9. Keep these facts in mind when setting up your telephone:

- Some features *must* be programmed on a button or they can't be used. (These features are marked with a ◆ on the **Programming Codes** list.)
- Other features (marked with • on the **Programming Codes** list) are settings that affect the way your phone works. Some settings, such as Personalized Ring, affect all the lines on your phone. During programming, you still have to select a line button, but it can be *any* line button the feature affects. Others, such as Delay Ring for a single line, are settings that affect a specific line and require you to press it during programming (these features are noted on the **Programming Codes** list). Settings remain active until you program them again.

Programming Buttons

To program a feature on an unused line button:
1. Label a button for the feature.
2. Slide the T/P switch to **P**.
3. Press the button you labeled.
4. Dial the programming code (see **Programming Codes**).
5. Repeat Steps 3 and 4 to program other buttons. (Label the buttons first.)
6. Slide the T/P switch to center.

Programming Settings

To program a setting:
1. Slide the T/P switch to **P**.
2. Press any **ICOM** or **SA** button, **OR**
   If the setting affects a specific line, press that line button.
3. Dial the programming code (see **Programming Codes**).
4. Repeat Steps 2 and 3 to program other settings.
5. Slide the T/P switch to center.

Special Characters

Features that dial numbers automatically may need special characters to allow for correct dialing or system response.

Press…	See…	Means…
Drop	s	Stop. Halts dialing sequence to allow for system response.
Hold	p	Pause. Inserts 1.5-sec. pause in dial sequence. Multiple consecutive pauses allowed.
Conference	f	Flash. Sends switchhook flash. Must be first entry in sequence.
#	#	End of Dialing. Used to signal end of dialing sequence or to separate grouped digits.

Programming Buttons & Settings

Programming Codes

Account Code Entry	✳ 82
Authorization Code Entry	✳ 80
Auto Answer All▼	✳ 754
Auto Dial♦	
inside	✳ 22 + extension
outside	✳ 21 + number
Callback	
automatic callback off●▲	✳✳ 12
automatic callback on●▲	✳ 12
selective callback	✳ 55
Call Waiting●	
off	✳✳ 11
on	✳ 11
Camp-On▲	✳ 57
Coverage	
Coverage inside on●	✳ 48
Coverage inside off●	✳✳ 48
Buttons for covering calls♦	
Primary Cover	✳ 40 + sender's extension number
Secondary Cover	✳ 41 + sender's extension number
Group Cover	✳ 42 + sender's extension number
Buttons for sending calls♦	
Coverage Off	✳ 49
Coverage VMS Off (outside calls only)	✳ 46
Direct Voice Mail	✳ 56
Do Not Disturb♦	✳ 47
Forward	✳ 33
Last Number Dial	✳ 84
Messaging	
leave message	✳ 25
delete message	✳ 26
next message	✳ 28
posted message ♦	✳ 751
return call	✳ 27
scroll	✳ 29

Paging group or all	✳ 22 + group extension
Paging loudspeaker	✳ 9 + line number
Park	✳ 86
Personal Speed Dial	**#** + (01–24) + ✳ 21 + phone number + **#**
	# + (01–24) + ✳ 21 + dial-out code + phone number + **# #**
Pickup	
general	✳ 9
group	✳ 88
inside	✳ 9 + extension
outside	✳ 9 + line number
Privacy	✳ 31
Reminders	
set reminder	✳ 81
cancel reminder	✳✳ 81
Ringing Options●	
abbreviated on	✳ 341
abbreviated off	✳ 342
delayed all lines	✳ 346
delayed one line	✳ 36
immediate all lines	✳ 347
immediate one line	✳ 37
no ring all lines	✳ 345
no ring one line	✳ 35
personalized ring ■	✳ 32 + ring (1–8)
send ring on	✳ 15
send ring off	✳✳ 15
Saved Number Dial♦	✳ 85
Signaling and Notify♦	
signaling	✳ 23 + extension
notify receive	✳ 758 + extension
notify send	✳ 757 + extension
System Speed Dial	✳ 24 + code (600–729)
Voice Announce♦▼	
on	✳ 10
off	✳✳ 10

- ♦ Must be programmed onto a line button.
- ● Sets up how your phone works. Use a line button to program (turn on or off). The setting is not programmed onto a line button.
- ■ On MLC-5, must be programmed by system manager.
- ▼ Not for MLC-5.
- ▲ See your system manager for details.

Feature Codes

Account Code	82 + code + **#**	
Authorization Code	80 + code + **#**	
Callback	55	
Call Waiting		
pick up call waiting call ■	87	
Camp-On	57	
Direct Voice Mail	56	
Follow Me	34 + extension	
Forward		
inside	33 + extension	
outside	33 + dial-out code + number + **#**	
Forward and Follow Me		
cancel from all extensions ■	✱ 34 ✱	
cancel from one extension ■	✱ 34 + extension	
cancel from your phone	33 + your extension	
Last Number Dial	84	
Messaging		
cancel message ■	✱ 53 + extension	
leave message	25	

Messaging continued		
leave message without calling ■	53 + extension	
delete message♦	26	
next message♦	28	
return call♦	27	
scroll♦	29	
turn off Message light (manually)	54	
Paging loudspeaker	9 + line number + zone	
Personal Speed Dial ■	code (01–24)	
Pickup		
group	88	
inside	9 + extension	
outside	9 + line number	
Privacy		
off	✱ 31	
on	31	
Reminders		
set reminder	81 + time + 2 or 7	
cancel reminder	✱ 81	
System Speed Dial	code (600–729)	

♦ Display phones only.

■ Available only by using feature code.

Special Characters

Features that dial numbers automatically may need special characters to allow for correct dialing or system response.

Press…	See…	Means…
Drop	s	Stop. Halts dialing sequence to allow for system response.
Hold	p	Pause. Inserts 1.5-sec. pause in dial sequence. Multiple consecutive pauses allowed.
Conference	f	Flash. Sends switchhook flash. Must be first entry in sequence.
#	**#**	End of Dialing. Used to signal end of dialing sequence or to separate grouped digits.

OFTEN-USED SYSTEM SPEED DIAL CODES

Called Party	Code	Called Party	Code

POSTED MESSAGES

Message	Code	Message	Code
DO NOT DISTURB	01		11
	02		12
	03		13
	04		14
	05		15
	06		16
	07		17
	08		18
	09		19
	10		20

PAGING NUMBERS

Paging Group/Page All	No.	Loudspeaker Paging	No.
		Line	
		Zone:	
		Zone:	
		Zone:	
		Zone:	
		Zone:	
		Zone:	

COVERAGE/PICKUP/CALLING GROUPS

Group Name	No.	Group Name	No.

PERSONAL SPEED DIAL CODES (BIS-10 & MLC-5 only)

Called Party	Code	Called Party	Code
	01		13
	02		14
	03		15
	04		16
	05		17
	06		18
	07		19
	08		20
	09		21
	10		22
	11		23
	12		24