

hp LaserJet 9000mfp

hp LaserJet 9000Lmfp



use

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Edition 1, 12/2002

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1 The basics

Congratulations on your purchase of the HP LaserJet 9000mfp/HP LaserJet 9000Lmfp (multifunction peripheral). If you have not done so, see the *start* guide provided with the product for setup instructions.

Now that the product is set up and ready to use, take a few moments to get to know the product. This chapter introduces the following:

- [Features and benefits of the product](#)
- [Helpful software for increased flexibility](#)
- [Help system](#)

Features and benefits of the product

The HP LaserJet 9000mfp/HP LaserJet 9000Lmfp is designed to be shared by a workgroup, and allows users to send black and white or color documents digitally, copy documents, and send print jobs to the product. The product is a standalone device and does not require connection to a computer. With the exception of network printing, you can select all functions at the product control panel.

Copying and sending

- modes for text, graphics and mixed text and graphics formats
- a job Interrupt feature (at copy boundaries)
- multiple pages per sheet (N-up layout)
- operator attendance animations (for example, paper-jam recovery)
- an auto-configure feature that matches output to product settings
- the ability to copy books
- e-mail compatibility
- a PowerSave feature that saves energy
- one-pass duplex scanning

Print cartridge

- supplies-status page with toner gauge, page count, and information about paper sizes used
- no-shake cartridge design
- authentic HP print cartridge detection
- automatic cartridge seal tab removal

Paper-handling options

- **Input**
 - **Tray 1 (multipurpose tray):** A multipurpose tray for paper, transparencies, labels, and envelopes. Holds up to 100 sheets of paper or 10 envelopes.
 - **Trays 2 and 3:** Two 500-sheet trays. These trays automatically detect standard paper sizes up to Ledger/A3 and allow printing on custom-size paper.
 - **Tray 4 (2000-sheet input tray):** This tray automatically detects standard paper sizes up to Ledger/A3 and allows printing on custom-size paper.
 - **Automatic Document Feeder (ADF):** Holds up to 100 sheets of paper.
 - **Duplex printing accessory:** Provides two-sided printing (printing both sides of the paper).
- **Output**
 - **ADF output:** Holds up to 100 sheets of paper.
 - **3000-sheet stacker:** Stacks up to 3000 sheets of paper.
 - **Bin 1** (face-up bin): Holds up to 125 sheets of paper.
 - **Bin 2** (face-down bin): Holds up to 3000 sheets of paper. The output bins are part of the output devices.
 - **3000-sheet stapler/stacker:** Provides multiposition stapling for up to 50 sheets of paper per job, or a maximum job height of 5.5 mm (0.22 inch).
 - **Bin 1** (face-up bin): Holds up to 125 sheets of paper.
 - **Bin 2** (face-down bin): Holds up to 3000 sheets of paper. The output bins are part of the output devices.
 - **Multifunction finisher:** Provides 1000 sheets of stacking capacity, stapling for as many as 50 sheets of paper per document, plus folding and saddle stitching of booklets that contain up to 10 sheets of paper.
 - **Stacker bin** (Bin 1): Holds up to 1000 sheets of paper.
 - **Booklet bin** (Bin 2): Holds up to 50 booklets.

Connectivity

- three enhanced input/output (EIO) expansion slots that support the following cards:
 - high-speed copy connection
 - hard disk
 - Fast Ethernet 10/100TX, which can be replaced with one of the following optional cards:
 - USB, Serial
 - LocalTalk
 - Ethernet (10Base-T, 10Base2)
 - Token Ring
- parallel connection
- an HP Fast InfraRed Connect (FIR)
- a Foreign Interface Harness (FIH) connection (AUX)
- an HP JetLink connector
- an HP Jetdirect print server

Environmental features

- PowerSave setting saves energy (meets ENERGY STAR® guidelines—HP LaserJet 9000mfp only)
- High content of recyclable components and materials in the product

Note See [“Protecting the environment” on page 238](#) for more information.

Firmware updates

Firmware updates provide the ability to upgrade the product firmware. To download the latest firmware, go to www.hp.com/go/lj9000_firmware and follow the instructions on the screen. To easily send firmware updates to multiple printers, use the HP Web JetAdmin software (go to www.hp.com/go/webjetadmin).

HP EIO hard disk

The EIO hard disk can be used to store selected print jobs, support RIP ONCE technology, and permanently store downloaded fonts and forms in the product. Unlike standard printer memory, many items on the EIO hard disk remain in the product even when the product is turned off. Fonts downloaded to the EIO hard disk are available to all users of the product.

The EIO hard disk can be write-protected through software for additional security.

Windows users

Use the HP Disk Management Utility to delete files and manage fonts on a mass storage device. See [“HP Disk Management Utility” on page 252](#). For more information, see the product software help.

Hewlett-Packard occasionally introduces new software tools for use with your product and accessories. These tools are available from the Internet. For more information, see the *introduce* guide on the compact disk (CD) that came with your product, or www.hp.com/support/lj9000 for the addresses of the HP website.

Macintosh users

Use the HP LaserJet Utility to download fonts and files. See [“HP LaserJet Utility \(Macintosh\)” on page 19](#) or the *HP LaserJet Utility Guide* online Help included with your HP LaserJet Utility software for more information.

Helpful software for increased flexibility

Windows software

System Administrator

- HP Common Installer
- HP Internet Installer
- HP Disk Image Utility
- HP Common Drivers

Client

- HP Common Installer
- HP Common Drivers

Macintosh software

System Administrator

- HP Common Installer
- HP Disk Image Utility
- HP Common Drivers Macintosh Client

Client

- PPDs/PDEs
- HP LaserJet Utility*
- Fonts*
- Help Files* (English only)

* These products are not supported in Traditional Chinese, Simplified Chinese, Korean, Japanese, Czech, Russian, and Turkish languages.

The drivers provided on the CD must be installed to take full advantage of the product features. The other programs are recommended, but are not required for operation. See the readme file for more information.

For network configuration and management, use the HP Web JetAdmin software, which is a server-based tool that system administrators can gain access to using a Web browser. For supported host systems and available languages or to download the software, go to www.hp.com/go/webjetadmin or use the link on the CD.

The most recent drivers, additional drivers, and other software are available from the Internet. Depending on the configuration of Windows-driven computers, the installation program for the product software automatically checks the computer for Internet access to obtain the latest software. If you do not have access to the Internet, see the *introduce* guide that came on the CD to obtain the most recent software.

Included with the product is a CD containing the HP LaserJet Printing System. On the CD are software components, documentation, and drivers that benefit users and system administrators. See the readme file for the most current information.

The CD includes software designed for end users and system administrators operating in the following environments:

- Microsoft® Windows® 9X and Windows Millennium Edition (Me)
- Microsoft Windows NT® 4.0 and Windows 2000
- IBM OS/2 version 3.0 or later (Web)
- Apple Mac OS 7.5 or later
- Linux (Web)
- AutoCAD™

The product system also includes software for system administrators using the following network operating systems:

- Novell NetWare 3.x, 4.x, or 5.x
- Microsoft Windows 9X and Windows Me
- Microsoft Windows NT 4.0, Windows 2000, and Windows Me
- Apple MAC OS (EtherTalk)
- Linux (Web)
- UNIX® (Web)

Network product installation for UNIX and other network operating systems is available from the Web or through a local authorized HP distributor.

Drivers

Drivers provide access to the product features and allow the computer to communicate with the product (by using a product language).

Drivers included with the product

The most recent drivers are available at www.hp.com/support/lj9000. Depending on the configuration of Windows-based computers, the installation program for the software automatically checks the computer for Internet access to obtain the latest drivers.

	PCL 5e	PCL 6	PS ^a
Windows 9X and Windows Me	✓	✓	✓
Windows NT 4.0 and Windows 2000	✓	✓	✓
Macintosh computer ^b			✓

- a. PostScript (PS) Level 3 emulation is referred to as PS throughout this user guide.
- b. Only PostScript Printer Description (PPDs) files are included. (See [“PostScript Printer Description Files \(PPDs\) and Printer Dialog Extension \(PDEs\)” on page 19](#)). If you need the Apple LaserWriter 8 printer driver, it comes with the Macintosh operating system (OS) or can be obtained directly from Apple.

Choose the right driver for your needs

Choose a driver based on the way you use the product.

- Use the PCL 6 driver to take full advantage of the product features. The PCL 6 driver is recommended unless backward compatibility with previous PCL drivers or older products is necessary.
- Use the PCL 5e driver if you want print results to look comparable to those from older products, or for font dual inline memory module (DIMM) support.
- Use the PS driver for compatibility with PostScript Level 3 needs.

The product automatically switches between PS and PCL printer languages.

For the Macintosh, use the Apple LaserWriter 8.6 or later printer driver, which is a PS driver.

Driver help

Each driver has help screens that can be activated using the Help button, the **F1** key, or the question mark symbol in the upper right corner in the printer driver (depending on the Windows operating system used). These help screens give detailed information about the specific driver. Printer driver help is separate from the software application help.

Additional drivers

You can obtain the following additional drivers by downloading them from the Internet, or by requesting them from an HP-authorized service or support provider. See www.hp.com/support/lj9000 for more information.

- OS/2 PCL5e and PCL 6 printer driver
- OS/2 PS2 printer driver
- AutoCAD

Note

If the required driver is not on the CD or is not listed here, check the software application installation disks or readme files to see if they include support for the product. If not, contact the software manufacturer or distributor and request a driver for the product.

Software for Windows

Use the system software to install the product. If you are installing the product on a network (Novell NetWare or Microsoft Windows network) from a Windows 9X, Windows NT 4.0, Windows 2000, or Windows Me system, the system software guides you through the installation process, and properly configures the network product.

Note If the product is used on a network, the network clients and servers must be properly configured to communicate on the network.

For additional network product configuration and management, use HP Web JetAdmin. HP Web JetAdmin is a browser-based management and should be installed only on the system administrator computer. For the latest list of supported host systems, visit HP Customer Care Online at www.hp.com/go/webjetadmin.

To gain access to the Windows driver

To configure the driver, gain access to it in one of the following ways:

Operating system	Temporarily change settings (from a software application)	Change default settings (across all software applications)
Windows 9X and Windows Me	From the File menu, click Print , and then click Properties . (The actual steps can vary; this is the most common method.)	Click the Start button, point to Settings , and then click Printers . Right-click the appropriate printer icon, and choose Properties .
Windows NT 4.0 and Windows 2000	From the File menu, click Print , and then click Properties . (The actual steps can vary; this is the most common method.)	Click the Start button, point to Settings , and then click Printers . Right-click and choose Document Defaults or Properties .

Note Settings in the driver and software application override control panel settings. (Software application settings override driver settings.)

Software for Macintosh computers

Apple LaserWriter driver, version 8.6 or later

The Apple LaserWriter 8.6 driver comes with the Mac OS, or can be obtained directly from Apple.

PostScript Printer Description Files (PPDs) and Printer Dialog Extension (PDEs)

PPDs, for OS 9 and earlier, in combination with the LaserWriter 8.6 printer driver, gain access to the printer features and allow the computer to communicate with the product. An installation program for the PPDs and other software is provided on the CD. Use the Apple LaserWriter 8.6 Driver that comes with the computer.

Use PDEs for OS X.

HP LaserJet Utility (Macintosh)

The HP LaserJet Utility allows control of features that are not available in the driver. The illustrated screens make selecting product features from the Macintosh computer easier than ever. Use the HP LaserJet Utility to do the following:

- customize the product control panel messages
- name the product, assign it to a zone on the network, download files and fonts, and change most of the product settings
- set a password for the product
- from the computer, lock out functions on the product control panel to prevent unauthorized access. (See the product software help)
- configure and set the product for internet protocol (IP) use
- initialize disk or flash memory
- manage fonts in random access memory (RAM), disk, or flash memory
- administer Job Retention features

See the HP LaserJet Utility Help for more information.

Fonts

Eighty screen fonts are installed that correspond with the PS fonts resident in the product.

Help system

At any time, you can gain access to the help system on the touch screen of the graphical display.

“What is this?” Help

The product provides information about any topic on the touch screen of the graphical display. On the top level screen, touch **Help**, and then touch **What is this?**. After touching **What is this?**, a pop-up dialog box asks you to “Touch any item for help.” After touching an item, a pop-up dialog box opens and displays information about the item you touched. After reading the information, touch a clear space on the screen to remove the **What is this?** pop-up dialog box.

On other levels of the touch screen, you can gain access to the Help system by touching **?**, located in the upper-right corner of each screen.

“Show me how” Help

Using **Show me how** Help, the product shows you how to use the product features.

- 1 Touch **Help**.
- 2 Touch **Show me how**. You can choose a topic from the Show Me How Index screen by using the scroll bar to highlight the required topic.
- 3 Touch **OK**.

Show me how also appears on a **What is this?** pop-up dialog box if the item you chose is a function that includes instructions. For example, if you touch **What is this?** Help, and then touch **Enhance**, you see a **Show me how** button in the pop-up dialog box. Touch the **Show me how** button for instructions about how to enhance your copies.

Print this topic

You can print any of the Show me how instructions by touching the **Print This Topic** button at the top of the Show Me How screen.

2 The control panel

Overview

The product control panel has a unique touch-screen graphical display that offers an integrated approach to copying, digital sending, and printing.

The control panel provides you with all the features you expect from a standard photocopier as well as printing and digital-sending capabilities. The control panel allows you to describe the features of the original document, specify any necessary modifications to the scanned image, and then select the features you want in the copy. For example, you can describe the original document as an A4-sized, duplexed, text document, then apply scaling or contrast changes you want in the copy. You can then select the copy options such as tray and paper size to be used for copying. The graphical display shows a representative image (page icon) of both your original document and the copy.

In addition, the control panel presents several menus that allow you to set system defaults, customize settings for a particular job, and store and retrieve printed and scanned jobs.

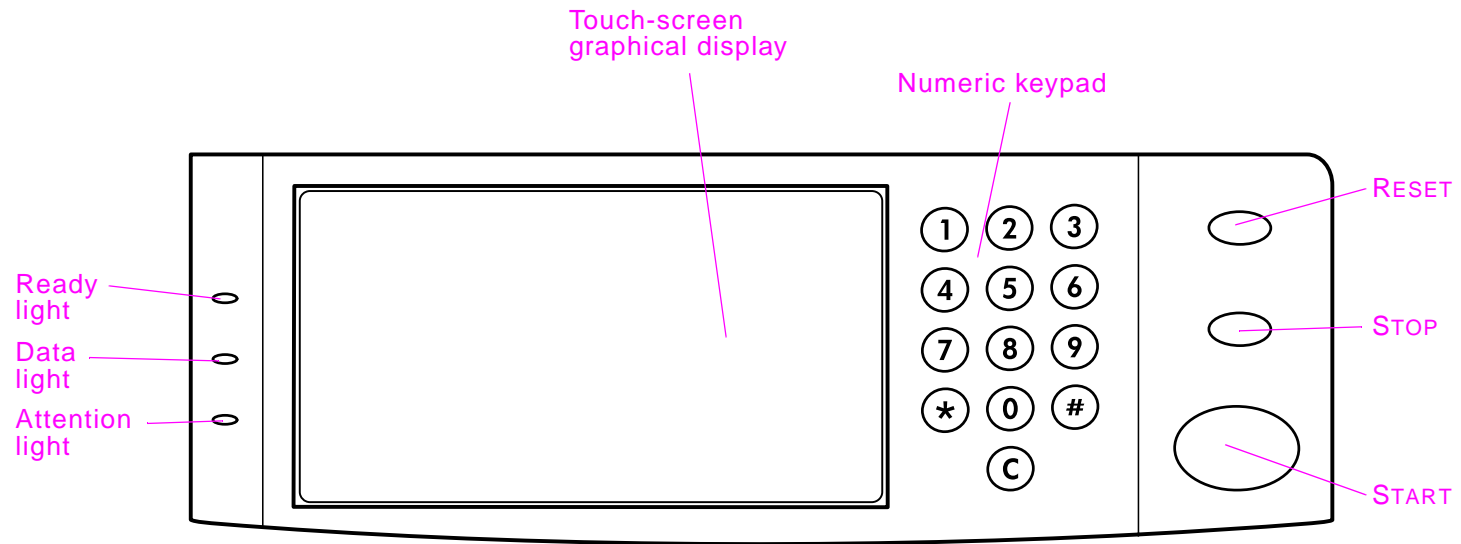
This chapter introduces the following control panel topics:

- [Control panel layout](#)
- [Control panel navigation](#)
- [Control panel default touch screen](#)
- [Interpreting control panel lights](#)

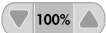


Specific control panel functions that pertain to sending, copying, and printing tasks are presented in later chapters.

Control panel layout

The control panel includes a touch screen graphical display, three job-control buttons, a numeric keypad, and three light-emitting diode (LED) indicator lights.

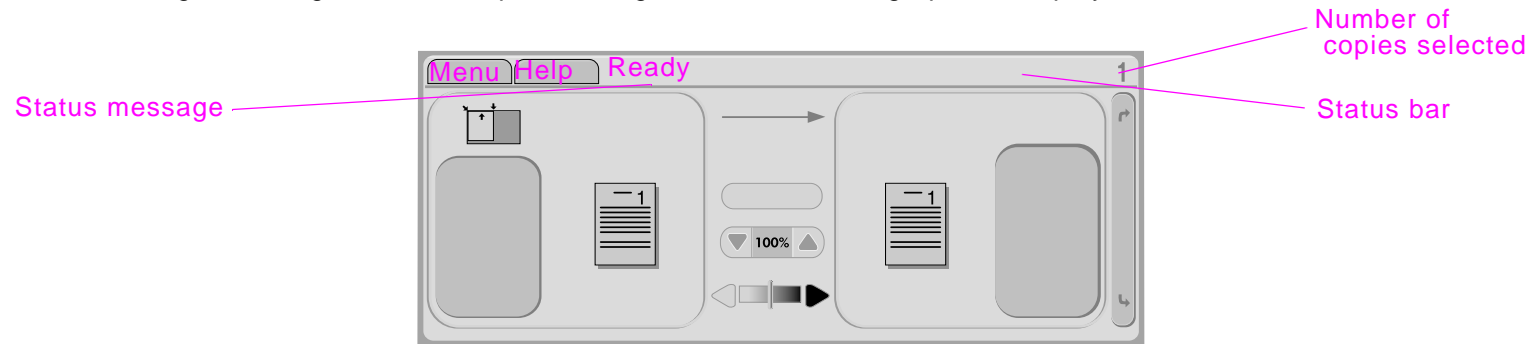


Control panel features

Features/Keys	Function
Status bar	Displays current device status, number of copies, menu and Help options.
Menu	Provides access to settings such as paper handling and device configuration.
Help	Provides access to “What is this?” or “Show me how” Help options.
Original	Displays settings describing the original document. The product can automatically detect the document size.
Copy	Displays settings describing the output features of the document.
Send Options	Allows you to send your documents via e-mail.
Reduce/Enlarge 	Reduces or enlarges the size of the copy.
Contrast Control 	Increases or decreases the brightness.
?	Allows you to gain access to “What is this?” Help. Embedded in the touch-screen menus.
Enhance 	Allows you to gain access to the screen that contains enhancement features.
RESET	Resets the job settings to factory or user-defined default values.
STOP	Cancels the active job.
START	Begins a copy job, starts digital sending, or continues a job that has been interrupted.
Numeric keypad	Allows you to type numeric values for number of copies required and other numeric values.

Control panel navigation

You navigate through the control panel using the touch-screen graphical display.



Status bar

The status bar is located at the top of the default touch-screen graphical display. The status bar displays Menu, Help, status messages, and the number of copies selected.

- Menu: Choose from a list of menus such as the **Information** menu and the **Paper Handling** menu.
- Help: Choose “What is this?” Help or “Show me how.” (See [See “Help system” on page 20.](#))
- Status messages: Shows the current status of the product, such as `Ready` or `Scanning Page 1.`
- Number of copies selected: Shows the current number of copies selected. The factory default setting is 1.

User-attention error messages are displayed in a pop-up dialog box that prohibits normal screen interaction until the message is cleared.

Cancel button

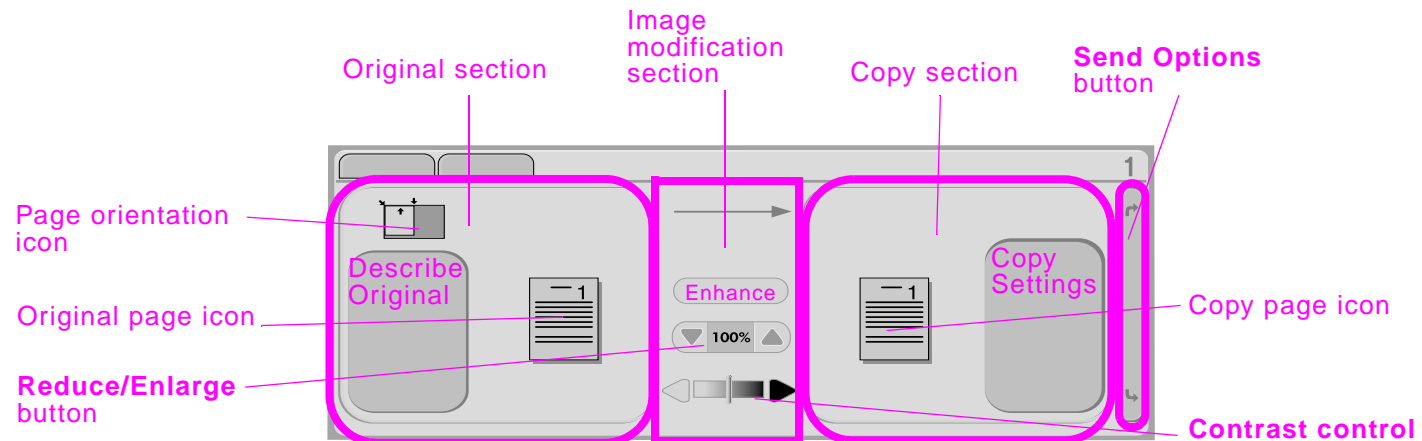
Each lower-level screen (any screen below the main screen) on the touch screen displays a **Cancel** button. Touching the **Cancel** button negates any changes you made, and takes you back to the previous screen.

OK button

Each lower-level screen on the touch screen displays an **OK** button. Touching the **OK** button accepts any changes you made, and takes you to the next screen.

Control panel default touch screen

The touch screen of the graphical display is divided into four sections: original, copy, image modification, and the **Send Options** button:



Original

The Original section on the main touch screen allows you to describe the characteristics of the original document. The Original section is divided into three components that describe the original being copied:

- **Page orientation icon:** Shows how the original should be placed on the glass or in the ADF. The paper size is automatically detected by the product when placed on the glass or in the ADF. You can override the auto-detect function by touching the **Describe Original** button and changing the size.
- **Describe Original button:** Displays the Original Settings screen where you can describe the original document.
- **Original page icon:** Displays the current settings in a graphical representation.

To describe an original

- 1 Touch the **Describe Original** button. The original settings screen appears on the touch screen.
- 2 Touch the settings that describe your document, such as size, page orientation, number of sides, and page content. The page icon shows the settings as you choose them.

Image modification

You can adjust the contrast using the **Contrast control**, and reduce or enlarge the image using the **Reduce/Enlarge** button, in this section of the graphical display. When touched, **Enhance** button exposes additional options for image modification.

Copy

The Copy section of the graphical display contains a copy page icon and the **Copy Settings** button.

- Copy page icon: Displays the current copy settings in a graphical representation.
- **Copy Settings** button: Displays the current copy settings and, when touched, allows you to change these settings.

Send Options

When touched, the **Send Options** button displays the digital sending options available to you. The e-mail function is standard on the product. Fax, folders, presets, and authentication are available only to customers who purchase the HP Digital Sender Module software.

The send options section overlays the copy and Image modification sections of the graphical display, but the original section and the **Contrast Control** bar still appear. The copy and image modification sections of the graphical display do not apply to digital sending.

Interpreting control panel lights

The control panel contains three indicator lights:

- Ready
- Data
- Attention

Light	Indication
Ready	
Off	The product is offline or has an error.
On	The product is ready to print.
Blinking	The product is going offline. Please wait.
Data	
Off	The product has no data to print.
On	The product has data to print, but is not ready or is offline.
Blinking	The product is processing or printing the data.
Attention	
Off	The product has no error.
On	The product has a critical error. Turn the product off and then on.
Blinking	Action is required. See the control panel display.

3 Digital sending

Overview

The product offers color-scanning and digital-sending capabilities. Using the control panel, you can scan black-and-white or color documents and send them to an e-mail address as an e-mail attachment. To use digital sending, the product must be connected to a local area network (LAN). The product connects directly to your LAN (see the *start* guide for more information about connecting to a LAN).

Note The product cannot copy or print in color, but it can scan and send color images.

This chapter addresses both scanning and sending, because they are fully integrated functions. The following topics are addressed in this chapter:

- [Digital-sending basics](#)
- [Using the address book](#)
- [More information](#)

Digital-sending basics

Introduction to digital sending

Digital sending offers the following benefits:

- Sends documents to multiple e-mail addresses, saving time and delivery costs.
- Delivers files in black-and-white or in color. Files can be sent in different file formats that can be manipulated by the recipient.
- Provides verification that e-mail was properly delivered.

With digital sending, documents are scanned into the product memory and sent to an e-mail address or multiple addresses as an e-mail attachment. Digital documents can be sent in several graphics formats, such as TIFF and JPEG (See [See “Changing the settings” on page 32.](#)), enabling recipients to manipulate the document file in various programs to meet their specific needs. Documents arrive in near-original quality, and then can be printed, stored, or forwarded.

The HP Digital Sender Module software offers the additional benefits of sending to a fax machine, authenticating the user for security purposes, and scanning to a folder.

Sending documents

The product scans at a 600 pixels-per-inch (ppi) resolution. The product scans both black-and-white and color originals. You can place originals either on the scanner glass or in the ADF. The scanner glass accommodates all sizes of media, including irregular-size documents, books, stapled documents, previously folded documents, and photographs.

You can choose default settings or change the scanning preference and files formats. Default settings are:

- color
- PDF (requires the recipient to have an Adobe® Acrobat® viewer to view the e-mail attachment)

Sending letter-size originals using the scanner glass or ADF

Use the following instructions to scan and send letter-size originals using the product default settings.

- 1 Place the document face down on the scanner glass.

On the touch screen of the graphical display:

- 2 Touch **Send Options**.

The Send Options box replaces the Copy Settings box. The Reduce/Enlarge selection disappears because that option does not apply to sending.

- 3 Touch **E-mail**.
- 4 Touch **From:** and, using the pop-up keyboard, type your e-mail address.

Note Touch  to delete any incorrect keystrokes.

- 5 Touch **To:** and then type the recipient e-mail address.
- 6 Touch **CC:** and then type the e-mail address of any copy recipients, if necessary. If you want to send a blind copy to an e-mail address, touch **BCC:** and type the address of the recipient.
- 7 Touch **Subject:** and then type the subject of your e-mail.
- 8 Touch **OK**.
- 9 Press **START**.

The control panel status bar displays the following: Processing Digital Send Job.

Changing the settings

Before you send a document, you can change the following settings:

- **Scan Preferences:** Select **Black and White** or **Color**.
- **File Type:** Select **PDF**, **TIFF**, **MTIFF**, or **JPG**.

Files can be transmitted to an e-mail address in any of these file formats:

- **PDF:** The PDF file format is the default setting, and it offers the best overall text and graphics quality. However, the recipient must have an Adobe Acrobat viewer installed to read PDF files. This file format produces one e-mail attachment that contains all the scanned pages.
- **JPG:** While a JPG file does not have the same quality as a PDF, the recipient can view a JPG file easily using an Internet browser. This file format produces one e-mail attachment for each scanned page. JPG files can be manipulated by the recipient and imported into various programs.
- **TIFF:** A TIFF is a standard file format that interfaces well with many computer programs and can be manipulated by the recipient. This file format produces one e-mail attachment for each scanned page.
- **MTIFF:** An MTIFF is a multipage TIFF that saves multiple scanned pages into a single e-mail attachment.

Note

MTIFF and PDF files might be divided into multiple e-mail attachments if the network limits the file size of e-mail attachments.

Sending a document to multiple recipients

- 1 Place a document face down on the scanner glass or in the ADF.
- 2 Touch **Send Options**.
- 3 Touch **E-mail**.
- 4 Touch **From:** and, using the pop-up keyboard, type your e-mail address.
- 5 Touch **To:** and then type the e-mail address of the first recipient. After typing the first e-mail address, touch **Enter** on the keyboard screen to insert a semi-colon, and then continue typing e-mail addresses.
- 6 To check the recipient list, touch the down arrow in the **To:** text line.
- 7 Touch **CC:** and then type the e-mail address of any copy recipients, if necessary. If you want to send a blind copy to an e-mail address, touch **BCC:** and type the address of the recipient.

- 8 Touch **Subject:** and then type the subject of your e-mail.
- 9 Touch **OK**.
- 10 Press **START**.

Using the auto-complete function

When you enter the **To**, **CC**, or **From** screens in the **Send to E-mail** feature, the auto-complete function is invoked. As you type the required address or name at the keyboard screen, the product automatically searches the address book list and displays the first matching address. You can then select that name by touching **Enter**, or continue typing the name until auto-complete finds the correct entry. If you type a character that does not match any entry in the list, the auto-complete text is removed from the display to show that you are typing an address that is not in the address book.

Using the address book


You can send to a list of recipients by using the address book feature of the product. See your system administrator for information about configuring address lists.

Creating a recipient list

On the touch screen of the graphical display:

- 1 Touch **Send Options**.
- 2 Touch **E-mail**.
- 3 Touch **To:** to gain access to the keyboard screen.
- 4 Type the first letter of the name.

Note The product starts at the beginning of the address list unless you type in the first letter of the name.

- 5 Touch  to gain access to the address book.
- 6 Navigate the address book using the scroll bar. Hold down the arrow to scroll quickly through the list.
- 7 Highlight the name to select a recipient, and then touch the **Add** button.

You can also select a distribution list by touching the **Group** button, or add a recipient from a local list by touching the **Local** button. Highlight the appropriate names, and then touch the **Add** button to add the name to your list of recipients.

You can remove a recipient from your list by scrolling to highlight the recipient, then touching the **Remove** button.

- 8 The names in the recipient list are placed in the text line of the keyboard screen. If you want, you can add a recipient that is not found in the address book by typing the e-mail address on the keyboard. After you are satisfied with your recipient list, touch **OK**.
- 9 Touch **OK** on the keyboard screen.
- 10 Finish typing **CC:** and **Subject:** on the Send To E-mail screen, if necessary. You can check the list of recipients by touching the down arrow in the **To:** text line.
- 11 Touch **OK**.
- 12 Follow the instructions on the status bar of the graphical display.

More information

For information about finding the IP addresses of the SMTP and LDAP servers, and about configuring the product for digital sending, see [“Digital sending configuration applet” on page 248](#).

4 Walk-up copying

Overview

This product functions as a standalone, walk-up copier—you do not have to have software installed or have your computer turned on to make photocopies. You can easily adjust copy settings at the control panel. Originals can be copied using either the ADF or the scanner glass. The product can process copying, printing, and digital-sending jobs simultaneously.

This chapter provides information about how to make black and white copies and how to change copy settings. The topics in this section include:

- [Basic copying instructions](#)
- [Selecting the output bin](#)
- [Altering the image](#)

It is helpful to review the chapter about basic control-panel operation before using the product copying functions.

Basic copying instructions

This section provides the basic instructions for copying. The paper size is automatically detected when the document is placed on the scanner glass or in the ADF. You can override the auto-detect feature by specifying the required input (Describe Original) and output (Copy Settings) at the control panel.

Copying using the default settings (one-touch copying)

The default settings for copying are:

- Number of copies: One
- Size: Letter-size original and letter-size copy

Note The product automatically detects the original paper size and makes a same-size copy. The factory default paper-size setting is Letter or A4 only if no paper is detected.

- Page Orientation: Portrait
- Number of Sides: One-sided copying
- Page Content: Mixed
- Job Mode: Off
- Heavy Paper: Off

To make copies using the default settings

- 1 Place the document face down on the scanner glass or in the ADF.
- 2 Press **START**.

Copying using user-defined settings

Using the following steps, you can change the settings for your copies.

To make copies using settings other than the default settings

1 Place the original face down on the scanner glass or in the ADF.

On the touch screen of the graphical display:

2 Touch **Describe Original** to view your options. You can choose Basic options or Advanced options.

3 Touch the **Basic** items that describe your original. Choose from:

- **Size:** Select the paper size of your original.
- **Page Orientation:** Select **Portrait** or **Landscape**.
- **Number of Sides:** Select **1-sided** or **2-sided**.
- **Page Content:** Select **Text**, **Graphic**, or **Mixed**.

4 Touch the **Advanced** tab to view your options in the **Advanced** screen. Choose from:

- **Heavy Paper:** Select **On** if your original is heavy paper.
- **Job Mode:** If you are combining multiple scans into a single job, select **On**.

5 After you make your selections, touch **OK**.

Note The page icon in the Original section of the graphical display shows a representative image of the original document.

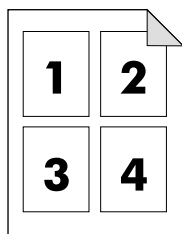
6 Make any necessary adjustments to the contrast and reduction or enlargement using the **Contrast Control** bar and the **Reduce/Enlarge** button in the image modification section of the graphical display.

7 Touch **Copy Settings** to view your options. You can choose **Basic** options or **Advanced** options.

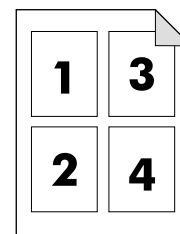
8 Touch the **Basic** items that describe the characteristics of the copies you are making. The items are:

- **Paper Size:** Select **Auto** (paper size is matched to original size), or the copy size that you desire. Be sure that you have loaded the correct paper size in the tray.
- **Number of Sides:** Select **1-sided** or **2-sided**.
- **Backside Orientation:** Select **Normal** or **Flip** (applies when **2-sided** copying is chosen),
- **Pages per sheet:** Select **1**, **2**, **4**, or **Booklet**.

If **4** pages per sheet is chosen, “Z” or “N” ordering is tailored to the page orientation, and the option to put a border around each smaller page is displayed.



“Z” ordering



“N” ordering

- **Borders:** Select **Border** or **No Border**.
 - **Staple:** Stapling options depend on your output device and the paper size selected. Selections include **None**, **Corner**, **1**, **2**, **3**, or **6**.
- 9 Touch the **Advanced** options, if necessary. Some of the options are:
- **Collation:** Select **Collated** or **Uncollated**.
 - **Output Bin:** Select **Bin 1** or **Bin 2**.
 - **Stored Job:** Select **On** to indicate that the copy job should be stored on the product rather than printed. Select **Off** to copy the job normally. See [“Creating a stored job” on page 41](#) for more information.
- 10 When you are finished, touch **OK**.

Note The page icon in the Copy section of the graphical display shows a representative image of the copy.

- 11 Using the numeric keypad, select the number of copies, and then press **START**.

Copying using the scanner glass

Use the scanner glass to copy small, lightweight (less than 46 g/m² or 12 lb), or irregularly sized originals, such as receipts, newspaper clippings, photographs, or old or worn documents. The scanner glass is also used to copy books, magazines, and manuals.

- 1 Place the document face down on the scanner glass.
- 2 Make any image modifications, and choose any copy settings, if necessary.
- 3 If you are making only one copy, press **START**. If you are making multiple copies, use the numeric keypad to select the number of copies (up to 999), and then press **START** to begin copying.

Copying using the ADF

Using the ADF, you can make as many as 999 copies of a document that has as many as 50 pages (depending on the thickness of the pages).

- 1 Load the document face down into the ADF. The product can automatically detect the paper size.
- 2 Make any image modifications, and choose any copy settings.
- 3 If you are making only one copy, press **START**. If you are making multiple copies, use the numeric keypad to select the required number of copies, and then press **START**.

Copying books

You can use the scanner glass to copy books.

- 1 Place the book face down on the scanner glass.
- 2 Align the book using the book bindings. Look for the book graphic at the top of the scanner glass to check the alignment.
- 3 Touch **Describe Original**.
- 4 Select **Book** as the Size.
- 5 Touch **OK**.

Note You can skip a page by touching the **Skip Page** button above the page icon. Touch the button once to skip the left page, twice to skip the right page, and three times to cancel page skipping.

- 6 Touch **Copy Settings**.
- 7 Select any output settings you want. Select the paper size that is the closest match to the actual size of the book you are copying.
- 8 Touch **OK**.
- 9 Using the numeric keypad, select the number of copies you want.
- 10 Press **START**.

Creating a stored job

Turning on the stored job setting indicates that you want the copy job to be stored on the product hard disk, and that you will print the job later. You must provide the following information to create a stored job:

- 1 Choose your basic copy settings (see [“Copying using user-defined settings” on page 38](#)).
- 2 Touch the **Advanced** tab.
- 3 At the **Stored Jobs** box, select **On**.

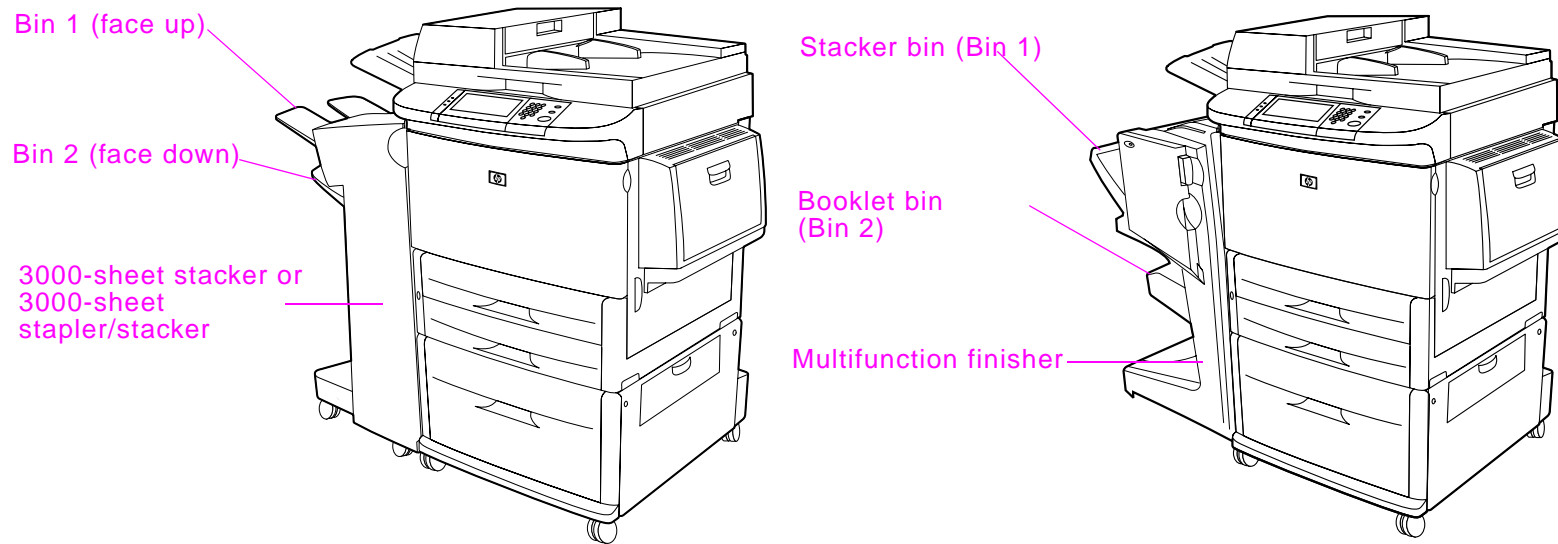
A popup dialog box displays, asking for the **User Name**, **Job Name**, and Personal Identification Number (**PIN**), if required. The keyboard displays when you select **User Name** and **Job Name**. The **PIN** is a four digit number that can be typed using the numeric keypad.

- 4 Type the **User Name**.
- 5 Type the **Job Name**.
- 6 Type the **PIN**, if required.
- 7 Touch **OK**.

See [“Printing a stored job” on page 72](#) for information on printing a stored job.

Selecting the output bin

The product has two output locations.



If you choose the 3000-sheet stacker or 3000-sheet stapler/stacker, the output bins are Bin 1 (face up) and Bin 2 (face down).

- **Bin 1** (face-up bin) is the top bin on the stacker or stapler/stacker. This bin holds up to 125 sheets of paper in face-up order as they exit the printer. A sensor causes the product to stop when the bin is full. Product operation continues when you empty or reduce the amount of paper in the bin.
- **Bin 2** (face-down bin) is the lower bin on the stacker or stapler/stacker. Bin 2 holds up to 3000 sheets of paper and allows you to stack or staple jobs. This bin is the default output bin.

If you choose the multifunction finisher, the output bins are the Stacker bin and the Booklet bin.

- The **Stacker bin** (Bin 1) is the top bin on the multifunction finisher. The Stacker bin provides 1000 sheets of stacking capacity, and offsets each job as it is stacked, delivering unstapled jobs face up or face down. This bin also provides stapling for up to 50 sheets of paper per document. The Stacker bin is the default output bin when the multifunction finisher is attached.
- The **Booklet bin** (Bin 2) is the lower bin on the multifunction finisher. This bin provides folding and saddle stitching of booklets for up to 10 sheets of paper.

Selecting an output location

You can select an output location at the control panel.

To select an output location from the control panel

On the touch screen of the graphical display:

- 1 Touch the **Copy Settings** box.
- 2 Touch **Advanced**.
- 3 Touch **Bin 1** or **Bin 2** in the Output Bin box.

Altering the image

You can modify and preview your original image before it is sent. The product features the following image modification functions on the main touch screen:

- **Reduce/Enlarge**
- **Contrast Control**
- **Enhance**

Touching **RESET** will return all current settings to their default values.

The product also has an autoscaling feature. If there is a size mismatch between the original page size and the copy page size, the product automatically calculates the reduce/enlarge percentage to fit the original to the copy.

Reduce or enlarge

The product can reduce copies to as little as 25 percent of the original size and enlarge copies to as much as 400 percent of the original size (200 percent when using the ADF). To reduce or enlarge your copies, touch the down or up arrow on the image modification area until you obtain the required reduction or enlargement. The scale percentage box indicates the percentage of reduction or enlargement.

Adjust the contrast

You can adjust the contrast by touching the arrows on the **Contrast Control** bar in the image modification area of the default touch screen. The slider moves to the lighter or darker area of the contrast bar.

Enhance the document

Touch the **Enhance** button to gain access to the embedded enhancement screen that allows you to remove the background, and increase or decrease the sharpness and density.

Background Removal

If you are copying a document that is printed on colored paper, you can enhance your copy quality by removing the background that might cause your copy to streak or blur. Adjust the amount of background removal by touching the arrows on the **Background Removal Control**. The slider moves to the lighter or darker area of the **Background Removal Control** bar.

Sharpness

The **Sharpness Control** specifies the sharpness setting that the scanner uses when the product scans your original. Sharpness enhances the edges of the original so that faint or fine text and graphics are reproduced more sharply. Adjust the amount of sharpness by touching the arrows on the **Sharpness Control** bar.

Density

Like the **Contrast Control** on the main touch screen, the **Density Control** on the enhancement screen allows you to determine the contrast of your copy. Touch the arrows on the **Density Control**, and move the slider to the lighter or darker area of the **Density Control** bar. Changing the density using the **Density Control** is reflected in the **Contrast Control** on the main screen. If you adjust the **Contrast Control** on the main screen, and then adjust the **Density Control** on the enhancement screen, the adjustment you made on the enhancement screen will override any adjustment you made on the main screen.

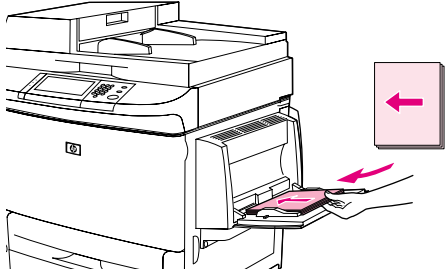

5 Printing

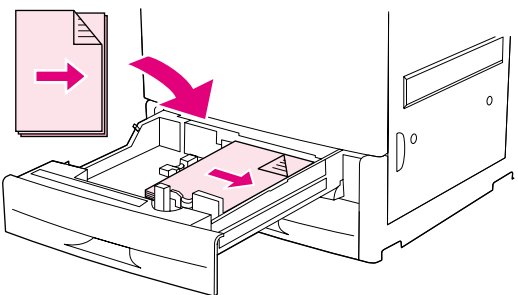
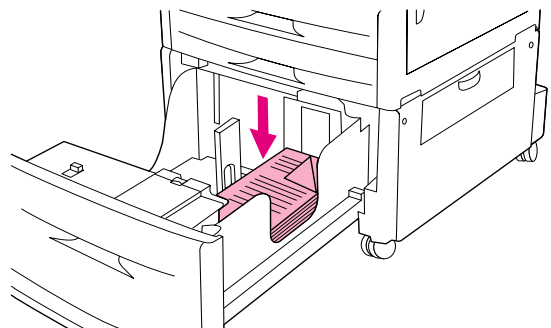
This section presents printing tasks, such as:

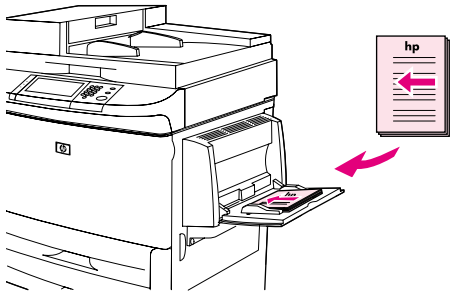
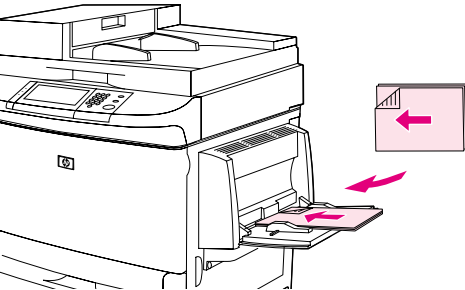
- [Orienting media](#)
- [Basic printing instructions](#)
- [Selecting the output bin](#)
- [Printing envelopes](#)
- [Printing special paper](#)
- [Using features in the driver](#)
- [Different first page](#)
- [Blank back page](#)
- [Customizing Tray 1 operation](#)
- [Printing by type and size of paper](#)
- [Job retention features](#)
- [Printing a private job](#)
- [Storing a print job](#)
- [Creating a QuickCopying job](#)
- [Proofing and holding a job](#)
- [Printing with the optional HP Fast InfraRed \(FIR\) Receiver](#)
- [Interrupting and resuming printing](#)

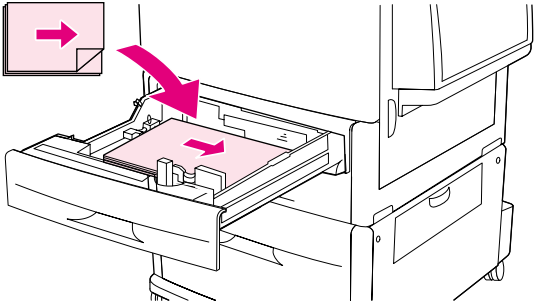
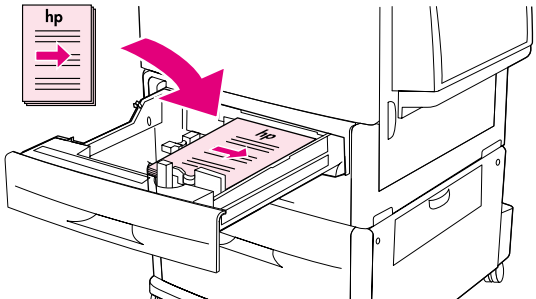
Orienting media

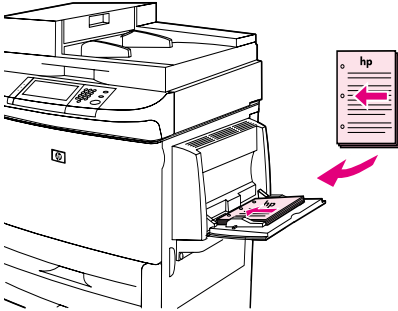
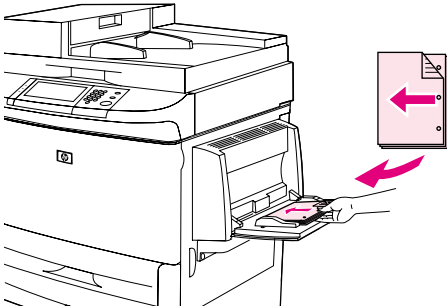
Orient media types and sizes according to the tray from which the media will print and according to whether the media will be duplexed (printed on both sides).

Type of media	Tray	Duplexed	Orient media like this
Letter or A4, including letterhead (weights up to 216 g/m ²) (58 lb bond)	1	No	Long edge toward feed direction; side to be printed facing up. 
Letter or A4, including letterhead (weights up to 216 g/m ²) (58 lb bond)	1	Yes	Long edge toward feed direction; first side to be printed facing down. 

Type of media	Tray	Duplexed	Orient media like this
Letter or A4, including letterhead (weights up to 199 g/m ²) (53 lb bond)	2, 3, or 4	No	<p>Long edge toward feed direction; side to be printed facing down.</p> 
Letter or A4, including letterhead (weights up to 199 g/m ²) (53 lb bond)	2, 3, or 4	Yes	<p>Long edge toward feed direction; first side to be printed facing up.</p> 

Type of media	Tray	Duplexed	Orient media like this
Other standard sizes and custom sizes (weights up to 216 g/m ²) (58 lb bond)	1	No	Long edge (up to 312 mm) toward feed direction; side to be printed facing up. For media with long edge greater than 312 mm, feed short edge, top of page, first. 
Other standard sizes and custom sizes (weights up to 216 g/m ²) (58 lb bond)	1	Yes	Long edge (up to 312 mm) toward feed direction; first side to be printed facing down. For media with long edge greater than 312 mm, feed short edge, bottom of page, first. 

Type of media	Tray	Duplexed	Orient media like this
Other standard sizes and custom sizes (weights up to 199 g/m ²) (53 lb bond)	2, 3, or 4	No	Long edge (up to 297 mm) toward feed direction; side to be printed facing down. For media with long edge greater than 297 mm, feed short edge, top of page, first. 
Other standard sizes and custom sizes (weights up to 199 g/m ²) (53 lb bond)	2, 3, or 4	Yes	Long edge (up to 297 mm) toward feed direction; first side to be printed facing up. For media with long edge greater than 297 mm, feed short edge, bottom of page, first. 

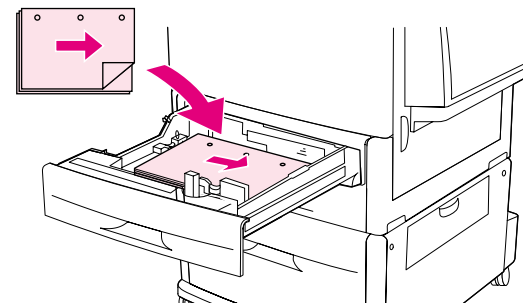
Type of media	Tray	Duplexed	Orient media like this
Prepunched Letter or A4 (weights up to 216 g/m ²) (58 lb bond)	1	No	Long edge with holes toward feed direction; side to be printed facing up. 
Prepunched Letter or A4 (weights up to 216 g/m ²) (58 lb bond)	1	Yes	Long edge without holes toward feed direction; first side to be printed facing down. 

Prepunched Letter or A4
(weights up to 199 g/m²)
(53 lb bond)

2, 3, or 4

No

Long edge with holes toward feed direction; side to be printed facing down.

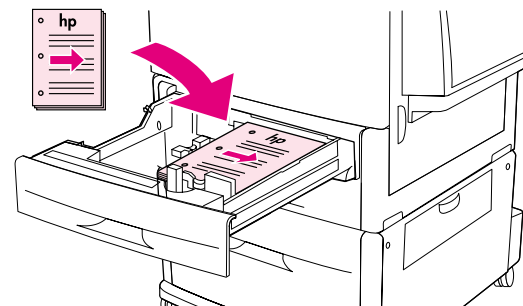


Prepunched Letter or A4
(weights up to 199 g/m²)
(53 lb bond)

2, 3, or 4

Yes

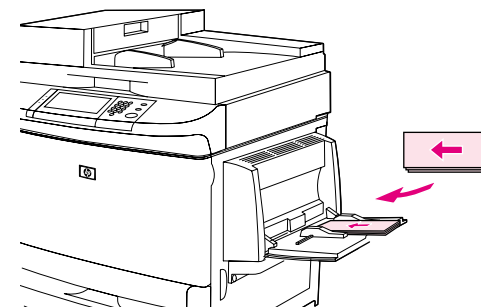
Long edge without holes toward feed direction; first side to be printed facing up.



Type of media	Tray	Duplexed	Orient media like this
Labels, Letter, A4 size sheets, or transparencies	Tray 1 only	No (Never duplex)	Long edge toward feed direction; side to be printed facing up.



Type of media	Tray	Duplexed	Orient media like this
Envelopes	Tray 1 only	No (Never duplex)	Short edge toward feed direction; side to be printed facing up. If height of envelope is greater than 7.5 inches, feed flap first. Otherwise, feed flap toward rear of product.



Basic printing instructions

This section provides the basic instructions for printing when setting options from the driver for this product (Windows) or the Apple LaserWriter (Macintosh). If possible, you should try to set product options from the program in which you are working or from the **Print** dialog box. Most Windows and Macintosh programs allow you to set the product options this way. If a setting is not available in the program or driver, you must set it at the product control panel.

To print

- 1 Make sure paper is loaded in the product. See the *introduce* guide on the product CD, or at www.hp.com/support/lj9000 and [“Orienting media” on page 47](#) for instructions.
- 2 If you loaded a custom size media in Tray 2, Tray 3, or Tray 4, or if you loaded any size media in Tray 1, set the tray to recognize the size of paper you loaded. See the *introduce* guide on the product CD, or at www.hp.com/support/lj9000.
- 3 Set the paper size.
 - For Windows: On the **File** menu, click **Page Setup** or **Print**. If you chose **Print**, make sure this product is selected and click **Properties**.
 - For Macintosh: On the **File** menu, choose **Page Setup**. Make sure this product is selected.
- 4 In the paper size box, select one of the following:
 - The name assigned to the size of paper you are using.
 - **Custom**
- 5 Select the orientation, such as **Portrait** or **Landscape**.
- 6 If the driver is not already open, on the **File** menu click **Print**. In Windows programs, also click **Properties**.

- 7 In the paper source box, select the tray from which you want paper pulled or select the paper type and size. See [“Printing by type and size of paper” on page 67](#).
- 8 Select any other settings you want, such as duplexing, watermarks, or different first page. For more information about these settings, see the tasks in this section.
- 9 The standard output bin is the default output location. Use this location for output of most types of media, including labels, transparencies, and heavy paper. Or, you can select an output accessory, such as the stacker or stapler/stacker.
- 10 Select the **Print** command to print the job.

Selecting the output bin

See [“Selecting the output bin” on page 42](#) for more information about selecting an output bin.

Selecting an output location

You can select an output location (bin) through your program or driver. (Where and how you make selections depends on your program or driver.) If you cannot select an output location from the program or driver, set the default product output location from the product control panel.

To select an output location from the control panel

- 1 Touch **Menu**.
- 2 Touch `Configure Device`.
- 3 Touch `Printing`.
- 4 Scroll to `Paper Destination`, and then touch `Paper Destination` to view the output bin options.
- 5 Scroll to the output bin or device you want, and then touch **OK**. An asterisk (*) appears next to your selection.

Printing envelopes

You can print envelopes using Tray 1, which holds up to 10 envelopes. Many types of envelopes can be printed from Tray 1.

Printing performance depends on the construction of the envelope. Always test a few sample envelopes before purchasing a large quantity. For envelope specifications, see the *introduce* guide on the product CD, or go to www.hp.com/support/lj9000.

CAUTION

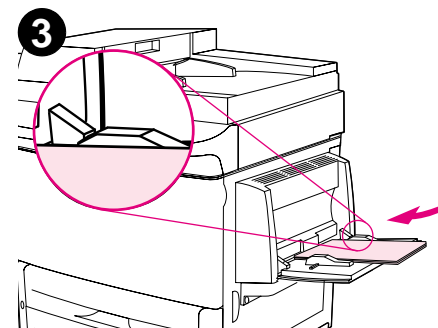
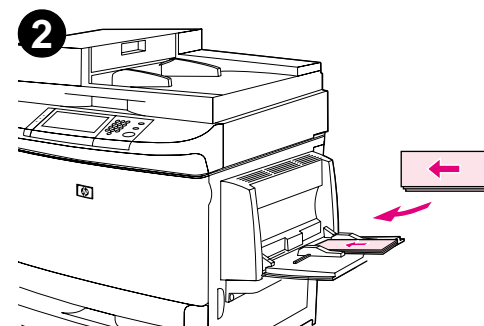
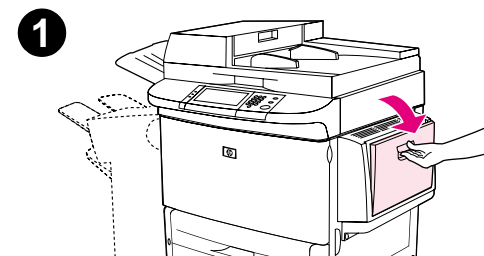
Envelopes with clasps, snaps, windows, coated linings, exposed self-stick adhesives, or other synthetic materials can severely damage the product. Do not use envelopes with pressure-sensitive adhesive.

The basic steps for printing envelopes are:

- 1 Load the envelopes. See [“To load envelopes in Tray 1” on page 57](#).
- 2 Move the fuser levers. See [“To change the fuser levers” on page 58](#).
- 3 Send the print job. See [“To print envelopes from a program” on page 59](#).

To load envelopes in Tray 1

- 1 Open Tray 1, but do not pull out the extension. (Most envelopes feed best without the extension. However, oversize envelopes might need the extension.)
- 2 Load up to 10 envelopes in the center of Tray 1 with the side-to-be-printed facing up, and the postage end toward the product. Slide the envelopes into the product as far as they will go without forcing them.
- 3 Adjust the guides to touch the envelope stack without bending the envelopes. Make sure the envelopes fit under the tabs on the guides.
- 4 Change the fuser levers (see ["To change the fuser levers" on page 58](#)).



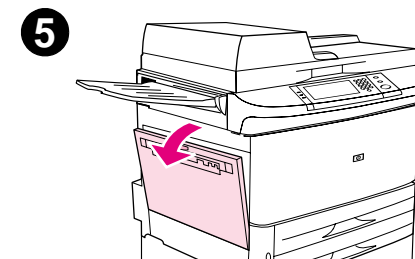
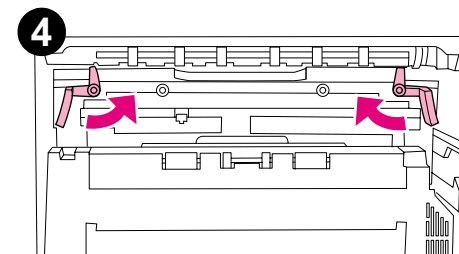
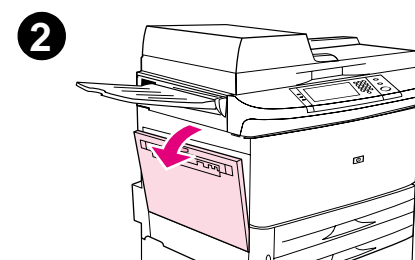
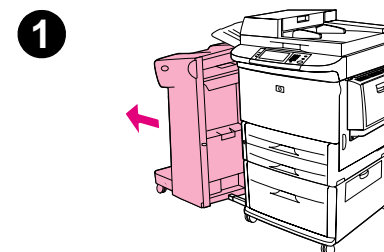
To change the fuser levers

- 1 Move the output device from the product to gain access to the left door.
- 2 Open the left door.

WARNING!

Avoid touching the adjacent fusing area as shown in step 2. It can be HOT.

- 3 Locate and lift up the two blue "T" shaped levers.
- 4 Return the fuser levers to the down position after printing an envelope.
- 5 Close the left door.



To print envelopes from a program

- 1 Load envelopes into Tray 1.
- 2 In your program or in the driver, specify Tray 1 or **Automatic**. Or, select the paper source.
- 3 Set the appropriate envelope size and type. For envelope specifications, see the *introduce* guide on the product CD, or go to www.hp.com/support/lj9000.
- 4 If your program does not automatically format an envelope, specify "Portrait" for page orientation.

CAUTION To avoid a jam, do not remove or insert an envelope after you begin printing.

- 5 Set margins to within 15 mm (0.6 inch) from the edge of the envelope. For best print quality, set margins for a return and mailing address (typical address margins for a Commercial #10 or DL envelope are offered). Avoid printing over the area where the three back flaps meet on the back of an envelope.
- 6 To print by type and size of paper, see the *introduce* guide on the product CD, or go to www.hp.com/support/lj9000.
- 7 Select the Bin 1 as the output location, if you print envelopes to the stacker or stapler/stacker. If you print envelopes to the multifunction finisher, select the Stacker bin as the output location.
- 8 When finished, return the fuser levers to the down position.

CAUTION Failure to return levers to the down position for standard paper types can result in poor print quality.

Printing special paper

This section contains guidelines for printing on special media, which includes letterhead, transparencies, full-bleed images, postcards, custom-size, and heavy paper.

Printing letterhead, prepunched paper, or preprinted paper (single-sided)

- When printing on letterhead, prepunched, or preprinted paper, it important to correctly orient the paper. See [“Orienting media” on page 47](#) for instructions.
- If the paper is heavier than 199 g/m² (53 lb bond) and less than 216 g/m² (58 lb bond), load it only in Tray 1. See the *introduce* guide on the product CD, or go to www.hp.com/support/lj9000 for complete paper specifications.
- When printing on both sides of prepunched paper, you must select prepunched paper as the paper type in the **Paper Handling** menu from the control panel and select prepunched paper from your driver.

Printing labels

- Orient labels according to the guidelines in [“Orienting media” on page 47](#).
- Print a stack of up to 50 sheets of labels from Tray 1.
- Use only labels recommended for laser printers. Make sure the labels meet the correct specifications. (See the *introduce* guide on the product CD, or go to www.hp.com/support/lj9000.)

CAUTION Failure to follow these instructions can damage the product.

Special cautions:

- Do not load Tray 1 to capacity, because labels are heavier than paper.
- Do not use labels that are separating from the backing sheet, wrinkled, or damaged in any way.
- Do not use labels that have the backing sheet exposed. (Labels must cover the entire backing sheet with no exposed spaces.)
- Do not feed a sheet of labels through the product more than once. The adhesive backing is designed for only one pass through the product.
- Do not print on both sides of labels.

Printing transparencies

- Transparencies used in this product must be able to withstand 200° C (392° F), the maximum temperature for the product.
- Use only transparencies recommended for use in laser printers.
- Use the standard output bin for transparencies.

CAUTION

Do not attempt to print on both sides of transparencies. Do not attempt to print envelopes, custom paper, or paper heavier than 199 g/m² (53 lb). Damage to the product or jams might result.

Guidelines for custom-size paper, card stock, and heavy paper

- You can print custom-size paper from Tray 1, Tray 2, Tray 3, or Tray 4.
- Any size paper heavier than 199 g/m² (53 lb) must be printed only from Tray 1. For paper specifications, see the *introduce* guide on the product CD, or go to www.hp.com/support/lj9000.
- If you are printing from Tray 1, the edge of the paper feeding into the product must be at least 98 mm (3.9 inches) wide to allow rollers inside the product to grab the paper, and a maximum of 312 mm (12.3 inches). Measuring from the leading edge to the trailing edge of the paper, the length must be at least 191 mm (7.5 inches) and a maximum of 470 mm (18.5 inches).
- If you are printing from Tray 2 or Tray 3, the edge of the paper feeding into the product must be at least 148 mm (5.8 inches) wide to allow rollers inside the product to grab the paper, and a maximum of 297 mm (11.7 inches). Measuring from the leading edge to the trailing edge of the paper, the length must be at least 210 mm (8.3 inches) and a maximum of 432 mm (17.0 inches).

- If you are printing from Tray 4, the edge of the paper feeding into the product must be at least 182 mm (7.2 inches) wide to allow rollers inside the product to grab the paper, and a maximum of 297 mm (11.7 inches). Measuring from the leading edge to the trailing edge of the paper, the length must be at least 210 mm (8.3 inches) and a maximum of 432 mm (17.0 inches).

Printing full-bleed paper

Since the product has the ability to print on specially cut paper up to 312 by 470 mm (12.3 by 18.5 inches), you can print up to 297 by 450 mm (11.7 by 17.7 inches) bleed images with crop marks from Tray 1. See your program help for more information.

Using features in the driver

When you print from a software application, many of the product features are available from the driver. To gain access to Windows drivers, see [“To gain access to the Windows driver” on page 18](#).

Note Settings in the driver and software application generally override control panel settings. (Software application settings generally override driver settings.)

Product collation

The product collation feature allows multiple original printing that provide you the following advantages:

- reduced network traffic
- faster return to application
- all original documents

Saving product setup information

Drivers allow you to save the product settings you use most often as the default settings. For example, the driver might be set to print on letter-size paper, portrait orientation, with automatic tray selection (from the first available tray).

Windows PCL 6 and PCL 5e drivers allow you to save product settings for multiple kinds of print jobs. For example, you might want to create a quick set for envelopes, or for printing the first page of a document on letterhead.

New driver features

Look for **Quick Sets**, **Scale to Fit** (any page size to any page size), and **Booklet Printing** options in the Windows driver, or see the driver help for more information.

Printing watermarks

A watermark is a notice, such as “Top Secret,” printed in the background of each page in a document. Check the driver for available options, or see the driver online help for more information.

For Macintosh, you can select “Custom” and specify the text you choose, depending on your driver version.

Different first page

To print a different first page

Follow these instructions for printing a first page that is different from other pages in the print job.

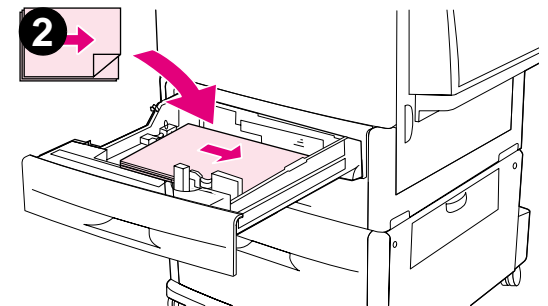
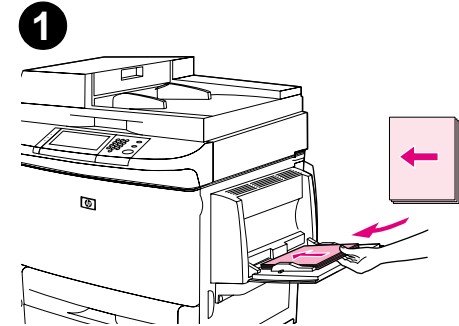
- 1 For Windows, select “Use different paper for first page” in your driver. Choose Tray 1 (or manual feed) for the first page and one of the other trays for the remaining pages. Place the paper for the first page in Tray 1. (For manual feed, place paper in Tray 1 after the job is sent to the product and the product requests paper.) For loading Tray 1, place the paper with the side to be printed up, the top of the page facing the rear of the product.

For Macintosh computers, select “First from” and “Remaining from” in the print dialog box.

Note

Where and how you make selections depends on your software application or associated driver. (Some options are only available through the driver.)

- 2 Load the paper for the remaining pages of the document into another tray. You can select the first and remaining pages by type of paper. For more information, see [“Printing by type and size of paper” on page 67](#).



Blank back page

This option allows you to add blank pages to the end of a print job.

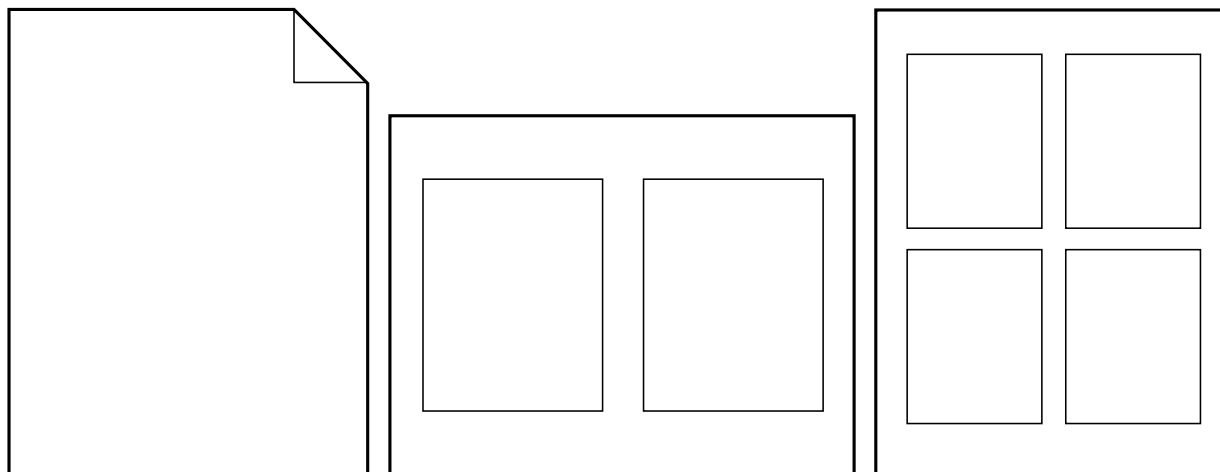
For Windows, select **Use different paper for first page** in the **Paper** tab of your driver, and then choose **Back Page**. You can then select the paper source you want to use for your back page. To turn the feature off, select **No back page**.

Printing multiple pages on one sheet of paper

You can print more than one page on a single sheet of paper. This feature is available in some drivers and provides a cost-effective way to print draft pages.

To print more than one page on a sheet of paper, look for a layout or pages-per-sheet option in the driver. (This is sometimes called 2-up, 4-up, or n-up printing.)

Printing left-to-right



Customizing Tray 1 operation

Customize Tray 1 to fit your printing needs.

The product can be set to print from Tray 1:

When the tray is loaded (Tray 1 Mode is set to First). Print speed might be slower than normal.

- Only when the type of paper loaded is specifically requested. Tray 1 Mode must be set to Cassette.

Printing from Tray 1 when the loaded paper is requested

When Tray 1 Mode is set to Cassette, the product treats Tray 1 like the internal trays. Instead of looking for paper in Tray 1 first, the product pulls paper starting either from the bottom tray upward or starting with the tray that matches type or size settings selected in the program from which you are printing.

From the program or the Print dialog box, set the type and size for a tray, if possible. If not, set the type and size from the product control panel. (See [“Printing by type and size of paper” on page 67.](#))

When Tray 1 Mode is set to Cassette, you can configure the media size for Tray 1. Choose Tray 1 Size for a list of standard sizes. Choose a size, then touch **OK**. For a custom size, choose Tray 1 Custom, and type the dimensions of the custom-size media.

Manually feeding paper from Tray 1

The manual feed feature is another way of printing special paper from Tray 1, such as envelopes or letterhead. If manual feed is selected, the product prints only from Tray 1.

When paper is loaded in Tray 1, set Tray 1 mode in the **Paper Handling** menu to First mode.

Printing by type and size of paper

You can configure the product to select paper by *type* (such as plain or letterhead) and *size* (such as letter or A4), as opposed to *source* (a paper tray).

Benefits of printing by type and size of paper

If you frequently use several kinds of paper, once trays are set correctly, you do not have to check which paper is loaded in each tray before you print. This is especially helpful when the product is shared and more than one person loads or removes paper.

Printing by type and size of paper is a way to be sure that print jobs always print on the required paper.

To set the type for the paper or media you loaded when you are unsure which type (such as bond or recycled) to choose, check the label on the package of paper. For supported types of paper, see the *introduce* guide on the product CD, or go to www.hp.com/support/lj9000.

Note The type and size settings can also be configured from the HP Web JetAdmin software for networked products. See the driver online help.

To print by type and size of paper

Note Settings in the driver and software application override control panel settings. (Software application settings generally override driver settings.)

- 1 Load and adjust the trays. (See the *introduce* guide on the product CD, or at www.hp.com/support/lj9000.)
- 2 On the touch screen of the graphical display, touch **Menu**, then touch Paper Handling.
- 3 Do one of the following:
 - To allow the product to automatically pull the type and size of paper loaded in Tray 1: Set Tray 1 Mode to First.
 - To print by type and size from Tray 1, but to have the product prompt you to load paper before printing: Set **Tray Mode** to **Cassette**. Touch Tray 1 Size, and select the size loaded. Touch Tray 1 Type, and select the type of media.
 - To print by type and size from Tray 2, Tray 3, or Tray 4 when the tray is loaded with standard size paper: Set the type. The size is automatically detected.
 - To print by type and size from Tray 2, Tray 3, or Tray 4 when the tray is loaded with a custom size paper: Set the size and type. For the size, select **Custom**, and then set the values using the measurements on the guides in the trays.
- 4 From the program or driver, select the type and size of paper.

To print by type and size, it might be necessary to unload or close Tray 1, or you can set Tray 1 to **Cassette** mode. For more information, see [“Paper handling menu” on page 189](#).

Job retention features

The four special job features available for this product are: Private jobs, Stored jobs, QuickCopy jobs, and Proof and hold jobs.

Follow the instructions below to gain access to the job retention features at the computer. Then, see the specific section for the type of job you want to create.

CAUTION If you turn the product off, all QuickCopy, Proof and hold, and Private jobs are deleted.

To gain access to the job storage features

For Windows

- 1 On the **File** menu, click **Print**.
- 2 Click **Properties** and click the **Destination** tab.
- 3 Under **Destination Features**, click **Options** to display **Job Storage Options**.

For Macintosh

In newer drivers: Select **Job Retention** from the pull-down menu in the print dialog box. In older drivers, select **Printer Specific Options**.

Printing a private job

The private printing feature lets a user specify that a job is not printed until that user releases it using a 4-digit personal identification number (PIN) through the product control panel. The user specifies the PIN in the driver, and the PIN is sent to the product as part of the print job.


To create private jobs

To specify that a job is private from the driver, select the Private Job option, enter a User Name and Job Name, and type a four-digit PIN. The job will not print until you enter the PIN at the control panel.

Releasing private jobs

The user can print a private job from the control panel.


To release private jobs

- 1 Touch **Menu**.
- 2 Touch **Retrieve Job**.
- 3 Scroll to **User Name**.
- 4 Scroll to your job.
- 5 Touch **Print**, and then touch **OK**. (The **Print** icon should have  next to it.)
- 6 Use the numeric keypad to type the PIN, and then touch **OK**.

Deleting a private job

A private job is automatically deleted from the product hard disk accessory after the user releases it for printing. If you want to delete the job without printing it, use this procedure.

To delete private jobs

- 1 Touch **Menu**.
- 2 Touch `Retrieve Job`.
- 3 Scroll to `User Name`.
- 4 Scroll to your job.
- 5 Scroll to `Delete`, and then touch **OK**. (`Delete` should have  next to it.)
- 6 Use the numeric keypad to type the PIN, and then touch **OK**.

Storing a print job

The user can download a print job to the product hard disk accessory without printing it. The user can then print the job at any time through the product control panel. For example, a user might want to download a personnel form, calendar, time sheet, or accounting form that other users can access and print.

To store a print job on the hard disk accessory, select the **Stored Job** option in the driver when printing from the product.

Note The stored job feature uses available RAM memory on the product if the product does not have a hard disk installed. For moderate to heavy use of this feature, HP recommends installing an optional hard disk.

To create stored jobs

In the driver, select the **Stored Job** option and type a user name and job name. The job does not print until someone requests it at the product. See [“Printing a stored job” on page 72](#).

Printing a stored job

The user can print a job stored on the product hard disk accessory from the control panel.

To print a stored job

- 1 Touch **Menu**.
- 2 Scroll to **Retrieve Job**.
- 3 Touch **User Name** to see a list of jobs.
- 4 Scroll to your job, and then touch **OK**.
- 5 To print the default number of copies, touch **Continue**. The screen changes to **Copies=n**. To change the number, use the numeric keypad or scroll to select a new number, and touch **OK**.


If **Print** has **🔒** next to it, the job is a private job and requires a PIN. See [“Printing a private job” on page 70](#).

Deleting a stored job

Jobs stored on the product hard disk accessory can be deleted from the control panel.

To delete a stored job

- 1 Touch **Menu**.
- 2 Touch to Retrieve Job.
- 3 Touch User Name to see a list of jobs.
- 4 Scroll to your job, and then touch **OK**.
- 5 Scroll to Delete, and then touch **OK**.

If Delete has  next to it, the job requires a PIN to delete. See [“Printing a private job” on page 70](#).

Creating a QuickCopying job

The QuickCopy feature prints the requested number of copies of a job and stores a copy on the product hard disk accessory. Additional copies of the job can be printed later. This feature can be turned off from the driver.

The default number of different QuickCopy jobs that can be stored on the product is 32. From the control panel, you can set a different default number. See [“JOB STORAGE LIMIT=32” on page 205](#).

To create QuickCopy jobs

CAUTION

If the product needs additional space to store newer QuickCopy jobs, the product will delete other stored QuickCopy jobs, starting with the oldest job. To permanently store the job and prevent the product from deleting it when space is needed, select the **Stored Job** option instead of the **QuickCopy** option.

In the driver, select the **QuickCopy** option and type a user name and a job name.

When you send the job to print, the product prints the number of copies you set in the driver. To print more quick copies at the product, see [“Printing additional copies of QuickCopy jobs” on page 75](#).

Printing additional copies of QuickCopy jobs

This section describes how to print additional copies of a job stored on the product hard disk accessory from the control panel.

To print more copies of a QuickCopy job

- 1 Touch **Menu**.
 - 2 Touch **Retrieve Job**.
 - 3 Touch **User Name** to see a list of jobs.
 - 4 Scroll to your job and touch **OK**.
 - 5 To print the default number of copies, go to the next step. Otherwise, do the following to check or change the number of copies to print:
 - a Scroll to **Copies**. The number of copies to be printed appears at the top of the window.
 - b To change the number, use the numeric keypad or select a new number. and then and touch **OK**.
 - 6 Scroll to **Print** and press **START**. The job prints.
- If **Print** has **🔒** next to it, the job requires a PIN to print. See [“Printing a private job” on page 70](#).

Deleting a QuickCopy job

Delete a QuickCopy job at the product when you no longer need it. If the product needs additional space to store new QuickCopy jobs, the product will automatically delete other stored QuickCopy jobs, starting with the oldest job.

Note Stored QuickCopy jobs can be deleted from the control panel or from HP Web JetAdmin.

To delete a QuickCopy job

- 1 Touch **Menu**.
- 2 Touch **Retrieve Job**.
- 3 Touch **USER NAME** to see a list of jobs.
- 4 Scroll to your job.
- 5 Scroll to **Delete**, and then touch **OK**.

If **Delete** has **🔒** next to it, the job requires a PIN to delete. See [“Printing a private job” on page 70](#).

Proofing and holding a job

The proof and hold feature provides a quick and easy way to print and proof one copy of a job and then to print the additional copies.

To permanently store the job and prevent the product from deleting it when space is needed for something else, select the **Stored Job** option in the driver.

To create a proof and hold job

CAUTION

If the product needs additional space to store newer proof and hold jobs, the product will delete other stored proof and hold jobs, starting with the oldest job. To permanently store the job and prevent the product from deleting it when space is needed, select the **Stored Job** option in the driver instead of the **Proof and Hold** option.

In the driver, select the **Proof and Hold** option and type a user name and job name.

The product prints one copy of the job for you to proof. Then, see [“Printing the remaining copies of a held job” on page 77.](#)

Printing the remaining copies of a held job

The user can print the remaining copies of a job held on the product hard disk accessory from the control panel.

To print a proof and hold job


- 1 Touch **Menu**.
 - 2 Touch **Retrieve Job**.
 - 3 Scroll to **USER NAME** and touch **Continue**.
 - 4 Scroll to your job, and then touch **OK**.
 - 5 Scroll to **Print** and press **START**. The job prints the remaining copies requested from the computer.
- If **Print** has **🔒** next to it, the job requires a PIN to print. See [“Printing a private job” on page 70.](#)

Deleting a held job

When a user sends a proof and hold job, the product automatically deletes that user's previous proof and hold job. If there is not a proof and hold job already for that job name and the product needs additional space, the product might delete other proof and hold jobs, starting with the oldest one.

To delete a proof and hold job

- 1 Touch **Menu**.
- 2 Touch **Retrieve Job**.
- 3 Touch **USER NAME** to see a list of jobs.
- 4 Scroll to your job, and then touch **Continue**.
- 5 Scroll to **Delete** and press **OK**.

If **Delete** has  next to it, the job requires a PIN to delete. See ["Printing a private job" on page 70](#).

Printing with the optional HP Fast InfraRed (FIR) Receiver

The optional HP Fast InfraRed (FIR) Receiver enables wireless printing from any IrDA-compliant portable device (such as a laptop computer) to the HP LaserJet 9000 Series products.

The printing connection is maintained by positioning the sending FIR port within operating range. Note that the connection can be blocked by objects such as a hand, paper, direct sunlight, or any bright light shining into either FIR port.

Note For more information, see the user guide for the HP Fast InfraRed Connect.

Setting up to print with Windows 9X

Before launching the Fast InfraRed driver, complete the following steps:

- 1 Click **Start**, click **Settings**, and then click **Printers**.
- 2 Select the HP LaserJet 9000mfp or HP LaserJet 9000Lmfp as your default printer.
- 3 While in the same **Printers** folder, choose **Properties**, then choose **Details**, and make sure that **Virtual Infrared LPT Port** is selected.
- 4 Select the file to print.

Printing a job using FIR

Depending on the size of the job, printing with the HP Fast InfraRed Receiver might be slower than printing with a cable connected directly to the parallel port.

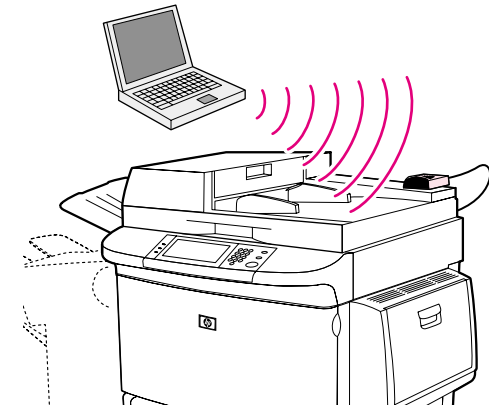
To print a job

- 1 Align your laptop computer (or other portable device equipped with an IrDA-compliant FIR window) within one meter (three feet) maximum of the HP FIR Connect. The FIR window must be at an angle of +/- 15 degrees relative to the product to ensure an effective connection for printing.

Note

To prevent a broken connection while printing, make sure the sending port remains within operating range and that there is nothing between the ports, such as a hand, paper, or even direct sunlight, to block transmission.

- 2 Print the job. The status indicator on the HP Fast InfraRed Receiver lights up, and, after a short delay, the product status bar displays `PROCESSING JOB.`



If the status indicator does not light up, realign the HP Fast InfraRed Receiver with the FIR port on the sending device, resend the print job, and maintain the alignment of all devices. If you have to move the equipment (for example, to add paper), make sure that all devices remain within the range of operation to maintain the connection.

If the connection is interrupted before your print job is complete, the HP Fast InfraRed Receiver status indicator turns off. You have up to 40 seconds to correct the interruption and continue the job. If the connection is resumed within this time, the status indicator lights up again.

Interrupting and resuming printing

The job interrupt and resume feature lets you temporarily stop the current print job in order to print another job through a FIR connection. When the FIR job is completed, the interrupted job resumes printing.

To interrupt the job at the product, connect to the FIR port on the product and send a job to the product. The product stops printing the current job when it reaches the end of the job it is printing. The product then prints the job sent over the FIR connection. When the product is done printing that job, it resumes printing the original job where it left off.

Making booklets

To make booklets easily, you can use the multifunction finisher you chose as your output device.

You can gain access to the booklet-printing feature through some programs, such as desktop publishing programs. Refer to the user guide that came with your program for information on making booklets.

If you are using a program that does not support booklet making, you can create booklets using your HP drivers.

Note HP recommends that you use your program to prepare and preview your document for printing, then use your HP driver to print and saddle stitch your booklet.

There are three main steps to creating a booklet from your driver:

- Preparing your booklet: Arrange the pages on a sheet (booklet imposition) to create a booklet. You can impose your document from your program or use the booklet-printing feature in your HP driver.
- Adding a cover: Add a cover to your booklet by selecting a different first page using a different paper type. You can also add a cover of the same paper type as your booklet. Booklet covers must be the same size as the rest of the sheets. However, the covers may be a different weight from the rest of the booklet.
- Saddle stitching: Paper must be fed into the product short edge first. The multifunction finisher staples the center of your booklet (saddle stitching). If your booklet is only one sheet of paper, the finisher will fold the sheet, but not staple it. If the booklet consists of more than one sheet of paper, the finisher will staple and then fold up to 10 sheets per booklet.

The booklet-printing feature of the multifunction finisher allows you to saddle stitch and fold booklets using the following paper sizes:

- A3
- A4
- Letter
- Legal
- Ledger

See the *multifunction finisher use guide* at www.hp.com/lj9000 for detailed information on making booklets.

6 Product maintenance

Overview

This section explains basic product maintenance:

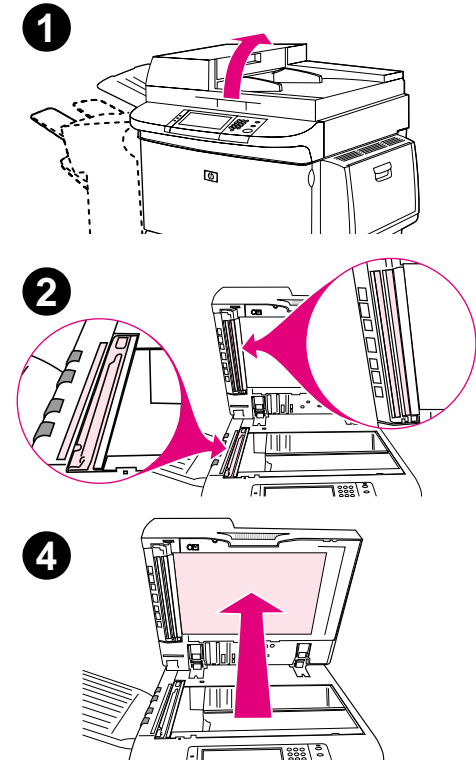
- [Cleaning the product](#)
- [Managing the print cartridge](#)
- [Print cartridge conditions](#)

Cleaning the product

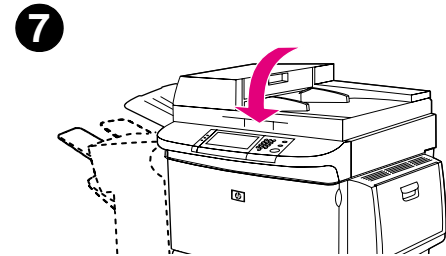
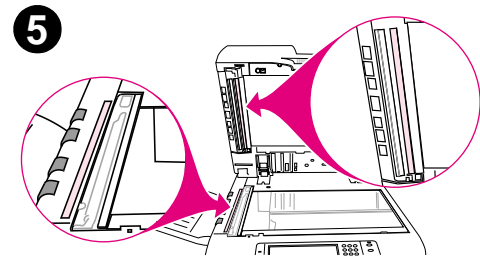
Cleaning the ADF delivery system

Clean the ADF only if it is visibly marked or dirty, or if you are experiencing a decrease in copy quality (such as streaking).

- 1 Lift the ADF.
- 2 Locate the top and bottom ADF glass strips.
- 3 Clean the glass strips by wiping them gently with a clean, damp, lint-free cloth. Use an ammonia-based surface cleaner to dampen the cloth.
- 4 Locate the white, vinyl ADF backing.



- 5 Locate the white, vinyl calibration strips.
- 6 Clean the ADF backing and the calibration strips by wiping them with a clean, damp, lint-free cloth. Use an ammonia-based surface cleaner to dampen the cloth.
- 7 Close the ADF.



To clean the top ADF glass strip

If you are still experiencing poor copy quality, you might need to clean the top ADF glass strip.

CAUTION

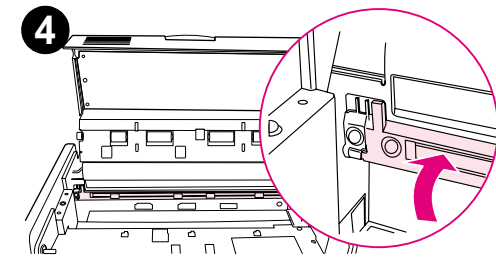
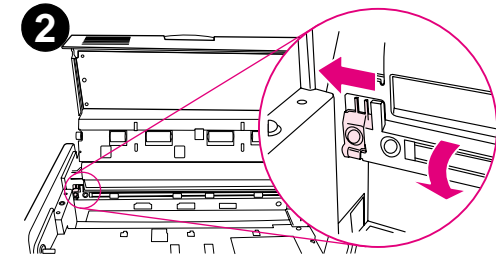
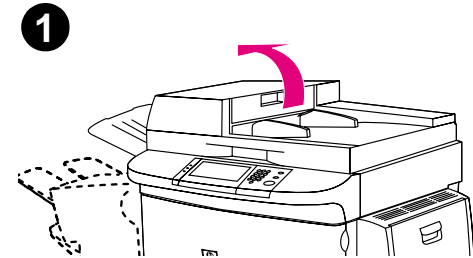
Clean this area only if you see copy defects such as streaks, and you notice dust inside the glass strip. Cleaning this area frequently could introduce dust into the product.

- 1 Open the ADF cover.
 - 2 Locate the latch that releases the top ADF glass strip. Push the latch to the left, and pull down to expose the inside of the glass strip.
 - 3 Gently wipe the glass with a dry, lint-free cloth.
-

CAUTION

Use dry cloth only in this area. Do not use solvents, cleaners, water, or compressed air. Doing so could severely damage the product.

- 4 Pull up on the latch to return the glass strip to its normal position.
- 5 Close the ADF cover.



To clean the ADF rollers

You should clean the rollers in the ADF if you are experiencing misfeeds or if your originals show marks as they exit the ADF.

- 1 Open the ADF.

CAUTION

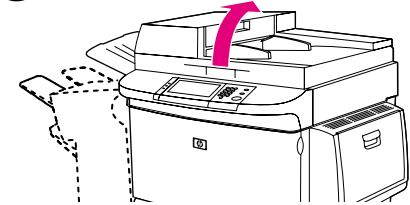
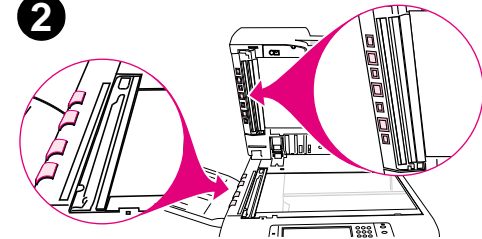
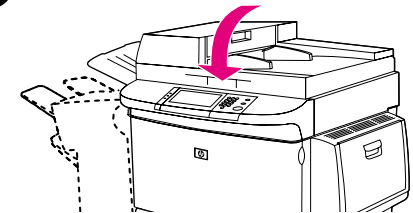
Clean the rollers only if you experience misfeeds or marks on the originals, and you notice dust on the rollers. Cleaning the rollers frequently could introduce dust into the product.

- 2 Locate the rollers near the glass strips.
- 3 Wipe the rollers gently with a clean, water-dampened, lint-free cloth.

CAUTION

Do not pour water directly onto the rollers. Doing so might damage the product.

- 4 Close the ADF.

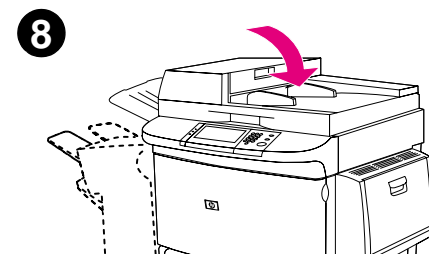
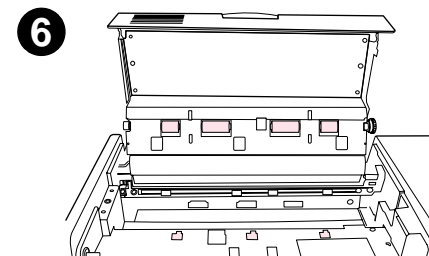
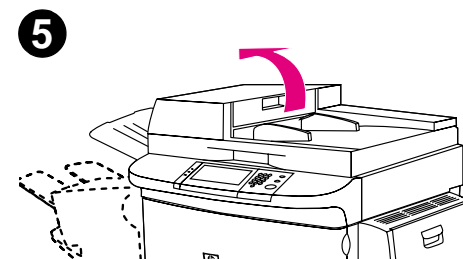
1**2****4**

- 5 Open the ADF cover.
- 6 Locate the rollers.
- 7 Wipe the rollers with a clean, water-dampened, lint-free cloth.

CAUTION

Do not pour water directly onto the rollers. Doing so might damage the product.

- 8 Close the ADF cover.
- 9 Close the delivery guide and wipe its outside surface with the cloth.



Cleaning the scanner glass

- Clean the scanner glass only if dirt is visible, or if you see poor copy quality (such as streaking).
- Clean the scanner glass surface by wiping it gently with a clean, damp, lint-free cloth. Use an ammonia-based surface cleaner to dampen the cloth.

CAUTION Do not pour or spray liquids directly onto the scanner glass.

CAUTION Do not press hard on the scanner glass surface. You might break the scanner glass.

Managing the print cartridge

When you use a new, authentic HP print cartridge (C8543X), you can obtain the following types of supplies information:

- amount of cartridge life remaining
- estimated number of pages remaining
- number of pages printed
- other supplies information

Non-HP print cartridge

Hewlett-Packard Company cannot recommend the use of non-HP print cartridges, either new or remanufactured. Because they are not HP products, HP cannot influence their design or control their quality. Service or repairs required as a result of using a non Hewlett-Packard print cartridge will *not* be covered under the product warranty.

When you use a non-HP print cartridge, the cartridge is unable to report on the status of the print cartridge. The `CARTRIDGE LOW` and `CARTRIDGE OUT` messages will not be provided.

Print cartridge authentication

When you insert a non-HP print cartridge in the product, the product will inform you if a cartridge is not a genuine HP print cartridge. If you insert a used HP cartridge from another HP product, the product can take as many as 60 printed pages to authenticate that the cartridge is a genuine HP part, and will then reactivate the supply status features.

If the product control panel message states that this is not a genuine HP print cartridge and you believe you purchased an HP cartridge, call the HP fraud hotline at (1) (887) 219-3183 (toll-free in North America).

Print cartridge storage

Do not remove the print cartridge from its package until you are ready to use it. The shelf life of a cartridge in an unopened package is approximately 2.5 years.

CAUTION To prevent damage to the print cartridge, do not expose it to light for more than a few minutes.

Checking the toner level

You can check the toner level using the product control panel, the product software, the embedded Web access server (see [“Checking the toner level using the embedded Web access server” on page 244](#)), or HP Web JetAdmin (see [“Checking the toner level using HP Web JetAdmin” on page 253](#)).

Using the product control panel

- 1 Touch **Menu**.
- 2 Touch PRINT SUPPLIES STATUS.
- 3 Press START to print the supplies status page. See [“Supplies status page” on page 171](#) for information about the supplies status page.

Using product software

Three things are required to use this feature:

- The “Supplies Information and Ordering” software must be installed on your computer (use the custom installation option to install this software).
 - The product must be directly connected to your computer (parallel).
 - You must have access to the World Wide Web.
- 1 At the bottom right of your screen (in the system tray), double-click the Printer icon. This opens the status window.
 - 2 On the left side of the status window, click the Printer icon from which you wish to obtain status.
 - 3 At the top of the status window, click the **Supplies** link. You can also scroll down to Supplies Status.

Note

If you want to order supplies, click **Order Supplies**. This opens a browser that produces a URL through which to purchase consumables. Select the supplies you wish to order and finish the ordering process.

Print cartridge conditions

Print cartridge is low

When the print cartridge is low, the product control panel displays the CARTRIDGE LOW message.

If the CARTRIDGE LOW message appears, but the product continues printing, CARTRIDGE LOW is set to CONTINUE (the default setting).

If the product stops printing when low toner is detected, CARTRIDGE LOW is set to STOP. To resume printing, press START.

The product continues to display CARTRIDGE LOW until you replace the print cartridge.

Select CARTRIDGE LOW=CONTINUE or CARTRIDGE LOW=STOP from the Configuration menu in the control panel (see [“System setup submenu” on page 205](#)).

Print cartridge is out

When a CARTRIDGE LOW message appears on the control panel display, the default setting allows the product to continue printing until you replace the print cartridge, or until the product receives an “end of drum life” message. When a CARTRIDGE OUT message appears at the end of the drum life, the product stops, and you cannot override the message or continue printing until you replace the drum. The product stops to prevent potential damage to the product.

HP recommends that you order a replacement print cartridge when you first receive a CARTRIDGE LOW alert. You can order a cartridge using the Internet Enabled Supplies Ordering feature. For a direct connection, click the printer icon on the bottom right of your screen, click the icon of the product you use, and click the Order Supplies link on the status page. In a network environment, use the Web access server to order supplies online.

Using the product cleaning page

Note

To ensure good print quality with certain types of paper, use the cleaning page every time the print cartridge is replaced. If the cleaning page is frequently needed, try a different type of paper.

If toner specks appear on the front or back side of your print jobs, follow the procedure below.

From the product control panel:

- 1 Touch **Menu**.
- 1 Touch `Configure Device`.
- 2 Touch `Print Quality`.
- 3 Scroll to `Create Cleaning Page`.
- 4 Touch `Create Cleaning Page`, and the page automatically prints.
- 5 When toner has been cleaned from inside the product, shiny black spots appear on the page black strip. If white spots appear on the black strip, print another cleaning page.

Note

For the cleaning page to work properly, print the cleaning page on copier-grade paper (not bond or rough paper).

Shaking the print cartridge

When you install a print cartridge for the first time, gently shake it from side to side to distribute the toner evenly inside the cartridge. Due to the new cartridge design, this is the only time you will need to shake the cartridge.

7 Problem solving

Overview

This section will help you to troubleshoot and solve product problems.

[“Clearing jams” on page 95](#)

Occasionally, paper can jam during printing. This section will help you to locate paper jams, properly clear them from the product, and solve repeated jams.

[“Understanding product messages” on page 117](#)

Many different messages can appear on the control panel display. Some messages tell the current product status, such as `INITIALIZING`. Other messages require action, such as `CLOSE FRONT DOOR`. Most of these messages are self-explanatory. However, some messages indicate a problem with the product, or require further action or description. This section lists these types of messages and tells you what to do if a message persists.

[“Correcting output quality problems” on page 138](#)

The product should produce print jobs of the highest quality. If print jobs do not appear sharp and clear, if defects such as lines, specks, or smears appear on the page, or if paper is wrinkled or curled, use this section to troubleshoot and solve the print quality problem.

[“Determining product problems” on page 146](#)

Before you can eliminate a product problem, you must understand the location of the problem. Use the tables in this section to determine the product problem, and then follow the corresponding troubleshooting suggestions.

[“Checking the product configuration” on page 167](#)

From the product, you can print information pages, which give details about the product and its configuration.

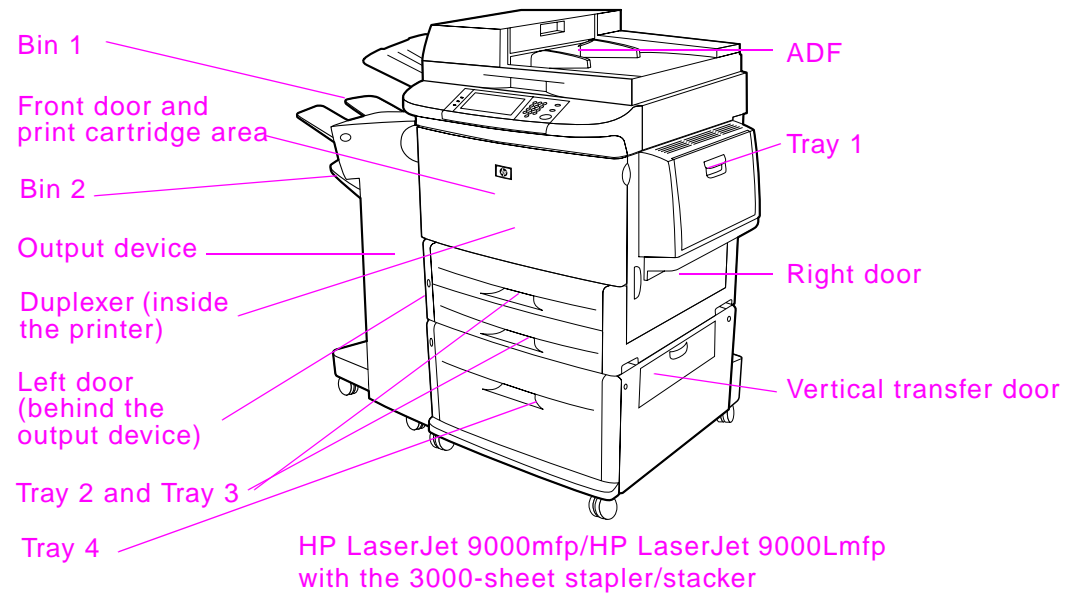
Clearing jams

If the control panel displays a paper jam message, look for paper in the locations indicated in the following graphic. You might need to look for paper in locations other than indicated in the paper jam message. If the location of the paper jam is not obvious, look first in the front door area.

After looking at the graphic, you can go to the procedure for clearing the jam. When clearing jams, be very careful not to tear the paper. If a small piece of paper is left in the product, it could cause additional jams. If jams are a recurring problem, see [“Solving repeated paper jams” on page 116](#).

Note Loose toner might remain in the product after a paper jam and cause output quality problems. These should clear up within a few pages.

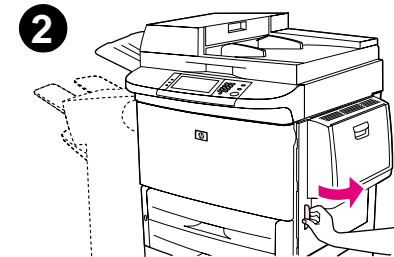
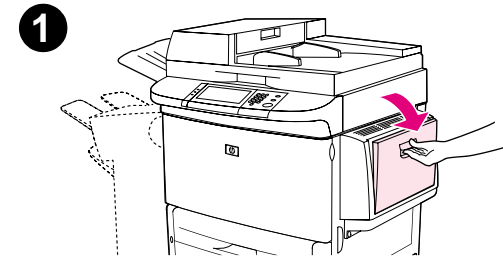
Jam locations



Clearing jams from the input tray areas

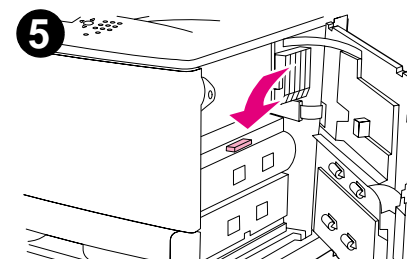
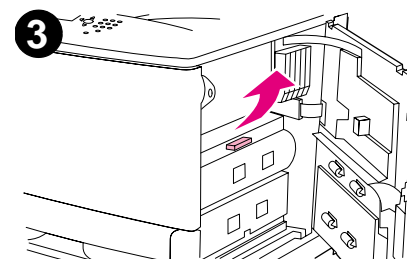
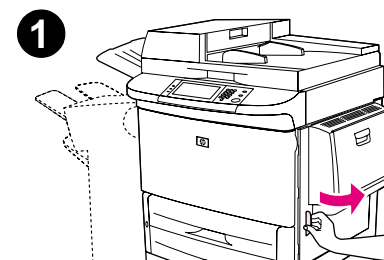
To clear jams in Tray 1

- 1 Check for paper in the Tray 1 area, and remove any paper from this area. Carefully check to be sure you have removed all pieces of torn paper.
- 2 Open and close the right door to reset the product.



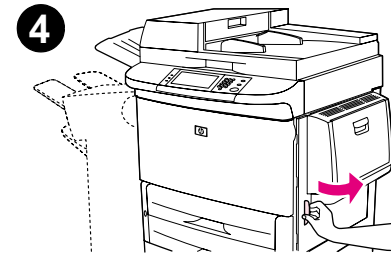
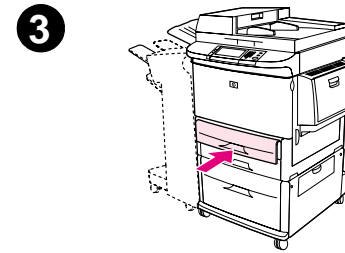
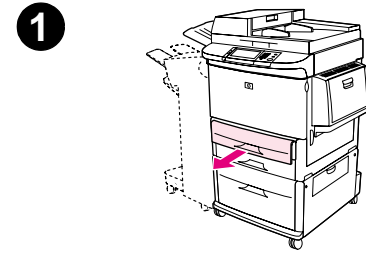
To clear jams inside the right door

- 1 Open the right door.
- 2 Check for paper in the right door area, and remove any paper from this area. Carefully check to be sure you have removed all pieces of torn paper.
- 3 Open the jam access cover. Pull out and lift the green tab.
- 4 Remove any paper from this area by pulling it out of the product.
- 5 Push the green lever down to original position.
- 6 Close the right door.



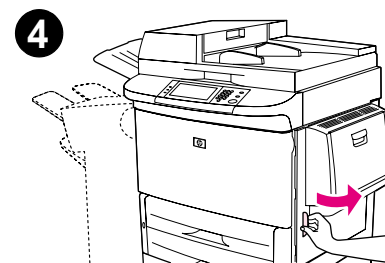
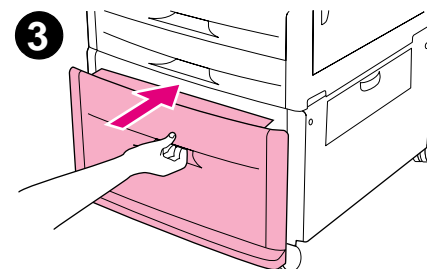
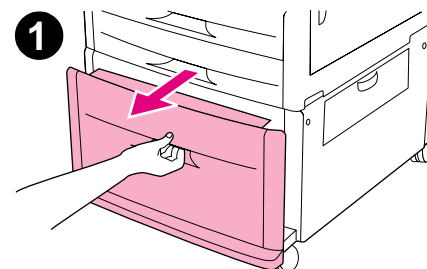
To clear jams in Trays 2 and 3

- 1 Open the tray until it stops.
- 2 Check for paper in the tray area, and remove any paper from this area. Carefully check to be sure you have removed all pieces of torn paper.
- 3 Close the tray.
- 4 Open and close the right door to reset the product.



To clear jams in Tray 4

- 1 Open Tray 4.
- 2 Check for paper in the tray area, and remove any paper from this area. Carefully check to be sure you have removed all pieces of torn paper.
- 3 Close Tray 4.
- 4 Open and close the right door to reset the product.



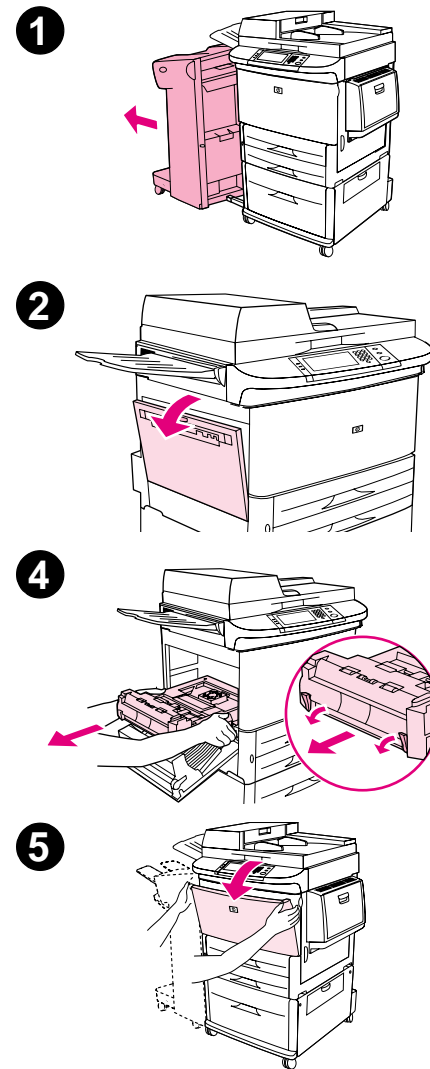
Clearing jams from the duplex printing accessory (duplexer)

To clear jams in the duplex printing accessory

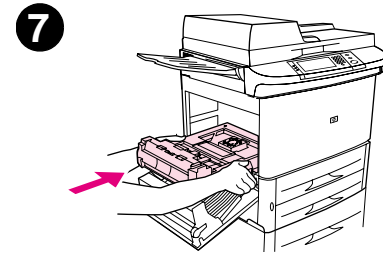
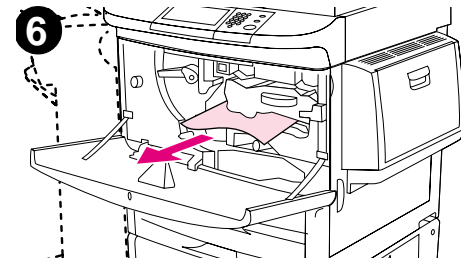
- 1 Move the output device away from the product to gain access to the left door.
- 2 Open the left door and carefully pull out any paper from area.

WARNING! Avoid touching the adjacent fusing area. It can be HOT.

- 3 Remove the duplex printing accessory by pressing the green lever and pulling the unit out until it stops.
- 4 Remove any paper by lifting the two green levers in the duplex printing accessory.
- 5 Open the front door.



- 6 Check for paper in the duplex printing accessory area, and remove any paper by pulling it out of the product. Be careful not to tear the paper.
- 7 Reinstall the duplex printing accessory by sliding it back into the slot until it locks into place.
- 8 Close all open doors. Push the output device back into place.



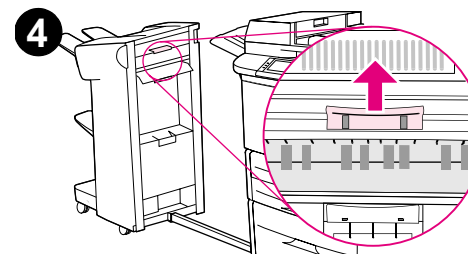
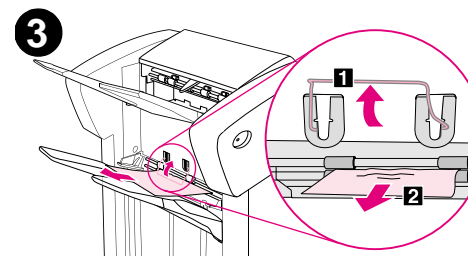
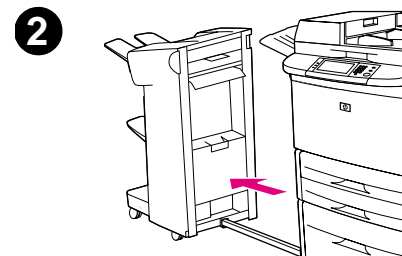
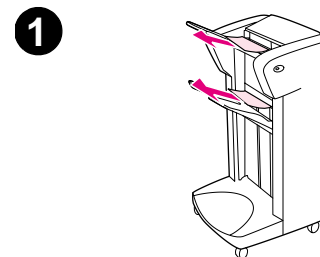
Clearing jams from the output areas

To clear jams in the stacker or stapler/stacker

- 1 If the jam extends into the output bins, slowly and carefully pull the paper straight out of the product so that it does not tear.
- 2 Move the output device away from the product.
- 3 On the stacker, lift the wire on Bin 2 of the device, and carefully pull out any paper from this area. If you have a stapler/stacker. On the stapler/stacker, carefully pull out any paper that might be protruding from the accumulator area.

Note Only the stacker has the wire on Bin 2.

- 4 Locate the green handle in the flipper area and lift the handle.

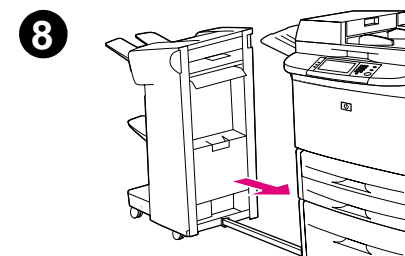
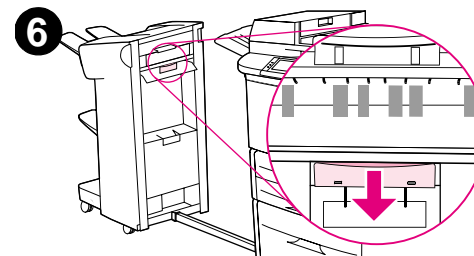
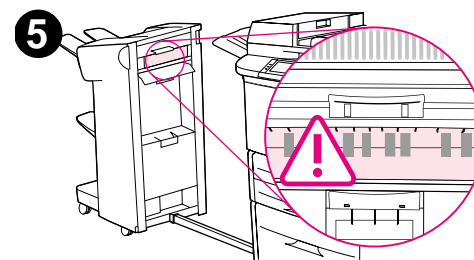


- 5 Carefully pull out any paper from the flipper area.

WARNING!

Avoid touching the flipper area. It can be HOT.

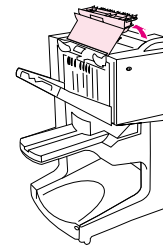
- 6 Locate the green handle in the paper path module, and then pull down on the handle.
- 7 Carefully pull out any paper from the paper path module.
- 8 Close all open doors. Push the output device back into place.



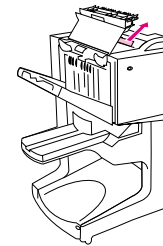
To clear jams in the multifunction finisher

- 1 Open the finisher cover.
- 2 Slowly and carefully pull the paper straight out of the finisher so that it does not tear.
- 3 Close the finisher cover.
- 4 Move the finisher away from the product.

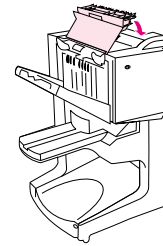
1



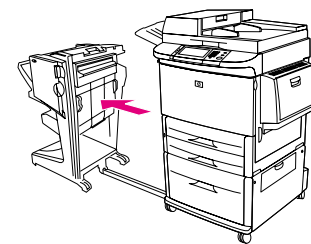
2



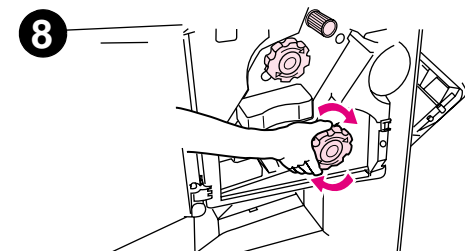
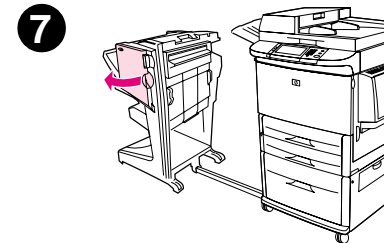
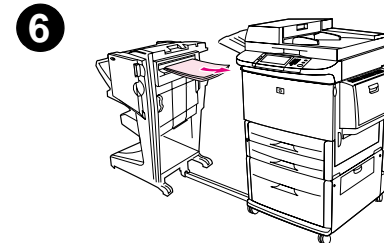
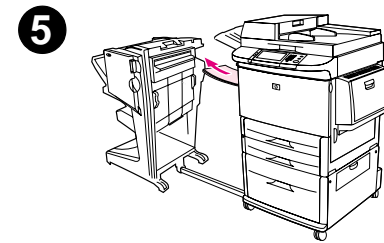
3



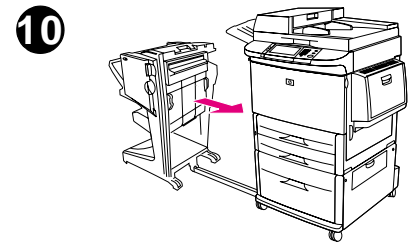
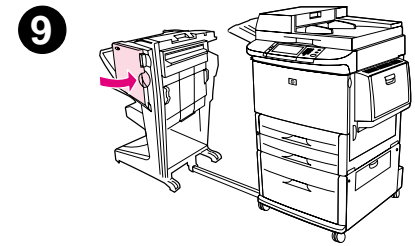
4



- 5 Carefully remove any paper from the printer output area.
- 6 Carefully remove any paper from the finisher input area.
- 7 Open the stapler-unit door.
- 8 To clear a booklet jam, turn the bottom green knob clockwise to remove the booklet.



- 9 Close the stapler-unit door.
- 10 Reattach the finisher.



To clear jams in the left door (fuser area)

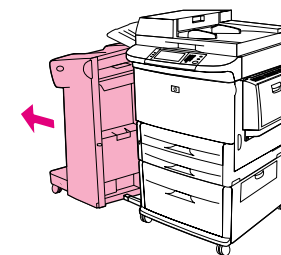
- 1 Move the output device away from the product to gain access to the left door.
- 2 Open the left door.

WARNING!

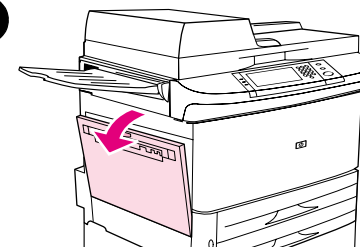
Avoid touching the adjacent fusing area. It can be HOT.

- 3 Remove any jammed or damaged paper from this area by pulling it out of the product.
- 4 Press down on the green tab and carefully check for paper. Be sure to remove all pieces of torn paper.
- 5 Close the left door. Push the output device back into place.

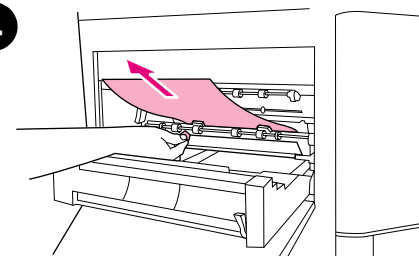
1



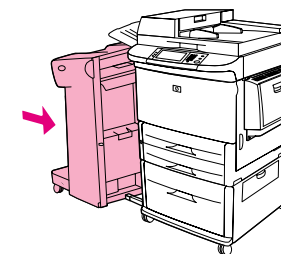
2



4



5

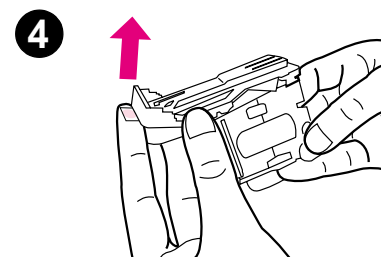
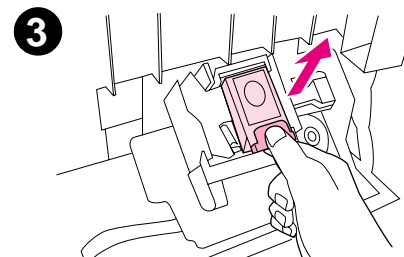
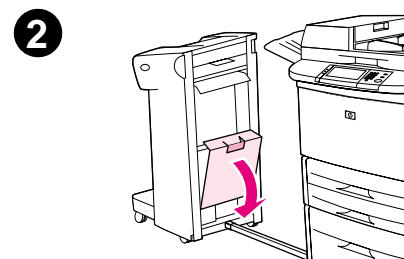
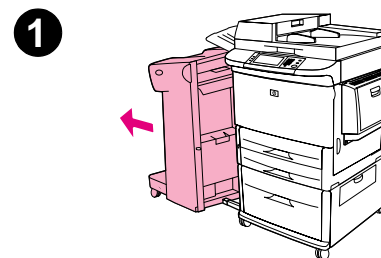


To clear a staple jam from the stapler/stacker

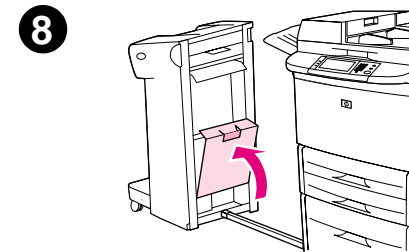
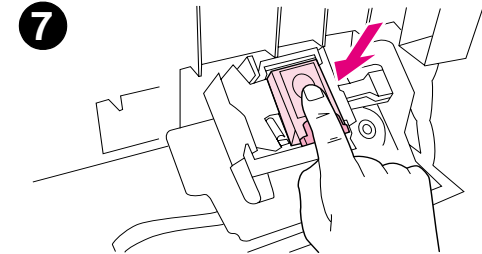
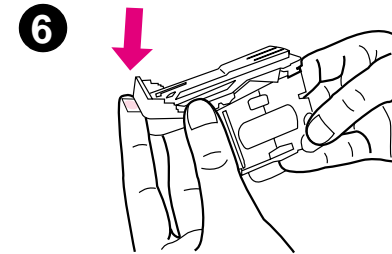
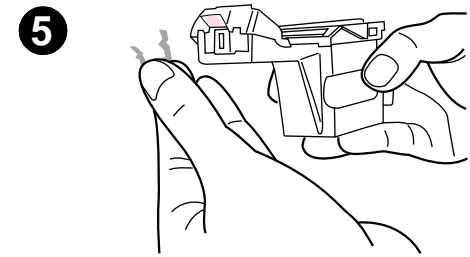
Note

The message JAM INSIDE STAPLER displays on the control panel.

- 1 Move the stapler/stacker away from the product.
- 2 Open the stapler unit door.
- 3 Pull the cartridge out.
- 4 Pull up on the lever labeled with a green dot.



- 5 Remove the damaged staple.
- 6 Press down on the lever labeled with a green dot.
- 7 Reinstall the staple cartridge.
- 8 Close the stapler unit door.

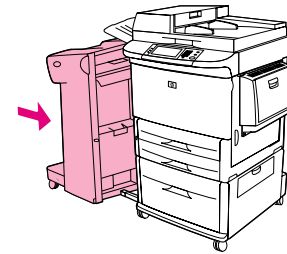


- 9 Reattach the stapler/stacker to the product.

Note

The stapler needs to reload after clearing a staple jam, so the first few documents (no more than five) might not be stapled. If a print job is sent and the stapler is jammed or is out of staples, the job will still print as long as the path to the output bin is not blocked.

9



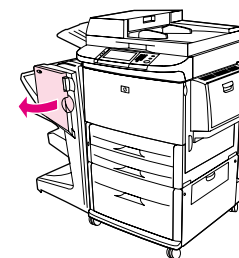
To clear a staple jam from the multifunction finisher

- 1 Open the stapler-unit door.
- 2 Slide the stapler-unit toward you.
- 3 Turn the large green knob until the blue dot appears in the window of the stapler unit.
- 4 Turn the small green knob at the top of the stapler unit counterclockwise until the staple cartridge moves to the left of the stapler unit.

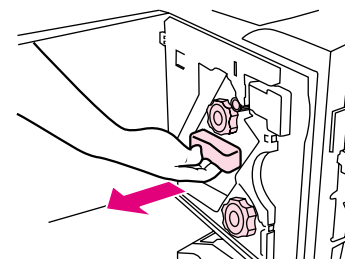
CAUTION

The blue dot must appear in the window of the stapler unit before you remove the staple cartridge. If you try to remove the staple cartridge before the blue dot appears in the window, you could damage the finisher.

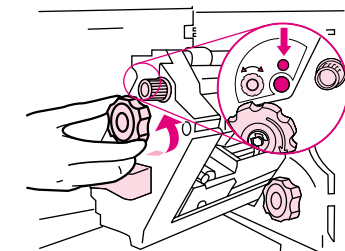
1



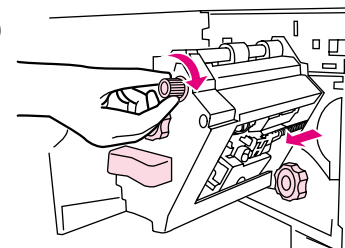
2



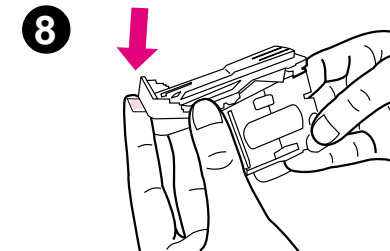
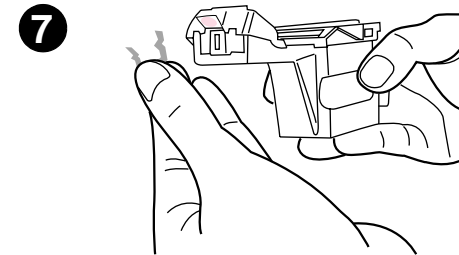
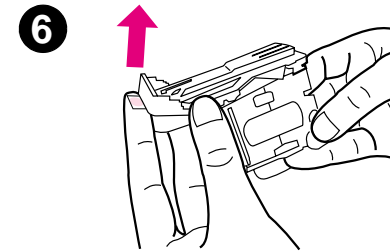
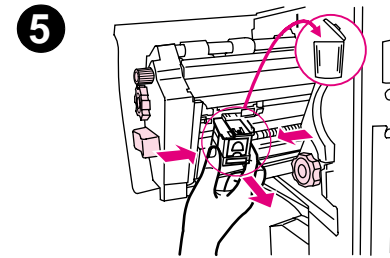
3



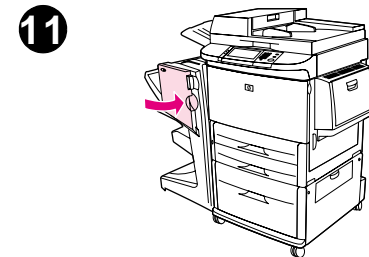
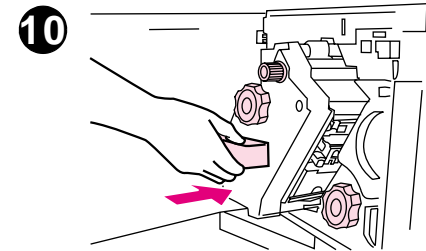
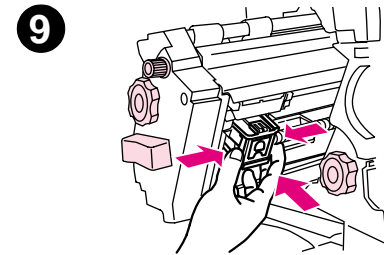
4



- 5 Remove the staple cartridge.
- 6 Pull up on the lever labeled with a green dot.
- 7 Remove the damaged staple.
- 8 Press down on the lever labeled with a green dot.

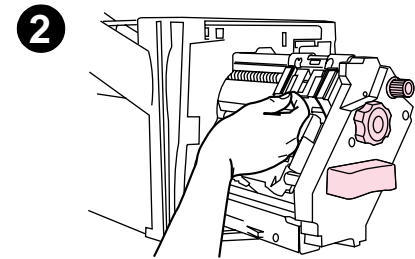


- 9 Reinstall the staple cartridge.
- 10 Slide the stapler unit into the finisher.
- 11 Close the stapler-unit door.



In rare instances, a staple jam might occur in the upper half of the stapler head.

- 1 Follow steps 1 through 4 for clearing a staple jam from the multifunction finisher (see page [112](#)).
- 2 Locate the damaged staple at the back of the stapler unit, and then remove the staple.
- 3 Follow steps 10 through 11 for clearing a staple jam from the multifunction finisher (see page [112](#)).



Solving repeated paper jams

Situation	Solution
General repeated paper jam problems	<ol style="list-style-type: none"> <li data-bbox="451 368 1730 432">1. Check to see that paper is correctly loaded in the trays and that all width guides are correctly set (See "Printing" on page 46). <li data-bbox="451 480 1730 544">2. Make sure that the paper tray is set for the size of paper installed and that the tray is not overloaded with paper. <li data-bbox="451 592 1730 655">3. Try turning over the stack of paper in the tray. If you are using prepunched or letterhead paper, try printing from Tray 1. <li data-bbox="451 703 1730 799">4. Do not use previously printed paper or torn, worn, or irregular paper. For recommended paper and other paper for your product, see the <i>introduce</i> guide on the product CD, or go to www.hp.com/support/lj9000. <li data-bbox="451 847 1730 943">5. Check the paper specifications. (See the <i>introduce</i> guide on the product CD, or go to www.hp.com/support/lj9000.) If paper is outside of the recommended specifications, problems can occur. <li data-bbox="451 991 1730 1054">6. Product might be dirty. Clean the product as described in the <i>introduce</i> guide on the product CD, or go to www.hp.com/support/lj9000. <li data-bbox="451 1102 1730 1139">7. Check that all damaged or jammed paper is removed from product.
Repeated paper jams in the ADF	<ol style="list-style-type: none"> <li data-bbox="451 1190 1730 1254">1. The ADF might be dirty. Clean the ADF as described in "Cleaning the ADF delivery system" on page 84.

Note

If paper jams continue, contact your HP-authorized service provider. (See the HP Customer Care section in the *introduce* guide on the product CD, or go to www.hp.com/support/lj9000.)

Clearing jams

Understanding product messages

Product messages appear on the control panel display to relay the normal status of the product (such as `Processing Job`), or an error condition (such as `Close Front Door`) that needs attention. [“Resolving control panel messages” on page 118](#) lists messages that require attention, or that might raise questions. Messages are listed in alphabetical order, with numeric messages at the end of the list. Not all messages are listed, because some (such as `Ready`) are self-explanatory.

Note Some product messages are affected by the `AUTO CONTINUE` and `CLEARABLE WARNINGS` settings in the `CONFIGURE DEVICE` menu, `System Setup` submenu, in the control panel (See [“System setup submenu” on page 205](#)).

Using the product help system

This product features a help system on the control panel that provides instructions for resolving most product errors. Certain control panel messages alternate with instructions about accessing the help system.

Whenever a `?` appears in an error message or a message alternates with `FOR HELP PRESS ?`, press the `?` key to view the help.

To exit the help system, press `?`.

If a message persists

- Some messages (e.g. requests to load a tray or a message that a previous print job is still in the product memory) allow you to touch **Continue** to print, or to press **STOP** to clear the job and eliminate the message.
- If a message persists after performing all of the recommended actions, contact an HP-authorized service or support provider. (See the *introduce* guide on the product CD, or go to www.hp.com/support/lj9000.)

Resolving control panel messages

Message	Explanation or recommended action
ACCESS DENIED MENUS LOCKED	The control panel function you are trying to access has been locked to prevent unauthorized access. See your system administrator.
ADF COVER OPEN	Close the ADF cover. Follow the instructions on the pop-up dialog box.
ADF PAPER JAM	A jam has occurred in the ADF. Follow the instructions on the pop-up dialog box.
ADF PICK ERROR	Make sure there are no more than 30 pages in your original. Follow the instructions on the pop-up dialog box.
ADF SKEW ERROR	Make sure that the paper guides are aligned on the sides of the originals, and that all originals are the same size. Follow the instructions on the pop-up dialog box.
BAD DUPLEXER CONNECTION	The duplex printing accessory is not connected properly to the product. Follow the instructions on the pop-up dialog box.
BAD TRAY CONNECTION	A tray is not connected properly to the product. Follow the instructions on the pop-up dialog box.
<BINNAME> FULL	The specified output bin is full. Empty the bin to continue printing.

Message	Explanation or recommended action
CANCELLING... <JOBNAME>	The product is cancelling a job. The message continues while the job is stopped, the paper path is flushed, and any remaining incoming data on the active data channel is received and discarded.
CARTRIDGE FAILURE	Cartridge is loaded and shipping protection strip cannot be fully removed. Return the cartridge for a new one. (See the <i>introduce</i> guide on the product CD, or go to www.hp.com/support/lj9000 .)
CARTRIDGE LOW - xxxx PAGES ESTIMATED To continue touch Continue	The message first appears when about eight percent of toner is remaining in the cartridge (about 2400 pages remaining for the 30,000-page cartridge at five percent coverage). Follow the instructions on the pop-up dialog box. See “Print cartridge conditions” on page 92 for more information.
CARTRIDGE OUT REPLACE CARTRIDGE	Drum in print cartridge is zero. Follow the instructions on the pop-up dialog box.
CHECKING PAPER PATH	The engine is rotating its rollers to check for possible paper jams.
CHECKING PRINTER	The engine is performing an internal test.
CHOSEN PERSONALITY NOT AVAILABLE alternates with READY	A print job requested a printer language (personality) that does is not available with this product. The job will not print and will be cleared from memory. Print the job using a driver for a different printer language, or add the requested language to the product (if available).

Message	Explanation or recommended action
CLEARING PAPER FROM PRINTER	The product jammed or was turned on and paper is detected in a wrong location. The product is automatically attempting to eject the pages. If possible, use the progress bar at the bottom of the display.
CLOSE FRONT DOOR ON LEFT ACCESSORY	The stapler door on the multifunction finisher is open, or it is not closed properly. Close the stapler door properly.
CLOSE FRONT OR LEFT DOOR	The front or left doors are open and must be closed for printing to continue.
CLOSE RIGHT DOOR	The right door is open and must be closed for printing to continue.
CLOSE TOP COVER ON LEFT ACCESSORY	The top cover on the multifunction finisher is open, or is not closed properly. Close the top cover properly.
DETECTABLE SIZE IN TRAY xx Move switch to standard	A tray is loaded with standard size paper, and the switch in the tray is set to custom. Move the switch to the "standard" position.
DIFFERENT PAPER SIZES IN JOB	Different paper sizes are used for a single job in the multifunction finisher. Verify that all pages in the job are configured for the same size paper.
DISK DEVICE FAILURE alternates with READY	The EIO hard disk had a critical failure and can no longer be used. Reseat the EIO hard disk. If the message continues, replace it with a new EIO hard disk.

Message	Explanation or recommended action
<code>DISK FILE OPERATION FAILED</code> alternates with <code>READY</code>	The requested operation could not be performed. You might have attempted an illegal operation, such as trying to download a file to a nonexistent directory.
<code>DISK FILE SYSTEM IS FULL</code> alternates with <code>READY</code>	Delete files from the EIO hard disk and then try again. HP Web JetAdmin can be used to delete files and fonts.
<code>DISK IS WRITE PROTECTED</code> alternates with <code>READY</code>	The disk device is protected, and no new files can be written to it.
<code>EIO NOT FUNCTIONAL</code>	The EIO hard disk is not working correctly. Follow the instructions on the pop-up dialog box.
<code>EIO DISK x SPINNING UP</code>	The EIO hard disk in slot x is spinning up its platter.
<code>EVENT LOG EMPTY</code>	The user is attempting to view an empty event log by selecting <code>SHOW EVENT LOG</code> from the control panel.

Message	Explanation or recommended action
FLASH DEVICE FAILURE alternates with READY	The flash DIMM had a critical failure and can no longer be used. Remove the flash DIMM and replace it with a new one.
FLASH FILE OPERATION FAILED alternates with READY	The requested operation could not be performed. You might have attempted an illegal operation, such as trying to download a file to a non-existent directory.
FLASH FILE SYSTEM IS FULL alternates with READY	Delete files from the flash DIMM. Use HP LaserJet Resource Manager to download or delete files and fonts. (See the software help for more information.)
FLASH IS WRITE PROTECTED alternates with Ready	The flash file is protected, and no new files can be written to it.
INCORRECT PIN	The wrong PIN is entered. Return to the previous screen and reenter the PIN.
INSERT OR CLOSE TRAY x	The specified tray must be inserted or closed for printing to continue.

Message	Explanation or recommended action
INSTALL BOOKLET BIN	The booklet bin for the multifunction finisher is not installed properly. Install the booklet bin properly. See the <i>use guide</i> that came with the finisher for more information.
INSTALL CARTRIDGE	The print cartridge has been removed or has been installed incorrectly. It must be replaced or reinstalled correctly for printing to continue.
INSTALL CONNECTION UNIT	Connection unit is not installed in the right access door of the product to allow printing from the input device.
LOAD TRAY xx alternates with To use another tray touch Continue.	A job is sent that requires a specific type and size that is not available. Load the requested paper into Tray 1. Touch Continue to use a type and size that is available in another tray.
MANUALLY FEED [TYPE] [SIZE] alternates with Continue	Load the requested paper into Tray 1. To override the message, touch Continue if the required paper is available in another tray. Touch Continue to use a type and size that is available in another tray.
MEMORY FULL STORED DATA LOST	There is no available memory in the product. The current job might not print correctly, and some resources (such as downloaded fonts) might have been deleted. You might want to add more memory to the product (See “Product memory and expansion” on page 218).

Message	Explanation or recommended action
MEMORY SETTINGS CHANGED	<p>Indicates the resource saving or I/O buffering settings were changed by the product because it did not have enough memory to use the previous settings. This usually occurs after removing memory from the product, adding a duplex printing accessory, or adding a printer language.</p> <p>You might want to change memory settings for I/O buffering and resource saving (although default settings are usually best), or add more memory to the product (See “Product memory and expansion” on page 218).</p>
MEMORY SHORTAGE JOB CLEARED	<p>The product did not have enough free memory to print the entire job. The remainder of the job will not print and will be cleared from memory.</p>
alternates with Ready	<p>Touch Continue to continue.</p> <p>Change the resource saving setting from the product control panel (See “Control panel menus” on page 185) or add more memory to the product (See “Product memory and expansion” on page 218).</p>
MEMORY SHORTAGE PAGE SIMPLIFIED	<p>The product had to compress the job in order to fit it in available memory. Some data loss might have occurred.</p>
alternates with Ready	<p>Touch Continue to continue.</p> <p>The print quality of these pages might not be acceptable. Reduce the complexity of these pages and reprint them.</p> <p>You might want to add more memory to the product (See “Product memory and expansion” on page 218).</p>
NO JOB TO CANCEL	<p>The Cancel button was pressed, but there is no active job or buffered data to cancel.</p> <p>Message is displayed for approximately two seconds before the product is returned to the READY state.</p>

Message	Explanation or recommended action
NON-HP CARTRIDGE DETECTED	The product has detected that the cartridge is not a genuine HP cartridge, and the message is displayed for approximately 30 seconds before the product is returned to the <code>READY</code> state. If you think you purchased an HP print cartridge, call the HP fraud hotline (1-877-219-3183, toll-free in North America). Any product repair required as a result of using a non-HP print cartridge is not covered under the product warranty.
PERFORM PRINTER MAINTENANCE	The product has passed its prescribed printed page threshold between maintenance procedures. To ensure optimum print quality, the product prompts you to perform routine maintenance every 350,000 pages. To order a Printer Maintenance Kit, see the <i>introduce</i> guide on the product CD, or go to www.hp.com/support/lj9000 .
RAM DISK DEVICE FAILURE alternates with <code>Ready</code>	The RAM disk had a critical failure and can no longer be used. Turn the product off, and then turn the product on to clear the message.
RAM DISK FILE OPERATION FAILED alternates with <code>Ready</code>	The requested operation could not be performed. You might have attempted an illegal operation, such as trying to download a file to a non-existent directory.
RAM DISK FILE SYSTEM IS FULL alternates with <code>Ready</code>	Delete files and then try again, or turn the product off, and then turn the product on to delete all files on the device. (Delete files using HP LaserJet Resource Manager or another software utility. See the software help for more information.) If the message persists, increase the size of the RAM disk. Change the RAM disk size from the Configuration menu in the control panel (See “System setup submenu” on page 205).

Message	Explanation or recommended action
RAM DISK IS WRITE PROTECTED alternates with Ready	The RAM disk is protected, and no new files can be written to it.
RESEND UPGRADE	There is an error in the product firmware flash. Resend a valid firmware image.
ROM DISK DEVICE FAILURE alternates with Ready	The ROM disk had a critical failure and can no longer be used. Turn the product off, and then turn the product on to clear the message.
ROM DISK FILE OPERATION FAILED alternates with Ready	The requested operation could not be performed. You might have attempted an illegal operation, such as trying to download a file to a non-existent directory.
ROM DISK FILE SYSTEM IS FULL alternates with Ready	Delete files and then try again, or turn the product off, and then turn the product on to delete all files on the device. (Delete files using HP LaserJet Resource Manager or another software utility. See the software help for more information.) If the message persists, increase the size of the ROM disk. Change the ROM disk size from the Configuration menu in the control panel (See "System setup submenu" on page 205).
ROM DISK IS WRITE PROTECTED	The ROM disk is protected, and no new files can be written to it.

Message	Explanation or recommended action
ROTATE PAPER IN TRAY xx alternates with Ready	Tray xx is loaded with Letter or A4 paper in the portrait orientation, but the job that used the tray did not specify booklet making. Tray xx has letter (or A4) but the paper needs to be rotated.
SIZE MISMATCH TRAY xx=[SIZE]	Tray xx is loaded with paper that is longer or shorter in the feed direction than the size configured for the tray. Follow the instructions on the pop-up dialog box.
STAPLE AREA SAFETY PROTECTION ACTIVATED	A staple safety alert has occurred. Remove any obstruction from the stacker bin ejection area.
STAPLER LOW ON STAPLES	The stapler device is running out of staples and needs to be refilled.
STAPLER OUT OF STAPLES	The stapler device is out of staples and needs to be refilled.
TRAY xx CONTAINS UNKNOWN MEDIA	The product cannot sense what type of media is in the specified tray (xx).
TRAY xx EMPTY alternates with Ready	Load the empty tray (xx) to clear the message. If you do not load the specified tray, the product will continue printing from the next available tray, and the message will continue to display.

Message	Explanation or recommended action
TRAY xx OPEN alternates with Ready	The specified tray is open or is not closed completely.
TRAY xx SIZE=*SELECTED SIZE alternates with To change, move switch in tray x	The custom switch is in the “standard” position, and a value from the menu is selected.
TOO MANY PAGES IN JOB TO STAPLE	The job height is greater than the stapler capacity. The height of the job to be stapled should not exceed 5.5 mm (0.22 inch). Verify that the job is within specifications to be stapled. See the <i>use guide</i> that came with the output device for more information.
TOO MANY PAGES TO MAKE BOOKLET	The page content is too large to be saddle stitched. Verify that the job is within specifications to be saddle stitched. See the <i>use guide</i> that came with the output device for more information.
TYPE MISMATCH TRAY x=[TYPE]	The system detected an overhead transparency in the paper path coming from the tray (xx).
UNABLE TO MOPY JOB	A mopy job cannot be mopped because of a memory, disk, or configuration problem. Only one copy will be produced. If job name is unknown, insert UNTITLED.

Message	Explanation or recommended action
UNABLE TO STORE JOB	A job cannot be stored on the product because of a memory, disk, or configuration problem. If job name is unknown, insert UNTITLED.
UNSUPPORTED SIZE IN TRAY xx	A sent job has a specified size that is not supported by the product.
USE [TYPE] [SIZE] FROM TRAY N INSTEAD?	If the requested paper size or type is not available, the product asks if it should use a different paper size or type. Select a size or type from a different tray.
WAIT FOR PRINTER TO REINITIALIZE	The RAM disk setting has been changed before the product is automatically rebooted. This change will not take effect until the product reinitializes. If you change the mode of the external device, turn the product off, turn the product on, and wait for the product to reinitialize.
xx.y PRINTER ERROR To continue touch Continue	A product error which can be cleared by touching Continue on the pop-up dialog box has occurred.
13.xy.zz JAM IN [LOCATION]	Remove jammed paper from the specified location (see “Clearing jams” on page 95). Open and close the front door to clear the message. If the message persists after all jams have been cleared, a sensor might be stuck or broken. Contact an HP-authorized service or support provider (see the <i>introduce</i> guide on the product CD, or go to www.hp.com/support/lj9000).
20 INSUFFICIENT MEMORY To continue touch Continue	The product received more data than can fit in its available memory. You might have tried to transfer too many macros, soft fonts, or complex graphics. Touch Continue to print the transferred data (some data might be lost), then simplify the print job or install additional memory (see “Product memory and expansion” on page 218).

Message	Explanation or recommended action
<p>21 PAGE TOO COMPLEX</p> <p>alternates with</p> <p>To continue touch Continue</p>	<p>The page formatting process was not fast enough for the product.</p> <p>Touch Continue to print the transferred data. (Some data might be lost.)</p> <p>The page protection item appears in the CONFIGURE DEVICE - DEFAULTS - EVENTS menu, and should be set to ON to print the page. When the page is successfully printed, PAGE PROTECT=ON, should be set back to AUTO (see “System setup submenu” on page 205).</p> <p>If this message appears often, simplify the print job.</p>
<p>22 EIO x BUFFER OVERFLOW</p>	<p>Too much data was sent to the EIO card in the specified slot (x). An improper communications protocol might be in use.</p> <p>Touch Continue to print the transferred data. (Some data might be lost.)</p> <p>Check the host configuration. If this message persists, contact an HP-authorized service or support provider. (see the <i>introduce</i> guide on the product CD, or go to www.hp.com/support/lj9000.)</p>
<p>22 PARALLEL I/O BUFFER OVERFLOW</p> <p>alternates with</p> <p>To continue touch Continue</p>	<p>Too much data was sent to the parallel port.</p> <p>Check for a loose cable connection, and be sure to use a high-quality cable.(see the <i>introduce</i> guide on the product CD, or go to www.hp.com/support/lj9000). (Some non-HP parallel cables might be missing pin connections or might otherwise not conform to the IEEE-1284 specification.)</p> <p>This error can occur if the driver you are using is not IEEE-1284 compliant. For best results, use the HP driver that came with the product (see “Drivers” on page 16).</p> <p>Touch Continue to clear the error message. (Data will be lost.)</p> <p>If this message persists, contact an HP-authorized service or support provider (see the <i>introduce</i> guide on the product CD, or go to www.hp.com/support/lj9000).</p>
<p>22 SERIAL I/O BUFFER OVERFLOW</p>	<p>The product serial buffer has overflowed during a busy state.</p> <p>Touch Continue to print the transferred data. (Some data might be lost.)</p>

Message	Explanation or recommended action
30.00.01 SCANNER I/O FAILURE CHECK CABLES AND CYCLE POWER	The product and the copy processor are not communicating. Check for a disconnected cable. Turn the product off, and then turn the product on.
30.00.02 SCANNER I/O FAILURE CHECK COPY CONNECT CARD	The high-speed-copy connect card was not detected. The copy connect card either is not installed or failed initialization.
30.01.yy SCAN FAILURE	The product fails to scan correctly. Turn the product off, then turn the product on. If this message persists, contact an HP-authorized service or support provider (see the introduce guide on the product CD, or www.hp.com/support/lj9000).
40 BAD SERIAL TRANSMISSION	A serial data error (parity, framing, or line overrun) occurred during the reception of data from the computer. Touch Continue to clear the error message and continue printing.
40 EIO x BAD TRANSMISSION	The connection between the product and the EIO card in the specified slot has been broken. Touch Continue to clear the error message and continue printing.
41.x PRINTER ERROR alternates with To continue touch Continue	A temporary printing error occurred. Turn the product off, then turn the product on. If this message persists, contact an HP-authorized service or support provider (see the <i>introduce</i> guide on the product CD, or go to www.hp.com/support/lj9000).

Message	Explanation or recommended action
<p>41.3 UNEXPECTED SIZE TRAY xx</p> <p>alternates with</p> <p>To change size touch Continue</p>	<p>A tray (xx) is loaded with paper that is longer or shorter in the feed direction than the size configured for the tray.</p> <p>Touch Continue to get to TRAY xx SIZE=. Reconfigure the size in a tray so the product will use a tray with the size required for the print job.</p> <p>If the error does not clear, turn the product off, then turn the product on.</p> <p>If this message persists, contact an HP-authorized service or support provider (see the <i>introduce</i> guide on the product CD, or go to www.hp.com/support/lj9000).</p>
<p>41.5 UNEXPECTED TYPE TRAY xx</p> <p>alternates with</p> <p>To change type touch Continue</p>	<p>The tray (xx) is loaded with paper that is not the same type configured for the tray.</p> <p>Touch Continue to get to TRAY xx TYPE=. Reconfigure the size in a tray so the product will use a tray with the type required for the print job.</p> <p>If the error does not clear, turn the product off, then turn the product on.</p> <p>If this message persists, contact an HP-authorized service or support provider (see the <i>introduce</i> guide on the product CD, or go to www.hp.com/support/lj9000).</p>
<p>49.xxxxxx</p>	<p>A critical firmware error has occurred.</p> <p>If this message persists, contact an HP-authorized service or support provider (see the <i>introduce</i> guide on the product CD, or go to www.hp.com/support/lj9000).</p>
<p>50.x FUSER ERROR</p>	<p>A fuser error has occurred.</p> <p>If this message persists, contact an HP-authorized service or support provider (see the <i>introduce</i> guide on the product CD, or www.hp.com/support/lj9000).</p>
<p>51.x PRINTER ERROR</p> <p>alternates with</p> <p>To continue cycle Power</p>	<p>A temporary printing error occurred.</p> <p>Turn the product off, then turn the product on.</p> <p>If this message persists, contact an HP-authorized service or support provider (see the <i>introduce</i> guide on the product CD, or www.hp.com/support/lj9000).</p>

Message	Explanation or recommended action
<p>52.x PRINTER ERROR</p> <p>alternates with</p> <p>To continue cycle Power</p>	<p>A temporary printing error occurred.</p> <p>Turn the product off, then turn the product on.</p> <p>If this message persists, contact an HP-authorized service or support provider (see the <i>introduce</i> guide on the product CD, or www.hp.com/support/lj9000).</p>
<p>53.xy.zz PRINTER ERROR</p>	<p>There is a problem with the product memory. The DIMM that caused the error will not be used. Values of x, y, and zz are as follows:</p> <p>x = DIMM type 0 = ROM 1 = RAM</p> <p>y = Device location 0 = Internal memory (ROM or RAM) 1 to 4 = DIMM slots 1, 2, 3, or 4</p> <p>zz = Error number</p> <p>You might need to reseal or replace the specified DIMM.</p> <p>Turn the product off, and then replace the DIMM that caused the error.</p> <p>If this message persists, contact an HP-authorized service or support provider (see the <i>introduce</i> guide on the product CD, or go to www.hp.com/support/lj9000).</p>
<p>55.xx PRINTER ERROR</p> <p>alternates with</p> <p>To continue touch Continue</p>	<p>A temporary printing error occurred.</p> <p>Touch Continue.</p> <p>If the error does not clear, turn the product off, then turn the product on.</p> <p>If this message persists, contact an HP-authorized service or support provider (see the <i>introduce</i> guide on the product CD, or go to www.hp.com/support/lj9000).</p>

Message	Explanation or recommended action
<p>56.x PRINTER ERROR</p> <p>alternates with</p> <p>To continue cycle Power</p>	<p>A temporary printing error occurred.</p> <p>Turn the product off, then turn the product on.</p> <p>If this message persists, contact an HP-authorized service or support provider (see the <i>introduce</i> guide on the product CD, or go to www.hp.com/support/lj9000).</p>
<p>57.x PRINTER ERROR</p>	<p>A temporary printing error occurred.</p> <p>Turn the product off, then turn the product on.</p> <p>If this message persists, contact an HP-authorized service or support provider (see the <i>introduce</i> guide on the product CD, or go to www.hp.com/support/lj9000).</p>
<p>58.x PRINTER ERROR</p> <p>alternates with</p> <p>To continue cycle Power</p>	<p>A temporary printing error occurred.</p> <p>Turn the product off, then turn the product on.</p> <p>If this message persists, contact an HP-authorized service or support provider (see the <i>introduce</i> guide on the product CD, or go to www.hp.com/support/lj9000).</p>
<p>59.x PRINTER ERROR</p> <p>alternates with</p> <p>To continue cycle Power</p>	<p>A temporary printing error occurred.</p> <p>Turn the product off, then turn the product on.</p> <p>If this message persists, contact an HP-authorized service or support provider (see the <i>introduce</i> guide on the product CD, or go to www.hp.com/support/lj9000).</p>
<p>60.x PRINTER ERROR</p>	<p>An obstruction prevents the tray specified by xx from lifting paper properly for feeding.</p> <p>If this message persists, contact an HP-authorized service or support provider (see the <i>introduce</i> guide on the product CD, or go to www.hp.com/support/lj9000).</p>

Message	Explanation or recommended action
62.x PRINTER ERROR	<p>There is a problem with the product memory. The x value refers to the location of the problem:</p> <p>0 = Internal memory</p> <p>1 to 4 = DIMM slots 1, 2, 3, or 4</p> <p>You might need to replace the specified DIMM.</p> <p>To continue, touch Continue.</p> <p>If this message persists, contact an HP-authorized service or support provider (see the <i>introduce</i> guide on the product CD, or go to www.hp.com/support/lj9000).</p>
64 PRINTER ERROR alternates with To continue cycle power	<p>A scan buffer error occurred.</p> <p>Turn the product off, and then turn the product on.</p> <p>If this message persists, contact an HP-authorized service or support provider (see the <i>introduce</i> guide on the product CD, or go to www.hp.com/support/lj9000).</p>
66.XY.ZZ OUTPUT DEVICE FAILURE	<p>A failure occurred with the output device.</p> <p>Check the cables. Turn the product off, and then turn the product on.</p> <p>If this message persists, contact an HP-authorized service or support provider (see the <i>introduce</i> guide on the product CD, or go to www.hp.com/support/lj9000).</p>
68.x PERMANENT STORAGE ERROR alternates with Continue	<p>An error occurred in the product nonvolatile memory (NVRAM), and one or more product settings has been reset to its factory default.</p> <p>Printing can continue, but there might be some unexpected functions because an error occurred in permanent storage.</p> <p>Touching Continue should clear the message.</p> <p>If this message persists, contact an HP-authorized service or support provider (see the <i>introduce</i> guide on the product CD, or go to www.hp.com/support/lj9000).</p>

Message	Explanation or recommended action
<p>68.x PERMANENT STORAGE FULL</p> <p>alternates with Continue</p>	<p>The product NVRAM is full. Some settings saved in the NVRAM might have been reset to the factory defaults.</p> <p>Printing can continue, but there might be some unexpected functions because an error occurred in permanent storage.</p> <p>Touching Continue should clear the message.</p> <p>If this message persists, contact an HP-authorized service or support provider (see the <i>introduce</i> guide on the product CD, or go to www.hp.com/support/lj9000).</p>
<p>68.x PERMANENT STORAGE WRITE FAIL</p>	<p>The product NVRAM is failing to write.</p> <p>Printing can continue, but there might be some unexpected functions because an error occurred in permanent storage.</p> <p>Touching Continue should clear the message.</p> <p>If this message persists, contact an HP-authorized service or support provider (see the <i>introduce</i> guide on the product CD, or go to www.hp.com/support/lj9000).</p>
<p>69.x PRINTER ERROR</p>	<p>A temporary printing error occurred.</p> <p>Turn the product off, reseal the duplex printing accessory, and then turn the product on.</p> <p>If this message persists, contact an HP-authorized service or support provider (see the <i>introduce</i> guide on the product CD, or go to www.hp.com/support/lj9000).</p>
<p>79.xxxxx PRINTER ERROR</p>	<p>A critical hardware error occurred.</p> <p>Turn the product off, and then turn the product on.</p> <p>If the message persists, contact an HP-authorized service or support provider (see the <i>introduce</i> guide on the product CD, or go to www.hp.com/support/lj9000).</p>
<p>8x.yyyyy</p>	<p>The EIO accessory card in slot x has encountered a critical error as specified by yyyy.</p>

Message	Explanation or recommended action
81 SERVICE (xxx)	This message is used when errors occur while testing the product at the manufacturing site.

Correcting output quality problems

The first step in correcting output quality problems is to determine if the image defect is present when copying and printing, or only when copying. If the image defect is present only when copying, see [“Cleaning the ADF delivery system” on page 84](#) or [“Cleaning the scanner glass” on page 89](#).

If the image defect is present only when printing, use the examples in the image defect table to determine which print quality problem you are experiencing, then see the corresponding reference pages to troubleshoot.

Note The examples below depict letter-size paper that has passed through the product long-edge first. (If the paper has passed through the product short-edge first, lines and repeating defects will run vertically rather than horizontally.)

Image defect table

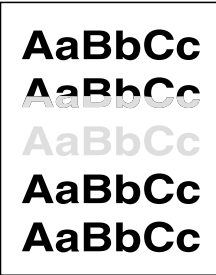
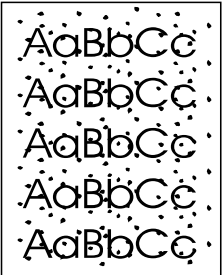
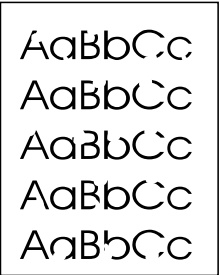
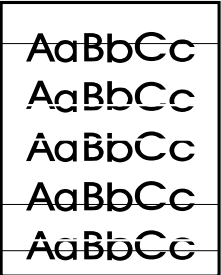

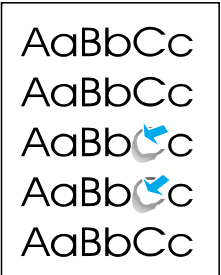
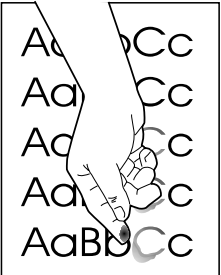
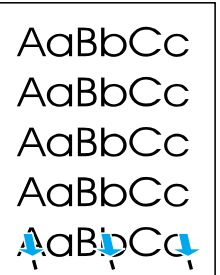
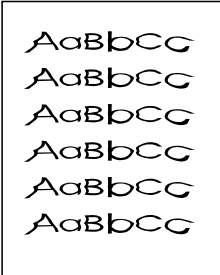
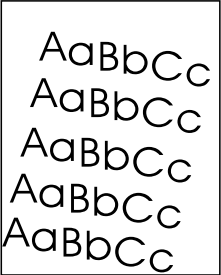
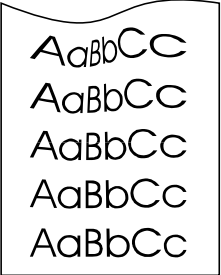
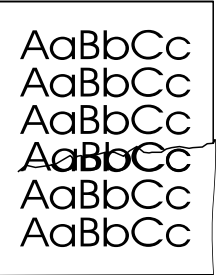
 <p>See “Light print or fade” on page 140</p>	 <p>See “Specks” on page 140</p>	 <p>See “Dropouts” on page 140</p>	 <p>See “Lines” on page 140</p>
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Image defect table

 <p>See “Gray background” on page 141</p>	 <p>See “Toner smear” on page 141</p>	 <p>See “Loose toner” on page 141</p>	 <p>See “Repeating defects” on page 142</p>
 <p>See “Misformed characters” on page 142</p>	 <p>See “Page skew” on page 142</p>	 <p>See “Curl or wave” on page 143</p>	 <p>See “Wrinkles or creases” on page 143</p>

Light print or fade

- The print cartridge might be low. Replace the print cartridge.
- Maintenance might be due. Check this by printing a copy of the supplies status page (see [“Supplies status page” on page 171](#)). If maintenance is due, order and install the printer maintenance kit. (See the *introduce* guide on the product CD, or go to www.hp.com/support/lj9000.)
- The print cartridge might be almost empty. Replace the print cartridge.

Specks

Specks might appear on a page after a jam has been cleared.

- Print a few more pages to see if the problem corrects itself.
- If specks occur frequently, set your product up to automatically run a cleaning page (see [“Using the product cleaning page” on page 93](#)).
- Clean the inside of the product (see the *introduce* guide on the product CD, or go to www.hp.com/support/lj9000) and run a manual cleaning page to clean the fuser (see [“Using the product cleaning page” on page 93](#)).
- Try using a different type of paper.
- Check for print cartridge leaks. If the print cartridge is leaking, replace it.

Dropouts

- Make sure that the environmental specifications for the product are being met (see [“Environmental product stewardship program” on page 238](#)).
- If the paper is rough and the toner easily rubs off, either try changing the fuser mode to High 1 or High 2, or try using a smoother paper.
- Try using a different paper type.

Lines

- Print a few more pages to see if the problem corrects itself.
- Clean the inside of the product (see the *introduce* guide on the product CD, or go to www.hp.com/support/lj9000) and run a manual cleaning page to clean the fuser (see [“Using the product cleaning page” on page 93](#)).
- Replace the print cartridge.

- Maintenance might be due. Check this by printing a copy of the supplies status page (see [“Supplies status page” on page 171](#)). If maintenance is due, order and install the printer maintenance kit. (See the *introduce* guide on the product CD, or go to www.hp.com/support/lj9000.)

Gray background

- Do not use paper that has already been run through the product.
- Print a few more pages to see if the problem corrects itself.
- Turn over the stack of paper in the tray. Also, try rotating the paper 180 degrees.
- At the product control panel, use the **Print quality** menu to decrease the toner density setting (see [“Print quality submenu” on page 202](#)).
- Make sure that the environmental specifications for the product are being met (see [“Environmental product stewardship program” on page 238](#)).
- Replace the print cartridge.

Toner smear

Also see [“Loose toner” on page 141](#).

- Print a few more pages to see if the problem corrects itself.
- Try using a different type of paper.
- Make sure that the environmental specifications for the product are being met (see [“Environmental product stewardship program” on page 238](#)).
- Clean the inside of the product (see the *introduce* guide on the product CD, or go to www.hp.com/support/lj9000) and run a manual cleaning page to clean the fuser (see [“Using the product cleaning page” on page 93](#)).
- Maintenance might be due. Check this by printing a copy of the supplies status page (see [“Supplies status page” on page 171](#)). If maintenance is due, order and install the printer maintenance kit. (See the *introduce* guide on the product CD, or go to www.hp.com/support/lj9000.)
- Replace the print cartridge.

Loose toner

Loose toner, in this context, is defined as toner that can be rubbed off the page.

- If paper is heavy or rough, try using a high fuser mode so that toner fuses more completely onto the paper. At the control panel, use CONFIGURE FUSER MODE MENU in the **Paper handling** menu (see [“Paper handling menu” on page 189](#)).
- If you have observed a rougher texture on one side of your paper, try printing on the non-rough side.
- Make sure that the environmental specifications for the product are being met (see [“Environmental product stewardship program” on page 238](#)).
- Make sure that paper type and quality meet HP specifications (see [“Specifications” on page 178](#)).
- Maintenance might be due. Check this by printing a copy of the supplies status page (see [“Supplies status page” on page 171](#)). If maintenance is due, order and install the printer maintenance kit. (See the *introduce* guide on the product CD, or go to www.hp.com/support/lj9000.)

Repeating defects

- Print a few more pages to see if the problem corrects itself.
- If the distance between defects is 38 mm (1.5 in) or 94 mm (3.76 in), the print cartridge might need to be replaced.
- Clean the inside of the product (see the *introduce* guide on the product CD, or go to www.hp.com/support/lj9000) and run a manual cleaning page to clean the fuser (see [“Using the product cleaning page” on page 93](#)).
- Maintenance might be due. Check this by printing a copy of the supplies status page (see [“Supplies status page” on page 171](#)). If maintenance is due, order and install the printer maintenance kit. (See the *introduce* guide on the product CD, or go to www.hp.com/support/lj9000.)

Misformed characters

- Print a few more pages to see if the problem corrects itself.
- Make sure that the environmental specifications for the product are being met (see [“Environmental product stewardship program” on page 238](#)).
- Maintenance might be due. Check this by printing a copy of the supplies status page (see [“Supplies status page” on page 171](#)). If maintenance is due, order and install the printer maintenance kit. (See the *introduce* guide on the product CD, or go to www.hp.com/support/lj9000.)

Page skew

- Print a few more pages to see if the problem corrects itself.
- Verify that there are no torn pieces of paper inside the product.

- Make sure that paper is loaded correctly, all adjustments have been made, and the paper is under the corner tabs (see [“Orienting media” on page 47](#)).
- Turn over the stack of paper in the tray. Also, try rotating the paper 180°.
- Make sure that paper type and quality meet HP specifications (see [“Specifications” on page 178](#)).
- Make sure that the environmental specifications for the product are being met (see [“Environmental product stewardship program” on page 238](#)).

Curl or wave

- Turn over the stack of paper in the tray. Also, try rotating the paper 180°.
- Make sure that paper type and quality meet HP specifications (see [“Specifications” on page 178](#)).
- Make sure that the environmental specifications for the product are being met (see [“Environmental product stewardship program” on page 238](#)).
- Try printing to a different output bin.
- If media is lightweight and smooth, try using a low fuser mode to reduce the heat in the fusing process. At the control panel, use CONFIGURE FUSER MODE MENU on the **Paper handling** menu to do this (see [“Paper handling menu” on page 189](#)).

Wrinkles or creases

- Print a few more pages to see if the problem corrects itself.
- Make sure that the environmental specifications for the product are being met (see [“Environmental product stewardship program” on page 238](#)).
- Turn over the stack of paper in the tray. Also, try rotating the paper 180°.
- Make sure that paper is loaded correctly, all adjustments have been made, and the paper is under the corner tabs (see [“Orienting media” on page 47](#)).
- Make sure that paper type and quality meet HP specifications (see [“Specifications” on page 178](#)).
- If envelopes are creasing, try storing envelopes so that they lie flat.

Preventing wrinkles on envelopes

If envelopes are wrinkled when printed, first ensure that you are using supported types of envelopes. Then, use the following procedure to move the fuser levers to the higher position while printing the envelopes.

To prevent wrinkles on envelopes

- 1 Move the output device away from the product.
- 2 Open the left door.

WARNING!

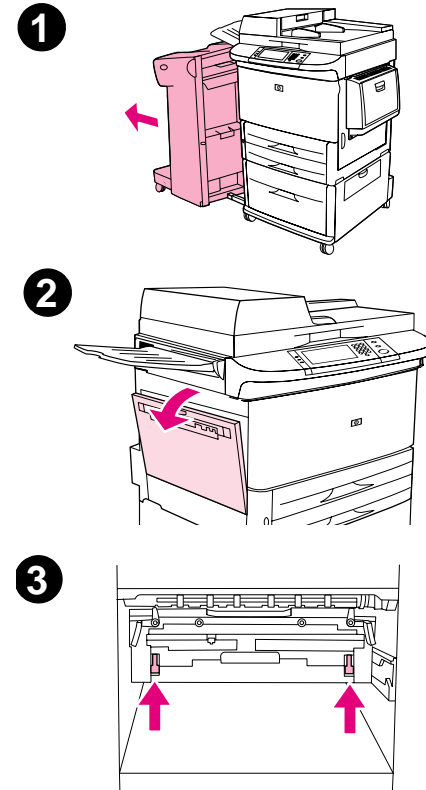
Avoid touching the adjacent fusing area. It can be HOT.

- 3 Locate and lift up the two blue levers.
- 4 Close the left door, and push the output device into place.

When finished printing the envelopes, return the fuser levers to the down position for standard paper types.

CAUTION

Failure to return levers in the down position for standard paper types might result in poor print quality.



Detecting product problems

Troubleshooting checklist

- Print job on custom paper does not fit correctly
- Problems with the stapler/stacker
- Problems with the multifunction finisher

Note For more information about the HP output devices, see the *use* guide that came with the device.

Determining product problems

Situation/Message	Solution
A product cover is open.	Firmly close the product doors (left, front, and right).
Correct size of paper is not loaded.	Check paper trays to be sure the correct sizes are loaded as configured. Also, check that guides are set correctly.
Display is blank, and internal fans are not running.	Make sure that the product power is on. Press all the keys to see if one is stuck; contact your HP-authorized service representative if this does not work.
Messages appear in the display.	See “Understanding product messages” on page 117 .
Paper is jammed in the product.	Check for paper jams (See “Clearing jams” on page 95).
Paper tray is out of paper.	Load paper. (See the <i>introduce</i> guide on the product CD, or go to www.hp.com/support/lj9000 .)
Product display is in the wrong language or displays unfamiliar characters.	Reconfigure the control panel display language. Touch Menu , then touch <code>Configure Device</code> . Touch <code>System Setup</code> , then touch Language . Touch your language, and then touch OK .
Product is not turned on.	Press the product control button to turn the product on (button in).
Product is not working at all.	Plug the AC power cord firmly into the grounded power receptacle and into the product. (Be sure the power source is energized.)

Situation/Message	Solution
Product is turned on, but internal fans are not running.	Make sure the line voltage is correct for the product power configuration. (See the plate next to the power receptacle on the back of your product for voltage requirements.) If you are using a power strip and its voltage is not within specification, plug the product directly into the power receptacle.
Product voltage is not correct.	Make sure line voltage is in the correct range. (See the product label next to the power receptacle on the back of the product for voltage requirements.)
The e-mail gateway is not configured. Contact <administrator contact information>.	This message is displayed when the product does not have an IP address for the SMTP gateway server. The administrator must configure the SMTP gateway address.
The e-mail gateway is not responding. Contact <administrator contract information>.	This message is displayed when the product does not receive a response from the SMTP gateway server. The administrator should confirm that the IP address on the product is correct, and that the SMTP server is running.
Error executing Digital Send job. Job failed.	The product experienced an error while executing the digital sending job. The administrator should check on the status of the SMTP server.
Processing a digital send job.	The product is processing a digital send job. Wait until the digital send job is completed.
The address book is full. To add an additional address, you must first delete an address from the address book.	Delete addresses from the address book.

Situation/Message	Solution
The system has found too many addresses to display. Refine your search.	Type in additional information so the product can search the list of addresses.
The e-mail addressing information was rejected because the address was incorrect or incomplete. The job has failed.	Correct the e-mail address and send the job again.
The e-mail gateway could not accept the job because the attachment is too large.	Try using a different file format or send the document a few pages at a time.
Network connection required for digital sending.	The product cannot find a network connection. The administrator should check to see if the product is connected to the network.
LDAP server is not responding. Contact <administrator contact information>.	This message is displayed when the product does not have an IP address for the LDAP gateway server. The administrator must configure the LDAP gateway address.
Digital send communication error.	Try to send again.

Software, computer, and product interface problems

Situation	Solution
A page fails to print.	Set <code>PRINT PS ERRORS=ON</code> , and then send the job again to print a PS error page. If this does not identify the problem, try turning off Resource Saving and I/O Buffering or try installing more memory (See “PCL or PS font list” on page 173).
A page prints with clipped margins.	If the page margins are clipped, you might have to print the page at 300-dpi resolution or install more memory. Also try turning off Resource Saving and I/O Buffering .
A PS error page prints.	<ul style="list-style-type: none"> • Make sure the print job is a PS job. • Check to see whether your program expected you to send a setup or PS header file to the product. • Check the product setup in your software application to make sure that the product is selected. • Check cable connections to ensure that they are secure. • Reduce the complexity of the graphic. • Add available memory by turning on Resource Saving.
A text listing of PS commands prints instead of your PS print job.	The control panel <code>PERSONALITY=AUTO</code> setting might have been confused by a nonstandard PS code. Check the <code>PERSONALITY</code> setting to see if it is set to <code>PS</code> or <code>PCL</code> . If it is set to <code>PCL</code> , set it to <code>PERSONALITY=AUTO</code> . If it is set to <code>AUTO</code> , set it to <code>PS</code> for this print job only. When the job has printed, return the setting to <code>AUTO</code> .
Attempted to use a disk-resident font, but the product substituted a different font.	If you are using <code>PCL</code> , print the PCL Font Page, and verify that the font is on the disk. If you are using <code>PS</code> , print the PS Font Page and make sure that the font is on the disk. If the font is not on the disk, use the HP Resource Manager or the Macintosh-based HP LaserJet utility to download the font.

Situation	Solution
Auto setup did not automatically set up the product.	<ul style="list-style-type: none">• Set up the product manually by selecting Configure.• Select an alternate PPD (See “Selecting an alternate PPD” on page 164).• The PPD might have been renamed. If so, select the renamed PPD (See “Selecting an alternate PPD” on page 164).• A network queue might be present.
Blank pages print.	<ul style="list-style-type: none">• Turn the product off and then back on.• Make sure the print cartridge is installed properly.
Cannot access Tray 2 or 3, or Tray 4.	Make sure that the paper tray guides are adjusted correctly for the paper size you are using. (See the <i>introduce</i> guide on the product CD, or go to www.hp.com/support/lj9000 .)
Cannot clear MANUALLY FEED [TYPE] [SIZE] message.	<ul style="list-style-type: none">• A previous print job might still be in the product buffer.• Make sure that Tray 1 has the correct paper size loaded. (See the <i>introduce</i> guide on the product CD, or go to www.hp.com/support/lj9000.)
Computer software problem.	Check that your computer is working correctly by printing from a program you know works, or by printing a plain text file to see if the problem is with your program or with your driver. (For example, <code>C:\dir>LPTn</code> where <code>n</code> is the number of the computer port the product is connected to, for example LPT1.) To print the page, you might have to send a form feed command from your computer.

Situation	Solution
Connection cannot be established or seems to take longer than usual.	<ul style="list-style-type: none">• Use a device that is IRDA-compliant; look for an IRDA symbol on the device, or see the computer user guide for IRDA specifications.• Make sure that the operating system on your computer includes a FIR driver and that your program uses a compatible driver. (Note that complex pages take longer to print.)• Position the HP Fast InfraRed Receiver within the range of operation described in “Printing a job using FIR” on page 80, and make sure that no object is blocking the connection. (This object could be a hand, paper, books, or even bright light.)• Make sure that the two IR ports are clean (free from dirt and grease).• Make sure that no bright light is shining directly into either IR port. Bright light of any kind (sunlight, incandescent light, fluorescent light, or light from an infrared remote control, such as those used for TVs and VCRs) shining directly into one of the IR ports might cause interference.• Position the portable device closer to the FIR port on the product.
Control panel settings, such as RESOLUTION or ORIENTATION, do not work or are ignored.	Software commands override control panel settings (See “Using control panel menus” on page 251 for information about how your program works with control panel settings).
Data from a previous print job is still in the product buffer.	<ul style="list-style-type: none">• Make sure that you are using the correct driver.• A complex print job might still be processing.• Make sure the product is not paused. Make sure the control panel reads PROCESSING JOB. If the product is paused, press START to resume printing.• Pull out the print cartridge and check for paper. Reseat the print cartridge.• Open Trays 2 and 3. Make sure that the appropriate paper is inserted. (See the <i>introduce</i> guide on the product CD, or go to www.hp.com/support/lj9000.) Close the trays.

Situation	Solution
Data is missing, but there are no product messages.	<ul style="list-style-type: none"> • Check your software application to be sure the print file contains no errors. • Check your cable to make sure it is securely connected to both the product and the computer. • Your parallel cable might be defective. Use a high-quality cable. (See the <i>introduce</i> guide on the product CD, or go to www.hp.com/support/lj9000 for an HP cable part number.) • Check your network connection.
Data light is flashing, but nothing prints.	<ul style="list-style-type: none"> • Make sure that you are using the correct driver. • A complex print job might still be processing. • Make sure the product is not paused. Make sure the control panel reads PROCESSING JOB. • Pull out the print cartridge and check for paper. Reseat the print cartridge. • Open Trays 2 and 3. Make sure that the appropriate paper is loaded. (See the <i>introduce</i> guide on the product CD, or go to www.hp.com/support/lj9000.) Close the trays.
Disk failure EIO x DISK NOT FUNCTIONING	Turn the product off and make sure that the EIO hard disk is inserted correctly and is securely fastened. If the control panel message continues to be displayed, the EIO hard disk needs to be replaced.
Disk is not initialized DISK x NOT INITIALIZED	Use the Windows-based HP Resource Manager or the Macintosh-based HP LaserJet Utility to initialize the disk.
Disk is write-protected DISK IS WRITE PROTECTED	Fonts and forms cannot be stored on the disk when the disk is write-protected. Use the Windows-based HP Resource Manager or the Macintosh-based HP LaserJet Utility to remove the write protection from the disk.

Situation	Solution
Driver might not be set up to print on both sides of the paper.	Make sure that the option to print on both sides of the paper is properly configured in the driver.
Duplex printing accessory jams.	Make sure that you are using the supported paper weights and sizes. (See the <i>introduce</i> guide on the product CD, or go to www.hp.com/support/lj9000 .)
FIR port status indicator does not light up.	<ul style="list-style-type: none"> • Make sure that the product is in <code>READY</code> mode and that the FIR port you are printing from is IRDA-compliant and within the range of operation described in “Printing a job using FIR” on page 80. • Make sure that the HP Fast InfraRed receiver is properly connected to the product. • Run the product Self Test. Make sure that FIR POD (IRDA Compliant) is printed under Installed Personalities and Options.
First page takes much longer to print than following pages.	<ul style="list-style-type: none"> • Make sure that the product displays <code>READY</code>. • Set the PowerSave feature for a longer time period (See “Configuration page” on page 169). If a page takes longer to print due to complex formatting commands, changing the PowerSave setting might not improve print speed. You might want to simplify the page.
Garbled pages print, there are overprints, or only a portion of a page prints.	<ul style="list-style-type: none"> • Make sure that your program is configured for the correct printer. • Replace the interface (I/O) cable with a cable you know works to see if the cable is defective. • Your parallel cable might be defective. Use a high-quality cable. (See the <i>introduce</i> guide on the product CD, or go to www.hp.com/support/lj9000 for an HP cable part number.) • Set the <code>PERSONALITY</code> item in the Configuration menu to <code>AUTO</code> (See “PERSONALITY=AUTO” on page 206). The product might have been set to PCL, and a PS job was sent to the product, or vice versa. • Data sent to the product might be corrupt. Try sending another file to see if it prints.

Situation	Solution
General operation problems.	For general paper operation information, see “Printing” on page 46 .
General repeated stapler jam problems.	<ul style="list-style-type: none">• Check to see that the job to be stapled is less than five mm (.08 inch) thick.• Stapler might have some trapped staple wires that are obstructing the magazine. Remove loose staples and paper dust from the inside of the stapler (See “To clear a staple jam from the stapler/stacker” on page 109).
Job has been properly sent, but the product will not print.	If the connection is broken before the entire print job has been transmitted to the product (printing has not yet started), the product might not print any of the job. Press STOP to clear the product memory. Then, reposition the portable device within the range of operation described in “Printing a job using FIR” on page 80 , and print the job again.
Job has incorrect fonts.	<ul style="list-style-type: none">• If you are printing an .EPS file, try downloading the fonts contained in the .EPS file to the printer before printing. Use the HP LaserJet Utility (See “Software for Macintosh computers” on page 19).• If the document is not printing with New York, Geneva, or Monaco fonts, go into the Page Setup dialog box, and select Options to deselect substituted fonts.
Job is not sent to the desired printer.	Another printer with the same or similar name might have received the print job. Make sure that the printer name matches the name selected in the Chooser (See “Selecting an alternate PPD” on page 164).

Situation	Solution
Job prints in Courier (the product default font) instead of the font you requested.	<ul style="list-style-type: none">• The requested typeface is not available in the product or is not present on the disk. Use a font download utility to download the required font.• Fonts downloaded to memory are lost when the product is turned off. They are also lost if Resource Saving is not used, and a personality switch is performed to print a PCL job. Disk fonts are not affected by PCL jobs or by turning the product off.• Print a PS Font Page to verify that the font is available. If a disk font appears to be missing, it might be because a software utility was used to delete the font, because the disk was reinitialized, or because the disk drive is not installed correctly. Print a configuration page to verify that the disk drive is installed and is functioning correctly.• Print a Disk Directory to help identify available fonts.
Job prints on the wrong side of the paper.	<ul style="list-style-type: none">• Make sure you have loaded the paper correctly. (See the <i>introduce</i> guide on the product CD, or go to www.hp.com/support/lj9000.)• If you are printing one-sided copies, load paper into Tray 1 with the side to be printed facing up. Load paper in Trays 2, 3, and Tray 4 with the side to be printed facing down.• If you are printing two-sided copies, load paper into Tray 1 with the first side to be printed facing down. Load paper in Trays 2, 3, and Tray 4 with the first side to be printed facing up.
Job was not duplexed.	<ul style="list-style-type: none">• Print a configuration page to ensure that the duplex printing accessory is installed properly (See “Configuration page” on page 169).• Make sure the duplex printing accessory has been configured in the driver.• Make sure that the software is not overriding the driver setting.

Situation	Solution
Job was not stapled.	<p>Jobs sent to the stapler might not be stapled for one or more of the following reasons:</p> <ul style="list-style-type: none">• One-page jobs will not be stapled.• The stapler is out of staples and <code>AUTO CONTINUE</code> is set to <code>ON</code>.• The wrong size or type of paper was used for the job.• More than 50 pages were sent to the stapler, exceeding its capacity.• The stapler has bent or broken staples in the stapler head.• A staple jam was recently cleared (up to two sequential jobs might not be stapled).• The job was sent to a bin other than the stapler bin because the wrong size or type of paper was used for the job.• The interface cable to the stapler unit might be defective or not connected properly.
Job went to a different location than was expected.	<p>The wrong size or type of paper was used for the job. (See the <i>introduce</i> guide on the product CD, or go to www.hp.com/support/lj9000.)</p>
Last page did not print and the Data light is on.	<ul style="list-style-type: none">• Make sure that you are using the correct driver.• Complex print job might still be processing.• Product might be waiting for the end of a file that did not come with the job. Touch Continue to send it.• Make sure the product is not paused. Make sure the control panel reads <code>PROCESSING JOB</code>.• Pull out the print cartridge and check for paper. Reseat the print cartridge.• Open Trays 2 and 3. Make sure that the appropriate paper is loaded. (See the <i>introduce</i> guide on the product CD, or go to www.hp.com/support/lj9000.) Close the trays.

Situation	Solution
LOAD TRAY × [TYPE] [SIZE] paper size message	Load the requested paper size, or touch Continue to print on a size already loaded. The product has a job in the buffer and is waiting to print on the correct paper size. Set the paper type in the control panel (See “Control panel menus” on page 185).
Network or shared printer problems.	Check for network or shared printer problems by connecting your computer directly to the product and printing from a program you know works. If you suspect network problems, check with your system administrator or consult the network documentation that came with your network cards.
Tray 4 will not work.	The power cord is not firmly plugged in to both the product and the power receptacle. Remove and reconnect the power cord.
Paper is loaded into Tray 1, and the control panel displays a load or manual feed message.	Load the correct paper in the tray. (See the <i>introduce</i> guide on the product CD, or go to www.hp.com/support/lj9000 .) If the correct paper is already loaded, touch Continue .
Paper is not going to the correct output location.	<ul style="list-style-type: none"> • Verify that the correct output bin is selected in the driver. For more information about changing driver settings, see the online help. • The paper does not meet the specifications for the output bin (See the <i>introduce</i> guide on the product CD, or go to www.hp.com/support/lj9000).
Paper jams and paper-feeding problems.	<ul style="list-style-type: none"> • See “To clear jams in Trays 2 and 3” on page 99 or “To clear jams in Tray 4” on page 100. • Ensure that paper specifications are within recommended range. (See the <i>introduce</i> guide on the product CD, or go to www.hp.com/support/lj9000.) • Make sure the paper guides are adjusted properly and are not skewed. (See the <i>introduce</i> guide on the product CD, or go to www.hp.com/support/lj9000.) • Perform preventive maintenance if requested by the product.

Situation	Solution
Paper size adjustment and installation.	See the <i>introduce</i> guide on the product CD, or go to www.hp.com/support/lj9000 .
Product does not recognize the duplex printing accessory.	<ul style="list-style-type: none">• Print a configuration page to ensure that the duplex printing accessory is installed properly (See “Configuration page” on page 169).• Turn the product off. Remove and reinstall the unit. Turn the product on.• Make sure that the duplex printing accessory has been configured in the driver.
Product does not recognize the hard disk.	Turn the product off and verify that the hard disk is inserted correctly and is securely fastened.
Product does not recognize Tray 4.	<ul style="list-style-type: none">• Make sure you selected Tray 4 in the driver (See “Helpful software for increased flexibility” on page 14).• Turn the product off and then back on.• Make sure the power cord is plugged into Tray 4 (See “Cabling configurations” on page 163).• If the product still does not recognize Tray 4, contact your dealer or authorized HP service provider.
Product does not recognize stapler.	Check the cable to the stapler. Make sure it is properly connected at both ends (See “Cabling configurations” on page 163).

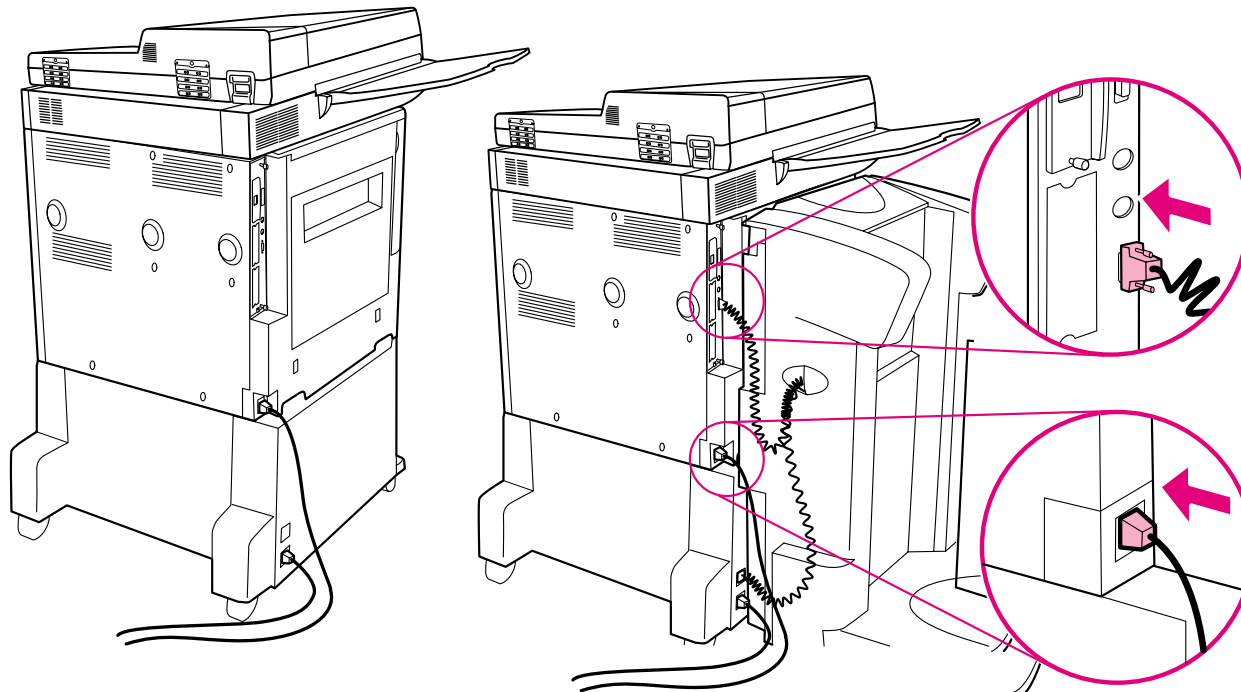
Situation	Solution
Product draws paper from the wrong tray.	<ul style="list-style-type: none"> • Be sure your program is selecting the correct paper size or type. • Make sure that the driver for your program is correctly installed, configured, and capable of requesting the required paper size and type. • The size of paper requested is not loaded in the tray selected. The product draws paper from the next default tray that contains the correct size. Load the correct paper in the tray and make sure the tray is adjusted correctly. Load the tray with enough paper to complete the print job. • If you selected Tray 2, 3, or Tray 4 and did not turn the product off when installing it, the product does not recognize it and draws paper from the next default tray source. Turn the product off, then back on, and the product will recognize the tray.
Product interface problems.	Print a configuration page from the control panel to verify that the interface configurations shown on the printout match those on the host computer (See “Configuration page” on page 169).
Product is paused.	Press START . The control panel should display READY and the Ready light should be lit. Resume printing.
Product is off or not connected to an active power source.	Make sure that all power cables are firmly plugged in to both the product components and an active power source. Make sure the product is on.
Product is ready, but not receiving data (the Data light does not blink).	<ul style="list-style-type: none"> • Check for loose I/O cable connections at the product and computer or network port. • Try your I/O cable on a system that you know works. • Check that the correct interface cable was selected and is securely connected to both the product and the computer. If the cable is not correctly configured, see the <i>start</i> guide for configuration information. • If connected to a network, print a Jetdirect configuration page to check for interface or network problems (See “Configuration page” on page 169).

Situation	Solution
Product is usually slow to respond.	<ul style="list-style-type: none">• Product speed is highly dependent on how your software application is set up, which driver you are using, and how much traffic is on the network. See the <i>start</i> guide for configuration information.• You might need to add more memory (See “Installing memory” on page 220).
Product port problem.	Check that your computer port is configured and working properly. One way to check this is to connect another product to that port on your computer and print from a program you know works.
Product prints only part of a page or document.	The connection has been broken during transmission. If you move the portable device during transmission, the connection can be broken. IRDA-compliant devices are designed to recover from temporary connection interruptions. You have up to 40 seconds to reestablish the connection (depending on the portable device being used).
Product prints wrong fonts or formats.	<ul style="list-style-type: none">• The font is not present in the product and must be downloaded from your program, or the proper font DIMM must be installed. Check your program to make sure the correct driver has been installed and configured. To verify that the font you want is available, print a PS or PCL font list (See “Information menu” on page 188).• Your software selected a substitute font for one that is not available in the product. (See your software program manual for more information about font selection.)

Situation	Solution
Printing stops in the middle of the job.	<ul style="list-style-type: none"> • Check the control panel display for an error message. • If you are on a network, make sure the computer is correctly configured and that there is not a network problem (see your system administrator). • Check the line voltage to make sure that it is steady and within product specifications. (See the <i>introduce</i> guide on the product CD, or go to www.hp.com/support/lj9000.) Turn the product off and then back on. • Check the time-out setting in your network application. You might need to increase it. • If you are trying to copy a file to the product from the DOS prompt, use the copy command <code>COPY [filename] LPTn /B</code> printer port, such as LPT1 (where n is the port number). <p data-bbox="625 727 688 754">Note</p> <p data-bbox="625 759 1724 786">To output the page, you might have to send a form feed command from the computer.</p>
PS print job will not print.	Check the configuration in the PostScript tab of Windows. Check that Protocol is set to AppleTalk and that Binary Data is not selected.
Software is selecting the wrong port.	Check your operating system port settings to be sure the print job is being sent to the correct port (for example, LPT1).
The control panel and driver are not set to the same paper size.	Make sure that the custom paper size defined from the control panel and the custom paper size defined in the driver are the same.
The file you are trying to print might not have the option to print on both sides of the paper turned on.	Make sure that the option to print on both sides of the paper is configured in the driver.
The FIR status indicator turns off during transmission.	The connection might have been broken. Press STOP to clear the product memory. Then, reposition the portable device within the range of operation described in “Printing a job using FIR” on page 80 , and print the job again.

Situation	Solution
The Macintosh computer is not communicating with the product.	<ul style="list-style-type: none"> • Make sure the control panel displays <code>READY</code>. • Make sure the correct driver is selected in the left half of the Chooser. Then make sure that the required product name is selected (highlighted) on the right half of the Chooser. There will be an icon next to the product name after the driver has been set up and configured with the PPD. • If the product resides on a network with multiple zones, make sure the correct zone is selected in the AppleTalk Zones box in the Chooser. • Make sure the correct product has been selected in the Chooser by printing a configuration page (See “Configuration page” on page 169). Make sure the name of the product displayed on the configuration page matches the product in the Chooser. • Make sure AppleTalk is active. (Select this in the Chooser or in the AppleTalk control panel, whichever is applicable for your OS version.) • Make sure the computer and product are on the same network. From Control Panels in the Apple menu, select the Network (or the AppleTalk) control panel and then choose the correct network (for example, LocalTalk or EtherTalk).
The driver icon does not appear in the Chooser .	Make sure the Apple LaserWriter 8 Chooser extension resides in the Extensions folder. If it is not present anywhere on your system, you can obtain the driver from your Macintosh OS system software CD, from Apple Computer, Inc., or see the <i>introduce</i> guide on the product CD, or go to www.hp.com/support/lj9000 .
Type has been specified as labels, transparencies, or envelopes.	<ul style="list-style-type: none"> • Make sure that the media type can be printed on both sides. (See the <i>introduce</i> guide on the product CD, or go to www.hp.com/support/lj9000.) • Change the media type to the proper media type for printing on both sides.

Cabling configurations



Selecting an alternate PPD

This section, which only applies to Macintosh users, explains how to select an alternate PPD.

To select an alternate PPD

- 1 Open the **Chooser** from the **Apple** menu.
- 2 Click the LaserWriter 8 icon.
- 3 If you are on a network with multiple zones, select the zone in the **AppleTalk Zones** box where the product is located.
- 4 Click the printer name you want to use in the **Select a PostScript Printer** box. (Double-clicking will immediately generate the next few steps.)
- 5 Click **Setup**. (This button might read **Create** for first-time setup.)
- 6 Click **Select PPD**.
- 7 Find the required PPD in the list and click **Select**. If the required PPD is not listed, choose one of the following options:
 - Select a PPD for a printer with similar features.
 - Select a PPD from another folder.
 - Select the generic PPD by clicking **Use Generic**. The generic PPD allows you to print, but limits your access to printer features.
- 8 In the **Setup** dialog box, click **Select**, and then click **OK** to return to the **Chooser**.

Note If you manually select a PPD, an icon might not appear next to the selected printer in the **Select a PostScript Printer** box. In the **Chooser**, click **Setup**, click **Printer Info**, and then click **Update Info** to bring up the icon.

- 9 Close the **Chooser**.

Renaming the product

If you are going to rename the product, do this before selecting the product in the **Chooser**. If you rename the product after selecting it in the **Chooser**, you will have to go back into the **Chooser** and reselect it.

Use the **Printer Name** feature in the **HP LaserJet Utility** settings to rename the product.

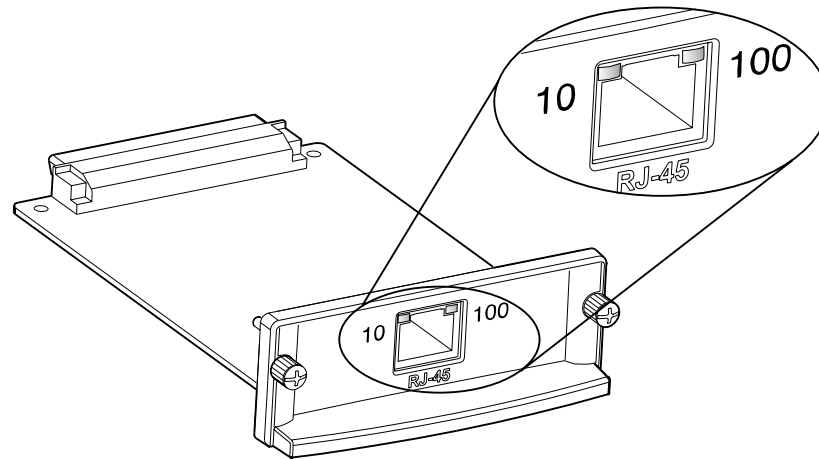
Communicating with an optional HP Jetdirect print server

If the product contains an optional HP Jetdirect internal print server, and you cannot communicate with the printer over the network, verify the operation of the print server. Check the Jetdirect Configuration Page for the message `I/O CARD READY`. For troubleshooting information, see the HP Jetdirect administrator's guide.

HP Jetdirect 610N 10/100TX Print Server

If the product contains an optional HP Jetdirect 10/100TX print server, check to see that the print server was able to link to the network. (If you have a different HP Jetdirect print server, see the guide that came with it.)

- Check the link-speed indicators (10 or 100) on the print server. If both are off, the product server failed to link to the network.



- Check the HP Jetdirect configuration page. The message `LOSS OF CARRIER ERROR` indicates that the print server failed to link to the network.

The HP Jetdirect 10/100TX print server might require up to 10 seconds to establish a link to the network. If the print server failed to link, verify that all cables are correctly connected. If all cables are correctly connected, but the print server still fails to link, follow the steps below to reconfigure the print server:

- 1 Use the **EIO** menu to manually set the link speed (10 or 100 Mbps) and communication mode (full or half-duplex) so that they match the network. (See [“EIO submenu” on page 212](#)). For example, if the port on the network switch is set for 100TX full-duplex operation, you must set the print server for 100TX full-duplex operation.

- 2 Turn the product off and back on and check the print server operation. If the print server fails to link, try a different network cable.

Checking the product configuration

From the control panel, you can print pages that give details about the product and its current configuration. The following information pages are described here:

- Menu map
- Configuration page
- Supplies status page
- Usage page
- PCL or PS font list
- File directory page
- Jetdirect
- Event log
- Paper path test

Use the following procedure to print these information pages. Then, see the specific sections below for more information about each page.

To print an information page

- 1 Touch **Menu**.
- 2 Touch `Information`.
- 3 Scroll to the information page you want and touch **OK**.

Menu map

To see the current settings for the menus and items available in the control panel, print a control panel menu map:

- 1 Touch **Menu**.
- 2 Touch Information.
- 3 Touch Menu.
- 4 Touch Print Menu Map.
- 5 Touch **OK**.

Many of these values can be overridden from the driver or program. You might want to store the menu map near the product for reference.

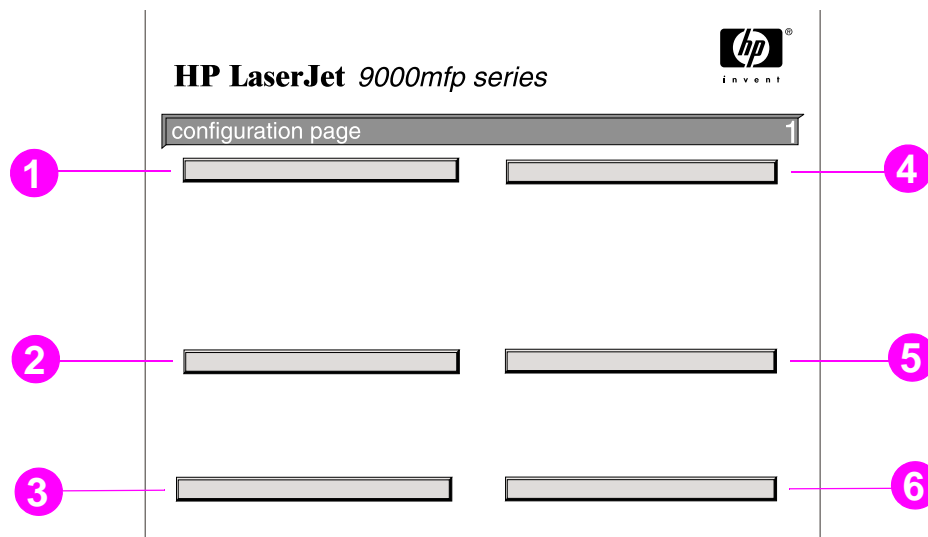
The content of the menu map varies, depending on the options currently installed in the product. For a complete list of control panel items and possible values, see [“Control panel menus” on page 185](#). To change a control panel setting, see [“Control panel menus” on page 185](#).

Configuration page

Use the configuration page to view current product settings, to help troubleshoot printer problems, or to verify installation of optional accessories, such as memory (DIMMs), paper trays, and product languages.

Note If an HP Jetdirect print server is installed, an HP Jetdirect configuration page will print out as well.

The configuration page contains the following information:



- 1 **Device Information** lists the serial number, HP JetSend IP addresses, page counts, and other information for the product.
- 2 **Event Log** lists the number of entries in the log, the maximum number of entries viewable, and the last three entries. The second page of the event log is the manufacturer page. This page contains information that might assist HP Customer Care representatives in solving possible product problems.
- 3 **Installed Personalities and Options** lists all product languages that are installed (such as PCL and PS), and lists options that are installed in each DIMM slot and EIO slot.
- 4 **Memory** lists the product memory information, PCL Driver Work Space (DWS), and I/O buffering and Resource Saving information.

- 5 **Security** lists the status of the control panel lock, control panel password, and disk drive.
- 6 **Paper Trays and Options** lists the size settings for all trays and lists paper-handling accessories that are installed.

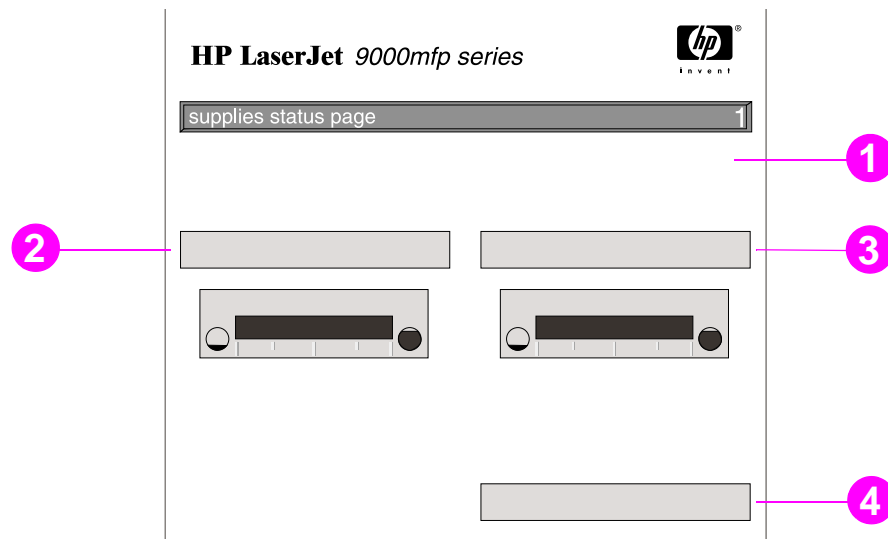
Note

Numbers in the sample printout match the numbers in the product messages. (See the *introduce* guide on the product CD, or go to www.hp.com/support/lj9000.) The content of the configuration page varies, depending on the options currently installed in the product.

Supplies status page

Use the supplies status page to obtain information about the toner cartridge installed in the product, the amount of toner left in the toner cartridge, and the number of pages and jobs that have been processed. The page also lets you know when you should schedule the next preventative maintenance.

The supplies status page contains the following information:

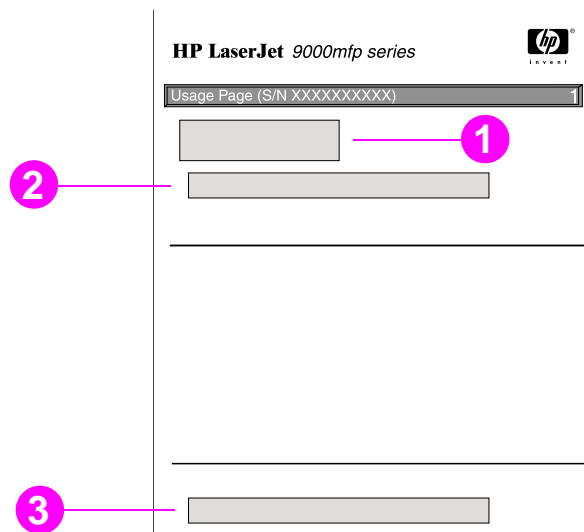


- 1 Supplies website** is the local website for ordering supplies through the Internet.
- 2 Cartridge Information** indicates the amount of toner available in the print cartridge, estimated pages remaining for the amount of toner left in the cartridge, total number of pages and jobs processed, print cartridge manufacture date and serial number, and how to recycle HP print cartridges.
- 3 Other Supplies Information** indicates the percentage of the maintenance kit has been used and the HP part numbers.
- 4 Device Information** lists total product page count, preventative maintenance interval, pages until next maintenance should be performed, and serial number of the product.

Usage page

Use the usage page to obtain information about the page sizes and number of pages printed, copied, and sent.

The usage page contains the following information:



- 1 **Product Name** and **Printer Name** indicate the series of HP LaserJet printer in use.
- 2 **Usage Totals** indicates types of pages that have been printed, copied, and scanned; the number of single-sided pages printed, copied and scanned; the number of duplexed pages printed, copied and scanned; and the total number of pages printed, copied and scanned.
- 3 **Coverage** indicates the amount of toner used on a page.

PCL or PS font list

Use the font lists to see which fonts are currently installed in the product. (The font lists also show which fonts are resident on a hard disk or flash DIMM.)

The PS font list shows the PS fonts installed, and gives a sample of those fonts. The following describes the information that can be found on the PCL font list:

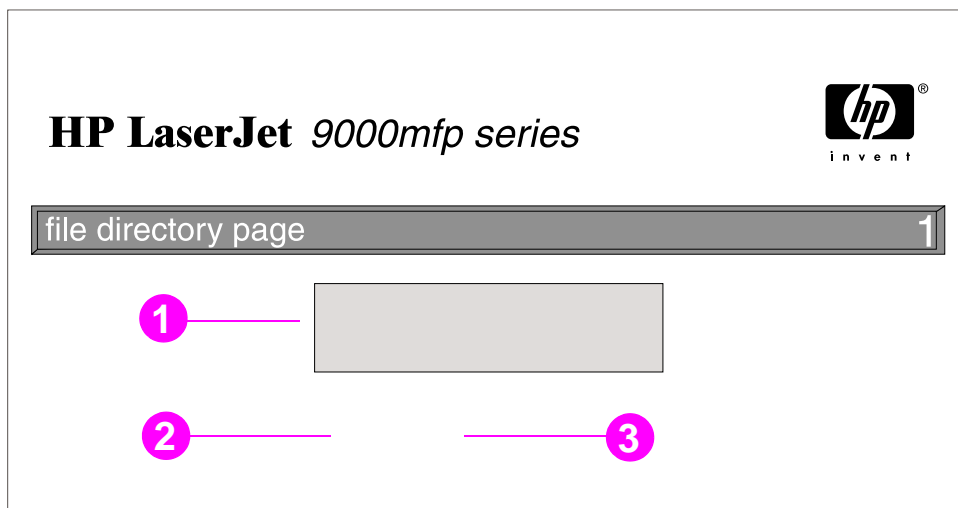
- **Font** gives the font names and samples.
- **Pitch/Point** indicates the pitch and point size of the font.
- **Escape Sequence** (a PCL 5e programming command) is used to select the designated font. (See the legend at the bottom of the font list page.)

Note For step-by-step instructions about using printer commands to select a font with MS-DOS programs, see [“Common PCL 5e printer commands” on page 232](#).

- **Font #** is the number used to select fonts from the control panel (not the software application). Do not confuse the font # with the font ID, described below. The number indicates the DIMM slot where the font is stored.
 - SOFT: Downloaded fonts that stay resident in the product until other fonts are downloaded to replace them or until the product is turned off.
 - INTERNAL: Fonts that permanently reside in the product.
- **Font ID** is the number you assign to soft fonts when you download them through software.

File directory page

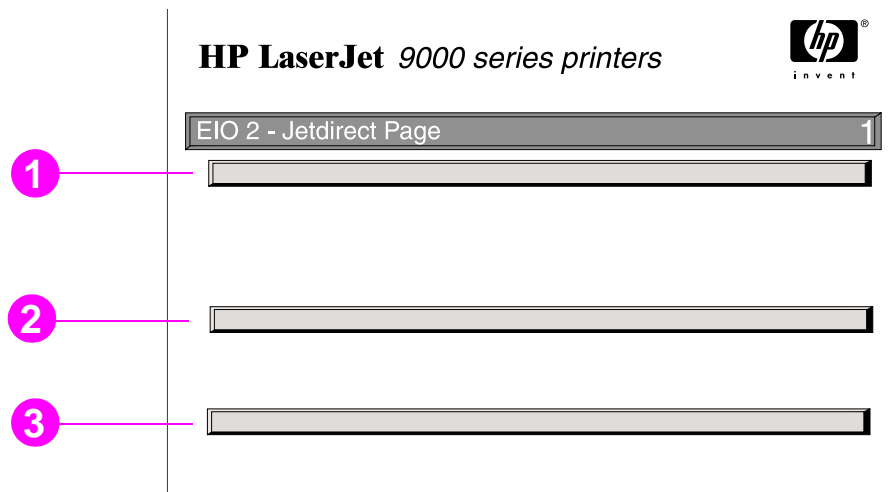
The file directory page contains the following information:



- 1 Disk Information** indicates the disk model number, serial number, capacity, available free space, and whether you might write to the disk.
- 2 File Size** column indicates the size of each file under the Directory/File Name column. If a directory is listed on the line, then Directory appears in this column, and its path is listed in the Directory/File Name column.
- 3 Directory/File Name** indicates the name of the file. Files in a subdirectory are listed right after the directory line. The files are not necessarily listed in alphabetic order.

Jetdirect page

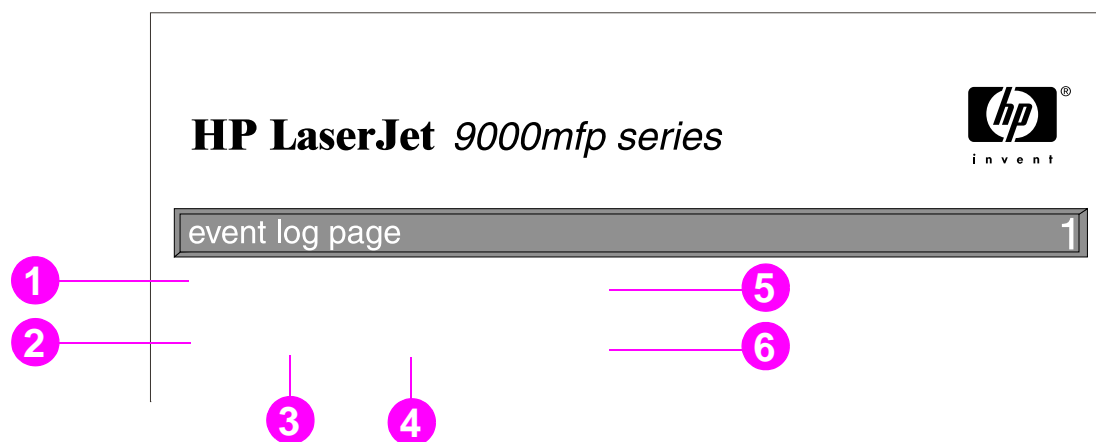
The Jetdirect page contains the following information:



- 1 HP Jetdirect Configuration** indicates the product status, model number, hardware firmware version, port select, port configuration, auto negotiation, manufacturing identification, and manufactured date.
- 2 Network Status** indicates the total packets received, unicast packets received, bad packets received, framing errors received, total packets transmitted, unsendable packets, transmit collisions, and transmit late collisions.
- 3 Protocol Information** indicates the status for TCP/IP, IPX/SPX, Novell/NetWare, AppleTalk, and DLC/LLC.

Event log page

The first page of the event log contains the following information:



- 1 Current Page Count** indicates the number of pages printed from the product.
- 2 Number** indicates the order in which the errors occurred. The last error to occur has the highest number.
- 3 Error** indicates the internal error code for each error.
- 4 Page Count** indicates the number of pages printed from the product when the error occurred.
- 5 Serial Number** indicates the serial number of the product.
- 6 Description or Personality** indicates whether the error occurred due to a problem within a product personality or due to a product jam.

The second page of the event log is the manufacturing page. This page contains information that might assist HP Customer Care representatives in solving possible product problems.

To print an event log

- 1 Touch **Menu**.
- 2 Touch `Configure Device`.
- 3 Scroll to `Diagnostics`.
- 4 Scroll to `Print Event Log` and touch **OK**.

Printing a paper path test

The paper path test can be used to verify that various paper paths are working properly or to troubleshoot problems with tray configuration.

To print a paper path test

- 1 Touch **Menu**.
- 2 Scroll to `Configure Device`.
- 3 Scroll to `Diagnostics`.
- 4 Scroll to `Set Paper Path Test` and touch **OK**.
- 5 Scroll to select the input tray you want to test, the output bin, the duplex printing accessory (if available), and number of copies, touching **OK** after you set the value for each. After selecting the last option, the paper path test automatically starts.

A Specifications

Overview

This section presents some of the product specifications.

Paper weight equivalence table

Use this table to determine approximate equivalent basis weight in weight specifications other than U.S. bond weight. For example, to determine the equivalent of 20 lb U.S. bond weight paper in U.S. cover weight, locate the bond weight (in row two, first column) and scan across the row to the cover weight (in the third column). The equivalent is 75 g/m² (28 lb).

Note Shaded areas indicate a standard weight for that grade.

U.S. Bond Weight (lb)	U.S. Text/ Book Weight (lb)	U.S. Cover Weight (lb)	U.S. Bristol Weight (lb)	U.S. Index Weight (lb)	U.S. Tag Weight (lb)	Metric Weight (g/m ²)
17	43	24	29	35	39	64
20	50	28	34	42	46	75
21	54	30	36	44	49	80
22	56	31	38	46	51	81
24	60	33	41	50	55	90
27	68	37	45	55	61	100
28	70	39	49	58	65	105
32	80	44	55	67	74	120
34	86	47	58	71	79	128
36	91	50	62	75	83	135

U.S. Bond Weight (lb)	U.S. Text/ Book Weight (lb)	U.S. Cover Weight (lb)	U.S. Bristol Weight (lb)	U.S. Index Weight (lb)	U.S. Tag Weight (lb)	Metric Weight (g/m ²)
39	100	55	67	82	91	148
42	107	58	72	87	97	157
43	110	60	74	90	100	163
47	119	65	80	97	108	176
53	134	74	90	110	122	199
58	146	80	98	120	133	216

Printing supplies

Item	Part number	Description or use
Print cartridge		
30,000 pages	C8543X	Replacement HP maximum capacity, smart print cartridge.
HP LaserJet Monochrome Transparencies		Specifically engineered for use with HP LaserJet monochrome printers.
Letter (8.5 by 11 in), 50 sheets/box	92296T	Specifications: 4.3 mil thickness. Two-sided coating.
A4 (210 by 297 mm), 50 sheets/box	92296U	
HP LaserJet Soft Gloss Paper		For use with HP Color LaserJet and HP LaserJet monochrome printers. Coated paper, good for business documents with high impact, such as brochures, sales material, and documents with graphics and photographic images.
Letter (8.5 by 11 in), 50 sheets/box	C4179A	Specifications: 32 lb. Two-sided satin gloss coating.
A4 (210 by 297 mm), 50 sheets/box	C4179B	
HP Premium Choice LaserJet Paper		For use with HP Color LaserJet and HP LaserJet monochrome printers. A heavy, super-bright paper for high-impact documents such as resumes, brochures, reports, and presentations.
Letter (8.5 by 11 in), 500 sheets/ream, 10-ream carton	HPU1132	Specifications: 98 bright, 32 lb.
A4 (210 by 297 mm), 500 sheets/ream, 4-ream carton	CHP410	
Tabloid (11 by 17 in), 250 sheets/ream, 6-ream carton	HPU1732	
A3 (420 by 297 mm), 500 sheets/ream, 4-ream carton	CHP420	

Printing supplies

Item	Part number	Description or use
HP LaserJet Paper		
Letter (8.5 by 11 in), 500 sheets/ream, 10-ream carton	HPJ1124	Enhances performance for all HP LaserJet printers. Heavier for letterhead, high-value memos, legal documents, direct mail, and correspondence. Specifications: 96 bright, 24 lb.
Letter (8.5 by 11 in), 3-hole, 500 sheets/ream, 10-ream carton	HPJ113H	
Legal (8.5 by 14 in), 500 sheets/ream, 10-ream carton	HPJ1424	
A4 (210 by 297 mm), 500 sheets/ream, 5-ream carton	CHP310	
Tabloid (11 by 17 in), 500 sheets/ream, 5-ream carton	HPJ1724	
HP Printing Paper		
Letter (8.5 by 11 in), 500 sheets/ream, 10-ream carton	HPP1122	For use with laser and inkjet printers. Created especially for small offices and home offices. Heavier and brighter than copier paper. Specifications: 92 bright, 22 lb.
A4 (210 by 297 mm), 500 sheets/ream, 5-ream carton	CHP210	
A3 (420 by 297 mm), 500 sheets/ream, 5-ream carton	CHP220	
HP MultiPurpose Paper		
Letter (8.5 by 11 in), 500 sheets/ream, 10-ream carton	HPM1120	For use with all office equipment (laser and inkjet printers, copiers, and fax machines). Created for businesses that want one paper for all their office needs. Brighter and smoother than other office papers. Specifications: 90 bright, 20 lb.
Letter (8.5 by 11 in), 500 sheets/ream, 5-ream carton	HPM115R	
Letter (8.5 by 11 in), 3-hole, 500 sheets/ream, 10-ream carton	HPM113H	
Legal (8.5 by 14 in), 500 sheets/ream, 10-ream carton	HPM1420	
Tabloid (11 by 17 in), 500 sheets/ream, 5-ream carton	HPM1720	

Printing supplies

Item	Part number	Description or use
HP Office Paper		
Letter (8.5 by 11 in), 500 sheets/ream, 10-ream carton	HPC8511	For use with all office equipment (laser and inkjet printers, copiers, and fax machines). Good for standard, high-volume printing. Brighter than standard papers.
Letter (8.5 by 11 in), 3-hole, 500 sheets/ream, 10-ream carton	HPC3HP	Specifications: 87 bright, 20 lb.
Legal (8.5 by 14 in), 500 sheets/ream, 10-ream carton	HPC8514	
A4 (210 by 297 mm), 500 sheets/ream, 5-ream carton	CHP110	
Tabloid (11 by 17 in), 500 sheets/ream, 5-ream carton	HPC1117	
HP Office Recycled Paper		
Letter (8.5 by 11 in), 500 sheets/ream, 10-ream carton	HPE1120	For use with all office equipment (laser and inkjet printers, copiers, and fax machines). Good for high-volume printing.
Letter (8.5 by 11 in), 3-hole, 500 sheets/ream, 10-ream carton	HPE113H	Satisfies U.S. Executive Order 13101 for environmentally preferable products.
Legal (8.5 by 14 in), 500 sheets/ream, 10-ream carton	HPE1420	Specifications: 84 bright, 20 lb, 30% post-consumer content.

Envelope margins

The following table gives typical address margins for a Commercial #10 or DL envelope.

Type of address	Top margin	Left margin
Return address	15 mm (0.6 inches)	15 mm (0.6 inches)
Delivery address	51 mm (2 inches)	85 mm (3.5 inches)

Note For the best print quality, position margins no closer than 15 mm (0.6 inches) from the edges of the envelope.

B Control panel menus

Overview

The control panel menu layout represents an attempt to show the menus used by all end users while protecting the menus used by administrators. End users will typically use the first three menus of the list. Administrators and service technicians will use the other items, which can be protected by a personal identification number (PIN).

You can perform most routine printing tasks from the computer through the driver or software application. This is the most convenient method to control the product, and will override the product control panel settings. See the help files associated with the software, or for more information about how to gain access to the driver, see [“Helpful software for increased flexibility” on page 14](#). If you cannot access a menu or an item, it is either not an option for the product, or your network administrator has locked the function. (The control panel will read ACCESS DENIED MENUS LOCKED.) See your system administrator.

Note Driver and software commands override the product control panel settings.

From the control panel, you can print a menu map that shows the layout and current settings of the control panel menu items (See [“Menu map” on page 168](#)).

Additional menu items can appear in the control panel, depending on the options currently installed in the product.

This appendix lists all the items and possible values for the product. (Default values are listed in the “Item” column.)

Note For more information about the HP output devices, see the *use guide* that came with the device.

This appendix includes:

- [Retrieve job menu](#) shows jobs stored on the device. Jobs are listed by user and job name. See [“Job retention features” on page 69](#) for information of how to store jobs.
- [Information menu](#) lists printable menu map and other information pages.
- [Paper handling menu](#) allows the user to set paper type (and size if not detected) for each product tray.
- [Configure device menu](#) allows administrators to set defaults, I/O ports, diagnostics, and resets.
 - [Printing submenu](#)
 - [Print quality submenu](#)
 - [System setup submenu](#)
 - [I/O submenu](#)
 - [Resets submenu](#)

Retrieve job menu

Note If there are no private, stored, quick copy, or proof-and-hold jobs on the product hard disk or RAM memory, the message NO STORED JOB is displayed when the menu is selected.

- 1 The user is presented a list of user names.
- 2 The user selects a user name, and is then shown a list of jobs stored for that user.
- 3 The user selects a job name, and can print or delete. If a job requires a PIN to print, **P** appears next to the **PRINT** command and a PIN must be provided. If a job requires a PIN to delete, **D** appears next to the **DELETE** command and a PIN must be provided.
- 4 If the user selects **PRINT**, the product prompts the user to specify the number of copies to print (1 to 32,000).

Information menu

To print an information page, scroll to the information page you want and touch **OK**.

Item	Explanation
PRINT MENU MAP	Generates a menu map that shows layout and current settings of the control menu items. The product will back up one screen to SET FRONT TO BACK when the page is completed.
PRINT CONFIGURATION	Generates a page detailing the current configuration of the product. The product will return to the online Ready state when the page is completed.
PRINT SUPPLIES STATUS	Generates a page that shows the number of pages remaining for each supply in the product. The product will return to the online Ready state when the page is completed.
PRINT USAGE PAGE	Generates a page that contains information that could be used for cost accounting. This item is only available if a hard disk is installed. The product will return to the online Ready state when the page is completed.
PRINT FILE DIRECTORY	Generates a directory page containing information for all installed mass storage devices. The product will return to the online Ready state when the page is completed.
PRINT PCL FONT LIST	Generates a typeface list of all PCL fonts available on the product. The product will return to the online Ready state when the page is completed.
PRINT PS FONT LIST	Generates a typeface list of all PS fonts available on the product. The product will return to the online Ready state when the page is completed.

Paper handling menu

When paper handling settings are correctly configured through the control panel, you can print by choosing the type and size of paper from the driver or software application. For more information, see [“Printing by type and size of paper” on page 67](#).

Some items in this menu (such as duplex and manual feed) are accessible from a software application, or from the driver (if the appropriate driver is installed). Driver and software application settings override control panel settings. For more information, see [“Using features in the driver” on page 63](#).

Item	Values	Explanation
TRAY 1 MODE=FIRST	FIRST CASSETTE	FIRST: Allows the user to specify if media in the tray should be used. CASSETTE: If set to CASSETTE, the tray must be configured with a size and type, and functions like all other trays.
TRAY <N> SIZE=LETTER		Allows the user to set the paper size for Tray 2, 3, and Tray 4 (if installed) when the custom switch is in the CUSTOM position. Size is detected if the switch is in the STANDARD position. Substitute the tray number for <N>.
TRAY <N> TYPE=PLAIN		Allows the user to specify the type of media in each tray. Substitute the tray number for <N>.

Item	Values	Explanation
FUSER MODES	AUTO NORMAL LOW HIGH1 HIGH2 SPEED	<p>Configure the fuser mode associated with each paper type.</p> <p>The fuser mode can only be changed from this menu option in the control panel.</p> <p>AUTO: Utilizes the optimum mode for that media type. NORMAL: Normal temperature, prints at 50 pages per minute (ppm) (40 ppm for the HP LaserJet 9000Lmfp). LOW: Low temperature, prints at 50 ppm (40 ppm for the HP LaserJet 9000Lmfp). HIGH1: Raises the temperature, prints at 50 ppm (40 ppm for the HP LaserJet 9000Lmfp). HIGH2: Raises the temperature, prints at 32 ppm. SPECIAL: Mode to print at normal speeds with a 40-second delay added to the beginning of the next job. After each 400 pages are printed, the first page of that job is printed at a slower speed in order to clean the fuser. No defects should be noticeable on the printed page. This is not a preferred setting.</p> <p>The default value for each paper type is <code>AUTO</code>.</p> <p>For a complete list of supported paper types, see the <i>introduce</i> guide on the product CD, or go to www.hp.com/cposupport/.</p> <p>CAUTION</p> <p>If you change the fuser mode to <code>HIGH1</code> or <code>HIGH2</code>, be sure to change it back to the default when you are done printing. Setting a paper type to <code>HIGH1</code> or <code>HIGH2</code> might shorten the life of some consumables, such as the fuser, and might cause other failures or jams.</p>

Configure device menu

This menu contains all administrative functions.

Originals submenu

Although you can gain access to each item using the touch screen graphical display, you can also select copying and sending items through the product menus.

Item	Values	Explanation
PAPER SIZE=AUTO	AUTO LETTER LEDGER LEGAL EXEC A3 A4 A5 B4 B5 BOOK	Sets the paper size of the original document. The product uses the paper sensors to automatically describe the size of the original document. If paper is not detect, the user can select from a list of supported paper sizes.
NUMBER OF SIDES=1	1 2	Indicates whether one side or both sides of the original document are scanned. The product prompts the user to turn the page over if 2 is selected and the original is placed on the glass.

Item	Values	Explanation
ORIENTATION= PORTRAIT	PORTRAIT LANDSCAPE	Indicates whether the orientation of the original is portrait (short edge top) or landscape (long edge top).
PAGE CONTENT=MIXED	MIXED TEXT GRAPHICS	Describes the type of image on the original. Choose graphics if the original consists of graphic images, or text if the image consists of text only. Choose mixed if the original contains graphics and text.
TEXT/GRAPHICS PRIORITY=4	0-8	Indicates the priority of text and graphics if CONTENT is defined as mixed. You can choose from nine increments. 0=maximum text 8=maximum graphics
DENSITY=4	0-8	Specifies the contrast and brightness of the image. You can choose from nine increments. 0=darkest 8=lightest
HEAVY PAPER=OFF	ON OFF	Indicates if heavy paper is being scanned. If Heavy Paper is set, the scanner will adjust the tension on the paper as it moves through the scanning area. It can impact output quality for papers whose weight is more than 100 g/mm.

Copying submenu

Item	Values	Explanation
SIDES=1	1 2	Indicates whether images should be printed on one side or both sides of the copy.
COLLATE=COLLATE	COLLATE UNCOLLATE	Indicates whether copies should be collated or not collated.
PAPER DESTINATION= FACE DOWN BIN	FACE UP BIN FACE DOWN BIN BOOKLET BIN	Indicates where the copies are delivered to the output device. You can choose the booklet bin only if the multifunction finisher is attached.
COPIES=1	1-999	Indicates the number of copies made when you press START without selecting the number of copies using the numeric keypad.

Item	Values	Explanation
STAPLES=NONE	Values vary depending on the output device attached	<p>If stapling is requested, indicates where the staple is placed and how many staples are placed.</p> <p>If a stacker is attached to the product, stapling is not an option.</p> <p>If a stapler/stacker is attached, you can choose the following values:</p> <p>NONE</p> <p>ONE (upper-left corner)</p> <p>ANGLED (upper-left corner)</p> <p>TWO</p> <p>THREE</p> <p>SIX</p> <p>CUSTOM (only if the stapler/stacker has a definition for "custom")</p> <p>OPPOSITE CORNER</p>
		<p>Note Because of paper size, paper orientation, and paper feed direction, you should experiment with staple options to find the results you want.</p>
		<p>If a multifunction finisher is attached, you can choose the following values:</p> <p>NONE</p> <p>ONE</p> <p>TWO</p> <p>SADDLE STITCH</p>

Enhancement submenu

Item	Values	Explanation
DENSITY=4	0-8	Specifies contrast and brightness of the image. 0=lightest 8=darkest
SHARPNESS=3	0-6	Specifies the sharpness setting. 0=minimum sharpness 6=maximum sharpness
BACKGROUND REMOVAL=2	0-8	Controls the amount of background material from the original that is eliminated on the copy. Background removal is useful when you copy both sides and do not want the material on the first side to be visible on the second side of the copy. 0=minimum background removal (more background is visible) 8=maximum background removal (less background is visible)

Sending submenu

Item	Values	Explanation
SCAN PREFERENCE=COLOR	COLOR BLACK AND WHITE	Determines whether the document is scanned in color or black and white.
FILE TYPE=PDF	PDF TIFF MTIFF JPEG	Specifies the file format of the e-mail attachment.

Printing submenu

Some items in this menu are available from a software application, or from the driver (if the appropriate driver is installed). Driver and program settings override control panel settings. For more information, see [“Using features in the driver” on page 63](#).

Item	Values	Explanation
COPIES=1	1 to 32,000	<p>Set the default number of copies by selecting any number from 1 to 32,000. Use the numeric keypad to select the number of copies.</p> <p>Note It is best to set the number of copies from the driver or software application. (Driver and software settings override control panel settings.)</p>
DEFAULT PAPER SIZE= LETTER	ANY LETTER LEGAL A4 EXECUTIVE 11X17 A3 JISB4 JISB5 CUSTOM A5	<p>Set the default image size for paper and envelopes. (The item name will change from paper to envelope as you scroll through the available sizes.)</p>
DEFAULT CUSTOM PAPER SIZE	UNIT OF MEASURE X DIMENSION Y DIMENSION	<p>Allows the user to set a custom paper size for any of the installed trays. Substitute the tray number for <N>. This menu only appears when the selected tray custom switch is in the custom size position. The user selects the X and Y dimensions of the custom paper size using the ruler labels in the trays.</p>

Item	Values	Explanation
PAPER DESTINATION= STANDARD OUTPUT BIN	STANDARD OUTPUT FACE UP OPTIONAL BIN	Allows the user to configure the output paper bin destination. Only installed bins will appear on the menu.
DUPLEX=OFF	OFF ON	Set the value to ON to print on both sides (duplex) or OFF to print on one side (simplex) of a sheet of paper. For more information, see the <i>introduce</i> guide on the product CD, or go to www.hp.com/cposupport/ .
BINDING=LONG EDGE	LONG EDGE SHORT EDGE	Allows the user to change the binding edge for duplex printing. The menu item is displayed when a duplex printing accessory is installed in the product and DUPLEX=ON.
OVERRIDE A4/LETTER= NO	YES NO	This command is used to print on letter-size paper when an A4 job is sent, but no A4-size paper is loaded in the product (or to print on A4-size paper when a letter job is sent, but no letter paper is loaded in the product).
MANUAL FEED=OFF	OFF ON	Feed the paper manually from Tray 1, rather than automatically from a tray. When MANUAL FEED=ON and Tray 1 is empty, the product goes offline when it receives a print job. It then displays MANUALLY FEED [PAPER SIZE]. For more information, see “Manually feeding paper from Tray 1” on page 66 .
EDGE TO EDGE OVERRIDE=OFF	OFF ON	Turns the edge-to-edge mode on or off for all print jobs. This mode can be overridden inside a print job by an edge-to-edge PJI variable.

Item	Values	Explanation
COURIER FONT=REGULAR	REGULAR DARK	Select the version of Courier font to use: REGULAR: The internal Courier font available on the HP LaserJet 4 Series printers. DARK: The internal Courier font available on the HP LaserJet III Series printers. Both fonts are not available at the same time.
WIDE A4=NO	YES NO	The Wide A4 setting changes the number of characters that can be printed on a single line of A4 paper. YES: Up to 80 10-pitch characters can be printed on one line. NO: Up to 78 10-pitch characters can be printed on one line.
PRINT PS ERRORS=OFF	ON OFF	Select ON to print the PS error page when PS errors occur.

Item	Values	Explanation
FORM LENGTH	60	Sets vertical spacing from 5 to 128 lines for default paper size. Enter the value using the numeric keypad.
ORIENTATION	PORTRAIT	Allows the user to select default page orientation. Note It is best to set the page orientation from the driver or software application. (Driver and software settings override control panel settings.)
FONT SOURCE	INTERNAL	INTERNAL: Internal fonts. SOFT: Permanent soft fonts. SLOT 1, 2, or 3: Fonts stored in one of the three DIMM slots.
FONT NUMBER	0-999	The product assigns a number to each font and lists them on the PCL Font List (See "PCL or PS font list" on page 173). The font number appears in the Font # column of the printout.
FONT PITCH=10.00	0.44 to 99.99	Using the numeric keypad or scroll and touch to enter a value. This item might not appear, depending on the font selected.
FONT POINT SIZE=12.00	4.00 to 999.75	Using the numeric keypad or scroll and touch to enter a value. This item might not appear, depending on the font selected.
SYMBOL SET=PC-8	PC-8	Select any one of several available symbol sets from the product control panel. A symbol set is a unique grouping of all the characters in a font. PC-8 or PC-850 is recommended for line draw characters.

Item	Values	Explanation
APPEND CR TO LF=NO	YES NO	Select YES to append a carriage return to each line feed encountered in backward-compatible PCL jobs (pure text, no job control). Some environments, such as UNIX, indicate a new line using only the line feed control code. This option allows the user to append the required carriage return to each line feed.

Print quality submenu

Some items in this menu are accessible from a software application, or from the driver (if the appropriate driver is installed). Driver and software application settings override control panel settings. For more information, see [“Using features in the driver” on page 63](#).

Item	Values	Explanation
SET REGISTRATION		Shift the margin alignment to center the image on the page from top to bottom, and left to right. You can also align the image on the front, with the image printed on the back.
RESOLUTION= FASTRES 1200	300 600 FASTRES 1200	<p>Select the resolution from the values listed below:</p> <p>300: Produces draft print quality at maximum product speed (50 ppm for the HP LaserJet 9000mfp and 40 ppm for the HP LaserJet 9000Lmfp). 300 dpi (dots per inch) is recommended for some bitmapped fonts and graphics, and for compatibility with the HP LaserJet III family of printers.</p> <p>600: Produces high print quality at maximum product speed (50 ppm for the HP LaserJet 9000mfp and 40 ppm for the HP LaserJet 9000Lmfp).</p> <p>FASTRES 1200: Produces optimum print quality (comparable to 1,200 dpi) at maximum product speed (50 ppm for the HP LaserJet 9000mfp and 40 ppm for the HP LaserJet 9000Lmfp).</p> <p>Note It is best to change the resolution from the driver or software application. (Driver and software settings override control panel settings.)</p>

Item	Values	Explanation
RET=MEDIUM	OFF LIGHT MEDIUM DARK	<p>Use product Resolution Enhancement technology (REt) setting to produce print with smooth angles, curves, and edges.</p> <p>All print resolutions, including FastRes 1,200, benefit from REt.</p> <p>Note It is best to change the REt setting from the driver or software application. (Driver and software settings override control panel settings.)</p>
ECONOMODE=OFF	OFF ON	<p>Turn EconoMode on (to save toner) or off (for high quality).</p> <p>EconoMode is designed to give print output at a very low cost. EconoMode will work only with genuine HP print cartridges.</p> <p>Note It is best to turn EconoMode on or off from the control panel (control panel settings override driver and software settings).</p>
TONER DENSITY=3	1 to 5	<p>Lighten or darken the print on the page by changing the toner density setting. The settings range from 1 (light) to 5 (dark), but the default setting of 3 usually produces the best results.</p> <p>Note It is best to change the toner density from the driver or software application. (Driver and software settings override control panel settings.)</p>
SMALL PAPER MODE	No value to select.	When printing narrow media the part of the fuser rollers that do not make contact with the media swell up and can cause wrinkles.

Item	Values	Explanation
CREATE CLEANING PAGE	No value to select.	<p>Touch Continue to print a cleaning page (for cleaning excess toner from the paper path).</p> <p>In order for the cleaning page to work properly, print the page on copier grade paper (not bond or rough paper). Follow the instructions on the cleaning page. The progress bar shows how long before the process is complete.</p>
PROCESS CLEANING PAGE	No value to select.	<p>This item appears only after a cleaning page has been generated (as described above).</p> <p>Touch Continue to process the cleaning page. The progress bar shows how long until the process is complete.</p>

System setup submenu

Items in this menu affect the product function. Configure the product according to your printing needs.

Item	Values	Explanation
JOB STORAGE LIMIT=32	1 to 100	Specifies the number of jobs that can be stored on the product hard-disk accessory.
JOB HELD TIMEOUT= OFF	OFF 1 HOUR 4 HOURS 1 DAY 1 WEEK	Sets the amount of time that QuickCopy, proof and hold, private, and stored jobs are kept before being automatically deleted from the queue.
POWERSAVE TIME=1 HOUR	1 MINUTE 15 MINUTES 90 MINUTES 1 HOUR 2 HOURS 4 HOURS	<p>Set how long the product remains idle before it enters PowerSave mode:</p> <ul style="list-style-type: none"> • Minimizes the amount of power consumed by the product when it is idle. • Reduces wear on the product electronic components (Turns off the display backlight). • When you send a print job, press a control panel key, open a paper tray, or open the top cover, the product automatically exits PowerSave mode. <p>Note PowerSave turns off the backlight on the display, but the display is still readable.</p>

Item	Values	Explanation
PERSONALITY=AUTO	AUTO PCL POSTSCRIPT	<p>Select the default product language (personality). Possible values are determined by which valid languages are installed in the product.</p> <p>Normally you should not change the product language (the default is AUTO). If you change it to a specific product language, the product does not automatically switch from one language to another unless specific software commands are sent to the product.</p>
CLEARABLE WARNINGS= JOB	ON JOB	<p>Set the amount of time that a clearable warning is displayed on the product control panel.</p> <p>ON: Warning messages display on the control panel until Continue is touched.</p> <p>JOB: Warning messages display on the control panel until the end of the job from which they were generated.</p>
AUTO CONTINUE=ON	ON OFF	<p>Determine how the product reacts to errors.</p> <p>ON: If an error prevents printing, the message is displayed, and the product goes offline for 10 seconds before returning online.</p> <p>OFF: If an error prevents printing, the message remains on the display, and the product does not print until Continue is touched.</p> <p>Note To stop printing when out of staples (when a stapler accessory is installed), set AUTO CONTINUE=OFF in the control panel System setup menu.</p>

Item	Values	Explanation
CARTRIDGE LOW= CONTINUE	CONTINUE STOP	<p>Determine how the product functions when toner is low. The CARTRIDGE LOW message first appears when the print cartridge is almost out of toner. (About 2,400 pages can still be printed at five percent coverage.)</p> <p>CONTINUE: The product continues to print while the CARTRIDGE LOW message is displayed.</p> <p>STOP: The product goes offline and wait for further action.</p> <p>For more information, see “Managing the print cartridge” on page 90.</p>
JAM RECOVERY= AUTO	AUTO ON OFF	<p>Determine how the product functions when a jam occurs.</p> <p>AUTO: The product automatically selects the best mode for product jam recovery (usually ON). This is the default setting.</p> <p>ON: The product automatically reprints pages after a jam is cleared.</p> <p>OFF: The product does not reprint pages following a jam. Printing performance might be increased with this setting.</p>
RAM DISK=AUTO	AUTO OFF	<p>This item determines how the RAM disk is configured. This item appears only if there is no optional hard disk installed, and the product has at least 8 megabytes (MB) of memory.</p> <p>OFF: The RAM disk is disabled.</p> <p>Note If the setting is changed from OFF to AUTO, the product automatically reinitializes when it becomes idle.</p>
LANGUAGE=ENGLISH		<p>Includes all languages in the list.</p> <p>When scrolling through the language values, LANGUAGE= should be updated so it is presented in the highlighted language.</p>

Item	Values	Explanation
RESET COPY TIMEOUT=60 SECONDS	ANY	Defines the amount of time until the copy settings return to the default settings after any control panel activity is completed. The administrator can set the value.

Item	Values	Explanation
RESET SEND TIMEOUT=60 SECONDS	ANY	Defines the amount of time before the send settings return to the default settings after any control panel activity is completed. The administrator can set the value.
HOLD OFF PRINT JOB=ON	ON OFF	Prevents network print jobs from starting within a specified period after a copy job is completed.
HOLD OFF TIME=15 SECONDS	ANY	Defines the amount of time that print jobs must wait if HOLD OFF PRINT JOB=ON. The administrator can set the value.
SCAN AHEAD=ON	ON OFF	Allows a copy job to be scanned even if the product is printing another job. The job will be scanned and held until it can be printed. If SCAN AHEAD=OFF, the job will not be scanned until the print job is completed.

Item	Values	Explanation
AUTO JOB INTERRUPT=OFF	OFF ON	Allows a copy job to automatically interrupt any currently printing network print job in between the number of full copies printed. When set to OFF, the copy job waits until the network print job is completed.
COPY JOB INTERRUPT=OFF	OFF ON	Allows a user to interrupt the current copy job to make a different copy. When you press the START key, the product presents a message that asks if you want to interrupt the current copy job. When set to OFF, the current copy job cannot be interrupted by another copy job.
EDGE-TO-EDGE COPIES=OFF	OFF ON	Indicates whether copies are printed edge-to-edge (within 1 mm, or 0.04 inch, of the edge of the paper) or have the normal 6.35 mm, or 0.25 inch, unprintable border.
AUDIBLE FEEDBACK=ON	ON OFF	Gives an audible indication when a key is pressed or when you touch an interactive area of the touch screen.

I/O submenu

Items in the **I/O** (input/output) menu affect the communication between the product and the computer.

Item	Values	Explanation
I/O TIMEOUT=15	5 to 300	Use this to select the I/O timeout period in seconds. (I/O timeout refers to the time, measured in seconds, that the product waits before ending a print job.) This setting allows you to adjust timeout for best performance. If data from other ports appear in the middle of your print job, increase the timeout value.
FIND SEND GATEWAYS		Initiates a search to find a valid SMTP server and a valid LDAP server on the network. <code>AUTO DISCOVER</code> also configures the two addresses after finding the valid servers.
SMTP GATEWAY	SMTP SERVER	The Internet Protocol (IP) address of the SMTP server that processes the e-mail sent from the product. This address must be configured for e-mail to function.
LDAP GATEWAY	LDAP SERVER	The IP address of the LDAP server that provides the address book for e-mail sent from the product. This IP address is optional.
TEST SEND GATEWAYS		Validates the configured servers.

Parallel input submenu

Item	Values	Explanation
HIGH SPEED	YES NO	Accepts faster parallel communications used for connections with newer computers.
ADVANCED FUNCTIONS=ON	ON OFF	Turn the bidirectional parallel communication on or off. The default is set for a bidirectional parallel port (IEEE-1284). This setting allows the product to send status readback messages to the computer. (Turning the parallel advanced functions on might slow language switching.)

EIO submenu

The EIO (enhanced input/output) submenu appears only when an EIO device is installed in an EIO slot on the product (such as an HP Jetdirect print server). The items in the menu depend on the particular accessory product installed. If the product contains an HP Jetdirect print server EIO card, you can configure basic networking parameters using the EIO menu. These and other parameters can also be configured through HP Web JetAdmin or other network configuration tools (such as Telnet

or browsing the embedded Web server).

Item	Options	Values	Explanation
TCP/IP	ENABLE	ON OFF	Selects whether the TCP/IP protocol is enabled (ON) or disabled (OFF).
	CONFIG METHOD	BOOTP DHCP MANUAL	Selects whether the TCP/IP configuration parameters are set automatically from a network server either using BootP (Bootstrap Protocol), DHCP (Dynamic Host Configuration Protocol), or manually from the EIO submenu.
	MANUAL SETTINGS		Provides access to parameters that can manually configured from the product control panel. For manual configuration, CONFIG METHOD must be set to MANUAL.
		IP ADDRESS n.n.n.n	The unique IP address of the product, where n is a value from 0 to 255.
		SUBNET MASK m.m.m.m	The subnet mask for the product, where m is a value from 0 to 255. The mask is applied to IP addresses to uniquely identify subnetworks and nodes.
		SYSLOG SERVER n.n.n.n	The IP address of the syslog server used to receive and log syslog messages.
		DEFAULT GATEWAY n.n.n.n	The IP address of the gateway or router used for communications with other networks.
		IDLE TIMEOUT xx	The timeout value (in seconds) after an idle TCP print data connection is automatically closed. The default value is 270 seconds. 0 disables the timeout.

Item	Options	Values	Explanation
IPX/SPX	ENABLE	ON OFF	Selects whether the IPX/SPX protocol stack is enabled (ON) or disabled (OFF).
	FRAME TYPE	AUTO	Selects the frame type setting for your network
		EN_8023 EN_II EN_8022 EN_SNAP TR_8022 TR_SNAP	AUTO (default) automatically sets and limits the frame type to the first one detected. For an Ethernet network only, frame type selections include EN_8023, EN_II, EN_8022, and EN_SNAP. For a Token Ring network only, frame type selections include TR_8022 and TR_SNAP.
SOURCE ROUTING	AUTO OFF ALL ROUTES SINGLE ROUTE	For a Token Ring network only, specify the NetWare Token Ring Source Routing parameter. AUTO (default): The type of source routing required on the network is automatically sensed. OFF: All packets are sent without source routing, and only packets from the same ring are received. ALL ROUTES and SINGLE ROUTES: All packets are sent with source routing (broadcasts and when the route is unknown).	
APPLETALK	ENABLE	ON OFF	For an Ethernet network only, selects whether the AppleTalk protocol is enabled (ON) or disabled (OFF).
DLC/LLC	ENABLE	ON OFF	Selects whether the DLC/LLC protocol stack is enabled (ON) or disabled (OFF).

Item	Options	Values	Explanation
LINK SPEED		AUTO 10T HALF 10T FULL 100TX HALF 100TX FULL	For an Ethernet network only, sets the network link speed and communication mode of the HP Jetdirect 10/100TX print server. The default setting is AUTO, where the product automatically configures itself to match the network link speed (10 or 100 Mbps) and communication mode (half or full duplex).

Resets submenu

Note Use this menu with caution. You can lose buffered page data or product configuration settings when you select these items. Reset the product only under the following circumstances:

- You want to restore the product default settings.
- Communication between the product and computer has been interrupted.
- You are having problems with a port.

The items in the **Resets** submenu will clear all memory in the product, while **RESET** clears only the current job.

Item	Explanation
RESTORE FACTORY SETTINGS	<p>This item performs a simple reset and restores most of the factory (default) settings. This item also clears the input buffer for the active I/O. E-mail gateways are not changed, and the local address book is not cleared.</p> <p>Resetting memory during a print job can result in data loss.</p> <p>This item does not affect network settings stored on the HP Jetdirect print server (if installed).</p>
CLEAR MAINTENANCE MESSAGE	<p>This item appears only after the PERFORM PRINTER MAINTENANCE message displays.</p> <p>OFF: The PERFORM PRINTER MAINTENANCE message will be cleared. If you do not replace the printer maintenance kit, the PERFORM PRINTER MAINTENANCE message will be displayed again after approximately 17,500 pages.</p> <p>The message should not be turned off unless the necessary product maintenance has been performed. If the required maintenance is not performed, product performance will degrade.</p> <p>For more information, see “Product maintenance” on page 83.</p>

Item	Explanation
POWERSAVE	This item allows the user to turn POWERSAVE ON and OFF. If POWERSAVE is OFF, the product will never enter PowerSave mode and no asterisk will appear next to any item when the user enters the POWERSAVE TIME menu item. The default value for POWERSAVE is ON.
LOCK CARRIAGE	This item allows you to lock the scan head in place when you transport the product.
CLEAR ADDRESS BOOK	This item allows you to remove all entries in the local address book.

C Product memory and expansion

Overview

This appendix includes:

- [Determining memory requirements](#)
- [Installing memory](#)
- [Checking memory installation](#)
- [Saving resources \(permanent resources\)](#)
- [Installing EIO cards/mass storage](#)

The product has two DIMM slots for upgrading:

- more product memory. DIMMs are available in 16, 32, 64, and 128 MB, for a maximum of 384 MB.
- flash DIMMs, available in 2, 4, 6, 8, and 16 MB. Unlike standard product memory, flash DIMMs can be used to permanently store downloaded items in the product, even when the product is off.
- DIMM-based accessory fonts, macros, and patterns.
- other DIMM-based product languages and product options.

Note Single in-line memory modules (SIMMs) used on previous HP LaserJet products are not compatible with this product.

You might want to add more memory to the product if you often print complex graphics or PS documents, print with the duplex printing accessory, use many downloaded fonts, or print large paper sizes (such as A3, B4, or 11 by 17).

For ordering information, see the HP Customer Care section in the *introduce* guide on the product CD, or go to www.hp.com/cposupport/.

Determining memory requirements

The amount of memory you need depends on the types of documents you print. Your print engine can print most text and graphics at 1,200 dpi FastRes without additional memory.

Add memory to your product if you:

- commonly print complex graphics.
- use many temporarily downloaded fonts.
- print complex documents.
- print two-sided documents.
- use advanced functions.
- print PostScript documents.

Installing memory

Use this procedure to install additional memory. Before you begin, print the configuration (touch **Menu**, touch **Information**, touch **Print Configuration**, touch **OK**) to find out how much memory is installed in the product before adding more memory. The table lists the maximum amount of memory allowed for each DIMM slot.

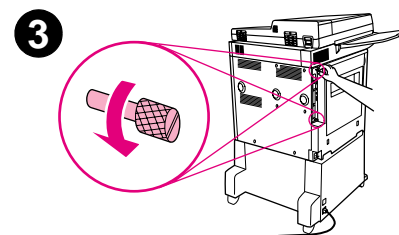
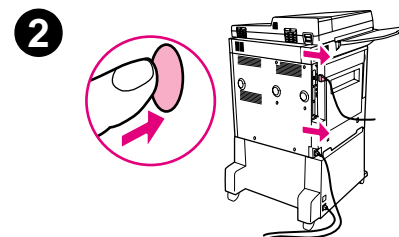
Slot label on the Configuration page	Slot label on the Formatter board	Description
Slot 1	J1	Flash firmware
Slot 2	J2	128 MB
Slot 3	J3	128 MB
Slot 4	J4	128 MB
Total		384 MB

CAUTION

Static electricity can damage DIMMs. When handling DIMMs, either wear an antistatic wrist strap or frequently touch the surface of the DIMM antistatic package, then touch bare metal on the product.

To install DIMMs

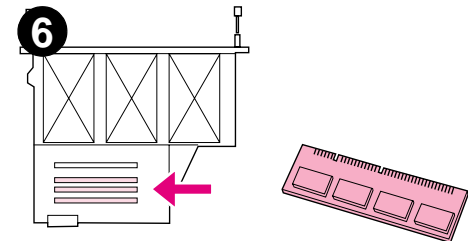
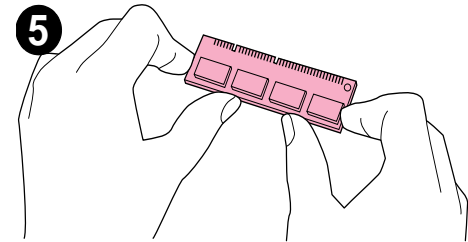
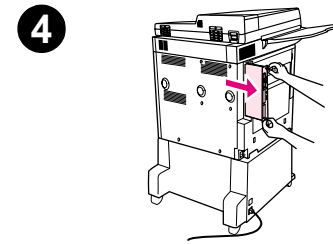
- 1 If you have not already done so, print the configuration to find out how much memory is installed in the product before adding more memory.
- 2 Turn the product off. Disconnect the power cord and any cables.
- 3 Loosen the two captive thumb screws on the back of the product.



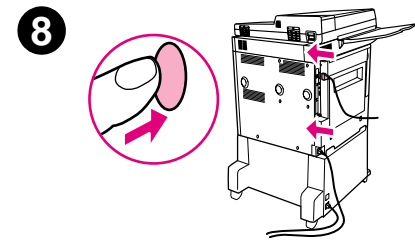
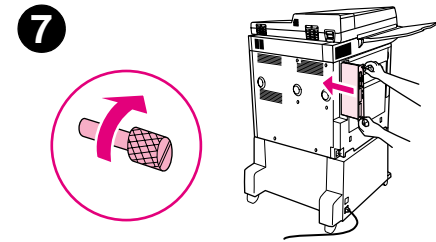
- 4 Grasp the screws and pull the formatter board out of the product. Place it on a flat, non-conductive surface.
- 5 Remove the DIMM from the antistatic package. Hold the DIMM with fingers against the side edges and thumbs against the back edge. Align the notches on the DIMM with the DIMM slot. (Check that the locks on each side of the DIMM slot are open, or outward.)

See [“Installing memory” on page 220](#) for the maximum amount of memory for each DIMM slot.

- 6 Press the DIMM straight into the slot (press firmly). Make sure the locks on each side of the DIMM snap inward into place. (To remove a DIMM, the locks must be released.)



- 7 Slide the formatter board back into the product and tighten the two screws.
- 8 Plug in the power cord and connect all cables. Turn the product on.



Checking memory installation

Follow this procedure to verify that DIMMs are installed correctly:

- 1 Check that the product control panel displays `READY` when the product is turned on. If an error message appears, a DIMM might have been incorrectly installed.
- 2 Print the configuration.
- 3 Check the memory section on the configuration page and compare it to the configuration printed before the DIMM installation. If the amount of memory has not increased, one of the following situations might have occurred:
 - The DIMM might not be installed correctly. Repeat the installation procedure.
 - The DIMM might be defective. Try a new DIMM, or try installing the DIMM in a different slot.

Note

If you installed a printer language (personality), check the Installed Personalities and Options section on the configuration page. This area should list the new printer language.

Saving resources (permanent resources)

Utilities or jobs that you downloaded to the product sometimes include resources (for example, fonts, macros, or patterns). Resources that are internally marked as permanent remain in the product memory until you turn the product off.

If you do not have a flash DIMM for storing downloaded resources, you might want to change the amount of memory allocated to each language when downloading an unusually large number of fonts, or if the product is in a shared environment.

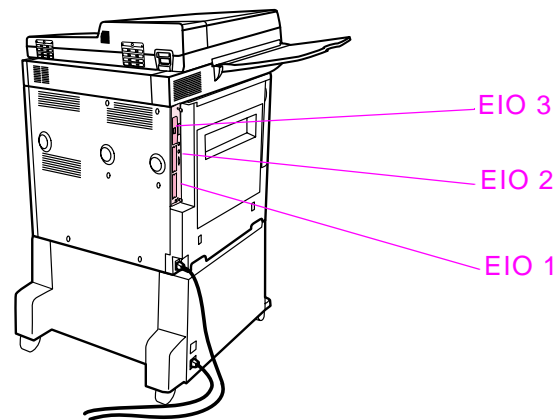
The minimum amount of memory that can be allocated to resource saving is 400 KB each for PCL and PS.

Installing EIO cards/mass storage

Hewlett-Packard constantly introduces new software tools for use with your product and accessories. These tools are available from the Internet free of charge. (See the *introduce* guide on the product CD, or go to www.hp.com/support/lj9000.)

Follow this procedure to install an EIO card or mass storage device:

- 1 Turn off the product and remove the power cord before installing the EIO cards or mass storage device.
- 2 Use the graphic for the location of the EIO cards or optional mass storage device, such as a hard disk.



- 3 Use HP Resource Manager to manage fonts on a mass storage device, or the HP LaserJet Utility on a Macintosh.
- 4 After you have installed a new device, print the configuration page.

D Printer commands

Overview

Most software applications do not require you to enter printer commands. See your computer and software documentation to find the method for entering printer commands, if needed.

This appendix includes:

- [Understanding PCL 5e printer command syntax](#)
- [Selecting PCL 5e fonts](#)
- [Common PCL 5e printer commands](#)

Note

The table at the end of this appendix contains commonly used PCL 5e commands (see [“Common PCL 5e printer commands” on page 232](#)). To order a *PCL 5/PJL Technical Reference Documentation Package*, see www.hp.com/support/lj9000.

PCL 5e

PCL 5e printer commands tell the product which tasks to perform or which fonts to use. This appendix provides a quick reference for users familiar with PCL 5e command structure.

Note

Unless PCL 5e backward compatibility is required, HP recommends that PCL 6 drivers be used to take full advantage of all product features. The PCL 5e driver in this product is not backward compatible with older products that use PCL 5e drivers.

HP-GL/2

The product has the ability to print vector graphics using the HP-GL/2 graphics language. Printing in the HP-GL/2 language requires that the product leave PCL 5e language and enter HP-GL/2 mode, which can be done by sending the product PCL 5e code. Some software applications change languages through their drivers.

PJL

HP Printer Job Language (PJL) provides control above PCL 5e and other printer languages. The four major functions provided by PJL are: product language changing, job separation, product configuration, and status readback from the printer. PJL commands may be used to change product default settings.

Understanding PCL 5e printer command syntax

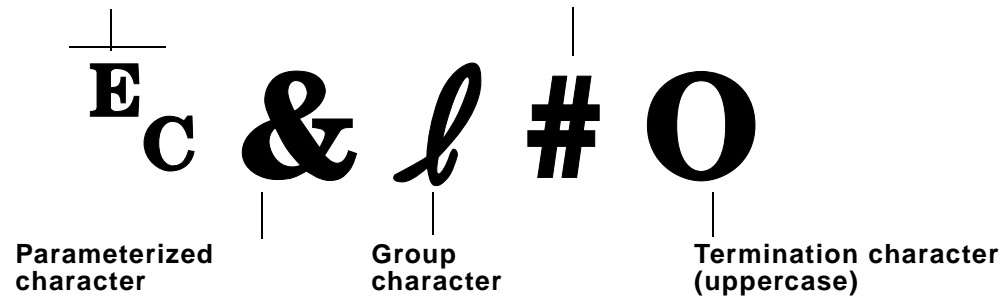
Before using printer commands, compare these characters:

Lowercase L:	l	Uppercase O:	O
Number one:	1	Number 0:	0

Many printer commands use the lowercase letter L (l) and the number one (1), or the uppercase letter O (O) and the number zero (0). These characters may not appear on your screen as shown here. You must use the exact character and case specified for PCL 5e printer commands.

Escape character
(begins escape sequence)

Value field (contains both
alphabetic and numeric characters)



Combining escape sequences

Escape sequences can be combined into one escape sequence string. There are three important rules to follow when combining code:

- 1 The first two characters after the escape character (the parameterized and group characters) must be the same in all of the commands to be combined.
- 2 When combining escape sequences, change the uppercase (termination) character in each individual escape sequence to lower case.
- 3 The final character of the combined escape sequence must be uppercase.

The following is an example of an escape sequence string that would be sent to the product to select legal paper, landscape orientation, and eight lines per inch:

```
Ec&I3AEc&I1OEc&I8D
```

The following escape sequence sends the same printer commands by combining them into a shorter sequence:

```
Ec&I3a1o8D
```

Selecting PCL 5e fonts

Print a PCL font list to view the command for each internal font (see [“PCL or PS font list” on page 173](#)). A sample section is shown below. Notice the two variable boxes for symbol set and point size.

Univers Medium Scale <esc>(<esc>(s1p v0s0b4148T I 01

These variables must be filled in, or the product will use defaults. For example, if you want a symbol set that contains line-draw characters, select the 10U (PC-8) or 12U (PC-850) symbol set. Other common symbol set codes are listed in the table in [“Font selection” on page 235](#).

Note Fonts are either “fixed” or “proportional” in spacing. The product contains both fixed fonts (Courier, Letter Gothic, and Lineprinter) and proportional fonts (CG Times, Arial, Times New Roman, and others).

Fixed-spaced fonts are generally used in applications such as spreadsheets and databases, where it is important for columns to line up vertically. Proportional-spaced fonts are generally used in text and word processing applications.

Common PCL 5e printer commands

Function	Command	Options (#)
Job control commands		
Reset	?E	n/a
Number of copies	Ec&l#X	1 to 32,000
2-sided/1-sided printing	Ec&l#S	0 = simplex (1-sided) printing 1 = duplex (2-sided) with long-edge binding 2 = duplex (2-sided) with short-edge binding

Function	Command	Options (#)
Page control commands		
Paper source	Ecl#H	0 = prints or ejects current page 1 = Tray 2 2 = manual feed, paper 3 = manual feed, envelope 4 = Tray 1 5 = Tray 3 7 = auto select 20 = Tray 4 22-69 = external trays
Paper size	Ecl#A	1 = Executive 2 = Letter 3 = Legal 6 = 11 by 17 17 = 16K 18 = JIS EXEC 19 = 8K 25 = A5 26 = A4 27 = A3 44 = B6-JIS 45 = B5-JIS 46 = B4-JIS 72 = Postcard (double) 80 = Monarch 81 = Commercial 10 90 = DL 91 = International C5 100 = B5 101 = Custom

Function	Command	Options (#)
Paper type	Ec&n#	5WdBond = Bond 6WdPlain = Plain 6WdColor = Color 7WdLabels = Labels 9WdRecycled = Recycled 11WdLetterhead = Letterhead 10WdCardstock = Cardstock 11WdPrepunched = Prepunched 11WdPreprinted = Preprinted 13WdTransparency = Transparency #WdCustompapertype = Custom ^a
Orientation	Ec&l#O	0 = Portrait 1 = Landscape 2 = Reverse Portrait 3 = Reverse Landscape
Top margin	Ec&l#E	# = number of lines
Text length (bottom margin)	Ec&l#F	# = number of lines from top margin
Left margin	Ec&a#L	# = column number
Right margin	Ec&a#M	# = column number from left margin
Horizontal motion index	Ec&k#H	1/120-inch increments (compresses print horizontally)
Vertical motion index	Ec&l#C	1/48-inch increments (compresses print vertically)
Line spacing	Ec&l#D	# = lines per inch (1, 2, 3, 4, 5, 6, 12, 16, 24, 48)
Perforation skip	Ec&l#L	0 = disable 1 = enable
Programming hints		
End of line wrap	Ec&s#C	0 = Enable 1 = Disable

Function	Command	Options (#)
Display functions On	EcY	n/a
Display functions Off	EcZ	n/a
Language selection		
Enter PCL mode	Ec%#A	0 = Use previous PCL cursor position 1 = Use current HP-GL/2 pen position
Enter HP-GL/2 mode	Ec%#B	0 = Use previous HP-GL/2 pen position 1 = Use current PCL cursor position
Font selection		
Symbol sets ^b	Ec(#	8U = HP Roman-8 Symbol Set 10U = IBM Layout (PC-8) (code page 437) Default Symbol Set 12U = IBM Layout for Europe (PC-850) (code page 850) 8M = Math-8 19U = Windows 3.1 Latin 1 9E = Windows 3.1 Latin 2 (commonly used in Eastern Europe) 5T = Windows 3.1 Latin 5 (commonly used in Turkey) 579L = Wingdings font
Primary spacing	Ec(s#P	0 = fixed 1 = proportional
Primary pitch	Ec(s#H	# = characters/inch
Set pitch mode ^c	Ec&k#S	0 = 10 4 = 12 (elite) 2 = 16.5 to 16.7 (compressed)
Primary height	Ec(s#V	# = points
Primary style ^b	Ec(s#S	0 = upright (solid) 1 = italic 4 = condensed 5 = condensed italic

Function	Command	Options (#)
Primary stroke Wt. ^b	Ec(s#B	0 = medium (book or text) 1 = semi bold 3 = bold 4 = extra bold
Typeface ^b	Ec(s#T	Print a PCL font list to view the command for each internal font (See “Information menu” on page 188).

- a. For custom paper, replace “Custompapertype” with the name of the paper, and replace the “#” with the number of characters in the name plus 1.
- b. Order the *PCL 5/PJL Technical Reference Documentation Package* for symbol set charts, or for more information see www.hp.com/support/lj9000.
- c. The preferred method is to use the primary pitch command.

E Regulatory information

Overview

This section provides information on HP programs that protect the environment.

- [Environmental product stewardship program](#)

Environmental product stewardship program

Protecting the environment

Hewlett-Packard Company is committed to providing quality products in an environmentally sound manner. This product has been designed with several attributes to minimize impacts on our environment.

The HP LaserJet product eliminates:

Ozone production This product generates no appreciable ozone gas (O₃).

The product design reduces:**Energy consumption
(HP LaserJet 9000mfp
only)**

Energy usage drops significantly while in PowerSave mode, which saves natural resources and saves money without affecting the high performance of this product. This product qualifies for ENERGY STAR®, which is a voluntary program to encourage the development of energy-efficient office products.

ENERGY STAR® is a U.S. registered service mark of the U.S. Environmental Protection Agency. As an ENERGY STAR® Partner, Hewlett-Packard Company has determined this product meets ENERGY STAR® Guidelines for energy efficiency. For more information, see www.energystar.gov/.

**Toner consumption**

EconoMode//Toner Miser uses significantly less toner, which might extend the life of the printer cartridge.

Paper use

The product manual/optional automatic duplex feature (two-sided printing), and N-up printing (multiple pages printed on one page) capability can reduce paper usage and the resulting demands on natural resources.

This HP LaserJet product also contributes to protecting the environment in the following ways:**Plastics**

Plastic parts over 25 grams are marked according to international standards that enhance the ability to identify plastics for recycling purposes at the end of the product life.

HP LaserJet Printing Supplies

In many countries/regions, the product printing supplies (for example, toner cartridge, drum, fuser) can be returned to HP through the HP Printing Supplies Returns and Recycling Program. An easy-to-use and free takeback program is available in over 48 countries/regions. Multi-lingual program information and instructions are included in every new HP LaserJet printer cartridge and consumables package.

HP Printing Supplies Returns and Recycling Program Information

Since 1990, the HP Printing Supplies Returns and Recycling Program has collected more than 47 million used LaserJet printer cartridges that otherwise may have been discarded in world landfills. The HP LaserJet printer cartridges and consumables are collected and bulk-shipped to our resource and recovery partners who disassemble the cartridge. After a thorough quality inspection, selected parts are reclaimed for use in new cartridges. Remaining materials are separated, and converted into raw materials for use by other industries to make a variety of useful products.

US returns

For a more environmentally responsible return of used cartridges and consumables, HP encourages the use of bulk returns. Simply bundle two or more cartridges together and use the single, prepaid, preaddressed UPS label that is supplied in the package. For more information in the U.S., call (1) (800) (340-2445) or visit the HP LaserJet Supplies website at www.hp.com/go/recycle.

Non-US returns

Non-US customers should call the local HP Sales and Service Office or visit the www.hp.com/go/recycle website for further information regarding availability of the HP Supplies Returns and Recycling Program.

Paper

This product is capable of using recycled papers when the paper meets the guidelines outlined in the *Print Media Guide*. See www.hp.com/support/lj9000 for ordering information. This product is suitable for the use of recycled paper according to DIN 19309.

Material restrictions	<p>This HP product contains mercury in the fluorescent lamp in the scanner/liquid crystal display that may require special handling at end-of-life.</p> <p>This product does not contain batteries.</p> <p>For recycling information, you can contact www.hp.com/go/recycle or contact your local authorities or the Electronics Industries Alliance: www.eiae.org.</p>
Material safety data sheet	<p>Material Safety Data Sheets (MSDS) can be obtained by contacting the HP LaserJet Supplies website at www.hp.com/go/msds.</p>

To ensure longevity of your HP LaserJet product, HP provides the following:

Extended warranty	HP SupportPack provides coverage for the HP hardware product and all HP-supplied internal components. The hardware maintenance covers a three-year period from date of the HP product purchase. The customer must purchase HP SupportPack within 90 days of the HP product purchase. For more information, see the HP Customer Care section in the <i>introduce</i> guide on the product CD, or go to www.hp.com/support/lj9000 .
Spare parts and consumables availability	Spare parts and consumable supplies for this product will be available for at least five years after production has stopped.
For more information	For more information about HP environmental programs, including: <ul style="list-style-type: none">● Product environmental profile sheets for this and many related HP products● HP commitment to the environment● HP environmental management system● HP end-of-life product return and recycling program● Material Safety Data Sheets see www.hp.com/go/environment or www.hp.com/hpinfo/community/environment .

F Administration tasks

Overview

This section presents some of the system administrator tasks.

Embedded Web access server

The embedded Web access server allows you to display status information, change settings, and manage the product from your computer.

The embedded Web access server requires a connection to the network, which is provided through the product HP Jetdirect network card. To use the embedded Web access server, you need:

- a TCP/IP-based network.
- a Web browser installed on your computer, preferably either Netscape Navigator 4.7x or Microsoft Internet Explorer 5.0x or later.

Note

You can gain access to the embedded Web access server from any operating system that supports the TCP/IP protocol and a Web browser. Parallel cable connections and IPX-based network printer connections are not supported. You cannot view the embedded Web server pages from outside a firewall.

You can reach the product home page through the embedded Web access server by entering the product IP address, or through HP Web JetAdmin.

HP Web JetAdmin is not included in the product installation software, but can be downloaded from the HP Web site at www.hp.com/go/webjetadmin.

In the embedded Web access server, you can:

- set up a support contact and support URLs.
- set up a password to control who can remotely access the networking pages.
- view general network status information, including network statistics stored on the print server.

For more information, see the online *hp embedded web server for hp LaserJet printers users guide*, available at www.hp.com/support/lj9000.

Checking the toner level using the embedded Web access server

- 1 In your Web browser, type the IP address for the product home page. This takes you to the product status page.
- 2 On the left side of the screen, click **Supplies Status**. This takes you to the supplies status page, which provides toner level information. See [“Supplies status page” on page 171](#) for information about the supplies status page.

Configuring and verifying an IP address

TCP/IP addresses can be assigned and configured on an HP Jetdirect print server using several options:

- HP Web JetAdmin
- HP JetAdmin for Windows
- embedded Web server

TCP/IP assignment

The system administrator or primary user is responsible for determining the TCP/IP address for a specific print server. If you are unsure what the TCP/IP address should be or if you are unfamiliar with using TCP/IP on a network, go to the HP Web site at www.hp.com/. Click Search in the upper left corner of the Web page and search for TCP/IP Overview.

Automatic discovery

The product is equipped with an HP Jetdirect network card. All HP Jetdirect print servers have a default TCP/IP address of 192.0.0.192. During product installation, your network server will automatically update the default HP IP address to an address available for use on your network. To determine the new system IP address, print a configuration page and check the TCP/IP status and address.

Dynamic Host Configuration Protocol (DHCP)

When the product is turned on, the HP Jetdirect print server broadcasts DHCP requests. DHCP automatically downloads an IP address from a network server. DHCP servers maintain a fixed set of IP addresses and only loan an IP address to the print server. Consult your operating system documentation to set up DHCP service on your network.

Verifying the TCP/IP configuration

Print a configuration page from the control panel or the external print server. Check the TCP/IP status and the TCP/IP addresses. If the information is incorrect, check your hardware connections (cables, hubs, routers, or switches) or recheck the validity of the TCP/IP address.

Changing an IP address

Use the following procedures if you have to change the product TCP/IP address for any reason.

HP Web JetAdmin

Open HP Web JetAdmin. Enter the TCP/IP address in the Quick Device Search, and click **Go**. At the top menu bar, follow this procedure for discovery options.

- 1 Choose the drop-down menu and click **Devices**.
- 2 From the drop-down menu, click **New Devices**. Click **Go**.
- 3 Click the column header of your choice (such as IP Address or Device Model) to arrange the list of available devices in ascending or descending order.
- 4 Highlight the product to configure, and click **Open Device**.
- 5 From the sub-menu at the top of the HP Web JetAdmin screen, click **Configuration**.
- 6 Click the network link located on the left side of the configuration screen.
- 7 Enter the new IP information. You might have to scroll down for more options.
- 8 Click **Apply** to save the settings.
- 9 Click the **Refresh** button located next to the question mark on the right side of the screen.
- 10 Verify the IP information by clicking **Status Diagnostics** or by printing a configuration page.

Embedded Web server

The product has an embedded Web server that can be used to modify the TCP/IP parameters. To use the embedded Web server, the HP Jetdirect print server must have an IP address already configured. On a network, this is done automatically during initial product installation.

- 1 Using a supported Web browser, type the current IP address of the HP Jetdirect print server as the URL. The Device Status page of the embedded Web server displays.
- 2 Click **Networking**. From this page, you can modify the network configuration of the device and, if necessary, the community name.

Digital sending configuration applet

To gain access to the embedded Web server digital sending configuration applet, follow these steps:

- 1 Open the embedded Web server.
- 2 Click the **Settings** tab.
- 3 Click **Digital Sending**.

Note You might be prompted to install a plug-in for your Web browser (the plug-in is required to run the applet).

The digital sending configuration applet of the embedded Web access server allows you to configure e-mail settings for outgoing and incoming mail. This enables you to use “send and receive” capabilities. Through this page, you can:

- enable and disable the digital sending service and establish a maximum file size.
- set the SMTP address for digital sending.
- set an alias to be displayed in the **From** field to replace the full e-mail address.
- set the default **Subject** field.
- use advanced features:
 - establish fixed default **Message Text**.
 - establish default document settings.
- test digital sending settings using the screen **Test** button.
- configure LDAP addressing for digital sending.

LDAP addressing settings

The LDAP addressing settings:

- establish LDAP parameters to allow access to a centralized network address book.
- enable the **Test** button to verify configuration.

Preferences settings

The Preferences settings:

- set default scanner settings:
 - default document size.
 - default document type: text, graphics, or both.
 - two-sided page.
- set administrator contact information to allow notification of errors that require your attention.

Note See <http://www.hp.com/support/lj900mfp> for more information.

Finding the IP address of the SMTP and LDAP servers

To configure digital sending, you must know the IP address of the SMTP server on your network. The product uses the SMTP server IP address to send e-mail messages to other computers. You might also have access to an LDAP server. LDAP servers hold e-mail addresses and names, and enable you to associate names (John Smith) with e-mail addresses (jsmith@hp.com).

Use the following methods to find the IP addresses of the SMTP and LDAP servers that the digital sending function uses.

Using Find Send Gateways

On the touch screen of the graphical display:

- 1 Touch **Menu**.
- 2 Touch **Configure Device**.
- 3 Touch **Sending**.
- 4 Touch **E-mail**.
- 5 Touch **Find Send Gateways**. The product searches your local network to try to determine the IP address of the SMTP gateway and the IP address of the LDAP server and displays the results on the touch screen. If the SMTP server or LDAP server is outside of your local network, the Find Send Gateways function will probably not be successful.

Using your e-mail client

Because most e-mail clients also use SMTP to send e-mail and LDAP to address email messages, you might be able to find the hostname of the SMTP gateway and LDAP server by looking at the settings of your e-mail client. For example, in Microsoft Outlook, you can find the hostname by clicking **Tools**, selecting **Services**, highlighting the server, and then clicking **Properties**. In many cases, the SMTP and LDAP servers are contained under one hostname. Once you have the hostname, you can find its IP address by using the following procedure:

- 1 At your computer, open the **Command Prompt** (also known as **MS-DOS Prompt**).
- 2 Type `nslookup` followed by the hostname (for example, `nslookup hostname`).
- 3 Press **ENTER**.

When you have found the IP address of the SMTP and LDAP servers, use them to configure digital sending. The embedded Web access server, HP Web JetAdmin, or the control panel can be used to do this.

Using control panel menus

For a complete list of control panel items and possible values, see [“Control panel menus” on page 185](#). when additional accessories are installed, new menu items automatically appear.

To print a control panel menu map

- 1 Touch **Menu**.
- 2 Touch **Information**.
- 3 Touch **Menu**.
- 4 Touch **Print Menu Map**.
- 5 Touch **OK** to exit the menu.

To change a control panel setting

- 1 Touch **Menu**.
- 2 Scroll to the menu you want and touch it to select it. Depending on the menu, you might have to repeat this step to select a submenu.
- 3 Scroll to the item you want and touch it to select it.
- 4 Scroll to the value you want and touch it to select it. An asterisk (*) appears next to the selection in the display, indicating that it is now the default.
- 5 Touch **OK** to exit the menu.

Settings in the driver and software override control panel settings. (Software settings override driver settings.)

HP Disk Management Utility

The HP Disk Management Utility should be installed only on the computer of the system administrator. The HP Disk Management Utility allows you to control the hard disk and flash memory features that are not found in the drivers. Bidirectional communication is required.

Note HP Disk Management Utility is not available for the Macintosh. If you are using a Macintosh, these features are available in the HP LaserJet Utility (version 3.5.1 or later).

Use the HP Disk Management Utility to do the following:

- initialize disk and flash memory
- download, delete, and manage fonts to disk and flash memory across networks

PostScript Type 1, PostScript Type 42 (TrueType fonts converted to PostScript format), TrueType, and PCL bitmap fonts. (To download Type 1 fonts, Adobe Type Manager must be loaded and running.)

Software for networks

HP Web JetAdmin software

HP Web JetAdmin is a browser-based management tool and should be installed only on the system administrator computer. HP Web JetAdmin is available from the Internet at www.hp.com/go/webjetadmin.

Note For the latest list of supported host systems, visit HP Customer Care Online at www.hp.com/go/webjetadmin.

When installed on a host server, HP Web JetAdmin can be opened by any client through a supported Web browser (such as Microsoft Internet Explorer 4.x, or Netscape Navigator 4.x or later) by browsing to the HP Web JetAdmin host.

Use HP Web JetAdmin to do the following:

- Install and configure products that are connected to a network with an HP Jetdirect print server.
- Manage and troubleshoot network products from any location.

Checking the toner level using HP Web JetAdmin

In HP Web JetAdmin, select the product device. The device status page shows toner level information.

HP Jetdirect Printer Installer for UNIX

The HP Jetdirect Printer Installer for UNIX is a simple printer installation utility for HP-UX and Sun Solaris networks. It is available for download at www.hp.com/support/net_printing.

Diagnostics menu

System administrators can use this menu to isolate parts, and to troubleshoot jam and quality issues.

Item	Values	Explanation
PRINT EVENT LOG		Generates a localized LIFO (last in, first out) list of the 50 most recent entries in the error log. The printed event log shows error number, page count, error code, and description or personality.
SHOW EVENT LOG		Allows the system administrator to scroll through the contents of the event log from the control panel, and shows the 50 most recent events.
SET PAPER PATH TEST		Generates a test page that is useful for testing the paper-handling features of the product.
SERVICE TEST		Engine tests access portions of the product internal diagnostics that occur when the product is turned on. These diagnostics are available as tools to help isolate problems that are not reported by the firmware.
SCANNER TESTS		Allows the system administrator to perform a variety of tests on the scanner if a problem occurs. The system administrator works in conjunction with a service technician to perform the scanner tests.
CONTROL PANEL		Allows the system administrator to perform tests on the control panel display if a problem occurs. The system administrator works in conjunction with a service technician to perform the control panel display tests.

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