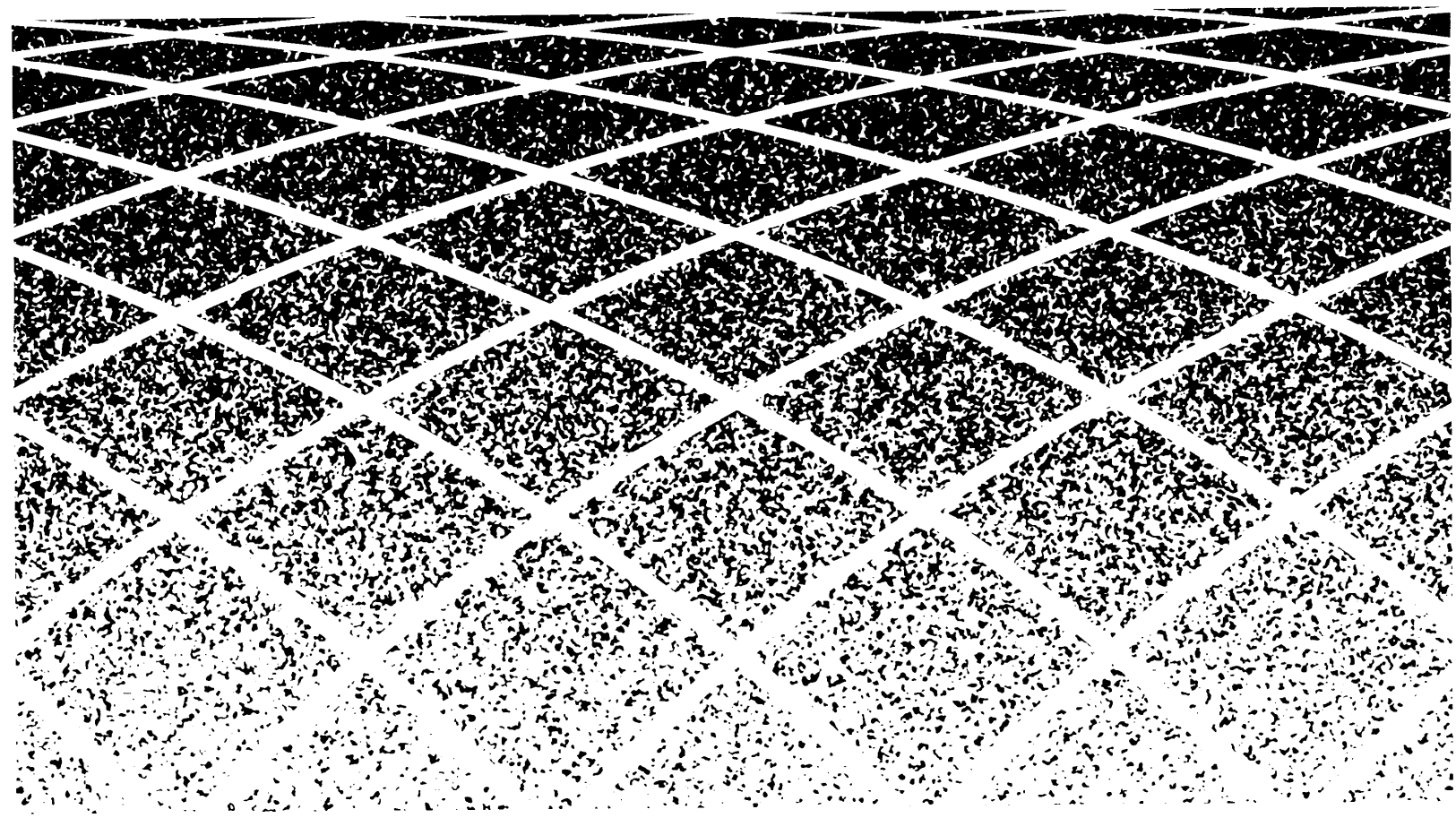




**MERLIN PFC™ Telephone**  
Phone•Fax•Copier

Installation and Maintenance



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## **NOTICE**

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## **TRADEMARK NOTICES**

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MERLIN LEGEND is a trademark of AT&T.  
MERLIN PFC is a trademark of AT&T.

## **SAFETY INFORMATION**

Before installing this product, please read and understand the safety instructions. This booklet also contains instructions related to safety labels on the product. Such instructions are identified by a triangle symbol, as follows:

The exclamation point within an equilateral triangle is intended to alert you to the presence of important operating and maintenance instructions in the literature accompanying the product. Always follow these basic safety precautions when using your telephone equipment. These precautions reduce the risk of electric shock to you and damage to the equipment.

**WARNING:** indicates the presence of a hazard that can cause death or severe personal injury if the hazard is not avoided.

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

## Safety Instructions for Installation Personnel

**WARNING:** This product should be installed by a qualified technician and must be properly grounded. Failure to do so can result in a risk of electrical shock, which may cause serious personal injury. Before product installation, verify that you are installing the equipment in a properly grounded 3-prong AC receptacle. If not, stop the installation and contact a qualified electrician.

**CAUTION:** The telephone wiring between the communications system controller or control unit and the MERLIN PFC telephone must be installed in the same building.

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

## Important Safety Instructions

- Read and understand all instructions.
- Follow all warnings and instructions marked on the product.
- This product can be hazardous if immersed in water.
- Do not use liquid cleaners or aerosol cleaners. Unplug this product from the wall outlet before cleaning. Use a damp cloth for cleaning.
- Do not use this product near water, for example, near a bath tub, wash bowl, kitchen sink, or laundry tub, in a wet basement or near a swimming pool.
- Do not place this product on an unstable cart, stand, or table. The product may fall, causing serious damage to the product.
- Never place this product near or over a radiator or heat register.
- Do not block slots and openings in the cabinet, back, or bottom provided for ventilation and to protect it from overheating. This product should not be placed in a built-in enclosure unless proper ventilation is provided.
- Do not block the openings by placing the product on a bed, sofa, rug, or other similar surface.
- This product should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supply to your home or office, consult your local power company.

- This product is equipped with a three-wire grounding-type plug with a third (grounding) pin. This plug will only fit into a standard ground-type power outlet. If you are unable to insert the plug into the outlet, contact your electrician to replace your obsolete outlet. Do not cut or remove the grounding prong or use 2-wire extension cords or adapters to defeat this safety feature of the product.
- Do not allow anything to rest on the power cord. Do not locate this product where the cord will be abused by persons walking on it.
- Do not overload wall outlets and extension cords as this can result in the risk of fire or electric shock.
- Never push objects of any kind into this product through cabinet slots as they may touch dangerous voltage points or short out parts that could result in a risk of fire or electric shock.
- Never spill liquids of any kind on the product.
- To reduce the risk of electric shock, do not disassemble this product. There are no user serviceable parts inside. Incorrect reassembly can cause electric shock when the unit is subsequently used.
- Unplug this product from the wall, remove the cords from the modular jacks in the unit, and refer servicing to qualified personnel under the following conditions:
  - When the power cord or plug is damaged or frayed.
  - If liquid has been spilled into the product.
  - If the product has been exposed to rain or water.
  - If the product does not operate normally by following the operating instructions. Adjust only those controls that are covered by the operating instructions because improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the product to normal operation.
  - If the product has been dropped or the cabinet has been damaged.
  - If the product exhibits a distinct change in performance.
- Avoid using the product during an electrical storm. There may be a remote risk of electric shock from lightning.
- If you suspect a gas leak, report it immediately, but use a telephone away from the area in question. The telephone's electrical contacts could generate a tiny spark. While unlikely, it is possible that this spark could ignite a heavy concentration of gas. This product is not approved for use in areas labeled by the Occupational Safety and Health Administration (OSHA) as "explosive environments." Only "Explosive Atmosphere Telephones" may be used in such hazardous environments.

**SAVE THESE INSTRUCTIONS**

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# 1. Introduction

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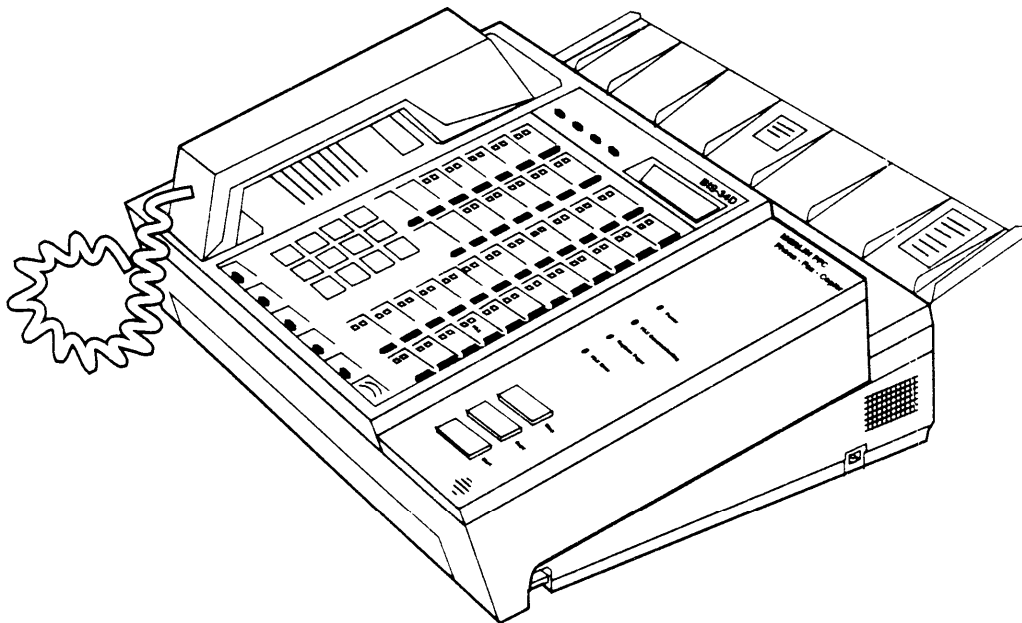
## Overview

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The MERLIN PFC™ Telephone (Figure 1-1) is the first AT&T telephone that offers the convenience of a telephone, facsimile, and copy machine right at the user's desk. It is uniquely designed to take advantage of all the capabilities of the following communications systems:

- MERLIN Communications System Models 206, 410, and 820
- MERLIN Communications System Models 1030 and 3070
- MERLIN Plus Communications System
- MERLIN® II Communications System
- MERLIN LEGEND™ Communications System
- System 25

Using the Built-In Speakerphone (BIS) on the telephone, the user can make and receive intercom and outside calls without lifting the handset. In addition, this telephone can access the advanced features that your communications system provides.



**Figure 1-1** MERLIN PFC Telephone  
(Phone~Fax~Copier)

## MERLIN PFC Parts List

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The MERLIN PFC package is shipped with the following parts:

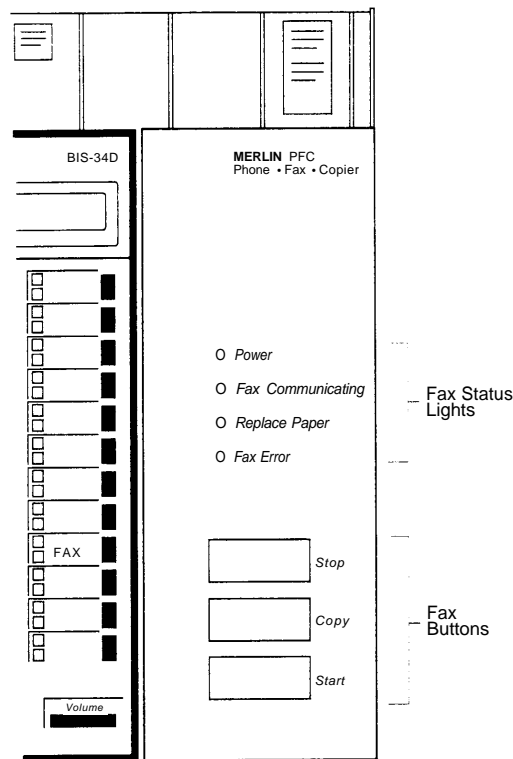
- MERLIN PFC Telephone (106-681-562) with display, fax, personal copier, and built-in speakerphone
- Handset (105-519-086)
- Handset cord (102-402-518)
- Two (D8W) modular telephone cords (103-786-802)
- One roll of MERLIN PFC Paper
- MERLIN PFC documentation:
  - This *MERLIN PFC Telephone Installation and Maintenance* (999-500-304) guide
  - The *MERLIN PFC User's Guide* (999-500-303)
  - MERLIN PFC Technician Fax Testing Sheet
  - System Label sheet containing the label for the Automatic Document Feeder Tray and the FAX label for the modular cord.



## PRINCIPLES OF OPERATION

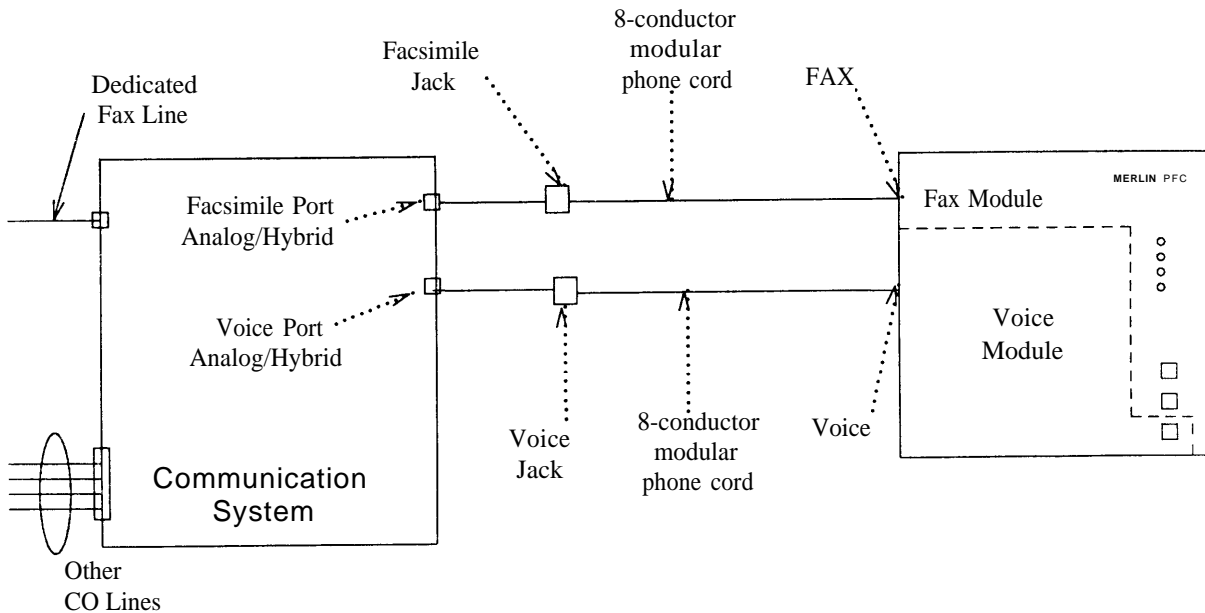
The MERLIN PFC Telephone consists of two modules: a voice module and a facsimile module, each operating separately from the other. Two ports on the communication system controller are required for the MERLIN PFC Telephone, two "wire runs" are needed (one for voice and one for facsimile), and there are two jacks provided on the telephone. The voice jack on the MERLIN PFC Telephone is labeled **Voice Line** and requires an analog (ATL) or hybrid port connection. The facsimile jack on the telephone is labeled **Line** and also requires an analog (ATL) or hybrid port connection.

The voice module is identical in operation and administration to a BIS-34D display telephone.



**Figure 1-1.** MERLIN PFC Telephone and Facsimile Buttons and Lights

The MERLIN PFC facsimile panel has four indicator lights and three buttons (see Figure 1-1). All four lights are controlled by the facsimile module. The **Stop** and **Copy** buttons are connected to the facsimile module and control its operation. The **Start** button is **not** connected to the facsimile module but is connected to a button of the voice module (the fourth button from the bottom on the right). This button is called FAX on the voice module's button label sheet. Pressing the **Start** button is the same as pressing the FAX button on the telephone and the two can be used interchangeably. A block diagram of these two modules is in Figure 1-2.



**Figure 1-2. MERLIN PFC Telephone Block Diagram**

To send a facsimile the following sequence of operations must occur:

- Insert the original document in the document feeder, face down.
- Dial a call to a facsimile machine using the voice module.
- Transfer the call to the facsimile station, using the transfer function of your communication system. This can be done using the one touch transfer feature, or pressing **Transfer** followed by a station or intercom button, or **Transfer** followed by dialing the facsimile station/intercom number.

*The facsimile station will now be rung, and the facsimile module will automatically answer. No ring will be heard. The facsimile module, sensing an original document in the document feeder, will enter transmission mode to send the facsimile.*

To receive a facsimile automatically:

- The document feeder must be empty.
- The call must be dialed directly to the facsimile station or routed by an attendant to that station.

*The facsimile station will now be rung, and the facsimile module will automatically answer (as above). No ring will be heard. The facsimile module, sensing an empty document feeder, will enter reception mode to receive and print the facsimile.*

To receive a facsimile manually:

- The document feeder must be empty.
- Answer an incoming call using the voice module. If it is a facsimile call then you will hear the facsimile tones.
- Transfer the call to the facsimile station, using the transfer function of your communication system (as above).

*The facsimile station will now be rung, and the facsimile module will automatically answer (as above). No ring will be heard. The facsimile module, sensing an empty document feeder, will enter reception mode to receive and print the facsimile.*

The purpose of the **Start** button is to simplify the transfer of a call to the facsimile station. This button will be programmed as an Intercom Auto-Dial, One Touch Transfer, or Direct Station Select (DSS) depending on the communications system type. The following table summarizes the operation of the MERLIN PFC and **Start** button programming.

System Type	One-Touch Transfer	Label	Operation	Start Button (FAX) Program
<b>MERLIN 206, 410 or 820 Feature Package 1 or 2</b>		B	Transfer-Start	Intercom Auto-Dial
<b>MERLIN 1030 or 3070 Feature Module 2, 4 or 5</b>		A	Start	Intercom Auto-Dial
<b>MERLIN 1030 or 3070 Feature Module 3</b>		E	Programmed Conference - Intercom Ring-Start-Hold	Intercom Auto-Dial
<b>MERLIN Plus Feature Module 1 or 2</b>		A	Start	One-Touch Transfer
<b>MERLIN II Feature Module 1, 2 or 3 Pooled or Square</b>	Enabled	A	Start	One-Touch Transfer
	Disabled	B	Transfer-Start	One-Touch Transfer
<b>MERLIN II Feature Module 2 or 3 Behind Switch</b>	C		Programmed-Transfer	One-Touch Transfer
<b>System 25</b>		B	Transfer-Start	Direct Station Select
<b>MERLIN LEGEND PBX or Key</b>	Enabled	A	Start	One-Touch Transfer
	Disabled	B	Transfer-Start	One-Touch Transfer
<b>MERLIN LEGEND Behind Switch</b>		C	Start	One-Touch Transfer

## 2. Installing the MERLIN PFC

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Before installing the MERLIN PFC, be sure to review the pre-installation requirements.

### Pre-Installation Requirements

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**WARNING:** Before installing this product, be sure there is a properly grounded 3-prong AC outlet available for the MERLIN PFC power connector. Improper grounding can result in a serious safety hazard.

**WARNING:** The telephone wiring between the communications system controller or control unit and the MERLIN PFC telephone must be installed in the same building.

The following pre-installation requirements apply to the MERLIN PFC:

- Be sure two analog (ATL) telephone jacks are available from the control unit: one for the voice station and one for the fax station.

**NOTE:** If two analog (ATL) extensions are not available, see the system manager or administrator of the communications system.

- Do not wall mount the unit due to the size and operation of the MERLIN PFC.
- This MERLIN PFC telephone must be installed in the same building as the communications system wiring and control unit or system controller. It cannot be used with an In Range Out of Building (IROB) adjunct.
- Verify that the dip switches (located on the bottom of the MERLIN PFC telephone unit) are set to the factory default as illustrated in Figure 2-1. For more information about the dip switches, refer to "Appendix A. Dip Switch Settings" at the back of this manual.

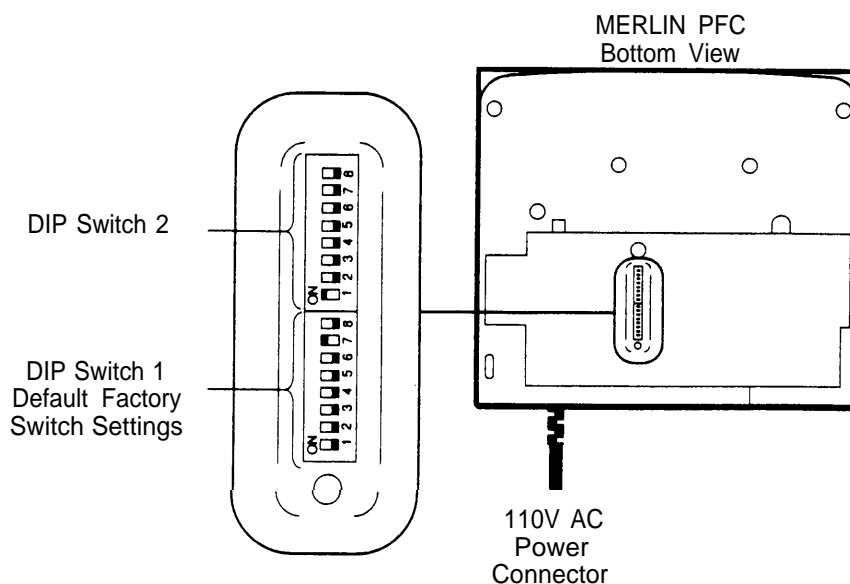


Figure 2-1 Dip Switch Location and Settings

## Installing the MERLIN PFC

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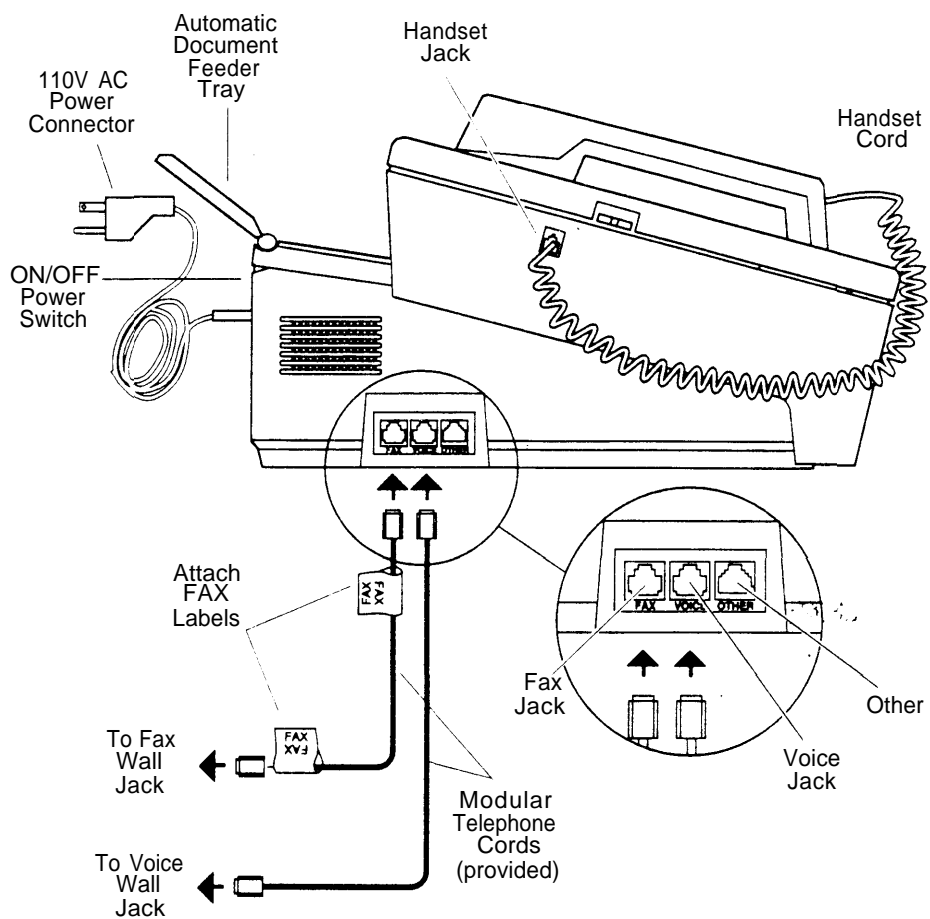
1. Unpack the MERLIN PFC telephone, telephone handset, handset cord, the roll of MERLIN PFC Paper, the two (D8W) modular telephone cords, and documentation from the shipping carton.

**NOTE:** Save the carton for reshipping.

2. Select a location for the MERLIN PFC near the grounded 115V AC 3-prong outlet and the two modular telephone wall jacks.
3. Be sure the On/Off switch located at the back of the unit is in the **Off** Position (Figure 2-2).
4. Locate one of the modular telephone cords.
5. Locate the label sheet (provided) and attach the two **FAX** labels on each end of the modular cord. (Figure 2-2).

**NOTE:** Keep the label sheet available for installing the appropriate label during the administration of the communications system.

6. Insert this modular cord into the **Fax** jack on the left side of the MERLIN PFC (Figure 2-2).
7. Insert the other end of this modular cord into the fax wall jack (Figure 2-2).
8. Locate the other modular cord and insert one end into the **Voice** jack on the left side of the MERLIN PFC (Figure 2-2).
9. Insert the other end of this modular cord into the voice wall jack (Figure 2-2).
10. Locate the handset and insert one end of the handset cord into the handset and the other end into the handset jack on the left side of the MERLIN PFC (Figure 2-2).
11. Open the Automatic Document Feeder Tray.
12. Insert the power cord into a grounded 115V AC 3-prong outlet and press the power switch to the On position (Figure 2-2). The AC power switch is located on the back of the unit above the power cord.

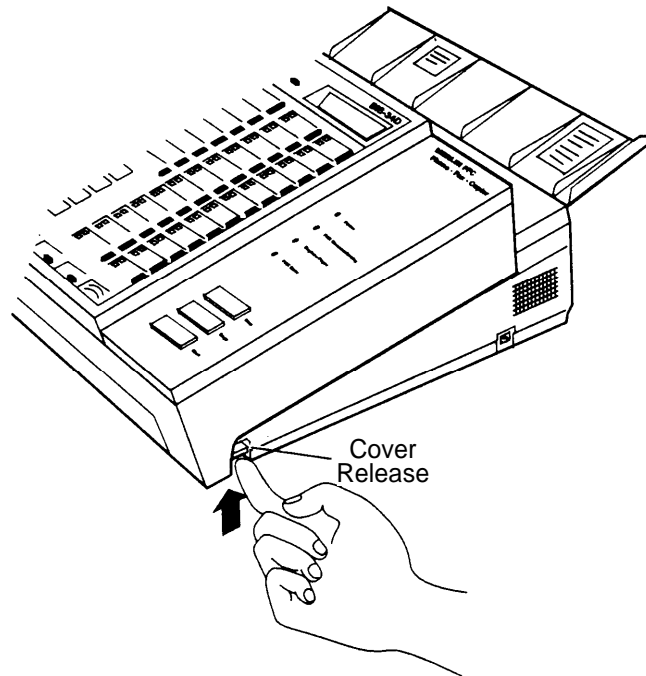


**Figure 2-2** Connections for the MERLIN PFC

13. Install the MERLIN PFC paper roll.

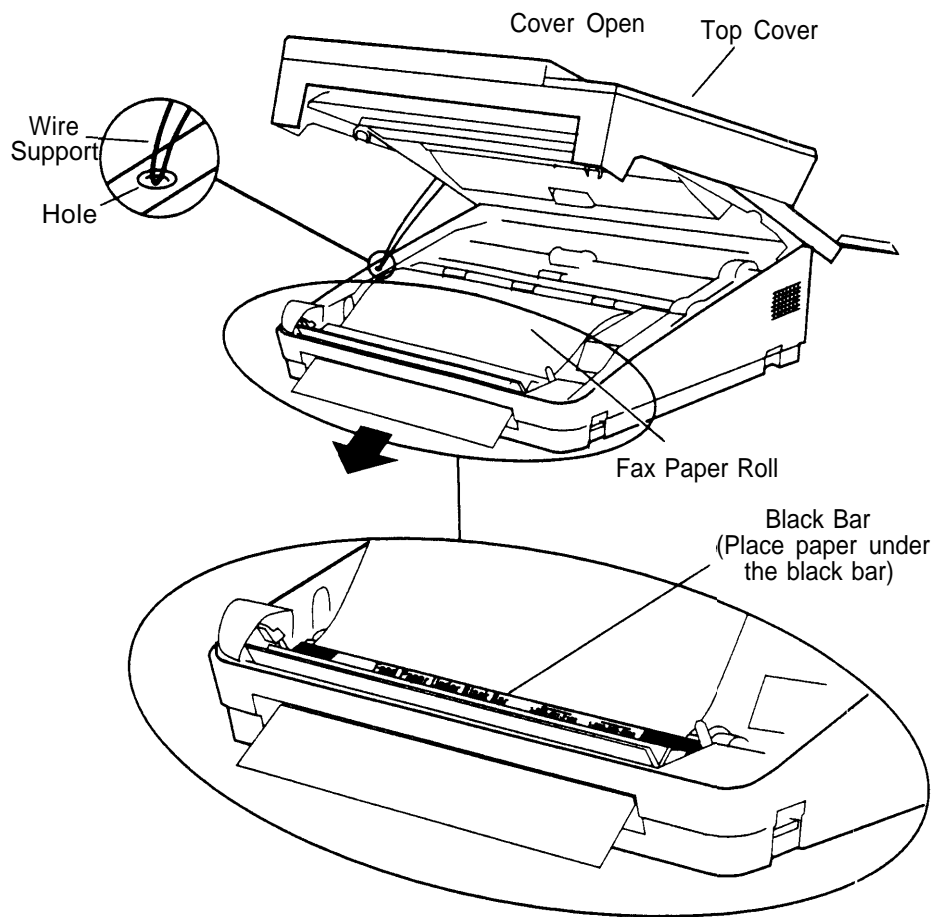
## Installing the MERLIN PFC Paper Roll

1. Lift the handset from the unit and place on a flat surface to the side of the unit.
2. Pull up on the cover release at the right front of the MERLIN PFC (Figure 2-3).



**Figure 2-3** MERLIN PFC Cover Release Location

3. As the cover is opened, a wire support drops down on the left inside of the unit. Secure this support into the hole located on the left inside of the unit base (Figure 2-4).
4. If it is present, remove and discard the protector sheet that protrudes from the Automatic Document Feeder. (This sheet is used only to protect the MERLIN PFC during shipping.)
5. Place the paper in the cradle so it unrolls from the top of the roll.
6. Feed the paper under the black bar (Figure 2-4).



**Figure 2-4** Installing the MERLIN PFC Paper Roll

7. As you close the cover, fold the wire support in place and close the top of the unit **securely** by pressing down **firmly** on both sides of the cover.  
*The MERLIN PFC feeds a small amount of paper through the bottom of the unit and cuts it automatically.*
8. Test the MERLIN PFC Telephone connection, according to the instructions on the next page.

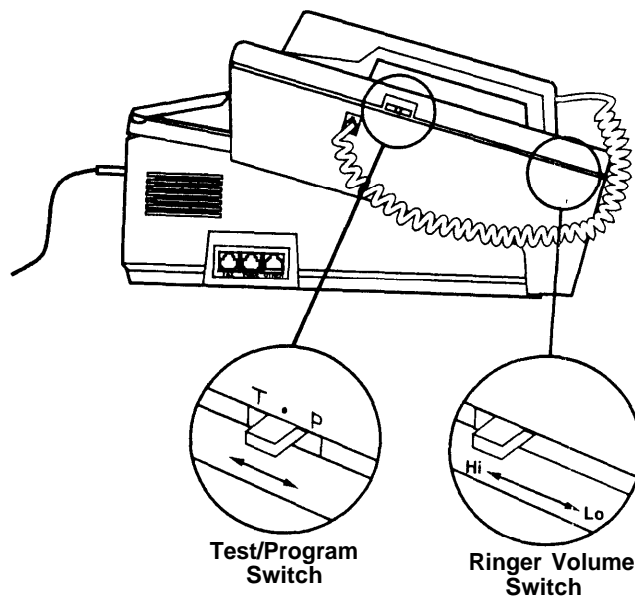


## Testing the MERLIN PFC Telephone Connection

**NOTE:** For the System 25 Communications System, perform this test **after** the administration for the MERLIN PFC is complete. To perform administration procedures, refer to Chapter 3, and the section, "Administering the System 25 Communications System".

After installing the telephone, test the telephone connection, the lights, and ringer as follows:

1. Slide the T/P switch up to the **T** (Test) position (Figure 2-5). The Test/Program (T/P) switch is located on the left side of the MERLIN PFC telephone (Figure 2-5). *The red and green lights next to the telephone's buttons flash alternately, the telephone rings, and all 16 block display characters darken.*



**Figure 2-5** Location of MERLIN PFC Test/Program (T/P) Switch

**NOTE:** If the telephone does not flash or ring and if the display does not darken, refer to Chapter 6, "Troubleshooting", for more information. If after reviewing this chapter, assistance is still needed, contact the AT&T Helpline at: **1-800-628-2888**.

2. After the test operation is successful, slide the T/P switch back to the center position for normal operation. *The telephone alarm sounds three short beeps.*
3. Test the fax connection according to the instructions on the next page.

## Testing the MERLIN PFC Fax Connection

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**NOTE:** For System 25 Communications System, perform this test after the administration for the MERLIN PFC is complete. To perform administration procedures, refer to Chapter 3, and the section "Administering the System 25 Communications System".

Test the MERLIN PFC fax connection as follows:

1. Disconnect the two modular cords from the jacks labeled **Fax** and **Voice** on the left side of the MERLIN PFC.
2. Insert the **FAX** modular cord into the **Voice** jack on the left side of the MERLIN PFC to test the fax connection.
3. Pick up the handset and listen for a dial tone.
4. Replace the handset.
5. Slide the T/P switch up to the **T** (Test) position (Figure 2-5). The Test/Program (T/P) switch is located on the left side of the MERLIN PFC telephone (Figure 2-5).  
*The red and green lights next to the telephone's buttons flash alternately, the telephone rings, and all 16 block display characters darken.*

**NOTE:** If the telephone does not flash or ring and if the display does not darken, refer to Chapter 6, "Troubleshooting", for more information. If after reviewing this chapter, assistance is still needed, contact the AT&T Helpline at:  
**1-800-628-2888.**

6. After the test operation is successful, slide the T/P switch back to the center position for normal operation.  
*The telephone alarm sounds three short beeps.*
7. Disconnect the **FAX** modular cord from the **Voice** jack on the left side of the MERLIN PFC and re-insert this modular cord into the **Fax** jack on the left side of the MERLIN PFC.
8. Reconnect the unlabeled modular cord into the **Voice** jack on the left side of the MERLIN PFC.
9. After the MERLIN PFC telephone has been tested for the telephone and fax connections, refer to the next chapter, "Administering the MERLIN PFC".

## 3. Administering the MERLIN PFC

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This section contains the information to administer an AT&T Communications System for the MERLIN PFC telephone. Before administering any communications system, read the overview information below for background about the MERLIN PFC.

### Overview

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The MERLIN PFC consists of two basic components:

- a BIS-34D telephone
- a facsimile machine

The MERLIN PFC operates the same as a BIS-34D telephone set with the addition of a basic fax machine that can send and receive faxes. The MERLIN PFC fax component does not have any programmable fax options (for example, time/date stamp, header information, etc.). The MERLIN PFC is designed to provide easy-to-use telephone, fax, and personal copier functions right at the user's desk.

To administer the MERLIN PFC for operation with an AT&T Communications System, refer to the appropriate section within this chapter:

- **Administering a MERLIN Communications System Models 206, 420, or 820**
- **Administering a MERLIN Communications System Models 1030/3070**
- **Administering a MERLIN Plus Communications System**
- **Administering a MERLIN II Communications System**
- **Administering a MERLIN LEGEND Communications System**
- **Administering a System 25 Communications System**

### Administering the MERLIN Communications System Models 206, 410, or 820

---

Before administering these communications systems for the MERLIN PFC, verify that the communications system has:

- Two analog (ATL) station ports available on the control unit: one for the voice station and one for the fax station.
- Feature Package 1 or 2 installed.
- A dedicated fax line for incoming fax calls (possibly shared for outgoing calls).

After verifying the configuration of the communications system:

- Install Label B onto the Automatic Document Feeder Tray following the illustration on the System Label sheet (provided).
- Administer the dedicated fax line. Refer to "Administering the MERLIN Communications System Models 206, 410, or 820 Dedicated Fax Line" in this chapter.
- Administer the voice station. Refer to "Administering the MERLIN Communications System Models 206, 410, or 820 Voice Station" in this chapter.
- Administer the fax station. Refer to "Administering the MERLIN Communications System Models 206, 410, or 820 Fax Station" in this chapter.

For more detailed information on administering these communications systems, refer to *MERLIN® Communications System Administration Manual: Models 206 and 410 with Feature Package 1* or *MERLIN® Communications System Administration Manual: Models 206, 410, and 820 with Feature Package 2*.

### **Administering the MERLIN Communications System Models 206, 410, or 820 Dedicated Fax Line**

Administer the dedicated fax line for the MERLIN PFC, keeping the following in mind:

- The Central Office Line dedicated for incoming fax calls must be connected to a line port on the control unit.
- If the dedicated fax line is shared (for outgoing calls only), administer the Ringing Option as **No Ring** at all telephones, except for the MERLIN PFC fax station.

### **Administering the MERLIN Communications System Models 206, 410 or 820 Voice Station**

Administer the voice station for operation with the MERLIN PFC, keeping the following in mind:

- Administer line assignments and telephone custom features at the voice station using the same methods as for a BIS-34D set.
- Assign the fax line to the voice station.
- Administer the fourth button from the bottom in the last column on the right as an **Auto Dial Intercom** button for the intercom number associated with the fax station as follows:
  1. Slide the T/P switch (on the left side of the MERLIN PFC) down to **P** (Program) to enter the program mode.
  2. Press the the fourth button from the bottom in the last column on the right.
  3. Dial **\*6** and dial the one (for a MERLIN Communication System Model 206) or two digits assigned as the **Intercom** number for the MERLIN PFC fax station.  
For example, if the MERLIN PFC fax station is assigned as **Auto Intercom 19**, dial **\*619**.
  4. Slide the T/P switch to the center position to exit the programming mode.

### **Administering the MERLIN Communications System Models 206, 410 or 820 Fax Station**

Administer the fax station for operation with the MERLIN PFC, keeping the following in mind:

1. Disconnect the two modular cords connected to the **Fax** and **Voice** jacks on the left side of the MERLIN PFC and insert the **FAX** modular cord into the **Voice** jack on the left side of the MERLIN PFC.
2. Slide the T/P switch (on the left side of the MERLIN PFC) down to **P** (program) to enter the program mode.

3. Press the line buttons to assign the appropriate Ringing Option:
  - Fax Line = **Ring Immediate** (red light on)
  - All other lines = **No Ring** (red lights off)

**NOTE:** If the communications system has Feature Package 2, administer the **Voice Announcement Disable** feature by pressing the **Intercom** button so the green light next to the button goes off.
4. Slide the T/P switch to the center position to exit the programming mode.
5. Disconnect the **FAX** modular cord from the **Voice** jack on the left side of the MERLIN PFC and reinsert it into the **Fax** jack on the left side of the MERLIN PFC.
6. Reinsert the unlabeled modular cord into the **Voice** jack on the left side of the MERLIN PFC.
7. Refer to Chapter 4, "Testing the MERLIN PFC Personal Copier and Facsimile", to complete the MERLIN PFC installation.

## **Administering the MERLIN Communications System Models 1030/3070 With Feature Module 2, 4, or 5**

---

Before administering this communications system for the MERLIN PFC, determine if the communications system has:

- Two analog (ATL) station ports on the communications system: one for the voice station and one for the fax station.
- Feature Module 2, 4, or 5 installed. (For information on the administration of a MERLIN Communications System Model 1030/3070 with Feature Module 3, refer to the section, "Administering the MERLIN Communications System Model 1030/3070 with Feature Module 3".)
- A dedicated fax line for incoming fax calls (possibly shared for outgoing calls).
- The switch on the control unit set for either pooled or square operation.

After determining the configuration of the communications system, perform the following tasks:

- Install Label A onto the Automatic Document Feeder Tray following the illustration on the System Label sheet (provided).
- Administer the dedicated fax line. Refer to "Administering the MERLIN Communications System Models 1030/3070 with Feature Module 2, 4, or 5 Dedicated Fax Line".
- Administer the voice station line. Refer to "Administering the MERLIN Communications System Models 1030/3070 with Feature Module 2, 4, or 5 Voice Station".
- Administer the fax station line. Refer to "Administering the MERLIN Communications System Models 1030/3070 with Feature Module 2, 4, or 5 Fax Station".

For detailed information on administering the communications system and a specific module, refer to: *MERLIN® Communications System Administration Manual: Models 1030 and 3070 with Feature Module 2*; *MERLIN® Communications System Administration Manual: Models 1030 and 3070 with Feature Module 4*; or *MERLIN® Communications System Administration Manual: Models 1030 and 3070 with Feature Module 5*.

### **Administering the MERLIN Communications System Models 1030/3070 (With Feature Module 2, 4, or 5) Dedicated Fax Line**

Administer the dedicated fax line for the MERLIN PFC, keeping the following in mind:

- The Central Office Line dedicated for incoming fax calls must be connected to a line port on the control unit.
- Do not assign the line to any pool.
- If the dedicated fax line is shared (for outgoing calls **only**), administer the Ringing Option as **No Ring** at all stations using the line, except the MERLIN PFC fax station.

### **Administering the MERLIN Communications System Models 1030/3070 (With Feature Module 2, 4, or 5) Voice Station**

Administer the voice station for operation with the MERLIN PFC, keeping the following in mind:

- Administer line assignments and telephone custom features at the voice station using the same methods as for a BIS-34D set.
- Assign the fax line to the voice station.
- Administer the fourth button from the bottom in the last column on the right as an **Auto Dial Intercom** button for the intercom number associated with the fax station as follows:
  1. Slide the T/P switch (on the left side of the unit) down to **P** (Program) to enter the program mode.
  2. Press the fourth button from the bottom in the last column on the right.
  3. Dial **\*91**.
  4. Dial the intercom number assigned to the MERLIN PFC fax station.
  5. Slide the T/P switch to the center position to exit the programming mode.

### **Administering the MERLIN Communications System Models 1030/3070 (With Feature Module 2, 4, or 5) Fax Station**

Administer the fax station for operation with the MERLIN PFC, keeping the following in mind:

- Pooled:
  - Do not administer the dedicated fax line to any other telephones except the fax and voice stations of the MERLIN PFC. Do not assign this line to any line pools.
  - Administer the designated fax line to **Ring Immediate** (red light on) at the fax station.
- Square:
  - All the lines assigned to the MERLIN PFC voice station must also be assigned to the fax station.
  - Administer the fax line as **Ring Immediate** (red light on) and all other lines as **No Ring** (red lights off).

- Disable the **Voice Announcement** feature at the fax station as follows:
  1. Disconnect the two modular cords connected to the **Fax** and **Voice** jacks on the left side of the MERLIN PFC and insert the **FAX** modular cord into the **Voice** jack on the left side of the MERLIN PFC.
  2. Slide the T/P switch (on the left side of the unit) down to **P** (Program) to enter the program mode.
  3. Press the **Intercom-Voice** button so the green light goes off. The **Voice Announcement** feature is disabled when the green light is off.
  4. Slide the T/P switch to the center position to exit the programming mode.
  5. Disconnect the **FAX** modular cord from the **Voice** jack on the left side of the MERLIN PFC and reinsert it into the **Fax** jack on the left side of the MERLIN PFC.
  6. Reinsert the unlabeled modular cord into the **Voice** jack on the left side of the MERLIN PFC.
- If the communications system has shared lines for outgoing fax calls, administer the **Ringng Option** for the fax line to **No Ring** (red light off) at all stations on which the line appears, except the fax station.
- Refer to Chapter 4, "Testing the MERLIN PFC Personal Copier and Facsimile", to complete the MERLIN PFC installation.

## **Administering the MERLIN Communications System Models 1030/3070 with Feature Module 3**

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Before administering this communications system for the MERLIN PFC, verify that the communications system has:

- Two analog (ATL) station ports available on the communications system: one for the voice station and one for the fax station.
- Feature Module 3 installed. (For information on the administration of a MERLIN Communications System Model 1030/3070 with Feature Module 2, 4, or 5, refer to the section, "Administering the MERLIN Communications System Model 1030/3070 with Feature Module 2, 4, or 5".)
- A dedicated fax line for incoming fax calls (possibly shared for outgoing calls).

After verifying the configuration of the communications system, perform the following tasks:

- Install Label E onto the Automatic Document Feeder Tray following the illustration on the System Label sheet (provided).
- Administer the dedicated fax line. Refer to "Administering the MERLIN Communications System Models 1030/3070 with Feature Module 3 Dedicated Fax Line".
- Administer the voice station. Refer to "Administering the MERLIN Communications System Models 1030/3070 with Feature Module 3 Voice Station".
- Administer the fax station. Refer to "Administering the MERLIN Communications System Models 1030/3070 with Feature Module 3 Fax Station".

For detailed information on administering this communications system and a specific module, refer to *MERLIN® Communications System Administration Manual: Models 1030 and 3070 with Feature Module 3*.

### **Administering the MERLIN Communications System Models 1030/3070 (With Feature Module 3) Dedicated Fax Line**

Administer the dedicated fax line for the MERLIN PFC, keeping the following in mind:

- The Central Office Line dedicated for incoming fax calls must be connected to a line port on the control unit.
- If the dedicated fax line is shared (for outgoing calls only), administer the Ringing Option as **No Ring** at all telephones, except for the MERLIN PFC fax station.

### **Administering the MERLIN Communications System Models 1030/3070 (With Feature Module 3) Voice Station**

Administer the voice station for operation with the MERLIN PFC, keeping the following in mind:

- Administer line assignments and telephone custom features at the voice station using the same methods as for a BIS-34D set.
- Assign the fax line as a secondary line at the voice station.
- Administer the fourth button from the bottom in the last column on the right as an **Auto Dial intercom** button for the intercom number associated with the fax station as follows:
  1. Slide the T/P switch (on the left side of the unit) down to **P** (Program) to enter the program mode.
  2. Press the fourth button from the bottom in the last column on the right.
  3. Dial **\*91**.
  4. Dial the intercom number assigned to the MERLIN PFC fax station.
  5. If an **Intercom Conference** button is not assigned, select a button and assign it as follows:
    - a. Press the selected button.
    - b. Dial **\*96**.
  6. Slide the T/P switch to the center position to exit the programming mode.
  7. Write the **Intercom Conference** button assignment on the telephone button label sheet, and instruct the customer to use it when sending a fax (following the instructions on the System Label attached to their Automatic Document Feeder Tray).

### **Administering the MERLIN Communications System Models 1030/3070 (With Feature Module 3) Fax Station**

Administer the fax station for operation with the MERLIN PFC, as follows:

- Assign the dedicated fax line to the fax station.
- Administer the designated fax line as **Ring Immediate** (red light on) at the fax station and all other lines as **No Ring** (red lights off).
- Disable the **Voice Announcement** feature at the fax station as follows:
  1. Disconnect the two modular cords connected to the **Fax** and **Voice** jacks on the left side of the MERLIN PFC and insert the **FAX** modular cord into the **Voice** jack on the left side of the MERLIN PFC.

## **3-6 Administering the MERLIN PFC**



2. Slide the T/P switch (on the left side of the unit) down to **P** (Program) to enter the program mode.
  3. Press **Intercom-Voice** so the light goes off. The **Voice Announcement** feature is disabled when the green light is off.
  4. Slide the T/P switch to the center position to exit the programming mode.
  5. Disconnect the **FAX** modular cord from the **Voice** jack on the left side of the MERLIN PFC and reinsert it into the **Fax** jack on the left side of the MERLIN PFC.
  6. Reinsert the unlabeled modular cord into the **Voice** jack on the left side of the MERLIN PFC.
- Refer to Chapter 4, "Testing the MERLIN PFC Personal Copier and Facsimile", to complete the MERLIN PFC installation.

## **Administering the MERLIN PLUS Communications System**

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Before administering this communications system for the MERLIN PFC, determine if the communications system has:

- Two analog (ATL) station ports available on the control unit: one for the voice station and one for the fax station.
- Release 1 or 2 installed.
- A dedicated fax line for incoming fax calls (possibly shared for outgoing calls).

After determining the configuration of the communications system, perform the following tasks:

- Install Label A onto the Automatic Document Feeder Tray following the illustration on the System Label sheet (provided).
- Administer the voice station. Refer to "Administering the MERLIN Plus Communications Systems Voice Station" in this chapter.
- Administer the fax station for line assignments. Refer to "Administering the MERLIN Plus Communications Systems Fax Station For Line Assignments" in this chapter.
- Administer the fax station for Voice Announcement disable and Ringing Options. Refer to "Administering the MERLIN Plus Communications Systems Fax Station For Voice Announcement Disable and Ringing Assignments" in this chapter.

For more detailed information on administering this communications system, refer to "Chapter 3. Administering The System" in the *MERLIN® Plus Communications System Manual* (for Feature Module 1) or the *MERLIN® Plus Communications System Release 2 System Manual* (for Feature Module 2).

### **Administering the MERLIN Plus Communications System Voice Station**

Administer the voice station for operation with the MERLIN PFC, keeping the following in mind:

- Administer line assignments and telephone custom features at the voice station using the same methods as for a BIS-34D set.
- Administer the fax line as a secondary line at the voice station.

- Administer the fourth button from the bottom in the last column on the right as an **Auto Intercom button** as follows:
  1. Slide the T/P switch on the left side of the unit down to **P** (program) to enter the program mode.
  2. Press the Auto Intercom button 21 (fourth button from the bottom on the right).
  3. Dial **\*91** and the two digits representing the intercom number assigned for the MERLIN PFC fax station. For example, if the MERLIN PFC fax station is assigned at **Intercom 15**, dial **\*9115**.
  4. Slide the T/P switch to the center position to exit the programming mode.

### **Administering the MERLIN Plus Communications System Fax Station For Line Assignments**

Administer the fax station for operation from the Attendant Console, keeping the following in mind:

1. Connect a MERLIN telephone into Station 10 on the control unit.  
**NOTE:** The MERLIN PFC telephone can be used.
2. Slide the T/P switch (on the left side of the MERLIN PFC) down to **P** (program) to enter the program mode.
3. To enter the administration mode, dial:
  - **#01** for Release 1
  - **#49** for Release 2
4. Dial the intercom number of the fax station.  
*A green light comes on next to the Auto Intercom button.*  
**NOTE:** *Green lights also light up next to the buttons of any lines already assigned to the telephone.*
5. Press each line button and assign the lines as follows:
  - Fax line: *Green light on*—the line is assigned to the MERLIN PFC fax
  - All other lines: *Green light off*—the line is not assigned to the MERLIN PFC fax
6. To exit the administration mode, dial:
  - **#01** for Release 1
  - **#49** for Release 2
7. Slide the T/P switch to the center position to exit the programming mode.
8. Leave Station 10 and go to the station where the MERLIN PFC unit is installed to disable the Voice Announcement feature and administer the Ringing Options.

### **Administering the MERLIN Plus Communications System Fax Station For Voice Announcement Disable and Ringing Options**

Administer the fax station for Voice Announcement Disable and Ringing Options as follows:

1. Disconnect the two modular cords connected to the **Fax** and **Voice** jacks on the left side of the MERLIN PFC and insert the **FAX** modular cord into the **Voice** jack on the left side of the MERLIN PFC.

## **3-8 Administering the MERLIN PFC**

2. Slide the T/P switch (on the left side of the MERLIN PFC) down to **P** (program) to enter the program mode.
3. Press the **Intercom** button.
4. Dial **\*39** to disable the Voice Announcement feature.  
*The green light next to the intercom button goes off.*
5. Press the line button for the MERLIN PFC fax line.
6. Dial **\*37** to set the Ringing Option to **Ring Immediate**.  
*The red light next to the line button becomes steady (stays on).*
7. Slide the T/P switch to the center position to exit the programming mode.
8. Disconnect the **FAX** modular cord from the **Voice** jack on the left side of the MERLIN PFC and reinsert it into the **Fax** jack on the left side of the MERLIN PFC.
9. Reinsert the unlabeled modular cord into the **Voice** jack on the left side of the MERLIN PFC.
10. Refer to Chapter 4, "Testing the MERLIN PFC Personal Copier and Facsimile", to complete the MERLIN PFC installation.

## **Administering the MERLIN II Communications System (For Pooled or Square Operation)**

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Before administering this communications system for the MERLIN PFC, verify that the communications system has:

- Two analog (ATL) station ports available on the control unit: one for the voice station and one for the fax station.
- A dedicated fax line for incoming fax calls (possibly shared for outgoing calls).
- Either pooled or square operation. (For information on the administration of the MERLIN II Communications System (Behind Switch Mode), refer to the section "Administering the MERLIN II Communications System (Behind Switch Mode)".
- The **One-Touch Transfer** feature is enabled or disabled.
  - Enabled: install Label A onto the Automatic Document Feeder Tray following the illustration on the System Label sheet (provided).
  - Disabled: install Label B onto the Automatic Document Feeder Tray following the illustration on the System Label sheet (provided).

After verifying the configuration of the communications system, perform the the following tasks:

- Administer the dedicated fax line. Refer to "Administering the MERLIN II Communications System (For Pooled or Square Operation) Dedicated Fax Line".
- Administer the voice station. Refer to "Administering the MERLIN II Communications System (For Pooled or Square Operation) Voice Station".
- Administer the fax station. Refer to "Administering the MERLIN II Communications System (For Pooled or Square Operation) Fax Station".

For general information about administering this communications system, refer to the *MERLIN® II Communications System Installation and Administration Manual*.

### **Administering the MERLIN II Communications System (For Pooled or Square Operation) Dedicated Fax Line**

Administer the dedicated fax line for the MERLIN PFC, keeping the following in mind:

- The Central Office Line dedicated for incoming fax calls must be connected to a line port on the control unit.
- Do not assign the line to any line pool.
- If the dedicated fax line is shared (for outgoing calls **only**), administer the Ringing Option as **No Ring** at all telephones, except for the MERLIN PFC fax station.

### **Administering the MERLIN II Communications System Voice Station (For Pooled or Square Operation)**

Administer the voice station for operation with the MERLIN PFC, keeping the following in mind:

- Administer line assignments and telephone custom features at the voice station using the same methods as for a BIS-34D set.
- Assign the fax line to the voice station.
- Administer the fourth button from the bottom in the last column on the right as an **Auto Dial Intercom** button for the intercom number associated with the fax station as follows:
  1. Slide the T/P switch (on the left side of the unit) down to **P** (Program) to enter program mode.
  2. Press the fourth button from the bottom in the last column on the right.
  3. Dial **\*91**
  4. Dial the intercom number assigned to the fax station.
  5. Slide the T/P switch to the center position to exit the program mode.

### **Administering the MERLIN II Communications System Fax Station (For Pooled or Square Operation)**

Administer the fax station for operation with the MERLIN PFC, keeping the following in mind:

**NOTE:** Refer to the *MERLIN® II Communications System System Manual* for details on administering Line Assignments, Ringing Options, and Centralized Programming.

- Pooled:
  - Assign only the fax line to this station.
  - Do not administer any other lines or line pools to this station.
- Square:
  - Administer all lines assigned to the MERLIN PFC voice station to the MERLIN PFC fax station.

- Disable the **Voice Announcement** feature and set the **Ringling Options** at the fax station as follows:
  1. Disconnect the two modular cords connected to the **Fax** and **Voice** jacks on the left side of the MERLIN PFC and insert the **FAX** modular cord into the **Voice** jack on the left side of the MERLIN PFC.
  2. Slide the T/P switch (on the left side of the unit) down to **P** (Program) to enter the program mode.
  3. Press **Intercom-Voice** button.
  4. Dial **\*35**.  
*The green light next to the **Intercom Voice** button should be off.*
  5. Administer the **Ringling Options** as follows:
    - a. Press the line button for the fax line.
    - b. Dial **\*37** for **Ring Immediate**.  
*The red light next to the button becomes steady.*
    - c. Administer the **Ringling Options** for all other lines as follows:
      1. Press each line button and dial **\*35**.  
*The red light next to the button goes off.*
      2. Repeat this process for all other lines.
  6. Slide the T/P switch to the center position to exit the programming mode.
  7. Disconnect the **FAX** modular cord from the **Voice** jack on the left side of the MERLIN PFC and reinsert it into the **Fax** jack on the left side of the MERLIN PFC.
  8. Reinsert the unlabeled modular cord into the **Voice** jack on the left side of the MERLIN PFC.
- Refer to Chapter 4, "Testing the MERLIN PFC Personal Copier and Facsimile", to complete the MERLIN PFC installation and administration.

## **Administering the MERLIN II Communications System (Behind Switch Mode)**

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Before administering this system in behind switch mode for the MERLIN PFC, verify that the communications system has:

- Two analog (ATL) station ports available on the control unit: one for the voice station and one for the fax station.
- A dedicated fax line for incoming fax calls.
- Behind switch mode. (For information about administering the communications system for Pooled or Square operation, refer to the previous section, "Administering the MERLIN II Communications System (For Pooled or Square Operation)".

After verifying the configuration of the communications system, perform the following tasks:

- Install Label C onto the Automatic Document Feeder Tray following the illustration on the System Label sheet (provided).

- Administer the voice station. Refer to "Administering the MERLIN II Communications System (Behind Switch Mode) Voice Station" in this chapter.
- Administer the fax station. Refer to "Administering the MERLIN II Communications System (Behind Switch Mode) Fax Station" in this chapter.

For general information on administering this communications system, refer to *MERLIN® II Communications System Installation and Administration*.

### **Administering the MERLIN II Communications System (Behind Switch Mode) Voice Station**

Administer the voice station for operation with the MERLIN PFC, keeping the following in mind:

- Administer line assignments and telephone custom features at the voice station using the same methods as for a BIS-34D set.
- Assign the fax line as a secondary line at the voice station.
- Administer the **Auto Dial Intercom** button and **Ringling Option** as follows:
  1. Slide the T/P switch (on the left side of the unit) down to **P** (Program) to enter program mode.
  2. Press the fourth button from the bottom in the last column on the right.
  3. Dial **\*91**.
  4. Dial the intercom number assigned to the fax station.
  5. Administer the **Ringling Option** for the fax line as follows:
    - A. Press the line button for the fax line.
    - B. Dial **\*35** for **No Ring**.  
*The red light next to the button is off.*
  6. If an **Intercom Transfer** button is not assigned, select the button and assign it as follows:
    - A. Press the selected button.
    - B. Dial **\*99**.
  7. Slide the T/P switch to the center position to exit the program mode.
  8. Write the **Intercom Transfer** button assignment on the telephone button label sheet, and instruct the customer to use it when sending a fax (following the instructions on the System Label attached to their Automatic Document Feeder Tray).

### **Administering the MERLIN II Communications System (Behind Switch Mode) Fax Station**

Administer the fax station for operation with the MERLIN PFC, keeping the following in mind:

- Assign the fax line to the fax station.
- Administer all lines assigned to the MERLIN PFC voice station to the MERLIN PFC fax station.

## **3-12 Administering the MERLIN PFC**

- Disable the **Voice Announcement** feature and set the **Ringing Options** at the fax station as follows:
  1. Disconnect the two modular cords connected to the **Fax** and **Voice** jacks on the left side of the MERLIN PFC and insert the **FAX** modular cord into the **Voice** jack on the left side of the MERLIN PFC.
  2. Slide the T/P switch (on the left side of the unit) down to **P** (Program) to enter the program mode.
  3. Press the **Intercom-Voice** button.
  4. Dial **\*35**.  
*The green light next to the button is off.*
  5. Administer the **Ringing Options** as follows:
    - a. Press the line button assigned for the fax line.
    - b. Dial **\*37** for **Ring Immediate**.  
*The red light next to the button becomes steady.*
    - c. Administer the **Ringing Options** for all other lines as follows:
      1. Press each button and dial **\*35**.  
*The red light next to the button goes off.*
      2. Repeat this process for all other lines.
  6. Slide the T/P switch to the center position to exit the programming mode.
  7. Disconnect the **FAX** modular cord from the **Voice** jack on the left side of the MERLIN PFC and reinsert it into the **Fax** jack on the left side of the MERLIN PFC.
  8. Reinsert the unlabeled modular cord into the **Voice** jack on the left side of the MERLIN PFC.
- Refer to Chapter 4, "Testing the MERLIN PFC Personal Copier and Facsimile", to complete the MERLIN PFC installation and administration.

## **Administering the MERLIN LEGEND Communications System (For PBX or Key Operation)**

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Before administering this communications system for the MERLIN PFC, verify that the communications system has:

- Two analog (ATL) station ports available on the control unit: one for the voice station and one for the fax station.
- A dedicated fax line for incoming fax calls, (possibly shared for outgoing calls), or Direct Inward Dialing (DID).
- Either PBX or key mode. (For information on administering the MERLIN LEGEND Communications System in behind switch mode, refer to the section "Administering the MERLIN LEGEND Communications System (Behind Switch Mode)").
- The **One-Touch** Transfer feature is enabled or disabled.
  - Enabled: install Label A onto the Automatic Document Document Feeder Tray following the illustration on the System Label sheet (provided).

- Disabled: install Label B onto the MERLIN PFC Automatic Feeder Tray following the illustration on the System Label sheet (provided).

After verifying the configuration of the communications system, perform the following tasks:

- Administer the dedicated fax line. Refer to "Administering the MERLIN LEGEND Communications System (For PBX or Key Mode) Dedicated Fax Line" in this chapter.
- Administer the voice station. Refer to "Administering the MERLIN LEGEND Communications System (For PBX or Key Mode) Voice Station" in this chapter.
- Administer the fax station. Refer to "Administering the MERLIN LEGEND Communications System (For PBX or Key Mode) Fax Station" in this chapter.

For general information on administering this communications system, refer to the following guides *MERLIN LEGEND™ Communications System Installation, Programming and Maintenance*; *MERLIN LEGEND™ Communications System Programming*; or *MERLIN LEGEND™ Communications System Reference*.

### **Administering the MERLIN LEGEND Communications System (For PBX or Key Mode) Dedicated Fax Line**

Administer the dedicated fax line for operation with the MERLIN PFC, keeping the following in mind:

- The Central Office Line dedicated for incoming fax calls must be connected to a line port on the control unit.
- Do not assign the line to any pool.
- If the dedicated fax line is shared (for outgoing calls only), administer the Ringing Option as **No Ring** at all stations to which the line is assigned, except the MERLIN PFC fax station.
- If Direct Inward Dialing (DID) is used, assign a DID number to the fax station. Write the DID number on the telephone button label sheet, and instruct the customer to use it for receiving incoming faxes.

### **Administering the MERLIN LEGEND Communications System (For PBX or Key Mode) Voice Station**

Administer the voice station for operation with the MERLIN PFC, keeping the following in mind:

- Line assignments and telephone custom features can be administered at the voice station using the same methods as administering a BIS-34D set.
- Assign the fax line to the voice station if a dedicated private line is used.
- Administer the fourth button from the bottom on the right as an **Auto Dial Intercom** button for the intercom number associated with the fax station, keeping the following in mind:
  1. Slide the T/P switch (on the left side of the unit) down to **P** (Program) to enter program mode.
  2. Press the fourth button from the bottom on the right.
  3. Dial **\*22**.



4. Dial the Intercom number assigned to the fax station.
5. Slide the T/P switch to the center position to exit the program mode.

### **Administering the MERLIN LEGEND Communications System (For PBX or Key Mode) Fax Station**

Administer the fax station for operation with the MERLIN PFC as follows:

- Remove all button assignments to the fax station except for **only one System Access or Intercom** appearance.
- Do not administer any other lines or line pools to this station.
- Administer the designated fax line to **Ring Immediate** and any other lines to **No Ring** at the fax station.
- Disable the **Voice Announcement** feature and set the **Ringling Options** at the fax station, keeping the following in mind:
  1. Disconnect the two modular cords connected to the **Fax** and **Voice** jacks on the left side of the MERLIN PFC and insert the **FAX** modular cord into the **Voice** jack on the left side of the MERLIN PFC.
  2. Slide the T/P switch (on the left side of the unit) down to **P** (Program) to enter the program mode.
  3. Press the **Intercom-Voice** button.
  4. Dial **\*\*10**.  
*The display shows **Voice Announce Disable**.*
  5. Administer the **Ringling Options** as follows:
    - a. Press the line button assigned for the fax line.
    - b. Dial **\*37** for **Ring Immediate**.  
*The red light next to the button becomes steady.*
    - c. Administer the **Ringling Options** for all other lines as follows:
      1. Press each button and dial **\*35**.  
*The red light next to the button goes off.*
      2. Repeat this process for all other lines.
  6. Slide the T/P switch to the center position to exit the programming mode.
  7. Disconnect the **FAX** modular cord from the **Voice** jack on the left side of the MERLIN PFC and reinsert it into the **Fax** jack on the left side of the MERLIN PFC.
  8. Reinsert the unlabeled modular cord into the **Voice** jack on the left side of the MERLIN PFC.
- Refer to Chapter 4, "Testing the MERLIN PFC Personal Copier and Facsimile", to complete the MERLIN PFC installation and administration.

## **Administering the MERLIN LEGEND Communications System (Behind Switch Mode)**

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Before administering this communications system (behind switch mode) for the MERLIN PFC, verify that the communications system has:

- Two analog (ATL) station ports available on the control unit: one for the voice station and one for the fax station.
- A dedicated fax line for incoming fax calls.

After verifying the configuration of the communications system, perform the following tasks:

- Install Label C onto the Automatic Document Feeder Tray following the illustration on the System Label sheet (provided).
- Administer the dedicated fax line. Refer to "Administering the MERLIN LEGEND Communications System (Behind Switch Mode) Dedicated Fax Line" in this chapter.
- Administer the voice station. Refer to "Administering the MERLIN LEGEND Communications System (Behind Switch Mode) Voice Station" in this chapter.
- Administer the fax station. Refer to "Administering the MERLIN LEGEND Communications System (Behind Switch Mode) Fax Station" in this chapter.

For general information on administering this communications system, refer to the following guides: *MERLIN LEGEND™ Communications System Installation, Programming and Maintenance*; *MERLIN LEGEND™ Communications System Programming*; or *MERLIN LEGEND™ Communications System Reference*.

### **Administering the MERLIN LEGEND Communications System (Behind Switch Mode) Dedicated Fax Line**

Administer the dedicated fax line for the MERLIN PFC, keeping the following in mind:

- Do not administer the dedicated fax line to any other stations, except the MERLIN PFC fax station.
- Do not assign this line to any pool.

### **Administering the MERLIN LEGEND Communications System (Behind Switch Mode) Voice Station**

Administer the voice station for operation with the MERLIN PFC, keeping the following in mind:

- Administer line assignments and telephone custom features at the voice station using the same methods as for a BIS-34D set.
- Assign the fax line as a secondary line at the voice station.
- Administer the fourth button from the bottom in the last column on the right as an **Auto Dial Intercom** button for the intercom number associated with the fax station as follows:
  1. Slide the T/P switch (on the left side of the unit) down to **P** (Program) to enter program mode.
  2. Press the fourth button from the bottom in the last column on the right.

3. Dial **\*22**.
4. Dial the intercom number assigned to the fax station.
5. Administer the fax station secondary line to **No Ring** (red light off).
6. If an **Intercom Transfer** button is not assigned, select the button and assign it as follows:
  - a. Press the selected button.
  - b. Dial **\*774**.
7. Slide the T/P switch to the center position to exit the program mode.
8. Write the **Intercom Transfer** button assignment on the telephone button label sheet, and instruct the customer to use it when sending a fax (following the instructions on the System Label attached to the Automatic Document Feeder Tray).

### **Administering the MERLIN LEGEND Communications System (Behind Switch Mode) Fax Station**

Administer the fax station for operation with the MERLIN PFC, keeping the following in mind:

- Assign the fax line to the fax station.
- Remove all button assignments to the fax station except for one **System Access** appearance.
- Disable the **Voice Announcement** feature and set the **Ringling Options** at the fax station as follows:
  1. Disconnect the two modular cords connected to the **Fax** and **Voice** jacks on the left side of the MERLIN PFC and insert the **FAX** modular cord into the **Voice** jack on the left side of the MERLIN PFC.
  2. Slide the T/P switch (on the left side of the unit) down to **P** (Program) to enter the program mode.
  3. Dial **\*\*10**.
  4. Administer the **Ringling Options** as follows:
    - a. Press the line button assigned for the fax line.
    - b. Dial **\*37** for **Ring Immediate**.  
*The red light next to the button becomes steady.*
    - c. Administer the **Ringling Options** for all other lines as follows:
      1. Press each button and dial **\*35**.  
*The red light next to the button goes off.*
      2. Repeat this process for all other lines.
  5. Slide the T/P switch to the center position to exit the programming mode.
  6. Disconnect the **FAX** modular cord from the **Voice** jack on the left side of the MERLIN PFC and reinsert it into the **Fax** jack on the left side of the MERLIN PFC.
  7. Reinsert the unlabeled modular cord into the **Voice** jack on the left side of the MERLIN PFC.

- Refer to Chapter 4, "Testing the MERLIN PFC Personal Copier and Facsimile", to complete the MERLIN PFC installation and administration.

## **Administering the System 25 Communications System**

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Before administering the communication system for the MERLIN PFC, verify that the communications system has:

- Two Hybrid ZTN79 or TN762B station ports and two Personal Dial Code (PDC) station numbers available: one port and PDC for the voice station and one port and PDC number for the fax station.
- A dedicated private line or Direct Inward Dialing (DID) number for incoming fax calls.

After verifying the configuration of the communications system, perform the following tasks:

- Install Label B onto the Automatic Document Feeder Tray following the illustration on the System Label sheet (provided).
- Administer the dedicated fax line. Refer to the section "Administering the System 25 Communications System Dedicated Fax Line" in this chapter.
- Administer the voice station. Refer to the section "Administering the System 25 Communications System Voice Station" in this chapter.
- Administer the fax station. Refer to the section "Administering the System 25 Communications System Fax Station" in this chapter.

For more detailed information on administering this communications system, refer to Chapter 7, "Administering Voice Stations", and Chapter 10, "Administering Button Assignments", in the *System 25 Communications System Administration Manual*.

### **Administering the System 25 Communications System Dedicated Fax Line**

Administer the dedicated fax line for operation with the MERLIN PFC as follows:

- Do not assign the line to any queues. Assign the line as **Queue Priority: 0**.
- Do not assign an owner to the line.
- Do not administer any bridged appearances to the line, except the MERLIN PFC voice and fax stations.

### **Administering the System 25 Communications System Voice Station**

Administer the voice station for operation with the MERLIN PFC as follows:

- Administer the telephone as a **34-Button Deluxe** set.
- Administer the fourth button from the bottom in the last column on the right (number 37) as the **Direct Station Select** (DSS) button and include the PDC for the MERLIN PFC fax station.  
*The light next to the button tracks the status of the fax station.*
- If a dedicated private line is used, administer any unassigned button (except the fourth button from the bottom on the right) as the fax personal line for outgoing calls.

## **Administering the System 25 Communication System Fax Station**

Administer the fax station for operation with the MERLIN PFC as follows:

- Administer the fax station as a **34 Button** set.
- For fax calls to the MERLIN PFC to be received automatically, the fax PDC/station must be called. For System 25 Communications Systems with Direct Inward Dialing (DID), administer a **DID** number as the fax PDC. Refer to Chapter 5, "Trunks", in the *System 25 Communications System Administration Manual*.
- Remove all button assignments to the fax station except for one **System Access** appearance.
- Enable ringing on the fax line.
- Do not allow call waiting or bridged appearances at the MERLIN PFC fax station.
- Do not allow any other line appearances on any other stations if the fax line is a dedicated incoming line for fax transmissions.
- Do not allow call coverage.
- After the System 25 Communications System administration is complete, refer to the following chapters to complete the installation:
  - a. Refer to Chapter 2, "Installing the MERLIN PFC", to test the telephone and fax connections.
  - b. Refer to Chapter 4, "Testing the MERLIN PFC Personal Copier and Facsimile", to test the copier and fax for use.

## 4. Testing the MERLIN PFC Personal Copier and Fax

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### Overview

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This chapter contains the information for testing the MERLIN PFC personal copier and fax functions **after** completing the administration of the customer's communications system. Complete and use the **MERLIN PFC Technician Fax Testing Procedures** sheet provided with the documentation for making a copy and sending a fax transmission.

### Testing the MERLIN PFC Personal Copier

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1. Be sure the MERLIN PFC power cord is connected to a grounded 115V AC 3-prong outlet and the power switch (located above the power cord on the back of the unit) is in the On position.

**NOTE:** If the power switch is in the On position, the **Power** light on the front of the MERLIN PFC is green.

2. Place the provided **MERLIN PFC Technician Fax Testing Sheet** sheet (or another document of 8 1/2 inch by 11 inch paper of no more than five pages) **face down** into the Automatic Document Feeder Tray located at the back of the MERLIN PFC.
3. Press the **Copy** button on the front the MERLIN PFC. *The paper to be copied begins to move several seconds after the button is pressed.*

**NOTE:** Copied documents print in **Fine** resolution.

4. Compare the copied page (or pages) to the original for clarity, resolution, and print density.

To adjust copy resolution, refer to the *MERLIN PFC User's Guide* for information.

**NOTE:** If the copy does not print clearly or lines are printed on the copy:

1. Open the MERLIN PFC top cover and wipe the copier glass with a lint-free, soft cloth to clear any residue on the glass.
  2. Close the cover **securely** by pressing down **firmly** on both sides of the the top of the MERLIN PFC unit.
  3. Resend the page(s).
5. After the copier test is successful, test the MERLIN PFC fax component according to the instructions on the next page.

## Testing the MERLIN PFC Fax

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1. Complete the **MERLIN PFC Technician Fax Testing Sheet** sheet.
2. Lift the handset and place a call to the AT&T Helpline at **1-800-458-1014**
3. Follow the instructions on the System Label attached to the MERLIN PFC Automatic Document Feeder Tray.

*The green light next to **Fax Communicating** on the front of the MERLIN PFC blinks green to indicate that the MERLIN PFC has initiated fax communication.*

*A steady green light (no blinking) indicates that the fax is being transmitted.*

*The fax transmission is complete when the green light next to **Fax Communicating** goes out.*

4. Hang up.  
*After the fax is transmitted, the light next to the **Fax Communicating** label on the front of the MERLIN PFC goes out.*
5. After the fax is received at the Helpline, the Helpline confirms the transmission by faxing the form back to the technician.

**NOTE:** If the fax is transmitted successfully to the Helpline, the Helpline responds on the sheet.

If you should experience other problems during the testing, call the AT&T Helpline at **1-800-628-2888** and select the fax option at the prompt.

## 5. Customer Education

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**NOTE:** If the MERLIN PFC Telephone was not installed or administered by a technician, refer to the *MERLIN PFC™ Telephone (Phone/Fax/Copier) User's Guide*.

This chapter contains a list of areas for the technician to review with the user about the operation of the MERLIN PFC after installation and administration procedures are completed for the product.

Before leaving the installation site, review the following areas with the customer:

- Tell the customer the fax number for the MERLIN PFC.
- Demonstrate the MERLIN PFC product components as follows:
  - Use and features of the BIS-34D telephone/speakerphone.
  - Sending and receiving a fax transmission (especially the "To Send A Fax" label for the customer's communications system).
  - Use of the simultaneous voice and fax operation (for example, a conference call, placing a call on hold, sending a fax, retrieving a call, etc.).
  - Use of the personal copier.
- Briefly review the troubleshooting procedures, especially for paper jams and closing the cover tightly.
- Inform the customer about the use of the AT&T Helpline at **1-800-628-2888**.
- Instruct the customer on how to install the MERLIN PFC Paper roll.
  - Advise the customer about using MERLIN PFC paper which has a one inch core, is 66 feet long, and was designed to reduce page curling. Inform the customer that other fax paper may not fit properly or work as well as this paper.
  - Explain to the customer how to order MERLIN PFC paper through the AT&T Sourcebook at **1-800-451-2100**. The Sourcebook offers a Fax Paper Delivery Service that automatically and regularly ships paper to the customer based on an agreement with the customer.



## 6. Troubleshooting

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This chapter contains a general checklist, a common copy and fax problems section, and a detailed troubleshooting section to use if problems should arise with the operation or performance of the MERLIN PFC.

If assistance is needed after using the information in this chapter, call the AT&T Helpline at **1-800-628-2888**.

### General Checklist

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Review the following steps to resolve problems with the MERLIN PFC **before** calling the AT&T Helpline:

1. Be sure that the MERLIN PFC AC power cord is connected securely into a grounded 115V AC 3-prong outlet.
2. Be sure that the On/Off switch (located on the rear of the MERLIN PFC) is in the **On** position.  
*The green light next to **POWER** on the front of the MERLIN PFC is on.*  
**NOTE:** The MERLIN PFC telephone can be working even though the AC power switch for the MERLIN PFC fax and personal copier is not on.
3. Be sure both the fax and voice modular telephone cords are securely connected into the correct jacks on the left side of the MERLIN PFC, the wall jacks, and on the communications system control unit.
4. Be sure the top cover to the MERLIN PFC unit is closed **securely** (press down **firmly** on both sides of the cover).
5. Try turning the MERLIN PFC power switch Off and On. Wait one minute for the system to initialize. Be sure the green light next to **Power** on the front of the unit is on.
6. Check with your System Administrator or Manager to be sure the fax line has been administered for **Immediate Ring** at the fax station of the control unit and for **No Ring** on any other lines for the fax station.
7. If the telephone or fax components are not operating, refer to Chapter 2, "Installing the MERLIN PFC", and perform the testing procedures presented at the end of the chapter again.
8. Review the next section, "Common MERLIN PFC Personal Copier and Fax Problems", for additional assistance.

## Common MERLIN PFC Personal Copier and Fax Problems

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This section contains a list of problems, possible causes, and solutions to review when you encounter MERLIN PFC personal copier or fax problems.

### Blank Copies

Possible Causes	Possible Solutions
<ol style="list-style-type: none"><li>1. Original inserted upside down.</li><li>2. Paper installed upside down.</li><li>3. Top of unit not shut tight.</li><li>4. Thermal head dirty.</li></ol>	<ol style="list-style-type: none"><li>1. Reinsert document text face down.</li><li>2. Check installation of paper.</li><li>3. Press down <b>firmly</b> on both sides of the top cover.</li><li>4. Call the AT&amp;T Helpline.</li></ol>

### Light Print

Possible Causes	Possible Solutions
<ol style="list-style-type: none"><li>1. Top of unit not shut tight.</li><li>2. Wrong type of fax paper.</li><li>3. Thermal head dirty.</li></ol>	<ol style="list-style-type: none"><li>1. Press down <b>firmly</b> on both sides of the top cover.</li><li>2. Install the correct MERLIN PFC Paper roll.</li><li>3. Call the AT&amp;T Helpline.</li></ol>

### Vertical Lines During Copying or Fax Transmission

Possible Causes	Possible Solutions
<ol style="list-style-type: none"><li>1. Dirt or lint on the scanner glass.</li><li>2. Dirt or lint in the document feed system.</li></ol>	<ol style="list-style-type: none"><li>1. Clean the MERLIN PFC scanner glass with a lint-free, soft cloth.</li><li>2. Wipe off the white plastic with a lint-free, soft cloth.</li></ol>

### Print Density Uneven During Copying or Fax Reception

Possible Causes	Possible Solutions
<ol style="list-style-type: none"><li>1. Top of unit not shut tight.</li><li>2. Defective thermal paper.</li><li>3. Thermal head dirty.</li></ol>	<ol style="list-style-type: none"><li>1. Press down <b>firmly</b> on both sides of the top cover.</li><li>2. Replace the MERLIN PFC Paper roll.</li><li>3. Call the AT&amp;T Helpline.</li></ol>

### Documents Misfeed

Possible Causes	Possible Solutions
<ol style="list-style-type: none"><li>1. Top of unit not shut tight.</li><li>2. Improper size or type of document.</li><li>3. Dirty feed rollers or ADF separator rubber.</li></ol>	<ol style="list-style-type: none"><li>1. Press down <b>firmly</b> on both sides of the top cover.</li><li>2. Use documents between 4.7 x 6.5 and 8.5 x 15.6 inches.</li><li>3. Call the AT&amp;T Helpline.</li></ol>

### MERLIN PFC Control Panel Lights Are On

Possible Causes	Possible Solutions
<ol style="list-style-type: none"><li>1. All four lights on the MERLIN PFC are on.</li></ol>	<ol style="list-style-type: none"><li>1. Open and close the cover securely by pressing down <b>firmly</b> on both sides of the cover.</li></ol>

### **Fax Received Has Missing or Interrupted Sections**

<b>Possible Causes</b>	<b>Possible Solutions</b>
1. Loose telephone modular cord connection.	1. Check the telephone modular cord connections between the MERLIN PFC and the communications system control unit.
2. Telephone network problem.	2. Call sender and ask them to resend.
3. Defective remote fax machine.	3. Call sender and ask them to use another fax machine.

### **Constant Messy Lines During Fax Reception**

<b>Possible Causes</b>	<b>Possible Solutions</b>
1. Loose telephone modular cord connections.	1. Check the telephone modular cord connections between the MERLIN PFC and the communications system control unit.
2. Local telephone line problem.	2. Retry the call.

### **Cannot Make or Receive Telephone Calls**

<b>Possible Causes</b>	<b>Possible Solutions</b>
1. BIS-34D telephone not connected properly.	1. Check the unlabeled telephone cord on the left side of the MERLIN PFC.
2. BIS-34D telephone problems.	2. Refer to the next section, "Detailed MERLIN PFC Troubleshooting", for assistance.

**Fax Cannot Be Transmitted, Fax Cannot Be Received, or Fax Cannot Be Transmitted or Received**

Possible Causes	Possible Solutions
1. The MERLIN PFC Power light is not on.	1. Be sure the power cord is connected to an outlet and that the On/Off switch located on the rear of the MERLIN PFC is in the <b>On</b> position.
2. The MERLIN PFC Replace Paper light is on.	2. Replace the fax paper. Refer to Chapter 5, "MERLIN PFC Maintenance and Error Codes" for procedures.
3. Fax cannot be transmitted.	3. Be sure the document is properly inserted in the Automatic Document Feeder Tray. Refer to Chapter 3, "Using the MERLIN PFC Telephone For Fax Communications" for procedures.
4. Fax cannot be received.	4. Be sure the Automatic Document Feeder Tray is empty.
5. The MERLIN PFC <b>Fax Error</b> light is on.	5. Press <b>Stop</b> until the light goes out or check for a paper jam. Refer to Chapter 5, "Maintenance and Error Codes" for procedures.
6. Paper jam.	6. Clear the paper jam. Refer to Chapter 5, "Maintenance and Error Codes" for procedures.
7. Telephone or system problem.	7. Refer to the next section, "Detailed MERLIN PFC Troubleshooting" for procedures.

## Detailed MERLIN PFC Troubleshooting

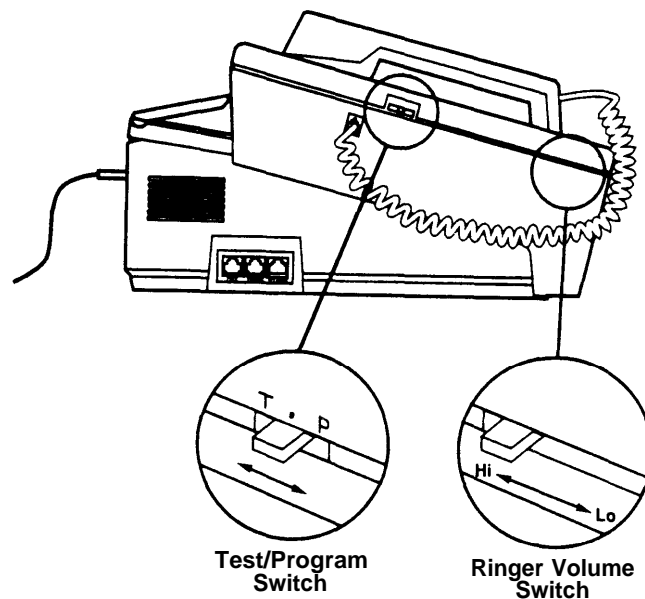
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This section presents detailed troubleshooting procedures to perform before calling the AT&T Helpline for assistance.

### Cannot Make or Receive Telephone Calls

#### Procedure A

1. Slide the T/P switch up to the **T** (Test) position (Figure 6-1). The Test/Program (T/P) switch is located on the left side of the MERLIN PFC telephone (Figure 6-1). *The red and green lights next to the telephone's buttons flash alternately, the telephone rings, and all 16 block display characters darken.*



**Figure 6-1** Location of MERLIN PFC Test/Program (T/P) Switch

2. If the lights flash, the telephone rings, and the display darkens, the test operation is successful and the administration of the BIS-34D telephone features is the problem. See your System Administrator or Manager for assistance in using the features.
3. If the telephone test is not successful (the lights do not flash, the telephone does not ring, or the display does not darken), use Procedure B which follows.
4. Slide the T/P switch to the center position to exit the programming mode.

## Procedure B

Use this procedure if Procedure A is not successful:

1. Locate another MERLIN multi-button telephone.
2. Disconnect the unlabeled modular cord from the **Voice** jack on the left side of the MERLIN PFC and insert the MERLIN PFC modular cord into the **Line** jack on the other telephone.
3. Slide the T/P switch on this telephone up to the **T** (test) position to enter the test mode.
  - If this other telephone passes the test mode (a dial tone is present and lights flash), this indicates that there may be a problem with the MERLIN PFC. Call the AT&T Helpline for assistance.
  - If there is no dial tone or the lights do not flash using this other telephone, see the System Administrator or Manager for the proper telephone connection.
4. Slide the T/P switch on the other telephone to the center position to exit the programming mode.
5. Disconnect the unlabeled modular cord from the **Line** jack on the other telephone and reinsert this cord into the **Voice** jack on the left side of the MERLIN PFC telephone.

## Fax Cannot Be Transmitted, Fax Cannot Be Received, or Fax Cannot Be Transmitted or Received

### Procedure A

Use the following procedure if you are unable to send or receive a fax:

1. Review Steps 1 and 2 presented in the "General Checklist" of this chapter.
2. Pick up the handset to place a call to the fax extension.

**NOTE:** For all MERLIN Communications Systems, after lifting the handset, press the **Intercom** button.
3. Listen for dial tone and dial the fax extension of the MERLIN PFC.
4. Press **Start** on the fax control panel on the front of the MERLIN PFC.
  - If the green light flashes next to the **Fax Communicating** on the front of the unit, and you hear fax tones but still cannot send a fax, call the AT&T Helpline for assistance in administering your system.
  - If you do not hear a fax tone, use Procedure B, which follows, to verify the fax connection.

## Procedure B

If you do not hear a fax tone on the fax extension, verify the fax connection for the MERLIN PFC as follows:

1. Disconnect the two modular cords connected to the **Fax** and **Voice** jacks on the left side of the MERLIN PFC and insert the **FAX** modular cord into the **Voice** jack on the left side of the MERLIN PFC.
2. Slide the T/P switch (on the left side of the MERLIN PFC) up to **T** (test) to enter the test mode.  
*The red and green lights next to the telephone buttons flash alternately, the telephone rings, and all 16 block display characters darken.*
  - If this test passes, from another telephone, dial the fax extension of the MERLIN PFC to verify audible ringing.
    - If there is audible ringing at the MERLIN PFC fax extension, there may be a hardware problem. Call the AT&T Helpline.
    - If there is no audible ringing at the MERLIN PFC fax extension, see the System Administrator or Manager for the extension number and the ringing options set for the fax extension.
  - If the test fails (the lights do not flash, the telephone does not ring, or the display does not darken), see your System Administrator or Manager for the communication system.
3. Slide the T/P switch to the center position to exit the programming mode.
4. Disconnect the **FAX** modular cord from the **Voice** jack on the left side of the MERLIN PFC and reinsert it into the **Fax** jack on the left side of the MERLIN PFC.
5. Reinsert the unlabeled modular cord into the **Voice** jack on the left side of the MERLIN PFC.

## MERLIN PFC Fax Answers All Calls

1. Disconnect the **FAX** modular cord from the **Fax** jack on the left side of the MERLIN PFC.
2. Call the AT&T Helpline for assistance.



## Appendix A. Dip Switch Settings

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The DIP switches have been set in the factory for proper MERLIN PFC fax operation. Only three of the settings can be changed to customize the operation of the MERLIN PFC. When changing a setting be sure to use an electrically non-conductive tool to slide the switch from one setting to another **WARNING:** Be sure to turn the power switch on the MERLIN PFC to OFF before adjusting any DIP switches.

### DIP Switch 1

**Bit 1:** Transmission Speed  
Off: 9600 bps On: 4800 bps  
Factory Setting: Off

The MERLIN PFC telephone transmits fax communications at 9600 bps. The MERLIN PFC facsimile component is set initially to transmit at this rate and to fall back to slower rates if poor telephone line conditions make it necessary.

Do not change this setting unless very poor line conditions and repeated attempts at the factory setting are unsuccessful.

**Bit 2:** Reception Speed  
Off: 9600 bps On: 4800 bps  
Factory Setting: Off

If poor telephone line conditions repeatedly prevent proper facsimile reception, use this dip switch setting to begin facsimile reception at 4800 bps.

**NOTE:** Changing the factory settings for switch bits 1 and 2 doubles the fax transmission and reception time. Do not change these settings unless the telephone lines repeatedly prevent communication at higher speeds.

**Bit 3:** Overseas  
Communications  
Off: Disabled On: Enabled  
Factory Setting: Off

The MERLIN PFC telephone can transmit over most international telephone lines without trouble. This setting compensates for the poorer transmission characteristics of some overseas lines. Use this setting to enable the overseas mode if international fax communication at the factory setting is not successful.

**NOTE:** Do not change the settings for DIP Switch 1 Bits 4, 5, 6, 7 or 8: Bit 7 should be ON and Bits 4, 5, 6, and 8 should be OFF. Do not change any of the settings for DIP switch 2. For switch 2 bit 1 should be ON, and bits 2-8 OFF.

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