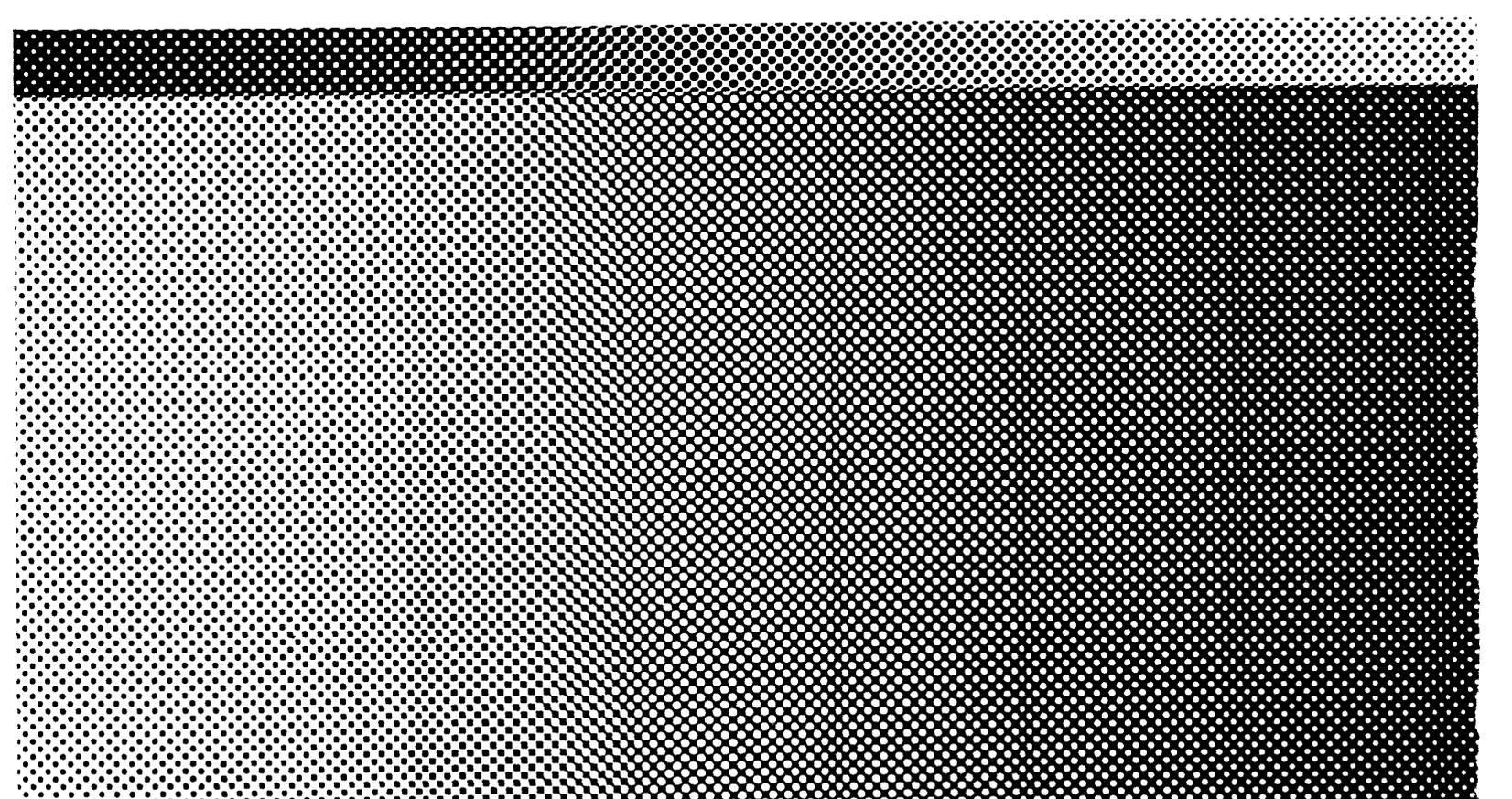AT&T

MERLIN®

COMMUNICATIONS SYSTEM

ADMINISTRATION MANUAL:
MODELS 1030 AND 3070
WITH FEATURE MODULE 5

MERLIN

COMMUNICATIONS SYSTEM

ADMINISTRATION MANUAL:

**MODELS 1030 AND 3070
WITH FEATURE MODULE 5**

Table of Contents

How to Use This Manual

The advanced technology of the **MERLIN®** communications system offers a flexibility that allows you to customize the system to meet your particular business communication needs. As system administrator, you'll probably be responsible for establishing the basic operating conditions of your **MERLIN** system immediately after installation. This includes such essential steps as setting the system to work with the Call Management System, if you have this automatic call distributor, and assigning lines to voice terminals.

You can also put optional systemwide features in place during your initial administration session or add them later, depending on your priorities. If your needs change over time, you can easily alter your **MERLIN** system to meet the new requirements of your business.

This administration manual takes you step-by-step through the procedures involved in customizing your system. Here is how to use the manual:

If you are setting up a new system for the first time:

1. Read the "Administration Overview," page 4, to learn about the tasks you'll be performing as system administrator.

2. Review the **"MERLIN** System Components," page 8, to familiarize yourself with the equipment you'll be working with.

3. If you haven't already decided which features you want your **MERLIN** system to have, look through the **"MERLIN** System Features" described on pages 136 through 143.

4. Get ready to administer your system by filling out the System and Voice Terminal Configuration Forms on pages 144 through 180, if you haven't done so already. You'll also need to review the information in "Preparing to Administer Your System," page 16.

5. Read through "Basic Administration," page 24, and perform those tasks that apply to your particular system.

   IMPORTANT If you plan to use the Call Management System (CMS) for the **MERLIN** System, you *must* set your **MERLIN** system to be compatible with CMS before going on to other administration steps.

6. Similarly, read through "Customizing with Additional System Options," page 45, and add the systemwide features that your business needs.

7. Review the features described in "Programming Voice Terminals for Office Priorities," page 105. Because these features have systemwide effects, you should program the features on selected voice terminals yourself or oversee any programming done by voice terminal users.

8. If you want to assign features to voice terminals to suit the preferences of individual users, perform the procedures described in "Programming Voice Terminals for Personal Priorities" page 115.

9. To learn how to program your attendant console(s), review "Special information about Attendant Consoles," page 127.

10. If you have many 5-button voice terminals or basic telephones connected to your system, read "Special Information about 5-Button Voice Terminals," page 131, and "Special Information about Basic Telephones," page 132.

If you are changing some options or features that are already in place:

1. Review the information in "Preparing to Administer Your System," page 16.

2. Using the Table of Contents, Index, or page references in **"MERLIN** System Features," page 136, locate the procedure for the option or feature you want to change and perform the necessary steps in the procedure. Streamlined instructions are provided in the "Quick Reference Guide to Administration Procedures" on page 183.

3. If you are making a basic modification to the system—that is, a modification that requires changing any of the switch settings on your control unit— read the information in "Changing Your System Later," page 27.

Administration Overview

Because the effects of system administration are wide-ranging, only you or someone you delegate should perform administration procedures. The term administer as used in this manual refers to the act of establishing certain options and features that have systemwide impact, such as assigning the outside lines that each voice terminal can access or defining System Speed Dial codes for everyone in the system to use. You use the switches on your control unit and the administrator/attendant console, the voice terminal connected to the intercom 10 jack on the control unit, to administer your system. Before you can perform administration, you have to put the system in a special state of operation called administration mode. (See "Entering and Leaving Administration Mode," page 28, for more information about this operating state.)

In contrast, the term program refers to assigning programmable features to an individual voice terminal. Anyone can put a voice terminal in programming mode and assign it features while the system is in the regular call-handling mode.

ADMINISTERING YOUR SYSTEM FOR THE FIRST TIME

System administration involves a series of simple procedures that you perform at the control unit and at the administrator/attendant console. The connections between the control units and the administrator/attendant consoles for Models 1030 and 3070 are illustrated below. The connection for Model 1520 is the same as that shown for Model 1030.

Voice terminal module jack 10

Model 1030 control unit

Administrator/Attendant console

Voice terminal module jack 10

Model 3070 control unit

Administrator/Attendant console
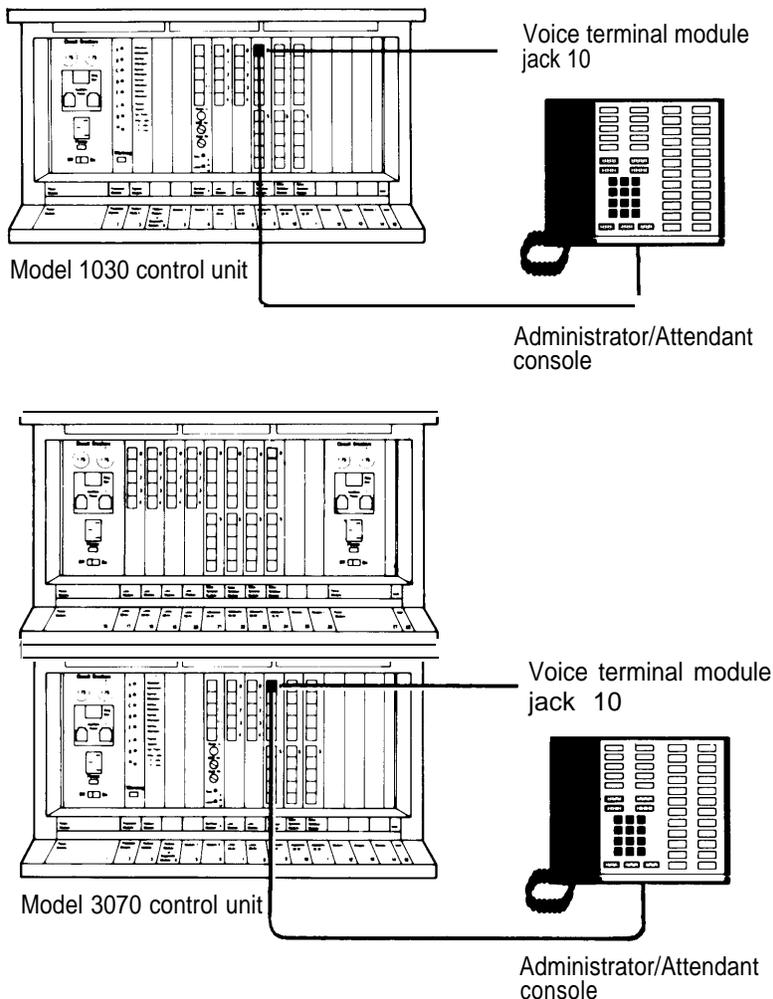
The MERLIN system is designed to be up and running with a minimum amount of administration. However, certain administration procedures are *required* to set up newly installed system, depending on the conditions of your communications environment and the options you choose. For example, if you want to use the Call management System (CMS) with your basic MERLIN system, you must administer your system to be compatible with CMS. Before performing any other procedures, review the information in "Basic Administration," page 24, and complete the required procedures that apply to your system and business needs.

The other systemwide administration procedures are optional. You can administer just the features you want to use, at your own convenience. Those features are described in "Customizing with Additional System Options," page 45.

There are some features that you may want to assign to certain voice terminals yourself because they influence call-handling efficiency throughout your entire business. Assigning these features does not involve administrative procedures, but rather, simple programming steps at the administrator/attendant console or at individual voice terminals. These procedures are described in "Programming Voice Terminals for Office Priorities," page 105.

Finally, if you want to help people program their voice terminals to meet their individual needs, follow the procedures outlined in "Programming Voice Terminals for Personal Priorities," page 115. Later, if your needs change, you can alter any system administration or programming that has been done.

The chart which follows shows the five types of procedures described in this manual. If you are about to perform system administration for the first time, be sure to read "Preparing to Administer Your System," page 16, before you attempt any procedures.

MAKING CHANGES TO YOUR SYSTEM LATER

Changing system features that were administered from the administrator/attendant console or programmed at individual voice terminals is a simple process. You just turn to the section of this manual that gives the procedure for assigning the feature or option you want, and follow the instructions. The "Quick Reference Guide to Administration Procedures" on page 183 provides streamlined instructions for programming systemwide features.

Making basic changes to the way your system operates—that is, changes to the switch settings on the control unit—is more complicated, since changing a setting may erase critical system administration that is now is place. Before you change any switch settings, review the information in "Changing Your System Later," page 27.

Prepare for System Administration

These procedures help you get ready to administer your system.

- Decide how people will access outside lines.
- Complete and keep handy your System and Voice Terminal Configuration Forms.
- Schedule a time to perform administration procedures.

Perform Basic Administration

Depending on your system requirements, some of these procedures maybe *necessary* immediately after your system is installed; you also perform these procedures whenever you need to change your system later. These procedures are carried out at the control unit and the administrator/attendant console.

- Set your control unit.
- Learn how to enter and leave administration mode.
- Specify Touch-Tone or rotary signaling.
- Set your system to work with the **MERLIN** Call Management System, if your business has this automatic call distributor.
- Set up a square system, with lines assigned to buttons.
- Set up a pooled system, with line pools, line-to-button assignments, and either Button Access or Dial Access to Line Pools.

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Customize with Additional System Options
These procedures are optional. Perform them at the administrator/attendant
console whenever you want to add these features to your system.

- Assign call restrictions.
- Administer Automatic Route Selection.
- Assign voice terminals to groups for Group Page.
- Assign voice terminals to groups for Group Call Distribution.
- Establish One-Touch Hold with Call Announcement, if you want this feature
    instead of One-Touch Transfer.
- Establish Enhanced Night Service.
- Program System Speed Dial codes.
- Administer Station Message Detail Recording options.
- Set return interval for transferred calls.
- Set disconnect interval for held calls.
- Set recall timer.

Program Voice Terminals for Office Priorities
These procedures are optional. Use Centralized Voice Terminal Programming
or perform them at individual voice terminals whenever you want to give some-
one access to these features.

- Assign an Automatic Line Selection sequence.
- Assign Programmable Line Ringing for incoming calls.
- Assign Cover buttons.
- Assign Line Pickup buttons.

Program Voice Terminals for Personal Priorities
These procedures are optional. Use Centralized Voice Terminal Programming
or perform them at individual voice terminals whenever you want to give some-
one access to these features.

- Assign features to programmable buttons.
- Assign Personal Speed Dial codes to 5- and 10-button voice terminals.
- Use special characters in programmed dialing sequences.
- Select a Personalized Ring.
- Program Voice Announcement Disable.
- Program Simultaneous Voice and Data Calls.

MERLIN System Components

When performing your administration tasks, you work with three components of the MERLIN system: the control unit, the administrator/attendant console, and individual voice terminals. You may also have some optional equipment that adds teatures and capabilities to your system but does not affect system administration. The following descriptions will help you become familiar with the components that make up your system.

For information about system installation, refer to the /nstallation Guide: /Mode/s 1030 *and 3070.*

THE MODEL 1030 CONTROL UNIT AND EXPANSION UNIT

The Model 1030 control unit provides connections for up to 10 outside lines and 30 voice terminals, or for up to 15 outside lines and 20 voice terminals, depending on the combination of Line and Voice Terminal Modules you choose. For a 1030 configuration, you have Line Modules in slots 7 and 8 (10 lines) and Voice Terminal Modules in slots 9, 10, and 11 (30 voice terminals). For a 1520 configuration, you replace the Voice Terminal Module in slot 11 with a Line Module. This increases the number of lines to 15 and decreases the number of voice terminals to 20.

The addition of an Expansion Unit makes the Model 1030 control unit a Model 3070 control unit and increases system capacity to as many as 30 outside lines and 70 voice terminals, again depending on the combination of Line and Voice Terminal Modules you choose. Similarly, a 1520 configuration can be changed to a 3070 configuration by replacing the Line Module in slot 11 with a Voice Terminal Module and adding an Expansion Unit.
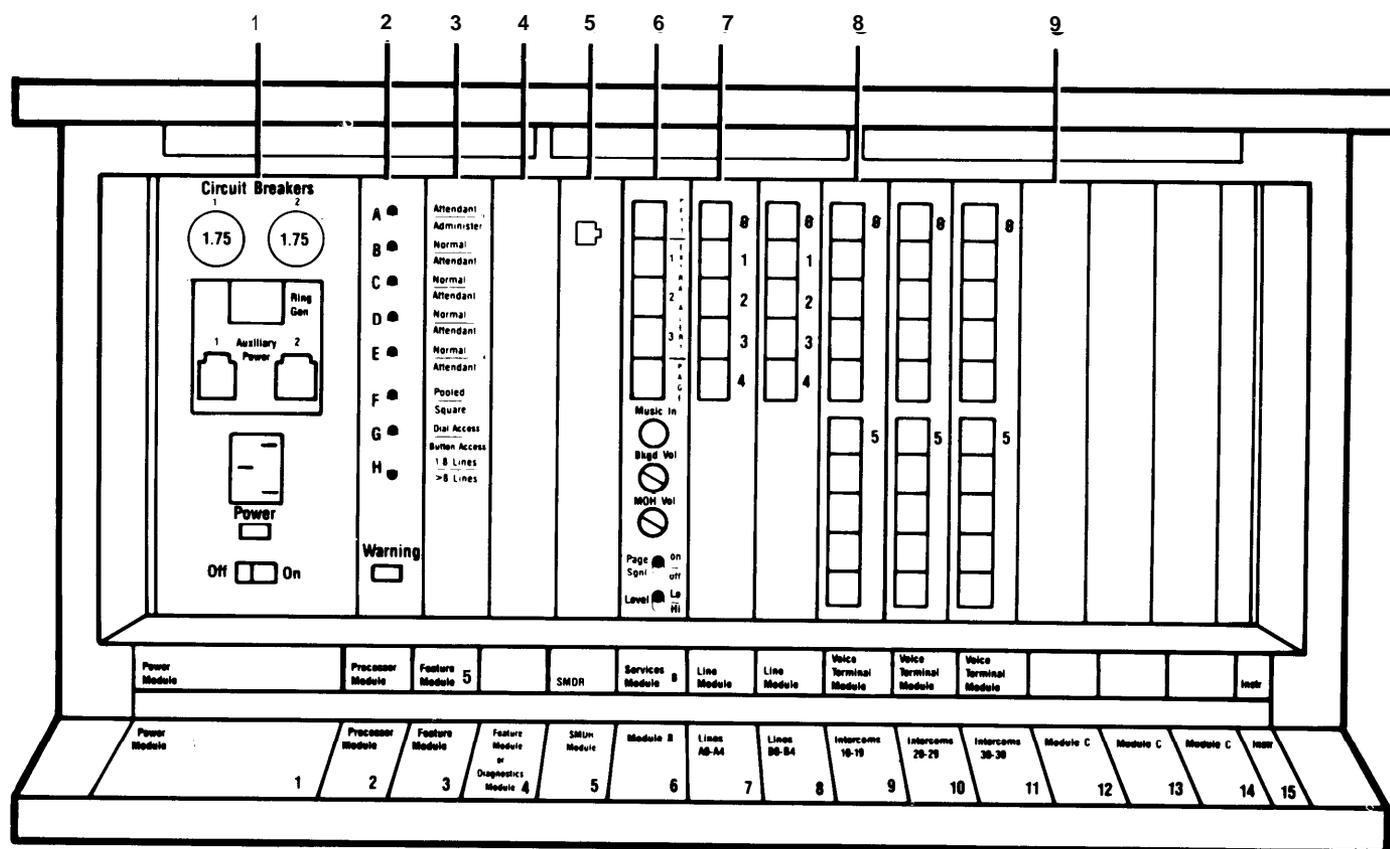
THE MODEL 1030 CONTROL UNIT

1. **Power Module:** Reduces ac power to a level the system can handle.

    l **Circuit Breakers.** Automatically cut the power to the control unit if an overload occurs.

    l **Ring Generator connector. Optional Ring** Generator Unit plugs in here if you have basic Touch-Tone or rotary telephones.

- **Auxiliary Power connector.** Auxiliary Power Unit plugs in hereto provide the additional power for systems with many optional accessories.
- **Power light.** Green light indicates power is on.
- **On/Off switch.** Turns the power to the control unit on and off.

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2. **Processor Module:** Works in conjunction with Feature Module 5 to control system operating conditions.

   - Switches A, B, C, D, E, F, G, and H. Select system options provided by Feature Module 5.
   - Warning light. Red light warns of problem in control unit. It also comes on for approximately one minute when you first turn on the system.

3. **Feature Module 5:** Contains the software that controls your MERLIN system. You set eight switches on the Processor Module, according to the labels on the Feature Module, to select the following options from the programs stored in Feature Module 5:

   - **Attendant/Administer (10) option.** Selects attendant or administration mode of operation for the administrator/attendant console.
   - **Normal/Attendant (11, 12, 13, 14) options.** Select normal or attendant mode of operation for these four voice terminals.
   - Pooled/Square option. Selects mode of operation for the system so that line buttons on voice terminals represent either groups of lines (pooled) or separate lines (square). For detailed information on this option, see "The Square vs. Pooled Decision," page 17.
   - **Dial Access/Button Access option.** Sets the system so that a line pool can be accessed at a voice terminal either by touching the button to which the pool is assigned or by touching a Pool Access button and then dialing the access code for that line pool.
   - . **1-8 Lines/ 8 Lines option.** Sets the system size to eight or fewer outside lines (small system) or to more than eight lines (large system).

4. **Diagnostics Module (optional):** Aids in identifying faulty components if the system malfunctions.

5. **SMDR (Station Message Detail Recording) Module (optional):** Allows connection of a printer so you can print out call traffic reports automatically as calls are made. The SMDR Module is also required for automatic operation of Enhanced Night Service with Time Set.

6. **Services Module (optional):** Contains the following jacks, switches, and adjusters to connect and control optional equipment:

   - **PFTT (Power Failure Transfer Telephone) jack.** With an adapter, connects up to four standard modular telephones for use as backup during commercial power outage. The system automatically switches service to them if power fails.
   - **Extra Alert jacks.** Three jacks connect strobe lights, loud bells, or horns for three noisy or remote zones where the regular voice terminal ring cannot be heard.

   - **Page jack.** Connects a loudspeaker paging system. With an adapter, you can have up to three paging zones.
   - **Music-In jack. Connects** a music source for Music-on-Hold or background music through a paging system.
   - **Bkgd Vol (Background Volume) control.** Allows volume adjustment for background music.
   - **MOH Vol (Music-on-Hold Volume) control.** Allows volume adjustment for Music-on-Hold.
   - **Page Sgnl switch. On** (up) provides a short tone before loudspeaker paging announcements. Off (down) eliminates the signal.
   - **Level switch.** Sets amplification for music source. Hi (down) is for sources with their own amplifiers; Lo (up) is for those without.

7. **Line Module:** Provides jacks for up to five outside lines. Normally, there are two Line Modules in the Model 1030 control unit. You may have a third, however, if you decide to replace the Voice Terminal Module normally found in slot 11 with a Line Module in order to have 15 lines instead of 10 (1520 configuration). If you want to add an Expansion Unit, however, you must first return your control unit to the 1030 configuration.

   The Expansion Unit contains up to four Line Modules. These modules, combined with two Line Modules in the 1030 control unit, provide the system maximum of six Line Modules (30 lines).

   - **Jacks O, 1, 2, 3, 4.** Connect outside lines to the MERLIN system. Line Modules have letters as well as numbers. For example, the first Line Module in the control unit is lettered A, so the jacks in that Line Module are called A0, A1, A2, A3, and A4.

8. **Voice Terminal Module:** Provides jacks for ten voice terminals. You may have up to three Voice Terminal Modules for the Model 1030 control unit and up to four additional Voice Terminal Modules in the Expansion Unit. A Basic Telephone Module with jacks for basic Touch-Tone or rotary telephones is also available.

   - "0" begins the numbering for the first five voice terminal jacks on the module. These jacks (and the location of the module) determine the intercom numbers of the voice terminals plugged into them. For example, if a Voice Terminal Module is plugged into the slot labeled "Intercoms 20-29," the jack labeled "O" is for intercom 20. The jack below it is for intercom 21, and so on.
   - "5" begins the numbers for the second five voice terminals.

9. **Module C (optional):** An Off-Premises Telephone interface to support off-premises telephones.

Addition of the Expansion Unit changes the Model 1030 control unit to a Model 3070 control unit and increases overall system capacity to 30 lines and 70 voice terminals. The unit can accommodate:

- Up to two Power Modules
- Up to four Line Modules
- Up to four Voice Terminal Modules

The second Power Module is required for systems with more than 20 lines or more than 60 voice terminals. The Expansion Unit also has two additional module slots for future use.

NOTE: If you add an Expansion Unit to a system configured for 15 outside lines and 20 voice terminals, you must remove the Line Module from slot 11 and replace it with a Voice Terminal Module. This returns your system to the standard configuration of 10 outside lines and 30 voice terminals. You can then insert modules into the appropriate slots in the Expansion Unit.

If Expansion Unit slots 17, 18, 21, 22, and 23 are empty, the power switch on the first Power Module (slot 16) must be set to off (left). If modules are inserted in any of these slots, the power switch must be set to On (right).

If Expansion Unit slots 19, 20, and 24 are empty, the power switch on the second Power Module (slot 27) must be set to Off (left). If modules are inserted in any of these slots, the power switch must be set to On (right).
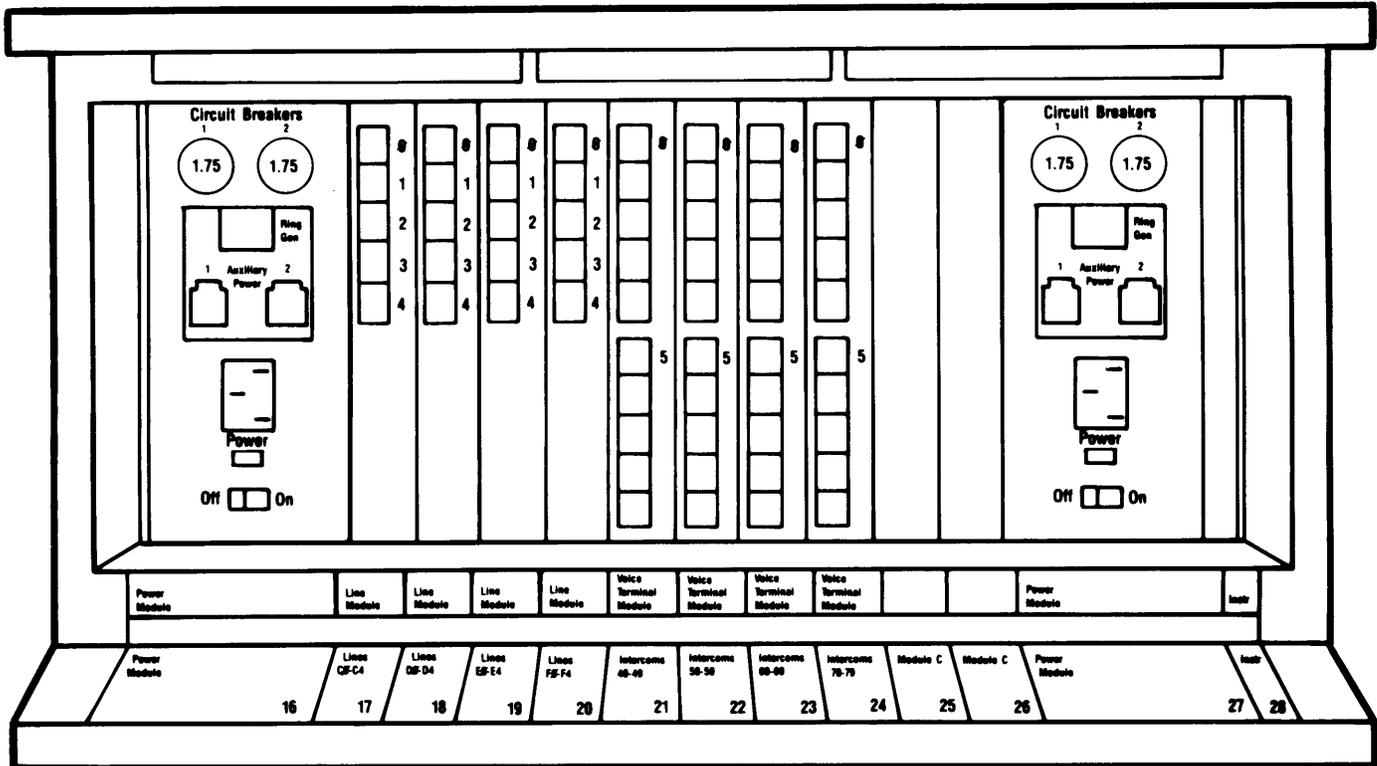
EXPANSION UNIT FOR MODEL 1030

THE ADMINISTRATOR/ATTENDANT CONSOLE

The administrator/attendant console is the voice terminal connected to the intercom 10 Voice Terminal Module jack in the control unit. The console operates in either of two ways, depending on which mode you put it in.

- It functions as your primary attendant console under day-to-day call-handling conditions.
- It functions as the administrator console when you use it to establish options and features for the system as a whole or for individual voice terminals.

To change the administrator/attendant console from one mode of operation to the other, you just set a switch on the control unit and then set another switch on the console itself. When the console is in administration mode, some of its buttons take on different functions than they have when the console is in the regular call-handling mode. Therefore, when you administer the system, you insert a special set of administration mode button labels in the console so that you know which buttons to touch. You'll find two sets of button labels in the back of this manual. Which set you'll use depends on the kind of administrator/attendant console you have.

Types of Consoles

The type of administrator/attendant console you have depends primarily on the number of voice terminals and lines in your system.

For systems with eight or fewer lines and 20 or fewer voice terminals (small systems—switch H on the control unit set to 1-8 Lines), you use the following console:

- The *administrator/attendant* console for small systems, a 34-button deluxe voice terminal

  This model is suitable for small systems because it has enough buttons to show the status of each line and each voice terminal in the system. The system assigns lines and intercom numbers to these buttons automatically. You can use the lights next to each button to keep track of what is happening on the lines and at the voice terminals you are working with.

For systems with more than eight lines or more than 20 voice terminals (large systems—switch H on the control unit set to> 8 Lines), these two consoles are available:

- The administrator/attendant console with Attendant Intercom Selector for large systems, a 34-button deluxe voice terminal with an attached Attendant Intercom Selector

  The administrator/attendant console with Attendant Intercom Selector is convenient for administering a large system because up to 70 voice terminals can be represented using the Auto Intercom buttons on the Attendant Intercom Selector. This leaves all 30 buttons on the left side of the console available to show the status of each line in the system. On this console, all your lines and intercom numbers are assigned to buttons automatically when the system is activated.

- The economy administrator/attendant console for large systems, a 34-button deluxe voice terminal without an Attendant Intercom Selector

  If you don't need the extra capacity or convenience provided by the Attendant Intercom Selector, you can use the economy administrator/attendant console to administer a large system. On this console, all your lines are assigned to buttons automatically. The unassigned programmable buttons can serve as Auto Intercom buttons or feature buttons while the console is in the attendant mode. Because the economy administrator/attendant console has no Auto Intercom buttons in the administration mode, you must specify a particular voice terminal by dialing its intercom number.

Administrator/attendant consoles for small and large systems in administration mode are illustrated on pages 12 and 13.

Administrator/Attendant Consoles for Small Systems* in Administration Mode
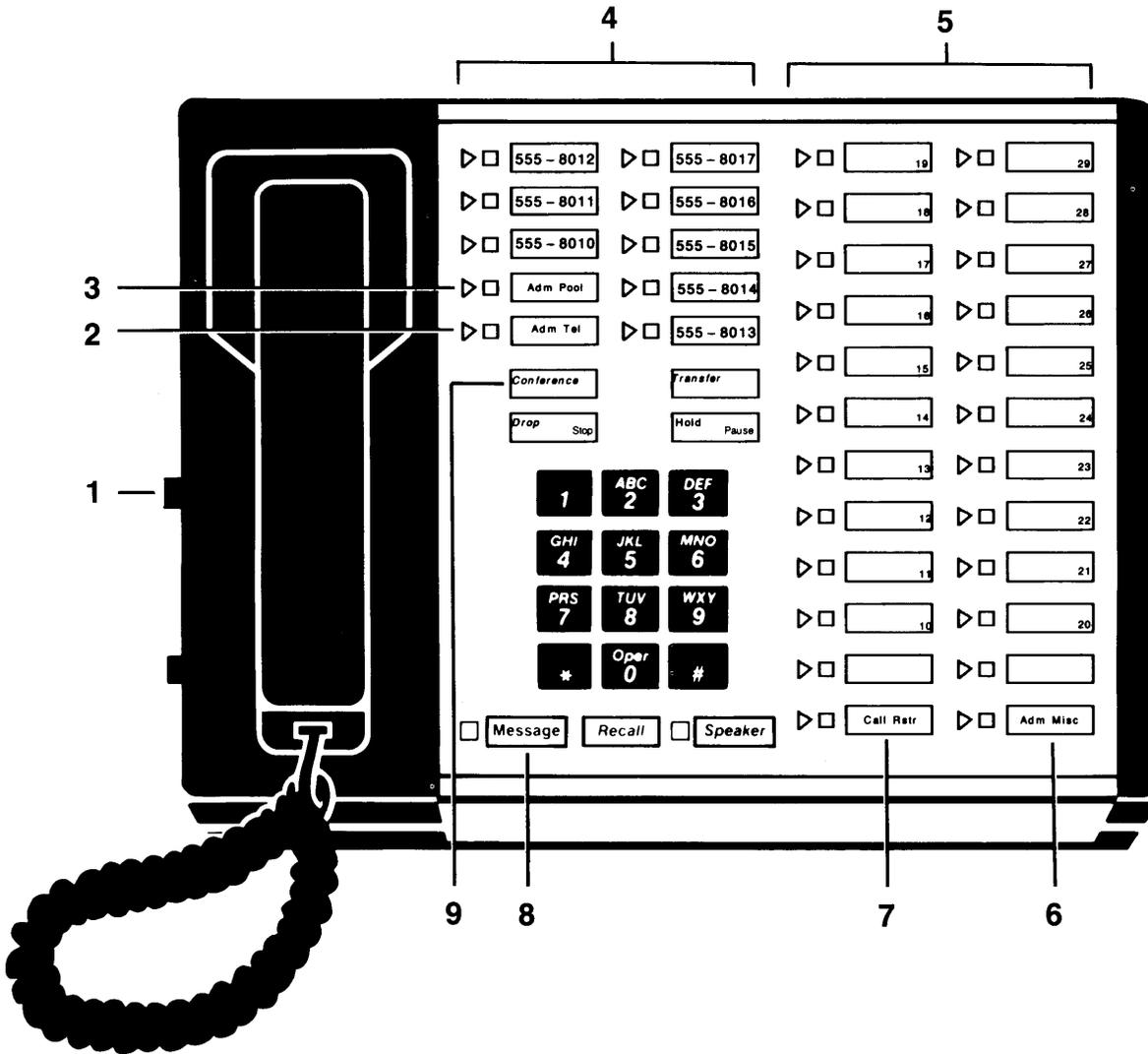
1. **T/P switch:** Set to P when performing system administration.

2. **Adm Tel button:** Used when assigning lines to voice terminals and assigning voice terminals Dial Access to Line Pools.

3. **Adm Pool button:** Used when setting up line pools.

4. **Line buttons.**

5. **Auto Intercom buttons** (10 through 29).

6. **Adm Mist button:** Used when specifying Touch-Tone or rotary signaling, assigning allowed-list call restrictions, and administering other system options.

7. **Call Rstr button:** Used when setting lines to detect a toll prefix or area code only and when assigning outward and toll call restrictions.

8. **Message button:** Used when giving a voice terminal the same assignments as one that has already been administered.

9. **Conference button:** Used to assign features to individual voice terminals from the administrator/attendant console.

*Systems with 8 or fewer lines and 20 or fewer voice terminals — switch H on control unit is up.

Administrator/Attendant Consoles for Large Systems* in Administration Mode
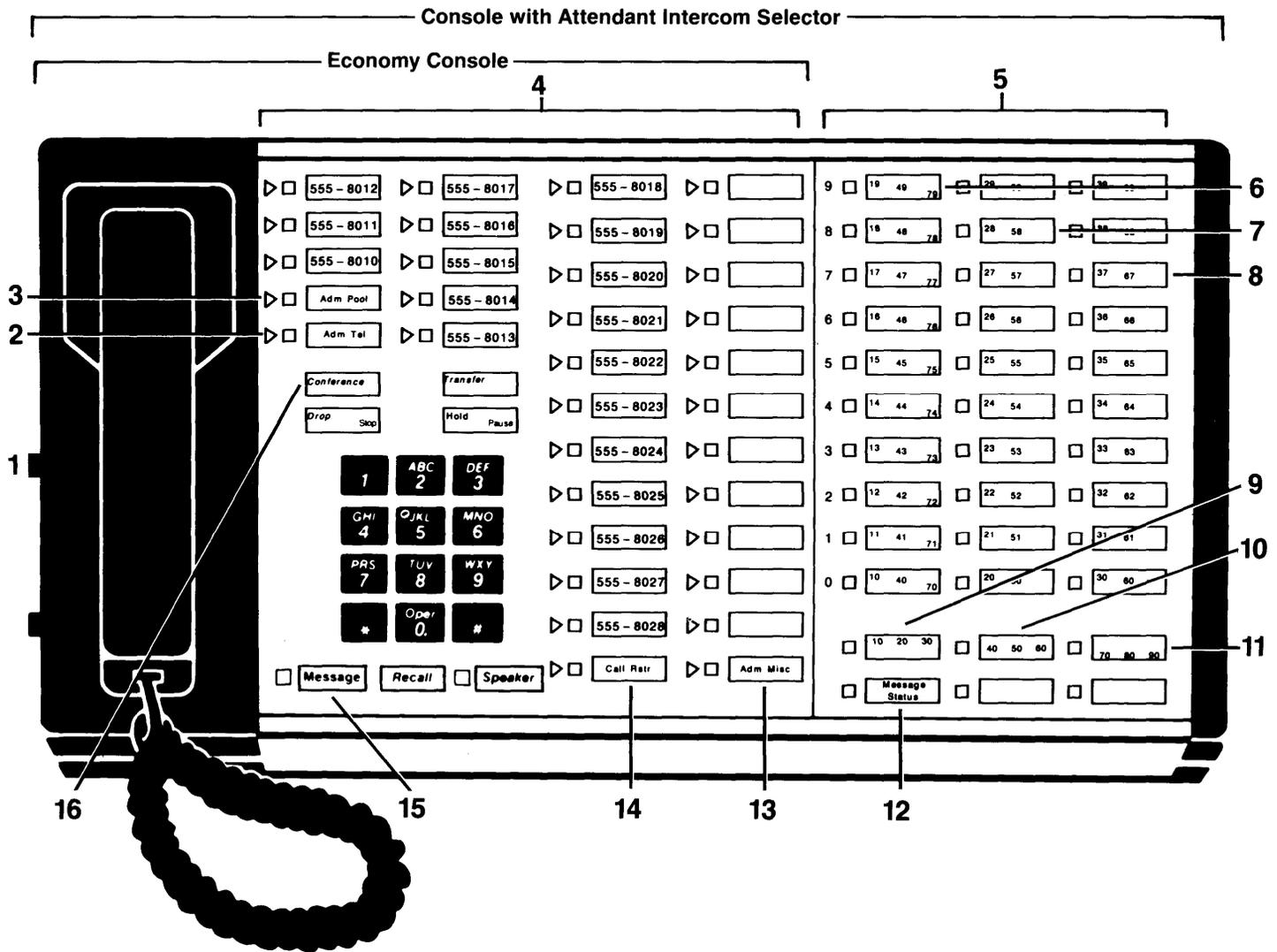
Console with Attendant Intercom Selector

Economy Console

<table>
<tr><td>T/P switch:</td></tr>
</table>

1. **T/P switch:** Set to P when performing system administration.

2. **Adm Tel button:** Used when assigning lines to voice terminals and assigning voice terminals Dial Access to Line Pools.

3. **Adm Pool button:** Used when setting up line pools.

4. **Line buttons and programmable buttons:** Buttons in first two left-hand columns are always line buttons.

5. **Auto Intercom buttons** (10 through 79).

6. **Auto Intercom buttons:** Buttons in this column represent intercom numbers 10-19,40-49, or 70-79, depending on which Shift button you touch.

7. **Auto Intercom buttons:** Buttons in this column represent intercom numbers 20-29 or 50-59, depending on which Shift button you touch.

8. **Auto Intercom buttons:** Buttons in this column represent intercom numbers 30-39 or 60-69, depending on which Shift button you touch.

9. **Shift button:** Used to access Auto Intercom buttons for intercom numbers 10 through 39.

10. **Shift button:** Used to access Auto Intercom buttons for intercom numbers 40 through 69.

11. **Shift button:** Used to access Auto intercom buttons for intercom numbers 70 through 79.

12. **Message Status button:** Not used for system administration. Be sure the light next to the button is off during administration.

13. **Adm Mist button:** Used when administering allowed-list call restrictions, Enhanced Night Service, and other system options.

14. **Call Rstr button:** Used when setting lines to detect a toll prefix or area code only and when assigning outward and toll call restrictions to voice terminals.

15. **Message button:** Used when giving a voice terminal the same assignments as one that has already been administered.

16. **Conference button:** Used when assigning features to individual voice terminals from this console.

* Systems with more than 8 lines or more than 20 voice terminals— switch H on control unit is down

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Using the Console

If you have an administrator/attendant console for small systems, you'll use Auto intercom buttons on your console to specify particular voice terminals during administration. If you have an administrator/attendant console with Attendant Intercom Selector for large systems, you'll use Shift buttons along with your Auto Intercom buttons. The paragraphs below describe how to use these buttons.

Auto Intercom Buttons. Each person's voice terminal has a unique 2-digit intercom number similar to an extension number. These intercom numbers (10 through 39 for a Model 1030 system, 10 through 79 for a Model 3070 system) are automatically assigned to Auto Intercom buttons on the administrator/attendant console in small systems and in large systems where the administrator/attendant console has an Attendant Intercom Selector. During system administration you use the lights next to each Auto Intercom button to determine the status of voice terminals in your system.

The economy administrator/attendant console has no Auto Intercom buttons in the administration mode. With this console you use the dial pad rather than an Auto intercom button to specify a particular voice terminal.

Shift Buttons (console with Attendant Intercom Selector only). Consoles with Attendant Intercom Selectors have three Shift buttons that let you administer as many as 70 voice terminals using only the 30 Auto Intercom buttons on the Attendant intercom Selector. When you touch one of the Shift buttons, you change the intercom numbers assigned to the Auto Intercom buttons. Use the left Shift button labeled 10-20-30 to select intercom numbers 10 through 39 in the blue band, the center Shift button labeled 40-50-60 to select intercom numbers 40 through 69 in the white band, and the right Shift button labeled 70-80-90 to select intercom numbers 70 through 79 in the gray band.

If you want to dial a particular intercom number, you must first touch the Shift button that provides access to the group of intercom numbers that includes the one you want. For example, if you want to assign lines to the voice terminal represented by intercom 31, touch the left Shift button. The light next to the Shift button comes on, and the Auto Intercom buttons now represent intercom numbers 10 through 39.

It's best to assign intercom numbers in the 10 through 39 range to people for whom an attendant handles many calls. The attendant can tell from which voice terminal a transferred call is returning if he or she transferred the call to an intercom number in the blue band.

Message Status Button (console with Attendant Intercom Selector only). The Message Status button is used only when your console is in the attendant mode. You use this button to find out which voice terminals have messages waiting for them.

OPTIONAL EQUIPMENT

You also may have optional equipment that adds features and capabilities to your system.

- **Attendant Intercom Selector.** Provides an attendant with 70 Auto Intercom buttons.

- **Basic Telephone and Modem Interface.** Connects telephones and data communication devices such as autodialers, answering machines, cordless telephones, facsimile machines, and auto-answer or originating modems to your **MERLIN** system. You can also use a transformer to connect a timer to a Basic Telephone and Modem Interface.

- **Basic Telephone Module.** Lets you connect basic Touch-Tone and rotary telephones to the **MERLIN** system.

- **Hands-Free Unit.** Provides you with full speakerphone capability including hands-free telephone conversation, On-Hook Dialing, Monitor-on-Hold, and teleconferencing.

- **Headset and Headset Adapter.** Enables an attendant to answer and listen to calls without lifting the handset.

- **General Purpose Adapter** (for use only with 10-button and 34-button voice terminals). Enables you to connect accessories, such as data terminals, cordless telephones, and autodialers, to a **MERLIN** system voice terminal.

- **Off-Premises Telephone Interface.** Connects off-premises telephones to your **MERLIN** system.

Preparing to Administer Your System

Before you start to administer your system, review this section to make sure you have the information and completed forms that you need.

> **Preparation Procedures**
>
> - Decide how people will access outside lines.
> - Complete your System and Voice Terminal Configuration Forms.
> - Schedule a time to perform administration procedures.

THE SQUARE VS. POOLED DECISION

For systems that have just been installed, you have to make a decision about a basic system characteristic—how people access outside lines with their voice terminals. You have the option of setting your system to be either square or pooled. In a square system, each outside line can appear on a separate button at each voice terminal. In a pooled system, outside lines are grouped together so that one button provides access to several outside lines. On attendant consoles, however, each outside line appears on a separate button, whether your system is pooled or square, and you cannot change this arrangement.

Whether your system should be square or pooled depends on your specific business needs. If you want to use the Automatic Route Selection feature, your lines must be pooled and your system must beset for Dial Access to Line Pools. The characteristics of both configurations are discussed in greater detail in the paragraphs that follow.

About Square Systems

In the **MERLIN** communications system, Models 1030 and 3070 with Feature Module 5, a square configuration is one in which outside lines are represented by separate buttons on every voice terminal in the system. A square configuration simplifies call-handling because people can join in on calls or pickup calls on hold just by touching the appropriate line button at almost any voice terminal.

You can choose between two kinds of square configurations: standard or customized. In the standard configuration, you give all voice terminals in the system access to the same lines. In the customized arrangement, on the other hand, you assign specific lines or sets of lines to selected groups of voice terminals. You can also assign personal lines to individual voice terminals in a customized square configuration.

Standard Square Configurations. The standard square configuration is ideal for offices in which all staff members use the same lines to make and receive calls. In this arrangement, every line in the system appears at each voice terminal that has enough buttons to accommodate that number of lines. Depending upon the size of your system, you can assign up to 30 lines to as many as 70 voice terminals.

You will assign each of your lines to the same buttons at each voice terminal. To get the most from a standard square configuration, all your voice terminals should have enough buttons to handle all the lines in your system. If you have smaller capacity voice terminals, see "Special Information about 5-Button Voice Terminals," page 131.

An example of a standard square configuration appears on the following page. All six lines in the system are available for general use and appear on the same buttons at each voice terminal, as shown.
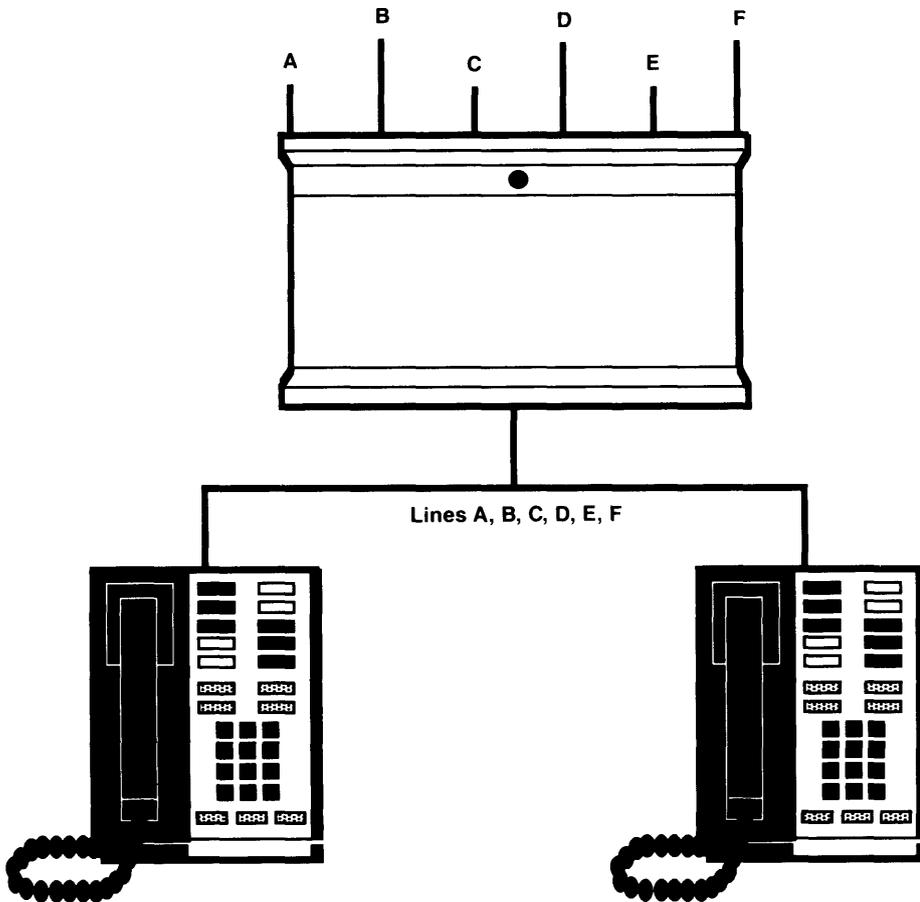
Lines are assigned to the same buttons at each voice terminal.

EXAMPLE OF STANDARD SQUARE CONFIGURATION

Pages 31 through 34 explain how to assign lines to buttons on voice terminals in a standard square configuration.

Customized Square Configurations. In a customized square configuration, you assign individual lines or groups of lines to selected voice terminals with similar requirements for placing and receiving calls. This arrangement lets you tailor your communications system to meet the needs of different departments. It also simplifies recordkeeping on calling patterns within your business.

The departments at a car dealership, for example, may have different calling needs. Say that Ultimate Motors has eight local lines, three WATS lines, and one Foreign Exchange (FX) line. The sales and office staff use the out-of-state WATS line frequently to speak with manufacturers' representatives, haulers, and other dealerships. This group uses one of the in-state WATS lines to contact customers, vendors, and the Division of Motor Vehicle Registration in the state capital. The third WATS line is an incoming in-state WATS line used by customers who live outside the immediate area. The service staff doesn't usually have to make long distance calls. However, one major equipment supplier is located 25 miles away, and calls to this supplier would normally be toll calls. To reduce this expense, Ultimate has a Foreign Exchange line for the supplier's exchange code, 560. When the service staff uses this line, calls to the supplier are treated as the equivalent of local calls. Because the manager handles many confidential negotiations over the telephone, he requires a personal line.

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A customized square configuration is the most appropriate system arrangement for Ultimate Motors' varied communication requirements. The administrator assigns the three WATS lines and three of the eight local lines to the sales and clerical staff. The service department voice terminals get three different local lines and the Foreign Exchange line. The seventh local line is assigned to the voice terminal at the parts desk, and the eighth is assigned as a personal line at the manager's voice terminal. The figure below illustrates this type of configuration.

Telephone Lines of Automobile Dealership
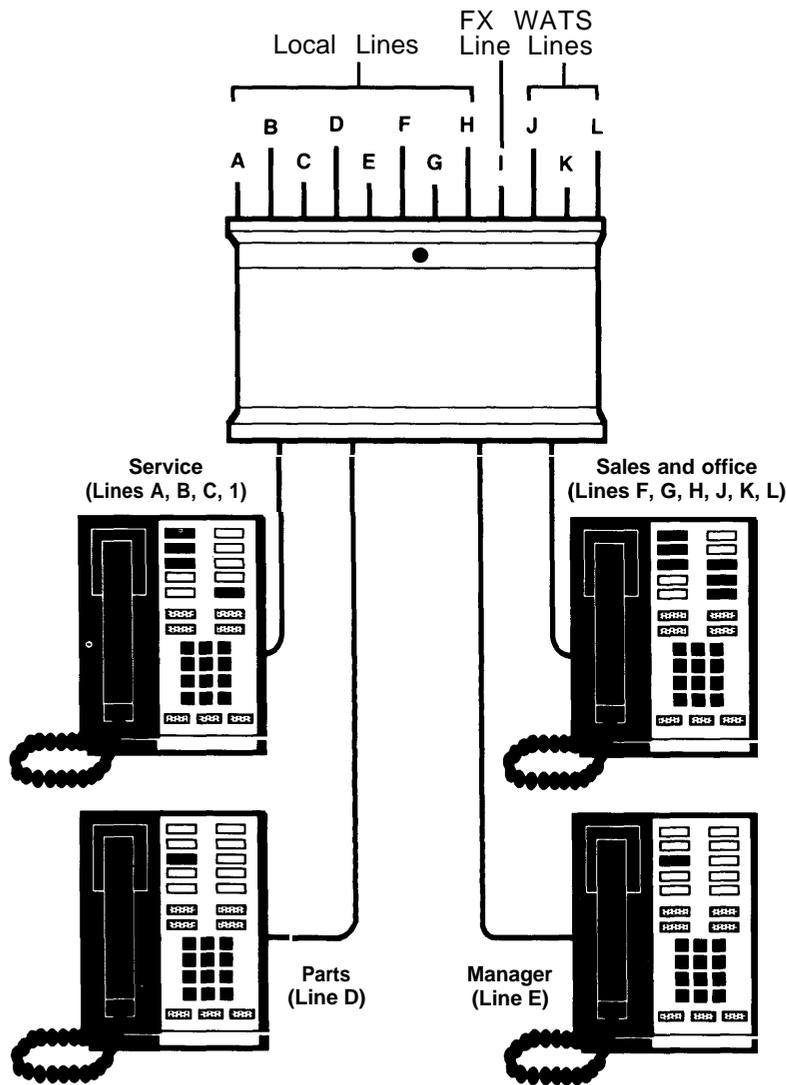
EXAMPLE OF CUSTOMIZED SQUARE CONFIGURATION

As the figure shows, this type of system provides complete flexibility in line assignment. You can assign lines to any available buttons on a voice terminal, in any order you wish. A person in a customized square system does not have to have a line assigned to his or her voice terminal in order to answer a ringing, parked, or held call on that line. Say that a customer calls on the in-state WATS line to ask if Ultimate has a particular gasket in stock. The salesperson who receives the call notifies the parts desk of the call. The parts clerk can use the Line Pickup feature described on page 114 to answer the call. If a voice terminal in the service area is ringing and nobody is free at the moment to answer it, someone in the adjacent office area can use the Call Pickup feature described on page 119 to answer the call.

Pages 31 through 34 explain how to assign lines to buttons on voice terminals in a customized square configuration.

About Pooled Systems

In a pooled configuration, you group several outside lines together into a pool that people can access with a single button on their voice terminals. When they place a call, they either touch the button assigned to a particular line pool (Button Access to Line Pools) or touch a Pool Access button and dial the code of the pool best suited for this type of call (Dial Access to Line Pools). The system then selects a free line from that pool, and the user dials the number he or she is trying to reach. If your system has Automatic Route Selection, users simply touch a Pool Access button and dial the number. The system routes the call automatically to the line pool specified by you, the administrator, for that type of call.

Your system can have as many as 11 different line pools. Each type of special-purpose line that your business has, such as WATS or Foreign Exchange (FX) lines, should be assigned to a separate pool. You should not mix types of lines in a pool because you cannot control which line people get when they access the pool. If your business has local lines, in-state WATS lines, and Band 1 out-of-state WATS lines, for example, you must set up at least three line pools.

When assigning lines in a pooled system, you can assign all, some, or none of your lines to a single pool (see diagram below), but you cannot assign any line to more than one pool. By the same token, you do not need to assign all your lines to pools; you can also assign individual lines that are not included in any pool to any voice terminal in your system. A diagram of a pooled system with eight lines appears on page 21.

Line B   Line D

Line A   Line C   Line E

Lines A, B, C, D, E pooled

Lines A, B, C, D, E pooled

Intercom-Voice

SIMPLE POOLED SYSTEM
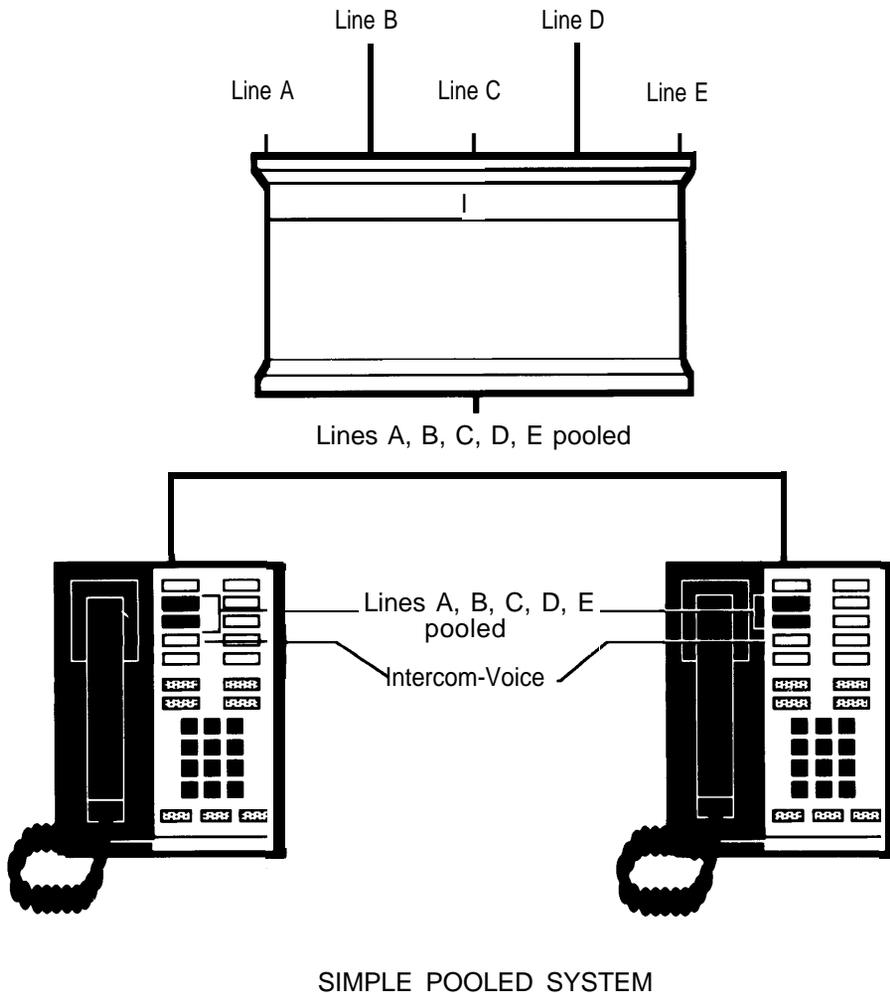
Line use is very efficient in a pooled system, so you may need fewer outside lines than you would with a square system. Furthermore, more programmable buttons on voice terminals are available for assignment as special-purpose line buttons or feature buttons.

Voice terminal 1 — Line pool 3, Main pool, Intercom-Voice

Voice terminal 2 — Line D, Main pool, Intercom-Voice

Voice terminal 3 — Line pool 2, Main pool, Intercom-Voice

Attendant console

Line C   Line H
Line B   Line G
Line A   Line F
Intercom-Voice   Line E
Intercom-Ring   Line D
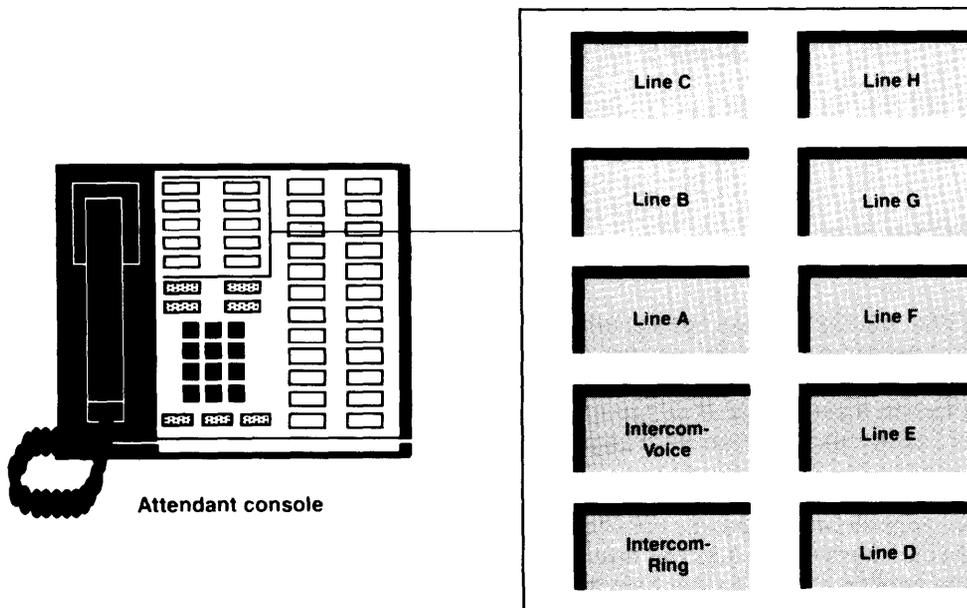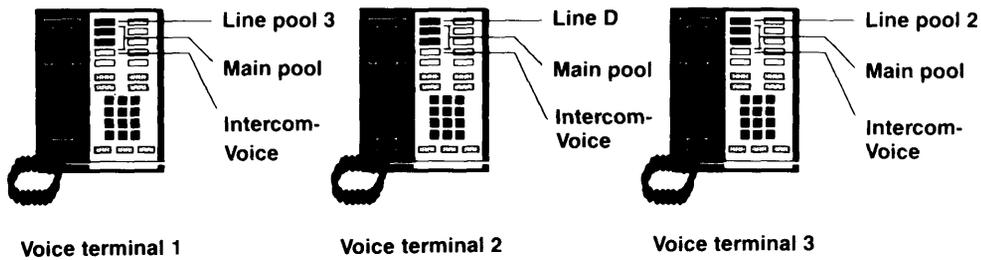
Main pool = Lines A, B, C
Line pool 2 = Lines E, F
Line pool 3 = Lines G, H
Line not assigned to pool = Line D

Button Access vs. Dial Access to Line Pools. You can choose one of two access options for line pools: Button Access to Line Pools or Dial Access to Line Pools. Because you set a switch for this option on your control unit, the method you select will be used at all the voice terminals in your system.

If you have only one or two line pools, Button Access is the best option for your system. If your system has several line pools, however, Dial Access is preferable because it provides access to all pools using only two buttons on each voice terminal. If you want to use Automatic Route Selection, you *must* select Dial Access. Dial Access is also necessary if you want basic telephones to have access to line pools or special lines or if you want 5-button voice terminals to have access to more than one special pool.

Dial code 893 = Line pool 5
Dial code 892 = Line pool 4
Dial code 891 = Line pool 3
Dial code 890 = Line pool 2
Dial code 9 = Main pool
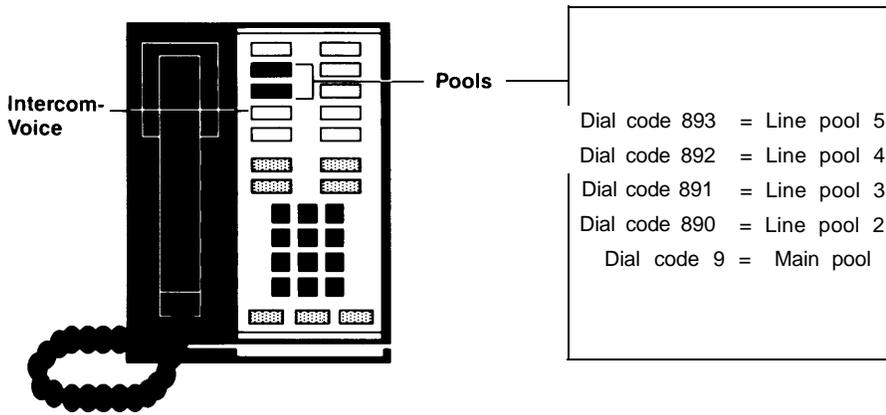
DIAL ACCESS TO POOLS

Assume that you have five line pools. With the Dial Access option (see the diagram above), you arrange the system so that people can access any line pool by lifting the handset, touching one of the two buttons above Intercom-Voice, and dialing the access code assigned to the pool (9 for the main pool or 890 through 899 for the others). Even if you set your system for Dial Access, you can still assign some pools to particular buttons, if you like.

With the Button Access option (see the diagram below), people access all line pools directly through pool buttons on each voice terminal. In such an arrangement, the first two buttons above Intercom-Voice provide access to the main pool. You may assign additional buttons for access to other pools that may include WATS lines, FX lines, or lines used for special purposes.
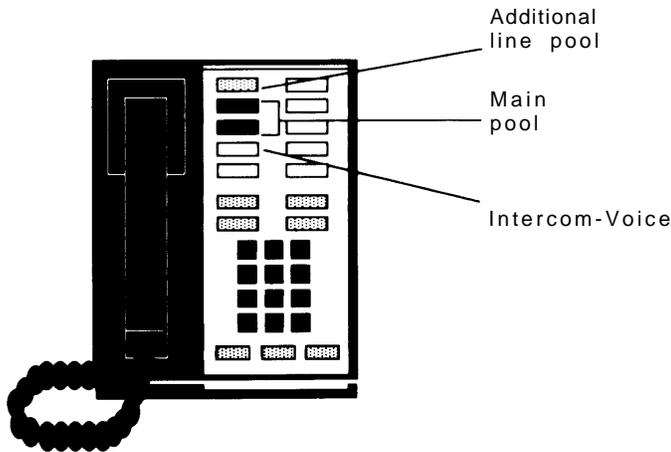
BUTTON ACCESS TO POOLS

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THE FORMS AND LABELS YOU NEED

Before you begin performing administration procedures, be sure to complete all the necessary forms:

- A System Configuration Form to keep a record of how the lines in your system are arranged.
- Voice Terminal Configuration Forms to record the lines and features assigned to all voice terminals. Fill out one of these for each voice terminal.

When you ordered your system, you should have filled out these forms when you completed the **MERLIN** Communications System Planning Guide: Models 1030 and 3070 with Feature Module 5. If you did not, turn to the Appendix, photocopy the forms included there, and fill them out before you proceed further. These forms serve as important references throughout later system administration procedures.

During system administration the buttons on the administrator/attendant console perform different functions than they do when the console is being used to handle calls. Therefore, you need a different set of button labels whenever you use the console for system administration.

Two sets of button labels for administrator/attendant consoles are provided in the back of this manual. One is for small systems (systems with switch H on the control unit set in the up position to 1-8 Lines), and the other is for large systems (systems with switch H on the control unit set in the down position >8 Lines). If you have an economy administrator/attendant console for a large system, you'll use the labels for slots 1 through 4 only. If you have an administrator/attendant console with an Attendant Intercom elector, you'll use the labels for slots 5 through 7 as well.

Write in the telephone numbers of your outside lines on your administration mode button labels. If you have a small system or a large system with an Attendant Intercom Selector, fill in the appropriate individual or group name for each intercom number as well. You may want to refer to your completed configuration forms as you fill in the button labels. Keep the button labels and completed configuration forms handy for use whenever you administer your system.

CHOOSING A TIME TO ADMINISTER YOUR SYSTEM

Before you begin administration procedures, choose a time when you do not expect many people to be using their voice terminals. When you perform some administration procedures, the system blocks all calls on the lines or voice terminals with which you are working. Blocked voice terminals generate soft, periodic beeps to alert people that they cannot be used. If you accidentally try to administer a voice terminal that has an active call, you do not cut off the caller. Rather, you are unable to continue administering that voice terminal until it is idle.

Basic Administration

Once your system planning and paperwork are complete, you can perform basic ad-ministration procedures. The chart below lists the procedures described in this sec-tion. Remember that if you are administering a new system that has just been in-stalled, some of these basic procedures maybe required to set the proper operating conditions for your particular environment, and you must perform them first before you goon to do any other system administration. Carry out the procedures in the order listed in the chart, but keep in mind that you may not need to perform all of them to customize your system to your particular environment. Read each procedure first to see if it applies to you.

IMPORTANT Administer your system at a time when you do not expect many peo-ple to be using their voice terminals.

Basic Administration Procedures

- Set your control unit.
- Learn how to enter and leave administration mode.
- Specify Touch-Tone or rotary signaling.
- If you want to configure your system to work with the **MERLIN** Call Management System (CMS), set your system to be compatible with CMS.
- If you have a square system, assign lines to buttons on voice terminals.
- If you have a pooled system, set up line pools, assign individual lines and line pools to voice terminals, and establish Button Access to Line Pools or Dial Access to Line Pools.

SETTING YOUR CONTROL UNIT

The first step in customizing the MERLIN system is to set the control unit to the operating conditions you select.

IMPORTANT If your control unit has been set previously and you just want to change the setting of a particular switch, be sure to read "Changing Your System Later," page 27, before resetting that switch.

Follow these steps to set your control unit:

1. Turn off the control unit by setting the On/Off switch on the Power Module to Off.

2. Set switch A, which is located in slot 2 (color-coded purple) on the Processor Module, to Administer (down).

   Switch A controls intercom number 10, which is always the main attendant position. Set switch A to the Administer position whenever you need to administer your system from the administrator/attendant console. When you finish administering, set switch A to Attendant (up).

   NOTE: Switch A, which sets the mode of the administrator/attendant console, is the only switch on the control unit that you can reset with the power on. If you reset any other switch with the power on, the control unit does not recommend any of changes you make until you turn the power of, then on again.

3. Set Switches B through E.

   Switches B through E control intercom numbers 11 through 14, respectively. These consoles normally function as voice terminals, but you can designate any of them as backup attendant consoles. If you designate a voice terminal to function as an attendant console, each outside line appears on a separate button, regardless of whether you select the pooled or square option.

   The four voice terminals selected by switches B through E plus the administrator/attendant console (intercom number 10) provide a maximum of five attendant consoles if you need them.

   * For those voice terminals that function as attendant consoles, set the switch to Attendant (down).
   * For those voice terminals that function as regular voice terminals, set the switch to Normal (up).

4. Set switch F.

   * If you have chosen to pool your lines, set switch F to Pooled (up) and go to Step 5.

      IMPORTANT: If you are changing Switch F from Square to Pooled or from Pooled to Square, be aware that you erase all system line administration and voice terminal programming that is now in place.

   * If you want every outside line to appear on a separate button, set switch F to Square (down). The eight lines plugged into jacks A0 through B2 appear automatically on all nonattendant voice terminals. Go to step 6

5. Set switch G.

   NOTE: The instructions that follow apply if switch F is set to Pooled (up}. If switch F is set to Square (down), switch G may be set to either position without having any effect on the system.

   - If you have decided to arrange your pooled system so that people can access line pools directly by simply touching the associated button on a voices terminal, set switch G to Button Access (down).
   - If you have decided to arrange your pooled system so that people can access any line pool by dialing the pool's access code, set switch G to Dial/Access (up). You must set switch G for Dial/Access if you want to use Automatic Route Selection. Even if you set your system for Dial Access to Pools, you can still program buttons at individual voice terminals to provide one-touch access to particular line pools.

6. Set switch H.

   - If you have eight or fewer outside lines and 20 or fewer voice terminals set switch H to 7-8 Lines (up).

     NOTE: The switch setting you select does not always have to correspond to the number of outside lines you actually have. For example, if you have eight or fewer lines but plan to grow beyond eight lines within a year or two, you might prefer to set switch H to > 8 (down) in order to simplify readministering the system later. if you change the setting of this switch later, you cancel any special line administration of programmed features on your attendant consoles.

   - If you have more than eight outside lines or more than 20 voice terminals, or if you expect your system to grow to this size in the next year or so, set switch H to > 8 Lines (down).

7. If your system has an SMDR (Station Message Detail Recording) Module and a printer with an RS-232 connector, connect the printer to the SMDR Module (refer to the instructions that come with the module).

8. Turn on the control unit by setting the On/Off switch on the Power Module to On (right). This causes the system to record the changes you just made. The warning light on the Processor Module will go on. Wait for the light to go off before continuing. If you have a printer hooked up, a page header will be printed.

9. If your system has a Services Module, make the following adjustments. Otherwise, go to step 10.

   - If you have background music through a loudspeaker paging system, you can adjust its volume @turning the Bkgd Vol control clockwise to raise the volume, or counterclockwise to lower it. if you do not have background music through a loudspeaker paging system, turn the control counter clockwise as far as it goes.
   - If you have Music-on-Hold, you can adjust its volume by turning the MOH Vol control clockwise to raise the volume, or counterclockwise to lower it. if you do not have Music-on-Hold, turn the control counterclockwise as far as it goes.
   - If you have a music source with its own amplifier, set this Level switch to Hi (down); otherwise, set the switch to Lo (up).
   - If you haves loudspeaker paging system and want a short tone to precede loudspeaker announcements, set the Page Sgnl switch to On (up). Otherwise, set the switch to Off (down).

10. If you are setting up a new system for the first time, enter administration mode, as described on page 28, and continue following the procedures in this section.

CHANGING YOUR SYSTEM LATER

Basic changes to the way your system operates—that is, changes to the switch settings on the control unit—may erase important system administration that is now in place. To change switch settings, turn to "Setting Your Control Unit," page 25, and follow the instructions for the switch you want to reset. Since you won't be performing the entire procedure, be especially careful not to skip any steps that are required. Follow the general instructions below to prevent this from happening.

General instructions for resetting control unit switches:

1. Set the On/Off switch on the Power Module to Off.

2. Set switch A to *Administer* (down).

3. Follow the instructions for the switch you intend to reset.

4. Turn the On/Off switch on the Power Module to *On.*

5. Perform any required readadministration or reprogramming discussed below in "Notes on Resetting Control Unit Switches."

6. Set switch A back to *Attendant* (up).

Notes on Resetting Control Unit Switches

Whenever you change the setting of a switch on the control unit, you will probably have to make other changes in your system. Keep the following in mind:

- If you add or remove attendant consoles (switches B through E), you have to reassign special lines and features to the voice terminals whose function you have just changed.

- If you change the setting of the Pooled/Square switch (switch F), you erase all system line administration and voice terminal programming that was formerly in place. You have to completely readminister all your lines; setup pools and Dial Access to Line Pools, if these apply; and reprogram all your voice terminals.

- If you change the setting of the Dial Access/Button Access switch (switch G), you must reprogram individual voice terminals accordingly. The system will automatically assign a different function to the two buttons above Intercom-**Voice.** You must assign line pools to particular buttons (Button Access) or give the voice terminal access to specified line pools (Dial Access). You must also assign individual lines to buttons.

- If you change the setting of the 1-8 lines/>8 lines switch (switch H), you cancel any special line administration or programmed features on your attendant consoles. The setting of this switch determines how the system automatically assigns lines and intercom numbers to the buttons on attendant consoles. It also determines the function of certain buttons on the attendant/administrator console when the console is in administration mode. (See "Initial Feature Assignments for Attendant Consoles," pages 129 and 130.)

  Note that the switch setting you select does not always have to correspond to the number of outside lines you actually have. For example, if you have eight or fewer lines but plan to grow beyond eight lines within a year or two, you might be wise to set switch H to> *8 Lines* in order to simplify readministering the system later.

ENTERING AND LEAVING ADMINISTRATION MODE

Administration mode is an operating state of your control unit and of your administrator/attendant console that is very different from their everyday state of operation. With the system in administration mode you are able to set up or change systemwide options or features. When you finish using the administrator/attendant console to administer your system, you must leave administration mode to resume normal attendant operations.

You must enter administration mode to set up a new system and again each time you use the attendant console to administer your system. The boxed instructions below tell you how to enter administration mode.

Entering Administration Mode

Switch A is located on the Processor Module (slot 2, color-coded purple) of the control unit. Set Switch A to *Administer* (down).

Insert the administration mode button labels provided at the back of this manual in the administrator/attendant console. Different sets are provided for large and small systems.

If the light next to **Message Status is** on, touch it once to turn it off before beginning to administer your system (large systems only).

Slide the T/P switch on the left side of the console to P.

Red and green lights start flashing next to the administration mode buttons labeled **Adm Pool, Adm Tel, Adm Misc,** and **Call Rstr.**

When you finish administration procedures at the console, you must leave administration mode to resume normal operation. Do this when you complete your initial system administration and whenever you complete any system changes in the future. The boxed instructions below tell you how to leave administration mode.

Leaving Administration Mode

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

2. Set switch A on the Processor Module of the control unit to Attendant (up).

3. Remove the administration mode button labels from the console and put them in a safe place for use at a later time. Insert the regular call-handling labels used by the attendant.

SPECIFYING TOUCH-TONE OR ROTARY SIGNALING

When your system is installed, it is set to generate Touch-Tone signals. If some of your lines are rotary, you need to reset your system accordingly. If you have rotary lines or if you are not sure what type of lines you have, follow the procedure below. If all your lines are Touch-Tone, turn to the next page to continue administering your system.

To determine if your lines are Touch-Tone or rotary, go to the administrator/attendant console and make sure that the T/P switch is in the center position. Then touch each line button and dial out. If a line is Touch-Tone, you hear tones and the dial tone stops. If a line is rotary, you hear tones but the dial tone is not interrupted. Follow the procedure below to specify Touch-Tone or rotary dialing.

1. If you have not already done so, enter the administration mode by following the boxed instructions on page 28.

2. Touch **Adm Misc.**

   The lights next to the administration mode buttons stop flashing, and the green light next to the **Adm Misc** *becomes steady.*

3. Dial the 4-character code #302.

4. One by one, touch the line button for each line in your system until the green light beside it shows the appropriate code. Each successive touch of a button gives you one of the following codes:

   Steady green light on = Touch-Tone signaling
   Green light off = rotary signaling

5. Touch **Adm Misc** again.

   The lights next to the administration modes buttons flash.

6. Continue to administer your system or leave admistration mode by following the boxed instructions on page 28.

SETTING YOUR SYSTEM TO OPERATE WITH THE CALL MANAGEMENT SYSTEM

If your business has the Call Management System (CMS) for the MERLIN Communications System, you need to set your basic MERLIN system to be compatible with this automatic call distributor.

If you do not have CMS, go on to the next section, "Setting Up Square Systems." If you have CMS, follow the procedure below to set your system for operation with CMS or to change it from CMS to non-CMS operation. For details on configuring your **MERLIN** system to work best with CMS, see your CSM documentation.

1. If you have not already done so, enter administration mode by following the boxed instructions on page 28.

2. Touch **Adm Misc.**

   The lights next to the administration mode buttons stop flashing, and the green light next to **Adm Misc** *becomes steady.*

3. Dial the 4-character code #314, then perform one of the following operations

      • To set your system to work with CMS, dial 1.

      • To set your system to work without CMS, dial 0.

4. Touch **Adm Misc.**

   The lights next to the administration mode buttons flash.

5. Continue to admister your system or leave administration mode by following the boxed instructions on page 28.

SETTING UP SQUARE SYSTEMS

In square systems, individual lines appear on separate buttons at voice terminals. If you want a standard square system, you will give all your voice terminals access to the same outside lines and assign the lines to the same buttons at every voice terminal. If you prefer a customized square system, you can assign different lines or groups of lines to selected voice terminals, in whatever order you want. If someone routinely carries on private telephone conversations, you may want to assign a personal line to his or her voice terminal as part of your customized square setup. If you assign a personal line only to that voice terminal, calls will not ring at other voice terminals or at the attendant's console.

The information that follows describes how to assign lines to buttons in square systems. (See page 17, "The Square vs. Pooled Decision," for more information on square systems.)

Notes on Assigning Lines to Voice Terminals

Before you assign lines to buttons, take note of this general information:

- Even though you may not be using the full capacity of a Line Module in the control unit, all five of the lines that would be represented by that module are automatically assigned to buttons on the administrator/attendant console. This occurs in both small and large systems. A port with no line cord plugged into it is called a nonequipped line appearance, or "ghost line." Remove any ghost lines from your administrator/attendant console so that these buttons can be used for custom features. To remove a ghost line, follow the procedure for removing lines from voice terminals in "Assigning Lines to Buttons" on page 33.

  If you have eight or fewer lines but have two Line Modules in the control unit, your system initially assigns ghost lines to the voice terminals in your system as well as to the administrator/attendant console. Remove these ghost lines from the voice terminals so that these buttons can be used.

- The Initial Feature Assignments diagrams on pages 129 and 130 illustrate the order in which lines are assigned to buttons on the administrator/attendant console when your system is first set up. The system automatically assigns lines to the buttons in the order in which the lines are plugged into the control unit. This is the "default" arrangement, that is, what your system does unless you specify something different, You can follow the procedure below to assign lines to buttons in a different order.

- When you assign a line to a voice terminal, the system automatically assigns the line to the first button that doesn't already have a line assigned to it, in the order shown in the diagram on the next page. You can assign lines to voice terminals in a different pattern by touching the line buttons in the order in which you want them to appear.

- Note that none of the voice terminals in your system come with preprinted button labels. Be sure to label the voice terminal buttons with the telephone numbers of the lines you assign.

. Always assign lines to one voice terminal at a time.

- Make sure you have a completed Voice Terminal Configuration Form for each voice terminal.

- Remember that voice terminals cannot be administered and used at the same time. You cannot assign lines to a voice terminal unless it is idle, and the user cannot place or receive calls while you are assigning lines. While you are administering a voice terminal, it beeps softly as a reminder that it cannot be used.

Order in Which the System Assigns Lines
in a Square System

▷□ **3**

▷□ **2**

▷□ **1**

▷□ Intercom-**V o i c e**

▷□ Intercom-**R i n g**

▷□ **8**

▷□ **7**

▷□ **6**

▷□ **5**

▷□ **4**

▷□ **9**

▷□ **10**

▷□ **11**

▷□ **12**

▷□ **13**

▷□ **14**

▷□ **15**

▷□ **16**

▷□ **17**

▷□ **18**

▷□ **19**

▷□

▷□ **2 0**

▷□ **21**

▷□ **22**

▷□ **23**

▷□ **24**

▷□ **25**

▷□ **26**

▷□ **27**

▷□ **28**

▷□ **29**

▷□ **30**

▷□
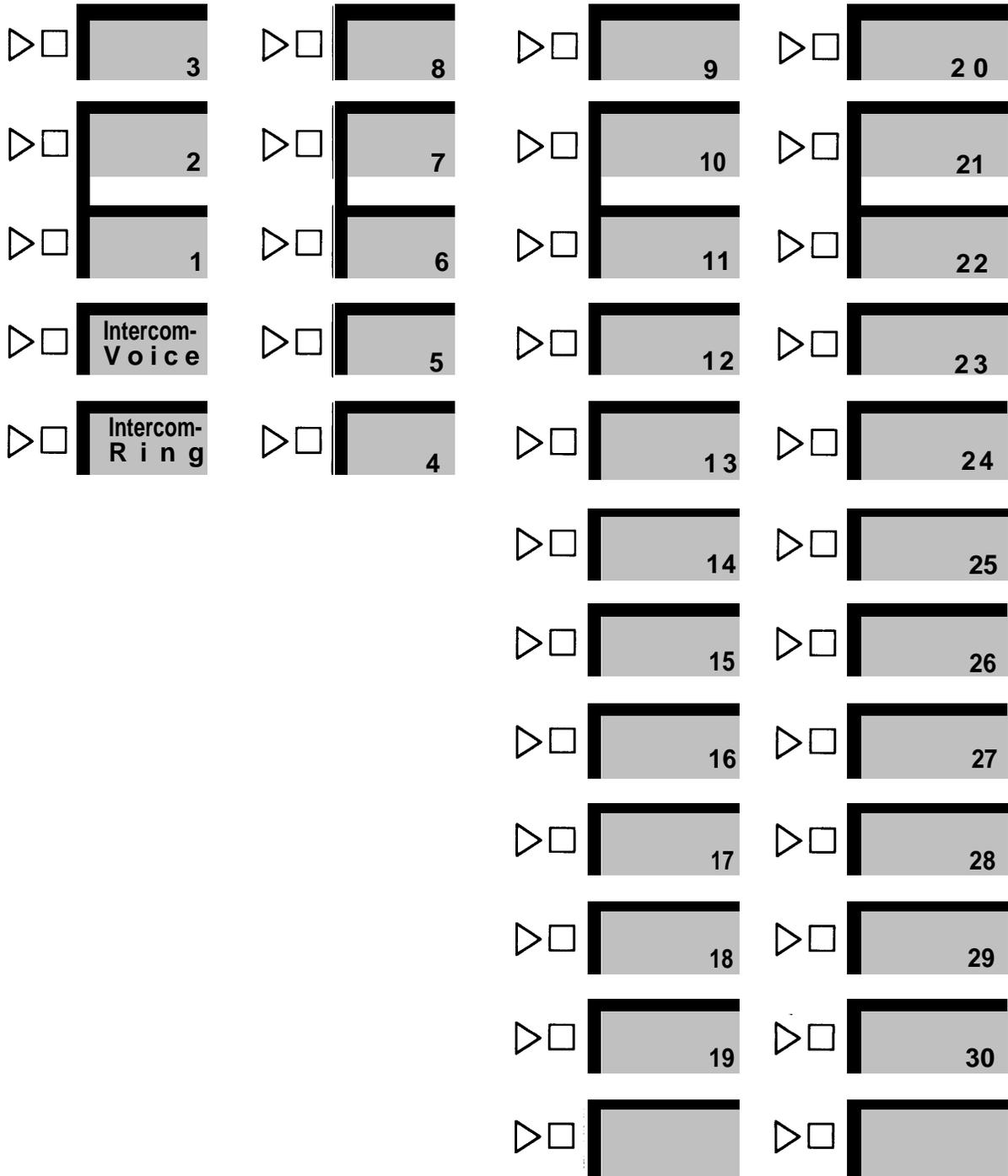
Preparing to Assign Lines to Voice Terminals

If you want to have a standard square system and have eight or fewer lines, your system has already been set up for you. The system automatically assigns the lines plugged into control unit jacks A0 through 62 to the eight line buttons above the dial pad on each voice terminal. If you have more than eight lines, however, you must follow the procedure below to assign the rest of your lines to each voice terminal in your system. The lines will be assigned to buttons in the order in which you touch them.

If you are setting up a customized square system for the first time, you should begin by removing all existing lines from each voice terminal in your system. If the primary attendant needs to have access to all general-use lines, remove from the administrator/attendant console only those lines that you are reserving for personal use. Follow the procedure below to assign lines to buttons on the voice terminals in your system. Remember that the lines will be assigned to buttons in the order in which you touch them.

NOTE: Later on in the administration process, you maybe assigning voice terminals to Call Distribution groups. These are groups of employees such as customer service representatives or order-entry clerks who share responsibility for answering telephone calls. If you assign these people's voice terminals to a Call Distribution group, the system directs each incoming call to the group member whose turn it is to take the next call. (For a detailed explanation of Group Call Distribution, see page 81.)

If you plan to associate outside lines with Call Distribution groups, keep these points in mind as you assign lines to your voice terminals:

- Any line that you plan to assign to a Call Distribution group must appear on a button at every voice terminal in the group.
- Generally speaking, outside lines assigned to Call Distribution groups should not appear on voice terminals outside the group. You can assign the lines to an attendant, however, if you want the attendant to answer calls when all the voice terminals in a group are busy.

Assigning Lines to Buttons

To assign individual lines to buttons in a standard or customized square system, follow the procedure below.

1. If you have not already done so, enter administration mode by following the boxed instructions on page 28.
2. Touch **Adm Tel.**
   The light next to the administration mode buttons stop flashing, and the green light next to **Adm Tel** becomes steady.
3. Dial the intercom number (14, for example) or touch the Auto Intercom. button for the voice terminal to which you want to assign lines. If the voice terminal is idle, a steady green light comes on next to its Auto Intercom button, and the system gives a 2-beep signal for you to begin. If the terminal is being used, the green lights next to the Auto Intercom button, and the **Adm Tel** flash rapidly. You must wait until the green lights become steady or try again later. If you try to assign a line to a busy voice terminal, you will hear a beep and will not be able to proceed.

4. Refer to the voice Terminal Configuration Form to see which lines to assign to this voice terminal. (If you plan a standard square configuration, you will be assigning all your lines to every voice terminal.)Steady green lights come on next to any lines already assigned to the voice terminal.

5. Touch the appropriate line buttons to add or remove lines from this voice terminal. The green light next to each line button tells you the current status of the line. Each succesive touch of a line button gives you one of the following codes:

    Green light on = line is assigned to this voice terminal
    Green light off = line is not assigned to this voice terminal

    The order in which you touch the line buttons determine the order in which lines appear on the voice terminal. For example, assume that eight lines (lines A0 through B2) are already assigned to voice terminal you are administering, and you want to add eight more. If you touch the line buttons in the order in which they appear on the voice terminal. If you touch the button for line C0 next, line C0 will appear on the button below the line C4 button, and so on. Be sure that the correct telephone number for each line appears on the associated buttopn on the voice terminal

6. Repeat steps 3 through 5 for each voice terminal to which you want to assign line.

    NOTE: If you are setting up a customized square sytem, try to administer groups of voice terminal that share the same line assignments at the same time. If you plan to assign a personal line to a voice terminal, be sure not to assign the line to any voice terminals that should not have access to that line.

    You can use the shortcut below to give another voice terminal the same line assignments as one you have already set up.   This procedures is especially timesaving if you have a standard square system, since all your voice terminals will have the same line assignments.

    NOTE: When you copy line assignments, you also copy restrictions and allowed-list permissions.

    a. Dial the intercom number or touch the Auto Intercom button of the   new voice terminal

    b. Touch **Message**

    The green light next to **Message** goes on.

    c. Dial the intercom number or touch the Auto Intercom button of the original voice terminal

7. Touch **Adm Tel.**

    The lights next to the administration mode buttons flash again.

8. Continue to administer your system or leave administration mode by following the boxed instructions on page 28.

SETTING UP POOLED SYSTEMS

In pooled systems, you group similar types of outside lines into a line pool. A person with access to that line pool either presses a button or dials a code to get one of the interchangeable lines in the pool. For example, you might group five local lines into one pool, three in-state WATS lines into a second pool, and two cross-country WATS lines into a third pool. This would free several buttons on voice terminals that would otherwise be required for individual lines. If you decide to set up a pooled system, you will probably want to pool all your lines except single, special-purpose lines and those that are needed as personal lines.

To setup a pooled system, you begin by assigning lines to line pools. Next, you assign individual lines to buttons on voice terminals. If your system has Button Access to Line Pools, you also assign selected pools to particular buttons. If your system has Dial Access to Line Pools, you give each voice terminal access to the pools the user needs.

The following sections describe how to setup a pooled system. (See "The Square vs. Pooled Decision," page 17, for more information about pooled systems.)

Preparing to Set Up Line Pools

If you plan to pool the lines in your system, you must first assign individual lines to the appropriate pools. Before you set up your line pools, please read the information below.

- Even though you may not be using the full capacity of a Line Module in the control unit, the lines that would be represented by that module are automatically assigned to buttons on the administrator/attendant console. A port with no line cord plugged into it is called a nonequipped line appearance, or "ghost line." Remove any ghost lines from the buttons to which the system assigned them on the administrator/attendant console so that these buttons can be used for custom features.

  If you have eight or fewer lines but have two Line Modules, your system assigns ghost lines to your administrator/attendant console and places the ghost lines in the main pool. Be sure to remove any ghost lines from the main pool.

- You cannot set up line pools unless all the voice terminals in your system are idle. Once you touch **Adm Pool** and see the steady green light that indicates you are free to administer your system, the system cannot place outgoing calls or receive incoming calls. Any callers will get a busy signal.

- Whenever you set switch F on the control unit to Pooled, the system automatically assigns all your lines to the main pool. Local lines should remain in the main pool, but all other lines can be removed. You can assign lines that you do not want in the main pool to other pools or use them as individual lines.

- Do not mix different types of lines. For example, do not put regular telephone lines and WATS lines in the same pool. Even within a WATS line pool, you cannot mix different bands of WATS lines or include both inbound and outbound lines. All lines in a pool must be interchangeable since you cannot control which lines people will get when they use the pool.

- The number of lines available for pooling is affected by the number of lines you must reserve for personal or special-purpose use. For example, if you have ten outside lines and two people need personal lines, there are eight lines left for pooling. If a line is assigned to a pool, it cannot be assigned to a second pool or as an individual line.

- . You can have up to 11 pools, with as many lines as you like in each pool. If you have Dial Access to Line Pools, people can access a particular pool by dialing the code assigned to the pool (9 for the main pool, 890 through 899 for additional pools).

Assigning Lines to Line Pools

Follow the procedure below to set up line pools.

1. If you have not already done so, enter administration mode by following the boxed instructions onn page 28,

2. Touch **Adm pool.**

   If your lines aren't in use, the iights next to the administration mode buttons stop flashing, the green light next to **Adm Pool** becomes steady. *The console gives a 2-beep signal for you to begin.*

   If this happens, go to step 4. If not, go to step 3.

3. If the green light next to **Adrn Pool** continues to flash instead of becoming steady and you don't hear a 2-beep signal, your lines are in use. You cannot set up line pools unless all the voice terminals in your system are idle. To find out which voice terminals are busy, set the T/P switch to the center position.

   Steady green lights show next to the Auto Intercom buttons for terminals that are in use.

   If you want to proceed with setting up line pools, return the T/P switch to P touch **Adm Pool** again, and wait. As soon as the system is idle, the console gives the 2-beep signal for you to begin. Go on to step 4.

   NOTE: If someone is on a data call, his or her voice terminal will not show a busy signal. However, you will not be able to proceed with setting up line pools until that voice terminal is idle.

4. When you enter administration mode and touch **Adm Pool,** the system puts you in the main pool, the one that must contain your local lines. The main pool is Pool 9. Refer to your System Configuration Form to review the numbers that you assigned to the rest of your line pools. You must dial these access codes (890 through 899) in order to administer each of your line pools.

   NOTE: if a line appears as an individual line at a voice terminal in your system, it will disappear from that terminal if you add it to a line pool. Before adding lines to pools, make sure they are not needed as individual lines,

   If you want to administer the main pool, go on to step 5. If you want to administer one of your other pools, dial the access code for that pool, then go on to step 5.

5. Steady red lights appear beside each line that is assigned to this pool. Refer to your completed System Configuration Form to see which lines you want to have in the pool.

6. Touch the button of any line whose pool assignment you want to change. Each touch of the button gives you one of the following codes:

   Steady red light on = line is assigned to pool
   Red light off = line is not assigned to pool

   NOTE: If you hear a beep, the line is already in another pool. You must remove the line from its current pool, by dialing that pool,s access code and touching the line button, before you can assign the line to a different pool.

7. To administer another pool, dial the appropriate access code (9 or 890 through 899) and repeat steps 5 and 6.

8. To make sure that your line pools are setup as you want them, dial the

9. Touch Adm Pool.

   The lights next to the administration mode buttons flash again.

10. Continue to administer your system or leave administration mode by

    following the boxed instructions on page 28.

Preparing to Assign Lines to Buttons and Set Up Access to Line Pools

You can assign individual lines and line pools to particular buttons on voice terminals and remove them from buttons whenever necessary, You can also assign individual voice terminals Dial Access to selected line pools. Before you begin assigning lines and line pools to buttons on voice terminals or assigning voice terminals Dial Access to Line Pools, please read the following information.

NOTE: If you plan to use Automatic Route Selection, you *must* set your system for Dial Access to Line Pools. The procedures for setting up Dial Access to Line Pools are presented on page 43.

- Always assign lines and line pools to one voice terminal at a time.

- Make sure you have a completed Voice Terminal Configuration Form for each voice terminal.

- The Initial Feature Assignments diagrams on pages 129 and 130 illustrate the order in which lines are assigned to buttons on attendant consoles when your system is first set up. The system automatically assigns lines to the attendant console in the order in which the lines are plugged into the control unit. This is the "default" arrangement, that is, what your system does unless you specify something different. You can change the order in which lines appear on the console by following the procedure given below.

- Each line in your system must appear on a separate button at attendant consoles. If you assign a line pool to an attendant console, your system automatically assigns all the lines to buttons in the order in which they appear in the line pool. Be aware that you may change the positions of your lines on the attendant console when you assign line pools,

  For example, say that you set up two pools. Pool 9 contains lines 1,3, and 4 and Pool 890 contains lines 2, 5, and 6. Lines 1 through 6 initially appear on your attendant console in numerical order. If you assign Pool 9, then Pool 890 to the attendant console, however, the lines will appear in this order: 1, 3, 4, 2, 5, 6. If you change your line order by assigning pooled lines to attendant consoles, be sure to relabel your buttons to show the correct line numbers. If you remove a pool from the attendant console, remember that you remove all the lines in that pool.

- Remember that voice terminals cannot be administered and used at the same time. You cannot assign lines and line pools to a voice terminal unless it is idle, and the user cannot place or receive calls while you are assigning lines. The voice terminal beeps softly while you are administering it as a reminder that it cannot be used.

- When you assign a line to a voice terminal, the system automatically assigns the line to the first button that doesn't already have a line assigned to it, in the order illustrated in the diagram on page 38. You can assign lines to voice terminals in a different pattern by changing the order in which you touch the line buttons. The procedures that follow show how to assign lines to buttons on voice terminals in whatever order you prefer.

Order in Which the System Assigns Lines and/or Line Pools in a Pooled System
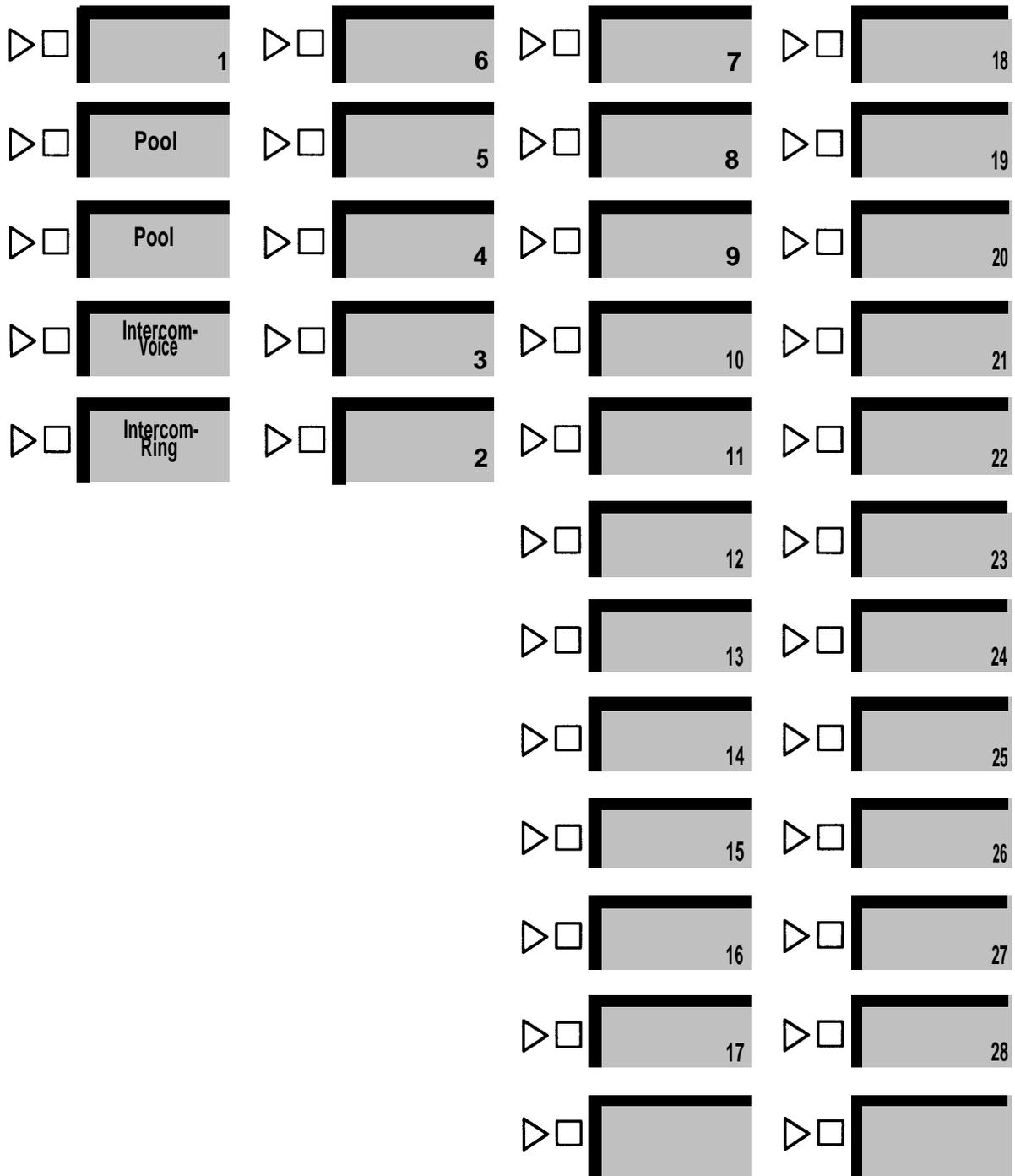
▷ □ | 1

▷ □ | Pool

▷ □ | Pool

▷ □ | Intercom-Voice

▷ □ | Intercom-Ring

▷ □ | 6

▷ □ | 5

▷ □ | 4

▷ □ | 3

▷ □ | 2

▷ □ | 7

▷ □ | 8

▷ □ | 9

▷ □ | 10

▷ □ | 11

▷ □ | 12

▷ □ | 13

▷ □ | 14

▷ □ | 15

▷ □ | 16

▷ □ | 17

▷ □

▷ □ | 18

▷ □ | 19

▷ □ | 20

▷ □ | 21

▷ □ | 22

▷ □ | 23

▷ □ | 24

▷ □ | 25

▷ □ | 26

▷ □ | 27

▷ □ | 28

▷ □

- Note that none of the voice terminals in your system come with preprinted button labels. Be sure to label the buttons with the correct numbers for the individual lines and line pools that you assign to the voice terminal.

- If you set switch G on your control unit for Button Access to Line Pools, the system automatically assigns Pool 9, the main pool, to the two buttons above **Intercom-Voice** on voice terminals. If you set your system for Dial Access to Line Pools, the system automatically assigns these two buttons as dial access buttons. People will touch one of these buttons before dialing the number of the pool they want to use.

- When you assign a line in a pool to a particular button on a voice terminal, you assign all the lines in that pool to that button. Therefore, if you want to assign a certain pool, such as a WATS line pool, to a separate button, you can do so by assigning any line in the pool to the button. You can do this whether switch G is set to Button Access or Dial Access.

- If someone regularly covers calls that come in on another person's line (for example, a secretary who answers someone's personal line), try to assign that line to both people. If you can't, use a Cover button (see page 112). Keep in mind, however, that a Cover button covers all calls that come in on the covered voice terminal, not just calls on a specific line.

The procedures that follow show how to assign individual lines to buttons and how to administer either Button Access or Dial Access to Line Pools. At this point, you should have decided which individual lines to assign to each of your voice terminals.

NOTE: Later on in the administration process, you maybe assigning voice terminals to Call Distribution groups. These are groups of employees such as customer service representatives or order-entry clerks who share responsibility for answering telephone calls. If you assign outside lines to a Call Distribution group, the system directs incoming calls on these lines to the next available voice terminal in the group. (For a detailed explanation of Call Distribution, see page 81.)

If you plan to associate individual lines or line pools with Call Distribution groups, keep these points in mind as you assign lines and line pools to your voice terminals:

- If you plan to assign an individual line or line pool to a Call Distribution group, you must assign the line or line pool to every voice terminal in the group.
- Generally speaking, lines and line pools assigned to Call Distribution groups should not be assigned to voice terminals outside the group. You can assign the lines to an attendant, however, if you want the attendant to answer calls when all the voice terminals in a group are busy.

Follow the procedures below to assign individual lines to buttons and to assign individual voice terminals Button Access or Dial Access to line pools. Be sure you have a completed Voice Terminal Configuration Form for each voice terminal you'll be administering.

Assigning Individual Lines to Buttons

To assign individual lines to buttons:

1. If you have not already done so, enter administration mode by following the boxed instructions on page 28.

2. Touch **Adm Tel.**

   The lights next to the administration mode buttons stop flashing, and the green light next to **Adm Tel** *becomes steady.*

3. Dial the intercom number (15, for example) or touch the Auto Intercom button for the voice terminal to which you want to assign lines.

   If the voice terminal is idle, a steady green light comes on next to its Auto Intercom button, and the system gives you a 2-beep signal to begin.

   If the voice terminal is being used, the green lights next to the Auto Intercom button and **Adm Tel** flash rapidly. You must wait until the green lights become steady or else try again later. If you try to assign lines to buttons at a busy voice terminal, the system will beep and you will not be able to proceed,

4. Refer to the Voice Terminal Configuration Form to see which Individual lines should be assigned to this voice terminal. Steady green lights show next to arty lines currently assigned to the voice terminal. Steady red lights show next to all lines contained in any system pool.

5. To add a Iine to or remove a line from this voice terminal, touch the button for that line. The green light next to the line button tells you its current status. Each touch of the line button gives you one of the following codes:

   > *Green light on = line is assigned to the voice terminal*
   > *Green light off = line is not assigned to the voice terminal*

   The order in which you touch the buttons during administration determines the order in which lines appear on the voice terminal. For example, suppose that you have three individual lines to assign to a voice terminal that has Dial Access to Line Pools. These lines appear in alphabetical and numerical order on your administrator/attendant console, as shown on pages 129 and 130. If you touch the button for line B3 first, it will be assigned to the first available position on the voice terminal, in this case the top button in the first column above the dial pad. If you touch the button for line AI next, it will be assigned to the next available position, the bottom button In the second column. Touching the button for line A0 will assign that line to the next available button, the button above the line A1 button.

   NOTE: If you plan to assign a personal line to a voice terminal, be sure not to assign the line to any voice terminals that should not have access to that line.

6. Repeat steps 3 through 5 for each voice terminal in your system.

   If you want to give a voice terminal the same line assignments as one that is already set up, use this shortcut:

   NOTE: When you copy line assignments, you also copy call restrictions, Dial Access to Line Pools, and allowed-list permissions.

   a. Dial the intercom number or touch the Auto Intercom Button of the now voice terminal.

   b, Touch **Message.**

   The green light next to **Message** goes on.

   c. Dial the intercom number or touch the Auto Intercom button of the original voice terminal.

7. Touch **Adm Tel.**

   The lights next to the administration mode buttons flash again.

8. Continue to administer your system, or leave administration mode by following the boxed instructions on page 28,

Assigning Line Pools to Buttons (Button Access to Line Pools)

If you have few line pools and do not use Automatic Route Selection, you will probably prefer to set your control unit and administer your voice terminals for Button Access to Line Pools. Remember that if you select Button Access, it will apply to all voice terminals in your system. Your system will automatically assign the main pool to the two buttons above Intercom-Voice on each voice terminal.

To assign a line pool to a button:

1. If you have not already done so, enter administration mode by following the boxed instructions on page 28.

2. Touch **Adm Tel.**

   The lIghts next to the administration mode buttons stop flashing, and the green light next to **Adm Tel** *becomes steady*

3. Dial the intercom number or touch the Auto Intercom button for the voice terminal at which you want to assign line pools to buttons.

   If the voice terminal is idle, a steady green light comes on next to its Auto Intercom button, and the system gives you a 2-beep signal to begin

   If the voice terminal is being used, the green lights next to its Auto intercom button and **Adm Tel** flash rapidly. You must wait until the green lights become steady or try again later.

4. Refer to the Voice Terminal configuration Form to see which line pools should be assigned to this voice terminal. Green lights show next to the buttons of any lines already assigned to this voice terminal. Red tights show next to the line buttons for each line in any system pool.

5. Touch the button of any line in the line pool you want to add to or remove from this voice terminal. Each successive touch of the line button gives you one of the following codes:

   > *Green light on = line pool is assigned to a button*
   > *Green light off = line pool is not assigned to a button*

   NOTE: The system automatically assigns the main pool tQ the two buttons above the Intercom buttons, and you cannot change this assignment. The system automatically assigns the other line pools to buttons in the order illustrated on page 38. To change the order in which pools other than the main pool appear on the voice terminal, removal all lines and line pools assigned to the voice terminal, following the procedure given above. Then touch the line buttons in the order you want the individual lines and line pools to appear on the voice terminal.

   If you're readministering a system, and you don't know the order in which lines and pools appear on the voice terminal, remove all the individual lines and line pools and reassign them. .

6. Repeat steps 3 through 5 for each voice terminal in your system,

   If you want to give a voice terminal the same line pool assignments as one that has already been set up, use this shortcut:

   NOTE: When you copy pool assignments, you also copy call restrictions, allowed-list permissions, access to line pools, and line assignments.

   a. Dial the intercom number or touch the Auto Intercom button of the new voice terminal.

   b. Touch **Message.**

      The green light next to **Message** goes on.

   c. Dial the intercom number or touch the Auto Intercom button of the original voice terminal.

7. Touch **Adm Tel.**

   The lights next to the administration mode buttons flash again.

8. Continue to administer your system, or leave administration mode by.

   following the boxed instructions on page 28.

Assigning Dial Access to Line Pools

If you have a pooled system and switch G on the control unit is set to Dial Access (up), you can assign individual voice terminals Dial Access to selected line pools. With this arrangement, a person can access any line pool by touching the Pool Access button and dialing the access code for the pool (9 for the main pool or 890 through 899 for additional pools).

If you plan to use Automatic Route Selection (ARS), you *must* use Dial Access to Line Pools.

Even if your system is set up for Dial Access to Line Pools, you can still provide Button Access to Line Pools at selected voice terminals. For example, say that you have seven line pools and you have chosen Dial Access to Line Pools to avoid tying up buttons on voice terminals unnecessarily. This arrangement works well for most staff members, who use different line pools for different types of calls. But Pat, an accounts receivable clerk, makes many calls a day, using local lines only. You may choose to assign the main pool to a button on Pat's voice terminal.

NOTE: If you have ARS, you do not have to provide Button Access to save people time in accessing the line pools that they use frequently. The system will select the line pool that you've designated as the best line pool for the type of call the person is making.

NOTE: Some voice terminals in your system may be equipped with an Automatic Tip/Ring Interface (ATRI), a Manual Tip/Ring Interface (MTRI), or a General Purpose Adapter (GPA). If you have Dial Access to Line Pools, you must assign a personal line or assign one of your line pools to a particular button on those voice terminals so that users can originate calls from these devices.

For more information about Dial Access to Line Pools, see "Button Access vs. Dial Access to Line Pools," page 22.

When your system is first set up, all your voice terminals have access to all the line pools in the system. Follow the procedure below to assign voice terminals Dial Access to particular line pools.

1. If you have not already done so, enter administration mode by following the boxed instructions on page 28.

2. Touch **Adm Tel**

   The lights next to the administration mode buttons stop flashing, and the green light next to **Adm Tel** *becomes steady.*

3. Dial the intercom number (16, for example] or touch the Auto intercom button for the voice terminal to which you want to assign Dial Access to selected line pools.

   If *the voice terminal is idle, a steady green light comes or? next to its Auto Intercom button, and the system gives you a 2-beep signal to begin.*

   If the voice terminal is being used, the green lights next to the Auto Intercom button and **Adm Tel** flash rapidly. You must wait until the green lights become steady or try again later.

4. Refer to your Voice Terminal Configuration Form to see to which pools this voice terminal should have Dial Access. Steady green lights come on next to the buttons of the lines assigned to this voice terminal, Steady red lights come on next to the buttons of each line assigned to one of the system pools.

5. Touch the same Auto Intercom button or dial the same intercom number again.

   A steady red light comes on next to the green light beside **Adm Tel.**

   If you are trying to assign Dial Access to a line pool to an attendant's console or if the voice terminal is busy, the red light will not come on and the system will beep. You won't be able to perform this procedure.

6. Touch the button next to one of the lines in each of the pools whose status you want to change. The green light beside the button for the line tells you whether the voice terminal has Dial Access to the pool that contains this line. Each successive touch of a line button gives you one of the following codes:

   Green light on = voice terminal has Dial Access to this pool
   Green light off = voice terminal does not have Dial Access to this pool

   Keep in mind that the lines in a pool always change as a group. Touching any button representing a line in a pool affects all the lines in that pool.

7. Repeat steps 3 through 6 for each voice terminal whose Dial Access to Line Pools you want to change.

   If you want to give a different voice terminal the same Dial Access to Line Pools as a voice terminal that has already been set up, use the shortcut described below.

   NOTE: When you copy the Dial Access assignments, you also copy all call restrictions, allowed-list permissions, and line and pool assignments from the original voice terminal.

   a. Dial the intercom number or touch the Auto Intercom button of the new voice terminal.

   b. Touch **Message,**

      The green light next to **Message goes** on.

   c. Dial the intercom number or touch the Auto Intercom button of the original voice terminal.

8. Touch **Adm Tel.**

   Lights next to the administration mode buttons flash again.

9. Continue to administer your system or leave administration mode by following the boxed instructions on page 28,

Customizing with Additional System Options

Once basic administration is completed, you can assign additional options to your system. The chart below lists the systemwide features described in this section. You may not need all of these features to meet your immediate business needs. Read the description of each procedure first to see if it applies to you.

If you have a printer, you can get printouts showing the current status of these system-wide features. Instructions for getting a System Information Report and other feature-specific printouts are included in the administration procedures in this section.

Customize with Additional System Options

- Assign call restrictions to voice terminals:
    - Set area code detection (if required) and assign outward and toll call restrictions.
    - Set up allowed lists.
    - —Assign allowed-list call restrictions to voice terminals.
- Administer Automatic Route Selection.
- Assign voice terminals to groups for Group Page.
- Assign voice terminals to Call Distribution groups.
- Set your system for One-Touch Hold with Call Announcement, if you want this feature instead of One-Touch Transfer of outside calls, or vice versa.
- Establish Enhanced Night Service.
- Program System Speed Dial codes.
- Administer SMDR (Station Message Detail Recording) options.
- Set return interval for transferred calls.
- Set disconnect interval for held calls.
- Set recall timer.

ASSIGNING CALL RESTRICTIONS TO VOICE TERMINALS

When your system is first installed, all voice terminals can be used to place intercom, local, and toll calls. If you want, you can restrict selected voice terminals to intercom or local calls only. If those restrictions are too extreme, you can setup allowed lists, which contain groups of numbers that can be dialed regardless of a voice terminal's call restrictions. You can assign these allowed lists to people who need to call numbers that are outside the general restrictions placed on their voice terminals.

You can assign one of the following basic calling ranges to each of your voice terminals:

- **Outward Call Restricted.** Intercom calls only, with allowed list(s) if required.
- **Toll Call Restricted.** Intercom and local calls only, with allowed list(s) if required.
- **Unrestricted.** All calls allowed.

The sections that follow describe the three steps involved in assigning call restrictions to voice terminals. You begin by assigning one of the three basic calling ranges shown above to each voice terminal. Next, if you want to let people at restricted voice terminals make certain types of outside and toll calls, you setup lists of.numbers that can be dialed. Then you assign the appropriate allowed list(s) to each restricted voice terminal.

Assigning Outward and Toll Call Restrictions

You may want to restrict some voice terminals to intercom or local calls only if, for example, these employees do not need to make outside or long distance business calls. You probably also want to restrict any voice terminal located in a public area such as a lobby. The procedure for assigning different types of call restrictions is presented below. If you want these restricted voice terminals to have limited additional calling capacity, follow the procedures for setting up and assigning allowed lists that are described in the following pages.

In order to restrict voice terminals to local calls only, your system must be able to identify toll calls as they are dialed. Your lines are automatically set to detect the toll prefix (0 or 1) used in most parts of the country when people dial a long distance call. If you use a toll prefix, you should skip steps 2 through 4 of the procedure below. These extra steps are needed to allow systems installed in areas where toll prefixes aren't used to detect long distance calls using area codes alone.

1. If you have not already done so, enter administration mode by following the boxed instructions on page 28.

   If you dial 0 or 1 before dialing a long distance call, go to step 5.

   If you do not dial 0 or 1 before dialing a long distance call, go to step 2.

2. Touch **Call Rstr.**

   The lights next to the administration mode buttons stop flashing, and the green light next to **Call Rstr** becomes steady.

3. Green lights next to rach line button show whether a toll prefix is required to detect a long distance call placed on this line. Touch each line button until the light beside it shows the appropriate code. Each successive touch gives you one of the following codes:

   Steady green light on = *toll prefix is needed to detect a long distance call*

   Green light off = *system detects long distance call by area code only*

4. Touch **Call Rstr,**

   The lights next to the administration mode buttons flash again.

5. Touch **Adm Tel.**

   *The lights next to the administration mode buttons stop flashing, and the green light next to **Adm Tel** becomes steady.*

6. Dial the intercom number or touch the Auto Intercom button for the voice terminal you want to restrict.

   If the voice terminal is idle, a steady green light comes on next to the Auto Intercom button, and the system gives a 2-beep signal for you to begin.

   If the voice terminal is being used, green lights next to the Auto Intercom button and **Adm Tel** flash rapidly. Wait until the green lights becomes steady, or try again later.

7. Refer to the Voice Terminal Configuration Form for this user to see what restrictions you plan to assign to this voice terminal. Then touch **Call Rstr** until the green light beside it shows that code for the call restrictions you want this voice terminal to have. Each successive touch gives you one of the following code:

Steady green light on = unrestricted (all calls allowed)
Flashing green light = toll restricted (intercom and local calls only plus allowed lists, if you assign any)
Green light off = outward resricted (intercom calls only plus allowed lists, if you assign any)

(See the following section for more information about allowed lists.)

8. Repeat steps 6 and 7 of this procedure until you have assigned call restrictions to all your voice terminals.

If you want to give a voice terminal the same call restrictions as one that has already been set up, use the shortcut below.

NOTE: When you copy the call restrictions, you also copy allowed-list permissions, Dial Access to Line Pools, and line and pool assignments from the original voice terminal.

   a. Dial the intercom number or touch the Auto Intercom button of the new voice terminal.

   b. Touch **Message.**
      *The green light next to **Message** goes on.*

   c. Dial the intercom number or touch the Auto Intercom button of the voice terminal whose restrictions you want to copy.

9. Touch **Adm Tel.**
    The lights next to the administration mode buttons flash again.

10. Continue to administer your system or leave administration mode by following the boxed instructions on page 28.

Setting Up Allowed Lists

Call restriction by allowed lists adds a group of permitted numbers to the calling range of an outward- or toll-restricted voice terminal. Permitted numbers consist of an area code, an exchange code (the first three digits of a 7-digit telephone number), both codes, or an emergency number such as 911.

For example, a customer service representative in New York City (area code 212) with atoll-restricted voice terminal might need to speak with customers in northern New Jersey (area code 201). This person should have area code 201 in his or her allowed list. A clerk in Houston with an outward-restricted voice terminal might need to call several local vendors and the company's headquarters in Chicago. The clerk's allowed list would include the first three digits of the local vendors' telephone numbers and the area code and first three digits of the firm's Chicago telephone number.

"Assigning Allowed-List Call Restrictions," the section that follows, explains how to assign allowed lists to restricted voice terminals.

You can establish up to eight allowed lists (which you number 0 through 7), each with a maximum of ten entries (which you number 0 through 9). Before you begin setting up allowed lists, fill out an Allowed-List Directory for each allowed list, using the form provided on page 170.

NOTE: If you use Automatic Route Selection (ARS), you may have digit absorption entries in your ARS tables. These codes instruct the system not to dial certain digits that the caller dialed when it places calls on line pools containing FX or tie lines. If you include in an allowed list an area code and/or exchange to which digit absorption applies, be sure to enter in the list on/y those digits that the system actually disk to place the call.

For example, say that you have an FX line pool for exchange 531 in area code 303. You have administered ARS with digit absorption so that the system absorbs the 1 and the 303 dialed by the caller and dials only 531 and the last four digits of the telephone number when placing calls to this exchange. If you want to allow restricted voice terminals to call numbers in this area code and exchange, you would enter "531" in an allowed list, not '303531 ."

Follow the procedure below to set up allowed lists.

1. If you have not alrady done so, enter administration mode by following the boxed instructions on page 28.

2. Touch **Adm Misc.**

   The lights next to the administration mode buttons stop flashing, and the green light next to **Adm Misc** *becomes steady*

3. Dial the 2-character code #5.

4. Dial the list number (0 through 7).

5. Dial the number (0 through 9) of the entry you want to record.

6. Dial the new entry, which may consist of an area code, an exchange code, or both. The entry may also be a special-purpose number such as 911.

7. Repeat steps 3 through 6 to add more entries to the same list or to add entries to a different list.

8. **If you want to remove an entry from a list,** perform steps 3 through 5 and touch **Drop.**

9. If you have a printer connected to your system, you can order a printout of any of your allowed lists. To get a printout, repeat steps 3 and 4, then dial the 5-character code 0#900.

   When the printout is completed, you hear a beep.

   Don't go on to step 10 until you hear the beep or you will get an incomplete printout. Don't remove the printout until you have completed step 10 or your page alignments will be affected.

10. Touch **Adm Misc.**

    The lights next to the administration mode button flash again.

11. Continue to administer your system or leave administration mode by following the boxed instructions on page 28.

A printout of a typical allowed list is shown below.

```
A      ALLOWED   LIST#   2


A      ENTRY  #  0:   212566
A      ENTRY  #  1:   805462
A      ENTRY  #  2:   404
A      ENTRY  #  3:   504832
A      ENTRY  #  4:   957
A      ENTRY  #  5:   318
A      ENTRY  #  6:   907562
A      ENTRY  #  7:   205353
A      ENTRY  #  8:   207761
A      ENTRY  #  9:   406586
```

Assigning Allowed-List Call Restrictions

Once you have created an allowed list you can assign it to any voice terminal. Follow the procedure below to assign allowed-list call restrictions.

1. If you have not already done so, enter administration mode by following the boxed instructions on page 28.

2. Touch **Adm Misc.**

   *The lights next to the administration mode buttons stop flashing, and the green light next to **Adm Misc** becomes steady.*

3. Dial the 2-character code #4.

4. Dial the number of the list (0 through 7) that you want to assign or reassign to voice terminals.

   Green lights come on next to the Auto Intercom buttons for all voice terminals that can access the allowed list.

   When you first set up your system, no terminals are able to access any list.

5. Touch the Auto Intercom button for each voice terminal whose status you want to change until the correct code is showing.

   Green light on = terminal can access the numbers in the list
   Green light off = terminal cannot access the numbers in the list

   If you don't have an Auto Intercom button for a voice terminal, perform One of the following operations as step 5.

   • To add a voice terminal, touch **Hold,** then dial its intercom number.

   • To remove a voice terminal, touch **Drop,** then dial its intercom number.

   • To remove all the voice terminals from the group, touch **Drop,** then touch ⋆ .

   When you use **Hold** or **Drop,** the console will beep if you try to add a voice terminal that is already in the group or to remove a voice terminal that is not in the group.

6. Repeat steps 3 through 5 for each allowed list that you want to assign to voice terminals in your system.

7. If you have a printer, you can request a printout to make sure the appropriate voice terminals have access to the allowed lists you have set up. To get a printout, dial the 4-character code #904.

   *The green light next to **Adm Mist** flashes. When the printout is completed, you hear a beep and the green light next to **Adm Mist** becomes steady*

   Don't go on to step 8 until you hear the beep or you'll get an incomplete printout. Wait to remove your printout until you have completed step 8 or your page alignments will be affected.

8. Touch **Adm Misc.**

   The lights next to the administration mode buttons flash again.

9. Continue to administer your system, or leave administration mode by following the boxed instructions on page 28,

A printout of a typical voice terminal access list appears on the next page.

A VOICE TERMINAL ACCESS TO ALLOWED LISTS

```
A   List   #   0:    10   12   13   14   15   17   19   20   21   22   23   25   26   27
A                    35   39   40   41   42   43   49   71   73   76


A   List   #   1:    11   17   19   22   24   26   31   37   39   40   45   52   55   56
A                    60   63   65   70   76


A   List   #   2:    13   15   16   19   21   23   24   29   30   31   32   33   34   35
A                    38   42   44   45   46   51   54   57   61   64   70   75   77   79


A   List   #   3:    10   11   12   13   14   15   16   17   18   19   20   21   22   23
A                    24   25   26   27   28   29   30   31   32   33   34   35   36   37
A                    38   39   40   41   42   43   44   45   46   47   48   49


A   List   #   4:    50   52   55   60   61   62   65


A   List   #   5:    12   15   17   23   24   30   31   32   33   38   39   51   52


A   List   #   6:    10   11   19   21   22   25   32   35   39   51   71   74


A   List   #   7:    30   31   32   33   34   35   36   37   38   39   42   43   44   45
A                    46   51   52   53   54   37   58   59   62   64   65   72   73   74
A                    75   79
```

ADMINISTERING AUTOMATIC ROUTE SELECTION (ARS)

Using the most economical method available to place each business call can mean significant savings for your company. Routing calls efficiently is especially important if you have several different line pools, such as local, WATS, Foreign Exchange (FX), or tie lines, or if you use an alternate long distance company. The ARS feature lets you specify how you want toll calls (calls for which an area code is dialed) and local calls (calls that don't require dialing an area code) to be routed to minimize costs for your business.

How ARS Works

With ARS in place, people in your business simply touch the Pool Access button and dial the telephone numbers they want to reach, without selecting particular line pools or dialing special routing digits. Your **MERLIN** system directs the call to the line pool that you have designated in your ARS tables as the best one for that type of call. If all the lines in your first-choice line pool are busy, the system routes the call to your second-choice line pool, and so on.

If a trunk line is busy, the caller hears a recorded "all circuits are busy" message. If this happens, the caller just touches the Pool Access button again to route the call to the next entry in the list of line pools that you have specified.

If you are using ARS, all callers must:

- Dial a toll prefix (0 or 1) before dialing a long distance call.
- Use the dialing pattern that you specify whenever they make calls that will be placed on special-purpose lines such as tie lines and FX lines. For example, if you setup a routing pattern for calls on your FX line pool that includes a leading 1 and the area code, callers must dial all 11 digits to place those calls.

Overview of ARS Administration

You follow the six steps listed below to set up and activate ARS.

Steps 1 through 4, the planning steps, are described in detail on pages 58 through 73. If you've already filled out the ARS table forms provided in the Planning Guide for the **MERLIN** System or if you want to change an existing ARS operation, turn to page 73 to begin carrying out steps 5 and 6, administration and activation of ARS.

1. Using the Automatic Route Selection Worksheet in the Appendix, divide your line pools into two categories:

    • Line pools used for toll calls (with area code).
    • Line pools used for local calls (without area code).

2. In view of the type of line in each line pool (local, WATS, etc.), determine:

    • How many different area codes each of your toll line pools should serve.
    • How many different exchanges each of your local line pools should serve.

        The number you enter on the worksheet is the number of area codes or exchanges for which each line pool is the preferred calling method.

3. Setup your default routing for toll and local calls by making the following entries in the Forms for Automatic Route Selection Tables provided in the Appendix:

    • In the form for the Default Toll Table, Table 8, make your first entry in the Pool column the number of the toll line pool that should be used to service the largest number of different area codes.
    • in the form for the Default Local Table, Table 9, make your first entry the number of the local line pool that should be used to service the largest number of different exchanges.

        You may choose to record the numbers of other pools as backup routes if all the lines in the first-choice pool are busy.

4. Setup additional ARS tables to mute calls to particular area codes and exchanges for which different line pools should be used. These might include calls that should be placed on WATS lines, FX lines, and other special-purpose lines.

        You can set up routing tables for as many as eight different types of calls such as these.

5. Using the completed Forms for Automatic Route Selection Tables as a guide, administer your ARS tables by inputting this information into your system.

6. Activate ARS.

If you haven't setup your ARS tables yet and would like more information on choosing your default routes and setting up other tables, look through the two sections that follow. They should help you decide how best to route calls, considering the kinds of calls people in your business make and the different line pools that you have available.

• "About ARS Tables" explains the different types of entries you make in the tables.
• "Preparing ARS Tables for a Typical Business" gives a step-by-step description of how an administrator sets up ARS routing patterns for his company. This business uses an alternate long distance company and has the following line pools:
    — Local lines
    — In-state (Band O) WATS lines
    — Foreign Exchange (FX) lines
    — Regional (Band 1) WATS lines
    — Cross-country (Band 5) WATS lines

    Look through the relevant sections of the example for suggestions on how to route calls most efficiently for your own business.

About ARS Tables

You administer ARS by setting up two default tables, Tables 8 and 9, and up to eight other tables, Tables 0 through 7, to route specific types of calls. Tables 0 through 7 may be any combination of 3-digit or 6-digit tables, as explained below and illustrated on the following two pages. The first 3-digit table that you setup should be Table 7, and the first 6-digit table should be Table 0. Sequential numbering, down from 7 for 3-digit tables and up from 0 for 6-digit tables, is required for current operation and future expansion.

3-Digit vs. 6-digit Tables. Most businesses use a single type of line, such as a cross-country WATS line, for all calls placed to a particular area code. For some businesses, however, the cost of long distance calls to numbers in another area code varies, depending on which exchange within that area code is dialed. You may want to set up some of your ARS tables so that the system selects different line pools for calls to different exchanges in the same area code. To do this, you create a 6-digit table, containing one 3-digit area code and a group of 3-digit exchanges within that area code. You can make as many of your tables as you want 6-digit rather than 3-digit tables.

- A 3-digit table lists either area codes or local exchanges, then specifies the line pools, in order of preference, on which the system should place calls to those area codes or exchanges.
- A 6-digit table I lists a sing/e area code in the 00 position, followed by a series of exchanges within that area code. The lower section of the table specifies the line pools, in order of preference, on which the system should place calls to those exchanges.

All 6-digit tables must be numbered in order and have lower numbers than any 3-digit tables that you set up. To allow space to add more tables in the future:

- Make your first 6-digit table Table 0 and number additional tables up from there (1, 2,3, …).
- Make your first 3-digit table Table 7 and number additional tables down from there (6, 5, 4, …).

Area Code/Exchange Section. The Area Code/Exchange section at the top of each 3-digit table contains up to 100 3-digit area codes or exchanges. The Area Code/ Exchange section at the top of each 6-digit table contains only one area code and up to 99 exchanges within that area code. If you have more than 100 or 99 entries, respectively, that should follow the same routing pattern, you can use two tables.

A   ARS IS: ACTIVE   NUMBER OF 6 DIGIT TABLES: 2

A   TABLE 0: AREA CODE/EXCHANGES
A   00)212 01)256 02)257 03)258 04)251 05)252 06)262 07)254 08)258 09)259
A   10)221 11)222 12)223 13)226 14)227 15)228 16)233 17)234 18)239 19)242
A   20)243 21)321 22)329 23)333 24)334 25)340 26)344 27)348 28)370 29)371
A   30)374 31)382 32)398 33)399 34)458 35)451 36)440 37)460 38)466 39)480
A   40)481 41)482 42)487 43)488 44)489 45)490 46)491 47)--- 48)--- 49)---
A   50)--- 51)--- 52)--- 53)--- 54)--- 55)--- 56)--- 57)--- 58)--- 59)---
A   60)--- 61)--- 62)--- 63)--- 64)--- 65)--- 66)--- 67)--- 68)--- 69)---
A   70)--- 71)--- 72)--- 73)--- 74)--- 75)--- 76)--- 77)--- 78)--- 79)---
A   80)--- 81)--- 82)--- 83)--- 84)--- 85)--- 86)--- 87)--- 88)--- 89)---
A   90)--- 91)--- 92)--- 93)--- 94)--- 95)--- 96)--- 97)--- 98)--- 99)---

A   POOL   ABSORB   OTHER DIGITS
A   0)890   3   -----------------------
A   1)---   --   -----------------------
A   2)---   --   -----------------------
A   3)---   --   -----------------------
A   4)---   --   -----------------------
A   5)---   --   -----------------------

TYPICAL 6-DIGIT TABLE

A   TABLE 7: AREA CODE/EXCHANGES
A   00)609 01)718 02)212 03)516 04)203 05)401 06)617 07)413 08)914 09)717
A   10)215 11)412 12)814 13)716 14)607 15)315 16)518 17)802 18)603 19)207
A   20)301 21)202 22)302 23)419 24)216 25)513 26)614 27)304 28)703 29)804
A   30)704 31)919 32)803 33)912 34)404 35)205 36)901 37)615 38)502 39)606
A   40)812 41)317 42)219 43)313 44)517 45)616 46)906 47)715 48)414 49)608
A   50)815 51)312 52)309 53)217 54)618 55)--- 56)--- 57)--- 58)--- 59)---
A   60)--- 61)--- 62)--- 63)--- 64)--- 65)--- 66)--- 67)--- 68)--- 69)---
A   70)--- 71)--- 72)--- 73)--- 74)--- 75)--- 76)--- 77)--- 78)--- 79)---
A   80)--- 81)--- 82)--- 83)--- 84)--- 85)--- 86)--- 87)--- 88)--- 89)---
A   90)--- 91)--- 92)--- 93)--- 94)--- 95)--- 96)--- 97)--- 98)--- 99)---

A   POOL   ABSORB   OTHER DIGITS
A   0)893   0   -----------------------
A   1)895   0   -----------------------
A   2)---   --   -----------------------
A   3)---   --   -----------------------
A   4)---   --   -----------------------
A   5)---   --   -----------------------

TYPICAL 3-DIGIT TABLE

```
A     TABLE 8: DEFAULT TOLL OUTPUT TABLE
A     POOL      ABSORB   OTHER DIGITS
A     0)896     0        ——————————————————————————
A     1)897     0        ——————————————————————————
A     2)———     —        ——————————————————————————
A     3)———     —        ——————————————————————————
A     4)———     —        ——————————————————————————
A     5)———     —        ——————————————————————————


A     TABLE 9: DEFAULT LOCAL OUTPUT TABLE
A     POOL      ABSORB   OTHER DIGITS
A     0)891     0        ——————————————————————————
A     1)892     0        ——————————————————————————
A     2)893     0        ——————————————————————————
A     3)———     —        ——————————————————————————
A     4)———     —        ——————————————————————————
A     5)———     —        ——————————————————————————


A     SPECIAL NUMBERS (411, 611, 911, 800, 900, 0) OUTPUT TABLE
A     POOL      ABSORB   OTHER DIGITS
A     0)  9     0        ——————————————————————————
```

TYPICAL DEFAULT AND SPECIAL NUMBERS TABLES

Pool, Absorb, and Other Digits Section. The Pool column of each ARS table contains the numbers of your line pools (9, 890 through 899), listed in the order you want them selected for calls made to the area codes and exchanges entered in the Area Code/Exchange section.

The *Absorb* column entry shows how many, if any, of the digits dialed by the caller should be absorbed (not dialed) by the system when it places these calls. This is done to be sure you get the full benefit from any special-purpose lines in your system such as FX lines and tie lines. You include an absorption type (see list below) in your tables to let the system route all appropriate calls to these lower-cost line pools.

Digit absorption doesn't interfere with call restriction or SMDR, if you have administered these features. The digits dialed by the caller are recorded for SMDR, while the digits dialed by the system are checked to be sure the call is allowed.

The default value for the absorption type is 0, which means the system places a call using the same set of digits that the caller dialed. The other five absorption types tell the system *not* to dial the following digits dialed by the caller:

- The leading 1 (absorption type 1)
- The area code (absorption type 2)
- 1 plus the area code (absorption type 3)
- 1 plus the exchange (absorption type 4)
- 1 plus the area code plus the exchange (absorption type 5)

For example, a branch office in Bowling Green, Ohio has a tie line pool to company headquarters in Detroit, Michigan. The complete telephone number at headquarters is an li-digit number, 1 + 313 + 7 digits. People in the branch office dial all eleven digits, but the system dials only the last four digits to place the call. The branch office administrator has associated absorption type 5 with the number of the tie line pool in her ARS tables. This tells the system to absorb the 1, the area code, and the exchange, so that the call can be placed on one of the tie lines.

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The *Other Digits* column of each of the ARS tables contains up to 20 additional characters required to place a call using the line pool specified in the corresponding entry in the Pool column. These characters are typically access codes and account codes needed to place calls using an alternate long distance company. When someone places a call that is routed through this table entry, the system automatically dials the necessary digits and pauses before the telephone number.

Default Tables. Tables 8 and 9, the default tables, have Pool Number, Absorb, and Other Digits sections only. Table 8, the Default Toll Table, is used for long distance calls to all area codes that aren't listed in Tables 0 through 7. Table 9, the Default Local Table, is used for local calls to all exchanges that aren't listed in Tables 0 through 7. If someone dials digits that don't match any of the entries in Tables 0 through 7, the system automatically routes toll calls to the line pools listed in Table 8 and local calls to the line pools listed in Table 9.

The Special Numbers Table. People in your business may need to call the following special numbers for information or for help or to place toll-free calls: 0, 411, 611, 911, 800, and 900. When your system was first set up, these six numbers were automatically assigned as the only entries in the Area Code/Exchange section of the Special Numbers Table. Pool 9, the main pool, was automatically assigned as the only entry in the Pool Number section of the Special Numbers Table, and absorption type 0 was assigned. You cannot change these table entries.

If you must dial an access number such as 9 before dialing a special number, you should enter this access code in the Other Digits section of the Special Numbers Table. If you want to use a different pool to reach one of these special numbers, you can place the special number (except 0) in the Area Code/Exchange section of a table that routes calls to the pool you prefer instead of to the main pool.

Preparing ARS Tables For a Typical Business

To get the maximum benefit from ARS, it is important to consider the calling patterns of people in your business and the relative costs of calls placed on different lines in your system. The following example illustrates the steps an administrator takes to analyze a company's needs and set up ARS tables to meet them.

Primo Foods is a northern New Jersey (area code 201) firm that distributes its specialty meat products in the United States and Canada. Primo has

- Six local lines
- Three in-state (Band 0) WATS lines
- Two FX lines to Philadelphia
- Two Northeastern (Band 1) WATS lines
- Three cross-country (Band 5) WATS lines.

Primo uses the alternate long distance company WHIZ for some types of calls. Users must dial 9501099 and wait for a dial tone, then dial 123789 and wait for a dial tone to access the lines used by WHIZ.

Frank, Prime's system administrator, has set up the following line pools:

- Pool 9 contains the company's six local lines. Pool 9 is the least expensive way to call the 20 exchanges in Prime's immediate calling area, which consists of the city in which the Primo facility is located and several nearby towns.
- Pool 890 contains the three in-state (Band 0) WATS lines. This pool can only be used for calls to the two New Jersey area codes, 609 and 201. It is the most economical method for calling anywhere in New Jersey except Primo's local calling area.
- Pool 891 contains the two FX lines to the 465 exchange in area code 215. This pool can *only* be used to place calls to an exchange in the southwestern section of Philadelphia, where Primo has several suppliers. It is the least expensive way to call numbers in area code 215 that have that exchange.

- Pool 892 contains the two Northeastern (Band 1) WATS lines. This pool can on-ly be used for calls to Massachusetts, Rhode Island, Connecticut, eastern New York, eastern Pennsylvania, Delaware, Maryland, and Washington, D.C. It is the least expensive way to make calls to area codes 413,617,401,203,212, 516,718, 914, 717, 215 (except the 465 exchange), 302, 301, and 202.
- Pool 893 contains the three cross-country (Band 5) WATS lines. This pool can be used for calls anywhere in the United States except New Jersey and Hawaii. It is the second least expensive way to make calls to area codes covered by the Northeastern WATS lines and the least expensive way to make calls to other area codes.

WHIZ, the alternate long distance company, is more expensive than the WATS lines for all calls within the United States. It is more expensive than local lines for calls within area code 201, but less expensive than the local lines for calls to all other area codes in the United States and to the nine area codes in Canada to which Primo employees place calls.

Frank begins to set UP ARS by separating Primo's line pools into the two categories shown below. based on the type at dialing for which each line pool should be used.

- Line Pools for Toll Call
  (Call dials 1 + area code + telephone number)
    — Pool 890 (Band 0 WATS lines) for area code 609
    — Pool 891 (FX lines)
    — Pool 892 (Band 1 WATS lines)
    — Pool 893 (Band 5 WATS lines)
    — Pool 9 + Other Digits (access to WHIZ)
- Lines Pools for Local Calls
  (Caller dials 1 + telephone number or telephone number alone)
    — Pool 9 (local lines)
    — Pool 890 (Band 0 WATS lines) for area code 201

Frank enters this line pool information in the first two columns of his Automatic Route Selection Worksheet. In the third column, he circles "T" for each line pool that he wants used for toll calls and "L." for each line pool that he wants used for local calls.

Setting Up the Default Tables. Frank's next step is to select the default routing pat-terns for toll calls and for local calls. The default tables, Tables 8 and 9, tell the system what line pools to use for calls to all area codes and exchanges not listed in Tables O through 7, To determine which line pools should be the default pools, he jots down in column 4 of his worksheet:

- The number of area codes for which each of Prime's toll line pools is the most economical calling method.
- The number of exchanges for which each of Prime's local line pools is the most economical calling method.

This tells him which line pools service the largest number of different area codes and exchanges and therefore should be the defaults.

Frank begins by selecting the default routing for toll calls. The toll dialing entries on his worksheet look like this:

Automatic Route Selection Worksheet

Number of exchanges in your local calling area: _____

Pool Number	Line Type	Type of Dialing	Number of Area Codes or Exchanges for which Line Pool is Used
890 for Area Code 609	Band 0 WATS (in-state)	(T) L	1
891	FX	(T) L	1
892	Band 1 WATS (Northeastern)	(T) L	13
893	Band 5 WATS (cross-country)	(T) L	all in U.S. except 14 served by 890 & 892
9 + other digits	alternate long distance company	(T) L	9 in Canada
		T L	
		T L	
		T L	
		T L	
		T L	
		T L	
		T L	
		T L	
		T L	
		T L	

T = Toll, L = Local

Default line pool for toll calls: _____ Backup line pool _____
Default line pool for local calls: _____ Backup line pool _____

The cross-country (Band 5) WATS lines are the preferred method for calling most area codes around the country, so Pool 893 should be the default toll route. WHIZ is a less economical but still acceptable backup method for placing these calls.

In the Forms for Automatic Route Selection Tables, Frank makes "893" his first entry in the Pool column for Table 8, the Default Toll Table. To make WHIZ the second-choice line pool, Frank puts down "9," the code for the main pool, as his second entry in the Pool column. Then he enters the access code and account code digits and pauses required for WHIZ on the corresponding line in the Other Digits column.

The completed form for the Default Toll Table looks like this:

Form for Automatic Route Selection Table

Table 8: Default Toll Table

780 _893_   _____   #780____

781 _9_   _9501099 pppp 123789 p_   #781____

782____   _____   #782____

783____   _____   #783____

784____   _____   #784____

785____   _____   #785____

Next, Frank selects the default routing for local calls. The local dialing entries on his worksheet look like this:

Automatic Route Selection Worksheet

Number of exchanges in your local calling area: _____

Pool Number	Line Type	Type of Dialing	Number of Area Codes or Exchanges for which Line Pool is Used
890 for Area Code 201	Band 0 WATS (in-state)	T (L)	all except 20 in local calling area
	local	T (L)	20 in local calling area
		T L	
		T L	
		T L	
		T L	
		T L	
		T L	
		T L	
		T L	
		T L	
		T L	
		T L	
		T L	
		T L	

T = Toll, L = Local

Default line pool for toll calls: _____ Backup line pool _____
Default line pool for local calls: _____ Backup line pool _____

Two line pools can be used for calls within area code 201.

- For the 20 exchanges in Prime's local calling area, the local lines are more economical.
- For all other exchanges in area code 201, the in-state WATS lines are more economical.

Because the in-state WATS lines are the preferred method for calling the largest number of different exchanges, Pool 890 should be the default local route. Local lines are an acceptable backup method for placing these calls if the WATS lines are busy, so Pool 9 is the second-choice default route. (Frank plans to use one of his nondefault tables to route to Pool 9 all calls to the 20 exchanges in Prime's local calling area.)

In the form for Table 9, the Default Local Table, Frank makes "890," the number of the Band 0 WATS line pool, his first entry in the Pool column. The second-choice route for these calls is the local line pool, so he enters "9" in the second position in the Pool column. Although these calls could also be placed using WHIZ, the cost would be too high to justify its use, so Frank doesn't include it in the table.

The completed form for the Default Local Table looks like this:

Table 9: Default Local Table

Pool	Other Digits	Absorb
#790 _890_	_____	#790 __
#791 _9_	_____	#791 __
#792 _	_____	#792 __
#793 _	_____	#793 __
#794 _	_____	#794 __
#795 _	_____	#795 __

Special Numbers (411, 611,911, 800, 900, 0) Table

Pool	Other Digits	Absorb
9	#800 _____	0

Once he has setup both default tables, Frank goes on to plan tables to route calls to specific area codes and exchanges for which Primo has low-cost line pools.

Setting Up 6-digit Tables. Frank begins by checking his list of line pools to see what 6-digit tables he needs to set up. These are tables that route toll calls to specific exchanges within an area code. The only 6-digit table he needs is a table to route calls to the 465 exchange in area code 215, for which Primo has FX lines.

Frank makes this 6-digit table Table 0. If he needs to set up more 6-digit tables in the future as Primo adds more special-purpose lines, he will number them 1,2, etc., keeping his 6-digit tables together as ARS requires. He enters the Philadelphia area code, 215, in the 00 position in the Area Code/Exchange section of the form for Table 0. Next, he enters 465, the exchange served by the FX lines, in the 01 position.

Since these calls should be placed on the FX lines, Frank writes down "891," the code for the FX line pool, as his first entry in the Pool column of Table 0. He then considers whether he needs to associate an absorption code with this line pool. He does, since employees must dial the complete n-digit telephone number to reach the Philadelphia suppliers, but the system places the call by dialing only the last 7 digits.

Frank enters "3" at the top of the Absorb column. As a result, when callers dial 1, then 215, then a number beginning with 465, the system absorbs the first four digits and dials just the 7-digit number, as required to use one of the FX lines.

Finally, Frank considers whether another line pool should be used for calls to this area code and exchange if the FX lines aren't available. Since the Northeast (Band 1) WATS line is also an acceptable method for placing these calls, Frank makes "892" his second entry in the Pool column of Table 0. He doesn't associate an absorption code with Pool 892, because the system dials the same digits as the caller to place a call on the Band 1 WATS lines.

The completed form for Table 0 looks like this:

Form for Automatic Route Selection Table

Total number of 6-digit tables: _1_

Is this a 6-digit table? _Yes_

Table 0
Area Code/Exchanges

#6000 _215_	#6001 _465_	#6002 ___	#6003 ___	#6004 ___
#6005 ___	#6006 ___	#6007 ___	#6008 ___	#6009 ___
#6010 ___	#6011 ___	#6012 ___	#6013 ___	#6014 ___
#6015 ___	#6016 ___	#6017 ___	#6018 ___	#6019 ___
#6020 ___	#6021 ___	#6022 ___	#6023 ___	#6024 ___
#6025 ___	#6026 ___	#6027 ___	#6028 ___	#6029 ___
#6030 ___	#6031 ___	#6032 ___	#6033 ___	#6034 ___
#6035 ___	#6036 ___	#6037 ___	#6038 ___	#6039 ___
#6040 ___	#6041 ___	#6042 ___	#6043 ___	#6044 ___
#6045 ___	#6046 ___	#6047 ___	#6048 ___	#6049 ___
#6050 ___	#6051 ___	#6052 ___	#6053 ___	#6054 ___
#6055 ___	#6056 ___	#6057 ___	#6058 ___	#6059 ___
#6060 ___	#6061 ___	#6062 ___	#6063 ___	#6064 ___
#6065 ___	#6066 ___	#6067 ___	#6068 ___	#6069 ___
#6070 ___	#6071 ___	#6072 ___	#6073 ___	#6074 ___
#6075 ___	#6076 ___	#6077 ___	#6078 ___	#6079 ___
#6080 ___	#6081 ___	#6082 ___	#6083 ___	#6084 ___
#6085 ___	#6086 ___	#6087 ___	#6088 ___	#6089 ___
#6090 ___	#6091 ___	#6092 ___	#6093 ___	#6094 ___
#6095 ___	#6096 ___	#6097 ___	#6098 ___	#6099 ___

Pool	Other Digits	Absorb
#700 _891_	_____	#700 _3_
#701 _892_	_____	#701 __
#702 ___	_____	#702 __
#703 ___	_____	#703 __
#704 ___	_____	#704 __
#705 ___	_____	#705 __

Setting Up 3-digit Tables. The rest of Frank's tables will be 3-digit tables. These tables specify line pool routing for calls to specific area codes or exchanges. Frank begins numbering these tables with 7, the highest number available, then numbers down (6, 5, etc.). As mentioned previously, this assures that space is available to add 6-digit tables in the future.

Frank begins by setting up Table 7 to route calls to the 20 exchanges in Prime's local calling area. These are the only exchanges in area code 201 that can be called less expensively on local lines than on the in-state (Band 0) WATS line, the default route.

Frank lists the 20 local area exchanges in the Area Code/Exchange section of the form for Table 7. His first entry in the Pool column is "9," the number of the local line pool. His second entry is "890," since the in-state WATS line pool is an acceptable, though less economical, way to make these calls.

He doesn't enter an absorption code, since all the digits dialed by the user are dialed by the system to place the call.

The completed form for Table 7 looks like this:

Form for Automatic Route Selection Table

Is this a 6-digit table? _no_

Table 7
Area Code/Exchanges

#6700 _834_	#6701 _949_	#6702 _946_	#6703 _975_	#6704 _764_
#6705 _131_	#6706 _462_	#6707 _530_	#6708 _576_	#6709 _577_
#6710 _566_	#6711 _583_	#6712 _591_	#6713 _671_	#6714 _957_
#6715 _739_	#6716 _741_	#6717 _747_	#6718 _780_	#6719 _842_
#6720 ___	#6721 ___	#6722 ___	#6723 ___	#6724 ___
#6725 ___	#6726 ___	#6727 ___	#6728 ___	#6729 ___
#6730 ___	#6731 ___	#6732 ___	#6733 ___	#6734 ___
#6735 ___	#6736 ___	#6737 ___	#6738 ___	#6739 ___
#6740 ___	#6741 ___	#6742 ___	#6743 ___	#6744 ___
#6745 ___	#6746 ___	#6747 ___	#6748 ___	#6749 ___
#6750 ___	#6751 ___	#6752 ___	#6753 ___	#6754 ___
#6755 ___	#6756 ___	#6757 ___	#6758 ___	#6759 ___
#6760 ___	#6761 ___	#6762 ___	#6763 ___	#6764 ___
#6765 ___	#6766 ___	#6767 ___	#6768 ___	#6769 ___
#6770 ___	#6771 ___	#6772 ___	#6773 ___	#6774 ___
#6775 ___	#6776 ___	#6777 ___	#6778 ___	#6779 ___
#6780 ___	#6781 ___	#6782 ___	#6783 ___	#6784 ___
#6785 ___	#6786 ___	#6787 ___	#6788 ___	#6789 ___
#6790 ___	#6791 ___	#6792 ___	#6793 ___	#6794 ___
#6795 ___	#6796 ___	#6797 ___	#6798 ___	#6799 ___

Pool	Other Digits	Absorb
#770 _9_	_____	#770 ___
#771 _890_	_____	#771 ___
#772 ___	_____	#772 ___
#773 ___	_____	#773 ___
#774 ___	_____	#774 ___
#775 ___	_____	#775 ___

Next, Frank checks his list to see what types of toll calls should have special routing. He has line pools suitable for calls to area code 609 only, to 13 other area codes in the Northeast, and to area codes in Canada. He plans to set up an ARS table for each of these types of calls.

His first step is to set up a table for calls to area code 609, the other area code in New Jersey. He enters "609" in the Area Code/Exchange section of the form for Table 6.

Since the in-state WATS line pool is the least expensive method for calling area code 609, Frank makes "890" his first entry in the Pool column of Table 6. WHIZ is an acceptable, though less economical, route for these calls. To make WHIZ the second-choice route, he writes down "9," the number of the main pool that provides access to WHIZ, as his second entry in the Pool column. In the corresponding space in the Other Digits column, he enters the WHIZ access number and account code, along with the required pauses.

Frank doesn't enter an absorption code in this table, since all digits dialed by the caller are dialed by the system to place the call.

Frank doesn't include Pool 9 without WHIZ in Table 6, although people could use local lines to place calls to numbers in area code 609. This is because Prime's financial director doesn't want long distance calls placed on local lines.

The completed form for Table 6 looks like this:

Form for Automatic Route Selection Table

Is this a 6-digit table? _no_

Table 6
Area Code/Exchanges

#6600 _609_	#6601 ___	#6602 ___	#6603 ___	#6604 ___
#6605 ___	#6606 ___	#6607 ___	#6608 ___	#6609 ___
#6610 ___	#6611 ___	#6612 ___	#6613 ___	#6614 ___
#6615 ___	#6616 ___	#6617 ___	#6618 ___	#6619 ___
#6620 ___	#6621 ___	#6622 ___	#6623 ___	#6624 ___
#6625 ___	#6626 ___	#6627 ___	#6628 ___	#6629 ___
#6630 ___	#6631 ___	#6632 ___	#6633 ___	#6634 ___
#6635 ___	#6636 ___	#6637 ___	#6638 ___	#6639 ___
#6640 ___	#6641 ___	#6642 ___	#6643 ___	#6644 ___
#6645 ___	#6646 ___	#6647 ___	#6648 ___	#6649 ___
#6650 ___	#6651 ___	#6652 ___	#6653 ___	#6654 ___
#6655 ___	#6656 ___	#6657 ___	#6658 ___	#6659 ___
#6660 ___	#6661 ___	#6662 ___	#6663 ___	#6664 ___
#6665 ___	#6666 ___	#6667 ___	#6668 ___	#6669 ___
#6670 ___	#6671 ___	#6672 ___	#6673 ___	#6674 ___
#6675 ___	#6676 ___	#6677 ___	#6678 ___	#6679 ___
#6680 ___	#6681 ___	#6682 ___	#6683 ___	#6684 ___
#6685 ___	#6686 ___	#6687 ___	#6688 ___	#6689 ___
#6690 ___	#6691 ___	#6692 ___	#6693 ___	#6694 ___
#6695 ___	#6696 ___	#6697 ___	#6698 ___	#6699 ___

Pool	Other Digits	Absorb
#760 _590_	_____	#760 ___
#761 _9_	_9501099 pppp123789p_	#761 ___
#762 ___	_____	#762 ___
#763 ___	_____	#763 ___
#764 ___	_____	#764 ___
#765 ___	_____	#765 ___

Frank's next step is to set up a table to route calls to area codes served by Prime's Northeastern (Band 1) WATS line pool. He begins by entering those 13 area codes in the Area Code/Exchange section of the form for Table 5.

Because the Northeastern WATS line pool is the least expensive method of calling these area codes, Frank makes "892" his first entry in the Pool column. The cross-country (Band 5) WATS line pool is an acceptable, though less economical, way to place these calls, so he makes "893" his second entry in the Pool column. WHIZ is the only other company-approved method for placing these calls. Frank makes "9," the number of the main pool, his third entry in the Pool column and enters the WHIZ access number and account codes, with pauses where required, on the corresponding line in the Other Digits column.

Frank doesn't enter an absorption code in this table because all digits dialed by the caller are dialed by the system to place the call.

The completed form for Table 5 looks like this:

Form for Automatic Route Selection Table

Is this a 6-digit table? _no_

Table 5
Area Code/Exchanges

#6500 _413_	#6501 _617_	#6502 _401_	#6503 _203_	#6504 _212_
#6505 _516_	#6506 _718_	#6507 _914_	#6508 _717_	#6509 _215_
#6510 _302_	#6511 _301_	#6512 _202_	#6513 ___	#6514 ___
#6515 ___	#6516 ___	#6517 ___	#6518 ___	#6519 ___
#6520 ___	#6521 ___	#6522 ___	#6523 ___	#6524 ___
#6525 ___	#6526 ___	#6527 ___	#6528 ___	#6529 ___
#6530 ___	#6531 ___	#6532 ___	#6533 ___	#6534 ___
#6535 ___	#6536 ___	#6537 ___	#6538 ___	#6539 ___
#6540 ___	#6541 ___	#6542 ___	#6543 ___	#6544 ___
#6545 ___	#6546 ___	#6547 ___	#6548 ___	#6549 ___
#6550 ___	#6551 ___	#6552 ___	#6553 ___	#6554 ___
#6555 ___	#6556 ___	#6557 ___	#6558 ___	#6559 ___
#6560 ___	#6561 ___	#6562 ___	#6563 ___	#6564 ___
#6565 ___	#6566 ___	#6567 ___	#6568 ___	#6569 ___
#6570 ___	#6571 ___	#6572 ___	#6573 ___	#6574 ___
#6575 ___	#6576 ___	#6577 ___	#6578 ___	#6579 ___
#6580 ___	#6581 ___	#6582 ___	#6583 ___	#6584 ___
#6585 ___	#6586 ___	#6587 ___	#6588 ___	#6589 ___
#6590 ___	#6591 ___	#6592 ___	#6593 ___	#6594 ___
#6595 ___	#6596 ___	#6597 ___	#6598 ___	#6599 ___

Pool	Other Digits	Absorb
#750 _892_	_____	#750 ___
#751 _893_	_____	#751 ___
#752 _9_	_9501099 PPPP 123789 P_	#752 —
#753 ___	_____	#753 ___
#754 ___	_____	#754 ___
#755 ___	_____	#755 ___

There is one more group of area codes that Primo employees call for which a particular line pool should be used. These are the area codes of Prime's Canadian distributors. WHIZ is the only company-approved method for these calls.

Frank makes Table 4 his routing table for calls to Canada. He lists the nine Canadian area codes that the salespeople call in the Area Code/Exchange section of the form for Table 4. He enters "9", for the main pool, in the Pool column and writes in the WHIZ access and account codes, with the required pauses, on the corresponding line in the Other Digits column.

He doesn't enter an absorption code, since all the digits dialed by the caller are dialed by the system to place the call.

The completed form for Table 4 looks like this:

Form for Automatic Route Selection Table

Is this a 6-digit table?   *no*

Table 4
Area Code/Exchanges

#6400 *604*	#6401 *403*	#6402 *514*	#6403 *819*	#6404 *418*
#6405 *416*	#6406 *613*	#6407 *902*	#6408 *506*	#6409 ___
#6410 ___	#6411 ___	#6412 ___	#6413 ___	#6414 ___
#6415 ___	#6416 ___	#6417 ___	#6418 ___	#6419 ___
#6420 ___	#6421 ___	#6422 ___	#6423 ___	#6424 ___
#6425 ___	#6426 ___	#6427 ___	#6428 ___	#6429 ___
#6430 ___	#6431 ___	#6432 ___	#6433 ___	#6434 ___
#6435 ___	#6436 ___	#6437 ___	#6438 ___	#6439 ___
#6440 ___	#6441 ___	#6442 ___	#6443 ___	#6444 ___
#6445 ___	#6446 ___	#6447 ___	#6448 ___	#6449 ___
#6450 ___	#6451 ___	#6452 ___	#6453 ___	#6454 ___
#6455 ___	#6456 ___	#6457 ___	#6458 ___	#6459 ___
#6460 ___	#6461 ___	#6462 ___	#6463 ___	#6464 ___
#6465 ___	#6466 ___	#6467 ___	#6468 ___	#6469 ___
#6470 ___	#6471 ___	#6472 ___	#6473 ___	#6474 ___
#6475 ___	#6476 ___	#6477 ___	#6478 ___	#6479 ___
#6480 ___	#6481 ___	#6482 ___	#6483 ___	#6484 ___
#6485 ___	#6486 ___	#6487 ___	#6488 ___	#6489 ___
#6490 ___	#6491 ___	#6492 ___	#6493 ___	#6494 ___
#6495 ___	#6496 ___	#6497 ___	#6498 ___	#6499 ___

Pool	Other Digits	Absorb
#740 *9*	*9501099 PPPP 123789 P*	#740 ___
#741 ___	_____	#741 ___
#742 ___	_____	#742 ___
#743 ___	_____	#743 ___
#744 ___	_____	#744 ___
#745 ___	_____	#745 ___

The routing patterns Frank has set up in the forms for the default tables and for Tables 0, 7,6,5, and 4 meet all of Prime's current needs. Frank leaves the forms for Tables 1 through 3 blank for now.

Preparing to Administer ARS Tables

Use the Forms for Automatic Route Selection Tables provided in the Appendix to set up ARS tables for your business, if you haven't done so already. It's important to prepare these tables carefully so that your business gains the maximum benefit from ARS. If you have a printer connected to your system, you can printout the ARS tables as you administer them, to serve a worksheets and for future reference.

Follow the procedures below to enter the information on your ARS tables into the **MERLIN** system.

REMEMBER: When you set up your control unit, you set switches F and G to the correct positions for ARS. Before you begin to administer ARS, make sure that switch F on the control unit is set to Pooled (up) and switch G on the control unit is set to *Dial Access* (up). If these switches aren't set correctly for ARS, read "Changing Your System Later," page 27, before you change any settings. Changing switch settings affects your entire MERLIN system.

Administering Area Code/Exchange Sections of ARS Tables

To administer the Area Code/Exchange sections of Tables 0 through 7, follow the procedure below. If you want to use different line pools for calls to different exchanges within the same area code, you can make as many of these tables as you choose 6-digit tables.

Tables 8 and 9 have no Area Code/Exchange sections for you to administer since they are default tables used in calling *all* area codes and exchanges not specified in the other tables. You cannot change the entries in the Area Code/Exchange section of the Special Numbers Table.

1. If you haven't already done so, enter administration mode by following the boxed instructions on page 28.

2. Touch **Adm Misc.**

   The lights next to the administration mode buttons stop flashing and the green light next to **Adm Misc** *becomes steady.*

3. To specify how man y of your ARS tables should be 6-digit rather than 3-digit tables, dial #305, then the number of tables (0 through 8) that should be 6-digit tables.

If you enter:	These tables are 6-digit:
#3050	None
#3051	Table 0 only
#3052	Tables 0 and 1
#3053	Tables 0, 1, and 2
#3054	Tables 0 through 3
#3035	Tables 0 through 4
#3036	Tables 0 through 5
#3037	Tables 0 through 6
#3038	Tables 0 through 7

   You can skip this step if you're setting up a new system and don't need any 6-digit table.

4. Dial the 2-character code #6

5. Dial the table number (0 through 7).

6. Dial the number (00 through 99) of the entry you want to record in the table

   For 6-digit tables, Entry 00 is the area code and entries 01 through 99 are
   exchanges within that area code.

7. Dial the area code of exchange you want to record.

8. **If you want to remove an entry,** repeat steps 4 through 6 and then touch **Drop.**

9. Repeat steps 4 through 7, or perform step 8, for each table entry you want
   to administer.

   If you need to administer the Pool, Absorb, and other Digits sections of your table, go on to
   step 3 of the procedure that follows, which is headed "Administering Pool, Absorb, and
   Other Digits Sections of ARS Tables." If not go on to step 10 below

10. If you have a printer connected to your system, you can get a printout of the complete set of ARS
    tables. Sample printouts are shown on pages 56 through 57. To get a printout, dial
    dial the 4-character code #902

    The green light next to **Adm Misc** *flashes. When the printout is completed, you hear a
    beep and the green light next to* **Adm Misc** *becomes steady.*

    Don't go on to step 11 until you hear the beep or you will get an incomplete printout. Don't
    remove the printout until you've completed step 11 or your page alignments will be affected.

11. Touch **Adm Misc.**

    The lights next to the administration mode buttons flash again.

12. Continue to administer your system or leave administration mode by following the boxed
    Instructions on page 28.

Administering Pool, Absorb, and Other Digits Sections of ARS Tables

To administer the Pool, Absorb, and Other Digits section of each table, follow the procedure below. Tables 0 through 9 contain specific pool numbers plus absorption codes, where needed, and any access numbers required for an alternate long distance company.

Your system automatically places 9, the number for the main pool, in the Pool column of the Special Numbers Table and associates absorption type 0 with the pool number. You cannot change this entry. If you want any special number except 0 to be routed to some other pool, place that special number in the Area Code/Exchange section of one of your other tables. You can make an entry in the Other Digits column of the Special Numbers Table, if you need to dial an access number such as 9 before dialing a special number.

1. If you haven't already done so, enter administration mode by following the boxed instructions on page 28.
2. Touch **Adm Misc.**

   The lights to the administration mode buttons stop flashing, and the green light next to **Adm Misc** *becomes steady.*

3. Dial the 2-character code #7.

4. Dial the table number (0 through 9).

5. Dial the number (0 through 5) of the entry you want to record.

6. Dial the pool number (9 or 890 through 899) you want to record.

7. Dial any additional numbers needed, such as an access code and an account code for an alternate long distance company, after the pool number.

   NOTE: Each entry in the table may include up to 20 characters. Charaters permitted: 0 through 9, pause **(Hold** button), a timed switchhook flash {Recall button), and Touch-Tone enable (Transfer button). # is not permitted. Make sure to enter the required number of pauses between the access code and the account code for an alternate long distance company. The average number of pauses required is four, but you may find that your system works best with more or fewer pauses. Be sure to add one pause after the account code as well.

8. After you have administered a pool number and any other digits required, you can associate an absorption type with the line pool. Follow these steps to add, change, or remove an absorption code:

   a. Perform steps 3 through 5.

   b. Your system is factory-set not to absorb any digits that callers dial. If a line pool requires absorption, enter the appropriate code to tell the system how many digits to drop if the user dials an unnecessary toll prefix, area code, or exchange for this type of line pool:

   ```
   0 = No absorption
   1 = Absorb leading 1
   2 = Absorb area code
   3 = Absorb 1 + area code
   4 = Absorb 1 + exchange
   5 = Absorb 1 + area code + exchange
   ```

   NOTE: If you change the pool number or other digits for an entry that has absorption type 1 through 5 associated with it, the system automatically changes the absorption type to 0 (no absorption). You must perform step 8 again if you want to retain an absorption type when you change a pool number or other digits.

9. **If you to remove any entry from a table,** perform steps 3 through 5 and then touch **Drop.**

10. Repeat steps 3 through 8, or perform step 9, for each table entry you want to administer. You must repeat steps 3 through 8 in order to add or change the pool number, other digits, or absorption type of an entry.

11. To change th eOther Digits column of the Special Numbers Table., dial the 4-character code #800 and perform one of the following operations:

    • To add other digits, perform step 7.
    • To remove other digits, touch **Drop.**

12. If you have a printer and want to see a printout of your ARS tables, go on to step 13 below. If you want to activate ARS for your system at this time, perform step 3 of the procedure headed "Activating and Deactivating ARS," on page 78

13. If you have a printer connected to your system, you can get a printout of the complete set of ARS tables. To order a printout, dial the 4-character code #902.

    The green light next to **Adm Misc** *flashes. When the printout is compolete, you hear a beep, and the green light next to* **Adm Misc** *becomes steady*

    Don't go on to step 14 until you hear the beep or you will ge an incomplete printout. Don't remove your printout from the printer until you complete step 14 or your page alignments will. be affected.

14. Touch **Adm Misc.**

    The lights next to the administration mode buttons flash again.

15. Continue to administer your system or leave administration mode by following the boxed instructions on page 28.

Activating and Deactivating ARS

Once ARS tables have been set up, you can activate or deactivate the ARS feature by entering administration mode and dialing a code.

When ARS is activated, voice terminal users simply touch a Pool Access button, lift the handset, and dial the telephone number they want to reach. The system selects the line pool that you have designated as the most appropriate one for this type of call. When placing the call, the system absorbs any unnecessary digits or dials any special numbers required, according to the information in your ARS tables.

When ARS is deactivated, voice terminal users touch one of the Pool Access buttons and dial the code (9 or 890 through 899) for the line pool they want to use to place the call. Then they dial the telephone number they want to reach, along with any special numbers that are required, such as the access code of an alternate long distance company.

To activate or deactivate ARS for your system, follow the procedure below.

1. If you haven't already done so, enter administration mode by following the boxed instructions on page 28

2. Touch **Adm Misc.**

   The lights next to the administration mode buttons stop flashing, and the green light . next to **Adm Misc** *becomes steady.*

3. To change the operating status or ARS, perform one of the following operations:

   • To activate ARS, dial the 5-character code #3041

   If you hear a beep, ARS cannot be activated. Go to the control unit and make sure that switch F is set to *Pooled* (up) and switch G is set to *Dial Access* (up), then try again.

   NOTE: Keep in mind that changing the setting of either of these switches affects the programming of your entire system. Read "Changing Your System Later", page 27, before changing the setting of either switch.

   • To deactivate ARS, dial the 5-character code #3040.

4. Touch **Adm Misc**

   The lights next to the administration mode buttons flash again.

5. Continue to administer your system, or leave administration mode by following the boxed instructions on page 28

ASSIGNING VOICE TERMINALS TO GROUPS FOR GROUP PAGE

It maybe convenient to page a particular group of employees such as department heads, committee members, or a project team without disturbing the entire staff. You can use the Group Page feature to page up to ten people through their voice terminal speakers. You do not need an external paging system to use this feature.

You can create up to seven paging groups, and each group can contain as many as ten voice terminals. You may assign a voice terminal to more than one paging group.

Follow the procedure below to assign and reassign voice terminals to paging groups.

1. If you have not already done so, enter administration mode by following the boxed instructions on page 28.

2. Touch **Adm Misc.**

   The light next to the administration mode buttons stop flashing, and the green light next to **Adm Misc** *becomes steady*

3. Dial the 3-character code #84.

4. Dial the number of the paging group (1 through 7) in which you want to add or remove voice terminals.

5. Refer to your completed Group Page Directory in the Appendix to see which voice terminals should be assigned to this paging group.

   If you have Auto Intercom buttons for these voice terminals, the light next to each button shows the voice terminal's Group Page assignments. Touch the Auto intercom button to include or remove a voice terminal from this paging group. Each successive touch gives you one of these codes:

   > *Steady green light on =   voice terminal in paging group*
   > *Green light off =   voice terminal not in paging group*

   If you don't have an Auto Intercom button for a voice terminal, perform one of the following operations to add it to or remove it from this paging group:

   - To add the voice terminal to the paging group, touch **Hold,** then dial its intercom number.
   - To remove a voice terminal from the paging group, touch **Drop,** then dial its intercom number.
   - To remove all the voice terminals from the paging group, touch Drop, then touch ∗ .

   When you use **Drop** and **Hold,** the console beeps if the system cannot carry out your instructions. If you hear a beep when you try to add a voice terminal to a paging group, the group already has the maximum of ten voice terminals assigned or the voice terminal is already assigned to this group. If you hear a beep when you try to remove a voice terminal from a paging group, the voice terminal is not in the group,

```
A     GROUP PAGING


A     Group # 841:   10   12   15   16   17   18   19   29   37   39

A     Group # 842:   11   30   31   32   33   34   35   36   37   58

A     Group # 843:   13   16   22   23   30   32   35   70   74   76

A     Group # 844:   12   15   19   24   26   30   34   39   52   56

A     Group # 845:   10   14   28   42   48   52   64   72   76   79

A     Group # 846:   42   43   50   51   52   60   61   62   66   67

A     Group # 847:   20   21   22   30   31   32
```

ASSIGNING VOICE TERMINALS, LINES, OR LINE POOLS TO GROUPS FOR GROUP CALL DISTRIBUTION

Your business may have groups of employees with similar responsibilities, anyone of whom can provide information or some other service to callers from within or from outside your business. If you assign their voice terminals to a Call Distribution group, your **MERLIN** system directs calls that are placed to the group to each voice terminal in turn. As a result, call handling duties are shared equally.

How Group Call Distribution Works

Once you have assigned voice terminals to a Call Distribution group, any intercom call to the group rings at the voice terminal of the person whose turn it is to take the next call. If you also assign lines and/or line pools to a Call Distribution group, any incoming call on one of those outside lines rings at the voice terminal of the person whose turn it is to take the next call.

For example, many calls come into Ultimate Motors daily from people who have questions about the cars the dealership has on its lot and on order. Ultimate's administrator has created a Sales Call Distribution Group consisting of salespeople Joe, Don, Maureen, and Phil. Whenever a call comes in on one of Ultimate's sales lines, the system determines which voice terminal received the last call. If Joe took that call, the system directs the new call to Don's voice terminal. If Don's voice terminal is busy, the call rings at Maureen's voice terminal. The receptionist, whose console is set for delayed ring on this line, answers the call if nobody is available to take it. This arrangement equalizes the salespeople's responsibility for handling inquiries and opportunity to bring new customers in for themselves.

Having Call Distribution groups can also make intercom calling more efficient. For example, Primo Foods' order-entry agents handle telephone orders and inquiries about products in the company's retail catalog. Agents often put customers on hold while they get billing information from Accounting or check the status of back-ordered items with Shipping. Because people in those departments belong to Call Distribution groups, an order entry agent just touches the intercom button, then dials the group's 3-digit code or touches an Auto Intercom button for that group. Agents get the information they need without having to look up individuals' intercom numbers or make a series of calls because several voice terminals are busy.

If an agent isn't free to take calls, he or she just turns on the Do Not Disturb feature. The system doesn't direct any calls to this voice terminal until the user turns off Do Not Disturb.

Preparing to Administer Group Call Distribution

As you administer Group Call Distribution, keep these points in mind:

* You may have up to six Call Distribution groups.
* Each group can contain as many as 15 voice terminals.
* You can assign a voice terminal to more than one group.
* You can associate up to 30 outside lines and up to 11 line pools with each group.
* A line or line pool can be associated with only one group.

Follow the procedure below to setup or change Call Distribution groups and to assign lines and line pools to groups. As you administer this feature, refer to your completed Call Distribution Group Directories in the Appendix to see which voice terminals and which lines, if any, should be assigned to each group. If you are assigning lines and line pools to a group, check your Voice Terminal Configuration Forms to be sure each voice terminal in the group has access to those lines or line pools.

1. If you have not already done so, enter administration mode by following the boxed instructions on page 28.

2. Touch **Adm Misc.**

   The lights next to the administration mode buttons stop flashing and the green light next to **Adm Misc** *becomes steady.*

3. Dial the 3-character code #85

4. Dial the number (0 through 5) of the Call Distribution group that you want to set up or change.

5. Touch the Auto Intercom button of each voice terminal you want to add to or remove from this group until the light next to the button shows the appropriate code.

   Green light on = voice terminal is included in the Call Distribution group
   Green light off = voice terminal is not included in the Call Distribution group

   If you don't have an Auto Intercom button for a voice terminal, perform one of the following operations, as step 5, to add it to or remove it from this Call Distribution group.

   * To add the voice terminal to the group, touch **Hold,** then dial its intercom number.

   * To remove the voice terminal from the group, touch **Drop,** then dial its intercom number

   * To remove all the voice terminals from the group, touch Drop, then touch ∗ .

      If you use **Hold** or **Drop,** the console beeps if the voice terminal you want to add is already in the group or if the voice terminal you want to remove isn't in the group.

6. Green lights show next to the buttons of lines that are assigned to this Call Distribution group. Red lights show next to the buttons of all lines that are part of line pools.

   If you want to associate lines or line pools with this Call Distribution group, touch each line button until the light next to the button shows the appropriate code. Touching the button of any line in a line pool changes the status of the whole line pools.

   Green light on = line or line pool is assigned to the Call Distribution group

   Green light off = line or line pool is not assigned to the Call Distribution group

7. Repeat steps 3 through 6 for each Call Distribution group you want to set up or change.

8. If you have a printer, you can request a printout to make sure your Call Distribution groups are set up the way you want them. A typical printout is illustrated below. To get a printout, dial the 4-character code #906.

   The green light next to **Adm Misc** *flashes. When the printout is completed, you hear a beep and the green light next to* **Adm Misc** *becomes steady.*

   Don't go on to step 9 until you hear the beep or you will get an incomplete printout. Wait to remove your printout until you have completed step 9 or your page alignments will be affected.

9. Touch **Adm Misc.**

   The lights next to the administration mode buttons flash.

10. Continue to administer your system, or leave administration mode by following the boxed instructions on page 28

A   GROUP CALL DISTRIBUTION

A   Group # 850: 10 11 12 13 14   15 16 17 21 26 30 31 35 39 53

A   Group # 851: 10 21 22 30 32 33 43 47 51 55 61 63 65 69 72

A   Group # 852: 41 51 55 58 66 70 71 72 73 74 75 76 77 78 79

A   Group # 833: 26 31 32 34 33 35 42 44 50 56 57 58 59 63 64

A   Group # 854: 16 25 33 34 36 37 38 40 42 43 46 49 52 53 69

A   Group # 855: 70 71 72 73 76 78 79

SETTING THE SYSTEM FOR ONE-TOUCH HOLD WITH CALL ANNOUNCEMENT

People in your business may want to put an outside call on hold while they place an intercom call. If you have administered One-Touch Hold with Call Announcement, they can do this by touching the Auto Intercom button of the coworker they want to contact. This feature makes it easy for a person in your office to:

- Screen an incoming call before passing it on to a coworker
- Get information from a coworker, then return to an outside call in progress

For example, customers often call Joe Hess of Ultimate Motors' sales staff to make offers on cars they have seen. Whenever an offer is more than a certain percentage below the sticker price, Manager Ken Cavelli likes to talk to the customer himself. In these cases, Joe presses his Auto Intercom button for Ken. This puts the customer on hold and places a call to Ken's voice terminal. When Ken answers, Joe explains the situation and tells Ken which line to pickup if he wants to talk with the customer.

Joe also has an Auto Intercom button for Margaret Horan, who arranges new car financing. If a customer asks about loan rates, Joe just touches Margaret's Auto Intercom button, asks her what the lowest current rate is, then touches the line button to be reconnected to the waiting customer.

Your **MERLIN** system came to you set for One-Touch Transfer rather than One-Touch Hold of in-progress calls. With One-Touch Transfer, a person talking with someone from outside your business transfers the outside call to a coworker by touching the coworker's Auto Intercom button.

One-Touch Transfer and One-Touch Hold with Call Announcement are "either/or" features. You can change your system from one type of operation to the other, but you cannot use both features at the same time.

Remember,

If your system is administered for:	And someone presses an Auto Intercom button while on an outside call:
One-Touch Transfer	The outside call is transferred to the voice terminal that the Auto Intercom button represents.
One-Touch Hold with Call Announcement	The outside call is put on hold and an intercom-voice call is placed to the voice terminal that the Auto Intercom button represents. If that voice terminal is set to receive ringing intercom calls only, the system places an intercom-ring call instead.

To administer One-Touch Hold with Call Announcement or to change from One-Touch Hold with Call Announcement to One-Touch Transfer, follow the procedure below.

1, If you have not already done so, enter administration mode by following the boxed instruction on page 28,

2. Touch **Admn Misc.**

   *The lights next to the administration mode buttons stop flashing and the green light next to **Adm Misc** becomes steady.*

3. Dial the 4-character code #315, then perform one of fhe following operations:
   • If you want One-Touch Transfer, dial 0.
   • If you want One-touch Hold with Call Announcement, dial 1.

4. If you have a printer connected to your system, you can make sure that you have selected the option you want by getting a System Information Report. A typical printout appears below. To order a printout, dial the 4-character code #905.

   *The green light next to **Adm Misc** flashes. When the printout is completed, you hear a beep and the green light next to **Adm Misc** becomes steady.*

   Don't go on to step 5 until you hear the beep or you will get an incomplete printout. Wait to remove your printout until you have completed step 5 or your page alignments will be affected.

5. Touch **Adm Misc.**

   The lights next to the adminisration mode buttons flash again..

6. Continue to administer your system, or leave administration mode by following the boxed instructions on page 28.

A   SYSTEM INFORMATION

A   SMDR Incoming Calls Recorded: YES
A   SMDR Minimum Call Lenght: 00 minutes
A   Current Date: 03/31/86
A   Current Time: 13:28:22

A   Incompatible with CMS

A   Tansfer Return Timer: A

A   Attendant Intercom Auto Dial With: Transfer

A   Dialing Time Out: 0

A   Recall Timer : 450

ESTABLISHING ENHANCED NIGHT SERVICE

The **MERLIN** system offers several options for after-hours telephone operation. You can administer these features in any combination to meet the current needs of your business.

The four Enhanced Night Service options are summarized below, then explained in more detail in the following pages. Take a few minutes now to decide how you want your system to work, then turn to the specific administrative procedures for the Enhanced Night Service features you have chosen. You can administer any or all of these features to meet your current requirements for after-hours telephone use, then add or change features as your needs change.

- If you have Night Service with Group Assignment, you can specify which voice terminals should ring immediately when calls come into an attendant console with which they share lines. See the description below.
- If you have Night Service with Extra Alert, which requires a Services Module, you can set extra-alerting devices such as bells or lights to ring or flash when calls come in on the lines you specify. See page 89.
- If you have Night Service with Outward Restriction, you can set your system so that only authorized users can place nonemergency calls. See page 90.
- If you have Night Service with Time Set, which requires an SMDR Module, you can set your system to turn Night Service on and off at the times you specify. See page 92.

Administering Night Service With Group Assignment

To make it easier for people in your business to answer after-hours calls, you can assign all the voice terminals associated with a particular attendant console to a Night Service group. Any call that comes into the attendant console while Night Service is in effect rings immediately at each available voice terminal in the group that has access to that particular line.

For example, most of the sales representatives at Primo Foods have four line pools assigned to their voice terminals. These line pools are set to "no ring" for their voice terminals so that Chris, the group secretary, can screen their calls. Pat, the sales director, has a personal line that also appears on Chris' attendant console.

Frank, the system administrator, has assigned each sales representative's voice terminal to the Sales Night Service Group. Whenever Chris activates Night Service, any call that comes into the attendant console, except a call on Pat's personal line, rings immediately at all the voice terminals in the group. The only exception is a voice terminal where the Do Not Disturb feature is in use.

As you plan your Night Service groups, keep these points in mind:

- You can assign a voice terminal to more than one Night Service group.

  If you have a night security person, for example, you may assign him or her a 34-button voice terminal and include the voice terminal in every Night Service group.

- You can put as many voice terminals as you want into a single Night Service group.

  If you have only one attendant console, for example, you may want to set up a single Night Service group containing all your voice terminals. In that case, after-hours calls that ring at the attendant's console ring simultaneously throughout your facility at all voice terminals that have access to the line on which the call comes in.

Follow the procedure below to add voice terminals to or remove them from Night Service groups.

1. If you have not already done so, enter administration mode by following the boxed instructions on page 28.

2. Touch **Adm Misc.**

   *The lights next to the administration mode buttons stop flashing and the green light next to **Adm Misc** becomes steady.*

3. Dial the 4-character code #307

4. Dial the intercom number (10 to 14) of the attendant for whom you are setting up or changing a Night Service group.

   If you have an Auto Intercom button for the attendant's console the green light next to the button flashes slowly

5. Touch the Auto intercom button of each voice terminal you want to add to or remove from this attendant's group until the light beside the button shows the appropriate code.

   Green light on = *voice terminal is included in the Night Service group,*
   Green light off = *voice terminal is not included in the Night Service group.*

   If you don't have an Auto intercom button for a voice terminal, use your dial pad to add it to or remove it from a Night service group.

   • To add the voice terminal, touch **Hold,** then dial its intercom number.
   • To remove the voice terminal, touch **Drop,** then dial its intercom number.
   • To remove all the voice terminals in the group, touch **Drop**, then touch ***.**

   If you use **Hold** and **Drop,** the console will beep if you try to add a voice terminal that is already in the group or to remove a voice terminal that is not in the group.

6. Repeat steps 4 and 5 fur each Night Service group you want to set up or change.

7. If you have a printer, you can order a printout to make sure your Night Service groups are set up the way you want them. A typical printout appears on the next page. To get a printout of the Night service Information Report, dial the 4-character code #907.

   *The green light next to **Adm Misc** flashes. When the printout is completed, you hear a beep and the green light next to **Adm Misc** becomes steady.*

   Don't go on to step 8 until you hear the beep or you will get an incomplete printout. Wait to remove your printout until you have completed step 8 or your page alignments will be affected.

8. Touch **Adm Misc.**

   The lights next to the administration mode buttons flash.

9. Continue to administer your system, or leave administration mode by following the boxed instruction on page 28.

A   NIGHT SERVICE INFORMATION

A   Group # 0:   11   12   13   14   15   16   17   18   19   28   29

A   Group # 1:   20   21   22   23   24 25   26   27   35   36   37   38   39

A   Group # 2:

A   Group # 3:   30   31   32   33   34   40   41   42   43   44   45   46   47   48
A   49

A   Group # 4: 40   41   42   43   44   45   46   47   48   49   50   51   52   53
A   54   55   56   57   58   59   60   61   62   63   64   65   66   67
A   68   69

A   Password: 1470
A   Current Day: MONDAY

	Turn off at:	Turn on at:
SUNDAY	23:59	23:59
MONDAY	07:45	16:30
TUESDAY	08:00	17:00
WEDNESDAY	07:45	17:00
THURSDAY	07:00	18:30
FRIDAY	08:30	18:00
SATURDAY	09:00	12:00

A   Emergency Allowed List:
A   o)   55558300
A   1)   3554700
A   2)   93841 1 1
A   3)   5303327
A   4) 18005558802
A   5)
A   6)
A   7)
A   8)
A   9)

A   Exclusion List:
A   15   34   35   36   37   38   70   71   72   73   74

Administering Night Service With Extra Alert

If your system includes the optional Services Module, you can associate extra-alerting devices such as bells and flashing lights with specific lines or line pools. Then, when Night Service is activated, the device rings or flashes whenever a call comes in on one of the designated lines.

For example, the Shipping Department at Primo Foods has an extra-alerting device, a bell, mounted above the entrance to the warehouse area. When Frank administered Prime's Enhanced Night Service, he assigned the individual line and the local line pool that appear on the Shipping Department's voice terminals to activate the device. Whenever Night Service is in effect, any call that comes in on the individual line or on any of the lines in the local line pool causes the bell to ring.

Follow the procedure below to assign up to three extra-alerting devices to lines or line pools. Remember that you can assign only one extra-alerting device to a particular line or line pool.

1. If you have not already done so, enter administration mode by foloowing the instructions on page 28.

2. Touch **Adm Misc.**

   The lights next to the administration mode buttons stop flashing and the green light next to **Adm Misc** *becomes steady.*

3. Dial the 4-character code #307.

4. One by one, touch the button for each line that you want to activate an extra-alerting device until the green light next to the line button shows the appropriate code. Each successive touch gives you one of the following code:

   Steady green light on = line activates alerting device 1
   Slowly flashing green light = line activates alerting device 2
   Rapidly flashing green light = line activates alerting device 3
   Green light off = line does not activate and alerting device

5. Touch **Adm Misc.**

   The lights next to the administration mode buttons flash again.

6. Continue to administer your system, or leave administration mode by following the boxed instructions on page 28.

Administering Night Service With Outward Restriction

This Night Service feature prevents unauthorized after-hours use of your business' telephones. When Night Service with Outward Restriction is in effect, staff members who know the Night Service password can make calls on their voice terminals as usual. Other people can dial only emergency numbers that you specify, such as the telephone numbers for your local police and fire departments. If someone tries to dial a nonemergency number without entering the password, the call won't go through unless the person is using a voice terminal on the Night Service Exclusion list.

For example, Frank has administered Night Service with Outward Restriction at Primo Foods. All the voice terminals are restricted while Night Service is in effect, except the plant manager's. Because the plant manager would rather not enter a password when he makes after-hours calls, Frank has assigned his voice terminal to the Night Service Exclusion list.

Barbara, who manages the Finance Department, often places calls to Prime's West Coast distributors after the department's attendant has left for the day. To do this while Night Service is in effect, Barbara touches **Recall,** then dials the 4-digit Night Service password, without lifting her handset. Then she lifts her handset and dials her call.

If your system includes Automatic Route Selection (ARS), people must dial the password before each call. If you don't have ARS, however, people can make a series of calls without entering the password again. If Primo did not have ARS, for example, Barbara would touch **Recall** and dial the password, without lifting her handset. Then she would lift her handset and dial her first call. She would just touch **Recall** between calls rather than reentering the password.

If a user doesn't dial the password within one minute after touching **Recall,** the voice terminal remains outward restricted.

NOTE: Once you have administered a password, Night Service with Outward Restriction will be activated for all your voice terminals whenever Night Service is turned on at any attendant console. At any given time, only one attendant can enter the password to turn Night Service on or off. If in the future you want to keep the ringing and alerting features of Enhanced Night Service but eliminate the calling restrictions, all you need to do is remove the password.

To administer Night Service with Outward Restriction, you specify a 4-digit password for your system and set up an allowed list of up to ten emergency numbers. If you want one or more voice terminals to be free from Outward Restriction, assign them to the Night Service Exclusion list.

NOTE: Keep in mind that users of basic telephones with the Basic Telephone Module cannot enter a password. If you have basic telephones with this module, you'll need to assign the people who use them to the Exclusion list if you want these people to be able to make nonemergency calls while Night Service with Outward Restriction is in effect.

Follow the procedure below to administer Night Service with Outward Restriction. You can also use this procedure to change your current password, list of emergency numbers, or Night Service Exclusion list.

1. If you have not already done so, enter administration mode by following the boxed instructions on page 28.

2. Touch **Adm Misc.**

   The lights next to the administration mode buttons stop flashing, and the green light next to **Admin Misc** *becomes steady.*

3. To administer a password for your system, dial the 4-character code #309, then perform one of the following operations:

   • To create a new password or replace an exisiting password, dial any 4 digits. You can use the digits 0 through 9 in any combination.
   • To remove an existing password, touch **Drop.**

4. To administer an allowed list of emergency telephone numbers, dial the 4-character code then perform one of the following operations:

   • To add or change an emergency telephone number, dial the netry number (0 to 9) of the telephone number on the allowed list, then dial the number itself (maximum of 12 digits).

     For example, if the first entry on your allowed list were 861-5000, the number of your local fire department, you would dial #310, then dial 08615000.

   • To remove an existing emergency telephone number, dail the netry number (0 to 9) of the telephone number on the allowed list, then touch **Drop.**

5. Repeat step 4 for each emergency number you want to add, change, or remove from your allowed list.

6. To assign voice terminals to the Night Service Exclusion list or remove them from this list, dial the 4-character code #308, then touch the Auto Intercom button of each voice terminal until the light next to the button shows the appropriate code.

   NOTE: Voice terminals on the Night Service Exclusion list retain the calll restrictions, if any, places on them during normal working hours. They are not protected in any other way from unauthorized use while Night Service with Outward Restriction is in effect.

   Green light on = voice terminal is assigned to the Exclusion list.
   Green light off = voice terminal is not assigned to the Exclusion list.

   If you don't have an Auto Intercom button for a voice terminal, use your dial pad to add it to or remove it from the Exclusion list.

   • To add a voice terminal to the list, touch **Hold,** then dial its intercom number.
   • To remove a voice terminal to the list, touch **Drop,** then dial its intercom number.
   • To remove all the voice terminals from the list, touch **Drop,** then touch ⋆ .
   When you use **Hold** and **Drop,** the console will beep if you try to add a voice terminal that is already on the list or to remove a voice terminal that is not on the list.

7. If you have a printer, you can get a Night Service Information Report showing the Night Service password, the allowed list of emergency telephone numbers, and the Exclusion list, if ou have one. A typical printout appears on page 88. To get a printout, dial the 4-character code #907

   The green light next to **Adm Misc** *flashes. When the printout is completed, you hear a beep and the green light next to* **Adm Misc** *becomes steady.*

   Don't go on to step 8 until your hear the beep or you will get an incomplete printout. Wait to remove your printout until you have completed step 8 or your page alignments will be affected.

   8. Touch **Adm Misc.**

      The lights next to the administration mode buttons flash again.

9. Continue to administer your system, or have administration mode by following the boxed instructions on page 28.

Administering Night Service With Time Set

If your **MERLIN** system includes the optional SMDR module, you can administer the system to turn Night Service on and off automatically for all your voice terminals. All you need to do is enter the times at which you want Night Service to go on and off each day. Attendants can override this automatic operation and turn Night Service on or off manually, if they prefer. You can also suspend Night Service with Time Set indefinitely, then reactivate it when you want to return to timer-controlled operation of Night Service.

For example, Primo Foods' hours of business are 8:00 a.m. to 5:30 p.m., Monday through Friday. Frank has administered Night Service with Time Set to turn Night Service off and on at these times and to leave Night Service on continuously from Friday evening until Monday morning.

All of Prime's voice terminals except those on the Night Service Exclusion list are protected from unauthorized use by Night Service with Outward Restriction. As a result, Frank and the attendants must enter a password if they want to turn Night Service on and off manually. For example, on days when Prime's receptionist gets to work before 8:00 a.m., she turns Night Service off manually by touching **Night Service** and dialing the password. The system turns Night Service on as usual at 5:30 p.m.

An attendant can override a single setting of Night Service with Time Set, as in the example above, but only the administrator can suspend timer-controlled operation indefinitely. For example, Frank has to suspend operation of Night Service with Time Set in order to provide telephone security at Primo during unusual events such as weekday holidays. Say that New Year's Day falls on a Wednesday, and Frank wants Night Service to stay in effect from Tuesday night through Thursday morning. He suspends Night Service with Time Set and activates Night Service manually at 5:30 p.m. on Tuesday. It stays on until Thursday morning, when Frank turns it off manually. During that day, he reactivates Night Service with Time Set. The system resumes control of Night Service and turns it on as usual at 5:30 p.m.

You can use Time Set for Night Service whether or not you are also using Outward Restriction. As you administer your system, remember that:

- If you have entered on and off times only, your system will turn Night Service with Extra Alert and Group Assignment on and off automatically at those times.
- If you have entered on and off times and a 4-digit password, your system will turn Night Service with Extra Alert, Group Assignment, and Outward Restriction on and off automatically at those times.

You can use the procedure shown below to establish, change, or remove timer settings for your system. If you want Night Service to remain on for the full 24 hours on days when your business is closed, don't set start and stop times for those days. If you administer stop and start times for Friday and Monday, for example, but set no times for Saturday and Sunday, your system will turn Night Service on Friday evening and leave it on until Monday morning.

Keep in mind that if you change settings for the current day while Night Service is in effect, the system turns Night Service off automatically. For example, if today is Thursday and you change the time Night Service should go off on Thursdays, Night Service will go off immediately. If this happens, you'll need to reactivate it manually, as described on page 95.

Follow this procedure to administer Night Service with Time Set:

1. If you have not already done so, enter administration mode by following the boxed instructions on page 28.

2. Touch **Adm Misc.**

   The lights next to the administration mode buttons stop flashing, and the green light next to **Adm Misc** *becomes steady.*

3. Foreach day of the week in turn, set the time of day when you want Night Service to go on automatically. You must perform both steps a. and b. for each day. If you want Night Service to stay on for a full day, such as a Saturday or a Sunday, don't set a start time for that day.

   a. Dial the 5-character code, as shown below, of the day of the week for which you're setting a time, then go on to step b.

      Sunday = #3110   Wednesday = #3113   Friday = #3115
      Monday = #3111   Thursday = #3114   Saturday = #3116
      Tuesday = #3112

   b. Perform one of the following operations:

      • To set or change the time that Night Service starts on the day dialed, dial two digits for the hour and two digits for the minute, in the 24-hour military format.

        For example, if you want Night Service to go on at 5:30 pm., dial 1730.

      • To remove the existing autotmatic start time for the day dialed, touch **Drop.** Once you remove this setting, Night Service will have to be turned on and off manually if you want to use it on the day of the week dialed.

4. For each day of the week in turn, set the time of day when you want Night Service to go off automatically. You must perform both steps a. and b. for each day. If you want Night Service to stay on for a full day, such as a Saturday or a Sunday, don't administer a stop time for that day.

   a. Dial the 5-character code, as shown below, of the day of the week for which you're setting a time, then go on to step b.

      Sunday = #3120   Wednesday = #3123   Friday = #3125
      Monday = #3121   Thursday = #3124   Saturday = # 3126
      Tuesday = #3122

   b. Perform one of the following operations:

      • To set or change the time Night Service goes off on the day dialed, dial two digits for the hour and two digits for the minute, in the 24-hour military format.

        For example, if you want Night Service to go off at 8:00 a.m., dial 0800.

      • To remove the existing automatic stop time for the day dialed, touch **Drop.** Once you remove this setting, Night Service must be turned on and off manually if you want to use it on the day of the week dialed.

5. If you have a printer and want to see a list of the times you've set for Night Service to go on and off, go on to step 7. If you don't need to see a printout and are ready to start automatic operation of Night Service at this time, go on to step 6.

6. Start the automatic operation of Night Service by dialing the 4-character code #313 and the number of the current day of the week (Sunday is 0; Saturday is 6).

   For example, if today is Tuesday, you dial the 5-character code #3132 to activate Night Service with Time Set.

   Go on to step 8.

7. To get a printout of the Night Service Information Report, which lists the times Night Service is set to go on and off each day of the week, dial the 4-character code #907.

   The green light next to **Adm Misc** *flashes. When the printout is completed, you hear a beep and the green light next to* **Adm Misc** *becomes steady.*

   Don't go on to step 8 until you hear a beep or you will get an incomplete printout. Wait to remove your printout until you have completed step 8 or your page alignments will be affected.

8. Touch **Adm Misc.**
   The lights next to the administration buttons flash again.

9. Continue to administer your system, or leave administration mode by following the boxed instructions on page 28.

Activating and Suspending Enhanced Night Service With Time Set

Once you've set the times when you want the system to turn Night Service on and off each day, you can enter administration mode and activate or suspend Night Service with Time Set to suit the operating schedule of your business. Follow the procedure below to put Night Service with Time Set in place or to remove it temporarily.

1. If you haven't already done so, enter administration mode by following the boxed instructions on page 28.

2. Touch **Adm Misc.**

   The lights next to the administration mode buttons stop flashing, and the gren light next to **Adm Misc** *becomes steady.*

3. To change the status of Night Service with Time Set, perform one of the operations shown below. Keep in mind that if you set or change the current day of the week while Night Service is on, it will go off.

   • To activate timer-controlled operation of Night Service, dial the 5-character code shown below for the current day of the week.

Sunday = #3130	Wednesday = #3133	Friday = #3135
Monday = #3131	Thursday = #3134	Saturday = #3136
Tuesday = #3132		

   • To suspend timer-controlled operation of Night Service, dial the 5-character code #3139

   If you suspend Night Service with Time Set, you must turn Night Service on and off manually. To reestablish timer control of Night Service, just follow the instructions given above for activating Night Service with Time Set.

4. Touch **Adm Misc.**
   The lights next to the administration buttons flash again.

5. Continue to administer your system, or leave administration mode by following the boxed instructions on page 28.

Activating and Deactivating Enhanced Night Service at the Attendant Console

To activate or deactivate Night Service manually, put the administrator/attendant console in the attendant mode, following the boxed instructions for leaving administration mode given on page 28, then perform one of these operations:

- To activate Night Service without Outward Restriction, touch **Night Service.**

   The *green light next to the button goes on.*

- To deactivate Night Service without Outward Restriction, touch **Night Service.**
   The green light next to the button goes off.

- To activate Night Service with Outward Restriction,

   a. Touch **Night Service.**

      The green light next to the button flashes.

   b. Dial the password.

      The green light becomes steady

      If you don't enter the password within one minute or if you make a mistake dialing the password, the green light goes out and Night Service remains off. If this happens, just perform both steps again.

- To deactivate **Night Service** with Outward Restriction,

   a. Touch **Night Service.**

      The green light next to the button flashes.

   b. Dial the password.

      The green light goes off.

      If you don't enter the password within one minute or if you make a mistake dialing the password, the green light becomes steady and Night Service remains on. If this happens, just perform both steps again.

PROGRAMMING SYSTEM SPEED DIAL CODES

You can assign System Speed Dial codes to selected telephone numbers and store them in your system so that people can reach the numbers by dialing the abbreviated codes. Before programming System Speed Dial codes, please read the following information and fill out the System Speed Dial Directory in the Appendix.

System Speed Dial codes may be unmarked or marked. Marked codes are very useful for alternate long distance company numbers, access codes, and other numbers you may not want everyone in your business to know.

- When a person uses an *unmarked* System Speed Dial code to make a call on a restricted voice terminal, the telephone number the code represents is subject to the same outward and toll restrictions as a normally dialed number. Also, if your system has Station Message Detail Recording, the phone number represented by the System Speed Dial code, not the code itself, is listed in the "Number Dialed" field of the SMDR report [see "Administering SMDR (Station Message Detail Recording) Options", page 99].

- If a person makes a call using a *marked System* Speed Dial code, however, the restrictions applied to the voice terminal do not apply, unless the voice terminal is outward-restricted without *any* allowed lists. An outward-restricted voice terminal with an empty allowed list assigned to it *can* be used to dial a marked System Speed Dial code. If the caller uses a marked System Speed Dial Code, the phone number dialed is not recorded by SMDR. Instead, the System Speed Dial code (for example, #63) is printed. The use of marked codes preserves the confidentiality of access codes and account numbers.

Follow the procedure below to assign System Speed Dial Codes.

1. If you have not already done so, enter administration mode by following the boxed instructions on page 28.

2. Touch **Conference.**

   The red light next to **Adm Tel** *goes on.*

3. Dial 0.

4. Dial the 3-character code (#60 through #99) that you want to assign to the telephone number.

5. If you ae storing a marked Speed Dial code, dial * after dialing the Speed Dial code.

6. Dial the telephone number. A number for a marked Speed Dial code can have a maximum of 39 characters; a number for an unmarked Speed Dial code can have up to 40 characters. These characters can include **Hold** (Pause) for a pause, **Drop** (Stop) for a stop, **Transfer** for Touch-Tone enable, and **Recall,** for a switchhook flash.

7. Repeat steps 4 through 6 for each System Dial code you want to assign.

8. Touch **Conference** twice.

9. If you have a printer connected to your system, you can follow the procedure below to get a printout of your System Speed Dial code numbers. An example of a portion of this type of printout appears on page 98.

   a. Touch **Adm Misc.**

      The lights next to the administration mode buttons stop flashing, and the green light next to **Adm Misc** *becomes steady.*

   b. Dial the 4-character code #901

      The green light next to **Adm Misc** *flashes.*

      All 40 codes (#60 through #99) are printed out, even if somes are not yet assigned to telephone numbers. If a number includes special characters, they will appear as t for Touch-Tone enable, s for stop, p for pause, or r for recall.

      When the printout is completed, you hear a beep and the green light next to **Adm Misc** *becomes steady.*

      Don't go on to step (c) until you hear the beep or you will get an incomplete printout. Don't remove your printout until you complete step (c) or your page alignments will be affected.

   c. Touch **Adm Misc.**
      The lights next to the administration mode buttons flash again.

10. Continue to administer your system, or leave administration mode following the boxed instructions on page 28.

A   SYSTEM SPEED DIAL. NUMBERS

A   Dial Code # 60:   12029555900
A   Dial Code # 61:   12023477878
A   Dial Code # 62:   12023330550
A   Dial Code # 63:   12025371119
A   Dial Code # 64:   18003237777
A   Dial Code # 65:   12126970838
A   Dial Code # 66:   12126055500
A   Dial Code # 67:   16077700119
A   Dial Code # 68:   12155471966p1577p3225
A   Dial Code # 69:   16053489904p9908s2508r6607
A   Dial Code # 70:   17138791100t5779p19556
A   Dial Code # 71:   17145913021pp5509t67110p2259
A   Dial Code # 72:   14049824164
A   Dial Code # 73:   *19047837434
A   Dial Code # 74:   *18089490815
A   Dial Code # 75:   6311000
A   Dial Code # 76:   16096465071
A   Dial Code # 77:   *16095965000ppp3359t667410p4395
A   Dial Code # 78:
A   Dial Code # 79:
A   Dial Code # 80:
A   Dial Code # 81:
A   Dial Code # 82:
A   Dial Code # 83:
A   Dial Code # 84:
A   Dial Code # 85:
A   Dial Code # 86:
A   Dial Code # 87:
A   Dial Code # 88:
A   Dial Code # 8?:
A   Dial Code # 90:
A   Dial Code # 91:
A   Dial Code # 92:
A   Dial Code # 93:
A   Dial Code # 94:
A   Dial Code # 95:
A   Dial Code # 96:
A   Dial Code # 97:
A   Dial Code # 98:
A   Dial Code # 99:

ADMINISTERING SMDR (STATION MESSAGE DETAIL RECORDING) OPTIONS

Station Message Detail Recording (SMDR) enables your business to keep records of incoming and outgoing calls. To use this feature, you need an SMDR Module in the control unit and a 1200-baud printer with an RS-232-C interface connector. Before administering SMDR, please read the following information.

- SMDR gives you information in a call report. This is a report of outgoing and incoming calls that is printed automatically as the calls occur. As the example below shows, the report includes the date and time of each call, its duration, the line and voice terminal on which the call is made, and, if the call is outgoing, the number dialed. The column titles are printed automatically when you turn the system on.

```
    DATE      TIME      CALLED  NUMBER   DUR.        LINE STN.          ACCOUNT
C 03/31/86  09:20         99574240   00:01:20     03   44         511670049
C 03/31/86  09:21          9578190   00:01:07     01   13
C 03/31/86  09:22        8909578193   00:00:59     04   44         561669442
C  03/31/86  09:26              IN   00:02:44     01   13
C 03/31/86  09:28          9577777   00:00:58     02   11
c 03/31/86  09:26              IN   00:02:50     03   14
```

The information in call reports helps you to develop records of your telephone traffic patterns and identify abuses in phone privileges so that you can use your system efficiently. If an account code is entered when the call is made, the call report prints it out for you. Account codes are helpful in billing customers and different departments of your company for telephone calls that should be charged to them.

- The system is set to record outgoing calls that last one minute or more; however, you can set the system for a longer or shorter minimum duration. The system is factory-set to record incoming as well as outgoing calls, but you can set the system to record outgoing calls only, if you prefer.

Follow the procedure below to administer SMDR. If you hear a beep after you dial an entry, try dialing it again. If you continue to get an error tone for an entry that you're sure is correct, the SMDR board may not be fully installed, and you'll need to consult your installer.

1. If you have not already done so, enter administration mode by following the boxed instructions on page 28.

2. Touch Adm Misc.

   The lights next to the administration mode buttons stop flashing, and the green light next to Adm Misc become steady.

3. To set the time, dial the 4-character code #300 plus two digits for hours and two digits for minutes in the 24- hour format.

   For example, if the time is 6:23 A.M., dial the 8-character code #3000623. If the time is 6:23 P.M., dial the 8-character code #3001823

   NOTE: If you change the time etting for SMDR while Night Service is in effect, Night Service will go off. You must reactivate it by following the instructions on page 95

4. To set the date, dial the 4-character code #301 and then dial two digits for the month, two digits for the day, and two digits for the year.

   For example, if the date is March 15, 1995, dial the 10-character code #301031585.

5. To specify minimum length of more than 1 minute for SMDR calls, dial the 4-character code #390 and then dial two digits for minutes.

   For example, if you want to specify a minimum lenght of 2 minutes, dial the 6-character code #39002. To specify a minimum of 0 minutes, the only minimum lenght shorter than 1 minute that the system can set, dial the 6-character code #39000.

6. To specify SMDR for incoming calls, dial one of the following code:

   If you want incoming calls as well as outgoing calls printed, dial the 5-character code #3911.

   If you want only outgoing calls printed, dial 5-character code #3910.

7. You may want to verify that SMDR is administered the way you want it. A typical printout of SMDR options is shown below. To get a printout of the SMDR options dial the 4-character code #905 or the 8-character code #390#900.

   The green light next to Adm Misc flashes.

   When the printout is completed, a beep sounds and the green light next to **Adm Misc** becomes steady.

   Don't go on to step 8 until you hear the beep, or you will get an incomplete printout. Don't remove your printout until you have completed step 8 or your page alignments will be affected.

8. Touch **Adm Misc.**

   The lights next to the administration mode buttons flash again.

9. Continue to administer your system, or leave administration mode by following the boxed instructions on page 28.

A SMDR OPTIONS

A SMDR Incoming Calls Recorded: YES
A SMDR Minimum Call Length: 00 minutes

TYPICAL PRINTOUT OF SMDR OPTIONS

Resetting SMDR

MERLIN systems are factory-set to activate SMDR automatically as soon as you enter the current time and date and any optional settings you need, then turn your printer on. If this does not happen or if your call reports do not print out correctly, you may need to perform the administration step shown below to activate or reactivate SMDR.

1. If you have not already done so, enter administration mode by following boxed instructions on page 28.

2. Touch **Adm Misc.**

   *The lights next to the administration mode buttons stop flashing, and the green light next to **Adm Misc** becomes steady.*

3. Dial the 5-character code #3160.

4. Touch **Adm Misc.**

   The lights next to the administration mode buttons flash again.

5. Continue to administer your system, or leave administration mode by following the boxed instructions on page 28.

Setting Your Printer to Scroll to the Top of the Page

Normally, your printer scrolls to the top of the next page and prints a new header when it completes a report. If the heading is being printed in the middle of the page, reset the printer by following the procedure below.

1. Turn off the printer and scroll the paper to the top of the next page.

2. Turn the printer on.

3. If you haven't already done so, enter administration mode by following the boxed instructions on page 28.

4. Touch **Adm Misc.**

   *The lights next to the administration mode buttons stop flashing, and the green light next to **Adm Misc** becomes steady.*

5. Dial the 4-character code #399.

6. Touch **Adm Misc.**

   The lights next to the administration mode buttons flash again.

7. Leave administration mode by following the boxed instructions on page 28.

SETTING THE RETURN INTERVAL FOR TRANSFERRED CALLS

When your system is installed, it is set up so that a call that is transferred from one voice terminal to another rings four times at the second voice terminal. Then, if nobody answers, the call continues to ring at this voice terminal and also begins to ring again at the voice terminal from which it was transferred. If you want, you can vary the number of times that transferred calls ring to suit the needs of your particular business.

For example, if your voice terminals serve large areas or if employees cannot stop their work immediately to answer calls, you may want to provide as many as nine rings before a transferred call is returned. On the other hand, if you prefer to minimize ringing at voice terminals that are unattended or in public places, you can set the return interval for one or two rings. You can also set your system not to return transferred calls at all.

Follow the procedure below to set the Transfer Return interval.

1. If you have not already done so, enter administration mode by following the boxed instructions on page 28

2. Touch **Adm Misc.**

   The lights next to the administration mode buttons stop flashing, and the green light next to **Adm Misc** *becomes steady.*

3. Dial the 4-character code #306.

4. Dial a number from 1 through 9 to indicate how many rings should occur before the transferred call returns. If you do not want transferred call to return, dial 0.

5. If you have a printer, you can get a system Information Report that shows the number of times a transferred call rings before it returns to the original voice terminal. To make sure that the Transfer Return Interval is set as you want it, dial the 4-character code #905.

   The green light next to **Adm Misc** *flashes. When the printout is complete, you hear a beep and the green light next to* **Adm Misc** *becomes steady.*

   Don't go on to step 6 until you hear the beep or you will get an incomplete printout. Wait to remove your printout until you have completed step 6 or your page alignments will be affected.

6. Touch **Adm Misc.**

   The lights next to the administration mode buttons flash.

7. Continue to administer your system, or leave administration mode by following the boxed instructions on page 28.

SETTING THE DISCONNECT INTERVAL FOR HELD CALLS

If one of the following situations occurs repeatedly, the disconnect interval of your **MERLIN** system probably doesn't match the disconnect interval at your telephone company's central office:

- A caller waiting on hold is disconnected (interval is set too short)
- A caller waiting on hold hangs up, but the light next to that line button on voice terminals in your system continues to flash, indicating that there is still a call on hold (interval is set too long)

Telephone company central offices, use either a "short" (50 millisecond) or a "long" (450 milliseconds) disconnect open interval. Because most switching systems use a long interval, your **MERLIN** system comes set for a long interval as well. If your telephone company uses a short interval or if your **MERLIN** system has been reprogrammed, these disconnect intervals may differ. If so, you may encounter problems with held calls.

Follow the procedure below to change the disconnect interval of your **MERLIN** system to match the central office disconnect interval.

1. If you have not already done so, enter administration mode by following the boxed instructions on page 28

2. Touch **Adm Misc.**

    The lights next to the administration mode buttons stop flashing and the green light next to **Adm Misc** *becomes steady.*

3. Dial the 4-character code #303.

4. Touch eah line button to change its disconnect interval. Each touch of the button gives you one of the following codes:

    Steady green light on = line has long disconnect interval
    Green light off = line has short disconnect interval.

5. Touch **Adm Misc.**
    The lights next to the administration buttons flash.

7. Continue to administer your system, or leave administration mode by following the boxed instructions on page 28.

SETTING THE RECALL TIMER

With the MERLIN system, you touch **Recall** instead of using the switchhook flash (a brief press of the switchhook). Your **MERLIN** system is factory-set to keep the outside line open for 450 milliseconds when you touch **Recall.** You can make this interval shorter or longer if you encounter these situations in your business:

- If people press **Recall** and nothing happens, the interval is too short. Change it to 650 milliseconds.

- If people press **Recall** and the outside call is disconnected, the interval is too long. Change it to 350 milliseconds.

  NOTE: The **Recall** button cannot be used with outside calls if your system has Automatic Route Selection.

Follow the procedure below to change the **Recall** interval.

1. If you haven't done so already, enter administration mode by following the boxed instructions on page 28.

2. Touch **Adm Misc.**

   The lights next to the administration mode buttons stop flashing and the green light next to **Adm Misc** *becomes steady.*

3. Dial the approriate 5-character code for the time interval you prefer:

   - #3180 for 350 milliseconds

   - #3181 for 450 milliseconds

   - #3182 for 650 milliseconds

   - #3183 for 1 second

4. If you have a printer, you can verify that the delay is set correctly by checking your System Information Report. To get a printout, dial the 4-character code #905.

   The green light next to **Adm Misc** *flashes. When the printout is completed, you hear a beep and the green light next* to **Adm Misc** *becomes steady.*

   Don't go on to step 5 until you hear the beep or you'll get an incomplete printout. Wait to remove your printout until you've completed step 5 or your page alignments will be affected

5. Touch **Adm Misc.**

   The lights next to the administration button flash.

6. Continue to administer your system or leave administration mode by following the boxed instructions on page 28

Programming Voice Terminals for Office Priorities

Your system comes ready to use with certain custom features assigned to the voice terminals. The illustrations on pages 106 through 108 show these initial feature assignments for all voice terminals (except attendant consoles) in both square and pooled systems. (Initial feature assignments for attendant consoles appear on pages 129 and 130.) Initially, all button labels on voice terminals are blank, so make sure all the buttons on the voice terminals are properly labeled with any initial features retained and any additional features assigned. You may want to give each person in your business a copy of the Voice Terminal Configuration Form for his or her voice terminal.

The people in your business can customize their voice terminals by changing initial custom feature assignments to suit their needs. Alternatively, you can program individual voice terminals from the administrator/attendant console, using Centralized Voice Terminal Programming.

Most of the custom features are designed primarily for the convenience of the person using them, but some have a broader application because they affect the calling patterns of your business. These features include Automatic Line Selection, Programmable Line Ringing, Call Coverage, and Line Pickup. Because these features have a businesswide influence, you may want to assign them yourself or oversee their assignment.

This section begins with a discussion of how to use Centralized Voice Terminal Programming, followed by descriptions of the procedures listed in the chart below.

Program Voice Terminals for Office Priorities

- Assign an Automatic Line Selection sequence,
- Assign Programmable Line Ringing for incoming calls.
- Assign Cover buttons.
- Assign Line Pickup buttons.

Initial Feature Assignments for Nonattendant Voice Terminals with 1030 or 3070 Configuration in Standard Square Systems

34-Button

10-Button

5-Button

Button	Feature / Number
3	(blank)
2	(blank)
1	(blank)
Intercom-Voice	
Intercom-Ring	

Button	Feature / Number
8	Page
7	Attendant (0)
6	Do Not Disturb
5	Privacy ★
4	(blank)

9 †	20
10	21
11	22
12	23
13	24
14	25
15	26
16	27
17	28
18	29
19 Saved Number	30
Last Number	

★ The system automatically assigns your first eight lines to positions above the dial pad. If you have fewer than eight lines, the feature shown on the left of each of these buttons is assigned.

† If you have more than eight lines, you must assign them to the buttons to the right of the dial pad. The numbers in the lower right-hand corner of each button indicate the order in which lines are assigned. If you don't use a button for a line, you can program a feature on the button.

Initial Feature Assignments for Nonattendant Voice Terminals
with 1520 Configuration in Standard Square Systems

34-Button

10-Button

5-Button

3

8

9 *

2

7

10

1

6

11

Intercom-
Voice

5

12

Intercom-
Ring

4

13
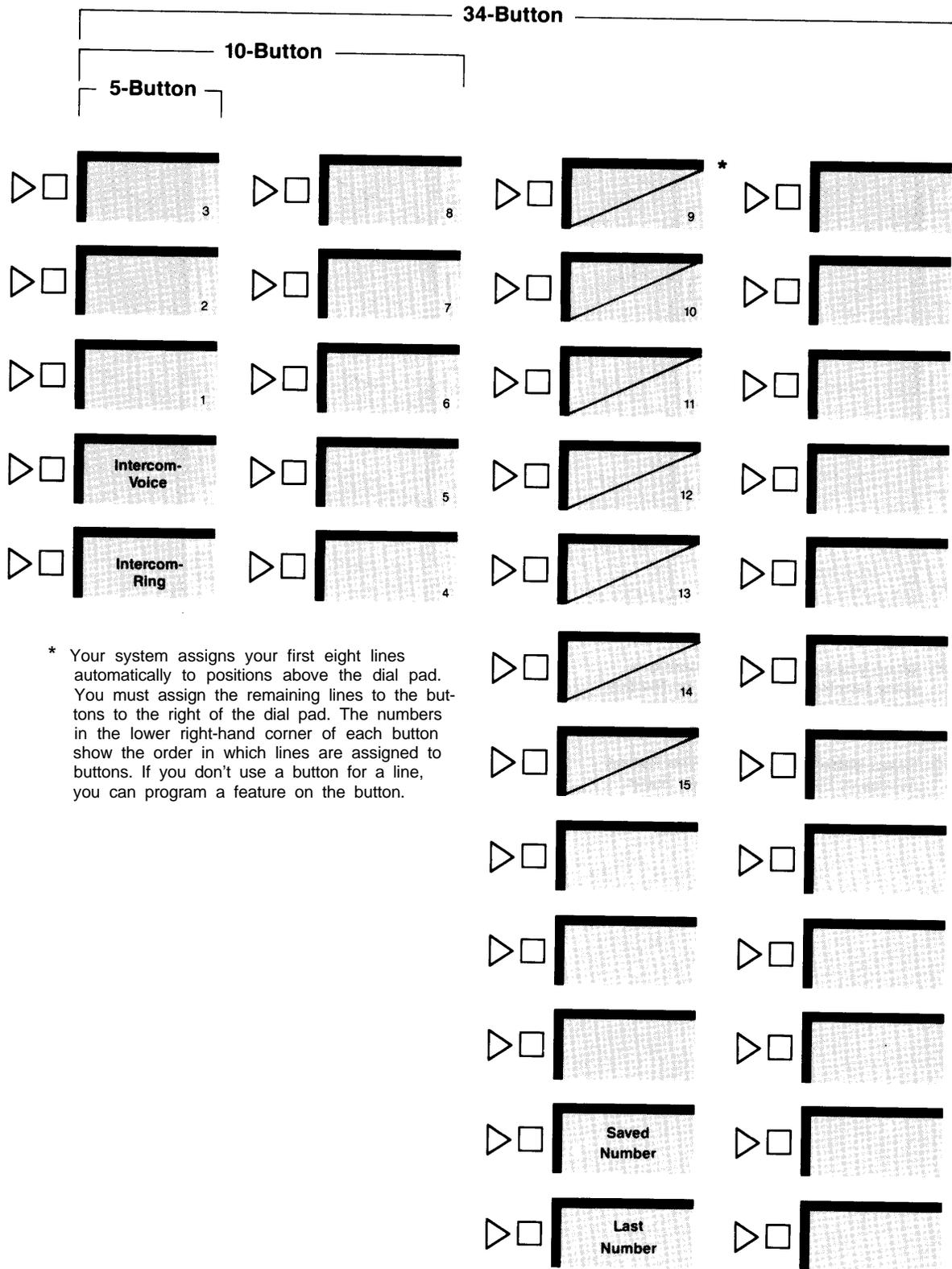
* Your system assigns your first eight lines
automatically to positions above the dial pad.
You must assign the remaining lines to the but-
tons to the right of the dial pad. The numbers
in the lower right-hand corner of each button
show the order in which lines are assigned to
buttons. If you don't use a button for a line,
you can program a feature on the button.

14

15

Saved
Number

Last
Number

Initial Feature Assignments for
Nonattendant Voice Terminals in Pooled Systems

34-Button

10-Button

5-Button

1 *	6 Page
Pool †	5 Attendant (0)
Pool †	4 Do Not Disturb
Intercom-Voice	3 Privacy
Intercom-Ring	2

* When you assign lines or pools to a voice terminal, they appear on the buttons in the order indicated by the numbers.

† These buttons may be used for Button Access or Dial Access to Line Pools.

USING CENTRALIZED VOICE TERMINAL PROGRAMMING

Using Centralized Voice Terminal Programming, you can assign features convenient-
ly to all voice terminals from the administrator/attendant console. You can use Cen-
tralized Voice Terminal Programming to assign any of the features described in this
section of the manual to individual voice terminals throughout your system.

1. If you have not already done so, enter administration mode by following
   the boxed instructions on page 28.

2. Touch **Conference.**

   The red light next to **Adm Tel** *goes on.*

3. Dial the intercom number or touch the Auto Intercom button of the voice
   terminal you want to program.

   The red light next to **Adm Tel** *goes out and a single tone sounds every 5
   seconds as a reminder that you are programming. This is similar to what you
   would hear if you were programming the voice terminal itself. The voice
   terminal you are programming cannot be used to make ore receive calls during
   this time, and callers get a busy signal.*

   If the voice terminal you want to program is busy, the red light next to **Adm Tel**
   and the green light next to the Auto Intercom button of the voice terminal flash
   alternately. You must wait for the voice terminal to become idle before
   continuing to step 4. If you prefer not to wait, you can touch **Conference** again and
   select another voice terminal to program, or touch **Conference** twice to terminate the
   programming procedure.

4. Program any features you wish to assign to the voice terminal.

5. To program another voice terminal, repeat steps 2 through 4.

6. Touch **Conference** twice.

7. Continue to administer your system, or leave administration mode by following the
   boxed instructions on page 28.

ASSIGNING AN AUTOMATIC LINE SELECTION SEQUENCE

Automatic Line Selection is a **MERLIN** system feature that gives you a free line whenever you pick up the handset. When a voice terminal is first installed, it automatically selects lines in the order in which they appear on the voice terminal. However, you can rearrange the Automatic Line Selection sequence if necessary. For each voice terminal you can specify which line the system gives you first and, if that line is busy, which line the system gives you second, and so on. A maximum of eight lines may be included in an Automatic Line Selection sequence. Before assigning an Automatic Line Selection sequence, please read the following information.

- When you program several features at once, Automatic Line Selection must be the first feature you program. If the voice terminal is already in programming mode, slide the T/P switch to the center position, and then back to P.

- If your system has Dial Access to Line Pools, any voice terminal with an Automatic Tip/Ring Interface (ATRI), a Manual Tip/Ring Interface (MTRI), or a General Purpose Adapter (GPA), *must* have a personal line or a button assigned to a particular pool in order to originate a call from the device. This button should be the first entry in the Automatic Line Selection sequence described below.

- Do not place both intercom and outside lines in the Automatic Line Selection sequence for any voice terminal.

- If all the outside lines on a voice terminal are assigned to pool buttons, or if they are assigned to separate buttons but are interchangeable with one another (for example, all regular telephone company lines), you will probably prefer to program this feature. But if a voice terminal has two or more different types of lines, such as a line pool plus a private line or a WATS line, it may not be wise to program the order for Automatic Line Selection. Users will probably prefer to select the most appropriate line or line pool for the type of call, either themselves or with Automatic Route Selection.

Use Centralized Voice Terminal Programming or follow the procedure below to assign an Automatic Line Selection sequence.

1. Go to the voice terminal you want to program.

2. Slide the T/P switch on the left side of the voice terminal to **P**

   The voice terminal rings every 5 seconds to remind you it is in program mode.

3. Dial**.

4. Touch the individual line and line pool buttons in the order you want them to be selected.

5. If you have more options to program on this voice terminal, you can do so. Otherwise, slide the T/P switch to the center position to return to normal operation.

ASSIGNING PROGRAMMABLE LINE RINGING FOR INCOMING CALLS

You can customize the line buttons, pool buttons, and Cover buttons on your voice terminals so that calls coming in on those lines ring in one of three different ways: immediate ring, delayed ring, or no ring.

All lines at attendant consoles are set to ring immediately. When your system is first installed, all lines above the dial pad on nonattendant consoles are set to "immediate ring" except for lines assigned to the pool buttons in a pooled system. These lines are initially set to "no ring". Lines to the right of the dial pad are also set to "no ring" initially. The ringing assignment for outside calls in no way affects internal calls, such as intercom and transferred calls. If you are assigning line ringing for the first time, please read the following information.

- **Immediate ring.** Assign immediate ringing of a line to anyone responsible for answering that line first (for example, the attendant, a secretary, or a receptionist). This option is also useful for personal lines that should not be screened or for people who answer their own calls.

- **Delayed ring.** Delayed ring provides backup coverage on shared lines. The voice terminal assigned delayed ringing for a certain line does not ring unless someone else fails to answer after two rings. Assign delayed ringing of a line to anyone who is responsible for answering a shared line if someone else doesn't pick it up, such as a group secretary. Delayed ring may also be useful on an attendant console that backs up your primary attendant console. (If you want to provide coverage for inside or transferred calls, or for lines that are not shared, use the Cover feature described on page 112.)

- **No ring.** Assign no ring to lines on a voice terminal that are always screened first at another voice terminal, such as pooled lines or someone's lines that ring first at a secretary's voice terminal. This option is also appropriate for voice terminals with no regular users or voice terminals in public places such as lobbies or conference rooms. When you assign no ring to an individual line, the green light next to the line button still flashes when a call comes in on the line. However, if you assign no ring to a pool button, the green light next to the button does not flash.

Use Centralized Voice Terminal Programming to assign line ringing from the administrator/attendant console, or follow the procedure below.

1. Go to the voice terminal you want to program.

2. Slide the T/P switch on the left side of the voice terminal to **P.**

   The voice terminal rings every 5 seconds to remind you it is in program mode.

3. Touch the outside line button that you want to program until the red light beside it shows the appropriate code. Each succesive touch gives you one of these codes:

   > *Steady red light on = immediate ring*
   > *Flashing red light = delayed ring*
   > *Red light off = no ring*

4. Repeat step 3 for each line that you want to program.

5. If you have more options to program on this voice terminal, you can do so. Otherwise, slide the T/P switch to the center position to return to normal operation.

ASSIGNING COVER BUTTONS

The Call Coverage feature is useful for people who cover calls for others with whom they do not share lines. A Cover button permits coverage of all lines on a voice terminal regardless of whether the covering voice terminal shares lines with the covered voice terminal. The lights next to a Cover button work like those next to any line button, but you cannot use a Cover button to make a call. If you are assigning Cover buttons for the first time, please read the following information.

- A Cover button may be programmed for primary or secondary coverage. Suppose that you assign Jim primary coverage for Susan's voice terminal (see diagram below). Then each time a call rings at Susan's voice terminal it also rings at Jim's voice terminal. To make certain that Susan's calls are answered when both Susan and Jim are away from their desks, you assign secondary coverage with delayed ring for Susan's voice terminal to Bill. This means that when a call comes in for Susan, it rings at Susan's voice terminal and at Jim's voice terminal, then starts ringing at Bill's voice terminal on the fifth ring. Jim's calls do not ring at Bill's voice terminal, however, unless you assign Call Coverage for Jim's calls to Bill. With this system, up to six people can have Cover buttons for a single voice terminal.

Same call rings at Jim's voice terminal.

If call isn't answered at Susan's or Jim's voice terminal after 4 rings, it begins to ring at Bill's voice terminal as well.

Susan

Jim

Bill

Jim provides primary covers-ge for Susan.

Bill provides secondary coverage for Susan.
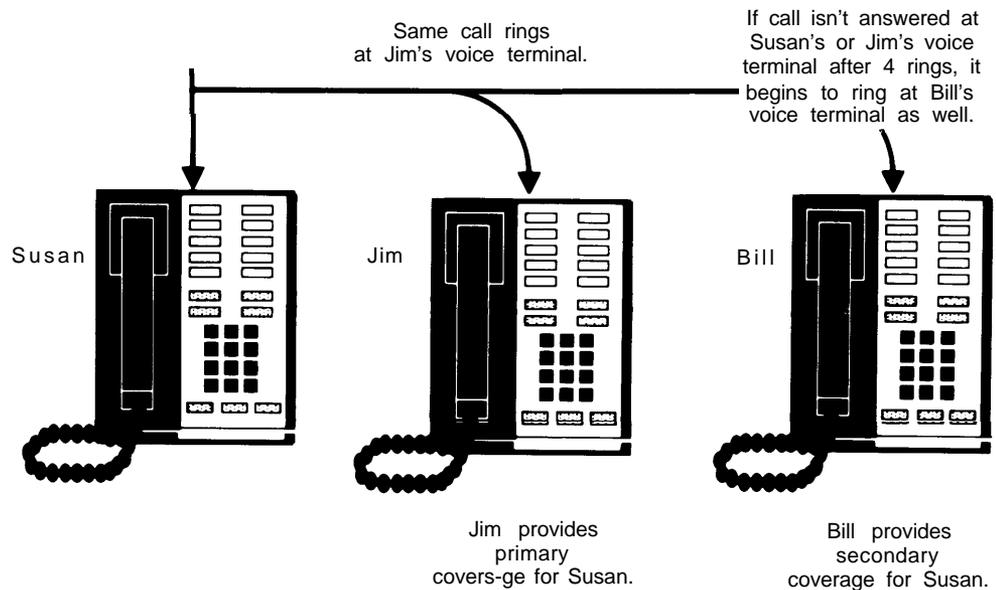
PRIMARY AND SECONDARY COVERAGE

- You will probably always want to program a delayed ring for the voice terminal providing secondary coverage. You can program the voice terminal providing primary coverage with an immediate or a delayed ring, depending on the users' preferences. Immediate and delayed ring are described on page 111.

- Assign *primary* coverage to someone who must screen a coworker's calls but does not share all lines with that person. You can also assign primary coverage to someone who must cover a coworker's intercom calls. A secretary who answers someone's calls, for example, would be assigned primary coverage of that person's voice terminal. You may program a primary Cover button for immediate ring, delayed ring, or no ring, depending upon the situation and personal preferences.

- Assign *secondary* coverage to anyone who is a second backup for the covered voice terminal, such as a personal secretary who covers calls for a group secretary when the group secretary doesn't answer calls for which he or she has a primary Cover button. In most cases, a secondary Cover button would be programmed for delayed ring.

- If all calls in your business come in through the attendant console, a Cover button for the console set to no ring is useful for people who sometimes work during times when the attendant is not on duty. In this way, they can tell by the flashing green light that someone is calling, and they can answer the call if they want to, but do not have to be bothered by ringing during regular business hours.

Use Centralized Voice Terminal Programming or follow the procedure below to assign Cover buttons.
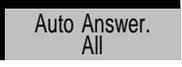
1. Go to the voice terminal you want to program.

2. Label the Cover button with the name of the person whose calls will be covered (for example, "Cover Susan").

3. Slide the T/P switch on the left side of the voice terminal to **P.**

   The voice terminal rings every 5 seconds to remind you it is in program mode.

4. Touch the button you want to be the Cover button. You must use a programmable button with lights, and you may program no more than six cover buttons on any one voice terminal.

5. Dial ∗ 4 to program primary coverage, or dial *5 to program secondary coverage.

6. Dial the 2-digit intercom number of the voice terminal you want the button to cover.

7. Cover buttons are set initially for no ring. To select the preferred line ringing option, touch the Cover button until the red light beside it shows the appropriate code. Each successive touch gives you one of the following code:

   Steady red light on = immediate ring
   Flashing red light = delayed ring
   Red light off = no ring

   If the green light beside the Cover button flashes and you hear a beep, you have not performed the procedure correctly. Repeat steps 4 throug 7.

8. If you have more options to program on this voice terminal, you can do so. Otherwise, slide the T/P switch to the center position to return to normal operation.

ASSIGNING LINE PICKUP BUTTONS

The Line Pickup feature allows a person to pick up a ringing, parked, or held call on a specific line at any voice terminal. This feature is especially convenient with parked or held calls. The attendant or another voice terminal user simply announces the call by intercom or by page, specifying the line number to be picked up. The person being called does not need to know where the call was received in order to pick it up. It is a good idea to number the lines on the attendant console if you're going to use Line Pickup.

This feature offers voice terminal users three options:

- Program individual buttons to pick up specific lines.
- Program one Line Pickup button and use it with 2-digit line codes to pick up lines.
- Dial ∗ 8 and a 2-digit line code to pick up a line.

You must program voice terminals for the first and second options, in which buttons are used. No programming is required for the third option. When you have determined which option to assign to a particular voice terminal, use Centralized Voice Terminal Programming to program the voice terminal from the administrator/ attendant console or follow the procedure below.

1. Go to the voice terminal that you want to program.

2. Slide the T/P switch on the left side of the voice terminal to **P**

   The voice terminal rings every 5 seconds to remind you it is in program mode.

3. Touch the button that you want to program.

4. Dial ∗ 84.

5. If you want to program the Line Pickup button for a specific line, dial the line code shown in the list below for that line. If you plan to have only one Line Pickup button that will be used with various line codes as required to pickup calls, go directly to step 6.

6. If you have more options to program on this voice terminal, you can do so. Otherwise, slide the T/P switch to the center position to return to normat operation.

Control Unit Jack Number	Line Code Number	Control Unit Jack Number	Line Code Number
A0	01	DO	**16**
AI	02	D1	17
A2	03	D2	18
A3	04	D3	19
A4	05	D4	20
B0	06	E0	21
B1	07	EI	22
B2	08	E2	23
B3	09	E3	24
B4	10	E4	25
co	11	F0	26
c I	12	F1	27
C2	13	F2	28
C3	14	F3	29
C4	15	F4	30

Programming Voice Terminals for Personal Priorities

By programming their own voice terminals, people can change the features on all but the fixed feature buttons and the line, pool, and intercom buttons. This allows almost everyone to have features that provide personal convenience, such as an Outside Auto Dial button for calling home. Whether you assign the features or someone else does, be sure the buttons are labeled with the proper feature names. The chart below lists the procedures presented in this section.

Program Voice Terminals for Personal Priorities

- Assign features to programmable buttons.
- Assign Personal Speed Dial codes to 5- and 10-button voice terminals.
- Use special characters in programmed dialing sequences.
- Select a Personalized Ring.
- Program Voice Announcement Disable.
- Program Simultaneous Voice and Data Calls.

ASSIGNING FEATURES TO PROGRAMMABLE BUTTONS

As system administrator, you may have to decide which custom features certain voice terminals should have, taking into consideration the individual's needs and the capabilities of the voice terminal. The Feature Programming Chart on pages 117 through 120 lists the programming codes needed to assign the features, and the initial feature assignments diagrams, pages 106 through 108, show which features are automatically assigned to the voice terminals. Before assigning features, please read the following information.

- Certain features require buttons with lights to indicate if the feature is on or off. These features are Do Not Disturb, Call Coverage, Privacy, Message, Coverage Inhibit, Auto Answer-Intercom, Auto Answer-All, and Account Number Entry.
- A button with lights is recommended, but not required, for Auto Intercom, Loudspeaker Page, and Manual Signaling.
- Features that require optional equipment are Loudspeaker Page, which may require a button, and Auto Answer-Intercom and Auto Answer-All, which always require a button.

Follow the procedure below to assign features at a voice terminal. If you prefer to program the voice terminal from the attendant's console, follow the procedure for Centralized Voice Terminal Programming on page 109.

1. Go to the voice terminal you want to program.

2. Label the button with the feature name,

3. Slide the T/P switch on the left side of the voice terminal to **P.**

   The voice terminal rings every 5 security to remind you it is in program mode.

4. Touch the button that you want to represent the feature.

5. Dial the appropriate feature programming code and additional numbers or characters, if required, from the Feature Programming Chart, pages 117 through 120. If you make a mistake, touch the button again and redial the information.

6. If you have more features to program on the voice terminal, you can do so by repeating steps 4 and 5 Otherwise, slide the T/P switch to the center position to return to normal operation.

Feature Programming Chart

Use the chart below as a quick reference when you want to program features onto your voice terminal.

Feature Name (Suggested Button Label)	Description	Programming Code	Notes
QUICK DIALING FEATURES			
Outside Auto Dial Name or Location	Dial outside telephone numbers or PBX/Centrex feature codes with one touch.	• Dial ✶ 90. • Dial an outside number, an account number, or a PBX, Centrex, or Custom Calling feature code.	
Auto Intercom Name or Location	Place ringing intercom calls with one touch.	• Dial ✶ 91. • Dial a **MERLIN** system intercom number.	A button with lights is recommended but not required. The green light goes on when the other person is using his or her voice terminal or is using the Do Not Disturb feature. You can use an Auto intercom button whenever instructions call for dialing an intercom number. You cannot program both Auto intercom and Manual Signaling for the same voice terminal.
Manual Signaling Signal Name	Generate a beep at another person's voice terminal.	• Dial ✶ 6. • Dial the intercom number for the person you want to signal.	Use Manual Signaling to contact someone with a prearranged signal. If you program this feature on a button with lights, the green light goes on when the other person is using his or her voice terminal or is using the Do Not Disturb feature. You cannot program Manual Signaling and Auto Intercom for the same voice terminal.
Personal Speed Dial (uses a dial code instead of a button)	Assign a 3-character code (#01 through #22) to each telephone number you call frequently.	• Dial a Personal Speed Dial code (#01 through #22). • Dial ✶ 90. • Dial an outside telephone number, a PBX, Centrex, or Custom Calling feature code, or an account number.	For 5-and 10-button voice terminals only.
System Speed Dial Name of Location	If you programmed System Speed Dial codes for frequently dialed numbers, you can assign any of them to buttons for one-touch dialing.	• Dial ✶ 95. • Dial a System Speed Dial code (#60 through #99).	You assign System Speed Dial codes to frequently called numbers; then everyone connected to your **MERLIN** system can use those codes for abbreviated dialing, It is not necessary to assign these codes to buttons.
Saved Number Redial Save Number	Save a number indefinitely for later redialing.	• Dial ✶ 74.	If you have a 5- or 10-button voice terminal, you can dial a code to use this feature instead of using a button
Last Number Redial Last Number	Redial the number you dialed most recently.	• Dial ✶ 73.	If you have a 5- or 10-button voice terminal, you can dial a code to use this feature instead of using a button.

Feature Programming Chart (continued)

Feature Name (Suggested Button Label)	Description	Programming Code	Notes
PAGING FEATURES			
Call Distribution — Group Name	Place an intercom call to any available group member	• Dial ✶ 91 + code: 850 for group 1 851 group 2 852 group 3 853 group 4 854 group 5 855 group 6	You designate the groups. Make available a list of the people assigned to individual groups.
Loudspeaker Page — Ldsp. Page All	Use your business' loud-speaker paging system to make announcements to all or some of the people in your organization.	• Dial ✶ 91. • Dial 80 for all zones 81 zone 1 82 zone 2 83 zone 3	Used only with loudspeaker paging equipment
Group Page — Group Page 1	Make a voice announce-ment through a group of voice terminal speakers in your **MERLIN** system.	• Dial ✶ 91. • Dial 841 for group 1 842 group 2 843 group 3 844 group 4 845 group 5 846 group 6 847 group 7	You designate the groups. Make available a list of the people assigned to individual groups.
AUTO ANSWER FEATURES			
Auto Answer-All — Auto Answer. All	Have a modem or answer-ing machine go on automatically whenever a call rings at your voice terminal.	• Dial ✶ 75.	Used only with a modem or answering machine. Requires a button with lights and a General Purpose Adapter.
Auto Answer-intercom — Auto Answer intercom	Have a Hands-Free Unit goon automatically when you receive intercom calls.	• Dial ✶ 70.	Used only with a Hands-Free Unit. Requires a button with lights.
CALL COVERAGE FEATURES			
Primary Coverage — Cover John	Receive calls for someone who is unable to answer his or her voice terminal.	• Dial ✶ 4. • Dial the intercom number of the person you want to cover.	Requires a button with lights. You can program up to six dif-ferent Cover buttons.
Cover John	Receive calls, after a delay, as a backup for a co-worker who covers some-one else's calls.	• Dial ✶ 5. • Dial the intercom number of the person you want to cover.	Requires a button with lights. You can program up to six dif-ferent Cover buttons.
Coverage Inhibit	Temporarily deactivate the Cover feature to make sure your calls don't ring at someone else's voice terminal.	• Dial ✶ 77.	Requires a button with lights.
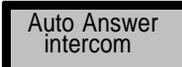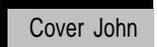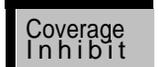
Feature Programming Chart (continued)

Feature Name (Suggested Button Label)	Description	Programming Code	Notes
OTHER FEATURES			
Privacy **Privacy**	Prevent people from joining your calls.	• Dial ✳ 72.	Needed only if you share lines with other people. Requires a button with lights.
Do Not Disturb Do Not Disturb	Temporarily prevent calls from ringing at your voice terminal.	• Dial ✳ 71.	Requires a button with lights. Does not affect calls transferred from a covered voice terminal.
Touch-Tone Enable Touch-Tone Enable	If your system has lines that carry rotary pulse signals, you can switch to Touch-Tone signals to use services such as alternate long distance or credit card authorization.	• Dial ✳ 76.	
Account Number Entry Account Number	Associate an account number with incoming or outgoing calls.	• Dial ✳ 82.	Requires a button with lights.
Call Park Call Park	"Park" a call at your voice terminal for someone to pick up from any voice terminal in your **MERLIN**	• Dial ✳ 86.	Use this feature when you aren't sure where to transfer a call. You can also use a dial sequence to activate this feature if you don't want to use a button. See page 137.
Call Pickup Call Pickup	Pick up a call that is ringing, parked, or held at another **MERLIN** system voice terminal.	• Dial ✳ 85.	You can also dial a code to use this feature.
Line Pickup Line Pickup	Pick up a line that is ringing, held, or parked anywhere in the system.	• Dial ✳ 84 or ✳ 84 and a 2-digit line code.	The 2-digit line codes are listed on page 114.
Message Message	Have your **MERLIN** system attendant notify you when you have a message waiting.	• Dial ✳ 98.	For 5-button voice terminals only.
Simultaneous Voice and Data Calls	Place a telephone call and a data call at the same time.	• Touch **Message.**	Light next to button shows whether simultaneous voice and data calls are permitted. *Green on* = *simultaneous voice and data calls permitted* *Green off* = *simultaneous voice and data calls are not permitted*
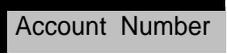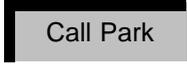
Feature Programming Chart (continued)

Feature Name (Suggested Button Label)	Description	Programming Code	Notes
OTHER FEATURES (continued)			
Notify-Send Send John	Notify someone that you need to talk with him or her.	• Dial ✶ 87 and a 2-digit intercom number.	Requires a button with lights. The person you want to notify must have programmed a Notify-Receive button with your intercom number.
Notify-Receive Receive Susan	Receive notification that someone needs to talk to you	• Dial ✶ 88 and a 2-digit intercom number.	Requires a button with lights. The person notifying you must have programmed a Notify-Send button with your intercom number.
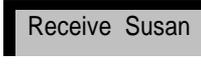
ASSIGNING PERSONAL SPEED DIAL CODES TO 5- AND 1O-BUTTON VOICE TERMINALS AND BASIC TELEPHONES

On 5- and 10-button voice terminals, you can program Personal Speed Dial codes instead of Outside Auto Dial buttons for frequently used numbers. You can also give basic telephones this capability, but only if you use Centralized Voice Terminal Programming. Use Centralized Voice Terminal Programming or follow the procedure below to program Personal Speed Dial codes.

1. Go to the voice terminal you want to program.

2. Slide the T/P switch on the left sid eof the voice terminal to **P.**

   The voice terminal rings every 5 seconds to remind you it is in program mode.

3. Dial the 3-character code you want to assign to the telephone number (available codes are #01 through #22)

4. Dial ∗ 90

5. Dial the telephone number (16-digit maximum). You can include the following special characters: **Hold** (Pause) for a pause, **Drop** (Stop) for a stop, **Transfer** for Touch-Tone Enable, and **Recall** for a switchhook flash.

6. Make a list of all Personal Speed Dial code numbers and the telephone numbers they represent.

7. If you have more Personal Speed Dial numbers to assign to this voice terminal, repeat steps 3 through 5. Otherwise, slide the T/P switch to the center position to return to normal operation.

USING SPECIAL CHARACTERS IN PROGRAMMED DIALING SEQUENCES

An Outside Auto Dial or Personal Speed Dial code can store up to 16 digits, including special characters. You use special characters when you need to program an automatic pause, stop, or switchhook flash (which means briefly depressing the switchhook) with the number. Before you program a special character into a sequence, please read the following information.

- If your **MERLIN** system works in combination with a PBX or Centrex system where you have to dial 9 to get an outside line, or if your system has Dial Access to Line Pools, you should program a pause after the 9 or access code in a programmed dialing sequence.

- When you use an alternate long distance service, you program one Outside Auto Dial button for the special service number and a separate Outside Auto Dial button for each person you use the service to call.

- When using an Outside Auto Dial button or a Personal Speed Dial code with a stop, resume the dialing sequence by touching the Outside Auto Dial button or dialing the Personal Speed Dial code again.

Now, use the sample procedures below as guidelines to program special characters into a dialing sequence.

1. Go to the voice terminal you want to program.

2. Label the button with the person's or service's name.

3. Slide the T/P switch on the left side of the voice terminal to *P.*
The voice terminal rings every 5 seconds to remind you it is in program mode.

4. Touch the button you have labeled for Outside Auto Dial.

Dial *90.

6. To program a pause (1.5 seconds) into a dialing sequence (for example, between an alternate long distance company telephone number and its access code):

   a. Dial 9 or another outside line access code.
   b. Touch **Hold** (Pause).
   c. Dial the outside number you want the button to represent.

7. To program a stop into a dialing sequence (for example, between a local telephone number and an alternate long distance authorization code):

   a. Dial the local telephone number (seven digits)
   b. Touch **Drop** (Stop).
   c. Dial the authorization code (five or six digits)

8. To program Touch-Tone Enable into a dialing sequence (for example, between a telephone number and a credit card authorization code):

   a. Dial the telephone number.
   b. Touch **Transfer.**
   c. Dial the credit card authorization code.

9. To program a switchhook flash into a dialing sequence (for example, for a Custom Calling, PBX, or Centrex code that calls for a switchhook flash):

   a. Touch **Recall.**
   b. Touch **Hold** (Pause).
   c. Dial the PBX or Centrex dial code sequence that accesses the feature you want to program.

10. To program a # onto a **MERLIN** system Outside Auto Dial button to access certain PBX or Centrex features:

   a. Touch the Outside Auto Dial button you want to program with a #.
   b. Dial the 5-character *90 ##.
   c. Dial the PBX or Centrex dial code sequence that accesses the feature you want to program.

11. If you have more options to program on this voice terminal, you can do so. Otherwise, slide the T/P switch to the center position to return to normal operation.

SELECTING A PERSONALIZED RING

The **MERLIN** system offers a choice of eight different ringing patterns for any voice terminal. This feature is particularly useful in offices where many people sit in the same room because it enables people to distinguish the ringing of their voice terminals from the ringing of others. The personalized part of the ring occurs at the end of the ringing pattern, so it does not interfere with the distinctive ringing patterns that signal whether a call is transferred, intercom, or outside call. Follow the procedure below to program a Personalized Ring.

1. Go to the voiuce terminal you want to program.

2. Slide the T/P switch on the left isde of the voice terminal *P.*

   The voice terminal rings every 5 seconds to remind you it is in program mode.

3. Touch **Speaker** repeatedly untio you hear the ring you want.

4. If you have more features to assign to this voice terminal, you can do so. Otherwise, slide the T/P switch to the center position to return to normal operation.

PROGRAMMING VOICE ANNOUNCEMENT DISABLE

When your system is installed, all voice terminals can receive either announced or ringing intercom calls. However, some people may not want their intercom calls signaled by a voice announcement. For some voice terminals, such as those in public locations, voice announcements may be impractical. Using Voice Announcement Disable, you can program voice terminals to block intercom voice announcements. As a result, all intercom calls to those voice terminals ring, even if the callers try to place an announced intercom call. Use Centralized Voice Terminal Programming or follow the procedure below to program this feature.

1. Go to the voice terminal you want to program.

2. Slide the T/P switch on the left side of the voice terminal to *P.*

   The voice terminal rings every 5 seconds to remind you it is in program mode.

3. Touch the Intercom-Voice button successively until the green light next to it shows the appropriate code. Each successive touch gives you one of these codes:

   > *Steady green light on = voice announcements permitted*
   > *Green light off = voice announcement blocked.*

4. If you have more features to program on this voice terminal, you can do so otherwise, slide the T/P switch to the center position to return to normal operation.

PROGRAMMING SIMULTANEOUS VOICE AND DATA CALLS

When a voice terminal in your system is connected to a General Purpose Adapter and a modem, it can link the user's computer terminal to a local or remote host computer. With the Simultaneous Voice and Data Call feature, the user can place or receive calls on his or her voice terminal without interrupting the exchange of data between the computer terminal and the host computer. Use Centralized Voice Terminal Programming or follow the procedure below to program this feature.

1. Go to the voice terminal you want to program.

2. Slide the T/P switch on the left side of the voice terminal to **P.**

   The voice terminal rings every 5 seconds to remind you it is in program mode.

3. Touch **Message** until the green light next to it shows the appropriate code. Each successive touch gives you one of these codes:

   Steady green light on = simultaneous voice and calls permitted
   Green light off = simultaneous voice and data calls not permitted.

4. If you have more features to program on this voice terminal, you can do so. Otherwise, slide the T/P switch to the center position to return to normal operation.

Special Information about Attendant Consoles

When the **MERLIN** system is installed, your attendant consoles come with features that are convenient for most businesses (see The Initial Feature Assignments Charts pages 129 and 130). The Attendant's Guide: Models 1030 and 3070 with Feature Module 5 describes all the attendant console features and how to use them.

Attendant consoles serve you best when they are customized to handle the calling patterns of your business. Procedures for assigning system options and individual features are the same for attendant consoles as for the other voice terminals in your system. Keep in mind, however, that attendant consoles always have a square line arrangement, even in pooled systems. Every line appears on a separate button.

PROGRAMMING TIPS FOR ATTENDANT CONSOLES

The attendant console for a small system should be a 34-button deluxe voice terminal, which has lights next to every button. The lights next to Auto Intercom buttons indicate which voice terminals are busy and which message lights are on.

Attendants in systems with a total of more than 30 lines and voice terminals will find an attendant console with Attendant Intercom Selector convenient. The system automatically assigns one of the Auto Intercom buttons on the Attendant Intercom Selector to every voice terminal in the system. These buttons allow the attendant to transfer calls easily, and the lights beside the buttons tell the attendant which voice terminals are busy and which message lights are on. On an economy attendant console, which doesn't have an Attendant Intercom Selector, Auto Intercom buttons aren't assigned automatically, but they can be programmed with the intercom numbers of selected voice terminals.

You probably want attendant lines to ring immediately when a call comes in, but there may be exceptions. For example, some people may not want their personal lines answered by anyone else. If you don't want the attendant to answer calls on certain lines, set those lines not to ring at the attendant consoles, or remove them entirely.

If you have more than one attendant, you can assign delayed ring to lines on one attendant console as a backup for the other.

Someone in your business may have a personal line that doesn't normally ring at the attendant's console. However, that person may want the attendant to answer calls on the personal line when he or she is out of the office. In that case, the attendant needs a Cover button for the voice terminal to which the personal line is assigned. (For more information about Cover buttons, see "Assigning Cover Buttons," page 112.) A Cover button is also necessary if the attendant is expected to cover intercom or transferred calls for anyone.

- A loudspeaker paging system or the Group Page feature makes it easy for an attendant to announce calls to people who are not always at the same location. You can set up the system so the attendant can page separate zones independently. For example, a paging system in a medical group shared by several doctors could be set up with one zone covering only those locations specific to a particular doctor, such as a consulting office, lab, and examining room. Similarly, the voice terminals in those same areas could makeup a "group" for Group Page. Then, when a call comes in, the attendant can park the call and page the person the call is for without bothering anyone else.

- You may want to change an attendant console to a nonattendant console if you need an additional voice terminal. Switches B through E on the Processor Module of the control unit represent attendant consoles with intercom numbers 11 through 14. To change the console's function, set the appropriate switch to Normal (up). Turn the power off and then on again, and administer the console as you would any nonattendant voice terminal.

   IMPORTANT Be aware that *when you change the setting of one of these switches, you erase all system line administration and voice terminal programming that is now in place for that voice terminal.*

NOTES ON PROGRAMMING AND USING ECONOMY ATTENDANT CONSOLES

. Auto Intercom buttons can be programmed on the economy attendant console for the attendant's use, although they won't function as Auto Intercom buttons if the console is put into administration mode.

. If your total number of lines and voice terminals doesn't exceed 30, the attendant can have an Auto Intercom button for each voice terminal in your system.

. If your total number of lines and voice terminals exceeds 30, the attendant won't have Auto Intercom buttons for some voice terminals in your system. The attendant designates one of these voice terminals by dialing its intercom number instead of touching its Auto Intercom button.

Initial Feature Assignments for Administrator/Attendant Console
for Small Systems* in Attendant Mode

34-Button Deluxe Voice Terminal

Intercom numbers

▷□ [A2]	▷□ [B2]	▷□ Intercom Auto Dial 19	▷□ Intercom Auto Dial 29
▷□ [A1]	▷□ [B1]	▷□ Intercom Auto Dial 18	▷□ Intercom Auto Dial 28
▷□ [A0]	▷□ [B0]	▷□ Intercom Auto Dial 17	▷□ Intercom Auto Dial 27
▷□ Intercom - Voice	▷□ [A4]	▷□ Intercom Auto Dial 16	▷□ Intercom Auto Dial 26
▷□ Intercom - Ring	▷□ [A3]	▷□ Intercom Auto Dial 15	▷□ Intercom Auto Dial 25
		▷□ Intercom Auto Dial 14	▷□ Intercom Auto Dial 24
		▷□ Intercom Auto Dial 13	▷□ Intercom Auto Dial 23
		▷□ Intercom Auto Dial 12	▷□ Intercom Auto Dial 22
		▷□ Intercom Auto Dial 11	▷□ Intercom Auto Dial 21
		▷□ Intercom Auto Dial 10	▷□ Intercom Auto Dial 20
		▷□ Outside Auto Dial	▷□ Outside Auto Dial
		▷□ Night Service	▷□ Send Message

* Control unit jack numbers represent the
outside line plugged into that jack.

For systems with 8 or fewer
lines and 20 or fewer voice ter-
minals — switch H on control
unit is in the up position.

Intercom-
Ring

Intercom-
Voice

A0 A1 A2 A3 A4

B0 B1 B2 B3 B4

C0 C1 C2 C3 C4

D0 D1 D2 D3 D4

E0 E1 E2 E3 E4

F0 F1 F2 F3 F4

Night
Service

Send
Message

Control unit jack number repre-
sent the outside line plugged into
that jack. If you have fewer than
30 lines, the unused buttons have
no features assigned.

* For systems with more than 8
lines or more than 20 voice ter-
minals — switch H on control unit
is in the down position.

Intercom
numbers

	0	1	2	3	4	5	6	7	8	9
10-20-30	10 40 70	11 41 71	12 42 72	13 43 73	14 44 74	15 45 75	16 46 76	17 47 77	18 48 78	19 49 79
40-50-60	20 50	21 51	22 52	23 53	24 54	25 55	26 56	27 57	28 58	29 59
70-80-90	30 60	31 61	32 62	33 63	34 64	35 65	36 66	37 67	38 68	39 69

Message
Status
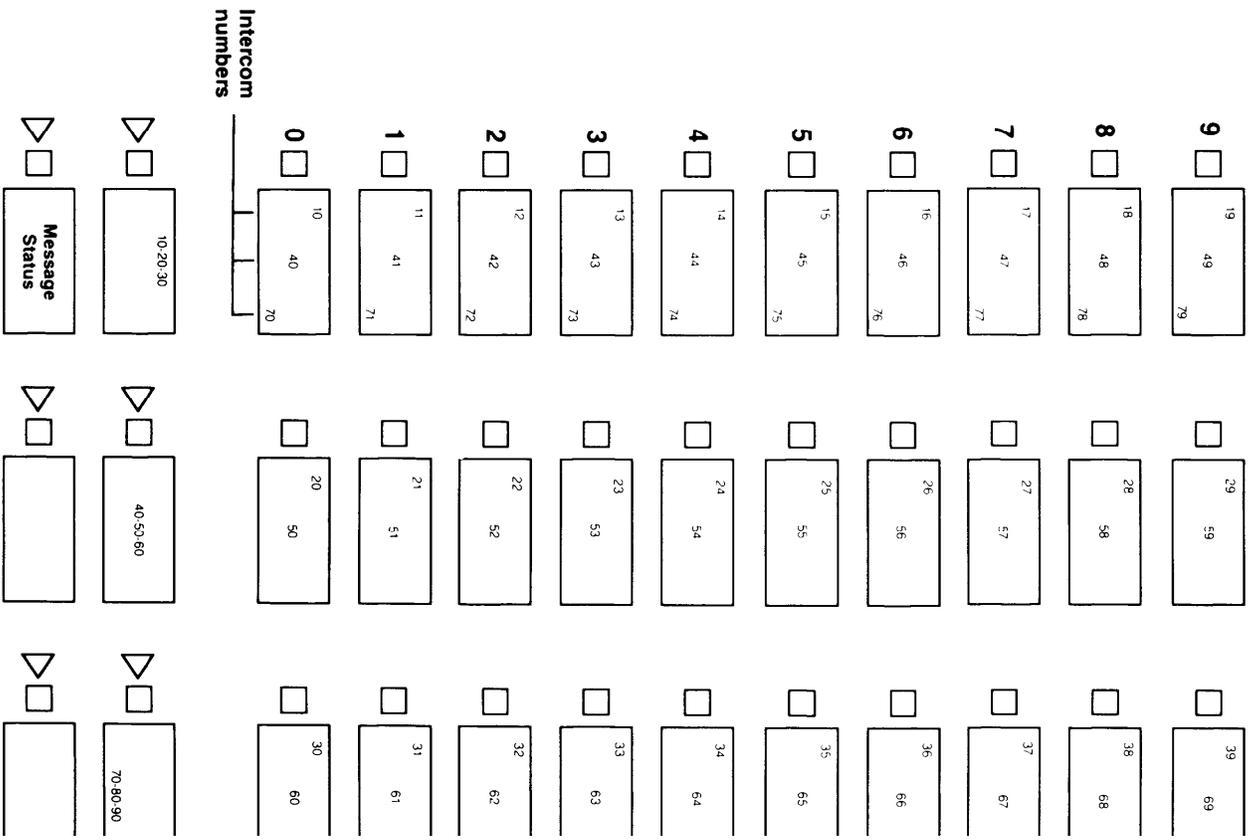
Special Information about 5-Button Voice Terminals

Calls can be transferred to a 5-button voice terminal from a line that the voice terminal does not have. You can use either Call Pickup or Line Pickup, depending on whether or not you know which line has the call you want to transfer to the 5-button voice terminal.

If you know which line the call is on, place the call on hold, page the person or use his or her Auto Intercom button, and announce the call, for example, "Harvey, you have a call from headquarters on line 2." Harvey then uses Line Pickup to take the call.

If you don't know which line the call is on, use Call Park to hold the call, and use Loudspeaker Page or Group Page to announce the call, for example, "Marie, you have a call from headquarters at intercom 17." Marie then uses Call Pickup to take the call.

Special Information about Basic Telephones

If you have basic telephones connected to an Off-Premises Telephone Interface, a Basic Telephone and Modem Interface, or a Basic Telephone Module, review the following information before you administer the telephones.

BASIC TELEPHONES CONNECTED TO AN OFF-PREMISES TELEPHONE INTERFACE (OPTI) OR A BASIC TELEPHONE AND MODEM INTERFACE (BTMI)

Follow the procedure below to administer a basic telephone.

1. Enter administration mode by following the boxed instructions on page 28.

2. Assign lines and pools to the intercom number assigned to the OPTI or BTMI by following the instructions in "Setting Up Square Systems", page 31, or "Setting Up Pooled Systems", page 35.

3. If you want to assign call restrictions to an OPTI or BTMI, follow the instructions in "Assigning Call Restrictions to Voice Terminals", page 46,

4. Leave administration mode by following the boxed instructions on page 28.

5. Use Centralized Voice Terminal Programming or connect a **MERLIN** voice terminal directly to the control unit voice terminal jack to which you plan to connect the OPTI or BTMI to program the terminal.

6. Since basic telephones may not answer voice-announced intercom calls immediately, you must follow the instructions on page 125 to program Voice Announcement Disable. As a result, voice-announced intercom calls to basic telephones become ringing intercom calls.

7. If you want to change the order in which the system selects available lines, follow the instruction on page 110 to assign an Automatic Line Selection sequence to the telephone, Do not include intercom lines in the sequence.

8. Set programmable line ringing on lines and line pools as preferred. Remove custom features assigned to buttons above the dial pad,

9. Disconnect the voice terminal or leave Centralized Voice Terminal Programming and connect the OPTI or BTMI to the same voice terminal jack.

10. Connect the basic telephone to the OPTI or to the BTMI,

11. If you later add or change the features assigned to a basic telephone, inform the person using the OPTI or BTMI,

Users dial the following codes to place calls on a basic telephone connected to an OPTI or BTMI:

To get Automatic Line Selection, dial 9.

To place a ringing intercom call, dial the 2-digit intercom number.

To place a voice-announced intercom call, dial 881 and the 2-digit intercom number.

To access the lines or line pools assigned to particular buttons above the dial pad on the voice terminal associated with the user's OPTI or BTMI intercom number, dial the codes shown in the illustrations on the following page.

Dial Codes to Access Lines, Pools, and Intercom Features Assigned to Voice Terminal Buttons

▷□ [884] ▷□ [889] ▷□ [884] ▷□ [889]

▷□ [883] ▷□ [888] ▷□ [883 Pool Access] ▷□ [888]

▷□ [882] ▷□ [887] ▷□ [882 Pool Access] ▷□ [887]

▷□ [881 Intercom-Voice] ▷□ [886] ▷□ [881 Intercom-Voice] ▷□ [886]

▷□ [880 Intercom-Ring] ▷□ [885] ▷□ [880 Intercom-Ring] ▷□ [885]
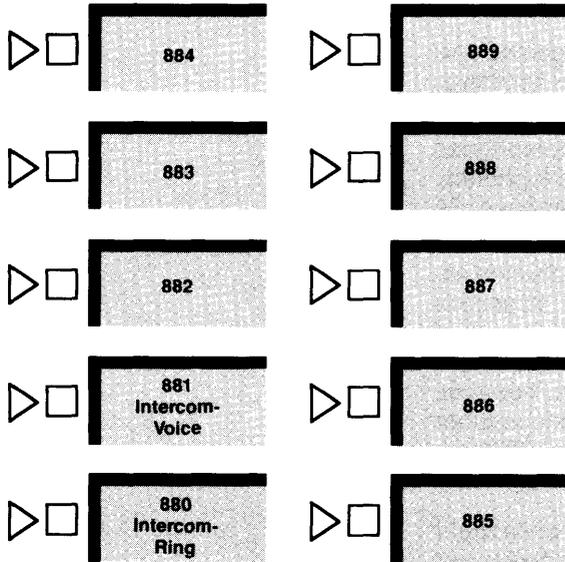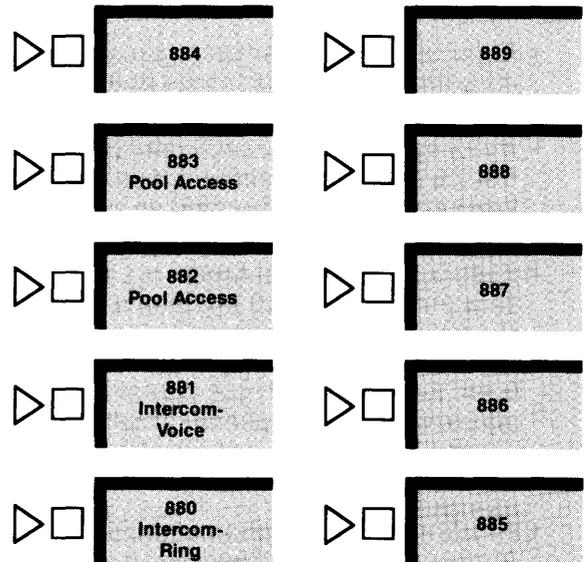
SQUARE SYSTEMS   POOLED SYSTEMS WITH DIAL ACCESS TO LINE POOLS

▷□ [884] ▷□ [889]

▷□ [883 Pool 9] ▷□ [888]

▷□ [882 Pool 9] ▷□ [887]

▷□ [881 Intercom-Voice] ▷□ [886]

▷□ [880 Intercom-Ring] ▷□ [885]
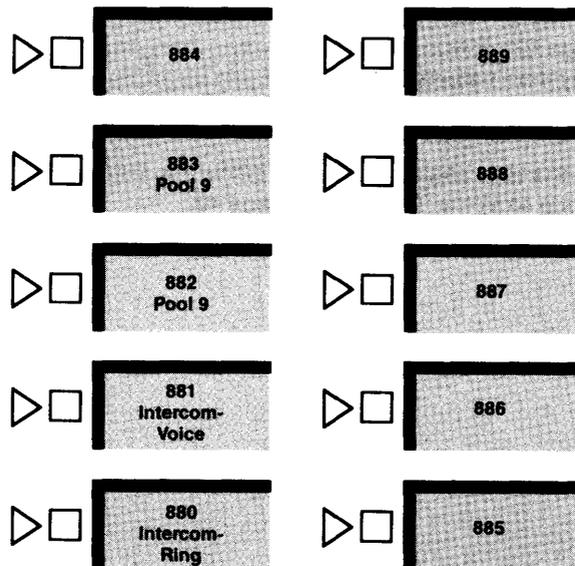
POOLED SYSTEMS WITH BUTTON ACCESS TO LINE POOLS

BASIC TELEPHONES CONNECTED TO A BASIC TELEPHONE MODULE

- If you have a square system, people with basic telephones get an outside line by dialing 88. The system automatically selects an available line from among those you've assigned to that telephone. Be sure to assign interchangeable lines.

- If you have a pooled system, you can follow the procedures on pages 42 and 43 to assign basic telephones Button Access to Line Pools or Dial Access to Line Pools.

- If your system has Button Access to Line Pools, people with basic telephones dial 9 to access the main pool. If you assign additional lines to their telephones, those people dial 88 to access an available line assigned to that telephone. Be sure to assign interchangeable lines.

- If your system has Dial Access to Line Pools, people with basic telephones access pools by dialing 9 and then a pool access code. For example, to access the main pool (access code 9), people dial 9 and then dial 9 again. If they want to access a different pool (for instance, the one with access code 891), they dial 9 and then dial 891. If your system uses Automatic Route Selection, however, people with basic telephones simply dial 9 and then dial the telephone number desired. If you assign additional lines to their telephones, users dial 88 to access an available line assigned to that telephone. Be sure to assign interchangeable lines.

- People with basic telephones cannot enter a password to make calls while Night Service with Outward Restriction is in effect. If you use this feature and you want these people to be able to make calls as they normally do while Night Service is in effect, you must assign them to your Night Service Exclusion list.

- Once you have assigned lines and line pools to a basic telephone, be sure to provide the person using the telephone with a list of codes for the lines and line pools to which he or she has access.

- The attendant can use Centralized Voice Terminal Programming to program Personal Speed Dial for a basic telephone. The user accesses this feature using the Speed Dial codes listed on page 121. Users can make these calls right after they lift their handsets, since the system selects a line pool. If you have Dial Access to Pools, the pool access code must be contained in the Personal Speed Dial number.

. If you want to assign call restrictions to a basic telephone, follow the instructions in "Assigning Call Restrictions to Voice Terminals", page 46.

SPECIAL REQUIREMENTS FOR PLACING VOICE OR DATA CALLS ON TOUCH-TONE TELEPHONES

The **MERLIN** system is factory-set to be compatible with standard equipment used at telephone company central offices. In the rare cases where an incompatibility exists, it can affect calls placed on Touch-Tone basic telephones connected to the **MERLIN** system by a Standard Telephone Module (STM).

The **MERLIN** system is factory-set to wait 12 seconds between dialed digits to be sure the user has entered all the digits of the number he or she wants to reach. During that time, the control unit also checks to be sure that this is an allowed call and notes the telephone number for SMDR, if the system has that feature. When the time is exceeded, any additional digits dialed aren't subject to call restrictions and don't appear on SMDR reports.

If equipment incompatibility is affecting calls placed from basic telephones connected to STMs in your system, shorten the dialing time-out as indicated below:

> If data calls such as credit card authorizations give incorrect results, set the interval at 4 or 8 seconds. In most cases, the 4-second setting works best.

> If callers don't get through to the numbers they dialed, set the interval at 0 seconds (no delay).

> **NOTE:** With a 0-second setting, basic telephones connected to the system by STMs aren't subject to call restrictions, and the numbers people dial aren't shown on the SMDR printout.

Follow the procedure below to set the dialing time-out. This involves changing the delay interval for basic Touch-Tone telephones between dialing of the last digit and connection with the outside line.

1. If you haven't already done so, enter administration mode by following the steps on page 28.

2. Touch **Adm Misc.**

   *The lights next to the administration mode buttons stop flashing, and the green light next to **Adm Misc** becomes steady.*

3. Dial the appropriate 5-character code for the delay interval you prefer:

   - #3170 for 0 seconds
   - #3171 for 4 seconds
   - #3172 for 8 seconds
   - #3173 for 12 seconds

4. If you have a printer, you can verify that the delay is set the way you want it by checking your System Information Report. To get a printout, dial the 4-character code #905.

   *The green light next to **Adm Misc** flashes. When the printout is completed, you hear a beep and the green light next to **Adm Misc** becomes steady*

   Don't go on to step 5 until you hear the beep or you'll get an incomplete printout, Wait to remove your printout until you've completed step 5 or your page alignments will be affected.

5. Touch **Adm Misc.**

   The lights next to the administration mode buttons flash.

6. Continue to administer your system or leave administration mode by fallowing the boxed instructions on page 28.

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MERLIN System Features

Your **MERLIN** system offers features that provide exceptional telephone service on both a businesswide and a personal basis. As system administrator, you make decisions about how the system operates as a whole and about which features should appear at each voice terminal. The chart on the next few pages describes all the features available to your system and suggests ways to use some of these features. It should help you decide which features are best for your business. The features are grouped alphabetically in three categories:

- **Fixed Features** are built into the system and require no programming. Fixed features associated with factory-labeled buttons appear in bold type in the chart.

- **Custom Features** can be changed according to company priorities and personal needs. Those that you, the system administrator, must assign are coded with the symbol **[A]** in the chart. Those that individuals may assign to their own voice terminals are coded with the symbol **[I]** . Features coded with **[A]** may be assigned by individuals, but you may want to approve such assignments to ensure that they meet the overall needs of your business.

  A page number under the name of each feature marked with an **[A]** tells you where you will find instructions on assigning the feature.

- **Optional Features** require the purchase of additional equipment.

The system comes ready to use with certain custom features in place on all voice terminals (see the initial feature assignments, pages 106 through 108). Since no two businesses are alike, however, you may want to change some or all feature assignments. You can change any custom feature by following the appropriate set of steps in this manual.

Fixed Features

Feature	Description
Call Park (See also Loudspeaker Page.)	Put a call on a special kind of hold so the call can be picked up at any voice terminal. • Using Call Park, an attendant trying to locate someone can park a call and page the person. The person can take the call at any voice terminal using the Line Pickup or Call Pickup feature.

Call Pickup
(See also Call Park, Loudspeaker Page, Night Service, Enhanced.)
	Answer a call for one voice terminal from another voice terminal. This feature can be programmed onto a button at any voice terminal.
	  • Answer another person's voice terminal without leaving your desk.
	  • Use this feature to retrieve parked and held calls and to pick up after-hours calls.

Call Waiting	When you are busy with a call, listen for a brief ring or voice announcement from your speaker and watch for a flashing green light that tells you a call is ringing on another line at your voice terminal.

Conference	Make conference calls that include as many as five people — the originator of the call, two people on intercom lines, and two people on outside lines.
	  • Conference the calling person to someone outside the system, put the call on hold, and be free to do other business.
	  • Make long distance calls from outside by calling your office and being conference to a WATS line.

Distinctive Ringing	Hear different ringing patterns for outside, transferred, and intercom calls. • Identify the type of call and answer it accordingly.
Drop	Disconnect one person at a time from a conference call, or drop a busy or unanswered line when you are trying to set up a conference call.
Group Listening **Speaker** *(See also* Auto Answer-Intercom.)	Let others in the room hear a caller through your voice terminal's speaker.
Hold *(See also* Music-on-Hold.)	Keep someone on the line so you can answer a second call or attend to another matter. The green light next to the line button holding your call flashes rapidly. The green lights next to line buttons on which others are holding calls flash at a slower rate.
Automatic Hold Release	Know immediately when a person on hold hangs up because the green light next to the line button goes off.
Automatic Hold Reminder	Hear a brief ring once every minute when you have a call on hold.
Intercom	Call people in your business using 2-digit numbers. • Signal others by ringing or voice announcement without cutting off your active calls or theirs.
Intercom-Ring	Intercom call comes in with a distinctive ring.
Intercom-Voice *(See also* Voice Announcement Disable.)	Make or receive short announcements using a **MERLIN** system voice terminal. • Announce calls before transferring them.
Line Pickup	Answer a call on a specific line that is ringing, parked, or on hold at one voice terminal by picking up the line at another voice terminal or the attendant console. This feature can be programmed onto a button at any voice terminal.
Line Request	Request a busy line, and receive a signal when the line becomes available.
Message Waiting *(See also* **Send Message.)**	See a green light beside **Message** when your system attendant has a message for you.

Fixed Features (continued)

Feature	Description
Monitor-on-Hold **Speaker**	Use your voice terminal's speaker to listen for a caller to return when you've been put on hold. • Frees you to do other work when you've been put on hold.
On-Hook Dialing **Speaker**	Turn on the speaker and dial an outside or intercom call without lifting the handset.
Recall	Touch **Recall** instead of pressing the switchhook to access PBX, Centrex, or Custom Calling features. If your **MERLIN** system isn't connected to a PBX or Centrex system, and if you aren't using a Custom Calling feature, use **Recall** to disconnect a call without hanging up your handset.
Ringing Line Selection	Answer a call without touching any buttons because your **MERLIN** system automatically selects the ringing line when a call comes in.
Send Message	If you're an attendant, notify a person that a message is waiting by touching **Send Message.**
Transfer	Pass outside calls to any voice terminal in your **MERLIN** system. Transfer calls with or without an intercom announcement. • Attendants can screen calls on intercom as part of transfer.
Transfer Return	Hear unanswered transferred calls ring again at the voice terminal from which they were transferred. • Transferred calls are not lost. • The attendant can tell from which voice terminal a transferred call is returning.
Voice Terminal Programming	Program voice terminals with custom features according to business and individual needs.
Voice Terminal Testing	Determine whether all lights and ringing mechanisms are working by sliding the T/P switch on the left side of the voice terminal to the *T* position.
Volume Control	Adjust the sound level of a voice terminal's ring and speaker.

Custom Features

Feature*	Description
Account Number Entry (used with SMDR only) **[I]**	Program a button with an account code associated with outside calls made or received. • Increase accuracy of call records. • Assure that charges for outside calls are billed to the appropriate account, job, or department.
Auto Intercom **[I]**	Program buttons on voice terminals for one-touch dialing of frequently called intercom numbers. • Look at the lights next to the buttons to see if someone is using his or her voice terminal; the green light goes on when the person is on a call or is using the Do Not Disturb feature.
One-Touch Transfer or	Transfer a call by touching the appropriate Auto Intercom button. . Transfer calls with one touch.
One-Touch Hold With Call Announcement	Put an outside call on hold and place an intercom voice call by touching the appropriate Auto Intercom button. • Screen calls before transferring them. • Get information from a coworker, then return to the call.
Automatic Line Selection **[AI]**	Get an available line when you lift your handset to make a call. Anyone can program a voice terminal to select lines in a specific order. • Program voice terminals to select long distance lines in the most economical order—for example, WATS line first, then regular service.
Automatic Route Selection **[A]**	Set up your system so that each time a person makes an outside call, the system selects a line pool that includes the most appropriate lines for that call. For this feature to operate, switch F on the control unit must be set to Pooled (up) and switch G must be set to Dial Access (up). • Increase voice terminal efficiency and reduce costs for your business. • Eliminate dialing of pool numbers.
Button Access to Line Pools **[A]**	Assign line pools to individual buttons. • Access a pool simply by touching a button.
Call Coverage (See also Programmable Line Ringing.) **[AI]**	Program buttons on voice terminals to cover calls for people with whom you do not share lines. Program buttons for either primary or secondary coverage and for immediate, delayed, or no ring. • Have as many as six Cover buttons.
Primary Coverage	Assign to someone who screens or answers another person's calls. • A secretary can answer all calls to a manager's voice terminal.
Secondary Coverage	Assign to someone who provides a second backup for a covered voice terminal. • A second secretary can answer the manager's calls when the first secretary is away from the desk.
Coverage Inhibit	Program buttons on voice terminals to turn off Call Coverage temporarily. • Limits use of Call Coverage to times when it is needed.
Call Forwarding Using Coverage Inhibit	Program a Cover button on another voice terminal and then program a Coverage Inhibit button on your own voice terminal to stop coverage whenever appropriate. • Have calls ring at a voice terminal in a different location when necessary.

*   **[A]** means that the administrator assigns the feature.

[I] means that the individual can assign the feature.

[AI] means that an individual can assign the feature with the administrator's approval.   139

Custom Features (continued)

Feature*	Description

Call Restriction
(See page 46.)
 	
[A]
 	
  Outward Call
  Restriction
 	
  Toll Call
  Restriction
 	
  Allowed-List
  Call Restriction
	Assign call restrictions to any voice terminal as necessary.
	  • Restrict voice terminals according to your business needs.
	
	Restrict some voice terminals to intercom calls only.
	  • Restrict voice terminals in public places such as lobbies.
	
	Restrict voice terminals to intercom and local calls only.
	  • Prevent abuse of telephone privileges.
	
	Allow toll-restricted voice terminals to make toll calls to a specific list of area codes and/or exchanges. Allow outward-restricted voice terminals to make local and toll calls specified on a list.
	  • Control telephone costs.

Centralized Voice Terminal
Programming
 	
[A]
	Program any voice terminal from the administrator/attendant console.
	  • Conveniently program voice terminals for people who do not do their own programming.
	  • Program voice terminals for business priorities without leaving the administrator/attendant console.

Dial Access to Line Pools
(See page 43.)
 	
[A]
	Assign all line pools to two buttons on each voice terminal, then access the pools using dial codes.
	  • Have access to as many as 11 line pools using only two buttons on a voice terminal.
	  • Save buttons on voice terminals for other features.

Dial Access to Line Pools Restriction **[A]**	Restrict some voice terminals from dial access to certain line pools. People using these voice terminals, however, may receive transferred calls on lines in these pools. • Restrict voice terminals used by people who have no need to make WATS line or Foreign Exchange calls.
Do Not Disturb **[I]**	Prevent a voice terminal from ringing for a temporary period. While Do Not Disturb is in effect, outside calls ring at the attendant console, intercom callers get a busy signal, and the green light goes on next to the Auto Intercom button representing the voice terminal on the attendant console. • Avoid being interrupted by ringing calls.
Group Page (See page 79.) **[A]**	Assign voice terminals to paging groups so that people can page each other through voice terminal speakers. • You do not need a loudspeaker paging system to use this feature.

Group Call Distribution
(see page 81.)
 	
[A]
	Assign voice terminals to a Call Distribution group so that incoming calls to the group go to each available voice terminal in turn.
	  • Distribute call-handling responsibility among group members.
	  • Decrease the chance that callers will get a busy signal.
	  • By assigning outside lines to Call Distribution groups, reduce the number of calls that attendants transfer.

Last Number Redial **[I]**	Program a button for one-touch dialing of the last number you called. People having 5- or 10-button voice terminals can use this feature by dialing #24.

* **[A]** means that the administrator assigns the feature.

  [I] means that the individual can assign the feature.

  [AI] means that an individual can assign the feature with the administrator's approval.

Custom Features (continued)

Feature*	Description
Line and Pool Assignment to Voice Terminals (See pages 31 through 41.) **[A]**	Assign any combination of pooled, personal, and special-purpose lines to any voice terminal. • Customize line assignments to control costs. • Reassign lines easily.
Manual Signaling **[I]**	Program a button so that touching it causes a beep at another voice terminal. • Use the button to signal another person.
Multiple Line Pools (See pages 35 and 46.) **[A]**	Assign outside lines to different line pools so that lines that provide the same service are pooled together. Your business may have up to 11 line pools. • Assign regular lines to one pool, WATS lines to another pool, and so on.
Notify **[I]**	Program a Notify-Send button to notify someone that you need to talk with them. Program a Notify-Receive button to receive such notification from another person. • People who need to contact one another frequently, such as a supervisor and a secretary, can leave word with one another. • Works independently of the attendant Message feature.
Outside Auto Dial **[I]**	Program buttons for one-touch dialing of frequently dialed account codes or outside telephone numbers.
Personal Speed Dial **[AI]**	For 5- and 10-button voice terminals only. Assign a 3-character Personal Speed Dial code to each account number or telephone number you frequently dial. Then use a Personal speed Dial code whenever you want to dial any of those numbers. Each person assigns Personal Speed Dial codes for use at his or her voice terminal only. • Use Personal Speed Dial codes when your voice terminal doesn't have room for many Outside Auto Dial buttons.
Personalized Ringing (See page 124.) **[I]**	Select one of eight ringing signals for your voice terminal. • Distinguish the ringing of your voice terminal from that of others.
Privacy **[I]**	Prevent others from joining calls on a personal line or a shared line in a square system.
Programmable Line Ringing (See also Call Coverage.) **[AI]**	Program outside line buttons, pool buttons, and cover buttons to ring immediately, after a delay, or not at all for incoming calls. This feature does not apply to transferred or intercom calls. • Program voice terminals in lobbies and conference rooms not to ring.
Saved Number Redial **[I]**	Store a dialed number for later one-touch dialing. The stored number remains the same until replaced with another number. A person can make other calls and then redial the saved number by touching the Saved Number button. People having 5- or 10-button voice terminals can use this feature by dialing the 3-character code #23. Any voice terminal may have more than one Saved Number button.
System Speed Dial (See page 96.) **[A]**	Assign System Speed Dial codes to a maximum of 40 telephone numbers. Codes are stored so that people throughout your business can dial them at any voice terminal. • Assign codes to frequently dialed numbers, such as the numbers of your branch offices. • Assign codes to numbers that you may not want everyone in your business to know.

*   **[A]** means that the administrator assigns the feature.

   [I] means that the individual can assign the feature.

   [AI] means that an individual can assign the feature with the administrator's approval.

Custom Features (continued)

Feature*	Description
Touch-Tone Enable **[I]**	Adjust the system to temporarily generate Touch-Tone signals when connected to lines that carry rotary signals. • If your business is connected to rotary lines, use alternate long distance service, banking-by-phone, credit card authorization, and other electronic services that require Touch-Tone dialing.
Touch-Tone/Rotary Option (See page 29.) **[A]**	Adjust the system to work with either Touch-Tone or rotary lines or both. • Keep your system flexible — connect some voice terminals to Touch-Tone lines, others to rotary lines, if necessary.
Voice Announcement Disable **[AI]**	Program voice terminals to block intercom voice announcements and to ring instead to signal intercom calls. • Program this feature on voice terminals in public places such as lobbies and conference rooms.

*   **[A]** means that the administrator assigns the feature.

   [I] means that the individual can assign the feature.

   [AI]   means that an individual can assign the feature with the administrator's approval.

Optional Features

Feature	Description
Extra Alert (See also Night Service, Enhanced.) Required equipment: • Services Module in control unit • Extra-alerting devices	Provide audible or visual signal by means of alerting devices such as bells, horns, or strobe lights. The system can accommodate alerting devices in up to three different areas of the building. Your business must supply alerting devices. • People in noisy areas can better tell when a call is ringing. • Use with Enhanced Night Service to alert people who are working late to pick up incoming calls by means of Call Pickup.
Loudspeaker Page Required equipment: • Services Module in control unit • Loudspeaker paging system	People can page each other using a loudspeaker paging system. The **MERLIN** system can accommodate up to three zones that can be paged individually or together. Your business must provide the paging system. • People can quickly locate others who are away from their desk or work areas. • Provide background music throughout your office or plant.
Music-on-Hold Required equipment: • Services Module in control unit • Music source	Provide callers with music when they are put on hold. Your business provides the music source (for example, a tape player or FM radio). • Reassure callers that they have not been disconnected when they are on hold.
Night Service, Enhanced (See page 86.) (See also Extra Alert.)	Provide various options for after-hours telephone operation. You can administer any or all features to meet your needs for alerting and security. Use a button on the attendant console to turn this feature on and off, or set your system to turn Night Service on and off automatically at preset times.
With Group Assignment	Specify which voice terminals should ring when calls come in to a particular attendant console. • Make it easier for people indifferent areas of your plant or office to answer after-hours calls placed to their departments or work groups.
With Extra Alert	Provide extra-alerting for up to three areas of your facility. • Notify people who are working late of incoming calls, even if they are away from their voice terminals.
With Outward Restriction	Prevent unauthorized use of your telephones outside regular business hours. Authorized personnel can make calls as usual, but others can only dial emergency numbers. • Control telephone costs. • Have the option of using either a password or the Exclusion feature to let staff members who are working late use their voice terminals as they normally do.
With Time Set	Have the **MERLIN** system turn Night Service on and off at the times you specify. • Attendants don't have to turn Night Service on and off manually. • Night Service operates automatically during weekends.
Simultaneous Voice and Data Calls Required equipment: • General Purpose Adapter	Make voice and data calls at the same time. • Obtain data from a computer while you are on the telephone. • Make a voice call while you are sending data to someone outside your business.

Appendix:
Instructions for Completing
System and Voice Terminal
Configuration Forms

Reading and completing this brief guide helps you decide how to set up your **MERLIN®** communications system (Models 1030 and 3070, with Feature Module 5) to satisfy the needs of your business. As you read through this guide, answer the questions in order as you come to them. The boxed instructions help you fill out a System Configuration Form and a Voice Terminal Configuration Form for each voice terminal in your system. You need these forms and the administration manual to customize your **MERLIN** system.

SYSTEM OPTIONS

The following questions help you fill out the System Configuration Form on page 157. Complete this form before filling out any Voice Terminal Configuration Forms.

1a. How many voice terminals are connected to your **MERLIN** system? _____

1b. How many additional voice terminals do you plan to add during the next year? _____

1c. Total number of voice terminals (#1a + #1b): _____

2a. How many outside lines does your system control? _____

2b. How many outside lines do you plan to add during the next year? _____

2c. Total number of outside lines (#2a + #2 b): _____

A.
> **System Size**
>
> If the answer to #2c is greater than 8, or if the answer to #1c is greater than 20, check "Large" on the System Configuration Form, page xx. Otherwise, check "Small. "

3. What sort of telephone system are the people in your system accustomed to using?

   Key System (a system, such as COM-KEY® or 1A2 Key, where each line appears on a separate button at each telephone) _____

   Nonkey System (a system, such as Horizon®, with many lines available through a few System Access or Trunk Access buttons or with basic telephones that each have their own line) _____

4. Do you want Automatic Route Selection (ARS)? With ARS, you can program your system to select automatically the route for each call based on what you administer. You make economical routing decisions and program the system with that information. Otherwise, individuals select the type of line they think is appropriate.

   Yes _____

   No _____

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B-1.

> **Line Representation**
>
> If the answer to #4 k yes, then check "Pooled" and "Dial Access + ARS" on the System Configuration Form, and skip to #9.

5. Did you order any 5-button voice terminals that will be used to answer incoming calls or make outgoing calls on more than three outside lines, or any 10-button voice terminals that will be used to answer incoming calls or make outgoing calls on more than eight outside lines?

Yes _____

No _____

B-2.

> **Line Representation**
>
> If the answer to #5 is no and the answer to #3 is Key, check "Square" for the type of line representation on the System Configuration Form, and skip to #9.

6. Circle A or B. How would you prefer to pass a call to a voice terminal that does not have a button for that particular line?

   A. Use the Transfer feature.

   B. Use the Line Pickup feature.

B-3.

> **Line Representation**
>
> If the answer to #6 is B, and the answer to #5 is no, and the answer to #3 is Key, check "Square" for the type of line representation on the System Configuration Form, and skip to #9.

7. Did you order any 5-button voice terminals that need to handle calls on more than two types of lines (for example, local lines and private lines), or any 10-button voice terminals that need to handle calls on more than seven types of lines?

Yes _____

No _____

B-4.

> **Line Representation**
>
> If the answer to #7 is yes, check "Pooled" and "Dial Access" on the System Configuration Form and skip to #9.

8. Circle A or B. Which would you rather do to get an outside line?

   A. Dial an access code (for example, 9) to get a line leaving more buttons available for features.

   B. Dedicate one button to each line or group of lines, making it unnecessary to dial an access code.

C.

> **Access to Pooled Line Representation**
>
> If the answer to #8 is A, check "Pooled" and "Dial Access" as the type of pool access on the System Configuration Form. If the answer to #8 is B, check "Pooled" and "Button Access" as the type of pool access.

9. How many attendant positions (5 maximum) will you have (to be used for answering and transferring calls coming into your business, or for monitoring call traffic)? _____

D.

> **Attendant Configuration**
>
> On the System Configuration Form, if the answer to #9 is 1 or 0, don't check any of the attendant configuration boxes. If the answer to #9 is 2, check the box next to "11" for attendant configuration. If the answer to #9 is 3, check the boxes beside "11" and "12." If the answer to #9 is 4, check the boxes beside "11,'"12," and "13." If the answer to #9 is 5, check the boxes beside "11 ," '12," "13," and "14." The system supports a maximum of five attendant positions.

10. Circle A or B. What type of administrator/attendant console will you be using for system administration?

   A. 34-Button Deluxe

   B. 34-Button Deluxe with Attendant Intercom Selector

E.

> **System Administration Terminal**
>
> If the answer to #10 is A, check "34-Button Deluxe" as the type of Administration Terminal on the System Configuration Form. If the answer to # is B, check "34-Button Deluxe with Attendant Intercom Selector" as the type of Administration Terminal. (For a more detailed explanation, see page 11.)

F.

> **Listing Telephone Numbers**
>
> In the column labeled "Telephone Number" on the System Configuration Form, list the telephone numbers for your outside lines. Start at the top of the column and work down without skipping any spaces. The order in which you list lines determines the order in which lines appear initially on attendant consoles and on all voice terminals in systems with square line representation. Group lines of the same type together (for example, group WATS lines together, Foreign Exchange (FX) lines together, etc.).

G.

> **Special Lines**
>
> Indicate which lines are special-purpose lines (for example, WATS, FX, personal lines, outward calls only, incoming calls only).

NOTE: If you checked "Square" for line representation, skip to question #11.

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H.

> **Assigning Lines to Pools**
>
> **Now** consider any groups of lines that can be used interchangeably for placing calls (for example, all regular local lines or all in-state WATS lines). Assign the access code 9 to the pool that contains your group of local lines—write "9" for "Pool Number" on the System Configuration Form. Assign a pool number (890 through 899) to each of the other groups of lines. Note that each pool can have as many or as few lines as you like but that each line can be in only one pool. (For a more detailed explanation, see page 35.)

11. Is it necessary to dial 0 or 1 to place long distance calls on any of your lines?

<div align="right">

Yes _____

No _____

</div>

1.

> Toll **Environment**
>
> For each line that does not require dialing 0 or 1 before placing long distance calls, check "Area Code Only" on the System Configuration Form.

J.

> **Rotary Lines**
>
> If you have any rotary outside lines, circle the "r" next to each line on the System Configuration Form. If you aren't sure if you have rotary or Touch-Tone lines, call your local telephone company.

NOTE: For the steps in boxes K, M, Q, R, and S, you will need to make a list of intercom numbers and identify to whom they will be assigned or complete Voice Terminal Options that begin on page 154. Keep in mind that it is best to assign intercom numbers in the 10 through 29 range to people for whom an attendant handles many calls.

K.

> **Enhanced Night Service with Group Assignment**
>
> If your system will have groups of voice terminals associated with each attendant position for call answering after normal business hours, fill out the Group Assignment Directory on pages 161 and 162. Voice terminals may be assigned to more than one group but an attendant position must be associated with each group. (For a more detailed explanation, see page 86.)

L.

> **Enhanced Night Service with Extra Alert**
>
> If your system will have an extra-alerting device, check "Night Ring" on the System Configuration Form to indicate which lines will activate this device when the person who usually answers calls is not available. If you have more than one extra-alerting device, indicate on the form which device will be activated by which lines. **NOTE:** Only one extra-alerting device can be activated by any one line. (For a more detailed explanation, see page 89.)

M.

Enhanced Night Service with Outward Restriction

If your system will prevent unauthorized after-hours use of your business' telephones, you need to assign telephone numbers to the Emergency Allowed List and you also must decide on a password. (There is space to fill in your password, but you probably do not want the password to be public knowledge.) On the Emergency Allowed List Table, page 163, fill in the telephone numbers that will be accessible during Enhanced Night Service with Outward Restriction, such as local police and fire departments and ambulance services. You may establish up to ten entries with a maximum of twelve digits per entry.

You may decide that certain voice terminals should be excluded from Enhanced Night Service with Outward Restriction. List the voice terminals that will be excluded on the Night Service Exclusion List found on the Night Service Outward Restriction Directory, page 163. (For a more detailed explanation, see page 90.)

N.

Enhanced Night Service with Time Set

If you want your system to turn Night Service on and off automatically, you need to assign the times when Night Service is to be turned on and off. You must have an SMDR module to use this feature. On the Enhanced Night Service with Time Set Table, on page 164, fill in the times for each day, when Night Service will automatically go on and off. (For a more detailed explanation, see page 94.)

O.

Station Message Detail Recording (SMDR Options)

If your system will use SMDR (Station Message Detail Recording) to keep a record of calls, fill in the minimum duration of calls to be recorded on the System Configuration Form. (If you don't specify a minimum call length, the system doesn't record calls that last less than 1 minute.) If you want to record all calls, enter "0." Also indicate whether or not the system should record incoming calls.

P

System Speed Dial Numbers

If you want to store numbers that anyone in your business can dial using a 3-character code, fill in these numbers on the System Speed Dial Directory, page 165. You can associate up to 40 digits and special characters, including pause (p), recall (r), and Touch-Tone Enable (t), with each System Speed Dial code. Remember to enter an asterisk (the asterisk counts as a digit) at the end of your marked Speed Dial code telephone numbers. (For a more detailed explanation, see page 96.)

Q.

Group Page Groups

If you plan to use the Group Page feature, which allows people to receive paging messages through their voice terminal speakers, you need to assign intercom numbers to Group Page groups. On the Group Page Directory, page 166, fill in the intercom numbers and names of people designated for each group. You may establish up to seven groups, each covering a maximum often people. Voice terminals can belong to more than one group. (For a more detailed explanation, see page 79.)

R.

Group Call Distribution (Intercom)

If you plan to use the Group Call Distribution feature, which allows voice terminals to be assigned to calling groups, you need to assign intercom numbers to Call Distribution groups. On the Group Call Distribution (Intercom) Directory, page 167, fill in the intercom numbers for each group. You may establish up to six groups, each containing a maximum of 15 intercom numbers. Voice terminals can belong to more than one group. (For a more detailed explanation, see page 81.)

S.

Group Call Distribution (Lines and/or Line Pools)

After you have assigned intercoms to Call Distribution groups, you can then assign lines and/or line pools to these Call Distribution groups. On the Group Call Distribution (Lines and/or Line Pools) Directory, pages 168 and 169, fill in the lines and/or line pools that will be associated with each group. You may establish up to six groups, each containing a maximum of 30 lines or 11 pools. There can be a combination of lines and pools. A line/pool can be assigned to only one group at any given time. (For a more detailed explanation, see page 81.)

T.

Allowed Lists

If you want people with call restricted voice terminals to be able to call some specific area codes or exchanges, list those allowed area codes and/or exchanges on the Allowed-List Directory, page 170. Each entry can have up to six digits (for example, an area code followed by an exchange number). You may create up to eight lists, each containing a maximum of ten allowed numbers. A restricted voice terminal can have access to more than one allowed list. (For a more detailed explanation, see page 149,)

12. When transferring calls from one voice terminal to another, how many times would you like the second voice terminal to ring before the call returns to the first voice terminal?

Select a number to represent the number of times a voice terminal rings before a transferred call is returned to the first voice terminal (0 for the call not to be returned, 1 through 9 for the number of rings.) _____

U.

Return Interval for Transferred Calls

On the System Configuration Form, write the number of times (1-9) you would like a voice terminal to ring, before a transferred call is returned to the first voice terminal. If you do not want calls to return to the first voice terminal, enter 0. (For a more detailed explanation, see page 102.)

13. Circle A or B. How do you want to pass calls?

A. One-Touch Transfer allows you to designate an Auto Intercom button for the intercom number of each person who should receive transferred calls. Touch the appropriate Auto Intercom button while on an outside call and it automatically transfers to the voice terminal of the person designated.

B. One-Touch Hold with Call Announcement allows you to touch an Auto Intercom button while on an outside call and place that call on Hold while the system automatically places an Intercom call to a station, Loudspeaker Page zone, Group Page group, or Group Call Distribution group. (The intercom call is placed to whatever is assigned to the Auto Intercom button that you touched.) Intercom Voice will be the first choice of making the intercom call. After the intercom call is made, you can then transfer the call, use Call Pickup or Line Pickup to pass the call, or speak to the caller yourself.

V.

One-Touch Hold with Call Announcement or One-Touch Transfer

If the answer to # 13 is A, check "One-Touch Transfer" on the System Configuration Form as the way to pass calls. If the answer to #13 is B, check "One-Touch Hold with Call Announcement" on the System Configuration Form as the way to pass calls. If you do not check an answer the system will pass calls automatically by way of One-Touch Transfer. (For a more detailed explanation, see page 84.)

---

14. Circle A or B. Will you be using the Call Management System (CMS) for the **MERLIN** communications system?

A. Yes

B. No

W.

Call Management System for the MERLIN Communications System

If the answer to #14 is A, check "Yes" on the System Configuration Form, to indicate that your system will be using the Call Management System for the **MERLIN** communications system. If the answer to #14 is B, check "No" on the System Configuration Form.

NOTE: If you decided not to use Automatic Route Selection, skip to the next section, titled "Voice Terminal Options".

X.

Automatic Route Selection Worksheet

If you plan to use Automatic Route Selection (ARS), there area few things you should consider before you enter any information into the ARS tables. Supply the following information to the Automatic Route Selection Worksheet on page 171 to help you fill out the ARS tables.

1. Enter the number of exchanges in your local calling area in the space provided at the top of the worksheet.

2. Enter your Pool Numbers (9, 890 through 899) in the column labeled Pool Numbers. If you use a line for different types of calls, enter the pool number once for each type of call with an explanatory note. For example, if a firm in Atlanta, Georgia (in the 404 area code), a state with two area codes, has an in-state WATS line, the administrator makes these entries:

Pool Number	Line Type	Type of Dialing	Number of Area Codes or Exchanges for which Pool Should Be Used
890 for area code 404	Band 0 WATS	T (L)	All except exchanges in local calling area.
890 for area code 912	Band 0 WATS	(T) L	1

3. Enter the line type such as Local, Foreign Exchange (FX), WATS, etc. for each Pool Number you have entered.

4. Circle the appropriate letter for the type of calls to be dialed on each line pool.

   T = Toll A toll call is a series of digits that begins with a 1 and is immediately followed by an area code. When dialing a toll call, you dial a total of 11 digits [1 + 3 (area code) + 3 (exchange) + 4 (number)].

   L = Local Any call that does not fall under the definition of toll. This includes plain 7-digit dialing as well as 1 + 7-digit dialing.

5. Enter the number of area codes or exchanges that you want each of your line pools to service. You may enter a phrase such as "All except Band 1 WATS area codes" rather than a specific number.

6. To select the default routing for toll calls, determine which pool number serves the greatest number of area codes. You will enter this information in the Default Toll Table on page 180. To select the default routing for local calls, determine which pool number serves the greatest numbers of exchanges. You will enter this information in the Default Local Table on page 180. Record the default pool numbers in the spaces provided at the bottom of the worksheet.

7. Continue to plan your use of the Automatic Route Selection feature at box Y.

Y.

Automatic Route Selection

If you plan to use Automatic Route Selection, you need to fill out as many of the Form for Automatic Route Selection Tables (0 through 7) as you re-quire. These forms are found on pages 172 through 179.

NOTE: To allow for future growth you should begin with Table 0 and con-tinue in numerical order using Table 1, Table 2, etc. for your six-digit tables. For 3-digit tables, you should start with Table 7 and continue in descend-ing numerical order using Table 6 next, then Table 5, etc. By following this procedure any blank tables will be between the two kinds of tables which will allow you to add either 3-digit or 6-digit tables at a later time.

1. Decide how many six-digit scanning tables you will need (none, or 1 through 8). Enter the number you decided upon in the space pro-vided on Form for Automatic Route Selection Table (Table 0) on page 172. You can use Tables 0 through 7 for 6-digit tables.

2. If you do not need any 6-digit tables, go to Step 4.

3. For a 6-digit table, entry 00 must be the area code. Entries 01 through 99 must be exchanges associated with the area code entered in 00.

4. For 3-digit tables, fill in a group of either area codes or exchanges to which calls could be routed through the same set of pools. You can fill out up to eight tables, numbered 0 through 7. (For example, say that your Northeastern (Band 1) WATS lines are the least expensive way to call people in the Northeast. You would list the area codes that can be dialed on the Northeastern WATS lines in the upper portion of the table form labeled Area Code/Exchange. You can list up to 100 area codes or exchanges in a table. If you need to list more than 100, use a second table and make sure that you list the same pools for both tables.

   NOTE: It does not matter in which order you list these area codes or exchanges.

5. Beginning with entry 0 in the lower portion of the table form labeled "Pool, " list the pool number (9 or 890-899) for the pool you have chosen for making these calls. (For example, you might fill in the pool number for the pool containing the Northeastern WATS lines.)

6. If any extra digits need to be automatically inserted when using this pool, list these after the pool number under the heading "Other Digits." (For example, alternate long distance companies may require special dialing codes or account numbers.)

7. In case the pool that you have listed as your first choice is busy, list possible backup routes as Pool entries 1, 2, 3, 4, and 5. (For example, after you have listed the pool number for the pool containing the Northeastern WATS lines, you would then list the next least expensive way of calling that area, for instance, the pool number for the pool containing local lines by which you could call people in the northeastern United States.)

8. If digit absorption is to be associated with a pool entry, list the absorption type under the heading "Absorb."

> Type 0 = No Absorption (Default)
> Type 1 = Leading "l"
> Type 2 = Area Code Only
> Type 3 = 1 + Area Code
> Type 4 = 1 + Exchange
> Type 5 = Area Code + Exchange

For example, if you have an FX line to the 609 area code and you do not want callers to have to use a special dialing pattern so the system can route calls to the FX line, do the following:

— Use a 6-digit table to list the 609 area code and the exchanges associated with the FX line.

— Use absorption type number 3, so that callers dial 1 + 609 + 7-digits but the system absorbs the 1 + area code.

9. Follow steps 3 through 8 to set up routing patterns for calls to each group of area codes or exchanges that you identified on the Automatic Route Selection Worksheet.

10. Use the Default Toll Table, Table 8 (page 180), to record route selections for all other toll calls. Refer to the Automatic Route Selection Worksheet. If digit absorption is needed for this table, refer to step 8.

11. Use the Default Local Table, Table 9 (page 180), to record route selections for local calls (7-digit and 1 + 7-digit dialing) to exchanges for which you have not routed patterns in tables 0 through 7. Refer to the Automatic Route Selection Worksheet (page 171). If digit absorption is needed for this table, refer to Step 8.

12. The Special Numbers Table (page 180) is used for routing calls to the following numbers: 0,411,611,911,800, and 900. If you must dial an access code to make operator assisted calls, list the access code in this table.

VOICE TERMINAL OPTIONS

Now that you've completed the System Configuration Form, begin filling out Voice Terminal Configuration Forms, one for each voice terminal in your system. You may want to begin by creating a system directory and planning which intercom number and which type of voice terminal each person will use. (The system directory form is included in your Control Unit's Installation kit.)

On pages 158 through 160, there are forms for voice terminals in square systems and pooled systems, and for attendant consoles. Make enough photocopies of the appropriate form (either square system, pooled system, or attendant console) so that you can fill out one form for each of your voice terminals. Fill out an attendant console form for intercom 10 first (this should be your primary attendant's console; refer to your System Configuration Form for the intercom numbers for additional attendant consoles), then fill out voice terminal forms for the remaining intercoms in numerical order without skipping numbers. Group basic telephones together (for example, reserve intercom numbers 60 through 69 for basic telephones) and use the remaining intercom numbers for **MERLIN** system voice terminals.

a.

> **Basic Information**
>
> Fill in an intercom number (10 through 39 for Model 1030 configured as a 1030, 10 through 29 for Model 1030 configured as a 1520, and 10 through 79 for Model 3070 configured as a 3070), and the user's name or location such as "Mail room." Keep in mind it is best to assign intercom numbers in the 10 through 29 range to people for whom an attendant handles many calls. On each Voice Terminal Configuration Form, check the appropriate boxes to indicate voice terminal size, the type of voice terminal stand, and the type of accessories used with the voice terminal.

NOTE: If you have a square system or if the voice terminal serves as an attendant console, skip to box d.

b.

> **Assigning Lines (Pooled Systems)**
>
> The first two buttons above the intercom buttons will be used for Dial Access to Line Pools or for Button Access to the main pool (access code 9). Assign any additional lines or line pools to separate buttons. Remember not to assign lines or line pools to buttons in the columns to the right of the dial pad on 34-button voice terminals since these buttons do not have lights. Write the line or line pool numbers or names in the numbered buttons on the Voice Terminal Configuration Form. Fill in the button labeled "1" first, then "2", "3", and so on.

c.

> **Dial Access to Line Pools**
>
> If you selected the Dial Access to Line Pools option, and the person using a particular voice terminal will use dial codes to select lines, list the dial codes in the lower left of the Voice Terminal Configuration Form. Refer to the System Configuration Form to check which lines are assigned to line pools.

d.

Assigning Lines (Attendant Consoles and Square Systems)

Although you can assign lines to whichever buttons you choose, there are several ways in which you can assign lines to make your system easier to administer and use. Assign identical line arrangements to all attendant positions and, if you have a standard square system, to all voice terminals as well. In a customized square system, assign identical line arrangements to voice terminals that have common call responsibilities. If it is convenient, have lines appear on voice terminals in the same order as they are connected to the control unit. Once you have decided on line assignments, write the telephone numbers on available line buttons.

e.

Call Coverage

If a voice terminal needs to cover calls to another voice terminal, write "Cover" and the name or intercom number of the person whose calls are to be covered on an available button (one that is not already a line or intercom button). Use only a button with lights next to it. Also assign an Auto Intercom button for each person to be covered and label the button with the person's name. These buttons should have lights. Check the initial feature assignment diagrams (pages 106 through 108) to see if there is a feature that you can replace with Call Coverage. You can assign a maximum of six Call Coverage buttons to a voice terminal.

f.

Automatic Answering

If a voice terminal has a Hands-Free Unit, write "Auto Answer-Intercom" on an available button with lights on the Voice Terminal Configuration Form. If a voice terminal has a General Purpose Adapter, write "Auto Answer-Outside" on an available button with lights on the form.

g.

Assign Other Features to Buttons

Review the initial features assignment diagrams (pages 106 through 108). Unless you have replaced the initial features with other features, copy the feature names onto the appropriate button label on the Voice Terminal Configuration Form.

h.

Line Ringing

Of the lines assigned to the voice terminal, determine which ones should ring immediately at the voice terminal, which should ring after a delay (so that calls ring only if the person who usually answers is unavailable), and which should not ring at all. Indicate the type of line ringing on the Voice Terminal Configuration Form by writing next to each line button "R" for immediate ringing, or "D" for delayed ringing after three rings. Similarly, indicate whether cover buttons should ring immediately ("R"), after a three-ring delay ("D"), or after a six-ring delay ('DD"). If a line shouldn't ring at the voice terminal, leave the space next to its button blank. Calls *transferred* on this line will still ring.

i.

Calling Restrictions

If the voice terminal should be restricted from making toll (long distance) calls, check "Toll Call Restriction" on the Voice Terminal Configuration Form. If the voice terminal should be restricted from making any outside calls, check "Outside Call Restriction."

j.

Allowed-List Assignment

If you are assigning one or more allowed lists (lists of area codes and/or exchanges that people with restricted voice terminals can call) to the voice terminal, record the numbers of the lists on the Voice Terminal Configuration Form.

k.

Automatic Line Selection

If lines don't appear on the voice terminal in the order in which they are most likely to be used, list them in the appropriate order under "Automatic Line Selection" on the Voice Terminal Configuration Form.

l

Return to box a and repeat this process for each voice terminal in your system.

System Configuration Form for
Models 1030 and 3070

Call Passing:
❏ One-Touch Transfer
❏ One-Touch Hold with
    Call Announcement

Call Management System:
❏ Yes ❏ No

Attendant Configuration:
❏ 11 ❏ 12 ❏ 13 ❏ 14

Return Ring Interval:
Number of Rings _____

System Size:
❏ Small (I-8 Lines)
❏ Large (>8 lines)

SMDR Options:
❏ Minimum length of calls recorded (minutes): _____
❏ Incoming calls recorded? (Y/N) _____

Administrator/Attendant Console:
❏ 34-Button Deluxe
❏ 34-Button Deluxe with Attendant Intercom Selector

Line Representation:
❏ Square   ❏ Pooled
             ❏ Dial Access
             ❏ Button Access
             ❏ Dial Access+ ARS

Telephone Number	Control Unit Jack Number	Line Code Number	Special Line Type?	Pool Number (9, 890-899)	Check if Area Code Only	Circle if Rotary	Check if Night Ring
	A0	01				r	
	AI	02				r	
	A2	03				r	
	A3	04				r	
	A4	05				r	
	60	06				r	
	B1	07				r	
	62	08				r	
	63	09				r	
	B4	10				r	
	C0	11				r	
	C1	12				r	
	C2	13				r	
	C3	14				r	
	C4	15				r	
	D0	16				r	
	D1	17				r	
	D2	18				r	
	D3	19				r	
	D4	20				r	
	E0	21				r	
	EI	22				r	
	E2	23				r	
	E3	24				r	
	E4	25				r	
	F0	26				r	
	F1	27				r	
	F2	28				r	
	F3	29				r	
	F4	30				r	

Voice Terminal Configuration Form for
Models 1030 and 3070 Attendant Consoles

Intercom #   Identification

Stand Type: **Accessories:**
❏ Wall   ❏ General Purpose Adapter   ❏ Acoustic Coupler Adapter
❏ Plastic   ❏ Headset   ❏ Hearing-Impaired Handset
❏ Fixed   ❏ Headset Adapter   ❏ Push-to-Listen Handset
❏ Desk   ❏ Hands-Free Unit   ❏ Voice Terminal Power Supply
❏ Metal   ❏ Extra Long Cord   ❏ Attendant Intercom Selector
❏ Adjustable

─────────────────────────────── **34-Button** ───────────────────────────────

▷☐ [A2]   ▷☐ [B2]   ▷☐ [B3]   ▷☐ [D4]

▷☐ [A1]   ▷☐ [B1]   ▷☐ [B4]   ▷☐ [E0]

▷☐ [A0]   ▷☐ [B0]   ▷☐ [C0]   ▷☐ [E1]

▷☐ [Intercom–Voice]   ▷☐ [A4]   ▷☐ [C1]   ▷☐ [E2]

▷☐ [Intercom–Ring]   ▷☐ [A3]   ▷☐ [C2]   ▷☐ [E3]

                                        ▷☐ [C3]   ▷☐ [E4]

Calling Restriction:
❏ Toll Call Restriction   ▷☐ [C4]   ▷☐ [F0]
❏ outside Call Restriction

Allowed-List Numbers (0-7):   ▷☐ [D0]   ▷☐ [F1]

                                        ▷☐ [D1]   ▷☐ [F2]

Automatic Line Selection: ▷☐ [D2]   ▷☐ [F3]

                                        ▷☐ [D3]   ▷☐ [F4]

                                        ▷☐ [Night Service]   ▷☐ [Send Message]

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Voice Terminal Configuration Form for
Models 1030 and 3070 Nonattendant Voice Terminals
(Square Systems)

Intercom #   Identification

Voice Terminal Size:
❏ 5-Button
❏ 10-Button
❏ 34-Button
❏ 34-Button Deluxe
❏ Basic Touch-Tone or
   Rotary Telephone

Stand Type:
❏ Wall
❏ Plastic
❏ Fixed
❏ Desk
❏ Metal
❏ Adjustable

Accessories:
❏ General Purpose Adapter
❏ Headset
❏ Headset Adapter
❏ Hands-Free Unit
❏ Extra Long Cord

❏ Acoustic Coupler Adapter
❏ Hearing-Impaired Handset
❏ Push-to-Listen Handset
❏ Voice Terminal Power Supply
❏ Attendant Intercom Selector

34-Button

10-Button

5-Button

A2 A1 A0 Intercom–Voice Intercom–Ring

B2 B1 B0 A4 A3

Calling Restriction:
❏ Toll Call Restriction
❏ Outside Call Restriction

Allowed-List Numbers (0-7):

Automatic Line Selection:

Night Service Exclusion
❏ Yes
❏ No

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Voice Terminal Configuration Form for
Models 1030 and 3070 Nonattendant Voice Terminals
(Pooled Systems)

Intercom #   Identification

Voice Terminal Size:
- ❏ 5-Button
- ❏ 10-Button
- ❏ 34-Button
- ❏ 34-Button Deluxe
- ❏ Basic Touch-Tone or
- ❏ Rotary Telephone

Stand Type:
- ❏ Wall
- ❏ Plastic
- ❏ Fixed
- ❏ Desk
- ❏ Metal
- ❏ Adjustable

Accessories:
- ❏ General Purpose Adapter
- ❏ Headset
- ❏ Headset Adapter
- ❏ Hands-Free Unit
- ❏ Extra Long Cord

- ❏ Acoustic Coupler Adapter
- ❏ Hearing-Impaired Handset
- ❏ Push-to-Listen Handset
- ❏ Voice Terminal Power Supply
- ❏ Attendant Intercom Selector

Dial Access to Pools (9, 890-899):

Calling Restriction:
- ❏ Toll Call Restriction
- ❏ Outside Call Restriction

Allowed-List Numbers (0-7):

Automatic Line Selection:

Night Service Exclusion
- ❏ Yes
- ❏ No

160

Enhanced Night Service
Group Assignment Directory

Attendant 10		Attendant 11		Attendant 12		Attendant 13		Attendant 14	
Entry	Intercom #	Entry	Intercom #	Entry	Intercom #	Entry	Intercom #	Entry	Intercom #
1		1		1		1		1	
2		2		2		2		2	
3		3		3		3		3	
4		4		4		4		4	
5		5		5		5		5	
6		6		6		6		6	
7		7		7		7		7	
8		8		8		8		8	
9		9		9		9		9	
10		10		10		10		10	
11		11		11		11		11	
12		12		12		12		12	
13		13		13		13		13	
14		14		14		14		14	
15		15		15		15		15	
16		16		16		16		16	
17		17		17		17		17	
18		18		18		18		18	
19		19		19		19		19	
20		20		20		20		20	
21		21		21		21		21	
22		22		22		22		22	
23		23		23		23		23	
24		24		24		24		24	
25		25		25		25		25	
26		26		26		26		26	
27		27		27		27		27	
28		28		28		28		28	
29		29		29		29		29	

Enhanced Night Service
Group Assignment Directory

Attendant 10		Attendant 11		Attendant 12		Attendant 13		Attendant 14	
Entry	Intercom #	Entry	Intercom #	Entry	Intercom #	Entry	Intercom #	Entry	Intercom #
30		30		30		30		30	
31		31		31		31		31	
32		32		32		32		32	
33		33		33		33		33	
34		34		34		34		34	
35		35		35		35		35	
36		36		36		36		36	
37		37		37		37		37	
38		38		38		38		38	
39		39		39		39		39	
40		40		40		40		40	
41		41		41		41		41	
42		42		42		42		42	
43		43		43		43		43	
44		44		44		44		44	
45		45		45		45		45	
46		46		46		46		46	
47		47		47		47		47	
48		48		48		48		48	
49		49		49		49		49	
50		50		50		50		50	
51		51		51		51		51	
52		52		52		52		52	
53		53		53		53		53	
54		54		54		54		54	
55		55		55		55		55	
56		56		56		56		56	
57		57		57		57		57	
58		58		58		58		58	
59		59		59		59		59	
60		60		60		60		60	
61		61		61		61		61	
62		62		62		62		62	
63		63		63		63		63	
64		64		64		64		64	
65		65		65		65		65	
66		66		66		66		66	
67		67		67		67		67	
68		68		68		68		68	
69		69		69		69		69	

Enhanced Night Service with Outward Restriction Directory

Password: _____

NOTE: If you want to keep your password private, do not fill in this blank.

Emergency Allowed List

Entry	Telephone Number
0	_____
1	_____
2	_____
3	_____
4	_____
5	_____
6	_____
7	_____
8	_____
9	_____

Night Service Exclusion List
(Voice Terminals not Restricted During Night Service)

Entry		Entry		Entry	
1	_____	26	_____	51	_____
2	_____	27	_____	52	_____
3	_____	28	_____	53	_____
4	_____	29	_____	54	_____
5	_____	30	_____	55	_____
6	_____	31	_____	56	_____
7	_____	32	_____	57	_____
8	_____	33	_____	58	_____
9	_____	34	_____	59	_____
10	_____	35	_____	60	_____
11	_____	36	_____	61	_____
12	_____	37	_____	62	_____
13	_____	38	_____	63	_____
14	_____	39	_____	64	_____
15	_____	40	_____	65	_____
16	_____	41	_____	66	_____
17	_____	42	_____	67	_____
18	_____	43	_____	68	_____
19	_____	44	_____	69	_____
20	_____	45	_____	70	_____
21	_____	46	_____		
22	_____	47	_____		
23	_____	48	_____		
24	_____	49	_____		
25	_____	50	_____		

Enhanced Night Service with Time Set Table

Day	Service Off	Service On
Sunday		
Monday		
Tuesday		
Wednesday		
Thursday		
Friday		
Saturday		

Enhanced Night Service was administered on: _____

(day of week)

System Speed Dial Directory

Dial Code	Stored Number	Dial Code	Stored Number
#60		#80	
#61		#81	
#62		#82	
#63		#83	
#64		#84	
#65		#85	
#66		#86	
#67		#87	
#68		#88	
#69		#89	
#70		#90	
#71		#91	
#72		#92	
#73		#93	
#74		#94	
#75		#95	
#76		#96	
#77		#97	
#78		#98	
#79		#99	

Group Page Directory

Group 1

Intercom #	Identification
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	

Group 2

Intercom #	Identification
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	

Group 3

Intercom #	Identification
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	

Group 4

Intercom #	Identification
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	

Group 5

Intercom #	Identification
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	

Group 6

Intercom #	Identification
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	

Group 7

Intercom #	Identification
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	

Group Call Distribution (Intercom) Directory

Group O		Group 1		Group 2	
Intercom #	Identification	Intercom #	Identification	Intercom #	Identification
1		1		1	
2		2		2	
3		3		3	
4		4		4	
5		5		5	
6		6		6	
7		7		7	
8		8		8	
9		9		9	
10		10		10	
11		11		11	
12		12		12	
13		13		13	
14		14		14	
15		15		15	

Group 3		Group 4		Group 5	
Intercom #	Identification	Intercom #	Identification	Intercom #	Identification
1		1		1	
2		2		2	
3		3		3	
4		4		4	
5		5		5	
6		6		6	
7		7		7	
8		8		8	
9		9		9	
10		10		10	
11		11		11	
12		12		12	
13		13		13	
14		14		14	
15		15		15	

Group Call Distribution (Lines and/or Line Pools) Directory

Group O		Group 1		Group 2	
Entry	Line or Line Pool #	Entry	Line or Line Pool #	Entry	Line or Line Pool #
1		1		1	
2		2		2	
3		3		3	
4		4		4	
15		5		5	
6		6		6	
7		7		7	
8		8		8	
9		9		9	
10		10		10	
11		11		11	
12		12		12	
13		13		13	
14		14		14	
15		15		15	
16		16		16	
17		17		17	
18		18		18	
19		19		19	
20		20		20	
21		21		21	
22		22		22	
23		23		23	
24		24		24	
25		25		25	
26		26		26	
27		27		27	
28		28		28	
29		29		29	
30		30		30	

Group Call Distribution (Lines and/or Line Pools) Directory (continued)

Group 3		Group 4		Group 5	
Entry	Line or Line Pool #	Entry	Line or Line Pool #	Entry	Line or Line Pool #
1		1		1	
2		2		2	
3		3		3	
4		4		4	
5		5		5	
6		6		6	
7		7		7	
8		8		8	
9		9		9	
		10		10	
11		11		11	
12		12		12	
13		13		13	
14		14		14	
15		15		15	
16		16			
17		17		17	
18		18		18	
19		19		19	
20		20		20	
21		21		21	
22		22		22	
23		23		23	
24		24		24	
25		25		25	
26		26		26	
27		27		27	
28		28		28	
29		29		29	
30		30		30	

Allowed-List Directory

List 0	List 1	List 2	List 3
Entry 0	Entry 0	Entry 0	Entry 0
1	1	1	1
2	2	2	2
3	3	3	3
4	4	4	4
5	5	5	5
6	6	6	6
7	7	7	7
8	8	8	8
9	9	9	9

List 4	List 5	List 6	List 7
Entry 0	Entry 0	Entry 0	Entry 0
1	1	1	1
2	2	2	2
3	3	3	3
4	4	4	4
5	5	5	5
6	6	6	6
7	7	7	7
8	8	8	8
9	9	9	9

Automatic Route Selection Worksheet

Number of exchanges in your local calling area: _____

Pool Number	Line Type	Type of Dialing	Number of Area Codes or Exchanges for which Line Pool is Used
		T L	
		T L	
		T L	
		T L	
		T L	
		T L	
		T L	
		T L	
		T L	
		T L	
		T L	
		T L	
		T L	
		T L	
		T L	

T = Toll, L = Local

Default line pool for toll calls: _____ Backup line pool _____
Default line pool for local calls: _____ Backup line pool _____

Form for Automatic Route Selection Table

Total number of 6-digit tables: ___

Is this a 6-digit table? ___

Table 0
Area Code/Exchanges

#6000 ___	#6001 ___	#6002 ___	#6003 ___	#6004 ___
#6005 ___	#6006 ___	#6007 ___	#6008 ___	#6009 ___
#6010 ___	#6011 ___	#6012 ___	#6013 ___	#6014 ___
#6015 ___	#6016 ___	#6017 ___	#6018 ___	#6019 ___
#6020 ___	#6021 ___	#6022 ___	#6023 ___	#6024 ___
#6025 ___	#6026 ___	#6027 ___	#6028 ___	#6029 ___
#6030 ___	#6031 ___	#6032 ___	#6033 ___	#6034 ___
#6035 ___	#6036 ___	#6037 ___	#6038 ___	#6039 ___
#6040 ___	#6041 ___	#6042 ___	#6043 ___	#6044 ___
#6045 ___	#6046 ___	#6047 ___	#6048 ___	#6049 ___
#6050 ___	#6051 ___	#6052 ___	#6053 ___	#6054 ___
#6055 ___	#6056 ___	#6057 ___	#6058 ___	#6059 ___
#6060 ___	#6061 ___	#6062 ___	#6063 ___	#6064 ___
#6065 ___	#6066 ___	#6067 ___	#6068 ___	#6069 ___
#6070 ___	#6071 ___	#6072 ___	#6073 ___	#6074 ___
#6075 ___	#6076 ___	#6077 ___	#6078 ___	#6079 ___
#6080 ___	#6081 ___	#6082 ___	#6083 ___	#6084 ___
#6085 ___	#6086 ___	#6087 ___	#6088 ___	#6089 ___
#6090 ___	#6091 ___	#6092 ___	#6093 ___	#6094 ___
#6095 ___	#6096 ___	#6097 ___	#6098 ___	#6099 ___

Pool	Other Digits	Absorb
#700 ___	_____	#700 ___
#701 ___	_____	#701 ___
#702 ___	_____	#702 ___
#703 ___	_____	#703 ___
#704 ___	_____	#704 ___
#705 ___	_____	#705 ___

Form for Automatic Route Selection Table

Is this a 6-digit table? ___

Table 1
Area Code/Exchanges

#6100 ___	#6101 ___	#6102 ___	#6103 ___	#6104 ___
#6105 ___	#6106 ___	#6107 ___	#6108 ___	#6109 ___
#6110 ___	#6111 ___	#6112 ___	#6113 ___	#6114 ___
#6115 ___	#6116 ___	#6117 ___	#6118 ___	#6119 ___
#6120 ___	#6121 ___	#6122 ___	#6123 ___	#6124 ___
#6125 ___	#6126 ___	#6127 ___	#6128 ___	#6129 ___
#6130 ___	#6131 ___	#6132 ___	#6133 ___	#6134 ___
#6135 ___	#6136 ___	#6137 ___	#6138 ___	#6139 ___
#6140 ___	#6141 ___	#6142 ___	#6143 ___	#6144 ___
#6145 ___	#6146 ___	#6147 ___	#6148 ___	#6149 ___
#6150 ___	#6151 ___	#6152 ___	#6153 ___	#6154 ___
#6155 ___	#6156 ___	#6157 ___	#6158 ___	#6159 ___
#6160 ___	#6161 ___	#6162 ___	#6163 ___	#6164 ___
#6165 ___	#6166 ___	#6167 ___	#6168 ___	#6169 ___
#6170 ___	#6171 ___	#6172 ___	#6173 ___	#6174 ___
#6175 ___	#6176 ___	#6177 ___	#6178 ___	#6179 ___
#6180 ___	#6181 ___	#6182 ___	#6183 ___	#6184 ___
#6185 ___	#6186 ___	#6187 ___	#6188 ___	#6189 ___
#6190 ___	#6191 ___	#6192 ___	#6193 ___	#6194 ___
#6195 ___	#6196 ___	#6197 ___	#6198 ___	#6199 ___

Pool	Other Digits	Absorb
#710 ___		#700 ___
#711 ___		#711 ___
#712 ___		#712 ___
#713 ___		#713 ___
#714 ___		#714 ___
#715 ___		#715 ___

Form for Automatic Route Selection Table

Is this a 6-digit table? ___

Table 2
Area Code/Exchanges

#6200 ___	#6201 ___	#6202 ___	#6203 ___	#6204 ___
#6205 ___	#6206 ___	#6207 ___	#6208 ___	#6209 ___
#6210 ___	#6211 ___	#6212 ___	#6213 ___	#6214 ___
#6215 ___	#6216 ___	#6217 ___	#6218 ___	#6219 ___
#6220 ___	#6221 ___	#6222 ___	#6223 ___	#6224 ___
#6225 ___	#6226 ___	#6227 ___	#6228 ___	#6229 ___
#6230 ___	#6231 ___	#6232 ___	#6233 ___	#6234 ___
#6235 ___	#6236 ___	#6237 ___	#6238 ___	#6239 ___
#6240 ___	#6241 ___	#6242 ___	#6243 ___	#6244 ___
#6245 ___	#6246 ___	#6247 ___	#6248 ___	#6249 ___
#6250 ___	#6251 ___	#6252 ___	#6253 ___	#6254 ___
#6255 ___	#6256 ___	#6257 ___	#6258 ___	#6259 ___
#6260 ___	#6261 ___	#6262 ___	#6263 ___	#6264 ___
#6265 ___	#6266 ___	#6267 ___	#6268 ___	#6269 ___
#6270 ___	#6271 ___	#6272 ___	#6273 ___	#6274 ___
#6275 ___	#6276 ___	#6277 ___	#6278 ___	#6279 ___
#6280 ___	#6281 ___	#6282 ___	#6283 ___	#6284 ___
#6285 ___	#6286 ___	#6287 ___	#6288 ___	#6289 ___
#6290 ___	#6291 ___	#6292 ___	#6293 ___	#6294 ___
#6295 ___	#6296 ___	#6297 ___	#6298 ___	#6299 ___

Pool	**Other Digits**	**Absorb**
#720 ___		#720 ___
#721 ___		#721 ___
#722 ___		#722 ___
#723 ___		#723 ___
#724 ___		#724 ___
#725 ___		#725 ___

Form for Automatic Route Selection Table

Is this a 6-digit table? ___
Table 3
Area   Code/Exchanges

#6300 ___	#6301 ___	#6302 ___	#6303 ___	#6304 ___
#6305 ___	#6306 ___	#6307 ___	#6308 ___	#6309 ___
#6310 ___	#6311 ___	#6312 ___	#6313 ___	#6314 ___
#6315 ___	#6316 ___	#6317 ___	#6318 ___	#6319 ___
#6320 ___	#6321 ___	#6322 ___	#6323 ___	#6324 ___
#6325 ___	#6326 ___	#6327 ___	#6328 ___	#6329 ___
#6330 ___	#6331 ___	#6332 ___	#6333 ___	#6334 ___
#6335 ___	#6336 ___	#6337 ___	#6338 ___	#6339 ___
#6340 ___	#6341 ___	#6342 ___	#6343 ___	#6344 ___
#6345 ___	#6346 ___	#6347 ___	#6348 ___	#6349 ___
#6350 ___	#6351 ___	#6352 ___	#6353 ___	#6354 ___
#6355 ___	#6356 ___	#6357 ___	#6358 ___	#6359 ___
#6360 ___	#6361 ___	#6362 ___	#6363 ___	#6364 ___
#6365 ___	#6366 ___	#6367 ___	#6368 ___	#6369 ___
#6370 ___	#6371 ___	#6372 ___	#6373 ___	#6374 ___
#6375 ___	#6376 ___	#6377 ___	#6378 ___	#6379 ___
#6380 ___	#6381 ___	#6382 ___	#6383 ___	#6384 ___
#6385 ___	#6386 ___	#6387 ___	#6388 ___	#6389 ___
#6390 ___	#6391 ___	#6392 ___	#6393 ___	#6394 ___
#6395 ___	#6396 ___	#6397 ___	#6398 ___	#6399 ___

Pool	Other Digits	Absorb
#730 ___	_____	#730 ___
#731 ___	_____	#731 ___
#732 ___	_____	#732 ___
#733 ___	_____	#733 ___
#734 ___	_____	#734 ___
#735 ___	_____	#735 ___

Form for Automatic Route Selection Table

Is this a 6___digit table? ___

Table 4
Area Code/Exchanges

#6400 ___	#6401 ___	#6402 ___	#6403 ___	#6404 ___
#6405 ___	#6406 ___	#6407 ___	#6408 ___	#6409 ___
#6410 ___	#6411 ___	#6412 ___	#6413 ___	#6414 ___
#6415 ___	#6416 ___	#6417 ___	#6418 ___	#6419 ___
#6420 ___	#6421 ___	#6422 ___	#6423 ___	#6424 ___
#6425 ___	#6426 ___	#6427 ___	#6428 ___	#6429 ___
#6430 ___	#6431 ___	#6432 ___	#6433 ___	#6434 ___
#6435 ___	#6436 ___	#6437 ___	#6438 ___	#6439 ___
#6440 ___	#6441 ___	#6442 ___	#6443 ___	#6444 ___
#6445 ___	#6446 ___	#6447 ___	#6448 ___	#6449 ___
#6450 ___	#6451 ___	#6452 ___	#6453 ___	#6454 ___
#6455 ___	#6456 ___	#6457 ___	#6458 ___	#6459 ___
#6460 ___	#6461 ___	#6462 ___	#6463 ___	#6464 ___
#6465 ___	#6466 ___	#6467 ___	#6468 ___	#6469 ___
#6470 ___	#6471 ___	#6472 ___	#6473 ___	#6474 ___
#6475 ___	#6476 ___	#6477 ___	#6478 ___	#6479 ___
#6480 ___	#6481 ___	#6482 ___	#6483 ___	#6484 ___
#6485 ___	#6486 ___	#6487 ___	#6488 ___	#6489 ___
#6490 ___	#6491 ___	#6492 ___	#6493 ___	#6494 ___
#6495 ___	#6496 ___	#6497 ___	#6498 ___	#6499 ___

Pool	Other Digits	Absorb
#740 ___	_____	#740 ___
#741 ___	_____	#741 ___
#742 ___	_____	#742 ___
#743 ___	_____	#743 ___
#744 ___	_____	#744 ___
#745 ___	_____	#745 ___

Form for Automatic Route Selection Table

Is this a 6___digit table? ___

Table 5
Area Code/Exchanges

#6500 ___	#6501 ___	#6502 ___	#6503 ___	#6504 ___
#6505 ___	#6506 ___	#6507 ___	#6508 ___	#6509 ___
#6510 ___	#6511 ___	#6512 ___	#6513 ___	#6514 ___
#6515 ___	#6516 ___	#6517 ___	#6518 ___	#6519 ___
#6520 ___	#6521 ___	#6522 ___	#6523 ___	#6524 ___
#6525 ___	#6526 ___	#6527 ___	#6528 ___	#6529 ___
#6530 ___	#6531 ___	#6532 ___	#6533 ___	#6534 ___
#6535 ___	#6536 ___	#6537 ___	#6538 ___	#6539 ___
#6540 ___	#6541 ___	#6542 ___	#6543 ___	#6544 ___
#6545 ___	#6546 ___	#6547 ___	#6548 ___	#6549 ___
#6550 ___	#6551 ___	#6552 ___	#6553 ___	#6554 ___
#6555 ___	#6556 ___	#6557 ___	#6558 ___	#6559 ___
#6560 ___	#6561 ___	#6562 ___	#6563 ___	#6564 ___
#6565 ___	#6566 ___	#6567 ___	#6568 ___	#6569 ___
#6570 ___	#6571 ___	#6572 ___	#6573 ___	#6574 ___
#6575 ___	#6576 ___	#6577 ___	#6578 ___	#6579 ___
#6580 ___	#6581 ___	#6582 ___	#6583 ___	#6584 ___
#6585 ___	#6586 ___	#6587 ___	#6588 ___	#6589 ___
#6590 ___	#6591 ___	#6592 ___	#6593 ___	#6594 ___
#6595 ___	#6596 ___	#6597 ___	#6598 ___	#6599 ___

Pool	Other Digits	Absorb
#750 ___	_____	#750 ___
#751 ___	_____	#751 ___
#752 ___	_____	#752 ___
#753 ___	_____	#753 ___
#754 ___	_____	#754 ___
#755 ___	_____	#755 ___

Form for Automatic Route Selection Table

Is this a 6___digit table? ___

Table 6
Area Code/Exchanges

#6600 ___	#6601 ___	#6602 ___	#6603 ___	#6604 ___
#6605 ___	#6606 ___	#6607 ___	#6608 ___	#6609 ___
#6610 ___	#6611 ___	#6612 ___	#6613 ___	#6614 ___
#6615 ___	#6616 ___	#6617 ___	#6618 ___	#6619 ___
#6620 ___	#6621 ___	#6622 ___	#6623 ___	#6624 ___
#6625 ___	#6626 ___	#6627 ___	#6628 ___	#6629 ___
#6630 ___	#6631 ___	#6632 ___	#6633 ___	#6634 ___
#6635 ___	#6636 ___	#6637 ___	#6638 ___	#6639 ___
#6640 ___	#6641 ___	#6642 ___	#6643 ___	#6644 ___
#6645 ___	#6646 ___	#6647 ___	#6648 ___	#6649 ___
#6650 ___	#6651 ___	#6652 ___	#6653 ___	#6654 ___
#6655 ___	#6656 ___	#6657 ___	#6658 ___	#6659 ___
#6660 ___	#6661 ___	#6662 ___	#6663 ___	#6664 ___
#6665 ___	#6666 ___	#6667 ___	#6668 ___	#6669 ___
#6670 ___	#6671 ___	#6672 ___	#6673 ___	#6674 ___
#6675 ___	#6676 ___	#6677 ___	#6678 ___	#6679 ___
#6680 ___	#6681 ___	#6682 ___	#6683 ___	#6684 ___
#6685 ___	#6686 ___	#6687 ___	#6688 ___	#6689 ___
#6690 ___	#6691 ___	#6692 ___	#6693 ___	#6694 ___
#6695 ___	#6696 ___	#6697 ___	#6698 ___	#6699 ___

Pool	Other Digits	Absorb
#760 ___	_____	#760 ___
#761 ___	_____	#761 ___
#762 ___	_____	#762 ___
#763 ___	_____	#763 ___
#764 ___	_____	#764 ___
#765 ___	_____	#765 ___

Form for Automatic Route Selection Table

Is this a 6___digit table? ___

Table 7
Area Code/Exchanges

#6700 ___	#6701 ___	#6702 ___	#6703 ___	#6704 ___
#6705 ___	#6706 ___	#6707 ___	#6708 ___	#6709 ___
#6710 ___	#6711 ___	#6712 ___	#6713 ___	#6714 ___
#6715 ___	#6716 ___	#6717 ___	#6718 ___	#6719 ___
#6720 ___	#6721 ___	#6722 ___	#6723 ___	#6724 ___
#6725 ___	#6726 ___	#6727 ___	#6728 ___	#6729 ___
#6730 ___	#6731 ___	#6732 ___	#6733 ___	#6734 ___
#6735 ___	#6736 ___	#6737 ___	#6738 ___	#6739 ___
#6740 ___	#6741 ___	#6742 ___	#6743 ___	#6744 ___
#6745 ___	#6746 ___	#6747 ___	#6748 ___	#6749 ___
#6750 ___	#6751 ___	#6752 ___	#6753 ___	#6754 ___
#6755 ___	#6756 ___	#6757 ___	#6758 ___	#6759 ___
#6760 ___	#6761 ___	#6762 ___	#6763 ___	#6764 ___
#6765 ___	#6766 ___	#6767 ___	#6768 ___	#6769 ___
#6770 ___	#6771 ___	#6772 ___	#6773 ___	#6774 ___
#6775 ___	#6776 ___	#6777 ___	#6778 ___	#6779 ___
#6780 ___	#6781 ___	#6782 ___	#6783 ___	#6784 ___
#6785 ___	#6786 ___	#6787 ___	#6788 ___	#6789 ___
#6790 ___	#6791 ___	#6792 ___	#6793 ___	#6794 ___
#6795 ___	#6796 ___	#6797 ___	#6798 ___	#6799 ___

Pool	Other Digits	Absorb
#770 ___	_____	#770 ___
#771 ___	_____	#771 ___
#772 ___	_____	#772 ___
#773 ___	_____	#773 ___
#774 ___	_____	#774 ___
#775 ___	_____	#775 ___

Form for Automatic Route Selection Table

Table 8: Default Toll Table

Pool	Other Digits	Absorb
#780 ___	_____	#780 ___
#781 ___	_____	#781 ___
#782 ___	_____	#782 ___
#783 ___	_____	#783 ___
#784 ___	_____	#784 ___
#785 ___	_____	#785 ___

Table 9: Default Local Table

Pool	Other Digits	Absorb
#790 ___	_____	#790 ___
#791 ___	_____	#791 ___
#792 ___	_____	#792 ___
#793 ___	_____	#793 ___
#794 ___	_____	#794 ___
#795 ___	_____	#795 ___

Special Numbers (411, 611,911,800,900, 0) Table

Pool	Other Digits	Absorb
9	#800 _____	0

Index

Quick Reference Guide to Administration Procedures

This chart summarizes the administrative procedures described on pages 29 through 126. For more information about a procedure, refer to the page listed.

Before you perform any of these procedures, enter administration mode by following the steps below.

- Set switch A on the Processor Module in the control unit to Administer (down).
- Insert the administration mode button labels (seethe back of this manual) in the administrator/attendant console.
- Slide the T/P switch on the left side of the console to *P.*

When you finish administering your system, leave administration mode by following the steps below.

- Slide the T/P switch to the center position.
- Set switch A on the Processor Module to Attendant (up).
- Remove the administration mode button labels from the console and insert the regular call-handling labels used by the attendant.

NOTE: If you have an economy administrator/attendant console, perform this procedure instead of touching an Auto Intercom button:

- Dial the intercom number to identify a voice terminal.
- Touch **Hold** and dial the intercom number to add a voice terminal to a group or list.
- Touch **Drop** and dial the intercom number to remove a voice terminal from a group or list.
- Touch **Drop** and then touch * to remove all the voice terminals from a group or list.

Procedure	Touch	Then
PERFORM BASIC ADMINISTRATION		

Specify Touch-Tone or rotary signaling.
 	
 (See page 29.)
	Adm Misc	• Dial #302.
		 • Touch line buttons.
		   Steady green on = Touch-Tone
		   Green off = rotary
		 • Touch **Adm Misc.**

Set system to work with Call Management System (CMS) or	**Adm Misc**	• Dial #3141. • Touch **Adm Misc.**
Set system to work without **CMS (default)** (See page 30.)	**Adm Misc**	• **Dial #3140.** • Touch **Adm Misc.**

Assign lines to voice ter- **minals in square systems.**
 	
 (See page 31.)
	Adm Tel	• **Touch Auto Intercom button representing voice terminal.**
		 • Touch line buttons.
		   Steady green on = line is assigned
		   Green off = line is not assigned
		 • Touch **Adm Tel.**

Set up line pools in pooled systems.
 	
 (See page 35.)
	Adm Pool	• Dial pool code (9 for main pool or 890 through 899 for additional pools) if administering more than one line pool.
		 • Touch line buttons.
		   Steady red on = line is in pool
		   Red off = line is not in pool
		 • Touch **Adm Pool.**

Quick Reference Guide to Administration Procedures (continued]

Procedure	Touch	Then
PERFORM BASIC ADMINISTRATION (continued)		

Assign lines and line pools to voice terminals in pooled systems.
 	
(See page 37.)
	Adm Tel	• Touch Auto Intercom button representing voice terminal.
		• Touch line buttons.
		   Steady green on = line or pool assigned
		   Green off = line or pool not assigned
		• Touch **Adm Tel.**

Assign Dial Access to Line Pools.
 	
(See page 43.)
	Adm Tel	• Touch Auto Intercom button representing voice terminal.
		• Touch same Auto Intercom button again.
		• Touch line buttons.
		   Steady green on = dial access to pool containing line
		   Green off = no dial access to pool containing line
		• Touch **Adm Tel.**

CUSTOMIZE WITH OTHER SYSTEM OPTIONS		
Assign outward and toll call restrictions to voice terminals. **NOTE:** If you do not need to dial a toll prefix (0 or 1) to place a long distance call, follow steps 1 and 2 below. If you use a toll prefix, just follow step 2 below.		

1. Set lines to identify long distance calls by toll prefix or by area code only.	**Call Rstr**	• Touch line buttons.
		   Steady green on = toll prefix
		   Green off = area code on/y
		• Touch Call Rstr.

2. Assign restrictions to voice terminals.
 	
(See page 47.)
	Adm Tel	• Touch Auto Intercom button representing voice terminal.
		• Touch Call Rstr.
		   Steady green on = all calls permitted
		   Flashing green = local and intercom calls and any assigned lists
		   Green off = intercom calls and any assigned lists
		• Touch **Adm Tel.**

Give a voice terminal the same line and call restriction assignments as another voice terminal.	**Adm Tel**	• Touch Auto Intercom button representing new voice terminal. • Touch Message. • Touch Auto Intercom button representing voice terminal whose assignments you want to copy.
Set up allowed lists. (See page 49.)	**Adm Misc**	• Dial #5. • Dial list number (0 through 7), then dial entry number (0 through 9). • Dial entry (area code and/or exchange). • Touch **Adm Misc.**

Assign allowed-list call restrictions to voice terminals.
 	
(See page 51.)
	Adm Misc	• Dial #4, then dial list number (0 through 7).
		• Touch Auto Intercom button representing voice terminal.
		   Steady green on = access to numbers in list
		   Green off = no access to numbers in list
		• Touch **Adm Misc.**

Get a printout of an allowed list.	**Adm Misc**	• Dial #5. • Dial list number (0 through 7). • Dial 0#900 and wait for beep. • Touch **Adm Misc.**

Quick Reference Guide to Administration Procedures (continued)

Procedure	Touch	Then
CUSTOMIZE WITH OTHER SYSTEM OPTIONS (continued)		
Administer Automatic Route Selection (ARS). (See page 53.)		
To specify how many tables are 6-digit tables:	**Adm Misc**	• Dial #305. • Dial number of 6-digit tables (0 through 8). • Touch **Adm Misc.**
To add an area code or exchange:	**Adm Mist**	• Dial #6. • Dial table number (0 through 7). • Dial entry number (00 through 99). • Dial entry (area code or exchange). • Touch **Adm Misc.**
To delete an area code or exchange:	**Adm Misc**	• Dial #6. • Dial table number (0 through 7). • Dial entry number (00 through 99). • Touch Drop. • Touch **Adm Misc.**
To add a pool number and other digits:	**Adm Misc**	• Dial #7. • Dial table number (0 through 9). • Dial entry number (0 through 5). • Dial entry (pool number and access or account code, if required). • Touch **Adm Misc.**

To associate an absorption type with a pool number after adding pool number:	**Adm Misc**	• Dial #7.
		• Dial table number (0 through 9).
		• Dial entry number (0 through 5).
		• Dial absorption type.
		  0 = none
		  1 = leading 1
		  2 = area code
		  3 = 1 + area code
		  4 = 1 + exchange
		  5 = 1 + area code + exchange
		• Touch **Adm Misc.**

To delete a pool number, absorption type, and other digits:	**Adm Misc**	• Dial #7. • Dial table number (0 through 9). • Dial entry number (0 through 5). • Touch Drop. • Touch **Adm Misc.**
To add other digits to Pool 9 in the Special Numbers Table:	**Adm Misc**	• Dial #800. • Dial entry (access and account code). • Touch **Adm Misc.**
To delete other digits in the Special Numbers Table:	**Adm Misc**	• Dial #800. • Touch Drop. • Touch **Adm Misc.**
Get a printout of ARS tables.	**Adm Misc**	. Dial #902 and wait for beep. . Touch **Adm Misc.**

Quick Reference Guide to Administration Procedures (continued)

Procedure	Touch	Then
CUSTOMIZE WITH OTHER SYSTEM OPTIONS (continued)		

Assign voice terminals to groups for Group Page.
 	
(See page 79.)
	Adm Misc	• Dial #84, then dial Group Page group number.
		• Touch Auto Intercom button representing voice terminal.
		   Steady green on = assigned to paging group
		      Green off = not assigned to paging group
		• Touch **Adm Misc.**

Get a printout of paging groups.	**Adm Misc**	• Dial #903 and wait for beep. • Touch **Adm Misc.**

Assign voice terminals to groups for Group Call Distribution.
 	
(See page 81.)
	Adm Misc	• Dial #85.
		• Dial number of Call Distribution group (0 through 5).
		• Touch Auto Intercom button representing voice terminal
		   Steady green on = assigned to group
		      green off = not assigned to group
		• Touch **Adm Misc.**

Associate lines with groups for Group Call Distribution	**Adm Misc**	• Dial #85.
		• Dial number of Call Distribution group (0 through 5)
		• Touch line button.
		   Steady green on = assigned to group
		      green off = not assigned to group.
		• Touch **Adm Misc.**

Get a printout of Call Distribution groups	**Adm Misc**	• Dial #906 and wait for beep. • Touch **Adm Misc.**
Set system for One-Touch Transfer (default) or	**Adm Misc**	• Dial #3150. • Touch **Adm Misc.**
Set system for One-Touch Hold with Call Announcement (See page 84.)	**Adm Misc**	• Dial #3151. • Touch **Adm Misc.**
Administer Enhanced Night Service (See page 86.)		

To assign voice terminals to attendant's Night Service group	**Adm Misc**	• Dial #307.
		• Dial attendant's intercom number (10 through 14),
		• Touch Auto Intercom button representing voice terminal.
		   Steady green on = assigned to group
		      Green off = not assigned to group
		• Touch Adm Misc.

To assign extra alerting devices to lines	**Adm Misc**	• Dial #307.
		• Touch line buttons.
		   Steady green on = line activates alerting device 1
		      Flashing green = line activates alerting device 2
		 Rapidly flashing green = line activates alerting device 3
		      Green off = line does not activate alerting device
		• Touch Adm Misc.

To assign Outward Restriction	**Adm Misc**	• Dial #309. • Dial a 4-digit password. • Touch **Adm Misc.**

Quick Reference Guide to Administration Procedures (continued)

Procedure	Touch	Then
CUSTOMIZE WITH OTHER SYSTEM OPTIONS (continued)		
Administer Enhanced Night Service (continued)		
To remove Outward Restriction	**Adm Misc**	• Dial #309. • Touch **Drop.** • Touch **Adm Misc.**
To set up a list of emergency numbers	**Adm Misc**	• Dial #310. • Dial entry number (0 through 9). • Dial telephone number. • Touch **Adm Misc.**

To set up an Exclusion list	**Adm Misc**	• Dial #308.
		• Touch Auto Intercom button representing voice terminal.
		  Steady green on = assigned to group
		        green off = not assigned to group
		• Touch **Adm Misc.**

To set times for Night Service to go on and off automatically on a particular day of the week	**Adm Misc**	• Dial #311. • Dial number of day of week (0 through 6). • Dial start time using 24-hour clock (2 digits for hour, 2 digits for minute). • Dial #312. • Dial number of day of week (0 through 6). • Dial stop time using 24-hour clock (2 digits for hour, 2 digits for minute). • Touch **Adm Misc.**
To enable Time Set Night Service by recording current day	**Adm Misc**	• Dial #313. • Dial number of current day of week (0 through 6). •I Touch **Adm Misc.**
To suspend Night Service with Time Set	**Adm Misc**	• Dial #313. • Dial 9. • Touch **Adm Misc.**
To get a printout of Enhanced Night Service Information	**Adm Misc**	• Dial #907 and wait for beep. • Touch **Adm Misc.**
Assign System Speed Dial codes. (See page 96.)	**Conference**	• Dial 0. • Dial System Speed Dial Codes (#60 through #99) and * if marked code. • Dial telephone number. • Touch Conference two times.
Get a printout of System Speed Dial codes.	**Adm Misc**	• Dial #901 and wait for beep. • Touch **Adm Misc.**
Administer Station Message Detail Recording (SMDR) options. (See page 99.)	**Adm Misc**	• Dial #300, then dial current time using 24-hour clock (2 digits for hour, 2 digits for minute). • Dial #301, then dial current date (2 digits for month, 2 digits for day, 2 digits for year). • Dial #390, then set minimum call duration (2 digits for minutes) • Dial #3910 to record outgoing calls only Dial #3911 to record outgoing and incoming calls. • Touch **Adm Misc.**
To get a printout of SMDR options.	**Adm Misc**	• Dial #905 or #390#900 and wait for beep. • Touch **Adm Misc.**

Quick Reference Guide to Administration Procedures (continued]

Procedure	Touch	Then
CUSTOMIZE WITH OTHER SYSTEM OPTIONS (continued)		
Set printer to scroll to top of page automatically (with printer off and scrolled to top of next page). (See page 101.)	**Adm Misc**	• Dial #399. • Touch **Adm Misc.**
Set Transfer Return Interval. (See page 102.)	**Adm Misc**	• Dial #306. • Dial number of rings (1 through 9) preferred before calls return to original voice terminal. Dial 0 if transferred calls should not return. • Touch **Adm Misc.**

Set disconnect interval for held calls.	**Adm Misc**	• Dial #303.
		• Touch line buttons.
		   Steady green on = *line drops held call on long (450 milli-second) signal (default)*
		   Green off = *line drops held call on short (50 milli-second) signal*
		• Touch **Adm Misc.**

To get a printout of System Information	**Adm Misc**	• Dial #905 and wait for beep. • Touch **Adm Misc.**
Prepare for Centralized Voice Terminal Programming. (See page 109.)	**Conference**	• Touch Auto Intercom button for terminal to be programmed.