



# hp color LaserJet 4600 series printer

**User Guide** 

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# **Appendix E Glossary**

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Printer basics

This chapter contains information on setting up your printer and becoming familiar with its features. The following topics are covered:

- Quick access to printer information
- Where to look for more information
- Printer configurations
- Printer features
- Walk around
- Control panel overview
- Control panel buttons
- Interpreting control panel indicator lights
- Control panel menus
- Menu hierarchy
- Retrieve job menu
- Information menu
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- Changing printer control panel configuration settings
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- Printer drivers
- Printer software
- Software for networks
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- Other components and utilities
- Network configuration
- Parallel configuration
- Enhanced I/O (EIO) configuration
- Supplies and accessories

## **Quick access to printer information**

#### World Wide Web links

Printer drivers, updated HP printer software, and product information and support may be obtained from the following URLs:

http://www.hp.com/support/lj4600

Printer drivers may be obtained from the following sites:

In China: <a href="mailto:ftp://www.hp.com.cn/support/lj4600">ftp://www.hp.com.cn/support/lj4600</a>
In Japan: <a href="mailto:ftp://www.hp.co.kr/support/lj4600">ftp://www.hp.co.kr/support/lj4600</a>
In Taiwan: <a href="mailto:http://www.hp.com.tw/support/lj4600">http://www.hp.com.tw/support/lj4600</a>
or the local driver website:

http://www.dds.com.tw

To order supplies:

United States: <a href="http://www.hp.com/go/ljsupplies">http://www.hp.com/go/ljsupplies</a>
Worldwide: <a href="http://www.hp.com/ghp/buyonline.html">http://www.hp.com/ghp/buyonline.html</a>

To order accessories:

http://www.hp.com/go/accessories

#### **User guide links**

- Walk around
- Replacing supplies
- Index

#### Where to look for more information

#### www

Several references are available for use with this printer. See <a href="http://www.hp.com/support/lj4600">http://www.hp.com/support/lj4600</a>.

## Setting up the printer



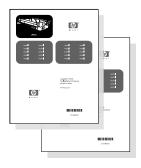
#### **Getting Started Guide**

Step-by-step instructions for installing and setting up the printer.



# HP Jetdirect Print Server Administrator's Guide

Instructions to configure and troubleshoot the HP Jetdirect print server.



# Accessory and Consumable Installation Guides

Step-by-step instructions, supplied with the printer's optional accessories and consumables, for installing the printer's accessories and consumables.

## Using the printer



#### **CD User Guide**

Detailed information on using and troubleshooting the printer. Available on the CD-ROM that came with the printer.



#### **Online Help**

Information on printer options that are available from within printer drivers. To view a Help file, access the online Help through the printer driver.



#### HTML (Online) User Guide

Detailed information on using and troubleshooting the printer. Available at <a href="http://www.hp.com/support/lj4600">http://www.hp.com/support/lj4600</a>. Once connected, select Manuals.

# **Printer configurations**

Thank you for purchasing the HP Color LaserJet 4600 series printer. This printer is available in the configurations described below.



#### **HP Color LaserJet 4600**

The HP Color LaserJet 4600 printer is a four-color laser printer that prints 17 pages per minute (ppm) for letter size paper and 16 ppm for A4 size paper.

- Trays. The printer comes with a multipurpose tray (Tray 1) that holds up to 100 sheets of various print media or 20 envelopes; 500-sheet paper feeder (Tray 2) that supports letter, legal, executive, JIS B5, A4, and A5-sized and custom media. Supports an optional 500-sheet paper feeder (Tray 3) that supports letter, legal, executive, JIS B5, A4, and A5-sized and custom media.
- Connectivity. The printer provides parallel and network ports for connectivity. The printer also contains three enhanced input/output (EIO) slots, an FIR connection, and a standard bidirectional parallel cable interface (IEEE-1284 compliant).
- Memory. The printer contains 96 megabytes (MB) of synchronous dynamic random access memory (SDRAM). To allow for memory expansion, the printer has three 168-pin DIMM slots that accept 64, 128, or 256 MB RAM each. This printer can support up to 512 MB of memory. 416 MB is available for additional SDRAM. An optional hard disk drive is available.



## HP Color LaserJet 4600n (Europe only)

The HP Color LaserJet 4600n printer includes the features of the 4600, plus automatic 2-sided printing.



#### HP Color LaserJet 4600dn

The HP Color LaserJet 4600dn includes the features of the 4600n plus an HP Jetdirect 610N printer server EIO network card.



#### **HP Color LaserJet 4600dtn**

The HP Color LaserJet 4600dtn includes the features of the 4600dn, additional 500-sheet paper feeder (Tray 3), and a total of 160 MB of SDRAM.

## **HP Color LaserJet 4600hdn**



The HP Color LaserJet 4600hdn includes the features of the 4600dtn, plus a hard disk.

## **Printer features**

This printer combines the quality and reliability of Hewlett-Packard printing with the features listed below. For more information on printer features, see the Hewlett-Packard website at <a href="http://www.hp.com">http://www.hp.com</a>.

Feature	Characteristics
Performance	<ul> <li>17 pages per minute (ppm) for letter size paper and</li> <li>16 ppm for A4 size paper.</li> </ul>
	<ul> <li>Prints on transparencies and glossy paper. For more information, see <u>Supported media weights and sizes</u>.</li> </ul>
Memory	<ul> <li>96 megabytes (MB) of synchronous dynamic random access memory (SDRAM) (160 MB in the HP Color LaserJet 4600dtn and 4600hdn printers).</li> </ul>
	<ul> <li>Can be expanded to 512 MB.</li> </ul>
	<ul> <li>Optional hard disk drive (included with the HP Color LaserJet 4600hdn printer).</li> </ul>
User interface	<ul><li>Graphic display on control panel.</li><li>Enhanced Help with animated graphics.</li></ul>
	<ul> <li>Embedded Web server to access support and order supplies (network-connected printers).</li> </ul>
Supported	HP PCL 6.
printer	HP PCL 5c.
personalities	<ul><li>PostScript 3 emulation.</li></ul>
	<ul> <li>Automatic language switching.</li> </ul>
Storage features	<ul> <li>Job retention (for printers with hard disks).</li> </ul>
	<ul><li>Fonts and forms.</li></ul>
	<ul> <li>Personal identification number (PIN) printing.</li> </ul>
Environmental	PowerSave setting.
features	<ul> <li>High content of recyclable components and materials.</li> </ul>
	<ul><li>Energy Star compliant.</li></ul>
	<ul> <li>Blue Angel compliant.</li> </ul>
Fonts	<ul> <li>80 internal fonts available for both PCL and PostScript emulation.</li> </ul>
	<ul> <li>80 printer-matching screen fonts in TrueType<sup>™</sup> format available with the software solution.</li> </ul>
	<ul> <li>Supports forms and fonts on the disk using HP Web Jetadmin.</li> </ul>

Feature	Characteristics
Paper handling	<ul> <li>Characteristics</li> <li>Prints on media from 77 mm by 127 mm (3 inches by 5 inches) up to legal size.</li> <li>Prints on media with weights from 60 g/m² to 163 g/m² (16 lb bond to 44 lb bond).</li> <li>Prints on a wide range of media types including glossy, labels, overhead transparencies, and envelopes.</li> <li>Multiple gloss levels.</li> <li>A 500-sheet paper feeder (Tray 2) that supports letter-, legal-, executive-, JIS B5-, A4-, and A5-sized and custom media.</li> <li>Optional 500-sheet paper feeder (Tray 3) that supports letter-, legal-, executive-, JIS B5-, A4-, and A5-sized and custom media; standard on HP Color LaserJet 4600dtn and 4600hdn printers.</li> </ul>
	<ul> <li>Two-sided printing on HP Color LaserJet 4600dn, 4600dtn, and 4600hdn printers.</li> <li>250-sheet face-down output bin.</li> </ul>
Accessories	<ul> <li>Printer hard disk, which provides storage for fonts and macros as well as job storage; standard on HP Color LaserJet 4600hdn.</li> <li>Dual inline memory modules (DIMM).</li> <li>Printer stand.</li> </ul>
	<ul> <li>Optional 500-sheet paper feeder (Tray 3) that supports letter-, legal-, executive-, JIS B5-, A4-, and A5-sized media; standard on HP Color LaserJet 4600dtn and 4600hdn printers.</li> <li>Flash DIMM.</li> <li>Fast InfraRed (FIR) pod.</li> </ul>
Connectivity	<ul> <li>Optional enhanced input/output (EIO) network card; standard on HP Color LaserJet 4600dn, 4600dtn, and 4600hdn printers.</li> <li>FIR connection.</li> <li>HP Web Jetadmin software.</li> <li>Standard bidirectional parallel cable interface (IEEE-1284 compliant).</li> </ul>
Supplies	<ul> <li>Supplies status page contains information on toner level, page count, and estimated pages remaining.</li> <li>No-shake cartridge design.</li> <li>Printer checks for authentic HP print cartridges at cartridge installation.</li> <li>Internet-enabled supply-ordering capabilities (using embedded Web server or printer Status and Alerts).</li> </ul>

### **Factors affecting printer performance**

Several factors affect the time it takes to print a job. Among these is maximum printer speed, measured in pages per minute (ppm). Other factors that affect printing speed include the use of special media (such as transparencies, glossy media, heavy media, and custom-size media), printer processing time, and download time.

The time required to download a print job from the computer and to process the job depends on the following variables:

- the complexity and size of graphics
- the printer's I/O configuration (network versus parallel)
- the speed of the computer you are using
- the amount of printer memory installed
- the network operating system and configuration (if applicable)
- printer personality (PCL or PostScript 3 emulation)

**Note** 

Adding additional printer memory might resolve memory problems, improve how the printer handles complex graphics, and improve download times, but it will not increase maximum printer speed (ppm rating).

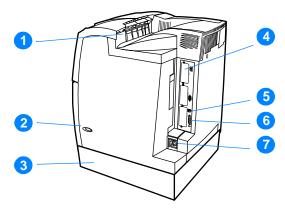
#### Walk around

The following illustrations identify the locations and names of key components of this printer.



#### Front view (shown with second 500-sheet paper feeder)

- 1. output bin
- 2. printer control panel
- 3. top cover
- 4. front cover (contains Tray 1)
- 5. Tray 2 (500 sheets of standard paper)
- 6. Tray 3 (optional; 500 sheets of standard paper)
- 7. on/off switch
- 8. access to print cartridges, transfer unit, and fuser



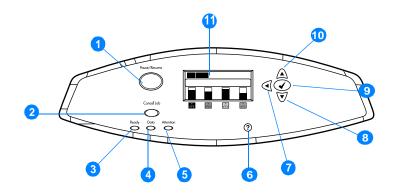
#### Back/side view

- 1. output bin
- 2. on/off switch
- 3. Tray 3 (optional)
- 4. EIO connection (quantity 3)
- 5. FIR (Fast infrared) connection
- 6. parallel connection
- 7. power connection

## **Control panel overview**

#### Introduction

The control panel provides control of printer functions and communicates information about the printer and print jobs. Its display provides graphic information about printer and supplies status, making it easy to identify and correct problems.



#### Control panel buttons and lights

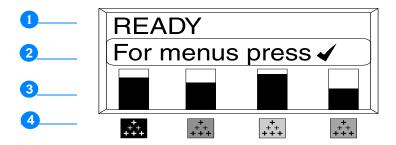
- Pause/Resume button
- 2. Cancel Job button
- 3. Ready light
- 4. Data light
- 5. Attention light
- 6. Help (?) button
- 7. Back arrow (◀) button
- 8. Down arrow (▼) button
- 9. Select (✓) button
- 10. Up arrow (▲) button
- 11. Display

The printer communicates via the display and the lights on the lower left side of the control panel. The Ready, Data, and Attention lights provide at-a-glance information about the state of the printer and alert you to printing problems. The display shows more complete status information as well as menus, help information, animations, and error messages.

## **Display**

The printer's display gives you complete, timely information about the printer and print jobs. Graphics illustrate levels of supplies, the locations of paper jams, and job status. Menus give access to printer functions and detailed information.

The top-level screen on the display has three areas:



- 1. Message area
- Prompt area
- 3. Supplies gauge
- 4. Print cartridge colors from left to right: black, magenta, yellow, and cyan.

The message and prompt areas of the display alert you to the state of the printer and tell you how to respond.

The supplies gauge shows the consumption levels of print cartridges (black, magenta, yellow, cyan). When a non-HP print cartridge is installed, a ? appears instead of the consumption level. The supplies gauge appears whenever the printer shows the READY state and whenever the printer shows a warning or error message concerning a supply item.

## Accessing the control panel from a computer

You can also access the printer control panel from a computer by using the setting page of the embedded Web server.

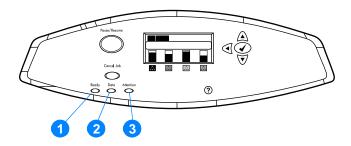
The computer shows the same information that the control panel shows. From your computer, you can also perform control panel functions such as checking supplies status, viewing messages, or changing tray configuration. For more information, see <u>Using the embedded Web server</u>.

# **Control panel buttons**

Use the buttons on the control panel to perform printer functions and to navigate and respond to menus and messages in the display.

Button name	Function
✓ Select	Makes selections and resumes printing after continuable errors
<ul><li>◆ Up arrow</li><li>◆ Down arrow</li></ul>	Navigate menus and text, and increase or decrease the values of numerical items in the display
◆ Back arrow	Navigates backward in nested menus, or quits menus or help
Pause/Resume	Temporarily stops and restarts printing, exits all menus
Cancel Job	Cancels and halts the current job in progress, clears paper from the printer, clears any continuable errors associated with the halted job, and is used to override a non-HP print cartridge
? Help	Provides animated graphics and detailed information on printer messages or menus

# **Interpreting control panel indicator lights**



#### **Control panel indicator lights**

- 1. Ready
- 2. Data
- 3. Attention

Indicator	On	Off	Flashing
Ready (green)	Printer is online (able to accept and process data).	Printer is offline or is turned off.	Printer is attempting to stop printing and go offline.
Data (green)	Processed data is present in the printer, but more data is needed to complete the job.	Printer is not processing or receiving data.	Printer is processing and receiving data.
Attention (amber)	A critical error has occurred. Printer requires attention.	No conditions exist that require attention.	An error has occurred. Printer requires attention.

## **Control panel menus**

#### Overview

You can perform most routine printing tasks from the computer through the printer driver or software application. This is the most convenient way to control the printer, and will override the printer control panel settings. See the help files associated with the software, or for more information on accessing the printer driver, see <a href="Printer">Printer</a> software.

You can also control the printer by changing settings in the printer's control panel. Use the control panel to access printer features not supported by the printer driver or software application. Use the control panel to configure trays for paper size and type.

#### **Getting started basics**

- Enter the menus and activate any selection by pressing the SELECT KEY (✔).
- Use the Up or Down arrows (▲ ▼) to navigate through the menus. In addition to menu navigation, the Up and Down arrows can increase and decrease numerical value selections. Hold down the Up or Down arrows to scroll faster.
- The Back button ( ◀ ) allows you to move back in menu selections as well as select numerical values when configuring the printer.
- Exit all menus by pressing PAUSE/RESUME.
- If no key is pressed for 30 seconds, the printer will return to the Ready state.
- A lock symbol next to a menu item means a PIN number is needed to use that item. Typically, this number is obtained from your network administrator.

# **Menu hierarchy**

The following tables list the menu hierarchies of each menu.

#### To enter the menus

Press ✓ once to enter MENUS.

Press ▲ or ▼ to navigate the listings.

Press 
to select the appropriate option.

MENUS	RETRIEVE JOB
	INFORMATION
	PAPER HANDLING
	CONFIGURE DEVICE
	DIAGNOSTICS
	SERVICE

# Retrieve job menu

See Retrieve job menu for more information.

RETRIEVE JOB	A list of stored jobs appears	
	NO STORED JOBS	

## Information menu

See <u>Information menu</u> for more information.

INFORMATION	PRINT MENU MAP
	PRINT CONFIGURATION
	PRINT SUPPLIES STATUS PAGE
	SUPPLIES STATUS
	PRINT USAGE PAGE
	PRINT DEMO
	PRINT FILE DIRECTORY
	PRINT PCL FONT LIST
	PRINT PS FONT LIST

# Paper handling menu

See Paper handling menu for more information.

PAPER HANDLING	TRAY 1 SIZE
	TRAY 1 TYPE
	TRAY <n> SIZE N = 2 or 3</n>
	TRAY <n> TYPE  N = 2 or 3</n>

# Configure device menu

See <u>Configure device menu</u> and <u>Changing printer control panel</u> <u>configuration settings</u> for more information.

CONFIGURE DEVICE	PRINTING	COPIES
COM TOUNE DEVICE	1 154111 4114	DEFAULT PAPER SIZE
		DEFAULT CUSTOM PAPER SIZE
		DUPLEX
		OVERRIDE A4/LETTER
		MANUAL FEED
		COURIER FONT
		WIDE A4
		PRINT PS ERRORS
		PCL
	PRINT QUALITY	ADJUST COLOR
		SET REGISTRATION
		PRINT MODES
		OPTIMIZE
	SYSTEM SETUP	JOB STORAGE LIMIT
		JOB HELD TIMEOUT
		TRAY BEHAVIOR
		POWERSAVE TIME
		PERSONALITY
		CLEARABLE WARNINGS
		AUTO CONTINUE
		SUPPLIES LOW
		JAM RECOVERY
		LANGUAGE
	I/O	I/O TIMEOUT
		PARALLEL INPUT
		EIO X
		(Where X=1, 2, or 3.)
	RESETS	RESTORE FACTORY SETTINGS
		POWERSAVE
		RESET SUPPLIES

# Diagnostics menu

See <u>Diagnostics menu</u> for more information.

DIAGNOSTICS	PRINT EVENT LOG
	SHOW EVENT LOG
	PQ TROUBLESHOOTING
	DISABLE CARTRIDGE CHECK
	PAPER PATH TEST
	SENSOR TEST
	COMPONENT TEST
	PRINT/STOP TEST

# Retrieve job menu

The retrieve job menu allows you to view listings of all stored jobs.

Menu item	Description
A list of stored jobs appears.	Scroll through the list to find a specific stored job.
NO STORED JOBS	If there are no stored jobs, this message appears in place of the list.

# **Information menu**

Use the information menu to access and print specific printer information.

Menu item	Description
PRINT MENU MAP	Prints the control panel menu map, which shows the layout and current settings of the control panel menu items. See Printer information pages.
PRINT CONFIGURATION	Prints the printer configuration page.
PRINT SUPPLIES STATUS	Prints the estimated remaining life for the supplies; reports statistics on total number of pages and jobs processed, print cartridge manufacture date, serial number, page counts, and maintenance information.
SUPPLIES STATUS	Displays the supplies status in a scrollable list.
PRINT USAGE	Prints a count of all media sizes that have passed through the printer; lists whether they were simplex, duplex, monochrome, or color; and reports the page count.
PRINT DEMO	Prints a demonstration page.
PRINT FILE DIRECTORY	Prints the name and directory of files stored in the printer on an optional hard disk.
PRINT PCL FONT LIST	Prints the available PCL fonts.
PRINT PS FONT LIST	Prints the available PS (emulated PostScript) fonts.

# Paper handling menu

The Paper handling menu allows you to configure input trays by size and type. This menu can also be used to set default media size and type. It is important to correctly configure the trays with this menu before you print for the first time.

#### Note

If you have used previous HP LaserJet printers, you might be accustomed to configuring Tray 1 to first mode or cassette mode. To mimic the settings for first mode, configure Tray 1 for size = AHY and type = AHY. To mimic the settings for cassette mode, set either the size or type for tray 1 to a setting other than AHY.

Menu item	Value	Description
TRAY 1 SIZE	A list of available sizes appears.	Allows you to configure the media size for Tray 1. The default is ANY. See Supported media weights and sizes for a complete list of available sizes.
TRAY 1 TYPE	A list of available types appears.	Allows you to configure the media type for Tray 1. The default is ANY. See Supported media weights and sizes for a complete list of available types.
TRAY (N) SIZE N = 2 or 3	A list of available sizes appears.	Allows you to configure the media size for Tray 2 or Tray 3. The default setting is the size detected by the guides in the tray. To use a custom size, move the switch in the try to custom. See <a href="Supported media weights and sizes">Supported media weights and sizes</a> for a complete list of available sizes.
TRAY (N) TYPE N = 2 or 3	A list of available types appears.	Allows you to configure the media type for Tray 2 or Tray 3. The default is PLAIN. See Supported media weights and sizes for a complete list of available types.

# Configure device menu

The configure device menu allows you to change the printer's default printing settings, adjust the print quality, change the system's configuration and I/O options, and reset the printer's default settings.

# **Printing menu**

These settings affect only jobs without identified properties. Most jobs identify all of the properties and override the values set from this menu.

Menu item	Values	Description
COPIES	1 - 32000	Allows you to set the default number of copies.
DEFAULT PAPER SIZE	A list of available sizes appears.	Allows you to set the default media size.
DEFAULT CUSTOM PAPER SIZE	UNIT OF MEASURE X DIMENSION Y DIMENSION	Allows you to set the default size for any job without dimensions.
DUPLEX	OFF ON	Allows you to enable or disable the duplex function on models with duplexing capability.
OVERRIDE A4/LETTER	NO YES	Allows you to set the printer to print an A4 job on letter-size paper when no A4 paper is loaded.
MANUAL FEED	ON OFF	Allows you to manually feed media.
COURIER FONT	REGULAR DARK	Allows you to select a version of the Courier font.
WIDE A4	NO YES	Allows you to change the printable area of A4 paper so that eighty 10-pitch characters may be printed on a single line.
PRINT PS ERRORS	OFF ON	Allows you to select to print PS error pages.
PCL	FORM LENGTH ORIENTATION FONT SOURCE FONT NUMBER FONT PITCH FONT POINTSIZE SYMBOL SET APPEND CR TO LF	Allows you to configure settings for the printer control language.

# Print quality menu

This menu allows you to adjust all aspects of print quality, including calibration, registration, and color half tone settings.

Menu item	Values	Description
ADJUST COLOR	CYAN DENSITY MAGENTA DENSITY YELLOW DENSITY BLACK DENSITY RESTORE COLOR VALUES	Allows you to modify the half tone settings for each color.
SET REGISTRATION	PRINT TEST PAGE SOURCE ADJUST TRAY 1 ADJUST TRAY 2 ADJUST TRAY 3	Allows simplex and duplex image alignment.
PRINT MODES	A list of available modes appears.	Allows you to associate each media type with a specific print mode.
OPTIMIZE	REDUCE BACKGROUND TRANSFER RESTORE OPTIMIZE	Allows you to optimize certain parameters for all jobs rather than optimizing by media type.
CALIBRATE NOW		Performs all printer calibrations.

# System setup menu

The system setup menu allows you to make changes to general printer configuration default settings such as PowerSave Time, printer personality (language), and jam recovery.

See <u>Changing printer control panel configuration settings</u> for more information.

Menu item	Values	Description
JOB STORAGE LIMIT	1-100	Sets the limit for the maximum number of jobs stored on the hard disk at the printer.
JOB HELD TIMEOUT	OFF 1 HOUR 4 HOURS 1 DAY 1 WEEK	Sets the period of time that the system keeps files in job storage before deleting them from the queue.
COLOR/MONO MIX	AUTO MOSTLY COLOR PAGES MOSTLY BLACK PAGES	AUTO will reset the printer to the factory default setting. MOSTLY COLOR PAGES will exhibit the NEVER SWITCH behavior to maximize performance. MOSTLY BLACK PAGES will exhibit the LOOK AHEAD FIRST behavior to improve cost per page as much as possible while minimizing impact to performance.
TRAY BEHAVIOR	USE REQUESTED TRAY MANUALLY FEED PROMPT	Allows you to specify settings for the tray selection behavior. (This setting allows you to configure the trays to behave like trays in some previous HP printers.)
POWERSAVE TIME	1 MINUTE 15 MINUTES 30 MINUTES 1 HOUR 2 HOURS 4 HOURS	Reduces power consumption when the printer has been inactive for an extended period.
PERSONALITY	AUTO PCL PS	Sets the default personality to automatic switching, PCL, or PostScript emulation.
CLEARABLE WARNINGS	ON JOB	Sets whether a warning is cleared on the control panel or when another job is sent.
AUTO CONTINUE	ON OFF	Determines printer behavior when the system generates an Auto Continuable error.
SUPPLIES LOW	CONTINUE STOP	Sets low supplies reporting options.
JAM RECOVERY	AUTO ON OFF	Sets whether the printer will attempt to reprint pages after a jams.

Menu item	Values	Description	
LANGUAGE	A listing of available languages appears.	Sets the default language.	

# I/O menu

This menu allows you to configure the printer's I/O options.

See Network configuration.

Menu item	Values	Description
I/0 TIMEOUT	5 - 300	Allows you to select the I/O timeout in seconds.
PARALLEL INPUT	HIGH SPEED ADVANCED FUNCTIONS	Allows you to select the speed at which the parallel port communicates with the host and to enable or disable the bidirectional parallel communication.
EIO X (Where X=1, 2, or 3.)	Possible values are: TCP/IP IPX/SPX AAPLETALK DLC/LLC LINK SPEED NOVELL	Allows you to configure EIO devices installed in slot 1, 2, or 3.

#### Resets menu

The resets menu allows you to reset factory settings, disable and enable PowerSave, and update the printer after new supplies are installed.

Menu item	Values	Description
RESTORE FACTORY SETTINGS	None.	Allows you to clear the page buffer, remove all perishable personality data, reset the printing environment, and return all default settings to factory defaults.
POWERSAVE	ON	Allows you to enable and disable
	OFF	PowerSave.
RESET SUPPLIES	NEW TRANSFER KIT	Allows you to inform the printer that a
	NEW FUSER KIT	new transfer kit or new fuser kit has been installed.

# **Diagnostics menu**

The diagnostics menu allows you to run tests that can help you identify and solve problems with the printer.

Menu item	Description
PRINT EVENT LOG	This item will print an event log that will display the last 50 entries in the printer's event, log, starting with the most recent.
SHOW EVENT LOG	This item displays the last 50 events on the control panel display, starting with the most recent.
PQ TROUBLESHOOTING	This item will print a series of print quality assessment pages that will help troubleshoot any print quality problems.
DISABLE CARTRIDGE CHECK	This item allows you to remove a print cartridge to help determine which cartridge is the source of the problem.
PAPER PATH TEST	This item is useful for testing the paper handling features of the printer, such as the configuration of the trays.
SENSOR TEST	This item allows you to test the paper path sensors and switches for correct operation.
PRINT/STOP TEST	This item isolates print quality faults more accurately by stopping the printer in mid print cycle. Stopping the print or in mid cycle allows you to see where the image begins to degrade.
COMPONENT TEST	This item will activate individual parts independently to isolate noise, leaking, and other hardware issues.

# Changing printer control panel configuration settings

By using the printer control panel, you can make changes to general printer configuration default settings such as tray size and type, PowerSave time, printer personality (language), and jam recovery.

The printer control panel can also be accessed from a computer by using the setting page of the embedded Web server. The computer shows the same information that the control panel shows. For more information, see <u>Using the embedded Web server</u>.

#### CAUTION

Configuration settings seldom need to be changed. Hewlett-Packard recommends that only the system administrator change configuration settings.

### Job storage limit

This option sets the limit for the maximum number of jobs stored on the hard disk at the printer. The maximum number allowed is 100, and the default value is 32.

#### Note

This option is only available if a hard disk is installed.

#### To set the job storage limit

- Press 

  ✓ to enter the MENUS.

- Press ✓ to select SYSTEM SETUP.
- Press ▲ or ▼ to change the value.
- 8. Press ✓ to set the value.
- 9. Press Pause/Resume.

#### Job held timeout

This option sets the period of time that the system keeps files in job storage before deleting them from the queue. The default setting for this option is OFF; the other available settings are 1 HOUR, 4 HOURS, 1 DAY, and 1 WEEK.

#### **Note**

This option is only available if a hard disk is installed.

#### To set the job held timeout

- Press ▼ to highlight CONFIGURE DEVICE.
- 3. Press ✓ to select CONFIGURE DEVICE.
- Press ✓ to select SYSTEM SETUP.

- 8. Press ▲ or ▼ to select the appropriate time period.
- 9. Press ✓ to set the time period.
- 10. Press Pause/Resume.

# Tray behavior options: use requested tray and manually feed

Tray behavior allows two user-defined options:

- USE REQUESTED TRAY—Selecting EXCLUSIVELY ensures that the printer will not automatically select another tray when you indicate that a specific tray should be used. Selecting FIRST allows the printer to pull from a second tray if the specified tray is empty. EXCLUSIVELY is the default setting.
- MANUALLY FEED—If you select ALWAYS (the default value), the system always displays a prompt before pulling from the multipurpose tray. If you select UNLESS LOADED, the system will only display the prompt if the multipurpose tray is empty.

### To set use requested tray

- Press 

  ✓ to enter the MENUS.

- 4. Press ▼ to highlight SYSTEM SETUP.
- Press ✓ to select SYSTEM SETUP.
- 6. Press ▼ to highlight TRAY BEHAVIOR.
- Press 

  ✓ to select TRAY BEHAVIOR.
- 9. Press ▲ or ▼ to select EXCLUSIVELY or FIRST.
- 10. Press ✓ to set the behavior.
- 11. Press Pause/Resume.

#### To set manually feed prompt

- 1. Press ✓ to enter the MENUS.
- 3. Press ✓ to select CONFIGURE DEVICE.
- 5. Press ✓ to select SYSTEM SETUP.
- 6. Press to highlight TRAY BEHAUTOR.
- 7. Press ✓ to select TRAY BEHAVIOR.
- 9. Press ✓ to select MANUALLY FEED PROMPT.
- 10. Press ▲ or ▼ to select ALWAYS or UNLESS LOADED.
- 11. Press ✓ to set the behavior.
- 12. Press Pause/Resume.

#### **PowerSave Time**

The adjustable PowerSave Time feature reduces power consumption when the printer has been inactive for an extended period. You can set the length of time before the printer goes into PowerSave mode to 1 MINUTE, 15 MINUTES, 30 MINUTES, or to 1 HOUR, 2 HOURS, or 4 HOURS. The default setting is 30 MINUTES.

Note

The printer display dims when the printer is in PowerSave mode. PowerSave mode does not affect printer warm-up time.

#### To set PowerSave Time

- Press 

  ✓ to select CONFIGURE DEVICE.
- Press ✓ to select SYSTEM SETUP.
- 7. Press ✓ to select POWERSAUE TIME.
- 8. Press ▲ or ▼ to select the appropriate time period.
- 9. Press ✓ to set the time period.
- 10. Press Pause/Resume.

#### To disable/enable PowerSave

- Press 
   to enter the MENUS.
- Press ✓ to select CONFIGURE DEVICE.
- Press ✓ to select RESETS.
- Press ▼ to highlight POWERSAUE.
- Press ✓ to select POWERSAUE.
- 8. Press ▲ or ▼ to select ON or OFF.
- Press 

  ✓ to set the selection.
- 10. Press PAUSE/RESUME.

# **Personality**

This printer features automatic personality (printer language) switching. AUTO is the default value.

- AUTO configures the printer to automatically detect the type of print job and configure its personality to accommodate that job.
- PCL configures the printer to use Printer Control Language.
- PS configures the printer to use PostScript emulation.

#### To set the personality

- 2. Press ▼ to highlight CONFIGURE DEVICE.
- Press 

  ✓ to select CONFIGURE DEVICE.
- Press ✓ to select SYSTEM SETUP.
- Press ▼ to highlight PERSONALITY.
- 7. Press ✓ to select PERSONALITY.
- Press ▲ or ▼ to select the appropriate personality (AUTO, PCL, PS).
- 9. Press ✓ to set the personality.
- 10. Press Pause/Resume.

# Clearable warnings

You can determine the display time of control panel clearable warnings with this option by selecting ON or JOB. The default value is JOB.

- □N displays clearable warnings until you press
- JOB displays clearable warnings until the end of the job in which it was generated.

#### To set the clearable warnings

- Press 

  ✓ to select CONFIGURE DEVICE.
- 4. Press ▼ to highlight SYSTEM SETUP.

- Press ✓ to select SYSTEM SETUP.
- 6. Press ▼ to highlight CLEARABLE WARNINGS.
- 8. Press ▲ or ▼ to select the appropriate setting.
- Press 

  ✓ to set the selection.
- 10. Press Pause/Resume.

#### **Auto continue**

You can determine printer behavior when the system generates an Auto Continuable error. ON is the default setting.

- ON displays an error message for ten seconds before automatically continuing to print.
- ○FF pauses printing any time the printer displays an error message and until you press

#### To set the auto continue

- Press ✓ to select CONFIGURE DEVICE.
- Press ✓ to select SYSTEM SETUP.
- 7. Press ✓ to select AUTO CONTINUE.
- 8. Press ▲ or ▼ to select the appropriate setting.
- Press v to set the selection.
- 10. Press Pause/Resume.

# Supplies low

The printer allows two options for reporting that supplies are low; CONTINUE is the default value.

- CONTINUE allows the printer to continue printing while displaying a warning until the supply is replaced.
- STOP causes the printer to pause printing until you replace the used supply or press \(\mu\), which allows the printer to print while continuing to display the warning.

### To set supplies low reporting

- 1. Press ✓ to enter the MENUS.
- 3. Press ✓ to select CONFIGURE DEVICE.
- Press ✓ to select SYSTEM SETUP.
- 7. Press ✓ to select SUPPLIES LOW.
- Press ▲ or ▼ to select the appropriate setting.
- Press 

  ✓ to set the selection.
- 10. Press Pause/Resume.

# Jam recovery

This option allows you to configure the printer response to paper jams, including how it handles the pages involved. AUTO is the default value.

- AUTO—the printer automatically turns jam recovery on when sufficient memory is available.
- N—The printer reprints any page involved in a paper jam.
   Additional memory is allocated to store the last few pages printed, and this may cause overall printer performance to suffer.
- OFF—The printer will not reprint any page that was involved in a paper jam. Since no memory is used to store the most recent pages, performance may be optimal.

#### To set jam recovery response

- Press 

  ✓ to enter the MENUS.
- Press 

  ✓ to select CONFIGURE DEVICE.
- Press ✓ to select SYSTEM SETUP.

- 8. Press ▲ or ▼ to select the appropriate setting.

- 9. Press ✓ to set the selection.
- 10. Press Pause/Resume.

### Language

The option to set the default language appears when the printer is first initialized. As you scroll through the available options, the list will appear in the language that is highlighted. When the list appears in the language desired, press  $\checkmark$  to set the language. You may also change the language at any time by following these steps:

#### To select language

- Press ▼ to highlight CONFIGURE DEVICE.

- Press ✓ to select SYSTEM SETUP.
- 7. Press ✓ to select LANGUAGE.
- 8. Press ▲ or ▼ to select the appropriate language.
- 9. Press \(\nu\) to set the selection.
- 10. Press Pause/Resume.

# To select language if the display is in a language you do not understand

- Press 

  ✓ once.
- Press ✓ once.
- Press ✓ once.
- 6. Press ▼ ten times.
- Press
- 8. Press ▲ or ▼ to select the appropriate language.
- 9. Press ✓ to set the selection.
- 10. Press Pause/Resume.

# Using the printer control panel in shared environments

Because your printer is shared with other users, adhere to the following guidelines to ensure successful printer operation:

- Consult your system administrator before making changes to control panel settings. Changing control panel settings could affect other print jobs.
- Coordinate with other users before changing the default printer font or downloading soft fonts. Coordinating these operations conserves memory and avoids unexpected printer output.
- Be aware that switching printer personalities, such as Emulated PostScript or PCL, affects the printed output of other users.

#### Note

Your network operating system may automatically protect each user's print job from the effects of other print jobs. Consult your system administrator for more information.

### **Printer drivers**

Printer drivers access the printer features and allow the computer to communicate with the printer. The following printer drivers are included with the printer.

Operating system <sup>1</sup>	PCL 5c	PCL 6	PS
Windows 95, 98, ME	<b>~</b>	~	<b>~</b>
Windows NT 4.0	<b>~</b>	~	<b>V</b>
Windows 2000	<b>~</b>	~	<b>✓</b>
Windows XP	<b>~</b>	~	<b>✓</b>
Macintosh OS			V

Not all printer features are available from all drivers or operating systems. See the online Help in your driver for availability of features.

#### Note

If your system did not automatically check the Internet for the latest drivers during software installation, download them from <a href="http://www.hp.com/support/lj4600">http://www.hp.com/support/lj4600</a>. Once connected, select <a href="Downloads and Drivers">Downloads and Drivers</a> to find the driver you wish to download.

#### Additional drivers

The following drivers are not included on the CD-ROM, but are available from the Internet or from HP Customer Care.

- OS/2 PCL 5c/6 printer driver
- OS/2 PS printer driver
- Windows NT 3.51 PCL 5c, Windows NT 3.51 PS
- UNIX model scripts
- Linux drivers
- Windows 3.1x (HP LaserJet 4500 driver)

#### **Note**

The OS/2 drivers are available from IBM and are packaged with OS/2. They are not available for Traditional Chinese, Simplified Chinese, Korean, and Japanese.

#### Note

For more information about Windows 3.1x drivers, go to <a href="http://www.hp.com/support/lj4600">http://www.hp.com/support/lj4600</a>.

### **Printer software**

Included with the printer is a CD-ROM containing the printing system software. The software components and printer drivers on this CD-ROM help you use the printer to its fullest potential. See the getting started guide for installation instructions.

#### Note

For the latest information about the printing system software components, view the ReadMe files on the CD-ROM.

This section summarizes the software included on the CD-ROM. The printing system includes software for end users and network administrators operating in the following operating environments:

- Microsoft Windows 95, 98, ME
- Microsoft Windows NT 4.0, 2000, and XP 32-bit
- Apple Mac OS, version 8.1 or greater
- AutoCAD drivers, versions 12-14

#### Note

For a list of the network environments supported by the network administrator software components, see <u>Network configuration</u>.

#### Note

For a list of printer drivers, updated HP printer software, and product support information go to <a href="http://www.hp.com/support/lj4600">http://www.hp.com/support/lj4600</a>

### Software for networks

For a summary of available HP network installation and configuration software solutions, see the *HP Jetdirect Print Server Administrator's Guide*. You can find this guide on the CD included with the printer.

#### **HP Web Jetadmin**

HP Web Jetadmin allows you to manage HP Jetdirect connected printers within your intranet using a browser. HP Web Jetadmin is a browser-based management tool and should be installed only on the network administrator's computer. It can be installed and run on a variety of systems:

#### www

To download a current version of HP WebJetadmin and for the latest list of supported host systems, visit HP Customer Care Online at <a href="http://www.hp.com/go/webjetadmin">http://www.hp.com/go/webjetadmin</a>.

When installed on a host server, HP Web Jetadmin can be accessed 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.

HP Web Jetadmin 6.2 and above have the following features:

- Task-oriented user interface provides configurable views, saving network managers significant time.
- Customizable user profiles let network administrators include only the function viewed or used.
- Instant e-mail notification of hardware failure, low supplies, and other printer problems now route to different people.
- Remote installation and management from anywhere using only a standard Web browser.
- Advanced autodiscovery locates peripherals on the network, without manually entering each printer into a database.
- Simple integration into enterprise management packages.
- Quickly find peripherals based on parameters such as IP address, color capability, and model name.
- Easily organize peripherals into logical groups, with virtual office maps for easy navigation.

For the latest information about HP Web Jetadmin go to <a href="http://www.hp.com/go/webjetadmin">http://www.hp.com/go/webjetadmin</a>.

## **UNIX**

The HP Jetdirect Printer Installer for UNIX is a simple printer installation utility for HP-UX and Solaris networks. It is available for download from HP Customer Care Online at <a href="http://www.hp.com/support/net\_printing">http://www.hp.com/support/net\_printing</a>.

#### **Embedded Web server**

This printer is equipped with an embedded Web server, which allows access to information about printer and network activities. A Web server provides an environment in which web programs may run, much in the same way that an operating system, such as Windows, provides an environment for programs to run on your PC. The output from these programs can then be displayed by a Web browser, such as Microsoft Internet Explorer or Netscape Navigator.

When a Web server is "embedded", that means it resides on a hardware device (such as a printer) or in firmware, rather than as software that is loaded on a network server.

The advantage of an embedded Web server is that it provides an interface to the printer that anyone with a network-connected PC and a standard Web browser can access. There is no special software to install or configure.

#### **Features**

The HP embedded Web server allows you to view printer and network card status and manage printing functions from your PC. With the HP embedded Web server, you can do the following:

- view printer status information
- determine the remaining life on all supplies and order new ones
- view and change tray configurations
- view and change the printer control panel menu configuration
- view and print internal pages
- receive notification of printer and supplies events
- add or customize links to other Web sites
- select the language in which to display the embedded Web server pages
- view and change network configuration

For a complete explanation of the features and functionality of the embedded Web server, see <u>Using the embedded Web server</u>.

# Other components and utilities

Several software applications are available for Windows and Macintosh OS users, as well as for network administrators. These programs are summarized below.

Windows	Macintosh OS	Network administrator
<ul> <li>Software installer — automates the printing system installation</li> <li>Online Web registration</li> <li>Printer status and alerts</li> </ul>	<ul> <li>PostScript Printer Description files (PPDs) — for use with the Apple PostScript drivers that comes with the Mac OS</li> <li>HP LaserJet Utility — a printer management utility for Mac OS users</li> </ul>	HP Web Jetadmin     — a browser-based system     management tool. See     http://www.hp.com /go/webjetadmin for the latest HP Web Jetadmin software      HP Jetdirect Printer Installer for UNIX — available for download from http://www.hp.com /support /net_printing

# **Network configuration**

You might need to configure certain network parameters on the printer. You can configure these parameters from the printer control panel, the embedded Web server, or for most networks, from the HP Web Jetadmin software (or the HP LaserJet Utility for Macintosh).

#### Note

For more information about using the embedded Web server, see <u>Using</u> the embedded Web server.

For a complete list of supported networks and for instructions on configuring network parameters from software such as the HP Web Jetadmin software, see the HP Jetdirect Print Server Administrator's Guide. The guide comes with printers in which an HP Jetdirect print server is installed.

This section contains the following instructions for configuring network parameters from the printer control panel:

- configuring Novell NetWare frame type parameters
- configuring TCP/IP parameters
- disabling unused network protocols

# **Configuring Novell NetWare frame type** parameters

The HP Jetdirect print server automatically selects a NetWare frame type. Select a frame type manually only when the print server selects an incorrect frame type. To identify the frame type chosen by the HP Jetdirect print server, print a configuration page from the printer control panel. See <a href="Printer information pages">Printer information pages</a>.

# To configure the Novell NetWare parameters from the printer control panel

- Press ✓ to select CONFIGURE DEVICE.
- 5. Press ✓ to select 1/0.
- 6. Press to highlight EI0 (where X = 1, 2, or 3).
- Press ✓ to select EI0 X.
- 8. Press ▼ to highlight NOVELL.
- Press ✓ to select NOVELL.
- 10. Press ▼ to highlight FRAME.
- 11. Press ✓ to select FRAME.
- 12. Press the PAUSE/RESUME button to return to the ready state.

Note

The default frame type value for the HP Color LaserJet 4600 is automatic.

# **Configuring TCP/IP parameters**

You can use the printer control panel to configure the following TCP/IP parameters:

- usage of the BOOTP file for configuration parameters (the default is to use the BOOTP file)
- IP address (4 bytes)
- subnet mask (4 bytes)
- default gateway (4 bytes)
- TCP/IP connection timeout (in seconds)

Note

Do not disable BOOTP if you will be using RARP or DHCP to configureTCP/IP parameters.

# To automatically configure TCP/IP parameters from the printer control panel

- Press 

  ✓ to enter the MENUS.
- Press ▼ to highlight CONFIGURE DEVICE.

- Press ✓ to select I ✓ 0.
- 6. Press to highlight EI0 (where X = 1, 2, or 3).
- Press ✓ to select EI0 X.
- Press ✓ to select AUTO.
- 10. Press the PAUSE/RESUME button to return to the READY state.

# To manually configure TCP/IP parameters from the printer control panel

Use manual configuration to set an IP address, subnet mask, and local and default gateway.

### Setting an IP address

- Press 

  ✓ to select CONFIGURE DEVICE.
- Press ▼ to highlight I/0.
- Press ✓ to select I ✓ 0.
- 6. Press  $\checkmark$  to highlight EIO  $\times$  (where X = 1, 2, or 3).
- Press ✓ to select EI0 X.
- Press 

  ✓ to select MANUAL.
- 11. Press ✓ to select IP ADDRESS.

#### Note

The first of three sets of numbers is highlighted. If there is not a number highlighted, a highlighted empty underscore appears.

- 12. Press the ▲ or ▼ arrow to to increase or decrease the number for configuring the IP address.
- 13. Press ✓ to move to the next set of numbers.
- 14. Repeat steps 12 and 13 until the correct IP address is entered.
- 15. Press the PAUSE/RESUME button to return to the READY state.

### Setting the subnet mask

- Press 

  ✓ to enter the MENUS.
- Press ✓ to select CONFIGURE DEVICE.
- Press ▼ to highlight I/0.
- 5. Press ✓ to select I/0.
- 6. Press ▼ to highlight EIO X (where X = 1, 2, or 3).
- 7. Press ✓ to select EIO X.
- Press ▼ to highlight MANUAL.
- 9. Press ✓ to select MANUAL.
- 11. Press ✓ to select SUBNET MASK.

#### Note

The first of three sets of numbers is highlighted. If there is not a number highlighted, a highlighted empty underscore appears.

- 12. Press the ▲ or ▼ arrow to to increase or decrease the number for configuring the subnet mask.
- 13. Press \(\nu\) to move to the next set of numbers.
- 14. Repeat steps 12 and 13 until the correct subnet mask is entered.
- 15. Press the PAUSE/RESUME button to return to the READY state.

### Setting the local and default gateway

- Press 

  ✓ to select CONFIGURE DEVICE.
- 5. Press ✓ to select I/0.
- Press ▼ to highlight EI0 X (where X = 1, 2, or 3).
- Press ▼ to highlight MANUAL.
- 9. Press ✓ to select MANUAL.
- 10. Press ▼ to highlight LOCAL GATEWAY or DEFAULT GATEWAY.
- 11. Press ✓ to select LOCAL GATEWAY or DEFAULT GATEWAY.

#### Note

The first of three sets of numbers are the default settings. If there is not a number highlighted, a highlighted empty underscore appears.

- 12. Press the ▲ or ▼ arrow to to increase or decrease the number for configuring LOCAL or DEFAULT GATEWAY.
- 13. Press ✓ to move to the next set of numbers.
- Repeat steps 12 and 13 until the correct local/default gateway is entered.
- 15. Press the PAUSE/RESUME button to return to the Ready state.

# **Disabling network protocols (optional)**

By factory default, all supported network protocols are enabled. Disabling unused protocols has the following benefits:

- decreases printer-generated network traffic
- prevents unauthorized users from printing to the printer
- provides only pertinent information on the configuration page
- allows the printer control panel to display protocol-specific error and warning messages

#### **Note**

TCP/IP configuration cannot be disabled on the HP Color LaserJet 4600 printer.

## To disable IPX/SPX

#### **Note**

Do not disable this protocol if Windows 95/98, Windows NT, ME, 2000, and XP users will be printing to the printer.

- Press 

  ✓ to select CONFIGURE DEVICE.
- Press ▼ to highlight I/0.
- 5. Press ✓ to select I/0.
- 6. Press ▼ to highlight EIO X (where X = 1, 2, or 3).
- Press ▼ to highlight IPX/SPX.
- 9. Press ✓ to select IPX/SPX.

- 11. Press ✓ to select ○N or ○FF.
- 12. Press the PAUSE/RESUME button to return to the READY state.

#### To disable DLC/LLC

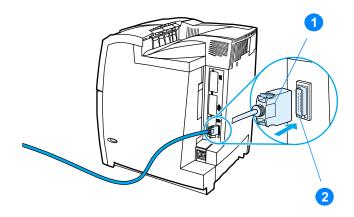
- Press 

  ✓ to enter the MENUS.
- 3. Press ✓ to select CONFIGURE DEVICE.
- 5. Press ✓ to select 1/0.
- 6. Press to highlight EI0 (where X = 1, 2, or 3).
- 7. Press ✓ to select EIO X.
- 9. Press ✓ to select DCL/LLC.
- 11. Press ✓ to select ○N or ○FF.
- 12. Press the PAUSE/RESUME button to return to the READY state.

# **Parallel configuration**

The HP Color LaserJet 4600 printer supports network and parallel connections at the same time. A parallel connection is made by connecting the printer to the computer using a bidirectional parallel cable (IEEE-1284 compliant) with a c-connector plugged into the printer's parallel port. The cable can be a maximum of 10 meters (30 feet) long.

When used to describe a parallel interface, the term *bidirectional* indicates that the printer is able to both receive data from the computer and send data to the computer through the parallel port.



#### Parallel port connection

- c-connector
- 2. parallel port

Note

To use the enhanced capabilities of the bidirectional parallel interface such as bidirectional communication between the computer and printer, faster transfer of data, and automatic configuration of printer drivers, ensure that the most recent printer driver is installed. For more information, see <a href="Printer drivers">Printer drivers</a>.

Note

Factory settings support automatic switching between the parallel port and one or more network connections on the printer. If you are experiencing problems, see <a href="Network configuration">Network configuration</a>.

# Enhanced I/O (EIO) configuration

This printer comes equipped with three enhanced input/output (EIO) slots. The three EIO slots hold compatible external devices such as the HP Jetdirect print server network cards or other devices. Plugging EIO network cards into the slots increases the number of network interfaces available to the printer.

EIO network cards can maximize printer performance when you are printing from a network. In addition they provide the ability to place the printer anywhere on a network. This eliminates the need to attach the printer directly to a server or a workstation and enables you to place the printer closer to the network users.

If the printer is configured through an EIO network card, configure that card through the control panel Configure device menu.

## **HP Jetdirect print servers**

HP Jetdirect print servers (network cards) can be installed in one of the printer's EIO slots. These cards support multiple network protocols and operating systems. HP Jetdirect print servers facilitate network management by allowing you to connect a printer directly to your network at any location. HP Jetdirect print servers also support the Simple Network Management Protocol (SNMP), which provides network managers with remote printer management and troubleshooting through HP Web Jetadmin software.

Note	Installation of these cards and network configuration should be performed by a network administrator. Configure the card either through the control panel or with HP Web Jetadmin software.

Note Refer to the HP Jetdirect print server documentation for information on which external devices or EIO network cards are supported.

#### Available enhanced I/O interfaces

HP Jetdirect print servers (network cards) provide software solutions for:

- Novell NetWare
- Microsoft Windows and Windows NT networks
- Apple Mac OS (LocalTalk)
- UNIX (HP-UX and Solaris)
- Linux (Red Hat and SuSE)
- Internet printing

For a summary of available network software solutions, refer to the HP Jetdirect Print Server Administrator's Guide, or visit HP Customer Care online at <a href="http://www.hp.com/support/net\_printing">http://www.hp.com/support/net\_printing</a>.

#### **NetWare networks**

When using Novell NetWare products with an HP Jetdirect print server, Queue Server mode provides improved printing performance over Remote Printer mode. The HP Jetdirect print server supports Novell Directory Services (NDS) as well as bindery modes. For more information, see the HP Jetdirect Print Server Administrator's Guide.

For Windows 95, 98, ME, NT 4.0, 2000, and XP systems, use the printer installation utility for printer setup on a NetWare network.

### **Windows and Windows NT networks**

For Windows 95, 98, ME, NT 4.0, 2000, and XP systems, use your printer installation utility for printer setup on a Microsoft Windows network. The utility supports printer setup for either peer-to-peer or client-server network operation.

### AppleTalk networks

Use the HP LaserJet Utility to set up the printer on an EtherTalk or LocalTalk network. For more information, refer to the *HP Jetdirect Print Server Administrator's Guide* included with printers equipped with the HP Jetdirect print server.

# LocalTalk configuration

The LocalTalk interface enables you to print directly from a standalone Apple Macintosh computer or from a Macintosh computer on a LocalTalk network. For specific information on configuring the computer and printer to print through a LocalTalk interface, refer to the printer's getting started guide and the *HP Jetdirect Print Server Administrator's Guide*.

Note

For LocalTalk configuration, the DIN-8 printer cable must be connected to the printer port of the Macintosh computer.

# LocalTalk network configuration

To connect the printer to a Macintosh computer on a LocalTalk network, use the HP LocalTalk Cable Kit. You will need a kit for each printer and an additional kit for each Macintosh computer on the network.

### **UNIX/Linux** networks

Use the HP Jetdirect printer installer for UNIX utility to set up the printer on HP-UX or Sun Solaris networks.

For setup and management on UNIX or Linux networks, use HP Web Jetadmin.

To obtain HP software for UNIX/Linux networks, visit HP Customer Care online at <a href="http://www.hp.com/support/net\_printing.">http://www.hp.com/support/net\_printing.</a> For other installation options supported by the HP Jetdirect print server, see the HP Jetdirect Print Server Administrator's Guide included with printers equipped with the HP Jetdirect print server.

# **Supplies and accessories**

#### www

To order supplies in the US, contact <a href="http://www.hp.com/go/ljsupplies">http://www.hp.com/go/ljsupplies</a>. To order supplies worldwide, see

http://www.hp.com/ghp/buyonline.html. To order accessories, see http://www.hp.com/go/accessories.

# Ordering directly through the embedded Web server (for printers with network connections)

Use the following steps to order printing supplies directly through the embedded Web server (see <u>Using the embedded Web server</u>.)

- In the Web browser on the computer, enter the IP address for the printer. The printer status window appears.
   Or, go to the URL provided in the alert email.
- 2. Select the **Setting** tab at the top of the window.
- 3. If asked to provide a password, enter the password.
- On the left side of the Device Configuration window, double-click Order Supplies. This provides a URL from which to purchase consumables. Supplies information with part numbers and printer information is provided.
- Select the part numbers you wish to order and follow the instructions on the screen.

# Ordering directly through the printer software (for printers directly connected to a computer)

The printer software gives you the ability to order supplies directly from the computer. Three things are necessary to use this feature:

- The "Printer Status and Alerts" software must be installed on your computer (use the custom installation option to install this software).
- The printer must be directly connected to your computer through a parallel cable. For more information, see <u>Parallel configuration</u>.
- You must have access to the World Wide Web.
- 1. At the bottom right of the screen (in the system tray), select the **Printer** icon. This opens the status window.

- 2. On the left side of the status window, select the appropriate **Printer** icon.
- 3. At the top of the status window, select **Supplies**. (You can also scroll down to Supplies Status.)
- 4. Click **Order Supplies**. The browser opens to the supplies purchasing page.
- 5. Select the supplies you wish to order.

### Supplies, accessories, and part numbers

Part	Part number	Type/size
Memory	J6054B	Printer hard disk
	C4287A	4 MB Flash DIMM
	C7848A	Synchronous 64 MB DIMM (SDRAM)
	C7850A	Synchronous 128 MB DIMM (SDRAM)
	C9653A	Synchronous 256 MB DIMM (SDRAM)
Accessories	J6057A	HP Jetdirect connectivity card
	C4103A	FIR pod
	C9667A	Printer cabinet
	C9664A	Optional 500-sheet paper feeder (Tray 3)
Printer supplies	C9720A	Black print cartridge
	C9721A	Cyan print cartridge
	C9722A	Yellow print cartridge
	C9723A	Magenta print cartridge
	C9724A	Image transfer kit
	C9725A	Image fuser kit (110 volt)
	C9726A	Image fuser kit (220 volt)

## Supplies, accessories, and part numbers

Part	Part number	Type/size
Cables	C2946A	IEEE-1284 compliant parallel cable, 3 m (approximately 10 feet) long, with 25-pin male/micro 36-pin male ("C" size) connector
	92215S	Macintosh DIN-8 printer cable
	92215N	HP LocalTalk cable kit
Media	C2934A	HP Color LaserJet Transparencies (letter) 50 sheets
	C2936A	HP Color LaserJet Transparencies (A4) 50 sheets
	C4179A	HP LaserJet Soft Gloss paper (letter) 200 sheets
	C4179B	HP LaserJet Soft Gloss paper (A4) 200 sheets
	Q1298A	HP LaserJet Tough paper (letter)
	Q1298B	HP LaserJet Tough paper (A4)
	HPU1132	HP Premium Choice LaserJet paper (letter)
	CHP410	HP Premium Choice LaserJet paper (A4)
	HPJ1124	HP LaserJet paper (letter)
	CHP310	HP LaserJet paper (A4)
Reference materials	5963- 7863	HP LaserJet Printer Family Paper Specifications Guide
	5021- 0337	PCL/PJL Technical Reference Package
	5507	For downloadable versions, go to <a href="http://www.hp.com/support/lj4600">http://www.hp.com/support/lj4600</a> . When connected, select <b>Manuals</b> .

# Printing tasks

This chapter describes how to perform basic printing tasks. The following topics are covered:

- Controlling print jobs
- Selecting print media
- Configuring input trays
- Printing on special media
- 2-sided (duplex) printing
- Special printing situations
- Job retention features
- Printing with the optional HP Fast InfraRed Receiver
- Managing memory

## **Controlling print jobs**

In the Microsoft Windows operating system, three settings affect how the printer driver tries to pull paper when you send a print job. The *Source*, *Type*, and *Size* settings appear in the **Page Setup**, **Print**, or **Print Properties** dialog boxes in most software programs. If you do not change these settings, the printer automatically selects a tray, using the default printer settings.

- Source. Printing by Source means you choose a specific tray from which you want the printer to pull paper. The printer tries to print from this tray, no matter what type or size is loaded in it. If you choose a tray that is configured from the embedded Web server for a type or size that does not match your print job, the printer does not print automatically. Instead, it waits for you to load the tray you chose with the type or size of print media for your print job. If you load the tray, the printer begins printing. If you press ✓, the printer tries to print from another tray.
- Type and Size. Printing by *Type* or *Size* means you want the printer to pull paper or print media from the first tray that is loaded with the type or size that you choose. Selecting media by type rather than source is similar to locking out trays and helps protect special media from accidental use. For example, if a tray is configured for letterhead, and you specify the driver to print on plain paper, the printer will not pull the letterhead from that tray. Instead, it will pull paper from a tray that has plain paper loaded and is configured for plain paper on the printer control panel. Selecting media by type and size results in significantly better print quality for heavy paper, glossy paper, and transparencies. Using the wrong setting can result in unsatisfactory print quality. Always print by Type for special print media such as labels or grayscale transparencies. Always print by Size for envelopes.
  - If you want to print by Type or Size and the trays have not been configured for a certain type or size from the embedded Web server, load the paper or print media into Tray 1 and then select the Type or Size from the Page Setup dialog box, the Print dialog box, or the Print Properties dialog box.
  - If you often print on a certain type or size of media, the printer
    administrator (for a network printer) or you (for a local printer)
    can use the embedded Web server to configure a tray for that
    type or size (see <u>Using the embedded Web server</u>). Then,
    when you choose that type or size as you print a job, the
    printer pulls from the tray configured for that type or size.

### **Print setting priorities**

Changes made to print settings are prioritized according to where the changes are made, as follows:

#### Note

The names of commands and dialog boxes may vary depending on your program.

- Page Setup dialog box. This dialog box opens when you click
   Page Setup or a similar command on the File menu of the program you are working in. Settings changed here override settings changed anywhere else.
- Print dialog box. This dialog box opens when you click Print, Print Setup, or a similar command on the File menu of the program you are working in. Settings changed in the Print dialog box have a lower priority and do not override changes made in the Page Setup dialog box.
- Printer Properties dialog box (printer driver). The printer driver opens when you click Properties in the Print dialog box. Settings changed in the Printer Properties dialog box do not override settings available anywhere else.
- Default printer settings. The default printer settings determine settings used in all print jobs, unless settings are changed in the Page Setup, Print, or Printer Properties dialog boxes, as described above. There are two ways to change the default printer settings:
- 1. Click **Start Settings Printers**, then right-click the printer icon and click **Properties.**
- 2. Click **Start Control Panel**, then select the **Printers** folder, right-click the printer icon and click **Properties**.

#### CAUTION

To avoid affecting print jobs of other users, make printer setup changes through the software application or the printer driver whenever possible. Printer setup changes made through the control panel become default settings for subsequent jobs. Changes made through an application or the printer driver affect only that specific job.

## **Selecting print media**

You can use many types of paper and other print media with this printer. This section provides guidelines and specifications for selecting and using different print media.

Before purchasing any media or specialized forms in quantity, verify that your paper supplier obtains and understands the print media requirements specified in the *HP LaserJet Family Paper Specification Guide*.

#### **WWW**

See <u>Supplies and accessories</u> for *HP LaserJet Family Paper Specification Guide* ordering information. To download a copy of the *HP LaserJet Family Paper Specification Guide* go to <a href="http://www.hp.com/support/lj4600">http://www.hp.com/support/lj4600</a> and select **Manuals**.

It is possible that media could meet all of the guidelines in this chapter and still not print satisfactorily. This may be due to abnormal characteristics of the printing environment or to other variables over which Hewlett-Packard has no control (for example, extremes in temperature and humidity).

Hewlett-Packard recommends testing any media before buying it in large quantities.

#### **CAUTION**

Using media that does not conform to the specifications listed here or in the paper specification guide can cause problems that require service. This service is not covered by the Hewlett-Packard warranty or service agreements.

#### Media to avoid

The HP Color LaserJet 4600 can handle many types of media. Use of media outside the printer's specifications will cause a loss of print quality and increase the chance of paper jams occurring.

- Do not use paper that is too rough.
- Do not use paper with cutouts or perforations other than standard 3-hole punched paper.
- Do not use multipart forms.
- Do not use paper that has already been printed on or that has been fed through a photocopier.
- Do not use paper with a watermark if you are printing solid patterns.

## Media that may damage the printer

In rare circumstances media can damage the printer. The following media must be avoided to prevent possible damage:

- Do not use media with staples attached.
- Do not use transparencies designed for Inkjet printers or other low temperature printers. Use only transparencies that are specified for use with HP Color LaserJet printers.
- Do not use photo paper intended for Inkjet printers.
- Do not use paper that is embossed or coated and is not designed for the temperatures of the HP Color LaserJet 4600 image fuser.
   Select media that can tolerate temperatures of 190° C (374° F) for .1 seconds. HP produces a selection of media that is designed for the Color LaserJet 4600 printer.
- Do not use letterhead paper with low temperature dyes or thermography. Preprinted forms or letterhead must use inks that can tolerate temperatures of 190° C (374° F) for 0.1 second.
- Do not use any media that produces hazardous emissions, or that melts, offsets, or discolors when exposed to 190° C (374° F) for 0.1 second.

www

To order HP Color LaserJet printing supplies, go to <a href="http://www.hp.com/go/ljsupplies">http://www.hp.com/go/ljsupplies</a> in the U.S. or to <a href="http://www.hp.com/qhp/buyonline.html">http://www.hp.com/qhp/buyonline.html</a> worldwide.

## **Configuring input trays**

The HP Color LaserJet 4600 series printer allows you to configure input trays by type and size. You can to load different media in the printer's input trays and then request media by type or size.

#### Note

If you have used previous HP LaserJet printers, you might be accustomed to configuring Tray 1 to first mode or cassette mode. To mimic the settings for first mode, configure Tray 1 for Size =  $\square$ HY and Type =  $\square$ HY. To mimic the settings from cassette mode, set either the size of type for Tray 1 to a setting other than  $\square$ HY.

#### Note

If you are duplex printing, be sure that the media loaded meets the specifications for duplex printing. (See <u>Supported media weights and sizes</u>.)

The instructions below are to configure the trays at the printer control panel. You can also configure the trays from your computer by accessing the embedded Web server. See <u>Using the embedded Web server</u>.

## **Configuring Tray 1 media type**

- 1. Press ✓ to enter the MENUS.
- 2. Press ▼ to highlight PAPER HANDLING.
- Press ✓ to select PAPER HANDLING
- Press ✓ to select TRAY 1 TYPE.
- 6. Press ▼ or ▲ to highlight the desired media type.
- 7. Press ✓ to select the media type.
- 8. Press PAUSE/RESUME to return to the READY state.

### **Configuring Tray 1 media size**

- 2. Press ▼ to highlight PAPER HANDLING.
- Press ✓ to select PAPER HANDLING.
- 4. Press ▼ to highlight TRAY 1 SIZE
- 5. Press ✓ to select TRAY 1 SIZE.

- 6. Press ▼ or ▲ to highlight the desired media size.
- Press 

  to select the media size.
- 8. Press Pause/Resume to return to the READY state.
- 9. If TRAY 1 SIZE is set to CUSTOM, the pop up menu for Custom appears.

## Tray 2 and Tray 3 media type

- Press 

  ✓ to enter the MENUS.
- Press ▼ to highlight PAPER HANDLING.
- 3. Press ✓ to select PAPER HANDLING.

- 6. Press ▼ or ▲ to highlight the desired media type.
- 8. Press Pause/Resume to return to the READY state

#### Tray 2 and Tray 3 media size

- Press 

  ✓ to select PAPER HANDLING.
- 4. Press ▼ to highlight TRAY 2 SIZE or TRAY 3 SIZE.
- Press ▼ or ▲ to highlight the desired media size.
- Press 

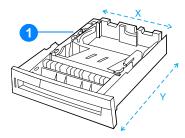
  ✓ to select the media size.
- 7. Press Pause/Resume to return to the READY state.

#### Tray 2 or Tray 3 custom media

The Custom media menu will be displayed when the Tray 2 or Tray 3 switch is in the custom size position. You must also change the size setting in the control panel from ANY CUSTOM to CUSTOM. There are three steps to set up custom media.

- 1. Unit of measure
- 2. X dimension
- 3. Y dimension

#### Custom/Standard switch



When all three steps are completed, the display will return to the PAPER HANDLING menu. Once a Custom size is set for a tray, it will be retained until the switch in the tray is moved back to Standard.

#### Unit of measure

- 3. Press ▲ or ▼ to highlight the correct measurement.
- Press 

  ✓ to select the value.

#### X dimension

The X Dimension is the width of the page as it feeds into the printer.

- 2. Press ✓ to select X DIMENSION.
- Press ▲ or ▼ to highlight the correct value.
- 4. Press ✓ to select the value. If the value entered is outside the vaild range, INUALID UALUE will appear for two seconds. The display prompts you to enter another value.

#### Y dimension

The Y Dimension is the length of the page as it feeds into the printer.

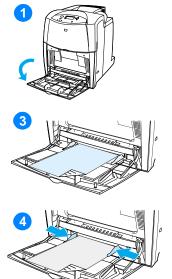
- Press ▼ to highlight Y DIMENSION.
- Press ✓ to select Y DIMENSION.
- Press ▲ or ▼ to highlight the correct value.
- 4. Press 

  to select the value. If the value entered is outside the the valid range, INVALID VALUE will appear for two seconds. The display prompts you to enter another value.

## **Printing from Tray 1 (multipurpose tray)**

Tray 1 is a multipurpose tray that holds up to 100 sheets of paper or 20 envelopes. It provides a convenient way to print envelopes, transparencies, custom-size paper, or other types of media without having to unload the other trays.

#### Loading media into Tray 1



**CAUTION** To avoid jams, never add or remove a media tray during printing.

- 1 Open Tray 1.
- 2 Set the side guides to the desired width.
- Load paper in the tray with the side to be printed on facing down.
- 4 Adjust the side guides so that they lightly touch the paper stack but do not bend the paper.

**Note** Make sure the paper fits under the tabs on the guides and not above the load level indicators.

## **Printing envelopes from Tray 1**

Many types of envelopes can be printed from Tray 1. Up to 20 envelopes can be stacked in the tray. Printing performance depends on the construction of the envelope.

• In the software, set margins at least 15 mm (0.6 inches) from the edge of the envelope.

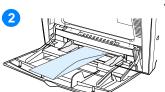
#### CAUTION

Envelopes with clasps, snaps, windows, coated linings, exposed selfstick adhesives, or other synthetic materials can severly damage the printer. To avoid jams and possible printer damage, never try to print on both sides of an envelope. Before you load envelopes, make sure they are flat, undamaged, and not stuck together. Do not use envelopes with pressure-sensitive adhesive.

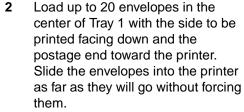
#### To load envelopes into Tray 1

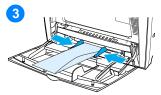


**CAUTION** To avoid jams, do not remove or insert envelopes during printing.



1 Open Tray 1.





Adjust the guides to touch the envelope stack without bending the envelopes. Make sure the envelopes fit under the tabs on the guides.

#### **Printing envelopes**

- 1. In the printer control panel, set the media size for Tray 1 to match the size envelope you are printing.
- 2. Specify Tray 1 or select the media source by size in the printer driver.
- If your software does not automatically format an envelope, specify Landscape for page orientation in your software application or printer driver. Use the following guidelines to set margins for return and destination addresses on Commercial #10 or DL envelopes.

Address type	Left margin	Top margin
Return	15 mm (0.6 inches)	15 mm (0.6 inches)
Destination	102 mm (4.0 inches)	51 mm (2.0 inches)

For envelopes of other sizes, adjust the margin settings appropriately.

4. Select **Print** from the software application or printer driver.

## **Printing from Tray 2 and Tray 3**

Tray 2 and optional Tray 3 hold up to 500 sheets of standard paper or a 50.8 mm (2 inch) stack of labels. Tray 3 attaches underneath Tray 2. When Tray 3 is properly installed, the printer detects it and lists Tray 3 as an option in the control panel CONFIGURE DEVICE menu. Tray 2 and Tray 3 adjust for Letter, Legal, A4, A5, JIS B5, Executive paper, and custom. The printer automatically detects the media size in Tray 2 and Tray 3 based on the tray's paper guide configuration. (See Supported media weights and sizes.)

#### CAUTION

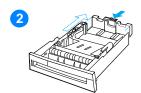
The paper path for the 500-sheet paper feeder passes through Tray 2. If Tray 2 is partially pulled out or removed, media from Tray 3 cannot feed into the printer. This causes the printer to stop and generates a message that Tray 2 must be installed.

## Loading standard-sized media into Tray 2 and Tray 3

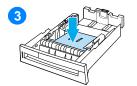
#### CAUTION

Do not print cardstock, envelopes, or unsupported sizes of media from Tray 2 or Tray 3. Print on these types of media only from Tray 1. Do not overfill the input tray or open it while it is in use. Doing so can cause jams in the printer.

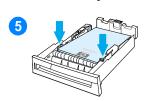




- 1 Remove the tray from the printer.
- Adjust the rear media-length guide by squeezing the guide adjustment latch and sliding the back of the tray to the length of the media being used.





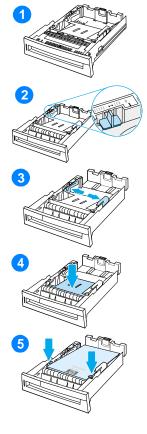


- 3 Push down the media lift plate until it locks.
- 4 Slide the media-width guides open to the size for the media you are using.
- 5 Load media face-up, making sure that the corners of the media fit under the front corner tabs.
- 6 Insert the tray into the printer.

**Note** If the tray is not properly adjusted, the printer might display an error message or paper might jam.

## Loading custom-sized media into Tray 2 and Tray 3

The Custom media menu will be displayed when the Tray 2 or Tray 3 switch is in the custom size position. You must also change the size setting in the control panel from ANY CUSTOM to CUSTOM.



- **1** Remove tray from the printer.
- 2 Move the tray switch to the Custom size position. Once a custom size is set for a tray, it will be retained until the switch is moved back to Standard.
- 3 Slide the media width guides all the way open and adjust the rear media-length guide to the length of the paper being used.
- 4 Push down the media lift plate until it locks.
- 5 Load media face-up, making sure that the corners of the media fit under the front tabs.
- 6 Slide the media width guides in making sure that they gently touch the paper. Insert the tray into the printer.

## Printing on special media

Use these guidelines when printing on special types of media.

### **Transparencies**

When printing on transparencies, use the following guidelines:

- Handle transparencies using the edges. Oils from your fingers deposited on the transparency can cause print quality problems.
- Use only overhead transparencies recommended for use in this printer. Hewlett-Packard recommends using HP Color LaserJet Transparencies with this printer. HP products are designed to work together for optimum printing results.
- In either the software application or the driver, select TRANSPARENCY as the media type, or print from a tray that is configured for transparencies.

#### **CAUTION**

Transparencies not designed for LaserJet printing will melt in the printer, causing damage to the printer.

#### **Glossy paper**

- In either the software application or the driver, select Glossy as the media type, or print from a tray that is configured for glossy paper.
- Use the control panel to set the media type to GLOSS for the input tray being used.
- Because this affects all print jobs, it is important to return the printer to its original settings once the job has printed. See <u>Configuring input trays</u> for more information.

Note

Hewlett-Packard recommends using HP Color LaserJet Soft Gloss paper with this printer. HP products are designed to work together for optimum printing results. If HP Color LaserJet Soft Gloss paper is not used with this printer, print quality may be compromised.

## **Colored paper**

- Colored paper should be of the same high quality as white xerographic paper.
- Pigments used must be able to withstand the printer's fusing temperature of 190° C (374° F) for 0.1 second without deterioration.
- Do not use paper with a colored coating that was added after the paper was produced.
- The printer creates colors by printing patterns of dots, overlaying and varying their spacing to produce various colors. Varying the shade or color of the paper will affect the shades of the printed colors.

#### **Envelopes**

Note

Envelopes can be printed only from Tray 1. Set the tray's media size to the specific envelope size. See <a href="Printing envelopes from Tray 1">Printing envelopes from Tray 1</a>.

Adhering to the following guidelines will help ensure proper printing on envelopes and help prevent printer jams:

- Do not load more than 20 envelopes into Tray 1.
- The weight rating of envelopes should not exceed 105 g/m² (28 lb bond).
- Envelopes should be flat.
- Do not use envelopes with windows or clasps.
- Envelopes must not be wrinkled, nicked, or otherwise damaged.
- Envelopes with peel-off adhesive strips must use adhesives that can withstand the heat and pressures of the printer's fusing process.
- Envelopes should be loaded face-down and with the postage end feeding into the printer first.

#### Labels

#### Note

For printing labels, set the tray's media type to LABELS in the printer control panel. See Configuring input trays. When printing labels, use the following guidelines:

- Verify that the labels' adhesive material can tolerate temperatures of 190° C (374° F) for 0.1 second.
- Verify that there is no exposed adhesive material between the labels. Exposed areas can cause labels to peel off during printing, which can cause printer jams. Exposed adhesive can also cause damage to printer components.
- Do not re-feed a sheet of labels.
- Verify that labels lie flat.
- Do not use labels that are wrinkled, bubbled, or otherwise damaged.

#### **Heavy paper**

- Use Tray 1 for paper that is heavier than 105 g/m² (28 lb bond up to 47 lb bond).
- For optimum results when printing on heavy paper, use the printer control panel to set the media type for the tray to HEAUY.
- In either the software application or the driver, select **Heavy** as the media type, or print from a tray that is configured for heavy paper.
- Because this setting affects all print jobs, it is important to return the printer back to its original settings once the job has printed.
   See <u>Configuring input trays</u>.

#### CAUTION

In general do not use paper that is heavier than the media specification recommended for this printer. Doing so can cause misfeeds, paper jams, reduced print quality, and excessive mechanical wear. However, some heavier media, such as HP Cover Stock, can be safely used.

#### Preprinted forms and letterhead

Observe the following guidelines for best results with preprinted forms and letterhead:

- Forms and letterhead must be printed with heat-resistant inks that will not melt, vaporize, or release hazardous emissions when subjected to the printer's fusing temperature of approximately 190° C (374° F) for 0.1 second.
- Inks must be non-flammable and should not adversely affect any printer rollers.
- Forms and letterhead should be sealed in a moisture-proof wrapping to prevent changes during storage.
- Before loading preprinted paper such as forms and letterhead, verify that the ink on the paper is dry. During the fusing process, wet ink can come off of preprinted paper.
- When duplex printing, load pre-printed forms and letterhead into Tray 2 and Tray 3 with the front of the page facing down and the top edge of the page towards the back of the printer. To load pre-printed forms and letterhead into Tray 1, load them with the front of the page facing up and the bottom edge feeding into the printer first.

#### Recycled paper

This printer supports the use of recycled paper. Recycled paper must meet the same specifications as standard paper. See the *HP LaserJet Family Paper Specification Guide*. Hewlett-Packard recommends that recycled paper contain no more than 5 percent ground wood.

## 2-sided (duplex) printing

Some printer models are capable of duplex printing, or printing on both sides of a page. To find out which models support 2-sided printing, see <a href="Printer configurations">Printer configurations</a>.

#### Note

You must specify 2-sided printing options in your software application or in the printer driver in order to print on both sides of the page.

#### To use 2-sided printing:

- Verify that the printer driver is configured for 2-sided printing. (For instructions, see the online Help for the printer driver.)
- Select the appropriate 2-sided printing options in the printer driver software. 2-sided printing options include page and binding orientation.
- 2-sided printing is not supported for certain media types, including transparencies, labels, cardstock, and glossy film.
- For best results, avoid 2-sided printing with rough-textured, heavy-weight media.

## Control panel settings for 2-sided printing

Many software applications allow you to change 2-sided printing settings. If your software application or printer driver does not allow you to adjust 2-sided printing settings, you can adjust these settings through the control panel. The factory default setting is OFF.

#### **CAUTION**

Do not use 2-sided printing when printing on labels. Serious damage may result.

## To enable or disable 2-sided printing from the printer control panel

#### Note

Changing settings for 2-sided printing through the printer control panel affects all print jobs. Whenever possible, change settings for 2-sided printing through your software application or printer driver.

- Press 

  ✓ to enter the MENUS.
- 2. Press ▼ to highlight CONFIGURE DEVICE.
- Press ✓ to select CONFIGURE DEVICE.
- Press 

  ✓ to select PRINTING.
- 6. Press ✓ to select DUPLEX.
- Press ▲ or ▼ to select ①N to enable 2-sided printing or ①FF to disable 2-sided printing.
- 8. Press \(\nu\) to set the value.
- 9. Press Pause/Resume.
- 10. Select 2-sided printing from your software application or printer driver, if possible.

#### Note

To select 2-sided printing from the printer driver, the driver must first be properly configured. (For instructions, see the online Help for the printer driver.)

## Options for binding 2-sided printing jobs

Before printing a 2-sided document, in the printer driver choose the edge on which you will bind your finished document. Long-edge or book binding is the conventional layout used in book binding. Short-edge or tablet binding is the typical calendar binding.

#### Note

The default binding setting is to bind on the long edge when the page is set up for portrait orientation. To change to short edge binding, click the **Flip Pages Up** check box.

## **Manual 2-sided printing**

Some printer models do not support automatic 2-sided printing. However, you can print on both sides of a page using manual 2-sided printing. To manually print on both sides, use the instructions below.

- 1. Print all the even-numbered pages first. (Many software applications have an option to print only odd or even pages.)
- 2. Remove the printed pages from the printer. If the print job has an odd number of pages, add a blank piece of paper to the bottom of the stack.
- 3. In your software application or in the printer driver, select **Manual Feed** as the paper source.
- In the printer driver, select the option to Manually Print on 2nd Side.
  - In PCL drivers, this option is found on the Finishing tab under Print Quality Details.
  - In the PostScript driver, this option is found in the Document Defaults section under the Advanced settings.
- 5. In your software application, select the option to print all the oddnumbered pages, and click **Print**. When the printer's control panel displays MANUALLY FEED, insert the stack of paper into Tray 1 in one of the following orientations.
  - For portrait orientation with long-edge (book) binding, place the stack with the previously printed side facing up and the top edge of the pages feeding into the printer first.
  - For portrait orientation with short-edge (calendar) binding, place the stack wth the previously printed side facing up and the bottom edge of the pages feeding into the printer first.
  - For landscape orientation with long-edge (calendar) binding, place the stack with the previously printed side facing up and the top edge of the pages to the left as you face the printer.
  - For landscape orientation with short-edge (book) binding, place the stack with the previously printed side facing up and the top edge of the pages to the right as you face the printer.

## **Special printing situations**

Use these guidelines when printing on special types of media.

### Printing a different first page

Use the following procedure to print the first page of a document on a different media type than the rest of the document, for example, to print the first page of a document on letterhead paper and the rest on plain paper.

- 1. From your application or printer driver, specify a tray for the first page and another tray for the remaining pages.
- 2. Load the special media into the tray that you specified in step 1.
- 3. Load the media for the remaining pages of the document into another tray.

You can also print on different media by using the printer control panel or printer driver to set the types of media that are loaded in the trays and then selecting the first and remaining pages by media type.

## Printing on custom-size media

The printer supports single-sided printing on custom-size media. Tray 1 supports media sizes from 76 by 127 mm (3 by 5 inches) to 216 by 356 mm (8.5 by 14 inches). Tray 2 and optional Tray 3 support media sizes from 182 by 210 mm (7.16 by 8.27 inches) to 216 by 356 mm (8.5 by 14 inches).

When printing on custom-size media, if Tray 1 is configured in the printer control panel as TRAY 1 TYPE=ANY and TRAY 1 SIZE=ANY, the printer will print on whatever media is loaded in the tray. When printing on custom size media from Trays 2 or 3, adjust the switch on the tray to the Custom position, and from the control panel, set the media size to CUSTOM or ANY CUSTOM.

Some software applications and printer drivers allow you to specify custom paper-size dimensions. Be sure to set the correct paper size in both the page setup and print dialog boxes.

If your software application requires you to calculate margins for custom-size paper, see the online Help for that application.

#### Stopping a print request

You can stop a print request either from the printer control panel or from your software application. To stop a print request from a computer on a network, see the online Help for the specific network software.

Note

It may take some time for all printing to clear after you have canceled a print job.

## To stop the current print job from the printer control panel

Press Cancel Job on the printer control panel to cancel the job that is currently printing. Pressing Cancel Job does not affect subsequent print jobs that are stored in the printer buffer.

## To stop the current print job from your software application

If several requests have been sent to the printer through your software, they may be waiting in a print queue (in Windows Print Manager, for example). See your software documentation for specific instructions on canceling a print request from the computer.

#### Job retention features

The HP Color LaserJet 4600 series printer lets you store a job in the printer's memory for printing at a later time. These job retention features are described below. To use job retention, you must install a hard disk drive in the printer and properly configure the printer driver.

To support job retention features for complex jobs, HP recommends that you install additional memory.

#### CAUTION

Make sure to uniquely identify jobs in the printer driver before printing. Using default names may override previous jobs with the same default name or cause the job to be deleted.

## Storing a print job

You can download a print job to the printer's hard disk without printing it. You can then print the job at any time through the printer control panel. For example, you may want to download a personnel form, calendar, time sheet, or accounting form that other users can access and print.

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

## Quick copying a job

The quick copy feature prints the requested number of copies of a job and stores a copy on the printer's hard disk. Additional copies can be printed later. This feature can be turned on or off from the driver.

## 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 print additional copies.

To permanently store the job and prevent the printer from deleting it select the **Stored Job** option in the driver.

#### **Printing stored jobs**

- 1. Press ✓ to enter MENUS.
- 2. RETRIEVE JOB is highlighted.
- 3. Press ✓ to select RETRIEVE JOB.
- 5. Press ✓ to select your USER NAME.
- 6. Press ▼ to highlight a JOB NAME.
- 7. Press ✓ to select the JOB NAME.
- 8. PRINT is highlighted.
- 9. Press ✓ to select PRINT.
- 10. Press ▲ and ▼ to select the number of copies.
- 11. Press ✓ to print the job.

#### **Deleting stored jobs**

When you send a stored job, the printer overwrites any previous jobs with the same user and job name. If there is not a job already stored under the same user and job name, and the printer needs additional space, the printer may delete other stored jobs starting with the oldest. The default number of jobs that can be stored is 32. You can change the number of jobs that can be stored from the control panel. For more information about setting the job storage limit, see Configure device menu.

If the printer is turned off, all stored jobs are deleted. A job can also be deleted from the control panel, from the embedded Web server, or from HP Web Jetadmin. To delete a job from the control panel, use the following procedure:

- 2. RETRIEVE JOB is highlighted.
- Press ✓ to select RETRIEVE JOB.

- 8. Press ▼ to highlight DELETE.
- 9. Press ✓ to select DELETE.
- 10. Press ✓ to delete the job.

#### Private jobs

The private printing feature lets you secure a job with a Personal Identification Number (PIN). That job cannot be printed or deleted until the PIN is entered at the control panel. A lock symbol next to a job name indicates the job is private.

Specify that a job is private from the driver. Select the **Private Job** option and type a 4-digit PIN. To avoid overwriting jobs with the same name, also specify a username and job name.

#### Printing a private job

- Press 

  ✓ to enter MENUS.
- 2. RETRIEVE JOB is highlighted.
- Press 

  ✓ to select RETRIEVE JOB.
- Press ✓ to select your USER NAME.

- 8. PRINT is highlighted.
- 9. Press ✓ to select PRINT.
- 10. Press ▲ or ▼ to select the first digit of the PIN.
- 11. Press ✔ to select the digit. The number changes to an asterisk.
- 12. Repeat steps 10 and 11 for the remaining three digits of the PIN.
- 13. Press ✓ when finished entering PIN.
- 14. Press ▲ and ▼ to select the number of copies needed.
- 15. Press ✓ to print the job.

#### Deleting a private job

If the printer is turned off, all private jobs are deleted. A private job can also be deleted from the printer control panel. You can delete a job without printing it or delete it after it is printed.

- Press 

  ✓ to enter MENUS.
- 2. RETRIEVE JOB is highlighted.
- 3. Press ✓ to select RETRIEVE JOB.
- Press ✓ to select your USER NAME.
- 6. Press ▼ to highlight a JOB NAME.
- 7. Press ✓ to select the JOB NAME.
- 9. Press ✓ to select DELETE.
- 10. Press ▲ or ▼ to select the first digit of the PIN.
- 11. Press ✓ to select the digit. The number changes to an asterisk.
- 12. Repeat steps 10 and 11 for the remaining three digits of the PIN.
- 13. Press ✓ when finished entering PIN.
- 14. Press ✓ to delete the job.

## Printing with the optional HP Fast InfraRed Receiver

The optional HP Fast InfraRed (FIR) Receiver enables wireless printing from any IRDA-compliant portable device (such as a laptop computer) to the printer.

The printing connection is maintained by positioning the sending infrared port within operating range. The connection is permanently broken if the sending port is moved out of operation range or if anything passing between the ports blocks transmission for more than 40 seconds. (This block could be a hand, paper, or even direct sunlight.)

#### **Note**

For more information, see the user guide that came with the optional HP Fast InfraRed Receiver. If your operating system does not have infrared software installed, contact your computer manufacturer for drivers and installation instructions.

## Setting up to print with Windows 95, 98, 2000, NT. ME, and XP

Before launching the InfraRed Driver, complete the following steps:

- 1. Click Start, click Settings, and then click Printers.
- Select the HP LaserJet 4600, 4600dn, 4600dtn, or 4600hdn as your default printer.
- 3. While in the same **Printers** folder, choose **Properties** then **Details**, and make sure that **Virtual Infrared LPT Port** is selected.
- 4. Select the file to print.

#### **Setting up to print with Macintosh computers**

The first step for setting up an infrared printer is creating a Desktop Printer icon using the Desktop Printer Utility. By default, the Desktop Printer Utility is located in the **Apple Extras/Apple LaserWriter** folder on the hard drive.

Printer IR will not be an option if the Infrared Control Panel and extensiion are not active. In addition, the infrared print capability is possible only with the HP LaserWriter version 8.6 driver or later.

- 1. Launch the Desktop Utility.
- 2. Select Printer IR (Infrared) and click OK.
- Change PostScript Printer Description (PPD) File to match the printer.
- 4. On the **File** menu, select **Save**.
- 5. Enter a name and location for the desktop printer icon and click **OK**.

#### Note

Once the icon is on the desktop (or saved elsewhere), printer options need to be manually configured. This step is essentially the same as selecting **Configure** after setting up a printer in the Chooser. To set the options, highlight the Desktop Printer icon and select **Change Setup** from the Printing menu.

## Printing a job

- Align your laptop computer (or other portable device equipped with an IRDA-compliant FIR window) within 1 meter (3 feet) maximum of the optional HP Fast InfraRed Receiver. The FIR window must be at an angle of within +/- 15 degress relative to the printer to ensure an effective connection for printing.
- 2. Print the job. The status indicator on the optional HP Fast InfraRed Receiver lights up, and, after a short delay, the printer control panel displays PROCESSING JOB.

If the status indicator does not light up, realign the optional 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, 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 optional 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.

#### Note

The connection is permanently broken if the sending port is moved out of operation range or if anything passing between the ports blocks transmission for more than 40 seconds. (This block could be a hand, paper, or even direct sunlight). Depending on the size of the job, printing with the optional HP Fast Infrared Receiver may be slower than printing with a cable connected directly to the parallel port.

## Interrupting and resuming printing

The job interrupt and resume feature lets you temporarily stop the job that is currently printing in order to print another job through an FIR connection. When the FIR job is finished printing, the interrupted job resumes printing.

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

## **Managing memory**

This printer supports up to 512 MB of memory. You can add additional memory by installing Dual Inline Memory Modules (DIMMs). To allow for memory expansion, the printer has five DIMM slots, which accept 64, 128, or 256 MB of RAM each. For information about installing memory, see Working with memory and print server cards.

The printer features Memory Enhancement Technology (MEt), which automatically compresses page data to provide the most efficient use of the printer's RAM.

The printer uses 168-pin, nonparity, synchronous DRAM memory modules. Extended data output (EDO) DIMMs are not supported.

#### **Note**

If memory problems occur when you are printing complex graphics, you can make more memory available by removing downloaded fonts, style sheets, and macros from printer memory. Reducing the complexity of a print job from within an application can help avoid memory problems.

# 3 Managing the printer

This chapter describes how to manage the printer. The following topics are covered:

- Printer information pages
- Using the embedded Web server
- Using Printer Status and Alerts

# **Printer information pages**

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

- menu map
- configuration page
- supplies status page
- usage page
- demo page
- file directory
- PCL or PS font list
- event log
- print quality troubleshooting page

# Menu map

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

- Press ▼ to highlight INFORMATION.
- 3. Press ✓ to select INFORMATION.
- 4. If PRINT MENU MAP is not highlighted, press ▲ or ▼ until it is highlighted.
- Press ✓ to select PRINT MENU MAP.

The message PRINTING... MENU MAP appears on the display until the printer finishes printing the menu map. The printer returns to the READY state after printing the menu map.

You might want to store the menu map near the printer for reference. The content of the menu map varies, depending on the options currently installed in the printer. (Many of these values can be overridden from the printer driver or software application.)

For a complete list of control panel menus and possible values, see Menu hierarchy.

# **Configuration page**

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

- 3. Press ✓ to select INFORMATION.
- Press ✓ to select PRINT CONFIGURATION.

The message PRINTING... CONFIGURATION appears on the display until the printer finishes printing the configuration page. The printer returns to the READY state after printing the configuration page.

Note

If the printer is configured with EIO cards (for example, an HP Jetdirect Print Server) or an optional hard disk drive, an additional configuration page will print that provides information about those devices.

# Supplies status page

The supplies status page illustrates the remaining life for the following printer supplies:

- print cartridges (all colors)
- transfer unit
- fuser

To print the supplies status page:

- Press 

  ✓ to select INFORMATION.
- Press ▼ to highlight PRINT SUPPLIES STATUS.
- 5. Press ✓ to select PRINT SUPPLIES STATUS.

The message PRINTING... SUPPLIES STATUS appears on the display until the printer finishes printing the supplies status page. The printer returns to the READY state after printing the supplies status page.

Note

If you are using non-HP supplies, the supplies status page will not show the remaining life for those supplies. For more information, see Non-HP print cartridges.

# Usage page

The usage page lists a page count for each size of media that has passed through the printer. This page count includes the number of pages that were printed on one side, the number that were printed on two sides (duplexed), and totals of the two printing methods for each media size. It also lists the average percentage of page coverage for each color.

- Press 

  ✓ to enter the MENUS.
- 2. Press ▼ to highlight INFORMATION.
- Press 

  ✓ to select INFORMATION.
- Press ✓ to select PRINT USAGE.

The message PRINTING... USAGE appears on the display until the printer finishes printing the usage page. The printer returns to the READY state after printing the usage page.

#### Demo

A demo page is a color photograph that demonstrates print quality.

- Press ▼ to highlight INFORMATION.
- Press ✓ to select INFORMATION.
- Press ✓ to select PRINT DEMO.

The message PRINTING... DEMO appears on the display until the printer finishes printing the demo page. The printer returns to the READY state after printing the demo page.

## File directory

The file directory page contains information for all installed mass storage devices. This option does not appear if no mass storage devices are installed.

- Press ▼ to highlight INFORMATION.
- Press 

  ✓ to select INFORMATION.
- Press ✓ to select PRINT FILE DIRECTORY.

The message PRINTING... FILE DIRECTORY appears on the display until the printer finishes printing the file directory page. The printer returns to the READY state after printing the file directory page.

#### PCL or PS font list

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

- Press ✓ to select INFORMATION.
- 5. Press ✓ to select PRINT PCL FONT LIST OF PRINT PS FONT LIST.

The message PRINTING... FONT LIST appears on the display until the printer finishes printing the font list page. The printer returns to the READY state after printing the font list page.

## **Event log**

The event log lists the printer events, including printer jams, service errors, and other printer conditions.

- Press ▼ to highlight DIAGNOSTICS.
- 3. Press ✓ to select DIAGNOSTICS.
- Press ✓ to select PRINT EVENT LOG.

The message PRINTING... EVENT LOG appears on the display until the printer finishes printing the event log. The printer returns to the READY state after printing the event log.

# Print quality troubleshooting pages

The print quality troubleshooting pages provide information on aspects of the printer that affect print quality.

- Press 

  ✓ to enter the MENUS.
- 2. Press ▼ to highlight DIAGNOSTICS.
- Press ✓ to select DIAGNOSTICS.
- Press ▼ to highlight PQ TROUBLESHOOTING.
- 5. Press ✓ to select PQ TROUBLESHOOTING.

The message PRINTING... PQ TROUBLESHOOTING appears on the display until the printer finishes printing the print quality troubleshooting information. The printer returns to the READY state after printing the print quality troubleshooting information.

The print quality troubleshooting information includes one page for each color (cyan, magenta, yellow, and black), printer statistics related to print quality, instructions on interpreting the information, and procedures to solve print quality problems.

www

If following the procedures recommended by the print quality troubleshooting pages does not improve print quality, go to <a href="https://www.hp.com/support/lj4600">www.hp.com/support/lj4600</a>.

# **Using the embedded Web server**

When the printer is directly connected to a computer, the embedded Web server is supported for Windows 95 and later. In order to use the embedded Web server with a direct connection, you must choose the Custom installation option when you install the printer driver. Select the option to load Printer Status and Alerts. The proxy server is installed as part of the Printer Status and Alerts software.

When the printer is connected to the network, the embedded Web server is automatically available. You may access the embedded Web server from Windows 95 and later.

The embedded Web server allows you to view printer and network status and to manage printing functions from your computer instead of from the printer control panel. Below are examples of what you can do using the embedded Web server:

- view printer control status information
- set the type of paper loaded in each tray
- determine the remaining life on all supplies and order new ones
- view and change tray configurations
- view and change the printer control panel menu configuration
- view and print internal pages
- receive notification of printer and supplies events
- view and change network configuration

To use the embedded Web server, you must have Microsoft Internet Explorer 4 and later or Netscape Navigator 4 and later. The embedded Web server works when the printer is connected to an IP-based network. The embedded Web server does not support IPX-based printer connections. You do not have to have Internet access to open and use the embedded Web server.

#### To access the embedded Web server

In a supported Web browser on your computer, type the IP address for the printer. (To find the IP address, print a configuration page. For more information about printing a configuration page, see <a href="Printer">Printer</a> information pages.)

Once you open the URL, you can bookmark it so that you can return to it quickly in the future.

- The embedded Web server has three tabs that contain settings and information about the printer: the **Information** tab, the **Settings** tab, and the **Network** tab. Click the tab that you want to view.
- 2. See the following sections for more information about each tab.

#### Information tab

The Information pages group consists of the following pages.

- Device Status. This page displays the printer status and shows the life remaining of HP supplies, with 0 percent representing that a supply is empty. The page also shows the type and size of print media set for each tray. To change the default settings, click Change Settings.
- **Configuration page.** This page shows the information found on the printer Configuration page.
- Supplies Status. This page shows the life remaining of HP supplies, with 0 percent representing that a supply is empty. This page also provides supplies part numbers. To order new supplies, click Order Supplies in the Other Links area on the left side of the window. To visit any website, you must have Internet access.
- **Event log.** This page shows a list of all printer events and errors.
- Usage page. This page shows a summary of the number of pages the printer has printed, grouped by size and type.
- Device Information. This page also shows the printer network name, address, and model information. To change these entries, click Device Information on the Settings tab.

#### Settings tab

This tab allows you to configure the printer from your computer. The **Settings** tab can be password protected. If this printer is networked, always consult with the printer administrator before changing settings on this tab.

The **Settings** tab contains the following pages.

- Configure Device. Configure all printer settings from this page.
   This page contains the traditional menus found on printers using a control panel display. These menus include Information, Paper Handling, Configure Device, and Diagnostics.
- Alerts. Network only. Set up to receive e-mail alerts for various printer and supplies events.
- Email. Network only. Used in conjunction with the Alerts page to set up incoming and outgoing e-mail, as well as to set e-mail alerts.
- Security. Set a password that must be entered to gain access to the Settings and Networking tabs. Enable and disable certain features of the EWS.
- Other Links. Add or customize a link to another website. This link is displayed in the Other Links area on all embedded Web server pages. These permanent links always appear in the Other Links area: HP Instant Support™, Order Supplies, and Product Support.
- Device Information. Name the printer and assign an asset number to it. Enter the name and e-mail address for the primary contact who will receive information about the printer.
- Language. Determine the language in which to display the embedded Web server information.

## **Networking tab**

This tab allows the network administrator to control network-related settings for the printer when it is connected to an IP-based network. This tab will not appear if the printer is directly connected to a computer, or if the printer is connected to a network using anything other than an HP Jetdirect print server card.

#### Other links

This section contains links that connect you to the Internet. You must have Internet access in order to use any of these links. If you use a dial-up connection and did not connect when you first opened the

embedded Web server, you must connect before you can visit these websites. Connecting might require that you close the embedded Web server and reopen it.

- HP Instant Support™. Connects you to the HP website to help you find solutions. This service analyzes your printer error log and configuration information to provide diagnostic and support information specific to your printer.
- Order Supplies. Click this link to connect to the HP website and order genuine HP supplies, such as print cartridges and paper.
- Product Support. Connects to the support site for the HP Color LaserJet 4600 printer. Then, you can search for help regarding general topics.

# **Using Printer Status and Alerts**

Printer Status and Alerts is supported only for Windows 95 and later versions.

The Printer Status and Alerts software is available to users of both networked and directly connected printers. To use Printer Status and Alerts software with a directly connected computer, you must choose the Custom installation option when you install the printer driver. Select the option to install Printer Status and Alerts. For network connections, Printer Status and Alerts is installed automatically with the Typical software installation option.

This software allows you to view the embedded Web server information for a particular printer. It also generates messages on the computer regarding the status of the printer and print jobs. Depending on how the printer is connected, you can receive different messages.

- Networked printers. You can receive regular job status messages that appear every time a print job is sent to the printer or every time the print job finishes printing. You can also receive alert messages. These messages appear when you are printing to a particular printer if that printer experiences a problem. In some cases, the printer can continue to print (such as when a tray that is not being used is open, or a print cartridge is low). In other cases, a problem may prevent the printer from printing (such as when paper is out, or a print cartridge is empty).
- Directly connected printers. You can receive alert messages
  that appear when the printer experiences a problem but can
  continue printing or a problem that prevents it from printing. You
  can also receive messages indicating the print cartridge is low.

You can set alert options for a single printer that supports Printer Status and Alerts, or you can set alert options for all printers that support Printer Status and Alerts. For networked printers, these alerts only appear for your jobs.

Note that even if you are setting alert options for all printers, not all options you select will apply to all printers. For example, when selecting the option to notify you when the print cartridges are low, directly connected printers that support Printer Status and Alerts will generate a message when the print cartridges are low. However, none of the networked printers will generate this message, unless it affects a user-specific job.

#### To choose which status messages appear

- 1. Open Printer Status and Alerts in one of these ways:
  - Double-click the **Printer Status and Alerts** tray icon, which is near the clock in the Tray Manager.
  - On the Start menu, point to **Programs**, point to **Printer Status** and **Alerts**, and click **Printer Status and Alerts**.
- 2. Click the **Options** icon in the left pane.
- 3. In the **For** field, select the printer driver for this printer, or select **All Printers**.
- 4. Clear the options for the messages you do not want to appear, and select the options for the messages you do want to appear.
- Under Status check rate, select how frequently you want the software to update the printer status information that the software uses to generate the messages. Status Check Rate might not be available if the printer administrator has restricted the rights to this function.

#### To view status messages and information

On the left side of the window, select the printer for which you want to see information. Information provided includes status messages, supplies status, and printer capabilities. You can also click the Job History (clock) icon at the top of the window to view a list of previous jobs sent to the printer from your computer.

# 4 Color

This chapter describes how the HP Color LaserJet 4600 series printer provides great color printing. This chapter also describes ways to produce the best possible color prints. The following topics are covered:

- Using color
- Managing color
- Matching colors

# **Using color**

The HP Color LaserJet 4600 series printer offers great color as soon as you set up the printer. It provides a combination of automatic color features to generate excellent color results for the general office user, plus sophisticated tools for the professional who is experienced with color use.

The HP Color LaserJet 4600 series printer provides carefully designed and tested color tables to provide smooth, accurate color rendition of all printable colors.

# **HP ImageREt 2400**

HP ImageREt 2400 is a technology that provides you with the best color print quality without having to change driver settings or make trade-offs between print quality, performance, and memory. ImageREt 2400 produces photorealistic images.

ImageREt 2400 provides 2400 dpi color laser-class quality through a multilevel printing process. This process precisely controls color by combining up to four colors within a single dot and by varying the amount of toner in a given area. As a result, ImageREt 2400, together with the 600-by-600 dpi engine resolution, creates millions of smooth colors.

## Paper selection

For the best color and image quality it is important to select the appropriate media type from the printer menu or from the front panel. See <u>Selecting print media</u>.

# **Color options**

Color options enable optimal color output automatically for diverse types of documents.

Color options use object tagging, which allows optimal color and halftone settings to be used for different objects (text, graphics, and photos) on a page. The printer driver determines which objects are used on a page and uses halftone and color settings that provide the best print quality for each object. Object tagging, combined with optimized default settings, produces great color out of the box.

In the Windows environment, the **Automatic** and **Manual** color options are on the **Color** tab in the printer driver.

#### **sRGB**

Standard red-green-blue (sRGB) is a world-wide color standard originally developed by HP and Microsoft as a common color language for monitors, input devices (scanners, digital cameras), and output devices (printers, plotters). It is the default color space used for HP products, Microsoft operating systems, the World Wide Web, and most office software sold today. sRGB is representative of the typical Windows PC monitor today and the convergence standard for high-definition television.

#### **Note**

Factors such as the type of monitor you use and the room's lighting can affect the appearance of colors on your screen. For more information, see <u>Matching colors</u>.

The latest versions of Adobe PhotoShop, CorelDRAW<sup>TM</sup>, Microsoft Office, and many other applications use sRGB to communicate color. Most importantly, as the default color space in Microsoft operating systems, sRGB has gained broad adoption as a means to exchange color information between applications and devices using a common definition that assures typical users will experience greatly improved color matching. sRGB improves your ability to match colors between the printer, the PC monitor and other input devices (scanner, digital camera) automatically, without the need to become a color expert.

# **Managing color**

Setting color options to Automatic will typically produce the best possible print quality for color documents. However, there may be cases when you want to print a color document in grayscale (black and white) or wish to change one of the printer's color options.

- Using Windows, print in grayscale or change the color options using settings found on the Color tab in the printer driver.
- Using a Macintosh computer, print in grayscale or change the color options using the Color Matching pop-up menu in the Print dialog box.

# **Print in Grayscale**

Selecting the **Print in Grayscale** option from the printer driver prints a document in black and white. This option is useful for previewing preliminary copies of slides and hardcopy output, or for printing color documents that will be photocopied or faxed.

# Automatic or manual color adjustment

The **Automatic** color adjustment option optimizes the neutral gray color treatment, halftones, and edge enhancements used for each element in a document. For more information, see your printer driver online Help.

#### Note

Automatic is the default setting and is recommended for printing all color documents.

The **Manual** color adjustment option allows you to adjust the neutral gray color treatment, halftones, and edge enhancements for text, graphics and photographs. To access the Manual color options, from the **Color** tab, select **Manual**, then **Settings**.

## Manual color options

Manual color adjustment allows you to adjust the Color (or Color Map) and Halftoning options individually for text, graphics, and photographs.

#### Halftone options

Halftone options affect the resolution and clarity of your color output. You can select halftone settings for text, graphics, and photographs independently. The two halftone options are **Smooth** and **Detail**.

- The Smooth option provides better results for large, solid-filled print areas. It also enhances photographs by smoothing out fine color gradations. Choose this option when uniform and smooth area fills are top priority.
- The **Detail** option is useful for text and graphics that require sharp distinctions among lines or colors, or images that contain a pattern or a high level of detail. Choose this option when sharp edges and details are top priority.

#### Note

Some applications convert text or graphics to raster images. In these cases, the **Photographs** settings will also control text and graphics.

#### **Neutral Grays**

The **Neutral Grays** setting determines the method used for creating gray colors used in text, graphics, and photographs.

Two values are available for the **Neutral Grays** setting:

- Black Only generates neutral colors (grays and black) using only black toner. This guarantees neutrals colors without a color cast.
- 4-Color generates neutral colors (grays and black) by combining all four toner colors. This method produces smoother gradients and transitions to non-neutral colors, and it produces the darkest black.

#### Note

Some applications convert text or graphics to raster images. In these cases, the **Photographs** settings will also control text and graphics.

#### **Edge Control**

The **Edge Control** setting determines how edges are rendered. Edge control has two components: adaptive halftoning and trapping. Adaptive halftoning increases edge sharpness. Trapping reduces the effect of color plane misregistration by overlapping the edges of adjacent objects slightly.

Four levels of edge control are available:

- Maximum is the most aggressive trapping setting. Adaptive halftoning is on for this setting.
- Normal is the default trapping setting. Trapping is at a medium level and adaptive halftoning is on.
- Light sets trapping at a minimal level, and adaptive halftoning is on.
- Off turns off both trapping and adaptive halftoning.

#### **RGB Color**

Two values are available for the **RGB Color** setting:

- Default instructs the printer to interpret RGB color as sRGB. sRGB is the accepted standard of Microsoft and the World Wide Web Organization (www).
- Device instructs the printer to print RGB data in raw device mode. To render photographs properly with this selection, you must manage image color in the application or operating system.

# **Matching colors**

The process of matching printer output color to your computer screen is quite complex because printers and computer monitors use different methods of producing color. Monitors *display* colors by light pixels using an RGB (red, green, blue) color process, but printers *print* colors using a CMYK (cyan, magenta, yellow, and black) process.

Several factors can influence your ability to match printed colors to those on your monitor. These factors include:

- print media
- printer colorants (inks or toners for example)
- printing process (inkjet, press, or laser technology for example)
- overhead lighting
- personal differences in perception of color
- software applications
- printer drivers
- PC operating system
- monitors
- video cards and drivers
- operating environment (humidity for example)

Keep the above factors in mind when colors on your screen do not perfectly match your printed colors.

For most users, the best method for matching colors on your screen to your printer is to print sRGB colors.

# PANTONE®\* color matching

PANTONE®\* has multiple color matching systems. PANTONE®\* Matching System is very popular and uses solid inks to generate a wide range of color hues and tints. See <a href="http://www.hp.com">http://www.hp.com</a> for details on how to use PANTONE®\* Matching System with this printer.

# Swatch book color matching

The process for matching printer output to preprinted swatch books and standard color references is complex. In general, you can obtain a reasonably good match to a swatch book if the inks used to create the swatch book are cyan, magenta, yellow, and black. These are usually referred to as process color swatch books.

Some swatch books are created from spot colors. Spot colors are specially created colorants. Many of these spot colors are outside of the gamut of the printer. Most spot color swatch books have companion process swatch books that provide CMYK approximations to the spot color.

Most process swatch books will have a note on what process standards were used to print the swatch book. In most cases they will be SWOP, EURO, or DIC. To get optimal color matching to the process swatch book, select the corresponding ink emulation from the printer menu. If you cannot identify the process standard, use SWOP ink emulation.

# 5

# Maintenance

This chapter describes ways to maintain your printer. The following topics are covered:

- Managing the print cartridge
- Changing print cartridges
- Replacing supplies
- Configuring alerts

# Managing the print cartridge

# **HP print cartridges**

When you use a genuine new HP print cartridge (part number C9720A, C9721A, C9722A, C9723A), you can obtain the following supplies information:

- percentage of supplies remaining
- estimated number of pages remaining
- number of pages printed

# Non-HP print cartridges

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

When you use a non-HP print cartridge, certain features, such as remaining toner volume data may not be available as a result of using this non-HP supply.

If the non-HP print cartridge was sold to you as a genuine HP product, see <u>HP fraud hotline</u>.

# Print cartridge authentication

The HP Color LaserJet 4600 series printer automatically authenticates the print cartridges when the cartridges are inserted into the printer. During authentication, the printer will let you know if a cartridge is or is not a genuine HP print cartridge.

If the printer control panel message states that this is not a genuine HP print cartridge and you believe you purchased an HP print cartridge, call the HP fraud hotline.

To override a non-HP print cartridge error message, see NON HP CARTRIDGE DETECTED.

#### **HP fraud hotline**

Call the HP fraud hotline (1-877-219-3183, toll-free in North America) when you install an HP print cartridge and the printer message says the cartridge is non-HP. HP will help determine if the product is genuine and take steps to resolve the problem.

Your print cartridge might not be a genuine HP print cartridge if you notice the following:

- You are experiencing a high number of problems with the print cartridge.
- The cartridge does not look like it usually does (for example, the orange pull tab is missing, or the packaging differs from HP packaging.)

# Print cartridge storage

Do not remove the print cartridge from its package until you are ready to use it.

#### CAUTION

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

# Print cartridge life expectancy

The life of the print cartridge depends on usage patterns and the amount of toner that print jobs require. For example, when printing text at 5 percent coverage, an HP print cartridge lasts an average of 8,000 pages. (A typical business letter is about 5 percent coverage.)

At any time, you can verify the life expectancy by checking the toner level, as described below.

# Checking the print cartridge life

You can check the print cartridge life using the printer control panel, the embedded Web server, printer software, or HP Web Jetadmin software.

#### Using the printer control panel

- Press 

  ✓ to enter the MENUS.
- 2. Press ▼ to highlight INFORMATION.
- Press 

  ✓ to select INFORMATION.
- 4. Press to highlight PRINT SUPPLIES STATUS PAGE.
- 5. Press ✓ to print the supplies status page.

#### Using the embedded Web server

- In your browser, enter the IP address for the printer home page. This takes you to the printer status page. See <u>Using the</u> embedded Web server.
- On the left side of the screen click Supplies Status. This takes you to the supplies status page, which provides print cartridge information.

#### **Using printer 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 printer must be directly connected to your computer viaparallel connection. See <u>Parallel configuration</u>.
- 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 from which to purchase supplies. Select the supplies you wish to order and follow the directions accordingly.

### **Using HP Web Jetadmin**

In HP Web Jetadmin, select the printer device. The device status page shows print cartridge information.

# **Changing print cartridges**

When a print cartridge approaches the end of its useful life, the control panel displays a message recommending that you order a replacement. The printer can continue to print using the current print cartridge until the control panel displays a message instructing you to replace the cartridge.

The printer uses four colors and has a different print cartridge for each color: black (K), magenta (M), cyan (C), and yellow (Y).

Replace a print cartridge when the printer control panel displays a REPLACE <COLOR> CARTRIDGE message. The control panel display will also indicate the color that should be replaced (unless a genuine HP cartridge is not currently installed).





- 1 Lift the top cover of the printer.
- 2 Pull down the front cover and transfer unit.

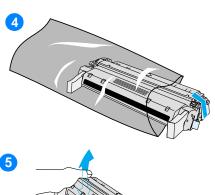
**CAUTION** Do not place any item on the transfer unit while it is open. If the transfer unit is punctured, print quality problems may result.

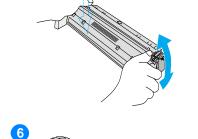


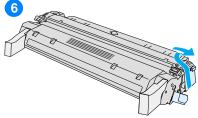


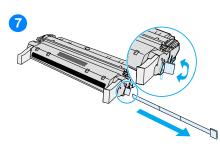
3 Remove the used print cartridge from the printer.

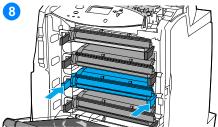












- 4 Remove the new print cartridge from the bag. Place the used print cartridge in the bag for recycling.
- Grasp both sides of the cartridge and distribute the toner by gently rocking the cartridge from side to side.
- 6 Remove the orange shipping lock from the new print cartridge. Discard the lock.
- 7 Remove the inside sealing tape by breaking the orange tab on the end of the new print cartridge and pulling the tape completely out. Discard the tape.
- 8 Align the print cartridge with the tracks inside the printer and insert the cartridge until it is completely seated.

**Note** If a cartridge is in the wrong slot, the control panel will display the message INCORRECT COLOR.

- 9 Close the front cover and then close the top cover. After a short while, the control panel should display
- 10 Installation is complete. Place the used print cartridge in the box in which the new cartridge arrived. See the enclosed recycling guide for recycling instructions.
- 11 If you are using a non-HP print cartridge, check the control panel for further instructions.

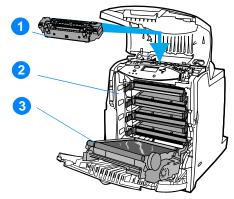
For additional help, go to <a href="http://www.hp.com/support/lj4600">http://www.hp.com/support/lj4600</a>.

# Replacing supplies

# **Locating supplies**

Supplies are identified by their labeling and their blue plastic handles.

The following figure illustrates the location of each supply item.



#### Supply item locations

- fuser
- 2. print cartridges
- 3. transfer unit

# Supply replacement guidelines

To facilitate the replacement of supplies, keep the following guidelines in mind when setting up the printer.

- Sufficient space is required above and in the front of the printer for removing supplies.
- The printer should be located on a flat, sturdy surface.

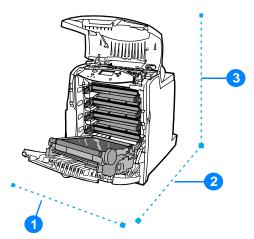
www

For instructions on installing supplies, see the installation guides provided with each supply item or see more information at <a href="http://www.hp.com/support/lj4600">http://www.hp.com/support/lj4600</a>. When you connect, select **Solve a Problem**.

Hewlett-Packard recommends the use of HP products in this printer. Use of non-HP products may cause problems requiring service that is not covered by the Hewlett-Packard warranty or service agreements.

# Making room around the printer for replacing supplies

The following illustration shows the clearance necessary in front of, above, and to the side of the printer for replacing supplies.



#### Supplies replacement clearance diagram

- 1. 530 mm (20.9 inches)
- 2. 1294 mm (50 inches)
- 3. 804 mm (31.7 inches)

# Approximate replacement intervals for supplies

The following table lists the estimated replacement intervals for supplies and the control panel messages that prompt when to replace each item.

Item	Printer message	Page count	Approximate time period <sup>2</sup>
Black cartridges	REPLACE BLACK CARTRIDGE	9,000 pages <sup>1</sup>	3 months
Color cartridges	REPLACE (COLOR) CARTRIDGE	8,000 pages <sup>1</sup>	2.7 months
ImageTransfer kit	REPLACE TRANSFER KIT	120,000 pages <sup>3</sup>	41 months
Image Fuser kit	REPLACE FUSER KIT	150,000 pages <sup>3</sup>	50 months

Approximate average A4-/letter-size page count based on 5 percent coverage of individual colors. Usage conditions and print patterns may cause results to vary.

www

To order supplies online, go to <a href="http://www.hp.com/support/li4600">http://www.hp.com/support/li4600</a>.

<sup>&</sup>lt;sup>2</sup> Approximate life is based on 3,000 pages per month.

<sup>&</sup>lt;sup>3</sup> Usage conditions and print patterns may cause results to vary.

# **Configuring alerts**

You can use HP Web Jetadmin or the printer's embedded Web server to configure the system to alert you of problems with the printer. The alerts take the form of e-mail messages to the e-mail account or accounts that you specify.

You can configure the following:

- the printer(s) you want to monitor
- what alerts are to be received (for example, alerts for paper jams, paper out, supplies status, and cover open)
- the e-mail account to which the alerts should be forwarded

Software	Information location	
HP Web Jetadmin	See <u>HP Web Jetadmin</u> for general information about HP Web Jetadmin.	
	See the HP Web Jetadmin Help system for details on alerts and how to set them up.	
Embedded Web server	See <u>Using the embedded Web server</u> for general information about the embedded Web server.	
	See the embedded Web server Help system for details on alerts and how to set them up.	

## Problemsolving

This chapter describes what to do if problems arise with your printer. The following topics are covered:

- Basic troubleshooting checklist
- Control panel messages
- Paper jams
- Media-handling problems
- Printer response problems
- Printer control panel problems
- Color printing problems
- Incorrect printer output
- Software application problems
- Print quality troubleshooting

## **Basic troubleshooting checklist**

If you are experiencing problems with the printer, this checklist may help identify the cause of the problem.

- Is the printer connected to power?
- Is the printer in the READY state?
- Are all necessary cables connected?
- Are any messages displayed on the control panel?
- Was a genuine HP supply installed?
- Were recently replaced print cartridges installed correctly? Was the pull tab on the cartridge removed?
- Were recently installed supply items (image fuser kit, image transfer kit) installed correctly?
- Is the on/off switch in the on position?

If you cannot find solutions to printer problems in this guide, see <a href="http://www.hp.com/supplies/lj4600">http://www.hp.com/supplies/lj4600</a>.

For additional information on installation and setup of the printer, see the getting started guide for this printer.

## **Control panel messages**

## Status messages

Status messages reflect the current state of the printer. They inform you of normal printer operation and require no interaction to clear them. They change as the state of the printer changes. Whenever the printer is ready, not busy, and has no pending warning messages, the status message READY is displayed if the printer is online.

## Warning messages

Warning messages inform you of data and print errors. These messages typically alternate with the READY or STATUS messages and remain displayed until the  $\checkmark$  button is pressed. If CLEARABLE WARNING is set to JOB in the printer's configuration menu, these messages are cleared by the next print job.

## **Error messages**

Error messages communicate that some action must be performed, such as adding paper or clearing a paper jam.

Some error messages are auto-continuable; if AUTO CONTINUE=ON the printer will continue normal operation after displaying an auto-continuable error message for 10 seconds.

Note

Any button pressed during the 10-second display of an autocontinuable error message will override the auto-continue feature and the function of the button pressed will take precedence. For example, pressing the CANCEL JOB button will cancel the job.

## Critical error messages

Critical error messages inform you of a device failure. Some of these messages can be cleared by turning the printer off and then on. These messages are not affected by the AUTO CONTINUE setting. If a critical error persists, service is required.

The following table lists and describes control panel messages, in alphabetical order.

## **Control panel messages**

Message	Description	Action
Access denied menus locked	An attempt has been made to modify a menu item while the control panel security mechanism is enabled by the printer administrator. The message will disappear shortly, and the printer will return to READY or BUSY state.	Contact the printer administrator to change settings.
Canceling <jobname></jobname>	The printer is in the process of canceling a job. The message will continue to be displayed while the job is stopped, the paper path flushed, and any remaining incoming data on the active data channel is received and discarded.	No action necessary.
Checkin9 paper path	The engine is turning its rollers to check for possible paper jams.	No action necessary.
Checkin9 printer	The engine is doing an internal test.	No action necessary.
CHOSEN PERSONALITY NOT AVAILABLE For help press ?	PJL encountered a request for a personality that did not exist in the printer. The job is aborted and no pages will be printed.	Press ? for detailed information.  Press ▲ and ▼ to step through the instructions.
alternates with		
CHOSEN PERSONALITY NOT AVAILABLE To continue press ✔		
Clearin9 event lo9	This message is displayed while the event log is cleared. The printer will back up one screen to Service Menu upon completion of printing the page.	No action necessary.
Clearin9 paper from printer	The printer jammed or detected misplaced paper when turned on. The printer is attempting to eject jammed pages automatically.	No action necessary.
CLOSE FRONT COVERS For help press <b>?</b>	The covers need to be closed.	Press ? for more information. Close front covers. Note: This message might also appear if the fuser is missing or incorrectly installed. Ensure that the fuser is correctly installed.

Message	Description	Action
CPR SENSOR OUT OF RANGE	The CPR Sensor is not behaving properly.	1. Force a calibration by either selecting Calibrate How from the menus or turn the printer off and then back on. 2. If the message persists, contact HP Support.
DATA RECEIVED To print last page press 🗸	The printer received data and is waiting for a form feed. When the printer receives another file, the message should disappear.	Press ✔ to continue.
Deleting <jobname></jobname>	The printer is currently deleting the stored job.	No action necessary.
DETECTABLE SIZE IN TRAY XX For help press ?	A tray has been loaded with paper that is a standard size and the switch in the tray is set to custom.	<ol> <li>Press ? for detailed information.</li> <li>Press ▲ and ▼ to step through instructions.</li> </ol>
alternates with  DETECTABLE SIZE IN		
TRAY XX Recommend move switch to STANDARD		
DISK DEVICE FAILURE  alternates with	A device failure has occurred on the specified drive.	Printing may continue for jobs that do not require access to the disk drive.
Ready For menus press		To clear the message, turn the printer off and then back on.
		If the message persists, remove and re-install the EIO disk drive.
		If the message persists, replace the EIO disk drive.
DISK FILE OPERATION FAILED	The printer received a PJL file system command that attempted to perform	<ol> <li>Printing may continue.</li> <li>Turn the printer off and</li> </ol>
alternates with	an illogical operation (for example, to download a file to a non-existent directory).	then back on.  3. If the message
Ready For menus press V		reappears, there may be a problem with the software application.

Message	Description	Action
DISK FILE SYSTEM IS FULL  alternates with  Ready For menus press	The printer received a PJL file system command that attempted to store something on the file system but was unsuccessful because the file system is full.	1. Use the HP Web Jetadmin software to delete files from the EIO disk drive and try again. 2. To remove this message from the display, turn the printer
DISK IS WRITE PROTECTED  alternates with	The file system device is protected and no new files can be written to it.	off and then back on.  1. To enable writing to the disk, turn off write protection, using HP Web Jetadmin.  2. To remove this
Ready For menus press		message from the display, turn the printer off and then back on.
Doors open. Test aborted.	A printer door has been opened during a test. The test has been aborted.	No action necessary.
EIO DISK X initializin9	The EIO disk device in slot X is initializing.	No action necessary.
EIO DISK X NOT FUNCTIONAL For help press <b>?</b>	The EIO disk in slot X is not working correctly.	Remove the EIO disk from the slot indicated and replace with a new EIO disk drive.
EIO DISK X spinnin9 up	The EIO disk device in Slot X is spinning up its platter.	No action necessary.
Event log empty	SHOW EVENT LOG was selected from the control panel, and the event log is empty.	No action necessary.
FLASH DEVICE FAILURE  alternates with	A device failure has occurred on the specified drive.	Printing may continue for jobs that do not require the Flash DIMM.
Ready For menus press		To remove this     message from the     display, turn the printer     off and then back on.
		If the message persists, remove and re-install the Flash DIMM.
		If the message persists, replace the Flash DIMM.
Flash disk X initializin9 Do not power off	The new flash DIMM installed in slot X is initializing.	No action necessary.

Message	Description	Action
FLASH FILE OPERATION FAILED alternates with	The printer received a PJL file system command that attempted to perform an illogical operation (for example, to download a file to a non-existent	Printing may continue.     Turn the printer off and then back on.
Ready For menus press	directory).	If the message     reappears, there may     be a problem with the     software application.
FLASH FILE SYSTEM IS FULL alternates with	The printer received a PJL file system command that attempted to store something on the file system but was unsuccessful because the file system	Use HP Web Jetadmin software to delete files from the Flash Memory and try again.
Ready For menus press	is full.	To remove this     message from the     display, turn the printer     off and then back on.
FLASH IS WRITE PROTECTED  alternates with	The file system device is protected and no new files can be written to it.	To enable writing to the Flash Memory, turn off write protection, using HP Web Jetadmin.
Ready For menus press		To remove this     message from the     display, turn the printer     off and then back on.
Genuine HP cartrid9e installed	A new HP cartridge has been installed. The printer returns to the READY state after approximately 10 seconds.	No action necessary.
Genuine HP supplies installed	A new HP cartridge has been installed. The printer returns to the READY state after approximately 10 seconds.	No action necessary.
INCORRECT (COLOR) CARTRIDGE	An incorrect cartridge is installed in a slot and the cover is closed.	<ol> <li>Press ✓ and then press</li> <li>for help.</li> </ol>
alternates with		<ol> <li>Press ▲ and ▼ to step through the instructions.</li> </ol>
Incorrect PIN	The wrong PIN was entered.	Re-enter PIN correctly. After three incorrect PIN entries, the printer will return to READY.

Message	Description	Action
INCORRECT SUPPLIES For status press ✔	At least one supply item is incorrectly positioned in the printer and another supply item is missing, incorrectly placed, out, or low.	<ol> <li>Press ✓ and then press         for help.     </li> <li>Follow the instructions on the display to locate and replace the incorrect supply.</li> <li>Press ▲ and ▼ to step through the instructions.</li> </ol>
Initializin9	This message is displayed when the printer is turned on, as soon as the individual tasks begin initialization.	No action necessary.
Initializin9 permanent stora9e	Displayed when the printer is turned on to show that permanent storage is being initiaized.	No action necessary.
INSERT OR CLOSE TRAY XX For help press ?	Tray XX must be inserted or closed before the current job can be printed.	<ol> <li>Press ? for detailed information.</li> <li>Press ▲ and ▼ to step through instructions.</li> </ol>
INSTALL (COLOR) CARTRIDGE	The cartridge is either not installed or not correctly installed in the printer.	Insert the cartridge or make sure the cartridge is fully seated.
alternates with		<ol><li>Press ? for detailed information.</li></ol>
For help press ?		<ul> <li>3. Press ▲ and ▼ to step through the instructions.</li> <li>4. If the error persists, contact HP Support.</li> </ul>
INSTALL FUSER For help press <b>?</b>	The fuser is either not installed or not correctly installed in the printer.	<ol> <li>Insert the fuser or make sure the installed fuser is fully seated.</li> <li>Press ? for detailed information.</li> <li>Press ▲ and ▼ to step through the instructions.</li> <li>If the error persists, contact HP Support.</li> </ol>
INSTALL SUPPLIES For status press ✔	At least one supply item is missing or is not correctly seated in the printer and another supply item is missing, incorrectly placed, out, or low. Insert the supply item or make sure the installed supply item is fully seated.	<ol> <li>Press ✓ and then press         • for help.</li> <li>Follow the instructions         on the display to locate         and replace the missing         or incorrect supply.</li> <li>Press ▲ and ▼ to step         through the         instructions.</li> </ol>

Message	Description	Action
INSTALL TRANSFER UNIT For help press ?	The transfer unit is either not installed or not correctly installed in the printer.	Insert the transfer unit or make sure the installed transfer unit is fully seated.
		<ol><li>Press ? for detailed information.</li></ol>
		<ol> <li>Press ▲ and ▼ to step through the instructions.</li> </ol>
		If the error persists, contact HP Support.
LOAD TRAY XX: [TYPE]	Tray XX is either empty or configured	<ol> <li>Press ? for detailed information.</li> </ol>
[SIZE] For help press	for a type and size other than specified in the job.	<ul><li>2. Press ▲ and ▼ to step through instructions.</li></ul>
alternates with		a no agri mon conone.
LOAD TRAY XX: [TYPE]		
[SIZE] To use another		
tray press 🗸		
LOAD TRAY XX:[TYPE] [SIZE] For help press	Tray XX is either empty or configured for a type and size other than	<ol> <li>Press ? for detailed information.</li> </ol>
?	specified in the job. No other tray is available.	<ol> <li>Press ▲ and ▼ to step through instructions.</li> </ol>
Loading program XX Do not power off	Programs and fonts can be stored on the printer's file system and are loaded into RAM when the printer is turned on. The number XX specifies a sequence number indicating the current program being loaded.	No action necessary.  Do not turn the printer off.
MANUALLY FEED [TYPE]	A job sent requires a specific paper	<ol> <li>Press ? for detailed information.</li> </ol>
[SIZE] For help	type and size that is not currently available.	2. Press ▲ and ▼ to step
press ?	arandoro.	through instructions.
alternates with		
MANUALLY FEED [TYPE]		
[SIZE] To continue		
press 🗸		

Message	Description	Action
If no paper in tray:  MANUALLY FEED [TYPE]  [SIZE] For help press  ?	A job sent requires a specific paper type and size that is not currently available.	<ol> <li>Press ? for detailed information.</li> <li>Press ▲ and ▼ to step through instructions.</li> </ol>
alternates with  MANUALLY FEED [TYPE]  [SIZE] To use another  tray press ✔		
No job to cancel	The CANCEL JOB button was pressed, but there is no active job or buffered data to cancel. This message is displayed for approximately two seconds before the printer is returned to the READY state.	No action necessary.
MovingMP tray solenoid To exit press Cancel Job key	The printer is executing a Component Test and the component selected is MP Tray Feed Solenoid.	No action necessary.
Movingtray feed solenoid To exit press Cancel Job key	The printer is executing a Component Test and the component selected is Tray Feed Solenoid.	·
NON HP CARTRIDGE DETECTED	A new cartridge has been installed that is not made by HP. This message is displayed until an HP cartridge is installed or CANCEL JOB is pressed.	If you believe you purchased an HP cartridge, please call the HP fraud hotline. Any printer repair required as a result of using non-HP cartridges is not covered under HP warranty. To continue printing, press CANCEL JOB. The first pending job will be cancelled.
NON HP CARTRIDGE IN USE alternates with Ready For menus press	The printer has detected that a non-HP print cartridge is currently installed.	If you believe you purchased an HP cartridge, please call the HP fraud hotline. Any printer repair required as a result of using non-HP cartridges is not covered under HP warranty.

Message	Description	Action
ORDER (COLOR) CARTRIDGE	The identified print cartridge is nearing the end of its useful life and the SUPPLIES LOW setting in the	<ol> <li>Order the identified print cartridge.</li> <li>Press          ✓ to continue.</li> </ol>
alternates with	SYSTEM SETUP SUBMENU is set to STOP. Override by pressing ✓.	<ol><li>Press ? for detailed information.</li></ol>
To continue press 🗸		<ol> <li>Press ▲ and ▼ to step through instructions.</li> </ol>
		Supplies ordering information is also available from the embedded Web server. See <u>Using the embedded Web server</u> for more information.
ORDER (COLOR)	The identified print cartridge is	Order the identified print     out tridge
CARTRIDGE	nearing the end of its useful life.  The printer is ready and will continue	cartridge.
alternates with	for the estimated number of pages indicated.	Estimated pages     remaining is based     upon historical page
XXXX PAGES LEFT		coverage of this printer.  3. Printing will continue until REPLACE ⟨CØLOR⟩ CARTRIDGE is shown.  4. Press ? for detailed information.  5. Press ▲ and ▼ to step through instructions.  6. Supplies ordering information is also available from the embedded Web server. See Using the embedded Web server for more information.
ORDER FUSER KIT XXXX PAGES LEFT To continue press ✔	The fuser is near end of life and the SUPPLIES LOW setting in the SYSTEM SETUP SUBMENU is set to STOP.	<ol> <li>Order the image fuser kit.</li> <li>Press  to continue printing. Printing can continue until supplies out is reached.</li> <li>Supplies ordering information is also available from the embedded Web server. See Using the embedded Web server for more information.</li> </ol>

Message	Description	Action
ORDER FUSER KIT XXXX	The fuser is near end of life.	1. Order the image fuser
PAGES LEFT To enter	The printer is ready and will continue	kit.
menus press 🗸	for the estimated number of pages indicated.	Printing can continue     until supplies out is     reached.
		<ol><li>Press ? for detailed information.</li></ol>
		<ol> <li>Press ▲ and ▼ to step through instructions.</li> </ol>
		5. Supplies ordering information is also available from the embedded Web server. See <u>Using the embedded Web server</u> for more information.
ORDER SUPPLIES For menus press ✔	More than one supply item is low.	<ol> <li>Press          to identify         which supplies should         be ordered.</li> </ol>
		Order the identified supplies.
		Printing can continue until supplies out is reached.
		<ol> <li>Press ? for detailed information.</li> </ol>
		<ol> <li>Press ▲ and ▼ to step through instructions.</li> </ol>
		6. Supplies ordering information is also available from the embedded Web server. See Using the embedded Web server for more information.

Message	Description	Action
ORDER SUPPLIES For status press✔	More than one supply item is low and the SUPPLIES LOW setting is set to STOP.	<ol> <li>Press          to identify         which supplies should         be ordered.</li> </ol>
		Order the identified supplies.
		<ol> <li>Press  twice to continue printing.</li> <li>Printing can continue until supplies out is reached.</li> </ol>
		4. Supplies ordering information is also available from the embedded Web server. See <u>Using the embedded Web server</u> for more information.
ORDER TRANSFER KIT XXXX PAGES LEFT To	The number of pages remaining for	Order the transfer kit.
continue press 🗸	the transfer unit has reached the low threshold and the SUPPLIES LOW setting in the SYSTEM SETUP SUBMENU is set to STOP.	Printing can continue     until transfer unit life is     out.
		<ol><li>Press ? for detailed information.</li></ol>
		<ol> <li>Press ▲ and ▼ to step through instructions.</li> </ol>
		5. Supplies ordering information is also available from the embedded Web server. See Using the embedded Web server for more information.
ORDER TRANSFER KIT XXXX PAGES LEFT To	The transfer unit is near end of life.	Order Transfer Kit.
enter menus press 🗸		Printing can continue     until transfer unit life is     out.
		<ol><li>Press ? for detailed information.</li></ol>
		<ol> <li>Press ▲ and ▼ to step through instructions.</li> </ol>
		5. Supplies ordering information is also available from the embedded Web server. See <u>Using the embedded Web server</u> for more information.

Message	Description	Action
OUTPUT BIN FULL Remove all paper from bin	The output bin is full and must be emptied for printing to continue.	Remove media from the output bin.
Paused To return to ready press RESUME key	The printer is paused, and there are no error messages pending at the display. The I/O continues receiving data until memory is full.	Press Pause/Resume.
Performin9 CALIBRATION	The printer is calibrating.	No action necessary.
Performing PAPER PATH TEST ABCDEFGHIJKLMN 1000000000000000	The printer is performing a Paper Path Test.	No action necessary.
Performing PRINT/STOP TEST	The printer is performing a Print/Stop Test.	No action necessary.
Performing SERVICE TEST	The printer is performing a SERVICE TEST.	No action necessary.
Performin9 up9rade	A firmware upgrade is in process.	No action necessary.
Please wait	The printer is in the process of clearing data.	No action necessary.
Powersave on	The printer is in the power save mode. Any button press, an error condition, or the receipt of printable data may clear this message.	No action necessary.
Printing CONFIGURATION	The printer is generating the configuration page. The printer will return to the online READY state when the page is completed.	No action necessary.
Printing DEMO	The printer is generating the demo page. The printer will return to the online READY state when the page is completed.	No action necessary.
Printing EVENT LOG	The printer is generating the event log page. The printer will return to the online READY state when the page is completed.	No action necessary.
Printing FILE DIRECTORY	The printer is generating the mass storage directory page. The printer will return to the READY state when the page is completed.	No action necessary.
Printing FONT LIST	The printer is generating either the PCL or PS personality typeface list. The printer will return to the READY state when the page is completed.	No action necessary.
Printing MENU MAP	The printer is generating the printer menu map. The printer will return to the READY state when the page is completed.	No action necessary.

Message	Description	Action
Printing PQ TROUBLESHOOTING	The printer is generating the print quality troubleshooting pages. The printer will return to the READY state when the pages are printed.	Follow the instructions on the printed pages.
Printing REGISTRATION PAGE	The printer is generating the registration page. The printer will return to the SET_REGISTRATION menu when the page is completed.	Follow the instructions on the printed pages.
Printing SUPPLIES STATUS	The printer is generating the supplies status page. The printer will return to the online READY state when the page is completed.	No action necessary.
Printing USAGE PAGE	The printer is generating the usage page. The printer will return to the online READY state when the page is completed.	No action necessary.
Processin9 duplex job Do not 9rab paper until job completes	Paper temporarily comes into the output bin while printing a duplex job. Do not attempt to remove the pages until the job is complete.	Do not grab paper as it temporarily comes into the output bin. The message will disappear when the job is finished.
Processing <jobname></jobname>	The printer is currently processing a job but is not yet picking pages. When paper motion begins, this message will be replaced by a message that indicates which tray the job is being printed from.	No action necessary.
Processing <jobname> copy <x> of <y></y></x></jobname>	The printer is currently processing or printing collated copies. The message indicates that copy X of Y total copies is currently being processed.	No action necessary.
Processin9 <jobname> from tray xx</jobname>	The printer is actively processing a job from the designated tray.	No action necessary.
RAM DISK DEVICE FAILURE	A device failure has occurred on the specified drive.	Turn the printer off and then back on.
alternates with		If the message persists, contact HP Support.
Ready For menus press		

Message	Description	Action
RAM DISK FILE	The printer received a PJL file system	Printing may continue.
OPERATION FAILED	command that attempted to perform	2. Turn the printer off and
	an illogical operation (for example, to	then back on.
alternates with	download a file to a non-existent	3. If the message
Ready For menus press	directory).	reappears, there may
✓		be a problem with the software application.
RAM DISK FILE SYSTEM	The printer received a PJL file system	Turn the printer off and
IS FULL	command that attempted to store	then back on to clear the
	something on the file system but was	message.
alternates with	unsuccessful because the file system	This will also delete any
	is full.	files saved in RAM.
Ready For menus press		
<b>/</b>	The Classic day is the control of th	A Talamakia (M. 1907)
RAM DISK IS WRITE PROTECTED	The file system device is protected and no new files can be written to it.	1. To enable writing to the RAM disk, turn off write
rkuleuleu	and no new mes can be written to it.	protection, using HP
alternates with		Web Jetadmin
		software.
Ready For menus press		2. To remove this
<b>✓</b>		message from the display, turn the printer
		off and then back on.
Ready For menus press	The printer is online and ready for	No action necessary.
<b>✓</b>	data. No status or device attendance	•
	messages are pending at the display.	
Ready Diagnostics mode	The printer is online and ready for	No action necessary.
To exit press Cancel	data. No status or device attendance	
Job key	messages are pending at the display.	Decret transition of
Receivin9 up9rade	A firmware upgrade is in progress.	Do not turn the printer off until the printer returns to
		Ready.
REINSTALL (COLOR)	The cartridge is not fully seated.	1. Press ? for detailed
CARTRIDGE		information.
		2. Press ▲ and ▼ to step
alternates with		through instructions.
F !1 <b>2</b>		
For help press ?	The printer is every time a Comment of	Domovo all naint
REMOVE ALL PRINT CARTRIDGES To exit	The printer is executing a Component Test and the component selected is	Remove all print cartridges.
press Cancel Job key	Belt only.	oartiiagos.
REMOVE AT LEAST 1	The printer is executing a Disable	Remove one print
PRINT CARTRIDGE To	Cartridge Check or Component Test	cartridge.
exit press Cancel Job	where the component selected is	
key	Cartridge Motor.	

Message	Description	Action
REPLACE (COLOR) CARTRIDGE	The identified print cartridge has reached the end of life. Printing will not continue until the	Replace the identified supplies to continue printing.
alternates with	cartridge is replaced.	2. Press ? for detailed information.
For help press <b>?</b>		<ul> <li>3. Press ▲ and ▼ to step through instructions.</li> <li>4. Supplies ordering information is also available from the embedded Web server. See Using the embedded Web server for more information.</li> </ul>
REPLACE FUSER KIT	The fuser kit is at end of life.	<ol> <li>Replace the identified supply to continue printing.</li> <li>Press ? for detailed information.</li> <li>Press ▲ and ▼ to step through instructions.</li> <li>Supplies ordering information is also available from the embedded Web server. See Using the embedded Web server for more information.</li> </ol>
REPLACE SUPPLIES For status press 🗸	At least one supply item is out and needs to be replaced and another supply item is either out or low.	<ol> <li>Press ✓ to identify which supplies should be replaced.</li> <li>Replace the identified supply to continue printing.</li> <li>Press ? for detailed information.</li> <li>Press A and ▼ to step through instructions.</li> <li>Supplies ordering information is also available from the embedded Web server. See Using the embedded Web server for more information.</li> </ol>

Message	Description	Action
REPLACE TRANSFER KIT For help press <b>?</b>	The transfer unit is at end of life.	Replace the identified supply to continue printing.
		Press ? for detailed information.
		<ol> <li>Press ▲ and ▼ to step through instructions.</li> </ol>
		4. Supplies ordering information is also available from the embedded Web server. See Using the embedded Web server for more information.
Request accepted Please wait	The printer has accepted a request to print an internal page, but the current job must finish printing before the internal page will print.	No action necessary.
Resend upgrade	The firmware upgrade was not completed successfully.	Attempt upgrade again.
Resetting count	YES is selected in the Reset Supplies menu, to reset the counts for any of the supplies that cannot be detected as new.	No action necessary.
Resettin9 factory settin9s	The printer is restoring factory settings.	No action necessary.
Restorin9 last saved state	The printer is restoring the last saved state.	No action necessary.
Rotating alienation motor To exit press CANCEL JOB	The printer is executing a Component Test and the component selected is Alienation Motor.	Press CANCEL JOB when ready to stop this test.
Rotatin9 belt drive To exit press CANCEL JOB	The printer is executing a Component Test and the component selected is Belt Only.	Press CANCEL JOB when ready to stop this test.
Rotatin9 (color) cartrid9e motor To exit press CANCEL JOB	A component test is in progress; the component selected is the <color> Cartridge motor.</color>	Press CANCEL JOB when ready to stop this test.
Rotatingfuser motor To exit press CANCEL JOB	The printer is executing a Component Test and the component selected is Fuser Motor.	Press CANCEL JOB when ready to stop this test.
Rotating (color) Laser Scanner To exit press CANCEL JOB	A Scanner Test is in progress.	Press CANCEL JOB when ready to stop this test.
Rotating transfer motors To exit press CANCEL JOB	The printer is executing a Component Test and the component selected is Transfer Motors.	Press CANCEL JOB when ready to stop this test.
Savin9 current state	The current state is being saved.	No action necessary.

Message	Description	Action
Settin9 saved	A menu selection has been saved.	No action necessary.
SIZE MISMATCH TRAY XX= <size> For help press <b>?</b></size>	The tray is loaded with media longer or shorter in the feed direction than the size configured for the tray.	Adjust the side and rear media guides against the paper.
alternates with  Ready For menus press ✓		2. If the media used is Letter, A4, Executive, B5 JIS, A5, or Legal sized, the tray switch should be set to STANDARD. Set the tray switch to CUSTOM for all other media sizes. The tray switch must be set before the size can be selected from the control panel.  3. Reset the paper size in the paper handling menu.
Test terminated	A diagnostic test has been	No action necessary.
rest terminated	terminated by pressing the CANCEL JOB button.	TVO action necessary.
TRAY XX CONTAINS UNKNOWN MEDIA	The media type in the specified tray cannot be determined.	<ol> <li>To change media type, press ✓. Use ▲ and ▼ to highlight the type, then press ✓ to select.</li> <li>To change the media size to Letter, A4, Executive, B5 JIS, A5, or Legal, leave the tray switch in the STANDARD position.</li> <li>To change the media size to other sizes, move the tray switch to CUSTOM, adjust the paper guides against the paper, and close the</li> </ol>
		tray.  4. Use ▲ and ▼ to highlight the media size, then press ✔ to select.
TRAY XX EMPTY (TYPE) (SIZE)  alternates with	The specified tray is empty and needs to be filled but the current job does not need this tray to print correctly.	Refill the tray at a convenient time.
Ready For menus press		

Message	Description	Action
TRAY XX OPEN For help press <b>?</b>	The specified tray is open or not closed completely.	Close the tray.
alternates with		
Ready For menus press		
TRAY XX SIZE= (XXXX SIZE> For help press ?	A non-detectable media size was selected from the menu and the tray switch is set to STANDARD.	Adjust the side and rear media guides against the paper.      If the media used is
alternates with  TRAY XX SIZE= <xxxx size=""> To chan9e, move switch in tray XX</xxxx>	The size selected from the menu does not match the size detected by the tray. Size detection occurs when the tray switch is set in the STANDARD position.	Letter, A4, Executive, B5 JIS, A5, or Legal sized, the tray switch should be set to STANDARD. Set the tray switch to CUSTOM for all other media sizes. The tray switch must be set before the size can be selected from the control panel.  3. Reset the paper size in the paper handling menu.
TRAY XX (TYPE) (SIZE) Size detected by tray  alternates with  TRAY XX (TYPE) (SIZE) To change type press	The printer is reporting the current configuration of tray XX. The tray switch is in the STANDARD position.	<ol> <li>To change media type, press ✓. Use ▲ and ▼ to highlight the type, then press ✓ to select.</li> <li>To change the media size to Letter, A4, Executive, B5 JIS, A5, or Legal, leave the tray switch in the</li> </ol>
		STANDARD position.  3. To change the media size to other sizes, move the tray switch to CUSTOM, adjust the paper guides against the paper, and close the tray.  4. Use ▲ and ▼ to highlight the media size, then press ✔ to select.

Message	Description	Action
TRAY XX (TYPE) (SIZE) Size specified by user alternates with	The printer is reporting the current configuration of tray XX. The tray switch is in the CUSTOM position.	<ol> <li>To change media type, press ✓. Use ▲ and ▼ to highlight the type, then press ✓ to select.</li> </ol>
TRAY XX (TYPE) (SIZE) To chan9e type press ✔		2. To change the media size to Letter, A4, Executive, B5 JIS, A5, or Legal, set the tray switch to the STANDARD position and adjust the media guides to the correct positions.
		3. To change the media size to other sizes, leave the tray switch in the CUSTOM position, adjust the media guides against the media, and close the tray.
		4. Select the paper handling menu from the control panel. Configure the size for the tray.
		5. See Configuring input trays for more details.
Unable to mory job <jobname></jobname>	A Mopy job cannot be mopied because of a memory, disk, or configuration problem. Only one copy will be produced.	No action necessary.
Unable to store job <jobname></jobname>	A job cannot be stored because of a memory, disk, or configuration problem.	Install additional memory in the printer, or install a disk drive into the printer. If a disk drive is installed, delete previously stored print jobs.
USE INSTEAD? TRAY 2: [TYPE] [SIZE] TRAY 3: [TYPE]	The printer is offering a selection of alternate media to use for the print job.	Highlight the media with ▲ and ▼. Press ✔ to select a choice.
Validatin9 supplies For menus press ✔	A new cartridge has been installed and the printer is determining whether it is an HP or non-HP	No action necessary.
alternates with	cartridge.	
Ready For menus press		

Message	Description	Action
Wait for printer to reinitialize	RAM Disk settings have been changed before the printer automatically restarts, or external device modes have changed.	No action necessary.
Warmin9 up	The printer is coming out of powersave mode. Printing will continue as soon as warmup is completed.	No action necessary.
10.XX.YY SUPPLIES ERROR For help press ?	The printer cannot read or write to at least one print cartridge memory tag or at least one memory tag is missing.	<ol> <li>Turn the printer off and then back on.</li> <li>If the error persists, contact HP Support.</li> <li>Press ? for more information.</li> </ol>
13.XX.YY JAM IN TOP COVER AREA For help press <b>?</b>	There is a jam in the top cover area.	<ol> <li>Press ? for detailed information about clearing the jam.</li> <li>Press ▲ and ▼ to step through the instructions.</li> <li>If the message persists after clearing all pages, contact HP Support.</li> </ol>
13.XX.YY JAM IN PAPER PATH For help press <b>?</b>	There is a jam in the media path.	<ol> <li>Press ? for detailed information about clearing the jam.</li> <li>Press ▲ and ▼ to step through the instructions.</li> <li>If the message persists after clearing all pages, contact HP Support.</li> </ol>
13.XX.YY.DUPLEX JOB INTERRUPTED For help press ?  alternates with  13.XX.YY.DUPLEX JOB INTERRUPTED Discard top sheet and press ✔  or  13.XX.YY.DUPLEX JOB INTERRUPTED Discard top two sheets and press ✔	A duplex job was interrupted by interference as media passed through the output bin during duplexing.	<ol> <li>Press ? for more information.</li> <li>Remove one or two pages from the output bin as directed by the display.</li> <li>Press ✔ to continue printing.</li> <li>NOTE: If JAM RECOVERY = OFF some pages will not be reprinted. Re-send the missing pages.</li> </ol>

Message	Description	Action
13.XX.YY.JAM IN DUPLEX PATH For help press <b>?</b>	There is a jam in the duplex path.	Press ? for detailed information about clearing the jam.
		2. Press ▲ and ▼ to step through the instructions.
		If the message persists after clearing all pages, contact HP Support.
13.XX.YY.JAM IN PAPER INPUT PATH For help press ?	There is a jam in the media input path.	Press ? for detailed information about clearing the jam.
		2. Press ▲ and ▼ to step through the instructions.
		If the message persists after clearing all pages, contact HP Support.
13.XX.YY.JAM IN TRAY 1 For help press ?	A page is jammed in the multi- purpose tray.	Press ? for detailed information about clearing the jam.
		<ol> <li>Press ▲ and ▼ to step through the instructions.</li> </ol>
		3. If the message persists after clearing all pages, contact HP Support.
13.XX.YY.JAM IN TRAY 2 For help press ?	A page is jammed in Tray 2.	Press ? for detailed information about clearing the jam.
		<ol> <li>Press ▲ and ▼ to step through the instructions.</li> </ol>
		If the message persists after clearing all pages, contact HP Support.
13.XX.YY.JAM IN TRAY 3 For help press ?	A page is jammed in Tray 3.	Press ? for detailed information about clearing the jam.
		<ol> <li>Press ▲ and ▼ to step through the instructions.</li> </ol>
		If the message persists after clearing all pages, contact HP Support.

Message	Description	Action
20 INSUFFICIENT MEMORY For help press ?	The printer has received more data from the computer than fits in available memory.	<ol> <li>Press          ✓ to resume printing.</li> <li>NOTE: A loss of data will</li> </ol>
alternates with		occur.
20 INSUFFICIENT MEMORY To continue press ✔		Reduce the complexity     of the print job to avoid     this error.
		Adding memory to the printer may allow printing of more complex pages.
22 EIO X BUFFER	The printer's EIO card in slot X has overflowed its I/O buffer during a busy	<ol> <li>Press          ✓ to resume printing.</li> </ol>
OVERFLOW To continue press 🗸	state.	NOTE: A loss of data will occur.
		If the message persists, contact HP Support.
22 PARALLEL I/O BUFFER OUERFLOW For help	The printer's parallel buffer has overflowed during a busy state.	<ol> <li>Press    to resume printing.</li> </ol>
press ?	overnewed daring a bady date.	NOTE: A loss of data will occur.
alternates with		If the message persists, contact HP Support.
22 PARALLEL I∕O BUFFER OVERFLOW To continue press ✔		
22 SERIAL I/O BUFFER OVERFLOW To continue	The printer's serial buffer has overflowed during a busy state.	<ol> <li>Press    to resume printing.</li> </ol>
press 🗸		NOTE: A loss of data will occur.
		If the message persists, contact HP Support.
40 BAD SERIAL TRANSMISSION To	A serial data error (parity, framing, or line overrun) has occurred while the	<ol> <li>Press    to resume printing.</li> </ol>
continue press 🗸	printer was receiving data.	NOTE: A loss of data will occur.
		If the message persists, contact HP Support.
40 EIO X BAD TRANSMISSION To	A connection with the card in EIO slot X has been abnormally broken.	<ol> <li>Press    to resume printing.</li> </ol>
continue press 🗸	soon asnormany broken.	NOTE: A loss of data will
		occur.  2. If the message persists, contact HP Support.

Message	Description	Action
41.3 UNEXPECTED SIZE IN TRAY XX For help press ?  alternates with  LOAD TRAY XX: [TYPE] [SIZE] For help press	Media is loaded which is longer or shorter in the feed direction than the size configured for the tray.	<ol> <li>If the incorrect size was selected, cancel the job or press ? to access help.</li> <li>Press ▲ and ▼ to step through the instructions.</li> </ol>
?		
41.5 UNEXPECTED TYPE IN TRAY XX For help press ?	The printer senses a different media type in the media path than configured in the tray.	<ol> <li>If the incorrect type was selected, cancel the job or press ? to access help.</li> </ol>
alternates with  LOAD TRAY XX: [TYPE]  [SIZE] For help press  ?		<ol> <li>Press ▲ and ▼ to step through the instructions.</li> </ol>
41.X PRINTER ERROR For help press ?	A printer error has occurred.	<ol> <li>Press          ✓ to continue or press ? for more information.</li> </ol>
alternates with  41.X PRINTER ERROR To		If the message persists, turn the printer off and then back on.
continue press 🗸		If the message still persists, contact HP Support.
49.XXXX PRINTER ERROR To continue turn off	A critical firmware error has occurred.	Turn the printer off and then back on.
then on		If the message persists, contact HP Support.
50.X FUSER ERROR For help press ?	A fuser error has occurred.	Turn the printer off and then back on.
		If the message persists, contact HP Support.
51.X PRINTER ERROR For help press <b>?</b>	A printer error has occurred.	<ol> <li>Press  to continue.</li> <li>Turn the printer off and then back on.</li> </ol>
alternates with		3. If the problem persists, contact HP Support.
51.X PRINTER ERROR To continue turn off then on		

Message	Description	Action
52.X PRINTER ERROR For	A printer error has occurred.	<ol> <li>Press    ✓ to continue.</li> </ol>
help press ?		Turn the printer off and then back on.
alternates with		3. If the problem persists, contact HP Support.
52.X PRINTER ERROR To		
continue turn off then		
on 53.X0.ZZ PRINTER ERROR	An error has occurred in the onboard	Press       to continue.
To continue turn off	RAM.	2. Turn the printer off and
then on		then back on.
		If the problem persists, contact HP Support.
53.XY.ZZ PRINTER ERROR	An error occurred on some memory of	
To continue press CANCEL JOB	the printer.	If the problem persists,
CHMUEL JUD	Values of X, Y, and ZZ are:	contact HP.
	X DIMM Type	
	1 RAM	
	Y Device Location	
	1 DIMM Slot 1	
	2 DIMM Slot 2	
	3 DIMM Slot 3	
	4 DIMM Slot 4	
	ZZ Error Number	
	0 Unsupported memory	
	1 Unrecognized memory	
	2 Unsupported memory size	
	3 Failed RAM test	
	4 Exceeded maximum RAM size	
	5 Invalid DIMM speed	
55.X PRINTER ERROR For	A printer command error has	1. Press 🗸 to continue.
help press ?	occurred.	Turn the printer off and then back on.
alternates with		If the problem persists, contact HP Support.
55.X PRINTER ERROR To		
continue press 🗸		
57.X PRINTER ERROR To continue turn off then	A printer fan error has occurred.	Turn the printer off and then back on.
on		2. If the problem persists,
		contact HP Support.

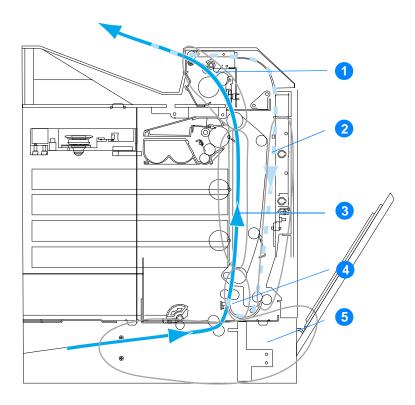
Message	Description	Action
58.X PRINTER ERROR For help press ?	A memory tag error was detected.	Turn the printer off and then back on.
alternates with		If the problem persists, contact HP Support.
58.X PRINTER ERROR To continue turn off then		
on		
59.X PRINTER ERROR For help press <b>?</b>	A printer motor error has occurred.	Turn the printer off and then back on.
alternates with		If the problem persists, contact HP Support.
59.X PRINTER ERROR To continue turn off then on		Note: This message might also appear if the transfer unit is missing or incorrectly installed. Ensure that the transfer unit is correctly installed.
62 NO SYSTEM To continue turn off then	No system was found.	Turn the printer off and then back on.
on		If the problem persists, contact HP Support.
64 PRINTER ERROR For help press <b>?</b>	Scan buffer error.	Turn the printer off and then back on.
alternates with		If the problem persists, contact HP Support.
64 PRINTER ERROR To continue turn off then on		
68.X PERMANENT STORAGE ERROR For help press ?	One or more printer settings saved in the non-volatile storage device is invalid and has been reset to its	<ol> <li>Press ✓ to continue.</li> <li>Turn the printer off and then back on.</li> </ol>
alternates with	factory default. Pressing the	3. If the problem persists, contact HP Support.
68.X PERMANENT STORAGE ERROR To continue press ✔	unexpected behavior.	
::'		

Message	Description	Action
68.X PERMANENT STORAGE FULL For help press ? alternates with	A non-volatile storage device is full. Pressing the ✓ button should clear the message. Printing can continue, but there may be unexpected behavior.	<ol> <li>Press          ✓ to continue.</li> <li>For 68.0 errors, turn the printer off and then back on.</li> </ol>
68.X PERMANENT STORAGE	<ul><li>X Description</li><li>0 for onboard NVRAM</li></ul>	3. If a <b>68.0</b> error persists, contact HP Support.
FULL To continue press ✔	1 for removable disk (flash or hard)	4. For <b>68.1</b> errors, use the HP Web Jetadmin software to delete files from the disk drive.
		5. For <b>68.1</b> errors that persist, contact HP Support.
68.X PERMANENT STORAGE WRITE FAIL To continue Press ✔	A non-volatile storage device is failing to write. Pressing the button should clear the message. Printing can continue, but there may be unexpected behavior.	<ol> <li>Press          to continue.</li> <li>Turn the printer off and then back on.</li> <li>If the problem persists, contact HP Support.</li> </ol>
	X Description	
	0 for onboard NVRAM	
	1 for removable disk (flash or hard)	
79.XXXX PRINTER ERROR To continue turn off	A critical hardware error has occurred.	Turn the printer off and then back on.
then on		If the problem persists, contact HP Support.
8X.YYYY EIO ERROR	The EIO accessory card in slot X has encountered a critical error.	Turn the printer off and then back on.
		If the problem persists, contact HP Support.

## Paper jams

Use this illustration to troubleshoot paper jams in the printer. For instructions on clearing paper jams, see <u>Clearing jams</u>.

#### Paper jam locations



(shown without optional Tray 3)

- 1. top cover area
- 2. duplex path
- 3. paper path
- 4. input path
- 5. trays

### Paper jam recovery

This printer automatically provides paper jam recovery, a feature that allows you to set whether the printer should attempt to automatically reprint jammed pages. The options are:

- AUTO Printer will attempt to reprint jammed pages.
- OFF Printer will not attempt to reprint jammed pages.

#### Note

During the recovery process, the printer may reprint several good pages that were printed before the paper jam occurred. Be sure to remove any duplicated pages.

#### To disable paper jam recovery

- Press ✓ to select SYSTEM SETUR.

- 8. Press ▼ to highlight OFF.
- 9. Press ✓ to select OFF.
- 10. Press the PAUSE/RESUME button to return to the READY state.

To improve print speed and increase memory resources, you may want to disable paper jam recovery. If paper jam recovery is disabled, the pages involved in a jam will not be reprinted.

## Common causes of paper jams

The following table lists common causes of paper jams and suggested solutions for resolving them.

Cause	Solution
Print media does not meet HP- recommended media specifications.	Use only media that meets HP specifications. See <u>Supported media</u> <u>weights and sizes</u> .
A supply item is installed incorrectly, causing repeated jams.	Verify that all print cartridges, the transfer unit, and the fuser are correctly installed.
You are reloading paper that has already passed through a printer or copier.	Do not use media that has been previously printed on or copied.
An input tray is loaded incorrectly.	Remove any excess media from the input tray. Press media down in the input tray so it fits below the tabs, and within the media width guides. See Configuring input trays.
Print media is skewed.	Input tray guides are not adjusted correctly. Adjust input tray guides so they hold media firmly in place without bending it. If media heavier than 105 g/m² (28 lb) is loaded into Tray 2 or Tray 3, the media might skew.
Print media is binding or sticking together.	Remove media, flex it, rotate it 180 degrees, or flip it over. Reload media into the input tray. Do not fan media.
Print media is removed before it settles into the output bin.	Reset the printer. Wait until the page completely settles in the output bin before removing it.
When duplexing, the print media is removed before the second side of the document is printed.	Reset the printer and print the document again. Wait until the page completely settles in the output bin before removing it.
Print media is in poor condition.	Replace the print media.
Print media is not picked up by the internal rollers from Tray 2 or Tray 3.	Remove the top sheet of media. If the media is heavier than 105 g/m² (28 lb), it may not be picked from the tray.
Print media has rough or jagged edges.	Replace the media.
Print media is perforated or embossed.	This media does not separate easily. You might need to feed single sheets from Tray 1.

Cause	Solution
Printer supply items have reached the end of their useful life.	Check the printer control panel for messages prompting you to replace supplies, or print a supplies status page to verify the remaining life of the supplies. See Replacing supplies for more information.
Media was not stored correctly.	Replace the print media. Media should be stored in the original packaging in a controlled environment.

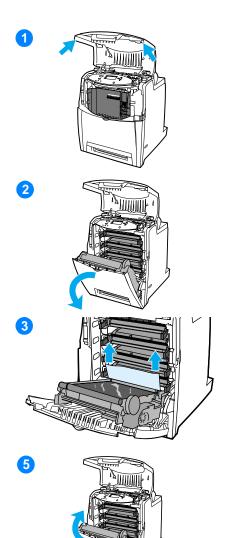
#### Note

If the printer still continues to jam, contact HP Customer Support or your authorized HP service provider. For more information, see <a href="http://www.hp.com/support/lj4600">http://www.hp.com/support/lj4600</a>.

## Clearing jams

Each section below corresponds with a jam message that might appear on the control panel. Use these procedures to clear the jam.

## Jam in Tray 1, Tray 2, or Tray 3



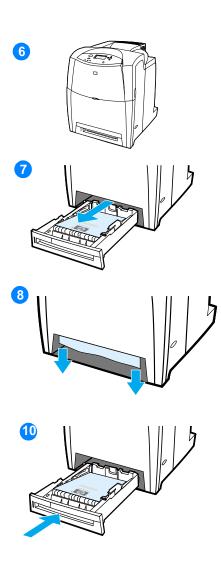
- 1 Using the side handles, open the top cover.
- 2 Grasp the green handle on the transfer unit and pull down. The front cover will open as the transfer unit is pulled down.

**CAUTION** Do not place anything on the transfer unit while it is open. If the transfer unit is punctured, print quality problems may result.

- **3** Grasp the media by both corners and pull up.
- 4 Inspect the paper path to ensure that it is clear.

**Note** If the media tears, make sure that all media fragments are removed from the paper path before resuming printing.

5 Close the transfer unit and front cover.



6 Close the top cover.

**Note** It is a good idea to inspect the input trays when clearing jams. However, opening and closing input trays has no effect on clearing jam messages.

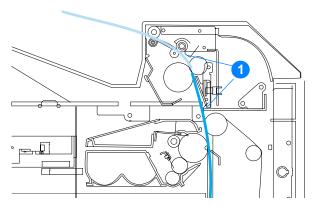
- 7 Pull out the tray and place it on a flat surface.
- 8 Remove any partially fed media. Grasp the media by both corners and pull down.
- 9 Inspect the media path to ensure that it is clear.

**Note** If the media tears, make sure that all media fragments are removed from the paper path before resuming printing.

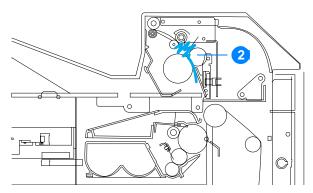
10 Check to make sure the media is located correctly and underneath the front corner tabs. Insert the tray into the printer. Make sure all trays are completely closed.

## Jams in the top cover

Jams in the top cover occur in of the areas indicated in the figures below. Use the procedures in this section to clear a jam in this area.



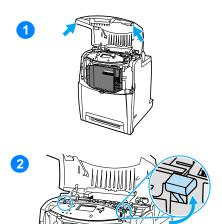
#### 1. Jammed paper

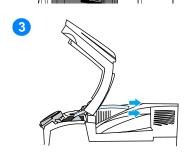


#### 2. Crumpled paper in the fuser

#### **WARNING!**

Do not touch the fuser. It is hot and could cause burns! The fuser's operating temperature is 190°C (374° F). Wait 10 minutes to allow the fuser to cool before touching the fuser.









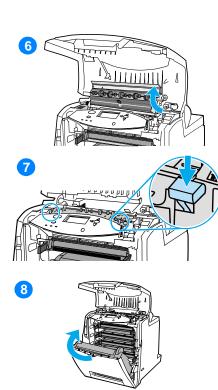
- 1 Using the side handles, open the top cover.
- 2 Firmly lift the two green handles on either side of the fuser to disengage the fuser rollers.
- **3** Grasp the media by both corners and pull to remove it.

**Note** If the media tears, make sure that all media fragments are removed from the paper path before resuming printing. Do not reach into the fuser until it has cooled.

4 Grasp the green handle on the transfer unit and pull down. The front cover will open as the transfer unit is pulled down.

**CAUTION** Do not place anything on the transfer unit while it is open. If the transfer unit is punctured, print quality problems may result.

Grasp the media by both corners and pull down. If the media appears to be crumpled in the fuser, go to step six.



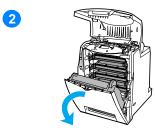
6 Open the fuser cover and remove any media that is crumpled in the fuser.

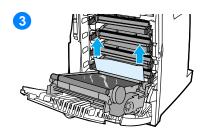
**Note** If the media tears, make sure that all media fragments are removed from the paper path before resuming printing. Do not reach into the fuser until it has cooled.

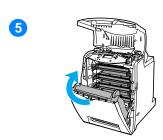
- 7 Firmly press down on the two green handles on either side of the fuser to re-engage the fuser rollers.
- 8 Close the transfer unit and front cover.
- **9** Close the top cover.

## Jam in paper input path or paper path











- 1 Using the side handles, open the top cover.
- 2 Grasp the green handle on the transfer unit and pull down. The front cover will open as the transfer unit is pulled down.

**CAUTION** Do not place anything on the transfer unit while it is open. If the transfer unit is punctured, print quality problems may result.

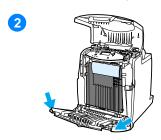
- 3 Grasp the media by both corners and pull up.
- 4 Inspect the media path to ensure that it is clear.

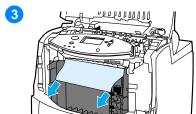
**Note** If the media tears, make sure that all media fragments are removed from the paper path before resuming printing.

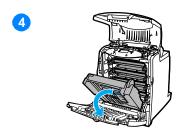
- 5 Close the transfer unit and front cover.
- 6 Close the top cover.

## Jam in duplex path





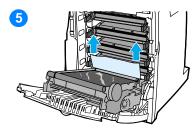




- 1 Using the side handles, open the top cover.
- 2 Open the front cover.
- **3** Grasp the paper by both corners and pull down.

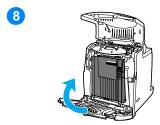
**Note** If the media tears, make sure that all media fragments are removed from the paper path before resuming printing.

4 Grasp the green handle on the transfer unit and pull down.











- **5** Grasp the paper by both corners and pull up.
- 6 If the media cannot be accessed from this location, close the transfer unit.
- **7** Grasp the media by both corners and pull.
- 8 Close the front cover.
- 9 Close the top cover.

## **Media-handling problems**

Use only media that meets the specifications outlined in the *HP LaserJet Printer Family Paper Specification Guide*. For ordering information, see <u>Supplies and accessories</u>.

For media specifications for this printer, see <u>Supported media weights</u> and <u>sizes</u>.

#### Printer feeds multiple sheets

Cause	Solution
The input tray is overfilled.	Remove excess media from the input tray.
The media is not under the tabs in the input tray (Trays 2 and 3).	Open the input tray and verify that the media is seated under the metal tabs.
Print media is sticking together.	Remove media, flex it, rotate it 180 degrees or flip it over, and then reload it into the tray.  Note: Do not fan media. Fanning can cause static electricity, which can cause media to stick together.
Media does not meet the specifications for this printer.	Use only media that meets HP media specifications for this printer. See Supported media weights and sizes.

#### Printer feeds incorrect page size

Cause	Solution
The correct size media is not loaded in the input tray.	Load the correct size media in the input tray.
The correct size media is not selected in the software application or printer driver.	Confirm that the settings in the application and printer driver are appropriate, since the application settings override the printer driver and control panel settings, and the printer driver settings override the control panel settings.
The correct size media for Tray 1 is not selected in the printer control panel.	From the control panel, select the correct size media for Tray 1.
The media size is not configured correctly for the input tray.	Print a configuration page or use the control panel to determine the media size for which the tray is configured.
The guides in the tray are not against the paper.	Verify that the guides are touching the paper.

### Printer feeds incorrect page size

The custom/standard switch in the tray is	Verify that the switch is in the correct position
not in the correct position.	for the media size.

#### Printer pulls from incorrect tray

Cause	Solution
You are using a driver for a different printer.	Use a driver for this printer.
The specified tray is empty.	Load media in the specified tray.
Tray behavior for the requested tray is set to FIRST in the system setup submenu of the configure device menu.	Change the setting to EXCLUSIVELY.
The media size is not configured correctly for the input tray.	Print a configuration page or use the control panel to determine the media size for which the tray is configured.
The guides in the tray are not against the paper.	Verify that the guides are touching the paper.
The custom/standard switch in the tray is not in the correct position.	Verify that the switch is in the correct position for the media size.

## Media does not feed automatically

Cause	Solution
Manual feed is selected in the software application.	Load Tray 1 with media, or, if the media is loaded, press ✔.
The correct size media is not loaded.	Load the correct size media.
The input tray is empty.	Load media into the input tray.
Media from a previous jam has not been completely removed.	Open the printer and remove any media in the paper path. Closely inspect the fuser area for jams. See <a href="Paper jams">Paper jams</a> .
The media size is not configured correctly for the input tray.	Print a confirmation page or use the control panel to determine the media size for which the tray is configured.
The guides in the tray are not against the paper.	Verify that the guides are touching the paper.
The custom/standard switch in the tray is not in the correct position.	Verify that the switch is in the correct position for the media size.

### Media does not feed from input Trays 2 or 3

Cause	Solution
Manual feed is selected in the software application.	Load Tray 1 with media, or, if the media is loaded, press ✔.
The correct size media is not loaded.	Load the correct size media.
The input tray is empty.	Load media in the input tray.
The correct media type for the input tray is not selected in the printer control panel.	From the printer control panel, select the correct media type for the input tray.
Media from a previous jam has not been completely removed.	Open the printer and remove any media in the paper path. Closely inspect the fuser area for jams. See <a href="Paper jams">Paper jams</a> .
Tray 3 (500-sheet paper feeder) does not appear as an input tray option.	Tray 3 only displays as an option if it is installed. Verify that Tray 3 is correctly installed. Verify that the printer driver has been configured to recognize Tray 3.
Tray 3 is incorrectly installed.	Print a configuration page to confirm that Tray 3 is installed. If not, verify that the optional installed 500 sheet feeder assembly is correctly attached to the printer.
The media size is not configured correctly for the input tray.	Print a configuration page or use the control panel to determine the media size for which the tray is configured.
The guides in the tray are not against the paper.	Verify that the guides are touching the paper.
The custom/standard switch in the tray is not in the correct position.	Verify that the switch is in the correct position for the media size.

### Transparencies or glossy paper will not feed

Cause	Solution
The correct media type is not specified in the software or printer driver.	Verify that the correct media type is selected in the software or printer driver.
The input tray is overfilled.	Remove excess media from the input tray. Do not load more than 200 sheets of glossy paper or glossy film or more than 100 transparencies in Tray 2 or Tray 3. Do not exceed the maximum stack height for Tray 1.

### Transparencies or glossy paper will not feed

Media in another input tray is the same size as the transparencies, and the printer is defaulting to the other tray.	Make sure that the input tray containing the transparencies or glossy paper is selected in the software application or printer driver. Use the printer control panel to configure the tray to the media type loaded.
The tray containing the transparencies or glossy paper is not configured correctly for type.	Make sure that the input tray containing the transparencies or glossy paper is selected in the software application or printer driver. Use the printer control panel to configure the tray to the media type loaded. See Configuring input trays.

#### Envelopes jam or will not feed in the printer

Cause	Solution
Envelopes are loaded in an unsupported tray. Only Tray 1 can feed envelopes.	Load envelopes into Tray 1.
Envelopes are curled or damaged.	Try using different envelopes. Store envelopes in a controlled environment.
Envelopes are sealing because the moisture content is too high.	Try using different envelopes. Store envelopes in a controlled environment.
Envelope orientation is incorrect.	Verify that the envelope is loaded correctly. See Configuring input trays.
This printer does not support the envelopes being used.	See <u>Supported media weights and sizes</u> or the HP LaserJet Printer Family Paper Specification Guide.
Tray 1 is configured for a size other than envelopes.	Configure Tray 1 size for envelopes.

### Output is curled or wrinkled

Cause	Solution
Media does not meet the specifications for this printer.	Use only media that meets the HP media specifications for this printer. See <u>Supported</u> media weights and sizes.
Media is damaged or in poor condition.	Remove media from the input tray and load media that is in good condition.
Printer is operating in an excessively humid environment.	Verify that the printing environment is within humidity specifications. See <a href="Printer">Printer</a> <a href="mailto:specifications">specifications</a> .

## Output is curled or wrinkled

You are printing large, solid-filled areas.	Large, solid-filled areas can cause excessive curl. Try using a different pattern.
Media used was not stored correctly and may have absorbed moisture.	Remove media and replace it with media from a fresh, unopened package.
Media has poorly cut edges.	Remove media, flex it, rotate it 180 degrees or turn it over, and then reload it into the input tray. Do not fan media. If the problem persists, replace the media.
The specific media type was not configured for the tray or selected in the software.	Configure the software for the media (see the software documentation). Configure the tray for the media, see Configuring input trays.

## Printer will not duplex or duplexes incorrectly

Cause	Solution
You are trying to duplex on unsupported media.	Verify that the media is supported for duplex printing. See <u>Supported media weights and sizes</u> .
The printer driver is not set up for duplex printing.	Set up the printer driver to enable duplex printing.
The first page is printing on the back of preprinted forms or letterhead.	Load preprinted forms and letterhead in Tray 1 with the letterhead or printed side up and the bottom of the page feeding into the printer.  For Tray 2 or Tray 3, load these media printed side down with the top of the page toward the back of the printer.

## **Printer response problems**

### No display message

Cause	Solution
The printer's on/off button is in the standby position.	Verify that the printer is on. Fans may run while the printer is in standby mode (off).
The printer's memory DIMMs are defective or installed incorrectly.	Verify that the printer's memory DIMMs are correctly installed and are not defective.
The power cord is not firmly plugged into both the printer and the power receptacle.	Turn off the printer and then disconnect and reconnect the power cord. Turn the printer back on.
The line voltage is incorrect for the printer power configuration.	Connect the printer to a proper voltage source, as specified on the Power Rating Label on the back of the printer.
The power cord is damaged or excessively worn.	Replace the power cord.
The power source receptacle is not working correctly.	Connect the printer to a different power receptacle.

## Printer is on, but nothing prints

Cause	Solution
The printer's Ready indicator light is not lit.	Press Pause/Resume to return the printer to the READY state.
The top cover is not closed properly.	Close the top cover firmly.
The Data indicator light is flashing.	The printer is probably still receiving data. Wait for the Data indicator to stop flashing.
REPLACE <color> CARTRIDGE appears on the printer display.</color>	Replace the print cartridge specified on the printer display.
A printer message other than READY appears on the printer control panel.	See Control panel messages.
The parallel port may have a DOS timeout error.	Add a MODE command to the AUTOEXEC.BAT file. See the DOS manual for additional information.
The PS (PostScript Emulation) personality is not selected.	Select PS or AUTO for the printer language; see Changing printer control panel configuration settings.

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### Printer is on, but nothing prints

The correct driver is not selected in the software application or printer driver.	Select the driver for PostScript Emulation for this printer in the software application or printer driver.
	printer driver.
The printer is not properly configured.	See Changing printer control panel configuration settings.
The computer port is not configured or is not working properly.	Run another peripheral connected to this port to verify that the port is working properly.
The printer has not been correctly named for the network or for a Macintosh computer.	Use the appropriate utility to name the printer on the network. For Macintosh computers, name the printer from within the Chooser menu.

## Printer is on but is not receiving data

Cause	Solution
The printer's Ready indicator light is not lit.	Press Pause/Resume to return the printer to the READY state.
The top cover is not closed properly.	Close the top cover firmly.
A printer message other than READY appears on the printer control panel.	See Control panel messages.
The interface cable is not correct for this configuration.	Select the correct interface cable for your configuration. See <u>Parallel configuration</u> or <u>Enhanced I/O (EIO) configuration</u> .
The interface cable is not securely connected to both the printer and the computer.	Disconnect and reconnect the interface cable.
The printer is not configured correctly.	See Changing printer control panel configuration settings for configuration information.
The interface configurations on the printer's configuration page do not match the configurations on the host computer.	Configure the printer to match the computer configuration.
The computer is not working properly.	Try using an application that you know works properly to check computer, or, in DOS, type Dir>Prn at the DOS prompt.
The computer port that the printer is connected to is not configured or is not working properly.	Run another peripheral connected to this port to verify that the port is working properly.
The printer has not been correctly named for the network or Macintosh computer.	Use the appropriate utility to name the printer on the network. For Macintosh computers, name the printer from within the Chooser menu.

### Unable to select the printer from the computer

Cause	Solution
If you are using a switch box, the printer may not be selected for the computer.	Select the correct printer through the switch box.
The printer's Ready indicator light is not lit.	Press Pause/Resume to return the printer to the READY state.
A printer message other than READY appears on the printer control panel.	See Control panel messages.
The correct printer driver is not installed in the computer.	Install the correct printer driver.
The correct printer and port are not selected on the computer.	Select the correct printer and port.
The network is not configured properly for this printer.	Use the network software to verify the printer's network configuration, or consult with the network administrator.
The power source receptacle is not working correctly.	Connect the printer to a different power receptacle.

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## **Printer control panel problems**

### Control panel settings work incorrectly

Cause	Solution
The printer control panel display is blank or is not lit, even when the fan is running.	Fans may run while the printer is in standby mode (off). Press the printer's on/off button to turn the printer on.
Printer settings in the printing software application or printer driver differ from the printer control panel settings.	Confirm that the settings in the application and printer driver are appropriate, since the application settings override the printer driver and control panel settings, and the printer driver settings override the control panel settings.
Control panel settings were not correctly saved after they were changed.	Reselect the control panel settings and then press ✔. An asterisk (*) should appear to the right of the setting.
The Data indicator light is lit, and there are no pages printing.	Buffered data exists in the printer. Press  to print the buffered data using current control panel settings and activate the new control panel settings.
If the printer is on a network, another user may have changed printer control panel settings.	Consult the network administrator to coordinate changes to printer control panel settings.

#### **Unable to select Tray 3 (optional 500-sheet paper feeder)**

Cause	Solution
Tray 3 (500-sheet paper feeder) does not appear as an input tray option on the configuration page or on the control panel.	Tray 3 only displays as an option if it is installed. Verify correct installation of Tray 3.
Tray 3 does not appear as an option in the printer driver.	Verify that the printer driver configuration recognizes Tray 3.

# **Color printing problems**

### Printing black instead of color

Cause	Solution
<b>Color</b> mode is not selected in the software application or printer driver.	Select <b>color</b> mode instead of grayscale or monochrome mode in the software application or printer driver, see Printer information pages to learn how to print a configuration page.
The correct printer driver is not selected in your software application.	Select the correct printer driver.
No color appears on the configuration page.	Consult your service representative.

#### Incorrect shade

Cause	Solution
The sealing tape has not been removed from the print cartridge.	Remove the sealing tape from the print cartridge for the color that is missing. See Changing print cartridges.
The media does not meet the specifications this printer.	s for See the HP LaserJet Printer Family Paper Specification Guide.
	Go to <a href="http://www.hp.com/support/lj4600">http://www.hp.com/support/lj4600</a> for HP LaserJet Family Paper Specification Guide ordering information. When you connect, select <b>Manuals</b> .
You are operating the printer in excessively humid conditions.	<ul> <li>Verify that the printer's environment is within humidity specifications. See <u>Operating</u> environment specifications.</li> </ul>
Note For more information a troubleshooting.	about color quality problems see Print quality

#### Missing color

Cause	Solution
Defective HP print cartridge	Replace the cartridge.
A non-HP cartridge might be installed.	Ensure that you are using a genuine HP print cartridge.

### Inconsistent colors after installing a print cartridge

Cause	Solution
The sealing tape has not been removed from the print cartridge.	Remove the sealing tape from the print cartridge for the color that is missing. See Changing print cartridges.
Another print cartridge may be low.	Check the supplies gauge on the control panel or print a supplies status page. See Printer information pages.
Print cartridges may be improperly installed.	Verify that each print cartridge is installed properly.

#### Printed colors do not match screen colors

Cause		Solution
Extremely light s printed.	creen colors are not being	The software application may interpret extremely light colors as white. If so, avoid using extremely light colors.
Extremely dark s in black.	creen colors are being printed	The software application may interpret extremely dark colors as black. If so, avoid using extremely dark colors.
The colors on the the printer output	e computer screen differ from t.	In the printer driver's <b>color control</b> tab, select <b>Screen Match</b> .
Note	Several factors can influence your ability to match printed colors to those on your screen. These factors include print media, overhead lighting, software applications, operating system palettes, monitors and video cards and drivers.	

## **Incorrect printer output**

#### Incorrect fonts are printed

Cause	Solution
The font has not been correctly selected in the software application.	Re-select the font in the software application.
The font is not available to the printer.	Download the font to the printer or use another font. (In Windows, the driver does this automatically.)
The correct printer driver is not selected.	Select the correct printer driver.

#### Unable to print all characters in a symbol set

Cause	Solution
The correct font is not selected.	Select the correct font.
The correct symbol set is not selected.	Select the correct symbol set.
The selected character or symbol is not supported by the software application.	Use a font that supports the selected character or symbol.

#### **Drifting text between printouts**

Cause	Solution
Your software application is not resetting the printer to the top of the page.	See the documentation for the software or the PCL/PJL Technical Reference Package for specific information.

#### Erratic, missing characters or interrupted printout

Cause	Solution
The interface cable is of poor quality.	Try using a different, higher-quality, IEEE- compliant cable. Parallel cables can be no longer than 10 meters (30 feet).
The interface cable is loose.	Disconnect and reconnect the interface cable.
The interface cable is damaged or bad.	Try using a different interface cable.
The power cable is loose.	Disconnect and reconnect the power cable.
You are attempting to print a PCL job with the printer configured for PostScript Emulation.	From the printer control panel, select the correct printer personality and then resend the print job.

#### Erratic, missing characters or interrupted printout

You are attempting to print a PostScript job with the printer configured for PCL.	From the printer control panel, select the correct printer personality and then resend the print job.
---	---

#### **Partial printout**

Cause	Solution
A memory error message appears on the printer control panel.	Free up printer memory by deleting unneeded downloaded fonts, style sheets, and macros from printer memory; or     Add more memory to the printer.
The file you are printing contain errors.	Check the software application verify that the file does not contain errors. To do so:  1) Print another file that you know is error-free from within the same application; or  2) Print the file from another application.

## **Guidelines for printing with different fonts**

- The 80 internal fonts are available in PostScript Emulation (PS) and PCL mode.
- To conserve printer memory, download only those fonts that are needed.
- If you require several downloaded fonts, consider installing additional printer memory.

Some software applications automatically download fonts at the beginning of each print job. It might be possible to configure those applications to download only soft fonts that are not already resident in the printer.

## **Software application problems**

#### Unable to change system selections through software

Cause	Solution
System software changes are locked out by the printer control panel.	Consult with your network administrator.
The software application does not support system changes.	See the software application documentation.
The correct printer driver is not loaded.	Load the correct printer driver.
The correct application driver is not loaded.	Load the correct application driver.

#### Unable to select a font from the software

Cause	Solution
The font is not available to the software application.	See the software application documentation.

#### Unable to select colors from the software

Cause	Solution
The software application does not support color.	See the documentation for the software application.
<b>Color</b> mode is not selected in the software application or printer driver.	Select <b>color</b> mode instead of grayscale or monochrome mode.
The correct printer driver is not loaded.	Load the correct printer driver.

#### Printer driver does not recognize Tray 3 or the duplex printing accessory

Cause	Solution
The printer driver has not been configured to recognize Tray 3 or the duplex printing accessory.	See the printer driver's online Help for instructions on how to configure the driver to recognize printer accessories.
The accessory may not be installed.	Verify that the accessory is properly installed.

## **Print quality troubleshooting**

#### Print quality problems associated with media

Some print quality problems arise from use of inappropriate media.

- Use paper that meets HP paper specifications. See <u>Supported</u> media weights and sizes.
- The surface of the media is too smooth.
  - Use media that meets HP paper specifications. See <u>Supported</u> media weights and sizes.
  - The driver setting is set incorrectly. Change the paper type setting to heavy or glossy.
- The media you are using is too heavy for the printer, and the toner is not fusing to the media.
- The transparencies you are using are not designed for proper toner adhesion. Use only transparencies designed for HP Color LaserJet printers.
- The moisture content of the paper is uneven, too high, or too low.
   Use paper from a different source or from an unopened ream of paper.
- Some areas of the paper reject toner. Use paper from a different source or from an unopened ream of paper.
- The letterhead you are using is printed on rough paper. Use a smoother, xerographic paper. If this solves your problem, consult with the printer of your letterhead to verify that the paper used meets the specifications for this printer. See <u>Supported media</u> weights and sizes.
- The paper is excessively rough. Use a smoother, xerographic paper.

#### Overhead transparency defects

Overhead transparencies may display any of the image quality problems that any other type of media will cause, as well as defects specific to printing transparencies. In addition, because transparencies are pliable while in the print path, they are subject to being marked by the media-handling components.

#### Note

Allow transparencies to cool at least 30 seconds before handling them.

- In the printer driver's Paper tab, select Transparency as the media type. Also, make sure that the tray is correctly configured for transparencies.
- Check that the transparencies meet the specifications for this printer. See <u>Supported media weights and sizes</u>. For more information, consult the *HP LaserJet Family Paper specification* Guide.

#### www

See <a href="http://www.hp.com/support/lj4600">http://www.hp.com/support/lj4600</a> for HP LaserJet Family Paper Specification Guide ordering information.

For downloadable manuals, go to <a href="http://www.hp.com/support/lj4600">http://www.hp.com/support/lj4600</a>. When you connect, select **Manuals**.

- Handle transparencies by the edges. Skin oil on the surface of transparencies can cause spots and smudges.
- Small, random dark areas on the trailing edge of solid fill pages may be caused by transparencies sticking together in the output bin. Try printing the job in smaller batches.
- The selected colors are undesirable when printed. Select different colors in the software application or printer driver.
- If you are using a reflective overhead projector, use a standard overhead projector instead.

# Print quality problems associated with the environment

The printer is operating in excessively humid or dry conditions.
 Verify that the printing environment is within specifications. See
 Operating environment specifications.

#### Print quality problems associated with jams

- Make sure that all media is cleared from the paper path; see Paper jam recovery.
- The printer recently jammed. Print two to three pages to clean the printer.
- The media does not pass through the fuser causing image defects to appear on subsequent documents. Print two to three pages to clean the printer. However, if the problem persists see the next section.

## Print quality troubleshooting pages

Use the built-in print quality troubleshooting pages to help diagnose and solve print quality problems.

- 1. Press ✓ to enter the MENUS.
- 3. Press ✓ to select DIAGNOSTICS.
- 4. Press ▼ to highlight PQ TROUBLESHOOTING.
- 5. Press ✓ to print the pages.

The printer returns to the READY state after printing the print quality troubleshooting pages.



# Service and support

## **Hewlett-Packard limited warranty statement**

HP PRODUCT HP Color LaserJet 4600, 4600dn, 4600dtn, and 4600hdn printer DURATION OF LIMITED WARRANTY One-year limited warranty

- HP warrants to you, the end-user customer, that HP hardware and accessories
  will be free from defects in materials and workmanship after the date of purchase,
  for the period specified above. If HP receives notice of such defects during the
  warranty period, HP will, at its option, either repair or replace products which
  prove to be defective. Replacement products may be either new or equivalent in
  performance to new.
- HP warrants to you that HP software will not fail to execute its programming
  instructions after the date of purchase, for the period specified above, due to
  defects in material and workmanship when properly installed and used. If HP
  receives notice of such defects during the warranty period, HP will replace
  software which does not execute its programming instructions due to such
  defects.
- 3. HP does not warrant that the operation of HP products will be uninterrupted or error free. If HP is unable, within a reasonable time, to repair or replace any product to a condition as warranted, you will be entitled to a refund of the purchase price upon prompt return of the product.
- 4. HP products may contain remanufactured parts equivalent to new in performance or may have been subject to incidental use.
- 5. Warranty does not apply to defects resulting from (a) improper or inadequate maintenance or calibration, (b) software, interfacing, parts or supplies not supplied by HP, (c) unauthorized modification or misuse, (d) operation outside of the published environmental specifications for the product, or (e) improper site preparation or maintenance.
- 6. TO THE EXTENT ALLOWED BY LOCAL LAW, THE ABOVE WARRANTIES ARE EXCLUSIVE AND NO OTHER WARRANTY OR CONDITION. WHETHER

WRITTEN OR ORAL, IS EXPRESSED OR IMPLIED AND HP SPECIFICALLY DISCLAIMS ANY IMPLIED WARRANTIES OR CONDITIONS OF MERCHANTABILITY, SATISFACTORY QUALITY, AND FITNESS FOR A PARTICULAR PURPOSE. Some countries, states or provinces do not allow limitations on the duration of an implied warranty, so the above limitation or exclusion might not apply to you. This warranty gives you specific legal rights and you might also have other rights that vary from country to country, state to state, or province to province.

- 7. HP's limited warranty is valid in any country or locality where HP has a support presence for this product and where HP has marketed this product. The level of warranty service you receive may vary according to local standards. HP will not alter form, fit or function of the product to make it operate in a country for which it was never intended to function for legal or regulatory reasons.
- 8. TO THE EXTENT ALLOWED BY LOCAL LAW, THE REMEDIES IN THIS WARRANTY STATEMENT ARE YOUR SOLE AND EXCLUSIVE REMEDIES. EXCEPT AS INDICATED ABOVE, IN NO EVENT WILL HP OR ITS SUPPLIERS BE LIABLE FOR LOSS OF DATA OR FOR DIRECT, SPECIAL, INCIDENTAL, CONSEQUENTIAL (INCLUDING LOST PROFIT OR DATA), OR OTHER DAMAGE, WHETHER BASED IN CONTRACT, TORT, OR OTHERWISE. Some countries, states or provinces do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.
- 9. THE WARRANTY TERMS CONTAINED IN THIS STATEMENT, EXCEPT TO THE EXTENT LAWFULLY PERMITTED, DO NOT EXCLUDE, RESTRICT OR MODIFY AND ARE IN ADDITION TO THE MANDATORY STATUTORY RIGHTS APPLICABLE TO THE SALE OF THIS PRODUCT TO YOU.

## Limited warranty for print cartridge life

This HP product is warranted to be free from defects in materials and workmanship during its useful life (end of life is indicated by a printer control panel low-life message).

This warranty does not cover products that have been modified, refurbished, remanufactured, misused, or tampered with in any way.

This limited warranty gives you specific legal rights. You may have other rights which vary from state to state, province to province, and country to country.

THE ABOVE WARRANTIES ARE EXCLUSIVE AND NO OTHER WARRANTY, WHETHER WRITTEN OR ORAL, IS EXPRESSED OR IMPLIED. THE HEWLETT-PACKARD COMPANY SPECIFICALLY DISCLAIMS THE IMPLIED WARRANTIES OR MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. TO THE EXTENT ALLOWED BY APPLICABLE LAW, IN NO EVENT SHALL HEWLETT-PACKARD COMPANY BE LIABLE FOR ANY INCIDENTAL, CONSEQUENTIAL, SPECIAL, INDIRECT, PUNITIVE, OR EXEMPLARY DAMAGES OR LOST PROFITS FROM ANY BREACH OF THIS WARRANTY OR OTHERWISE.

In the event that your product proves to be defective, please return to place of purchase with a written description of the problem.

## Transfer unit and fuser warranty

This HP product is warranted to be free from defects in materials and workmanship for one year or until the printer control panel indicates a low-life message, whichever occurs first.

This warranty does not cover products that have been modified, refurbished, remanufactured, misused, or tampered with in any way.

This limited warranty gives you specific legal rights. You may have other rights which vary from state to state, province to province, and country to country.

THE ABOVE WARRANTIES ARE EXCLUSIVE AND NO OTHER WARRANTY, WHETHER WRITTEN OR ORAL, IS EXPRESSED OR IMPLIED. THE HEWLETT-PACKARD COMPANY SPECIFICALLY DISCLAIMS THE IMPLIED WARRANTIES OR MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. TO THE EXTENT ALLOWED BY APPLICABLE LAW, IN NO EVENT SHALL HEWLETT-PACKARD COMPANY BE LIABLE FOR ANY INCIDENTAL, CONSEQUENTIAL, SPECIAL, INDIRECT, PUNITIVE, OR EXEMPLARY DAMAGES OR LOST PROFITS FROM ANY BREACH OF THIS WARRANTY OR OTHERWISE.

In the event that your product proves to be defective, please return to place of purchase with a written description of the problem.

## **HP** maintenance agreements

HP has several types of maintenance agreements that meet a wide range of support needs. Maintenance agreements are not part of the standard warranty. Support services may vary by area. Check with your local HP dealer to determine the services available to you.

## On-site service agreements

To provide you with the level of support best suited to your needs, HP has on-site service agreements with three response times:

#### Priority on-site service

This agreement provides 4-hour service response to your site for calls made during normal HP business hours.

#### Next-day on-site service

This agreement provides support by the next working day following a service request. Extended coverage hours and extended travel beyond HP's designated service zones are available on most on-site agreements (for additional charges).

#### Weekly (volume) on-site service

This agreement provides scheduled weekly on-site visits for organizations with many HP products. This agreement is designated for sites using 25 or more workstation products, including printers, plotters, computers, and disk drives.

# В

# Specifications and regulatory information

## **Printer specifications**

## **Physical dimensions**

Dimensions	HP LaserJet 4600	HP LaserJet 4600 with optional Tray 3
Height	566 mm (22.30 inches)	654 mm (25.77 inches)
Width	456 mm (17.97 inches)	456 mm (17.97 inches)
Depth	480 mm (18.91 inches)	480 mm (18.91 inches)
Weight (with supplies)	Approximately 36.3 kg (80.03 lb)	Approximately 43.8 kg (96.56 lb)

### **Electrical specifications**

#### **WARNING!**

Power requirements are based on the country/region where the printer is sold. Do not convert operating voltages. This may damage the printer and void the product warranty.

Electrical specifications	110-Volt models	220-Volt models
Power requirements	100 to127 V (-10%, +6%) 50/60 Hz (+/- 2 Hz)	220 to 240 V (-10%, +6%) 50/60 Hz (+/- 2 Hz)
Minimum recommended circuit capacity for typical product	6 Amps	3 Amps

Electrical specifications	110-Volt models	220-Volt models
Average power consumption (Watts) LaserJet 4600 Printing Standby PowerSave Off	437 W 33 W 32 W 0 W	415 W 37 W 34 W 0 W

#### Note

These values are subject to change. See <a href="http://www.hp.com/support/lj4600">http://www.hp.com/support/lj4600</a> for current information.

PowerSave default activation time is 30 minutes.

## **Operating environment specifications**

Temperature Recommended Allowed	17 to 25° C (62.6 to 77° F) 10 to 30° C (50 to 86° F)
Humidity Recommended Allowed	30 to 70% RH 10 to 80% RH
Altitude Allowed	0 to 2600 m (0 to 8530 ft)

## **Acoustic emissions**

Sound power level	Per ISO 9296
Printing (17 ppm)	L <sub>WAd</sub> =6.5 bels or less (A) [ 65 dB (A)]
PowerSave	L <sub>WAd</sub> =5.0 bels or less (A) [ 50 dB (A)]
Bystander (1 m) Printing PowerSave	Per ISO 9296 L <sub>pAm</sub> =51 dB(A) L <sub>pAm</sub> =34 dB(A)

#### Note

These values are subject to change. See <a href="http://www.hp.com/support/lj4600">http://www.hp.com/support/lj4600</a> for current information.

## **FCC** regulations

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy. If this equipment is not installed and used in accordance with the instructions, it may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- reorient or relocate the receiving antenna.
- increase separation between equipment and receiver.
- connect equipment to an outlet on a circuit different from that to which the receiver is located.
- consult your dealer or an experienced radio/TV technician.

#### Note

Any changes or modifications to the printer that are not expressly approved by HP could void the user's authority to operate this equipment.

Use of a shielded interface cable is required to comply with the Class B limits of Part 15 of FCC rules.

## **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 the environment.

#### Ozone production

This product generates no appreciable ozone gas (O<sub>3</sub>).

#### **Energy consumption**

Energy usage drops significantly while in PowerSave mode, which saves natural resources and saves money without affecting the high performance of this printer. 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 that

this product meets ENERGY STAR® Guidelines for energy efficiency. For more information, see <a href="http://www.energystar.gov/">http://www.energystar.gov/</a>.

#### Paper use

This product's optional automatic duplex feature (two-sided printing) can reduce paper usage and the resulting demands on natural resources.

#### **Plastics**

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

## **HP LaserJet Printing Supplies**

In many countries/regions, this product's printing supplies (print cartridges, fuser, and transfer unit) 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 print cartridge and supplies 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 might have been discarded in the world's landfills. The HP LaserJet printer cartridges and consumables are collected and bulk-shipped to our resource and recovery partners, who disassemble the cartridges. 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.

- U.S. 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, pre-paid, and pre-addressed 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 <a href="http://www.hp.com/go/recycle">http://www.hp.com/go/recycle</a>.
- Non-U.S. recycling returns—Non-U.S. customers should call the local HP Sales and Service Office or visit the <a href="http://www.hp.com/go/recycle">http://www.hp.com/go/recycle</a> website for further information regarding availability of the HP Supplies Returns and Recycling Program.

#### Recycled paper

This product is capable of using recycled papers when the paper meets the guidelines outlined in the Print Media Guide. This product is suitable for the use of recycled paper according to DIN 19309.

#### Material restrictions

This product does not contain batteries.

This product does not contain added mercury.

This product contains lead in solder.

For recycling information, contact <a href="http://www.hp.com/go/recycle">http://www.hp.com/go/recycle</a>, contact your local authorities, or go to the Electronics Industries Alliance website <a href="http://www.eiae.org">http://www.eiae.org</a>.

#### **Material Safety Data Sheet (MSDS)**

Material Safety Data Sheets (MSDS) can be obtained by contacting the HP LaserJet Supplies website at <a href="http://www.hp.com/go/msds">http://www.hp.com/go/msds</a>.

#### **Extended warranty**

HP SupportPack provides coverage for the HP hardware product and all HP-supplied internal components. The hardware maintenance covers a 1 to 5 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, contact the HP Customer Care Service and Support group.

#### Spare parts and supplies availability

Spare parts and supplies for this product will be available for at least five years after production has stopped.

#### For more information

On HP's environmental programs, including:

- Product environmental profile sheet for this and many related HP products
- HP's commitment to the environment.
- HP's environmental management system
- HP's end-of-life product return and recycling program
- Material Safety Data Sheets

See <a href="http://www.hp.com/go/environment">http://www.hp.com/go/environment</a> or

http://www.hp.com/hpinfo/community/environment/.

### **Declaration of Conformity**

according to ISO/IEC Guide 22 and EN 45014

Manufacturer's Name: Hewlett-Packard Company
11311 Chinden Boulevard
Boise, Idaho 83714-1021 USA

declares that the product

Product Name: HP Color LaserJet 4600/4600n/4600dn/4600dtn/4600hdn

Printer

Including 500-sheet paper feeder

**Model Number:** C9660A / C9692A / C9661A / C9662A / C9663A Printer

C9664A 500-sheet paper feeder

Product Options: ALL

#### conforms to the following Product Specifications:

Safety: IEC 950:1991+A1+A2+A3+A4 / EN 60950:1992+A1+A2+A3+A4+A11

IEC 825-1:1993 +A1 / EN 60825-1:1994 +A11 Class 1 Laser/LED Product)

EMC: CISPR 22:1997 / EN 55022:1998 Class B1

EN 61000-3-2:1995 EN 61000-3-3:1995 EN 55024: 1998

FCC Title 47 CFR, Part 15 Class B2

/ ICES-002, Issue 2 AS / NZS 3548:1995

#### **Supplementary Information:**

The product herewith complies with the requirements of the EMC Directive 89/336/EEC and the Low Voltage Directive 73/23/EEC, and carries the CE-Marking accordingly:

#### Hewlett-Packard Company Boise, Idaho USA April 1, 2002

#### For regulatory topics only:

Australia Contact: Product Regulations Manager, Hewlett-Packard Australia Ltd., 31-41 Joseph Street, Blackburn, Victoria 3130, Australia

European Contact: Your Local Hewlett-Packard Sales and Service Office or Hewlett-Packard Gmbh, Department HQ-TRE / Standards Europe, Herrenberger Straße110-140, D-71034 Böblingen (FAX: +49-7031-14-3143)

USA Contact: Product Regulations Manager, Hewlett-Packard Company, PO Box 15, Mail Stop 160, Boise, ID 83707-0015 (Phone: 208-396-6000)

<sup>&</sup>lt;sup>1</sup> The product was tested in a typical configuration with Hewlett-Packard Personal Computer Systems.

<sup>2</sup> This Device complies with Part 15 of the FCC Rules. Operation is subject to the following two Conditions:

<sup>(1)</sup> this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

<sup>&</sup>lt;sup>3</sup> The model number may include an additional suffix letter "R".

<sup>&</sup>lt;sup>4</sup> Product exhibits Class A operation when connected to Local Area Network (LAN) cables using print server accessories.

## **Safety statements**

## Laser safety

The Center for Devices and Radiological Health (CDRH) of the U.S. Food and Drug Administration has implemented regulations for laser products manufactured since August 1, 1976. Compliance is mandatory for products marketed in the United States. The printer is certified as a "Class 1" laser product under the U.S. Department of Health and Human Services (DHHS) Radiation Performance Standard according to the Radiation Control for Health and Safety Act of 1968. Since radiation emitted inside the printer is completely confined within protective housings and external covers, the laser beam cannot escape during any phase of normal user operation.

#### WARNING!

Using controls, making adjustments, or performing procedures other than those specified in this user guide may result in exposure to hazardous radiation.

## **Canadian DOC regulations**

Complies with Canadian EMC Class B requirements.

« Conforme á la classe B des normes canadiennes de compatibilité électromagnétiques. « CEM ». »

## **EMI statement (Korea)**

사용자 안내문 (B급 기기)

이 기기는 비업무용으로 전자파장해검정을 받은 기기로서, 주거지역에서는 물론 모든 지역에서 사용할 수 있습니다.

# **VCCI statement (Japan)**

この装置は、情報処理装置等電波障害自主規制協議会(VCCI)の基準に基づくクラスB情報技術装置です。この装置は、家庭環境で使用することを目的としていますが、この装置がラジオやテレビジョン受信機に近接して使用されると、受信障害を引き起こすことがあります。
取り扱い説明書に従って正しい取り扱いをして下さい。

#### Laser Statement for Finland

#### Luokan 1 laserlaite

#### Klass 1 Laser Apparat

HP Color LaserJet 4600, 4600n, 4600dn, 4600dtn, 4600hdn laserkirjoitin on käyttäjän kannalta turvallinen luokan 1 laserlaite. Normaalissa käytössä kirjoittimen suojakotelointi estää lasersäteen pääsyn laitteen ulkopuolelle. Laitteen turvallisuusluokka on määritetty standardin EN 60825-1 (1994) mukaisesti.

#### **VAROITUS!**

Laitteen käyttäminen muulla kuin käyttöohjeessa mainitulla tavalla saattaa altistaa käyttäjän turvallisuusluokan 1 ylittävälle näkymättömälle lasersäteilylle.

#### VARNING!

Om apparaten används på annat sätt än i bruksanvisning specificerats, kan användaren utsättas för osynlig laserstrålning, som överskrider gränsen för laserklass 1.

#### HUOLTO

HP Color LaserJet 4600, 4600n, 4600dn, 4600dtn, 4600hdn - kirjoittimen sisällä ei ole käyttäjän huollettavissa olevia kohteita. Laitteen saa avata ja huoltaa ainoastaan sen huoltamiseen koulutettu henkilö. Tällaiseksi huoltotoimenpiteeksi ei katsota väriainekasetin vaihtamista, paperiradan puhdistusta tai muita käyttäjän käsikirjassa lueteltuja, käyttäjän tehtäväksi tarkoitettuja ylläpitotoimia, jotka voidaan suorittaa ilman erikoistyökaluja.

#### VARO!

Mikäli kirjoittimen suojakotelo avataan, olet alttiina näkymättömällelasersäteilylle laitteen ollessa toiminnassa. Älä katso säteeseen.

#### **VARNING!**

Om laserprinterns skyddshölje öppnas då apparaten är i funktion, utsättas användaren för osynlig laserstrålning. Betrakta ej strålen. Tiedot laitteessa käytettävän laserdiodin säteilyominaisuuksista: Aallonpituus 775-795 nm Teho 5 m W Luokan 3B laser

# Print media specifications

# Supported media weights and sizes

For optimum results, use conventional 75 g/m  $^2$  (20 lb) photocopy paper. Verify that the paper is of good quality and is free of cuts, nicks, tears, spots, loose particles, dust, wrinkles, curls, or bent edges.

Tray	Media type and size	Media weight	Capacity
Tray 1	Paper/Cardstock Standard: Letter/A4	60 g/m <sup>2</sup> to 163 g/m <sup>2</sup> (16 lb to 44 lb)	100 sheets of 75 g/m <sup>2</sup> (20 lb) paper
	Legal Executive JIS B5 A5		Maximum stack height: 10 mm (0.6 inches)
	Custom:		
	Minimum size:		
	76 by 127 mm		
	(3 by 5 inches)		
	Maximum size: 216 by 356 mm (8.5 by 14 inches)		

Tray	Media type and size	Media weight	Capacity
Tray 1, continued	Glossy paper Standard: Letter/A4 Legal Executive JIS B5 A5	75 g/m <sup>2</sup> to 120 g/m <sup>2</sup> (20 lb to 32 lb)	Maximum stack height: 10 mm (0.6 inches)
	Custom: Minimum size: 76 by 127 mm (3 by 5 inches)  Maximum size: 216 by 356 mm (8.5 by 14 inches)		
	Transparencies Letter A4	Thickness: 0.13 mm (5 mil.)	Maximum stack height: 10 mm (0.6 inches)
Tray 1	Glossy Film Standard: Letter/A4 Legal Executive JIS B5 A5	Thickness: 0.13 mm (5 mil.)	Maximum stack height: 10 mm (0.6 inches)
	Custom: Minimum size: 76 by 127 mm (3 by 5 inches)		
	Maximum size: 216 by 356 mm (8.5 by 14 inches)		
	Envelope Com 10 Monarch C5 DL B5	Max: 105 g/m <sup>2</sup> (28 lb)	20 envelopes

Tray	Media type and size	Media weight	Capacity
Tray 1, continued	Label Standard: Letter/A4 Legal Executive JIS B5 A5  Custom: Minimum size: 76 by 127 mm (3 by 5 inches)	Media Weight	Maximum stack height: 10 mm (0.6 inches)
	Maximum size: 216 by 356 mm (8.5 by 14 inches)		

Tray	Media type and size	Media weight	Capacity
Tray 2 and optional Tray 3	Paper Standard: Letter/A4	60 g/m <sup>2</sup> to 105 g/m <sup>2</sup> (16 lb to 28 lb)	500 sheets of 75 g/m <sup>2</sup> (20 lb) paper
	Legal Executive JIS B5 A5		Maximum stack height: 50 mm (2 inches)
	Custom: Minimum size: 148 by 210 mm (7.16 by 8.17 inches)		
	Maximum size: 216 by 356 mm (8.5 by 14 inches)		
	Glossy Paper Standard: Letter/A4 Legal Executive JIS B5 A5	75g/m <sup>2</sup> to 120 g/m <sup>2</sup> (20 lb to 32 lb)	Limit of 200 sheets
	Custom: Minimum size: 182 by 210 mm (7.16 by 8.17 inches)		
	Maximum size: 216 by 356 mm (8.5 by 14 inches)		

Tray	Media type and size	Media weight	Capacity
Tray 2 and optional Tray 3	Label Standard: Letter/A4 Legal Executive JIS B5 A5		Maximum stack height: 50 mm (2 inches)
	Custom: Minimum size: 182 by 210 mm (7.16 by 8.17 inches)		
	Maximum size: 216 by 356 mm (8.5 by 14 inches)		
	Transparencies Letter A4	Thickness: 0.13 mm (5 mil.)	Limit of 100 sheets
	Glossy Film Standard: Letter/A4 Legal Executive JIS B5 A5	Thickness: 0.13 mm (5 mil.)	Limit of 100 sheets
	Custom: Minimum size: 182 by 210 mm (7.16 by 8.17 inches)		
	Maximum size: 216 mm by 356 mm (8.5 by 14 inches)		
Duplex printing	Paper, Glossy Paper Standard: A4/Letter Legal Executive JIS B5	75 g/m <sup>2</sup> to 105 g/m <sup>2</sup> (20 lb to 28 lb)	
	Custom paper sizes are not supported for 2-sided printing.		

<sup>\*</sup>Trays 2 and 3 use "Custom" size specifically for B5 ISO. Trays 2 and 3 do not support the range of custom sizes available in Tray 1.

# D

# Working with memory and print server cards

# **Printer memory**

The printer has five dual in-line memory module (DIMM) slots.

#### Note

For maximum flexibility in DIMM support, the formatter is designed with four 168-pin DIMM slots and a fifth 100-pin DIMM slot. Due to technical limitations, only four DIMMs can be loaded at a time, so the fifth DIMM slot (100-pin) is logically the same as the fourth DIMM slot (168-pin). The system can only have a DIMM installed on the fourth DIMM slot (168-pin) provided that no DIMM is installed in the fifth DIMM slot (100-pin) and vice versa.

Use these DIMM slots to upgrade the printer with:

- more printer memory DIMMs are available in 64, 128, and 256 MB
- flash memory DIMMs available in 4 MB; unlike standard printer memory, flash DIMMs can be used to permanently store downloaded items in the printer, even when the printer is off
- DIMM-based accessory fonts, macros, and patterns
- other DIMM-based printer languages and printer options

You may want to add more memory to the printer if you often print complex graphics or PS documents, or use many downloaded fonts. Additional memory also allows the printer to print multiple, collated copies at the maximum speed.

Note	Single in-line memory modules (SIMMs) used on previous HP LaserJet printers are not compatible with the printer.

To order DIMMs, see Supplies and accessories.

Before ordering additional memory, see how much is currently installed by printing a configuration page.

### Printing a configuration page

1. Press ✓ to enter the MENUS.

Note

- 3. Press ✓ to select INFORMATION.
- 4. Press ▼ to highlight PRINT CONFIGURATION.
- 5. Press ✓ to print the configuration page.

# **Installing memory and font DIMMs**

You can install more memory for the printer, and you can also install a font DIMM to allow the printer to print characters for languages such as Chinese or the Cyrillic alphabet.

#### 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 and then touch bare metal on the printer.

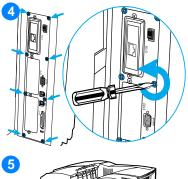
# To install memory and font DIMMs



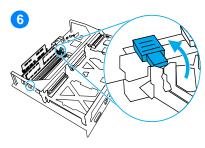
- 1 Turn the printer off.
- 2 Disconnect all power and interface cables
- 3 Locate the formatter board in the rear of the printer.



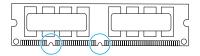




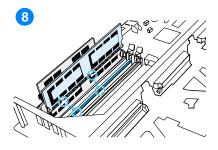


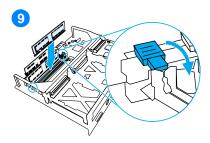






- 4 Remove the eight screws holding the board in place, and set them aside.
- 5 Slide out the formatter board and set it on a clean, flat, grounded surface.
- **6** Release the locks on each side of the DIMM slot.
- 7 Remove the DIMM from the antistatic package. Locate the alignment notches on the bottom edge of the DIMM.









8 Holding the DIMM by the edges, align the notches on the DIMM with the bars in the DIMM slot.

Note If you have difficulty inserting the DIMM or closing the latches, make sure the notches on the bottom of the DIMM are aligned with the bars in the slot. If the DIMM still does not go in, make sure you are using the correct type of DIMM.

- 9 Firmly press the DIMM straight into the slot. Close the locks on each side of the DIMM until they snap into place.
- Align the formatter board in the tracks at the top and bottom of the slot, and slide the board back into the printer. Replace and tighten the eight screws removed in step 2.
- 11 Reconnect the power cable and interface cables, and turn the printer on.
- 12 If you installed a memory DIMM, go to <u>Enabling memory</u>. If you installed a language font DIMM, go to <u>Enabling the language font DIMM</u>.

### **Enabling memory**

If you installed a memory DIMM, set the printer driver to recognize the newly added memory.

### To enable memory for Windows

- On the Start menu, point to Settings, and click Printers or Printers and Faxes.
- 2. Select this printer and select Properties.
- 3. On the **Configure** tab, click **More**.
- 4. In the **Total Memory** field, type or select the total amount of memory that is now installed.
- 5. Click OK.
- 6. Go to Checking DIMM installation.

# **Enabling the language font DIMM**

If you installed a language font DIMM in the printer, you must select the Font DIMM option in the printer driver for the font DIMM to work properly.

# To enable fonts from the PCL 5c and PCL 6 printer drivers for Windows

- 1. On the Start menu, point to Settings, and click Printers.
- 2. Select this printer and select Properties.
- 3. On the **Configure** tab, click **More**.
- 4. Select the **Font DIMM** check box.
- In the Configure Font DIMMs dialog box, click Add to add the font file.
- 6. In the **Add Font DIMM** dialog box, browse to the location of the font file, select the font file, and click **OK**.
- 7. In the **Configure Font DIMMs** dialog box, select the installed DIMM
- Click OK.
- 9. Print a configuration page. See Printing a configuration page.

# **Checking DIMM installation**

Check that the DIMMs are installed correctly and working.

#### To check DIMM installation

- 1. Turn the printer on. Check that the Ready light is on after the printer has gone through the startup sequence. If an error message appears, a DIMM may have been incorrectly installed.
- 2. Print a configuration page. See Printing a configuration page.
- 3. Check the Installed Personalities and Options section on the configuration page and compare it with the configuration page printed before the DIMM installation.
- 4. If the amount of recognized memory has not increased:
  - The DIMM may not be installed correctly. Repeat the installation procedure.
  - The DIMM may be defective. Try a new DIMM.

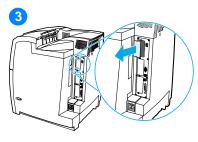
# Installing an HP Jetdirect print server card

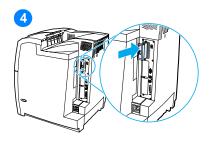
You can install an HP Jetdirect print server card in the base model printer, which comes with an open EIO slot.

# To install an HP Jetdirect print server card

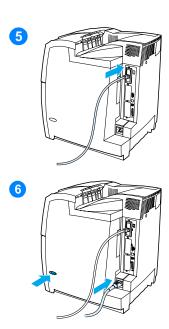








- 1 Turn the printer off.
- 2 Disconnect all power and interface cables.
- 3 Locate an empty EIO slot. Loosen and remove the two retaining screws holding the cover for the EIO slot onto the printer, and then remove the cover. You will not need these screws and cover again.
- 4 Firmly insert the HP Jetdirect print server card into the EIO slot. Insert and tighten the retaining screws that came with the print server card.



- 5 Connect the network cable.
- **6** Reconnect the power cable, and turn the printer on.
- 7 Print a configuration page (see Printing a configuration page). In addition to a printer configuration page and a Supplies Status page, an HP Jetdirect configuration page that contains network configuration and status information should also print.

If it does not print, uninstall and reinstall the print server card to ensure that it is completely seated in the slot.

- 8 Perform one of these steps:
- Choose the correct port. See the computer or operating system documentation for instructions.
- Reinstall the software, choosing the network installation this time.



Term	Definition
bidirectional communication	Two-way data transmission.
bin	A receptacle for holding printed pages.
BOOTP	Abbreviation for "Bootstrap Protocol," an Internet protocol that allows a computer to find its own IP address.
chooser	A Macintosh accessory that allows you to select a device.
control panel	The area on the printer that contains buttons and a display screen. Use the control panel to set printer settings and to get information about the printer's status.
default	The normal or standard setting for hardware or software.
DHCP	Abbreviation for "dynamic host configuration protocol." DHCP enables individual computers or peripherals connected to a network to find their own configuration information, including the IP address.
DIMM	Abbreviation for "dual in-line memory module." A small circuit board that holds memory chips.
duplex	A feature that allows printing on both sides of a sheet of paper.
EIO	Abbreviation for "Enhanced Input/Output." A hardware interface used for adding an internal print server, network adaptor, hard disk, and other plug-in functionality for HP printers.

Term	Definition
Emulated PostScript	Software that emulates Adobe PostScript, a programming language that describes the appearance of the printed page.
EPS	Abbreviation for "Encapsulated PostScript": a type of graphics file.
FIR	Abbreviation for "Fast InfraRed." InfraRed wireless printing.
firmware	Programming instructions that are stored in a read-only memory unit inside the printer.
font	A complete set of letters, numerals, and symbols in a typeface.
fuser	The assembly that uses heat to fuse the toner onto the paper or other media.
grayscale	Various shades of gray.
halftone pattern	A halftone pattern uses differing sizes of ink dots to produce a continuous-tone image such as a photograph.
HP Jetdirect	HP product for network printing.
HP Web Jetadmin	HP trademarked Web-based printer control software that lets you use a computer to manage any peripheral connected to an HP Jetdirect print server.
I/O	Abbreviation for "input/output" and refers to computer port settings.
IP address	The unique number assigned to a computer device connected to a network.
IPX/SPX	Abbreviation for "internetwork packet exchange/sequenced packet exchange."
macro	A single keystroke or command that results in a series of actions or instructions.
media	The paper, labels, transparencies, or other material on which the printer prints the image.
memory tag	A memory partition with a specific address.
monochrome	Black and white. Devoid of color.

Term	Definition
тору	The HP term for "multiple original prints" capability.
network	A system of computers interconnected by telephone wires or other means in order to share information.
network administrator	A person who manages a network.
page buffer	Temporary printer memory used to hold page data while the printer creates an image of the page.
parallel cable	A type of computer cable often used to connect printers directly to a computer rather than to a network.
parallel port	A connection point for a device connected with a parallel cable.
PCL	Abbreviation for "Printer Control Language."
peripheral	An auxilliary device, such as a printer, modem, or storage system, that works in conjunction with a computer.
personality	Distinctive features or characteristics of a printer or printer language.
pixel	Abbreviation for "picture element," which is the smallest unit of area in an image displayed on a screen.
PJL	Abbreviation for "Printer Job Language."
PostScript	A trademarked page description language.
PPD	Abbreviation for "PostScript Printer Description."
printer driver	Software program that allows a computer to access printer features.
RAM	Abbreviation for "random access memory," a type of computer memory used to store data that may change.
RARP	Abbreviation for "Reverse Address Resolution Protocol," a protocol that enables a computer or peripheral to determine its own IP address.
raster image	An image composed of dots.
render	The process of outputting text or graphics.

Term	Definition
RJ-45	A type of connector used for data transmission over standard telephone wire.
ROM	Abbreviation for "read-only memory," a type of computer memory used to store data that should not be changed.
supplies	Materials used by the printer that are used up and must be replaced. Supply items for the HP Color LaserJet 4600 printer are the four print cartridges, the transfer belt, and the fuser.
TCP/IP	An internet protocol (developed by the U.S. Department of Defense) that has become the global standard for communications.
toner	The fine black or colored powder that forms the image on the printed media.
transfer belt	The black plastic belt that transports the media inside the printer and transfers the toner from the print cartridges onto the media.
tray	A receptacle for holding blank media.
xerographic paper	General term for paper intended for photocopy or laser printer use.

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