HP Color LaserJet CP4005
User Guide

invent

HP Color LaserJet CP4005

User Guide

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HP customer care

Online services

For 24-hour access to information using a modem or Internet connection:

World Wide Web URL: For the HP Color LaserJet CP4005 Series printers, updated HP printer software, product and support information, and printer drivers in several languages can be obtained from http://www.hp.com/support/ljcp4005. (The sites are in English.)

Go to http://www.hp.com/support/net_printing for information about network printing using HP Jetdirect print servers.

HP Instant Support Professional Edition (ISPE) is a suite of Web-based troubleshooting tools for desktop computing and printing products. ISPE helps you quickly identify, diagnose, and resolve computing and printing problems. The ISPE tools may be accessed from http://instantsupport.hp.com.

Telephone support

HP provides free telephone support during the warranty period. When you call, you will be connected to a responsive team waiting to help you. For the telephone number for your country/region, see the flyer that came in the box with the product. You can also visit http://www.hp.com, and then click **Contact HP**, and then click **Contact HP Worldwide**. Before calling HP, have the following information ready: product name and serial number, date of purchase, and description of the problem.

You can also find support on the Internet at http://www.hp.com. Click the **support & drivers** block.

Software utilities, drivers, and electronic information

Go to http://www.hp.com/go/ljcp4005_software for the HP Color LaserJet CP4005 Series printer. The Web page for the drivers might be in English, but you can download the drivers themselves in several languages.

For telephone support, see the flyer that came in the box with the printer.

HP direct ordering for accessories or supplies

In the United States, supplies can be ordered from http://www.hp.com/sbso/product/supplies. In Canada, supplies can be ordered from http://www.hp.ca/catalog/supplies. In Europe, supplies can be ordered from http://www.hp.com/supplies. In Asia-Pacific, supplies can be ordered from http://www.hp.com/paper/.

Accessories can be ordered from http://www.hp.com/go/accessories.

Call 1-800-538-8787 (U.S.) or 1-800-387-3154 (Canada).

HP service information

To locate HP-Authorized Dealers, call 1-800-243-9816 (U.S.) or 1-800-387-3867 (Canada). For service for your product, call the customer support number for your country/region. See the flyer that came in the box with the printer.

HP service agreements

Call 1-800-835-4747 (U.S.) or 1-800-268-1221 (Canada).

Extended Service: 1-800-446-0522

HP support and information for Macintosh computers

Go to http://www.hp.com/go/macosx for Macintosh OS X support information and HP subscription service for driver updates.

Go to http://www.hp.com/go/mac for products designed specifically for the Macintosh user.

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1 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
- Printer configurations
- Printer features
- Walk around
- Printer software
- Printer drivers
- Printer drivers for Macintosh computers
- Software for Macintosh computers
- Using the HP Printer Utility for Macintosh
- Print media specifications

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/ljcp4005

Printer drivers may be obtained from the following sites:

- In China: http://www.hp.com.cn/support/cp4005
- In Japan: http://www.jpn.hp.com/support/cp4005
- In Korea: http://www.hp.co.kr/support/cp4005
- In Taiwan: http://www.hp.com.tw/support/cp4005, or the local driver Web site: http://www.dds.com.tw

To order supplies:

- United States: http://www.hp.com/go/ljsupplies
- Worldwide: http://www.hp.com/ghp/buyonline.html

To order accessories:

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

User guide links

For the latest version of the HP Color LaserJet CP4005 user guide, go to http://www.hp.com/support/ljcp4005.

Where to look for more information

Several references are available for use with this printer. See http://www.hp.com/support/ljcp4005.

Setting up the printer

Start Guide

Provides step-by-step instructions for installing and setting up the printer. This document is located on the CD_ROM provided with the printer.

HP Driver Pre-Configuration Guide

For detailed information about configuring printer drivers, go to http://www.hp.com/go/hpdpc_sw.

HP Embedded Web Server User Guide

Information about using the embedded Web server is available on the CD-ROM that came with the printer.

Accessory and Consumable Installation Guides

Provides step-by-step instructions for installing the printer's accessories and consumables. Supplied with the printer's optional accessories and consumables.

Using the printer

CD-ROM User Guide

Provides detailed information on using and troubleshooting the printer. Available on the CD-ROM included with the printer.

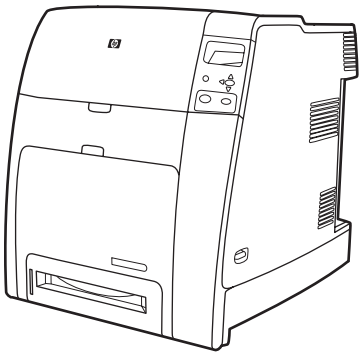
Online Help

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

Printer configurations

Thank you for purchasing the HP Color LaserJet CP4005 Series printer. This printer is available in two configurations.

HP Color LaserJet CP4005n (product number CB503A)

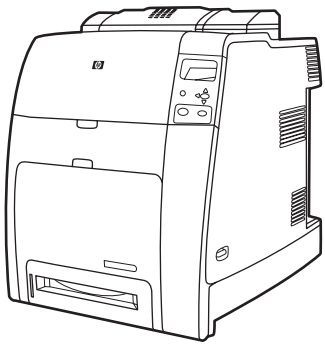


The HP Color LaserJet CP4005 printer is a four-color laser printer that prints up to 30 pages per minute (ppm) for black and 25 pages per minute (ppm) for color.

- **Trays**. The printer comes with a multipurpose tray (Tray 1) that holds up to 100 sheets of various print media or 20 envelopes. A standard 500-sheet paper feeder (Tray 2) supports letter, legal, executive, 8.5 X 13, JIS B5, executive (JIS), 16K, A4, and A5, and custom media. The printer also supports one optional 500-sheet paper feeder (Tray 3).
- **Connectivity**. The printer provides a network port (RJ-45 connector) and universal serial bus (USB).
- **Memory**. 128 megabytes (MB) of dual data-rate (DDR) synchronous dynamic random access memory (SDRAM) in a single DIMM slot that can be upgraded to a maximum of 512 MB.

NOTE To accommodate memory expansion, the available 200-pin small outline dual inline memory module (SODIMM) slot accepts 128, 256, or 512 MB RAM. The printer can support up to 512 MB of memory.

HP Color LaserJet CP4005dn (product number CB504A)



The HP Color LaserJet CP4005dn Series printer includes the features of the CP4005n, plus a duplexer for automatic two-sided printing, and an additional 128 MB of memory for a total of 258 MB of memory.

Printer features

This printer combines the quality and reliability of Hewlett-Packard printing with the following new features and standard capabilities. For more information about printer features, see the Hewlett-Packard Web site at http://www.hp.com/support/ljcp4005.

Table 1-1 Features

Performance	• Prints up to 30 pages per minute (ppm) in black & white and 25 ppm in color for letter-sized (8.5"x11") and A4-size paper. • First page prints in 10 seconds or less for black & white and 12 seconds or less for color from the Ready prompt. This wait time is similar for first page out times from Powersave or sleep mode.
Memory	• 128 MB of memory for the HP Color LaserJet CP4005n, 256 MB for the HP Color LaserJet CP4005dn. **NOTE** Memory specification: HP Color LaserJet CP4005 Series printers use 200-pin small outline dual inline memory modules (SODIMM) that accepts 128, 256, or 512 MB RAM. The printer can support up to 512 MB of memory.
User interface	• Four-line graphic display on control panel. • Enhanced Help with animated graphics. • Embedded Web server to access support and order supplies (network-connected printers). • HP Easy Printer Care Software (a Web-based status and troubleshooting tool).
Supported printer personalities	• HP PCL 6. • HP PCL 5c. • PostScript® 3 emulation. • Portable document format (PDF).

Job storage features	• Full job storage features.
	  ◦ Personal identification number (PIN) printing. A user can send a print file to the printer with a PIN embedded in the job print it by typing in the PIN at the control panel.
	  ◦ Mopier mode. A print file is processed on the computer and sent one time only to the printer. It is then spooled at the printer, and the requested numbers of copies are printed.
	  ◦ Proof and hold. A multi-copy print file is sent to the printer, the first copy is printed for proofing, and the remainder of the job is held at the printer for printing or cancellation.
	• Personal identification number (PIN) printing.
	• Fonts and forms.

Environmental features	• Sleep mode setting. • High content of recyclable components and materials. • Energy Star® compliant.

Table 1-1 Features (continued)

Fonts	• 80 internal fonts available for both PCL and PostScript emulation. • 80 printer-matching screen fonts in TrueType format available with the software solution. • Supports forms and fonts on the disk using HP Web Jetadmin.
Paper handling	• Prints on media from 77 mm x 127 mm (3 inches x 5 inches) up to 216 mm x 356 mm (8.5 inches x 14 inches) (legal size). For ordering information, see Part numbers. • Tray 1 can process heavy media from 60 g/m^2 to 220 g/m^2 (16 lb to 60 lb), as well as standard 80 lb cover stock. For ordering information, see Part numbers. • Tray 2 and optional Tray 3 can process media from 60 g/m^2 to 120 g/m^2 (16 lb to 32 lb). • Prints on a wide range of media types, including HP laser photo media, glossy papers, and transparencies, as well as heavy stock, labels, and envelopes. • Prints multiple gloss levels. • Standard 100-sheet multi-purpose paper tray (Tray 1) supports letter, legal, executive, 8.5 X 13, JIS B5, executive (JIS), 16K, A4, A5, and custom media. • Standard 500-sheet paper feeder (Tray 2) that supports letter, legal, executive, 8.5 X 13, JIS B5, executive (JIS), 16K, A4, A5, and custom media. • One optional 500-sheet paper feeder (Tray 3) support letter, legal, executive, 8.5 X 13, JIS B5, executive (JIS), 16K, A4, A5, and custom media. • Standard 500-sheet face-down output bin. • Duplexer for automatic two-sided printing (duplexing) standard on the HP Color LaserJet CP4005dn Series printer. • Automatic duplexing of 120 g/m^2 (32 lb) paper at full speed - 30 sides (15 sheets) per minute.
Accessories	• Small outline dual inline memory modules (SODIMMs). • Flash memory slot for firmware upgrades. • Printer stand. • One optional 500-sheet paper feeder (Tray 3).
Connectivity	• USB 2.0 Hi-Speed Device port (Type B connector). • HP Jetdirect embedded print server to enable network connectivity. • Optional HP Jetdirect external print servers to enable alternative network connectivity through the USB port.
Supplies	• Supplies status page contains information on toner level, page count, and estimated pages remaining. • High-capacity no-shake cartridge pre-installed in the printer automatic-toner seal removal feature. • Printer checks for authentic HP print cartridges at cartridge installation. • Internet-enabled supply-ordering capabilities through the embedded Web server, Web Jetadmin network printer software, and HP Easy Printer Care Software. For more information, see http://www.hp.com/go/easyprintercare.

Walk around

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

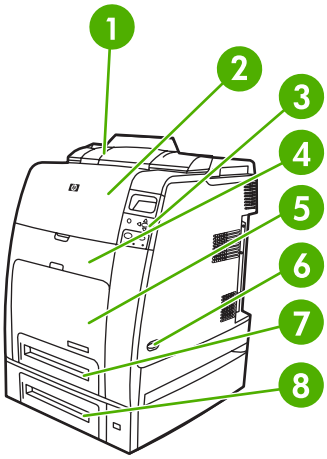


Figure 1-1 Front view (HP Color LaserJet CP4005dnwith optional 500-sheet feeder shown)

1	Duplexer
2	Top cover
3	Control panel
4	Front cover (access to print cartridges, transfer unit, and fuser)
5	Tray 1
6	On/off switch
7	Tray 2
8	Optional Tray 3

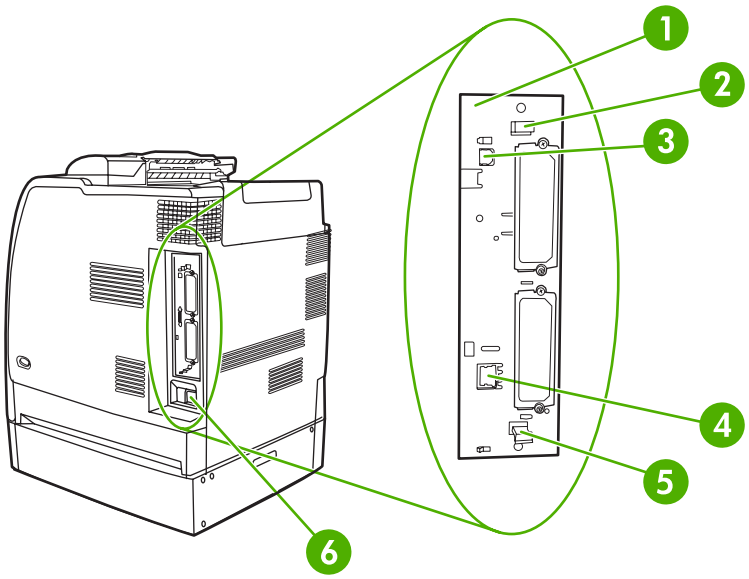


Figure 1-2 Back/side view (HP Color LaserJet CP4005dn with optional 500-sheet feeder shown)

1	Formatter board
2	Upper formatter board tab
3	USB 2.0 Hi-Speed Device port (Type B connector)
4	Ethernet Base 10/100T Networking port (RJ-45 connector)
5	Lower formatter board tab
6	Power cord connection

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, see the readme file on the Web at http://www.hp.com/support/ljcp4005. For information about installing the printer software, view the Install Notes on the CD-ROM included with the printer.

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® 2000, XP (32-bit), and XP Pro (64-bit)
- Microsoft Server 2003 (32-bit and 64-bit)
- Mac OS X v10.2, v10.3, and v10.4

NOTE For a list of the network environments supported by the network administrator software components, see Network configuration.

NOTE For a list of printer drivers, updated HP printer software, and product support information, go to http://www.hp.com/support/ljcp4005.

Software

Software features

Automatic Configuration, Update Now, and Preconfiguration features are available with the HP Color LaserJet CP4005 Series printer.

Driver Autoconfiguration

The HP LaserJet PCL 6 and PCL 5c drivers for Windows and the PS drivers for Windows 2000 and Windows XP feature automatic discovery and driver configuration for printer accessories at the time of installation. Some accessories that Driver Autoconfiguration supports are the duplexing unit, optional paper Tray 3, and dual inline memory modules (DIMMs). If the environment supports bidirectional communication, the installer presents Driver Autoconfiguration as an installable component by default for a Typical Installation and for a Custom Installation.

Update Now

If you have modified the configuration of the HP Color LaserJet CP4005 printer since installation, the driver can be automatically updated with the new configuration in environments that support bidirectional communication. Click the **Update Now** button to automatically reflect the new configuration in the driver.

NOTE The Update Now feature is not supported in environments where shared Windows 2000 or Windows XP clients are connected to Windows 2000 or Windows XP hosts.

HP Driver Preconfiguration

HP Driver Preconfiguration is a software architecture and set of tools that allows HP software to be customized and distributed in managed corporate printing environments. Using HP Driver

Preconfiguration, information technology (IT) administrators can preconfigure the printing and device defaults for HP printer drivers before installing the drivers in the network environment. For more information, see the *HP Driver Preconfiguration Support Guide*, which is available at http://www.hp.com/support/ljcp4005 and http://www.hp.com/hpdpc_se

Installing the printing system software

The following sections contain instructions for installing the printing system software.

The printer comes with printing system software and printer drivers on a CD-ROM. The printing system software on the CD-ROM must be installed to take full advantage of the printer features.

If you do not have access to a CD-ROM drive, you can download the printing system software from the Internet at http://www.hp.com/support/ljcp4005.

NOTE You can obtain Model Scripts for Linux by downloading them from the Internet. For Linux support see http://www.hp.com/go/ljcp4005_software.

You can download the latest software free of charge at http://www.hp.com/go/ljcp4005.

Installing Windows printing system software for direct connections

This section explains how to install the printing system software for Microsoft Windows 2000 and Windows XP.

When installing the printing software in a direct-connect environment, always install the software before connecting the USB cable. If the USB cable was connected before the software installation, see Installing the software after the USB cable has been connected.

Use a USB cable for the direct connection. Use a standard 2 meter (6 foot) USB cable.

Installing the printing system software

1. Close all software programs that are open or running.
2. Insert the printer CD-ROM into the CD-ROM drive.

   If the welcome screen does not open, start it by using the following procedure:

   - On the **Start** menu, click **Run**.
   - Type the following: X:\setup (where X is the letter of the CD-ROM drive).
   - Click **OK**.
3. When prompted, click **Install** and follow the instructions on the computer screen.
4. Click **Finish** when the installation has completed.
5. You might need to restart the computer.
6. Print a Test Page or a page from any software program to make sure that the software is correctly installed.

If installation fails, reinstall the software. If this fails, check the installation notes and readme files on the printer CD-ROM or the flyer that came in the printer box, or go to http://www.hp.com/support/ljcp4005 for help or more information.

Installing the software after the USB cable has been connected

If you have already connected a USB cable to a Windows computer, the **New Hardware Found** dialog box appears when you turn on the computer.

Installing the software for Windows 2000 or Windows XP

1. In the **New Hardware Found** dialog box, click **Search**.
2. On the **Locate Driver Files** screen, select the **Specify a Location** check box, clear all other check boxes, and then click **Next**.
3. Type the letter for the root directory. For example, X:\ (where "X:\" is the letter of the root directory on the CD-ROM drive).
4. Click **Next**.
5. Follow the instructions on the computer screen.
6. Click **Finish** when installation has completed.
7. Select a language and follow the instructions on the computer screen.
8. Print a Test Page or a page from any software program to make sure that the software is correctly installed.

   If installation fails, reinstall the software. If this fails, check the installation notes and readme files on the printer CD-ROM or the flyer that came in the printer box, or go to http://www.hp.com/support/ljcp4005 for help or more information.

Installing Windows printing system software for networks

The software on the printer CD-ROM supports network installation with a Microsoft network. For network installation on other operating systems, go to http://www.hp.com/support/ljcp4005.

The HP Jetdirect embedded print server in the HP Color LaserJet CP4005n or HP Color LaserJet CP4005dn Series printers includes a 10/100 Base-TX network port. For other available HP Jetdirect print servers, go to http://www.hp.com/go/jetdirect.

Installing the printing system software

1. If you are installing the software on Windows 2000 or Windows XP make sure that you have administrator privileges.
2. Make sure that the HP Jetdirect print server and printer are properly connected to the network. Print a configuration page (see Printer information pages). On the second page of the configuration page, locate the IP address that is currently configured. You might need this address to initially identify the printer on your network and complete the installation.
3. Close all software programs that are open or running.
4. Insert the printer CD-ROM into the CD-ROM drive.

If the welcome screen does not open, start it by using the following procedure:

- On the **Start** menu, click **Run**.
- Type the following: X:\setup (where X is the letter of the CD-ROM drive).
- Click **OK**.

5. When prompted, click **Install Printer** and follow the instructions on the computer screen.
6. Click **Finish** when installation has completed.
7. You might need to restart the computer.
8. Print a Test Page or a page from any software program to make sure that the software is correctly installed.

   If installation fails, reinstall the software. If this fails, check the installation notes and readme files on the printer CD-ROM or the flyer that came in the printer box, or go to http://www.hp.com/support/ljcp4005 for help or more information.

Setting up a Windows computer to use the network printer with Windows-sharing

If the computer will print directly to the printer, you can share the printer on the network so that other network users can print to it.

See your Windows documentation to enable Windows-sharing. After the printer is shared, install the printer software on all computers that share the printer.

Uninstalling the software

This section explains how to uninstall the printing system software.

Removing software from Windows operating systems

Use Add/Remove Programs to select and remove any or all of the Windows HP printing system components.

1. Click **Start**, click **Control Panel**, and then click **Add/Remove Programs**.
2. Point to **HP Color LaserJet CP4005** and then click **Change/Remove**.
3. Click **Uninstaller**.
4. Click **Next**.
5. Select the HP printing system components you want to uninstall.
6. Click **OK**.
7. Follow the instructions on the computer screen to complete the uninstallation.

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-ROM included with the printer.

HP Web Jetadmin

HP Web Jetadmin allows you to manage HP Jetdirect-connected printers within your intranet using a Web browser. HP Web Jetadmin is a browser-based management tool, and should be installed only on a single network administration server. It can be installed and run on these systems:

- Fedora Core and SuSe Linux
- Windows 2000 Professional, Server, and Advanced Server
- Windows XP Professional Service Pack 1
- Windows Server 2003

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 5.5 and 6.0 or Netscape Navigator 7.0.

HP Web Jetadmin has 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.
- Ability to quickly find peripherals based on parameters such as IP address, color capability, and model name.
- Ability to easily organize peripherals into logical groups, with virtual office maps for easy navigation.
- Ability to manage and configure multiple printers at once.

To download a current version of HP Web Jetadmin and to see the latest list of supported host systems, visit http://www.hp.com/go/webjetadmin.

Utilities

The HP Color LaserJet CP4005 Series printer is equipped with several utilities that make it easy to monitor and manage the printer on a network.

HP Easy Printer Care Software

The HP Easy Printer Care Software is a software program that you can use for the following tasks:

- Viewing color usage information
- Checking the printer status
- Checking the supplies status
- Setting up alerts

- Viewing printer documentation
- Gaining access to troubleshooting and maintenance tools

You can use the HP Easy Printer Care Software when the printer is directly connected to your computer or when it is connected to a network. The HP Easy Printer Care Software is available at http://www.hp.com/go/easyprintercare.

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 computer. 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 can access with a network-connected computer or a standard Web browser. There is no special software to install or configure. For more information about the HP embedded Web server, see the *Embedded Web Server User Guide*. You can find this guide on the CD-ROM included with the printer.

Features

The HP embedded Web server allows you to view printer and network card status and manage printing functions from your computer. 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 Using the embedded Web server.

Other components and utilities

Several software applications are available for Windows and Mac OS users, as well as for network administrators.

Windows	Mac OS	Network administrator
• Software installer — automates the printing system installation • Online Web registration	• PostScript Printer Description files (PPDs) — for use with the Apple PostScript drivers that comes with the Mac OS	• HP Web Jetadmin — A browser-based system management tool. See http://www.hp.com/go/webjetadmin for the latest HP Web Jetadmin software.

Printer drivers

The product comes with software that allows the computer to communicate with the product (by using a printer language). This software is called a printer driver. Printer drivers provide access to product features, such as printing on custom-sized paper, resizing documents, and inserting watermarks.

Supported printer drivers

The following printer drivers are provided for the product. If the printer driver that you want is not on the product CD-ROM or is not available at http://www.hp.com, contact the manufacturer or distributor of the program that you are using, and request a driver for the product.

NOTE The most recent drivers are available at http://www.hp.com/go/ljcp4005_software. Depending on the configuration of Windows-based computers, the installation program for the product software automatically checks the computer for Internet access in order to obtain the latest drivers.

NOTE For Windows 2000, Windows XP, and Windows Server 2003, the HP Color LaserJet CP4005 Series printers include a monochrome PCL 6 driver that can be installed for users who will be printing only black-and-white print jobs.

Operating system[1]	PCL 6 printer driver[2]	PCL 5 printer driver	PS printer driver	PPD[3] printer driver
Windows 2000	X	X	X	
Windows XP	X	X	X	
Windows Server 2003	X	X	X	
Mac OS X v10.2, v10.3, and v10.4.				X

1 Not all product features are available from all drivers or operating systems. See the context-sensitive help in the printer driver for available features.

2 For Windows 2000, Windows XP, and Windows Server 2003, the HP Color LaserJet CP4005 Series printers include a monochrome PCL 6 driver that can be installed for users who print only black-and-white print jobs.

3 PostScript (PS) Printer Description files (PPDs)

Additional drivers

The Linux drivers are not included on the CD-ROM, but are available from the Internet.

You can obtain Model Scripts for Linux by downloading them from the Internet or by requesting them from an HP-authorized service or support provider. For Linux support go to www.hp.com/go/linux.

Select the correct printer driver

Select a printer driver based on the operating system that you are using and the way that you use the product. See the printer-driver Help for the features that are available. For information about gaining access to the printer-driver Help, see Printer-driver Help.

- The PCL 6 printer driver can provide the best overall performance and access to your printer features.
- The PCL 5 printer driver is recommended for general office monochrome and color printing.
- Use the PostScript (PS) driver if you are printing primarily from PostScript-based programs such as Adobe PhotoShop and CorelDRAW®, for compatibility with PostScript Level 3 needs, or for PS flash font support.

NOTE The product automatically switches between PS and PCL printer languages.

Printer-driver Help (Windows)

Printer-driver Help is separate from program Help. The printer-driver help provides explanations for the buttons, checkboxes, and drop-down lists that are in the printer driver. It also includes instructions for performing common printing tasks, such as printing on both sides, printing multiple pages on one sheet, and printing the first page or covers on different paper.

Activate the printer-driver Help screens in one of the following ways:

- Click the **Help** button.
- Press the F1 key on the computer keyboard.
- Click the question-mark symbol in the upper-right corner of the printer driver.
- Right-click on any item in the driver, and then click **What's This?**.

Gaining access to the printer drivers

Use one of the following methods to open the printer drivers from your computer:

Operating System	To change the settings for all print jobs until the software program is closed	To change the print job default settings (for example, turn on Print on Both Sides by default)	To change the configuration settings (for example, add a tray or enable/disable Manual Duplexing)
Windows 2000, XP, and Server 2003.	1. On the **File** menu in the software program, click **Print**. 2. Select the HP Color LaserJet CP4005, and then click **Properties** or **Preferences**. The steps can vary; this procedure is most common.	1. Click **Start**, click **Settings**, and then click **Printers** or **Printers and Faxes**. 2. Right-click the HP Color LaserJet CP4005 icon, and then select **Printing Preferences**.	1. Click **Start**, click **Settings**, and then click **Printers** or **Printers and Faxes**. 2. Right-click the HP Color LaserJet CP4005 icon, and then select **Properties**. 3. Click the **Device Settings** tab.

Operating System	To change the settings for all print jobs until the software program is closed	To change the print job default settings (for example, turn on Print on Both Sides by default)	To change the configuration settings (for example, add a tray or enable/disable Manual Duplexing)
Mac OS X v10.2	1. On the **File** menu, click **Print**. 2. Change the settings that you want on the various pop-up menus.	1. On the **File** menu, click **Print**. 2. Change the settings that you want on the various pop-up menus. 3. On the **Presets** pop-up menu, click **Save as** and type a name for the preset. These settings are saved in the **Presets** menu. To use the new settings, you must select the saved preset option every time you open a program and print.	1. In the Finder, on the **Go** menu, click **Applications**. 2. Open **Utilities**, and then open **Print Center**. 3. Click on the print queue. 4. On the **Printers** menu, click **Show Info**. 5. Click the **Installable Options** menu. **NOTE** Configuration settings might not be available in Classic mode.
Mac OS X v10.3 and V10.4	1. On the **File** menu, click **Print**. 2. Change the settings that you want on the various pop-up menus.	1. On the **File** menu, click **Print**. 2. Change the settings that you want on the various pop-up menus. 3. On the **Presets** pop-up menu, click **Save as** and type a name for the preset. These settings are saved in the **Presets** menu. To use the new settings, you must select the saved preset option every time you open a program and print.	1. Open **Printer Setup Utility** by selecting the hard drive, clicking **Applications**, clicking **Utilities**, then double-clicking **Printer Setup Utility**. 2. Click on the print queue. 3. On the **Printers** menu, click **Show Info**. 4. Click the **Installable Options** menu.

Printer drivers for Macintosh computers

The printer comes with printer-driver software that uses a printer language to communicate with the printer. Printer drivers provide access to printer features, such as printing on custom-sized paper, resizing documents, and inserting watermarks.

Supported printer drivers

A Macintosh printer driver and the necessary PPD files are included with the printer. If the printer driver that you want is not on the printer CD, check the installation notes and the late-breaking readme files to see if the printer driver is supported. If it is not supported, contact the manufacturer or distributor of the software program that you are using, and request a driver for the printer.

NOTE The most recent drivers are available at http://www.hp.com/go/ljcp4005_software.

Gaining access to the printer drivers

Use one of the following methods to open the printer drivers from your computer.

Operating System	To change the settings for all print jobs until the software program is closed	To change the print job default settings (for example, turn on Print on Both Sides by default)	To change the configuration settings (for example, add a physical option such as a tray, or turn on or off a driver feature such as Allow Manual Duplexing)
Mac OS X v10.2	1. On the **File** menu, click **Print**. 2. Change any settings that you want to on the various pop-up menus.	1. On the **File** menu, click **Print**. 2. Change the settings that you want on the various pop-up menus, and then, on the **Presets** pop-up menu, click **Save as** and type a name for the preset. These settings are saved in the **Presets** menu. To use the new settings, you must select the saved preset option every time you open a program and print.	1. In the Finder, on the **Go** menu, click **Applications**. 2. Open **Utilities**, and then open **Print Center**. 3. Click on the print queue. 4. On the **Printers** menu, click **Show Info**. 5. Click the **Installable Options** menu. **NOTE** Configuration settings might not be available in Classic mode.
Mac OS X v10.3 and v10.4	1. On the **File** menu, click **Print**. 2. Change any settings that you want to on the various pop-up menus.	1. On the **File** menu, click **Print**. 2. Change the settings that you want on the various pop-up menus, and then, on the **Presets** pop-up menu, click **Save as** and type a name for the preset.	1. Open **Printer Setup Utility** by selecting the hard drive, clicking **Applications**, clicking **Utilities**, and then double-clicking **Printer Setup Utility**. 2. Click on the print queue. 3. On the **Printers** menu, click **Show Info**.

Operating System	To change the settings for all print jobs until the software program is closed	To change the print job default settings (for example, turn on Print on Both Sides by default)	To change the configuration settings (for example, add a physical option such as a tray, or turn on or off a driver feature such as Allow Manual Duplexing)
		These settings are saved in the **Presets** menu. To use the new settings, you must select the saved preset option every time you open a program and print.	4. Click the **Installable Options** menu.

Software for Macintosh computers

The HP installer provides PostScript® Printer Description (PPD) files, Printer Dialog Extensions (PDEs), and the HP Printer Utility for use with Macintosh computers.

If both the printer and the Macintosh computer are connected to a network, use the printer embedded Web server (EWS) to configure the printer. For more information, see Using the embedded Web server.

Installing Macintosh printing system software for networks

This section describes how to install Macintosh printing system software. The printing system software supports Mac OS X v10.2, v10.3, and v10.4.

The printing system software includes the following components:

- **PostScript Printer Description (PPD) files**

  The PPDs, in combination with the Apple PostScript printer drivers, provide access to printer features. An installation program for the PPDs and other software is provided on the compact disc (CD) that came with the printer. Use the Apple PostScript printer driver that comes with the computer.

- **HP Printer Utility**

  The HP Printer Utility provides access to features that are not available in the printer driver. Use the illustrated screens to select printer features and complete the following tasks with the printer:

  - Name the printer.
  - Assign the printer to a zone on the network.
  - Assign an internet protocol (IP) address to the printer.
  - Download files and fonts.
  - Configure and set the printer for IP printing.

  You can use the HP Printer Utility when your printer is directly connected using a USB cable or is connected to a TCP/IP-based network.

NOTE The HP Printer Utility is supported for Mac OS X v10.2, v10.3, and v10.4,

For more information about using the HP Printer Utility, see Using the HP Printer Utility for Macintosh.

To install printer drivers for Mac OS X v10.2, v10.3, and v10.4

1. Connect the network cable between the HP Jetdirect print server and a network port.
2. Insert the CD into the CD-ROM drive.

   The CD menu runs automatically. If the CD menu does not run automatically, double-click the CD icon on the desktop.
3. Double-click the **Installer** icon in the HP LaserJet Installer folder.
4. Follow the instructions on the computer screen.

5. On the computer hard drive, open **Applications**, open **Utilities**, and then open **Print Center** or **Printer Setup Utility**.

   NOTE If you are using Mac OS X v10.3 or v10.4, then the **Printer Setup Utility** has replaced the **Print Center**.

6. Click **Add Printer**.
7. Select **Bonjour** as the connection type.
8. Select your printer from the list.
9. Click **Add Printer**.
10. Close the Print Center or the Printer Setup Utility by clicking the close button in the upper-left corner.

Installing Macintosh printing system software for direct connections (USB)

This section explains how to install the printing system software for Mac OS X v10.2, v10.3, and v10.4.

The Apple PostScript driver must be installed in order to use the PPD files. Use the Apple PostScript driver that came with your Macintosh computer.

To install the printing system software

1. Insert the printer CD into the CD-ROM drive and run the installer.

   The CD menu runs automatically. If the CD menu does not run automatically, double-click the CD icon on the desktop.

2. Double-click the **Installer** icon in the HP LaserJet Installer folder.
3. Follow the instructions on the computer screen.
4. When prompted, connect a USB cable between the USB port on the printer and the USB port on the computer. Use a standard 2-meter (6.56-foot) USB cable.

   NOTE For Mac OS X v10.2, v10.3, and v10.4: USB queues are created automatically when the printer is attached to the computer. In some cases, the queue will use a generic PPD if the installer has not been run before the USB cable is connected. To change the queue PPD, open the Print Center or Printer Setup Utility, select the correct printer queue, and then click **Show Info** to open the **Printer Info** dialog box. In the pop-up menu, select **Printer Model**, and then, in the pop-up menu in which **Generic** is selected, select the correct PPD for the printer.

5. Print a test page or a page from any software program to make sure that the software is correctly installed.

   If installation fails, reinstall the software. If this fails, see the installation notes or late-breaking readme files on the printer CD or the flyer that came in the printer box, or go to http://www.hp.com/support/ljcp4005 for help or more information.

To remove software from Macintosh operating systems

To remove the software from a Macintosh computer, drag the PPD files to the trash can.

Using the HP Printer Utility for Macintosh

Use the HP Printer Utility to configure and maintain a printer from a computer running Mac OS X v10.2, v10.3, and v10.4, or later. This section describes several functions that you can perform through the HP Printer Utility.

Opening the HP Printer Utility

The process that you use to start the HP Printer Utility depends on the Macintosh operating system that you are using.

To open the HP Printer Utility in Mac OS X v10.2, v10.3, v10.4, or later

1. Open the Macintosh HD.
2. Click **Library**, and then click **Printers**.
3. Click **hp**, and then click **Utilities**.
4. Double-click **HP Printer Selector** to open the HP Printer Selector.
5. Select the printer that you want to configure, and then click **Utilities**.

NOTE If the **Printer Setup Utility** icon is in the Dock, you can access it by clicking on the icon.

Printing a cleaning page

Print a cleaning page if the printer is not printing jobs at the expected quality level.

1. Open the HP Printer Utility.
2. In the **Configuration Settings** list, select **Color Cleaning**.
3. Click **Print Cleaning Page** to print the cleaning page.

Printing a configuration page

Print a configuration page to view the printer settings. For more information about the configuration page, see Configuration page.

1. Open the HP Printer Utility.
2. In the **Configuration Settings** list, select **Configuration Page**.
3. Click **Print Configuration Page** to print the configuration page.

Viewing supplies status

View the status of the printer supplies (such as print cartridges, imaging drum, or print media) from a computer.

1. Open the HP Printer Utility.
2. In the **Configuration Settings** list, select **Supplies Status**.
3. Click the **Supplies** tab to view the status of various replaceable supplies, and click the **Media** tab to view the status of print media.
    - To view a more detailed status list, click **Detailed Supplies Information**. The Supplies Information dialog box appears.
    - To order supplies online, click **Order HP Supplies**. You must have Internet access in order to use the online ordering Web page. For more information about online ordering, see Ordering supplies online and using other support features.

Ordering supplies online and using other support features

Use the HP Web site to order printer supplies, register the printer, get customer support, or learn about recycling printer supplies. You must have Internet access in order to use the supplies and support Web pages.

1. Open the HP Printer Utility.
2. In the **Configuration Settings** list, select **HP Support**.
3. Click one of the following buttons:
    - **Instant Support**: Opens a Web page that you can use to seek technical assistance.
    - **Order Supplies Online**: Opens a Web page that you can use to order printer supplies.
    - **Online Registration**: Opens a Web page that you can use to register the printer.
    - **Return & Recycle**: Opens a Web page that you can use to find information about recycling used supplies.

Uploading a file to the printer

Send a file from the computer to the printer. The action that the printer takes depends on the type of file that you send to it. For example, when you send a print-ready file (such as a .PS or .PCL file), the printer prints the file.

1. Open the HP Printer Utility.
2. In the **Configuration Settings** list, select **File Upload**.
3. Click **Choose**, navigate to the file that you want to upload, and then click **OK**.
4. Click **Upload** to load the file.

Updating the firmware

Obtain the new firmware files for your printer at http://www.hp.com, and then update the printer firmware by loading the new firmware file.

1. Open the HP Printer Utility.
2. In the **Configuration Settings** list, select **Firmware Update**.
3. Click **Choose**, navigate to the firmware file that you want to upload, and then click **OK**.
4. Click **Upload** to load the firmware file.

Activating the two-sided printing (duplexing) mode

Turn on the two-sided printing feature on printers equipped with automatic duplexers.

1. Open the HP Printer Utility.
2. In the **Configuration Settings** list, select **Duplex Mode**.
3. Select **Enable Duplex Mode** to activate the two-sided printing mode, and then click **Apply Now**.

Printing stored jobs

Turn on the printer job-storing function, or print a stored job from the computer. You also can delete a stored print job.

1. Open the HP Printer Utility.
2. In the **Configuration Settings** list, select **Stored Jobs**.
3. Perform any of the following tasks:
   - To turn on the job-storing function, select **Enable Job Storing**, and then click **Apply Now**.
   - To print a stored job, select a stored job in the list, type the necessary personal identification number (PIN) in the **Enter Secure Job PIN** box, type the number of copies that you want in the **Copies to Print** box, and then click **Print**.
   - To delete a stored job, select a stored job in the list, and then click **Delete**.

Configuring trays

Change the default printer tray settings from the computer.

1. Open the HP Printer Utility.
2. In the **Configuration Settings** list, select **Trays Configuration**.
3. In the **Trays** list, select the tray to be configured.

   NOTE To make the selected tray the default tray for printing, click **Make Default**.

4. In the **Default Media Size** pop-up menu, select the default media size for the tray.

5. In the **Default Media Type** pop-up menu, select the default media type for the tray.
6. Click **Apply Now**.

Changing network settings

Change the network internet protocol (IP) settings from the computer. You also can open the embedded Web server to change additional settings. For more information about the embedded Web server, see Using the embedded Web server.

1. Open the HP Printer Utility.
2. In the **Configuration Settings** list, select **IP Settings**.
3. Change any of the settings in the following pop-up menus or fields:
   - **Configuration**
   - **Host Name**
   - **IP Address**
   - **Subnet Mask**
   - **Default Gateway**

   If you want to change more settings in the embedded Web server, click **Additional**. The embedded Web server opens with the **Networking** tab selected.
4. Click **Apply Now**.

Opening the embedded Web server

Open the embedded Web server through the HP Printer Utility. For more information about the embedded Web server, see Using the embedded Web server.

1. Open the HP Printer Utility.
2. In the **Configuration Settings** list, select **Additional Settings**.
3. Click **Open Embedded Web Server**.

Setting up e-mail alerts

Set up e-mail messages that alert you to certain events that occur with the printer, such as a low toner level in a print cartridge.

1. Open the HP Printer Utility.
2. In the **Configuration Settings** list, select **E-mail Alerts**.
3. Click the **Server** tab, and, in the **SMTP server** box, type the server name.
4. Click the **Destinations** tab, click the add (**+**) button, and then type the e-mail addresses, mobile device numbers, or Web site URLs to which you want the e-mail alerts sent.

NOTE If your printer supports e-mail lists, you can make alerts lists for specific events the same way that you added e-mail addresses.

5. Click the **Events** tab, and, in the list, define the events for which an e-mail alert should be sent.
6. To test the alerts setup, click the **Server** tab, and then click **Test**. A sample message is sent to the defined e-mail addresses if the configuration is correct.
7. Click **Apply Now**.

Print media specifications

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.

- To order supplies in the U.S., go to http://www.hp.com/go/ljsupplies.
- To order supplies worldwide, go to http://www.hp.com/ghp/buyonline.html.
- To order accessories, go to http://www.hp.com/go/accessories.

NOTE Test any media, particularly custom media, before purchasing large quantities to ensure that it will perform satisfactorily.

Supported media weights and sizes

Table 1-2 Tray 1 media sizes

Tray 1	Dimensions	Weight or thickness	Capacity
Paper and cardstock, standard sizes (letter/A4, legal, executive, JIS B5, A5); custom sizes	Range: 76 x 127 mm (3 x 5 in) to 216 x 356 mm (8.5 x 14 in)	Range: 60 g/m^2 (16 lb) bond to 220 g/m^2 (60 lb) bond	Maximum stack height: 10 mm (0.6 in) Equivalent to 100 sheets of 75 g/m^2 (20 lb) bond
Glossy paper (letter/A4, legal, executive, JIS B5, A5) **NOTE** Do not use inkjet papers in this printer.	Range: 76 x 127 mm (3 x 5 in) to 216 x 356 mm (8.5 x 14 in)	Range: 75 g/m^2 (20 lb) bond to 220 g/m^2 (60 lb) bond	Maximum stack height: 10 mm (0.6 in)
Transparencies (letter/A4), suitable for use in laser printers	Letter: 215.9 x 279.4 mm (8.5 x 11 in) A4: 210 x 297 mm (8.27 x 11.7 in)	Minimum 0.13 mm (0.005 in) thick	Maximum stack height: 10 mm (0.6 in)
HP Tough paper (letter/A4)	Letter: 215.9 x 279.4 mm (8.5 x 11 in) A4: 210 x 297 mm (8.27 x 11.7 in)	0.13 mm (0.005 in) thick	Maximum stack height: 10 mm (0.6 in)
HP Color Laser Glossy Photo Paper (letter/A4) **NOTE** Do not use inkjet papers in this printer.	Letter: 215.9 x 279.4 mm (8.5 x 11 in) A4: 210 x 297 mm (8.27 x 11.7 in)	220 g/m^2 (60 lb) bond	Maximum stack height: 10 mm (0.6 in)
Envelopes (Com 10, Monarch, C5, DL, B5)		Range: 60 g/m^2 (16 lb) bond to 90 g/m^2 (24 lb)bond	20 envelopes
Labels (letter/A4, legal, executive, JIS B5, A5), suitable for use in laser printers	Range: 76 x 127 mm (3 x 5 in) to 216 x 356 mm (8.5 x 14 in)	Maximum 0.23 mm (0.009 in) thick	Maximum stack height: 10 mm (0.6 in)

Table 1-3 Tray 2 and optional Tray 3 media sizes[1]

Tray 2 and optional Tray 3	Dimensions	Weight or thickness	Capacity
Paper, standard sizes (letter/A4, legal, executive, JIS B5, A5); custom sizes	Range: 148 x 210 mm (5.83 x 8.27 in) to 216 x 356 mm (8.5 x 14 in)	Range: 60 g/m^2 (16 lb) bond to 120 g/m^2 (32 lb) bond	Maximum stack height: 56 mm (2.2 in) Equivalent to 530 sheets of 75 g/m^2 (20 lb) bond
Glossy paper (letter/A4, legal, executive, JIS B5, A5) **NOTE** Do not use inkjet papers in this printer.	Range: 148 x 210 mm (5.83 x 8.27 in) to 216 x 356 mm (8.5 x 14 in)	Range: 75 g/m^2 (20 lb) bond to 120 g/m^2 (32 lb) bond	Maximum stack height: 56 mm (2.2 in)
HP Color Laser Glossy Photo & Imaging Paper (letter/A4) **NOTE** Do not use inkjet papers in this printer.	Letter: 215.9 x 279.4 mm (8.5 x 11 in) A4: 210 x 297 mm (8.27 x 11.7 in)	120 g/m^2 (32 lb) bond	Maximum stack height: 56 mm (2.2 in)
Transparencies (letter/A4), suitable for use in laser printers	Letter: 215.9 x 279.4 mm (8.5 x 11 in) A4: 210 x 297 mm (8.27 x 11.7 in)	Minimum: 0.13 mm (0.005 in) thick	Maximum stack height: 56 mm (2.2 in)
HP Tough Paper (letter/A4)	Letter: 215.9 x 279.4 mm (8.5 x 11 in) A4: 210 x 297 mm (8.27 x 11.7 in)	Maximum: 0.13 mm (0.005 in) thick	Maximum stack height: 56 mm (2.2 in)
Labels (letter/A4 and custom sizes), suitable for use in laser printers	Range: 148 x 210 mm (5.83 x 8.27 in) to 216 x 356 mm (8.5 x 14 in)	Maximum: 0.13 mm (0.005 in) thick	Maximum stack height: 56 mm (2.2 in)

[1] Tray 2 and optional Tray 3 use custom sizes specifically for B5 ISO. These trays do not support the range of custom sizes that can be used in Tray 1.

Table 1-4 Automatic duplex printing (two-sided printing)

Automatic duplex printing	Dimensions	Weight or thickness
Paper	Standard sizes: Letter: 215.9 x 279.4 mm (8.5 x 11 in) A4: 210 x 297 mm (8.27 x 11.7 in) 8.5 x 13: 215.9 x 330.2 mm (8.5 x 13 in) Legal: 215.9 x 355.6 mm (8.5 x 14 in)	Range: 60 g/m^2 (16 lb) bond to 120 g/m^2 (32 lb) bond

Table 1-4 Automatic duplex printing (two-sided printing) (continued)

Automatic duplex printing	Dimensions	Weight or thickness
	Executive: 184.2 x 266.7 mm (7.25 x 10.5 in) JIS B5: 182 x 257 mm (7.17 x 10.12 in)	
Glossy paper (A4/letter, 13 x 8.5 in, legal, executive, JIS B5) **NOTE** Do not use inkjet papers in this printer.	See above for standard sizes supported	Range: 75 g/m^2 (20 lb) bond to 120 g/m^2 (32 lb) bond
HP Color Laser Glossy Photo & Imaging Paper (A4/letter) **NOTE** Do not use inkjet papers in this printer.	Standard sizes: Letter: 215.9 x 279.4 mm (8.5 x 11 in) A4: 210 x 297 mm (8.27 x 11.7 in)	120 g/m^2 (32 lb) bond

2 Control panel

This chapter contains information on the printer control panel, which provides control of printer functions and communicates information about the printer and print jobs. The following topics are covered:

- Introduction
- Control panel buttons
- Interpreting control panel indicator lights
- Control panel menus
- Menu hierarchy
- Retrieve job menu
- Information menu
- Paper handling menu
- Configure device menu
- Diagnostics menu
- Changing printer control panel configuration settings
- Using the printer control panel in shared environments

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.

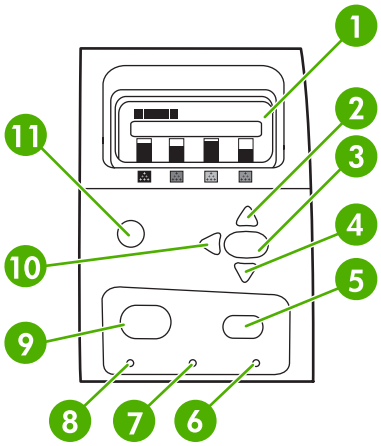


Figure 2-1 Control panel buttons and lights

1	Display
2	Up arrow (▲) button
3	Select (✔) button
4	Down arrow (▼) button
5	Stop button
6	Attention light
7	Data light
8	Ready light
9	Menu button
10	Back/Exit (⮌) button
11	Help (?) button

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 four-line control panel 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 status information.

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

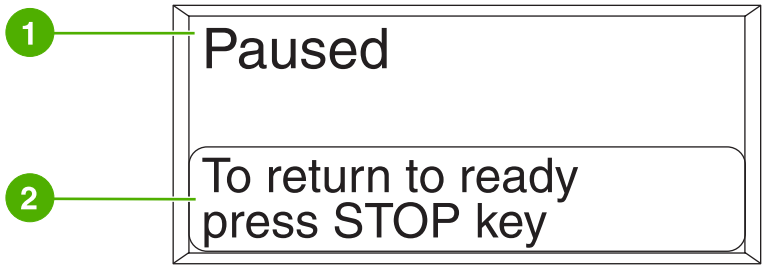


Figure 2-2 Printer display

1	Message area
2	Prompt area

Figure 2-3 Printer display

1	Message area
2	Supplies gauge
3	Print cartridge colors are indicated from left to right: black, magenta, cyan, and yellow

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, cyan, and yellow). A **?** appears instead of the consumption level when the level is not known. This can occur in the following circumstances:

- Missing cartridges
- Incorrectly placed cartridges
- Cartridges with an error
- Some non-HP cartridges

The supplies gauge appears whenever the printer shows the **Ready** state with no warnings. It will also appear when the printer shows a warning or error message concerning a print cartridge or multiple supplies.

Accessing the control panel from a computer

You can also access the printer control panel from a computer by using the Settings 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 Using the embedded Web server.

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 recovery errors.
▲ Up arrow ▼ Down arrow	Navigates menus and text, and increases or decreases the values of numerical items in the display.
⮌ Back/exit arrow	Navigates backward in nested menus, or quits menus or help.
Menu	Accesses and exits the menus.
Stop	Pauses the current job and provides options to resume printing or to cancel the current job.
? Help	Provides animated graphics and detailed information on printer messages or menus.

Interpreting control panel indicator lights

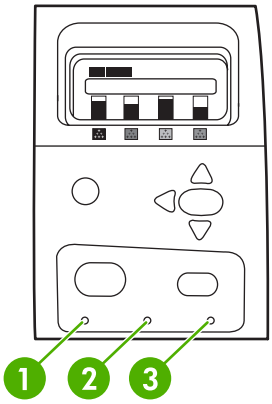


Figure 2-4 Control panel indicator lights

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

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 Printer 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 Menu button.
- 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 Menu.
- If no key is pressed for 60 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 hierarchies of each menu.

To enter the menus

Press Menu 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	**PRINT STORED JOB LIST**
	USER NAME
	ALL PRIVATE JOBS
	PRINT
	COPIES
	DELETE

Information menu

See Information menu for more information.

INFORMATION	**PRINT MENU MAP**
	PRINT CONFIGURATION
	PRINT SUPPLIES STATUS PAGE
	SUPPLIES STATUS
	PRINT USAGE PAGE
	PRINT DEMO
	PRINT RGB SAMPLES
	PRINT CMYK SAMPLES

		PRINT FILE DIRECTORY
		PRINT PCL FONT LIST
		PRINT PS FONT LIST

Paper handling menu

See Paper handling menu for more information.

PAPER HANDLING	**TRAY X SIZE**	
	X = 1, 2 or 3	
	TRAY X TYPE	
	X = 1, 2 or 3	

Configure device menu

See Configure device menu and Changing printer control panel configuration settings for more information.

CONFIGURE DEVICE	**PRINTING**	**COPIES**
		DEFAULT PAPER SIZE
		DEFAULT CUSTOM PAPER SIZE
		DUPLEX
		DUPLEX BINDING
		OVERRIDE A4/LETTER
		MANUAL FEED
		COURIER FONT
		WIDE A4
		PRINT PS ERRORS
		PRINT PDF ERRORS
		PCL
	PRINT QUALITY	**ADJUST COLOR**
		SET REGISTRATION
		AUTO SENSE MODE
		PRINT MODES
		OPTIMIZE
		QUICK CALIBRATE NOW
		CALIBRATE NOW

		COLOR RET
		CREATE CLEANING PAGE
		PROCESS CLEANING PAGE
		AUTO CLEANING
		CLEANING INTERVAL
	SYSTEM SETUP	**Date/Time**
		JOB STORAGE LIMIT
		JOB HELD TIMEOUT
		SHOW ADDRESS
		Restrict Color
		COLOR/BLACK MIX
		TRAY BEHAVIOR
		Sleep Delay
		WAKE TIME
		DISPLAY BRIGHTNESS
		PERSONALITY
		CLEARABLE WARNINGS
		AUTO CONTINUE
		REPLACE SUPPLIES
		ORDER AT
		COLOR SUPPLY OUT
		JAM RECOVERY
		RAM DISK
		LANGUAGE
	I/O	**I/O TIMEOUT**
		Embedded Jetdirect X
		(Where X = 1 or 2)
	RESETS	**RESTORE FACTORY SETTINGS**
		SLEEP MODE

Diagnostics menu

See Diagnostics menu for more information.

DIAGNOSTICS	**PRINT EVENT LOG**	
	SHOW EVENT LOG	

	PQ TROUBLESHOOTING
	PRINT DIAGNOSTICS PAGE
	DISABLE CARTRIDGE CHECK
	PAPER PATH SENSORS
	PAPER PATH TEST
	MANUAL SENSOR TEST
	MANUAL SENSOR TEST 2
	COMPONENT TEST
	PRINT/STOP TEST
	COLOR BAND TEST

Retrieve job menu

The **RETRIEVE JOB** menu allows you to view listings of all stored jobs.

Menu item	Description
PRINT STORED JOB LIST	Prints a page that lists all jobs stored on the printer. Each person who has jobs stored on the printer is listed. The number in parentheses indicates how many jobs that person has stored.
USER NAME	Each user who has stored jobs is listed by name. Select the appropriate user name to see a list of stored jobs.
ALL PRIVATE JOBS	This message is displayed if a user has stored jobs that require a PIN.
PRINT	When printing a private job, the user is prompted to enter a PIN.
COPIES	The number of copies of the job to be printed. The default is 1.
DELETE	When deleting a private job, the user is prompted to enter a PIN.

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 PAGE	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 status of the print cartridges, fuser kit, and transfer kit in a scrollable list.
PRINT USAGE PAGE	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 RGB SAMPLES	Prints color samples for different RGB values. The samples act as a guide for color matching on the HP Color LaserJet CP4005 Series printer.
PRINT CMYK SAMPLES	Prints color samples for different CMYK values. The samples act as a guide for color matching on the HP Color LaserJet CP4005 Series printer.
PRINT FILE DIRECTORY	Prints the name and directory of files stored in the printer.
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. It is important to correctly configure the trays with this menu before you print for the first time.

NOTE If you have used other HP LaserJet printer models, you might be accustomed to configuring Tray 1 to **First** mode or **Cassette** mode. On HP Color LaserJet CP4005 Series printers, setting the Tray 1 size and type to **ANY SIZE** is equivalent to **First** mode. Setting the size or type for Tray 1 to a setting other than **ANY SIZE** is equivalent to **Cassette** mode.

Menu item	Value	Description
TRAY X SIZE	A list of available sizes appears.	Allows you to configure the media size for Tray 1 (X = 1). The default is **ANY SIZE**. See Supported media weights and sizes for a complete list of available sizes.
TRAY X TYPE	A list of available types appears.	Allows you to configure the media type for Tray 1 (X = 1). The default is **ANY TYPE**. See Supported media weights and sizes for a complete list of available types.
TRAY X SIZE X = 2 or optional 3	A list of available sizes appears.	Allows you to configure the media size for Tray 2 or optional Tray 3. The default is **Letter**. The media size is detected by the guides in the tray. See Supported media weights and sizes for a complete list of available sizes.
TRAY X TYPE X = 2 or optional 3	A list of available types appears.	Allows you to configure the media type for Tray 2 or optional 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 default printing settings, adjust the print quality, change the system configuration and I/O options, and reset the 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. This menu can also be used to set default media size and type.

Menu item	Values	Description
COPIES	Range:1 - 32000	Allows you to set the default number of copies. The default number is **1**.
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. The default unit of measurement is **MILLIMETERS**.
DUPLEX	**OFF** **ON**	Allows you to enable or disable the duplex function on models with duplexing capability. The default is **OFF**.
DUPLEX BINDING	**LONG EDGE** **SHORT EDGE**	Allows you to specify which edge of the sheet is to be bound when printing duplex jobs. The default is **LONG EDGE**.
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. The default is **YES**.
MANUAL FEED	**OFF** **ON**	Allows you to manually feed media. The default is **OFF**.
COURIER FONT	**REGULAR** **DARK**	Allows you to select a version of the Courier font. The default is **REGULAR**.
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. The default is **NO**.
PRINT PS ERRORS	**OFF** **ON**	Allows you to select to print PS error pages. The default is **OFF**.
PRINT PDF ERRORS	**OFF** **ON**	Allows you to select to print PDF error pages. The default is **OFF**.
PCL	**FORM LENGTH** **ORIENTATION** **FONT SOURCE** **FONT NUMBER** **FONT PITCH**	**FORM LENGTH**: Sets vertical spacing from 5 to 128 lines for default paper size. **ORIENTATION**: Allows you to select default page orientation to portrait or landscape. **FONT SOURCE**: Selects the font source.

Menu item	Values	Description
	FONT POINT SIZE **SYMBOL SET** **APPEND CR TO LF** **SUPPRESS BLANK PAGES** **MEDIA SOURCE MAPPING**	**FONT NUMBER**: The printer assigns a number to each font and lists the numbers on the PCL font list. The range is 0 to 999. **FONT PITCH**: Selects the font pitch. This item might not appear, depending on the font selected. The range is 0.44 to 99.99. **FONT POINT SIZE**: Selects the font point size. This appears only if a font with a scalable point size is selected as the default font. The range is 4.00 to 999.75. **SYMBOL SET**: Selects any one of several available symbol sets at the printer control panel. A symbol set is a unique grouping of all the characters in a font. PC-8 or PC-850 is recommended for line-draw characters. **APPEND CR TO LF**: Select **Yes** to append a carriage return to each line-feed that is encountered in backward-compatible PCL jobs (pure text, no job control). Some environments indicate a new line by only the line-feed control code. Use this option appends the required carriage return to each line feed. **SUPPRESS BLANK PAGES**: When generating your own PCL, extra form feeds are included that would cause a blank page to be printed. Select **Yes** for form feeds to be ignored if the page is blank. The PCL5 **MEDIA SOURCE MAPPING** command selects an input tray by a number that maps to the various available trays and feeders.

Print quality menu

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

Menu item	Values	Description
ADJUST COLOR	**HIGHLIGHTS** **MIDTONES** **SHADOWS** **RESTORE COLOR VALUES**	Allows you to modify the half tone settings for each color. The default for each color is **0**.
SET REGISTRATION	**PRINT TEST PAGE** **Source** **ADJUST TRAY X**	Shifts the margin alignment to center the image on the page from top to bottom, and left to right. You can also align the image that is printed on the front with the image that is printed on the back.

Menu item	Values	Description
		PRINT TEST PAGE: Prints a test page that shows the current registration settings. **Source**: Allows you to select the tray for which you want to print the test page. If installed, optional trays appear as selections, where [N] is the number of the tray. **ADJUST TRAY X**: Sets the registration fro the specified tray, where [N] is the number of the tray. A selection appears for each tray that is installed, and registration must be set for each tray. • **X1 SHIFT**: Registration of the image on the paper from side to side, as the paper lies in the tray. For duplexing, this side is the second side (back) of the paper. • **X2 SHIFT**: Registration of the image on the paper from side to side, as the paper lies in the tray, for the first side (front) of a duplexed page. This item appears only if a duplexer is installed and enabled. Set the **X1 SHIFT** first. • **Y SHIFT**: Registration of the image on the paper from top to bottom, as the paper lies in the tray.
AUTO SENSE MODE	**TRAY 1 SENSING** **TRAY 2-N SENSING**	Allows you to set trays to automatically sense the type of paper loaded. For more information, see the section entitled Automatic media type sensing (auto sense mode).
PRINT MODES	A list of available modes appears.	Allows you to associate each media type with a specific print mode.
OPTIMIZE	A list of available parameters appears. **BELT CONTACT** **CACO3 PAPER** **TALC PAPER** **BACKGROUND 1** **BACKGROUND 2** **TRANSPARENCY** **MEDIA TYPE** **REGISTRATION** **LONG PAPER** **PRE-ROTATION** **RE-TRANSFER**	Allows you to optimize certain parameters for all jobs rather than optimizing by media type.

Menu item	Values	Description
	FUSER TEMP **TRAY 1** **RESTORE OPTIMIZE**	
QUICK CALIBRATE NOW		Performs partial printer calibrations. For more information, see Calibrating the printer.
CALIBRATE NOW		Performs all printer calibrations. For more information, see Calibrating the printer.
COLOR RET	**OFF** **ON**	The **COLOR RET** menu item allows you to turn on or turn off the printer REt (Resolution Enhancement Technology) setting. The default is **ON**.
CLEANING INTERVAL	**1000** **2000** **5000** **10000** **20000**	Select **CLEANING INTERVAL** to set the interval for automatic cleaning. The intervals correspond to the number of pages that the printer has printed. The default is **1000**. See Using the cleaning page for more information.
AUTO CLEANING	**Off** **On**	Select **AUTO CLEANING** to turn automatic cleaning on or off. The default is **Off**. See Using the cleaning page for more information.
CREATE CLEANING PAGE	No value to select.	Select **CREATE CLEANING PAGE** to create a cleaning page for the HP Color LaserJet CP4005n printer. The HP Color LaserJet CP4005dn printer is equipped with an external duplexer and generates a cleaning page automatically when **PROCESS CLEANING PAGE** is selected. See Using the cleaning page for more information.
PROCESS CLEANING PAGE	No value to select.	Select **PROCESS CLEANING PAGE** to process the cleaning page. See Using the cleaning page for more information.

System setup menu

The **SYSTEM SETUP** menu allows you to make changes to general printer configuration default settings such as sleep mode, printer personality (language), and jam recovery.

See Changing printer control panel configuration settings for more information.

Menu item	Values	Description
Date/Time	**DATE** **Date Format** **TIME** **Time Format**	Allows you to set various configurations for the date format when setting the date and select a 12-hour or 24-hour clock when setting time.
SHOW ADDRESS	**AUTO** **OFF**	This item determines whether the printer's IP address is shown on the display with the **Ready** message. The default is **OFF**.
Restrict Color	**DISABLE COLOR** **ENABLE COLOR** **COLOR IF ALLOWED**	Disables or restricts color use. The default is **ENABLE COLOR**. To use the **COLOR IF ALLOWED** setting, set up user permissions through the embedded Web server, HP Easy Printer Care, and Web Jetadmin. See Using the embedded Web server.
COLOR/BLACK MIX	**AUTO** **MOSTLY COLOR PAGES** **MOSTLY BLACK PAGES**	This menu item establishes how the printer switches from color to monochrome (black and white) mode for maximum performance and print cartridge life. **AUTO** will reset the printer to the factory default setting. The default is **AUTO**. Select **MOSTLY COLOR PAGES** if nearly all of your print jobs are color with high page coverage. Select **MOSTLY BLACK PAGES** if you print mostly monochrome print jobs, or a combination of color and monochrome print jobs.
TRAY BEHAVIOR	**USE REQUESTED TRAY** **MANUALLY FEED PROMPT** **PS DEFER MEDIA** **SIZE/TYPE PROMPT** **USE ANOTHER TRAY** **DUPLEX BLANK PAGES** **IMAGE ROTATION**	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 and to configure two-sided printing behavior for pre-printed paper.) The default for **USE REQUESTED TRAY** is **EXCLUSIVELY**. The default for **USE ANOTHER TRAY** is **ENABLED**. The default for **MANUALLY FEED PROMPT** is **ALWAYS**. **PS DEFER MEDIA** affects how paper is handled when printing from an Adobe PS print driver. **ENABLED** uses HP's paper handling. **Disabled** uses the Adobe PS paper handling. The default is **ENABLED**. The default for **DUPLEX BLANK PAGES** is **AUTO**. The default for **IMAGE ROTATION** is **Standard**.

Menu item	Values	Description
		See Changing printer control panel configuration settings for more information.
Sleep Delay	**1 Minute** **15 MINUTES** **30 MINUTES** **45 MINUTES** **60 MINUTES** **90 MINUTES** **2 HOURS** **4 HOURS**	Reduces power consumption when the printer has been inactive for the selected period. The default is **30 MINUTES**.
WAKE TIME	A list of day and hour variables appears.	When enabled, the default is daily at **7:00 AM**. This menu item opens a wizard that can be used to set the printer wake time.
DISPLAY BRIGHTNESS	Range is 1 through 10.	Sets the brightness of the control panel display. The default is **5**.
PERSONALITY	**AUTO** **PCL** **PDF** **PS**	Sets the default personality to automatic switching, PCL, PDF, or PostScript emulation modes. The default is **AUTO**.
CLEARABLE WARNINGS	**JOB** **ON**	Sets whether a warning is cleared on the control panel or when another job is sent. The default is **JOB**.
AUTO CONTINUE	**OFF** **ON**	Determines printer behavior when the system generates an Auto Continuable error. The default is **ON**.
REPLACE SUPPLIES	**STOP AT LOW** **STOP AT OUT** **OVERRIDE AT OUT**	Sets printer behavior when a cartridge is low. The default is **STOP AT LOW**. This option allows the printer to continue printing until a color supply is exhausted. When the printer is set to **STOP AT OUT**, printing pauses until the color supply is replaced. **OVERRIDE AT OUT** allows printing to continue when a color supply is out, but displays a warning that override is in use and that the supply must be replaced.
ORDER AT	RANGE=0-100	The user can set the percent remaining at which the **ORDER AT** message appears. The default is 15.
COLOR SUPPLY OUT	**STOP** **AUTOCONTINUE BLACK**	Sets the **COLOR SUPPLY OUT** printer behavior when a color supply is empty. When the printer is set to **AUTOCONTINUE BLACK**, the printer will continue printing using black toner only. The default is **STOP**.

Menu item	Values	Description
JAM RECOVERY	**AUTO** **OFF** **ON**	Sets whether the printer will attempt to reprint pages after a jam. The default is **AUTO**.
RAM DISK	**AUTO** **OFF**	Allows you to specify how the RAM disk is configured. When set to **AUTO**, the printer determines the optimal RAM disk size based on the amount of available memory. The default is **AUTO**. This message displays in models that do not have a hard disk installed.
LANGUAGE	A listing of available languages appears.	Sets the default language. The default language is **ENGLISH**.

I/O menu

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

See Network configuration.

Menu item	Values	Description
I/O TIMEOUT	**15 Seconds** Range: 5 - 300	Allows you to set the printer I/O timeout in seconds.
EMBEDDED JETDIRECT MENU	The values may vary. Possible values may include: **TCP/IP** **SECURE WEB** **RESET SECURITY** **LINK SPEED**	**TCP/IP**: Use the TCP/IP menu to configure basic TCP/IP settings. **SECURE WEB**: Specify whether the embedded Web server accepts communications by using only secure HTTP (HTTPS) or by using both HTTP and HTTPS. **RESET SECURITY**: Specifies whether the current security settings on the print server are saved or reset to factory defaults. **LINK SPEED**: Selects the network link speed and communication mode for the 10/100T print server. To ensure proper communication, the Jetdirect settings must match those of the network.

Resets menu

The **RESETS** menu allows you to reset factory settings, disable and enable sleep mode, 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

Menu item	Values	Description
		printing environment, and return all default settings to factory defaults.
SLEEP MODE	Values are **ON** and **OFF**.	Allows you to enable and disable sleep mode. The default is **ON**.

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 prints a Series of 8 pages that include instructions, pages for each color, a demo page, and a configuration page. These pages can help isolate print-quality problems.
PRINT DIAGNOSTICS PAGE	This item allows you to print a page that can assist in diagnosing printer problems.
DISABLE CARTRIDGE CHECK	This item allows you to remove a print cartridge to help determine which cartridge is the source of a problem.
PAPER PATH SENSORS	This item performs a test on each of the printer's sensors to determine if they are working correctly and displays the status of each sensor.
PAPER PATH TEST	This item is useful for testing the paper handling features of the printer, such as the configuration of the trays.
MANUAL SENSOR TEST	This item performs tests to determine whether the paper path sensors are operating correctly.
MANUAL SENSOR TEST 2	This item performs tests to determine whether the paper path sensors are operating correctly.
COMPONENT TEST	This item will activate individual parts independently to isolate noise, leaking, and other hardware issues.
PRINT/STOP TEST	This item isolates print quality faults more accurately by stopping the printer in mid-print cycle. Stopping the printer in mid-print cycle allows you to see where the image begins to degrade. Stopping the printer in mid-print cycle will cause a jam that may need to be manually removed. A service representative should perform this test.
COLOR BAND TEST	Use this page to print a color band test page that is used to identify arcing in the high-voltage power supply.

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, sleep mode, printer personality (language), and jam recovery.

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

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

Show IP address

This item determines whether the printer IP address is shown on the display with the **Ready** message. Options are **AUTO** and **OFF**. The default setting for this option is **OFF**.

Showing the IP address

1. Press Menu to enter the **MENUS**.
2. Press ▼ to highlight **CONFIGURE DEVICE**.
3. Press ✔ to select **CONFIGURE DEVICE**.
4. Press ▼ to highlight **SYSTEM SETUP**.
5. Press ✔ to select **SYSTEM SETUP**.
6. Press ▼ to highlight **SHOW ADDRESS**.
7. Press ✔ to select **SHOW ADDRESS**.
8. Press ▲ or ▼ to select the desired option.
9. Press ✔ to select the option.
10. Press Menu.

Color/black mix

This item allows you to configure printer settings to optimize printer and cartridge performance for the printing environment. If the printer is primarily used for black printing (over two-thirds of the pages are black only), change the printer settings to **MOSTLY BLACK PAGES**. If the printer is primarily used for color printing, change the printer settings to **MOSTLY COLOR PAGES**. If the printer is used for a mix of black-only and color print jobs, it is recommended that you use the printer default of **AUTO**. To determine the percentage of color pages, print a configuration page. See Printer information pages to learn how to print a configuration page. The configuration page shows the total number of pages printed and the number of color pages printed. To determine the percentage of color pages printed, divide the color page count by the total page count.

Setting the color/black mix

1. Press Menu to enter the **MENUS**.
2. Press ▼ to highlight **CONFIGURE DEVICE**.

3. Press ✔ to select **CONFIGURE DEVICE**.
4. Press ▼ to highlight **SYSTEM SETUP**.
5. Press ✔ to select **SYSTEM SETUP**.
6. Press ▼ to highlight **COLOR/BLACK MIX**.
7. Press ✔ to select **COLOR/BLACK MIX**.
8. Press ▲ or ▼ to select the desired option.
9. Press ✔ to select the option.
10. Press Menu.

Tray behavior options

Tray behavior allows seven 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 or does not match the settings specified for the print job. **EXCLUSIVELY** is the default setting.
- **MANUALLY FEED PROMPT**. If you select **ALWAYS** (the default value), the system always displays a prompt before pulling from Tray 1 (multipurpose tray). If you select **UNLESS LOADED**, the system will only display the prompt if Tray 1 is empty.
- **PS DEFER MEDIA**. This setting affects how non-HP PostScript drivers will behave with the device. There is no need to change this setting if using the drivers supplied by HP. If set to **ENABLED**, non-HP PostScript drivers will use the HP tray selection method as the HP drivers do. If set to **Disabled**, some non-HP PostScript drivers will use the PostScript tray selection method instead of the HP method.
- **SIZE/TYPE PROMPT**. This option allows you to control whether or not the tray configuration message, and corresponding prompt to change type or size is shown when a tray transitions from opened to closed. Values for this option are **Display** and **DO NOT DISPLAY**.
- **USE ANOTHER TRAY**. This menu item allows you to enable or disable the prompt to select another tray. Values for this option are **ENABLED** and **Disabled**. **ENABLED** is the default.
- **DUPLEX BLANK PAGES**. This item allows you to determine how a job is to be duplexed. The available values are **AUTO**, which is the default value, and **YES**. If **AUTO** is selected, blank pages within the print job are not duplexed. If **YES** is selected, any blank pages within the job are duplexed.

Setting the printer to use the requested tray

1. Press Menu to enter the **MENUS**.
2. Press ▼ to highlight **CONFIGURE DEVICE**.
3. Press ✔ to select **CONFIGURE DEVICE**.
4. Press ▼ to highlight **SYSTEM SETUP**.
5. Press ✔ to select **SYSTEM SETUP**.
6. Press ▼ to highlight **TRAY BEHAVIOR**.

7. Press ✔ to select **TRAY BEHAVIOR**.
8. Press ✔ to select **USE REQUESTED TRAY**.
9. Press ▲ or ▼ to select **EXCLUSIVELY** or **FIRST**.
10. Press ✔ to set the behavior.
11. Press Menu.

Setting manually feed prompt

1. Press Menu to enter the **MENUS**.
2. Press ▼ to highlight **CONFIGURE DEVICE**.
3. Press ✔ to select **CONFIGURE DEVICE**.
4. Press ▼ to highlight **SYSTEM SETUP**.
5. Press ✔ to select **SYSTEM SETUP**.
6. Press ▼ to highlight **TRAY BEHAVIOR**.
7. Press ✔ to select **TRAY BEHAVIOR**.
8. Press ▼ to highlight **MANUALLY FEED PROMPT**.
9. Press ✔ to select **MANUALLY FEED PROMPT**.
10. Press ▲ or ▼ to select **ALWAYS** or **UNLESS LOADED**.
11. Press ✔ to set the behavior.
12. Press Menu.

Setting the printer default for PS defer media

1. Press Menu to enter the **MENUS**.
2. Press ▼ to highlight **CONFIGURE DEVICE**.
3. Press ✔ to select **CONFIGURE DEVICE**.
4. Press ▼ to highlight **SYSTEM SETUP**.
5. Press ✔ to select **SYSTEM SETUP**.
6. Press ▼ to highlight **TRAY BEHAVIOR**.
7. Press ✔ to select **TRAY BEHAVIOR**.
8. Press ▼ to highlight **PS DEFER MEDIA**.
9. Press ✔ to select **PS DEFER MEDIA**.
10. Press ✔ to select **ENABLED** or **Disabled**.
11. Press ✔ to set the behavior.
12. Press Menu.

Setting the printer to use size/type prompt

1. Press Menu to enter the **MENUS**.
2. Press ▼ to highlight **CONFIGURE DEVICE**.
3. Press ✔ to select **CONFIGURE DEVICE**.
4. Press ▼ to highlight **SYSTEM SETUP**.
5. Press ✔ to select **SYSTEM SETUP**.
6. Press ▼ to highlight **TRAY BEHAVIOR**.
7. Press ✔ to select **TRAY BEHAVIOR**.
8. Press ▼ to highlight **SIZE/TYPE PROMPT**.
9. Press ▲ or ▼ to select **DISPLAY** or **DO NOT DISPLAY**.
10. Press ✔ to set the behavior.
11. Press Menu.

Setting the printer to use another tray

1. Press Menu to enter the **MENUS**
2. Press ▼ to highlight **CONFIGURE DEVICE**.
3. Press ✔ to select **CONFIGURE DEVICE**.
4. Press ▼ to highlight **SYSTEM SETUP**.
5. Press ✔ to select **SYSTEM SETUP**.
6. Press ▼ to highlight **TRAY BEHAVIOR**.
7. Press ✔ to select **TRAY BEHAVIOR**.
8. Press ▼ to highlight **USE ANOTHER TRAY**.
9. Press ▲ or ▼ to select **ENABLED** or **Disabled**.
10. Press ✔ to set the behavior.
11. Press Menu.

Setting the printer to duplex blank pages

1. Press Menu to enter the **MENUS**.
2. Press ▼ to highlight **CONFIGURE DEVICE**.
3. Press ✔ to select **CONFIGURE DEVICE**.
4. Press ▼ to highlight **SYSTEM SETUP**.
5. Press ✔ to select **SYSTEM SETUP**.
6. Press ▼ to highlight **TRAY BEHAVIOR**.

7. Press ✓ to select **TRAY BEHAVIOR**.
8. Press ▼ to highlight **DUPLEX BLANK PAGES**.
9. Press ▲ or ▼ to select **AUTO** or **YES**.
10. Press ✓ to set the behavior.
11. Press Menu.

Setting the printer to rotate images

1. Press Menu to enter the **MENUS**.
2. Press ▼ to highlight **CONFIGURE DEVICE**.
3. Press ✓ to select **CONFIGURE DEVICE**.
4. Press ▼ to highlight **SYSTEM SETUP**.
5. Press ✓ to select **SYSTEM SETUP**.
6. Press ▼ to highlight **TRAY BEHAVIOR**.
7. Press ✓ to select **TRAY BEHAVIOR**.
8. Press ▼ to highlight **IMAGE ROTATION**.
9. Press ▲ or ▼ to select **STANDARD** or **ALTERNATE**.
10. Press ✓ to set the behavior.
11. Press Menu.

Sleep delay

The adjustable sleep mode feature reduces power consumption when the printer has been inactive for an extended period. You can set the length of time before the printer enters sleep mode to **1 MINUTE**, **15 MINUTES**, **30 MINUTES**, **45 MINUTES**, **60 MINUTES**, **90 MINUTES**, **2 HOURS**, or **4 HOURS**. The default setting is **30 MINUTES**.

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

Setting sleep delay

1. Press Menu to enter the **MENUS**.
2. Press ▼ to highlight **CONFIGURE DEVICE**.
3. Press ✓ to select **CONFIGURE DEVICE**.
4. Press ▼ to highlight **SYSTEM SETUP**.
5. Press ✓ to select **SYSTEM SETUP**.
6. Press ▼ to highlight **Sleep Delay**.
7. Press ✓ to select **Sleep Delay**.

8. Press ▲ or ▼ to select the appropriate time period.
9. Press ✔ to set the time period.
10. Press Menu.

NOTE If media is loaded in optional Tray 3 when the printer is in sleep mode, the printer will not sense new media when it comes out of sleep mode. This could cause the printer to use wrong paper for a print job. Be sure to wake the printer before loading media in optional Tray 3.

Disabling/enabling sleep mode

1. Press Menu to enter the **MENUS**.
2. Press ▼ to highlight **CONFIGURE DEVICE**.
3. Press ✔ to select **CONFIGURE DEVICE**.
4. Press ▼ to highlight **RESETS**.
5. Press ✔ to select **RESETS**.
6. Press ▼ to highlight **SLEEP MODE**.
7. Press ✔ to select **SLEEP MODE**.
8. Press ▲ or ▼ to select **ON** or **OFF**.
9. Press ✔ to set the selection.
10. Press Menu.

Wake time

The wake time feature allows you to instruct the printer to wake at a certain time on selected days, to eliminate waiting for the warm-up and calibration periods. You must have **SLEEP MODE** on to set the wake time.

To set or change the wake time, use the following steps:

Setting the wake time

1. Press Menu to enter the **MENUS**.
2. Press ▼ to highlight **CONFIGURE DEVICE**.
3. Press ✔ to select **CONFIGURE DEVICE**.
4. Press ▼ to highlight **SYSTEM SETUP**.
5. Press ✔ to select **SYSTEM SETUP**.
6. Press ▼ to highlight **WAKE TIME**.
7. Press ✔ to select **WAKE TIME**.
8. Press ▲ or ▼ to select the day of the week.

9. Press ✔ to accept the selection.
10. Press ▲ or ▼ to select **custom** or **Off**.
11. Press ✔ to accept the selection.
12. Press ▲ or ▼ to select the hour.
13. Press ✔ to accept the selection.
14. Press ▲ or ▼ to select the minutes.
15. Press ✔ to accept the selection.
16. Press ▲ or ▼ to select **AM** or **PM**.
17. Press ✔ to accept the selection.
18. Press ✔ to enter **APPLY TO ALL DAYS**.
19. Press ▲ or ▼ to select **YES** or **NO**.
20. Press ✔ to accept the selection.
21. Press ▲ or ▼ to select the days of the week to which **WAKE TIME** applies.
22. Press ✔ to accept each selection.
23. Press Menu.

Display brightness

The display brightness feature allows you to set the level of brightness for the control panel display. The allowable range of values is 1 through 10. The default for this feature is **5**.

To change or set the display brightness, use the following steps:

Setting the display brightness

1. Press Menu to enter the **MENUS**.
2. Press ▼ to highlight **CONFIGURE DEVICE**.
3. Press ✔ to select **CONFIGURE DEVICE**.
4. Press ▼ to highlight **SYSTEM SETUP**.
5. Press ✔ to select **SYSTEM SETUP**.
6. Press ▼ to highlight **DISPLAY BRIGHTNESS**.
7. Press ✔ to select **DISPLAY BRIGHTNESS**.
8. Press ▲ or ▼ to highlight the desired value.
9. Press ✔ to accept the selection.
10. Press Menu.

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.
- **PDF** configures the printer to print PDF files.
- **PS** configures the printer to use PostScript emulation.

Setting the personality

1. Press Menu to enter the **MENUS**.
2. Press ▼ to highlight **CONFIGURE DEVICE**.
3. Press ✔ to select **CONFIGURE DEVICE**.
4. Press ▼ to highlight **SYSTEM SETUP**.
5. Press ✔ to select **SYSTEM SETUP**.
6. Press ▼ to highlight **PERSONALITY**.
7. Press ✔ to select **PERSONALITY**.
8. Press ▲ or ▼ to select the appropriate personality (**AUTO**, **PCL**, **PDF**, or **PS**).
9. Press ✔ to set the personality.
10. Press Menu.

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**.

- **ON** displays clearable warnings until you press ✔.
- **JOB** displays clearable warnings until the end of the job in which it was generated.

Setting the clearable warnings

1. Press Menu to enter the **MENUS**.
2. Press ▼ to highlight **CONFIGURE DEVICE**.
3. Press ✔ to select **CONFIGURE DEVICE**.
4. Press ▼ to highlight **SYSTEM SETUP**.
5. Press ✔ to select **SYSTEM SETUP**.
6. Press ▼ to highlight **CLEARABLE WARNINGS**.
7. Press ✔ to select **CLEARABLE WARNINGS**.

8. Press ▲ or ▼ to select the appropriate setting.
9. Press ✔ to set the selection.
10. Press Menu.

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.
- **OFF** pauses printing any time the printer displays an error message and until you press ✔.

Setting auto continue

1. Press Menu to enter the **MENUS**.
2. Press ▼ to highlight **CONFIGURE DEVICE**.
3. Press ✔ to select **CONFIGURE DEVICE**.
4. Press ▼ to highlight **SYSTEM SETUP**.
5. Press ✔ to select **SYSTEM SETUP**.
6. Press ▼ to highlight **AUTO CONTINUE**.
7. Press ✔ to select **AUTO CONTINUE**.
8. Press ▲ or ▼ to select the appropriate setting.
9. Press ✔ to set the selection.
10. Press Menu.

Replace supplies

The printer allows three options for handling the printer when a color cartridge is low and should be replaced. **STOP AT LOW** is the default value.

- **STOP AT OUT** pauses printing until the color supply is replaced. The control panel displays a warning that the supply is low and should be replaced.
- **STOP AT LOW** allows the printer to continue printing until the color supply is exhausted. The control panel displays a warning that the supply is out and should be replaced.
- **OVERRIDE AT OUT** allows printing to continue when a color supply is out, but displays a warning that override is in use and that the supply must be replaced.

NOTE Using the Override mode may result in unsatisfactory print quality. HP recommends replacing the supply when the **REPLACE SUPPLIES Override in use** message is displayed. HP Supplies Premium Protection Warranty coverage ends when a supply is used in Override mode.

Setting replace supplies response

1. Press Menu to enter the **MENUS**.
2. Press ▼ to highlight **CONFIGURE DEVICE**.
3. Press ✓ to select **CONFIGURE DEVICE**.
4. Press ▼ to highlight **SYSTEM SETUP**.
5. Press ✓ to select **SYSTEM SETUP**.
6. Press ▼ to highlight **REPLACE SUPPLIES**.
7. Press ✓ to select **REPLACE SUPPLIES**.
8. Press ▲ or ▼ to select the appropriate setting.
9. Press ✓ to set the selection.
10. Press Menu.

Order at

This menu option allows you to set the point at which you are reminded to order new supplies. The point is measured in terms of percent remaining. The allowable range is **0-100**. The default is **15**.

Setting order at response

1. Press Menu to enter the **MENUS**.
2. Press ▼ to highlight **CONFIGURE DEVICE**.
3. Press ✓ to select **CONFIGURE DEVICE**.
4. Press ▼ to highlight **SYSTEM SETUP**.
5. Press ✓ to select **SYSTEM SETUP**.
6. Press ▼ to highlight **ORDER AT**.
7. Press ✓ to select **ORDER AT**.
8. Press ▲ or ▼ to select the appropriate setting.
9. Press ✓ to set the selection.
10. Press Menu.

Color supply out

There are two options for this menu item. The default is **STOP**.

- **STOP** causes the printer to stop printing until the empty color supply is replaced.
- **AUTOCONTINUE BLACK** allows the printer to continue printing using black toner only when a color supply is empty. A warning message displays on the control panel when the printer is in this mode. Printing in this mode is allowed only for a specific number of pages. After that, the printer will pause printing until you replace the empty color supply.

Setting color supply out response

1. Press Menu to enter the **MENUS**.
2. Press ▼ to highlight **CONFIGURE DEVICE**.
3. Press ✔ to select **CONFIGURE DEVICE**.
4. Press ▼ to highlight **SYSTEM SETUP**.
5. Press ✔ to select **SYSTEM SETUP**.
6. Press ▼ to highlight **COLOR SUPPLY OUT**.
7. Press ✔ to select **COLOR SUPPLY OUT**.
8. Press ▲ or ▼ to select the appropriate setting.
9. Press ✔ to set the selection.
10. Press Menu.

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.
- **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.
- **ON** — the printer reprints any page involved in a paper jam. Additional memory is allocated to store the last few pages printed, and this might cause overall printer performance to suffer.

Setting jam recovery response

1. Press Menu to enter the **MENUS**.
2. Press ▼ to highlight **CONFIGURE DEVICE**.
3. Press ✔ to select **CONFIGURE DEVICE**.
4. Press ▼ to highlight **SYSTEM SETUP**.
5. Press ✔ to select **SYSTEM SETUP**.
6. Press ▼ to highlight **JAM RECOVERY**.
7. Press ✔ to select **JAM RECOVERY**.
8. Press ▲ or ▼ to select the appropriate setting.
9. Press ✔ to set the selection.
10. Press Menu.

RAM disk

This option allows you to specify how the RAM disk is configured. Options are **AUTO** and **OFF**. When set to **AUTO**, the printer determines the optimal RAM size based on the amount of available memory. The message displays only in printer models that do not have a hard disk installed. The default is **AUTO**.

Changing RAM disk behavior

You can change this behavior at any time by following these steps:

1. Press Menu to enter the **MENUS**.
2. Press ▼ to highlight **CONFIGURE DEVICE**.
3. Press ✔ to select **CONFIGURE DEVICE**.
4. Press ▼ to highlight **SYSTEM SETUP**.
5. Press ✔ to select **SYSTEM SETUP**.
6. Press ▼ to highlight **RAM DISK**.
7. Press ✔ to select **RAM DISK**.
8. Press ▲ or ▼ to select **AUTO** or **OFF**.
9. Press ✔ to set the selection.
10. Press Menu.

Language

On some products, the option to set the default language appears when the printer is first initialized. Use the ▲ or ▼ arrow to scroll through the available options. When the desired language is highlighted, press the ✔ to set the default language. The default language is **ENGLISH**.

You may also change the language at any time by following these steps:

Selecting the language

1. Press Menu to enter the **MENUS**.
2. Press ▼ to highlight **CONFIGURE DEVICE**.
3. Press ✔ to select **CONFIGURE DEVICE**.
4. Press ▼ to highlight **SYSTEM SETUP**.
5. Press ✔ to select **SYSTEM SETUP**.
6. Press ▼ to highlight **LANGUAGE**.
7. Press ✔ to select **LANGUAGE**.
8. Press ▲ or ▼ to select the appropriate language.
9. Press ✔ to set the selection.
10. Press Menu.

Selecting the language if the display is in a language you do not understand

1. Turn the printer power off.
2. Hold down the ✔ key while turning the printer power on until all three lights stay on.
3. Press ✔ again.
4. Press ▲ or ▼ to scroll through the available languages.
5. Press ✔ to save the desired language as the new default.

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.

3 I/O configuration

This chapter describes how to configure certain network parameters on the printer. The following topics are covered:

- Network configuration
- USB configuration
- HP Jetdirect print servers
- Wireless printing

Network configuration

You might need to configure certain network parameters on the printer. You can configure these parameters from installation software, the printer control panel, the embedded Web server, or management software, such as HP Web Jetadmin.

NOTE For more information about using the embedded Web server, see Using the embedded Web server.

For more information about supported networks and network configuration tools, 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 instructions for configuring TCP/IP network parameters from the printer control panel:

Configuring TCP/IP parameters

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

- IP address (4 bytes)
- Subnet mask (4 bytes)
- Default gateway (4 bytes)

Manually configuring TCP/IP parameters from the printer control panel

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

Setting an IP address

1. Press Menu to enter the **MENUS**.
2. Press ▼ to highlight **CONFIGURE DEVICE**.
3. Press ✔ to select **CONFIGURE DEVICE**.
4. Press ▼ to highlight **I/O**.
5. Press ✔ to select **I/O**.
6. Press ▼ to highlight **EMBEDDED JETDIRECT MENU**.
7. Press ✔ to select **EMBEDDED JETDIRECT MENU**.
8. Press ▼ to highlight **TCP/IP**.
9. Press ▼, highlight **IPV4 SETTINGS**, and then press ✔ to select **IPV4 SETTINGS**.
10. Press ✔ and select **CONFIG METHOD**.
11. Press ▼ to highlight **MANUAL**, and then press ✔.
12. Press ▼ to highlight **MANUAL SETTINGS**.
13. Press ✔ to select **MANUAL SETTINGS**.

14. Press ▼ to highlight **IP Address:**.
15. Press ✔ to select **IP Address:**.

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

16. Press ▲ or ▼ to increase or decrease the number for configuring the IP address.
17. Press ✔ to move to the next set of numbers.
18. Repeat steps 15 and 16 until the correct IP address is entered.
19. Press the Menu button to return to the **Ready** state.

Setting the subnet mask

1. Press Menu to enter the **MENUS**.
2. Press ▼ to highlight **CONFIGURE DEVICE**.
3. Press ✔ to select **CONFIGURE DEVICE**.
4. Press ▼ to highlight **I/O**.
5. Press ✔ to select **I/O**.
6. Press ▼ to highlight **EMBEDDED JETDIRECT MENU**.
7. Press ✔ to select **EMBEDDED JETDIRECT MENU**.
8. Press ▼ to highlight the **TCP/IP** menu.
9. Press ✔ to select **TCP/IP**.
10. Press ▼, highlight **IPV4 SETTINGS**, and then press ✔ to select **IPV4 SETTINGS**.
11. Press ▼ to highlight **MANUAL SETTINGS**.
12. Press ✔ to select **MANUAL SETTINGS**.
13. Press ▼ to highlight **SUBNET MASK**.
14. Press ✔ to select **SUBNET MASK**.

NOTE The first of three sets of numbers is highlighted.

15. Press ▲ or ▼ to increase or decrease the number for configuring the subnet mask.
16. Press ✔ to move to the next set of numbers.
17. Repeat steps 14 and 15 until the correct subnet mask is entered.
18. Press the Menu button to return to the **Ready** state.

Setting the default gateway

1. Press Menu to enter the **MENUS**.
2. Press ▼ to highlight **CONFIGURE DEVICE**.
3. Press ✔ to select **CONFIGURE DEVICE**.
4. Press ▼ to highlight **I/O**.
5. Press ✔ to select **I/O**.
6. Press ▼ to highlight **EMBEDDED JETDIRECT MENU**.
7. Press ✔ to select **EMBEDDED JETDIRECT MENU**.
8. Press ▼ to highlight **TCP/IP**.
9. Press ✔ to select **TCP/IP**.
10. Press ▼ to highlight **MANUAL SETTINGS**.
11. Press ✔ to select **MANUAL SETTINGS**.
12. Press ▼ to highlight **DEFAULT GATEWAY**.
13. Press ✔ to select **DEFAULT GATEWAY**.

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

14. Press ▲ or ▼ to increase or decrease the number for configuring **DEFAULT GATEWAY**.
15. Press ✔ to move to the next set of numbers.
16. Repeat steps 15 and 16 until the correct subnet mask is entered.
17. Press the Menu button to return to the **Ready** state.

USB configuration

This printer supports a USB 2.0 connection. The USB port is located on the back of the printer, as shown in the figure below. You must use an A-to-B type USB cable.

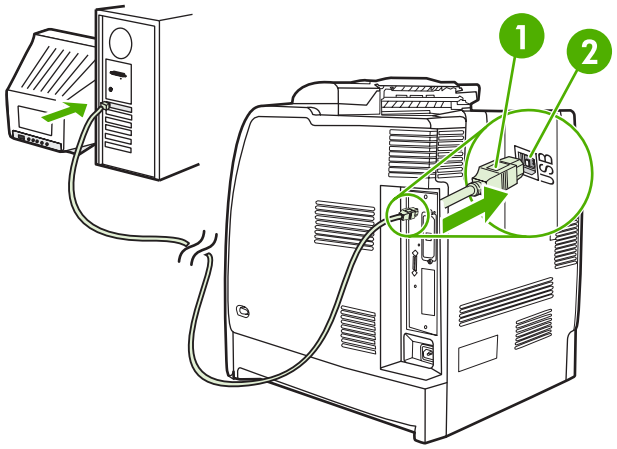


Figure 3-1 USB configuration

1	USB 2.0 Hi-Speed Device port (Type B connector)
2	USB port

HP Jetdirect print servers

The HP Jetdirect print servers facilitate network management by allowing you to connect a printer directly to your network at any location. They support multiple network protocols and operating systems. 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.

The HP Color LaserJet CP4005 Series printers are equipped with embedded HP Jetdirect print servers. These servers support Ethernet 10/100T networking for peripherals.

Available software solutions

For a summary of available software solutions, refer to the *HP Jetdirect Print Server Administrator's Guide*, or visit http://www.hp.com/support/net_printing.

Wireless printing

Wireless networks offer a safe, secure, and cost-effective alternative to traditional wired network connections.

IEEE 802.11 standard

Optional HP Jetdirect wireless print servers support connection to an 802.11 network. This wireless technology provides a high-quality printing solution without the physical constraints of wiring.

Peripherals can be conveniently placed anywhere in an office or home and can be easily moved without changing network cables. Installation is easy with the HP Install Network Printer Wizard.

NOTE HP Jetdirect 802.11 print servers are available for USB connections.

4 Printing tasks

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

- Controlling print jobs
- Selecting print media
- Automatic media type sensing (auto sense mode)
- Configuring input trays
- Printing on special media
- Using features in the printer driver
- Using features in the Macintosh printer driver
- Two-sided (duplex) printing
- Special printing situations
- Job storage features
- 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 that 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. If you select a tray that is configured 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 provides options to print from another tray.

Type and size

Printing by **Type** or **Size** means that you want the printer to pull paper or print media from the appropriate tray loaded with the correct type and size. 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 might result in unsatisfactory print quality. Always print by **Type** for special print media, such as labels or heavy media. Print by **Size** for envelopes, if possible.

- If you want to print by **Type** or **Size**, select the type or size from the **Page Setup** dialog box, the **Print** dialog box, or the **Print Properties** dialog box, depending on the application.
- 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 configure a tray for that type or size. Then, when you choose that type or size as you print a job, the printer pulls media 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**, click **Settings**, click **Printers**, and then right-click the printer icon. Click **Properties** and then click **Device Settings**.
2. Click **Start**, click **Control Panel**, and then select the **Printers** folder, right-click the printer icon. Click **Properties** and then click **Device Settings**.

For more information, see Printer drivers or Printer drivers for Macintosh computers.

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. For more information about supported print media, see Print media specifications.

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

This printer 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.

- 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.

Paper that can damage the printer

In rare circumstances, paper can damage the printer. Avoid the following paper to prevent possible damage to the printer:

- Do not use paper with staples attached.
- Do not use transparencies designed for inkjet printers or other low-temperature printers, or transparencies designed for monochrome printing. Use only transparencies that are specified for use with HP Color LaserJet printers.
- Do not use glossy or photo papers intended for inkjet printers.
- Do not use paper that is embossed or coated and is not designed for the temperatures of the image fuser. Select media that can tolerate temperatures of 190°C (374°F) for 0.1 second.
- 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 undesirable emissions, or that melts, offsets, or discolors when exposed to 190°C (374°F) for 0.1 second.

To order HP Color LaserJet printing supplies, go to http://www.hp.com/go/ljsupplies in the United States or to http://www.hp.com/ghp/buyonline.html worldwide.

Automatic media type sensing (auto sense mode)

The HP Color LaserJet CP4005 Series printers can automatically classify media into one of the following categories:

- Plain
- Transparency
- Glossy
- Extra-heavy glossy
- Glossy film
- Heavy
- Light

The automatic media type sensor functions only when that tray is configured to Any Type Plain. Configuring a tray to any other type, such as Bond or Glossy, deactivates the media sensor in that tray.

NOTE Get optimal performance with the automatic media sensing feature when using original HP media designed for use in HP color LaserJet printers.

Tray 1 sensing

Full sensing (default)

- The printer stops at each page to sense media type.
- This is the best mode for using mixed media in a single print job.

Expanded sensing

- Each time the printer begins a print job, it stops the first page to sense the type.
- The printer assumes that the second and all subsequent pages are of the same media type as the first page.
- This is the second-fastest mode, and is useful for using stacks of the same media type.

Transparency

- The printer does not stop any pages for sensing but distinguishes between transparencies (Transparency mode) and paper (Normal mode).
- This is the fastest mode and is useful for high-volume printing in Normal mode.

Tray 2 and optional Tray 3 sensing

Expanded sensing

- The printer stops the first five pages fed from each paper tray to sense the type and averages the five results.
- The printer assumes that the sixth and all subsequent pages are of the same media type, until the printer is turned off or goes into sleep mode, or until the tray is opened.

Transparency only (default)

- The printer does not stop any pages for sensing but distinguishes between transparencies (Transparency mode) and paper (Normal mode).
- This is the fastest mode and is useful for high-volume printing in Normal mode.

Configuring input trays

The printer allows you to configure input trays by type and size. You can load different media in the printer's input trays and then request media by type or size using the control panel.

NOTE If you have used other HP LaserJet printer models, you might be accustomed to configuring Tray 1 to **First** mode or **Cassette** mode. On HP Color LaserJet CP4005 Series printers, setting the Tray 1 size and type to **ANY SIZE** is equivalent to **First** mode. Setting the size or type for Tray 1 to a setting other than **ANY SIZE** is equivalent to **Cassette** mode.

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

NOTE 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 Using the embedded Web server.

Configuring trays when the printer gives a prompt

In the following situations, the printer automatically prompts you to configure the tray for type and size:

- When you load paper into the tray
- When you specify a particular tray or media type for a print job through the printer driver or a software application and the tray is not configured to match the print job settings

The control panel displays the message **LOAD TRAY X [TYPE] [SIZE]**, **To change type press ✔ ✔**. The instructions below explain how to configure the tray after the prompt appears.

NOTE The prompt does not appear if you are printing from Tray 1 and if Tray 1 is configured for **ANY SIZE** and **ANY TYPE**.

Configuring a tray when loading paper

NOTE If media is loaded in optional Tray 3 when the printer is in sleep mode, the printer will not sense new media when it comes out of sleep mode. This could cause the printer to use wrong paper for a print job. Be sure to wake the printer before loading media in optional Tray 3.

1. Load paper in the tray. If you are using Tray 2 or optional Tray 3, close the tray.
2. The printer displays the tray configuration message **To change size press ✔**.
3. Press ✔ to display the **TRAY X SIZE=** menu.
4. To change the size, press ▼ or ▲ to highlight the correct size.
5. Press ✔ to select the size.

   A **Setting saved** message appears, and then a prompt appears to configure the paper type.
6. To change the type, press ▼ or ▲ to highlight the correct paper type.
7. Press ✔ to select the paper type.

A **Setting saved** message appears, and then the current type and size settings are displayed.

8. If size and type are now correct, press ⮌ to clear the message.

Configuring a tray to match print job settings

1. In the software application, specify the source tray, the paper size, and the paper type.
2. Send the job to the printer.

   If the tray needs to be configured, the **LOAD TRAY X:** message appears.
3. Load the tray with the correct paper. When the tray is closed, the **TRAY X SIZE=** appears.
4. If the highlighted size is not correct, press ▼ or ▲ to highlight the correct size.
5. Press ✔ to select the correct size.

   A **Setting saved** message appears, and then a prompt appears to configure the paper type.
6. If the highlighted paper type is not correct, press ▼ or ▲ to highlight the desired paper type.
7. Press ✔ to select the paper type.

   A **Setting saved** message appears, and then the current type and size settings are displayed.

Configuring trays using the paper handling menu

You can also configure the trays for type and size without a prompt from the printer. Use the **PAPER HANDLING** menu to configure the trays as follows.

Configuring the paper size

1. Press Menu to enter the **MENUS**.
2. Press ▼ to highlight **PAPER HANDLING**.
3. Press ✔ to select **PAPER HANDLING**.
4. Press ▼ to highlight **TRAY X SIZE**. (X represents the number of the tray you are configuring.)
5. Press ✔ to select **TRAY X SIZE**.
6. Press ▼ or ▲ to highlight the correct size.
7. Press ✔ to select the correct size.

Configuring the paper type

1. Press Menu to enter the **MENUS**.
2. Press ▼ to highlight **PAPER HANDLING**.
3. Press ✔ to select **PAPER HANDLING**.
4. Press ▼ to highlight **TRAY X TYPE**. (X represents the number of the tray you are configuring.)
5. Press ✔ to select **TRAY X TYPE**.

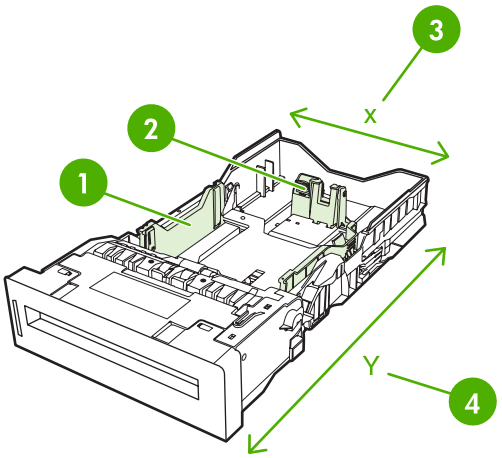
6. Press ▼ or ▲ to highlight the correct paper type.
7. Press ✔ to select the correct paper type.

   A **Setting saved** message appears, and then the current type and size settings are displayed.

Configuring Tray 2 and optional Tray 3 for a custom paper size

The printer automatically detects many sizes of paper, but you can also configure trays for custom paper sizes. You must specify the following parameters:

- Unit of measure (millimeters or inches)
- X dimension (the width of the page as it feeds into the printer)
- Y dimension (the length of the page as it feeds into the printer)



1	Media width guides
2	Media length guides
3	Page width (X dimension)
4	Page length (Y dimension)

Use the following procedure to configure a tray for a custom size. Once a custom size is set for a tray, it will be retained until the media length guides are reset.

Setting a custom size in Tray 2 or optional Tray 3

1. Open the tray and place the media face-up in the tray.
2. Set the media length guides to the appropriate non-standard position and close the tray.
3. When the tray configuration message appears, press ✔.
4. Press ▲ to change **ANY CUSTOM** to **custom**.
5. Press ✔ to select **custom**.
6. Press ▲ or ▼ to highlight the correct unit (either millimeters or inches).

7. Press ✔ to select the value.

   After the unit of measure is set properly, set the X dimension as follows:

8. Press ▲ or ▼ to highlight the correct value.

9. Press ✔ to select the value. If the value entered is outside the valid range, **Invalid value** will appear for two seconds. The display prompts you to enter another value.

   After the X dimension is set properly, set the Y dimension as follows:

10. Press ▲ or ▼ to highlight the correct value.

11. Press ✔ to select the value. If the value entered is outside the valid range, **Invalid value** will appear for two seconds. The display prompts you to enter another value. The printer displays a message indicating the dimensions for the custom size.

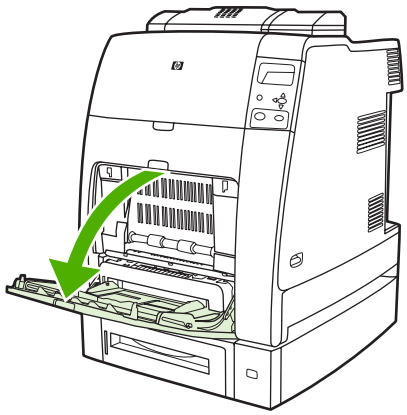
Printing from Tray 1 (multipurpose tray)

Tray 1 is a multipurpose tray that holds up to 100 sheets of 75 g/m^2 (20 lb) paper or 20 envelopes. It provides a convenient way to print envelopes, transparencies, custom-size paper, media heavier than 32 lb, or other types of media without having to unload the other trays.

Loading Tray 1

CAUTION To avoid jams, never add or remove paper from Tray 1 during printing.

1. Open Tray 1.



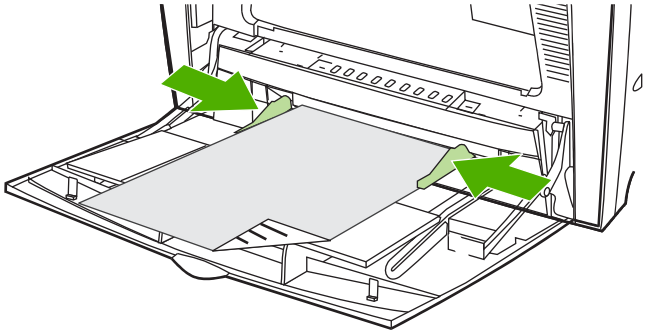
2. Set the side guides to the desired width.

3. Load paper in the tray with the side to be printed facing down and the top of the page facing you.

NOTE Tray 1 can hold approximately 100 sheets of standard 75 g/m^2 (20 lb) office paper.

NOTE If you are duplex printing, see Two-sided (duplex) printing for loading instructions.

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.

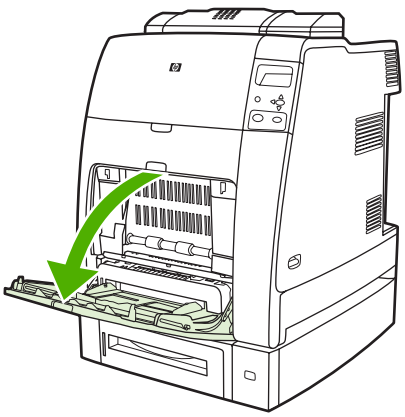
In the software, set margins at least 15 mm (0.6 inches) from the edge of the envelope.

CAUTION Envelopes with clasps, snaps, windows, coated linings, exposed self-stick adhesives, or other synthetic materials can severely 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.

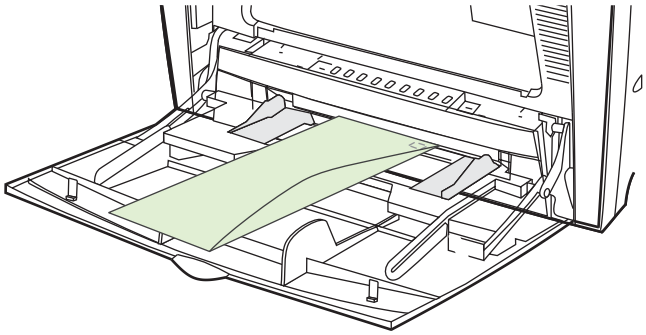
Loading envelopes into Tray 1

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

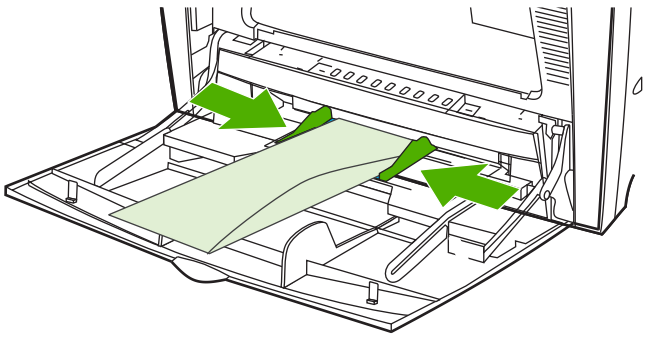
1. Open Tray 1.



2. Load up to 20 envelopes in the center of Tray 1 with the side to be printed facing down and the postage end toward the printer. Slide the envelopes into the printer as far as they will go without forcing them.



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



Printing envelopes

1. Specify Tray 1 or select the media source by size in the printer driver.
2. 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	5 mm (0.2 inch)	5 mm (0.2 inch)
Destination	102 mm (4.0 inches)	51 mm (2.0 inches)

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

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

Printing from Tray 2 or optional Tray 3

Tray 2 and optional Tray 3 each hold up to 500 sheets of standard paper or a 50.8 mm (2 inch) stack of labels. Tray 2 stacks above the optional 500-sheet Tray 3, and, when properly installed, the printer detects optional Tray 3 and shows it as an option in the control panel **CONFIGURE DEVICE** menu. The trays adjust for detectable media sizes; letter, legal, A4, A5, JIS B5, and executive; and undetectable

media sizes: 8.5 x 13 and Executive (JIS), double Japan postcard, and custom. The printer automatically detects the media size in these trays based on the tray's paper guide configuration. (See Supported media weights and sizes.)

CAUTION The paper path for optional Tray 3 passes through Tray 2. If Tray 2 is partially pulled out or removed, media from optional Tray 3 cannot feed into the printer. The printer will stop and generate a message that Tray 2 must be installed. Similarly, all installed trays that are above the tray that is being used must be closed in order for paper to feed into the printer.

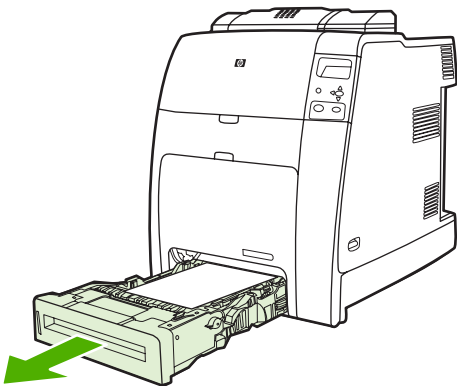
Loading detectable standard-sized media into Tray 2 and optional Tray 3

NOTE If media is loaded in optional Tray 3 when the printer is in sleep mode, the printer will not sense new media when it comes out of sleep mode. This could cause the printer to use wrong paper for a print job. Be sure to wake the printer before loading media in optional Tray 3.

The following detectable standard-sized media is supported in Tray 2 and optional Tray 3: letter, legal, executive, A4, A5, and (JIS) B5.

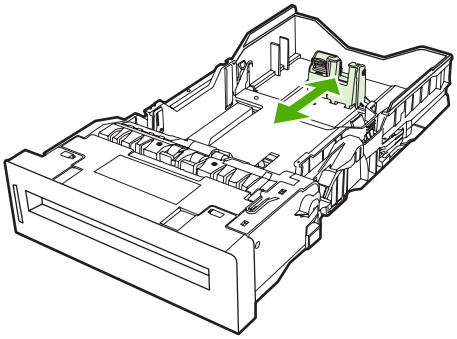
CAUTION Do not print cardstock, envelopes, heavy or extra heavy paper, or unsupported sizes of media from the 500-sheet trays. Print on these types of media only from Tray 1. Do not overfill the input tray or open it while it is in use. Doing so can cause jams in the printer.

1. Remove the tray from the printer.

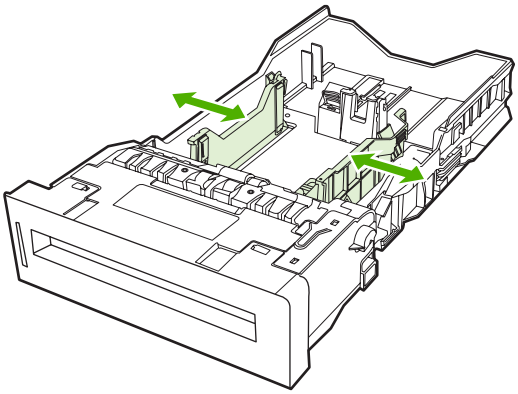


NOTE After sliding the tray out, lift the tray up slightly to remove it.

2. 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. Slide the media-width guides open to the size for the media you are using.



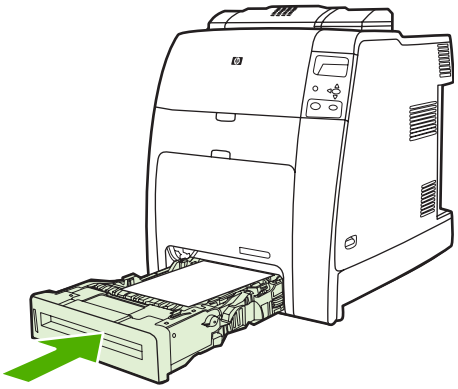
4. Load media into the tray face up.

NOTE For best performance, load the tray completely full without splitting or fanning the ream of paper. Splitting or fanning the ream might cause a multi-feed problem, which could result in a paper jam. The capacity of the paper tray can vary. For example, if you are using 75 g/m^2 (20 lb) paper, the tray holds a full ream of 500 sheets. If the media is heavier than 75 g/m^2 (20 lb), the tray will not hold a full ream, and you must reduce the number of sheets accordingly. Do not overfill the tray because the printer might not pick up the paper.

NOTE If the tray is not properly adjusted, the printer might display an error message or the media might jam.

NOTE If you are duplex printing, see Two-sided (duplex) printing for loading instructions.

5. Insert the tray into the printer. The printer will display the tray's media type and size. If the configuration is not correct, press the ✔ key when the printer prompts you to configure the tray for type and size. (For more information see Configuring a tray when loading paper.)



6. If the configuration is correct, press ⮌ to clear the message.

Loading undetectable standard-sized media into Tray 2 and optional Tray 3

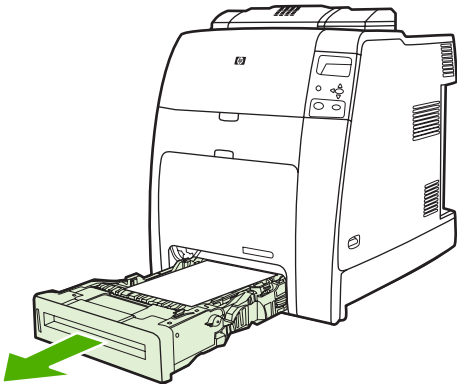
CAUTION If media is loaded in optional Tray 3 when the printer is in sleep mode, the printer will not sense new media when it comes out of sleep mode. This could cause the printer to use wrong paper for a print job. Be sure to wake the printer before loading media in optional Tray 3.

Undetectable standard-sized media sizes are not marked in the tray, but are listed in the **Size** menu for the tray.

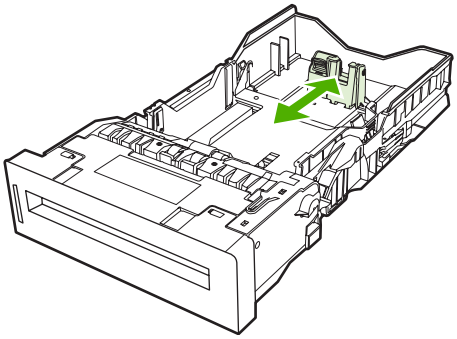
The following undetectable standard-sized media is supported in the 500-sheet trays: executive (JIS), 8.5 x 13, double Japan postcard, and 16K.

CAUTION Do not print cardstock, envelopes, heavy or extra heavy paper, or unsupported sizes of media from the 500-sheet trays. 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 paper jams.

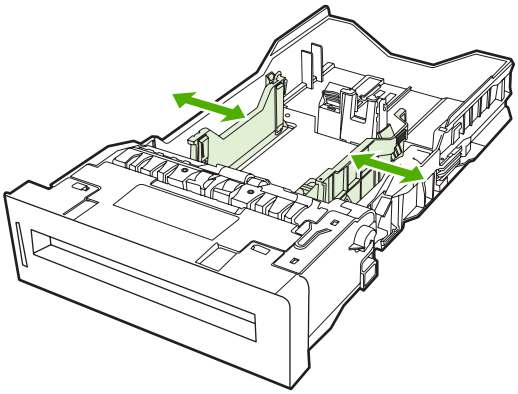
1. Remove the tray from the printer.



2. 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. Slide the media-width guides open to the size for the media you are using.



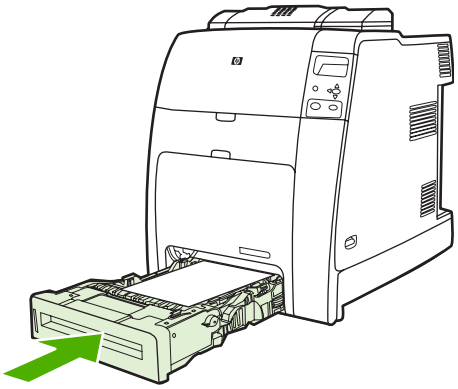
4. Load media into the tray face up.

NOTE For best performance, load the tray completely full without splitting or fanning the ream of paper. Splitting or fanning the ream might cause a multi-feed problem, which could result in a paper jam. The capacity of the paper tray can vary. For example, if you are using 75 g/m^2 (20 lb) paper, the tray holds a full ream of 500 sheets. If the media is heavier than 75 g/m^2 (20 lb), the tray will not hold a full ream, and you must reduce the number of sheets accordingly. Do not overfill the tray because the printer might not pick up the paper.

NOTE If the tray is not properly adjusted, the printer might display an error message or the media might jam.

NOTE If you are duplex printing, see Two-sided (duplex) printing for loading instructions.

5. Insert the tray into the printer. The printer will display the tray's media type and size. If the configuration is not correct, press the ✔ key when the printer prompts you to configure the tray for type and size. (For more information, see Configuring a tray when loading paper.)

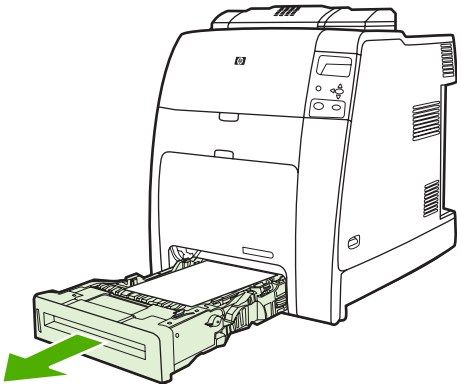


6. If the configuration is correct, press ⮌ to clear the message.

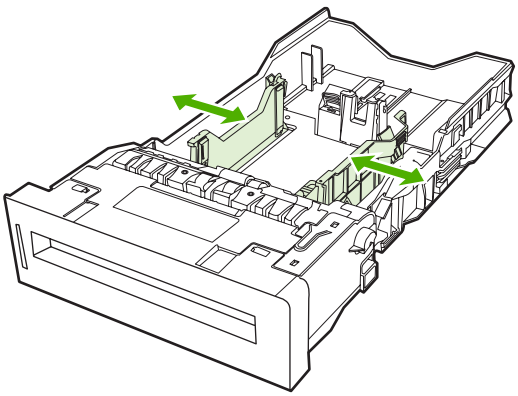
Loading custom-sized media into Tray 2 and optional Tray 3

To use custom media, you must change the size setting on the control panel to **custom** and set the unit of measure, X dimension, and Y dimension. See Configuring a tray to match print job settings for more information.

1. Remove tray from the printer.



2. Slide the media width guides all the way open and adjust the rear media-length guide to the length of the paper being used.



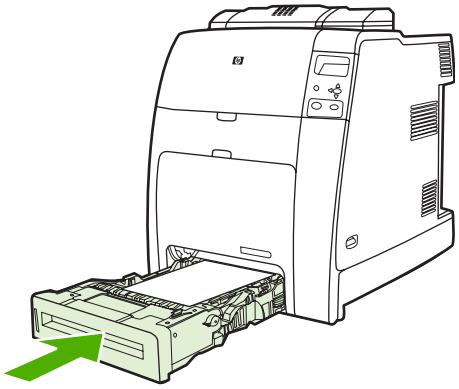
3. Load media into the tray face up.

NOTE For best performance, load the tray completely full without splitting or fanning the ream of paper. Splitting or fanning the ream might cause a multi-feed problem, which could result in a paper jam. The capacity of the paper tray can vary. For example, if you are using 75 g/m^2 (20 lb) paper, the tray holds a full ream of 500 sheets. If the media is heavier than 75 g/m^2 (20 lb), the tray will not hold a full ream, and you must reduce the number of sheets accordingly. Do not overfill the tray because the printer might not pick up the paper.

NOTE If you are duplex printing, see Two-sided (duplex) printing for loading instructions.

4. Slide the media width guides in making sure that they gently touch the paper. Insert the tray into the printer.

5. Insert the tray into the printer. The printer will display the tray's type and size configuration. To specify custom dimensions, or if the type is not correct, press ✔ and follow the prompts. To enter specific dimensions or change the size selection from **ANY CUSTOM** to **custom**, see Configuring a tray to match print job settings.



6. If the configuration is correct, press ⮌ to clear the message.

Printing on special media

Use these guidelines when printing on special types of media.

NOTE Special media such as envelopes, transparencies, custom-size paper, or heavy media greater than 120 g/m^2 is used in Tray 1.

To print on any special media, use the following procedure:

1. Load the media in the paper tray.
2. When the printer prompts you for the paper type, select the correct media type for the paper loaded in the tray. For example, select **GLOSSY 75-105 G/M2** when loading HP Color Laser Glossy Photo Paper.
3. In the software application or the printer driver, set the media type to match the media type that is loaded in the paper tray.

NOTE For the best print quality, always verify that the media type selected on the printer control panel and the media type selected in the application or printer driver match the type of media loaded in the tray.

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 Laser Transparencies. 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.

  For more information, see Printer drivers or Printer drivers for Macintosh computers.

CAUTION Transparencies not designed for LaserJet printing might melt in the printer or wrap around the fuser, causing damage to the printer.

Glossy paper

- In either the software application or the driver, select **GLOSSY 75-105 G/M2**, **HEAVY GLOSSY**, or **INTERMEDIATE90-104** 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 **GLOSSY 75-105 G/M2** 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 Configuring input trays for more information.

NOTE Hewlett-Packard recommends using HP Color Laser Glossy Photo Paper and soft glossy papers designed for use in HP color laser printers. HP products are designed to work together for optimum printing results. If other types of glossy media are used, print quality could be compromised.

Colored paper

- Colored paper should be of the same high quality as white xerographic paper.
- Pigments used in colored media must be able to withstand the printer's fusing temperature of 190° C (374°F) for 0.1 second without deterioration.
- 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 Printing envelopes from Tray 1.

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 90 g/m^2 (24 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 the labels lie flat.
- Do not use labels that are wrinkled, bubbled, or otherwise damaged.

Heavy paper

The following heavy paper types can be used with the HP Color LaserJet CP4005 Series printers.

Paper type	Paper weight
Heavy and extra-heavy stock	105-163 g/m^2
	28-43 lb
Cardstock	164-220 g/m^2
	43-58 lb
Intermediate	90-105 g/m^2
	24-28 lb
HP Tough paper	5 mil

When printing on heavy paper types, use the following guidelines:

- Use Tray 1 for paper that is heavier than 120 g/m^2 (32 lb).
- For optimum results when printing on heavy paper, use the printer control panel to set the media type for the tray to **HEAVY 105-120 G/M2**.
- 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 Configuring input trays.

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.

HP LaserJet Tough paper

When printing on HP LaserJet Tough paper, use the following guidelines:

- Handle HP LaserJet Tough paper only by the edges. Oils from your fingers deposited on HP LaserJet Tough paper can cause print quality problems.
- Use only HP LaserJet Tough paper with this printer. HP products are designed to work together for optimum printing results.
- In either the software application or the driver, select **TOUGH PAPER** as the media type, or print from a tray that is configured for HP LaserJet Tough paper.

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 undesirable 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.
- To load pre-printed forms and letterhead into Tray 1, load them face down with the top edge of the page facing toward you.
- To load pre-printed forms and letterhead into Tray 2 or optional Tray 3, load them face up with the top edge of the page facing away from you.
- When duplex printing, load pre-printed forms and letterhead into Tray 2 or optional 500-sheet Tray 3 face down with the top edge of the page towards you.

Recycled paper

This printer supports the use of recycled paper. Recycled paper must meet the same specifications as standard paper. Hewlett-Packard recommends that recycled paper contain no more than 5% ground wood.

Using features in the printer driver

When you print from a software program, many of the product features are available from the printer driver. For complete information about the features that are available in the printer driver, see the printer-driver Help. The following features are described in this section:

- Creating and using quick sets
- Creating and using watermarks
- Resizing documents
- Setting a custom paper size from the printer driver
- Using different paper/covers
- Printing a blank first page
- Printing multiple pages on one sheet of paper
- Printing on both sides of the paper
- Setting the color options
- Using the HP Digital Imaging Options dialog box
- Using the Services tab

NOTE Settings in the printer driver and software program generally override control-panel settings. Software-program settings generally override printer-driver settings.

Creating and using quick sets

Use quick sets to save the current driver settings for reuse. For example, you can save the page orientation, print on both sides, and paper source settings in a quick set. Quick sets are available on most printer-driver tabs. You can save up to 25 Print Task Quick Sets.

NOTE The printer driver might report that 25 Print Task Quick Sets have been defined when fewer than 25 are visible. Some predefined Print Task Quick Sets, which do not apply to your product, might be included and are counted in the total number.

To create a quick set

1. Open the printer driver (see Gaining access to the printer drivers).
2. Select the print settings that you want to use.
3. In the **Print Task Quick Sets** box, type a name for the selected settings (for example "Quarterly Report" or "My Project Status").
4. Click **Save**.

To use quick sets

1. Open the printer driver (see Gaining access to the printer drivers).
2. Select the quick set that you want to use from the **Print Task Quick Sets** drop-down list.
3. Click **OK**. The product is now set to print according to the saved settings in the quick set.

NOTE To restore printer-driver default settings, select **Default Print Settings** from the **Print Task Quick Sets** drop-down list.

Creating and using watermarks

A watermark is a notice, such as "Confidential," that is printed in the background of each page of a document.

To use an existing watermark

1. Open the printer driver (see Gaining access to the printer drivers).
2. From the **Effects** tab, click the **Watermarks** drop-down list.
3. Click the watermark that you want to use.
4. If you want the watermark to appear only on the first page of the document, click **First Page Only**.
5. Click **OK**. The product is now set to print the watermark that you have selected.

To remove the watermark, click **(none)** in the **Watermarks** drop-down list.

Resizing documents

Use the document resizing options to scale a document to a percentage of its normal size. You can also choose to print a document on a different size paper, with or without scaling.

To reduce or enlarge a document

1. Open the printer driver (see Gaining access to the printer drivers).
2. On the **Effects** tab, type the percentage by which you want to reduce or enlarge your document.

   You can also use the scroll bar to adjust the reduce or enlarge percentage.
3. Click **OK**. The product is now set to scale the document to the reduce or enlarge percentage that you selected.

To print a document onto a different paper size

1. Open the printer driver (see Gaining access to the printer drivers).
2. On the **Effects** tab, click **Print Document On**.
3. Select the target paper size to print on.
4. To print the document on the target paper size without scaling it to fit, make sure that the **Scale to Fit** option is *not* selected.
5. Click **OK**. The product is now set to print the document as you specified.

Setting a custom paper size from the printer driver

To set a custom paper size

1. Open the printer driver (see Gaining access to the printer drivers).
2. On the **Paper** or **Paper/Quality** tab, click **Custom**.
3. On the **Custom Paper Size** window, type the name of the custom paper size.
4. Type the paper-size length and width. If you type a size that is too small or too large, the driver automatically adjusts the size to the minimum or maximum size that is allowed.
5. If necessary, click the button to change the unit of measure between millimeters and inches.
6. Click **Save**.
7. Click **Close**. The product is now set to print the document on the custom-size paper that you selected. The name that you saved appears in the paper-size list for future use.

Using different paper/covers

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

1. Open the printer driver (see Gaining access to the printer drivers).
2. On the **Paper** or **Paper/Quality** tab, select the appropriate paper for the first page of the print job.
3. Click **Use Different Paper/Covers**.
4. In the list box, click the pages or covers that you want to print on different paper.
5. To print front or back covers, you must also select **Add Blank or Preprinted Cover**.
6. Select the appropriate paper type or source for the other pages of the print job. The product is now set to print the document on the paper that you selected.

NOTE The paper size must be the same for all pages of the print job.

Printing a blank first page

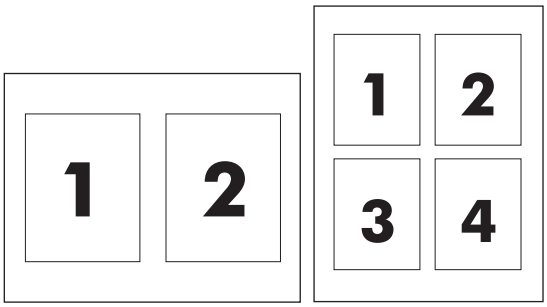
To print a blank first page

1. Open the printer driver (see Gaining access to the printer drivers).
2. On the **Paper** or **Paper/Quality** tab, click **Use Different Paper/Covers**.
3. In the list box, click **Front Cover**.
4. Click **Add Blank or Preprinted Cover**.

Printing multiple pages on one sheet of paper

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

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



To print multiple pages on one sheet of paper

1. Open the printer driver (see Gaining access to the printer drivers).
2. Click the **Finishing** tab.
3. In the section for **Document Options**, select the number of pages that you want to print on each sheet (1, 2, 4, 6, 9, or 16).
4. If the number of pages is greater than 1, select the correct options for **Print Page Borders** and **Page Order**.
   - Click **Print Page Borders** if you want to print a border around each page on the sheet.
   - Click **Page Order** to select the order and placement of the pages on the sheet.
5. Click **OK**. The product is now set to print the number of pages per sheet that you have selected.

Printing on both sides of the paper

When a duplex printing accessory is installed, you can automatically print on both sides of a page. If a duplex printing accessory is not installed, you can manually print on both sides of a page by feeding the paper through the product a second time.

NOTE In the printer driver, **Print on Both Sides (manually)** is available only when no duplex printing accessory is installed in the product or when the duplex printing accessory does not support the type of print media being used.

To print on both sides by using the duplex-printing accessory

1. Insert enough paper into one of the trays to accommodate the print job. If you are loading special paper such as letterhead, load it in one of the following ways:
   - For Tray 1, load the letterhead paper with the front side up, bottom-edge first.
   - For all other trays, load the letterhead paper with front side down, and the top edge at the back of the tray.

   CAUTION Do not load paper that is heavier than 105 g/m^2 (28 lb bond). This could lead to a Paper Jam in the printer.
2. Open the printer driver (see Gaining access to the printer drivers).
3. For Windows, on the **Finishing** tab, click **Print on Both Sides**.
4. Click **OK**. The product is now ready to print on both sides of the paper.

To print on both sides manually

1. Insert enough paper into one of the trays to accommodate the print job. If you are loading special paper such as letterhead, load it in one of the following ways:

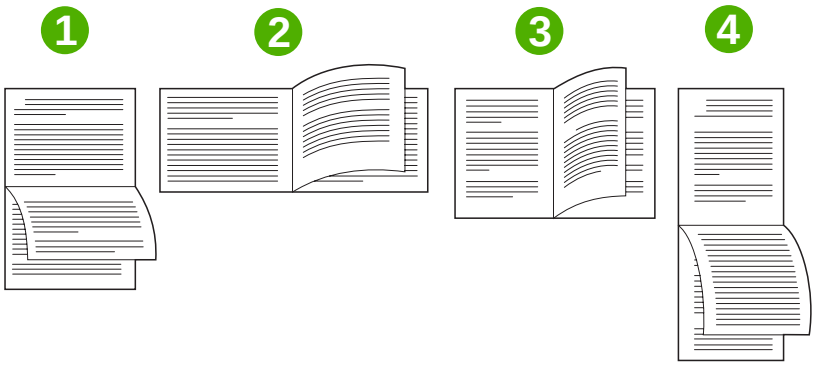
   - For Tray 1, load the letterhead paper with the front side up, bottom-edge first.
   - For Tray 2 and optional Tray 3, load letterhead paper with front side down, and the top edge at the back of the tray.

   CAUTION Do not load paper that is heavier than 105 g/m^2 (28 lb bond). Jamming could result.

2. Open the printer driver (see Gaining access to the printer drivers).
3. On the **Finishing** tab, select **Print on Both Sides (manually)**.
4. Click **OK**.
5. Send the print job to the product.
6. Go to the product. Remove any blank paper that is in Tray 1. Insert the printed stack with the printed side up, and the bottom-edge feeding into the product first. You must print the second side from Tray 1. Follow the instructions in the pop-up window that appears before feeding the output stack back into Tray 1 for printing the second half.
7. A prompt might appear on the control-panel display that instructs you to press a button to continue.

Layout options for printing on both sides

The four duplex orientation options are shown below. To select option 1 or 4, select **Flip Pages Up** in the printer driver.



1. Long-edge landscape	This layout is often used in accounting, data processing, and spreadsheet programs. Every other printed image is oriented upside-down. Facing pages are read continuously from top to bottom.
2. Short-edge landscape	Each printed image is oriented right-side-up. Facing pages are read from top to bottom on the left page, then from top to bottom on the right page.

3. Long-edge portrait	This is the default setting, and the most common layout used, with every printed image oriented right-side-up. Facing pages are read from top to bottom on the first page, then from top to bottom on the second page.
4. Short-edge portrait	This layout is often used with clipboards. Every other printed image is oriented upside-down. Facing pages are read continuously from top to bottom.

Setting the color options

Options on the **Color** tab control how colors are interpreted and printed from software programs. You can choose either **Automatic** or **Manual** color options. For more information, see Managing printer color options on Windows computers.

- Select **Automatic** to optimize the color and halftone used for each element in a document (such as text, graphics, and photographs). The **Automatic** setting provides additional color options for applications and operating systems that support color-management systems. This setting is recommended for printing all color documents.
- Select **Manual** to manually adjust the color and halftone modes for text, graphics, and photographs. If you are using a PCL driver, you can adjust the RGB data. If you are using the PS driver, you can adjust RGB or CMYK data.

To set the color options

1. Open the printer driver (see Gaining access to the printer drivers).
2. Select the **Color** tab.
3. In the **Color Options** area, select the option that you want to use.
4. If you selected **Manual**, click **Settings** to open the **Color Settings** dialog box. Adjust the individual settings for text, graphics, and photographs. You can also adjust the general printing settings. Click **OK**.
5. In the **Color Themes** area, select the **RGB Color** option that you want to use.
6. Click **OK**. The product is now set to use the color options that you selected.

Using the HP Digital Imaging Options dialog box

HP Digital Imaging Options make it easy for you to get better photos and images.

NOTE **HP Digital Imaging Options** are available for Windows 2000, Windows XP, and Windows Server 2003.

The following options are available on the **HP Digital Imaging Options** dialog box:

- **Contrast Enhancement**: Automatically enhance colors and contrast for washed-out photos. Click **Automatic** to allow the printer software to intelligently brighten your photo, focusing only on areas that need adjustment.
- **Digital Flash**: Adjust the exposure in dark areas of photos to bring out detail. Click **Automatic** to allow the printer software to balance lightness and darkness automatically.

- **SmartFocus**: Enhance the image quality and clarity of low resolution images such as those downloaded from the Internet. Click **On** to allow the printer software to sharpen details in the image automatically.
- **Sharpness**: Adjust the image sharpness to your preference. Click **Automatic** to allow the printer software to set the level of sharpening for the image automatically.
- **Smoothing**: Soften an image. Click **Automatic** to allow the printer software to set the level of smoothing for the image automatically.

Opening the HP Digital Imaging Options dialog box

1. Open the **Printer Properties** dialog box.
2. Click the **Paper/Quality** tab, and then click the **HP Digital Imaging** button.

NOTE If you installed the HP Image Zone software, you can use it to edit and further enhance digital photos.

Using the Services tab

NOTE The **Services** tab is available for Windows XP.

If the product is connected to a network, use the **Services** tab to obtain product supply-status information and troubleshooting information. Click the **Device and Supplies status icon** to open the **Device Status** page of the HP Embedded Web Server. This page shows the current status of the product, the percentage of life remaining for each supply, and information for ordering supplies.

Using features in the Macintosh printer driver

When you print from a software program, many of the printer features are available from the printer driver. For complete information about the features that are available in the printer driver, see the printer-driver Help. The following features are described in this section:

- Creating and using presets in Mac OS X
- Printing a cover page
- Printing multiple pages on one sheet of paper
- Printing on both sides of the paper
- Setting the color options

NOTE Settings in the printer driver and software program generally override control-panel settings. Software-program settings generally override printer-driver settings.

Creating and using presets in Mac OS X

Use presets to save the current driver settings for reuse. For example, you can save the page orientation, print-on-both-sides feature, and paper-type settings in a preset.

To create a preset

1. Open the printer driver (see Gaining access to the printer drivers).
2. Select the print settings that you want to use.
3. In the **Presets** box, click **Save As...**, and type a name for the preset (for example "Quarterly Report" or "My Project Status").
4. Click **OK**.

To use presets

1. Open the printer driver (see Gaining access to the printer drivers).
2. In the **Presets** menu, select the preset that you want to use.

NOTE To restore printer-driver default settings, select **Standard** from the **Presets** pop-up menu.

Printing a cover page

If you want to, you can print a separate cover page for your document that includes a message (such as “Confidential”).

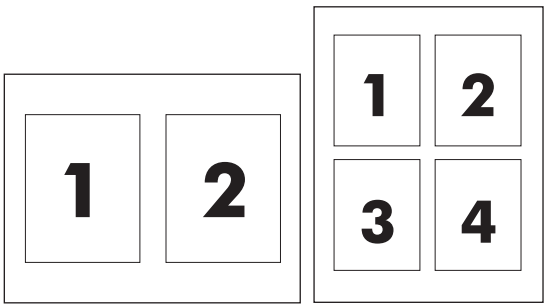
To print a cover page

1. Open the printer driver (see Gaining access to the printer drivers).
2. On the **Cover Page** or **Paper/Quality** pop-up menu, select whether to print the cover page **Before Document** or **After Document**.
3. If you are using Mac OS X, in the **Cover Page Type** pop-up menu, select the message that you want to print on the cover page.

NOTE To print a blank cover page, select **Standard** as the **Cover Page Type**.

Printing multiple pages on one sheet of paper

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



To print multiple pages on one sheet of paper

1. Open the printer driver (see Gaining access to the printer drivers).
2. Click the **Layout** pop-up menu.
3. Next to **Pages per Sheet**, select the number of pages that you want to print on each sheet (1, 2, 4, 6, 9, or 16).
4. If the number of pages is greater than 1, next to **Layout Direction**, select the order and placement of the pages on the sheet.
5. Next to **Borders**, select the type of border to print around each page on the sheet.

Printing on both sides of the paper

When a duplex printing accessory is installed, you can automatically print on both sides of a page. If a duplex printing accessory is not installed, you can manually print on both sides of a page by feeding the paper through the printer a second time.

To print on both sides by using the duplex-printing accessory

1. Insert enough paper into one of the trays to accommodate the print job. If you are loading special paper such as letterhead, load it in one of the following ways:

   - For Tray 1, load the letterhead paper with the front side up and the bottom-edge feeding into the printer first.
   - For Tray 2 and optional Tray 3, load the letterhead paper with the front side down and the top edge at the back of the tray.

   CAUTION Do not load paper that is heavier than 105 g/m^2 (28-lb bond). Jamming might result.

2. Open the printer driver (see Gaining access to the printer drivers).
3. Open the **Layout** pop-up menu.
4. Next to **Two Sided Printing**, select either **Long-Edge Binding** or **Short-Edge Binding**.
5. Click **Print**.

To print on both sides manually

1. Insert enough paper into one of the trays to accommodate the print job. If you are loading special paper such as letterhead, load it in one of the following ways:

   - For Tray 1, load the letterhead paper with the front side up and the bottom-edge feeding into the printer first.
   - For Tray 2 and optional Tray 3, load the letterhead paper with the front side down, and the top edge at the back of the tray.

   CAUTION Do not load paper that is heavier than 105 g/m^2 (28-lb bond). Jamming might result.

2. Open the printer driver (see Gaining access to the printer drivers).
3. On the **Finishing** pop-up menu, select the **Manual Duplex** option.

   NOTE If the **Manual Duplex** option is not enabled, select **Manually Print on 2nd Side**.

4. Click **Print**.
5. Go to the printer. Remove any blank paper that is in Tray 1. Insert the printed stack with the printed side up and the bottom-edge feeding into the printer first. You must print the second side from Tray 1. Follow the instructions in the pop-up window that appears before replacing the output stack in Tray 1 for printing the second half.
6. If a prompt appears on the control-panel display, press a control-panel button to continue.

Setting the color options

Use the **Color Options** pop-up menu to control how colors are interpreted and printed from software programs.

NOTE For more information about using the color options, see Managing printer color options on Macintosh computers.

To set the color options

1. Open the printer driver (see Gaining access to the printer drivers).
2. Open the **Color Options** pop-up menu.
3. If you are using Mac OS X, click **Show Advanced Options**.
4. Manually adjust the individual settings for text, graphics, and photographs.

Two-sided (duplex) printing

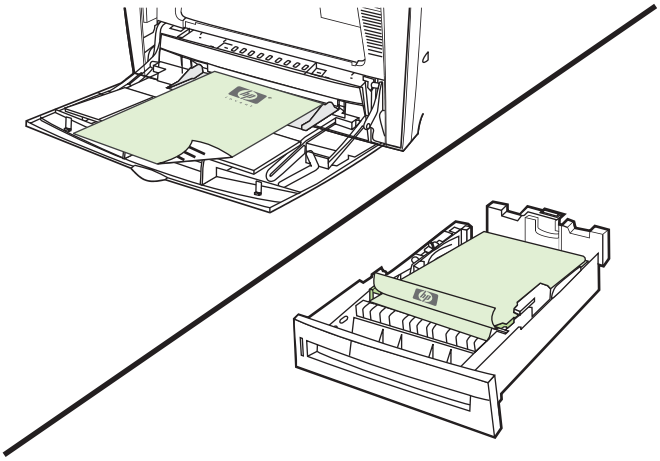
Some printer models are capable of duplex printing (printing on both sides of a page). To find out which models support automatic duplexing, see Printer basics. All printer models support manual duplexing.

NOTE You must specify two-sided printing options in your software application or in the printer driver in order to print on both sides of the page. If this option is not visible in the software application or printer driver, use the following information to make duplex printing options available.

To use two-sided printing:

- Verify that the printer driver is configured to show the two-sided printing options: automatic and/or manual. For instructions, see the online Help for the printer driver. For more information, see Printer drivers or Printer drivers for Macintosh computers.
- Once the two-sided printing option is shown, select the appropriate two-sided printing options in the printer driver software. Two-sided printing options include page and binding orientation. For more information about options for binding two-sided printing jobs, see Options for binding two-sided printing jobs.
- Automatic two-sided printing is not supported for certain media types, including transparencies, envelopes, labels, heavy, extra heavy, cardstock, and HP Tough paper. (The maximum weight paper for automatic duplex printing is 120 g/m^2 (32 lb) bond.)
- Automatic two-sided printing supports letter, A4, 8.5 x 13, legal, executive, and JIS B5 paper sizes.
- Manual two-sided printing can support all sizes and more types of media. (Transparencies, envelopes, and labels are not supported.)
- If both automatic and manual two-sided printing are enabled, the printer will automatically print on two sides if the size and type are supported by the duplexer. Otherwise, it will manually duplex.
- For best results, avoid two-sided printing with rough-textured, heavy-weight media.
- To load pre-printed forms and letterhead into Tray 1, load them face up with the top edge of the page facing away from you.
- When duplex printing, load pre-printed forms and letterhead into Tray 2 or optional Tray 3 face down with the top edge of the page towards you.

NOTE Loading paper for duplexing is different than loading for one-sided printing.



Control panel settings for automatic two-sided printing

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

CAUTION Do not use two-sided printing when printing on labels. Serious damage could result.

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

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

NOTE Any changes made in the printer driver will override settings made using the printer control panel.

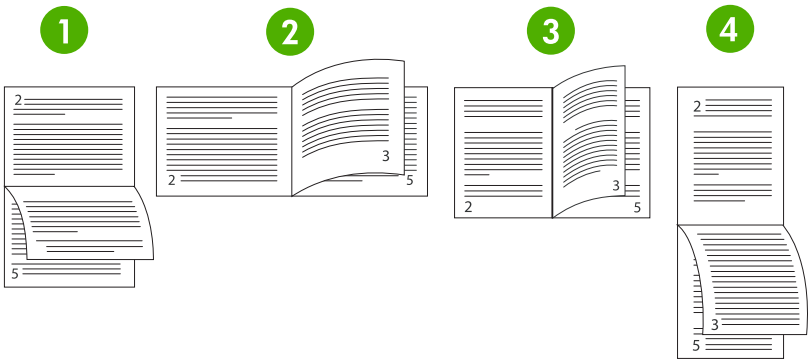
1. Press Menu to enter the **MENUS**.
2. Press ▼ to highlight **CONFIGURE DEVICE**.
3. Press ✔ to select **CONFIGURE DEVICE**.
4. Press ✔ to select **PRINTING**.
5. Press ▼ to highlight **DUPLEX**.
6. Press ✔ to select **DUPLEX**.
7. Press ▲ or ▼ to select **ON** to enable two-sided printing or **OFF** to disable automatic two-sided printing.
8. Press ✔ to set the value.
9. Press Menu.
10. Select two-sided printing from your software application or printer driver, if possible.

NOTE To select two-sided printing from the printer driver, the driver must first be properly configured. For instructions, see the online Help for the printer driver. For more information, see Printer drivers or Printer drivers for Macintosh computers.

Options for binding two-sided printing jobs

Before printing a two-sided document, use the printer driver to 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 long-edge binding, click the **Flip Pages Up** check box.



1	Long-edge landscape[1]	This layout is often used in accounting, data processing, and spreadsheet programs. Every other printed image is oriented upside-down. Facing pages are read continuously from top to bottom.
2	Short-edge landscape	Each printed image is oriented right-side-up. Facing pages are read from top to bottom on the left page, then from top to bottom on the right page.
3	Long-edge portrait	This is the default printer setting, and the most common layout used, with every printed image oriented right-side-up. Facing pages are read from top to bottom on the left page, then from top to bottom on the right page.
4	Short-edge portrait[1]	This layout is often used with clipboards. Every other printed image is oriented upside-down. Facing pages are read continuously from top to bottom.

[1] When using Windows drivers, select **Flip Pages** to see the designated binding options.

Manual two-sided printing

If you want to print on two sides (duplex) on paper other than the supported sizes or weights (for example, paper heavier than 120 g/m^2 (32 lb) or very thin paper), you will have to go to the printer and reinsert the paper manually after the first side has printed.

NOTE Damaged or previously used paper can cause paper jams and should not be used.

NOTE Manual two-sided printing is not supported for systems that use the PS driver.

To manually print on two sides (duplex)

1. Ensure that the printer driver is configured to allow manual duplexing. For more information, see Printer drivers or Printer drivers for Macintosh computers. In the printer driver, select **Allow Manual Duplex**.
2. From the application, open the printer driver.
3. Select the appropriate size and type.
4. On the **Finishing** tab, click **Print on Both Sides** or **Print on Both Sides (Manually)**.
5. The default binding option is to bind on the long edge of the paper in portrait layout. To change the setting, click the **Finishing** tab, and select the **Flip pages up** checkbox.
6. Click **OK**. The **Print on Both Sides** instructions will appear. Follow the instructions to finish printing your document.

NOTE If the total number of sheets to be duplexed exceeds the Tray 1 capacity for manual duplex jobs, feed the top 100 sheets and press ✔. When prompted, feed the next 100 sheets and press ✔. Repeat as necessary until all the sheets from the output stack have been loaded into Tray 1.

For more information, see Printer drivers or Printer drivers for Macintosh computers.

Printing booklets

You can use some versions of the printer driver to control the booklet printing when duplexing. You can select binding on the left or right side on letter, legal, or A4 paper size. Windows 2000 and Windows XP supports booklet printing for all paper sizes.

See the printer driver online Help for more information about the printing booklets feature.

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.

   For more information, see Printer drivers or Printer drivers for Macintosh computers.

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 a blank back cover

Use the following procedure to print a blank back cover. You can also select an alternate paper source or print on a different media type than the rest of the document.

1. On the printer driver's **Paper** tab, select **Use different paper**, then from the drop-down list, select **Back Cover**, check **Add a blank back cover**, and then click **OK**.

2. For more information, see Printer drivers or Printer drivers for Macintosh computers.

You can also select an alternate paper source or print a blank back cover on a different media type than the rest of the document. If desired, select a different source and type from the drop-down lists.

Printing on custom-size media

The printer supports single-sided printing on custom-size media. Tray 1 supports media sizes from 76 x 127 mm (3 x 5 inches) to 216 x 356 mm (8.5 x 14 inches). Tray 2 and optional Tray 3 support media sizes from 148 x 210 mm (5.83 x 8.27 inches) (A5 size) to 216 x 356 mm (8.5 x 14 inches).

When printing on custom-size media, if Tray 1 is configured in the printer control panel as **TRAY X TYPE= ANY TYPE** and **TRAY X SIZE= ANY SIZE**, the printer will print on whatever media is loaded in the tray. When printing on custom-size media from Tray 2 or optional Tray 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**.

In some software programs and printer drivers, you can specify custom paper-size dimensions. You can configure custom paper sizes from the printer driver's **Paper** tab or **Forms** tab (Windows 2000 and Windows XP). Be sure to set the correct paper size in both the **Page Setup** and **Print** dialog boxes.

For more information about how to access the printer drivers, see Printer drivers or Printer drivers for Macintosh computers.

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.

Stopping the current print job from the printer control panel

1. Press Stop on the printer control panel to pause the job that is currently printing. The control panel menu provides the option to resume printing or to cancel the current job.
2. Press Menu to exit the menu and resume printing.
3. Press ✔ to cancel the job.

Pressing Stop does not affect subsequent print jobs that are stored in the printer buffer.

Stopping the current print job from a software application

A dialog box will appear briefly on the control panel display, giving you the option to cancel the print job.

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

If a print job is waiting in a print queue (computer memory) or print spooler (Windows 2000 or Windows XP), delete the print job there.

For Windows 2000 or Windows XP, click **Start**, click **Settings**, and then click **Printers**. Double-click the **HP Color LaserJet CP4005 Series printer** icon to open the print spooler. Select the print job you that want to cancel and then press **Delete**. If the print job is not canceled, you might need to shut down and restart the computer.

Job storage features

Use the HP Color LaserJet CP4005 Series printer job-storage feature lets to store a job in the printer's memory for printing at a later time. The job storage features use random access memory (RAM).

To support job storage features for complex jobs, or if you often print complex graphics, print PostScript (PS) documents, or use many downloaded fonts, HP recommends that you install additional memory.

NOTE To use the Private Job, Proof and Hold, and Mopy features, the printer must have a minimum of 256 MB DDR.

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. For more information, see Printer drivers or Printer drivers for Macintosh computers.

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. This option stores the print job on the printer hard disk or in printer RAM memory, and prints only the first copy of the job, allowing you to check the first copy. If the document prints correctly, you can print the remaining copies of the print job from the printer control panel. The number of proof-and-hold print jobs that can be stored in the printer is set from the printer control panel.

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 Menu to enter **MENUS**.

   RETRIEVE JOB is highlighted.

2. Press ✔ to select **RETRIEVE JOB**.
3. Press ▼ to highlight your **USER NAME**.
4. Press ✔ to select your **USER NAME**.
5. Press ▼ to highlight a **JOB NAME**.
6. Press ✔ to select the **JOB NAME**.

   PRINT is highlighted.

7. Press ✔ to select **PRINT**.
8. Press ▲ or ▼ to select the number of copies.
9. 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.

A job can 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:

1. Press Menu to enter **MENUS**.

   RETRIEVE JOB is highlighted.

2. Press ✔ to select **RETRIEVE JOB**.
3. Press ▼ to highlight your **USER NAME**.
4. Press ✔ to select your **USER NAME**.
5. Press ▼ to highlight a **JOB NAME**.
6. Press ✔ to select the **JOB NAME**.
7. Press ▼ to highlight **DELETE**.
8. Press ✔ to select **DELETE**.
9. Press ✔ to delete the job.

Private jobs

This option allows you to send a print job directly to the printer memory. Selecting **Private Job** activates the PIN field. The print job can be printed only after you type a PIN in the printer control panel. After the job is printed, the printer removes the job from the printer memory.

This feature is useful when you are printing sensitive or confidential documents that you do not want to leave in an output bin after printing. Private Job stores the print job in printer RAM memory. After it is released for printing, the private job is immediately deleted from the printer. If more copies are needed, you have to reprint the job from the program.

If you send a second private job to the printer with the same user name and job name as an existing private job (and you have not released the original job for printing), the job will overwrite the existing job, regardless of the PIN. Private jobs are deleted if power to the printer is turned off.

NOTE A lock symbol next to a job name indicates that the job is private.

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

Printing a private job

1. Press Menu to enter **MENUS**.

   RETRIEVE JOB is highlighted.

2. Press ✔ to select **RETRIEVE JOB**.
3. Press ▼ to highlight your **USER NAME**.
4. Press ✔ to select your **USER NAME**.

5. Press ▼ to highlight a **JOB NAME**.
6. Press ✔ to select the **JOB NAME**.

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

Deleting a private job

A private job can be deleted from the printer control panel. You can delete a job without printing it, or it will be automatically deleted after it is printed.

1. Press Menu to enter **MENUS**.

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

Mopier mode

When Mopier mode is enabled, the printer produces multiple, collated copies from a single print job. Multiple-original printing (mopying) increases printer performance and reduces network traffic by sending the job to the printer once, then storing it in the printer's RAM. The remainder of the copies are printed at the printer's fastest speed. Documents can be created, controlled, managed, and finished from the desktop, which eliminates the extra step of using a photocopier.

The HP Color LaserJet CP4005 Series printers support mopying when they have sufficient total memory (128 MB DDR). The mopying feature is enabled by default if the **Mopier Mode** setting is **Enabled** on the **Device Settings** tab.

Managing memory

The HP Color LaserJet CP4005 Series printers support up to 544 MB of memory: 512 MB DDR. You can add additional memory by installing dual data-rate (DDR) memory. To accomodate for memory expansion, the printer has one DDR slot, which accepts 128, 256, or 512 MB of RAM. For information about installing memory, see Working with memory.

NOTE Memory specification: HP Color LaserJet CP4005 Series printers use 200-pin small outline dual inline memory modules (SODIMM) that support 128, 256, or 512 MB of RAM.

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 DDR SODIMM. 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.

5 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 the HP Easy Printer Care Software

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
- Print RGB samples
- Print CMYK samples
- File directory
- PCL or PS font list
- Event log

Menu map

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

1. Press Menu to enter the **MENUS**.
2. Press ▼ to highlight **INFORMATION**.
3. Press ✔ to select **INFORMATION**.
4. If **PRINT MENU MAP** is not highlighted, press ▲ or ▼ until it is highlighted.
5. 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.

1. Press Menu to enter the **MENUS**.
2. Press ▼ to highlight **INFORMATION**.
3. Press ✔ to select **INFORMATION**.

4. Press ▼ to highlight **PRINT CONFIGURATION**.
5. 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 an HP Jetdirect print server 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:

1. Press Menu to enter the **MENUS**.
2. Press ▼ to highlight **INFORMATION**.
3. Press ✔ to select **INFORMATION**.
4. Press ▼ to highlight **PRINT SUPPLIES STATUS PAGE**.
5. Press ✔ to select **PRINT SUPPLIES STATUS PAGE**.

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.

1. Press Menu to enter the **MENUS**.
2. Press ▼ to highlight **INFORMATION**.
3. Press ✔ to select **INFORMATION**.
4. Press ▼ to highlight **PRINT USAGE PAGE**.
5. Press ✔ to select **PRINT USAGE PAGE**.

The message **Printing... USAGE PAGE** 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 page

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

1. Press Menu to enter the **MENUS**.
2. Press ▼ to highlight **INFORMATION**.
3. Press ✔ to select **INFORMATION**.
4. Press ▼ to highlight **PRINT DEMO**.
5. Press ✔ to select **PRINT DEMO**.

The message **Printing... DEMO PAGE** appears on the display until the printer finishes printing the demo page. The printer returns to the **Ready** state after printing the demo page.

Print CMYK samples

Use the **PRINT CMYK SAMPLES** page to print CMYK color samples to match the color values in your application.

1. Press Menu to enter the **MENUS**.
2. Press ▼ to highlight **INFORMATION**.
3. Press ✔ to select **INFORMATION**.
4. Press ▼ to highlight **PRINT CMYK SAMPLES**.
5. Press ✔ to select **PRINT CMYK SAMPLES**.

The message **Printing... CMYK SAMPLES** appears on the display until the printer finishes printing the sample pages. The printer returns to the **Ready** state after printing the pages.

Print RGB samples

Use the **PRINT RGB SAMPLES** page to print RGB color samples to match the color values in your application.

1. Press Menu to enter the **MENUS**.
2. Press ▼ to highlight **INFORMATION**.
3. Press ✔ to select **INFORMATION**.
4. Press ▼ to highlight **PRINT RGB SAMPLES**.
5. Press ✔ to select **PRINT RGB SAMPLES**.

The message **Printing... RGB SAMPLES** appears on the display until the printer finishes printing the sample pages. The printer returns to the **Ready** state after printing the pages.

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.

1. Press Menu to enter the **MENUS**.
2. Press ▼ to highlight **INFORMATION**.
3. Press ✔ to select **INFORMATION**.
4. Press ▼ to highlight **PRINT FILE DIRECTORY**.
5. 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.)

1. Press Menu to enter the **MENUS**.
2. Press ▼ to highlight **INFORMATION**.
3. Press ✔ to select **INFORMATION**.
4. Press ▼ to highlight **PRINT PCL FONT LIST** or **PRINT PS FONT LIST**.
5. Press ✔ to select **PRINT PCL FONT LIST** or **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.

1. Press Menu to enter the **MENUS**.
2. Press ▼ to highlight **DIAGNOSTICS**.
3. Press ✔ to select **DIAGNOSTICS**.
4. Press ▼ to highlight **PRINT EVENT LOG**.
5. 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.

Using the embedded Web server

NOTE When the printer is directly connected to a computer, use the HP Easy Printer Care Software to view the printer status.

When the printer is directly connected to a computer, the embedded Web server is supported for Windows 2000 and later.

When the printer is connected to the network, the embedded Web server is automatically available. You can access the embedded Web server from Windows 2000 and later, or through the Apple Safari browser.

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.
- Restrict access to color printing. (See http://www.hp.com/go/coloraccess for setup instructions.)

To use the embedded Web server, you must have Microsoft Internet Explorer 6.0 or later, or Netscape Navigator 6.2 or 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. For more information about the HP embedded Web server, see the *HP Embedded Web Server User Guide*. You can find this guide on the CD-ROM included with the printer.

Accessing 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 Printer information pages.)

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

1. The embedded Web server has three tabs that contain settings and information about the printer: the **Information** tab, the **Settings** tab, and the **Networking** 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% 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% 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 Web site, 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.
- **Control panel**. This page shows an image of the text currently appearing on the printer's control panel display.

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**, and **Configure Device**.
- **Alerts**. Network only. Set up to receive e-mail alerts for various printer and supplies events. Alerts may also be sent to a URL.
- **E-mail**. 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 embedded Web server.
- **Other Links**. Add or customize a link to another Web site. 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.

- **Time Services**. Configure the printer's time settings.
- **Restrict Color**. Set user color print job restrictions. For more information on restricting and reporting color usage, see http://www.hp.com/go/coloraccess.

Setting the real-time clock

Use the real-time clock feature to set the date and time settings. The date and time information is attached to stored print jobs, so that you can identify the most recent versions of stored print jobs.

When setting the clock, you can set the date format, date, time format, and time.

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.

Click **Help** on the Networking tab pages for more information on network settings.

Other links

This section contains links that connect you to the Internet to order supplies or obtain product support. You must have Internet access 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 Web sites. Connecting might require that you close the embedded Web server and reopen it.

- **HP Instant Support™**. Connects you to the HP Web site 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 Web site and order genuine HP supplies, such as print cartridges and paper.
- **Product Support**. Connects to the support site for the HP Color LaserJet CP4005 printer. Then, you can search for help regarding general topics.

Using the HP Easy Printer Care Software

The HP Easy Printer Care Software is an application that you can use for the following tasks:

- View color usage information.
- Check the printer status.
- Check supplies status.
- Set up alerts.
- Gain access to troubleshooting and maintenance tools.

You can use the HP Easy Printer Care Software when the printer is directly connected to your computer or when it is connected to a network. To use the HP Easy Printer Care Software go to http://www.hp.com/go/easyprintercare.

NOTE You do not have to have Internet access to open and use the HP Easy Printer Care Software. However, if you click a Web-based link, you must have Internet access to go to the site associated with the link.

Supported operating systems

The HP Easy Printer Care Software is supported for Windows 2000, Windows XP, and Windows 2003 server.

To use the HP Easy Printer Care Software

Use one of the following methods to open HP Easy Printer Care Software:

- On the **Start** menu, select **Programs**, select **HP Easy Printer Care**, and then select **Start HP Easy Printer Care**.
- In the Windows system tray/taskbar (in the lower righthand corner of the desktop), double-click the HP Easy Printer Care Software icon.
- Double-click the desktop icon.

HP Easy Printer Care Software sections

The HP Easy Printer Care Software contains the sections described in the table below.

Section	Description
Overview tab Contains basic status information for the printer.	• **Device** list: Shows the printers that you can select. • **Device Status** section: Shows printer status information. This section will indicate printer alert conditions, such as an empty print cartridge. It also shows device-identification information, control-panel messages, and print-cartridge levels. After you correct a problem with the printer, click the button to update the section. • **Supplies Status** section: Shows detailed supplies status, such as the percentage of toner remaining in the print cartridges and the status of the media that is loaded in each tray. • **Supplies Details** link: Opens the supplies status page to view more detailed information about printer supplies, ordering information, and recycling information.

Section	Description
Support tab Provides help information and links.	• Printer usage reports • Software updates, including automatic updates for HP drivers • Online diagnostics • Online user documentation • Online support **NOTE** If you use a dial-up connection and did not connect to the Internet when you first opened the HP Easy Printer Care Software, you must connect before you can visit these Web sites.
Supplies Ordering window Provides access to online or e-mail supplies ordering.	• Ordering list: Shows the supplies that you can order for each printer. If you want to order a certain item, click the **Order** check box for that item in the supplies list. • **Shop Online for Supplies** button: Opens the HP supplies Web site in a new browser window. If you have checked the **Order** check box for any items, the information about those items can be transferred to the Web site. • **Print Shopping List** button: Prints the information for the supplies that have the **Order** check box selected. • **Email Shopping List** button: Creates a text list of items that have the **Order** check box selected. The list can be copied into an e-mail message that you send to your supplier.
Alert Settings window Allows you to configure the printer to automatically notify you of printer issues.	• Alerts on or off: Activates or deactivates the alerts feature for a certain printer. • When alerts appear: Sets when you want alerts to appear—either when you are printing to that particular printer, or anytime there is a printer event. • Alert event type: Sets whether you want alerts for only critical errors, or for any error, including continuable errors. • Notification type: Sets what type of alert should appear (pop-up message or system tray alert, and e-mail message).
Device List tab Shows information about each printer in the **Devices** list.	• Printer information, including printer name, make, and model • An icon (if the **View as** drop-down box is set to **Tiles**, which is the default setting) • Any current alerts for the printer If you click a printer in the list, the HP Easy Printer Care Software opens the **Overview** tab for that printer. **Device List** tab information includes the following:
Find Other Printers window Allows you to add more printers to your printer list.	Clicking the **Find Other Printers** link in the **Devices** list opens the **Find Other Printers** window. The **Find Other Printers** window provides a utility that detects other network printers so that you can add them to the **Devices** list and then monitor those printers from your computer.

6 Color

This chapter describes how the HP Color LaserJet CP4005 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
- Color matching
- Managing printer color options on Windows computers
- Managing printer color options on Macintosh computers

Using color

The HP Color LaserJet CP4005 Series printer offers great color printing 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 CP4005 Series printer provides carefully designed and tested color tables to provide a smooth, accurate color rendition of all printable colors.

HP ImageREt 3600

HP ImageREt 3600 print technology is a system of innovative technologies developed exclusively by HP to deliver superior print quality. The HP ImageREt system sets itself apart from the industry by integrating technology advancements and optimizing each element of the print system. Several categories of HP ImageREt have been developed for a variety of user needs.

The system's foundation is composed of key color laser technologies, including image enhancements, smart supplies, and high-resolution imaging. As the level or category of ImageREt increases, these core technologies are refined for more advanced system usage, and additional technologies are integrated. HP offers superior image enhancements for general office documents and marketing collateral. Optimized for printing on HP color laser high-gloss papers, HP Image REt 3600 provides superior results on all supported media, and under a variety of environmental conditions.

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 Selecting print media.

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.

For more information, see Printer drivers or Printer drivers for Macintosh computers.

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 Web, and most office software sold today. sRGB is representative of the typical Windows computer 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 Color matching.

The latest versions of Adobe PhotoShop, CorelDRAW™, 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 computer monitor and other input devices (scanner, digital camera) automatically, without the need to become a color expert.

Printing in four colors — CMYK

Cyan, magenta, yellow, and black (CMYK) are the inks used by a printing press. The process is often called four-color printing. CMYK data files are typically used by and originate from graphic arts (printing and publishing) environments. The printer will accept CMYK colors through the PS printer driver. The printer color-rendering of CMYK is designed to provide rich, saturated colors for text and graphics.

CMYK ink set emulation (PostScript only)

The printer color rendering of CMYK can be made to emulate several standard offset press ink sets. In some situations, the CMYK color values in an image or document might not be suited to the printer. For example, a document might be optimized for another printer. For best results, the CMYK values should be adapted to the HP Color LaserJet CP4005 Series printer. Select the appropriate color input profile from the printer driver.

- **Default CMYK+**. HP CMYK+ technology produces optimal printing results for most printing jobs.
- **SWOP (Specification for Web Offset Publications)**. Common ink standard in the United States and other countries/regions.
- **Euroscale (also known as Euro Standard)**. Common ink standard in Europe and other countries/regions.
- **DIC (Dainippon Ink and Chemical)**. Common ink standard in Japan and other countries/regions.
- **Custom profile**. Select this option to use a custom input profile to accurately control color output, for example, to emulate another HP color LaserJet printer. Color profiles can be downloaded from http://www.hp.com.

Color matching

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
- Computer 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.

Sample book color matching

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

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

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

Printing color samples

To use the color samples, select the color sample that is the closest match to the color that you want. Use the sample's color value in your application to describe the object you want to match. Colors can

vary depending on paper type and the software application used. For more details on how to use the color samples, go to http://www.hp.com/support/ljcp4005.

Use the following procedure to print color samples at the printer using the control panel:

1. Press Menu to enter the **MENUS**.
2. Press ▼ to highlight **INFORMATION**.
3. Press ✔ to select **INFORMATION**.
4. Press ▼ to highlight **PRINT CMYK SAMPLES** or **PRINT RGB SAMPLES**.
5. Press ✔ to select **PRINT CMYK SAMPLES** or **PRINT RGB SAMPLES**.

Managing printer color options on Windows computers

Setting color options to Automatic typically produces the best possible print quality for the most common printing requirements. However, for some documents, setting the color options manually can enhance the way the document appears. Examples of these documents include marketing brochures that contain many images or documents that are printed on a media type that is not listed in the printer driver.

For Windows, you can print in grayscale or change the color options by using settings found on the **Color** tab in the printer driver.

For more information about how to access the printer drivers, see Gaining access to the printer drivers.

Print in grayscale

Select the **Print in Grayscale** option from the printer driver to print a document in black and white.

RGB Color (Color Themes)

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

- Select **Default (sRGB)** for most printing needs. This setting instructs the printer to interpret RGB color as sRGB, which is the accepted standard of Microsoft and the World Wide Web Organization (WWW).
- Select **Image optimization (sRGB)** to enhance documents in which the content is mainly bitmap images, such as .GIF or .JPEG files. This setting instructs the printer to use the best color matching for rendering sRGB, bitmap images. This setting has no effect on text or vector-based graphics. Using glossy media in combination with this setting provides the maximum enhancement.
- Select **AdobeRGB** for documents that use the *AdobeRGB* color space rather than sRGB. For example, some digital cameras capture images in AdobeRBG, and documents that are produced with Adobe PhotoShop use the AdobeRGB color space. When printing from a professional software program that uses AdobeRGB, it is important that you turn off the color management in the software program and allow the printer software to manage the color space.
- Select **None** to instruct the printer to print RGB data in raw device mode. To render documents properly when this option is selected, you must manage color in the program in which you are working or in the operating system.

  CAUTION Use this option only if you are familiar with the procedures for managing color in the software program or in the operating system.

- Select **Custom Profile** when you want to duplicate the printed output from other printers or use special effects, such as sepia tones. This setting instructs the printer to use a custom input profile to more accurately predict and control color output. You can download custom profiles from http://www.hp.com.

Automatic or manual color adjustment

The **Automatic** color adjustment option optimizes the neutral gray color treatment, halftones, and edge enhancements that are 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 most 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

You can manually adjust color options for Edge Control, Halftones, and Neutral Grays.

Edge Control

The **Edge Control** setting determines how edges are rendered. Edge control has three components: adaptive halftoning, REt, and trapping. Adaptive halftoning increases the edge sharpness. Trapping reduces the effect of incorrect color alignment by slightly overlapping the edges of adjacent objects. The color REt option smoothes the edges.

NOTE If you notice white gaps between objects, or if you notice areas that have a slight shadow of cyan, magenta, or yellow at the edge, choose an edge-control setting that increases the trapping level.

Four levels of edge control are available:

- **Maximum** is the most aggressive trapping setting. Adaptive halftoning and color REt settings are on.
- **Normal** is the default trapping setting. Trapping is at a medium level. Adaptive halftoning and color REt settings are on.
- **Light** sets trapping at a minimal level. Adaptive halftoning and color REt settings are on.
- **Off** turns off trapping, adaptive halftoning, and color REt.

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 for 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 bitmap images. In these cases, setting the color options for **Photographs** also affects how text and graphics appear.

Neutral Grays

The **Neutral Grays** setting determines the method used for creating gray colors that are 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 neutral 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, setting the color options for **Photographs** also affects how text and graphics appear.

Restricting color printing

The HP Color LaserJet CP4005 Series printers include a **Restrict Color** setting for networked printers. A network administrator can use the setting to restrict user access to the color printing features in order to conserve color toner. If you are unable to print in color, see your network administrator.

1. Press **Menu**.
2. Press ▼ to select **PRINT QUALITY**, and then press ✔.
3. Press ▼ to select **SYSTEM SETUP**, and then press ✔.
4. Press ▼ to select **Restrict Color**, and then press ✔.
5. Press ▼ to select one of the following options:
   - **DISABLE COLOR**: This setting denies the printer color capabilities to all users.
   - **ENABLE COLOR**: This is the default setting, which allows all users to use the printer color capabilities.
   - **COLOR IF ALLOWED**: This setting allows the network administrator to allow color use for select users. Use the embedded Web server to designate users who can print in color.
6. Press ✔ to save the setting.

The network administrator can monitor color usage for a specific HP Color LaserJet CP4005 Series printer by printing a color-usage job log. See Printer information pages for more information.

For more information about restricting and reporting color usage, go to http://www.hp.com/go/coloraccess.

Managing printer color options on Macintosh computers

Setting the color options to Automatic typically produces the best possible print quality for the most common printing requirements. However, for some documents, setting the color options manually can enhance the way the document appears. Examples of these documents include marketing brochures that contain many images or documents that are printed on a media type that is not listed in the printer driver.

Print color as gray or change the color options by using the **Color Options** pop-up menu in the **Print** dialog box.

For more information about how to gain access to the printer drivers, see Gaining access to the printer drivers.

Print Color as Gray

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

Advanced color options for text, graphics, and photographs

Use manual color adjustment to adjust the **Color** (or **Color Map**) and **Halftoning** options for a print job.

Halftone options

Halftone options affect the resolution and clarity of your color output. You can select halftone settings independently for text, graphics, and photographs. 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. Select this option when uniform and smooth area fills are the top priority.
- The **Detail** option is useful for text and graphics that require sharp distinctions among lines or colors, or for images that contain a pattern or a high level of detail. Select this option when sharp edges and details are the top priority.

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

Neutral Grays

The **Neutral Grays** setting determines the method that the printer uses to create gray colors in text, graphics, and photographs.

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

- **Black Only** generates neutral colors (grays and black) by using only black toner. This guarantees neutral colors that do not have 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 software programs convert text or graphics to raster images. In these cases, the **Photographs** settings also control text and graphics.

RGB Color

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

- Select **Default (sRGB)** for most printing needs. This setting instructs the printer to interpret RGB color as sRGB, which is the accepted standard of Microsoft and the World Wide Web Organization (WWW).
- Select **Image optimization (sRGB)** to enhance documents in which the content is mainly bitmap images, such as .GIF or .JPEG files. This setting instructs the printer to use the best color matching for rendering sRGB, bitmap images. This setting has no effect on text or vector-based graphics. Using glossy media in combination with this setting provides the maximum enhancement.
- Select **AdobeRGB** for documents that use the AdobeRGB color space rather than sRGB. For example, some digital cameras capture images in AdobeRGB, and documents that are produced with Adobe PhotoShop use the AdobeRGB color space. When printing from a professional software program that uses AdobeRGB, it is important that you turn off the color management in the software program and allow the printer software to manage the color space.
- Select **None** to instruct the printer to print RGB data in raw device mode. To render documents properly when this option is selected, you must manage color in the program that you are using or in the operating system.

  CAUTION Use this option only if you are familiar with the procedures for managing color in the software program or in the operating system.

- Select **Custom Profile** when you want to duplicate the printed output from other printers or use special effects, such as sepia tones. This setting instructs the printer to use a custom input profile to more accurately predict and control color output. You can download custom profiles from http://www.hp.com.

Edge Control

The **Edge Control** setting determines how edges are rendered. Edge control has three components: adaptive halftoning, Resolution Enhancement Technology (REt), and trapping. Adaptive halftoning increases the edge sharpness. Trapping reduces the effect of incorrect color alignment by slightly overlapping the edges of adjacent objects. The color REt option smooths the edges.

NOTE If you notice white gaps between objects, or if you notice areas that have a slight shadow of cyan, magenta, or yellow at the edge, choose an edge-control setting that increases the trapping level.

Four levels of edge control are available:

- **Maximum** is the most aggressive trapping setting. Adaptive halftoning and color REt settings are on.
- **Normal** is the default trapping setting. Trapping is at a medium level. Adaptive halftoning and color REt settings are on.
- **Light** sets trapping at a minimal level. Adaptive halftoning and color REt settings are on.
- **Off** turns off trapping, adaptive halftoning, and color REt.

7 Maintenance

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

- Managing print cartridges
- Changing print cartridges
- Replacing supplies
- Using the cleaning page
- Configuring alerts

Managing print cartridges

Be sure to use genuine HP print cartridges with ColorSphere toner for the best printing results. HP ColorSphere toners ensure high quality results, page after page. This section provides information about using and storing HP cartridges correctly. It also provides information about using non-HP print cartridges.

HP print cartridges

When you use a genuine new HP print cartridge, you can obtain the following supplies information:

- Percentage of supplies remaining
- Estimated number of pages remaining
- Number of pages printed

NOTE See Part numbers for cartridge ordering information.

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 HP fraud hotline.

Print cartridge authentication

The HP Color LaserJet CP4005 Series printer automatically authenticates the print cartridges when the cartridges are inserted into the printer. During authentication, the printer informs you if a cartridge is 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, press the ✔ button.

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 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. HP black and color print cartridges both last an average of 7,500 pages. when printing on letter or A4-size paper at 5% coverage. Usage conditions and print patterns can make actual results vary.

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 print cartridge life using the printer control panel, the embedded Web server, printer software, HP Easy Printer Care Software, or HP Web Jetadmin software.

Using the printer control panel

1. Press Menu to enter the **MENUS**.
2. Press ▼ to highlight **INFORMATION**.
3. 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

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

Using HP Easy Printer Care Software

On the **Overview** tab, in the **Supplies Status** section, click **Supplies Details** to open the supplies status page.

For more information about HP Easy Printer Care software, go to http://www.hp.com/go/easyprintercare.

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 (if a genuine HP cartridge is currently installed).

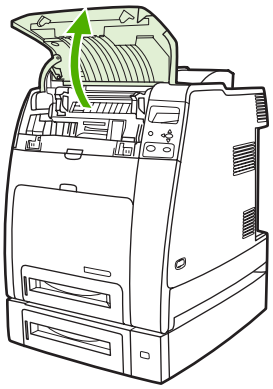
Replacing a print cartridge

CAUTION If toner gets on clothing, wipe it off with a dry cloth and wash the clothes in cold water. Hot water sets toner into fabric.

NOTE For information about recycling used print cartridges, see Return and recycling instructions, or visit the HP LaserJet Supplies Web site at http://www.hp.com/go/recycle.

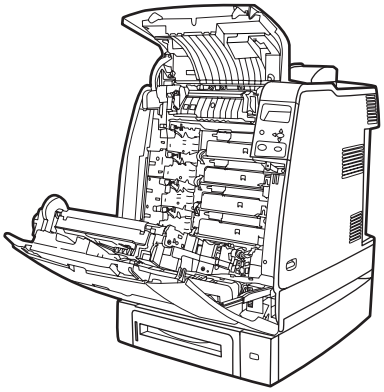
To replace the print cartridge

1. Lift the top cover of the printer.



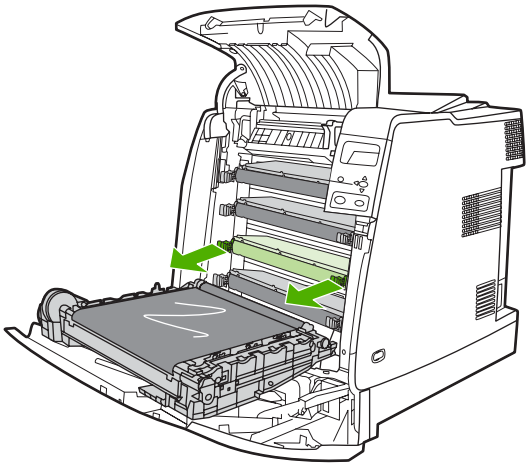
CAUTION The fuser might be hot.

2. Pull down the front cover and transfer unit.

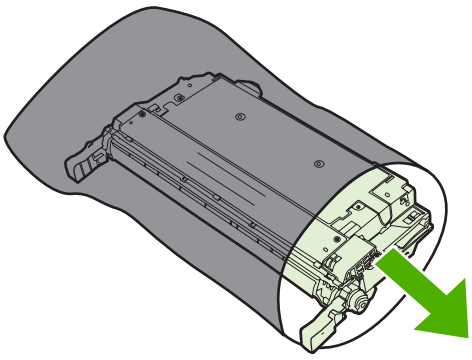


CAUTION Do not place any item on the transfer unit while it is open. If the transfer unit is punctured, print quality problems could result.

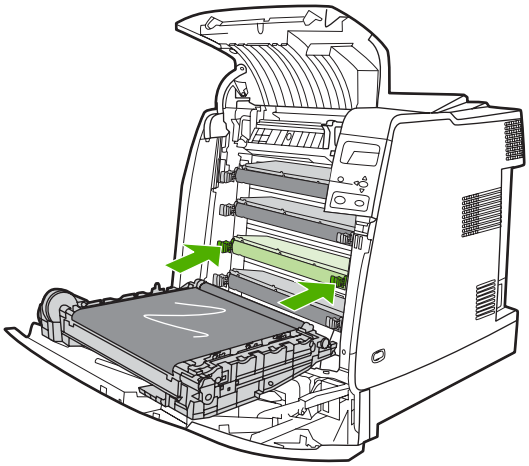
3. Remove the used print cartridge from the printer.



4. Remove the new print cartridge from the bag. Place the used print cartridge in the bag for recycling.



5. Align the print cartridge with the tracks inside the printer and insert the cartridge until it is completely seated.



NOTE The print cartridge tape seal is removed automatically when the print cartridge is installed in the printer.

NOTE If a cartridge is in the wrong slot, the control panel will display the message **INCORRECT [COLOR] CARTRIDGE**.

6. Close the front cover and then close the top cover. After a short while, the control panel should display **Ready**.
7. 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.
8. If you are using a non-HP print cartridge, check the control panel for further instructions.

For additional help, go to http://www.hp.com/support/ljcp4005.

Replacing supplies

When you use genuine HP supplies, the printer automatically notifies you when supplies are nearly depleted. The notification to order supplies allows ample time to order new supplies before they need to be replaced.

Locating supplies

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

The following figure illustrates the location of each supply item.

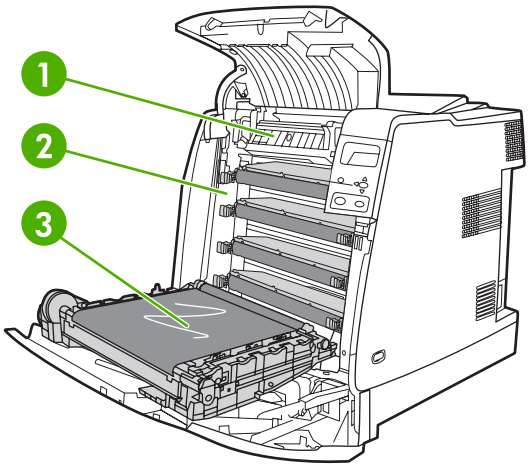


Figure 7-1 Supply item locations

1	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.

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

For instructions about installing supplies, see the installation guides that came with each supply item or find more information at http://www.hp.com/support/ljcp4005. When you connect, click **Solve a Problem**.

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

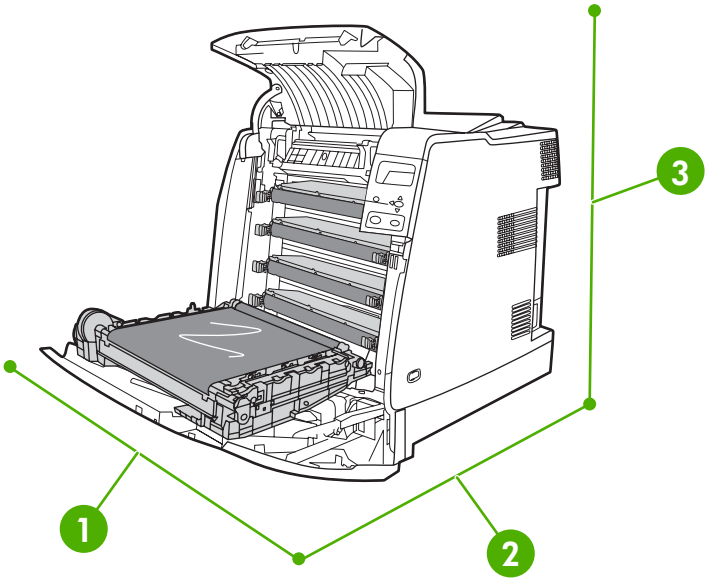


Figure 7-2 Supplies replacement clearance diagram

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. Usage conditions and print patterns can cause results to vary.

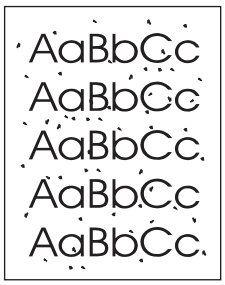
Item	Printer message	Page count	Approximate time period[2]
Black cartridges	**REPLACE BLACK CARTRIDGE**	7,500 pages[1]	4 months
Color cartridges	**REPLACE [COLOR] CARTRIDGE**	7,500 pages[1]	4 months
Image transfer kit	**REPLACE TRANSFER KIT**	100,000 pages	50 months
Image fuser kit	**REPLACE FUSER KIT**	125,000 pages[3]	62 months

1 Approximate average A4-/letter-size page count based on 5% coverage of individual colors.
2 Approximate life is based on 2,000 pages per month.
3 Approximate life is estimated at 125,000 pages when printing in 4-page intermittent mode.

You can use the embedded Web server to order supplies. For more information, see Using the embedded Web server.

Using the cleaning page

During printing, toner and dust particles can accumulate inside the printer. Over time, this buildup can cause print quality problems, such as toner specks or smearing. This printer has a cleaning mode that can correct and prevent these problems.



Cleaning the HP Color LaserJet CP4005n printer at the control panel

1. Press Menu to enter the **MENUS**.
2. Press ▼ to highlight **CONFIGURE DEVICE**.
3. Press ✔ to select **CONFIGURE DEVICE**.
4. Press ▼ to highlight **PRINT QUALITY**.
5. Press ✔ to select **PRINT QUALITY**.
6. Press ▼ to highlight **CREATE CLEANING PAGE**.
7. Press ✔ to select **CREATE CLEANING PAGE**.

   NOTE The printer prints a cleaning page with a pattern. The **PROCESS CLEANING PAGE** option is not available for these printers until the cleaning page has been created.

8. Press Menu to enter the **MENUS**.
9. Press ▼ to highlight **CONFIGURE DEVICE**.
10. Press ✔ to select **CONFIGURE DEVICE**.
11. Press ▼ to highlight **PRINT QUALITY**.
12. Press ✔ to select **PRINT QUALITY**.

13. Press ▼ to highlight **PROCESS CLEANING PAGE**.
14. Press ✔ to select **PROCESS CLEANING PAGE**.

Cleaning the HP Color LaserJet CP4005dn printer at the control panel

1. Press Menu to enter the **MENUS**.
2. Press ▼ to highlight **CONFIGURE DEVICE**.
3. Press ✔ to select **CONFIGURE DEVICE**.
4. Press ▼ to highlight **PRINT QUALITY**.
5. Press ✔ to select **PRINT QUALITY**.
6. Press ▼ to highlight **PROCESS CLEANING PAGE**.
7. Press ✔ to select **PROCESS CLEANING PAGE**.

   A page with a pattern prints.

Setting auto cleaning

The **AUTO CLEANING** menu option allows you to turn auto cleaning on or off. When auto cleaning is turned on, the printer prints a cleaning page when the page count reaches the value set in the cleaning interval. If auto cleaning is set to **Off**, the cleaning interval is not shown. The default value for auto cleaning is **Off**.

1. Press Menu to enter the **MENUS**.
2. Press ▼ to highlight **CONFIGURE DEVICE**.
3. Press ✔ to select **CONFIGURE DEVICE**.
4. Press ▼ to highlight **PRINT QUALITY**.
5. Press ✔ to select **PRINT QUALITY**.
6. Press ▼ to highlight **AUTO CLEANING**.
7. Press ✔ to select **AUTO CLEANING**.
8. Press ▼ to highlight the desired value.
9. Press ✔ to select the desired value.

Setting the cleaning interval

The **CLEANING INTERVAL** menu option allows you to set the interval at which the auto cleaning is due for the printer. The cleaning interval can be set anywhere from 1,000 to 20,000 pages.

1. Press Menu to enter the **MENUS**.
2. Press ▼ to highlight **CONFIGURE DEVICE**.
3. Press ✔ to select **CONFIGURE DEVICE**.
4. Press ▼ to highlight **PRINT QUALITY**.
5. Press ✔ to select **PRINT QUALITY**.

6. Press ▼ to highlight **CLEANING INTERVAL**.
7. Press ✔ to select **CLEANING INTERVAL**.
8. Press ▼ to highlight the desired value.
9. Press ✔ to select the desired value.

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 HP Web Jetadmin 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 Using the embedded Web server 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.

8 Problem solving

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

- Basic troubleshooting checklist
- Factors affecting printer performance
- Troubleshooting information pages
- Control panel message types
- Control panel messages
- Paper jams
- Common causes of paper jams
- Clearing jams
- Media-handling problems
- Printer response problems
- Printer control panel problems
- Incorrect printer output
- Software application problems
- Troubleshooting common Macintosh problems
- Color printing problems
- Print quality troubleshooting

Basic troubleshooting checklist

If you are experiencing problems with the printer, this checklist can 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?
- Were recently installed supplies (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 http://www.hp.com/support/ljcp4005.

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

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 USB)
- 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).

Troubleshooting information pages

From the printer control panel, you can print pages that can help diagnose printer problems. The procedures for printing the following information pages are described here:

- Configuration page

  NOTE It is recommended that you print a configuration page before beginning any printer diagnostics.

- Paper path test page
- Registration page
- Event log

Configuration page

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

1. Press Menu to enter the **MENUS**.
2. Press ▼ to highlight **INFORMATION**.
3. Press ✔ to select **INFORMATION**.
4. Press ▼ to highlight **PRINT CONFIGURATION**.
5. 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.

NOTE If the printer is configured with an HP Jetdirect print server or duplexer, an additional configuration page will print that provides information about those devices.

Paper path test page

The **paper path test** page is useful for testing the paper handling features of the printer. You can define the paper path you want to test by selecting the source, destination, and other options available on the printer.

1. Press Menu to enter the **MENUS**.
2. Press ▼ to highlight **DIAGNOSTICS**.
3. Press ✔ to select **DIAGNOSTICS**.
4. Press ▼ to highlight **PAPER PATH TEST**.
5. Press ✔ to select **PAPER PATH TEST**.

The message **Performing... PAPER PATH TEST** appears on the display until the printer finishes the paper path test. The printer returns to the **Ready** state after printing the paper path test page.

Registration page

The **registration** page prints a horizontal arrow and a vertical arrow that show how far from center an image can be printed on the page. You can set registration values for a tray so that an image on the back and front of a page is centered. Setting the registration also allows edge-to-edge printing to be set to within approximately 2 mm (0.08 inch) of all edges of the paper. Image placement varies slightly for each tray. Perform the registration procedure for each tray.

1. Press Menu to enter the **MENUS**.
2. Press ▼ to highlight **CONFIGURE DEVICE**.
3. Press ✔ to select **CONFIGURE DEVICE**.
4. Press ▼ to highlight **PRINT QUALITY**.
5. Press ✔ to select **PRINT QUALITY**.
6. Press ▼ to highlight **SET REGISTRATION**.
7. Press ✔ to select **SET REGISTRATION**.

   NOTE You can select a tray by specifying a **Source**. The default **Source** is Tray 2. To set the registration for Tray 2, go to step 12. Otherwise, proceed to the next step.

8. Press ▼ to highlight **Source**.
9. Press ✔ to select **Source**.
10. Press ▼ or ▲ to highlight a tray.
11. Press ✔ to select the tray.

    After selecting the tray, the printer control panel returns to the **SET REGISTRATION** menu.

12. Press ▼ to highlight **PRINT TEST PAGE**.
13. Press ✔ to select **PRINT TEST PAGE**.
14. Follow the instructions on the printed page.

The message **Printing... REGISTRATION PAGE** appears on the display until the printer finishes printing the registration page. The printer returns to the **Ready** state after printing the registration page.

Event log

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

1. Press Menu to enter the **MENUS**.
2. Press ▼ to highlight **DIAGNOSTICS**.
3. Press ✔ to select **DIAGNOSTICS**.
4. Press ▼ to highlight **PRINT EVENT LOG**.
5. 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.

Control panel message types

Control panel messages are divided into three types, depending on their severity.

- Status messages
- Warning messages
- Error messages

Within the error message category, some messages are ranked as *Critical* error messages. This section explains the differences between the control panel message types.

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 ✔ button is pressed. If **CLEARABLE WARNINGS** 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 auto-continuable error message will override the auto-continue feature and the function of the button pressed will take precedence. For example, pressing the Menu button will display the main menu.

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 listing

Control panel message	Description	Recommended action
10.90.X REPLACE **[COLOR] CARTRIDGE** alternates with **For help press ?**	A color cartridge is out of toner and needs to be replaced.	Replace the color cartridge.
10.X.X CARTRIDGES **NOT ENGAGED**	The print cartridge is not seated properly in the printer.	Remove and reinstall the print cartridge.
10.X.X SUPPLY **MEMORY ERROR** alternates with **For help press ?** The supplies gauge will display the consumption levels of print cartridges.	The printer cannot read or write to at least one print cartridge memory tag or at least one memory tag is missing. The following control panel messages correspond to the color of the print cartridge: 10.00.00 = black print cartridge 10.00.01 = cyan print cartridge 10.00.02 = magenta print cartridge 10.00.03 = yellow print cartridge	1. Turn the printer off then on. 2. Press ? for more information. 3. If the error persists, contact HP Support at http://www.hp.com/support/ljcp4005.
11.X INTERNAL CLOCK ERROR	This message is displayed when there is a problem with the real-time clock on the formatter board. XX=01 Dead clock battery XX=02 Dead real-time clock	Press ✔ to continue. If this error occurs, the printer will continue to track the time and date using the processor clock until the printer is turned off. Unless the error is corrected, you will be prompted to reset the date and time whenever the printer is turned off then on.
13.X.XX JAM IN **DUPLEX PATH** **For help press ?**	There is a jam in the duplex path.	1. Press ? for detailed information about clearing the jam. 2. Press ▲ and ▼ to step through the instructions. 3. For more information, see Clearing jams. 4. If the message persists after clearing all pages, contact HP Support at http://www.hp.com/support/ljcp4005.
13.X.XX JAM IN **PAPER PATH** **For help press ?**	There is a jam in the paper path.	1. Press ? for detailed information about clearing the jam. 2. Press ▲ and ▼ to step through the instructions.

Control panel message	Description	Recommended action
		3. For more information, see Clearing jams. 4. If the message persists after clearing all pages, contact HP Support at http://www.hp.com/support/ljcp4005.
13.X.XX JAM IN **TRAY 1** **Clear jam then** **press ✔**	Paper is jammed in Tray 1.	1. Press **?** for detailed information about clearing the jam. 2. Press ▼ to see step by step information. 3. For more information, see Clearing jams. 4. If the message persists after clearing all pages, contact HP Support at http://www.hp.com/support/ljcp4005.
13.X.XX JAM IN **TRAY X** **For help press ?**	A page is jammed in Tray 2 or optional Tray 3.	1. Press **?** for detailed information about clearing the jam. 2. Press ▲ and ▼ to step through the instructions. 3. For more information, see Clearing jams. 4. If the message persists after clearing all pages, contact HP Support at http://www.hp.com/support/ljcp4005.
13.X.XX JAM IN TOP **COVER OR DUPLEX AREA** **For help press ?**	There is a jam in the top cover area.	1. Press **?** for detailed information about clearing the jam. 2. Press ▲ and ▼ to step through the instructions. 3. For more information, see Clearing jams. 4. If the message persists after clearing all pages, contact HP Support at http://www.hp.com/support/ljcp4005.
13.X.XX JAM INSIDE **DUPLEXER** **For help press ?**	Paper is jammed in the duplexer. Check the device for jammed paper.	1. Press **?** for detailed information about clearing the jam. 2. Press ▲ and ▼ to step through the instructions. 3. For more information, see Clearing jams. 4. If the message persists after clearing all pages, contact HP Support at http://www.hp.com/support/ljcp4005.
13.X.XX MULTIPLE **JAMS IN DUPLEX PATH** **For help press ?**	There are multiple jams in the duplex path. This includes the top cover area.	1. Press **?** for detailed information about clearing the jam. 2. Press ▲ and ▼ to step through the instructions.

Control panel message	Description	Recommended action
		3. For more information, see Clearing jams. 4. If the message persists after clearing all pages, contact HP Support at http://www.hp.com/support/ljcp4005.
13.X.XX MULTIPLE **JAMS IN PAPER PATH** **For help press ?**	There are multiple jams in the paper path. This includes the top cover area.	1. Press ? for detailed information about clearing the jam. 2. Press ▲ and ▼ to step through the instructions. 3. For more information, see Clearing jams. 4. If the message persists after clearing all pages, contact HP Support at http://www.hp.com/support/ljcp4005.
20 Insufficient Memory **For help press ?** alternates with **20 Insufficient Memory**	The printer has received more data from the computer than fits in available memory.	1. Press ✔ to continue printing. **NOTE** A loss of data will occur. 2. Reduce the complexity of the print job to avoid this error in the future. 3. Adding memory to the printer may allow printing of more complex pages.
22 EMBEDDED I/O **BUFFER OVERFLOW** alternates with	The embedded Jetdirect print server has overflowed.	Press ✔ to continue. When this error occurs, data might be lost. If necessary, resend the job to the printer.
40 EMBEDDED I/O BAD **TRANSMISSION** alternates with	A connection with the embedded Jetdirect print server has been broken.	Turn the printer off then on. Press ? for more information. If the message persists, contact HP Support at http://www.hp.com/support/ljcp4005.
41.3 UNEXPECTED **SIZE IN TRAY X** **For help press ?** alternates with **LOAD TRAY X** **[TYPE] [SIZE]** **To use another** **tray press ✔**	Media is loaded that is longer or shorter in the feed direction than the size configured for the tray.	1. If the incorrect size was selected, cancel the job or press ? to access help. OR 2. Press ✔ to select another tray. 3. Press ▲ and ▼ to step through the instructions.

Control panel message	Description	Recommended action
41.5 UNEXPECTED **TYPE IN TRAY X** **For help press ?** alternates with **LOAD TRAY X** **[TYPE] [SIZE]** **To use another** **tray press ✔**	The printer senses a different media type in the media path than configured in the tray.	1. If the incorrect type was selected, cancel the job or press ? to access help. OR 2. Press ✔ to select another tray. 3. Press ▲ and ▼ to step through the instructions.
49.XXXX **PRINTER ERROR** **To continue** **turn off then on**	A critical firmware error has occurred.	1. Turn the printer off then on. 2. If the message persists, contact HP Support at http://www.hp.com/support/ljcp4005.
50.X FUSER ERROR **For help press ?**	A fuser error has occurred. The following are specific fuser errors: 50.1: A low fuser temperature error has occurred in the main thermistor. 50.2: A fuser warm-up service error has occurred. 50.3: A high fuser temperature error has occurred in the main thermistor. 50.6: An open fuser error has occurred. 50.7: A fuser pressure release mechanism failure has occurred. The error might be due to an inadequate power supply, inadequate line voltage, or a problem with the fuser.	1. Turn the printer off then on. 2. Press ▲ and ▼ to step through the instructions. 3. If the message persists, contact HP Support at http://www.hp.com/support/ljcp4005.
50.X FUSER ERROR **To continue** **turn off then on**	A fuser error has occurred.	Turn the printer off then on.
51.2Y **PRINTER ERROR** **For help press ?** alternates with **51.2Y** **PRINTER ERROR** **To continue**	Either a laser beam detects an error, or a laser error has occurred. The values of Y are: **Y Description** 0 - Black 1 - Cyan 2 - Magenta 3 - Yellow	1. Turn the printer off then on. 2. If the problem persists, contact HP Support at http://www.hp.com/support/ljcp4005.

Control panel message	Description	Recommended action
turn off then on		
52.X PRINTER ERROR alternates with **To continue** **turn off then on**	A printer error has occurred.	Turn the printer off then on. Press **?** for more information. If the message persists, contact HP Support at http://www.hp.com/support/ljcp4005.
53.XX.X CHECK RAM **DIMM SLOT X**	A memory error has occurred.	If prompted to do so, press ✔ to continue. The printer should come to the **Ready** state, but will not make full use of all memory installed. Otherwise: 1. Turn the printer off. 2. Verify that all DDR SDRAM meets specifications and is correctly seated. 3. Turn the printer on. 4. If the problem persists, contact HP Support at http://www.hp.com/support/ljcp4005.
54.XX **PRINTER ERROR** **To continue** **turn off then on**	Printing cannot continue. There is a sensor malfunction. Values of X are: 01 - Humidity sensor 15 - Yellow 16 - Magenta 17 - Cyan 18 - Black	1. Turn the printer off then on. 2. If the problem persists, contact HP Support at http://www.hp.com/support/ljcp4005.
55.X.X DC **CONTROLLER ERROR** **For help press ?** alternates with **55.0X.YY PRINTER ERROR** **PRINTER ERROR** **To continue** **turn off then on**	A printer command error has occurred.	1. Turn the printer off then on. 2. If the problem persists, contact HP Support at http://www.hp.com/support/ljcp4005.
56.XX **PRINTER ERROR** **To continue** **turn off then on**	A printer error has occurred.	1. Turn the printer off then on. 2. If the problem persists, contact HP Support at http://www.hp.com/support/ljcp4005.

Control panel message	Description	Recommended action
57.0X **PRINTER ERROR** **To continue** **turn off then on**	A printer fan error has occurred.	1. Turn the printer off then on. 2. If the problem persists, contact HP Support at http://www.hp.com/support/ljcp4005.
58.0X **PRINTER ERROR** **For help press ?** alternates with **58.0X** **PRINTER ERROR** **To continue** **turn off then on**	A memory tag error was detected.	1. Turn the printer off then on. 2. If the problem persists, contact HP Support at http://www.hp.com/support/ljcp4005.
59.XY **PRINTER ERROR** **For help press ?** alternates with **59.XY** **PRINTER ERROR** **To continue** **turn off then on**	A printer motor error has occurred.	1. Turn the printer off then on. 2. If the problem persists, contact HP Support at http://www.hp.com/support/ljcp4005. Note: This message might also appear if the transfer unit is missing or incorrectly installed. Ensure that the transfer unit is correctly installed.
60.X **PRINTER ERROR** alternates with **To continue** **turn off then on**	A tray lifting error has occurred, where XX is the number of the tray.	1. Press ▼ to see step by step information. 2. If the error reappears, turn the printer off then on. 3. If the error does not clear, record the message and contact HP Support at http://www.hp.com/support/ljcp4005.
62 NO SYSTEM **To continue** **turn off then on**	No system was found.	1. Turn the printer off then on. 2. If the problem persists, contact HP Support at http://www.hp.com/support/ljcp4005.
68.X PERMANENT **STORAGE FULL** **For help press ?** alternates with **68.X PERMANENT**	A non-volatile storage device is full. Pressing the ✔ button should clear the message. Printing can continue, but there may be unexpected behavior. **X Description** 0 for onboard NVRAM 1 for removable disk (flash or hard)	1. Press ✔ to continue. 2. For **68.0** errors, turn the printer off then on. 3. If a **68.0** error persists, contact HP Support.

Control panel message	Description	Recommended action
STORAGE FULL		4. For **68.1** errors, use the HP Web Jetadmin software to delete files from the disk drive. 5. For **68.1** errors that persist, contact HP Support.
68.X PERMANENT **STORAGE WRITE FAIL**	A non-volatile storage device is full. Pressing the ✔ button should clear the message. Printing can continue, but there may be unexpected behavior. **X Description** 0 for onboard NVRAM 1 for removable disk (flash or hard)	1. Press ✔ to continue. 2. If the message persists, turn the printer off then on. 3. If the problem persists, contact HP Support at http://www.hp.com/support/ljcp4005.
68.X STORAGE ERROR **SETTINGS CHANGED** **For help press ?** alternates with **68.X STORAGE ERROR** **SETTINGS CHANGED**	One or more printer settings saved in the non-volatile storage device is invalid and has been reset to its factory default. Pressing the ✔ button should clear the message. Printing can continue, but there may be unexpected behavior.	1. Press ✔ to continue. 2. If the message persists, turn the printer off then on. 3. If the problem persists, contact HP Support at http://www.hp.com/support/ljcp4005.
69.X PRINTER ERROR **For help press ?** alternates with **69.X PRINTER ERROR** **To continue** **turn off then on**	A printer error has occurred.	Turn the printer off then on. Press **?** for more information.
79.XXXX **PRINTER ERROR** **To continue** **turn off then on**	A critical hardware error has occurred.	1. Turn the printer off then on. 2. If the problem persists, contact HP Support at http://www.hp.com/support/ljcp4005.
[FS] DEVICE **FAILURE** **To clear press ✔** alternates with **Ready**	A device failure has occurred on the specified drive. Printing can continue for jobs that do not require the Flash DIMM.	1. To clear the message, press the ✔ key. 2. If the message persists, remove and re-install the EIO disk drive. 3. Turn the printer back on. 4. If the message still persists, replace the Flash DIMM.

Control panel message	Description	Recommended action
[FS] DEVICE **WRITE PROTECTED** **To clear press ✔** alternates with **Ready**	The file system device is protected and no new files can be written to it.	1. To enable writing to the Flash Memory, turn off write protection, using HP Web Jetadmin. 2. To clear the message, press the ✔ key. 3. If the message persists, turn the printer off then on.
[FS] FILE **SYSTEM IS FULL** **To clear press ✔** alternates with **Ready**	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 HP Web Jetadmin software to delete files from the Flash Memory and try again. 2. To clear the message, press the ✔ key. 3. If the message persists, turn the printer off then on.
[FS] NOT **INITIALIZED**	The device has not been initialized.	You can use Web JetAdmin to initialize the device.
ABCDEFGHIJ **0110000000** alternates with **To exit press.** Stop	This message is displayed when a paper path sensor test or a paper path test is run. The alphabetical value indicates which sensor is being checked.	No action necessary.
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** state.	Contact the printer administrator to change settings.
BAD DUPLEXER **CONNECTION** alternates with **For help press ?**	The duplexer is not connected properly and must be reinserted before printing can continue.	Turn the printer off. Press ▼ to see step by step information.
BAD OPTIONAL TRAY **CONNECTION**	The 500-sheet input tray is not making proper connection with the printer.	1. Verify that the printer is on a level surface. 2. Turn the printer off. 3. Reseat the printer on the 500-sheet input tray. 4. Turn the printer on after reseating the 500-sheet input tray.
BLACK CARTRIDGE IN **WRONG POSITION** alternates with **For help press ?**	The black cartridge is installed in the wrong slot and the cover is closed.	1. Open the top and front covers. △ **CAUTION** The image transfer unit can be easily damaged. 2. Open the image transfer unit.

Control panel message	Description	Recommended action
The supplies gauge will display the consumption levels of print cartridges.		3. Remove the incorrect print cartridge. 4. Install the correct print cartridge. 5. Close image transfer unit and then close the top and front covers.
Calibrating...	The printer is calibrating.	No action necessary.
Canceling... X	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.
CARD SLOT X **NOT FUNCTIONAL**	The flash card in slot X is not working correctly.	1. Turn the printer off. 2. Remove the card from the slot indicated and replace with a new card.
Checking paper path	The engine is turning its rollers to check for possible paper jams.	No action necessary.
Checking printer	The engine is doing an internal test.	No action necessary.
CHOSEN PERSONALITY **NOT AVAILABLE** alternates with **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.	1. Press **?** for detailed information. 2. Press ▲ and ▼ to step through the instructions. 3. Reprint using the correct driver for the device.
CLEANING DISK X% COMPLETE	A storage device is being cleaned. Do not turn the printer off. When the process is complete, the printer will automatically restart.	No action necessary.
Cleaning...	A cleaning page is being processed.	No action necessary.
Clearing event log	This message is displayed while the event log is cleared. The printer will exit the **MENUS** once the event log has been cleared.	No action necessary.
Clearing paper path	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 ?**	The top cover needs to be closed.	Close front covers. **NOTE** This message might also appear if the fuser is missing or incorrectly installed. Ensure that the fuser is correctly installed.
Close top cover.	The top cover of the printer is open.	Close the top cover.

Control panel message	Description	Recommended action
Creating... CLEANING PAGE	This message is displayed while a cleaning page is being generated. When the page is complete, the control panel display backs up one screen to the **PRINT QUALITY** menu.	No action necessary. When the page is printed, follow the instructions printed on the cleaning page to process the page.
CYAN CARTRIDGE IN **WRONG POSITION** alternates with **For help press ?** The supplies gauge will display the consumption levels of print cartridges.	The cyan cartridge is installed in the wrong slot and the cover is closed.	1. Open the top and front covers. **CAUTION** The image transfer unit can be easily damaged. 2. Open the image transfer unit. 3. Remove the incorrect print cartridge. 4. Install the correct print cartridge. 5. Close image transfer unit and then close the top and front covers.
DATA RECEIVED **To print last page press Go ✔** alternates with **Ready** **To print last page press Go ✔**	The printer received data and is waiting for a form feed. When the printer receives another file, the message should disappear.	Press ✔ to continue printing.
Date/Time	Prompt for setting the printer date and time. Default format is [YYYY]/[MMM]/[DD] [HH]-[MM].	To change, press ✔ and follow the time and date prompts.
DELETING PRIVATE JOBS	The printer is deleting a private stored job. A PIN is required to delete a private job.	No action necessary.
Deleting... X	The printer is currently deleting the stored job.	No action necessary.
DISK DEVICE **FAILURE** **To clear press ✔** alternates with **Ready**	A device failure has occurred on the specified drive. Printing may continue for jobs that do not require access to the disk drive.	1. To clear the message, press the ✔ key. 2. If the message persists, remove and re-install the EIO disk drive. 3. Turn the printer back on. 4. If the message still persists, replace the EIO disk drive.
DISK FILE **OPERATION FAILED** **To clear press ✔** alternates with **Ready**	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 directory). Printing may continue.	1. To clear the message, press the ✔ key. 2. If the message persists, turn the printer off then on. 3. If the message reappears, there may be a problem with the software application.

Control panel message	Description	Recommended action
DISK FILE **SYSTEM IS FULL** **To clear press ✔** alternates with **Ready**	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 the stored job from the printer control panel. 2. To clear the message, press the ✔ key. 3. If the message persists, turn the printer off then on.
DISK FILE **SYSTEM IS FULL** **To clear press ✔** alternates with **Ready**	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.	• To clear the message, press the ✔ key. • If the message persists, turn the printer off then on. **NOTE** This will also delete any files saved in RAM.
DISK IS **WRITE PROTECTED** **To clear press ✔** alternates with **Ready**	The file system device is protected and no new files can be written to it.	1. To enable writing to the disk, turn off write protection, using HP Web Jetadmin. 2. To clear the message, press the ✔ key. 3. If the message persists, turn the printer off and then on.
Event Log Empty	**SHOW EVENT LOG** was selected from the control panel, and the event log is empty.	No action necessary.
FLASH FILE **OPERATION FAILED** **To clear press ✔** alternates with **Ready**	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 directory).	1. To clear the message, press the ✔ key. 2. If the message persists, turn the printer off then on. 3. If the message reappears, there may be a problem with the software application.
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.
INCOMPATIBLE [COLOR] **CARTRIDGE** alternates with **For help press ?** The supplies gauge will display the consumption levels of print cartridges.	A cartridge is installed that is not intended for use with this device.	1. Open the top and front covers. **CAUTION** The image transfer unit can be easily damaged. 2. Open the image transfer unit. 3. Remove the incorrect print cartridge. 4. Install the correct print cartridge. 5. Close image transfer unit and then close the top and front covers.

Control panel message	Description	Recommended action
INCOMPATIBLE SUPPLIES alternates with **For status press ✔** The supplies gauge will display the consumption levels of print cartridges.	At least two supplies are installed that are not intended for use in this device.	1. Press ✔ to access the **SUPPLIES STATUS** menu. 2. Press ▲ and ▼ to highlight the specific supply that has a problem. 3. Press **?** to view help for the supply. 4. Press ▲ and ▼ to step through the instructions.
Incorrect PIN	The wrong PIN was entered. After three incorrect PIN entries, the printer will return to **Ready**.	Re-enter PIN correctly.
Initializing **permanent storage**	Displayed when the printer is turned on to show that permanent storage is being initialized.	No action necessary.
Initializing...	This message is displayed when the printer is turned on, as soon as the individual tasks begin initialization.	No action necessary.
INSERT OR CLOSE **TRAY X** **For help press ?**	Tray XX must be inserted or closed before the current job can be printed.	Close the tray indicated.
INSTALL FUSER	The fuser is not installed or is not installed correctly.	Confirm that the fuser is installed in the printer and is fully seated. Press ▼ to see step by step information.
INSTALL SUPPLIES **For status press ✔** The supplies gauge will display the consumption levels of print cartridges.	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.	1. Press ✔ to access the SUPPLIES STATUS menu. 2. Press ▲ and ▼ to highlight the specific supply that has a problem. 3. Press **?** to view help for the supply. 4. Press ▲ and ▼ to step through the instructions.
INSTALL TRANSFER UNIT	The transfer unit is not installed or is not installed correctly.	1. Press ✔ to access the SUPPLIES STATUS menu. 2. Press ▼ to highlight the transfer unit. 3. Press **?** to view help. 4. Press ▲ and ▼ to step through the instructions.
INSUFFICIENT MEMORY **TO LOAD FONTS/DATA** **For help press ?** alternates with **Device**	The device does not have enough memory to load the data, such as fonts or macros from the location specified. **Device** can be one of the following: INTERNAL = ROM directly on the formatter board CARD SLOT X = font card in slot X	1. To use the device without the data, press ✔. 2. To solve the problem, add more memory to the device. DDR SDRAM Memory: 128MB, (Q2630A) or 256MB (Q2631A).

Control panel message	Description	Recommended action
	DIMMS	
LOAD TRAY 1: **[TYPE] [SIZE]** alternates with **LOAD TRAY 1:** **[TYPE] [SIZE]** **For help press ?**	Tray 1 is loaded and configured for a type and size other than the one specified in the job.	1. If the correct paper is loaded, press ✔. 2. Otherwise, remove the incorrect paper and load Tray 1 with the specified paper. 3. If prompted, confirm the size and type of paper loaded. 4. Confirm that the media guides are in the correct position. 5. To use another tray, remove paper from Tray 1 and then press ✔.
LOAD TRAY 1: **[TYPE] [SIZE]** **For help press ?**	This message appears when Tray 1 is selected but is not loaded, and no other paper trays are available for use.	Load the correct paper in Tray 1 and press ✔ to continue. If prompted, confirm the size and type of paper loaded.
LOAD TRAY 1: **[TYPE] [SIZE]** **To use another** **tray press ✔** Alternates with **LOAD TRAY 1:** **[TYPE] [SIZE]** **For help press ?**	This message appears when Tray 1 is selected but is not loaded, and other paper trays are available for use.	1. Load the correct paper in the tray. 2. If prompted, confirm the size and type of paper loaded. 3. Otherwise, select another tray.
LOAD TRAY X **[TYPE] [SIZE]** **For help press ?**	This message appears when Tray XX is selected but is not loaded, and no other paper trays are available for use.	Load the correct paper in the tray and press ✔ to continue.
LOAD TRAY X **[TYPE] [SIZE]** **To use another** **tray press ✔** alternates with **LOAD TRAY X** **[TYPE] [SIZE]** **For help press ?**	Tray XX is either empty or configured for a type and size other than specified in the job, and another paper tray is available.	1. Load the paper tray with the specified media. 2. Confirm that the media guides are in the correct position. 3. If prompted, confirm the size and type of paper loaded. 4. To use another tray, press ✔.
Loading **program X** **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.

Control panel message	Description	Recommended action
MAGENTA CARTRIDGE IN **WRONG POSITION** alternates with **For help press ?** The supplies gauge will display the consumption levels of print cartridges.	The magenta cartridge is installed in the wrong slot and the cover is closed.	1. Open the top and front covers. **CAUTION** The image transfer unit can be easily damaged. 2. Open the image transfer unit. 3. Remove the incorrect print cartridge. 4. Install the correct print cartridge. 5. Close image transfer unit and then close the top and front covers.
MANUALLY FEED **[TYPE] [SIZE]** alternates with **To use another tray press ✔**	The job specifies manual feed, but Tray 1 is empty. Another tray is available.	Add paper to Tray 1 or press ✔ to select another tray.
MANUALLY FEED **[TYPE] [SIZE]**	A job was sent specifying **MANUAL FEED** and Tray 1 is empty. No other tray is available.	1. Load Tray 1 with the correct paper and press ✔ to continue. 2. If prompted, confirm the size and type paper loaded.
MANUALLY FEED **[TYPE] [SIZE]** alternates with **MANUALLY FEED** **[TYPE] [SIZE]** **For help press ?**	The job specifies **MANUAL FEED**, but Tray 1 is already loaded and configured for a type or size other than that specified in the job.	1. Load the correct paper in Tray 1. 2. If prompted, confirm the size and type of paper loaded. 3. Otherwise, press ✔ to select another tray.
MANUALLY FEED **[TYPE] [SIZE]** **To use another** **tray press ✔** alternates with **MANUALLY FEED** **[TYPE] [SIZE]** **For help press ?**	A job was sent that specified **MANUAL FEED** and Tray 1 is empty. Another tray is available.	1. Load Tray 1 with the correct paper. 2. If prompted, confirm the size and type of paper loaded. 3. Otherwise, press ✔ to select another tray.
MANUALLY FEED **OUTPUT STACK** alternates with	The even-numbered pages of a manual two-sided document have been printed and the printer is waiting for the output stack to be inserted for the odd-numbered pages to be printed.	Follow the instructions on the **Print on Both Sides** instruction dialog box at the computer. OR Press **?** for help at the printer.

Control panel message	Description	Recommended action
Then press ✔ to **print second sides**		
Moving solenoid **To exit press.** Stop	The printer is executing a component test and the component selected is a solenoid.	No action necessary.
Moving solenoid and motor **To exit press.** Stop	The printer is executing a component test and the components selected are the solenoid and the motor.	No action necessary.
No job to cancel	There are no stored jobs that can be canceled.	No action necessary.
NON HP SUPPLY **IN USE** alternates with **Ready** The supplies gauge will display the consumption levels of print cartridges, but the level of any refilled cartridge will not be shown.	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 (1–877–219–3183, toll-free in North America). **CAUTION** Any printer repair required as a result of using non-HP cartridges is not covered under HP warranty.
ORDER [COLOR] **CARTRIDGE** The supplies gauge will display the consumption levels of print cartridges. alternates with **Ready** The supplies gauge will display the consumption levels of print cartridges.	The identified print cartridge is nearing the end of its useful life. The printer is ready and will continue for the estimated number of pages indicated. Estimated pages remaining is based upon the historical page coverage of this printer. Printing will continue until a supply needs to be replaced.	1. Press **?** to view help for the message. 2. Obtain the part number for the print cartridge indicated. 3. Order a print cartridge **NOTE** Supplies ordering information is also available from the embedded Web server. See Using the embedded Web server for more information.
ORDER FUSER KIT **LESS THAN X PAGES** **For help press ?** alternates with **Ready**	The fuser is near the end of its life. The printer is ready and will continue for the estimated number of pages indicated. Printing will continue until a supply needs to be replaced.	1. Press **?** to view help for the message. 2. Obtain the part number for the fuser kit. 3. Order the fuser kit. **NOTE** Supplies ordering information is also available from the embedded Web server. See Using the embedded Web server for more information.
ORDER SUPPLIES alternates with **Ready** **For help press ?** The supplies gauge will display the consumption levels of print cartridges.	More than one supply item is low. Printing will continue until a supply needs to be replaced.	1. Press Menu to access the menus. 2. Press ▲ or ▼ to highlight **INFORMATION**, and then press ✔. 3. Press ▲ or ▼ to highlight **SUPPLIES STATUS**, and then press ✔. 4. Press ▲ or ▼ to highlight a supply that needs to be ordered.

Control panel message	Description	Recommended action
		5. Press ? to access help for the supply. 6. Obtain a part number from help. 7. Order the supply. 8. Repeat the previous steps as necessary for each supply that needs to be ordered. 9. Supplies ordering information is also available from the embedded Web server. See Using the embedded Web server for more information.
ORDER TRANSFER KIT **LESS THAN X PAGES** **For help press ?** alternates with **Ready**	The transfer unit is near end of life. Printing can continue.	1. Press ? to view help for the message. 2. Obtain the transfer kit part number from help. 3. Order the transfer kit. **NOTE** Supplies ordering information is also available from the embedded Web server. See Using the embedded Web server for more information.
Paused **To return to Ready** **press STOP**	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 the Stop key.
Performing upgrade	A firmware upgrade is in process.	Do not turn the printer off until the printer returns to **Ready**.
Performing... **PAPER PATH TEST**	The printer is performing a paper path test.	No action necessary.
Please wait	The printer is in the process of clearing data.	No action necessary.
PRINT/STOP TEST	The printer is performing a print/stop test.	No action necessary.
PRINTING STOPPED	This message is displayed when a Print/Stop Test is run and time expires.	Press ✔ to continue printing.
Printing... **CMYK SAMPLES**	This message displays while the printer CMYK samples page is being generated.	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 PAGE**	The printer is generating the demo page. The printer will return to the online **Ready** state when the page is completed.	No action necessary.

Control panel message	Description	Recommended action
Printing... **DIAGNOSTICS PAGE**	The printer is generating the diagnostics page. The printer will return to the online **Ready** state when the page is completed.	No action necessary.
Printing... **ENGINE TEST**	The printer is generating the engine test 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.
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... **RGB SAMPLES**	This message displays while the printer RGB samples page is being generated.	No action necessary.
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.
Processing duplex **job** **Do not grab 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 job **from tray X**	The printer is actively processing a job from the designated tray.	No action necessary.
Processing...	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.

Control panel message	Description	Recommended action
Processing... **copy <X> of <Y>**	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.
Processing... **INTERMITTENT MODE** **For help press ?**	This message might be displayed during periods of heavy usage if the printer becomes overheated. If this occurs, the printer enters a mode in which it prints for one minute and pauses for one minute. This cycle continues until the operating temperature stabilizes.	Press ▼ to see step by step information.
RAM DISK DEVICE **FAILURE** **To clear press ✔** alternates with **Ready**	A device failure has occurred on the specified drive.	1. To clear the message, press the ✔ key. 2. If the message persists, turn the printer off then on. 3. If the message persists, contact HP Support at http://www.hp.com/support/ljcp4005.
RAM DISK FILE **OPERATION FAILED** **To clear press ✔** alternates with **Ready**	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 directory). Printing may continue.	1. To clear the message, press the ✔ key. 2. If the message persists, turn the printer off then on. 3. If the message reappears, there may be a problem with the software application.
RAM DISK IS **WRITE PROTECTED** **To clear press ✔** alternates with **Ready**	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 protection, using HP Web Jetadmin software. 2. To clear the message, press the ✔ key. 3. If the message persists, turn the printer off then on.
Ready The supplies gauge will display the consumption levels of print cartridges.	The printer is online and ready for data. No status or device attendance messages are pending at the display.	No action necessary.
Ready **Diagnostics mode** **To exit press.** Stop	The printer is in a special diagnostics mode.	Press the Stop key to exit the special diagnostics mode. OR No action is necessary.
Ready **IP Address:**	The printer is online and ready.	No action necessary.
Receiving **upgrade**	A firmware upgrade is in progress.	Do not turn the printer off until the printer returns to **Ready**.
REINSERT DUPLEXER	The duplexer has been removed.	Press ▼ to see step by step information.
REMOVE ALL	The printer is executing a component test and the component selected is Belt Only.	Remove all print cartridges.

Control panel message	Description	Recommended action
PRINT CARTRIDGES **To exit press.** Stop		
Remove at least one **print cartridge.** **To exit press.** Stop	The printer is executing a disable cartridge check or component test where the component selected is the cartridge motor.	Remove one print cartridge.
REPLACE [COLOR] **CARTRIDGE** The supplies gauge will display the consumption levels of print cartridges. alternates with The supplies gauge will display the consumption levels of print cartridges.	The identified print cartridge has reached the end of life and the **COLOR SUPPLY OUT** setting in the **SYSTEM SETUP** menu is set to **STOP AT OUT**. Printing can continue.	1. Order the appropriate print cartridge. 2. To continue, press ✔. 3. Open the front and top covers and then open the image transfer unit. **CAUTION** The image transfer unit can be easily damaged. 4. Remove the identified print cartridge. 5. Install a new print cartridge. 6. Close the image transfer unit and the top and front covers. 7. Supplies ordering information is also available from the embedded Web server. See Using the embedded Web server for more information.
REPLACE FUSER KIT **For help press ?**	The fuser kit has reached the end of its life. Replace the fuser kit. Printing can continue although print quality might be reduced.	1. Open the top cover. 2. Grasp the purple handles on the fuser unit. 3. Remove the old fuser unit from the printer. 4. Install a new fuser unit and secure with thumb screws. 5. Close the top cover. 6. Supplies ordering information is also available from the embedded Web server. See Using the embedded Web server for more information.
REPLACE FUSER KIT **For help press ?** alternates with **REPLACE FUSER KIT**	The fuser is nearing the end of its useful life and the **REPLACE SUPPLIES** setting in the **SYSTEM SETUP** menu is set to **STOP AT OUT**. Printing can continue.	1. Order the fuser kit. 2. To continue printing, press ✔. 3. To replace the fuser kit, perform the following steps: • Open the top cover. • Grasp the purple handles on the fuser unit.

Control panel message	Description	Recommended action
		• Remove the old fuser unit from the printer. • Install the new fuser unit. • Close the top cover. • Supplies ordering information is also available from the embedded Web server. See Using the embedded Web server for more information.
REPLACE SUPPLIES The supplies gauge will display the consumption levels of print cartridges.	Multiple supplies are at the end of their useful life and the **REPLACE SUPPLIES** setting in the **SYSTEM SETUP** menu is set to **STOP AT OUT**.	1. Press ✔ to access the **SUPPLIES STATUS** menu. 2. Press ▲ and ▼ to highlight the specific supply that has a problem. 3. Press **?** to view help for the supply. 4. Press ▲ and ▼ to step through the instructions. 5. Supplies ordering information is also available from the embedded Web server. See Using the embedded Web server for more information.
REPLACE SUPPLIES **For status press ✔** The supplies gauge will display the consumption levels of print cartridges.	Multiple supplies are at the end of their useful life. If the supplies affected are cartridges only, printing has stopped because the **REPLACE SUPPLIES** setting in the **SYSTEM SETUP** menu is set to **STOP AT LOW**. If the affected supplies are cartridges only, printing will not continue.	1. Press ✔ to access the **SUPPLIES STATUS** menu. 2. Press ▲ and ▼ to highlight the specific supply that has a problem. 3. Press **?** to view help for the supply. 4. Press ▲ and ▼ to step through the instructions. 5. Supplies ordering information is also available from the embedded Web server. See Using the embedded Web server for more information.
REPLACE SUPPLIES **Override in use** alternates with <Current status message>	The printer is set to continue printing even though a print cartridge has reached end of life. **CAUTION** Using the Override mode can result in unsatisfactory print quality. HP recommends replacing the supply when the **REPLACE SUPPLIES Override in use** message appears. The HP Supplies Premium Protection Warranty coverage ends when a supply is used in Override mode.	Press ▼ to see step by step information.
REPLACE SUPPLIES **Using black only** alternates with	This message is generated when a print cartridge (or print cartridges) has reached the out condition and the printer is set to **AUTOCONTINUE BLACK**.	Press ▼ to see step by step information.

Control panel message	Description	Recommended action
<Current status message>		
REPLACE TRANSFER KIT **For help press ?**	The transfer unit is at end of life. Printing can continue but print quality might be reduced.	1. Open the top and front cover. 2. Lower the transfer unit by pulling the green handle at the top of the unit downward. 3. Depress the small blue latches located on either side of the bottom of the transfer unit and lift the unit out of the printer. 4. Install the new transfer unit. 5. Close the front and top covers. 6. Supplies ordering information is also available from the embedded Web server. See Using the embedded Web server for more information.
REPLACE TRANSFER KIT **For help press ?** alternates with **REPLACE TRANSFER KIT**	The transfer unit is nearing the end of its useful life and the **REPLACE SUPPLIES** setting in the **SYSTEM SETUP** menu is set to **STOP AT OUT**.	1. Order the transfer kit. 2. To continue printing, press ✔. 3. To replace the transfer kit, perform the following steps: • Open the top and front cover. • Lower the transfer unit by pulling the green handle at the top of the unit downward. • Depress the small blue latches located on either side of the bottom of the transfer unit and lift the unit out of the printer. • Install the new transfer unit. • Close the front and top covers. • 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.
Restoring... [accessory #]	The printer is restoring external accessory settings in response to a user request.	No action necessary.
Restoring...	The printer is restoring settings. This message is displayed during the execution of	No action necessary.

Control panel message	Description	Recommended action
	a restore action, such as **RESTORE COLOR VALUES**.	
Restoring... **factory settings**	The printer is restoring factory settings.	No action necessary.
RESTRICTED FROM PRINTING IN COLOR alternates with **Ready**	The printer is set to **COLOR IF ALLOWED** and you or your software program are not authorized to print in color.	Get your network administrator to set the user or program permissions that will allow you to print in color.
Rotating [COLOR] **motor** **To exit press.** Stop	A component test is in progress; the component selected is the <color> cartridge motor.	Press Stop when ready to stop this test.
Rotating motor **To exit press.** Stop	The printer is executing a component test and the component selected is a motor.	Press Stop when ready to stop this test.
Setting saved	A menu selection has been saved.	No action necessary.
SIZE MISMATCH **TRAY X=[SIZE]** **For help press ?** alternates with **Ready**	The tray is loaded with media longer or shorter in the feed direction than the size configured for the tray.	1. Adjust the side and rear media guides against the paper. 2. If necessary, press ✔ after the tray is closed to change the paper size or type configuration to match the size or type in the tray.
Sleep mode on	The printer is in sleep mode. A button press, receipt of printable data, or an error condition will clear this message.	No action necessary.
SUPPLIES IN **WRONG POSITION** alternates with **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.	1. Press ✔ to access the **SUPPLIES STATUS** menu. 2. Press ▲ and ▼ to highlight the specific supply that has a problem. 3. Press ? to view help for the supply. 4. Press ▲ and ▼ to step through the instructions.
Transfer unit can **be easily damaged.** alternates with **For help press ?** The supplies gauge will display the consumption levels of print cartridges.	The cartridge is either not installed or not correctly installed in the printer.	1. Open the top and front covers. **CAUTION** The image transfer unit can be easily damaged. 2. Open the image transfer unit. 3. Insert the print cartridge and make sure that it is fully seated.

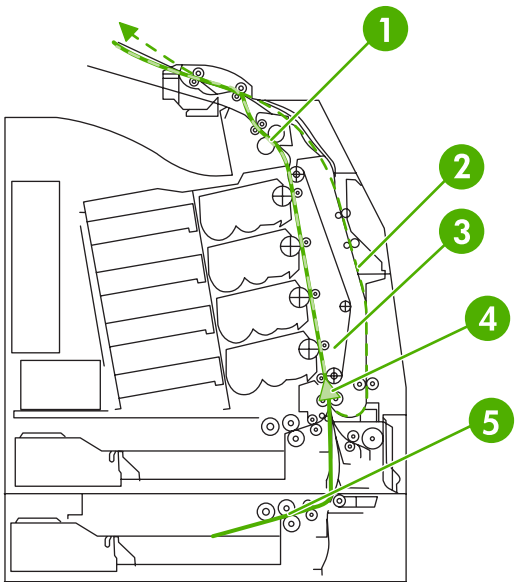
Control panel message	Description	Recommended action
		4. Close the image transfer unit and then close the top and front covers. 5. If the error persists, contact HP Support at http://www.hp.com/support/ljcp4005.
TRAY X EMPTY **[TYPE] [SIZE]** alternates with **Ready**	The specified tray is empty and the current job does not need this tray to print.	Refill the tray at a convenient time.
TRAY X OPEN **For help press ?** alternates with **Ready**	The specified tray is open or not closed completely.	Close the tray.
TRAY X SIZE= [SIZE] **Setting saved**	The size selected from the menu has been saved.	No action is necessary.
TYPE MISMATCH **TRAY X=[TYPE]** **For help press ?** alternates with **Ready**	The media type loaded in the tray does not match the media type configured for the tray.	1. Adjust the side and rear guides against the paper. 2. If necessary, press ✔ after the tray is closed to change the paper size or type to match the paper loaded in the tray.
Unable to mopy job alternates with **Processing...**	The print job cannot be mopied because of a memory or configuration problem. Only one copy will be produced.	Install additional memory in the printer.
Unable to Store Job **JOB NAME** alternates with **Processing...**	A job cannot be stored because of a memory or configuration problem.	Install additional memory in the printer.
USB ACCESSORY **ERROR** **For help press ?**	This message appears when a connected USB accessory draws too much power. When this happens, the ACC port is disabled and printing stops.	Press ▼ to see step by step information.
USE TRAY X **[TYPE] [SIZE]** **To change press ▲/▼** **To use press ✔**	The printer is offering a selection of alternate media to use for the print job.	1. View tray configurations (type and size) using ▲ and ▼. 2. Press ✔ to select a tray to use. 3. To return to the previous message, press Back.
Wait for printer	RAM disk settings have been changed before the printer automatically restarts, or external	No action necessary.

Control panel message	Description	Recommended action
to reinitialize	device modes have changed or the printer is coming out of the diagnostics mode and will automatically restart.	
Waiting for **tray X to lift**	The printer is waiting for Tray 2 or optional Tray 3 to lift.	No action necessary.
Warming up	The printer is coming out of sleep mode. Printing will continue as soon as warmup is completed.	No action necessary.
X.X EMBEDDED **JET DIRECT ERROR**	This message is generated by a failure of the embedded Jetdirect print server.	Turn the printer off then on. Press **?** for more information. If the message persists, contact HP Support at http://www.hp.com/support/ljcp4005.
YELLOW CARTRIDGE IN **WRONG POSITION** alternates with **For help press ?** The supplies gauge will display the consumption levels of print cartridges.	The yellow cartridge is installed in the wrong slot and the cover is closed.	1. Open the top and front covers. **CAUTION** The image transfer unit can be easily damaged. 2. Open the image transfer unit. 3. Remove the incorrect print cartridge. 4. Install the correct print cartridge. 5. Close image transfer unit and then close the top and front covers.

Paper jams

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

NOTE All areas of the printer that might need to be opened to clear jams are equipped with green handles for rapid identification.



1	Top cover area
2	Duplex path
3	Paper path
4	Input path
5	Optional Tray 3

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 automatically attempt to reprint jammed pages. This is the default.
- **OFF** — Printer will not attempt to reprint jammed pages.
- **On** — Printer will attempt to reprint jammed pages.

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

To disable paper jam recovery

1. Press Menu to enter the **MENUS**.
2. Press ▼ to highlight **CONFIGURE DEVICE**.
3. Press ✔ to select **CONFIGURE DEVICE**.
4. Press ▼ to highlight **SYSTEM SETUP**.
5. Press ✔ to select **SYSTEM SETUP**.
6. Press ▼ to highlight **JAM RECOVERY**.
7. Press ✔ to select **JAM RECOVERY**.
8. Press ▼ to highlight **OFF**.
9. Press ✔ to select **OFF**.
10. Press the Menu button to return to the **Ready** state.

To improve print speed and increase memory resources, you might 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.

Paper jams

Cause and solution

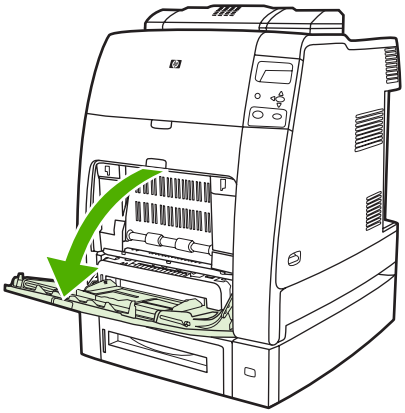
Cause	Solution
When the printer is first installed, the protective insert does not eject properly.	See Jam in Tray 1.
Print media does not meet HP-recommended media specifications.	Use only media that meets HP specifications. See Supported media weights and sizes.
A supply item is installed incorrectly, 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 media from the input tray and replace the media within the tray. Adjust the media width guide to hold the media firmly in place without bending it. 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/m^2 (28 lb) is loaded into Tray 2 and optional 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 optional Tray 3.	Remove the top sheet of media. If the media is heavier than 105 g/m^2 (28 lb), it might 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.
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 continues to jam, contact HP Customer Support or your authorized HP service provider. For more information, see http://www.hp.com/support/ljcp4005.

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

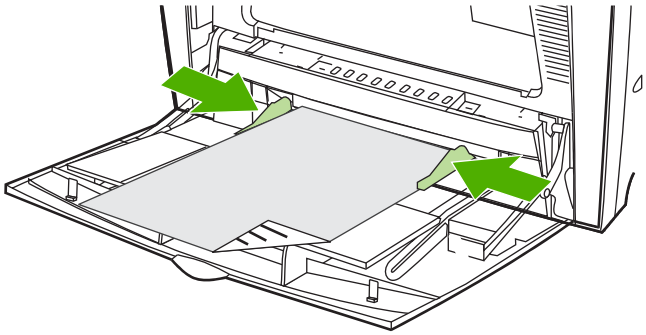
1. Open Tray 1.



2. Remove loaded paper from Tray 1.
3. Reload paper in Tray 1 and check to make sure the media is loaded correctly.

NOTE Do not load media above the fill tabs.

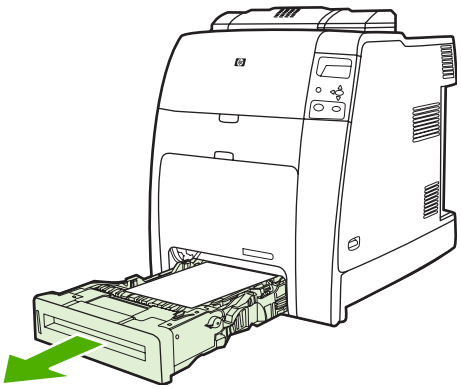
4. Confirm that the guides are in the correct position.



5. To continue printing, press ?, and then press ✔.

Jam in Tray 2 or optional Tray 3

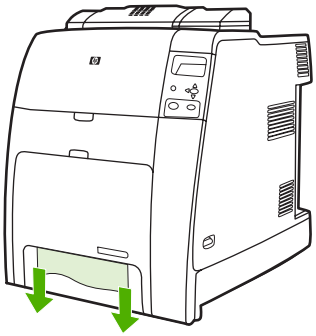
1. Pull out the tray indicated and place it on a flat surface. Make sure that the paper guides are in the correct position.



2. Remove any partially fed media. Grasp the media by both corners and pull down.

NOTE Use Tray 1 to avoid jams with heavier paper.

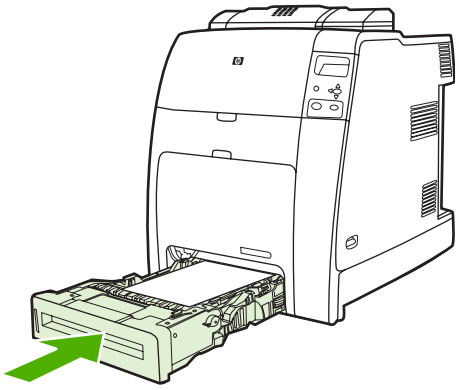
3. Inspect the media path to ensure that it is clear.



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

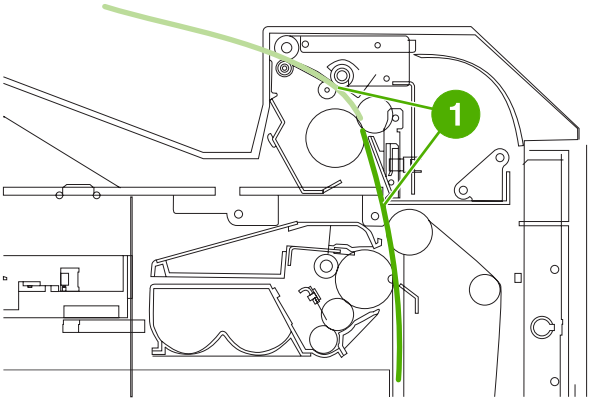
4. For jams that occur in optional Tray 3, check the trays above for jams as well. For example, if the jam occurs in optional Tray 3, also open Tray 2 and Tray 1 and remove any jammed media.

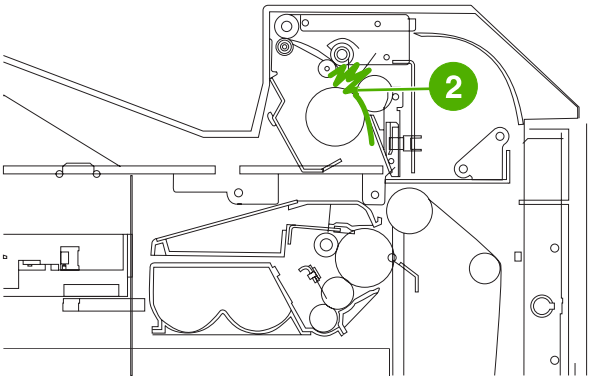
5. Check to make sure the media is loaded correctly. Insert the tray into the printer. Make sure all trays are completely closed.



Jams in top cover area

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.



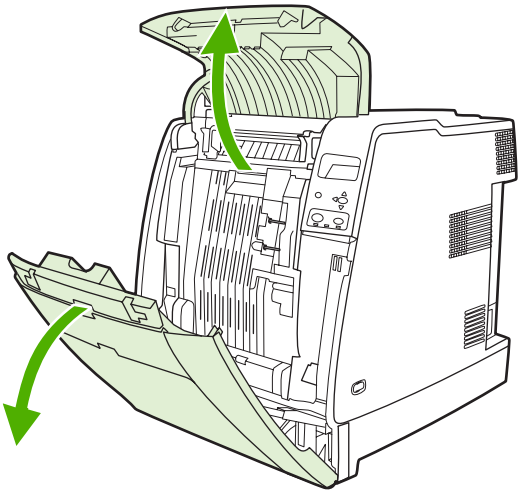


1	Jammed paper
2	Crumpled paper in the fuser

Clearing a jam in the top cover area

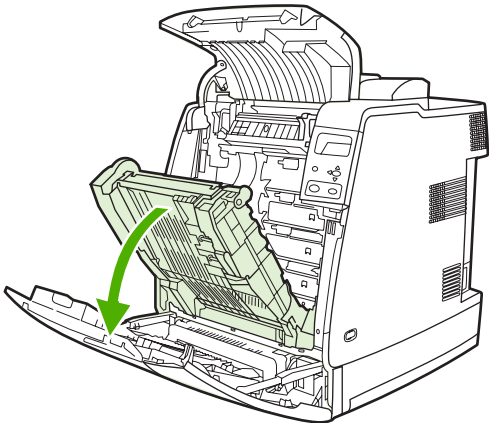
WARNING! Do not touch the fuser. It is hot and could cause burns! The fuser's operating temperature is 190°C (374°F). Wait ten minutes to allow the fuser to cool before touching the fuser.

1. Open the top and front covers.

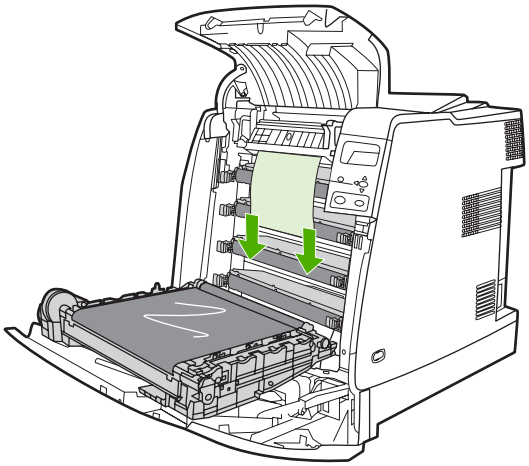


2. Grasp any visible media by both corners and pull to remove it.

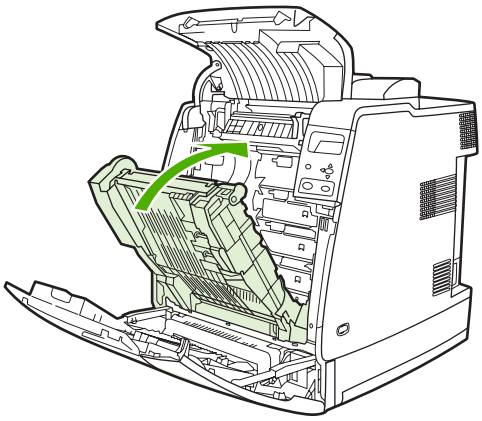
3. Grasp the green handle on the transfer unit and pull down.



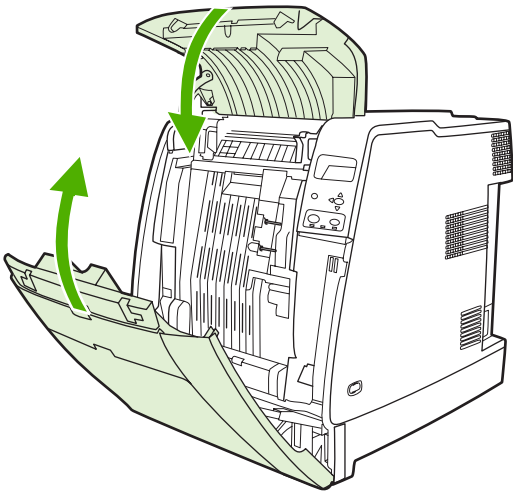
4. Grasp the media by both corners and pull down.



5. Close the transfer unit.

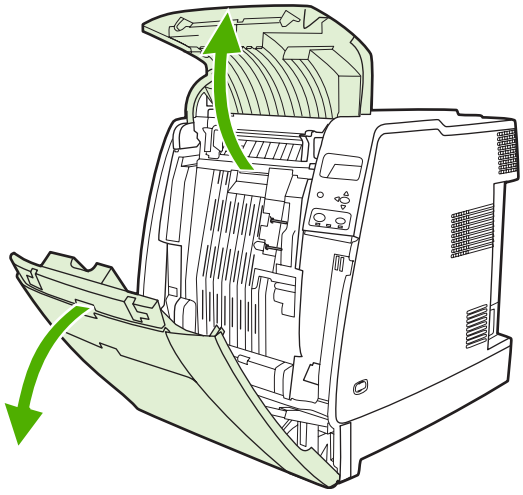


6. Close the top and front covers.

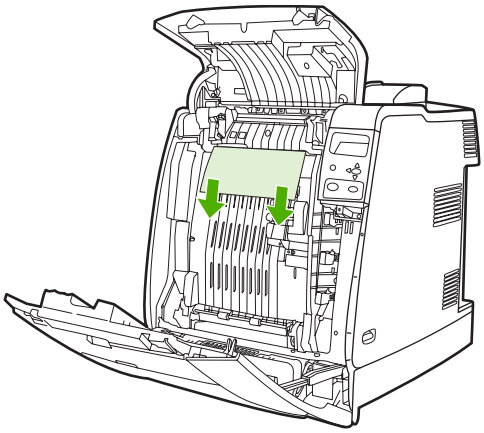


Clearing other jams

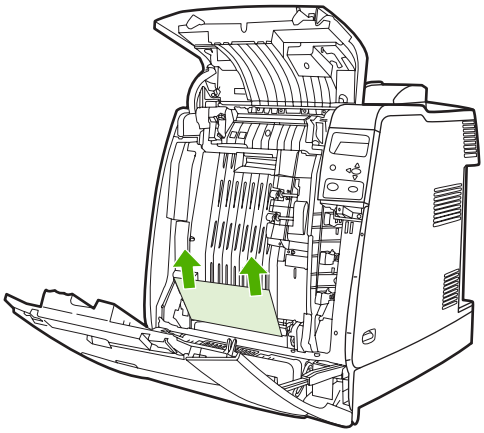
1. Using the handles, open the top and front covers.



2. If media is present, grasp the media by both corners and pull down.

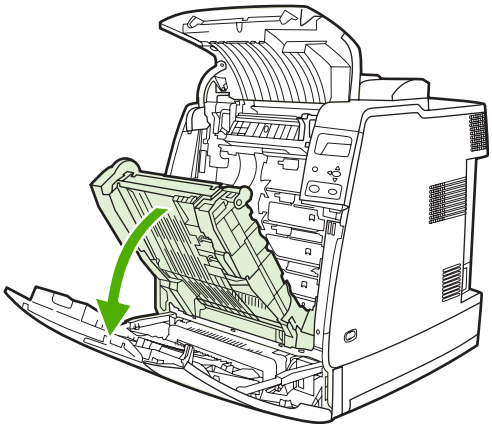


3. If media is present, grasp the media by both corners and pull up.

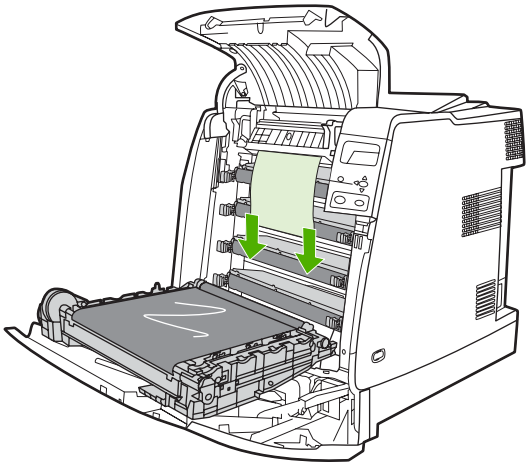


NOTE If no media is present at these locations, continue to the next step.

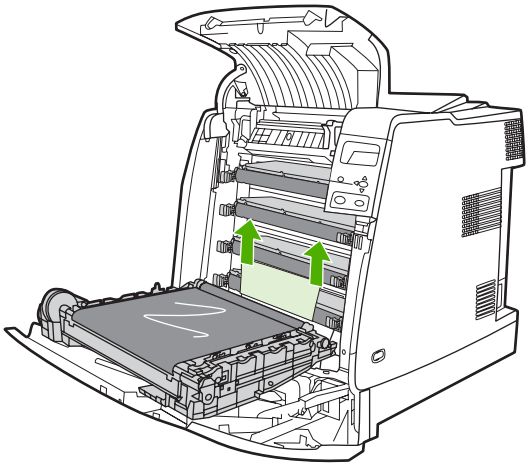
4. Grasp the green handle on the transfer unit and pull down.



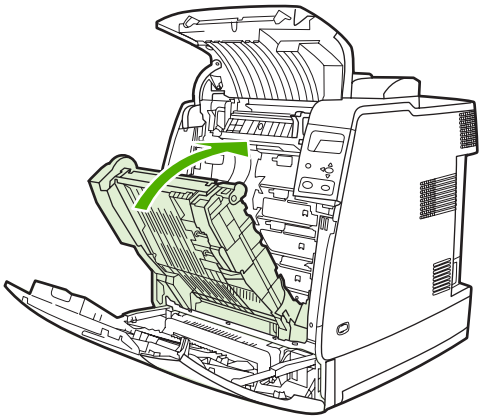
5. If media is present, grasp the media by both corners and pull down.



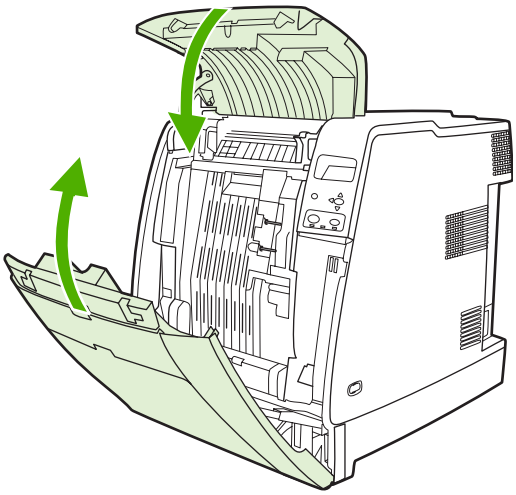
6. If media is present, grasp the media by both corners and pull up.



7. Close the transfer unit.



8. Close the top and front covers.



Media-handling problems

Use only media that meets HP specifications. For paper specifications for this printer, see Supported media weights and sizes.

For media ordering information, see Supplies and accessories.

Multiple sheets

Table 8-1 Printer feeds multiple sheets

Cause and solution

Cause	Solution
The input tray is overfilled.	Remove excess media from the input tray.
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.
Trays are not properly adjusted.	Make sure that the rear media-length guide indicates the length of media being used.

Incorrect page size

Table 8-2 Printer feeds incorrect page size

Cause and solution

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, because the application settings override the printer driver and control panel settings, and the printer driver settings override the control panel settings. For more information, see Printer drivers or Printer drivers for Macintosh computers.
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 rear and width media guides are touching the paper.

Incorrect tray

Table 8-3 Printer pulls from incorrect tray

Cause and solution	
Cause	**Solution**
You are using a driver for a different printer. For more information, see Printer drivers or Printer drivers for Macintosh computers.	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.

Automatic feed error

Table 8-4 Media does not feed automatically

Cause and solution	
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 Paper jams.
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 rear and width media guides are touching the paper.

Tray 2 or optional Tray 3 feed error

Table 8-5 Media does not feed from Tray 2 or optional Tray 3

Cause and solution	
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.

Table 8-5 Media does not feed from Tray 2 or optional Tray 3 (continued)

Cause and solution

Cause	Solution
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 Paper jams.
None of the optional trays appear as input tray options.	The optional trays only display as available if they are installed. Verify that any optional trays are correctly installed. Verify that the printer driver has been configured to recognize the optional trays. For more information, see Printer drivers or Printer drivers for Macintosh computers.
An optional tray is incorrectly installed.	Print a configuration page to confirm that the optional tray is installed. If not, verify that the tray 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.

Special media feed error

Table 8-6 Transparencies or glossy paper will not feed

Cause and solution

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 and optional Tray 3. Do not exceed the maximum stack height for Tray 1.
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. For more information, see Printer drivers or Printer drivers for Macintosh computers. 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. For more information, see Printer drivers or Printer drivers for Macintosh computers. Use the printer control panel to configure the tray to the media type loaded. See Configuring input trays.
Transparencies or glossy paper might not meet supported media specifications.	Use only media that meets the HP media specifications for this printer. See Supported media weights and sizes.

Envelope printing error

Table 8-7 Envelopes jam or will not feed in the printer

Cause and solution

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 Supported media weights and sizes.
Tray 1 is configured for a size other than envelopes.	Configure Tray 1 size for envelopes.

Output quality

Table 8-8 Output is curled or wrinkled

Cause and solution

Cause	Solution
Media does not meet the specifications for this printer.	Use only media that meets the HP media specifications for this printer. See Supported 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 Printer specifications.
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 might 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.

Duplexing error

Table 8-9 Printer will not duplex or duplexes incorrectly

Cause and solution

Cause	Solution
You are trying to duplex on unsupported media.	Verify that the media is supported for duplex printing. See Supported media weights and sizes.
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 and optional Tray 3, load these media printed side down with the top of the page toward the back of the printer.

Printer response problems

Control panel display is blank

Table 8-10 No display message

Cause and solution

Cause	Solution
The printer's on/off button is in the standby position.	Verify that the printer is on. Fans might 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 does not print

Table 8-11 Printer is on, but nothing prints

Cause and solution

Cause	Solution
The printer's **Ready** indicator light is not lit.	Press Stop 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.	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 output bin is full.	Remove some or all of the media in the output bin.
The PS (PostScript Emulation) personality is not selected.	Select **PS** or **AUTO** for the printer language. For more information, see Changing printer control panel configuration settings.
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. For more information, see Printer drivers or Printer drivers for Macintosh computers.
The printer is not properly configured.	See Changing printer control panel configuration settings.

Table 8-11 Printer is on, but nothing prints (continued)

Cause and solution

Cause	Solution
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.

Printer not receiving data

Table 8-12 Printer is on, but is not receiving data

Cause and solution

Cause	Solution
The printer's **Ready** indicator light is not lit.	Press Stop 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 HP Jetdirect print servers, or USB configuration.
The interface cable is not securely connected to both the printer and the computer.	Disconnect and reconnect the interface cable. For Jetdirect network connections, verify that the Link LED is on. The Link LED indicates that a proper network connection is established.
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 the computer, or, in MS-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.

Printer selection

Table 8-13 Unable to select the printer from the computer

Cause and solution

Cause	Solution
If you are using a switch box, the printer might not be selected for the computer.	Select the correct printer through the switch box.
The printer's **Ready** indicator light is not lit.	Press Stop to return the printer to the **Ready** state.
A printer message other than **Ready** appears on the printer control panel.	See Control panel messages.

Table 8-13 Unable to select the printer from the computer (continued)

Cause and solution

Cause	Solution
The correct printer driver is not installed in the computer.	Install the correct printer driver. For more information, see Printer drivers or Printer drivers for Macintosh computers.
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.

Printer control panel problems

Control panel setting

Table 8-14 Control panel settings work incorrectly

Cause and solution

Cause	Solution
The printer control panel display is blank or is not lit, even when the fan is running.	Fans might 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, because the application settings override the printer driver and control panel settings, and the printer driver settings override the control panel settings. For more information, see Printer drivers.
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 might have changed printer control panel settings.	Consult the network administrator to coordinate changes to printer control panel settings.

Selecting optional Tray 3

Table 8-15 Unable to select optional Tray 3

Cause and solution

Cause	Solution
Optional Tray 3 does not appear as an option on the configuration page or on the control panel.	Optional Tray 3 appears available only if it is installed. Verify that the tray is correctly installed.
Optional Tray 3 does not appear as available in the printer driver.	Verify that the printer driver configuration recognizes optional Tray 3. For more information, see Printer drivers or Printer drivers for Macintosh computers.

Incorrect printer output

Incorrect fonts

Table 8-16 Incorrect fonts are printed

Cause and solution

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. For more information, see Printer drivers or Printer drivers for Macintosh computers.

Symbol sets

Table 8-17 Unable to print all characters in a symbol set

Cause and solution

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

Table 8-18 Drifting text between printouts

Cause and solution

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.

Output errors

Table 8-19 Erratic, missing characters or interrupted printout

Cause and solution

Cause	Solution
The interface cable is of poor quality.	Try using a different, higher-quality, IEEE-compliant cable.
The interface cable is loose.	Disconnect and reconnect the interface cable.

Table 8-19 Erratic, missing characters or interrupted printout (continued)

Cause and solution

Cause	Solution
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.
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

Table 8-20 Partial printout

Cause and solution

Cause	Solution
A memory error message appears on the printer control panel.	1. Free up printer memory by deleting unneeded downloaded fonts, style sheets, and macros from printer memory; or 2. Add more memory to the printer.
The file you are printing contains 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

System selection through software

Table 8-21 Unable to change system selections through software

Cause and solution

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. For more information, see Printer drivers or Printer drivers for Macintosh computers.
The correct application driver is not loaded.	Load the correct application driver.

Font selection from software

Table 8-22 Unable to select a font from the software

Cause and solution

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

Color selection from software

Table 8-23 Unable to select colors from the software

Cause and solution

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

Optional Tray 3 and duplexer recognition

Table 8-24 Printer driver does not recognize optional Tray 3 or the duplexer

Cause and solution

Cause	Solution
The printer driver has not been configured to recognize optional Tray 3 or the duplexer.	See the printer driver's online Help for instructions on how to configure the driver to recognize printer accessories. For more information, see Printer drivers or Printer drivers for Macintosh computers.
The accessory might not be installed.	Verify that the accessory is properly installed.

Troubleshooting common Macintosh problems

This section lists problems that can occur when using Mac OS 9.*x* or Mac OS X.

Solving problems with Mac OS X.

Table 8-25 Problems with Mac OS X

The printer driver is not listed in the Print Center or Printer Setup Utility.

Cause	Solution
The printer software might not have been installed or was installed incorrectly.	Make sure that the printer PPD is in the following hard-drive folder: `Library/Printers/PPDs/Contents/Resources/<lang>.lproj`, where <lang> is the two-letter language code for the language that you are using. If necessary, reinstall the software. See the getting started guide for instructions.
The Postscript Printer Description (PPD) file is corrupt.	Delete the PPD file from the following hard-drive folder: `Library/Printers/PPDs/Contents/Resources/<lang>.lproj`, where <lang> is the two-letter language code for the language that you are using. Reinstall the software. See the getting started guide for instructions.

The printer name, IP address, or Bonjour host name does not appear in the printer list in the Print Center or Printer Setup Utility.

Cause	Solution
The printer might not be ready.	Make sure that the cables are connected correctly, the printer is on, and the ready light is on. If you are connecting through a USB or Ethernet hub, try connecting directly to the computer or use a different port.
The wrong connection type might be selected.	Make sure that **USB**, **IP Printing**, or **Bonjour** is selected, depending on the type of connection that exists between the printer and the computer.
The wrong printer name, IP address, or Bonjour host name is being used.	Print a configuration page in order to check the printer name, IP address, or Bonjour host name. Verify that the name, IP address, or Bonjour host name on the configuration page matches the printer name, IP address, or Bonjour host name in the Print Center or Printer Setup Utility.
The interface cable might be defective or of poor quality.	Replace the interface cable. Make sure to use a high-quality cable.

The printer driver does not automatically set up your selected printer in the Print Center or Printer Setup Utility.

Cause	Solution
The printer might not be ready.	Make sure that the cables are connected correctly, the printer is on, and the ready light is on. If you are connecting through a USB or Ethernet hub, try connecting directly to the computer or use a different port.
The printer software might not have been installed or was installed incorrectly.	Make sure that the printer PPD is in the following hard-drive folder: `Library/Printers/PPDs/Contents/Resources/<lang>.lproj`, where <lang> is the two-letter language code for the language that you are using. If necessary, reinstall the software. See the getting started guide for instructions.

Table 8-25 Problems with Mac OS X (continued)

The printer driver does not automatically set up your selected printer in the Print Center or Printer Setup Utility.

Cause	Solution
The Postscript Printer Description (PPD) file is corrupt.	Delete the PPD file from the following hard-drive folder: `Library/Printers/PPDs/Contents/Resources/<lang>.lproj`, where <lang> is the two-letter language code for the language that you are using. Reinstall the software. See the getting started guide for instructions.
The printer might not be ready.	Make sure that the cables are connected correctly, the printer is on, and the ready light is on. If you are connecting through a USB or Ethernet hub, try connecting directly to the computer or use a different port.
The interface cable might be defective or of poor quality.	Replace the interface cable. Make sure to use a high-quality cable.

A print job was not sent to the printer that you wanted.

Cause	Solution
The print queue might be stopped.	Restart the print queue. Open **print monitor** and select **Start Jobs**.
The wrong printer name or IP address is being used. Another printer with the same or similar name, IP address, or Bonjour host name might have received your print job.	Print a configuration page in order to check the printer name, IP address, or Bonjour host name. Verify that the name, IP address, or Bonjour host name on the configuration page matches the printer name, IP address, or Bonjour host name in the Print Center or Printer Setup Utility.

An encapsulated PostScript (EPS) file does not print with the correct fonts.

Cause	Solution
This problem occurs with some programs.	• Try downloading the fonts that are contained in the EPS file to the printer before printing. • Send the file in ASCII format instead of binary encoding.

You are unable to print from a third-party USB card.

Cause	Solution
This error occurs when the software for USB printers is not installed.	When adding a third-party USB card, you might need the Apple USB Adapter Card Support software. The most current version of this software is available from the Apple Web site.

Table 8-25 Problems with Mac OS X (continued)

When connected with a USB cable, the printer does not appear in the Print Center or Printer Setup Utility after the driver is selected.

Cause	Solution
This problem is caused by either a software or a hardware component.	**Software troubleshooting** • Check that your Macintosh supports USB. • Verify that your Macintosh operating system is Mac OS X v10.2, v10.3, and v10.4. • Ensure that your Macintosh has the appropriate USB software from Apple. **Hardware troubleshooting** • Check that the printer is turned on. • Verify that the USB cable is connected correctly. • Check that you are using the appropriate high-speed USB cable. • Ensure that you do not have too many USB devices drawing power from the chain. Disconnect all of the devices from the chain, and connect the cable directly to the USB port on the host computer. • Check to see if more than two nonpowered USB hubs are connected in a row on the chain. Disconnect all of the devices from the chain and connect the cable directly to the USB port on the host computer. **NOTE** The iMac keyboard is a nonpowered USB hub.

Color printing problems

Printout color error

Table 8-26 Printing black instead of color

Cause and solution

Cause	Solution
Color mode is not selected in the software application or printer driver.	Select **Color** 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.
The control-panel setting for **COLOR SUPPLY OUT** is set to **AUTOCONTINUE BLACK**, and one of the color print cartridges is out. The printer continues to print in black only.	Replace the color print cartridge.
The control-panel setting for **Restrict Color** is set to **DISABLE COLOR**, or it is set to **COLOR IF ALLOWED** and you do not have permission to print in color.	Change the control-panel setting to **ENABLE COLOR**.

Incorrect shade

Table 8-27 Incorrect shade

Cause and solution

Cause	Solution
The media does not meet the specifications for this printer.	For information on media specifications, see Supported media weights and sizes
You are operating the printer in excessively humid conditions.	Verify that the printer's environment is within humidity specifications. See Environmental specifications. **NOTE** For more information about color quality problems, see Print quality troubleshooting.

Missing color

Table 8-28 Missing color

Cause and solution

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.

Cartridge error

Table 8-29 Inconsistent colors after installing a print cartridge

Cause and solution	
Cause	**Solution**
Another print cartridge might be low.	Check the supplies gauge on the control panel or print a supplies status page. See Printer information pages.
Print cartridges might be improperly installed.	Verify that each print cartridge is installed properly.
A non-HP cartridge might be installed.	Ensure that you are using a genuine HP print cartridge.

Color match error

Table 8-30 Printed colors do not match screen colors

Cause and solution	
Cause	**Solution**
Extremely light screen colors are not being printed.	The software application might interpret extremely light colors as white. If so, avoid using extremely light colors.
Extremely dark screen colors are being printed in black.	The software application might interpret extremely dark colors as black. If so, avoid using extremely dark colors.
The colors on the computer screen differ from the printer output.	On the printer driver's **Color Control** tab, there are several options that affect color matching between the screen and the printed page, such as **Color Themes** and **Color Options**. For more information, see Color matching. **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.

Print quality troubleshooting

When occasional print quality problems occur, use the information in this section to help solve the problem.

Print quality problems associated with media

Some print quality problems arise from use of inappropriate media.

- Use paper that meets HP paper specifications. See Supported media weights and sizes.
- The surface of the media is too smooth. Use media that meets HP paper specifications. See Supported media weights and sizes.
- The print driver setting might be incorrect. Be sure that you have selected the correct driver setting for the paper that you are using.
- The print mode might be set incorrectly, or the paper might not meet recommended specifications. For more information, see Supported media weights and sizes.
- 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 Supported media weights and sizes.
- The paper is excessively rough. Use a smoother, xerographic paper.

Overhead transparency defects

Overhead transparencies might display any of the image quality problems that any other type of media could display, as well as defects specific to 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.

- On 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 Supported media weights and sizes.

  For ordering information, see Part numbers.
- 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 might 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 Environmental 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

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

1. Press Menu to enter the **MENUS**.
2. Press ▼ to highlight **DIAGNOSTICS**.
3. Press ✔ to select **DIAGNOSTICS**.
4. 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 (black, magenta, cyan, and yellow), printer statistics related to print quality, instructions on interpreting the information, and procedures to solve print quality problems.

If following the procedures recommended by the print quality troubleshooting pages do not improve print quality, go to http://www.hp.com/support/ljcp4005.

Print quality troubleshooting tool

The print quality troubleshooting tool helps you identify and troubleshoot print quality issues for the HP Color LaserJet CP4005 printer. The tool includes solutions for many print quality issues, using standard images to provide a common diagnostic environment. It is designed to provide intuitive, step-by-step directions for printing troubleshooting pages that are used to isolate print quality problems and provide possible solutions.

To find the print quality troubleshooting tool, go to the following URL: http://www.hp.com/go/printquality/cp4005.

Calibrating the printer

The HP Color LaserJet CP4005 Series printer automatically calibrates and cleans at various times to maintain the highest level of print quality. The user might also request the printer to calibrate via the printer's control panel, using **QUICK CALIBRATE NOW** or **CALIBRATE NOW** located in the **PRINT QUALITY** menu. **QUICK CALIBRATE NOW** is used for color tone calibration and takes about 65 seconds. If color density or tone seems wrong, Quick Calibration can be run. Full Calibration includes the Quick Calibrate routines and adds Drum Phase Calibration and Color Plane Registration (CPR). This takes about 4 minutes and 20 seconds. If color layers (black, magenta, cyan, and yellow) on the printed page seem to be shifted from one another, **CALIBRATE NOW** should be run.

The HP Color LaserJet CP4005 Series printer incorporates a new feature to skip calibration when appropriate, thereby making the printer available more quickly. For example, if the printer is turned off and on quickly (within 20 seconds), calibration is not needed and is skipped. In this case, the printer will reach the **Ready** state approximately 1 minute sooner.

While the printer is calibrating and cleaning, the printer will pause printing for the amount of time it takes to complete the calibration or cleaning. For most calibrations and cleaning, the printer will not interrupt a print job, but will wait for the job to complete before calibrating or cleaning.

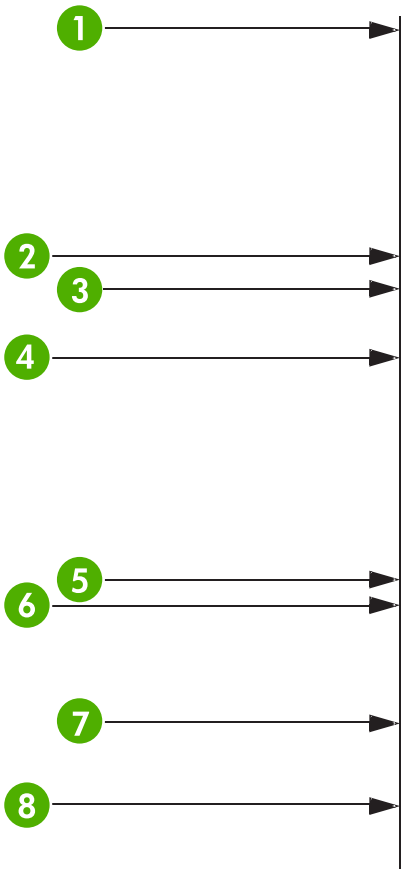
1. Press Menu to enter the **MENUS**.
2. Press ▼ to highlight **CONFIGURE DEVICE**.
3. Press ✔ to select **CONFIGURE DEVICE**.
4. Press ▼ to highlight **PRINT QUALITY**.
5. Press ✔ to select **PRINT QUALITY**.
6. Press ▼ to highlight **QUICK CALIBRATE NOW**.
7. Press ✔ to select **QUICK CALIBRATE NOW**.

OR

To perform a full calibration, use **CALIBRATE NOW** instead of **QUICK CALIBRATE NOW** in steps 6 and 7.

Repetitive defect ruler

If defects repeat at regular intervals on the page, use this ruler to identify the cause of the defect. Place the top of the ruler at the first defect. The marking that is beside the next occurrence of the defect indicates which component needs to be replaced.



1	First occurrence of the defect (the distance from the top of the page to the defect might vary.
2	Print cartridge (34.3 mm (1.35 inches))
3	Print cartridge or transfer roller (if the defect occurs in only one color, the defective part is the print cartridge; if the defect occurs in all colors, the defective part is the ETB) (37.7 mm (1.48 inches))
4	Print cartridge (42.7 mm (1.68 inches))
5	ETB (75 mm (2.95 inches))
6	Fuser (76.0 mm (2.99 inches))
7	Fuser (81.0 mm (3.19 inches))
8	Print cartridge (94.2 mm (3.71 inches))

To confirm that a print cartridge is the problem, insert a print cartridge from another HP Color LaserJet CP4005 Series printer, if one is available, before ordering a new print cartridge.

If the defect repeats at 94.0 mm (3.75 inch) intervals, try replacing the print cartridge before replacing the fuser.

Print quality defect chart

Use the examples in the print quality defect chart to determine which print-quality problem you are experiencing, and then see the corresponding pages to find information that can help you troubleshoot

the problem. For the latest information and problem-solving procedures, go to http://www.hp.com/support/ljcp4005 and http://www.hp.com/go/printquality/ljcp4005

NOTE The print-quality defect chart assumes the use of letter- or A4-size media that has moved through the printer short-edge first (portrait orientation).

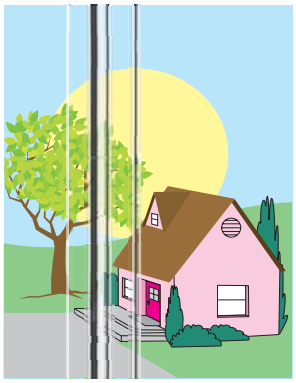
An image with no defects

Horizontal lines or streaks

- Make sure that the operation and location requirements of the printer are met.
- Print the Print Quality Troubleshooting Pages (see Print quality troubleshooting) and follow the diagnostic procedure listed on the first page to help isolate the defect to a particular component.

Misaligned colors

- Calibrate the printer.



Vertical lines

- Print the Print Quality Troubleshooting Pages (see Print quality troubleshooting) and follow the diagnostic procedure listed on the first page to help isolate the defect to a particular component.

Repetitive defects

- Make sure that the operation and location requirements of the printer are met.
- Print the Print Quality Troubleshooting Pages (see Print quality troubleshooting) and follow the diagnostic procedure listed on the first page to help isolate the defect to a particular component.

Color fade in all colors

- Make sure that the operation and location requirements of the printer are met.
- Calibrate the printer.

Color fade in one color

- Make sure that the operation and location requirements of the printer are met.
- Calibrate the printer.
- Print the Print Quality Troubleshooting Pages (see Print quality troubleshooting) and follow the diagnostic procedure listed on the first page to help isolate the defect to a particular component.

Fingerprints and media dents

- Make sure to use supported media.
- Make sure that the media you are using does not have any wrinkles or dents from handling, and that the media is not contaminated with visible fingerprints or other foreign substances.
- Print the Print Quality Troubleshooting Pages (see Print quality troubleshooting) and follow the diagnostic procedure listed on the first page to help isolate the defect to a particular component.

Loose toner

- Make sure that the operation and location requirements of the printer are met.
- Make sure to use supported media.
- Make sure that the media type and size for the tray are set correctly in the control panel for the media that you are using.
- Make sure that the media is loaded correctly and that the size guides are touching the edges of the stack of media.

  Make sure that the media you are using does not have any wrinkles or dents from handling, and that the media is not contaminated with visible fingerprints or other foreign substances.

Smeared toner

- Make sure to use supported media.

White areas (dropouts) on page

- Make sure that the operation and location requirements of the printer are met.
- Make sure to use supported media.
- Make sure that the media you are using does not have any wrinkles or dents from handling, and that the media is not contaminated with visible fingerprints or other foreign substances.
- Make sure that the media type and size for the tray are set correctly in the control panel for the media that you are using.
- Calibrate the printer.
- Print the Print Quality Troubleshooting Pages (see Print quality troubleshooting) and follow the diagnostic procedure listed on the first page to help isolate the defect to a particular component.

Media damage (wrinkles, curl, creases, tears)

- Make sure that the operation and location requirements of the printer are met.
- Make sure to use supported media.
- Make sure that the media is loaded correctly.
- Make sure that the media type and size for the tray are set correctly in the control panel for the media that you are using.
- Make sure that the media you are using does not have any

Specks or stray toner

- Make sure that the operation and location requirements of the printer are met.
- Make sure to use supported media.
- Make sure that the media type and size for the tray are set correctly in the control panel for the media that you are using.
- Calibrate the printer.
- Print the Print Quality Troubleshooting Pages (see Print quality troubleshooting) and follow the diagnostic procedure listed on the

	wrinkles or dents from handling, and that the media is not contaminated with visible fingerprints or other foreign substances.
	• Make sure that the following supplies are seated correctly:
	  • fuser
	  • transfer belt
	• Inspect the jam areas and remove any undetected jammed or torn media.
		first page to help isolate the defect to a particular component.

	Skewed, stretched, or off-center page
	• Make sure that the operation and location requirements of the printer are met.
	• Make sure to use supported media.
	• Make sure that the media is loaded correctly.
	• For problems with page skew, turn over the stack of media and rotate the stack 180 degrees.
	• Make sure that the following supplies are seated correctly:
	  • fuser
	  • transfer belt
	• Inspect the jam areas and remove any undetected jammed or torn media.	

A Working with memory

Printer memory

You might 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.

To accommodate memory expansion, the available 200-pin small outline dual inline memory module (SODIMM) can be upgraded to a maximum of 512 MB of memory. DDR SDRAM memory is available in 128, 256, and 512 MB modules.

NOTE Memory specification: HP Color LaserJet CP4005 Series printers use 200-pin small outline dual inline memory modules (SODIMM) that support 128, 256, or 512 MB of RAM.

The printer has one flash memory card slot for printer firmware.

- The flash memory card is reserved for printer firmware.

  NOTE Use the flash memory card slot for firmware only. The slot is marked "Firmware Slot".

NOTE Single inline memory modules (SIMMs) and dual in-line memory modules (DIMMs), used on previous HP LaserJet printer, are not compatible with this printer.

NOTE To order SODIMMs, see Supplies and accessories.

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

Printing a configuration page

1. Press Menu to enter the **MENUS**.
2. Press ▼ to highlight **INFORMATION**.
3. Press ✔ to select **INFORMATION**.
4. Press ▼ to highlight **PRINT CONFIGURATION**.
5. Press ✔ to print the configuration page.

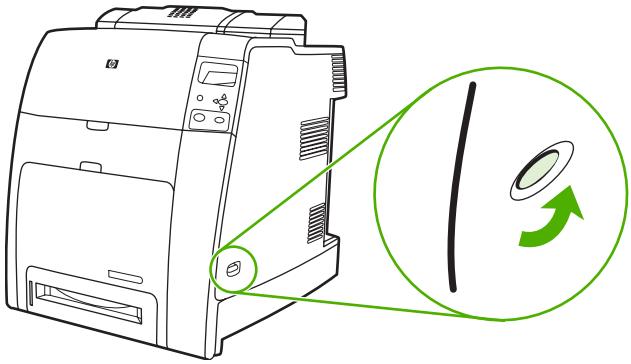
Installing memory

You can install more memory for the printer.

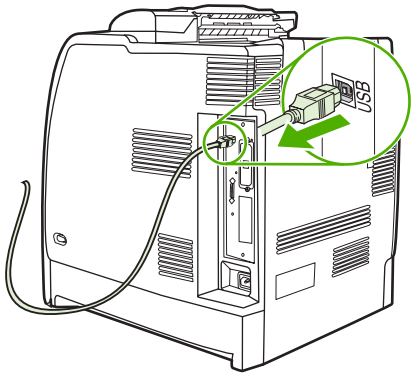
CAUTION Static electricity can damage DIMMs. When handling DIMMs, either wear an antistatic wrist strap, or frequently touch the surface of the DIMM antistatic package and then touch bare metal on the printer.

Installing DDR memory DIMMs

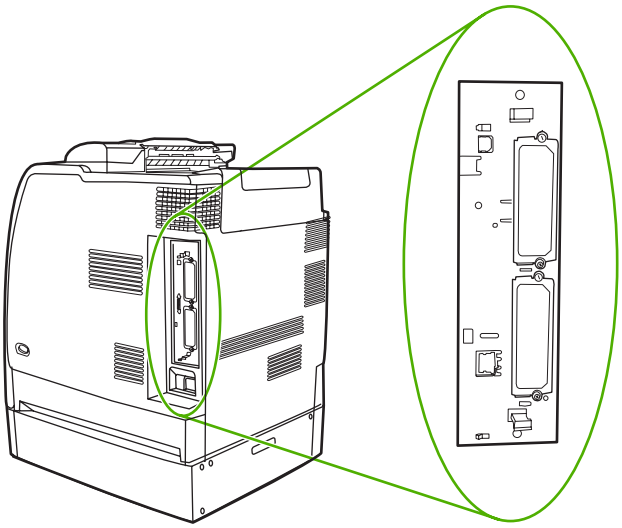
1. Turn the printer off.



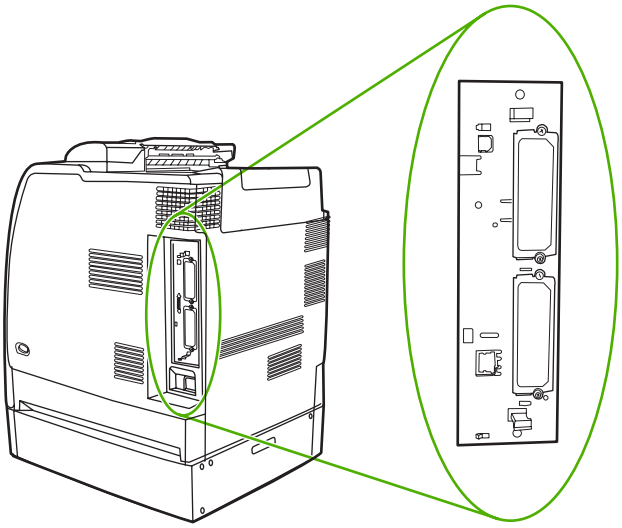
2. Disconnect all power and interface cables.



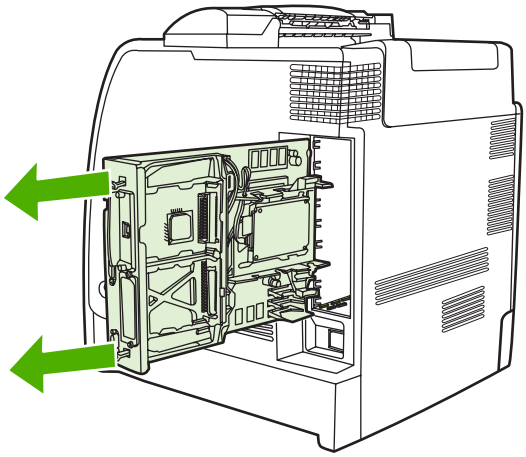
3. Locate the formatter board in the rear of the printer.



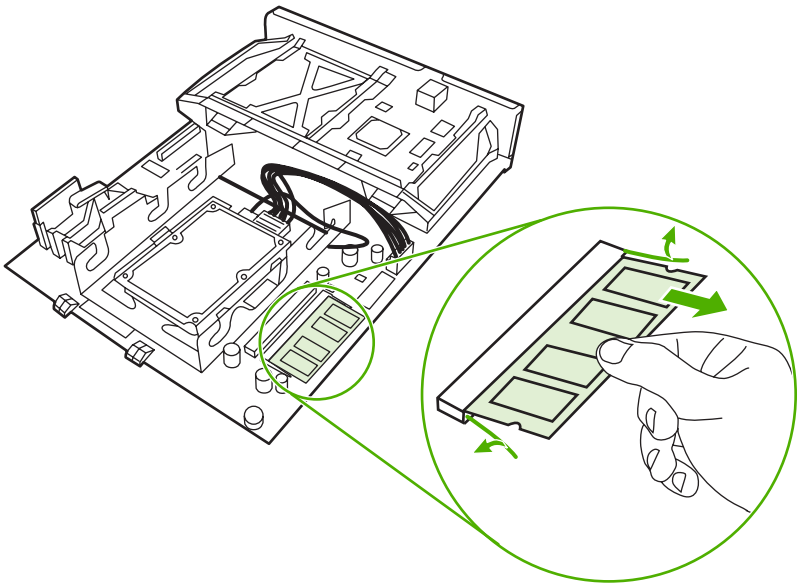
4. Grasp the black tabs situated near the top and bottom of the formatter board.



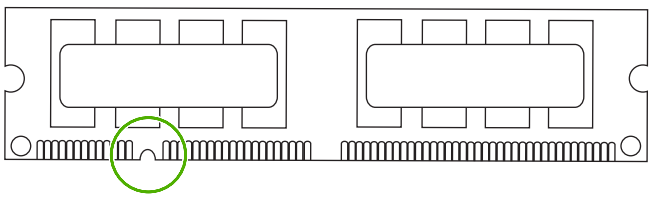
5. Gently pull on the black tabs to pull the formatter board from the printer. Place the formatter board on a clean, flat, grounded surface.



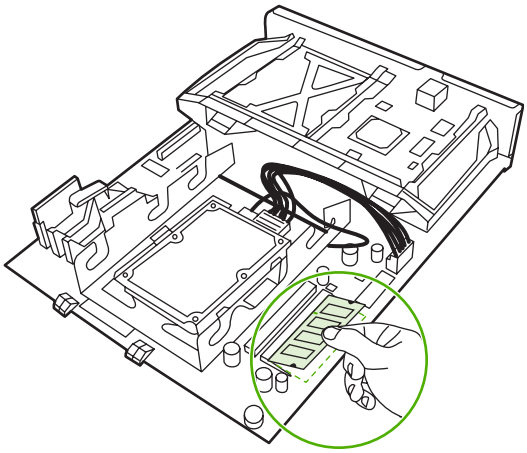
6. To replace a DDR DIMM that is currently installed, spread the latches apart on each side of the DIMM slot, lift the DDR DIMM up at an angle, and pull it out.



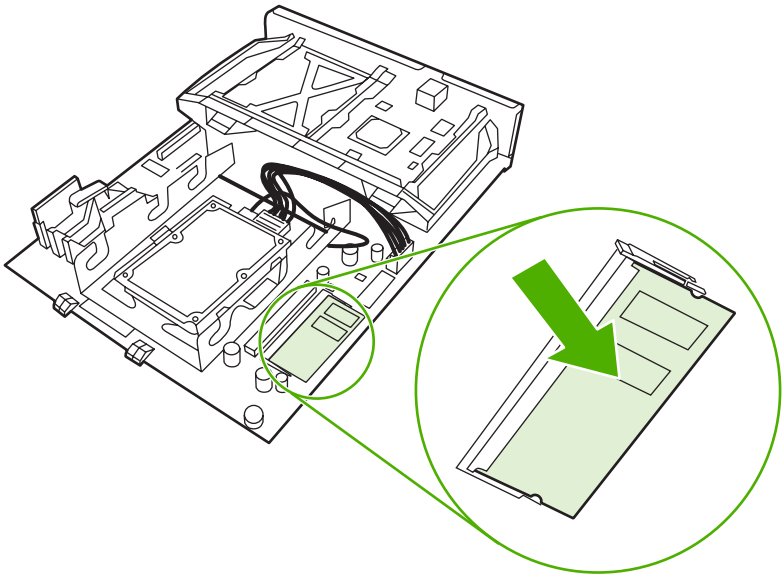
7. Remove the new DIMM from the antistatic package. Locate the alignment notch on the bottom edge of the DIMM.



8. Holding the DIMM by the edges, align the notch on the DIMM with the bar in the DIMM slot at an angle and firmly press the DIMM into the slot until it is fully seated. When installed correctly, the metal contacts are not visible.

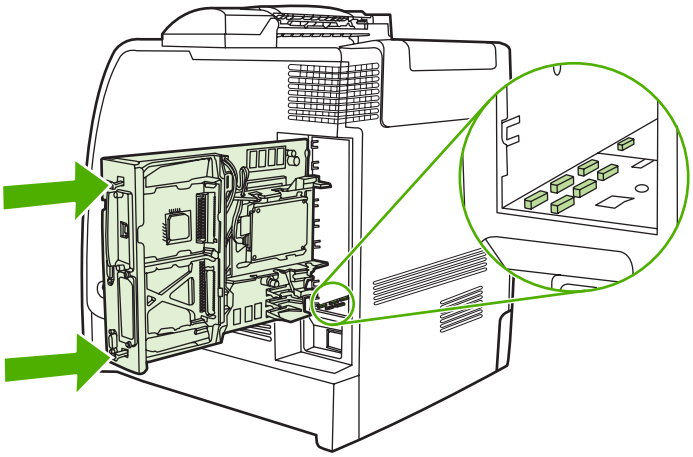


9. Push down on the DIMM until both latches engage the DIMM.

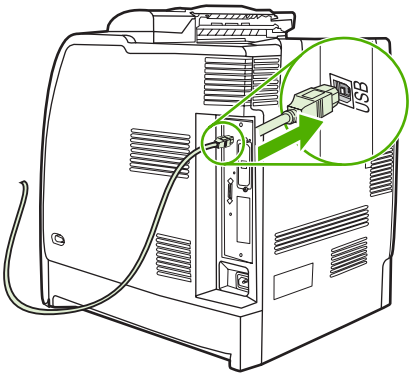


NOTE If you have difficulty inserting the DIMM, make sure the notch on the bottom of the DIMM is aligned with the bar in the slot. If the DIMM still does not go in, make sure you are using the correct type of DIMM.

10. Align the formatter board in the tracks at the top and bottom of the slot, and then slide the board back into the printer.



11. Reconnect the power cable and interface cables, and turn the printer on.



12. If you installed a memory DIMM, go to Enabling memory.

Enabling memory

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

To enable memory for Windows 2000 and Windows XP

1. On the **Start** menu, point to **Settings**, and click **Printers** or **Printers and Faxes**.
2. Right-click the printer and select **Properties**.
3. On the **Device Settings** tab, click **Printer Memory** (in the **Installable Options** section).
4. Select the total amount of memory that is now installed.
5. Click **OK**.

B Supplies and accessories

To order supplies in the U.S., contact http://www.hp.com/go/ljsupplies. 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 Using the embedded Web server.)

1. 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 e-mail.
2. Click **Other Links**.
3. Click **Order Supplies**. The browser opens to a page in which you can choose to send information about the printer to HP. You also have the option to order supplies without sending the printer's information to HP.
4. Select the part numbers you want to order and follow the instructions on the screen.

Part numbers

To order supplies through the embedded Web server, select the part numbers you want to order and follow the instructions on the screen.

Supplies, accessories, and part numbers

Part	Part number	Type/size
Memory	Q7721A	DIMM 128-MB DDR 200-pin SDRAM
	Q7722A	DIMM 256-MB DDR 200-pin SDRAM
	Q7723A	DIMM 512-MB DDR 200-pin SDRAM
Accessories	Q7501A	Printer stand
	Q7499A	Optional 500-sheet paper feeder (Tray 3)
Printer supplies	CB400A	HP black print cartridge with ColorSphere toner
	CB401A	HP cyan print cartridge with ColorSphere toner
	CB402A	HP yellow print cartridge with ColorSphere toner
	CB403A	HP magenta print cartridge with ColorSphere toner
	Q7504A	Image transfer (ETB) kit
	Q7502A	Image fuser kit (110 volt)
	Q7503A	Image fuser kit (220 volt)
Cables	C6518A	HP USB 2.0 printer cable a-b, 2 meter (6 feet)
Media	Q6541A	HP Color Laser Soft Gloss Presentation Paper (letter), 200 sheets
	Q6542A	HP Professional 120 Soft Gloss Laser Paper (A4), 200 sheets
	Q1298A	HP LaserJet Tough Paper (letter)
	Q1298B	HP Superior 165 Satin Matt Laser 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)
	Q2413A	HP Premium Cover Paper (letter), 100 sheets
	Q6545A	HP Laser Gloss Photo/Image Paper (letter)

Part	Part number	Type/size
	Q6547A	HP Professional 120 Glossy Laser Paper (A4)
	Q6607A	HP Color Laser Glossy Photo Paper (letter), 200 sheets
	Q6614A	HP Photo 220 Glossy Laser Paper (A4), 100 sheets
	Q6610A	HP Color Laser Brochure Paper (letter), 250 sheets
	Q6616A	HP Superior 160 Glossy Laser Paper (A4), 150 sheets
	C2934A	HP Color Laser Transparencies (letter), 50 sheets
	C2936A	HP Color Laser Transparencies (A4), 50 sheets
Reference materials	CB503-90901	*HP Color LaserJet CP4005 User Guide* For downloadable versions, go to http://www.hp.com/support/ljcp4005. When connected, select **Manuals**.
	CB503-90931	*HP Color LaserJet CP4005 Getting Started Guide* For downloadable versions, go to http://www.hp.com/support/ljcp4005. When connected, select **Manuals**.
	Q7499-90901	*500-sheet Tray Install Guide* For downloadable versions, go to http://www.hp.com/support/ljcp4005. When connected, select **Manuals**.
	Q7504-90902	*ETB Kit Install Guide* For downloadable versions, go to http://www.hp.com/support/ljcp4005. When connected, select **Manuals**.
	Q7502-90902	*110V/220V Fuser Install Guide* For downloadable versions, go to http://www.hp.com/support/ljcp4005. When connected, select **Manuals**.
	5851-2977	*Formatter Install Guide* For downloadable versions, go to http://www.hp.com/support/ljcp4005. When connected, select **Manuals**.
	5851-2978	*Roller Kit Install Guide* For downloadable versions, go to http://www.hp.com/support/ljcp4005. When connected, select **Manuals**.
	Q7501–90901	*Printer Stand Install Guide*

Part	Part number	Type/size
		For downloadable versions, go to http://www.hp.com/support/ljcp4005. When connected, select **Manuals**

C Service and Support

Hewlett-Packard limited warranty statement

HP PRODUCT	DURATION OF LIMITED WARRANTY
HP Color LaserJet CP4005n and CP4005dn	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.

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.

HP products may contain remanufactured parts equivalent to new in performance or may have been subject to incidental use.

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.

HP’s limited warranty is valid in any country/region 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/region for which it was never intended to function for legal or regulatory reasons. 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/regions, 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/region to country/region, state to state, or province to province.

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/regions, 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.

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.

Print cartridge limited warranty statement

This HP Print Cartridge is warranted to be free from defects in materials and workmanship.

This warranty does not apply to print cartridges that (a) have been refilled, refurbished, remanufactured or tampered with in any way, (b) experience problems resulting from misuse, improper storage, or operation outside of the published environmental specifications for the printer product or (c) exhibit wear from ordinary use.

To obtain warranty service, please return the product to place of purchase (with a written description of the problem and print samples) or contact HP customer support. At HP's option, HP will either replace products that prove to be defective or refund your purchase price.

TO THE EXTENT ALLOWED BY LOCAL LAW, THE ABOVE WARRANTY IS 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.

TO THE EXTENT ALLOWED BY LOCAL LAW, IN NO EVENT WILL HP OR ITS SUPPLIERS BE LIABLE FOR DIRECT, SPECIAL, INCIDENTAL, CONSEQUENTIAL (INCLUDING LOST PROFIT OR DATA), OR OTHER DAMAGE, WHETHER BASED IN CONTRACT, TORT, OR OTHERWISE.

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.

Fuser and transfer unit limited warranty statement

This HP product is warranted to be free from defects in materials and workmanship until the printer provides a low-life indicator on the control panel.

This warranty does not apply to products that (a) have been refurbished, remanufactured or tampered with in any way, (b) experience problems resulting from misuse, improper storage, or operation outside of the published environmental specifications for the printer product or (c) exhibit wear from ordinary use.

To obtain warranty service, please return the product to place of purchase (with a written description of the problem) or contact HP customer support. At HP's option, HP will either replace products that prove to be defective or refund your purchase price.

TO THE EXTENT ALLOWED BY LOCAL LAW, THE ABOVE WARRANTY IS 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.

TO THE EXTENT ALLOWED BY LOCAL LAW, IN NO EVENT WILL HP OR ITS SUPPLIERS BE LIABLE FOR DIRECT, SPECIAL, INCIDENTAL, CONSEQUENTIAL (INCLUDING LOST PROFIT OR DATA), OR OTHER DAMAGE, WHETHER BASED IN CONTRACT, TORT, OR OTHERWISE.

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.

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.

D Printer specifications

Physical dimensions

Table D-1 Physical dimensions

Product	Height	Depth	Width	Weight
HP Color LaserJet CP4005n	582 mm (22.9 in.)	598 mm (23.5 in.)	521 mm (20.5 in.)	47.7 kg (105.1 lb.)
HP Color LaserJet CP4005dn with duplexer	628.6 mm (24.7 in.)	598 mm (23.5 in.)	521 mm (20.5 in.)	48.9 kg (107.8 lb.)
HP Color LaserJet CP4005n with optional Tray 3	1010.6 mm (39.8 in.)	715 mm (28.2 in.)	630 mm (24.8 in.)	104.3 kg (230 lb.)
HP Color LaserJet CP4005dn with optional Tray 3 and duplexer	1375.5 mm (54.2 in.)	715 mm (28.2 in.)	630 mm (24.8 in.)	130.5 kg (287.7 lb.)
Optional paper Tray 3	117 mm (4.6 in.)	578 mm (22.8 in.)	514 mm (20.25 in.)	8.9 kg (19.6 lb.)
Printer stand	148 mm (5.8 in.)	715 mm (28.2 in.)	630 mm (24.8 in.)	37.6 kg (83 lb.)

Electrical specifications

	110-Volt models	220-Volt models
Power requirements	100-127V (+/- 10%) 50/60 Hz (+/- 2 Hz)	220-240V (+/- 10%) 50/60 Hz (+/- 2 Hz)
Rated current	8 Amps	4 Amps

Table D-2 Power consumption (average, in watts)[1]

	Power consumption (average, in watts)			
Product model	Printing (31 ppm letter)[2]	Ready[3, 4]	Sleep[5]	Off
HP Color LaserJet CP4005n	567	55	17	0.3
HP Color LaserJet CP4005dn	567	55	17	0.3

NOTE [1]Values are subject to change. See http://www.hp.com/support/ljcp4005 for current information.

[2]Power reported is the highest value measured using all standard voltages.

[3]Maximum heat dissipation for all models in **Ready** mode is 225 BTU/hour.

[4]Default time from **Ready** mode to **Sleep** mode is 30 minutes.

[5]Recovery time from **Sleep** mode to start of printing is less than 15 seconds.

Acoustic emissions

Sound Power Level	Declared Per ISO 9296
Printing (31 ppm letter)[1, 2, 3]	L_{WAd}=6.7 Bels (A) [67 dB (A)]
Ready	L_{WAd}=4.7 Bels (A) [47 dB (A)]
Sound Pressure Level - Bystander Position	**Declared Per ISO 9296**
Printing (31 ppm letter)[1, 2, 3]	L_{pAm}=50 dB (A)
Ready	L_{pAm}=31 dB (A)

NOTE [1]Values are subject to change. See http://www.hp.com/support/ljcp4005 for current information.

[2]Configuration tested: Base printer, simplex printing on A4 paper.

[3]HP Color LaserJet CP4005 speed: 30 ppm black and 25 ppm color.

Environmental specifications

Specification	Recommended	Allowed
Temperature	17 to 25°C (62.6 to 77°F)	15 to 30°C (59 to 86°F)
Humidity	30 to 70% relative humidity (RH)	10 to 80% RH
Altitude	N/A	0 to 2600 m (0 to 8530 ft)

E Regulatory information

FCC regulations

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. Hewlett-Packard shall not be liable for any direct, indirect, incidental, consequential, or other damage alleged in connection with the furnishing or use of this information.

Environmental product stewardship program

Protecting the environment

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

Ozone production

This product generates no appreciable ozone gas (O_3).

Power consumption

Power usage drops significantly while in Ready/Sleep mode, which saves natural resources and saves money without affecting the high performance of this product. To determine the ENERGY STAR® qualification status for this product see the Product Data Sheet or Specifications Sheet. Qualified products are also listed at:

http://www.hp.com/hpinfo/globalcitizenship/environment/productdesign/ecolabels.html

Paper use

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

Plastics

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

HP LaserJet print supplies

It's easy to return and recycle your empty HP LaserJet print cartridges—free of charge—with HP Planet Partners. Multilingual program information and instructions are included in every new HP LaserJet print cartridge and supplies package. You help reduce the toll on the environment further when you return multiple cartridges together rather than separately.

HP is committed to providing inventive, high-quality products and services that are environmentally sound, from product design and manufacturing to distribution, customer use and recycling. When you participate in the HP Planet Partners program, we ensure your HP LaserJet print cartridges are recycled properly, processing them to recover plastics and metals for new products and diverting millions of tons of waste from landfills. Since this cartridge is being recycled and used in new materials, it will not be returned to you. Thank you for being environmentally responsible!

NOTE Use the return label to return original HP LaserJet print cartridges only. Please do not use this label for HP inkjet cartridges, non-HP cartridges, refilled or remanufactured cartridges or warranty returns. For information about recycling your HP inkjet cartridges please go to http://www.hp.com/recycle.

Return and recycling instructions

United States and Puerto Rico

The enclosed label in the HP LaserJet toner cartridge box is for the return and recycling of one or more HP LaserJet print cartridges after use. Please follow the applicable instructions below.

Multiple returns (two to eight cartridges)

1. Package each HP LaserJet print cartridge in its original box and bag.
2. Tape up to eight single boxes together using strapping or packaging tape (up to 70 lbs).
3. Use a single pre-paid shipping label.

OR

1. Use your own suitable box, or request a free bulk collection box from the http://www.hp.com/recycle or 1-800-340-2445 (holds up to eight HP LaserJet print cartridges).
2. Use a single pre-paid shipping label.

Single returns

1. Package the HP LaserJet print cartridge in its original bag and box.
2. Place the shipping label on the front of the box.

Shipping

For all HP LaserJet print cartridge recycling returns, give the package to UPS during your next delivery or pickup, or take it to an authorized UPS drop-off center. For the location of your local UPS drop-off center, call 1-800-PICKUPS or visit http://www.ups.com. If you are returning via USPS label, give the package to a U.S. Postal Service carrier or drop off at a U.S.Postal Service Office. For more information, or to order additional labels or boxes for bulk returns, visit http://www.hp.com/recycle or call 1-800-340-2445. Requested UPS pickup will be charged normal pickup rates. Information subject to change without notice.

Non-US returns

To participate in HP Planet Partners return and recycling program, just follow the simple directions in the recycling guide (found inside the packaging of your new printer supply item) or visit http://www.hp.com/recycle. Select your country/region for information on how to return your HP LaserJet printing supplies.

Paper

This product is capable of using recycled papers when the paper meets the guidelines outlined in the *HP LaserJet Printer Family Print Media Guide*. This product is suitable for the use of recycled paper according to EN12281:2002.

Material restrictions

This HP product does not contain added mercury.

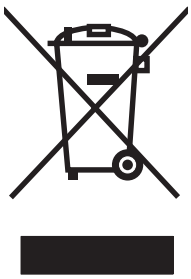
This HP product contains a battery that might require special handling at end-of-life. The batteries contained in or supplied by Hewlett-Packard for this product include the following:

HP Color LaserJet CP4005 Series	
Type	Carbon monofluoride lithium battery
Weight	0.8 grams
Location	Formatter board
User-removable	No

廢電池請回收

For recycling information, you can go to www.hp.com/recycle, or contact your local authorities or the Electronics Industries Alliance: www.eiae.org.

Disposal of waste equipment by users in private households in the European Union



This symbol on the product or on its packaging indicates that this product must not be disposed of with your other household waste. Instead, it is your responsibility to dispose of your waste equipment by handing it over to a designated collection point for the recycling of waste electrical and electronic equipment. The separate collection and recycling of your waste equipment at the time of disposal will help to conserve natural resources and ensure that it is recycled in a manner that protects human health and the environment. For more information about where you can drop off your waste equipment for recycling, please contact your local city office, your household waste disposal service or the shop where you purchased the product.

Material Safety Data Sheet (MSDS)

Material Safety Data Sheets (MSDS) for supplies containing chemical substances (for example, toner) can be obtained by contacting the HP Web site at www.hp.com/go/msds or www.hp.com/hpinfo/community/environment/productinfo/safety.

For more information

To obtain information about these environmental topics:

- 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

Visit http://www.hp.com/go/environment or http://www.hp.com/hpinfo/community/environment/productinfo/safety.

Declaration of Conformity

Declaration of Conformity
according to ISO/IEC Guide 22 and EN 45014

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

declares, that the product

Product Name:	HP Color LaserJet CP4005 Series including accessories: Q7499A-Optional 1x500 Sheet Paper Tray
Regulatory Model Number[2]:	BOISB-0404-00
Product Options:	All
Toner Cartridge:	CB400A, CB401A, CB402A, CB403A

conforms to the following Product Specifications:

Safety:	IEC 60950-1:2001 / EN60950-1:2001 IEC 60825-1:1993 + A1 + A2 / EN 60825-1:1994 + A11 + A2 (Class 1 Laser/LED Product) GB4943-2001
EMC:	CISPR 22:1993 / EN 55022:1994 +A1, +A2-Class B[1] EN 61000-3-2:2000 EN 61000-3-3:1995 + A1:2001 EN 55024:1998+A1 amendment FCC Title 47 CFR, Part 15 Class B / ICES-003, Issue 4 GB9254-1998

Supplementary Information:

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

This Device complies with Part 15 of the FCC Rules. Operation is subject to the following two Conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

[1]The product was tested in a typical configuration with Hewlett-Packard Personal Computer Systems.

[2]For regulatory purposes, this product is assigned a Regulatory model number. This number should not be confused with the product name or the product number(s).

Boise, Idaho 83714-1021, USA

03 July, 2006

For regulatory topics only:

European Contact:	Your Local Hewlett-Packard Sales and Service Office or Hewlett-Packard Gmbh, Department HQ-TRE/Standards Europe, Herrenberger Straße 140, D-71034 Böblingen, Germany, (FAX: +49-7031-14-3143)
USA Contact:	Product Relations Manager, Hewlett-Packard Company, PO Box 15, Mail Stop 160, Boise, Idaho 83707-0015, USA, (Phone: 208-396-6000)

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 could result in exposure to hazardous radiation.

Canadian DOC regulations

Complies with Canadian EMC Class B requirements.

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

EMI statement (Korea)

B급 기기 (가정용 정보통신기기)

이 기기는 가정용으로 전자파적합등록을 한 기기로서
주거지역에서는 물론 모든지역에서 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。
取扱説明書に従って正しい取り扱いをして下さい。

AC cordset statement (Japan)

製品には、同梱された電源コードをお使い下さい。
同梱された電源コードは、他の製品では使用出来ません。

Laser Statement for Finland

Luokan 1 laserlaite

Klass 1 Laser Apparat

HP Color LaserJet CP4005n, CP4005dn -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 CP4005n, CP4005dn -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

Glossary

bidirectional communication Two-way data transmission.

bin A receptacle for holding printed pages.

BOOTP Abbreviation for "Bootstrap Protocol," an Internet protocol that allows a networked computer or peripheral to automatically obtain its IP configuration from a BOOTP server.

CMYK An acronym for colors "cyan, magenta, yellow, and black."

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.

DDR Acronym for double data-rate.

default The normal or standard setting for hardware or software.

DHCP An acronym for "dynamic host configuration protocol." DHCP enables individual computers or peripherals connected to a network to automatically obtain their IP configuration from a DHCP server.

DIMM An acronym 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 An acronym 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.

embedded Web server A server that is completely contained within a device. Embedded Web servers provide management information about the device. They are helpful for managing single devices on a small network. By using a Web browser to access an embedded Web server, network users can obtain network printer status updates, perform simple troubleshooting operations, change device configuration settings, and link to online customer support. When you need to manage many network devices, it is more effective to use an integrated Web server management tool, such as HP Web Jetadmin.

Emulated PostScript Software that emulates Adobe PostScript, a programming language that describes the appearance of the printed page.

firmware Programming instructions that are stored in a read-only memory unit inside the printer.

Flash memory card A small-sized, high-quality, removable memory card.

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 device management software that lets you manage a single printer or multiple printers using a Web browser.

I/O An acronym for "input/output" and refers to computer port settings.

IP address The unique number assigned to a computer device connected to a network.

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.

MIME An acronym for Multipurpose Internet Mail Extensions.

monochrome Black and white. Devoid of color.

mopy 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.

PCL An acronym for "Printer Control Language."

PDF An acronym for Portable Document Format. The native file format for Adobe Systems Incorporated Acrobat. PDF is the file format for representing documents in a manner that is independent of the original application software, hardware, and operating system used to create those documents.

peripheral An auxiliary 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 An acronym for "Printer Job Language."

PostScript A trademarked page description language.

PPD An acronym for "PostScript Printer Description."

Print Task Quick Set A feature of the printer driver that allows you to save the current printer driver settings (for example: page orientation, two-sided printing, and paper sources) for reuse.

printer driver Software program that allows a computer to access printer features.

RAM An acronym for "random access memory," a type of computer memory used to store data that may change.

RARP An acronym 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.

RGB An acronym for colors red, green, and blue.

ROM An acronym for "read-only memory," a type of computer memory used to store data that should not be changed.

supplies Materials that the printer uses up and that must be replaced. Supply items for the HP Color LaserJet CP4005 Series 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 unit 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.

XHTML An acronym for extensible hypertext markup language.

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