

LASERJET PROFESSIONAL P1560 and P1600 Printer series User Guide



www.hp.com/support/ljp1560series www.hp.com/support/ljp1600series



# HP LaserJet Professional P1560 and P1600 printer series

User Guide

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#### Conventions used in this guide

- TIP: Tips provide helpful hints or shortcuts.

Notes provide important information to explain a concept or to complete a task.

**CAUTION:** Cautions indicate procedures that are recommended to avoid losing data or damaging the product.

**WARNING!** Warnings alert you to specific procedures to avoid personal injury, catastrophic loss of data, or extensive damage to the product.

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# **1 Product basics**

- Product comparison
- Environmental features
- <u>Product features</u>
- <u>Product views</u>

# **Product comparison**

HP LaserJet Professional P1560 printer series

HP LaserJet Professional P1600 printer series



- **Speed**: 22 A4 pages per minute (ppm), 23 letter-size ppm
- Trays: Priority input slot (10-sheet) and a main-input tray (250-sheet)
- Output bin: 125-sheets
- Connectivity: Hi-Speed USB 2.0 port
- Two-sided printing: Manual duplexing (using the printer driver and the go button in the control-panel)



- Speed: 25 A4 ppm, 26 letter-size ppm
- **Trays**: Priority input slot (10-sheet) and a main-input tray (250-sheet)
- Output bin: 125-sheets
- Connectivity: Hi-Speed USB 2.0 port and on-board networking
- Two-sided printing: Automatic duplexing

# **Environmental features**

Duplex	Save paper by using duplex printing as your default print setting.
	• The HP LaserJet Professional P1560 printer series supports manual duplexing.
	<ul> <li>The HP LaserJet Professional P1600 printer series supports automatic and manual duplexing.</li> </ul>
Recycling	Reduce waste by using recycled paper.
	Recycle print cartridges by using the HP return process.
Energy savings	Save energy by initiating Auto-Off mode for the product.
HP Smart Web Printing	Use HP Smart Web Printing to select, store, and organize text and graphics from multiple Web pages and then edit and print exactly what you see onscreen. It gives you the control you need for printing meaningful information while minimizing waste.
	Download HP Smart Web Printing from this Web site: <a href="http://www.hp.com/go/smartweb">www.hp.com/go/smartweb</a> .

# **Product features**

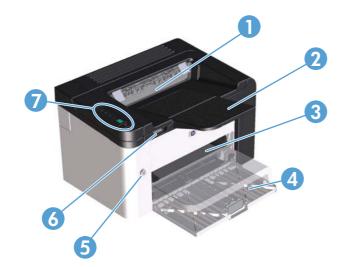
Benefit	Supporting features
Print quality	Genuine HP print cartridge.
	• True 600 x 600 dots per inch (dpi) text and graphics.
	• FastRes (1200 dpi).
	<ul> <li>Adjustable settings to optimize print quality.</li> </ul>
Supported operating systems	• Windows 7 (32-bit and 64-bit)
	<ul> <li>Windows Vista (32-bit and 64-bit)</li> </ul>
	• Windows XP (32-bit and 64-bit)
	• Windows Server 2008 (32-bit and 64-bit)
	• Windows Server 2003 (32-bit and 64-bit)
	<ul> <li>Mac OS X v10.4, v10.5, v10.6</li> </ul>
Ease of use	<ul> <li>HP Smart Install feature installs product software when you connect a USB cable between the product and a computer.</li> </ul>
	• The genuine HP print cartridge is easy to install.
	<ul> <li>Convenient access to the print cartridge and to the paper path through the print-cartridge door.</li> </ul>
	• Paper tray can be adjusted with one hand.
Flexible paper handling	<ul> <li>A main-input tray for letterhead, envelopes, labels, transparencies, custom-sized media, postcards, and heavy paper.</li> </ul>
	<ul> <li>Priority input slot for letterhead, envelopes, labels, transparencies, custom-sized media, postcards, and heavy paper.</li> </ul>
	• A 125-sheet top output bin.
	Print on both sides
	<ul> <li>HP LaserJet Professional P1560 printer series: Manual duplexing.</li> </ul>
	<ul> <li>HP LaserJet Professional P1600 printer series: Automatic duplexing.</li> </ul>
Interface connections	Hi-Speed USB 2.0 port
	<ul> <li>A built-in internal print server for connecting to a 10/100Base-T network (network models only).</li> </ul>
Energy savings	<ul> <li>The product automatically conserves electricity by substantially reducing power consumption when it is not printing.</li> </ul>
Economical printing	<ul> <li>N-up printing (printing more than one page on a sheet) and Printing on Both Sides features save paper.</li> </ul>
	<ul> <li>EconoMode (might save toner).</li> </ul>

Benefit	Supporting features
Supplies	<ul> <li>A supplies status page with print cartridge gauges that estimate remaining supply level. Not available for non-HP supplies.</li> </ul>
	• Authentication for genuine HP print cartridges.
	• Easy ordering for replacement supplies.
Accessibility	• The online user guide is compatible with text screen-readers.
	• All doors and covers can be opened by using one hand.
Security	Kensington lock receptacle on back of product.

# **Product views**

#### Front and left side view

Figure 1-1 HP LaserJet Professional P1560 and P1600 printer series



1	Output bin
2	Output tray extension
3	Priority input slot
4	Main-input tray
5	Power button
6	Cartridge door lift-tab
7	Control panel

#### **Back view**

Í		
1	USB port	
	HP internal network port (HP LaserJet Professional P1600 printer series only)	
2	Power receptacle	
3	Kensington lock	
4	Duplexer and rear jam-access door (HP LaserJet Professional P1600 printer series only)	

Figure 1-2 HP LaserJet Professional P1560 and P1600 printer series

#### Serial number and model number location

The label that contains the product and serial numbers is on the rear of the product.

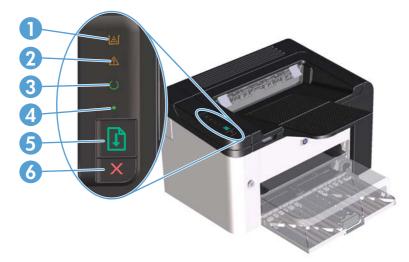


#### **Control-panel layout**

The control panel contains four lights and two buttons.

**NOTE:** See <u>Interpret control-panel light patterns on page 80</u> for a description of what the light patterns mean.

Figure 1-3 HP LaserJet Professional P1560 and P1600 printer series control panel



1	Toner light 🔝: When the print cartridge is low, the toner light 🔛 illuminates. When the print cartridge is out of the product, the toner light 🔛 blinks.						
2	Attention light <u></u> : Indicates that the print-cartridge door is open or other errors exist.						
3	Ready light (): When the product is ready to print, the ready light () is on. When the product is processing data, the ready light () blinks.						
4	Go light •: Indicates that there is a continuable error (along with the attention light <u>)</u> .						
5	Go button $\textcircled{1}$ : To print a configuration page, press and hold the go button $\textcircled{1}$ , and then release the button when the ready light $\bigcirc$ blinks. To print a demo page, press and release the go button $\textcircled{1}$ . When the go light $\bigcirc$ is flashing, press the go button $\textcircled{1}$ to continue the print job.						
6	Cancel button $\mathbf{X}$ : To cancel the print job, press the cancel button $\mathbf{X}$ .						

# 2 Software for Windows

- <u>Supported operating systems for Windows</u>
- <u>Supported printer-drivers for Windows</u>
- <u>Select the correct printer-driver for Windows</u>
- Priority for print settings
- Change printer-driver settings for Windows
- <u>Remove software for Windows</u>
- Supported utilities for Windows

### Supported operating systems for Windows

The product comes with software for the following Windows® operating systems:

- Windows 7 (32-bit and 64-bit)
- Windows Vista (32-bit and 64-bit)
- Windows XP (32-bit and 64-bit)
- Windows Server 2008 (32-bit and 64-bit)
- Windows Server 2003 (32-bit and 64-bit)

For more information about upgrading from Windows 2000 Server to Windows Server 2003, using Windows Server 2003 Point and Print, or using Windows Server 2003 Terminal Services and Printing, go to <a href="http://www.microsoft.com">http://www.microsoft.com</a>.

### **Supported printer-drivers for Windows**

The product comes with software for Windows that allows the computer to communicate with the product. 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.

**NOTE:** The most recent drivers are available at <u>www.hp.com/support/lip1560series</u> or <u>www.hp.com/support/lip1600series</u>.

In addition to the printer drivers that are installed during a HP Smart Install or from the product CD, the following printer drivers are available for download from the Web:

- PCL 5 Universal Printer Driver for Windows (HP UPD PCL 5) (HP LaserJet Professional P1600 printer series only)
- XPS (XML Paper Specification) driver

NOTE: For more information about the UPD, see <a href="http://www.hp.com/go/upd">www.hp.com/go/upd</a>.

# Select the correct printer-driver for Windows

MOTE: Only the HP LaserJet Professional P1600 printer series supports the HP Universal Print Driver.

Whenever possible, use the printer drivers installed during the HP Smart Install or from the product CD. The UPD printer driver is a secondary back-up printer driver.

#### **HP Universal Print Driver (UPD)**

NOTE: To use the HP UPD, you must disable the product HP Smart Install feature.

The HP Universal Print Driver (UPD) for Windows is a single driver that gives you instant access to virtually any HP LaserJet product, from any location, without downloading separate drivers. It is built on proven HP print driver technology and has been tested thoroughly and used with many software programs. It is a powerful solution that performs consistently over time.

The HP UPD communicates directly with each HP product, gathers configuration information, and then customizes the user interface to show the product's unique, available features. It automatically enables features that are available for the product, such as two-sided printing and stapling, so you do not need to enable them manually.

For more information, go to <u>www.hp.com/go/upd</u>.

# **Priority for print settings**

Changes to print settings are prioritized depending on where the changes are made:

NOTE: The names of commands and dialog boxes might vary depending on your software program.

- **Page Setup dialog box**: Click **Page Setup** or a similar command on the **File** menu of the program you are working in to open this dialog box. Settings changed here override settings changed anywhere else.
- **Print dialog box**: Click **Print**, **Print Setup**, or a similar command on the **File** menu of the program you are working in to open this dialog box. Settings changed in the **Print** dialog box have a lower priority and usually do not override changes made in the **Page Setup** dialog box.
- **Printer Properties dialog box (printer driver)**: Click **Properties** in the **Print** dialog box to open the printer driver. Settings changed in the **Printer Properties** dialog box usually do not override settings anywhere else in the printing software. You can change most of the print settings here.
- **Default printer driver settings**: The default printer driver settings determine the settings used in all print jobs, *unless* settings are changed in the **Page Setup**, **Print**, or **Printer Properties** dialog boxes.

# Change printer-driver settings for Windows

Change the settings for all print jobs until the software program is closed

- 1. On the File menu in the software program, click **Print**.
- 2. Select the driver, and then click **Properties** or **Preferences**.

The steps can vary; this procedure is most common.

Change the default settings for all print jobs

1. Windows XP, Windows Server 2003, and Windows Server 2008 (using the default Start menu view): Click Start, and then click Printers and Faxes.

-or-

Windows XP, Windows Server 2003, and Windows Server 2008 (using the Classic Start menu view): Click Start, click Settings, and then click **Printers**.

-or-

Windows Vista and Windows 7: Click Start, click Control Panel, and then in the category for Hardware and Sound click Printer.

2. Right-click the driver icon, and then select **Printing Preferences**.

Change the product configuration settings

1. Windows XP, Windows Server 2003, and Windows Server 2008 (using the default Start menu view): Click Start, and then click Printers and Faxes.

-or-

Windows XP, Windows Server 2003, and Windows Server 2008 (using the Classic Start menu view): Click Start, click Settings, and then click Printers.

-or-

Windows Vista and Windows 7: Click Start, click Control Panel, and then in the category for Hardware and Sound click Printer.

- 2. Right-click the driver icon, and then select **Properties**.
- 3. Click the **Device Settings** tab.

# **Remove software for Windows**

#### Use the uninstall utility to remove Windows software

- 1. Click Start, and then click All Programs.
- 2. Click HP, and then click HP LaserJet Professional P1560 and P1600 printer.
- 3. Click **Uninstall**, and then follow the onscreen instructions to remove the software.

#### Use the Windows Control Panel to remove software

#### Windows **XP**

- 1. Click Start, Control Panel, and then Add or Remove Programs.
- 2. Find and select the product from the list.
- 3. Click the **Change/Remove** button to remove the software.

#### Windows Vista and Windows 7

- 1. Click Start, Control Panel, and then Programs and Features.
- 2. Find and select the product from the list.
- 3. Select the Uninstall/Change option.

# **Supported utilities for Windows**

NOTE: Only the HP LaserJet Professional P1600 printer series supports utilities for Windows.

#### **HP Web Jetadmin**

HP Web Jetadmin is a simple print and imaging peripheral management software tool that helps optimize product use, control color costs, secure products, and streamline supplies management by enabling remote configuration, proactive monitoring, security troubleshooting, and reporting of printing and imaging products.

To download a current version of HP Web Jetadmin and for the latest list of supported host systems, visit <u>www.hp.com/go/webjetadmin</u>.

When installed on a host server, a Windows client can gain access to HP Web Jetadmin by using a supported Web browser (such as Microsoft® Internet Explorer) by navigating to the HP Web Jetadmin host.

#### **HP Embedded Web Server**

NOTE: Only the HP LaserJet Professional P1600 printer series supports the HP Embedded Web Server.

The product is equipped with an embedded Web server, which provides access to information about product and network activities. This information appears in a Web browser, such as Microsoft Internet Explorer, Apple Safari, or Firefox.

The embedded Web server resides on the product. It is not loaded on a network server.

The embedded Web server provides an interface to the product that anyone who has a networkconnected computer and a standard Web browser can use. No special software is installed or configured, but you must have a supported Web browser on your computer. To gain access to the embedded Web server, type the IP address for the product in the address line of the browser. (To find the IP address, print a configuration page. For more information about printing a configuration page, see <u>Print information pages on page 54</u>.)

For a complete explanation of the features and functionality of the embedded Web server, see <u>Embedded Web server sections on page 56</u>.

# **3** Use the product with Mac

- <u>Software for Mac</u>
- <u>Print with Mac</u>

# Software for Mac

#### Supported operating systems for Macintosh

The product supports the following Macintosh operating systems:

• Mac OS X v10.4, v10.5, and v10.6

NOTE: PPC and Intel® Core™ processors are supported.

#### Supported printer drivers for Macintosh

The HP LaserJet software installer provides PostScript® Printer Description (PPD) files, a CUPS driver, and the HP Printer Utilities for Mac OS X. The HP printer PPD file, in combination with the CUPS driver, provides full printing functionality and access to specific HP printer features.

#### **Remove software for Mac**

Use the uninstall utility to remove the software.

1. Browse to the following folder:

Library/Printers/hp/laserjet/P1100\_P1560\_P1600Series/

- 2. Double-click the HP Uninstaller.app file.
- 3. Click the **Continue** button, and then follow the onscreen instructions to remove the software.

#### **Priority for print settings for Mac**

Changes to print settings are prioritized depending on where the changes are made:

NOTE: The names of commands and dialog boxes might vary depending on your software program.

- **Page Setup dialog box**: Click **Page Setup** or a similar command on the **File** menu of the program you are working in to open this dialog box. Settings changed here might override settings changed anywhere else.
- **Print dialog box**: Click **Print**, **Print Setup**, or a similar command on the **File** menu of the program you are working in to open this dialog box. Settings changed in the **Print** dialog box have a lower priority and do *not* override changes made in the **Page Setup** dialog box.
- **Default printer driver settings**: The default printer driver settings determine the settings used in all print jobs, *unless* settings are changed in the **Page Setup** or **Print** dialog boxes.

Change the settings for all print jobs until the software program is closed		Change the default settings for all print jobs		Change the product configuration settings	
1.	On the File menu, click Print.	1.	On the File menu, click Print.	Ma	ıc OS X v10.4
2.	Change the settings that you want on the various menus.	2.	Change the settings that you want on the various menus.	1.	From the Apple menu, click System Preferences and then Print & Fax.
		3.	On the <b>Presets</b> menu, click <b>Save</b>		
			<b>as</b> and type a name for the preset.	2.	Click Printer Setup.
		These settings are saved in the <b>Presets</b>		3.	Click the Installable Options
			menu. To use the new settings, you must		menu.
			select the saved preset option every time you open a program and print.		ıc OS X v10.5 and v10.6
				1.	From the Apple menu, click System Preferences and then Print & Fax.
				2.	Click Options & Supplies.
				3.	Click the <b>Driver</b> menu.
				4.	Select the driver from the list, and configure the installed options.

#### **Change printer-driver settings for Macintosh**

#### **Software for Mac**

#### **HP Printer Utility for Mac**

Use the HP LaserJet Utility to print the product information pages and to change the Auto-Off setting from a Mac computer.

To open the HP LaserJet Utility, complete the procedure below.

Open the Print Queue, and then click the Utility icon.

#### **Supported utilities for Mac**

#### **HP Embedded Web Server**

NOTE: Only the HP LaserJet Professional P1600 printer series supports the HP Embedded Web Server.

The product is equipped with an embedded Web server, which provides access to information about product and network activities. This information appears in a Web browser, such as Microsoft Internet Explorer, Apple Safari, or Firefox.

The embedded Web server resides on the product. It is not loaded on a network server.

The embedded Web server provides an interface to the product that anyone who has a networkconnected computer and a standard Web browser can use. No special software is installed or configured, but you must have a supported Web browser on your computer. To gain access to the embedded Web server, type the IP address for the product in the address line of the browser. (To find the IP address, print a configuration page. For more information about printing a configuration page, see <u>Print information pages on page 54</u>.)

For a complete explanation of the features and functionality of the embedded Web server, see <u>Embedded Web server sections on page 56</u>.

### **Print with Mac**

#### **Create and use printing presets in Macintosh**

Use printing presets to save the current printer driver settings for reuse.

#### **Create a printing preset**

- 1. On the File menu, click Print.
- **2.** Select the driver.
- 3. Select the print settings.
- 4. In the **Presets** box, click **Save As...**, and type a name for the preset.
- 5. Click OK.

#### **Use printing presets**

- 1. On the File menu, click Print.
- **2.** Select the driver.
- 3. In the **Presets** box, select the printing preset that you want to use.

NOTE: To use printer-driver default settings, select **Standard**.

#### Resize documents or print on a custom paper size

You can scale a document to fit on a different size of paper.

- 1. On the File menu, click Print.
- 2. Open the **Paper Handling** menu.
- 3. In the area for **Destination Paper Size**, select **Scale to fit paper size**, and then select the size from the drop-down list.
- 4. If you want to use only paper that is smaller than the document, select Scale down only.

#### Print a cover page

You can print a separate cover page for your document that includes a message (such as "Confidential").

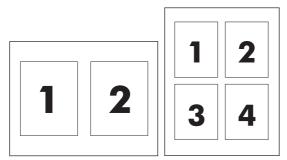
- 1. On the File menu, click Print.
- **2.** Select the driver.

- 3. Open the **Cover Page** menu, and then select whether to print the cover page **Before Document** or **After Document**.
- 4. In the **Cover Page Type** 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.
```

#### Print multiple pages on one sheet of paper in Macintosh

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



- 1. On the File menu, click Print.
- **2.** Select the driver.
- 3. Open the **Layout** menu.
- 4. 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).
- 5. Next to **Layout Direction**, select the order and placement of the pages on the sheet.
- 6. Next to **Borders**, select the type of border to print around each page on the sheet.

### Print on both sides (duplex) with Mac

#### **Automatic**

**NOTE:** Automatic duplexing is only supported for the HP LaserJet Professional P1600 printer series product.

The printer driver only supports certain media sizes for automatic duplexing. Use the manual duplexing procedure for media sizes not available in the printer driver.

Automatic duplexing feature is enabled by default. To disable automatic duplexing, change the product configuration settings. See <u>Change printer-driver settings for Macintosh on page 19</u>.

- 1. Insert enough paper into the input tray to accommodate the print job. If you are loading special paper such as letterhead, load it face-down in the tray.
- 2. On the File menu, click Print.
- 3. Open the Layout menu.
- 4. Next to Two-Sided, select either Long-Edge Binding or Short-Edge Binding.
- 5. Click Print.

#### Manual

- 1. Insert enough paper into the input tray to accommodate the print job. If you are loading special paper such as letterhead, load it face-down in the tray.
- 2. On the File menu, click Print.
- 3. Mac OS X v10.4: In the Layout drop-down list, select the Long-edged binding item or the Short-edged binding item.

-or-

Mac OS X v10.5 and v10.6: Click the Two-sided check box.

- 4. Click **Print**. Follow the instructions in the dialog box that opens on the computer screen before placing the output stack in the tray for printing the second half.
- 5. Go to the product, and remove any blank paper that is in the tray.
- 6. Take the printed stack from the output bin, and then insert the stack printed side down into the tray with the top edge feeding into the product first.
- 7. At the computer, click the **Continue** button to finish the print job.

# 4 Connect the product

- <u>Supported network operating systems</u>
- <u>Connect with USB</u>
- <u>Connect to a network</u>

# Supported network operating systems

NOTE: Only the HP LaserJet Professional P1600 printer series supports network functions.

The following operating systems support network printing:

- Windows 7 (32-bit and 64-bit)
- Windows Vista (Starter Edition, 32-bit, and 64-bit)
- Windows XP (32-bit, Service Pack 2)
- Windows XP (64-bit, Service Pack 1)
- Windows Server 2008 (32-bit and 64-bit)
- Windows Server 2003 (Service Pack 1)
- Mac OS X v10.4, v10.5, and v10.6

# **Printer sharing disclaimer**

HP does not support peer-to-peer networking, as the feature is a function of Microsoft operating systems and not of the HP printer drivers. Go to Microsoft at <u>www.microsoft.com</u>.

# **Connect with USB**

This product supports a USB 2.0 connection. You must use an A-to-B type USB cable that is no longer than 2 meters (6.56 feet).

### **HP Smart Install**

**NOTE:** This installation type is supported for Windows only.

The HP Smart Install allows you to install the product driver and software by connecting the product to a computer through a USB cable.

**NOTE:** The installation CD is not required during a HP Smart Install. Do not insert the software installation CD into the computer CD drive.

- 1. Turn the product on.
- 2. Connect the USB cable.
- 3. The HP Smart Install program should start automatically. Follow the onscreen instructions to install the software.
  - If the HP Smart Install program does not start automatically, AutoPlay might be disabled on the computer. Browse the computer and double-click the HP Smart Install drive to run the program.
  - If the program prompts you to select a connections type, select the **Configure to print using USB** option.

### **CD** installation

1. Insert the software installation CD into the computer CD drive.

**NOTE:** Do not connect the USB cable until prompted.

- 2. If the installation program does not open automatically, browse the CD contents and run the SETUP.EXE file.
- 3. Follow the onscreen instructions for installing the software.

When you use the CD to install the software, you can select the following types of installations:

Easy Install (recommended)

You are not prompted to accept or make changes to defaults.

Advanced Install

You are prompted to accept or make changes to defaults.

# **Connect to a network**

The HP LaserJet Professional P1600 printer series can connect to networks through the HP internal networking port.

# Supported network protocols

To connect a networking-equipped product to your network, you need a network that uses the following protocol.

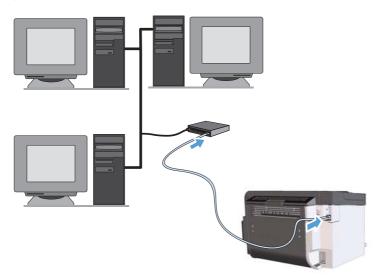
• Functional wired TCP/IP network

# Install the product on a wired network

NOTE: To resolve network connection problems, see <u>Solve connectivity problems on page 104</u>.

You can install the product on a network by using the HP Smart Install or from the product CD. Before you begin the installation process, do the following:

- Connect the CAT-5 Ethernet cable to an available port on the Ethernet hub or router.
- Connect the Ethernet cable to the Ethernet port on the back of the product.
- Verify that one of the network lights is illuminated on the network port located on the back of the product.



#### HP Smart Install on a wired network

**NOTE:** This installation type is supported for Windows only.

- 1. Print a configuration page and locate the product IP address. See Print information pages on page 54.
- 2. Open a Web browser using the computer where you want to install the product.
- 3. Type the IP address for the product in the address line of the browser.
- 4. Click the HP Smart Install tab.
- 5. Click the **Download** button.
- 6. Follow the onscreen instructions to complete the product installation.

#### **CD** installation on a wired network

**NOTE:** When you use the CD to install the software, you can select the Easy Install (recommended) or the Advanced Install (you are prompted to accept or make changes to defaults) installation type.

- 1. Insert the software installation CD into the computer CD drive.
- 2. If the installation program does not open automatically, browse the CD contents and run the SETUP.EXE file.
- 3. Follow the onscreen instructions for setting up the product and installing the software.

**NOTE:** Make sure that you select **Configure to print over the Network** when prompted.

### **Configure network settings**

#### View or change network settings

Use the embedded Web server to view or change IP configuration settings.

- 1. Print a configuration page, and locate the IP address.
  - If you are using IPv4, the IP address contains only digits. It has this format:

XXX.XXX.XXX.XXX

• If you are using IPv6, the IP address is a hexadecimal combination of characters and digits. It has a format similar to this:

xxxx::xxxx:xxxx:xxxx:xxxx

- 2. To open the embedded Web server, type the IP address into the address line of a Web browser.
- 3. Click the **Networking** tab to obtain network information. You can change settings as needed.

#### Set or change the network password

Use the embedded Web server to set a network password or change an existing password.

1. Open the embedded Web server, click the **Networking** tab, and click the **Password** link.

**NOTE:** If a password has previously been set, you are prompted to type the password. Type the password, and then click the **Apply** button.

- 2. Type the new password in the **Password** box and in the **Confirm Password** box.
- 3. At the bottom of the window, click the **Apply** button to save the password.

#### **IP address**

The product IP address can be set manually, or it can be configured automatically using DHCP, BootP, or AutoIP.

To change the IP address manually, use the **Networking** tab in the HP Embedded Web Server.

#### Link speeds and duplex settings

NOTE: In this section duplex refers to bi-directional communication, not two-sided printing.

Use the **Networking** tab in the embedded Web server to set the link speed if necessary.

Incorrect changes to the link speed setting might prevent the product from communicating with other network devices. For most situations, leave the product in automatic mode. Changes can cause the product to turn off, and then on. Make changes only when the product is idle.

# 5 Paper and print media

- Understand paper and print media use
- Special paper or print media guidelines
- Change the print driver to match the media type and size
- <u>Supported paper sizes</u>
- Supported paper types
- Tray and bin capacity
- Load paper trays

# Understand paper and print media use

This product supports a variety of paper and other print media in accordance with the guidelines in this user guide. Paper or print media that does not meet these guidelines might cause poor print quality, increased jams, and premature wear on the product.

For best results, use only HP-brand paper and print media designed for laser printers or multiuse. Do not use paper or print media made for inkjet printers. Hewlett-Packard Company cannot recommend the use of other brands of media because HP cannot control their quality.

It is possible for paper to meet all of the guidelines in this user guide and still not produce satisfactory results. This might be the result of improper handling, unacceptable temperature and/or humidity levels, or other variables over which Hewlett-Packard has no control.

**CAUTION:** Using paper or print media that does not meet Hewlett-Packard's specifications might cause problems for the product, requiring repair. This repair is not covered by the Hewlett-Packard warranty or service agreements.

# Special paper or print media guidelines

This product supports printing on special media. Use the following guidelines to obtain satisfactory results. When using special paper or print media, be sure to set the type and size in the printer driver to obtain the best results.

**CAUTION:** HP LaserJet products use fusers to bond dry toner particles to the paper in very precise dots. HP laser paper is designed to withstand this extreme heat. Using inkjet paper could damage the product.

Media type	Do	Do not
Envelopes	<ul> <li>Store envelopes flat.</li> <li>Use envelopes where the seam extends all the way to the corner of the envelope.</li> <li>Use peel-off adhesive strips that are approved for use in laser printers.</li> </ul>	<ul> <li>Do not use envelopes that are wrinkled, nicked, stuck together, o otherwise damaged.</li> <li>Do not use envelopes that have clasps, snaps, windows, or coated linings.</li> <li>Do not use self-stick adhesives or other synthetic materials.</li> </ul>
Labels	<ul> <li>Use only labels that have no exposed backing between them.</li> <li>Use labels that lie flat.</li> <li>Use only full sheets of labels.</li> </ul>	<ul> <li>Do not use labels that have wrinkles or bubbles, or are damaged.</li> <li>Do not print partial sheets of labels</li> </ul>
Transparencies	<ul> <li>Use only transparencies that are approved for use in laser printers.</li> <li>Place transparencies on a flat surface after removing them from the product.</li> </ul>	• Do not use transparent print medic not approved for laser printers.
Letterhead or preprinted forms	<ul> <li>Use only letterhead or forms approved for use in laser printers.</li> </ul>	• Do not use raised or metallic letterhead.
Heavy paper	• Use only heavy paper that is approved for use in laser printers and meets the weight specifications for this product.	• Do not use paper that is heavier than the recommended media specification for this product unless it is HP paper that has been approved for use in this product.
Glossy or coated paper	<ul> <li>Use only glossy or coated paper that is approved for use in laser printers.</li> </ul>	<ul> <li>Do not use glossy or coated paper designed for use in inkjet products</li> </ul>

# Change the print driver to match the media type and size

Selecting media by type and size results in significantly better print quality for heavy paper, glossy paper, and overhead transparencies. Using the wrong setting can result in unsatisfactory print quality. Always print by **Type** for special print media, such as labels or transparencies. Always print by **Size** for envelopes.

- 1. On the File menu in the software program, click Print.
- 2. Select the driver, and then click **Properties** or **Preferences**.
- 3. Click the **Paper/Quality** tab.
- 4. In the **Type is** or **Size is** list box, select the correct media type or size.
- 5. Click OK.

# Supported paper sizes

This product supports various paper sizes, and it adapts to various media.

**NOTE:** To obtain best print results, select the appropriate paper size and type in your print driver before printing.

The printer driver only supports certain media sizes for automatic duplexing. Use the manual duplexing procedure for media sizes not available in the printer driver.

Size	Dimensions	Main-input tray	Priority input slot
Letter	216 x 279 mm (8.5 x 11 in)	$\checkmark$	$\checkmark$
Legal	216 x 356 mm (8.5 x 14 in)	$\checkmark$	$\checkmark$
A4	210 x 297 mm (8.27 x 11.69 in)	$\checkmark$	$\checkmark$
Executive	184 x 267 mm (7.25 x 10.5 in)	$\checkmark$	$\checkmark$
8.5 x 13	216 x 330 mm (8.5 x 13 in)	$\checkmark$	$\checkmark$
A5	148 x 210 mm (5.83 x 8.27 in)	$\checkmark$	$\checkmark$
A6	105 x 148 mm (4.13 x 5.83 in)	$\checkmark$	$\checkmark$
B5 (JIS)	182 x 257 mm (7.17 x 10.12 in)	$\checkmark$	$\checkmark$
16k	184 x 260 mm (7.24 x 10.23 in)		
	195 x 270 mm (7.68 x 10.62 in)	$\checkmark$	$\checkmark$
	197 x 273 mm (7.75 x 10.75 in)		
Custom	<b>Minimum</b> : 76 x 127 mm (3 x 5 in)	$\checkmark$	$\checkmark$
	<b>Maximum</b> : 216 x 356 mm (8.5 x 14.0 in)		

#### Table 5-2 Supported envelopes and postcards

Size	Dimensions	Main-input tray	Priority input slot
Envelope #10	105 x 241 mm (4.13 x 9.49 in)	$\checkmark$	$\checkmark$
Envelope DL	110 x 220 mm (4.33 x 8.66 in)	$\checkmark$	$\checkmark$
Envelope C5	162 x 229 mm (6.93 x 9.84 in)	$\checkmark$	$\checkmark$
Envelope B5	176 x 250 mm (6.7 x 9.8 in)	$\checkmark$	$\checkmark$
Envelope Monarch	98 x 191 mm (3.9 x 7.5 in)	$\checkmark$	$\checkmark$

#### Table 5-2 Supported envelopes and postcards (continued)

Size	Dimensions	Main-input tray	Priority input slot
Japanese Postcard	100 x 148 mm (3.94 x 5.83 in)	$\checkmark$	$\checkmark$
Double Japanese Postcard Rotated	148 x 200 mm (5.83 x 7.87 in)	$\checkmark$	$\checkmark$

# Supported paper types

For a complete list of specific HP-brand paper that this product supports, go to <u>www.hp.com/support/lip1560series</u> or <u>www.hp.com/support/lip1600series</u>.

Paper type (printer driver)	Main-input tray	Priority input slot
Plain	✓	$\checkmark$
Recycled	$\checkmark$	$\checkmark$
Vellum	$\checkmark$	$\checkmark$
Light	$\checkmark$	$\checkmark$
Mid-weight	$\checkmark$	$\checkmark$
Неаvy	$\checkmark$	$\checkmark$
Extra Heavy	$\checkmark$	$\checkmark$
Letterhead	$\checkmark$	$\checkmark$
Preprinted	$\checkmark$	$\checkmark$
Prepunched	$\checkmark$	$\checkmark$
Color	$\checkmark$	$\checkmark$
Bond	$\checkmark$	$\checkmark$
Rough	$\checkmark$	$\checkmark$
nvelope	$\checkmark$	$\checkmark$
abels	$\checkmark$	$\checkmark$
Cardstock	$\checkmark$	$\checkmark$
ransparency	$\checkmark$	$\checkmark$
ostcards	$\checkmark$	$\checkmark$

# Tray and bin capacity

Tray or bin	Paper type	Specifications	Quantity	
Main-input tray	Paper	Range:	250 sheets of 75 g/m <sup>2</sup> (20 lk	
		60 g/m² (16 lb) bond to 163 g/m² (43 lb) bond	bond	
	Envelopes	Less than 60 g/m² (16 lb) bond to 90 g/m² (24 lb) bond	Up to 10 envelopes	
	Transparencies	Minimum 0.13 mm (0.005 in) thick	Up to 125 transparencies	
Priority input slot	Paper	Range:	Equivalent to 10 sheets of	
		60 g/m² (16 lb) bond to 163 g/m² (43 lb) bond	75 g/m² (20 lb) bond	
	Transparencies	Minimum 0.13 mm (0.005 in) thick	Maximum stack height: 1 mm (0.03 in)	
Output bin	Paper	Range:	Up to 125 sheets of 75 g/m <sup>2</sup>	
		60 g/m² (16 lb) bond to 163 g/m² (43 lb) bond	(20 lb) bond	
	Transparencies	Minimum 0.13 mm (0.005 in) thick	Up to 75 transparencies	
	Envelopes	Less than 60 g/m² (16 lb) bond to 90 g/m² (24 lb) bond	Up to 10 envelopes	

# Load paper trays

**CAUTION:** If you try to print on media that is wrinkled, folded, or damaged in any way, a jam might occur. See <u>Clear jams on page 85</u> for more information.

### **Priority input slot**

The priority input slot holds up to ten sheets of media or one envelope, one transparency, or one sheet of labels or cardstock. Load media with the top forward and the side to be printed on facing up. To prevent jams and skewing, always adjust the side media guides before feeding the media.

### **Main-input tray**

The main-input tray holds 250 pages of 75 g/m<sup>2</sup> (20 lb) paper, or fewer pages of heavier media (a 25 mm (0.9 in) stack height or less).

Load media with the top forward and the side to be printed on facing up. To prevent jams and skewing, always adjust the side and front media guides.

**NOTE:** When you add new media, make sure that you remove all of the media from the input tray and straighten the entire stack. This helps prevent multiple sheets of media from feeding through the product at one time, reducing media jams.

# Paper orientation for loading trays

Only use media that is recommended for laser printers. See <u>Supported paper sizes on page 35</u>.

If you are using paper that requires a specific orientation, load it according to the information in the following table.

Paper type	How to load paper	
Preprinted or letterhead	•	Face up
	•	Top edge leading into the product
Prepunched	•	Face up
	•	Holes toward the left side of the product
Envelope	•	Face up
	•	Left short edge leading into the product

**NOTE:** Use the priority input slot for printing one envelope or other special media. Use the main-input tray for printing multiple envelopes or other special media.

1. Before loading the media, slide the media guides outward to slightly wider than the media.



2. Place the media in the tray and adjust the media guides to the correct width.



# **6 Print tasks**

- <u>Cancel a print job</u>
- Print with Windows

# Cancel a print job

You can stop a print request by using the control panel or by using the software program. For instructions about how to stop a print request from a computer on a network, see the online Help for the specific network software.

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

# Stop the current print job from the control panel

 $\land$  Press the cancel button  $\times$  on the control panel.

### Stop the current print job from the software program

When you send the print job, a dialog box appears briefly on the screen, giving you the option to cancel the print job.

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

If a print job is waiting in a print queue or print spooler, delete the print job there.

1. Windows XP, Windows Server 2008, and Windows Server 2003 (using the default Start menu view): Click Start, and then click Printers and Faxes.

-or-

Windows XP, Windows Server 2008, and Windows Server 2003 (using the Classic Start menu view): Click Start, and then click Printers.

-or-

Windows Vista and Windows 7: Click Start, click Control Panel, and then in the category for Hardware and Sound click Printer.

- 2. In the list of printers, double-click the name of this product to open the print queue or spooler.
- Select the print job that you want to cancel, right-click the job, and then click the Cancel or Delete item.

# **Print with Windows**

# **Open the Windows printer driver**

- 1. On the File menu in the software program, click Print.
- 2. Select the product, and then click **Properties** or **Preferences**.

### Get help for any print option with Windows

Printer-driver Help is separate from program Help. The printer-driver help provides explanations for the buttons, check boxes, 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:

- In the printer driver **Properties** dialog box, 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.

### Change the number of print copies with Windows

- 1. Open the printer driver, click the **Properties** or **Preferences** button, and then click the **Advanced** tab.
- 2. In the **Copies** area, use the arrow buttons to adjust the number of copies.

If you are printing multiple copies, click the **Collate** check box to collate the copies.

3. Click the **OK** button.

# Print colored text as black with Windows

- 1. Open the printer driver, click the **Properties** or **Preferences** button, and then click the **Advanced** tab.
- 2. Click the Print All Text as Black check box.
- 3. Click the **OK** button.

### Save custom print settings for reuse with Windows

#### Use a printing quick set

- Open the printer driver, and then click the Properties or Preferences button. The Print Tasks Quick Sets drop-down list appears on all tabs except the Services tab.
- 2. In the **Print Tasks Quick Sets** drop-down list , select one of the quick sets, and then click **OK** to print the job with the predefined settings.

#### Create a custom printing quick set

- Open the printer driver, and then click the Properties or Preferences button. The Print Tasks Quick Sets drop-down list appears on all tabs except the Services tab.
- 2. Select an existing quick set as a base.
- 3. Select the print options for the new quick set.
- 4. Click **Save As**, type a name for the quick set, and then click **OK**.

### Improve print quality with Windows

#### Select a page size

- 1. Open the printer driver, click the **Properties** or **Preferences** button, and then click the **Paper**/ **Quality** tab.
- 2. Select a size from the Size is drop-down list.
- 3. Click the **OK** button.

#### Select a custom page size

- 1. Open the printer driver, and then click the **Paper/Quality** tab.
- 2. Click the **Custom** button. The **Custom Paper Size** dialog box opens.
- 3. Type a name for the custom size, specify the dimensions, and then click **Save**.
- 4. Click the **Close** button, and then click the **OK** button.

#### Select a paper type

- 1. Open the printer driver, click the **Properties** or **Preferences** button, and then click the **Paper**/ **Quality** tab.
- 2. Select a type from the **Type is** drop-down list.
- 3. Click the **OK** button.

#### Select the print resolution

- 1. Open the printer driver, click the **Properties** or **Preferences** button, and then click the **Paper**/ **Quality** tab.
- 2. In the **Print Quality** area, select an option from the drop-down list. See the printer-driver online Help for information about each of the available options.

**NOTE:** To use a draft-quality resolution, in the **Print Quality** area, click the **EconoMode** check box.

3. Click the **OK** button.

# Print the first or last page on different paper with Windows

- 1. Open the printer driver, click the **Properties** or **Preferences** button, and then click the **Paper**/ **Quality** tab.
- 2. Click the **Use Different Paper/Covers** check box, and then select the necessary settings for the front cover, other pages, and back cover.
- 3. Click the **OK** button.

### Scale a document to fit page size with Windows

- 1. Open the printer driver, click the **Properties** or **Preferences** button, and then click the **Effects** tab.
- 2. Click the **Print document on** check box, and then select a size from the drop-down list.
- 3. Click the **OK** button.

### Add a watermark to a document with Windows

- 1. Open the printer driver, click the **Properties** or **Preferences** button, and then click the **Effects** tab.
- 2. Select a watermark from the Watermarks drop-down list.

To print the watermark on the first page only, click the **First page only** check box. Otherwise, the watermark is printed on each page.

**3.** Click the **OK** button.

# Print on both sides (duplex) with Windows

#### **Automatic**

**NOTE:** Automatic duplexing is only supported for the HP LaserJet Professional P1600 printer series product.

The printer driver only supports certain media sizes for automatic duplexing. Use the manual duplexing procedure for media sizes not available in the printer driver.

Before you can use the automatic duplexing feature, you must select the **Allow Automatic Duplexing** check box on the **Device Settings** tab of the printer properties dialog box. See <u>Change</u> printer-driver settings for Windows on page 13.

1. Load paper face-down in the priority input slot or in the main-input tray.



- 2. Open the printer driver, and then click the **Finishing** tab.
- 3. Click the **Print on both sides** check box. If you will bind the document along the top edge, click the **Flip pages up** check box.
- 4. At the computer, click the **OK** button to print the job.

#### Manual

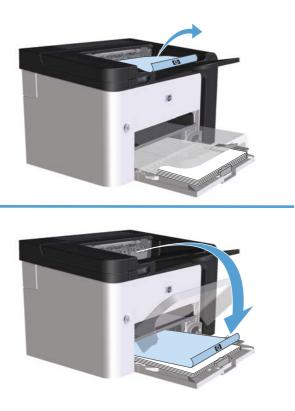
Before you can use the manual duplexing feature, you must select the **Allow Manual Duplexing** check box on the **Device Settings** tab of the printer properties dialog box. See <u>Change printer-driver</u> settings for Windows on page 13.

1. Load paper face-down in the priority input slot or in the main-input tray.



- 2. Open the printer driver, and then click the **Finishing** tab.
- 3. Click the **Print on both sides (manually)** check box. If you will bind the document along the top edge, click the **Flip pages up** check box.
- 4. Click the **OK** button to print the first side of the job.

5. Retrieve the printed stack from the output bin, and, maintaining the paper orientation, place it with the printed-side facing down in the main-input tray.



6. At the product control panel, press the go button 🕻 to print the second side of the job.

### **Create a booklet with Windows**

- 1. Open the printer driver, click the **Properties** or **Preferences** button, and then click the **Finishing** tab.
- 2. Click the **Print on both sides (manually)** check box.
- 3. In the Booklet layout drop-down list, click the Left binding or Right binding option. The Pages per sheet option automatically changes to 2 pages per sheet.
- 4. Click the **OK** button.

# Print multiple pages per sheet with Windows

- 1. Open the printer driver, click the **Properties** or **Preferences** button, and then click the **Finishing** tab.
- 2. Select the number of pages per sheet from the Pages per sheet drop-down list.
- 3. Select the correct options for **Print Page Borders**, **Page Order**, and **Orientation**.
- 4. Click the **OK** button.

# Select page orientation with Windows

- 1. Open the printer driver, click the **Properties** or **Preferences** button, and then click the **Finishing** tab.
- 2. In the Orientation area, select the Portrait or Landscape option.

To print the page image upside down, select the **Rotate by 180 degrees** option.

**3.** Click the **OK** button.

#### **Use HP ePrint**

HP ePrint is a suite of Web-based printing services that enable a supported HP product to print documents of the following types:

- E-mail messages and attachments sent directly to the HP product's e-mail address
- Documents from select mobile device print applications

#### **Use HP Cloud Print**

Use HP Cloud Print to print e-mail messages and attachments by sending them to the product's e-mail address from any e-mail enabled device.

**NOTE:** The product must be connected to a wired or wireless network. To use HP Cloud Print, you must first have access to the Internet and enable HP Web Services.

- 1. Enable HP Web Services in the HP Embedded Web Server (EWS) by following these steps:
  - **a.** After the product is connected to the network, print a configuration page and identify the product IP address.
  - **b.** At your computer, open a Web browser and enter the product IP address into the address line. The HP EWS appears.
  - **c.** Click the **HP Web Services** tab. If your network does not use a proxy server to access the Internet, proceed to the next step. If your network uses a proxy server to access the Internet, follow these instructions before proceeding to the next step:
    - i. Select the **Proxy Settings** tab.
    - ii. Select the Check this box if your network uses a proxy server to access the Internet check box.
    - **iii.** In the **Proxy Server** field, enter the proxy server address and port number, and then click the **Apply** button.

- **d.** Select the HP Web Services tab and click the **Enable** button. The product configures the connection to the Internet, and then a message appears informing you that an information sheet will be printed.
- e. Click the **OK** button. An ePrint page prints out. On the ePrint page, look for the e-mail address that is automatically assigned to the product.
- 2. To print a document, attach it to an e-mail message, and then send the message to the product's email address. Go to <u>www.hpeprintcenter.com</u> for a list of supported document types
- 3. Optionally, use the HP ePrintCenter Web site to define security settings and to configure default print settings for all HP ePrint jobs sent to this product:
  - a. Open a Web browser and go to <u>www.hpeprintcenter.com</u>.
  - **b.** Click **Sign In**, and enter your HP ePrintCenter credentials or sign up for a new account.
  - **c.** Select your product from the list, or click the **+ Add printer** button to add it. To add the product, you need the product code, which is the segment of the product e-mail address that is before the @ symbol.

**NOTE:** This code is valid for only 24 hours from the time you enable HP Web Services. If it expires, follow the instructions to enable HP Web Services again, and obtain a new code.

- **d.** Click the **Setup** button. The **HP ePrint Settings** dialog box appears. Three tabs are available:
  - Allowed Senders. To prevent your product from printing unexpected documents, click the Allowed Senders tab. Click Allowed Senders Only, and then add the e-mail addresses from which you want to allow ePrint jobs.
  - **Print Options**. To set up default settings for all ePrint jobs sent to this product, click the **Print Options** tab, and then select the settings that you want to use.
  - **Advanced**. To change the product's e-mail address, click the **Advanced** tab.

#### **Use AirPrint**

Direct printing using Apple's AirPrint is supported for iOS 4.2 or later. Use AirPrint to print directly to the product from an iPad (iOS 4.2), iPhone (3GS or later), or iPod touch (third generation or later) in the following applications:

- Mail
- Photos
- Safari
- Select third-party applications

**NOTE:** The product must be connected to a wired or wireless network.

To print, follow these steps:



#### 2. Tap Print.

**NOTE:** If you are printing for the first time, or if your previously selected product is not available, you must select a product before proceeding to the next step.

3. Configure the print options and then tap **Print**.

# 7 Manage and maintain

- Print information pages
- Use the HP Embedded Web Server
- Economy settings
- Quiet mode settings
- Manage supplies and accessories
- <u>Clean the product</u>
- Product updates

# **Print information pages**

You can print the following information pages.

# **Configuration page**

The configuration page lists current product settings and properties. This page also contains a status log report. To print a configuration page, do one of the following:

- Press and hold the go button i when the ready light is on and no other jobs are printing.
   Release the go button i when the ready light i begins blinking. The configuration page prints.
- Select **Config Page** from the **Print Information Pages** drop-down on the **Services** tab in the Printer Preferences.
- HP LaserJet Professional P1600 printer series only: Open the embedded Web server (see <u>Open the embedded Web server on page 55</u>), click the Information tab, and then select Print Info Pages. Click the Print button next to Print Configuration Page.

### Supplies status page

The supplies status page provides the following information:

- The estimated percentage of toner remaining in the print cartridge (only available if a genuine HP print cartridge is installed)
- The number of pages and print jobs that have been processed (only available if a genuine HP print cartridge is installed)
- Ordering and recycling information

To print a supplies status page, do one of the following:

- selecting **Supply Status Page** from the **Print Information Pages** drop-down on the **Services** tab in the Printer Preferences.
- HP LaserJet Professional P1600 printer series only: Open the embedded Web server (see <u>Open the embedded Web server on page 55</u>), click the Information tab, and then select Print Info Pages. Click the Print button next to Print Supplies Page.

### Demo page

The demo page contains examples of text and graphics. To print a demo page, do one of the following:

- Press and release the go button is when the ready light is on and no other jobs are printing. The demo page prints.
- Select **Demo Page** from the **Print Information Pages** drop-down on the **Services** tab in the Printer Preferences.

# **Use the HP Embedded Web Server**

NOTE: Only the HP LaserJet Professional P1600 printer series supports the embedded Web server.

Use the embedded Web server (EWS) to view product and network status and to manage printing functions from your computer.

- View product status information
- Determine the remaining life on all supplies and order new ones
- View and change the product default configuration settings
- View and change network configuration

You do not need to install any software on the computer. You only need to use one of these supported Web browsers:

- Microsoft Internet Explorer 6.0 (and later)
- Firefox 1.0 (and later)
- Mozilla 1.6 (and later)
- Opera 7.0 (and later)
- Safari 1.2 (and later)
- Konqueror 3.2 (and later)

The embedded Web server works when the product is connected to a TCP/IP-based network. The embedded Web server does not support IPX-based connections or direct USB connections.

**NOTE:** You do not have to have Internet access to open and use the embedded Web server. However, if you click a link on any of the pages, you must have Internet access to open the linked site.

### **Open the embedded Web server**

To open the embedded Web server, type the IP address or host name of the product in the address field of a supported Web browser. To find the IP address, print a configuration page at the product by pressing and holding the go button i when the ready light () is on and no other jobs are printing. Release the go button i when the ready light () begins blinking. The configuration page prints.

**NOTE:** The HP LaserJet Professional P1600 printer series supports IPv4 and IPv6. For more information, go to <u>www.hp.com/go/ljp1600series</u>.

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

The embedded Web server has four tabs that contain settings and information about the product: the **Information** tab, the **Settings** tab, the **HP Smart Install** tab, and the **Networking** tab.

# **Embedded Web server sections**

#### **Information tab**

The Information pages group consists of the following pages:

- Device Status displays the status of the product and HP supplies.
- **Device Configuration** shows the information found on the configuration page.
- **Supplies Status** shows the status of HP supplies and provides part numbers. To order new supplies, click **Shop for Supplies** in the upper-right part of the window.
- **Network Summary** shows the information found on the Network Summary page.
- **Print Info pages** allows you to print a configuration page or a supplies status page.

#### Settings tab

Use this tab to configure the product from your computer. If this product is networked, always consult with the product administrator before changing settings on this tab.

#### **Networking tab**

Network administrators can use this tab to control network-related settings for the product when it is connected to an IP-based network.

#### **HP Smart Install tab**

**NOTE:** This tab is supported for Windows only.

Use this tab to download and install the printer driver.

#### Links

Links are located in the upper-right part of the Status pages. 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.

- **Shop for Supplies**. Click this link to connect to the Sure Supply Web site (<u>www.hp.com/post-embed/ordersupplies-na</u>) and order genuine HP supplies from HP or a reseller of your choice.
- **Support**. Connects to the product support site. You can search for help regarding general topics.

# **Economy** settings

### **EconoMode**

This product has an EconoMode option for printing drafts of documents. Using EconoMode can use less toner and decrease the cost per page. However, using EconoMode can also reduce print quality.

HP does not recommend the full-time use of EconoMode. If EconoMode is used full-time, the toner supply might outlast the mechanical parts in the print cartridge. If print quality begins to degrade under these circumstances, you must install a new print cartridge, even if there is toner supply remaining in the cartridge.

Enable or disable EconoMode in any of these ways:

- In the Windows Printer Properties, open the Paper/Quality tab, and select the EconoMode option.
- In the embedded Web server (HP LaserJet Professional P1600 printer series only), open the Settings tab and select the PCL Settings option. Use the Settings drop-down list to select On or Off.
- **NOTE:** Disabling EconoMode by using the embedded Web server only effects print jobs that use the PCL 5 universal Printer Driver (available for download from the Web).

To deselect EconoMode for print jobs that use the printer driver that comes on the product CD, you must deselect **EconoMode** in the printer driver.

• In the HP Printer Utility for Macintosh, click **Print Settings**, and then click **Economode & Toner Density**.

### Auto-Off mode

Auto-Off is an energy-saving feature of this product. After a user-specified time period, the product automatically reduces its power consumption (Auto-Off). The product returns to the ready state when a button is pressed or a print job is received. When the product is in Auto-Off mode, all of the control-panel LEDs and the power button backlight LED are off.

**NOTE:** Although the product lights are off in Auto-Off mode, the product will work normally when it receives a print job.

Wireless models do not support the Auto-On/Auto-Off mode. Sleep mode, with power consumption of 3.4W, is supported on wireless models.

#### Change the Auto-Off delay time

You can change how long the product remains idle (Auto-Off delay) before it enters Auto-Off mode.

**NOTE:** The default Auto-Off delay setting is 5 minutes.

- 1. Open the printer properties, and then click the **Device Settings** tab.
- 2. Select the Auto-Off delay from the Auto-Off drop-down list.

**NOTE:** The changed setting does not go into effect until a print job is sent to product.

# **Quiet mode settings**

This product has a quiet mode that reduces noise during printing. When quiet mode is turned on, the product prints at a slower speed.

NOTE: Quiet mode reduces the product print speed, which might improve print quality.

Follow these steps to enable quiet mode.

- 1. Open the printer properties, and then click the **Device Settings** tab.
- 2. Click the **Enable** option to turn on the **Quiet Mode** feature.

# **Manage supplies and accessories**

Correctly using, storing, and monitoring the print cartridge can help ensure high-quality output.

# Manage print cartridges

#### **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.

#### HP policy on non-HP print cartridges

Hewlett-Packard Company cannot recommend the use of non-HP print cartridges, either new or remanufactured.

**NOTE:** Any damage caused by a non-HP print cartridge is not covered under the HP warranty and service agreements.

To install a new genuine HP print cartridge, see <u>Replace the print cartridge on page 63</u>.

#### HP fraud hotline and Web site

Call the HP fraud hotline (1-877-219-3183, toll-free in North America) or go to <u>www.hp.com/go/</u> <u>anticounterfeit</u> when you install an HP print cartridge and the control-panel message says the cartridge is non-HP. HP will help determine if the cartridge is genuine and take steps to resolve the problem.

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

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

#### **Recycle supplies**

To install a new HP print cartridge, follow the instructions that are included in the box that contains the new supply, or see the getting started guide.

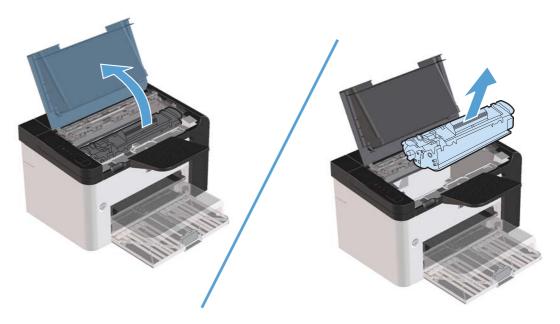
To recycle supplies, place the used supply in the box in which the new supply arrived. Use the enclosed return label to send the used supply to HP for recycling. For complete information, see the recycling guide that is included with each new HP supply item.

# **Replacement instructions**

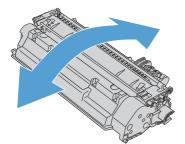
#### **Redistribute toner**

When a small amount of toner remains in print cartridge, faded or light areas might appear on the printed page. You might be able to temporarily improve print quality by redistributing the toner.

1. Open the print-cartridge door, and then remove the print cartridge.

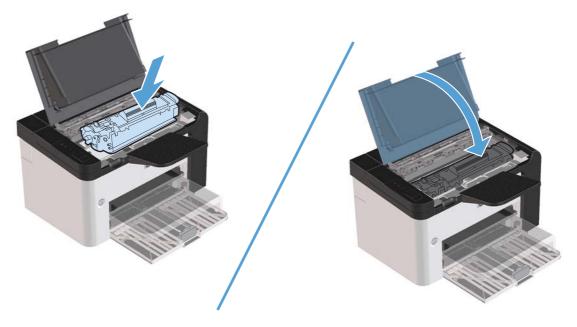


2. To redistribute the toner, gently rock the print cartridge from front to back.



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

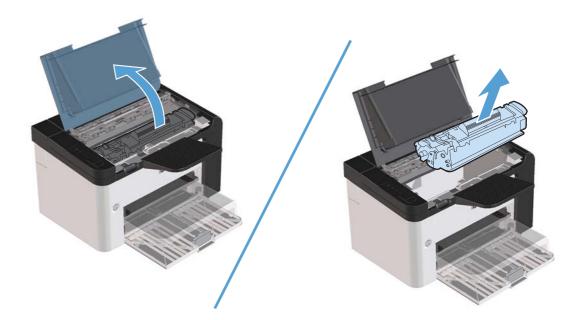
3. Reinsert the print cartridge into the product, and then close the print-cartridge door.



If the print is still light, install a new print cartridge.

#### **Replace the print cartridge**

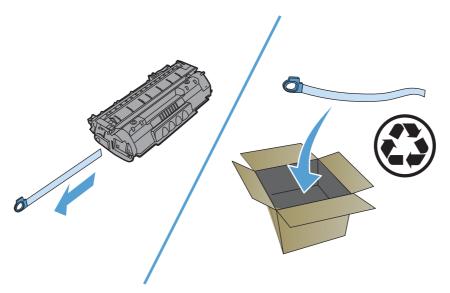
1. Open the print-cartridge door, and remove the old print cartridge. See the recycling information inside the print-cartridge box.



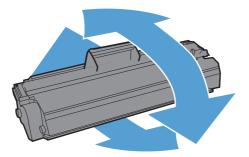
2. Remove the new print cartridge from the bag.

**CAUTION:** To prevent damage to the print cartridge, hold the print cartridge at each end.

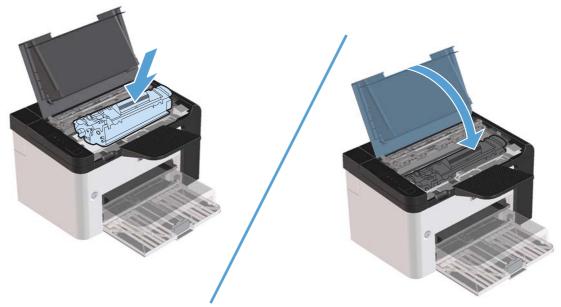
**3.** Pull the tab and completely remove the tape from the cartridge. Put the tab in the print-cartridge box to return for recycling.



4. Gently rock the print cartridge from front to back to distribute the toner evenly inside the cartridge.



5. Insert the print cartridge in the product and close the print-cartridge door.



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

**NOTE:** When toner is low, faded or light areas appear on the printed page. You might be able to temporarily improve print quality by redistributing the toner. To redistribute the toner, remove the cartridge from the product and gently rock it from front to back.

#### **Replace the pickup roller**

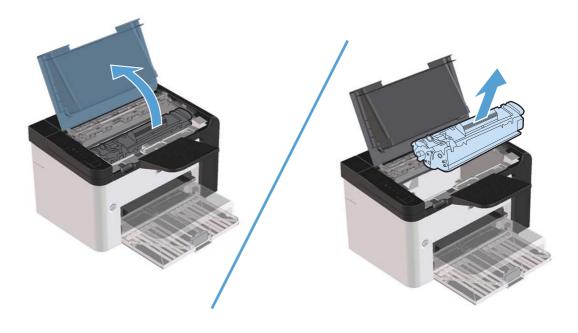
Normal use with good media causes wear. The use of poor media might require more frequent replacement of the pickup roller.

If the product regularly mispicks (no media feeds through), you might need to change or clean the pickup roller. See <u>Clean the pickup roller on page 71</u> to order a new pickup roller.

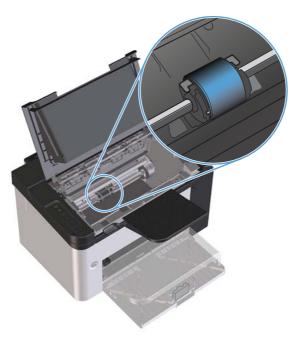
**WARNING!** Before changing the pickup roller, use the power switch to turn the product off, and wait for the product to cool.

**CAUTION:** Failure to complete this procedure might damage the product.

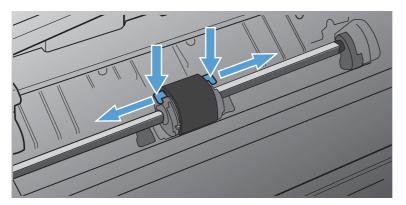
- 1. Open the print-cartridge door, and remove the print cartridge.
- **CAUTION:** To prevent damage to the print cartridge, minimize its exposure to direct light. Cover the print cartridge with a sheet of paper.



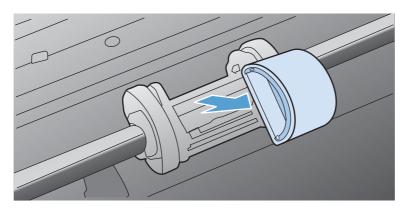
**2.** Find the pickup roller.



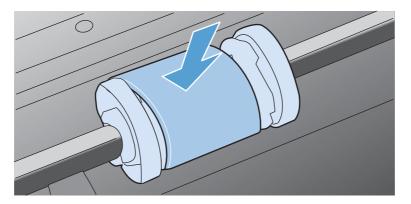
**3.** Release the small, white tabs on each side of the pickup roller, and rotate the pickup roller toward the front.



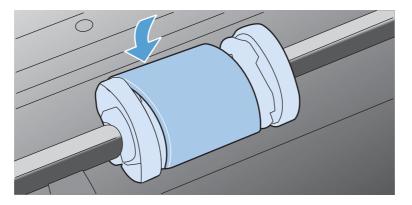
4. Gently pull the pickup roller up and out.



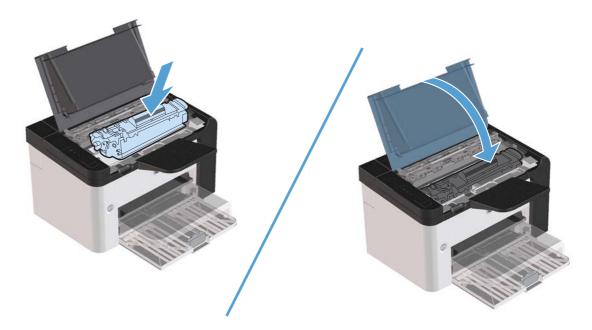
5. Position the new pickup roller in the slot. The circular and rectangular slots on each side prevents you from installing the roller incorrectly.



6. Rotate the top of the new pickup roller away from you until both sides snap into place.



7. Insert the print cartridge in the product and close the print-cartridge door.



#### **Replace the separation pad**

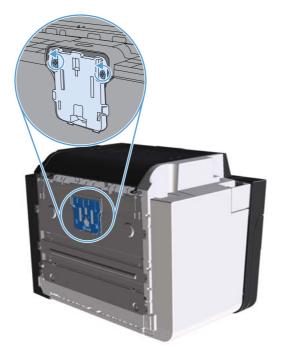
Normal use with good media causes wear. The use of poor media might require more frequent replacement of the separation pad.

If the product regularly pulls multiple sheets of media at a time, you might need to change the separation pad.

**WARNING!** Before changing the separation pad, use the power switch to turn the product off, and wait for the product to cool.

**NOTE:** Before you change the separation pad, clean the pickup roller. See <u>Clean the pickup roller</u> on page 71.

- 1. Remove the paper and close the main-input tray. Set the product on its front.
- 2. At the bottom of the product, unscrew the two screws holding the separation pad in place.



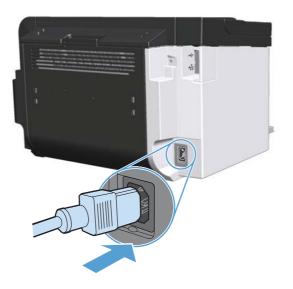
**3.** Remove the separation pad.



4. Insert the new separation pad, and screw it into place.



5. Plug the product into the wall outlet, and turn on the product.

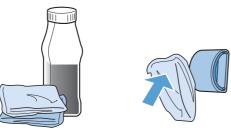


# **Clean the product**

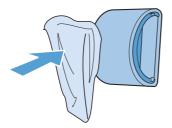
### Clean the pickup roller

If you want to clean the pickup roller before deciding to replace it, follow these instructions:

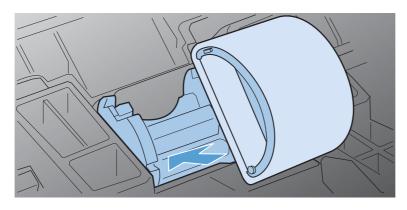
- 1. Unplug the power cord from the product, and then remove the pickup roller as described in <u>Replace the pickup roller on page 65</u>.
- 2. Dab a lint-free cloth in isopropyl alcohol, and then scrub the roller.



- **WARNING!** Alcohol is flammable. Keep the alcohol and cloth away from an open flame. Before you close the product and plug in the power cord, allow the alcohol to dry completely.
- **NOTE:** In certain areas of California, air pollution control regulations restrict the use of liquid isopropyl alcohol (IPA) as a cleaning agent. In those areas of California, please disregard the previous recommendations and use a dry, lint-free cloth, moistened with water, to clean the pickup roller.
- 3. Use a dry, lint-free cloth, to wipe the pickup roller and remove loose dirt.



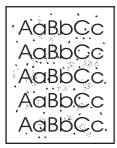
4. Allow the pickup roller to dry completely before you reinstall it in the product.



5. Plug the power cord into the product.

### Clean the paper path

If you are experiencing toner specks or dots on the printouts, clean the paper path. This process uses a transparency to remove dust and toner from the paper path. Do not use bond or rough paper.



**NOTE:** For best results use a sheet of transparency. If you do not have any transparencies, you can use copier-grade media (60 to 163 g/m<sup>2</sup> (16 to 43 lb)) that has a smooth surface.

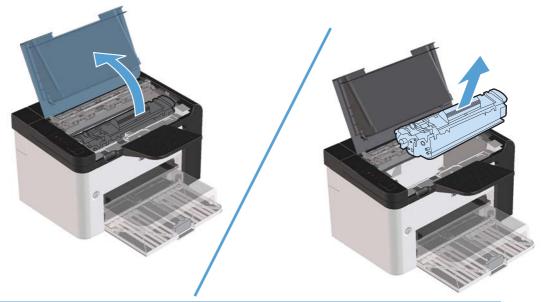
- 1. Make sure that the product is idle and the ready light () is on.
- **2.** Load media in the input tray.
- 3. Open the printer **Properties**.
- 4. Click the **Device Settings** tab.
- 5. In the Cleaning Page area, click the Start button to process the cleaning page.

**NOTE:** The cleaning process takes about 2 minutes. The cleaning page stops periodically during the cleaning process. Do not turn the product off until the cleaning process has finished. You might need to repeat the cleaning process several times to thoroughly clean the product.

### Clean the print-cartridge area

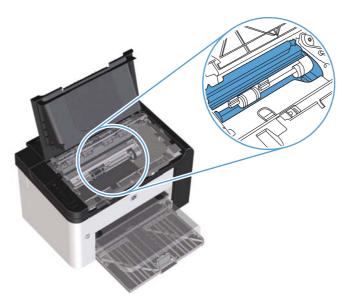
You do not need to clean the print-cartridge area often. However, cleaning this area can improve the quality of the printed sheets.

- **WARNING!** Before cleaning the product, turn the product off by unplugging the power cord, and wait for the product to cool.
  - 1. Unplug the power cord from the product. Open the print-cartridge door, and remove the print cartridge.

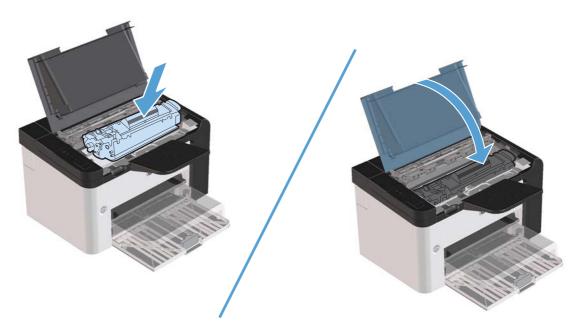


**CAUTION:** Do not touch the black-sponge transfer roller inside the product. Doing so can damage the product.

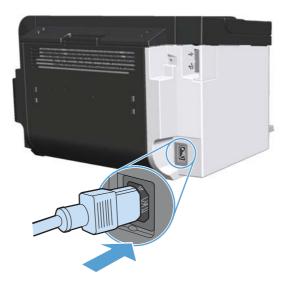
**CAUTION:** To prevent damage, do not expose the print cartridge to light for an extended time. Cover it with a piece of paper. 2. Use a dry, lint-free cloth, to wipe any residue from the paper-path area and the print-cartridge cavity.



3. Replace the print cartridge, and close the print-cartridge door.



4. Plug the power cord into the product.



# **Clean the exterior**

Use a soft, damp, lint-free cloth to wipe dust, smudges, and stains off of the exterior of the device.

# **Product updates**

# Firmware updates

Firmware and software updates and installation instructions for this product are available at <u>www.hp.com/support/lip1560series</u> or <u>www.hp.com/support/lip1600series</u>. Click **Downloads and drivers**, click the operating system, and then select the download for the product.

# 8 Solve problems

- <u>Solve general problems</u>
- <u>Restore factory settings</u>
- Interpret control-panel light patterns
- <u>Clear jams</u>
- <u>Solve paper-handling problems</u>
- <u>Solve image-quality problems</u>
- <u>Solve performance problems</u>
- <u>Solve connectivity problems</u>
- <u>Solve product software problems</u>

# Solve general problems

If the product is not responding correctly, complete the steps in the following checklist, in order. If the product does not pass a step, follow the corresponding troubleshooting suggestions. If a step resolves the problem, you can stop without performing the other steps on the checklist.

### **Troubleshooting checklist**

- 1. Make sure that the product ready light () is on. If no lights are on, complete these steps:
  - **a.** Open and then close the print-cartridge door to deactivate the Auto-Off mode.
  - **b.** Check the power-cable connections.
  - c. Make sure that the power switch is on.
  - **d.** Make sure that the line voltage is correct for the product power configuration. (See the label that is on the back of the product for voltage requirements.) If you are using a power strip and its voltage is not within specifications, plug the product directly into the wall. If it is already plugged into the wall, try a different outlet.
  - e. Make sure that the print-cartridge is installed correctly.
  - f. If none of these measures restores power, contact HP Customer Care.
- **2.** Check the cabling.
  - **a.** Check the cable connection between the product and the computer or network port. Make sure that the connection is secure.
  - **b.** Make sure that the cable itself is not faulty by using a different cable, if possible.
  - c. Check the network connection. See <u>Solve network problems on page 104</u>.
- 3. Check to see if any control-panel lights are lit. See <u>Interpret control-panel light patterns</u> on page 80.
- 4. Make sure that the paper that you are using meets specifications.
- 5. Make sure that the product software is installed correctly.
- 6. Verify that you have installed the printer driver for this product. Check the program to make sure that you are using the printer driver for this product.
- 7. Print a configuration page. See Print information pages on page 54.
  - **a.** If the page does not print, check that at least one tray contains paper.
  - **b.** If the page jams in the product, see <u>Clear jams on page 85</u>.

- 8. If the configuration page prints, check the following items.
  - **a.** If the page does not print correctly, the problem is with the product hardware. Contact HP Customer Care.
  - **b.** If the page prints correctly, the product hardware is working. The problem is with the computer that you are using, with the printer driver, or with the program.
- **9.** Print a short document from a different program that has worked in the past. If this solution works, the problem is with the program you are using. If this solution does not work (the document does not print) complete these steps:
  - **a.** Try printing the job from another computer that has the product software installed.
  - **b.** If you connected the product to the network, connect the product directly to a computer with a USB cable. Redirect the product to the correct port, or reinstall the software, and then select the new connection type that you are using.
  - **c.** If the print quality is unacceptable, complete the following steps:
    - Verify that the print settings are correct for the media you are using. See <u>Change the</u> print driver to match the media type and size on page 34.
    - Use the procedures in <u>Solve image-quality problems on page 96</u> to solve print-quality problems.

### Factors that affect product performance

Several factors affect the time it takes to print a job:

- Maximum product speed, measured in pages per minute (ppm)
- The use of special paper (such as transparencies, heavy paper, and custom-size paper)
- Product processing and download time
- The complexity and size of graphics
- The speed of the computer that you are using
- The USB connection
- The product I/O configuration
- The network operating system and configuration (if applicable)

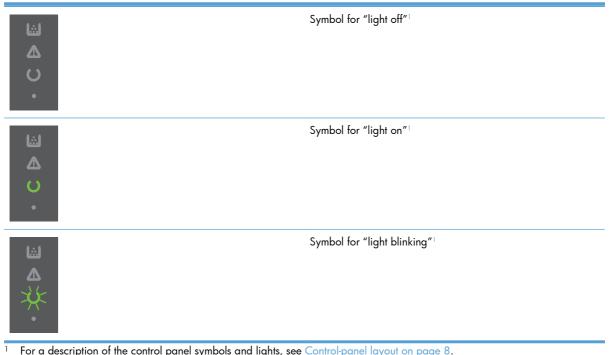
# **Restore factory settings**

To restore the product to the factory-default settings, follow these steps.

- **1.** Turn the product off.
- 2. Turn the product on, and while it is initializing press and hold both control-panel buttons at the same time until all the lights blink in unison.

# **Interpret control-panel light patterns**

#### Table 8-1 Status-light legend



For a description of the control panel symbols and lights, see <u>Control-panel layout on page 8</u>.

Light status	Light pattern	State of the product	Action
All lights are off <b>NOTE:</b> The power button backlight is off.		The product is in Auto-Off mode or is turned off.	Press the power button to deactivate the Auto-Off mode or turn on the product

#### Table 8-2 Control-panel lights

Light status	Light pattern	State of the product	Action
All lights are off		The formatter is not connected to the	<ol> <li>Turn off the product.</li> </ol>
<b>NOTE:</b> The power button backlight is on.		product correctly.	2. Wait 30 seconds, and then turn on the product.
	O		<ol> <li>Wait for the product to initialize.</li> </ol>
	•		Contact HP customer support. See <u>Customer support</u> on page 118.
Attention A, ready (), and go lights cycle. Toner light is off. <b>NOTE:</b> The power button backlight is on.		The formatter is initializing.	No action required. Wait for the initialization period to end. The product enters the Ready state when the initialization period is finished.
All lights cycle. <b>NOTE:</b> The power button backlight is on.		The product is processing a cleaning page.	No action required. Wait for the cleaning process to end. The product enters the Ready state when the cleaning process is finished.

#### Table 8-2 Control-panel lights (continued)

Light status	Light pattern	State of the product	Action
Ready light () is on, and all other lights are off. NOTE: The power button backlight is on.		The product is in the Ready state.	No action required. The product is ready to receive a print job
Ready light () is blinking, and all other lights are off. <b>NOTE:</b> The power button backlight is on.		The product is receiving or processing data.	No action required. The product is receiving or processing a print job. To cancel the current job, press the cancel button X.
Attention light $\bigwedge$ is blinking, and all other lights are off. <b>NOTE:</b> The power button backlight is on.		The product has experienced an error that can be corrected at the product, such as a jam, an open door, or the absence of paper in the proper tray.	Inspect the product, determine the error, and then correct the error. If the error is the absence of paper in the proper tray or the product is in a manual feed mode, put the proper paper in the tray and follow the onscreen instructions, or open and close the print- cartridge door to resume printing.

#### Table 8-2 Control-panel lights (continued)

Light status	Light pattern	State of the product	Action
Attention light $\bigwedge$ is blinking, ready light $\bigotimes$ is on, and other lights are off. <b>NOTE:</b> The power button backlight is on.		The product has experienced a continual error from which it will recover on its own.	To recover from the error and print the available data, press the go button . If the recovery is successful, the product continues to the processing data state and completes the job. If the recovery is unsuccessful, the product continues to the continuable error state. Try removing any media from the media path and turning the product power off, and then on again.
The attention A, ready (), and go Iights are on. Toner light A is off. NOTE: The power button backlight is on.		The product has experienced a fatal error from which it cannot recover.	<ol> <li>Turn off the product.</li> <li>Wait 30 seconds, and then turn or the product.</li> <li>Wait for the product to initialize.</li> <li>If the error persists, contact HP customer support. See <u>Customer support</u> on page 118.</li> </ol>

#### Table 8-2 Control-panel lights (continued)

Light status	Light pattern	State of the product	Action
The ready () and toner i lights are on. <b>NOTE:</b> The power button backlight is on.		The print cartridge is near the estimated end of life.	Order a new print cartridge and have it ready. See <u>Order</u> parts, accessories, and supplies on page 112.
Toner light is blinking.		The print cartridge has been removed from the product.	Reinsert the print cartridge in the product.

Table 8-2	Control-	panel ligh	nts (e	continued)
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# **Clear jams**

When clearing jams, be very careful not to tear jammed paper. If a small piece of paper remains in the product, it could cause additional jams.

**CAUTION:** Before clearing jams, turn the product off and disconnect the power cord.

#### **Common causes of jams**

The input trays are loaded incorrectly or are too full.

**NOTE:** When you add new media, always remove the media from the tray and straighten the entire stack. This helps prevent multiple feeds and reduces media jams.

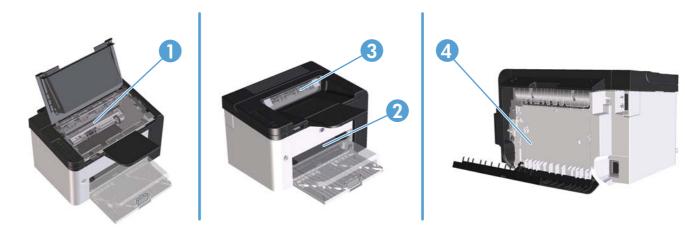
- The media does not meet HP-recommended specifications.
- The product needs to be cleaned to remove paper dust and other particles from the paper path.

Loose toner might remain in the product after a media jam. This toner clears up after a few sheets print.

**CAUTION:** If you get any toner on your clothes or hands, wash them in cold water. Hot water will set the toner into the fabric.

#### **Jam locations**

Jams can occur at the following locations in the product.



1	Internal areas
2	Input trays
3	Output bins
4	Rear door and duplexer (HP LaserJet Professional P1600 printer series)

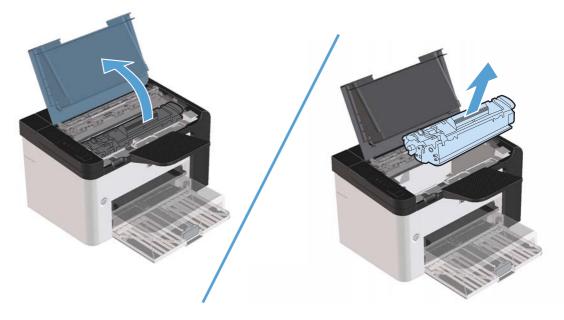
# Clear jams from the input trays

**CAUTION:** Do not use sharp objects, such as tweezers or needle-nose pliers, to remove jams. Damage caused by sharp objects will not be covered by the warranty.

When removing jammed media, pull the jammed media straight away from the product. Pulling jammed media out of the product at an angle can damage the product.

**NOTE:** Depending on where the jam is located, some of the following steps might not be necessary.

1. Open the print-cartridge door, and then remove the print cartridge.



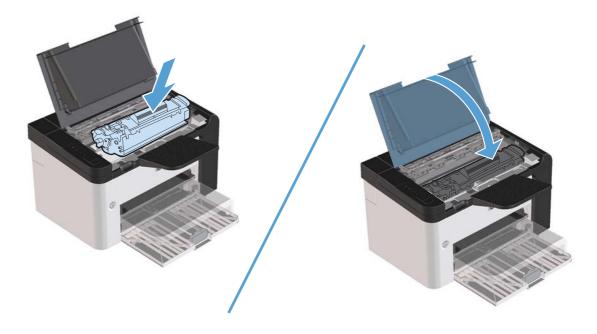
2. In the main-input tray or the priority input slot, remove the media stack.



3. With both hands, grasp the side of the jammed media that is most visible (this includes the middle), and carefully pull it free from the product.



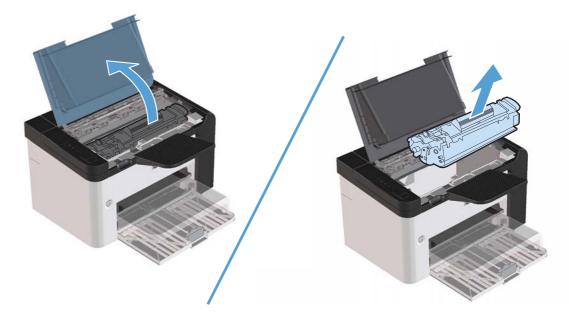
**4.** Reinstall the print cartridge and close the print-cartridge door.



# Clear jams from the duplexer

NOTE: Only the HP LaserJet Professional P1600 printer series has an automatic duplexer.

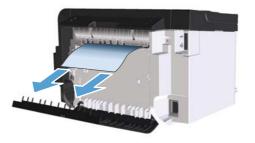
1. Open the print-cartridge door, and then remove the print cartridge.



2. Open the rear door.



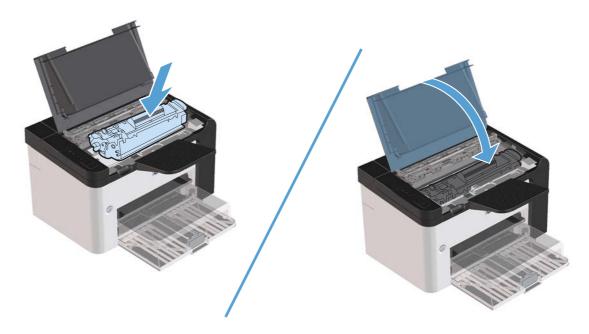
3. Carefully grasp the jammed paper, and slowly pull it out of the product



4. Close the rear door.



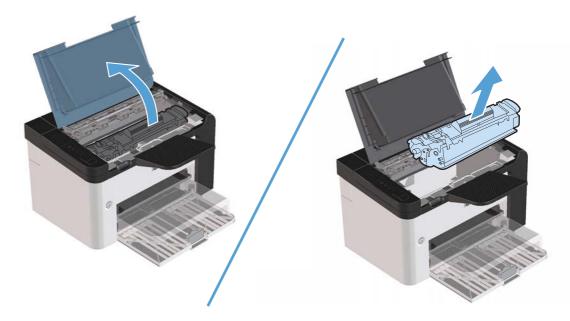
5. Reinstall the print cartridge and close the print-cartridge door.



### Clear jams from the output areas

**CAUTION:** Do not use sharp objects, such as tweezers or needle-nose pliers, to remove jams. Damage caused by sharp objects will not be covered by the warranty.

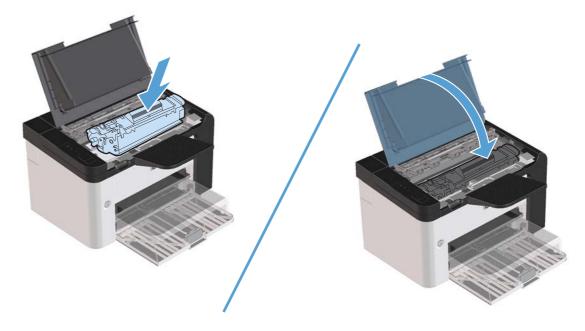
1. Open the print-cartridge door, and then remove the print cartridge.



2. Keep the print cartridge door open, and then with both hands, grasp the side of the jammed media that is most visible (this includes the middle), and carefully pull it free from the product.

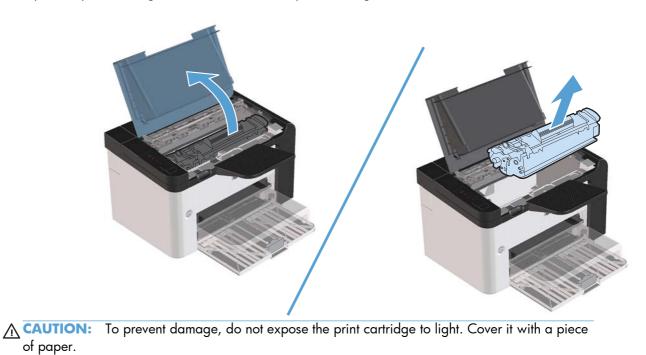


3. Reinstall the print cartridge, and then close the print-cartridge door.



# Clear jams from inside the product

1. Open the print-cartridge door, and remove the print cartridge.



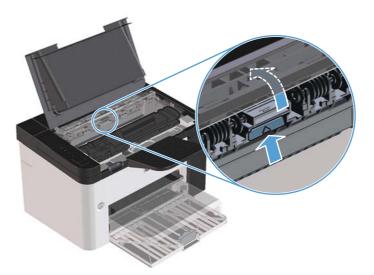
2. If you can see the jammed paper, carefully grasp the jammed paper, and slowly pull it out of the product.

**NOTE:** If you can not see the jammed paper, go to the next step.

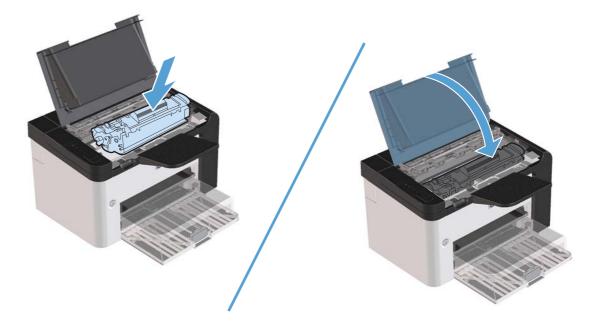
If you successfully removed the jammed paper, skip the next step.



**3.** Press the green tab and then open the jam-access door, carefully grasp the jammed paper and slowly pull it out of the product.



4. Reinstall the print cartridge, and then close the print-cartridge door.



### Solve repeated jams

- Verify that the input tray is not overfilled. The input tray capacity varies depending on the type of print media that you are using.
- Verify that the media guides are properly adjusted.
- Check that the input tray is securely in place.
- Do not add print media into the input tray while the product is printing.
- Use only HP-recommended media types and sizes.
- Do not fan media prior to loading it in a tray. To loosen the ream, hold it firmly in both hands and twist the media by rotating your hands in the opposite direction.
- Do not let print media stack up in the output bin. The print media type and the amount of toner used affect the output bin capacity.
- Check the power connection. Make sure that the power cord is firmly connected to both the product and the power supply box. Plug the power cord into a grounded power outlet.

#### Change the jam recovery setting

When the Jam Recovery feature is turned on, the product reprints any pages that are damaged during a jam.

- 1. Open the product Properties dialog box.
- 2. Click the **Device Settings** tab.
- 3. Click the Auto option or the Off option under Jam Recovery.

# Solve paper-handling problems

The following problems with media cause print-quality deviations, jams, or damage to the product.

Problem	Cause	Solution	
Poor print quality or toner adhesion	int quality or toner adhesion heavy, too smooth, or it is embossed or from a faulty paper lot.		
Dropouts, jamming, or curl	The paper has been stored incorrectly.	Store paper flat in its moisture-proof wrapping.	
	The paper has variability from one side to the other.	Turn the paper over.	
Excessive curl	The paper is too moist, has the wrong grain direction, or is of short-grain construction	Use long-grain paper.	
	The paper varies from side to side.	Turn the paper over.	
Jamming, damage to product	The paper has cutouts or perforations.	Use paper that is free of cutouts or perforations.	
Problems with feeding	The paper has ragged edges.	Use high-quality paper that is made for laser printers.	
	The paper varies from side to side.	Turn the paper over.	
	The paper is too moist, too rough, too heavy or too smooth, has the wrong grain direction, or is of short-grain	Try another kind of paper, between 100 and 250 Sheffield, 4% to 6% moisture content.	
	construction or it is embossed or from a faulty paper lot.	Use long-grain paper.	
Print is skewed (crooked).	The media guides might be incorrectly adjusted.	Remove all media from the tray, straighten the stack, and then load the media in the tray again. Adjust the media guides to the width and length of the media that you are using and try printing again.	
More than one sheet feeds at one time.	The tray might be overloaded.	Remove some of the media from the tray.	
	The media might be wrinkled, folded, or damaged.	Verify that the media is not wrinkled, folded, or damaged. Try printing on media from a new or different package.	
The product does not pull media from the tray.	The product might be in manual-feed mode.	Verify that the product is not in manual feed mode, and then print the job again.	
	The pickup roller might be dirty or damaged.	Contact HP Customer Care. See <u>Service</u> and support on page <u>113</u> or the support flyer that came in the box.	
	The paper-length adjustment control in the main-input tray is set at a length that is greater than the media size.	Set the paper-length adjustment control to the correct length.	

# Solve image-quality problems

You can prevent most print-quality problems by following these guidelines.

- Use paper that meets HP specifications. See <u>Paper and print media on page 31</u>.
- Clean the product as necessary. See <u>Clean the paper path on page 72</u>.

### Image defect examples

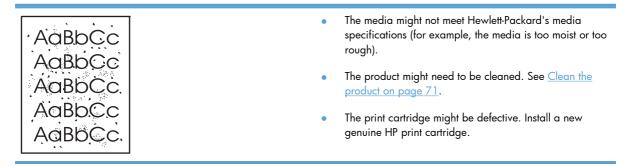
This section provides information about identifying and correcting print defects.

**NOTE:** If these steps do not correct the problem, contact an HP-authorized dealer or service representative.

#### Light print or faded

	•	The print cartridge is nearing end of life.
AaBbCc AaBbCc	•	Redistribute the toner to extend the life. See <u>Redistribute</u> toner on page 61.
AaBbCc AaBbCc	•	The media might not meet Hewlett-Packard's media specifications (for example, the media is too moist or too rough).
AaBbCc	•	If the whole page is light, the print density adjustment is too light or EconoMode might be turned on. Adjust the print density, and disable EconoMode in the printer Properties.

#### **Toner specks**



# Dropouts

AabbCc	٠	A single sheet of media might be defective. Try reprinting the job.
AaBbCc AaBbCc	٠	The media moisture content is uneven or the media has moist spots on its surface. Try printing with new media.
ACBUCC AaBbCc	•	The media lot is bad. The manufacturing processes can cause some areas to reject toner. Try a different type or brand of media.
	٠	Place the product in quiet mode, and send the print job again. See <u>Quiet mode settings on page 59</u> .
	•	The print cartridge might be defective. Install a new genuine HP print cartridge.

# **Vertical lines**

AdBbCc AdBbCc	The photosensitive drum inside the print cartridge has probably been scratched. Install a new genuine HP print cartridge.
AabCc	
AdBbCc	
AdBbCc	

# Gray background

	•	Change the media to a lighter basis weight.
AaBbCc	•	Check the product's environment. Very dry (low humidity)
AaBbCc		conditions can increase the amount of background shading.
AaBbCc		5
AaBbCc	•	The density setting might be too high. Adjust the density setting.
AaBbCc	•	Install a new genuine HP print cartridge.

## **Toner smear**

AaBbCc AaBbCc	me	toner smears appear on the leading edge of the edia, the media guides might be dirty. Wipe the media vides with a dry, lint-free cloth.
AaBbCc	• Ch	heck the media type and quality.
AaBbCc		e fuser temperature might be too low. In your printer iver, make sure the appropriate media type is selected.
AaBbCc		ace the product in quiet mode, and send the print job gain. See Quiet mode settings on page 59.
		stall a new genuine HP print cartridge.

## Loose toner

AaBhCc	•	The fuser temperature might be too low. In your printer driver, make sure the appropriate media type is selected.
AuBbCc	•	Clean the inside of the product.
AaBbCc	•	Check the media type and quality.
AaBbCc	•	Place the product in quiet mode, and send the print job
AaBbCc		again. See <u>Quiet mode settings on page 59</u> .
L	•	Plug the printer directly into an AC outlet instead of into a power strip.

# Vertical repetitive defects

AaBbCC AaBbCc	<ul> <li>The print cartridge might be damaged. If a repetitive mark occurs at the same spot on the page, install a new genuine HP print cartridge.</li> </ul>
	<ul> <li>The internal parts might have toner on them. If the defects occur on the back of the page, the problem will probably correct itself after a few more printed pages.</li> </ul>
AaBbCc	<ul> <li>In your printer driver, make sure the appropriate media type is selected.</li> </ul>

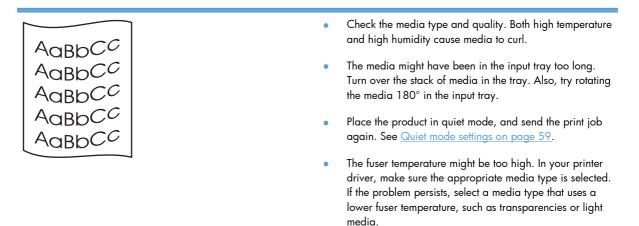
## **Misformed characters**

AabbCc AabbCc AabbCc AabbCc AabbCc	<ul> <li>If characters are improperly formed, producing hollow images, the media stock might be too slick. Try a different media.</li> <li>If characters are improperly formed, producing a wavy effect, the product might need service. Print a configuration page. If the characters are improperly</li> </ul>
AaBbCC AaBbCC	formed, contact an HP-authorized dealer or service
	representative.

## Page skew

AaBbCc AaBbCc AaBbCc AaBbCc AaBbCc	•	Make sure that the media is loaded correctly and the media guides are not too tight or too loose against the media stack. The input bin might be too full. Check the media type and quality.
--	---	--

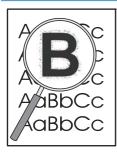
## Curl or wave



## Wrinkles or creases

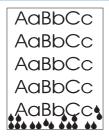
	•	Make sure that media is loaded properly.
AaBbCc	•	Check the media type and quality.
AaBbCc AaBbCc	•	Turn over the stack of media in the tray. Also, try rotating the media 180° in the input tray.
AaBbCc		Place the product in quiet mode, and send the print job
AaBbCc		again. See <u>Quiet mode settings on page 59</u> .
	•	For envelopes, this can be caused by air pockets inside the envelope. Remove the envelope, flatten the envelope, and try printing again.

## **Toner scatter outline**



- If large amounts of toner have scattered around the characters, the transfer of toner to the media is not optimal (a small amount of toner scatter is normal for laser printing). Try a different media type setting in the printer driver, or use a different media type.
- Turn over the stack of media in the tray.
- Use media that is designed for laser printers.
- Place the product in quiet mode, and send the print job again. See <u>Quiet mode settings on page 59</u>.

### Moisture





**NOTE:** This product dissipates heat by using convective cooling. The heat and moisture generated by the printing process escape through vents in the product exterior or through the output bin area.

Water droplets from the convective cooling process will not damage the product.

#### Verify normal product operation

The release of moisture is a result of normal product operation. However, HP recommends using the following steps to verify that the product is releasing steam and does not have a functional problem.

- 1. Turn the product off, and then on.
- Send a print job to the product, and then verify that the product is operating correctly.
- When printing a job and vapor is visible, immediately reprint the job using the same sheet of paper. There should be either no visible vapor, or much less vapor during the printing process.

#### Limit or reduce steam or vapor

- Make sure that the product is placed in a well-ventilated area that meets the environmental specifications in this guide. See <u>Environmental specifications on page 122</u>.
- Do not place the product, or store paper, near an outside entrance where temperature changes can increase humidity.
- Use an unopened ream of paper that has not been exposed to high humidity.
- Store paper in an airtight container, where it will be less likely to absorb moisture.
- Place the product in quiet mode, and send the print job again. See <u>Quiet mode settings on page 59</u>.

# **Optimize and improve image quality**

## **Change print density**

You can change the print density setting by from the printer properties dialog box.

1. Windows XP, Windows Server 2008, and Windows Server 2003 (using the default Start menu view): Click Start, and then click Printers and Faxes.

-or-

Windows XP, Windows Server 2008, and Windows Server 2003 (using the Classic Start menu view): Click Start, and then click Printers.

-or-

Windows Vista: Click Start, click Control Panel, and then in the category for Hardware and Sound click Printer.

- 2. In the list of printers, right-click the name of this product, and then click the **Properties** menu item to open the printer properties dialog box.
- 3. Click the **Device settings** tab, and then move the **Print Density** slider to the desired setting.
- 4. Click the **Apply** button to accept the setting, and then click the **OK** button to close the dialog box.

# Solve performance problems

Problem	Cause	Solution	
Pages print but are totally blank.	The sealing tape might still be in the print cartridges.	Verify that the sealing tape has been completely removed from the print cartridges.	
	The document might contain blank pages.	Check the document that you are printing to see if content appears on all of the pages.	
	The product might be malfunctioning.	To check the product, print a Configuration page.	
Pages print very slowly.	Heavier paper types can slow the print job.	Print on a different type of paper.	
	Complex pages can print slowly.	Proper fusing may require a slower print speed to ensure the best print quality.	
	Narrow or small media can print slowly.		
Pages did not print.	The product might not be pulling paper correctly.	Make sure paper is loaded in the tray correctly.	
	The paper is jamming in the product.	Clear the jam. See <u>Clear jams</u> on page 85.	
	The USB cable might be defective or incorrectly connected.	• Disconnect the USB cable at both ends and reconnect it.	
		<ul> <li>Try printing a job that has printed in the past.</li> </ul>	
		• Try using a different USB cable.	
	Other devices are running on your computer.	The product might not share a USB port If you have an external hard drive or network switchbox that is connected to the same port as the product, the other device might be interfering. To connect and use the product, you must disconnect the other device or you must use two USB ports on the computer.	

# **Solve connectivity problems**

**NOTE:** Restore the factory default settings for the product. See <u>Restore factory settings on page 79</u>. If the problem persists, try the solutions in this section.

# Solve direct-connect problems

If you have connected the product directly to a computer, check the cable.

- Verify that the cable is connected to the computer and to the product.
- Verify that the cable is not longer than 2 meters (6 feet). Replace the cable if necessary.
- Verify that the cable is working correctly by connecting it to another product. Replace the cable if necessary.

# Solve network problems

**NOTE:** Before performing the procedures in this section, restore the product factory-default settings. See <u>Restore factory settings on page 79</u>.

Check the following items to verify that the product is communicating with the network. Before beginning, print a configuration page. See <u>Print information pages on page 54</u>.

1. Are there any physical connection problems between the workstation or file server and the product?

Verify that the network cabling, connections, and router configurations are correct. Verify that the network cable lengths meet network specifications.

2. Are your network cables connected properly?

Make sure that the product is attached to the network using the appropriate port and cable. Check each cable connection to make sure it is secure and in the right place. If the problem continues, try a different cable or ports on the hub or transceiver. The amber activity light and the green link status light next to the port connection on the back of the product should be lit.

3. Are the link speed and duplex settings set correctly?

Hewlett-Packard recommends leaving this setting in automatic mode (the default setting).

4. Can you "ping" the product?

Use the command prompt to ping the product from your computer. For example:

ping 192.168.45.39

Ensure that the ping displays round-trip times.

If you are able to ping the product, verify that the IP address configuration for the product is correct on the computer. If it is correct, delete and then add the product again.

If the ping command failed, verify that the network hubs are on, and then verify that the network settings, the product, and the computer are all configured for the same network.

Verify that the ping command is successful for other devices on the network (if not, a firewall might be blocking the ping command).

Try opening the embedded Web server to verify that the computer is communicating with the product.

5. Have any software applications been added to the network?

Make sure they are compatible and that they are installed correctly with the correct printer drivers.

6. Are other users able to print?

The problem may be workstation-specific. Check the workstation network drivers, printer drivers, and redirection (capture in Novell NetWare).

7. If other users are able to print, are they using the same network operating system?

Check your system for proper network operating system setup.

8. Is your protocol enabled?

Check the status of your protocol on the configuration page. You can also use the embedded Web server to check the status of other protocols. See <u>Embedded Web server sections on page 56</u>.

- 9. Does the product appear in HP Web Jetadmin or other management application?
  - Verify network settings on the configuration page.
  - Confirm the network settings for the product using the product control panel (for products with control panels).

# Solve product software problems

# Solve common Windows problems

Error message:	
"General Protection FaultException OE"	
"Spool32"	
"Illegal Operation"	
Cause	Solution
	Close all software programs, restart Windows, and try again.
	Delete all temp files from the Temp subdirectory. Determine the name of the directory by opening the AUTOEXEC.BAT file and looking for the statement "Set Temp =". The name after this statement is the Temp directory. It is usually C:\TEMP by default, but can be redefined.
	See the Microsoft Windows documentation that came with the computer for more information about Windows error messages.

# Solve common Macintosh problems

#### Table 8-3 Problems in Mac OS X

#### The printer driver is not listed in the Printer Setup Utility or the Print & Fax list.

Cause	Solution
The product software might not have been installed or was installed incorrectly.	Make sure that the product .GZ file is in the following hard-drive folder:
	• <b>Mac OS X v10.4:</b> Library/Printers/PPDs/Contents/Resources/ <lang>.lproj, where <lang> is the two-letter language code for the language that you are using.</lang></lang>
	Mac OS X v10.5 and v10.6: Library/Printers/PPDs/ Contents/Resources
	If necessary, reinstall the software. See the getting started guide for instructions.
The Postscript Printer Description (PPD) file is corrupt.	Delete the .GZ file from the following hard-drive folder:
	• <b>Mac OS X v10.4:</b> Library/Printers/PPDs/Contents/Resources/ <lang>.lproj, where <lang> is the two-letter language code for the language that you are using.</lang></lang>
	Mac OS X v10.5 and v10.6: Library/Printers/PPDs/ Contents/Resources
	Reinstall the software. See the getting started guide for instructions.

#### The product name does not appear in the product list in the Printer Setup Utility or Print & Fax list.

Cause	Solution
The product might not be ready.	Make sure that the cables are connected correctly, the product is on, and the ready light () is on.
The wrong product name is being used.	Print a configuration page to check the product name. Verify that the name on the configuration page matches the product name in the Printer Setup Utility or the Print & Fax list.
The interface cable might be defective or of poor quality.	Replace the cable with a high-quality cable.

# The printer driver does not automatically set up the selected product in the Printer Setup Utility or the Print & Fax list.

Cause	Solution
The product might not be ready.	Make sure that the cables are connected correctly, the product is on, and the ready light $\bigcirc$ is on.

#### Table 8-3 Problems in Mac OS X (continued)

The printer driver does not automatically set up the selected product in the Printer Setup Utility or the Print & Fax list.

Cause	Solution
The product software might not have been installed or was installed incorrectly.	<ul> <li>Make sure that the product PPD is in the following hard-drive folder:</li> <li>Mac OS X v10.4: Library/Printers/PPDs/Contents/Resources/ <lang>.lproj, where <lang> is the two-letter language code for the language that you are using.</lang></lang></li> <li>Mac OS X v10.5 and v10.6: Library/Printers/PPDs/ Contents/Resources</li> <li>If necessary, reinstall the software. See the getting started guide for instructions.</li> </ul>
The Postscript Printer Description (PPD) file is corrupt.	<ul> <li>Delete the .GZ file from the following hard-drive folder:</li> <li>Mac OS X v10.4: Library/Printers/PPDs/Contents/Resources/ <lang>.lproj, where <lang> is the two-letter language code for the language that you are using.</lang></lang></li> <li>Mac OS X v10.5 and v10.6: Library/Printers/PPDs/ Contents/Resources</li> <li>Reinstall the software. See the getting started guide for instructions.</li> </ul>
The interface cable might be defective or of poor quality.	Replace the interface cable with a high-quality cable.

#### A print job was not sent to the product that you wanted.

Cause	Solution
The print queue might be stopped.	Restart the print queue. Open <b>print monitor</b> and select <b>Start</b> Jobs.
The wrong product name is being used. Another product with the same or similar name might have received your print job.	Print a configuration page to check the product name. Verify that the name on the configuration page matches the product name in the Printer Setup Utility or Print & Fax list.

#### You are unable to print from a third-party USB card.

Cause	Solution
This error occurs when the software for USB products 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.

When connected with a USB cable, the product does not appear in the Printer Setup Utility or Print & Fax list 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.	
	<ul> <li>Verify that your Macintosh operating system is Mac OS X v10.4 or later.</li> </ul>	
	<ul> <li>Ensure that your Macintosh has the appropriate USB software from Apple.</li> </ul>	
	Hardware troubleshooting	
	• Check that the product is turned on.	
	• Verify that the USB cable is connected correctly.	
	<ul> <li>Check that you are using the appropriate high-speed USB cable.</li> </ul>	
	<ul> <li>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.</li> </ul>	
	<ul> <li>Check to see if more than two non-powered USB hubs are connected in a row on the chain. Disconnect all of the device from the chain, and then connect the cable directly to the USI port on the host computer.</li> </ul>	
	NOTE: The iMac keyboard is a non-powered USB hub.	

# **A** Supplies and accessories

- Order parts, accessories, and supplies
- <u>Part numbers</u>

# Order parts, accessories, and supplies

Order supplies and paper	www.hp.com/go/suresupply
Order genuine HP parts or accessories	www.hp.com/buy/parts
Order through service or support providers	Contact an HP-authorized service or support provider.
Order using HP software	Embedded Web server sections on page 56

# **Part numbers**

The following list of accessories was current at the time of printing. Ordering information and availability of the accessories might change during the life of the product.

# **Paper-handling accessories**

ltem	Description	Part number
Pickup roller	Pickup roller for main-input tray	RL1-1497-000CN
Separation pad assembly	Separation pad for main-input tray	RM1-4227-000CN

# **Print cartridges**

ltem	Description	Part number
HP LaserJet print cartridge	Standard-black print cartridge	See one the following items to determine the print cartridge part number.
		• The print cartridge
		• The supplies status page
		• The help navigation page
		<ul> <li>On the embedded Web server page Information tab, click the Supplies Status link, or the Supplies Detail button</li> </ul>
		• Go to <u>www.hp.com/post-embed/</u> ordersupplies-na

# **Cables and interfaces**

ltem	Description	Part number
USB cable	2-meter A-to-B cable	8121-0868

# **B** Service and support

- Hewlett-Packard limited warranty statement
- HP's Premium Protection Warranty: LaserJet print cartridge limited warranty statement
- End User License Agreement
- Customer self-repair warranty service
- Customer support
- <u>Repack the product</u>

# Hewlett-Packard limited warranty statement

HP PRODUCT	DURATION OF LIMITED WARRANTY
HP LaserJet Professional P1566, P1606dn	One year from date of purchase

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.

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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 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.

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# HP's Premium Protection Warranty: LaserJet print cartridge limited warranty statement

This HP product is warranted to be free from defects in materials and workmanship.

This warranty does not apply to products 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.

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# **End User License Agreement**

PLEASE READ CAREFULLY BEFORE USING THIS SOFTWARE PRODUCT: This End-User License Agreement ("EULA") is a contract between (a) you (either an individual or the entity you represent) and (b) Hewlett-Packard Company ("HP") that governs your use of the software product ("Software"). This EULA does not apply if there is a separate license agreement between you and HP or its suppliers for the Software, including a license agreement in online documentation. The term "Software" may include (i) associated media, (ii) a user guide and other printed materials, and (iii) "online" or electronic documentation (collectively "User Documentation").

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#### 4. TRANSFER.

a. Third Party Transfer. The initial end user of the HP Software may make a one-time transfer of the HP Software to another end user. Any transfer will include all component parts, media, User Documentation, this EULA, and if applicable, the Certificate of Authenticity. The transfer may not be an indirect transfer, such as a consignment. Prior to the transfer, the end user receiving the transferred

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11. RESERVATION OF RIGHTS. HP and its suppliers reserve all rights not expressly granted to you in this EULA.

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Rev. 11/06

# **Customer self-repair warranty service**

HP products are designed with many Customer Self Repair (CSR) parts to minimize repair time and allow for greater flexibility in performing defective parts replacement. If during the diagnosis period, HP identifies that the repair can be accomplished by the use of a CSR part, HP will ship that part directly to you for replacement. There are two categories of CSR parts: 1) Parts for which customer self repair is mandatory. If you request HP to replace these parts, you will be charged for the travel and labor costs of this service. 2) Parts for which customer self repair is optional. These parts are also designed for Customer Self Repair. If, however, you require that HP replace them for you, this may be done at no additional charge under the type of warranty service designated for your product.

Based on availability and where geography permits, CSR parts will be shipped for next business day delivery. Same-day or four-hour delivery may be offered at an additional charge where geography permits. If assistance is required, you can call the HP Technical Support Center and a technician will help you over the phone. HP specifies in the materials shipped with a replacement CSR part whether a defective part must be returned to HP. In cases where it is required to return the defective part to HP, you must ship the defective part back to HP within a defined period of time, normally five (5) business days. The defective part must be returned with the associated documentation in the provided shipping material. Failure to return the defective part may result in HP billing you for the replacement. With a customer self repair, HP will pay all shipping and part return costs and determine the courier/carrier to be used.

# **Customer support**

Get telephone support for your country/region	Country/region phone numbers are on the flyer that was in the box with your product or at <a href="www.hp.com/support/">www.hp.com/support/</a> .		
Have the product name, serial number, date of purchase, and problem description ready.			
Get 24-hour Internet support	www.hp.com/support/ljp1560series or www.hp.com/ support/ljp1600series		
Get support for products used with a Macintosh computer	www.hp.com/go/macosx		
Download software utilities, drivers, and electronic information	www.hp.com/go/ljp1560series or www.hp.com/go/ ljp1600series		
Order additional HP service or maintenance agreements	www.hp.com/go/carepack		

# **Repack the product**

If HP Customer Care determines that your product needs to be returned to HP for repair, follow these steps to repack the product before shipping it.

**CAUTION:** Shipping damage as a result of inadequate packing is the customer's responsibility.

- 1. Remove and retain the print cartridge.
- **CAUTION:** It is *extremely important* to remove the print cartridge before shipping the product. A print cartridge that remains in the product during shipping can leak and cover the product engine and other parts with toner.

To prevent damage to the print cartridge, avoid touching the roller on it, and store the print cartridge in its original packing material or so that it is not exposed to light.

- 2. Remove and retain the power cable, interface cable, and optional accessories, such as an EIO card.
- 3. If possible, include print samples and 50 to 100 sheets of paper or other print media that did not print correctly.
- **4.** In the U.S., call HP Customer Care to request new packing material. In other areas, use the original packing material, if possible. Hewlett-Packard recommends insuring the equipment for shipment.

# **C** Specifications

- Physical specifications
- <u>Power consumption, electrical specifications, and acoustic emissions</u>
- Environmental specifications

# **Physical specifications**

#### Table C-1 Physical specifications<sup>1</sup>

Specification	HP LaserJet Professional P1560 printer series	HP LaserJet Professional P1600 printer series	
Product weight	5.9 kg (13.0 lb)	6.5 kg (14.3 lb)	
Product height	245 mm (9.65 in)	245 mm (9.65 in)	
Product depth minimum	239 mm (9.41 in)	280 mm (11.02 in)	
Product depth maximum	369 mm (14.53 in)	410 mm (16.14 in)	
Product width	382 mm (15.04 in)	382 mm (15.04 in)	

<sup>1</sup> Values are based on preliminary data. See <u>www.hp.com/support/lip1560series</u> or <u>www.hp.com/support/lip1600series</u>.

# Power consumption, electrical specifications, and acoustic emissions

See <u>www.hp.com/go/lip1560\_regulatory</u> or <u>www.hp.com/go/lip1600\_regulatory</u> for current information.

# **Environmental specifications**

#### Table C-2 Environmental specifications

	Operating <sup>1</sup>	Storage <sup>1</sup>	
Temperature	15° to 32.5°C (59° to 90.5°F)	-20° to 40°C (-4° to 104°F)	
Relative Humidity	10% to 80%	10% to 90%	

<sup>1</sup> Values are based on preliminary data. See <u>www.hp.com/support/lip1560series</u> or <u>www.hp.com/support/lip1600series</u>.

# **D** Regulatory information

- FCC regulations
- Environmental product stewardship program
- <u>Declaration of conformity</u>
- Safety statements

# **FCC** regulations

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

- Reorient or relocate the receiving antenna.
- Increase separation between equipment and receiver.
- Connect equipment to an outlet on a circuit different from that to which the receiver is located.
- Consult your dealer or an experienced radio/TV technician.

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

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

# **Environmental product stewardship program**

# **Protecting the environment**

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

## **Ozone production**

This product generates no appreciable ozone gas  $(O_3)$ .

## **Power consumption**

Power usage drops significantly while in Ready or Auto-Off mode, which saves natural resources and saves money without affecting the high performance of this product. Hewlett-Packard printing and imaging equipment marked with the ENERGY STAR<sup>®</sup> logo is qualified to the U.S. Environmental Protection Agency's ENERGY STAR specifications for imaging equipment. The following mark will appear on ENERGY STAR qualified imaging products:



Additional ENERGY STAR qualified imaging product model information is listed at:

www.hp.com/go/energystar

## **Toner consumption**

EconoMode uses less toner, which might extend the life of the print cartridge.

#### Paper use

This product's manual/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 HP LaserJet print cartridges after use—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 <a href="http://www.hp.com/recycle">http://www.hp.com/recycle</a>.

# **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 (more than one cartridge)

- 1. Package each HP LaserJet print cartridge in its original box and bag.
- Tape the boxes together using strapping or packaging tape. The package can weigh up to 31 kg (70 lb).
- 3. Use a single pre-paid shipping label.

#### OR

- 1. Use your own suitable box, or request a free bulk collection box from <u>www.hp.com/recycle</u> or 1-800-340-2445 (holds up to 31 kg (70 lb) of 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 <u>www.ups.com</u>. 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 <u>www.hp.com/recycle</u> or call 1-800-340-2445. Requested UPS pickup will be charged normal pickup rates. Information subject to change without notice.

#### **Residents of Alaska and Hawaii**

Do not use the UPS label. Call 1-800-340-2445 for information and instructions. The U.S. Postal Service provides no-cost cartridge return transportation services under an arrangement with HP for Alaska and Hawaii.

#### Non-U.S. 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 product supply item) or visit <u>www.hp.com/recycle</u>. 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 does not contain a battery.

# 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.

# **Chemical substances**

HP is committed to providing our customers with information about the chemical substances in our products as needed to comply with legal requirements such as REACH (Regulation EC No 1907/2006 of the European Parliament and the Council). A chemical information report for this product can be found at: <a href="http://www.hp.com/go/reach">www.hp.com/go/reach</a>.

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

Material Safety Data Sheets (MSDS) for supplies containing chemical substances (for example, toner) can be obtained by accessing the HP Web site at <a href="http://www.hp.com/go/msds">www.hp.com/go/msds</a> or <a href="http://www.hp.com/go/msds">www.hp.com/hpinfo/</a> 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 www.hp.com/go/environment or www.hp.com/hpinfo/globalcitizenship/environment.

# **Declaration of conformity**

according to ISO/IEC 17050-1 and EN 17050-1; DoC#: BOISB-0902-00-rel. 1.0			
Manufacturer's Name:	Hewlett-Packard Company		
Manufacturer's Address:	11311 Chinden Boulevard,		
	Boise, Idaho 83714-1021, USA		
declares, that the product			
Product Name:	HP LaserJet Professional P1566/P1606 printer series		
Regulatory Model: <sup>2)</sup>	BOISB-0902-00		
Product Options:	All		
Toner Cartridges:	CE278A		
conforms to the following Product Specifications:			
SAFETY: IEC 60950-1:2001 / EN60950-1: 2001 +A11			
IEC 60825-1:1993	+A1 +A2 / EN 60825-1:1994 +A1 +A2 (Class 1 Laser/LED Product)		
GB4943-2001			
EMC: CISPR22:2005 +A1	CISPR22:2005 +A1:2005 / EN55022:2006 +A1:2007 - Class B <sup>1)</sup>		
EN 61000-3-2:200	EN 61000-3-2:2006		
EN 61000-3-3:1995 +A1 +A2			
EN 55024:1998 +	A1 +A2		
FCC Title 47 CFR, Part 15 Class B / ICES-003, Issue 4			
GB9254-1998, GB	17625.1-2003		

#### **Supplementary Information:**

The product herewith complies with the requirements of the EMC Directive 2004/108/EC and the Low Voltage Directive 2006/95/EC, and carries the CE-Marking **C** 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, these products are assigned a Regulatory model number. This number should not be confused with the product name or the product number(s).

Boise, Idaho 83713, USA

#### March 2010

#### 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), <u>http://www.hp.com/</u> go/certificates

USA Contact Product Regulations Manager, Hewlett-Packard Company, PO Box 15, Mail Stop 160, Boise, ID 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 device 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 device is completely confined within protective housings and external covers, the laser beam cannot escape during any phase of normal user operation.

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

# **Canadian DOC regulations**

Complies with Canadian EMC Class B requirements.

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

# 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。
```

# **Power cord instructions**

Make sure your power source is adequate for the product voltage rating. The voltage rating is on the product label. The product uses either 110-127 Vac or 220-240 Vac and 50/60 Hz.

Connect the power cord between the product and a grounded AC outlet.

**CAUTION:** To prevent damage to the product, use only the power cord that is provided with the product.

# Power cord 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。

# EMC statement (Korea)

B급 기기	이 기기는 가정용(B급)으로 전자파적합등록을 한 기		
(가정용 방송통신기기)	기로서 주로 가정에서 사용하는 것을 목적으로 하		
	며, 모든 지역에서 사용할 수 있습니다.		

# Laser statement for Finland

#### Luokan 1 laserlaite

#### Klass 1 Laser Apparat

HP LaserJet Professional P1566, P1606dn, 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 LaserJet Professional P1566, P1606dn - 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.

## **GS** statement (Germany)

Das Gerät ist nicht für die Benutzung im unmittelbaren Gesichtsfeld am Bildschirmarbeitsplatz vorgesehen. Um störende Reflexionen am Bildschirmarbeitsplatz zu vermeiden, darf dieses Produkt nicht im unmittelbaren Gesichtsfeld platziert werden.

# Substances Table (China)

# 有毒有害物质表

根据中国电子信息产品污染控制管理办法的要求而出台

	有毒有害物质和元素					
	铅 (Pb)	汞	镉	六价铬	多溴联苯	多溴二苯醚
部件名称		(Hg)	(Cd)	(Cr(VI))	(PBB)	(PBDE)
打印引擎	Х	0	X	0	0	0
控制面板	0	0	0	0	0	0
塑料外壳	0	0	0	0	0	0
格式化板组件	Х	0	0	0	0	0
碳粉盒	Х	0	0	0	0	0

3685

0:表示在此部件所用的所有同类材料中,所含的此有毒或有害物质均低于 SJ/T11363-2006 的限制要求。

X:表示在此部件所用的所有同类材料中,至少一种所含的此有毒或有害物质高于 SJ/T11363-2006 的限制要求。

注:引用的"环保使用期限"是根据在正常温度和湿度条件下操作使用产品而确定的。

# **Restriction on Hazardous Substances statement (Turkey)**

Türkiye Cumhuriyeti: EEE Yönetmeliğine Uygundur

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