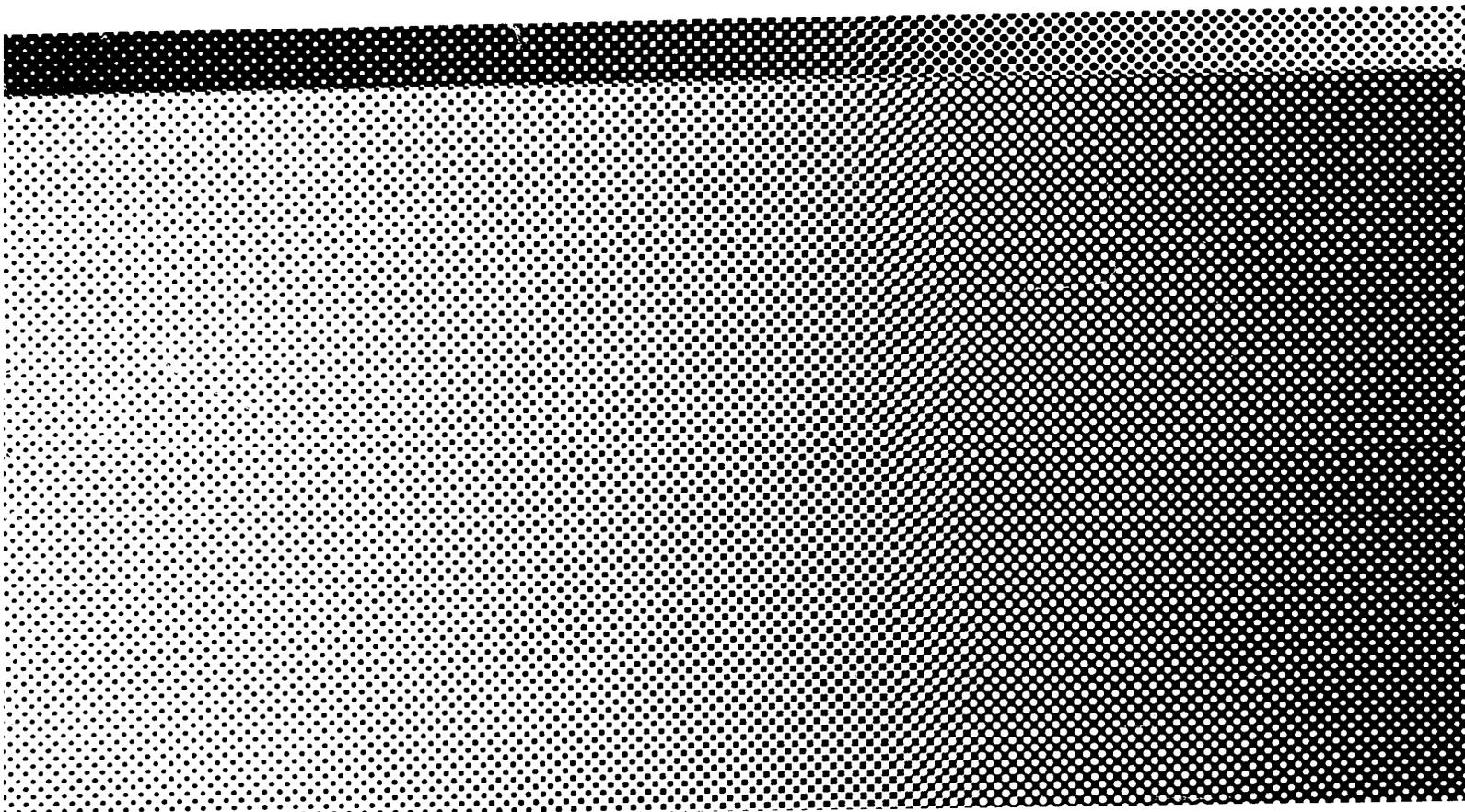




# MERLIN<sup>®</sup>

COMMUNICATIONS SYSTEM

ADMINISTRATION MANUAL:  
MODELS 206 AND 410  
WITH FEATURE PACKAGE 1



---

# Table of Contents

	Page
<b>How to Use This Manual</b>	2
<b>The MERLIN Voice Terminal</b>	3
<b>Setting the Control Unit</b>	4
Model 206 and 410 Control Units	4
Setting the Switches	4
<b>Reviewing Your MERLIN System's Fixed Features</b>	6
Uses and Benefits of Fixed Features	6
<b>Selecting and Programming Custom Features</b>	8
Uses and Benefits of Custom Features	8
Initial Feature Assignments	9
Basic Programming Instructions	10
Programming Tips	10
Special Characters in Programming Outside Auto Dial	10
Feature Programming Chart	11
Programming Line Ringing Options	12
Assigning Automatic Line Selection Sequences	12
<b>Special Information for the System Attendant</b>	14
Assigning Line Ringing	14
Transferring Calls	14
Transferring Calls Directly	14
Transferring Calls with Intercom Announcement	15
Transferring Calls with Hold and Intercom Consultation	15
Using Intercom Auto Dial Buttons	15
Using the Headset	15
<b>Moves and Changes</b>	16
Moving Your System	16
Increasing Your System's Capacity	16
Adding Features and Accessories to Your System	16
Uses and Benefits of Optional Features	17
<b>Isolating and Correcting Troubles</b>	18
Troubleshooting Chart	18
<b>Index</b>	20

---

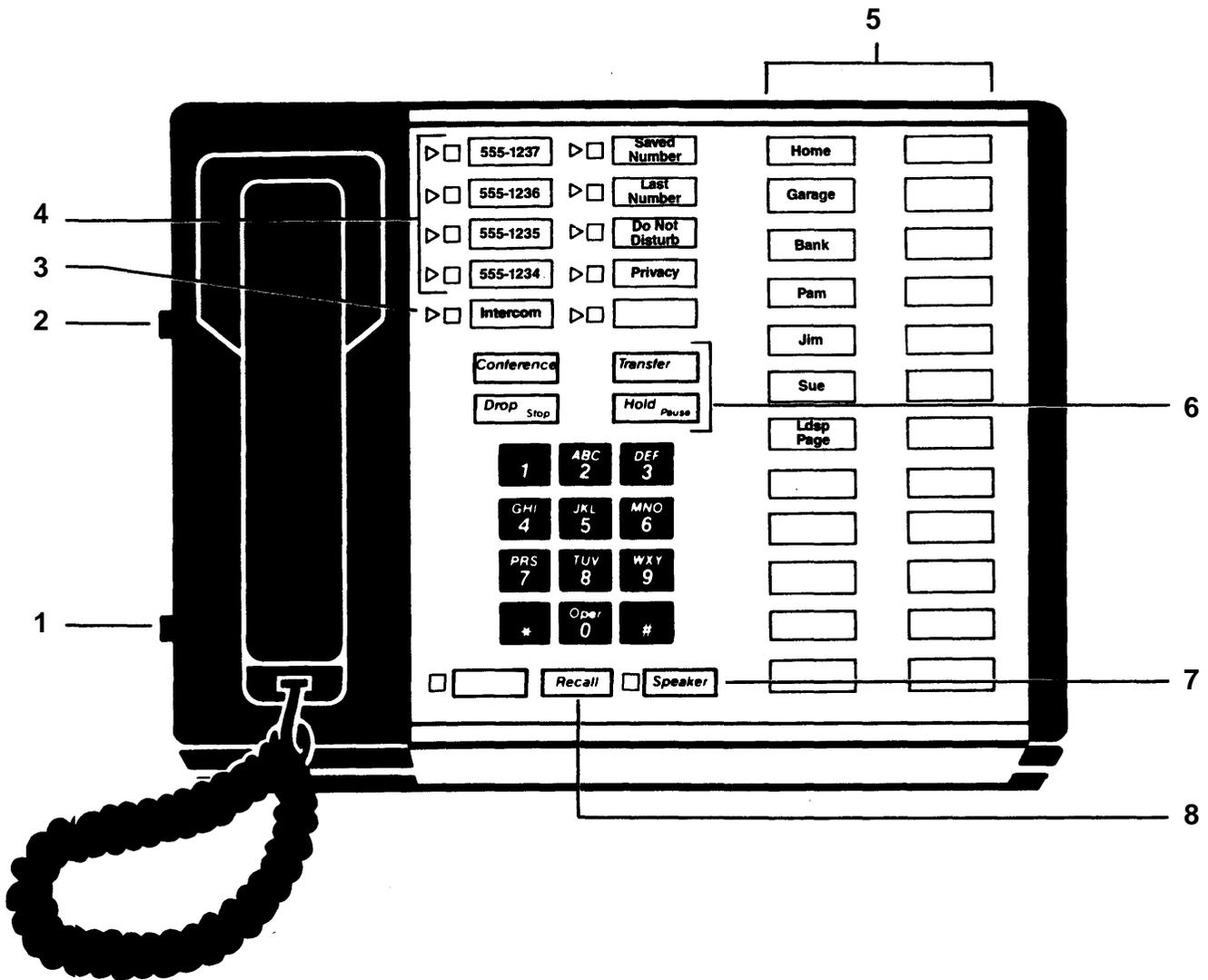
# How to Use This Manual

The MERLIN™ communications system provides you with features that give your business many expanded communications capabilities. Each voice terminal (MERLIN system telephone) comes with features already assigned that allow you to transfer calls, put people on hold, and set up conference calls. You can program other features onto the system and onto individual voice terminals, such as one-touch dialing of outside or intercom numbers or one-touch redialing of a number you have saved.

As system administrator, you are responsible for making the MERLIN system work to its maximum efficiency in serving your company's communications needs. You need to know more about its custom features, capabilities, and programming than does the average telephone user. This administration manual gives you the information you need to set up and customize your MERLIN system. Here is how to use this manual:

1. Read "Setting the Control Unit," pages 4-5, to become more familiar with the lights and switches on the control unit. To set your control unit for use, follow the procedures described on page 4.
2. Read "Reviewing Your MERLIN System's Fixed Features," pages 6-7, and become familiar with the MERLIN system fixed features, those features that are already available when your system is installed.
3. Look at "Selecting and Programming Custom Features," pages 8-13, and decide which custom features best meet your business' and the individual user's needs. Then, do the necessary programming by following the "Basic Programming Instructions" on page 10.
4. If you have an attendant, review "Special Information for the System Attendant," pages 14-15, and be sure that he or she knows the steps for assigning line ringing options, transferring calls, and using Intercom Auto Dial buttons and a headset.
5. In case you ever need to relocate or you decide to purchase more equipment for your system, look over "Moves and Changes," pages 16-17.
6. If your system malfunctions, refer to "Isolating and Correcting Troubles," pages 18-19.

# The MERLIN System Voice Terminal



1. Adjust the volume of your voice terminal's speaker and ringing by using the volume control.
2. Test your voice terminal and program custom features with the T/P (Test/Program) switch.
3. Touch **Intercom** and dial a 2-digit number to contact others connected to your MERLIN system.
4. Use line buttons to call people who aren't connected to your MERLIN system.
5. Program custom features onto available buttons.
6. Use **Conference**, **Drop**, **Transfer**, and **Hold** for efficient call-handling.
7. Touch **Speaker** for On-Hook Dialing and Group Listening.
8. Use **Recall** to disconnect a call or for PBX and Centrex features.

Read about your MERLIN system's fixed features on pages 6-7, and custom features on pages 8-13.

---

# Setting the Control Unit

Your MERLIN system control unit connects lines from the telephone company and the individual voice terminals in your business. The software in its cartridges lets you program features, and it can accommodate optional cartridges that provide still more features. Model 206 has two outside line jacks and six voice terminal jacks; Model 410 has four outside line jacks and ten voice terminal jacks.

Read the following descriptions of the parts of the control unit, and study the diagram on the next page. When you are ready to begin to set your control unit, complete the necessary steps described in "Setting the Switches," below.

## MODEL 206 AND 410 CONTROL UNITS

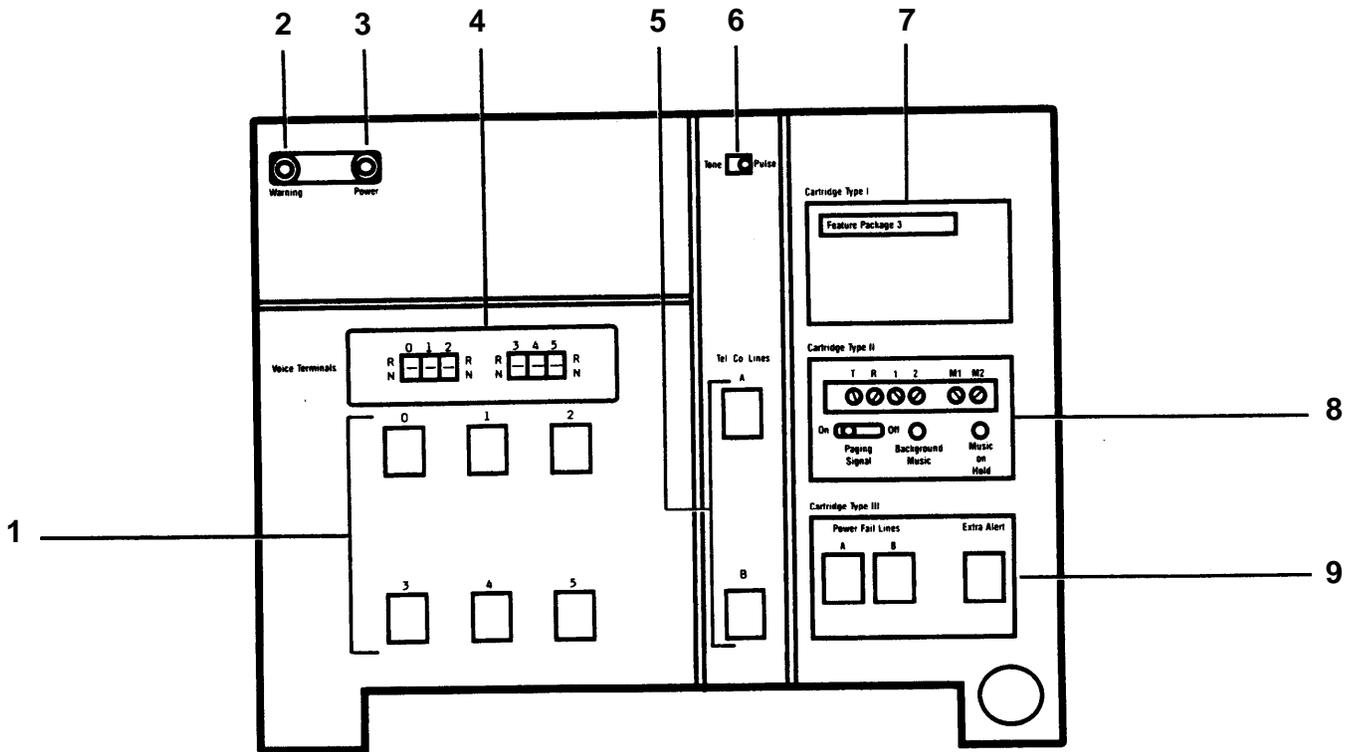
- 1. Voice Terminal Jacks.** The MERLIN system voice terminals plug in here. The number of the jack gives the intercom number of the voice terminal: for the Model 206 control unit, the jacks are labeled 0 through 5; for the Model 410 control unit, the jacks are labeled 10 through 19.
- 2. Red Warning Light.** The MERLIN system constantly checks itself for possible problems. If the red warning light is on, there is trouble with the system. (See "Isolating and Correcting Troubles," pages 18-19.)
- 3. Green Power Light.** The green light should be on all the time to indicate that the control unit is receiving electric power.
- 4. Ringing or Outward Calls Switches.** These switches control the ability of people in your MERLIN system to make outside calls.
- 5. Telephone Company Line Jacks.** Your lines from the telephone company plug in here. Line jacks on the Model 206 control unit are labeled A and B; on the Model 420 control unit, the line jacks are marked A through D.
- 6. Tone/Pulse Switch.** For TouchTone service, this switch is set to *Tone*. For rotary (dial pulse) service, it is set to *Pulse*.
- 7. Cartridge Type I Slot.** This slot accommodates feature cartridges that offer custom features.
- 8. Cartridge Type II Slot.** In this slot you can place cartridges that provide the system with audio options such as connections for Music-on-Hold and a loudspeaker paging system.
- 9. Cartridge Type III Slot.** This slot accommodates cartridges that give the system line-associated options such as connections for Extra Alert horns and bells and Power Failure Transfer Telephones.

## SETTING THE SWITCHES

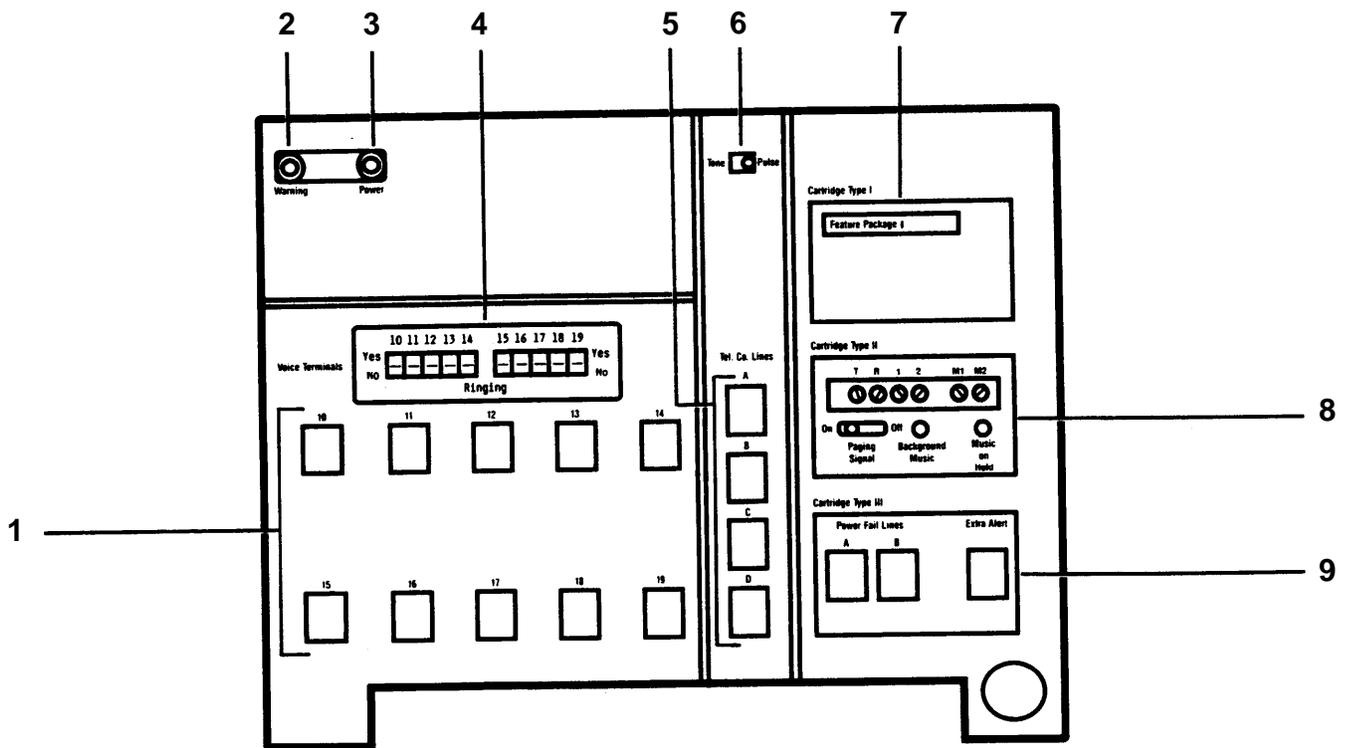
To set your control unit, follow these steps:

1. If your lines have Touch-Tone service, set this switch to *Tone*. Otherwise, set it to *Pulse*.
2. To permit voice terminals to place outside calls, set all Outward Calls switches to *Yes* (up). To prevent a particular voice terminal from making outside calls, set the switch to *No* (down).

**NOTE:** On some control units, these switches are labeled R and N. Ignore the R and N, and consider the up position to be *Yes* and down to be *No*.



MODEL 206 CONTROL UNIT



MODEL 410 CONTROL UNIT

# Reviewing Your MERLIN System's Fixed Features

Fixed features are built into the system and require no special programming. Some fixed features, such as Conference, Drop, Transfer, and Hold, are associated with factory-labeled buttons on your voice terminal. (See "The MERLIN System Voice Terminal," page 3.) The following chart lists and describes the fixed features and their uses and benefits.

## Uses and Benefits of Fixed Features

Feature	Uses and Benefits
Call Waiting	Provides a brief ring through the speaker and a flashing green light to indicate another call is coming in on a second line. <ul style="list-style-type: none"> <li>• No need to worry about missing important calls while you are busy on the telephone.</li> </ul>
Conference	Enables a person to include up to two other people from outside numbers in a conference call. Two people from within the system can join the conference by touching one of the line buttons associated with the call. <ul style="list-style-type: none"> <li>• Answer questions immediately by adding another person to the call—no need for time-wasting callbacks.</li> </ul>
Distinctive Ringing	Provides different ringing patterns for incoming, transferred, and intercom calls. <ul style="list-style-type: none"> <li>• Know where a call is coming from and answer accordingly.</li> </ul>
Drop	Makes it possible to disconnect a person from a conference call. <ul style="list-style-type: none"> <li>• Drop a person from a conference call while maintaining contact with another in privacy.</li> <li>• Drop a busy or unanswered line that has been added to a conference call.</li> </ul>
Group Listening	Enables a person to turn on the speaker so that people in the office can hear the other end of the conversation. <ul style="list-style-type: none"> <li>• Allow other people in the office to hear both sides of the discussion.</li> </ul>
Hold	Makes it possible to keep someone on the line without communication. (When <i>you</i> put a call on hold, the green light next to the line button <i>flashes rapidly</i> . When <i>someone else</i> puts a call on hold from another voice terminal in your MERLIN system, the green light <i>flashes slowly</i> .) <ul style="list-style-type: none"> <li>• Answer a second call or attend to another matter.</li> <li>• Have a confidential conversation without the person on hold hearing.</li> </ul>
Hold Reminder	Beeps every minute as a reminder that a person is on hold. <ul style="list-style-type: none"> <li>• Do not forget calls on hold.</li> </ul>
Intercom	Enables people in the same MERLIN system to call each other without tying up outside lines. <ul style="list-style-type: none"> <li>• Use a 2-digit number to call another person in your office.</li> <li>• Signal others without interrupting active calls.</li> </ul>

## Uses and Benefits of Fixed Features (continued)

Feature	Uses and Benefits
Monitor-on-Hold	<p>Makes it possible for a person who is put on hold to turn on the speaker, hang up, and go back to work until he or she is taken off hold.</p> <ul style="list-style-type: none"> <li>• Continue working until the other person returns to the call.</li> </ul>
On-Hook Dialing	<p>Allows a person to turn on the voice terminal's speaker and dial outside or intercom calls without lifting the handset.</p> <ul style="list-style-type: none"> <li>• Continue working until the other person answers the call.</li> <li>• Keep trying a busy number without lifting the handset.</li> </ul>
Recall	<p>Provides a timed switchhook flash for use with PBX or Centrex systems.</p> <ul style="list-style-type: none"> <li>• Access PBX or Centrex system features without having to use switchhook flashes.</li> <li>• Disconnect a call without hanging up.</li> </ul>
Ringing Line Selection	<p>Makes it possible to pick up the ringing line automatically when a call comes in.</p> <ul style="list-style-type: none"> <li>• Answer a call by just lifting the handset; no need to touch any buttons.</li> </ul>
Speaker	<p>Turns the voice terminal speaker on and off.</p> <ul style="list-style-type: none"> <li>• Hear the other person without lifting the handset, although you need to lift the handset in order for the person to hear you.</li> </ul>
Transfer	<p>Enables a person to pass outside calls to any other voice terminal in the system. A distinctive ring indicates a transferred call. Calls can be transferred with or without an intercom announcement.</p> <ul style="list-style-type: none"> <li>• Pass calls to the correct people efficiently.</li> <li>• Screen calls on intercom during the transfer process.</li> </ul>
Transfer Return	<p>Makes certain an unanswered transferred call rings again at the originating voice terminal.</p> <ul style="list-style-type: none"> <li>• Do not lose transferred calls.</li> </ul>
Voice Terminal Programming	<p>Enables a person to program custom features onto a voice terminal.</p> <ul style="list-style-type: none"> <li>• Customize each voice terminal to meet the needs of individuals and of the business.</li> </ul>
Voice Terminal Testing	<p>Enables a person to check if the lights and the ringer are working by moving the switch on the side of the voice terminal.</p> <ul style="list-style-type: none"> <li>• Verify that the voice terminal has been installed correctly.</li> </ul>
Volume Control	<p>Makes it possible to adjust sound level of the speaker and the ring on the voice terminal.</p> <ul style="list-style-type: none"> <li>• Control the loudness of the speaker and the ringing.</li> </ul>

# Selecting and Programming Custom Features

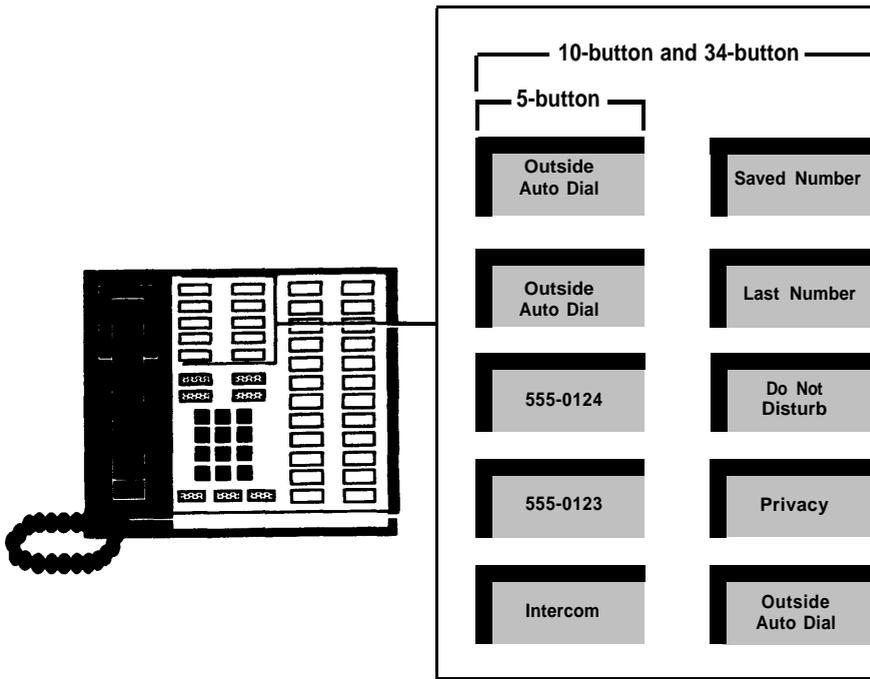
With the MERLIN system it is possible to assign and reassign programmable features to available buttons on the voice terminal. (See "Initial Feature Assignments," page 9.) Thus, people in your telephone system can customize their voice terminals by selecting the custom features that best suit their individual needs. (See the chart below.) However, some of these features, such as Automatic Line Selection and Programmable Line Ringing, have a broader application because they influence the calling patterns of your business. Because these features have businesswide impact, you may want to oversee their assignment.

## Uses and Benefits of Custom Features

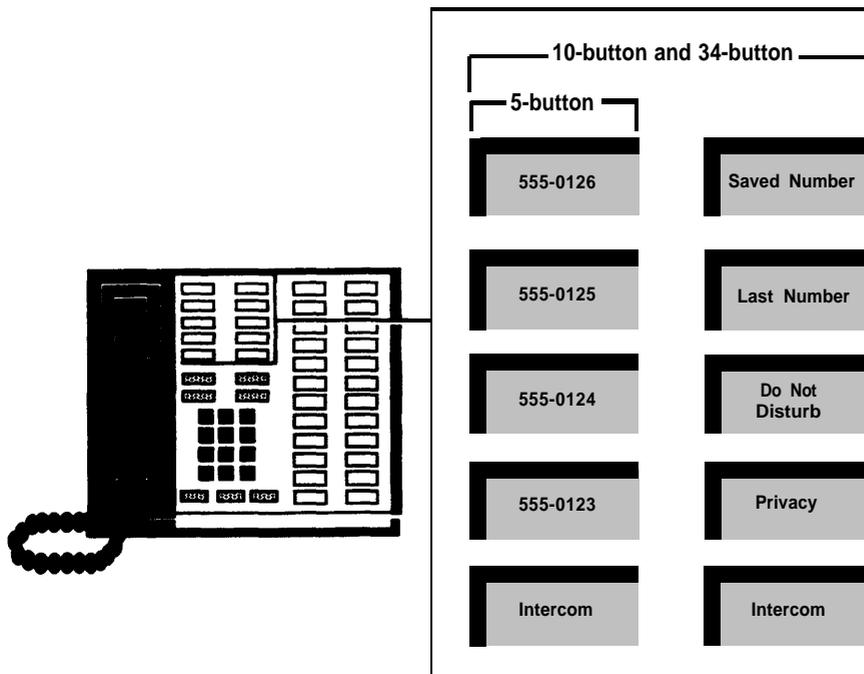
Feature	Uses and Benefits
Auto Answer-Intercom	Turns on an optional Hands-Free Unit when receiving intercom calls. <ul style="list-style-type: none"> <li>• No need to lift your handset and touch a button to answer an intercom call.</li> </ul>
Automatic Line Selection	Automatically selects a free line when you lift your handset to make a call. <ul style="list-style-type: none"> <li>• No need to find a free line or touch a button.</li> <li>• Make it easier for a person in your business to get a free line when he or she places a call by programming a line that is least-used to be the first line in the Automatic Line Selection sequence.</li> </ul>
Do Not Disturb	Temporarily prevents the voice terminal from ringing. Intercom callers get a busy signal. <ul style="list-style-type: none"> <li>• Work or have a meeting without interruption by a ringing phone.</li> </ul>
Intercom Auto Dial Manual Signaling	Enables a person to program an intercom number onto a button for quick dialing. <ul style="list-style-type: none"> <li>• Dial frequently called intercom numbers more quickly.</li> </ul> Causes a beep at another person's voice terminal. <ul style="list-style-type: none"> <li>• Signal other people even when they are busy on the telephone.</li> </ul>
Last Number Redial	Automatically stores the last number dialed. A person can redial by touching the Last Number Redial button. <ul style="list-style-type: none"> <li>• No need to keep redialing an outside number that is busy or not answered.</li> </ul>
Outside Auto Dial	Enables a person to program a button with an outside number for fast dialing. <ul style="list-style-type: none"> <li>• Dial frequently called outside numbers with one touch.</li> <li>• No need to remember or look up numbers each time you want to dial them.</li> </ul>
Privacy	Prevents others from accidentally joining your calls. <ul style="list-style-type: none"> <li>• Make confidential calls in private.</li> </ul>
Programmable Line Ringing	Allows the administrator to program the lines on a particular voice terminal to ring immediately, after a delay, or not at all on incoming calls. This does not apply to transferred or intercom calls. <ul style="list-style-type: none"> <li>• Program the lines on a voice terminal to ring according to personal preference and the needs of the business.</li> <li>• Program a line on a second voice terminal to ring when the person to whom the call is directed does not answer.</li> <li>• Program the voice terminals in a lobby or conference room not to ring on incoming calls.</li> </ul>
Saved Number Redial	Stores a number for later redialing. This stored number remains active until it is replaced with another number. You can redial the saved number after making other calls by touching the Saved Number Redial button. A voice terminal can have more than one Saved Number button. <ul style="list-style-type: none"> <li>• Make other calls and try the saved number later simply by touching a button.</li> <li>• No need to keep redialing an outside number that is busy or unanswered.</li> </ul>

## INITIAL FEATURE ASSIGNMENTS

When your MERLIN communications system voice terminals are first installed, they have the features shown below. If the individual voice terminal users want to program different custom features onto these buttons than those already assigned to their voice terminals, they can choose custom features from the chart on page 8. Otherwise, the buttons can remain with the initially assigned custom features. Note that you cannot change the outside line and the intercom line buttons. Those people who have 5-button voice terminals connected to the Model 410 control unit should be aware that their voice terminals have four line buttons and an intercom button rather than programmable buttons.



MODEL 206



MODEL 410

---

## BASIC PROGRAMMING INSTRUCTIONS

To program and reprogram custom features onto available buttons on a voice terminal, follow these simple directions.

1. Label the button(s) you want to program.
2. Slide the T/P (Test/Program) switch on the left side of the voice terminal to the P (Program) position.  
*The voice terminal rings every 5 seconds to remind you that you are programming and that you cannot place or receive calls.*
3. Touch the button you want to program.
4. Dial the feature's programming code and any other numbers required. (See the Feature Programming Chart, page 11.) If you make a mistake when programming a button, simply touch the button again and redial the programming code and all required numbers.
5. If you want to program other buttons, repeat the previous two steps.
6. Slide the T/P switch to the center position.

### Programming Tips

- If the person has a Hands-Free Unit, program Auto Answer-Intercom on a button.
- Have the user decide which people within your business he or she will frequently call, and program an Intercom Auto Dial button for each of those people.
- Make all remaining buttons Outside Auto Dial buttons and program them for frequently called outside numbers.
- Decide if the person using this voice terminal will cover calls for anyone, and then program the appropriate line ringing options. (See "Programming Line Ringing Options," page 12.)

Before you begin programming, check the Feature Programming Chart on page 11 for programming details for each custom feature. Be especially aware of which custom features need buttons with lights. When you complete the programming procedure, keep this chart handy as a quick reference in case you want to reassign a new feature onto an available button.

### Special Characters in Programming Outside Auto Dial

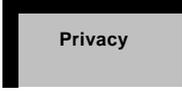
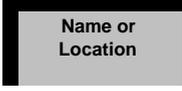
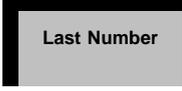
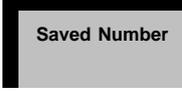
You may need to include some special characters, such as a pause, a stop, or a switchhook flash, when you program outside telephone numbers, PBX or Centrex feature codes, an alternate long distance number, or other computer services onto an Outside Auto Dial button.

**Pause.** To program a 1.5 second pause into a dialing sequence: touch **Hold** (Pause).

**Stop.** To program a stop: touch **Drop** (Stop).

**Switchhook Flash.** To program a switchhook flash (for PBX and Centrex feature codes): (1) touch **Recall**; (2) touch **Hold** (Pause).

## Feature Programming Chart

Feature Name (Suggested Button Label)	Programming Code	Notes
Auto Answer-Intercom 	Dial * 70.	These features require a button with a light.
Do Not Disturb 	Dial * 71.	
Privacy 	Dial * 72.	
Intercom Auto Dial 	Dial * 6 + an intercom number.	A button with lights is recommended but not required.
Loudspeaker Page 	Dial * 66.	
Outside Auto Dial 	Dial * 90 + an outside number.	
Last Number Redial 	Dial * 73.	These features do not require buttons with lights.
Saved Number Redial 	Dial * 74.	

---

## PROGRAMMING LINE RINGING OPTIONS

You can program how and when incoming calls ring on each outside line at each voice terminal. When your system is installed, the lines at each voice terminal ring immediately when a call comes in on them. However, you can change this by programming some lines to ring at one voice terminal, other lines at other voice terminals, or the same line to ring differently at different voice terminals. You can even have a line ring at one voice terminal only if it is not answered at another after a designated number of rings. Read the following tips on how you can program this feature.

- **Immediate Ring.** People responsible for answering incoming calls, such as the system attendant, should have the lines on their telephones programmed for immediate ring. (See “Special Information for the System Attendant,” pages 14-15.) You can also use this option for private lines that don’t need to be screened or for people who answer their own calls.
- **Delayed Ring.** You can provide backup coverage on a shared line by having that line ring at a second voice terminal only after it has rung a few times somewhere else. Then, when calls come in for a person who is away from his or her desk, that person’s calls will ring at a second telephone, the voice terminal of a backup person. Delayed ring is often useful for a secretary who can pick up calls for someone on a private line.
- **No Ring.** People who do not normally answer incoming calls should have their lines programmed to no ring. Also, you might program telephones in public places, such as lobbies or conference rooms, not to ring. A line programmed to no ring does not ring on outside calls, but continues to ring for transferred and intercom calls.

To program the type of line ringing you want, follow these steps:

1. Slide the T/P switch to *P*.
2. Touch the line buttons successively until the red light indicates the type of ringing you want:

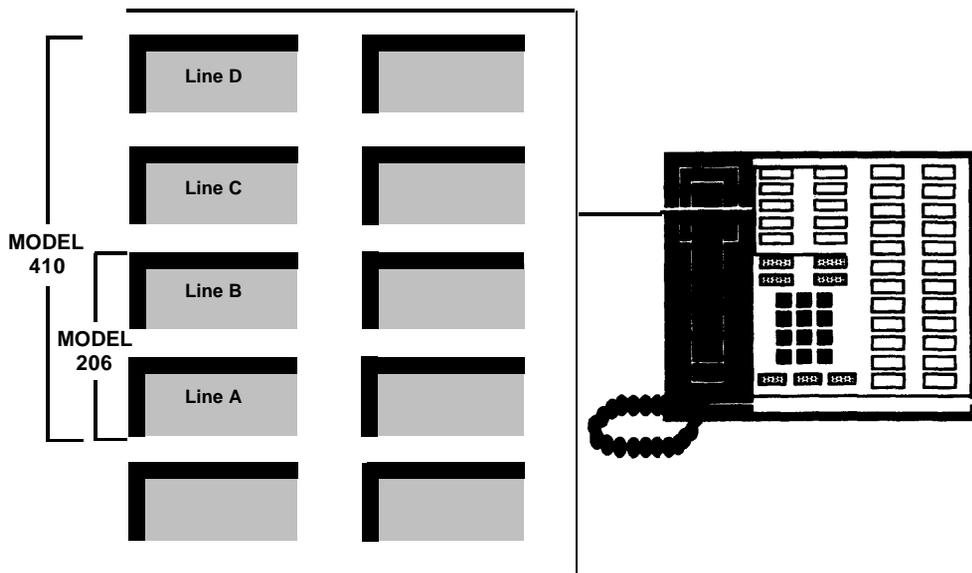
*Red light on* = *immediate ring*  
*Red light flashing* = *delayed ring*  
*Red light off* = *no ring*

3. Slide the T/P switch to the center position.

## ASSIGNING AUTOMATIC LINE SELECTION SEQUENCES

Automatic Line Selection determines which free line the system gives each voice terminal when someone lifts the handset to make a call. When your system is installed, the system selects free lines appearing on voice terminal line buttons in the order in which the lines are plugged into the control unit jacks. This means that if line A, which is plugged into jack A on the control unit, is busy when you pick up the handset, the system automatically gives you line B, plugged into jack B. The in-

itial Automatic Line Selection order for voice terminals plugged into the Model 206 control unit and those plugged into the Model 410 control unit appears below.



However, a different order for the Automatic Line Selection may be more efficient for your voice terminals. For example, you may want to make the least-used line the first line to be selected in the line sequence. All, some, or none of a voice terminal's lines can be placed in an Automatic Line Selection sequence, and the sequence can be different for each voice terminal. Below are some tips to guide you in assigning Automatic Line Selection sequences.

- If all lines are regular telephone company lines, you probably won't want to program this feature. In this case, the system selects the lines in the order in which they are plugged into the control unit jacks.
- You may want to reserve your published telephone number for incoming calls and therefore place it last in the line sequence on everyone's voice terminal.
- It is usually not a good practice to have different types of lines programmed into the same Automatic Line Selection sequence. If, for instance, you have an FX line to a specific location included in the sequence, do not also include a regular line which could be used to call anywhere. Also, if you use FX lines, make certain that all of these lines you program into an Automatic Line Selection sequence go to the same place.
- If a person in the office places mainly long distance calls, program the Automatic Line Selection sequence to first select the WATS lines and then select regular lines that allow callers to make both local and long distance calls.
- Since usually the line you specify as first in the sequence gets the most use, it may be to your advantage to spread telephone usage evenly across your lines, especially if you have usage-sensitive rates on your local telephone lines. You can accomplish this by assigning different people different sequences for Automatic Line Selection.

To program Automatic Line Selection:

1. Slide the T/P switch to *P*.
2. Dial \*\*.
3. Touch the line buttons in the order you want them to be selected.
4. Slide the T/P switch to the center position.

---

# Special Information For The System Attendant

Many businesses have a system attendant or receptionist, a person who answers the calls and transfers them to other people in the office. If your business has an attendant, you will want to make sure that he or she reads and understands the following information about assigning line ringing options, transferring calls, and using Intercom Auto Dial buttons and a headset.

## **ASSIGNING LINE RINGING**

You and the attendant can determine whether incoming calls on the voice terminals ring immediately, ring after a delay, or do not ring at all. The programming procedure is so simple that you can change call coverage and line ringing on an as-needed basis. If the attendant answers most of the calls that come into the office, you may find it best to program lines on other phones either to delayed ring or no ring. (Also, see "Programming Line Ringing Options," page 12.) Here are some tips for the attendant:

- If there is no backup for the attendant when he or she is unavailable, set the lines on all other phones in the office to delayed ring, so that if the attendant is unable to answer incoming calls (after two rings), the calls automatically ring at the other voice terminals in the office.
- If there is someone to cover for the attendant, calls should be routed to that person rather than ringing at other voice terminals in the office. Program the backup person's lines to delayed ring and program all others in the office to no ring.
- If the usual backup person is unavailable, simply reprogram his or her lines to no ring and program someone else's voice terminal to delayed ring for the time that the attendant and the backup person are away.

## **TRANSFERRING CALLS**

If the attendant answers most of the incoming calls, he or she should be familiar with the three ways to transfer calls: directly, with intercom announcement, and with Hold and intercom consultation.

### **Transferring Calls Directly**

Transferring a call directly to someone else, without intercom announcement or consultation, is very simple:

1. Touch **Transfer**.
2. Touch the Intercom Auto Dial button or dial the intercom number of the person to whom the call is being transferred.
3. Hang up.

The person to whom the call is transferred hears a distinctive transfer ringing and lifts the handset. If no one answers the call, it returns to the attendant's phone.

---

### **Transferring Calls with Intercom Announcement**

With an extra step, the person to whom the call is transferred can be told who is calling:

1. Touch **Transfer**.
2. Touch **Intercom**.
3. Touch the Intercom Auto Dial button or dial the intercom number of the person to whom the call is being transferred.
4. Make your announcement.
5. Hang up.

The person receiving the transferred call hears the announcement over the voice terminal speaker and needs only to lift the handset to accept the call.

### **Transferring Calls with Hold and Intercom Consultation**

With this method the attendant is able to discuss the call with the person to whom it is being transferred. There are many reasons for consulting about the call: a person may want to get out a file before taking the call, may be busy and not want to answer the call at all, or may want the attendant to answer the call and take a message.

1. Touch **Hold**.
2. Touch **Intercom**.
3. Touch the Intercom Auto Dial button or dial the intercom number of the person to whom the call is being transferred.
4. Discuss the call with the person.
5. Tell the person on which line to pick up the call.
6. Hang up.

### **USING INTERCOM AUTO DIAL BUTTONS**

For the attendant, programmed Intercom Auto Dial buttons increase the efficiency of the Transfer feature in several ways:

- It is easier and quicker to make intercom calls.
- The green light next to the button shows when a line is busy (steady light).
- The green light also identifies the person calling the attendant (rapidly flashing light).

### **USING THE HEADSET**

If the attendant has a heavy call-handling load, he or she may want to use a headset with the Headset Adapter rather than lifting the handset throughout the day.

---

# Moves and Changes

Your MERLIN system can expand as your company grows and as your communication needs increase. It is simple to increase its capacity, and since the system is modular in design, you can add features and accessories. In addition, every component in the MERLIN system is portable, so if your business moves, your MERLIN system can move with you.

## **MOVING YOUR SYSTEM**

If your business moves, just take the MERLIN system with you. All the connecting cords are snap-in, modular, and easy to install. You need to order new lines from your local telephone company and, depending on your new floor plan, you may need to order some new lengths of modular connecting cords from your MERLIN system supplier.

If you relocate people within your business, they can keep the same voice terminals, intercom numbers, and all programmed features. Simply move the voice terminals to the new offices, then connect the voice terminal cords to the control unit. To keep the same features, each voice terminal must keep the same intercom number. (For more information on moving your system, refer to the *Installation Guide: Models 206 and 410.*)

## **INCREASING YOUR SYSTEM'S CAPACITY**

There are several ways in which you can make additions to your system:

- You can order another line from the telephone company; all you need from your MERLIN system supplier is another modular line cord.
- You can purchase additional voice terminals and appropriate-length extension cords and plug them in yourself.
- If your business communications needs outgrow the capacity of your present MERLIN system, you can replace the control unit with a larger model. But, you can keep and continue to use your voice terminals, feature cartridges (unless you purchase a Model 1030 control unit), and accessories.

## **ADDING FEATURES AND ACCESSORIES TO YOUR SYSTEM**

Although you need only the control unit and the individual voice terminals to set up and use your system, you may also have optional equipment that adds features and capabilities to your system. Note that optional features often require the purchase of additional equipment.

By purchasing one or more of the following cartridges, you can increase the usefulness and flexibility of your MERLIN system:

- Another Feature Package (Type I cartridge) adds custom features to your system, thus expanding the operation of each voice terminal.
- An audio cartridge (Type II cartridge) enables you to add to your system such features as Music-on-Hold, which provides music for clients whom you put on hold, and Loudspeaker Page, which allows you to use a loudspeaker system.
- An added-services cartridge (Type III cartridge) allows you to add Extra Alert horns or bells so workers in noisy areas of the building are aware that the telephone is ringing, and Power Failure Transfer telephones which continue service in case of loss of electric power.

The chart on page 17 lists the optional features, any required equipment, and the uses and benefits of each feature.

## Uses and Benefits of Optional Features

Feature	Uses and Benefits
<p>Extra Alert</p> <p>Required equipment:</p> <ul style="list-style-type: none"> <li>• Type III cartridge in the control unit</li> </ul>	<p>Makes it possible to provide an audible or visual signal, such as bells, horns, or strobe lights, in three different areas of the building. Your business must supply alerting devices.</p> <ul style="list-style-type: none"> <li>• Alert people in noisy areas that the phone is ringing.</li> </ul>
<p>General Purpose Adapter</p>	<p>Connects telephone accessories to any MERLIN system telephone.</p> <ul style="list-style-type: none"> <li>• Add a modem for data communication with a computer.</li> <li>• Add a cordless telephone or a basic Touch-Tone or rotary telephone.</li> </ul>
<p>Hands-Free Unit</p>	<p>Provides speakerphone capability.</p> <ul style="list-style-type: none"> <li>• Have a telephone conversation from anywhere in the room.</li> <li>• Answer intercom calls without lifting the handset.</li> <li>• Answer outside calls with one touch.</li> <li>• Enjoy On-Hook Dialing, Monitor-on-Hold, and Group Listening.</li> </ul>
<p>Headset and Headset Adapter</p>	<p>Enables the attendant to handle calls without lifting the handset.</p> <ul style="list-style-type: none"> <li>• Speak and listen to someone during a phone conversation without having to lift the handset.</li> </ul>
<p>Loudspeaker Page</p> <p>Required equipment:</p> <ul style="list-style-type: none"> <li>• Type II cartridge in the control unit</li> </ul>	<p>Makes it possible to page others on a loudspeaker system. Your business must supply the paging system.</p> <ul style="list-style-type: none"> <li>• Quickly locate people who are away from their desks or normal work areas.</li> </ul>
<p>Music-on-Hold</p> <p>Required equipment:</p> <ul style="list-style-type: none"> <li>• Type II cartridge in the control unit</li> </ul>	<p>Makes it possible to provide callers with music when they have been put on hold. Your business must supply the music source.</p> <ul style="list-style-type: none"> <li>• Let people on hold know they have not been forgotten; thus, they will hold on longer.</li> <li>• Project a pleasant company image.</li> </ul>
<p>Power Failure Transfer</p> <p>Required equipment:</p> <ul style="list-style-type: none"> <li>• Type III cartridge in the control unit</li> </ul>	<p>Permits connection of two standard modular telephones to which system automatically switches if power fails.</p> <ul style="list-style-type: none"> <li>• Make certain that telephone service continues despite a power failure.</li> </ul>

# Isolating and Correcting Troubles

If something goes wrong in the operation of your MERLIN system, use the following troubleshooting chart to determine the possible cause of the problem. In many cases, you can clear the trouble yourself without the need for a service call.

## Troubleshooting Chart

Trouble	Possible Cause	Do This
You cannot make an outside call.	<ul style="list-style-type: none"> <li>The telephone company lines may be faulty.</li> </ul>	<ul style="list-style-type: none"> <li>Plug a standard modular telephone into the telephone company wall jack for your incoming line that has the trouble.</li> <li>If you experience the same problem when you use the standard modular phone, report the trouble to your local telephone company.</li> </ul>
	<ul style="list-style-type: none"> <li>The Outward Calls switches on the control unit are set to <i>No</i> (down).</li> </ul>	<ul style="list-style-type: none"> <li>Set Outward Calls switches to <i>Yes</i> (up).</li> </ul>
	<ul style="list-style-type: none"> <li>The Tone/Pulse switch on the control unit is not set correctly.</li> </ul>	<ul style="list-style-type: none"> <li>Set the Tone/Pulse switch to <i>Pulse</i>. If you purchase Touch-Tone service from the telephone company, set the switch to <i>Tone</i>.</li> </ul>
All voice terminals are dead; that is, there are no lights, no dial tone.	<ul style="list-style-type: none"> <li>All connections may not be secure.</li> </ul>	<ul style="list-style-type: none"> <li>Check the connections plugged into each voice terminal, the control unit, and the telephone company line jacks.</li> <li>If there are any loose connections, make them secure.</li> </ul>
	<ul style="list-style-type: none"> <li>There is no power to the control unit.</li> </ul>	<ul style="list-style-type: none"> <li>If the green light on the control unit is off, plug something else into the ac outlet to see if it is supplying power. (Make sure the control unit is not plugged into a switch-controlled outlet.)</li> </ul>
The red warning light on the control unit is lit.	<ul style="list-style-type: none"> <li>The cartridges may be loose.</li> </ul>	<ul style="list-style-type: none"> <li>Unplug the control unit.</li> <li>Make sure that all cartridges are firmly seated in the control unit slots.</li> <li>Plug in the control unit.</li> <li>Wait for a full 5 minutes.</li> <li>If the red light goes out (and stays out), the trouble is cleared up.</li> <li>If the red light remains on, call your equipment supplier.</li> </ul>

## Troubleshooting Chart (continued)

Trouble	Possible Cause	Do This
The voice terminals do not ring.	<ul style="list-style-type: none"> <li>• The volume control is turned off.</li> </ul>	<ul style="list-style-type: none"> <li>• Turn up the volume.</li> </ul>
	<ul style="list-style-type: none"> <li>• The lines are programmed not to ring.</li> </ul>	<ul style="list-style-type: none"> <li>• Program line ringing as desired.</li> </ul>
	<ul style="list-style-type: none"> <li>• The Do Not Disturb feature is activated.</li> </ul>	<ul style="list-style-type: none"> <li>• Touch <b>Do Not Disturb</b> to deactivate the feature. (The green light goes off.)</li> <li>• If the buttons on your voice terminal are not labeled, check each programmable button to see if the green light next to it is on; the Do Not Disturb feature should be on one of those buttons. Then, reprogram those buttons.</li> </ul>
The voice terminal will not stop ringing.	<ul style="list-style-type: none"> <li>• The T/P switch may be set to <i>P</i> (Program).</li> </ul>	<ul style="list-style-type: none"> <li>• Slide the T/P switch to the center position.</li> </ul>
One custom feature does not work, but the others do.	<ul style="list-style-type: none"> <li>• The feature was not programmed correctly.</li> </ul>	<ul style="list-style-type: none"> <li>• Reprogram the feature to the same button.</li> </ul>
	<ul style="list-style-type: none"> <li>• The feature is not being used correctly.</li> </ul>	<ul style="list-style-type: none"> <li>• Review the description of the feature's use in the <i>User's Guide: Models 206 and 410 with Feature Package 1</i>.</li> </ul>

---

# Index

- Adding Features and Accessories, 16 - 17
- Auto Answer-Intercom, 8, 10
- Automatic Line Selection, 8, 12 - 13
- Basic Programming Instructions, 10
- Call Waiting, 6
- Conference, 6
- Control Unit, 4, 5
  - Model 206 Control Unit Diagram, 5
  - Model 410 Control Unit Diagram, 5
  - Parts of the Control Unit, 4
  - Setting the Switches, 4
- Custom Features, 8 - 13
  - Basic Programming Instructions, 10
  - Feature Programming Chart, 11
  - Initial Feature Assignments, 9
  - Uses and Benefits of Custom Features, 8
- Delayed Ring. *See* Programmable Line Ringing
- Distinctive Ringing, 6
- Do Not Disturb, 8
- Drop, 6
- Extra Alert, 17
- Feature Programming Chart, 11
- Fixed Features, 6 - 7
  - Uses and Benefits of Fixed Features, 6 - 7
- General Purpose Adapter, 17
- Group Listening, 6
- Hands-Free Unit, 17
- Headset, 17
  - Using the Headset. *See* System Attendant
- Headset Adapter, 17
- Hold, 6
  - Hold Reminder, 6
- Immediate Ring. *See* Programmable Line Ringing
- Increasing Your System's Capacity, 16
- Initial Feature Assignments, 9
- Intercom, 6
  - Intercom Auto Dial, 8, 10
  - Manual Signaling, 8
  - Using Intercom Auto Dial. *See* System Attendant
- Last Number Redial, 8
- Loudspeaker Page, 17
- Manual Signaling. *See* Intercom Auto Dial
- Monitor-on-Hold, 7
- Moving Your System, 16
- Music-on-Hold, 17
- No Ring. *See* Programmable Line Ringing
- On-Hook Dialing, 7
- Optional Features, 16 - 17
  - Uses and Benefits of Optional Features, 17
- Outside Auto Dial, 8, 10
- Outward Call Restriction, 8
- Pause. *See* Special Characters
- Power Failure Transfer, 17
- Privacy, 8
- Programmable Line Ringing, 8, 12
  - Delayed Ring, 12
  - Immediate Ring, 12
  - No Ring, 12
- Recall, 7
- Ringling Line Selection, 7
- Saved Number Redial, 8
- Speaker, 7
- Special Characters in Programming
  - Outside Auto Dial, 10
  - Pause, 10
  - Stop, 10
  - Switchhook Flash, 10
- Stop. *See* Special Characters
- Switchhook Flash. *See* Special Characters
- System Attendant, Special Information for, 14 - 15
  - Assigning Line Ringing, 14
  - Transferring Calls, 14 - 15
  - Using Intercom Auto Dial, 15
  - Using the Headset, 15
- T/P (Test/Program) Switch, 3, 10
- Transfer, 7
  - Transfer Return, 7
- Transferring Calls. *See* System Attendant
- Troubleshooting, 18 - 19
- Voice Terminal Module, 3
- Voice Terminal Programming, 7
- Voice Terminal Testing, 7
- Volume Control, 3, 7



AT&T  
Information Systems

MERLIN is a trademark of AT&T  
© Copyright 1985 AT&T. Printed in the U.S.A.  
999-504-135 IS

Issue 5

July, 1985

