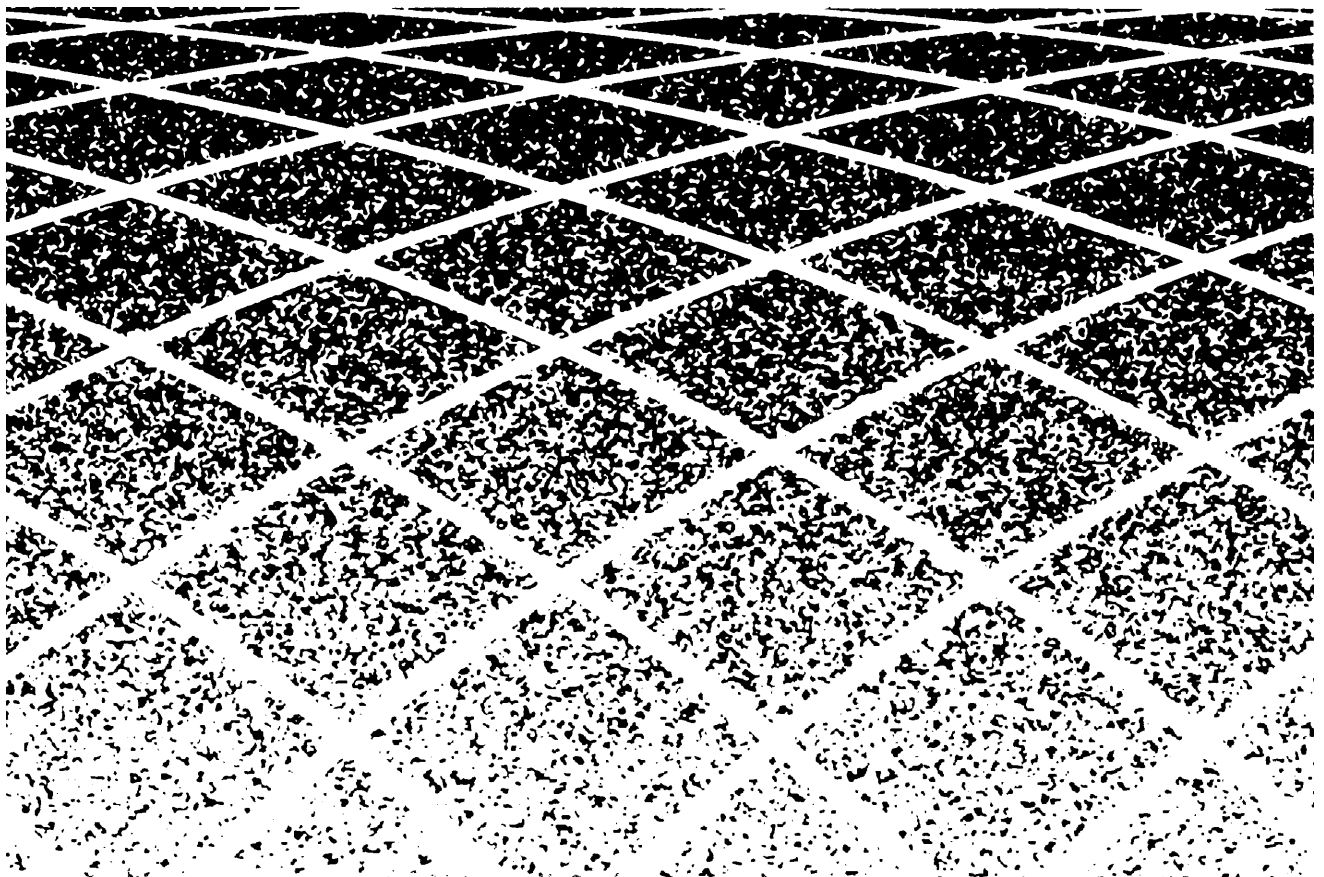




MERLIN[®] Identifier

Installation & Administration



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**518-601-100
Issue 1
June 1993**

Notice

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

Federal Communications Commission (FCC)

Interference Notice

This equipment has been tested and found to comply with the limits of a Class A digital device, pursuant to Part 15 of FCC rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his or her own expense.

FCC Requirements

1. The Federal Communications Commission (FCC) has established Rules which permit this system to be directly connected to the telephone network. Connection to the telephone network shall be through a standard network interface jack USOC RJ11C. These USOCs must be ordered from your Telephone Company. This equipment should not be used on party lines or coin lines.
2. If this system is malfunctioning, it may also be causing harm to the telephone network; this system should be disconnected until the source of the problem can be determined and until repair has been made. If this is not done, the telephone company may temporarily disconnect service.
3. The telephone company may make changes in its technical operations and procedures; if such changes affect the compatibility or use of this system, the telephone company is required to give adequate notice of the changes. You will be advised of your right to file a complaint with the FCC.

4. Before connecting this system, you must inform the local telephone company of the following:
- The telephone numbers you will be using with this equipment.
 - The appropriate registration number and ringer equivalence number (REN) which can be found on the back or bottom of the control unit. [The ringer equivalence number (REN) is used to determine how many devices can be connected to your telephone line. In most areas, the sum of the RENs of all devices on any one line should not exceed five (5.0). If too many devices are attached, they may not ring properly.]
 - When this equipment is permanently disconnected from the line(s).

Port ID	REN/SOC	FIC	USOC
MERLIN Identifier	0.0B/9.0Y Always connected in parallel with MERLIN Phone System	02LS2	RJ11C

5. Repairs to this equipment can be made only by the manufacturers, their authorized agents, or by others who may be authorized by the FCC. [In the event repairs are needed on this equipment, please contact the AT&T National Service Assistance Center (NSAC) at 1 800 628-2888 or your authorized AT&T dealer.]

Canadian Department of Communications (DOC)

Interference Information

This digital apparatus does not exceed the Class A limits for radio noise emissions set out in the radio interference regulations of the Canadian Department of Communications.

Le Présent Appareil Numérique n'émet pas de bruits radioélectriques dépassant les limites applicables aux appareils numériques de la class A prescrites dans le Règlement sur le brouillage radioélectrique édicté par le ministère des Communications du Canada.

Security

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

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

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PROCOMM PLUS and Datastorm are registered trademarks of Datastorm Technologies, Inc.

Windows is a trademark of Microsoft Corporation.

Warranty

AT&T provides a limited warranty to this product. Refer to the "Limited Use Software License Agreement" card provided with this package.

Ordering Information

The order number for this book is 518-601-100. To order additional books, call 1 800 432-6600 in the U.S. and 1 800 255-1242 in Canada.

Support Telephone Numbers

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

Important Safety Information

1. Never install telephone wiring during a lightning storm.
2. Never install telephone jacks in wet locations unless the jack is specifically designed for wet locations.
3. Never touch uninsulated telephone wires or terminals unless the telephone has been disconnected at the network interface.
4. Use caution when installing or modifying telephone lines.

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Introduction

1

MERLIN® Identifier is a MERLIN telephone system adjunct that lets businesses use Caller ID* service to support business operations. If your regional telephone company provides Caller ID service, your business can use the MERLIN Identifier system to do the following:

- Display the telephone number of an incoming call if the call was made from a local exchange with Caller ID service within your LATA (Local Area Telephone Access)
- Display the caller's name if the incoming call's telephone number matches a telephone number and name in the MERLIN Identifier database, or it can display the name and number if both are provided by the telephone company
- Beep to ensure that the caller receives attention if the incoming call's telephone number has been designated as a "priority" call in the MERLIN Identifier database

* Caller ID is a Custom Local Area Signalling Service (CLASS) offered by regional telephone companies for selected calling areas or exchanges. Contact your telephone company to find out the telephone exchanges providing Caller ID in your LATA calling area.

- Review information for the last 18 calls on each of four telephone lines to ensure that callers have received timely service

If the MERLIN Identifier system is used with a purchased Windows™-based contact management software application, or your own custom database management software running on a personal computer (PC), you can use the MERLIN Identifier system to do the following as well:

- Set up a business-specific profile (database) of additional caller information that displays automatically when a call's telephone number matches a telephone number already in the profile
- Add notes or memos to the profile as the call progresses
- Transfer caller names and telephone numbers between the MERLIN Identifier database and the PC database profile
- Maintain a call history log of incoming calls, both answered and unanswered

MERLIN Identifier Components and Features

The MERLIN Identifier system consists of a Control Unit, individual Display units, an Administrative Keyboard, and an Administrative Display unit. Optionally, the MERLIN Identifier system can connect to a personal computer (PC) for administrative or database management functions and to a serial printer to output Caller ID information. Refer to Figure 1 as you read about the MERLIN Identifier component descriptions that follow.

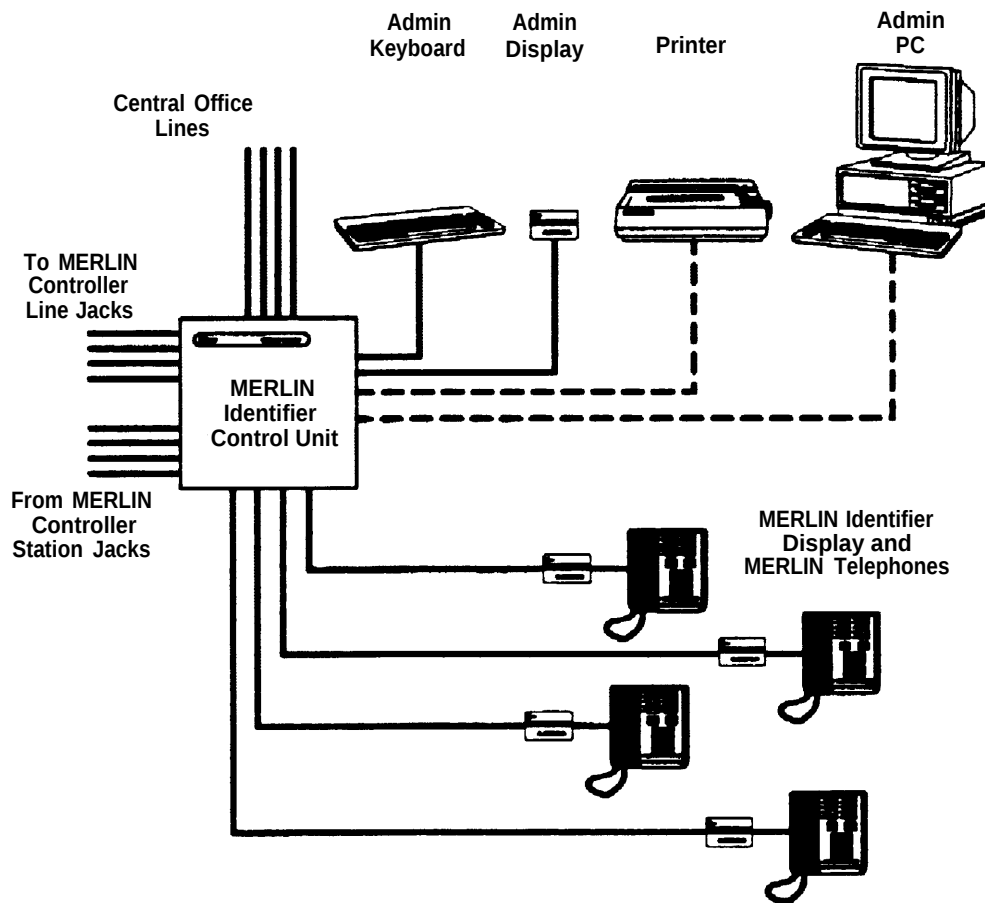


Figure 1. MERLIN Identifier Components

MERLIN Identifier Control Unit provides Caller ID functions, administrative functions, and the MERLIN Identifier database. For each incoming call, the MERLIN Identifier system sends the following information to the MERLIN Identifier Displays: the last two digits of the line number on which the call was received, the time and date of the call as recorded at the Central Office, and if the caller's exchange provides Caller ID service, the caller's telephone number as well.

If the telephone number matches a record in the MERLIN Identifier database that has a name associated with it, the MERLIN Identifier system also sends the caller's name to the MERLIN Identifier Displays. If the Central Office sends the caller's name with the telephone number and there is no matching name in the database, the name supplied by the Central Office is sent to the MERLIN Identifier Displays.

MERLIN Identifier Displays display the information sent to them from the MERLIN Identifier Control Unit—both Caller ID information as it is received and MERLIN Identifier database information that corresponds to the caller's telephone number. If the caller's MERLIN Identifier database record has a "priority flag," the MERLIN Identifier Display can be set to beep to call attention to it. The MERLIN Identifier Display can also be set to beep at every call, or never to beep at all. Users can scroll through the information displayed for the last 18 callers on each of up to four Central Office lines.

See the *MERLIN Identifier User's Quick Reference* for more information on MERLIN Identifier Displays.

MERLIN Identifier Administrative Display and Keyboard are used by the system administrator to set up the MERLIN Identifier system and maintain the MERLIN Identifier database. MERLIN Identifier command menus, messages, and prompts are displayed on the Administrative Display. Single character administrative commands are entered on the Administrative Keyboard and simultaneously displayed on the Administrative Display.

Administrative PC is a customer-provided PC that can be used in place of the standard Administrative Display and keyboard to provide additional administrative features such as expanded menus and prompts, and data transfers between the MERLIN Identifier database and database software running on the PC.

NOTE:

The Administrative PC requires asynchronous communications software to communicate with the MERLIN Identifier Control Unit.

Serial Printer provides a printed copy of Caller ID information, such as line number, caller's telephone number, caller name from MERLIN Identifier database, and day and time of call, as it is received by the the MERLIN Identifier Control Unit. This printed copy can be used as a source of data for the MERLIN Identifier database. If desired, you can connect a PC instead of the printer to capture the Caller ID output for use in your own custom PC applications.

Supported Telephone Equipment

The MERLIN Identifier system supports all past and present MERLIN telephone systems and stations.

MERLIN Identifier Database

The MERLIN Identifier Control Unit lets you create and maintain a database of approximately 2500 caller records consisting of a 10-digit telephone number and a 16-character name. If many of the caller names are less than 16 characters, even more caller records can be maintained.

The system administrator is responsible for creating and maintaining the MERLIN Identifier database. Using either the Administrative Display and Keyboard, or optionally, an Administrative PC, the system administrator enters the telephone numbers and names of callers into the MERLIN Identifier database as they should appear on the MERLIN Identifier Displays.

Database Integrity

The following features ensure the integrity of the caller information in the MERLIN Identifier database:

- Password entry is required before access to administrative database functions is permitted
- Access to administrative functions “times-out” after 120 seconds of keyboard inactivity—password entry is required before the administrative functions can be accessed again
- Record locking during edit prevents the “half-edited” database records from displaying at the MERLIN Identifier Display—the original, unedited record displays instead
- Capacitor power backup retains data for a minimum of 72 hours following power loss

Database Transfers

The system administrator can transfer caller information between the MERLIN Identifier database and a database management system running on the Administrative PC. Both database upload and download transfers are supported using asynchronous communications software, such as PROCOMM PLUS® or Windows Terminal*, and either XMODEM or text file transfer protocols.

* Although other asynchronous communications software may work, only PROCOMM PLUS 2.01 and Windows 3.1 Terminal are recommended for use with MERLIN Identifier.

System Administration Overview

The MERLIN Identifier system administrator is initially responsible for the planning, set up, and installation of the MERLIN Identifier system. This requires the following efforts:

- Ordering Caller ID service for the lines to be monitored by the MERLIN Identifier system
- Determining the location and requirements for the MERLIN Identifier equipment
- Identifying the MERLIN phones that require MERLIN Identifier Displays (each requires an AC outlet nearby)
- Determining whether to administer MERLIN Identifier from a PC or a MERLIN Identifier Display and keyboard
- Setting up MERLIN Identifier database maintenance procedures and source data documents
- Setting up and maintaining a PC database management system, if one is used

Once the MERLIN Identifier system has been installed, the system administrator is responsible for maintaining the MERLIN Identifier database and training MERLIN Identifier users.

Installing the MERLIN Identifier System

2

Installing the MERLIN® Identifier system consists of the following installation steps:

- Step 1. Verifying that you have the necessary MERLIN Identifier components
- Step 2. Mounting the MERLIN Identifier Control Unit
- Step 3. Wiring the MERLIN Identifier Control Unit
- Step 4. Mounting the MERLIN Identifier Displays
- Step 5. Wiring the MERLIN Identifier Displays
- Step 6. Connecting the Administrative components
- Step 7. Setting up MERLIN Identifier parameters

STEP 1: Verify MERLIN Identifier Components

Make sure that you have the following before you install the MERLIN identifier system:

- Caller ID service on the Central Office lines to be monitored by the MERLIN Identifier system
- MERLIN Identifier components for your planned installation
- AC power outlets for each MERLIN Identifier Display, the MERLIN Identifier Control Unit, and any optional equipment

Required MERLIN Identifier Components

Your AT&T MERLIN Identifier system shipment should contain the components you ordered. Verify your shipment against the individual MERLIN Identifier parts list options found in Appendix B.

At a minimum, your order should contain the following:

- MERLIN Identifier Control Unit and cover, 9 volt 1 ampere power transformer, modular cords with RJ45 plugs, modular cords with RJ11 plugs, and mounting screws
- For keyboard administration, a keyboard, keyboard adapter cable, two keyboard mounting brackets, MERLIN Identifier Display, display wall mounting, 9 volt 200 milliampere power transformer, a modular cord with RJ45 plugs, and mounting screws
- For PC administration, a modular cord with RJ45 plugs and RJ45-to-DB9 and RJ45-to-DB25 adapters

- One or more MERLIN Identifier Displays, each with a 9 volt 200 milliampere power transformer, a modular cord with RJ45 plugs, a modular cord with RJ11 plugs, and a phone mounting bracket or a display wall mounting and mounting screws

Optional Equipment

If you ordered it, your shipment may also include a serial printer, two modular cords with RJ45 plugs, an RJ45-to-DB9 adapter, and an RJ45-to-DB25 adapter.

STEP 2: Mount the MERLIN Identifier Control Unit

The MERLIN Identifier Control Unit should be mounted near the MERLIN Controller—placed on a desk, on a shelf, or mounted on a plywood sheet attached to the wall studs. If you place the MERLIN Identifier Control Unit on a desk or shelf, make sure that you have adequate space to work. If you mount the MERLIN Identifier Control Unit on the wall, refer to Figure 2 as you follow the instructions below:

1. Position the MERLIN Identifier Control Unit on the plywood surface near the MERLIN Controller and an AC power outlet, and mark points on the plywood surface for the pilot holes.

WARNING:

Do not use the supplied mounting screws if you are mounting the MERLIN Identifier Control directly to the wall and not to plywood. Instead, use wall fasteners, such as screws with expansive wall anchors or Molly bolts, to ensure permanent and secure mounting.

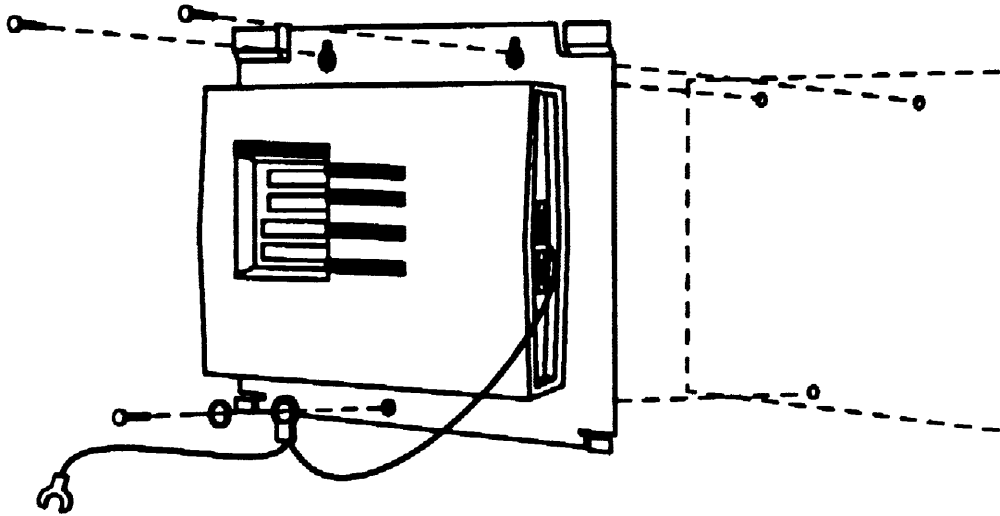


Figure 2. Mounting the MERLIN Identifier Control Unit

2. Remove the MERLIN Identifier Control Unit and drill pilot holes in the mounting surface for the #6 x 1/2-inch self-tapping screws (supplied) or for the wall fasteners you have selected.
3. Do one of the following:
 - If you are mounting to plywood, align the mounting holes in the MERLIN Identifier Control Unit base with the pilot holes and drive #6 x 1/2-inch screws through the top two mounting holes.
 - If you are mounting directly to the wall, first install the wall fasteners, then align the mounting holes in the MERLIN Identifier Control Unit base with the pilot holes and drive the screws or bolts through the top two mounting holes.
4. Drive a screw or bolt through the lockwasher, grounding wire eyelet terminal, and bottom mounting hole.
5. Attach the grounding wire spade terminal to an approved ground.

STEP 3: Wire the MERLIN Identifier Control Unit

Refer to Figures 3 and 4 as you follow the instructions below to wire the MERLIN Identifier Control Unit:

1. Disconnect the Central office line cords from the MERLIN Controller jacks labeled “LINES” and plug them into the corresponding MERLIN Identifier Control Unit jacks labeled “C.O. LINES IN” (see Figure 3).

NOTE:

If it has not already been done, you should label all lines going in and coming out of the MERLIN Controller.

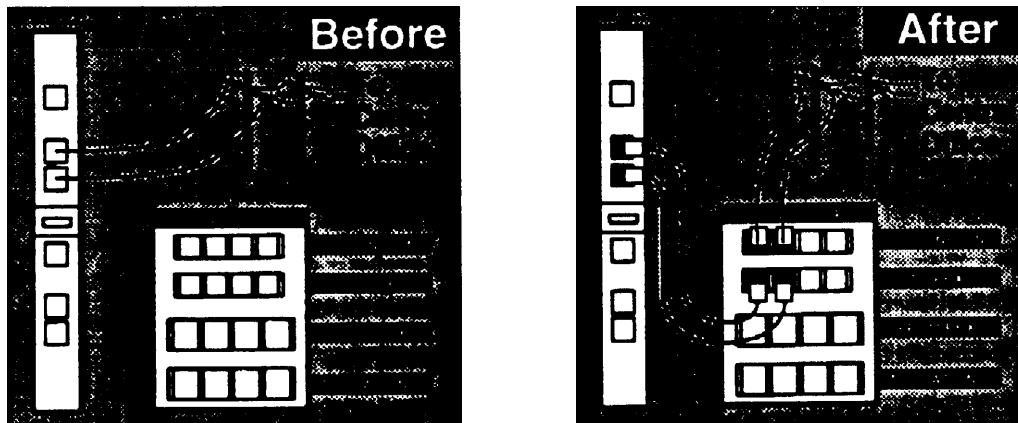


Figure 3. Rerouting the Central Office Lines

2. Using the modular cords with RJ11 plugs, bridge each Central Office line to the MERLIN Controller by plugging one end into the MERLIN Identifier Control Unit jacks labeled “TO PBX” and the other end into the MERLIN Controller jacks labeled “LINES” (see Figure 3).
 3. Disconnect the station line cords from the MERLIN Controller jacks labeled “STATIONS” and plug them into the corresponding MERLIN Identifier Control Unit jacks labeled “TO STATIONS” (see Figure 4).
-

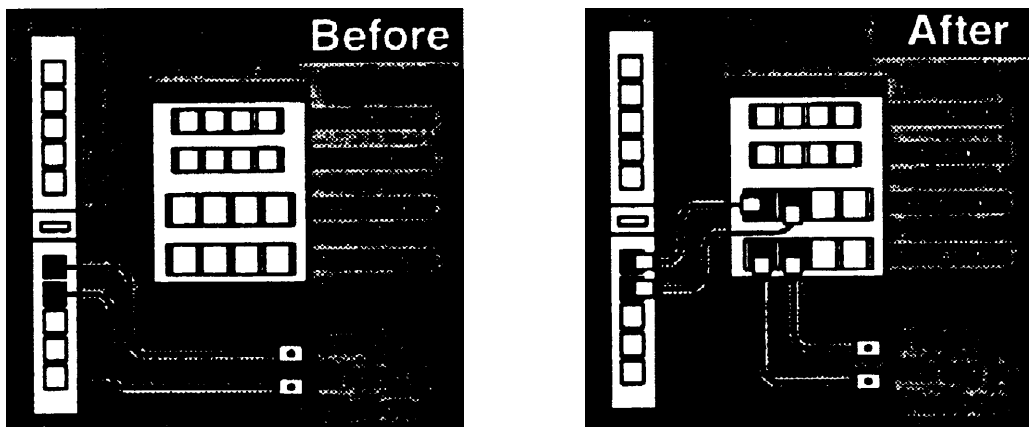


Figure 4. Rerouting the Station Lines

4. Using the modular cords with RJ45 plugs, bridge each station line to the MERLIN Controller by plugging one end into the MERLIN Identifier Control Unit jacks labeled “FROM PBX” and the other end into the MERLIN Controller jacks labeled “STATIONS” (see Figure 4).

STEP 4: Mount the MERLIN Identifier Display Units

MERLIN Identifier Display units can be mounted directly on a wall or to the MERLIN telephone. Refer to Figure 5 as you follow the instructions to mount the MERLIN Identifier Display units.

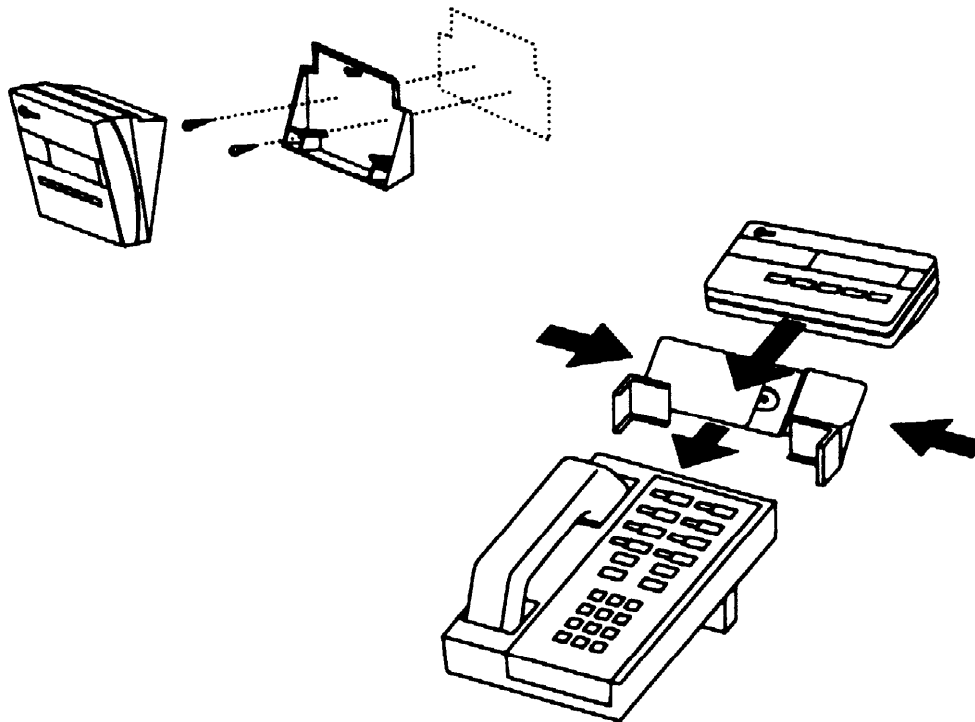


Figure 5. Mounting the MERLIN Identifier Display Units

Wall Mounting

To mount the MERLIN Identifier Display unit to the wall, follow the instructions below:

1. Position the wall mounting bracket on the wall near the MERLIN telephone and an AC power outlet, and mark points for the pilot holes.
2. Remove the wall mounting bracket, drill pilot holes, and install the plastic screw anchors.
3. Reposition the wall mounting bracket over screw anchors and drive the #6 x 1/2-inch self-tapping screws through the mounting holes and into the anchors.
4. Align the slots on the back of the MERLIN Identifier Display with the three prongs on the wall mounting bracket, and snap the MERLIN Identifier Display into place.

Telephone Mounting

To mount the MERLIN Identifier Display unit to a MERLIN telephone, follow the manufacturer's instructions included with the telephone mounting bracket.

STEP 5: Wire the MERLIN Identifier Display Units

Refer to Figure 6 as you follow the instructions to connect the MERLIN Identifier Display unit to the MERLIN telephone and to a PC.

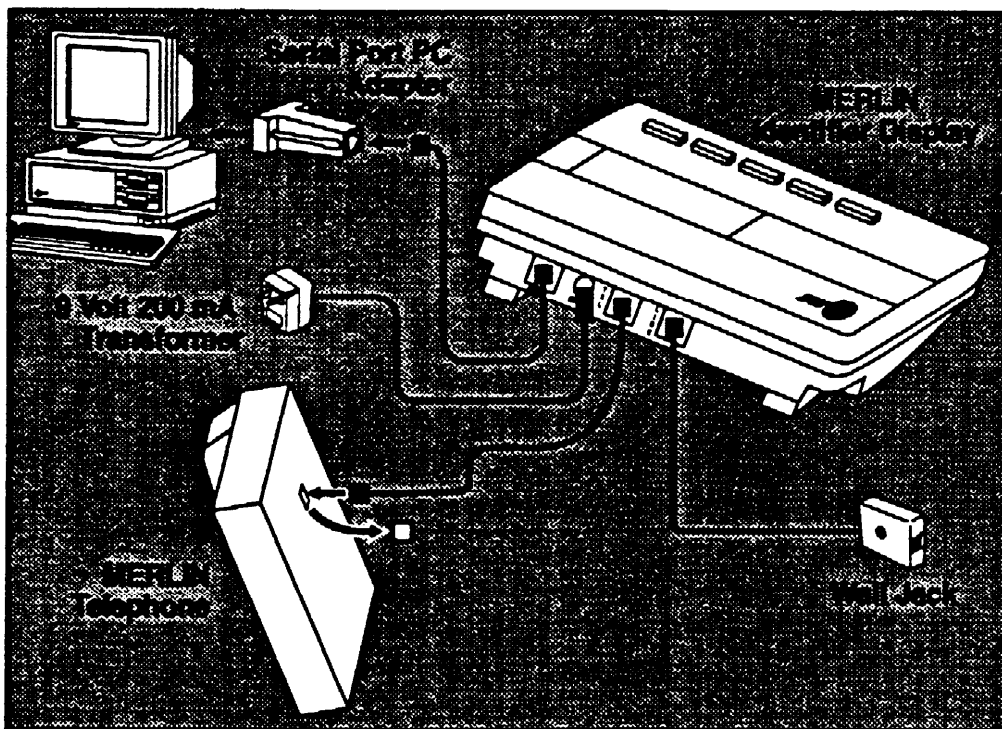


Figure 6. Wiring the MERLIN Identifier Display Units

Connecting the Display to a MERLIN Telephone

Follow the instructions below to wire MERLIN Identifier Display units to MERLIN telephones:

1. Remove the station cord from the back of the MERLIN telephone and plug it into the MERLIN Identifier Display jack labeled "LINE."
2. Plug one end of the 18 inch, modular cord with RJ45 plugs into the MERLIN Identifier Display jack labeled "TEL" and the other end into the jack on the back of the MERLIN telephone.
3. Plug the 9 volt 200 milliampere transformer power cord into the MERLIN Identifier Display port labeled "9V-DC" and the transformer into an AC power outlet.

The MERLIN Identifier Display should display the following to show that it is powered on:

MERLIN IDENTIFIER

Connecting the Display to a PC

A PC running a purchased, Windows™-based contact management software application or asynchronous communications software can be used to capture Caller ID information from a MERLIN Identifier Display. The MERLIN Identifier Displays come with a modular cord and an RJ11-to-DB9 adapter. If your PC's serial port requires a DB25 connection, you must purchase a DB9-to-DB25 adapter.

To connect a PC to a MERLIN Identifier Display, refer to Figure 6 and follow the steps below:

1. Unplug the the MERLIN Identifier Display power cord and switch off the PC.

2. Connect one end of the modular cord into the MERLIN Identifier Display jack labeled “RS232” and the other end to the jack in the RJ11-to-DB9 adapter.
3. Connect the DB9 adapter to the PC’s serial port, either COM1 or COM2.
4. Start the PC and either the contact management software application or the asynchronous communications software.
 - If you use the contact management software application, follow the manufacturer’s instructions to set up and operate the software.
 - If you use your own communications software, set up the PC’s communications software as a direct connection with the parameters as given under “Connecting the Administrative PC” in “STEP 6,” and start the communications program capture feature.
5. Reconnect the MERLIN Identifier Display power cord.

STEP 6: Connecting Administrative Components

You can administer the MERLIN Identifier system from either an Administrative Display using a PC Keyboard or from an Administrative PC running asynchronous communications software. Refer to Figure 7 as you follow the instructions to connect your administrative components.

WARNING:

To prevent damage to the MERLIN Identifier Control Unit and equipment you connect to it, remove their power cords before connecting them.

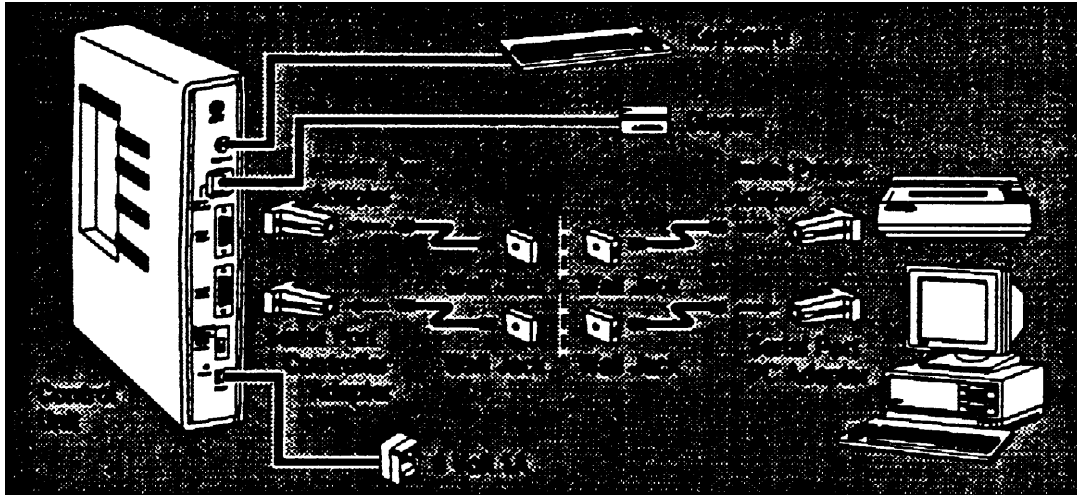


Figure 7. Connecting Administrative Components

Connecting the Administrative Keyboard and Display

To connect the Administrative Keyboard and Display to the MERLIN Identifier Control Unit:

1. Plug the Administrative Keyboard cord to the MERLIN Identifier Control Unit port labeled "Keyboard." Use the supplied adapter cable if your keyboard cord ends with a 5-pin DIN connector.
2. If no shelf or desk space is available for the Administrative Keyboard, mount the keyboard wall mounting brackets on the wall near the MERLIN Identifier Control Unit using the #6 x 1/2-inch self-tapping screws (supplied) and plastic wall anchors.

3. Follow the instructions under “STEP 4” to mount the MERLIN Identifier Display to be used as the Administrative Display.
4. Plug one end of the modular cord into the Administration Display jack labeled “LINE” and the other end into the MERLIN Identifier Control Unit jack labeled “Admin Display.”
5. Slide the Administrative Mode switch to the “Keybd/Display” position.
6. Plug the transformer power cord into the MERLIN Identifier Administration Display port labeled “9V-DC” and the transformer into an AC power outlet.

The MERLIN Identifier Control Unit power LED should light and the ENTER PASSWORD prompt should display on the Administrative Display screen.

7. Switch on the power to the MERLIN Identifier Control Unit.
8. Install the MERLIN Identifier Control Unit cover by sliding it into position from the top.

Connecting the Administrative PC

The Administrative PC can be situated in the same room as the MERLIN Identifier Control Unit or located in another room. If you want to locate the Administrative PC in another room, you will need to install a jack near the MERLIN Identifier Control Unit and another jack near the Administrative PC, and run an inside wire between the two jacks before using the procedure that follows.

To connect an Administrative PC to the MERLIN Identifier Control Unit:

1. Connect the RJ45-to-DB9 adapter labeled “Serial Port Controller” to the MERLIN Identifier Control Unit port labeled “RS232 Admin.”

2. Connect one of the following RJ45 adapters to the Administrative PC's serial port:
 - For a 9-pin COM port, connect the RJ45-to-DB9 adapter labeled "Serial Port PC."
 - For a 25-pin COM port, connect the RJ45-to-DB25 adapter labeled "Serial Port PC."
3. Do one of the following:
 - If the Administrative PC is in the same room as the MERLIN Identifier Control Unit, connect a modular cord with RJ45 plugs directly between the "Serial Port Controller" adapter and the "Serial Port PC" adapter.
 - If the Administrative PC is in a separate room, connect a modular cord with RJ45 plugs directly between the "Serial Port Controller" adapter on the MERLIN Identifier Control Unit and its designated wall jack. Then connect a modular cord with RJ45 plugs directly between the "Serial Port PC" adapter on the Administrative PC's serial port and its designated wall jack.
4. Slide the MERLIN Identifier Control Unit Administrative Mode switch to the "RS232 Admin" position.
5. Start the Administrative PC and the communications software.

6. Set up the Administrative PC's communications software as a direct connection with the following parameters:

Port: COM1 or COM2 to match physical connection

Speed: 1200 bps

Data length: 8 bits

Stop Bits: 1 bit

Parity: none

Duplex: full

7. Plug the 9 volt 1 ampere transformer power cord into the MERLIN Identifier Control Unit port labeled "9V-DC" and the transformer into an AC power outlet.

The MERLIN Identifier Control Unit power LED should light and the ENTER PASSWORD prompt should display on the Administrative PC screen.

8. Install the MERLIN Identifier Control Unit cover by sliding into position from the top.

Connecting a Serial Printer

Depending on your MERLIN Identifier system requirements, you may also want to connect a serial printer to the MERLIN Identifier Control Unit to collect Caller ID information.

The serial printer can be situated in the same room as the MERLIN Identifier Control Unit, or located in another room. If you want to locate the serial printer in another room, you will need to install a jack near the MERLIN Identifier Control Unit and another jack near the serial printer, and run an inside wire between the two jacks before using the procedure that follows.

To connect the serial printer to the MERLIN Identifier Control Unit, refer to Figure 7 and follow the steps below:

1. Unplug the the MERLIN Identifier Control Unit power cord and the printer's or PC's power cord.

2. Connect the RJ45-to-DB9 adapter labeled “Printer Port Controller For use with Printer only” to the MERLIN Identifier Control Unit port labeled “Serial Printer.”
3. Connect the RJ45-to-DB25 adapter labeled “Serial Printer” to the printer’s serial port.
4. Do one of the following:
 - If the serial printer is in the same room as the MERLIN Identifier Control Unit, connect a modular cord with RJ45 plugs directly between the “Printer Port Controller For use with Printer only” adapter and the “Serial Printer” adapter.
 - If the serial printer is in a separate room, connect a modular cord with RJ45 plugs directly between the “Printer Port Controller For use with Printer only” adapter on the MERLIN Identifier Control Unit and its designated wall jack. Then connect a modular cord with RJ45 plugs directly between the “Serial Printer” adapter on the serial printer and its designated wall jack.
5. Connect the power cord to the printer or PC and an AC power outlet.
6. Reconnect the MERLIN Identifier Control Unit power cord.

Be sure to follow the instructions in “Setting Up the Printer Serial Port” in “STEP 7” to set up the correct line termination required by the serial printer.

Connecting a PC Instead of the Printer

A PC running asynchronous communications software can be used instead of a serial printer to capture Caller ID information from the MERLIN Identifier Control Unit. If you are using an Administrative PC, the same PC can be used if it has a free serial port or you install a switch box.

The PC can be situated in the same room as the MERLIN Identifier Control Unit or located in another room. If you want to locate the PC in another room, you will need to install a jack near the MERLIN Identifier Control Unit and another jack near the PC, and run an inside wire between the two jacks before using the procedure that follows.

To connect a PC to the MERLIN Identifier Control Unit, follow the steps below:

1. Unplug the the MERLIN Identifier Control Unit power cord and switch off the PC.
2. Connect the RJ45-to-DB9 adapter labeled "Printer Port Controller Serial Port Only" to the MERLIN Identifier Control Unit port labeled "Serial Printer."
3. Connect one of the following adapters to the PC's serial port:
 - For a 9-pin COM port, connect the RJ45-to-DB9 adapter labeled "Serial Port PC."
 - For a 25-pin COM port, connect the RJ45-to-DB25 adapter labeled "Serial Port PC."

4. Do one of the following:
 - If the PC is in the same room as the MERLIN Identifier Control Unit, connect a modular cord with RJ45 plugs directly between the “Printer Port Controller Serial Port Only” adapter and the “Serial Port PC” adapter.
 - If the PC is in a separate room, connect a modular cord with RJ45 plugs directly between the “Printer Port Controller Serial Port Only” adapter on the MERLIN Identifier Control Unit and its designated wall jack. Then connect a modular cord with RJ45 plugs directly between the “Serial Port PC” adapter on the PC’s serial port and its designated wall jack.
5. Reconnect the PC’s power cord and start the PC and the communications software.
6. Set up the PC’S communications software using the parameters as given under “Connecting the Administrative PC” in “STEP 6.”
7. Start the communications program capture feature.
8. Reconnect the MERLIN Identifier Control Unit power cord.

STEP 7: Set Up MERLIN Identifier Parameters

After the MERLIN Identifier system has been installed, the following initial system parameters must be set up:

- Changing the default administration password
- Setting up the telephone lines
- Setting up the serial port

Notes on Entering Data

The MERLIN Identifier system simplifies the entry of commands and database information in the following ways:

- Displaying upper-case for all letters, whether you type them in upper- or lower-case
- Employing mnemonic commands that are entered by typing a single character
- Supporting type-over edit mode only (<Insert> key not supported)
- Supporting the <Backspace> and <Tab> keys to position the cursor
- (Administrative PC Only) Supporting a Beginner mode where prompts and menus are displayed, and an Advanced mode where menus are displayed only upon request
- (Administrative PC Only) Displaying a menu of commands when you enter **?** or **H** (for **Help**)

Entering the Administration Password

You can access the MERLIN Identifier system administration and database functions only by entering the administration password. The password is **IDENTIFIER** until you change it.

- To enter the administration password, type the password and press <Enter>.

To prevent others from viewing the password, the MERLIN Identifier system does not display the password as you type it.

After you enter the password, the MERLIN Identifier system displays the menu as shown in Figure 8.

Administrative Display Screen

```
New Edt Srch Del  
F+. - $RZQ
```

Administrative PC Screen

```
.....  
* Merlin Identifier version v1.24  
* Main command menu:  
* H(elp) or ? - print main command menu (this menu)  
* M(ode) ----- switch between Advanced and beginner modes  
* N(ew) ----- add an entry to the database  
* S(earch) ---- find the next entry containing a pattern  
* R(e-search) - search again with the same pattern  
* F(irst) ----- move to first name/number in database  
* + or = ----- move to next name/number  
* . (period) -- show currant name/number  
* - (minus) --- move to previous name/number  
* E(dit) ----- edit currant name/number  
* D(elete) ---- delete current name/number  
* P(rint) ----- print entire database on screen  
* $ ----- display numbe of database entries  
* T(ransfer) -- send or receive name/number pairs  
* Z ----- set system parameters  
* Q(uit) ----- leave administration mode  
* <Esc> ----- general process interruption key  
.....
```

Figure 8. MERLIN Identifier Administration Menu

See Appendix A for a complete list of the MERLIN Identifier system administration and database commands.

NOTE:

Be sure to log off by entering **Q** (for **Quit**) on the Administrative Keyboard or pressing <Esc> at the Administrative PC until the ENTER PASSWORD prompt displays. The MERLIN Identifier Control Unit also logs you off automatically if there is no keyboard activity for 120 seconds.

Changing the Administration Password

The administration password prevents unauthorized users from accessing MERLIN Identifier system administration and database functions. The password can be any combination of 1–12 alphabetic or numeric characters. For security reasons, you should use at least 6 characters for the password and change the password periodically.

To change the administration password, follow the instructions below:

1. Enter the current password.
2. Enter **Z** to access the System Parameter menu.
3. Enter **P** (for **Password**).
4. Enter the current password when prompted.
5. Enter the new password when prompted. (It does not display.)
6. Enter the new password again when prompted to confirm that you entered it correctly. (It does not display.)
7. Press <Esc> to exit the System Parameter menu.

Setting Up the Telephone Lines

The MERLIN Identifier system lets you attach MERLIN Identifier Displays to up to four Central Office telephone lines. The MERLIN Identifier Display shows the last two digits of the telephone line numbers you set up.

To assign telephone numbers, follow the instructions below:

1. Enter the Administration password.
2. Enter **Z** to access the System Parameter menu.
3. Enter the number, 1–4, of the telephone line you want to set.
4. Enter the last four digits of the telephone line number.

You must enter all four digits even though only the last two digits show on the MERLIN Identifier Displays.

5. Repeat Steps 3 and 4 for each line number to be monitored by a MERLIN Identifier Display.
6. Press <Esc> to exit the System Parameter menu.

Setting Up the Printer Serial Port

Serial printers require one of the following line terminations:

- Carriage return (<CR>)
- Carriage return plus a line feed (<CR><LF>)

To set up the MERLIN Identifier Control Unit printer port, follow the instructions below:

1. Verify the line termination required by the printer.
2. Enter the Administration password.

3. Enter **Z** to access the System Parameter menu.
The current printer status is displayed, either <CR> only or <CR><LF>.
4. Type **C** to toggle the line termination between a carriage return (<CR>) and a carriage return plus a line feed (<CR> <LF>).
5. Press <Esc> to exit the System Parameter menu.

Administering the MERLIN Identifier Database

3

MERLIN Identifier Database Description

The MERLIN® Identifier database stores records in the following format:

PAAAAAAAAAAAAAAAAANNNNNNNNNN

where:

P is a Priority flag.

AAAAAAAAAAAAAAAA is the 1-to-16 character caller name.

NNNNNNNNNN is the caller's 10-digit telephone number.

The MERLIN Identifier database can store approximately 2500 records. Because the MERLIN Identifier database stores caller records using variable record-length format, more memory is available to store additional records when caller names are less than the 16 characters allotted. For example, if 900 records use 13-character names instead of all 16 characters, an additional 100 database records with 16-character names could be stored.

Caller Names

All upper-case alphabetic characters and punctuation marks can be used for caller names. The MERLIN Identifier system stores database records in alphabetical order by caller name. To facilitate recognition of names on the MERLIN Identifier Displays, always record caller names in the same format—such as last name first. For example, enter SUE WALLACE and BERT WASHINGTON into the database as WALLACE, SUE and WASHINGTON, BERT, or SUE WALLACE and BERT WASHINGTON, but not WALLACE, SUE and BERT WASHINGTON.

Telephone Numbers

Telephone numbers are stored in the database using standard area code, exchange, and number format. All 10 digits of the telephone number must be used.

Depending on your data collection and call tracking needs, you may not want to differentiate calls based on all digits of telephone numbers. The MERLIN Identifier system lets you substitute the question mark (“?”) as a wild-card character in place of individual digits in the telephone number.

Advantages of Using the Wild-Card Character

Using one or more wild-card characters offers the following advantages in storing telephone numbers in the database and displaying Caller ID information:

- Each wild-card character used in a telephone number replaces 10 individual digits (0 through 9)—thus a single wild-card character has the potential to reduce the database by 9 records, two wild-card characters have the potential to reduce the database by 99 records, and so on
- Selected ranges of telephone numbers could be assigned to a single record
- All telephone numbers within a calling exchange could be represented by just a single database record
- All telephone numbers within an area code could be represented by just a single database record

The following examples show how the wild-card character can be used to address business needs.

Example 1: A local delivery service in the 901 area code has been monitoring its telephone calls and finds that a significant number of calls involved telephone numbers 555-4100 to 555-4199. A further check reveals that a single company uses all 100 of those telephone numbers. To use a single database record to represent all 100 of the company's telephone numbers, a caller record with telephone number 901-555-41?? and the company's name has been set up in the MERLIN Identifier database. Now any time a telephone order is placed from telephone numbers 555-4100 to 555-4199, the delivery service knows to send the delivery person to the same company.

Example 2: The delivery service in “Example 1” only delivers within a five mile radius. The manager has identified four surrounding telephone exchanges outside the radius likely to place an order, but to which deliveries would not be made: 332, 125, 976, and 212. To immediately identify those exchanges to employees, the following telephone numbers were added to the MERLIN Identifier database with the name **NO DELIVERY:** 901-332-????, 901-125-????, 901-976-????, and 901-212-???? . Now whenever a delivery request comes in from those exchanges, the employee politely explains that the location is outside the delivery range.

Setting Up and Maintaining the Database

The MERLIN Identifier database enables you to match the names of frequent callers to their telephone numbers. This database can be set up in the following ways:

- Using the Administrative Keyboard and Display or Administrative PC to enter individual caller records directly into the database from the following sources:
 - Your files or paper records
 - Caller ID information output from the serial printer attached to the MERLIN Identifier Control Unit
- Transferring data from computer-based applications:
 - Database files
 - Mailing list files
 - Plain ASCII text files

Maintaining the Database Directly

The following MERLIN Identifier database functions can be performed from Administrative Keyboard and Display or the Administrative PC:

- Adding a new record
- Searching for a specific record to display, edit, or delete
- Editing an existing record
- Deleting an existing record

Adding Database Records

To add a record to the MERLIN Identifier database, follow the instructions below:

1. Enter the administration password.
2. Enter **N** (for **New**).

The MERLIN Identifier system displays the following characters to prompt the correct entry of the caller record:

-----	1-to-16 character caller name
- 000-000-0000	Priority flag (default is no priority) and 10-digit caller telephone number

3. Type over the dashes with the name of the caller.
4. (Priority Callers Only) Move the cursor to the minus sign (-) and press the Plus (+) key to identify a priority caller.
5. Type over the 000-000-0000 with the telephone number. The MERLIN Identifier ignores dashes and spaces between the area code, exchange, and line number fields.

Type all 10 digits, including the area code.

6. Press <Enter> to save the record.
If a record with the identical telephone number already exists, enter **Y** to confirm its replacement.
7. Repeat Steps 2 through 6 to add more records.

Selecting Database Records

Use the following commands to select a MERLIN Identifier database caller record for displaying or subsequent administration tasks:

Command	MERLIN Identifier System Response
F (First)	Select the first caller record in the database
+ (Plus)	Scroll to the next caller record in the database
. (Period)	Display the currently selected caller record
- (Minus)	Scroll to the previous caller record
\$	Display the number of records in the database

The MERLIN identifier database contains the following lines to tell you when the beginning or end of the database has been reached:

BEGINNING OF DATABASE
END OF DATABASE

Searching for Specific Database Records

To search for a record containing a specific string of characters in the caller name, follow the instructions below:

1. Enter the administration password.
2. Enter **S** (for **Search**).

NOTE:

The search starts from the current record. If you want to search the entire database, enter **F** (for **First**) before entering the Search command.

3. Enter the string of characters to search for.

The MERLIN Identifier system displays a record with a caller name containing the search string entered.

Repeating the Last Search

Searches may not always display the caller record you want.

To repeat the search using the same string of characters defined in the last search:

- Enter **R** (for **Re-search**).

The MERLIN Identifier system displays the next record with a caller name containing the search string entered.

Editing Database Records

To edit the current record after selecting or displaying it, follow the instructions below:

1. Enter **E** (for **Edit**).
2. Move the cursor to the information to be changed and type the changes.
3. Press <Enter> to save the record.

If the record already exists, enter **Y** to confirm its replacement.

Deleting a Database Record

To delete the current database record after selecting or displaying it, follow the instructions below:

1. Enter **D** (for **Delete**).
You are prompted to confirm the deletion.
2. Enter one of the following:
 - **Y** to delete the record
 - **N** to cancel the deletion

Maintaining the Database Using File Transfers

The MERLIN Identifier Transfer command lets you download MERLIN Identifier database records for use in other applications or to make a backup copy of the database. The Transfer command also lets you maintain caller names and telephone numbers in a PC application and upload the records to the MERLIN Identifier database.

There are no restrictions on downloading MERLIN Identifier database records to the Administrative PC. However, the following restrictions apply when uploading records to the MERLIN Identifier database:

- Record format must not exceed the following record format or the record will be discarded by MERLIN Identifier:

PAAAAAAAAAAAAAAAANNNNNNNNNN

where:

P is “+” to indicate a Priority record.

AAAAAAAAAAAAAAAA is the 1-to-16 character caller name.

NNNNNNNNNN is the caller’s 10-digit telephone number.

- Only the first 16 characters of the name are accepted—any others are discarded
- Records must be delimited by a carriage return <CR>; no field delimiters can be used
- First line of the upload file must contain the uppercase words **BEGINNING OF DATABASE**
- Last line of the upload file must contain the uppercase words **END OF DATABASE**
- File upload is destructive—new records are added and records with matching phone numbers are overwritten
- If more records are uploaded than will fit in the database, the extra records are discarded and the MERLIN Identifier system displays the last record that was successfully uploaded

Downloading Database Records

To download records from the MERLIN Identifier database to the Administrative PC, follow the instructions below:

1. Start the communications software on the Administrative PC.
2. Enter the administration password.
3. Enter **T** (for **Transfer**).
4. Enter one of the following:
 - **X** to download using the XMODEM protocol
 - **T** to download as standard ASCII text characters
5. Enter **R** (for **Receive**).
6. Initiate the download file transfer option for the Administrative PC communications program and specify a target filename of your own choosing.

Uploading Records

CAUTION:

When uploading a large database during a heavy incoming call period, some Caller ID data may be missed. It is recommended that such transfers be made during evening hours or other light call traffic periods.

It is recommended that you sort the records on your Administrative PC before you upload them to the MERLIN Identifier database.

To upload records from the Administrative PC to the MERLIN Identifier database, follow the instructions below:

1. Start the communications software on the Administrative PC.
2. Enter the Administration password.

3. Enter **T** (for **Transfer**).
4. Enter one of the following:
 - **X** to upload using the XMODEM protocol
 - **T** to upload as standard ASCII text characters
5. Enter **S** (for **Send**).
6. Initiate the upload file transfer option for the Administrative PC communications program.

Changing the Administration Mode

If you are using the Administrative PC, you can speed up administration tasks by changing the mode from Beginner (factory default setting) to Advanced. In Advanced mode, the MERLIN Identifier system does not display extended prompts or the command menu unless you type **?** or **H** for Help.

To toggle the Administration Mode between Beginner and Advanced, follow the instructions below:

1. Enter the Administration password.
2. Enter **M** (for **Mode**).

If you encounter a problem with MERLIN® Identifier, be sure to look for possible causes in this chapter before calling the AT&T Helpline or your AT&T Authorized Dealer.

Common problems

- Many common problems involve loose, physical connections and loss of power. Be sure to check all connections, switches, and outlets before calling for help.
- If you do not get caller telephone numbers on the MERLIN Identifier Display units, do the following:
 - Contact your local telephone company and verify that you have Caller ID service to the Central Office lines you want to monitor.
 - Verify that you have the correct Central Office lines and station lines connected to the MERLIN Identifier Control Unit.
 - Change your automated attendant setting to answer after 2 or 3 rings (Caller ID information is transmitted between the first and second ring).

Power LED does not light on MERLIN Identifier Control Unit

- Make sure you are using the 9 volt 1 ampere power transformer and not the 9 volt 200 milliampere power transformer supplied with the MERLIN Identifier Display units.
- Make sure that the power cord is firmly seated in the 9V-DC port on the MERLIN Identifier Display unit.

MERLIN Identifier Display unit does not appear to have power

- Make sure that the power cord is firmly seated in the 9V-DC port on the MERLIN Identifier Display unit.
- Check for power at the AC outlet.

**MERLIN Identifier Control Unit appears to be locked up
(does not receive calls and/or cannot be administered)**

- Reset MERLIN Identifier Control Unit by moving Administrative Mode switch to opposite position and back again.

Serial printer is not printing

- Verify that you are using the correct adapters and the modular cords.
- Verify that you have the correct line termination, either <CR> or <CR><LF>.
- If using inside wiring to connect the printer to the MERLIN Identifier Control Unit, verify that the correct inside wires and jacks are being used.

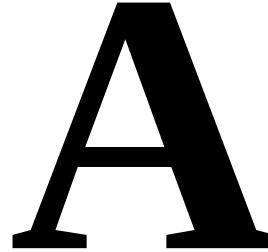
Administrative PC does not communicate with the MERLIN Identifier Control Unit

- Verify that the Administrative Mode switch is in the “RS232 Admin” position.
- Verify that you are using the correct adapters and modular cords.
- If using inside wiring to connect the PC to the MERLIN Identifier Control Unit, verify that the correct inside wires and jacks are being used.
- Verify that you are using the correct PC serial port.
- Verify your communication settings for the PC.

PC software does not communicate with the Display unit

- Verify that you are using the correct adapters and modular cords.
- Verify that you are using the correct PC serial port.
- Verify your communication settings for the PC.
- Verify your software installation.

Technical Reference



MERLIN Identifier System Record Formats

The MERLIN® Identifier system record formats use the fields that follow:

P	is either “-” for a non-Priority record or “+” for a Priority record
AAAAAAAAAAAAAAAA	the caller name
NNNNNNNNNN	the caller telephone number
LLLL or LL	the four- or two-digit line number
MM/DD	the date of call (month/day)
HH:MM	the time of call (hour:minute)
T	A for AM or P for PM

MERLIN Identifier Database Record Format

PAAAAAAAAAAAAAAAANNNNNNNNNN

Serial Printer Output Record Format

LLLL NNN-NNN-NNNN AAAAAAAAAAAAAAAAA MM/DD HH:MM T <CR
or CRLF option>

MERLIN Identifier Display Output Record Format

LL NNNNNNNNNN AAAAAAAAAAAAAAAAA MM/DD HH:MMT <CR>

Serial Cable Pin Configurations

The following tables list the pin assignments for the RS232 adapters included with MERLIN Identifier system components. Adapters are identified by their labels.

NOTE:

All modular cords supplied with the MERLIN Identifier system components are polarized—other similar-looking modular cords may not be compatible with the adapter pin configurations.

Serial Port Controller (RJ45-to-DB9)

RJ45 Female	DB9 Male
Red	Pin 2
Yellow	Pin 3
Green	Pin 5
Black	Pin 7

Serial Port PC (RJ45-to-DB9)

RJ45 Female	DB9 Female
Red	Pin 2
Yellow	Pin 3
Green	Pin 5
Black	Pin 7

Serial Port PC (RJ45-to-DB25)

RJ45 Female	DB25 Female
Red	Pin 5
Yellow	Pin 4
Green	Pin 3
Black	Pin 2

**Printer Port Controller—For Use with
Printer Only (RJ45-to-DB9)**

RJ45 Female	DB9 Female
Red	Pin 8
Yellow	Pin 3
Green	Pin 5

Serial Printer (RJ45-to-DB25)

RJ45 Female	DB25 Male
Red	Pin 20
Yellow	Pin 3
Green	Pin 7
N/C	Pins 4, 5, 6, 8

Printer Port Controller (Serial Port Only) (RJ45-to-DB9)

RJ45 Female	DB9 Female
Red	Pin 3
Yellow	Pin 7
Green	Pin 5

MERLIN Identifier Command Reference

The following tables define the MERLIN Identifier system administration commands and indicate whether a command is only available for administering the MERLIN Identifier system by the Administrative PC.

Main Menu Commands

Command	Admin. PC Only	Description
D (Delete)	No	Deletes the current database record.
E (Edit)	No	Displays the current database record for editing.
F (First)	No	Displays the first record in the database.
H (Help) or ?	Yes	Displays the commands available for the current menu.
M (Mode)	Yes	Switches between Beginner and Advanced system administration modes.
N (New)	No	Prompts for the entry of a new caller name.
P (Print)	Yes	Displays the contents of the MERLIN Identifier database on the screen.
Q (Quit) or <Esc>	No	Exits the Main menu.
R (Re-search)	No	Repeats the search using the same string of characters.

Command	Admin. PC Only	Description
S (Search)	No	Finds the next database record containing a specified string of characters.
T (Transfer)	Yes	Displays the database Transfer Menu. See "Transfer Subcommands."
Z (System Parameter)	No	Displays the System Parameter Menu. See "System Parameter Subcommands."
+ (plus)	No	Displays the next database record.
- (minus)	No	Displays the previous database record.
. (period)	No	Displays the current database record.
\$ (dollar sign)	No	Displays the number of database records.

System Parameter Subcommands

Command	Admin. PC Only	Description
C (Carriage)	No	Switches the serial printer port line termination between a carriage return <CR> and carriage return and a linefeed <CR><LF>.
H (Help)	Yes	Displays the commands available for the current menu.
P (Password)	No	Changes the database password.
D (Display)	No	Displays all four line numbers.
1 (Line 1)	No	Sets the first line number.
2 (Line 2)	No	Sets the second line number.

Command	Admin. PC Only	Description
3 (Line 3)	No	Sets the third line number.
4 (Line 4)	No	Sets the fourth line number.
<Esc>	No	Exits System Parameter Menu.

Transfer Subcommands

Command	Admin. PC Only	Description
M (Help)	Yes	Displays the commands available for the current menu.
R (Receive)	Yes	Initiates a file download to the MERLIN Identifier database.
S (Send)	Yes	Initiates a file upload from the MERLIN Identifier database.
T (Text)	Yes	Specifies a plain ASCII text file transfer.
X (XMODEM)	Yes	Specifies an XMODEM file transfer.
<Esc>	No	Exits Transfer Menu.

Parts Reference

B

The following tables show the parts included with each MERLIN® Identifier system component package.

Controller Assembly with Administrative Display and Keyboard
PE Code 6128 KBD COM Code 406 891 556

Parts Name	Quantity
Controller	1 (with mounting plate)
#6 x 1/2" Self-Tapping Screws	3 (for mounting Controller)
Cable phone 8-conductor x 7'	4 (Controller to MERLIN)
Cable phone 4-conductor x 7'	4 (Controller to MERLIN CO lines)
Power Adapter 9V 2.5mm plug	1 (9 Volt 1 Amp plug—Black)
Controller Cable Cover	1
Keyboard 101	1
Keyboard Mounting Brackets	2
Keyboard Cord Adapter	1
Cable phone 8-conductor x 7'	1 (Controller to Admin. Display)
#6 x 1/2" Self-Tapping Screws	6 (for mounting keyboard)
Display Assembly	1 (with wall mounting)
Documentation	3

Controller Assembly with PC Administration
PE Code 6128 PCA COM Code 406 891 564

Parts Name	Quantity
Controller	1 (with mounting plate)
#6 x 1/2" Self-Tapping Screws	3 (for mounting Controller)
Cable phone 8-conductor x 7'	4 (Controller to MERLIN)
Cable phone 4-conductor x 7'	6 (Controller to MERLIN CO lines) and RS232 connections
Power Adapter 9V 2.5mm plug	1 (9 Volt 1 Amp plug—Black)
Controller Cable Cover	1
Adapter (Serial Port @ Controller)	1
Adapter (Serial Port @ PC DB25)	1
Adapter (Serial Port @ PC DB9)	1
Documentation	2

Display Assembly with Mounting Bracket
PE Code 6128 DIS COM Code 406 891 572

Parts Name	Quantity
Display Unit	1
Power Adapter	1 (9 Volt 200ma plug—Black)
Cable phone 8-conductor x 18"	1 (Display to phone)
Cable phone 4-conductor x 7'	1 (RS232 port to PC)
Adapter (DB9 to 4-conductor phone)	1 (Converter DB9 port to phone connector)
Mounting Bracket	1
#6 x 1/2" Self-Tapping Screws and wall anchors	2
Documentation	1

Display Assembly with Phone Mounting

PE Code 6128 BKT COM Code 406 891 598

Parts Name	Quantity
Mounting Bracket with knob	1
Velcro	1

Database Management Software

PE Code 6128 SFW COM Code 406 891 721

Parts Name	Quantity
Software	1
Documentation	1

Printer Option

PE Code 4200 572 COM Code 406 716 464

Parts Name	Quantity
AT&T Model 572 Call Accounting Terminal (CAT) Printer	1
Power cord	1
Cable DB9	1
Documentation	1

Parts Ordered Individually

Parts Name	COM Code
Adapter (@ Controller DB9) For RS232 only	406 960 955
Adapter Kit, PC Administration	406 960 930
Adapter Kit, Printer	406 960 948
Bracket, Display Phone Mount	406 891 937
Cable, Serial Port RS232 Controller to PC	406 891 903
Controller with Mounting Panel	406 891 648
Display	406 891 663
Fixture, Display Wall Mount	406 891 929
Keyboard 101	406 891 655
Manual, MERLIN Identifier Installation and Administration	406 891 713
MERLIN Identifier User's Quick Reference for Display	406 891 705
Software, Database Management	406 891 721

MERLIN MLX Telephone Wiring

C

When the MERLIN® Identifier is used with a MERLIN LEGEND® system having MLX™ sets, a pair of installer-wired 104A termination outlets is required for each MLX set to be connected to a MERLIN Identifier Display unit.

Figure 9 shows the location of the 104A termination outlets with respect to the other MERLIN Identifier system components. Figure 10 shows the internal “strapping” required for the 104A termination outlets.

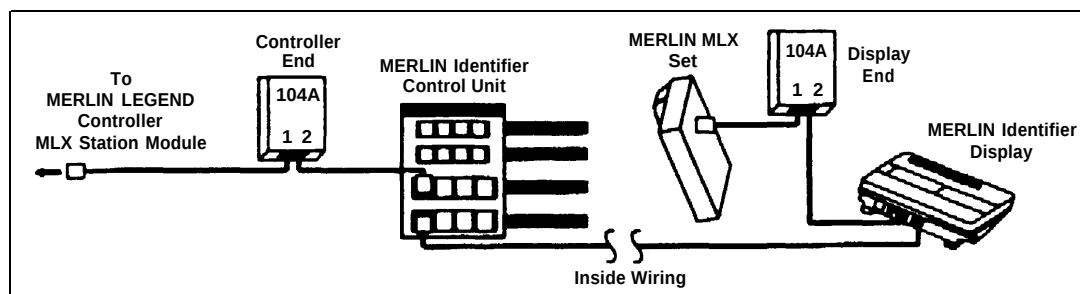


Figure 9. MERLIN Identifier Cabling for MERLIN LEGEND MLX Sets

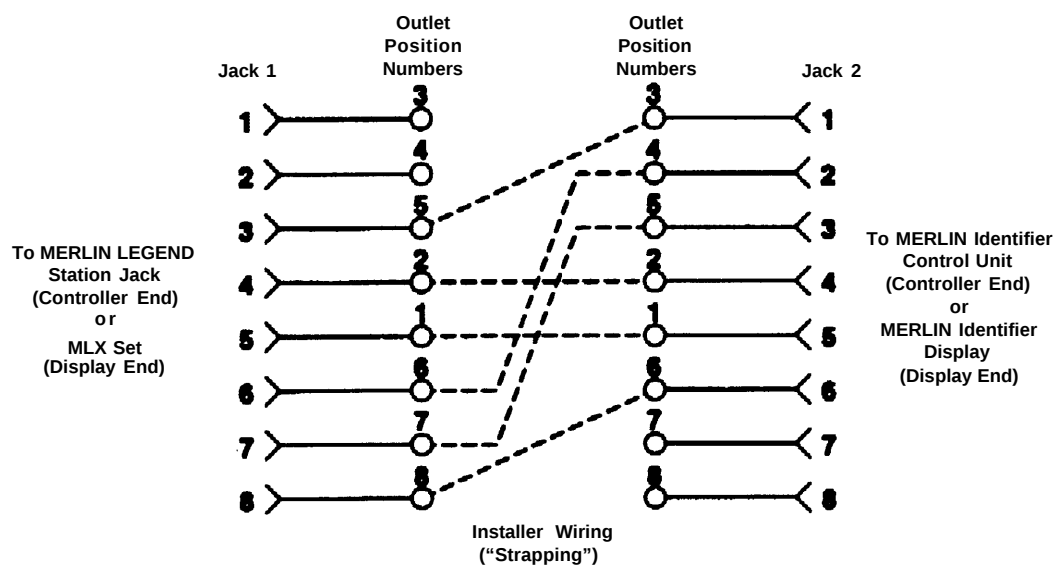


Figure 10. 104A Termination Outlet Strappings to Connect MERLIN LEGEND MLX Sets to MERLIN Identifier

AT&T 518-601-100

Graphics © AT&T 1988

