Technical Support Solutions Guide

HP ScanJet 4Si Scanner

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About This Guide

Purpose

This guide is designed as a reference for people who provide postsale technical support for HP ScanJet 4Si scanners. This guide provides answers to frequently asked questions.

Use this guide with other product documentation, such as the product notes available from HP FIRST, the HP facsimile information retrieval system. To retrieve HP FIRST information via your fax machine, call (800) 333-1719. Use the Administrator's and User's Guides and other documents available with the product or separately from HP.

Organization

This guide uses the standard format for an HP Technical Support Solutions Guide (TSSG). TSSG documents contain information about the product and its installation, operation, problem resolution, and service and support.

Contents

1

Product Information

Product Positioning

The HP ScanJet 4Si scanner is the first network scanner that captures paper-based information in electronic form for distributing, sharing, and filing within a workgroup. It is a high-speed, 300 dpi scanner that attaches directly to Novell NetWare networks. It includes an automatic document feeder that feeds paper at 15 pages per minute, and desktop software, including optical character recognition (OCR). The desktop software is licensed for use by 20 users.

The HP ScanJet 4Si scanner users are small to medium Novell networked workgroups (5-20 seats) in information-intensive departments of medium to large companies. Users are the corporate sharer and corporate communicator.

The HP ScanJet 4Si scanner takes advantage of the networked office to provide better productivity for the workgroup. It is accessible and easy to use by all of its members. The HP ScanJet 4Si scanner is the most cost-efficient method for a networked workgroup to convert hardcopy information into an electronic format and add it to e-mail or groupware applications. The benefits for the workgroup are increased productivity and efficiency.

Network scanning or "scan-to-share" is entirely different from traditional scanning. A networked scanner's primary purpose is to improve communication in a workgroup environment through electronic distribution and sharing of documents. Network scanners also facilitate the management of information. Traditional scanners are used primarily for desktop publishing and graphics purposes.

Product Description

The HP ScanJet 4Si scanner enables users to "pick-up" information printed on paper, turn it into an electronic format and attach it to e-mail messages for further distribution, plug it into groupware databases, or turn it into editable computer text to improve or create new documents.

In most instances, users walk to their scanning station, select their name, scan the document, return to their computer, and see the scanned document as a "thumbnail" on a desktop to be dragged and dropped on an application icon for further processing. The scanner software is commonly used in conjunction with groupware, e-mail, OCR, store and retrieve, and workflow applications.

The scanner provides users with a direct and seamless connection to their network, eliminating the need for a dedicated personal computer. The scanner uses Simple Network Management Protocol (SNMP) and Management Information Base (MIB), which ensure network manageability.

Network Scanning

The HP ScanJet 4Si scanner can be attached to your network at any location and provides ease of use, offers network management capabilities, and increases scanner performance. Among the benefits of the HP ScanJet 4Si scanner are:

- **Flexible Location**—the scanner can be placed anywhere on a network and eliminates the need to attach the scanner directly to a server or personal computer, enabling it to be placed closer to your network users.

- **Performance**—the scanner performance is improved by fast paper handling through the Automatic Document Feeder, and network performance is protected by data compression techniques.

- **Easy-to-Use Software**—the scanner comes with three easy-to-use software packages: HP ScanJet 4Si Administrative Software, for configuring the device, and other system administrator activities; HP ScanJet 4Si Utility, for determining and adjusting user settings; and Visioneer PaperPort for manipulating scanned documents and items.

- **Network Management**—the network scanner interface allows remote monitoring; the scanner appears as an intelligent node on the network and is accessible through various diagnostic utilities.

Figure 1-1
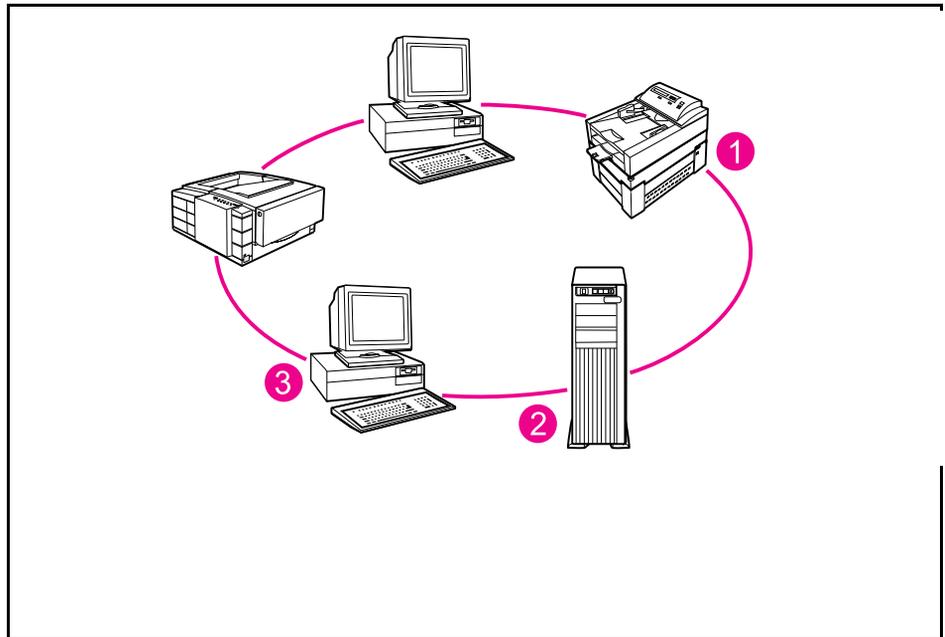
Data flows quickly from the HP ScanJet 4Si scanner, using network protocols.

Workgroup scanning uses a network to connect its members to a single scanner, much like users are connected to a network printer. Data flows from 1) the scanner to 2) the network file server, and then to 3) your computer, as shown in Figure 1-1.

Product Features

Performance
- 15 ppm at 1 bit/pixel at 300 dpi
- Grayscale definition: 1, 4, and 8 bits/pixel
- 300 dpi optical resolution up to 1200 dpi interpolated at 100% scaling; 1500 dpi at 80% scaling
- Comes with embedded Optical Character Recognition software
- Supports, image scanning, e-mail, fax, and groupware software

Paper Handling
- Supports multiple paper sizes:
  - Executive (7.25 x 10.5 inches)
  - Letter (8.5 x 11 inches)
  - A4 (8.3 x 11.7 inches)
  - A5 (5.85 x 8.3 inches)
  - Legal (8.5 x 14 inches)
- Holds up to 50 pages in ADF
- Scans text, graphics, and photos

Software
- Visioneer PaperPort software allows users to receive, view, and manipulate documents scanned with HP ScanJet 4Si scanners
- HP ScanJet 4Si Administrative Software allows network administrators to quickly configure scanners and their associated user pools and print queues
- HP ScanJet 4Si Utility software for determining and adjusting user scanner settings, and monitoring scanner status.

Network Support
- NetWare 3.1X and 4.X on IPX (NetWare 4.X only in Bindery Emulation Mode)

Interface Support
- Universal power supply
- 10Base-T Ethernet (RJ-45) and Token Ring (DB-9 or RJ-45) LAN connector

Ordering Information

This section provides ordering information for the HP ScanJet 4Si scanner. Availability and technical information are subject to change without notice. Contact HP's North American Distribution Organization (NADO), European Distribution Operation (EDO), or an HP sales representative to order items.

Original Part Numbers

Scanner Part Numbers

The HP ScanJet 4Si scanner comes in two versions:

- Ethernet (C1302A)
- Token Ring (C1303A).

The only physical difference between the two versions is the LAN adapter card in the network box. The LAN adapter card (*not* a JetDirect card) is not customer-removable.

Replacement Parts, Accessories and Documentation

You can order replacement parts for the scanner by contacting your sales representative or the Hewlett-Packard dealer where you bought the scanner. Within the United States you can order the parts below directly from HP at (800) 227-8164.

Item	Part Number*
Scanner power cord	8120-6328
Network box power cord	8120-6328
SCSI cable and terminator	C1301-67901
Administrator's Guide	C1301-90900
User's Manual	C1301-90905
Quick Reference Guide	C1301-90910
Replacement disks (full set)	C1301-60100
ADF delivery guide	FB3-0308-000CN
ADF lower rollers	FB3-0328-000CN

*Power cord, software, and manual part numbers are U.S.. and Canada only. Contact your HP dealer for part numbers outside the U.S. or Canada.

Express Exchange Program

HP's Express Exchange Program allows customers to exchange faulty modules (as diagnosed by an HP Customer Support Center). The ScanJet 4Si scanner is composed of three modules that the user stacks and connects together. Usually only the defective module for the scanner will be exchanged under the Express Exchange Program.

The support center will be required to determine the faulty module, aided by information from the control panel (if it is still working). Service center agents will require the part number for the faulty module in order to exchange it. In the cases where the fault cannot be located in a particular module, the entire scanner unit will be replaced.

Note   Authorized dealers are advised to exchange the entire HP ScanJet 4Si scanner unless the failed module has visible defects or has already been replaced with a unit from stock.

Support Center Tools for Module Exchange

Customer Support Centers will have the following tools to allow diagnosis of scanner problems down to a module level:

- **Visible Problems**—cracked glass, power indicators, switch-on test
- **Control Panel**—error codes that appear on the control panel indicate a broken component
- **Technical Support Solutions Guide** (this document)

Check the electronic services listed in Chapter 6, "Service and Support" or the HP Support Assistant CD-ROM for the latest information on supporting the HP ScanJet 4Si.

Exchange Assemblies

There are six different "products" that can be sent to a customer when exchanging an HP ScanJet 4Si scanner: two exchange "units" and four exchange "modules." Refurbished parts can be ordered with the part numbers in the table below.

Exchange Assembly Part Numbers			
Part		Europe	U.S./Rest of World
	Control Panel + ADF	C1301-69901	C1301-69902
	Scanner Also called Scanner Base	C1301-69001	C1301-69002
	Network Box (Ethernet) **Network Box (Token Ring)**	C1304-69001 C1305-69001	C1304-69002 C1305-69002
	Ethernet Exchange Unit **Token Ring Exchange Unit**	C1302-69001 C1303-69001	C1302-69002 C1303-69002
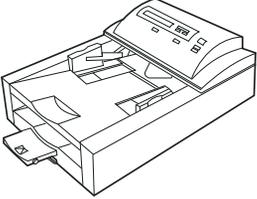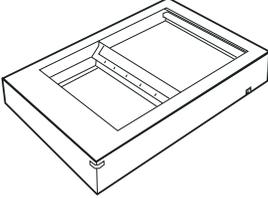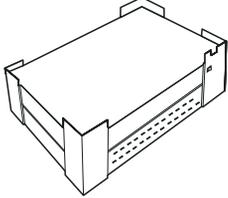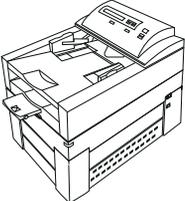
Scanner Specifications

Feature	Specification
Scanner Type	Flatbed
Maximum Document Size	Flatbed: 216 x 297 mm (8.5 x 11.7 in.) ADF: 216 x 356 mm (8.5 x 14 in.)
Scanning Element	Charged-coupled device
Light Source	Xenon lamp
Interface	LAN: Ethernet or Token Ring
Optical Resolution	300 dpi
Scanning Speed	15 pages per minute
Image Processing Options (preset)	Text, Photo, Text & Photo
AC Line Voltage	100-240 VAC, 50-60 Hz
Power Consumption	70W maximum
Weight	15.2 kg

Environmental Ranges

Temperature	
Operating	10 to 32.5 ^{o}C (50 to 90.5 ^{o}F)
Storage	- 30 to 60 ^{o}C (-22 to 140 ^{o}F)
Humidity	
Operating	20 to 80% noncondensing (10 to 32.5 ^{o}C)
Storage	20 to 80% (0 to 40 ^{o}C) 20 to 60% (40 to 60 ^{o}C)

System Architecture

Network Components

A typical workgroup on a LAN has some personal computer client stations, a Novell NetWare file server, a network printer, and, of course, the HP ScanJet 4Si scanner. The HP ScanJet 4Si scanner acts as a normal NetWare client.

The scanning process begins from the network scanner's front panel. The user selects the network destination, presses the Start button, and the pages are scanned. The scanned images are compressed and then transferred to the network server, where they are stored temporarily on a shared disk in a directory named workarea.

Scanned items are stored in the work area until a user connects to the network. Each client personal computer can be configured to automatically search for, import, and display all new scanned documents, or new documents can be imported and displayed only when Visioneer PaperPort is launched.

Data transfer on the network is transparent to the user. Data are transferred from the server to the personal computer client using the standard DOS driver I/O to access network disks. Each new document is completely transferred and decompressed before it is displayed on the client personal computer.

Figure 1-2
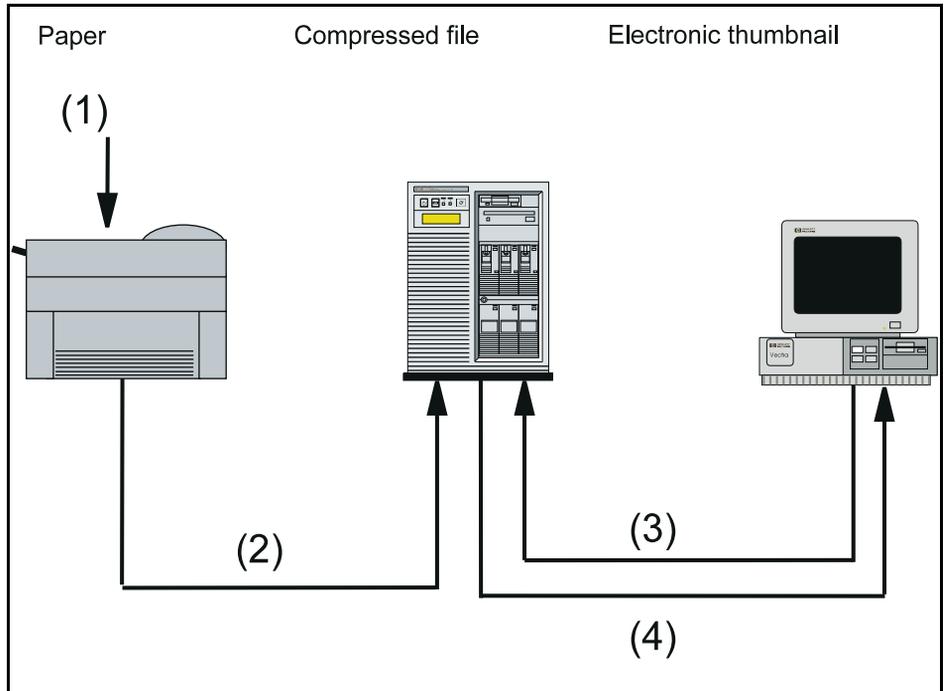
Software Components

The HP ScanJet 4Si has four main software modules (the first three listed are visible to the user):

- **HP ScanJet 4Si Administrative Software**—system administrator software that displays the most important information related to all connected and working network scanners.
- **Visioneer PaperPort 3.0**—the desktop (Windows-executable) program. PAPRPORT.DRV is the virtual device driver.
- **HP ScanJet 4Si Utility**—a Windows program that enables end users to customize their scanning profiles and check the network scanner status.
- **SSNet (DLL)**—a Windows .DLL interface between the user applications (PaperPort desktop and the HP ScanJet 4Si Utility) and the network.

Note

All of these module run in a Windows station, even if they can be installed on a file server. There is no software module to load in the file server (no NetWare Loadable Module or "NLM"). See Chapter 4 for additional information on the scanner and software effects on a network.

Figure 1-3
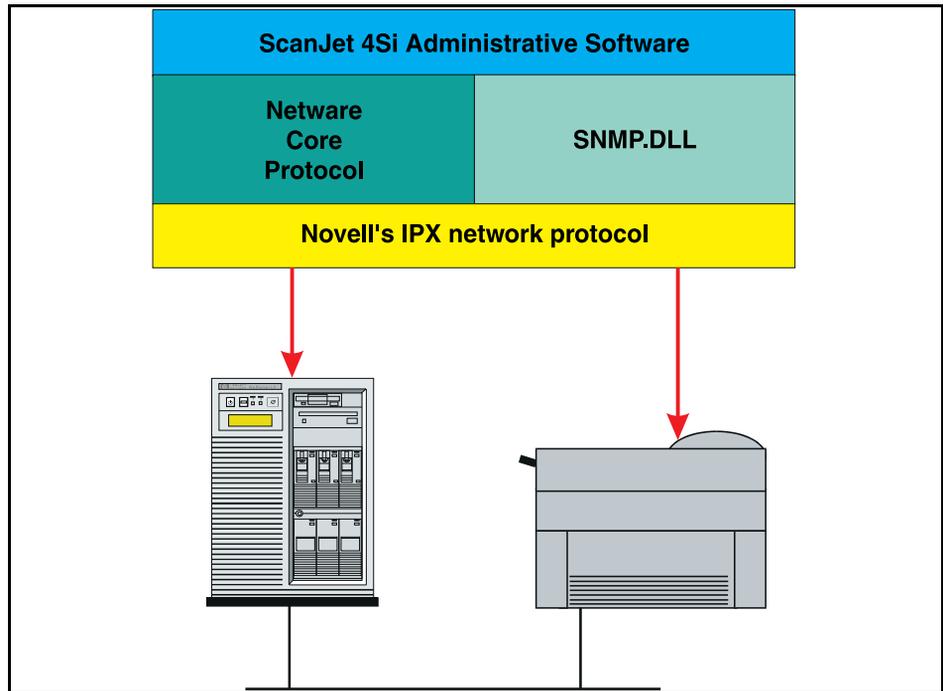
Server/Scanner communication via software.

Network Protocols

The HP ScanJet 4Si Administrative Software communicates with the NetWare **file server** only through the NCP protocol. The software communicates with the **network scanner** only through the SNMP (on IPX) protocol. The following DLLs (Windows Dynamic Link Library files) are provided with the software: SNMP, NWCALLS, and NWIPXSPX.

File System Organization on the File Server

The HP ScanJet 4Si Administrative Software creates its own work directories on VOL 0 (typically called SYS) on the NetWare server. One directory with several subdirectories is created during the software installation, as shown below. The NetWare Supervisor is the owner of this directory. The ScanJet 4Si scanner and its users only have read and find rights on these directories, which is why the administrative software can be used only with Supervisor privileges, if you want to perform any kind of configuration activities.

Figure 1-4

```
SYS:HPSSCAN
                        ── configs.cfg
                        ── hpsusrs.cfg
                        ── HPSSHARE
                        ── HPCLIENT
                        └── USERS
                                   └── TOM
                                              ── custom settings
                                              ── scanned documents
```
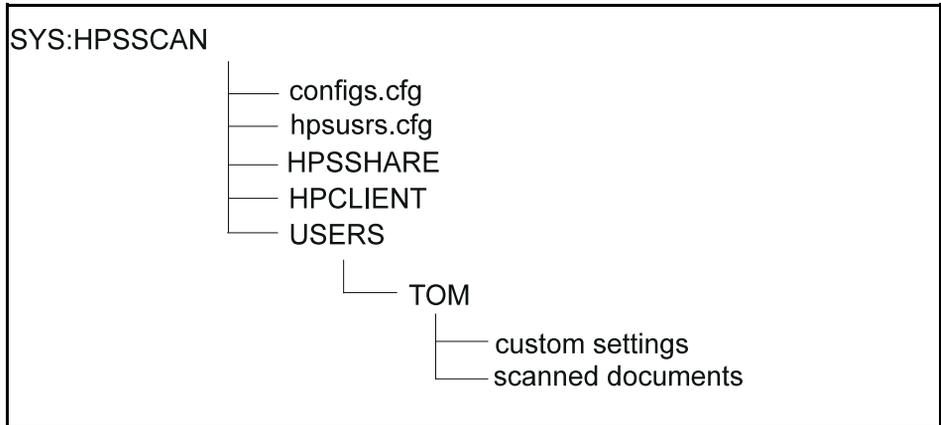
While adding users to the network scanner, the software automatically creates a subdirectory for each user named WORKAREA. The software does not use the group manager concept defined in the NetWare environment. Each user has ownership of his/her workarea; the system administrator and the user have full rights on the user's workarea.

The system administrator and/or the user can create custom (private) settings that are saved in the user's workarea directory. The software stores newly scanned items addressed to a user in his/her work area. To retrieve a scanned item, each user must log in to the file server with his/her user name.

System Requirements

User Systems

- 80386 or above (486 recommended)
- 8.5 megabytes of available disk space for local installation (standalone)
- 0.5 megabytes of available disk space for shared installation (workstation)
- 4 megabytes for swap file
- 4 megabytes of RAM (8 megabytes required to use OCR software included with Visioneer PaperPort)
- Windows 3.1, Windows 3.11, Windows 95, and Windows for Workgroups 3.11
- Novell NetWare version 3.1 or above
- IPX version 3.10 or above
- NetWare shell version 3.26 or above

Network Server

- 7 megabytes of available disk space for installation to allow users to run the user's software from a local directory
- 15.5 megabytes of available disk space for installation to allow users to run the user's software from a shared directory
- Bindery Emulation Mode for NetWare 4.x
- At least one user defined having supervisor equivalency for NetWare 4.x in the Bindery Emulation Context.

Note The network server is used as temporary storage for scanned documents. Overall system performance will benefit from larger available disk space (minimum: 10 megabytes; recommended: 50 megabytes).

Note The HP ScanJet 4Si scanner uses G4 and Packbits compressions to send data over the network, which improves performance and reduces disk usage on the server. When the data arrives at the client work station, it is converted to Visioneer's proprietary compression format (.MAX). For more information on file compression, see Chapter 4, "Effects on Networks."

Supported Environments

The HP ScanJet 4Si behaves on the network as any other client personal computer. The scanner connects to the file server, where it has been configured as any common NetWare client. In the server's Bindery, it appears as a specific-type NetWare object. The HP ScanJet 4Si scanner operates in the following environments:

- **Client Operating Systems**
  - Windows 3.1x (except standard mode)
  - Windows for Workgroups 3.11
  - Windows 95 (see section below)
- **Netware shell version 3.26 or above**
- **Network protocol: Novell IPX version 3.10 or above**
- **Network Operating Systems**
  - Novell NetWare 3.1x
  - Novell NetWare 4.x (Bindery Emulation)
- **Network Topologies**
  - Ethernet 10Mbps
  - Token Ring 4/16Mbps

Windows 95 Support

The HP ScanJet 4Si scanner software is compliant with but not certified for Windows 95. All the software for the HP ScanJet 4Si scanner can run on Windows 95; however, the traffic light feature of the HP ScanJet 4Si utility does not function in Windows 95.

Non-supported Environments

The HP ScanJet 4Si scanner is not supported in the following environments:

- Non-DOS client operating systems (Mac, OS/2, UNIX)
- Windows 3.1x standard mode
- Windows emulations from other operating systems are not certified
- Netware shell and protocols not provided by Novell
- Non ODI IP configurations (IPX.COM, NDIS)
- NetWare/IP
- No other network operating systems (Windows NT server, LAN server, LAN Manager, Banyan Vines, peer-to-peer LANs)
- NetWare for UNIX
- Other cabling systems (100 VG AnyLAN, FDDI)

Ethernet Frame Type or Token Ring Speed must be preset between the system administrator's client PC and the scanner.

Supported Links

PaperPort links allow users to drag & drop a thumbnail onto an icon to launch an application. If the application is already running, PaperPort will start a separate new session of the application.

Some supported links ship with the applications, which means that when you install the application, the link is added in the Desktop Link toolbar. These applications are Caere PageKeeper (version 2.0 and later) and Xerox TextBridge (version 2.8 and later). For a complete list of applications supported by PaperPort links, see "Using the PaperPort Software and Links" in Chapter 3.

How Links Work

At startup, PaperPort launches library files to identify supported applications. These library files (.glk files) are similar to standard .dll files and are located in the PaperPort directory. If a .glk file returns "application found," PaperPort displays the icon for that application.

Each .glk file can support one or more applications and contains all the calls necessary to load and operate the supported link. There are also generic .glk files for FAX or TEXT applications; therefore, various word processing applications can use a common .glk file.

Icons for applications that are not automatically supported by PaperPort can be displayed if they have their own .glk file. These applications can also install the .glk file in their own directory, as long as the proper entry is created in the MAXLIN.INI file under the Windows directory.

For more information on using PaperPort links, see Chapter 3.

2

Installation and Configuration

Your Hewlett-Packard Scanner

This chapter will help you install and configure your scanner and its software. The following sections will help you with the following tasks:

- Unpacking the scanner
- Identifying package contents
- Selecting a suitable location
- Setting up the scanner for operation
- Unlocking the scanner
- Configuring the scanner

Figure 2-1
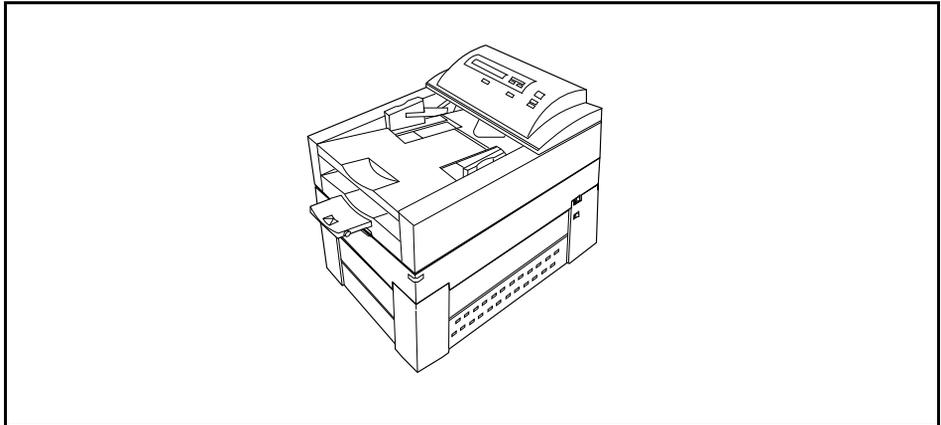
HP ScanJet 4Si Scanner

Location Requirements

Figure 2-2

5.91inches/150mm

4.72inches/120mm

2.28inches/58mm

4.06inches/103mm

16.14inches/410mm

11.30inches/287mm

3.94inches/100mm

1.73inches/44mm   16.14inches/410mm

11.30inches/287mm

Top View   **Side View**
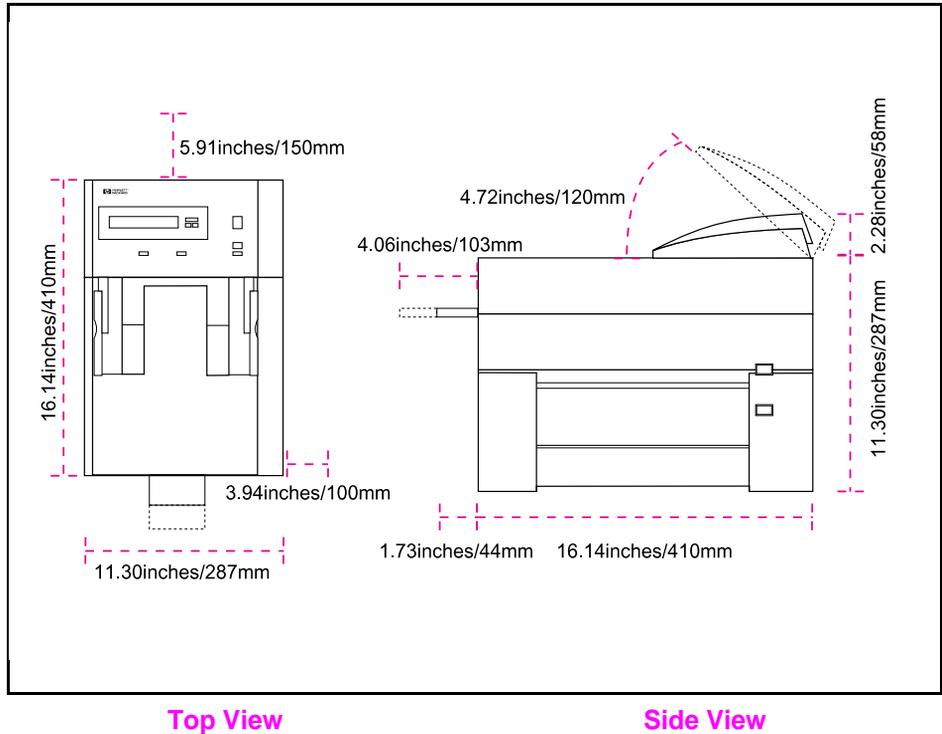
Location requirements:

- Space allowance around scanner as shown

- Room temperature: 10 to 32.5 C/ 50 to 90.5 F

- Relative humidity: 20% to 80%

- Stable environment with no abrupt temperature or humidity changes

- A sturdy, level surface for placement.

- No exposure to chemicals or direct sunlight

- A well-ventilated room

- Location free of constant vibrations

Caution   Relock the scanner whenever you move it to prevent damage. See Step 3 in this chapter for instructions.

2 **Installation and Configuration**

Step 1. Unpack the Scanner
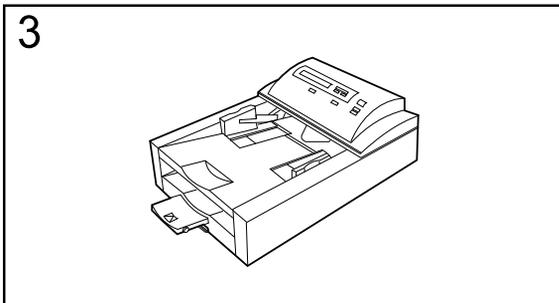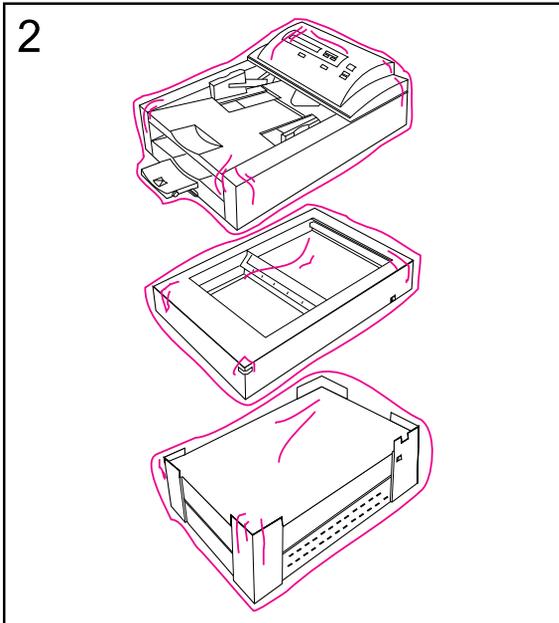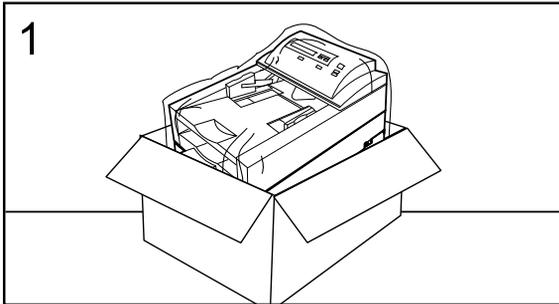
Remove the Internal Packaging

1 Carefully unpack the scanner from its box.
2 Remove plastic shipping bags.
3 Remove packaging tape from the automatic document feeder.

Check the package contents against the illustrations on the following page and identify the various scanner parts.

Note

Save your box and packaging materials in case you need to move or ship the scanner later.

Check the Package Contents

Figure 2-3

2 Installation and Configuration
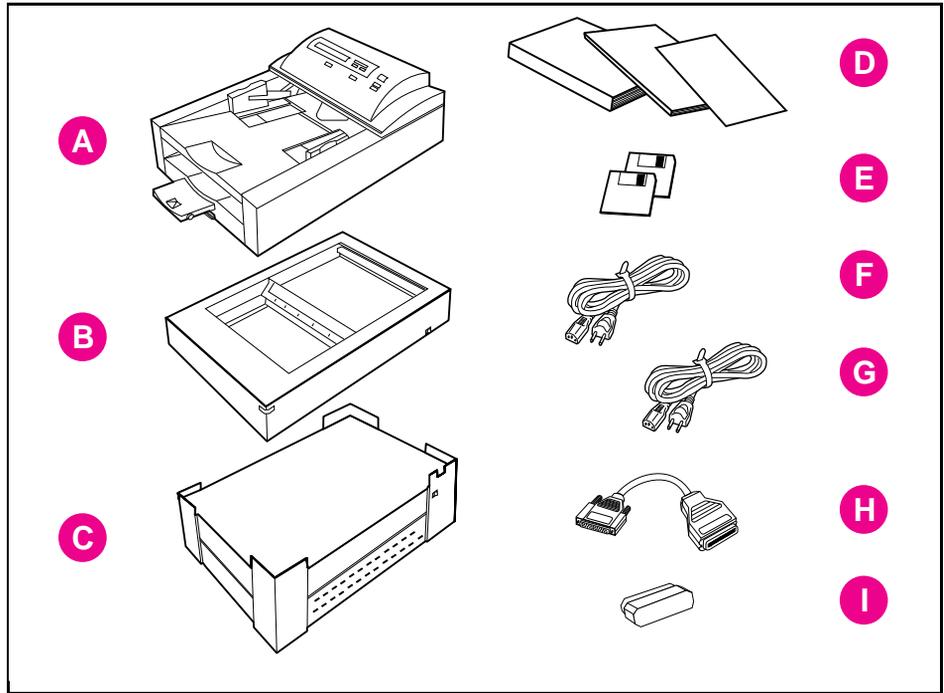
Locate each item listed below:

A	Automatic Document Feeder	F	Scanner Power Cord
B	Scanner	G	Network Box Power Cord
C	Network Box	H	SCSI Interface Cable
D	Documentation	I	SCSI Terminator
E	Software Disks		

Identifying the Scanner Parts

The following illustrations give the location and names of key scanner parts.

Figure 2-4
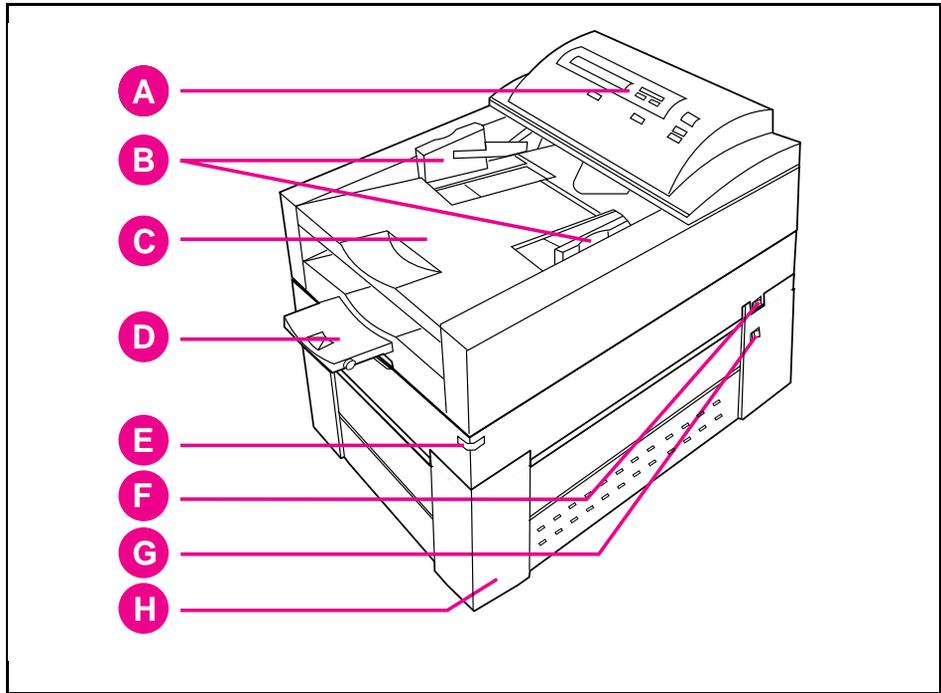
HP ScanJet 4Si scanner, Front View

A	Control Panel	E	Scanner Base Power Indicator
B	Input Paper guides	F	Scanner Base Power Switch
C	Automatic Document Feeder	G	Network Box Power Switch
D	Output Paper Stop and Handle	H	Network Box

Figure 2-5
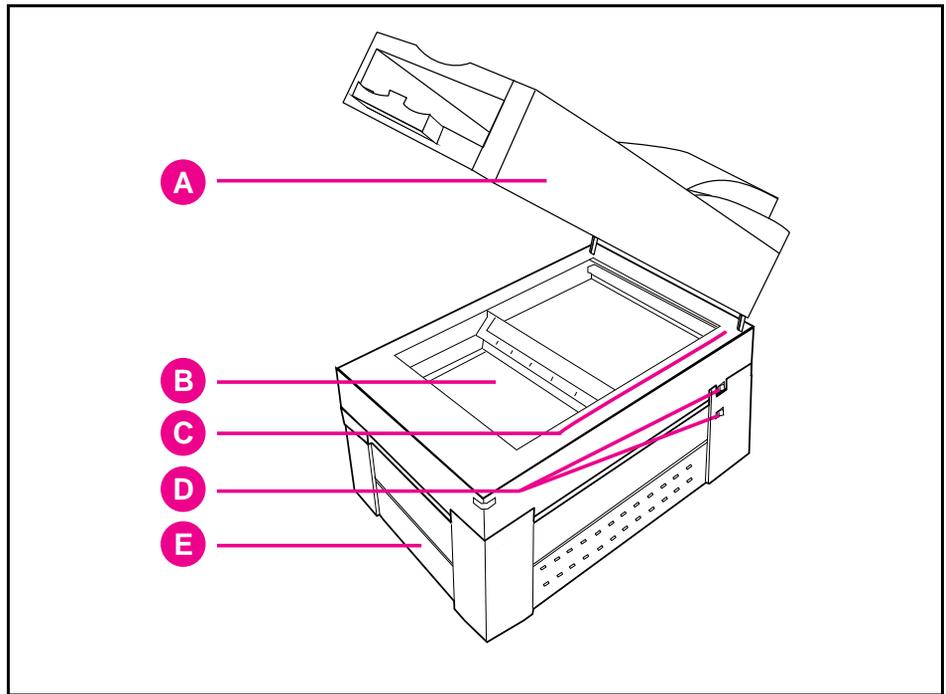
HP ScanJet 4Si scanner, Front View with Cover Lifted

A	Automatic Document Feeder	D	Power switches
B	Scanner glass	E	Network box
C	Paper alignment arrow		

Figure 2-6
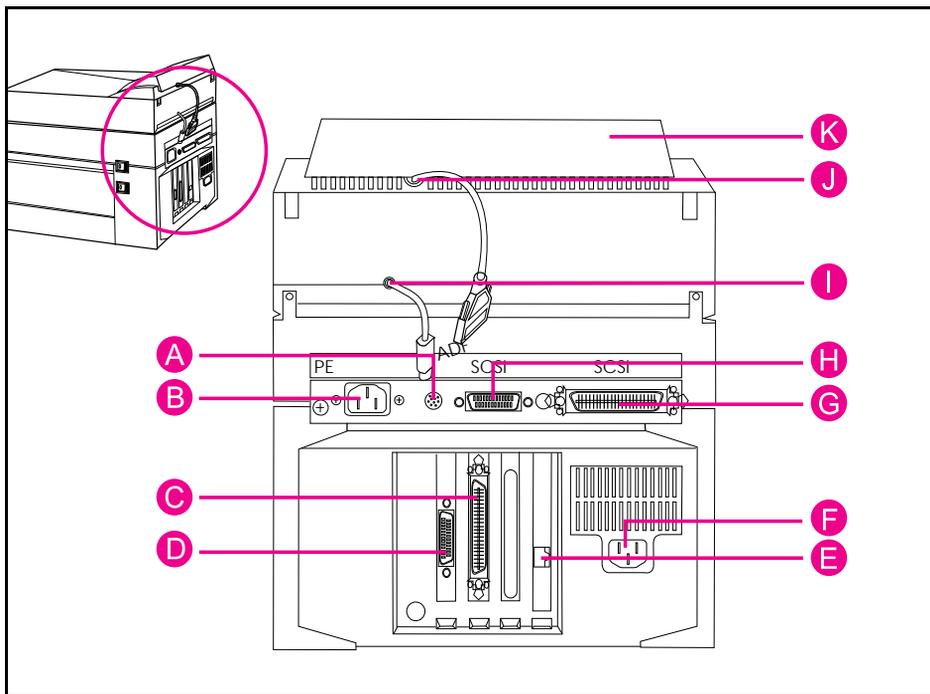
HP ScanJet 4Si scanner, Rear View

A	ADF Connector Socket	G	SCSI Terminator Socket
B	Scanner Power Connector Socket	H	Scanner SCSI Connector
C	Network Box SCSI Connector	I	ADF Connector Cable
D	Control Panel Connector Socket	J	Control Panel Connector Cable
E	LAN Connector (10BASE-T or Token Ring)	K	Control Panel
F	Network Box Power Connector Socket		

Step 2. Assemble the Scanner and Network Box
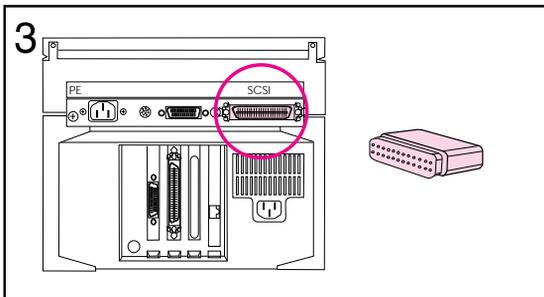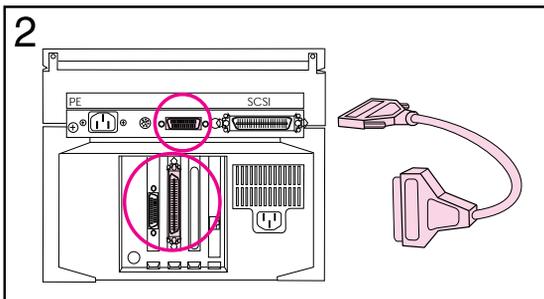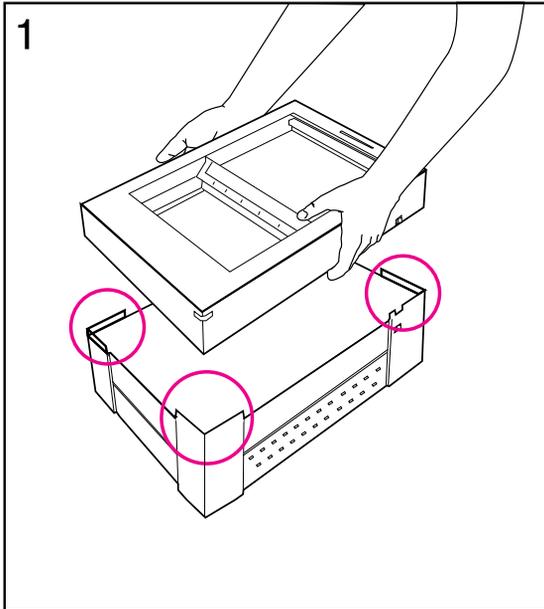
1 Assemble the scanner and network box by aligning the scanner with the mounting pins on the network box. (Verify that the scanner is aligned on all corners.)

2 Connect the SCSI interface cable to the scanner and network box.

3 Connect the SCSI terminator to the scanner.

Step 3. Unlock the Scanner
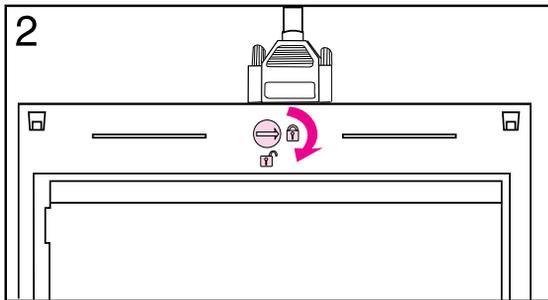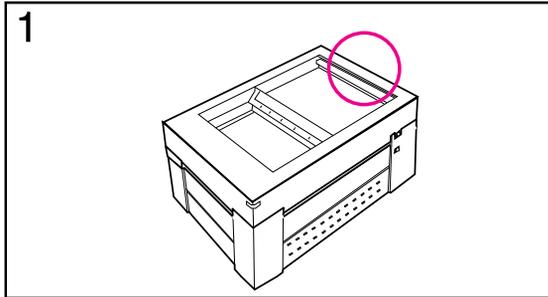
A locking mechanism secures and protects the internal mirror assembly during shipment. It must be unlocked before you can use the scanner.

1 Locate the locking screw near the back of the scanner.

2 Using a coin, turn the locking screw 90 degrees clockwise.

Relocking the Scanner

Caution
Relock the scanner whenever you move it to prevent damage.

1 Remove the automatic document feeder.

2 Return the light bar to the home position:

- Turn the scanner on.
- Wait until the lamp in the light bar is off.
- Turn the scanner off.

3 Locate the locking screw.

4 Using a coin, turn the locking screw 90 degrees counter-clockwise.

Step 4. Install the Automatic Document Feeder
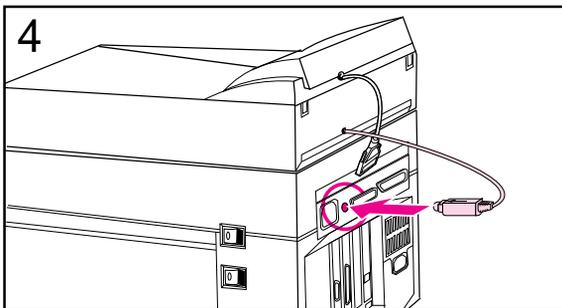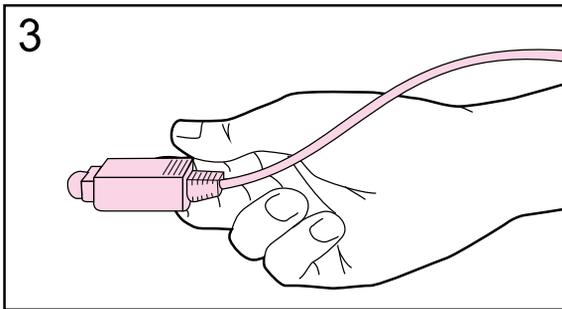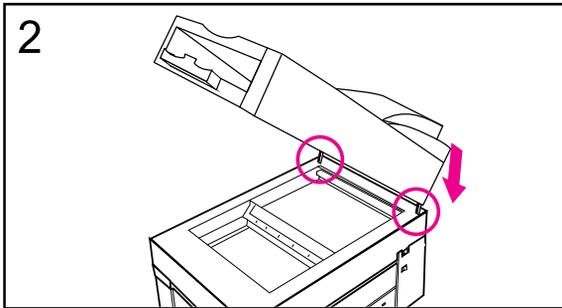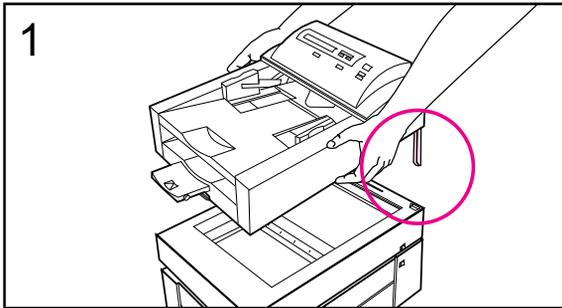
1 Hold the automatic document feeder (ADF) with the mounting posts above the corresponding holes on the back end of the scanner.

2 Lower the ADF until the mounting posts are inserted all the way into the holes and the ADF is in contact with the scanner.

Note

Ensure that all cables are out of the way for proper installation.

3 Hold the ADF connector cable so that the flat side is on top to align the plug with the scanner socket.

4 Plug the ADF cable into the scanner socket.
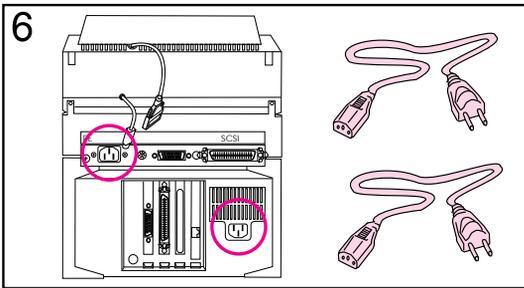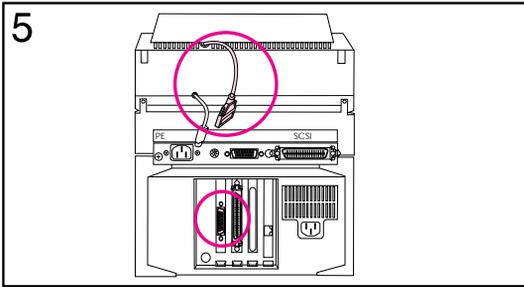
5 Plug the control panel cable into the network box.

6 Attach the power cords to the scanner and network boxes and plug the other ends into an electrical outlet.

Note

Attach your network interface cable into the network box:
A) 10Base-T jack (RJ-45) or
B) Token Ring (DB-9 or RJ-45)
This cable is not shipped with the scanner.

Step 5. Configure the Scanner

The HP ScanJet 4Si scanner can be configured to display another language, change the default paper size for the Automatic Document Feeder, Token Ring speed, or frame type. The configuration menus are displayed in the following sequence:

1. Languages
2. Default Paper Size
3. Token Ring Speed (for Token Ring networks only)
4. Network Frame Type

Figure 2-7 shows the control panel keys: A) Menu, B) Scroll back C) Scroll forward, D) Start key, E) Stop, and F) Abort. The following table explains how the control panel keys work within the configuration menu.

Figure 2-7
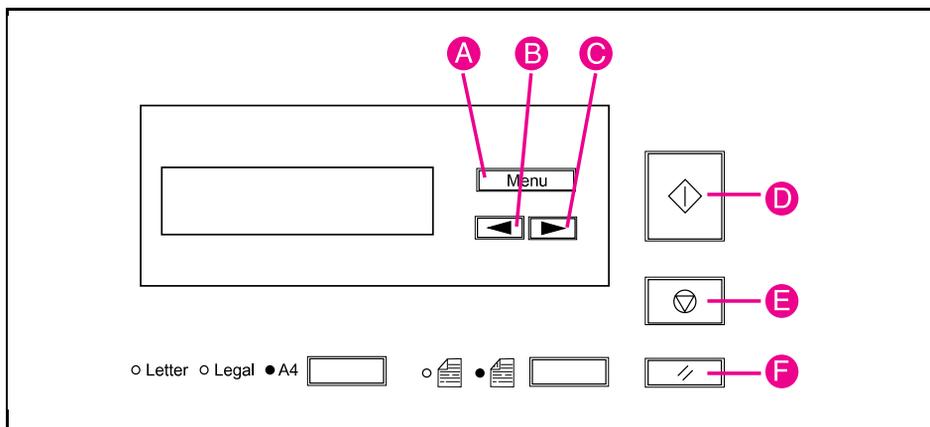
	Key	Action
A	Menu Key	Enters the top level menu so you may select a parameter value
B/C	Scroll Keys	Moves through the list of menus and parameter values
D	Start Key	Saves changes and exits to normal use (from the top level menu)
E	Stop Key	Ignores changes and moves to the top level menu
F	Abort Key	Ignores changes and returns scanner to normal use (from the top level menu)

To Enter the Configuration Menus

Before you can configure the scanner on the server, use the following steps to configure the control panel. The configuration menus allow you to configure the control panel language, network frame type, token ring speed (token ring networks only) and paper size. The first value shown in each configuration menu is the currently selected value.

Use the following **power-up sequence** to enter the configuration menus.

1 Turn off the network box.

2 Press and hold the stop and abort keys. (Refer to Figure 2-7 for key positions.)

3 Turn on the network box.

4 After a few seconds, release the keys.

5 The scanner control panel displays `Self Test Initializing...Wait.`

6 When it is ready for you to enter the configuration menus, the display will read `Press Menu to Select Languages.`

Note   If you do not select the Frame Type correctly, the HP Administrative Software will not recognize the scanner.

To Select the Display Language

The control panel is capable of displaying in one of six languages: English, French, German, Italian, Portuguese, or Spanish. Skip this section if you want the scanner to display English, which is the factory default.

1 Press **MENU** to enter the Languages menu. `Current Language: English` appears on the control panel.

2 Press a scroll key repeatedly until the desired language appears.

3 Press **MENU** to select the language and return to the top level menu.

4 Press a scroll key to move to the Default Paper Size menu; press the start key to save changes and return to normal use, or press the stop key to ignore changes and move to the next menu.

Note   The control panel displays its messages in the language you have selected.

To Select the Default Paper Size

The scanner is capable of setting Letter, A4, or Legal paper sizes as the default paper size on the control panel. Skip this section if you want the scanner to boot with Letter size paper selected, which is the factory default.

1 Press a scroll key until `Press menu to select Default paper sizes.` appears.

2 Press **MENU** to enter the Default Paper Size menu. `Current Paper Default: Letter` appears on the control panel.

3 Press the scroll forward key repeatedly until the desired paper size appears.

4 Press **MENU** to select the paper size displayed and return to the top level menu.

5 Press a scroll to move to the Token Ring Speed menu (if you have a Token Ring network) or Network Frame Type menu (if you have a Ethernet network); press the start key to save changes and return to normal use, or press the abort key to ignore changes return to normal use.

To Select the Token Ring Speed (Token Ring Networks Only)

If you have a token ring network, you can select the token ring speed. Skip this section if you do not have a token ring network, or if you want the scanner to use token ring speed 16, which is the factory default.

1 `Press menu to select Token Ring speeds` appears on the display.

2 Press **MENU** to enter the Token Ring Speed menu. `Token Ring Speed: 16` will be displayed on the control panel.

3 Press a scroll key repeatedly until the desired token ring speed appears.

4 Press **MENU** to select the token ring speed displayed and return to the top level menu.

5 Press scroll forward to move to the Network Frame Type menu; press the start key to save changes and return to normal use, or press the abort key to ignore changes and return to normal use.

Note   If token ring speed has been changed, the scanner will automatically reboot after exiting the Configuration Menu.

To Select the Network Frame Type

The scanner is capable of operating with the following network frame types: Ethernet 802.2, Ethernet 802.3, Ethernet SNAP, Ethernet II, Token Ring, or Token Ring SNMP. Skip this section if you want the scanner to use the Ethernet 802.3 frame type for Ethernet networks or Token Ring for Token Ring networks, which are the factory defaults for each network.

1 `Press Menu to selet Frame types` appears on the display.

2 Press **MENU** to enter the Network Frame Type menu. `Current Frame Type: Ethernet 802.3` appears on the control panel.

3 Press the scroll forward key repeatedly until the desired frame type appears.

4 Press **MENU** to select the frame type displayed and return to the top level menu.

5 If you have completed your configuration, press the start key to return to normal use. Otherwise, press scroll forward to return to the Languages menu, or press the stop key to ignore changes and return to normal use.

Note   If the network frame type has been changed during configuration, the scanner will automatically reboot after exiting the Configuration Menu.

Hardware Installation Complete

The scanner displays the message `ScanJet 4Si unconfigured` with the scanner's node address on the control panel display. You will need this address when you configure the scanner on the server (see the following section). If this message is not displayed, refer to Chapter 5, "Problem Solving," for more information.

Your Scanner Software and Network Connection

This section will help you with the following tasks:

- Installing scanner software
- Configuring the scanner on the network
- Adding end users to the scanner
- Installing the end user software
- Selecting configuration options, including enabling copying from the scanner to a network printer

Step 1. Install the Scanner Software on the File Server

The HP ScanJet 4Si setup program will copy the HP ScanJet 4Si Administrative Software to the directory you designate, and will make the user's software available for users to install by copying it to the network directory you designate.

The administrators' software consists of the following:

- **HP ScanJet 4Si Administrative Software** - allows administrators to quickly configure Network scanners, and their associated user pools and print queues. It also allows administrators to manage the configured network scanners.

  The users' software consists of the following:

- **Visioneer PaperPort program** - allows users to receive, view, and manipulate documents scanned with the HP ScanJet 4Si scanner.
- **HP ScanJet 4Si Utility** - lets end users determine and adjust user settings, and remotely monitor the network scanner's status.

To install the software

1 Turn on your computer.
2 Log on to the network with supervisor privileges.
3 Start Microsoft Windows.
4 Insert Disk 1 into the floppy drive (usually A: or B:).
5 Select the *File* menu from the *Program Manager* window.
6 Choose *Run*.
7 Type A:\INSTALL (or B:\INSTALL) in the Command Line box.
8 Press Enter .
9 Follow the instructions on the screen.

Installing the Administrator's Software

The HP ScanJet 4Si Administrative Sofware can be installed on any directory on your system. You may install it in a shared directory so that network administrators will be able to run it from any client computer on the network.

Installing Users' Software

You will need to designate how the users' software will be run by end users. You may allow them to run it from:

- Local directory only (Standalone)
- Shared directory only (Workstation)
- Local or Shared (users choose between the items above).

Allowing users to run the users' software from a shared directory saves client disk space resources and allows easier updates of software upgrades; however, the software will run slower using this kind of installation.

Allowing users to run the users' software from a local diretory means the software to may run quicker; however, it uses more client disk space resources.

If you choose one of the last two options, the setup program will create a directory to contain the shared programs (under the install directory you specified).

In all cases, the setup program asks you whether it should assign R (read) and F (file scan) trustees to the EVERYONE group for you. If you answer NO, then you will have to do this by hand in order for users to be able to run the users' software install program and the users' software from the shared network directory. In this way you may grant stringent trustees as you think appropriate.

Step 2. Configuring the Scanner to the Network

Now that you have installed the scanner software, you will need to use HP ScanJet 4Si Administrative Software to connect the scanner to the network.

Run HP ScanJet 4Si Administrative Software

Turn on scanner and network box. Take note of the address displayed on the Control Panel. Double-click on the icon for the HP ScanJet 4Si Administrative Software, or:

1 Within Windows, select the *File* menu from *Program Manager*.
2 Choose *Run*.
3 Type the path where the software is installed followed by SCANADM. For example, X:\HPSSCAN\ADMIN4SI\SCANADM.EXE.
4 Press **Enter**.

Connect to a file server

Connect to the file server where you want to configure the scanner (if you are not already connected), following the instructions below.

Note   If you are logged in with Supervisor privileges, you can use the File Server Connection window to see the Connected Servers list.

1 Select the *Server* menu.
2 Choose *Connect*.
3 Highlight the server you desire in the Available File Servers list.
4 Click *<<Attach*.
5 Choose a user with Supervisor rights.
6 Enter the password.
7 Click *Close*.

Note   You can use the *<<Attach* button to change your login account on a server already listed in the connected servers list (if, for example, you were logged in without supervisor equivalency).

Configure the scanner

Choose the scanner you want to configure by highlighting its row on screen. If you do not see your new scanner, make sure you have set the frame type correctly (See Configure the Scanner on page 2-13). The unconfigured scanner can be identified by the node address that is the same displayed on its control panel.

1 Select the *Scanner* menu.
2 Choose *Configure*.
3 Enter a name for the scanner in the Scanner Name field.

Note   The scanner name may be up to 29 characters in length. It cannot contain spaces, slashes (/), backslashes (\), colons (:), semicolons (;), question marks (?), asterisks (*), or commas (,).

4 Type a description of the scanner (up to 128 characters) in the Description field (optional).
5 Select the server name from the Server list.
6 Choose whether to display the user's NetWare full names or NetWare login names on the scanner's control panel.

Note   User names are displayed up to 20 characters, the maximum control panel width. For NetWare 4.0x users, the option is not enabled and you must choose login names. For NetWare 4.1x, the user's surname is used instead of the full name.

7 Click *OK*.

Note   If a message appears warning you that a scanner entry with that name is already stored on the server, abort the operation and change the name assigned to the scanner, unless you are restoring a damaged unit or replacing it with a new one. If you are restoring or replacing a unit, you will not need to reassign the users to the scanner.

Step 3. Add End Users to the Scanner

With the software installed and scanner configured for your network, you can now add end users. **At least one end user is needed for the scanner to work.**

1 Within HP ScanJet 4Si Administrative Software, select the scanner where you want to add users.

2 Select the *Scanner* menu.

3 Choose *Add Users*.

4 Highlight a user(s) in the *Available Users* list, which comes from the NetWare users list.

5 Click *<<Add* to move the selected user(s) to the *Available Users* list.

Note   If you have NetWare 3.x and you choose to display full names on the scanner's control panel, HP ScanJet 4Si Administrative Software will prompt you to input a full name for any selected user who does not already have one.

6 Repeat steps 4 and 5 until all needed users have been added to the *Available Users* list.

Note   For options when adding end users and setting default properties, see the Configurations Options section in this chapter.

Step 4. Install the End User Software

End users will perform the following procedure from their systems to enable them to use the scanner. This procedure will install the Visioneer PaperPort Software and the HP ScanJet 4Si Utility.

The directory that the user specifies in Step 3 must be defined by the network administrator. The network administrator will also define if the installation will allow users to run program from a local directory (Standalone) or from a shared directory (Workstation).

1 Within Windows, select the *File* menu from *Program Manager*.
2 Choose *Run*.
3 Type the path where the software is installed followed by SETUP.EXE. For example, X:\HPSSCAN\CLIENTSW\SETUP4SI\DISK1\SETUP.EXE.
4 Press **Enter**.
5 Follow the instructions on the screen.

This procedure must be repeated for each end user client.

Note
Users must have a drive mapped onto the network server's volume where the end users' software install program has been placed. (Refer to Step 1. Install the Scanner Software.)

If trustees have not been granted to users in the installation procedure (refer to Step 1, "Install the Scanner Software"), the users will not be able to find and run the users' software setup program.

Figure 2-8
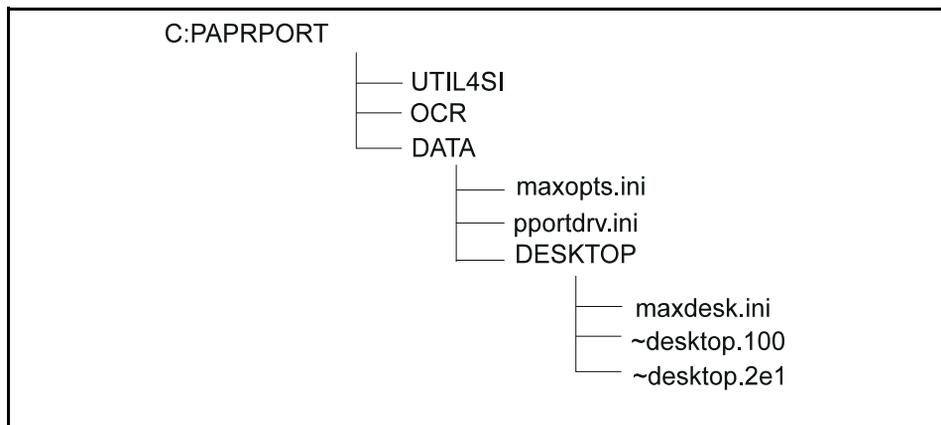
Directory structure for client PCs.

How the software changes configuration files

Installing the scanner software causes the following changes to the user's configuration files. Information in italics is for the shared installation.

WIN.INI:
run=c:\paprport\runppdrv.exe
run = x:\hpsscan\clientsw\share4si\runppdrv.exe

<table>
<tr><td>

Note

</td><td>

This sets up a driver. The driver tries to load ssnet.dll, which, in turn, polls the file server for a network scanner. If it doesn't find the scanner, it doesn't report anything.

</td></tr>
</table>

SYSTEM.INI
[driver]
paprport= c:\paprport\pportdrv.drv
paprport= x:\hpsscan\clientsw\share4si\pportdrv.drv

[ssnet]
ssnetapi_path = c:\paprport\util4si\ssnetapi.dll
nsu - executable_path= c:\paprport\util4si\nsuapp.exe
ssnetapi_path =
x:\hpsscan\clientsw\share4si\util4si\ssnetapi.dll
nsu - executable_path=
x:\hpsscan\clientsw\share4si\util4si\nsuapp.exe

The PPORTDRV.INI file is documented in the README.TXT file.

Step 5: Selecting Configuration Options

In addition to the previous installation steps, the HP ScanJet 4Si scanner has several configuration options. Review the following options to decide if you want to use them or if scanner's default settings are appropriate for your network and end users.

Scan to Print (Enable Copying Functionality)

The HP ScanJet 4Si scanner can be configured so that documents are copied from the scanner on a PCL5-compatible (or above) network printer. The print queue names associated to the network printer will appear on the control panel as the documents are scanned.

To enable copying for scan to print

1 Within HP ScanJet 4Si Administrative Software, highlight the desired scanner.

2 Select the *Scanner* menu.

3 Choose *Add Printers*.

Note   If both the lists are empty, no print queues have been defined on the server.

4 Highlight the print queue(s) you want to use in the Available Queues list.

5 Click *<<Add*.

6 Click *OK*.

Note   You can set printer parameters by clicking *Setup* when you have a print queue highlighted. This action will allow you to select the type of printer that is associated with the print queue and set print parameters that will increase the copy quality. See Chapter 4, "Effects on Networks" for more information on copying functionality (scan to print).

Change End User Default Properties

You can redefine or override the default properties for the users on a server.

This set of properties (related to work area and custom settings) will be assigned to all new users added to a scanner on the selected server.

You can override default properties for an individual end user by highlighting the user name and clicking *Properties* on the Users Setup window.

1 Within HP ScanJet 4Si Administrative Software select the *Server* menu.
2 Choose *Default User Properties*.
3 Select a work area volume name. This setting allows you to designate where the scanned files will reside on the current file server for all new end users (default is the volume 0).
4 Enter a number up to 16 in the Maximum Number of Custom Settings box. This setting allows each user to define up to 16 configurations of scanner settings (default is 5).
5 Select the default preferred scanner setting. The software uses each grouped setting of scanner parameters to obtain the best results for a given type of scanning.
6 Click *OK*.

Override End User Default Properties

The Properties window allows you to override the default properties for a selected user.

1 Within HP ScanJet 4Si Administrative Software select the *Scanner* menu.
2 Choose *Add Users*.
3 Highlight the desired user name in the Current Users List.
4 Click *Properties*.
5 Select a work area volume name. This setting allows you to designate where the scanned files will reside on the current file server.
6 Select a preferred scanner setting from the preferred setting box. The settings listed will be the system settings available on the current server. Custom settings can be used only by the HP ScanJet 4Si Utility.
7 Enter a number up to 16 in the Maximum Number of Custom Settings box. This setting allows the user to define up to 16 configurations of scanner settings.
8 Checking the Work Area Locked box will prevent any documents that are scanned on the designated scanner to be sent to this specified user. The default is unlocked.

Create Common Scanner Settings

You can create a system set of scanner settings to optimize the kinds of jobs that users will be doing. These settings will be the default used for all new scanner users on the selected server. The HP ScanJet 4Si Administrative Software program has three predetermined settings:

- Best Text
- Best Text & Photo
- Best Photo

To add new scanner settings

1 Within HP ScanJet 4Si Administrative Software, choose *Settings* from the Server menu.

2 Select the file server from the Server Selection list. By clicking *Connect* you can add or remove servers from the Server Selection list

3 When you have selected the server(s) desired, click *Add*.

4 Click *OK*.

5 Enter the name for the configuration in the Setting Name field.

6 Select settings for the following fields: resolution, scaling, intensity, contrast, output data type, dither pattern, and background (optional). See the *User's Guide* for definitions of each field.

7 Select the paper size setting. You may select Control Panel Select or Custom from the control panel. If you select Custom you must enter its height and width.

8 Click *OK*.

Note   In the future you can copy any newly distributed configuration setting by clicking *Copy* and entering a path and filename that contains the configuration settings.

3

Operation and Use

Introduction

This chapter explains how users operate and interact with the HP ScanJet 4Si scanner. The following topics are discussed:

- Scanner usage model
- Using the scanner control panel
- Using the HP ScanJet 4Si Utility
- Using the HP ScanJet Administrative Software
- Using the PaperPort software and its links

Scanner Usage Model

How a user operates and interacts with the HP ScanJet 4Si scanner is considerably different than traditional scanners. The following steps describe the general process from start to finish. The user:

1 Checks the HP ScanJet 4Si Utility traffic light to see if the scanner is available.
2 Goes to the scanner and loads document in the ADF.
3 Selects his/her user name from the control panel.
4 Presses the Start button. The document is scanned through the ADF to the Paper Output Slot. The user collects the originals. The scanned information is sent to the selected user's desktop.
5 Returns to computer, where the scanned information will appear as an untitled thumbnail on the PaperPort desktop.
6 Uses Drag & Drop via PaperPort links to move the scanned information to the desired application.

Note the features described in this process that are different from traditional scanners:

- **Traffic Light**—This convenient feature of the HP ScanJet 4Si Utility allows users to see if the scanner is available *before* they leave their desks to scan their documents.
- **Scanning Process**—The user begins scanning the document at the scanner rather than computer software. The interaction with the scanner itself is as simple as selecting the recipient, pressing the Start button, and collecting the originals. The scanned items are sent to the user's computer over the network.
- **Simple Document Manipulation**—Scanned items can be manipulated easily and quickly using the PaperPort software and, using Drag & Drop, can be sent to other applications, such as word processing, fax, and e-mail applications.

Convenience Copy Usage Model

The following steps describe the general convenience copy process from start to finish. The user:

1 Checks the HP ScanJet 4Si Utility traffic light to see if the scanner is available.
2 Goes to the scanner and loads document in the ADF.
3 Presses Menu to selects the print queue from the control panel.
4 Presses Menu again to select the number of copies by using the scroll keys (< or >).
5 Presses the Start button. The document is scanned through the ADF to the Paper Output Slot. The user collects the originals. The scanned information is sent to the selected printer.
6 Goes to printer to retrieve the copies.

Note   Print queues are added at the end of the list of users—use the scroll back (<) key for fast access to selecting the print queues (Step 3 above). You cannot copy a document in duplex mode.

3 Operation and Use

Using the Control Panel

To scan a document into PaperPort's desktop, you need to tell the scanner through its control panel where you want your document to be sent:

1 With the control panel display reading `Ready: Press Menu to select destination`, press the Menu key. The first destination (users or printers) on the alphabetical list will appear.

```
Ready: Press Menu          Menu
to select destination      ◄  ►
```

2 Scroll through the destination list by pressing the < or > key until the desired destination is displayed. The message `CURRENT USER:` or `CURRENT PRINTER:` followed by the selected destination will appear.

```
CURRENT USER:              Menu
JANE DOE                   ◄  ►
```
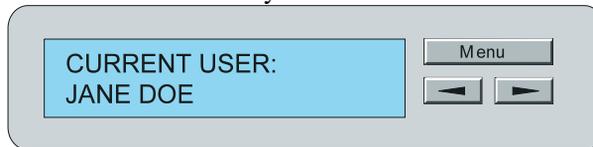
3 Press the Start button to begin scanning.

Control Panel Tips

- Hold down the < or > key to move through the destination list rapidly.
- The preferred scanner setting at the destination selected will be used automatically. To use a different scanner setting, press the Menu key. The first setting (or preferred setting, if defined) will appear. Scroll through the list of available settings using the < or > key. The new setting will appear on the control panel display.
- To stop scanning and save all of your data, press the Stop key.
- To stop scanning without saving your data, press the Abort key.

Using the HP ScanJet 4Si Utility

The HP ScanJet 4Si Utility is a tool you can use to monitor your networked scanner and customize your settings based on the items you scan most frequently. Using this utility, you can create your own custom settings by selecting resolution, scaling, contrast, and other variables to get the best quality product from whatever you're scanning.

- Monitor your networked scanner's status
- Lock or unlock your workarea
- Change your scanning preferences

HP has provided standard system settings already configured to scan photos, text, or text with photos. In addition to these, your system administrator may have created other system settings that are available for all HP ScanJet 4Si workgroup users.

You can start the HP ScanJet 4Si utility in several ways:

- Start PaperPort, and the utility starts automatically.
- Click the HP ScanJet 4Si Utility button on the PaperPort Command Bar.
- Double-click on the icon for the HP ScanJet 4Si Utility.
- Select the *Run* command from the File menu in Program Manager.

3 Operation and Use

Using the Tool Bar

With the Tool Bar, you can select the following commands:

Scanner Status Use this button to check the status of the current network scanner you are monitoring or to select a different scanner to monitor.	**Workarea Lock** Use this button to lock or unlock your workarea. This prevents others from sending or saving data to your workarea. You can also clear the data in your workarea using this button.	Scanner Settings Use this button to select system settings, modify existing custom settings, and create custom settings.	**Help** Use this button to start the help program.	Exit Use this button to exit HP ScanJet 4Si Utility.

To monitor scanner status:

1 Click the Scanner Status button on the Menu bar or select *Scanner Monitor* from the View menu.   The Scanner Status Dialog box will appear.

Scanner Status
Preferred Scanner :
HP_SCANJET_4SI
Scanner Status :
Ready
Available scanners :
HP_SCANJET_4SI
[**Close**] [Set Preferred] [**Help**]
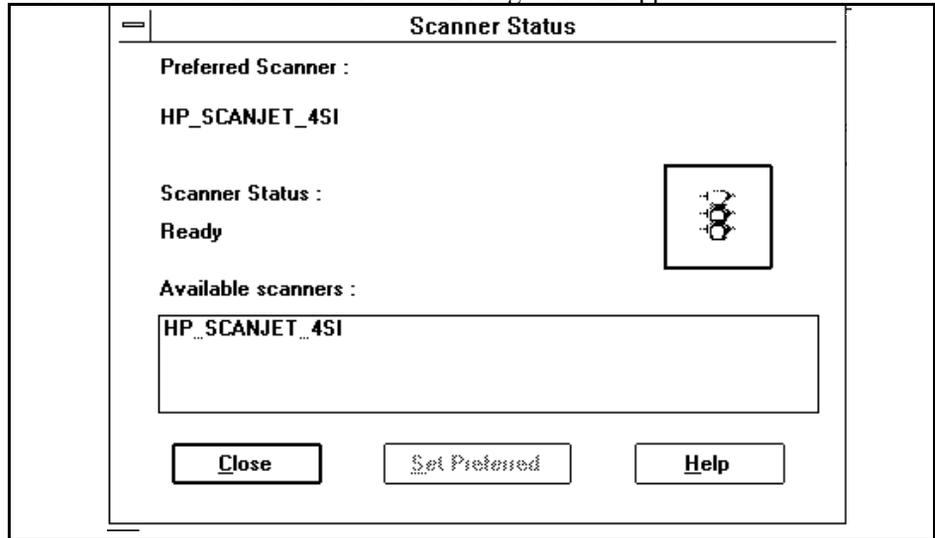
2 Select the scanner you wish to monitor.

3 Click Save or double-click the scanner name.

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Note   When you return to the main window, the Status Bar will display the name of the scanner you've just selected and its status.

To lock or unlock your workarea:

Locking your workarea prevents anyone, including you, from scanning and saving documents to your workstation. The dialog box has two buttons to "toggle" your workarea status between locked and unlocked. Choose once to select; choose again to de-select.

1 Click on the Scanner Status button on the Tool Bar or select *WorkArea Lock* from the View menu. The WorkArea Lock dialog box will appear.

2 Click the button next to WorkArea Lock/Unlock to select whether you want to lock or unlock your workarea.

3 Click *OK* to exit the dialog box.

Note   Use the Clear Workarea feature when your workarea is locked, but documents have been scanned to your workarea. This feature will remove all of the documents that are currently in your workarea so that they will never be loaded into the HP ScanJet 4Si desktop. If you select *Clear Workarea*, any items scanned to your workarea will be deleted; you will not be able to recover the scanned items.

3 Operation and Use

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Changing Scanning Preferences:

HP ScanJet 4Si Utility allows you to change your scanning preferences by selecting a system setting, creating a custom setting, or modifying a custom setting. The scanner comes with three preset settings:

- Best Text
- Best Photo
- Best Text & Photo

When you choose to create a custom setting, you can specify resolution, scaling, and other options. You can set a preferred setting, and that setting will automatically be used when you begin scanning.

```
┌─────────────────────────────────────────────────────────────┐
│ ─ │              Scanner Settings                            │
├─────────────────────────────────────────────────────────────┤
│                                                              │
│   Total custom settings:          5                          │
│                                                              │
│   Available custom settings:      4                          │
│                                                              │
│   Preferred setting:       (SYSTEM)    TEXT                  │
│                                                              │
│  ┌──────────────────────────────────────┐                   │
│  │ (CUSTOM)    UNTITLED                  │                   │
│  │ (SYSTEM)    TEXT                      │                   │
│  │ (SYSTEM)    PHOTO                     │    ┌──────────┐   │
│  │ (SYSTEM)    PHOTO AND TEXT            │    │  Help    │   │
│  │                                      │    └──────────┘   │
│  │                                      │                   │
│  │                                      │    ┌──────────┐   │
│  │                                      │    │  Close   │   │
│  │                                      │    └──────────┘   │
│  └──────────────────────────────────────┘                   │
│                                                              │
│  ┌─────────┐  ┌─────────┐  ┌──────────┐  ┌──────────────┐   │
│  │  New... │  │  Edit...│  │ Remove...│  │ Set Preferred│   │
│  └─────────┘  └─────────┘  └──────────┘  └──────────────┘   │
└─────────────────────────────────────────────────────────────┘
```
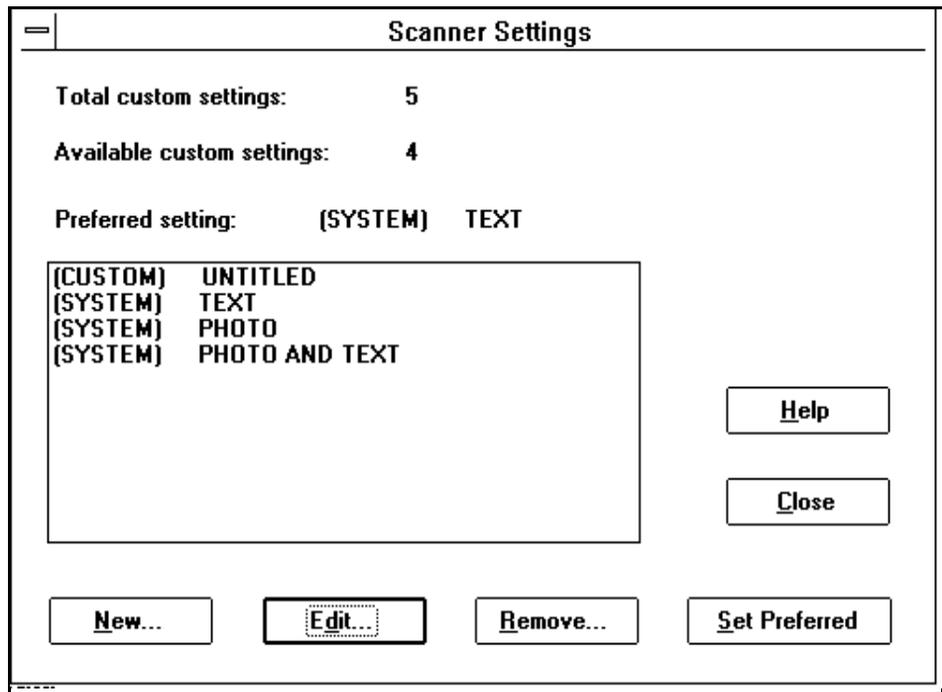
To select a preferred setting:

1 Click the Scanner Settings button on the Tool Bar or select *View, Scanner Settings* from the View menu.

2 Click on the setting you would like to use to select it.

3 Click *OK* to select a setting or click "Set Preferred" to select a setting as your default setting.

Note　　When you select a preferred setting, this setting will automatically appear as your default setting at the control panel. A (P) will appear beside the setting on the control panel.

To create a custom setting:

1 Click the Scanner Settings button on the Tool Bar or select *View, Scanner Settings* from the View menu.

2 Click the New button in the Scanner Settings Dialog Box. The Scanner Settings Values Dialog Box will appear.

3 Enter a name for your custom setting.

4 Enter the custom settings you would like.

5 Click *OK* to save your new setting.

6 When you return to the Scanner Settings Dialog box, *OK* to return to the Main window.

Your custom setting is added to the list of available settings.

Note　　There are a maximum number of custom settings you can create. Your system administrator has determined this number. You can see this number in the "Scanner Settings" dialog box next to "Total custom settings." If your "Available Custom Settings" line says 0, you will not be able to create a new setting without replacing or removing an existing setting. You can't replace or remove a system setting.

3 Operation and Use

Custom Settings Available

Setting	Description
Setting Name	Contains name of the setting. If this is a new setting, the phrase "Untitled" will appear in this box. If you are editing an existing setting, the name of the setting appears in this box. Enter a name up to 20 characters long.
Resolution	Select the resolution by using this scroll bar. You may select from 12 to 1500 dots per inch (dpi). The greater the number of dpi, the greater amount of detail will be visible. The default value is 300. Do not use more resolution than necessary. Extra resolution does not add more detail and takes up more disk space.
Scaling	The scaling range available is based on the resolution you have selected. Scaling reduces or increases the physical size of your image. The default value is 100.
Intensity	Contains the intensity value. This can vary from 0 to 255. The default value is 128.
Contrast	Contains the contrast value. This can vary from 0 to 255. Low contrast number values are mostly grays, while high contrast number values are stark blacks and whites. The default value is 128.
Output Data Type	Select two boxes. The top box has four values: Black & White 1bit, Dithered, Grayscale 4bit, and Grayscale 8bit. Choose one of these to modify the number of bits for pixels. The menu in the second box is only enabled if you select Dithered in the top box. If you have selected Dithered, select among: Coarse Fatting, Fine Fatting, Bayer Dither, and Vertical Line. The default for Output Data Type is Black & White.
Background Control	Select whether or not you would like background control. Default is "off."
Paper Size	Select either control panel or custom. "Control Panel" settings are selected at the scanner control panel. The options are A4, Legal, or Letter. "Custom" settings are user defined within the following ranges: width 0.0042 - 8.5 inches (0.01058 - 21.578 centimeters) and height 0.0042 - 14 inches (0.01058 - 35.541 centimeters).

Note
If you choose the same name as an existing custom setting, HP ScanJet 4Si Utility will warn you. You may either click *OK* to continue and overwrite the old setting or click *Cancel* to return to the dialog box and modify the setting name.

To edit an existing setting:

1 Click the Scanner Settings button on the Tool Bar or select *View, Scanner Settings* from the View menu.

2 Select the scanner setting you would like to modify.

3 Click Edit. The Scanner Settings Values dialog box will contain the name and preferences of your selected setting.

4 Change the name of the existing setting to avoid replacing that setting. Leave the name the same, if you want to replace the settings permanently.

5 Edit any of the settings you wish to change.

6 Click OK to save your new setting.

7 When you return to the Scanner Settings Values dialog box, click *OK* to return to the Main window or click Cancel to leave values unchanged.

Note If you choose the same name as an existing custom setting, HP ScanJet 4Si Utility will warn you that you can either overwrite the settings with the new values or abort the operation. To do this, click *OK* to continue and overwrite the old setting or click *Cancel* to return to the dialog box and modify the setting name.

To remove a custom setting:

If you no longer use one of the existing custom settings or you would like to save a new custom setting but have reached the total number of custom settings your system administrator allows you, you can remove an existing custom setting.

1 Open the Scanner Settings dialog box by double-clicking the Scanner Settings button on the Tool Bar or select *View, Scanner Settings* from the View menu.

2 Select the scanner setting you would like to remove from the Scanner Settings Dialog Box.

3 Click the Remove button.

4 When you return to the Scanner Settings Dialog box, click OK to return to the Main window.

Note You cannot remove a system setting.

Using the HP ScanJet 4Si Administrative Software

The HP ScanJet 4Si Administrative Software shows the most important information related to all the network scanners configured on the network. If a scanner does not appear on this screen, it means that the software cannot receive Service Advertising Protocol (SAP) messages from the scanner (for example, the scanner might be powered off or configured incorrectly). To use this software, you must be logged in with Supervisor privileges.

In the illustration, the HP ScanJet 4Si Administrative software shows the following information:

- **Name**—the logical name of the scanner. Unconfigured is displayed for new scanners or when the network box has been replaced.
- **Network**—the network address.
- **Address**—the HP ScanJet 4Si media access control (MAC) address.
- **Server**—the name of the NetWare file server where the HP ScanJet 4Si is configured.
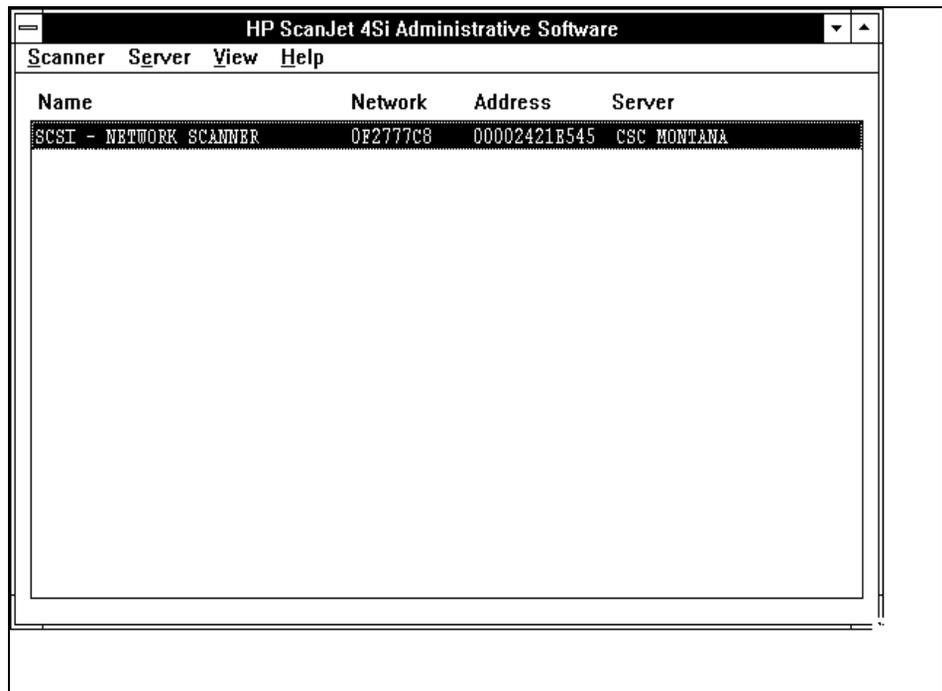
HP ScanJet 4Si Administrative Software—Menu Items

The HP ScanJet 4Si Administrative Software can also provide the following information or allow you to perform the following actions:

Scanner Menu

- Configure
- Add Users
- Add Printers
- Status
- Unconfigure
- Reset

Status of Scanner HP_SCANJET_4SI	
Scanner Name :	HP_SCANJET_4SI
Server Name :	LJSU_312_3
Scanner Description :	THE WORLD FIRST TRUE NETWORK SCANNER
Scanner Status :	READY
Scanner Model :	HP ScanJet 4Si, v1.00.A
Network Frame	Ethernet_802.2
Power On Time :	3:02:55

[Close]   [Help]

Choosing Status on the Scanner menu will show scanner and server name, model, availability, and frame type.

Server Menu

- Connect
- Settings
- Default User Properties
- Cleanup (of unrecognized files)

Scanner Setting Values

Setting Name : TEXT

12   Resolution : 300   1500

Output Data Type

Black&White 1bit

4   Scaling: 100   400

1   Intensity: 128   255

Dither Pattern

1   Contrast: 128   255

Background Control ⊠

Paper size

Control Panel Select   Height (in):   Width (in):

OK   Cancel   Help

Choosing Settings from the Server menu allows various adjustments to scanning and paper size values.

View Menu

- Filter (allows list of network scanners to be filtered by one or more criteria)
- Sort (by name, server, network number, or address)
- Refresh

Using the PaperPort Software and Links

Links let you process or send PaperPort items without leaving PaperPort. PaperPort automatically displays link icons for your printer, and the applications it supports, including word processing and spreadsheet applications, electronic fax, e-mail, and graphics, and optical character recognition (OCR) applications.

PaperPort Links

See the table below for applications that PaperPort can detect automatically.

E-Mail Applications	Groupware Applications	Word Processing Applications	Fax Applications	OCR Applications*	Graphics and Additional Applications
Lotus cc: Mail v 2.0/later Microsoft Mail v 3.2/later DaVinci Mail v 2.5 (v 3.0 is not supported)	Lotus Notes v 3.0c/later Novell GroupWise v 4.1 WordPerfect Office 4.0a	Microsoft Word 2.0/later WordPerfect v 6.0/later Lotus AmiPro v 3.1/later Microsoft Write v 3.11	Delrina WinFax 4.0/later Trio Datafax v 1.0 Phoenix Eclipse FAX v 6.0 WordStar/ZSoft Ultrafax v 1.0/later Any fax application that works as a Windows print driver**	Caere OmniPage Pro v 5.0/later Caere OmniPage Direct v 1.0/later Calera WordScan Plus v 3.0/later Calera WordScan v 3.0/later	Corel PhotoPaint (bundled with Corel Draw)

* If you experience problems when using OCR links, make sure you have at least 8 MB of RAM available, 4 MB Windows swap file, and enough disk space to create temporary word processing files.
** You could experience poor image quality when sending grayscale images with the following fax links: Intel FaxAbility v 1.0/later, Caere FaxMaster v 1.01/later, and Intel Proshare v 1.5/later. Try converting the image to black and white before faxing or scan the image directly as black and white rather than grayscale.

Note

PaperPort links can be added for many more application links than are listed here, provided that an application link file (.glk) is available for your favorite application. To find out what application links are supported and how to obtain a link file, refer to the "Links" section of the HP ScanJet 4Si scanner README file. To open this file, double-click on the "HP ScanJet 4Si README - User" icon in the PaperPort group in the Program Manager.

Types of Links

- **Printer**—Use this icon to print items instead of choosing the Print command from the File menu.
- **E-mail**—Use the e-mail icon to send a PaperPort item as an attachment to an e-mail message. The Link Bar displays an e-mail icon for each e-mail application installed on your computer that works with PaperPort.
- **Word Processor**—The word processor icon shows which word-processing application will receive text from PaperPort after the text is converted by your OCR application. If you also have another supported OCR application on your computer, PaperPort will create an additional link icon for it. You can then read text directly into that application using drag-and-drop techniques.
- **Spreadsheet** —The spreadsheet icon displays the spreadsheet selected for the OCR software provided with PaperPort. Use this link when you want to convert a scanned spreadsheet into editable numbers and text. Like the word processor link, this link will process a item, convert its image text and numbers into editable text and numbers, and then open it in the selected spreadsheet application. In most cases, the column-by-column layout of the scanned spreadsheet will be retained.
- **OCR**—If another OCR application, such as Caere OmniPage Limited Edition (LE), is installed on you computer, its icon will also appear on the Link Bar. When you use this OCR link, the file is converted to a TIFF file, and processed by that OCR application. If you install other supported OCR applications, PaperPort automatically adds those icons to the Link Bar.
- **Electronic Fax**—The fax icon shows which fax application PaperPort will use to send items. If you are using one of the fax applications supported by PaperPort, shown in the table on the previous page, its icon will appear automatically. If you are using another fax application, the icon will be a generic fax icon as shown in the sample above. You can then select your fax application in the PaperPort Preferences dialog box.
- **Graphics (and other applications)**—This is a sample of an additional link icon that will be added to your PaperPort Link Bar. Other links include Adobe Photoshop 2.5 and 3.0 and KidPix.

Tip   For information about selecting the scanning options that will give the best results for items that you want to send as e-mail, fax, or process with your OCR software, see the *User's Guide*, Chapter 4, "Setting Scanner Preferences."

Note   Many applications can also become PaperPort links. For details, see the section, "Setting Preferences for the Links," later in this chapter.

Basic Steps for Using Links

The steps for using links are similar each time you use a link:

1 Scan items into PaperPort.
2 Drag and drop items onto the appropriate link icon in the Link Bar, or choose *Links* from the File menu and select the appropriate link application from the Links submenu. You can also select the item(s) and just click on the link icon.
3 Use the linked application as you normally do. For example, if you're sending a item using an electronic fax link, address the electronic fax and send it.

Note   Some applications limit the number of pages that can be received from the PaperPort link. If you have trouble with large stacks of pages, try sending the pages in smaller batches.

3 Operation and Use

Printing Link

You can print from both Page View and Desktop View. PaperPort can print in black-and-white and grayscale.

To print a Item:

1 In Desktop View, select the item to print. If you're looking at the item in the Page View, you do not have to select it.

2 In Desktop View, drag and drop the item onto the *Printer* icon on the Link Bar, or just click the *Printer* icon. From the File menu, choose *Print*. The Print dialog box appears so you can select the print options.

3 Click *OK* to begin printing.

Note If you have deselected the Display Print Dialog option in the PaperPort Preferences dialog box, printing starts immediately.

Note If the item has annotations that you don't want on the printed copy, display the item in Page View; then remove the checkmark next to the *Show Annotations* command on the Annotations menu. Choosing the command removes the checkmark.

Print Option	Description
Print to Range	**All** prints all pages in the selected item. If you're printing a stack, prints all pages in the stack. **Pages** prints a range of pages from the selected stack. Enter the pages to print From and To.
Print to File	Select this option to print pages to a file instead of to the printer. When you click OK a dialog box appears so that you can designate the file to receive the printed pages.
Copies	Type the number of copies to print.
Collate Copies	Click to print the copies as collated items. For example, if you're printing three copies of a three-page stack, the pages will be printed 123, 123, 123 if you select Collate Copies, and 111, 222, 333 if you do not.

E-Mail Link

You can send a item from PaperPort using your e-mail application. For example, you can mail scanned memos, budgets, newspaper clippings, photographs, and spreadsheets as attachments to your e-mail message.

To send items using e-mail:

1 On the PaperPort Desktop, select the item(s) you want to send.

2 Drag and drop the item onto the e-mail icon in the Link Bar, or from the File menu, choose *Links*, then choose the e-mail application name from the Links submenu.

3 Open your e-mail application.

4 Fill in the message information, and send the message.

PaperPort creates a file and attaches the item to an e-mail message. The file has the extension .MAX, for example, DOC-0001.MAX. If the item is a single page, the file name begins with PAGE and is followed by the item's number, for example, PAGE0002.MAX.

Note   If you want to send someone a PaperPort item who doesn't currently have PaperPort, you can attach the PaperPort Viewer. However, the PaperPort Viewer is able to display .MAX 2.0 files only. If you are using a later version of PaperPort, save the item in .MAX 2.0 format before sending it. For more information, see "PaperPort Viewers" later in this chapter.

Using PaperPort with cc:Mail

If you use cc:Mail to send messages, a set of familiar dialog boxes will appear when you use the e-mail link from PaperPort.

To send a cc:Mail message

1 Drag the item from the PaperPort Desktop onto the cc:Mail icon on the Link Bar.

2 In the Login dialog box that appears, enter the name and password that you normally use to login to your cc:Mail account.

3 Click OK. The remaining dialog boxes that appear offer the standard cc:Mail options, including access to your private post office addresses and internet addresses. However, access to bulletin boards must be through the cc:Mail application itself.

4 When you send the message, the PaperPort item is sent as an attachment to the message.

3 Operation and Use

To display e-mail messages sent from PaperPort

When you receive an e-mail message with an attached PaperPort file, you can view the e-mail message and the attached file. You can display an attached file in different ways, depending on your e-mail software:

- With some e-mail applications, such as Lotus cc:Mail, you can double-click the attachment to display it.
- With some e-mail applications, use Shift-double-click to automatically run the PaperPort application and display the attachment.
- Save the attached file by using the e-mail Save or Save As command, then opening the attachment in PaperPort to display it.

Word Processor Link

A scanned item is an image, and you cannot edit its text. However, you can use PaperPort with optical character recognition (OCR) software to process a scanned image. The OCR software converts the scanned text image to editable text; it does not translate photos or graphics. You can process an entire item, or only the text that you select. You have several options for using OCR software with PaperPort:

- **PaperPort OCR software**—Use the word-processing or spreadsheet icons on the Link Bar. The text is processed by the OCR software provided with PaperPort and then opened in you selected word-processing or spreadsheet application
- **OCR software link**—If you have other OCR software on your computer you can use it to process the text. Use that OCR's icon on the Link Bar. That OCR application opens and displays the converted text.
- **Copy As Text command**—You can select text, or an entire PaperPort item, copy it as text, and paste it in some other application. During copying, the OCR software automatically converts the image into text. When you paste the text into another application, it is editable text.

OCR Links

Use the following steps to process text using either the PaperPort OCR software or with other OCR software.

To process text using the PaperPort OCR link:

1 On the PaperPort Desktop, select an item.

2 Drag and drop the item onto the Word Processing icon in the Link Bar, or from the File menu, choose *Links,* then choose OCR from the submenu.

The OCR software converts the item to editable text, then the word-processing application opens and the converted text is an untitled file waiting to be saved as a word-processing file. You can now edit the text as you normally would with that application.

To process text using another OCR link:

1 On the PaperPort Desktop, select an item.

2 Drag and drop the item onto that OCR icon on the Link Bar, or from the File menu choose *Links,* then choose the name of the OCR software from the submenu. The file will be converted to a TIFF file and processed by the OCR software.

To process text using the Copy As Text commands:

1 If you want to process an entire item, select it on the Desktop.

2 From the Edit menu, choose Copy As Text. PaperPort processes the text with the OCR software and places the now-editable text onto the Clipboard. You can then paste the text into another application, such as a word processor.

Note   If you want to process only a portion of a page, display it in Page View, click the Selection button on the Annotation Tool Bar, and select the portion of text that you want.

Electronic Fax Link

You can scan a item to the PaperPort Desktop, add annotations, and send the item as an electronic fax using your fax application. Your computer must have access to a fax modem and electronic fax software to send a fax from PaperPort.

To send items using the fax link:

1 On the Desktop, select the item(s) you want to fax. If you don't want PaperPort annotations to appear in the faxed item, uncheck the *Show Annotations* option from the Annotations menu.
2 Drag the item onto the Fax icon in the Link Bar, or choose *Links* from the File menu, then choose the fax name from the submenu. To send a fax from Page View, use the *Links* command on the File menu.
3 Use your electronic fax application as you normally do.

To read a WinFax fax in PaperPort:

1 From the File menu, choose *Import Fax*. The Import Fax dialog box appears and lists the faxed items available to be read in PaperPort.
2 Select one of the faxed items in the list. A thumbnail of it appears in the dialog box.
3 Find the faxed items to read and select them, or to read all of the faxed items, click *Select All*.
4 Click *Import*.

The selected faxed items appear on the PaperPort Desktop. You can now select them there and switch to Page View to read the fax.

3 Operation and Use

Setting Preferences for Links

Each link icon on the Link Bar has a set of preferences for customizing the way the link operates.

To set preferences for the Links:

1 From the Edit menu, choose *PaperPort Preferences*. The PaperPort Preferences dialog box appears.

2 The category list shows the Link icons. Use the scroll bar to see the icons on the list.

3 In the Category list, click the icon of the link you want to customize. For example, to set preferences for your fax software, click its Fax icon. The options in the Preferences dialog box will apply to the icon you clicked.

4 Select the options for the link. Click *OK*.

Note   Use the generic fax and word processor links to specify applications that are not automatically supported by PaperPort. The generic links are "wildcard" icons that you can use to specify links to other fax applications or word processor to use with the PaperPort OCR software. To use one of these links, click on it and assign the desired application's .EXE file to it.

PaperPort Link Preferences

The options available in the PaperPort Preferences dialog box depend on the applications that are on your computer. For that reason, some of your PaperPort preferences may differ from those shown in the following table.

Link Icon	Option	Description
All that appear on the Link Bar	Display Link Icon	Select to see the icon on the Link Bar on the PaperPort Desktop. If this option is not selected, the icon does not appear, but you will still be able to use the link by choosing from the Link submenu in the File menu.
Printer	Collate Copies	Prints multiple copies with pages of each copy in sequence.
	Automatic Page Orientation	Changes the page orientation of the printer to match the selected item's page orientation.
	Display Print Dialog	Displays the Print dialog box before the item is printed. If this option is not selected, the dialog box does not appear.
E-mail	File Format to Use	Select the file format the item is saved as when it is attached to an e-mail message. The available formats may include PaperPort (.MAX versions 2.0 and earlier and version 3.0), the e-mail application's format, Windows Bitmap (.BMP), Windows Paintbrush (.PCX), Multi-page PCX (.DCX), and several TIFF formats. If you choose PaperPort, the recipient must have PaperPort or PaperPort Viewer installed to read the attached PaperPort file. If you know that the recipient only has the PaperPort viewer, you need to save the files as .MAX version 2.0 or earlier. Otherwise, the viewer will not be able to read the file.
	Save Password	Select this option if you want PaperPort to require the password before it starts the e-mail application. If you save your password, PaperPort bypasses the Login dialog box. Not all e-mail links support this preference.
	Receipt	Select for a return receipt when the e-mail message is received and opened by a recipient.
	Log	Select if you want a copy of the message to be put into the user's log.

Link Icon	Option	Description
Word Processor, Spreadsheet, Copy As Text, and Generic Word Processor	Word Processor Application	Use this option to select the application to receive the converted text from the OCR software. For example, to send the converted text to NotePad, enter the full path name of the NotePad application file. (It will have an .EXE extension.) The application does not have to be a word processor; you can also set this link to send converted text to a spreadsheet.
	Browse.	Use this button to select the application file (.EXE) for the OCR link. A dialog box appears, and you can find and select the .EXE file. When you select the file and click OK on that dialog box, the full path name is entered in the Word Processor Application field.
	Item Format	Click on the drop-down arrow and choose the format for the converted text. PaperPort will automatically choose the right format for the word processor that is already selected. You can also choose other formats, such as ASCII, for special situations. The format **must** be supported by **both** the OCR software and the word processor application.
	OCR Package	Use this option if you have another OCR software package on your computer and want to assign it to the word-processor link on the Link Bar. Click on the drop-down arrow and choose the OCR package from the list.
	OCR Settings	Click to see special settings for the OCR software package you selected. Two typical options are (these pertain to Word 6.0): Automatic Page Orientation—PaperPort determines if the page is in portrait or landscape mode and will send it in that mode. Decolumnized Output—Organizes the text in a single format, even if the original item has multiple columns, such as a newspaper article. (Test this setting to see if it works for your scanned items.)
Fax and Generic Fax	Automatic Page orientation	PaperPort determines if the page is in portrait or landscape mode and will send it in that mode.
	Setup	Displays a dialog box for additional fax setup options, such as page size and orientation. The options depend on the fax application.
Generic Fax Only	Select a Fax Driver	Use this option to assign a fax driver to your generic electronic fax application (one that PaperPort does not configure automatically). PaperPort will add that fax icon to the Link Bar.
Graphics and additional OCR	File Format to Use	Select the file format in which to save the graphic item. The options will be Windows graphic formats, such as .BMP and .PCX.
	Replace Desktop Item if Modified	If you make changes to the image in the graphics application and then save it, the modified image replaces the original one on the PaperPort Desktop.
	Show Annotation Warning	If selected, a warning message appears when you drag an image onto the graphics link reminding you that if you make any changes to the image in the graphics application, and then save it, all annotations made to the item in PaperPort are deleted from the item.

PaperPort Viewers

The PaperPort Viewer lets you share PaperPort items with others who do not own PaperPort software. With PaperPort Viewer, others can view and print PaperPort items.

Note   If you use PaperPort 3.0 and send an item to someone else to view using the PaperPort Viewer, save the item in a .MAX 2.0 format. Others will not be able to view your PaperPort 3.0 files.

Obtaining Copies of PaperPort Viewer

PaperPort Viewer for Windows comes with the software on separate disks. You can distribute PaperPort Viewers to others free of charge. PaperPort Viewers are also available free on CompuServe. Others can log on to CompuServe and retrieve the PaperPort Viewer file. To download the files, just type `Go PaperPort` in the Office Automation Forum.

Hardware and Software Requirements

- **Windows**
  - IBM or 100%-compatible personal computer with a 386 microprocessor or higher
  - Windows 3.1 or later
  - 4 MB of memory
  - 1 MB of hard disk space
  - VGA monitor or better
- **Macintosh**
  - Macintosh Plus or later model
  - System 6.0.4 or above
  - 2 MB of memory
  - 400 kilobytes (K) of hard disk space

Installing PaperPort Viewer

To Install the PaperPort Viewer for Windows

1 Start Windows.
2 Choose Run from the Program Manager File menu and enter the drive and path information (for example, type N:\PAPRVIEW\PAPRVIEW.EXE in the Run box). The first time you start a shared copy of PaperPort Viewer from a workstation, it displays a message asking if you want to complete the workstation installation.
3 Choose Install Viewer to complete the installation. A message indicates when the workstation installation is complete.
4 Click OK to close the message.

To install PaperPort Viewer for Macintosh:

The PaperPort Viewer for Macintosh comes as a self-extracting archive file. You should have the file PaperPort Viewer.sea on disk before starting.

1 Display the Macintosh desktop.
2 Insert the PaperPort Viewer for Macintosh disk into the floppy disk drive.
3 Double-click the file PaperPort Viewer.sea.
4 Click Continue. The directory dialog box appears.
5 Select where you want to install PaperPort Viewer, then click OK to begin the installation.
6 A message indicates when the PaperPort Viewer installation is completed.

4

Effects on Networks

Effects on Networks

No NLM Loaded on the NetWare Server

There is no scanner software module (no Network Loadable Module or "NLM") loaded on the server, which guarantees that the HP ScanJet 4Si scanner installation will not jeopardize your server state. The NetWare server is used only to store temporary data in the user workareas, and to keep some general configuration files. The network scanning system may be installed on different volumes of the server disk. In all cases, everything is saved under a directory called HPSSCAN.

Impact on Network Performance

The HP ScanJet 4Si acts as a common NetWare client personal computer that transfers files to the server or prints to a network printer. To achieve better transfer performance and cause less impact on the overall network, data is compressed (G4 and Packbits) internally and then it is sent to the server. The table below shows approximate file sizes per page and compression schemes for the HP ScanJet 4Si-Server and Server-Client transactions:

Data Type	File Size	Compression
1-bit	30 KB	G4
4-bit	1 MB	Packbits
8-bit	8 MB	None

Scanner-to-Desktop Data Conversion

When data is received at the client PC, PaperPort converts the compressed file to its own format (.MAX), which allows full manipulation of the documents.

Note   For information on how the scanner software changes your system configuration files, see "Installing the Scanner Software: in Chapter 2.

New Object in the Bindery

Any HP ScanJet 4Si scanner installed will be a new object in the NetWare server Bindery. Its unique object number is 0x0815 (OT_NETWORK_SCANNER). The HP ScanJet 4Si Administrative Software will create, update, or delete OT_NETWORK_SCANNER objects from the Bindery based on the task it is processing.

Note

Do not use any Bindery administrative tool other than HP ScanJet Administrative software to edit or delete the OT_NETWORK_SCANNER object because it will damage your network scanner installation.

Service Advertising Protocol (SAP)

The HP ScanJet 4Si scanner uses SAP messages to notify the HP ScanJet 4Si Administrative Software of its presence on the network. A SAP message is sent every 60 seconds and it is mainly used by HP ScanJet 4Si Administrative Software to check the presence of new and old HP ScanJet 4Si scanners on the network. SAP messages contain information about the scanner, as shown below. In order to have the HP ScanJet 4Si Administrative Software working correctly, ensure that it can receive SAP packets from the HP ScanJet 4Si scanner (same frame type). Do not put any SAP filtering in between the software and scanner.

Figure 4-1
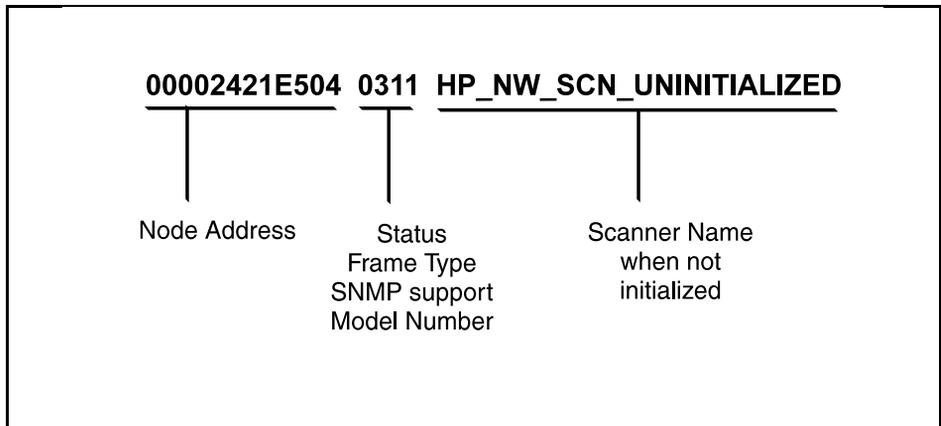
The scanner sends SAP packets with information about its presence on the network.

Scan-to-Print (Copy Functionality)

Scan-to-Print (copy functionality) is implemented using the NetWare print queue mechanism. Before enabling copy functionality on an HP ScanJet 4Si scanner, the network administrator has to create at least one print queue on the server using the Novell PCONSOLE tool (NWADMIN on NetWare 4.x), and then he/she can use the HP ScanJet 4Si Administrative Software to add the print queue as a special user of the HP ScanJet 4Si scanner.

Scan-to-print jobs are sent Packbits-compressed directly to the printer, which has to be PCL 5-compatible. The HP ScanJet 4Si scanner addresses the network printer as any other NetWare client (it does not use SPX protocol).

Scan to Print performance varies based on job size, the number of copies, and the kind of original item scanned. Generally, the following performance can be expected for text items:

- 1 copy of 1 text page = 2 ppm
- multiple copies of 1 text page = up to 14 ppm

5

Problem Solving

Introduction

This chapter discusses basic scanner maintenance procedures, explains scanner control panel and software messages and errors, and recommends actions you can take to correct problems.

This chapter will help you with the following tasks:

- Troubleshooting
  - If Your Scanner Isn't Working
  - Clearing Paper Jams
  - Scanner Maintenance
  - Unconfiguring the Scanner
  - Resetting the Scanner
  - Replacing a Broken Scanner or Network Box
- Error Messages
  - Control Panel Status and Error Messages
  - HP ScanJet 4Si Administrative Software Messages
  - HP ScanJet 4Si Utility Messages
  - Visioneer PaperPort Error Messages
- Warranty and Service Information

If you have questions that are not answered in this chapter, see the "HP Service Worldwide" section in Chapter 6 for information on contacting Hewlett-Packard Service and Support.

Troubleshooting

Scanner is Not Working

Make sure the following conditions are true:

- The two power cords are connected securely to the scanner and network boxes, and they are plugged into electrical outlets.
- Scanner, ADF, and control panel are connected to the network box with the proper cables.
- Scanner and network box are turned on.
- Scanner is connected to the network.
- Scanner is unlocked.

If these conditions are met and the scanner is still not working, turn the scanner and network box off, wait 10 seconds, and 1) turn on the scanner on followed by 2) the network box.

Scanned Image Quality is Poor

- If scanned pages are blank, white, or have repeated patterns, make sure that a page is not already on the scanner glass. Otherwise, see the Scanner Maintenance section later in this chapter.

Clearing Paper Jams

1

2

3

4

Reinsert it. Continue=<l>
Stop & Save=\/ Abort=//

Menu

◄ ►

Letter Legal A4
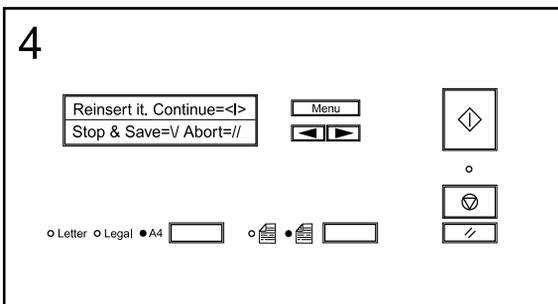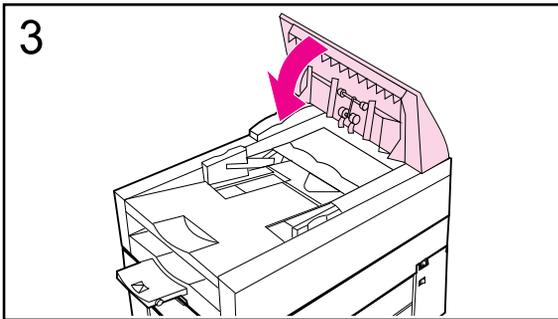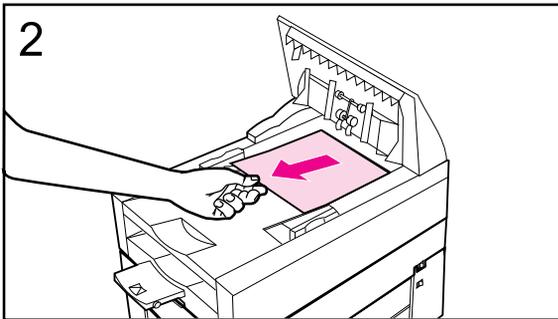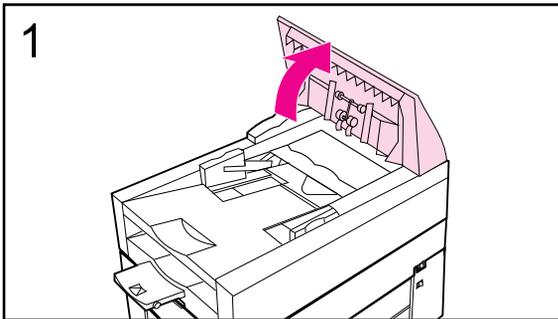
When you have a paper jam, the scanner control panel displays an error directing you to where it occurred: the start of a page, the end of a page, or inside the ADF. Use one of the procedures on the following pages to remove the type of paper jam you have.

Jams at the start of a page

1 Open the ADF cover
2 Remove the jammed paper
3 Close the ADF cover securely.
4 The control panel will prompt you to do one of the following actions by pressing the corresponding key:
   - Reinsert the paper and continue scanning <l>
   - Stop scanning and save your data (\/)
   - Stop scanning without saving your data (//)

Jams at the end of a page
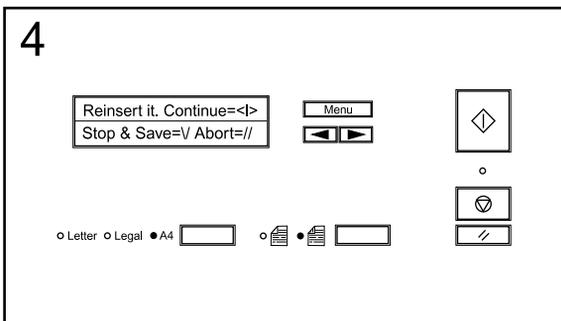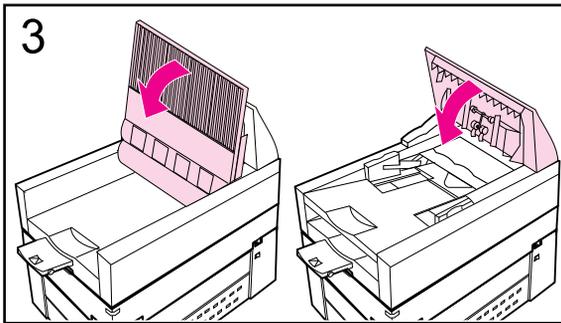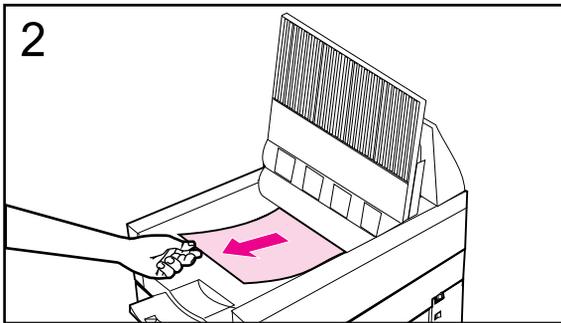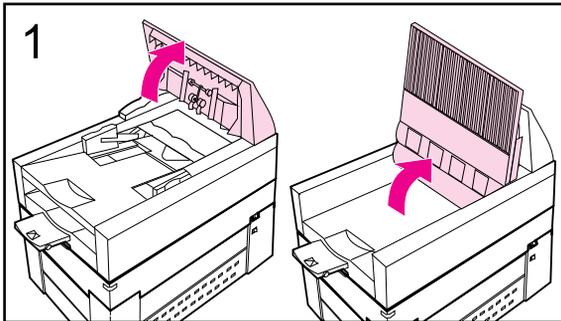
1 Open the ADF cover, and lift up the document tray.
2 Remove the jammed paper.
3 Close the document tray and the ADF cover securely.
4 The control panel will prompt you to do one of the following actions by pressing the corresponding key:
- Reinsert the paper and continue scanning <l>
- Stop scanning and save your data (\/)
- Stop scanning without saving your data (//)

1

2

3

4

Reinsert it. Continue=<l>
Stop & Save=\/ Abort=//

Menu

◄ ►

○ Letter ○ Legal ● A4

5 Problem Solving
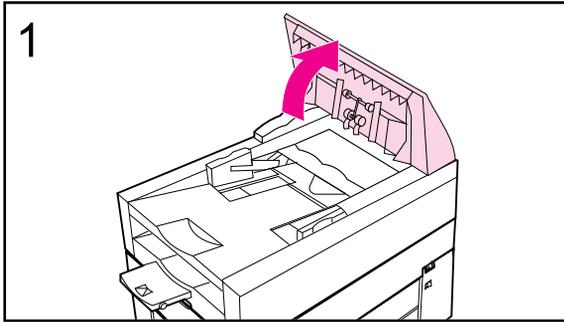
Jams inside the ADF

1 Open the ADF cover.

2 Lift up the ADF unit.

3 Open the delivery guide by grasping the small plastic handles on either side of the delivery guide and pulling down.

4 Remove the jammed paper.
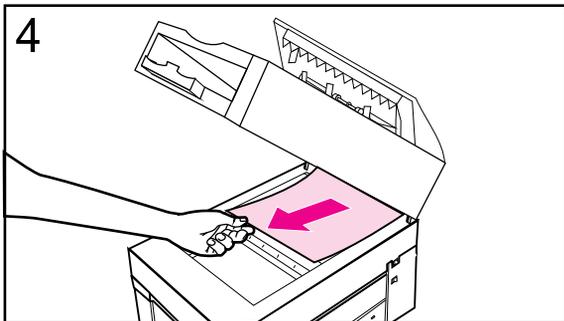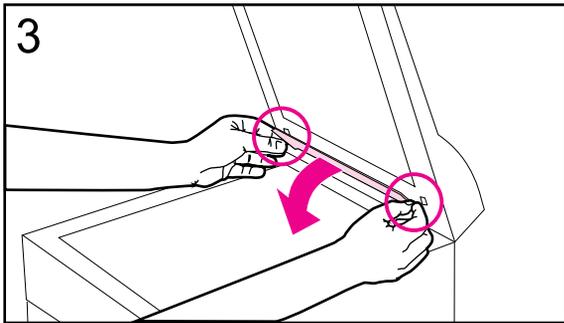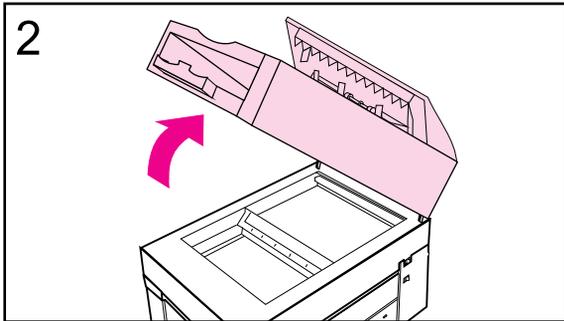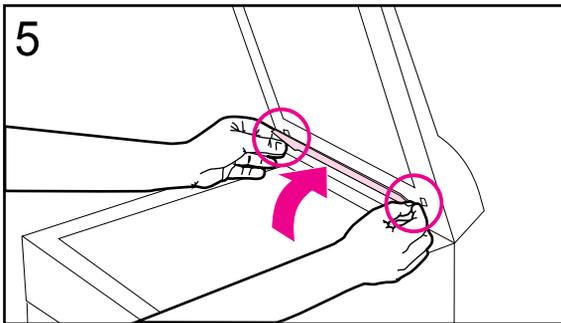
5 Close the delivery guide sheet by aligning its holes with the small plastic spindles on the delivery guide and pressing down.

6 Close the document tray and the ADF cover securely.

7 The control panel will prompt you to do one of the following actions by pressing the corresponding key:
- Reinsert the paper and continue scanning <I>
- Stop scanning and save your data (\/)
- Stop scanning without saving your data (//)

Reinsert it. Continue=<I>
Stop & Save=\/ Abort=//

Menu

◄ ►

○ Letter ○ Legal ● A4

5 Problem Solving
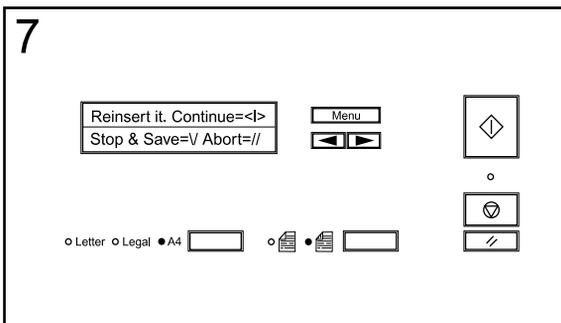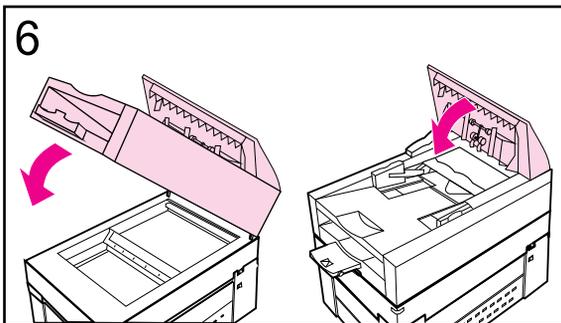
Scanner Maintenance

Your HP ScanJet 4Si scanner requires occasional cleaning and regular maintenance to produce the best results when scanning documents. If you do not receive error messages from your scanner software or the control panel but you notice problems with the quality of your scanned documents, the following procedures may help.

The section will help you with the following tasks:

- Cleaning the scanner
- Replacing the delivery guide sheet
- Replacing the lower roller
- Cleaning up work area files

Cleaning the Scanner

Caution   Always turn off the scanner and unplug all power cords before cleaning.

1   With a clean, soft cloth and a mild detergent, wipe off the outside of the scanner.
2   Dry the scanner with a clean, soft cloth.
3   Lift up the ADF
4   Open the delivery guide by grasping the small plastic handles on either side of the delivery guide and pulling down.
5   Use a clean, soft, dry cloth, wipe the inside surface of the delivery guide sheet.
6   Close the delivery guide and wipe its outside surface with the cloth.

Note   If your scanning quality is still poor after cleaning (vertical black lines, for example), you will need to replace the delivery guide sheet. See the procedure below. For ordering details, see "Replacement Parts and Accessories" later in this chapter.
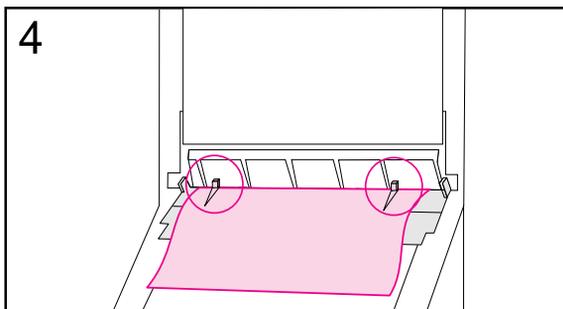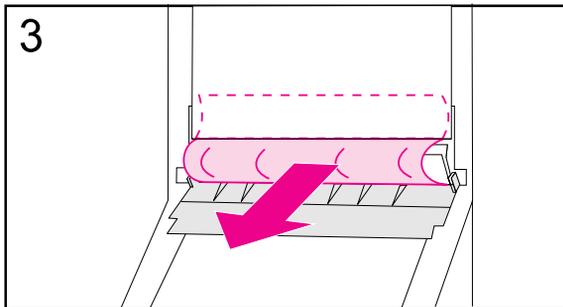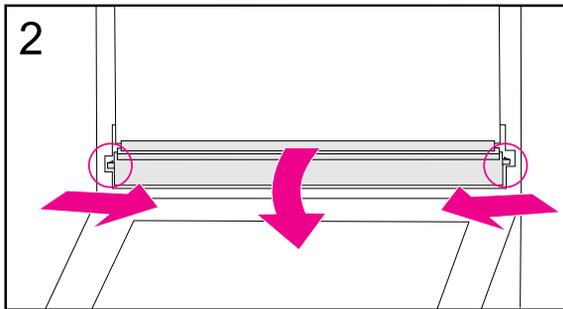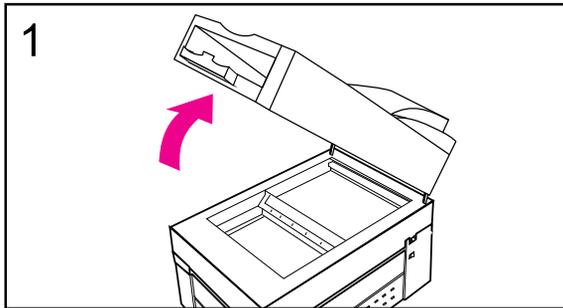
Replacing the Delivery Guide Sheet

1 Lift up the ADF
2 Open the delivery guide by grasping the small plastic handles on either side of the delivery guide and pulling down.
3 Remove the used delivery guide sheet.
4 Install the new delivery guide sheet by aligning its holes with the small plastic spindles on the delivery guide and pressing down.

Note

Make sure that the free end of the clear guide is tucked behind the white padded sheet.
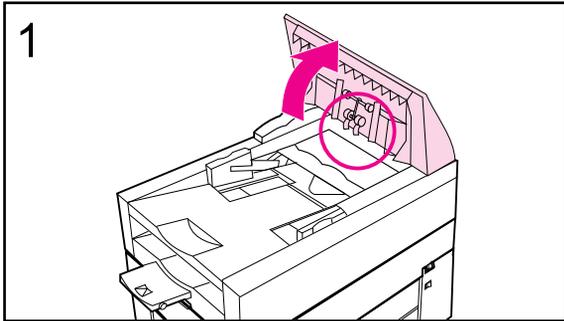
Replacing the Lower Roller

1. Lift up the ADF.
2. Press down on the plastic cover located behind the right hand roller, and pull the cover towards you.
3. Move the rollers to the right and remove the rollers and roller bar.
4. Install the new lower rollers by inserting the left side into the matching bar in the scanner .
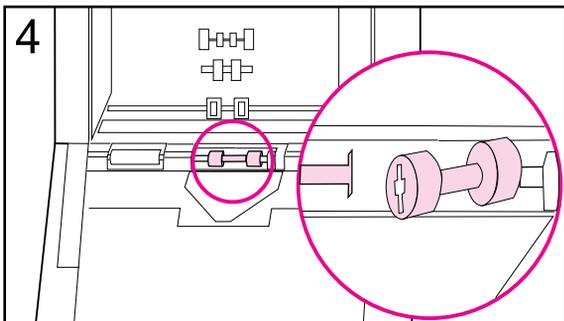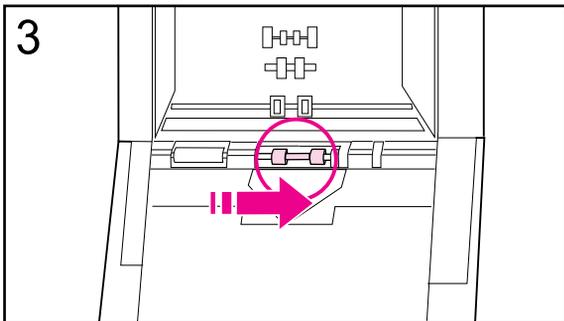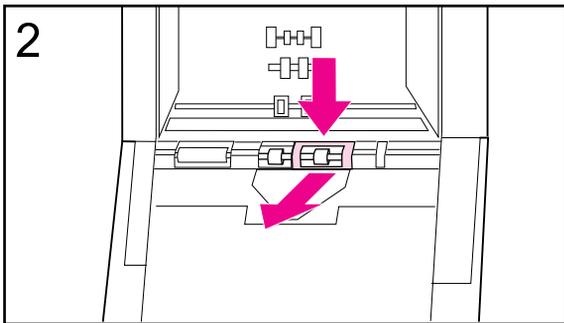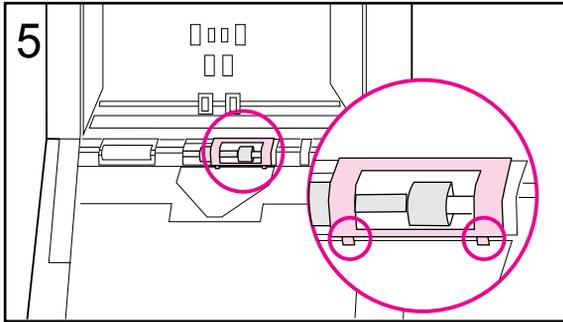
5 Replace the plastic cover, putting the bottom feet in place first.

Cleaning Up Work Area Files

Occasionally unwanted document files or stray pages of documents will be stored on the server in the user's work area. You can delete these files from the Cleanup window in the HP ScanJet 4Si Administrative Software program.

1 Within HP ScanJet 4Si Administrative Software, select the *Server* menu.
2 Choose *Cleanup*.
3 Select the file server from the Server Selection list. You may add/remove servers from the Server Selection list by clicking *Connect.*
4 Highlight any of the unrecognized files (for example, files with numbered extensions, such as .000, .001.002, etc., or files with a .hps extension).
5 Click *Delete* to erase the files.
6 Click *OK* to exit.

Unconfiguring and Resetting the Scanner

If you need to move your scanner from one network to another, or unconfigure the scanner, the HP ScanJet 4Si Administrative Software gives you the option to restore factory defaults and reconfigure the scanner.

Restoring Factory Defaults

To clear the scanner's configuration settings and return to the factory defaults, use the following procedure. The scanner must be unconfigured with the special key combination:

1 Turn off the scanner.
2 Press the following control panel keys at the same time: PAPER SIZE, DUPLEX and LEFT ARROW.
3 Turn on the scanner.
4 Reinitialize the scanner using the HP ScanJet 4Si Administrative Software (see procedure below).

Installing a Replacement Scanner

Use the following steps when replacing a broken scanner or network box with a new unit or after you have unconfigured a scanner and restored factory defaults.

1 Install the replacement unit.
2 Name the scanner in the HP ScanJet 4Si Administrative Software. Use the same name for the new unit as the one it replaced.

Note   If you don't remember the name of the unit being replaced, use the HP ScanJet 4Si Utility software.

3 If the old name is used, all of the previous configuration information is recovered. If a new name is used, all the users must be added again.

5 Problem Solving

Control Panel Messages

The HP ScanJet 4Si scanner control panel displays two types of messages: status and error. Scanner status messages tell you what is happening in various scanning operations and usually require no action.

Scanner error messages may require actions such as checking to make sure your scanner, associated software, or network is operating correctly.

The scanner's status and error messages are presented alphabetically in the following tables.

Control PanelStatus/Error Messages

Control Panel Status/Error Message	Description	Recommended Action
A4 paper selected	The document you have selected to scan is on A4-size paper.	No action needed.
Aborted!	The user chose to stop the scanning job without saving the data.	No action needed.
Aborting...	The user has chosen to abort the current job. All pages that have been scanned will be erased.	No action needed.
Auto-resetting...	The system is performing an auto-resetting, which clears all the previous selections.	No action needed.
Booting ScanJet 4Si	The scanner is booting.	No action needed.
Communication error (13)	The control panel is working, but there is something wrong with the connection to the network box.	1. Check if the cable connecting the control panel with the network box is plugged in. 2. If error persists: it is not clear if the problem is in the control panel or network box. The entire unit should be exchanged.

NOTE TO DEALERS:
Unless a module has a visible defect or can be replaced from stock, dealers are advised to exchange the entire HP ScanJet 4Si scanner unit (see Chapter 1, "Express Exchange Program.")

Control Panel Status/Error Message	Description	Recommended Action
Configuration error (70-71-72) ScanJet 4Si halted	The internal configuration parameters are corrupted.	Reconfigure the scan station (see "Resetting the Scanner" in this chapter).
Copies	The number of copies selected for the current job is shown next to this prompt.	No action needed.
Copy error (111) Press any key...	An error occurred while writing a page into the queue.	To verify that the print queue and printer are working, run NetWare command PCONSOLE to check the print queue: 1. If it was deleted, create the print queue again and assign it to the scanner using HP ScanJet 4Si Administrative Software. 2. If the print queue has not been canceled, check if the scanner name is entered in the Q-USERS property. If not, run HP ScanJet 4Si Administrative Software and assign the scanner to the print queue. 3. Check to see if the server SYS volume (where print queues are) is full. Send a network print job to the same print queue to see if it prints out**.**
Copying page	The scanner is copying a page.	No action needed.
Cover opened! (209) Please close it.	The ADF cover is open	Close the cover. If the problem persists, replace the ADF and control panel module.
Current application:	The user has selected to scan to the application shown next to this prompt.	No action needed

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Control Panel Status/Error Message	Description	Recommended Action
Current default paper:	A message within the configuration menus prompting the system administrator to select a default paper size.	Choose a default paper size; see Chapter 2 for more information on using the configuration menus.
Current frame type:	A message within the configuration menus prompting the system administrator to select a frame type.	Choose a frame type; see Chapter 2 for more information on using the configuration menus.
Current language:	A message within the configuration menus prompting the system administrator to select a display language.	Choose a display language; see Chapter 2 for more information on using the configuration menus.
Current num. of copies	The number that appears in the next line is the current number of copies selected.	No action needed.
Current printer:	The print queue name on the line below is the current selection.	No action needed.
Current setting:	Lists the current scanner configuration available for the selected destination.	No action needed.
Current Token Ring speed:	A message within the configuration menus prompting the system administrator to select a Token Ring speed.	Choose a Token Ring speed; see Chapter 2 for more information on using the configuration menus.
Current user:	The user on the line below is the current selection.	No action needed.
Destination locked (108) Press any key...	The user at that location has locked the work area. A workarea is locked even when locking field is not found in the private configuration file.	1. Use HP ScanJet 4Si Utility to unlock the work area. 2. A lock is also generated when the "Lock" field is not found in the HPSSCAN\ USERS\ <workarea>\ CONFIGS.CFG file. Check if lock field exists, 3. If not: delete user with HP ScanJet 4Si Administrative Software, delete his/her workarea and create the user again.

NOTE TO DEALERS:
Unless a module has a visible defect or can be replaced from stock, dealers are advised to exchange the entire HP ScanJet 4Si scanner unit (see Chapter 1, "Express Exchange Program.")

Control Panel Status/Error Message	Description	Recommended Action
Done!	The scanner has completed the scanning job.	No action needed.
Double-sided selected	You have selected to scan a two-sided (duplexed) document.	No action needed.
From:	This message corresponds to the message "To."	No action needed.
Initializing...wait	The control panel is working but there is something wrong with the connection to the network box.	1. Ensure the cable connecting the control panel with the network box is properly plugged in. 2. If error persists: it is not clear if the problem is in the control panel or network box. The entire unit should be exchanged.
Internal error (10) ScanJet 4Si halted	Internal information on temporary storage cannot be accessed.	1. Power cycle the scanner. 2. If the problem persists, replace the network box.
Internal error (11) ScanJet 4Si halted	Internal memory error	1. Power cycle the scanner. 2. If the problem persists, replace the network box.
Internal error (12) ScanJet 4Si halted	Internal memory error	If the error message shows up just after booting, there are too many destinations or print queues defined. 1. Run HP ScanJet 4Si Administrative Software to remove some of them from the scanner configuration and reset the network scanner. If the error message shows up **when the GO key is pressed** for the selected destination, it means that the destination has too many settings defined, which cannot be handled by the network scanner. 1. Execute the HP ScanJet 4Si Utility software to remove some settings and reset the network scanner.

NOTE TO DEALERS:
Unless a module has a visible defect or can be replaced from stock, dealers are advised to exchange the entire HP ScanJet 4Si scanner unit (see Chapter 1, "Express Exchange Program.")

Control Panel Status/Error Message	Description	Recommended Action
Internal error (14) ScanJet 4Si halted	Internal error.	Reboot the scanner. If the error persists, please report it to HP Customer Service Center for escalation.
Internal error (15) ScanJet 4Si halted	Connection problem between the scanner and network box.	Execute the following steps 1. Turn off the scanner and network box. 2. Check the SCSI cable between the scanner and the network box. 3. Turn on the scanner and network box. If the problem persists, replace the network box.
Internal error (16) ScanJet 4Si halted	Internal memory error	Power cycle the scanner. If the problem persists replace the network box.
Internal error (65-66) ScanJet 4Si halted	Internal memory error.	Power cycle the scanner. If the problem persists replace the network box.
Internal error (73) Press any key...	The internal information about the localized messages for your language cannot be accessed.	Try reconfiguring the language. If the error persists, the language file is corrupted. Replace the network box.
Internal error (74) Press any key ...	The internal information about the localized messages for your language are corrupted.	Try reconfiguring the language. If the error persists, the language file is corrupted. Replace the network box.

NOTE TO DEALERS:
Unless a module has a visible defect or can be replaced from stock, dealers are advised to exchange the entire HP ScanJet 4Si scanner unit (see Chapter 1, "Express Exchange Program.")

Control Panel Status/Error Message	Description	Recommended Action
Internal error (120) ScanJet 4Si halted	HP ScanJet 4Si scanner has reached the maximum number of destinations or configurations.	If the error message shows up **just after booting** there are too many destinations or print queues defined. 1. Run HP ScanJet 4Si Administrative Software to remove some of them from the scanner configuration and reset the network scanner. If the error message shows up **when the MENU or START key is pressed** for the selected destination, it means that the destination has too many settings defined for the network scanner. 1. Run the ScanJet 4Si Network Utility Software to remove some settings and reset the network scanner.
Internal error (121) ScanJet 4Si halted	Internal error.	Power cycle the scanner. If the problem persists, replace the network box.
Internal error (122-124) ScanJet 4Si halted	Error accessing internal scanner memory.	Power cycle the scanner. If the problem persists, replace the network box.
Internal error (125) Press any key...	The diagnostic module did not run correctly.	Power cycle the scanner. If the problem persists, replace the network box.
Internal error (211) ScanJet 4Si halted	Internal memory error	Execute the following steps 1. Turn the scanner and network box off and then on again. 2. Check the current user settings, reducing the resolution/scaling in order to reduce the amount of data generated. 3. If the problem persists, replace the network box.

NOTE TO DEALERS:
Unless a module has a visible defect or can be replaced from stock, dealers are advised to exchange the entire HP ScanJet 4Si scanner unit (see Chapter 1, "Express Exchange Program.")

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Control Panel Status/Error Message	Description	Recommended Action
Invalid destination (109) Press any key.	The destination selected does not exist.	The NetWare user (OT_USER) is no longer defined in the server bindery. 1. Run HP ScanJet 4Si Administrative Software to remove the destination name from the network scanner user pool 2. Reset the scanner.
Legal paper selected	The document you have selected to scan is on legal-size paper.	No action needed.
Letter paper selected	The document you have selected to scan is on letter-size paper.	No action needed.
Network error (150-153)	There is a problem with the network. **150:** Error loading or connecting to the network stack (Ethernet) Problem accessing ring (Token Ring only) **151**: Problem reading connection status or setting the connection as primary **152:** Error initializing SNMP or when MIB is registered **153:** Error initializing SAP	1. Power cycle the scanner 2. *Token Ring networks*: Check if the network cable is connected. 3. If the error persists, replace the network box.

NOTE TO DEALERS:
Unless a module has a visible defect or can be replaced from stock, dealers are advised to exchange the entire HP ScanJet 4Si scanner unit (see Chapter 1, "Express Exchange Program.")

Control Panel Status/Error Message	Description	Recommended Action
Network error (155) Press any key...	Error locking the file on the server.	If the **error occurs at boot time,** the file HPSSCAN\ HPSSUSRS.CFG is locked by some other process on the network (HP ScanJet 4Si Administrative Software or the HP ScanJet 4Si Utility software). 1. Power cycle the scanner. 2. If the error persists, remove the file lock with NetWare administrator tools or check if the file is not there. If the **error occurs at run time,** the locked file in the private or the system CONFIGS.CFG file. To solve the error, repeat steps 1 and 2 above. Check if the following files exist and are not locked: HPSSCAN\CONFIGS.CFG, HPSSCAN\HPSSUSRS.CFG, HPSSCAN\USERS\<workarea> \CONFIGS.CFG
Network error (156) Press any key...	Cannot open private configuration file.	1. Ensure that a file called CONFIGS.CFG exists in the selected destination workarea. 2. Ensure the scanner has the READ trustee in the selected destination workarea. If not, run HP ScanJet 4Si Administrative Software to delete and reassign the same destination to the network scanner. 3. Ensure the file is not locked. Ask network administrator to remove the destination user with HP ScanJet 4Si Administrative Software, delete the workarea and recreate the same user.

NOTE TO DEALERS:
Unless a module has a visible defect or can be replaced from stock, dealers are advised to exchange the entire HP ScanJet 4Si scanner unit (see Chapter 1, "Express Exchange Program.")

5 Problem Solving

Control Panel Status/Error Message	Description	Recommended Action
Network error (157) Press any key...	The scanner found an error synchronizing date & time with the server. Error reading server date & time	1. Check if the server date and time clock is working correctly. 2. Check if the network scanner object still exists in the server bindery. Server date and time is used to generate HPS file names; if the read fails no name is generated.
Network error (158) Press any key...	Cannot generate an unique file name for a scanner document on the server disk	Check if the server date and time are correctly set. This error happens if the server clock has been set to a value back in time. 1. Force the network administrator to set the server clock at the right time: today, now! Going backward in time could mean that the same filenames are generated. When an HPS file is created and a file with the same name exists, the creation fails.

NOTE TO DEALERS:
Unless a module has a visible defect or can be replaced from stock, dealers are advised to exchange the entire HP ScanJet 4Si scanner unit (see Chapter 1, "Express Exchange Program.")

Control Panel Status/Error Message	Description	Recommended Action
Network error (159) Press any key...	Error opening the HPS file at the end of the pages transmission. At the beginning of the transmission the HPS file is created and locked. When all the pages are sent, the HPS file is opened and filled with pages information. The error is generated if the open fails	1. Ensure the workarea owned by the selected destination still exists on the server disk. 2. Check if the server disk is full. 3. Check if the maximum available disk space for the workarea owner has been reached. 4. Check if the scanner has CREATE, WRITE, FILESCAN, and READ permissions in the workarea owned by the selected destination. 5. If the trustees have been removed, add them using NetWare tools or run HP ScanJet 4Si Utility and reassign the same user/destination to the network scanner. 6. Check if the network scanner object still exists in the server bindery.
Network error(160) Press any key ...	Error creating or opening file on the server disk. This error happens when a file cannot be created in the destination workarea	1. Ensure the workarea owned by the selected destination still exists on the server disk. 2. Check if the server disk is full. 3. Check if the maximum available disk space for the workarea owner has been reached. 4. Check if the scanner has CREATE, WRITE, FILESCAN, and READ permissions in the workarea owned by the selected destination. 5. If the trustees have been removed, add them using NetWare tools or run HP ScanJet 4Si Utility and reassign the same user/destination to the network scanner. 6. Check if the network scanner object still exists in the server bindery.

NOTE TO DEALERS:
Unless a module has a visible defect or can be replaced from stock, dealers are advised to exchange the entire HP ScanJet 4Si scanner unit (see Chapter 1, "Express Exchange Program.")

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Control Panel Status/Error Message	Description	Recommended Action
Network error (161) Press any key...	Error writing the contents of a page file (TIFF file)	1. Ensure the workarea owned by the selected destination still exists on the server disk. 2. Check if the server disk is full. 3. Check if the maximum available disk space for the workarea owner has not been reached. 4. Check if the scanner has CREATE and WRITE permissions in the workarea owned by the selected destination. 5. If the trustees have been removed, add them using NetWare tools or run HP ScanJet 4Si Utility and reassign the same user/destination to the network scanner. 6. Check if the network scanner object still exists in the server Bindery. 7. If this error shows up at boot time, ensure the HPSSUSRS.CFG file exists under the HPSSCAN directory on volume zero.
Network error (162) Press any key...	The private file holding settings is corrupted. One of the following keyword has not been found in the private configuration file: "PConf," "TConf," or "Lock."	1. Run the HP ScanJet 4Si Utility software to see if private configurations are read correctly. 2. Delete destination user with HP ScanJet 4Si Administrative Software, remove the workarea and create the user again. 3. Open the HPSSCAN\ USERS\<workarea> \CONFIGS.CFG and check if the keywords exist, and if they are correctly set.
Network error (163) Press any key...	Network card diagnostic failed.	Power cycle the scanner. If the problem persists, replace the network box.

NOTE TO DEALERS:
Unless a module has a visible defect or can be replaced from stock, dealers are advised to exchange the entire HP ScanJet 4Si scanner unit (see Chapter 1, "Express Exchange Program.")

Control Panel Status/Error Message	Description	Recommended Action
Network error (164) Press any key...	Impossible to read primary volume name from network server.	1. Power cycle the scanner. 2. Check server primary volume status and name. Preferred name is "SYS". 3. Ensure the volume 0 has a valid name
Next page? Continue=<l> Stop & Save = \/ Abort= //	The scanner is asking the user to insert the next page on the scanner glass and to press an appropriate key to continue.	Press <l> to continue, \/ to stop and save the data, or // to abort and lose the data.
Next side? Continue=<l> Stop & Save = \/ Abort= //	The scanner is asking the user to press an appropriate key to continue your duplex job.	Press <l> to continue, \/ to stop and save the data, or // to abort and lose the data.
No paper feeder	The ADF is not properly connected.	1. Check all cable connections. 2. Try turning the scanner off and on again. 3. If error persists: it is not clear if the problem is in the ADF or the scanner. The entire unit should be exchanged.
No preferred setting (107) Press any key...	The preferred configuration is undefined, missing, or corrupted.	Select a preferred setting on the control panel. If you would like to scan in the future without selecting a setting at the control panel, select a setting as preferred following the instructions in Chapter 2. 1. Find preferred configuration name (PConf) and attribute (TConf) from the private configuration file (HPSSCAN\ USERS \<workarea> \CONFIGS.CFG) and check if the configuration is defined. 2. If the preferred configuration is not defined, assign to PConf a name of some system configuration and try again to see if the error still appears.

NOTE TO DEALERS:
Unless a module has a visible defect or can be replaced from stock, dealers are advised to exchange the entire HP ScanJet 4Si scanner unit (see Chapter 1, "Express Exchange Program.")

Control Panel Status/Error Message	Description	Recommended Action
No settings found (106) Press any key...	There are no settings for the user (destination) selected. All the configurations owned by the selected user are corrupted and there are no system configurations.	Run HP ScanJet 4Si Administrative Software to define at least one system setting, which will be visible to all the users/destinations. 1. Remove the user from the network scanner user pool and erase his/her workarea. 2. Assign the user again to the network scanner and see if the error is resolved. 3. If the error is not resolved, erase the HPSSCAN\ CONFIGS.CFG (system configurations) file and use HP ScanJet 4Si Administrative Software to create a new one.
No users found	No users have been associated with the scanner. The network scanner doesn't have any assigned user because the user pool is empty or because all the users have some configuration problem	The scanner must have at least one user/destination. 1. Run the HP ScanJet 4Si Administrative Software and designate a user/destination (see Chapter 2). 2. If users have been defined and no users are loaded from the network scanner it is a configuration problem. All the user workareas must be erased, together with the HPSSUSRS.CFG file. 3. Unconfigure the scanner with the special key combination: PAPER SIZE, DUPLEX and LEFT ARROW. 4. Reinitialize the system with HP ScanJet 4Si Administrative Software.
Open the cover and remove the paper	After a Stop or Abort command, the scanner is asking the user to remove the paper from the ADF.	Remove the paper.

NOTE TO DEALERS:
Unless a module has a visible defect or can be replaced from stock, dealers are advised to exchange the entire HP ScanJet 4Si scanner unit (see Chapter 1, "Express Exchange Program.")

Control Panel Status/Error Message	Description	Recommended Action
Pages copied:	The scanner has finished copying your document and lists the total number of pages copied.	No action needed.
Pages scanned:	The scanner has finished scanning your document and lists the total number of pages scanned.	No action needed.
Paper jam! Open the cover & remove paper (204)	A sheet of paper is jammed in the ADF.	Remove the paper following the instructions earlier in this chapter. Replace the ADF and control panel.
Paper size selected from desktop	Any paper selection made at the control panel is lost because the user selected a setting with a custom paper size at the desktop.	No action needed.
...please wait	Internal error booting the system	Power cycle the scanner. If the problem persists, replace network box**.**
Press any key	The scanner is waiting for the user to press a key to confirm an action.	Press the appropriate key.
Press menu to select	A message within the configuration menus prompting the system administrator to select a parameter.	Select the desired parameter; see Chapter 2 for more information on using the configuration menus.

5 Problem Solving

NOTE TO DEALERS:
Unless a module has a visible defect or can be replaced from stock, dealers are advised to exchange the entire HP ScanJet 4Si scanner unit (see Chapter 1, "Express Exchange Program.")

Control Panel Status/Error Message	Description	Recommended Action
Printer not found (110) Press any key...	The printer selected is no longer available. A print queue has been assigned to the network scanner and then removed using NetWare tools.	Run NetWare command PCONSOLE to check if the print queue has been deleted or removed. 1. If it was deleted, recreate the print queue and assign it to the scanner using HP ScanJet 4Si Administrative Software. 2. Run NetWare PCONSOLE to check if the scanner has been removed from the list of queue users. If so, run HP ScanJet 4Si Administrative software to reassign the print queue to the scanner.
Ready: press menu to select destination	The system is ready and is waiting for you to press the Menu key to start the destination selection phase.	Press Menu to select the destination where you want to send the scanned document.
Rebooting... (101)	The scanner is rebooting.	No action required.
Reinsert it Continue <l> Stop ∨ Abort //	The scanner is asking the user to place paper in the ADF.	Place paper in the ADF and press either <l> to continue, ∨ to stop and save and save the data, or // to abort and lose the data.
Reinsert the paper!	The user pressed "Continue" after the first side of a duplex (2-sided) job was scanned without reinserting the paper.	Insert the paper.
ScanJet 4Si unconfigured (address) (102)	The scanner has not been connected to the server.	See instructions in Chapter 2. If the control panel does not display a network address, ensure the following: 1. Network cable is attached properly and the network box is on. 2. Frame type used by the scanner is the same as that used by your LAN. 3. Token Ring speed used by the scanner is the same as that used by your LAN.

NOTE TO DEALERS:
Unless a module has a visible defect or can be replaced from stock, dealers are advised to exchange the entire HP ScanJet 4Si scanner unit (see Chapter 1, "Express Exchange Program.")

Control Panel Status/Error Message	Description	Recommended Action
Scanner error (201) ScanJet 4Si halted	Error initializing the scanner	Execute the following steps 1. Turn off the scanner and network box. 2. Check the SCSI cable between the scanner and the network box. 3. Turn on the scanner and network box. If the problem persists: it is not clear if the problem is in the scanner or network box. The entire unit should be exchanged.
Scanner error (205) ScanJet 4Si halted	Scanner element failed to return to home position	Execute the following steps 1. Turn off the scanner and turn it on again to clear the error. 2. If problems persist, replace the scanner base.
Scanner error (206) ScanJet 4Si halted	The lamp did not achieve the required intensity for proper scanning	Execute the following steps 1. Turn off the scanner and turn it on again to clear the error. 2. If problems persist, replace the scanner base.
Scanner error (207) ScanJet 4Si halted	The connected scanner is an unknown model.	The user is trying to use a scanner that is not the correct HP-issued scanner.
Scanner error (208) ScanJet 4Si halted	Internal memory error.	Execute the following steps 1. Turn off the scanner and turn it on again to clear the error. 2. If problems persist, replace network box.
Scanner not connected(202) ScanJet 4Si halted	Communication problems with the scanner. The scanner is not connected to the network box.	Execute the following steps 1. Turn off the scanner and turn it on again to clear the error. 2. If the problem persists: It is not clear if the problem is in the scanner or network box. The entire unit should be exchanged.

NOTE TO DEALERS:
Unless a module has a visible defect or can be replaced from stock, dealers are advised to exchange the entire HP ScanJet 4Si scanner unit (see Chapter 1, "Express Exchange Program.")

5 Problem Solving

Control Panel Status/Error Message	Description	Recommended Action
Scanner problems	The scanner is not communicating properly.	1. Turn the scanner off, wait 10 seconds, and turn the scanner back on. 2. Power cycle the network box. 3. Make sure that the SCSI cable between the scanner and the network box is connected.
Scanning back page	The scanner is currently scanning the back of a two-sided page.	No action needed.
Scanning front page	The scanner is currently scanning the front of a two-sided page.	No action needed.
Scanning page	The scanner is scanning a page.	No action needed.
Self-test Fail XY	The control panel is not working.	Replace the control panel and ADF.
Self-test Initializing...wait	The control panel is working but there is something wrong with the connection to the network box.	1. Ensure the cable connecting the control panel with the network box is properly plugged in. 2. If the problem persists: It is not clear if the problem is in the control panel or network box. The entire unit should be exchanged.
Setting:	The predefined setting selected appears next to this prompt.	No action needed.
Single-sided selected	You have selected to scan a single-sided (simplex) document.	No action needed.
Stop & Save	The scanner is asking if the user would like to stop scanning and save the data.	Confirm this action by following the instructions on the control panel
Stopped and saved!	The user chose to stop the scanning job but save the data.	No action needed.
Stopped!	The user stopped the copying job.	No action needed.
Stopping & saving...	The scanner is terminating the scanning job and saving the data.	No action needed.

NOTE TO DEALERS:
Unless a module has a visible defect or can be replaced from stock, dealers are advised to exchange the entire HP ScanJet 4Si scanner unit (see Chapter 1, "Express Exchange Program.")

Control Panel Status/Error Message	Description	Recommended Action
Stopping...	The scanner is terminating the scanning job.	No action needed.
To:	The destination selected follows this prompt.	No action needed.
Transmitting data... please wait	The scanner is transmitting data.	Wait before scanning another item.
Waiting to attach... (server name) (103)	The scanner is talking to the server. The scanner is configured to attach to the specified server, but the server does not answer.	Wait to begin scanning. If the message persists, check the following: 1. If the server name printed on the second line of the control panel exists and that the server itself is up and running. 2. If the network cable is plugged in to the back of the scanner, and that the LED is on (Ethernet only). 3. If the frame type used by the scanner is the same frame used by your LAN. Use the scanner's configuration menu, as shown in Chapter 2. 4. If you LAN is Token Ring check if the speed used by the scanner is the same one used by your LAN. Use the scanner's configuration menu, as shown in Chapter 2. 5. Check if the maximum number of licensees for the server has been reached. 6. Use special key combination (PAPER SIZE, DUPLEX AND LEFT ARROW) to change the unit back to the unconfigured state and reconfigure it.

NOTE TO DEALERS:
Unless a module has a visible defect or can be replaced from stock, dealers are advised to exchange the entire HP ScanJet 4Si scanner unit (see Chapter 1, "Express Exchange Program.")

Control Panel Status/Error Message	Description	Recommended Action
Waiting to login (scanner name)	The scanner is identifying itself to the server. The network scanner is configured, but the network scanner object is unknown to the server.	Wait to begin scanning. If the message persists, check the following: 1. If the scanner name shown on the second line of the control panel is the same name given to the scanner in the HP ScanJet 4Si Administrative Software. 2. If the server where the scanner is trying to log on has reached the maximum number of allowed connections. 3. If the scanner object has been removed from the server bindery. In this case the scanner does not show up in the HP ScanJet 4Si Administrative Software. 4. Use special key combination (PAPER SIZE, DUPLEX AND LEFT ARROW) to change the unit back to the unconfigured state and reconfigure it.

NOTE TO DEALERS:
Unless a module has a visible defect or can be replaced from stock, dealers are advised to exchange the entire HP ScanJet 4Si scanner unit (see Chapter 1, "Express Exchange Program.")

HP ScanJet 4Si Administrative Software Messages

This table lists and describes errors you may have while working with the HP ScanJet 4Si Administrative Software software and recommends possible solutions to each error.

Problem or Message	Error Description	Recommended Action
HP ScanJet 4Si Administrative Software won't start up	HP ScanJet 4Si Administrative Software does not support a version of software you are using.	Ensure you are using supported software: - Windows 3.1x, Windows for Workgroups 3.11, and Windows '95 - NetWare shell NETX V3.26 or above - NWNETAPI.DLL 1.30 - IPX V3.10 or above - IPXODI V1.20 or above (only if using ODI) - NWIPXSPX.DLL V1.32
	Insufficient memory.	Free as much memory as possible by closing other applications. Try starting HP ScanJet 4Si Administrative Software again.
	IPX protocol is not correctly installed.	Ensure your software versions are supported by HP ScanJet 4Si Administrative Software. Ensure you've installed and loaded the NetWare protocol stack software components. Check if the versions you're using are supported by HP ScanJet 4Si Administrative Software.
	NetWare is not correctly loaded.	1. Ensure your installation of the NetWare client software is complete. Make sure you've regularly downloaded all of the software. 2. Ensure your software versions are supported by HP ScanJet 4Si Administrative Software. 3. If you have a multi-network environment, verify that NetWare is one of the activated NOSs.
	While configuring network scanners on a NetWare 4.x server, you get an error message referring to system directories or file creation .	Log in from outside HP ScanJet 4Si Administrative Software. Older Novell VLM versions can have problems with NetWare 4.x file servers. The current release with NetWare 4.x is 1.20 Novell VLMs. You can check your version from the DOS prompt by typing `VLM/?`. If this does not work, try unconfiguring the affected scanner, then configuring it again.

Problem or Message	Error Description	Recommended Action
HP ScanJet 4Si Administrative Software won't start up (continued)	While logging into a NetWare 4.x server from HP ScanJet 4Si Administrative Software you get an "Attempt to log in to the file server failed" message.	Log in from outside HP ScanJet 4Si Administrative Software. Older Novell VLM versions can have problems with NetWare 4.x file servers. The current release with NetWare 4.x is 1.20 Novell VLMs. You can check your version from the DOS prompt by typing VLM/?. If this does not work, try unconfiguring the affected scanner, then configuring it again.
	Network scanner list does not display one or more scanners you expected to find or scanner name disappears from list after setting or changing its configuration.	1. Look at the missing scanner's control panel. If the display says "Rebooting...," wait for this phase to be completed and then refresh the HP ScanJet 4Si Administrative Software screen (View/Refresh menu, or F5 key). Note any error messages on the control panel and refer to the appropriate section in this table. 2. If the control panel is blank, make sure the scanner is turned on (check both the power switches). Make sure all of the connections are in place for both the scanner and the network box. 3. If this does not work, try unconfiguring the affected scanner, then configuring it again.
Insufficient memory.	There's not enough memory either to run HP ScanJet 4Si Administrative Software or to do a specific operation.	Free as much memory as possible by closing other applications. Try operation again.
System file may be corrupted. Missing information about user XXX on server YYY.	There is a corrupted system file that contains information for the designated user on the designated server.	Use HP ScanJet 4Si Administrative Software's Scanner/Users/Properties to build the correct data structures for the user.
The system settings file is missing, corrupted or empty.	The system settings file has been illegally deleted or edited.	Use HP ScanJet 4Si Administrative Software's Server/Settings and HP installation/upgrade toolkit to rebuild the file.

Problem or Message	Error Description	Recommended Action
This operation requires Supervisor-equivalent privileges. Attempt to log in to the file server failed.	This operation requires a log in on the affected server with Supervisor-equivalent rights.	Check the user name and password you've input to HP ScanJet 4Si Administrative Software. Use HP ScanJet 4Si Administrative Software's Server/Connect to log into the server as a user with Supervisor equivalency. If the server runs NetWare 4.x, check to ensure that at least one user is defined with supervisor equivalency.
This operation requires you to be logged in. Attempt to attach to the file server failed.	This operation requires a log in on the affected file server.	Use HP ScanJet 4Si Administrative Software's Server/Connect to log into the server. 1. Check the network link to the server. 2. Check if the server is correctly up and running.
This scanner is no longer responding to network commands.	A network command/request sent from HP ScanJet 4Si Administrative Software was not acknowledged by the scanner.	Check if the scanner is on and running correctly. Try operation again.
This server already contains a set of users and printers associated with this name.	You are asking to assign a scanner a name already existing in the server internal database.	Do not use the same name for different scanners. However, answer YES if you're reinstalling a repaired/replaced scanner.
Unable to add directory's trustee rights.	HP ScanJet 4Si Administrative Software is not able to assign all the necessary access permissions to a user's Work Area (Note: the user's name is displayed at top of the message).	Work Area may have been deleted by mistake. Remove the user from all the network scanners on that server, then add the user again.
Unable to copy user's file <filepath>.	HP ScanJet 4Si Administrative Software can't copy one of the user files when the Work Area is moved to a different volume.	Check if the server is on and running correctly, if it is linked to the client system where HP ScanJet 4Si Administrative Software is being executed. Ensure there is enough storage room for the files to copy on the destination volume. Check the volume's media integrity.
Unable to create system directory <directory path>.	HP ScanJet 4Si Administrative Software can't create one of the system directories.	Check if the server is on and running correctly, if it is linked to the client system where HP ScanJet 4Si Administrative Software is being executed. Ensure the volume 0 is not out of space.

Problem or Message	Error Description	Recommended Action
Unable to create the object in the bindery.	HP ScanJet 4Si Administrative Software can't create the scanner object on the server.	Check if the server is on and running correctly, if it is linked to the client system where HP ScanJet 4Si Administrative Software is being executed.
Unable to find a settings file on this path.	The file selected is not recognized format.	Check the file path you selected.
Unable to read from NetWare bindery.	HP ScanJet 4Si Administrative Software can't read from the scanner object on the server.	Check if the server is on and running correctly, if it is linked to the client system where HP ScanJet 4Si Administrative Software is being executed. If you have some special NetWare tool allowing to deal with non-standard objects, the object may have been deleted or corrupted. In this case, unconfigure the affected scanner, and configure it again.
Unable to remove the object from bindery.	HP ScanJet 4Si Administrative Software can't delete the scanner object on the server.	Check if the server is on and running correctly, if it is linked to the client system where HP ScanJet 4Si Administrative Software is being executed. If you have some special NetWare tool allowing to deal with non-standard objects, the object may have been deleted or corrupted.
Unable to write bindery property.	HP ScanJet 4Si Administrative Software can't change the contents of a scanner object's property.	Check if the server is on and running correctly, if it is linked to the client system where HP ScanJet 4Si Administrative Software is being executed. If you have some special NetWare tool allowing to deal with non-standard objects, the object may have been deleted or corrupted. In this case, unconfigure the affected scanner, and configure it again.

HP ScanJet 4Si Utility Messages

This table lists and describes error messages you may receive while working with the HP ScanJet 4Si Utility and recommends possible solutions for each error.

HP ScanJet 4Si Utility Error Message	Error Description	Recommended Action
A network error occurred while trying to determine the work area status.	A network error occurred while trying to determine the work area status.	Ensure user network connections are present and server is accessible.
Cannot connect to file server specified in the NSUAPP.INI file.	HP ScanJet 4Si Utility has read the name of the server from the NSUAPP.INI file, but it is not possible to connect to the file server specified.	Check that the server name in the NSUAPP.INI file [Settings] section is the same one for which the user is configured. If the server is no longer valid, remove the value specified after the entry server.
Error in INI file: cannot find path for SSNETAPI.DLL	The SSNETAPI.DLL file cannot be found in the specified directory.	Check to see that the entry SSNETAPI_PATH in the NSUAPP.INI file points to the correct directory and that the SSNETAPI.DLL is in that directory.
Error Memory allocation error.	There is not enough memory for the application to run.	Close any other applications you have running and try to load the software again.
Error while enumerating scanners. Cannot proceed.	A list of scanners on which the user is configured cannot be obtained.	The settings file may be corrupt or the server may be inaccessible. Ensure user network connections are present and server is accessible.
Error while obtaining scanner status information.	The status of your preferred scanner cannot be determined.	Ensure user network connections are present and server is accessible.
Error while reading preferred setting. Cannot proceed.	The preferred setting cannot be read.	The settings file may be corrupt or the server may be inaccessible. Ensure user network connections are present and server is accessible.
Error while reading setting values. Cannot proceed	The current values for the setting cannot be read.	The settings file may be corrupt or the server may be inaccessible. Ensure user network connections are present and server is accessible.
Error while reading the system settings. Cannot proceed.	The system settings cannot be read from the file server.	The settings file may be corrupt or the server may be inaccessible. Ensure user network connections are present and server is accessible.

HP ScanJet 4Si Utility Error Message	Error Description	Recommended Action
Error while reading user settings. Cannot proceed.	System setting cannot be read from the file server.	The settings file may be corrupt or the server may be inaccessible. Ensure user network connections are present and server is accessible.
Error while trying to add the new setting.	The new setting cannot be added to your list.	The settings file may be corrupt or the server may be inaccessible. Ensure user network connections are present and server is accessible.
Error while trying to perform the requested operation in the work area status.	It is not possible to either lock or unlock your work area.	Ensure user network connections are present and server is accessible.
Error while trying to remove the selected setting.	The setting selected for removal cannot be deleted.	The settings file may be corrupt or the server may be inaccessible. Ensure user network connections are present and server is accessible.
Error while trying to set the new preferred scanner.	The new preferred scanner cannot be set.	Ensure user network connections are present and server is accessible.
Error while trying to set the new preferred setting.	The new preferred setting value cannot be set.	The settings file may be corrupt or the server may be inaccessible. Ensure user network connections are present and server is accessible.
Error while trying to update the setting values.	The new values for the setting cannot be saved.	The settings file may be corrupt or the server may be inaccessible. Ensure user network connections are present and server is accessible.
Failed to load SSNETAPI.DLL. Application cannot proceed.	Your computer cannot load this file.	Make sure you have enough memory to load a file of this size by loading an application you have in memory.
Generic error with SSNETAPI.DLL	A generic error has been detected while accessing resources on the file server or when transmitting data on the network.	Ensure user network connections are present and server is accessible.
HP ScanJet 4Si Utility does not start when Visioneer PaperPort desktop starts.	Visioneer PaperPort desktop cannot find or load HP ScanJet 4Si Utility application.	Check that the SYSTEM.INI file contains the entry NSU_EXECUTABLE_PATH in the section [MaxDrv] and that it contains a valid directory where NSUAPP.EXE is present. If the problem persists, close some applications to free memory.

HP ScanJet 4Si Utility Error Message	Error Description	Recommended Action
INI file missing from Windows directory. Cannot proceed.	The NSUAPP.INI file cannot be found in the Windows directory.	Create a new copy of the NSUAPP.INI file and save it in the Windows directory.
It is impossible to read the settings files on the server. They may be corrupted or unavailable.	Your settings file may be corrupt; HP ScanJet 4Si Utility cannot read the values for the settings.	Check to see if file is corrupted. If it is not possible to recover this file, recreate your custom settings. Make a backup copy of the new file to avoid having to do this procedure in the future.
NetWare not loaded	NetWare shell is not loaded with Windows.	Ensure that the SYSTEM.INI file specifies the network.drv entry.
Network shell error.	A generic error has been detected by the NetWare shell on your system.	Ensure user network connections are present.
No preferred setting has been specified. This may cause problems when scanning. Please specify one.	This message appears if your preferred setting is no longer available, and the application cannot set a preferred setting for you.	Select a preferred setting from the list of available settings. If user does not have any available settings, configure preferred settings for user.
No scanner is configured for this user. The application cannot proceed.	HP ScanJet 4Si Utility cannot find a network scanner that you are configured to work on.	Ensure the user is configured to work on a network scanner. Ensure the user has been configured for the file server on which he/she is logged in.
User not configured on server...	You are not configured to use the network scanner on the file server you are using.	Have the user log on to a different server where he/she is configured or configure the user for the file server he/she is using.
User not logged in on server...	You are not logged onto any NetWare file server.	Have the user log on to a NetWare file server configured to use the scanner.

Visioneer PaperPort Error Messages

This table lists and describes error messages you may receive while working with the Visioneer PaperPort software and recommends possible solutions for each error.

Error Message	Recommended Action
An error was encountered while receiving a document.	Visioneer PaperPort cannot understand some of the pages it is attempting to scan. Try to scan document again.
Cannot load component <drive>\<directory>\ SSNETAPI.DLL required for network scanning.	Check to see that the entry SSNETAPI_PATH in the NSUAPP.INI file points to the correct directory and that the SSNETAPI.DLL is in that directory. Edit the SSNETAPI_PATH property in the [MaxDrv] section of the SYSTEM.INI with the full path to the SSNETAPI.DLL. Restart Windows and Visioneer PaperPort. If SSNETAPI.DLL is not present on the system, uninstall Visioneer PaperPort and reinstall it as a whole.
Cannot register with network scanning component because: <drive>\<directory>\ SSNETAPI.DLL does not have enough memory.	Close other applications to free memory. Close and restart Visioneer PaperPort.
Cannot register with network scanning component because: Windows does not have enough resources.	Close other applications to free memory. Close and restart Visioneer PaperPort.
Cannot register with network scanning component because: Windows does not have enough memory.	Close other applications to free memory. Close and restart Visioneer PaperPort.
Cannot register with network scanning component because: NetWare shell not loaded.	Close Visioneer PaperPort and Windows. Reboot your system with the NetWare network. Restart Windows and Visioneer PaperPort.
Cannot register with network scanning component because: user not logged on to file server.	Close Visioneer PaperPort. Log on to file server. Restart Visioneer PaperPort.
Cannot register with network scanning component because: user not configured to use a network scanner on current file server(s).	Close Visioneer PaperPort. Log on to file server where you are configured to use a network scanner. Restart Visioneer PaperPort. If user is not configured, set up user for network scanner use. See Chapter 2.
Could not access functions in <drive>\<directory>\ SSNETAPI.DLL.	Uninstall Visioneer PaperPort and reinstall it as a whole.

Error Message	Recommended Action
Document is corrupted and cannot be deleted.	Clean orphan pages and corrupted data structures using HP ScanJet 4Si Administrative Software. Rescan document.
Document is corrupted and cannot be received.	Clean orphan pages and corrupted data structures using HP ScanJet 4Si Administrative Software. Rescan document.
Document is momentarily locked and cannot be received. Retry later.	Share data structure may be locked by another user. Close and restart Visioneer PaperPort. If problem persists, try again later.
Internal error: S-<hexadecimal code>	Close and restart Visioneer PaperPort. If you receive the error again: Close and restart Windows and Visioneer PaperPort. If the error persists, reboot your system, log on to the network, and restart Windows and Visioneer PaperPort again.
Not enough memory available to receive document.	Close other applications to free memory. Try action again.
Windows does not have enough memory to load <drive>\<directory>\ SSNETAPI.DLL.	Close other applications to free memory. Close and restart Visioneer PaperPort.

6

Service and Support

Hewlett-Packard Service Worldwide

Hewlett-Packard products are sold and supported worldwide through Hewlett-Packard Sales and Service Offices and through dealers. There are more than 240 Hewlett-Packard Sales and Service Offices worldwide. To locate the nearest one, use your phone directory or call one of the Hewlett-Packard regional offices listed in this chapter.

Customer Support Options US and Canada		
Customer Support Assistance	(208) 323-2551 Mon-Fri 6 a.m. to 6 p.m. (Mountain Time) *Free of charge during the Warranty Period. Please have your serial number ready when calling.*	
	Post-warranty telephone assistance is available to answer your product questions. (900) 555-1500 *($2.50** per minute, US only)* or call (800) 999-1148 *($25** per call, Visa or Master Card, US and Canada)* Mon-Fri 7 a.m. to 6 p.m. and Saturday from 9 a.m. to 3 p.m. (Mountain Time) *Charges begin only when you connect with a support technician.*	
Obtaining Software Utilities and Electronic Information	**Phone:** (970) 339-7009	**Mail:** Hewlett Packard P.O. Box 1754 Greeley, CO 80632
	Fax: (970) 330-7655	
	Internet: Anonymous FTP: ftp.boi.external.hp.com	
	World-Wide Web: URL http://www.hp.com	
	HPBulletin Board Service: (208) 344-1691 and set your communication software to N,8,1	
	America On-Line: Type HP to start your tour, or call (800) 827-6364 and ask for representative 1118 to subscribe.	
	CompuServe: HP forum (GO HP), or call (800) 524-3388 and ask for representative #51.	
Accessories and Supplies	(800) 538-8787	
HP Support Assistant CD-ROM	This support tool offers a comprehensive online information system designed to provide technical and product information on HP products. To subscribe to this quarterly service in the US or Canada, call (800) 457-1762.	
To Locate HP Authorized Dealers	(800) 243-9816 (US) (800) 387-3867 (Canada)	
HP Authorized Dealer Support	(800) 544-9976 (dealers only)	
Parts and Manuals	(800) 227-8164 (US) (800) 387-3154 (Canada)	
HP Repair Contracts	(800) 743-8308 (US) (800) 268-1221 (Canada)	
Software Application Notes and Audio Tips		
HP FIRST*	(800) 333-1917 (208) 344-4809	

* HP FIRST (Fax Information Retrieval Support Technology) is a no-charge, 24-hour self-help service that provides answers to the most common questions about HP products. Through HP FIRST, you can receive ordering information, software application notes and printer driver update request forms. Simply dial the HP FIRST number from a touch tone phone connected with a Group 3 Facsimile machine and follow the voice prompts that guide you to select an index of available support and product documents.

** Prices subject to change without notice.

Customer Support Options Worldwide		
Customer Support Assistance (language options available)	Dutch	+31.20.681.64.73
	Danish	+31.20.681.61.71
	English	+31.20.682.82.91 or 0891 391 000
	Spanish	+31.20.581.33.19 or 906 39 10 00
	French	+31.20.681.82.60 or 3670 39 49
	German	+31.20.681.71.74
	Italian	+31.20.581.33.18
	Norwegian	+31.20.682.00.94
	Finnish	+31.20.681.12.14
	Swedish	+31.20.681.80.25
	Japanese	81 3 3335-8333
	Mexican	(+52 5) 326-45-00 or 91-800-50-198
Obtaining Software	Call HP First.	**World-Wide Web:** URL http://www.hp.com
Accessories and Supplies	Call HP First.	
HP Authorized Service	Call HP First.	
HP Dealer	Call HP First.	
Software Application Notes		
HP FIRST*	United Kingdom	0-800-96-02-71
	Netherlands	06-02-22-420
	Belgium (Dutch)	0800-1-1906
	Belgium (French)	0800-1-7043
	Germany	0130-8100-61
	France	05-90-5900
	Spain	900-993123
	Italy	1678-59020
	Switzerland (German)	155-1527
	Switzerland (French)	155-1526
	Austria	0660-8128
	Finland	9800-13134
	Norway	800-11319
	Denmark	800-10453
	Sweden	020-795743
	Taiwan	02-791-5589
	China	010-505-5280
	Japan	81 3 3335-8622
	English outside of U.K.	(31) 20-681-5792

HP Sales and Service Offices

Before calling an HP Sales and Service office, be sure to contact the appropriate Customer Support Center number listed in the previous table. To find a service-authorized HP dealer in the U.S., call (800) 752-0900. To find a service-authorized HP dealer outside of the U.S. contact one of the following offices:

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Argentina: Hewlett-Packard Argentina, S.A. Montaneses 2150 (1428) Buenos Aires Argentina Telephone: 541 787-7100 Fax: 541 787-7213	**Before calling an HP Sales and Service office, be sure to contact the appropriate Customer Support Center number listed in the previous table.**
Australia/New Zealand: Hewlett-Packard Australia Ltd. 31-41 Joseph Street Blackburn, Victoria 3130 Australia Telephone: 61 3 272-2895	**Austria:** Hewlett-Packard Ges.m.b.H. Lieblgasse 1 P.O. Box 72 A-1222 Vienna Austria Telephone: 43 222 2500-0
Belgium: Hewlett-Packard Belgium SA/NV Boulevard de la Woluwe, 100, Woluwedal B-1200 Brussels Belgium Telephone: 32 2 761 31 11	**Brazil:** Hewlett Packard Alameda Rio Negro 750 06454 - 000 Alphaville - Barueri - S.P. Brazil Telephone: 55 11 726-8000
Canada: Hewlett-Packard (Canada) Ltd. 17500 Trans-Canada Highway Kirkland, Quebec H9J 2X8 Canada Telephone: 1 514 697-4232 Hewlett-Packard (Canada) Ltd. 6877 Goreway Drive Mississauga, Ontario L4XX 1M8 Canada Telephone: 1 416 678-9430	Canadian Customer Information Center: 1 800 387-3867 HP Direct Marketing: 1 416 671-8383 Hardware Service: 1 800 268-1221 Customer Support Center (English service only): 1 208 323-2551

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China: China Hewlett-Packard Company 5-6/F, West Wing Office China World Trade Center No. 1, Jian Guo Men Wai Avenue Beijing, 100004, China Telephone: 86 10 505-3888 ext 8800	**Czech Republic:** Hewlett-Packard S.R.O. Novodvorska 82 14200 Praha 414 Czech Republic Telephone: 42 (2) 471 73 21
Denmark: Hewlett-Packard A/S Kongevejen 25 DK-3460 Birkerød Denmark Telephone: 45 45 99 10 00	**European Headquarters:** Hewlett-Packard S.A. Route du Nant-d'Avril 150 CH-1227 Meyrin 2 (Geneva) Switzerland Telephone: 41 22/780 81 11
Far East Area: Hewlett-Packard Asia Pacific Ltd. 17-21/. Shell Tower, Times Square 1 Matheson Street, Causeway Bay Hong Kong Telephone: 852 599-7777	**Finland:** Hewlett-Packard Oy Piispankalliontie 17 P.O. Box 68 SF-02200 Espoo Finland Telephone: 358 0/887 21
France: Hewlett-Packard France 28, rue Jacques Ibert BP 5820 75858 Paris CDEX 17 France Telephone: 33 (1) 40 89 77 00	**Germany:** Hewlett-Packard GmbH Herrenberger Strasse 130 W-7030 Böblingen Germany Telephone: 49 7031/14-0
Greece: Hewlett-Packard Hellas 62, Kifissias Avenue GR Maroussi-Athens 15125 Greece Telephone: 30 1 689 64 11	**Hungary:** Hewlett-Packard & Control Kft. Erzsebet kiralyne utja 1/c 1118 Budapest Hungary Telephone: 36 (1) 142 09 86
Italy: Hewlett-Packard Italiana S.p.A. Via Giuseppe di Vittorio, 9 I-20063 Cernusco sul Naviglio Milano Italy Telephone: 39 2/92 121	**Japan:** Hewlett-Packard Japan 3-29-21, Takaido-Higashi Suginami-Ku, Tokyo 168 Japan Telephone: 81 3 3335-8333 Fax: 81 3 3335-8338

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Norway: Hewlett-Packard Norge A/S P.O. Box 34 Østerndalen 16-18 N-1345 Østers Norway Telephone: 47 2 87 97 00	**Poland:** Hewlett-Packard Polska Sp. z o.o. Ul.Newelska Nr. 6 PL-01447 Warszawa Poland Telephone: 48 22 37 50 65
Portugal: Hewlett-Packard Portugal, S.A. Rua Gregrio Lopes, Lote 1732A 1400 Lisboa Portugal Telephone: 351 1-3017330	**Russia:** Hewlett-Packard Representative Office Pokrovski Blvd. 4/17 KV12 101000 Moscow Russia Telephone: 7095 923 50 01

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Sweden: Hewlett-Packard Sverige AB Skalholtsgatan 9 Box 19 S-164 93 Kista Sweden Telephone: 46 8/750 20 00	Switzerland: Hewlett-Packard (Schweiz) AG In der Luberzen CH-8902 Urdorf Switzerland Telephone: 01- 735 72 74 Fax: 01- 735 77 06
Taiwan: Hewlett-Packard Taiwan Ltd. 8F, 337 Fu-Hsing North Road Taipei, Taiwan R. O.C. Telephone: 886 2 712 0404	**Thailand:** Hewlett-Packard Thailand Ltd. 11th Floor, Pacific Place 140 Sukhumvit Road Bangkok, 10110 Thailand Telephone: 66 2 254-6720
Turkey: Hewlett-Packard Bilgisayar ve lm Sistemleri A.S. 19 Mayis cad.Nova/Baran Plaza K.12 (Headquarters) 80220 S is li-Istanbul Turkey Telephone: 90 1 224 59 25	**United Kingdom:** Hewlett-Packard Limited Cain Road Bracknell GB-Berkshire RG12 1HN United Kingdom Telephone: 44 344/360000
Venezuela: Hewlett-Packard de Venezuela, C.A. 3ra. Transversal, Los Ruices Norte Edificio Segre, Pisos 1, 2 y 3 Caracas 1071, D.F. Venezuela Telephone: 582 239-4133 Fax: 582 239-3080	

Appendix A

Frequently Asked Questions

Technical Questions

The following sections provide brief answers to some frequently asked questions about the HP ScanJet 4Si scanner. They are intended only as a guide for service and support engineers.

Key Dates:

- Ship release: October 2, 1995
- Introduction: November 1, 1995

General

Who designed the scanner and software?

HP designed the scanner with the help of a development partner. The software was developed in partnership with Visioneer.

Can I upgrade my current scanner to a ScanJet 4Si scanner?

No.

Is the scanner ready to operate when it comes out of the box?

The scanner requires some installation and configuration after you unpack it. The scanner does **not** come with a network cable. For complete information on package contents, as well as installation and configuration instructions, see Chapter 2.

Installation

Is there a simple installation utility to connect the scanner to the network?

The HP ScanJet 4Si scanner is easy to install. The network administrator, connected to the network with Supervisor equivalence, will be able to install the scanner with a few easy steps. For complete installation specifications, requirements, and information, see Chapter 2.

Are any training materials included with the scanner?

The scanner and software come with manuals (User's Guide, Administrator's Guide and Quick Reference Card). The scanner software also includes online help.

How much space does the software require on end-user PCs?

0.5 MB for remote installation and 8.5 MB for local installation. For complete installation specifications, requirements, and information, see Chapter 2.

Operating System/Software Support

Which Novell network types are supported?

- NetWare 3.1x or above (4.x in Bindery Emulation)
- IPX version 3.10 and above
- NetWare shell version 3.6 and above

For complete installation specifications, requirements, and information, see Chapter 2.

Will NetWare for UNIX work instead of standard NetWare?

No.

Does the scanner support 100 base VG?

No.

Will the scanner work if Windows is installed on the file server and not locally?

Yes.

What is the difference between a network shared installation and a local installation?

Speed—during application boot-up, a network installation will take more time. For more information about shared versus local installation, see Chapter 2.

Does the software require NLMs or ALMs?

No, the scanner software runs as a standard client application. For more information see Chapter 4.

What protocols does the scanner support?

- Ethernet (RJ-45)
- Token Ring (RJ-45/DB9)

For more information about network protocols, see Chapter 4. For information on scanner features and specifications, see Chapter 1.

Does the scanner support Windows 95?

Yes. The scanner software is compliant with but not certified for Windows 95. All the software for the HP ScanJet 4Si scanner can run on Windows 95; however, some features do not function in Windows 95. For more information about Windows 95 support, as well as other supported and non-supported software, see Chapter 1.

When will HP's scanners support other LANs, client operating systems, color, and other non-supported items?

HP is conducting market research to determine which of these and other items to support.

Network/Network Management

What network management utilities are provided, and do they have remote diagnostics?

The scanner comes with HP ScanJet 4Si Administrative software. Remote re-boot and status monitoring are possible.

Does the scanner support any other network management tools?

Any tool supporting SNMP will be able to pick up the scanner address and other similar tasks.

Does the scanner support SNMP and/or Open View?

Yes. The scanner supports SNMP. Open View also supports SNMP, and therefore, the scanner can be identified with it. However, Open View does not allow extensive control over the scanner. For more information on scanner features and specifications, as well as supported and non-supported software, see Chapter 1.

Is there an easy way to clean up or reinstall the scanner hard disk (after power loss, for example)?

Yes. Temporary files on the scanner hard disk are cleaned up at power up. Temporary files found on the file server can be cleaned up using the ScanJet 4Si Administrative software. For more information on cleaning up work area files, see Chapter 5.

Does the scanner have a MIB?

Yes, MIB-II, and a private network scanner MIB.

Can the scanner be managed through HP JetAdmin?

No. JetAdmin is currently designed for network printer management only.

Does the ScanJet 4Si support the NDS mode?

No. NetWare 4.x LANS are supported only in Bindery Emulation mode. However, the ScanJet 4Si can operate on a NetWare 4.x LAN because every NetWare 4.x server has the Bindery Emulation mode built in.

Is a toolkit available?

Yes. There are software developer toolkits available for both the network scanner (SSNet application interface) and for developing Visioneer links to your application.

Performance

How long can I expect the scanner to last?

The duty cycle will vary from scanner to scanner, depending on use, care, and maintenance. The scanner has a minimum duty cycle of 130,000 scans. The target duty cycle is 200,000 scans. The estimated mean-time between failure is 10,000 hours.

Will the software provided with the scanner compress scanned data?

Yes. The file scanned is compressed by the scanner firmware. The software application decompresses and recompresses data in its internal format. For more information on scanner data compression, see Chapter 4.

Can users scan documents directly to other users?

Yes. However, users have the ability to lock their names. Scanned items cannot be sent to a locked desktop. For more information on locking or unlocking a desktop or changing and overriding user settings, see Chapter 2.

Can a user prevent unwanted documents from being sent?

Yes. Users can lock their local work areas with the HP ScanJet 4Si Utility software. For more information on locking or unlocking a desktop or changing and overriding user settings, see Chapter 2.

What are the scanner settings?

The scanner comes with three preset settings:

- Best Text
- Best Text & Photo
- Best Photo

Users can create custom settings with the software provided. For more information on using and creating scanner settings, see Chapter 2.

How important is grayscale?

Grayscale can be important for DTP use, printing copies of color documents, and for some OCR applications. For these instances, grayscale is available as an optional setting. Users can create custom settings with the software provided. For more information on using and creating scanner settings, see Chapter 2.

What is data compression and when is it used?

G4 is a data compression algorithm that reduces files from 100 KB to 20 KB, depending on the content of the page. (For a comparison, fax machines generally use G3, a lower rate of compression). For grayscale information, the scanner uses Packbits compression. The scanner uses data compression to improve performance and reduce its impact on the network. For more information on data compression, see Chapter 4.

If everyone on my 10- to 20-person network starts using a network scanner for distributing documents, how will it affect file size and data storage?

Server disk usage is not normally significant because files are transferred to user areas (usually the user's c:\ drive) as soon as the client PC connects to the server. The amount of disk usage is affected by the following factors:

- how many scanned documents users maintain on their desktops
- whether users convert files to editable text via OCR
- the number of scans done at higher resolutions and 4-bit or 8-bit grayscale.

How will the traffic created by scanned images affect network performance?

The product will act like a common PC client, doing all of the core activity and buffering within the product itself and sending compressed data onto the network. Therefore, the network will not be heavily affected. The scanner has no NLM.

How big are the file sizes for scanned images? Does the file size create a problem for the LAN?

For most common scans (1-bit, 300 dpi), the rate of compression is 20-30% of the size of the original, and depends on the type of document being scanned. The space required from the network is no bigger than a standard word processing file. For more information on data compression and its effect on a network, see Chapter 4.

Where are files scanned to a desktop stored and managed?

Files can be stored on the server or on the client, depending on network setup.

What is the scanner's maximum data transfer rate?

The scanner will send at whatever rate can be sustained by the network.

What is the range of scan speeds?

The scanner and ADF can scan at up to 15 pages per minute. For 15 pages, it takes the scanner 2 minutes and 19 seconds, from the time the Go key is pressed until it arrives on the PC desktop. The speed also depends on the client PC.

What printers are compatible with the scanner?

All PCL5 printers or above.

Limitations

Why is the scanner limited to 20 users? Can more be added?

More than 20 users are difficult to scroll through/select from the scanner.
However, more users can be added by buying an additional user license directly
from Visioneer.

Service and Support

What is the scanner warranty?

The scanner has a 1-year Express Exchange warranty plus phone support from
HP's Customer Support Center. Additional options, such as on-site service, are
available. For more information on the Express Exchange program, see Chapter 1.

How will HP service the network scanner?

In the U.S. and most European countries, the scanner will be serviced by the
Express Exchange program. For more information on the Express Exchange
program, see Chapter 1.

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