

HP 9195A

Installing the HP ScanJet Plus Scanner with HP Scanning Gallery Plus 5.0 Software



**HEWLETT
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This manual was created using HP Tag on an HP Vectra Personal Computer, an HP ScanJet Plus scanner, and an HP LaserJet series IID printer.

FCC Radio Frequency Interference Statement For Model 9195A 110V

This equipment generates and uses radio frequency energy and may, if not installed and used properly, that is, in strict accordance with the manufacturer's instructions, cause interference to radio and television reception.

It has been type tested and found to comply with the limits for a Class B computing device in accordance with the specifications in Subpart J of Part 15 of FCC rules, which are designed to provide a reasonable protection against such interference in a residential installation. Shielded data cables were used during the type test; therefore, properly shielded and terminated data cables should be used to reduce potential interference. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- reorient the receiving antenna.
- relocate the computer with respect to the receiver.
- plug the computer into a different outlet so that computer and receiver are on different branch circuits.

If necessary, the user should consult the dealer or an experienced radio/television technician for additional suggestions.

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

Introduction

Welcome to *Installing the HP ScanJet Plus Scanner with Scanning Gallery Plus 5.0 Software*. This guide is for users of AT compatible systems and users of Micro Channel systems who want to perform the following installation procedures:

- Installation of an HP ScanJet Plus scanner and Scanning Gallery Plus 5.0 with or without HP AccuScan software for the first time.
- Installation of the Scanning Gallery Plus 5.0 with or without HP AccuScan software on a computer system with an HP ScanJet or HP ScanJet Plus scanner already installed.

In either case, your installation will be successful if you do these things:

- Make sure you have either Windows/286, version 2.11, Windows/386, version 2.11 or Windows version 3.0 installed on your system.
- Install the software before you install the interface card.
- If you are using an AT system, set the switches on the interface card according to the settings recommended by the installation program.
- If you are using a Micro Channel system, have the backup Reference Diskette available.
- Run the SCANTEST program to test your hardware and software installation.

Refer to “Special Situations” at the end of the AT compatible section or the Micro Channel section if you have problems during installation.

If those instructions do not correct the problem, and you purchased your ScanJet Plus scanner from a dealer, call your dealer.

If you purchased your ScanJet Plus scanner from your Hewlett-Packard sales representative, call the Hewlett-Packard Customer Assistance line at:

(208) 323-2551

Customer Assistance Phone Number

Note If you are installing only software, go directly to chapter 2, “Installing Software.”

Hardware and Software Requirements and Recommendations

Use the following table to configure your system for Scanning Gallery Plus 5.0 software.

**Table 0-1.
HP Scanning Gallery Plus 5.0 Software System Configuration**

	Required	Recommended
COMPUTER SYSTEM	286 based system with a clock speed of 8 megahertz or greater	286, 386sx or 386 system with a clock speed of 12 megahertz or greater
OPERATING SYSTEM	DOS 3.3, 4.01	DOS 3.3, 4.01
	Windows 2.11, 3.0	Windows 2.11, 3.0
MEMORY	640 kilobytes	640 kilobytes plus 1 megabyte RAM
	1.2 megabyte (5.25 inch) or 720 kilobytes (3.5 inch) disk drive	1.2 megabyte (5.25 inch) or 720 kilobytes (3.5 inch) disk drive
	4 megabytes available disk space	4 megabytes of available disk space; 40 megabyte hard drive
MONITOR	EGA	VGA
POINTING DEVICE	MS Windows compatible device	MS Windows compatible device
SCANNER	HP ScanJet scanner and interface card with Scanning Gallery Plus 5.0	HP ScanJet Plus scanner and interface card with Scanning Gallery Plus 5.0

Use the following table to configure your system for Scanning Gallery Plus 5.0 and HP AccuScan software.

Table 0-2. HP AccuScan Software System Configuration

	Required	Recommended
COMPUTER SYSTEM	286 based system with a clock speed of 10 megahertz or greater	286, 386sx or 386 system with a clock speed of 16 megahertz or greater
OPERATING SYSTEM	DOS 3.3, 4.01	DOS 3.3, 4.01
	Windows 2.11, 3.0	Windows 2.11, 3.0
MEMORY	2 megabytes RAM (1 megabyte base in which the RAM between 640 kilobytes and 1 megabyte is available as extended memory, plus 1 megabyte additional memory compatible with LIM 4.0) OR 640K base plus 2 megabytes additional memory compatible with LIM 4.0	3 megabytes RAM (1 megabyte base plus 2 megabytes additional memory compatible with LIM 4.0)
	1.2 megabyte (5.25 inch) or 720 kilobytes (3.5 inch) disk drive	1.2 megabyte (5.25 inch) or 720 kilobytes (3.5 inch) disk drive
	7 megabytes available disk space	7 megabytes of available disk space; 40 megabyte hard drive
MONITOR	EGA	VGA
POINTING DEVICE	MS Windows compatible device	MS Windows compatible device
SCANNER	HP ScanJet scanner and interface card with Scanning Gallery Plus 5.0	HP ScanJet Plus scanner and interface card with Scanning Gallery Plus 5.0

LIM is the standard developed by Lotus, Intel, and Microsoft for expanded memory. Check the documentation that came with your expanded memory to see if it is compatible with LIM 4.0.

Refer to Statistics under the Help menu in the HP AccuScan software for additional help in getting the best performance from HP AccuScan on your particular system.



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Unpacking the Scanner

Note If you are installing only software, go directly to chapter 2, “Installing Software.”

The ScanJet Plus scanner components are shipped in two boxes. Check for damage while unpacking the scanner and the interface kit boxes. If you notice any damage, notify the dealer or the HP sales office where you purchased the ScanJet Plus scanner.

Save all shipping and packaging materials in case you want to transport the ScanJet Plus scanner in the future.

You should find the following items in the scanner box:

- ScanJet Plus scanner
- Power cord
- *Guide to the HP ScanJet Plus Scanner*
- Packing list

Refer to the *Guide to the HP ScanJet Plus Scanner* for maintenance and specification information.

Remove all packaging materials from the scanner, including the tape from the copyboard cover and any paper between the copyboard glass and the copyboard cover.

Warning To avoid electrical shock, do not remove the copyboard glass for any reason. If the glass breaks, unplug the scanner power cord immediately.

You should find the following items in the ScanJet Plus scanner interface kit:

- Interface/adapter card
- Interface cable
- Installation Guide
- User's Guide
- Software disks

1-2 Unpacking the Scanner

Unlocking the Scanner

Caution A locking mechanism secures and protects the scanner's internal mirror assembly during shipment. It must be unlocked before you can perform a scan. Failure to unlock the scanner can damage the scanning mechanism.

Unlock the scanner as follows:

1. Tilt the scanner on end so that the underside of the scanner faces you.
2. Locate the release lever on the underside of the scanner.
3. Slide the release lever out from the scanner until the bottom of the release lever is even with the scanner body and clicks into place. See figure 1-1.
4. Return the scanner to its original position.

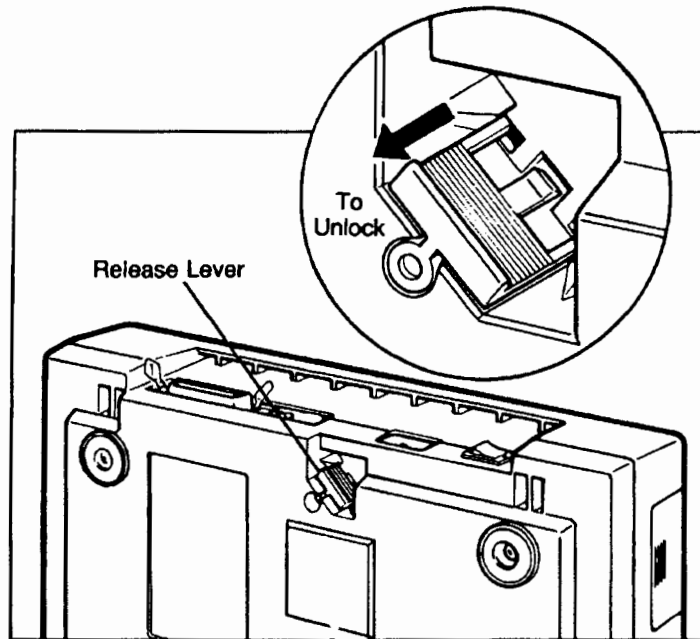


Figure 1-1. Unlocking the ScanJet Plus Scanner

Locking the Scanner

Caution It is important to relock the ScanJet Plus scanner before moving it. Failure to relock the scanner may cause damage to the scanning mechanism.

Lock the scanner as follows:

1. Remove the automatic document feeder if one is attached to the scanner.
2. Return the scanning bar to its home position by turning off the scanner, then turning on the scanner and waiting 10 seconds.
3. Turn off the scanner.
4. Disconnect the power cord from the electrical outlet.
5. Relock the scanner by tilting it on end and sliding the release lever toward the scanner until you feel it lock. See figure 1-2.



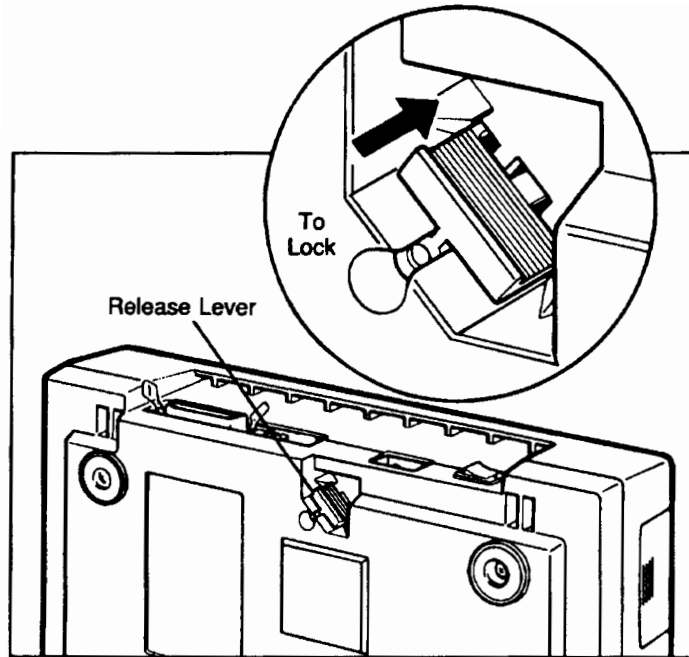


Figure 1-2. Relocking the ScanJet Plus Scanner



Installing Software

Note Microsoft Windows/286, version 2.11, Windows/386, version 2.11, or Windows 3.0 must be installed on your system before you can install Scanning Gallery Plus 5.0 and HP AccuScan software. Install Scanning Gallery Plus 5.0 before installing HP AccuScan.

Install Scanning Gallery Plus 5.0 software from any 1.2 megabyte flexible disk drive for 5.25 inch disks, or any 720 kilobyte or 1.44 megabyte flexible disk drive for 3.5 inch disks. For example, start the installation program from drive A as follows:

1. Insert the Scanning Gallery Plus 5.0 Disk A, or Disk A & B into drive A.
2. Type: A:
3. Press: RETURN
4. Type: SETUP
5. Press: RETURN
6. Follow the instructions that appear on the screen.

If you have been using the ScanJet Plus scanner, have the interface card installed in your computer system, and have your scanner connected, you're done! Now, test your software installation by running the SCANTEST program and choosing Minimal Test. Refer to "Testing Your Installation" in chapter 3.

If you have not installed the interface card in your computer, read the following pages for installation instructions.

Note If you are using a Micro Channel computer, go to chapter 4, "Installing Hardware on Micro Channel Systems."

Installing Hardware on AT Compatible Systems

Note If you are using a Micro Channel computer, go directly to chapter 4, "Installing Hardware on Micro Channel Systems."

Use these figures to become familiar with the ScanJet Plus scanner and the interface card.

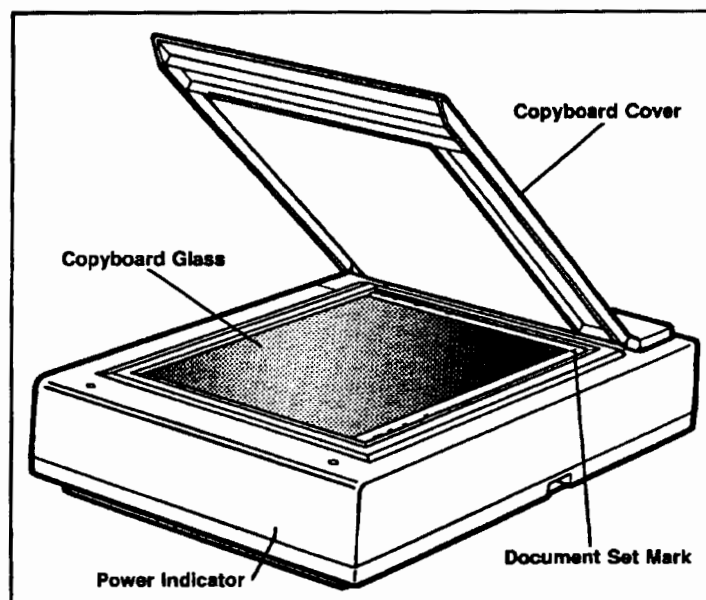


Figure 3-1. ScanJet Plus Scanner, Front

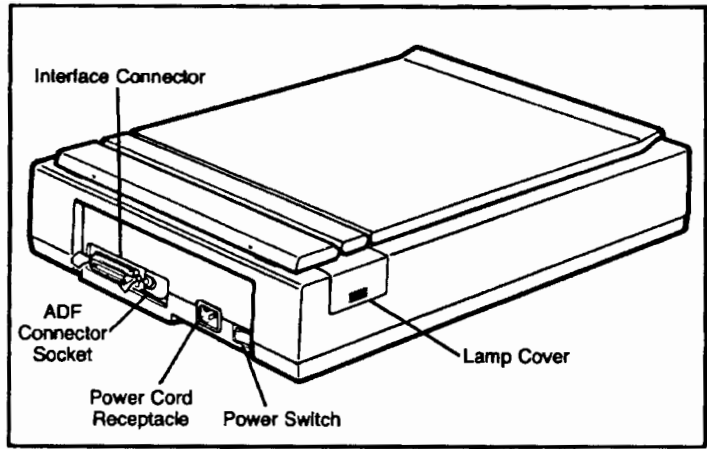


Figure 3-2. ScanJet Plus Scanner, Back

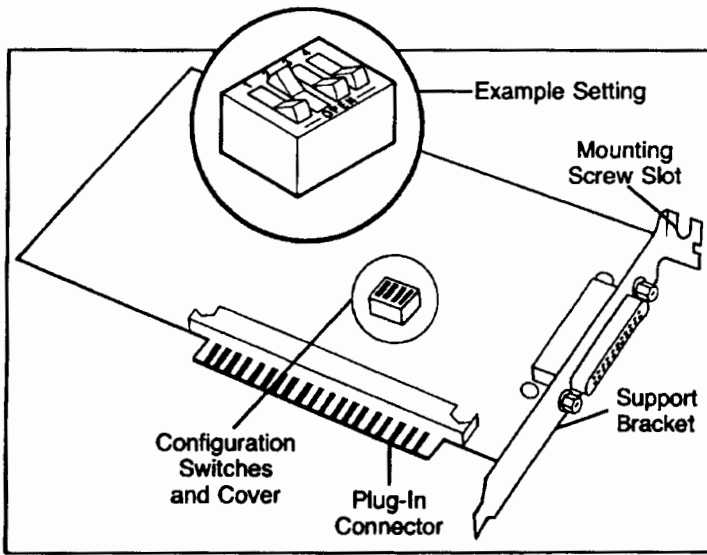


Figure 3-3. Interface Card for AT Computers

3-2 Installing Hardware on AT Compatible Systems

Setting the Switches

After completing the software installation program (see chapter 2), follow the steps below to set the configuration switches on the interface card to the setting suggested by the installation program.

1. Remove the interface card from its protective anti-static bag.

Caution The interface card, like most electronic components, is sensitive to static electricity. When removing the interface card from the anti-static bag, hold it by the top edge.

2. Find the switches on the interface card. See figure 3-3.
3. Remove the plastic cover from the switches, if the cover is attached.
4. With a pencil or your fingers, set the switches to the positions suggested for your system in the installation program. See figure 3-4.

If you need information about I/O ports and ROM address settings to properly install the interface card on your system, refer to the “Special Situations” section at the end of this chapter.

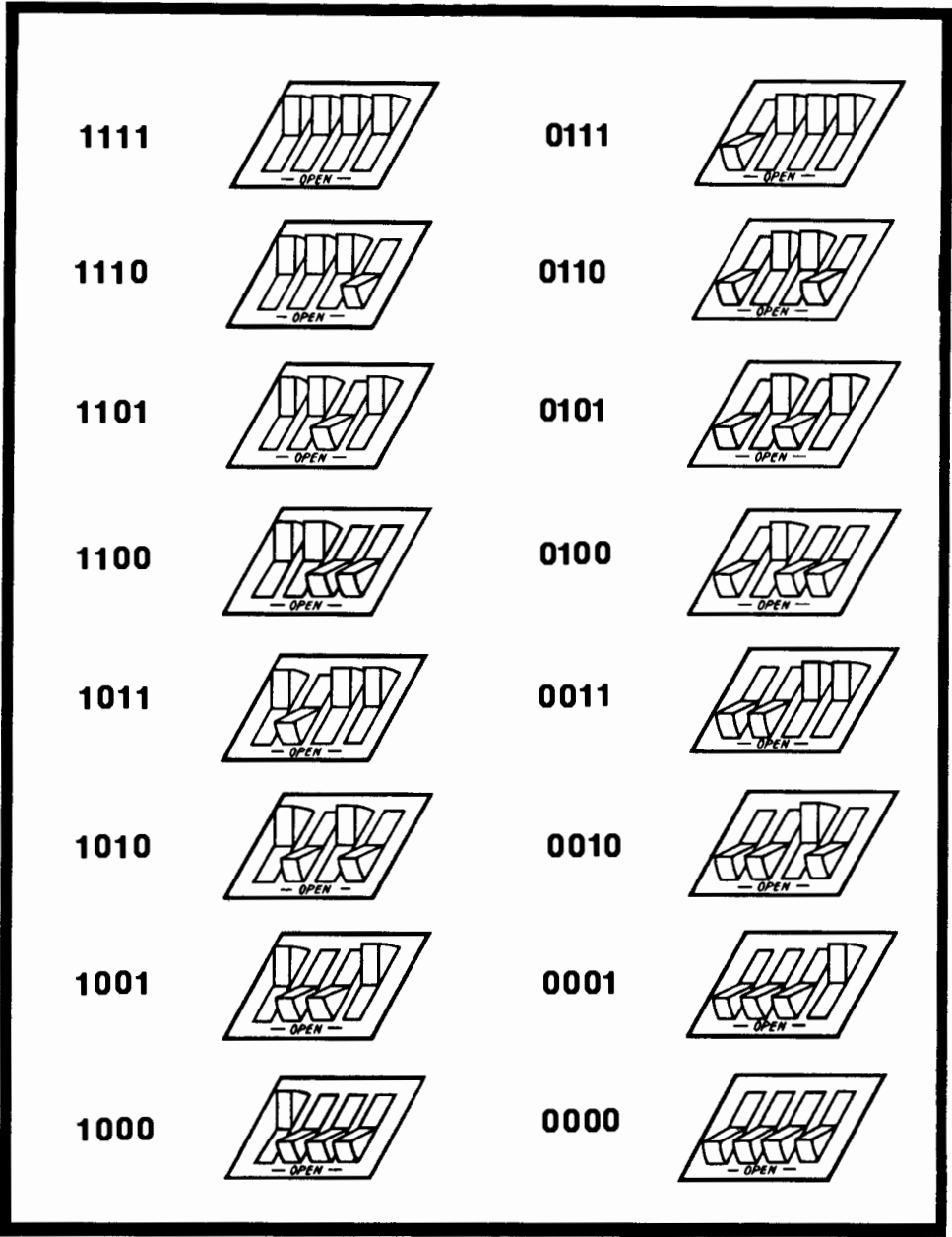


Figure 3-4. Examples of Switch Settings
3-4 Installing Hardware on AT Compatible Systems

Installing the Interface Card

1. Turn off your computer.
2. Unplug the computer system power cords from electrical outlets.

Warning **Unplug all power cords from your computer system before installing the interface card.**

3. Remove the top cover of your computer. (You may need to refer to your computer user's manual.)
4. Choose any empty card slot, but preferably one with a short connector socket. See figure 3-5.

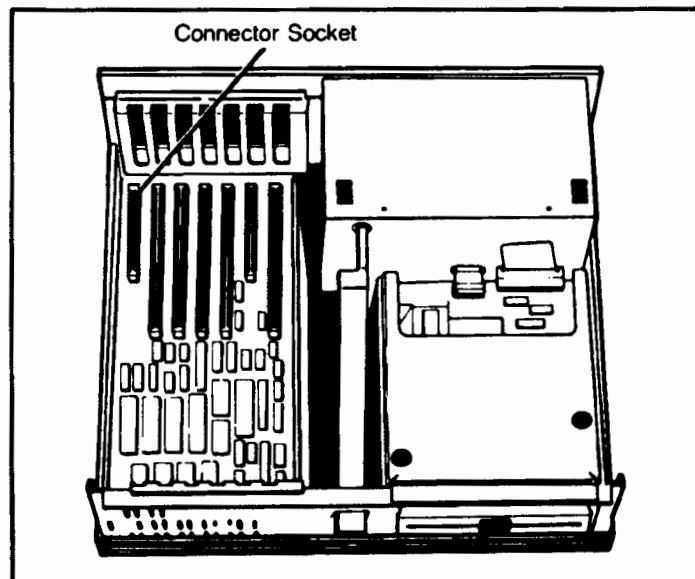


Figure 3-5. Accessory Card Slots

5. Remove the slot cover from the back of your computer by removing the screw which holds the slot cover in place. See figure 3-6.

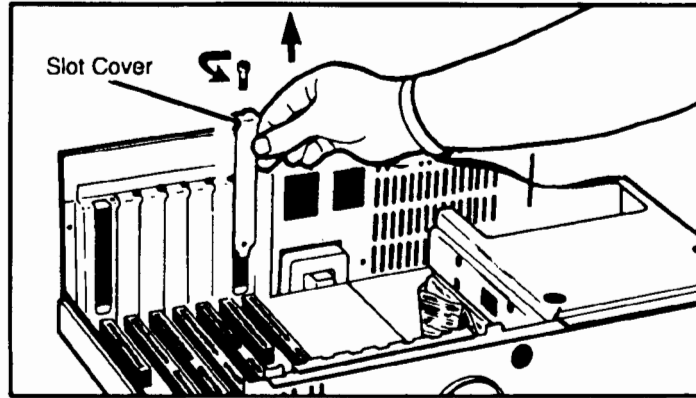


Figure 3-6. Removing the Slot Cover Screw

3-6 Installing Hardware on AT Compatible Systems

6. Position the interface card in your computer as shown in figure 3-7. If you are having difficulty fitting the card in the slot, you may need to adjust the position of an adjacent slot cover or support bracket to allow more room for the card.

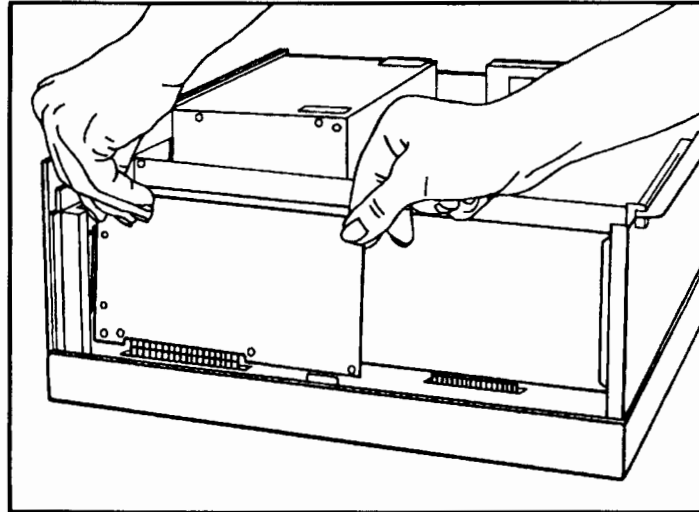


Figure 3-7. Installing the Interface Card

7. Insert the interface card into the connector socket and press the card down firmly until the plug-in connector seats into the connector socket.



8. With the slot cover screw, secure the support bracket of the interface card to the back panel of the computer, as shown in figure 3-8.

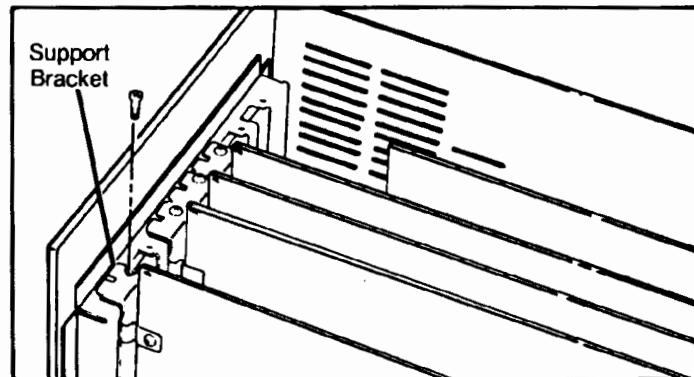


Figure 3-8. Replacing the Slot Cover Screw

Note

If you are currently using or plan to install a 16-bit VGA board, see the “Special Situations” section at the end of this chapter for help in avoiding conflicts with the ScanJet Plus interface card.

9. Replace the computer top cover.

Connecting the Scanner to Your Computer

To connect the ScanJet Plus scanner to your computer:

1. Attach the smaller end of the interface cable to the connector on the scanner interface card that you installed. See figure 3-9.

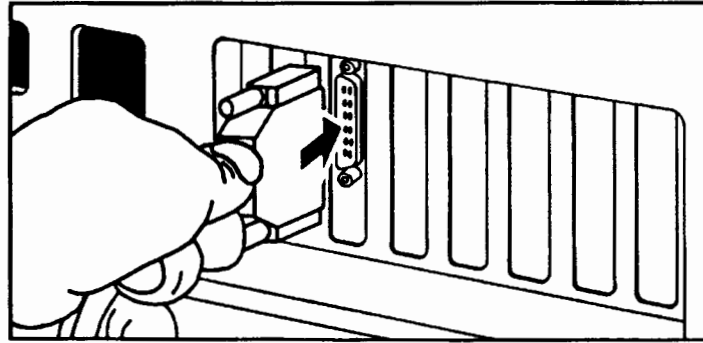


Figure 3-9. Connecting the Interface Cable to the Computer

2. Tighten the screws on the cable.

3. Attach the other end of the interface cable to the connector on the back of the scanner by pushing the wire loop connectors into the holders on the interface cable. See figure 3-10.

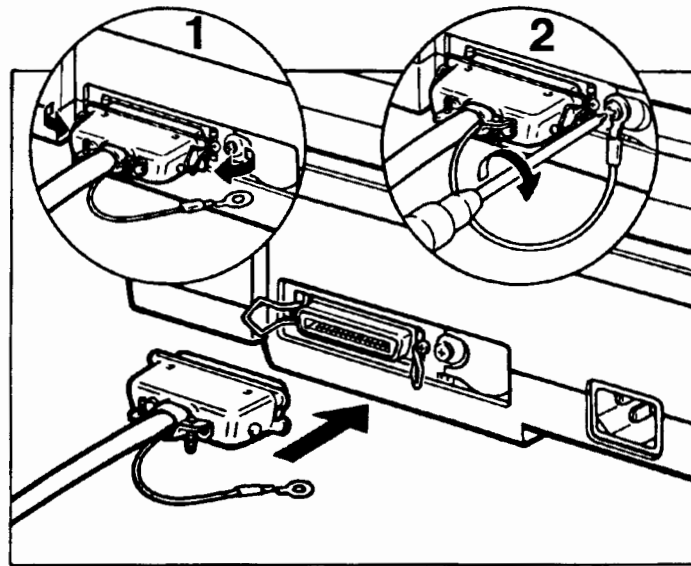


Figure 3-10. Connecting the Interface Cable to the Scanner

4. Remove the screw located to the right of the scanner connector, insert the screw into the loop end of the ground wire, and replace the screw in the scanner. See the inset in figure 3-10.

3-10 Installing Hardware on AT Compatible Systems

Turning on the Equipment

1. Attach the power cord to the scanner. See figure 3-11.

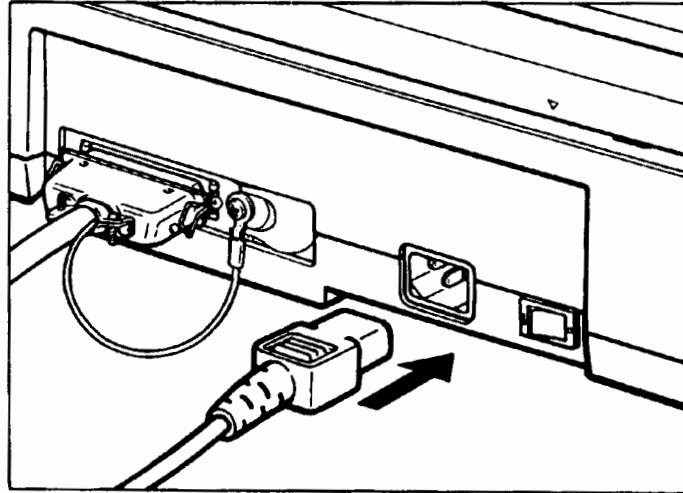


Figure 3-11. Connecting the Power Cord to the Scanner

Caution

Make sure the mirror assembly is unlocked before the scanner is plugged in and turned on. Damage to the scanner can occur if the scanner is turned on before the mirror assembly is unlocked. See page 1-3 for instructions.

2. Plug the scanner power cord into an electrical outlet.

3. Turn on the scanner power switch. See figure 3-12. The power indicator on the front of the scanner should be lit.

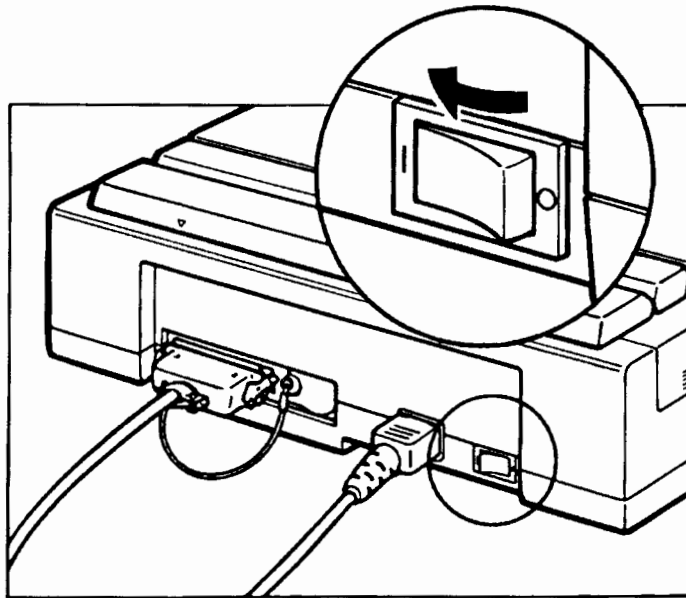


Figure 3-12. Turning On the Scanner

4. Plug your computer power cord into an electrical outlet.
5. Turn on any other peripheral devices in your computer system.
6. Turn on your computer power switch.

(If you have a separate switch for your computer monitor, turn it on too.)

If your screen displays error messages or fails to display its usual system prompt or start-up messages within a minute, you may have a problem with the installation of the scanner. Refer to the "Special Situations" section at the end of this chapter for help.

3-12 Installing Hardware on AT Compatible Systems

Testing Your Installation

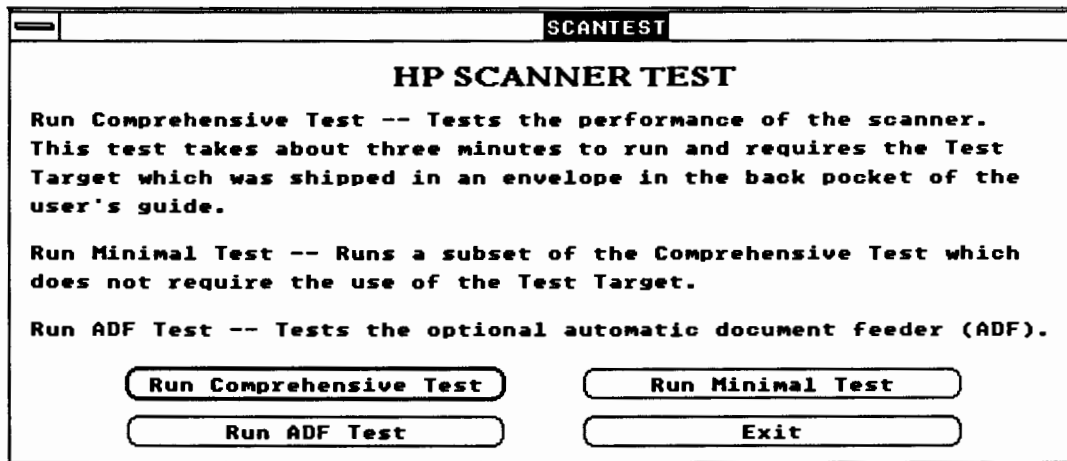
Your Scanning Gallery Plus 5.0 software contains a utility called SCANTEST. Use the SCANTEST program to test your installation and your scanner.

To bring up the Scanning Gallery Plus 5.0 program:

1. From the SCANGAL5 directory, type **WIN**.
2. Move the pointer to the file **SCANGAL5.EXE**.
3. Double-click the left mouse button to open **SCANGAL5.EXE**.

To begin the SCANTEST Program, drag the Help menu and select **Diagnostics**.

When the SCANTEST program begins, you should see a window like this one:



If you have installed the interface card, running the Comprehensive Test to test the performance of the scanner is recommended.

If you have installed only software, running the Minimal Test is recommended.

Running the Comprehensive Test

The Comprehensive Test requires the test target. Follow these steps to run the Comprehensive Test:

1. Locate the test target envelope in the back pocket of the manual binder.
2. Handling the test target by the edges, remove it from the protective envelope.
3. Place the test target squarely against the scaled frame of the copyboard with the image of the kitten against the glass and the orange arrows aligned as in figure 3-13.

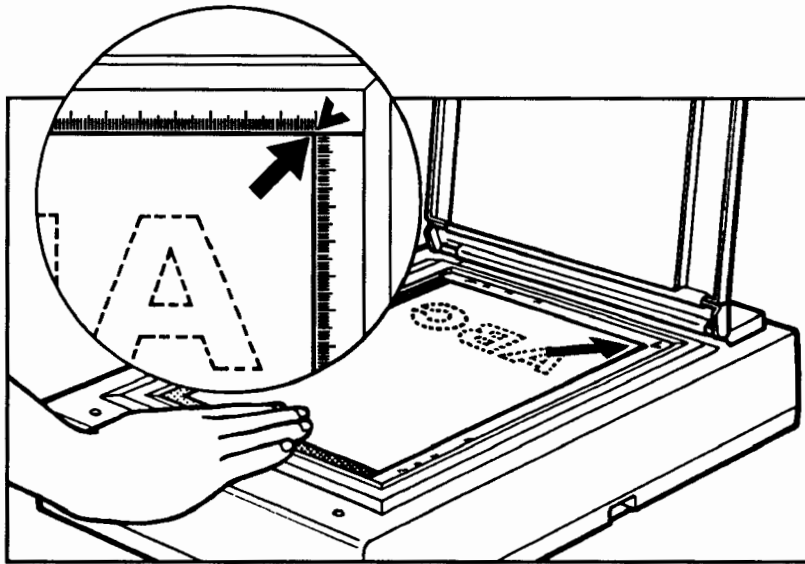


Figure 3-13. Placing the Test Target on the Copyboard

4. Click Run Comprehensive Test.
5. When the test is completed, return the test target to the protective envelope.

3-14 Installing Hardware on AT Compatible Systems

Special Situations

Solving Address Conflicts in AT Compatible Systems

If your computer boots up improperly or not at all, or if you see error messages, an address conflict may be causing the problem. Address conflicts can be resolved by changing the switches on one of the conflicting cards to choose a new location within the computer's address space. Use the information in the following figure and table to choose new switch positions to resolve the address conflict.

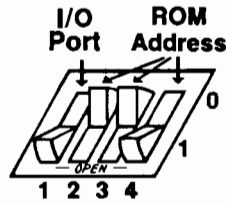


Figure 3-14. Example of Switch Setting

Table 3-1. Selecting I/O and ROM Address Switch Positions

ScanJet Plus Interface Card		Expansion	Configuration
Switch 1 Settings	Addresses	ROM Address (Hexadecimal)	Switch Settings 2 3 4
"0"	278H - 27FH (LPT2)	C0000-C3FFF	0 0 0
"1"	268H - 26FH	C4000-C7FFF	1 0 0
		C8000-CBFFF	0 1 0
		CC000-CFFFF	1 1 0
		D0000-D3FFF	0 0 1
		D4000-D7FFF	1 0 1
		D8000-DBFFF	0 1 1
		DC000-DFFFF	1 1 1

Using 16-bit VGA Interface Cards

Address conflict problems may occur if you install the ScanJet Plus scanner interface card in a system with a 16-bit VGA interface card. Refer to the previous two pages on "Solving Address Conflicts" first to resolve a conflict with a VGA card.

If you have changed the switches on the ScanJet Plus interface card and are still experiencing problems, there are two other solutions to this problem.

Solution One

Set the 16-bit card to the 8-bit mode using the switch on the VGA interface card following the instructions from the VGA manufacturer. This procedure causes the monitor to operate in an 8-bit mode.

Solution Two

Set the 16-bit card to the 8-bit mode using the switch on the VGA board.

1. Using the software disk that came with the VGA card, install the driver RAMBIOS.SYS into the root directory.
2. Add the statement `DEVICE=C:\RAMBIOS.SYS` to the CONFIG.SYS file to allow the video memory address to be installed into system memory and not into the system ROM Expansion memory location. (About 24 K of system memory will be used.)

This procedure allows the monitor to operate in a 16-bit mode.

Note	Most manufacturers of VGA interface cards use the RAMBIOS.SYS driver but the name of the driver may vary. Refer to the documentation supplied with your VGA interface card.
-------------	---

Installing the Scanner Driver

Automatically Installing the Scanner Driver

To automatically install only the scanner driver follow this procedure during software installation:

1. Type **A:** and press **ENTER**.
2. Type **SETUP /D** and press **ENTER**.

This will copy the driver to the root directory, and make the necessary modifications to your CONFIG.SYS file. If you have an AT compatible system and have not installed the scanner interface card, it will help you choose a switch setting. If you have a PS/2 Micro Channel system, it will copy the necessary files to your backup Reference Diskette.

Manually Installing the Scanner Driver

1. Copy the SJDRIVER.SYS file from the Scanning Gallery Plus 5.0 Disk A to your hard disk.
2. Using a text editor, add the following line to your CONFIG.SYS file:

```
DEVICE=SJDRIVER.SYS
```

3. Resave your CONFIG.SYS file.

For AT compatible systems, run SJSWITCH.EXE from the Scanning Gallery Plus 5.0 Disk A to choose a switch setting for your interface card.

For PS/2 Micro Channel machines, copy the @601F.ADF file from the Scanning Gallery Plus 5.0 Disk A to your backup Reference Diskette.

Updating the WIN.INI File

Using SETUP to Update the WIN.INI File

If you reinstall Windows after installing Scanning Gallery Plus 5.0 with or without AccuScan, the changes made to your WIN.INI file by the Scanning Gallery Plus 5.0 software will be lost. You may use the SETUP program to update the WIN.INI file or you may update the WIN.INI file manually.

1. Type **A:** and press **ENTER**.
2. Type **SETUP /W** and press **ENTER**.

The SETUP program will make the necessary modifications to the WIN.INI file.

Manually Updating the WIN.INI File

For Scanning Gallery Plus 5.0.

1. Copy the **SCANNER.TXT** and **IMAGECON.TXT** files from the Scanning Gallery Plus 5.0 Disk A to your Windows directory.
2. Use a text editor or the DOS copy command to add the information from these files to your WIN.INI file.

COPY WIN . INI+IMAGECON . TXT+SCANNER . TXT

For Scanning Gallery Plus 5.0 and AccuScan.

1. Copy the **SCANNER.TXT** and **OCRCON.TXT** files from the AccuScan Disk A to your Windows Directory.
2. Use a text editor or the DOS copy command to add the information from these files to your WIN.INI file.

COPY WIN . INI+OCRCON . TXT+SCANNER . TXT

Manually Modifying the AUTOEXEC.BAT File

If you already have a path statement in your AUTOEXEC.BAT file, add the statement

```
C:\SCANGAL5;
```

For example, if you installed Scanning Gallery Plus 5.0 on C drive after editing the AUTOEXEC.BAT file, your path would look like this:

```
C:\;C:\WINDOW;C:\SCANGAL5;
```

If no path statement exists in your AUTOEXEC.BAT file, you need to create this path statement.

```
PATH C:\;C:\SCANGAL5
```

Manually Installing the Complete Software Package

Copy all the files from all the disks. If you are installing both Scanning Gallery Plus 5.0 and AccuScan, copy the Scanning Gallery Plus 5.0 disks first. Then follow the instructions above for manually installing the driver and modifying the CONFIG.SYS, WIN.INI, and AUTOEXEC.BAT files.

Installing Hardware on Micro Channel Systems

This chapter is for users installing the ScanJet Plus scanner on a Micro Channel system.

Note In this chapter, the Micro Channel interface board is called an “adapter.”

Use these figures to become familiar with the ScanJet Plus scanner and the adapter.

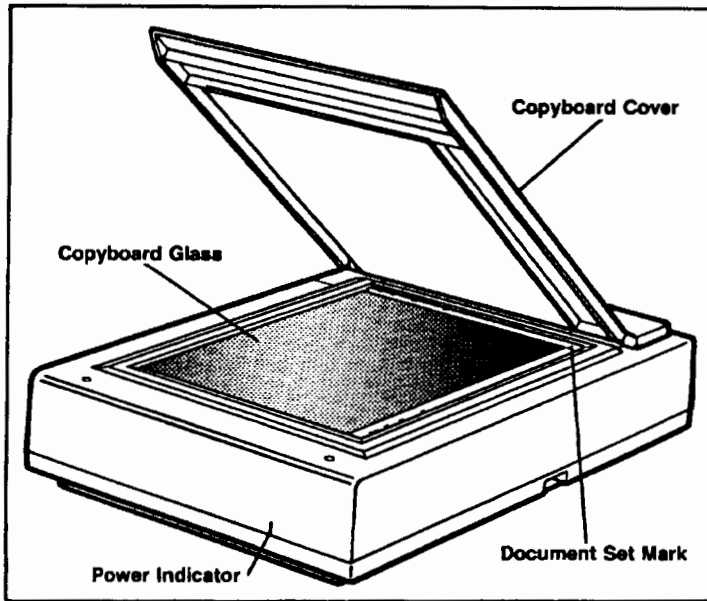


Figure 4-1. ScanJet Plus Scanner, Front

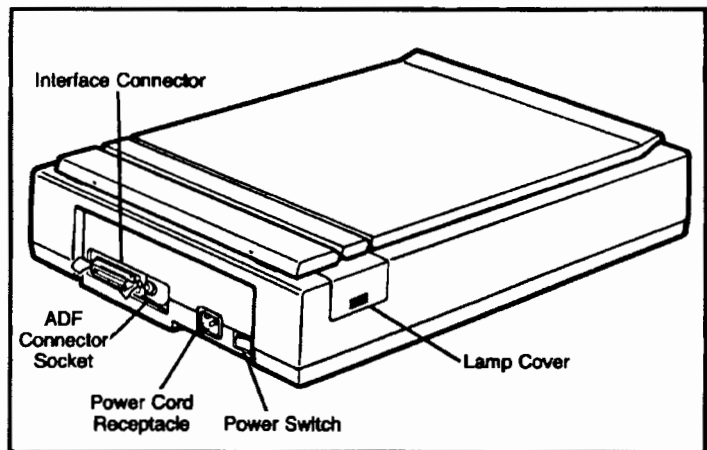


Figure 4-2. ScanJet Plus Scanner, Back

4-2 Installing Hardware on Micro Channel Systems

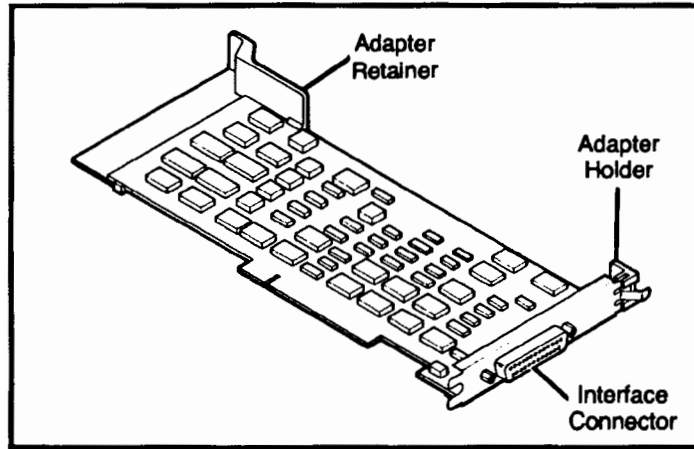


Figure 4-3. Adapter for Micro Channel Computers

Installing the Adapter

1. Turn off your computer.
2. Unplug the computer system power cords from electrical outlets.

Warning **Unplug all power cords from your computer system before installing the adapter.**

3. Remove the top cover of your computer. If you need help, refer to your computer user's manual.
4. Choose any empty expansion slot, but preferably one with a short (8-bit) socket. See figure 4-4.

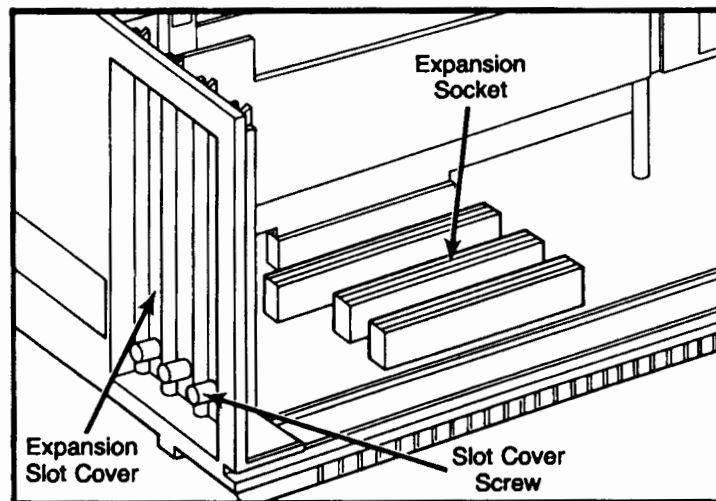


Figure 4-4. Accessory Card Slots

5. Remove the expansion slot cover from the back of your computer by loosening the screw that holds the slot cover in place and sliding up the expansion slot cover.

4-4 Installing Hardware on Micro Channel Systems

Caution The adapter, like most electronic components, is sensitive to static electricity. When removing the adapter from the anti-static bag, hold it by the plastic holder.

6. Remove the adapter from the protective anti-static bag, holding the adapter by its plastic holder.
7. Position the adapter in your computer as shown in figure 4-5.

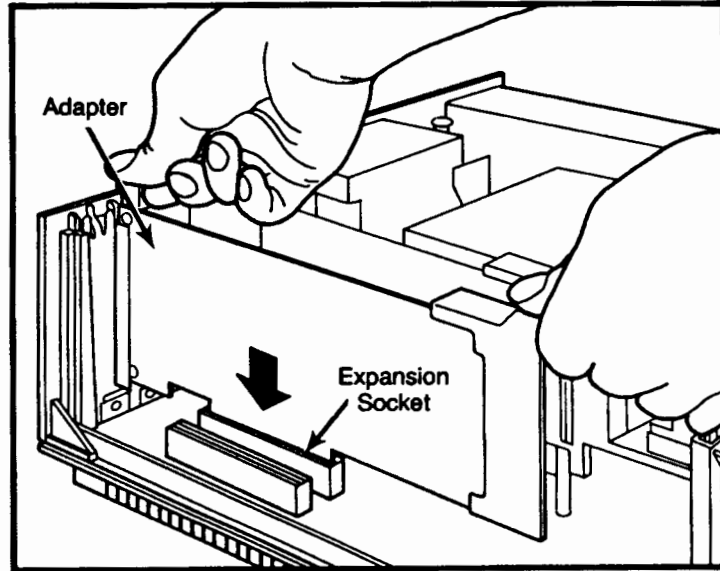


Figure 4-5. Installing the Adapter

8. Insert the adapter into the slot and press the adapter until it seats in the expansion socket.
9. Tighten the expansion slot screw to secure the adapter to the rear panel of the computer.
10. Replace the computer cover.

Connecting the Scanner to Your Computer

To connect the ScanJet Plus scanner to your computer:

1. Attach the small end of the interface cable to the connector on the scanner adapter that you installed. See figure 4-6.

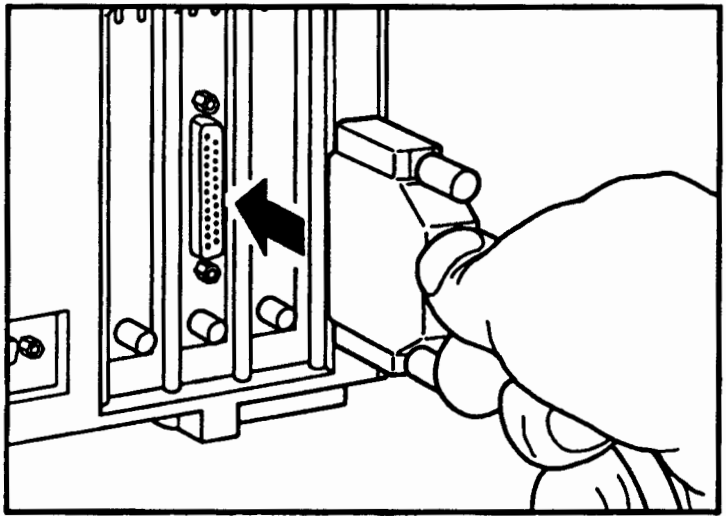


Figure 4-6. Connecting the Interface Cable to the Computer

2. Tighten the screws on the cable.

3. Attach the other end of the interface cable to the connector on the back of the scanner by pushing the wire loop connectors into the holders on the interface cable. See figure 4-7.

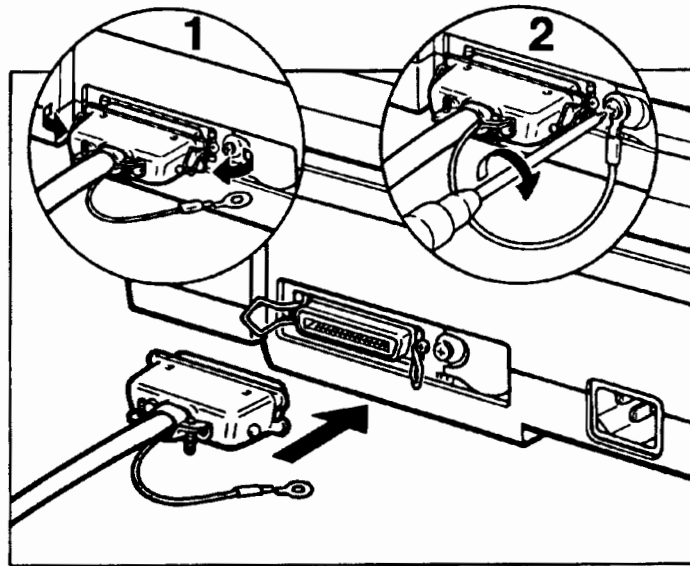


Figure 4-7. Connecting the Interface Cable to the Scanner

4. Remove the screw located to the right of the scanner connector, insert the screw into the loop end of the ground wire, and replace the screw in the scanner. See the inset figure 4-7.

Turning on the Equipment

1. Attach the power cord to the scanner. See figure 4-8.

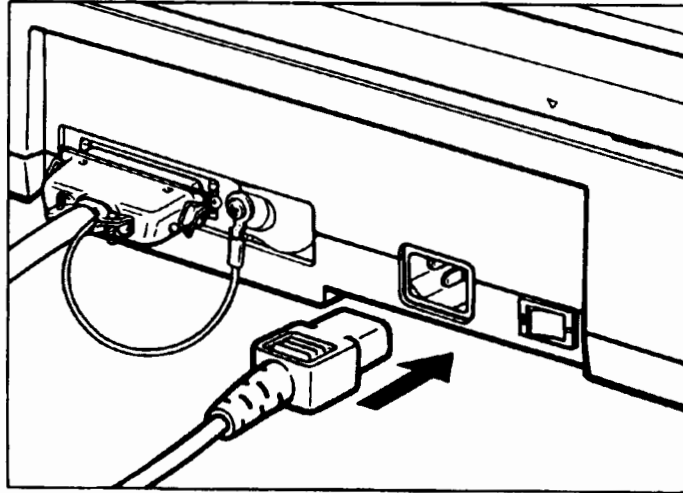


Figure 4-8. Connecting the Power Cord to the Scanner

Caution Make sure the mirror assembly is unlocked before the scanner is plugged in. Damage to the scanner can occur if the scanner is turned on before the mirror assembly is unlocked. See page 1-3 for instructions.

2. Plug the scanner power cord into an electrical outlet.

3. Turn on the scanner power switch. See figure 4-9. The power indicator on the front of the scanner should be lit.

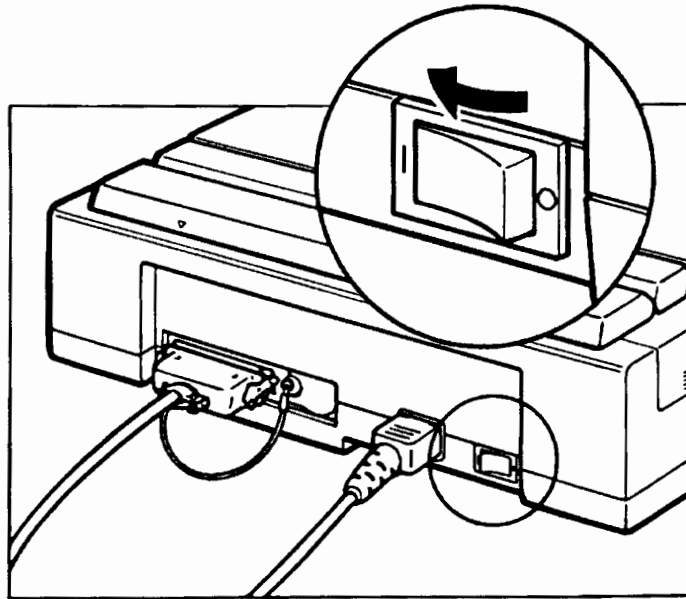


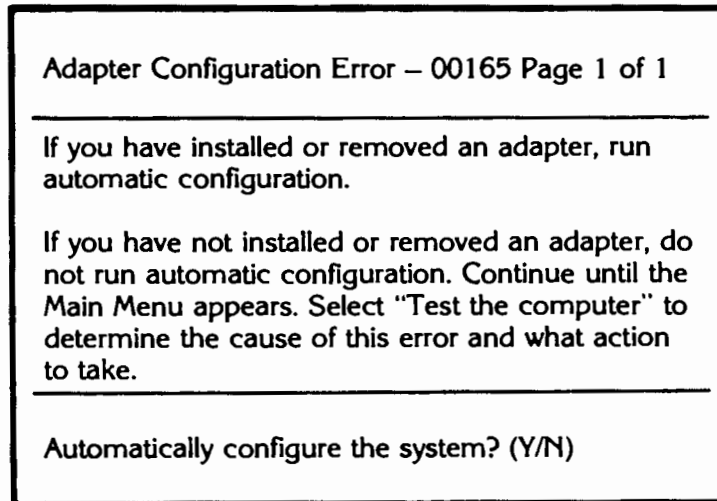
Figure 4-9. Turning On the Scanner

4. Plug your computer power cord into an electrical outlet.
 5. Turn on any other peripheral devices in your computer system.
 6. Insert your backup copy of the IBM PS/2 Reference Diskette in Drive A.
 7. Turn on your computer power switch.
- (If you have a separate switch for the computer monitor, turn it on too.)

Reconfiguring Your Computer System

To reconfigure your computer system:

1. Restart your computer system from the backup Reference Diskette.
2. Press the Enter key to clear the IBM screen. An Adapter Configuration Error screen will appear. These screens vary slightly depending on your PS/2 model. See the example screen below.



3. Press Y to automatically configure the system.
4. Remove the backup Reference Diskette from Drive A after your system automatically restarts.

If your screen displays error messages or fails to display its usual system prompt or start-up messages within a minute, you may have a problem with the installation of the scanner. Refer to the Troubleshooting section at the end of this chapter for help.

4-10 Installing Hardware on Micro Channel Systems

Testing Your Installation

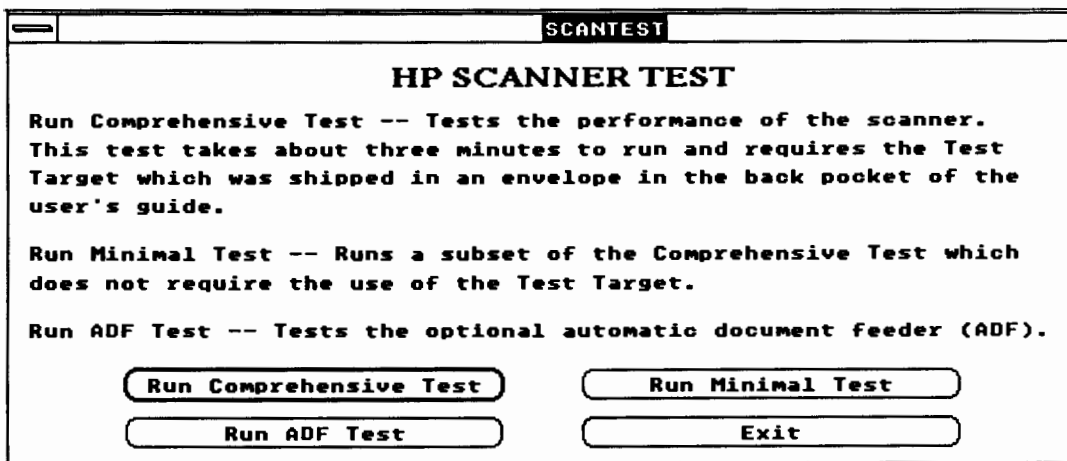
Your Scanning Gallery Plus 5.0 program contains a utility called SCANTEST. You'll use the SCANTEST program to test your installation and your scanner.

To bring up the Scanning Gallery Plus 5.0 program:

1. From the SCANGAL5 directory, type: **WIN**
2. Move the pointer to the file SCANGAL5.EXE.
3. Double-click the left mouse button to open SCANGAL5.EXE.

To begin the SCANTEST program, drag the Help menu and select **DIAGNOSTICS**.

When the SCANTEST program begins, you should see a window like this one:



If you have installed the adapter, running the Comprehensive Test is recommended.

If you have installed software, running the Minimal Test is recommended.

Running the Comprehensive Test

The Comprehensive Test requires the test target. Follow these steps to run the Comprehensive Test:

1. Locate the test target envelope in the back pocket of the manual binder.
2. Handling the test target by the edges, remove it from the protective envelope.
3. Place the test target squarely against the scaled frame of the copyboard with the image of the kitten against the glass and the orange arrows aligned as in figure 4-10.

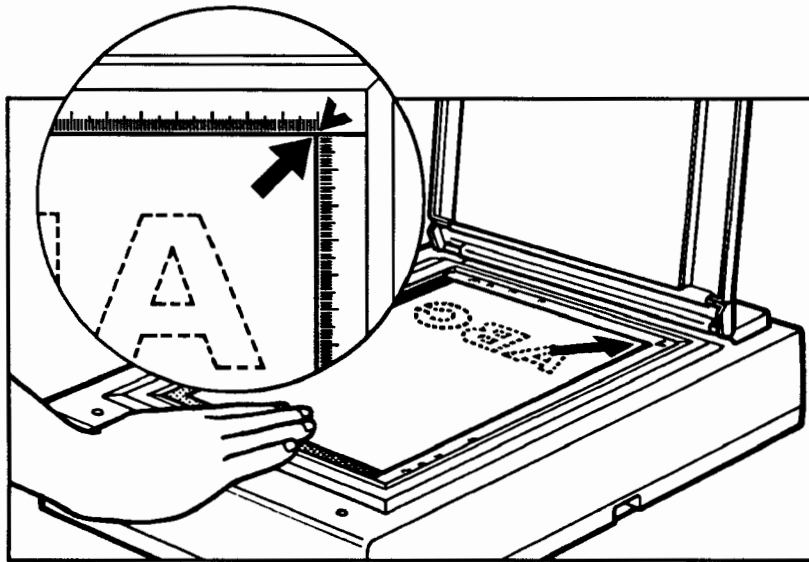


Figure 4-10. Placing the Test Target on the Copyboard

4. Click Run Comprehensive Test.
5. When the test is completed, return the test target to the protective envelope.

4-12 Installing Hardware on Micro Channel Systems

Troubleshooting

If you are having a problem with the scanner or have a question or concern, read this section.

Blank Screen Or Error 00165?

If, while restarting your system, you notice that your computer has stopped operating and the number 00165 appears at the top of a nearly blank screen, correct the problem by following the steps below:

1. Insert the backup Reference Diskette in Drive A.

Use a non-write-protected diskette. The original IBM Reference Diskette will not work.

2. Turn off, and then restart your computer.

You should see the IBM screen. Refer to the “Reconfiguring Your System” section earlier in this chapter for instructions about reconfiguring your system.

No Adapter Configuration Error?

If you have installed the adapter and restarted your computer from the backup Reference Diskette, you should see the “Adapter Configuration Error—00165” screen shown in the “Reconfiguring Your System” section earlier in this chapter.

If your monitor shows the Main Menu screen instead, your computer is not recognizing that the adapter has been installed. To fix the problem:

1. Turn off your computer and disconnect the power cord from the electrical outlet.
2. Check to make sure the adapter is seated in the expansion socket.
3. Insert the backup Reference Diskette in Drive A.
4. Restart your computer system.

You should see the IBM screen shown in the “Reconfiguring Your System” section earlier in this chapter. Follow instructions on that page.

If this procedure does not fix the problem, try installing the adapter in a different expansion slot. If it still doesn’t work, then your adapter is probably damaged. Call your Hewlett-Packard dealer or sales representative for assistance.

Adapter Description Warning?

If, while running the automatic configuration program, you see a warning on your screen saying that no adapter description file could be found, then:

- An error occurred when the installation program ran.
- Your backup Reference Diskette was not in Drive A when you ran the automatic configuration program.

To fix the problem:

1. Turn off your computer and disconnect the power cord from the electrical outlet.
2. Remove the ScanJet Plus adapter from your computer.
3. Remove the backup Reference Diskette from Drive A.
4. Restart your computer.
5. Go to the beginning of this installation guide and follow instructions for installing the scanner software.

If the condition recurs, you might have a damaged software diskette. Call your Hewlett-Packard dealer or sales representative for assistance.

Automatic Configuration Problems

If, while running the automatic configuration program, you see a warning on your screen indicating an address conflict, follow the instructions below:

1. Follow the screen instructions to return to the Main Menu.
2. Select **Set Configuration** from the Main Menu.
3. Select **Change Configuration** from the Set Configuration menu.

4-14 Installing Hardware on Micro Channel Systems

4. Look for an asterisk placed next to an item on the screen. An asterisk indicates an item has an address conflict. Only one of the two conflicting items will have an asterisk.
5. Move the cursor keys to the conflicting item. See figure 4-11.

Change Configuration		*Conflicts
Total System Memory		
Installed Memory	3072KB (3.0MB)	
Usable Memory	3072KB (3.0MB)	
Built In Features		
Installed Memory	1024KB (1.0MB)	
Diskette Drive A Type	[1.44MB 3.5"]	
Diskette Drive B Type	[Not Installed]	
Math Coprocessor	Not Installed	
Serial Port	[SERIAL 1]	
Parallel Port	[PARALLEL 1]	
Slot1 - Empty		
Slot2 - Hewlett-Packard Scanner Interface Adapter		
I/O Port Location	[0278-027FH (Parallel 3)]	
Memory Location	[0CC000-0CFFFH]*	
ESC = Quit FS = Previous F10 = Save Home F1 = Help F6 = Next End PageDown		

Figure 4-11. Asterisk Designates Address Conflicts

6. With the cursor keys, move the highlighter to the conflicting item next to the asterisk.
7. Use F5 and F6 keys to change the selections within the highlighted field.

Figure 4-12 shows an example of a new selection that eliminated the asterisk and the conflict shown in figure 4-11. You can select from three I/O port locations and eight ROM memory locations for the ScanJet Plus adapter.

Change Configuration	
Total System Memory	
Installed Memory	3072KB (3.0MB)
Usable Memory	3072KB (3.0MB)
Built In Features	
Installed Memory	1024KB (1.0MB)
Diskette Drive A Type	[1.44MB 3.5"]
Diskette Drive B Type	[Not Installed]
Math Coprocessor	Not Installed
Serial Port	[SERIAL 1]
Parallel Port	[PARALLEL 1]
Slot1 - Empty	
Slot2 - Hewlett-Packard Scanner Interface Adapter	
I/O Port Location	[0278-027FH (Parallel 2)]
Memory Location	[0CC000-0CFFFFH]
ESC = Quit	FS = Previous F10 = Save Home
F1 = Help	F6 = Next End PageDown

Figure 4-12. Address Selection

8. If you need additional information about an item on the screen, use the Help feature by moving (use the arrow keys) the highlighter to the item and pressing the F1 key.
9. When the asterisk disappears, you have resolved the conflict.
10. When the conflict is cleared, follow instructions on the screen to save the configuration.
11. Remove the backup Reference Diskette.
12. Press the ESC key to restart your system with the new configuration.

Glossary

Adapter

Another term for interface card. A printed circuit board inserted into your computer that adds a new capability to your computer.

Address

A number that identifies the memory location of a peripheral device.

Addressing Conflict

A problem that occurs when two adapters try to use the same memory location.

Automatic Configuration

A method used to set the addresses of adapters and options in your computer system memory. The automatic configuration program can be run from the IBM Reference Diskette.

Backup Reference Diskette

A duplicate of the IBM Reference Diskette. (See IBM PS/2 documentation for more information about making a backup diskette.) The backup Reference Diskette should not be write-protected because adapter description files are copied to it.

Booting

A term for restarting the computer. The computer “pulls itself up by its bootstraps” and gets ready to operate.

Cable

Provides a connection between computers and peripherals.

CONFIG.SYS

A file which contains special DOS commands which are executed when the computer is turned on.

Disk

A circular plate of magnetically coated material used to store computer information. The diskette is similar to a stereo record but it records data instead of music.

Driver

A program that allows the operating system to communicate with a peripheral device.

Hardware

The tangible parts of the computer system—the computer and the peripheral devices.

Interface Cable

The cable that connects the adapter to a peripheral device.

Interface Card

A printed circuit board inserted into your computer that adds a new capability to your computer.

LIM

LIM is the standard developed by Lotus, Intel, and Microsoft for expanded memory.

Micro Channel

The open architecture that IBM uses to add options and adapters to PS/2 computers without using switches.

Option Diskette

A diskette containing essential software for configuring and controlling an adapter or option.

SCANTEST

The user-confidence program provided to test whether the scanner is configured properly and scanning correctly.

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