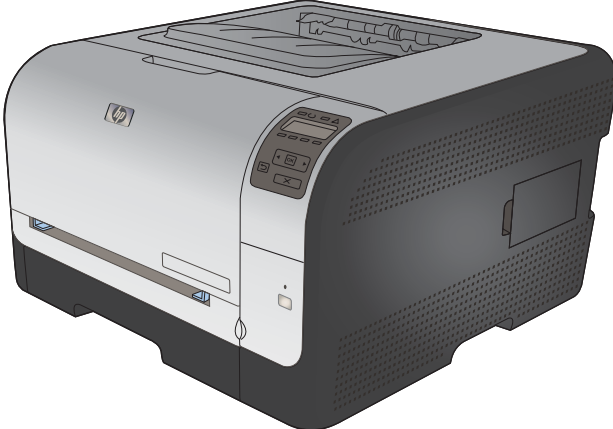




LASERJET PRO CP1520

COLOR PRINTER SERIES

User Guide





HP LaserJet Pro CP1520 color printer series

User Guide

Copyright and License

© 2010 Copyright Hewlett-Packard Development Company, L.P.

Reproduction, adaptation, or translation without prior written permission is prohibited, except as allowed under the copyright laws.

The information contained herein is subject to change without notice.

The only warranties for HP products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. HP shall not be liable for technical or editorial errors or omissions contained herein.

Edition 1, 9/2010

Part number: CE873-90901

Trademark Credits

Adobe®, Acrobat®, and PostScript® are trademarks of Adobe Systems Incorporated.

Intel® Core™ is a trademark of Intel Corporation in the U.S. and other countries.


Java™ is a US trademark of Sun Microsystems, Inc.


Microsoft®, Windows®, Windows® XP, and Windows Vista® are U.S. registered trademarks of Microsoft Corporation.


UNIX® is a registered trademark of The Open Group.

ENERGY STAR and the ENERGY STAR mark are registered U.S. marks.

Conventions used in this guide

 **TIP:** Tips provide helpful hints or shortcuts.

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

 **CAUTION:** Cautions indicate procedures that you should follow to avoid losing data or damaging the product.


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

Table of contents

1 Product basics	1
Product comparison	2
Environmental features	3
Accessibility features	3
Product views	4
Front view	4
Back view	5
Interface connections	5
Serial number and model number location	6
Control panel layout	7
2 Control panel menus	9
Reports menu	10
Quick Forms menu	11
System Setup menu	12
Service menu	15
Network Setup menu	16
3 Software for Windows	17
Supported operating systems for Windows	18
Supported printer drivers for Windows	18
Select the correct printer driver for Windows	18
Change print job settings	19
Change printer-driver settings for Windows	20
Change the settings for all print jobs until the software program is closed	20
Change the default settings for all print jobs	20
Change the product configuration settings	20
Remove software for Windows	21
Supported utilities for Windows	21
Other Windows components and utilities	22
Software for other operating systems	22

4 Use the product with Mac	23
Software for Mac	24
Supported operating systems for Mac	24
Supported printer drivers for Mac	24
Install software for Mac operating systems	24
Install software for Mac computers connected directly to the product	24
Install software for Mac computers on a wired network (IP)	25
Obtain the IP address	25
Install the software	25
Install software for Mac computers on a wireless network	26
Connect the product to a wireless network using WPS	26
Connect the product to a wireless network using WPS by using the control panel menus	26
Connect the product to a wireless network using a USB cable	26
Remove software from Mac operating systems	27
Change printer-driver settings for Mac	27
Software for Mac computers	27
HP Utility for Mac	27
Open the HP Utility	28
HP Utility features	28
Supported utilities for Macintosh	28
Print with Mac	29
Cancel a print job with Mac	29
Change the paper size and type with Mac	29
Create and use printing presets with Mac	29
Resize documents or print on a custom paper size with Mac	30
Print a cover page with Mac	30
Use watermarks with Mac	30
Print multiple pages on one sheet of paper with Mac	31
Print on both sides of the page (duplex printing) with Mac	31
Set the color options with Mac	32
Use the Services menu with Mac	32
5 Connect the product	33
Supported operating systems for networks	34
Printer sharing disclaimer	34
Connect with USB	34
CD installation	34
Connect to a network	35
Supported network protocols	35
Install the product on a wired network	35
Obtain the IP address	35
Install the software	36

Connect the product to a wireless network (wireless models only)	36
Connect the product to a wireless network using WPS	37
Connect the product to a wireless network using WPS by using the control panel menus	37
Connect the product to a wireless network using a USB cable	37
Install the software for a wireless product currently on the network	38
Disconnect from the wireless network	38
Reduce interference on a wireless network	38
Advanced wireless setup	39
Wireless communication modes	39
Wireless security	39
Connect the product to an ad-hoc wireless network	40
Configure IP network settings	40
View or change network settings	40
Set or change the product password	41
Manually configure IPv4 TCP/IP parameters from the control panel	41
Link speed and duplex settings	41
6 Paper and print media	43
Understand paper use	44
Special paper guidelines	44
Change the printer driver to match the paper type and size	45
Supported paper sizes	46
Supported paper types	47
Load paper trays	48
Load Tray 1	48
Load Tray 2	48
Configure trays	51
7 Print tasks	53
Cancel a print job	54
Basic print tasks with Windows	55
Open the printer driver with Windows	55
Get help for any printing option with Windows	55
Change the number of print copies with Windows	56
Save custom print settings for reuse with Windows	56
Use a printing shortcut with Windows	56
Create printing shortcuts	57
Improve print quality with Windows	59
Select the page size with Windows	59
Select a custom page size with Windows	60
Select the paper type with Windows	60
Select the paper tray with Windows	60

Print on both sides (duplex) with Windows	61
Print multiple pages per sheet with Windows	63
Select page orientation with Windows	64
Set color options with Windows	66
Additional print tasks with Windows	67
Print colored text as black (grayscale) with Windows	67
Print on preprinted letterhead or forms with Windows	67
Print on special paper, labels, or transparencies	69
Print the first or last page on different paper with Windows	72
Scale a document to fit page size	74
Add a watermark to a document with Windows	76
Create a booklet with Windows	76

8 Color 79

Adjust color	80
Change the color theme for a print job	80
Change the color options	80
Manual color options	81
Use the HP EasyColor option for Windows	82
Match colors	83

9 Manage and maintain 85

Print information pages	86
Use HP ToolboxFX	88
View the HP ToolboxFX	88
HP ToolboxFX sections	89
Status	89
Event log	89
Help	89
System Settings	89
Device Information	90
Paper Setup	91
Print Quality	91
Print Density	91
Paper Types	92
System Setup	93
Print Settings	93
Printing	93
PCL5c	93
PostScript	93
Network Settings	93
Shop for Supplies	93
Other Links	93

Use the HP Embedded Web Server	94
Open the HP Embedded Web Server	94
HP Embedded Web Server features	95
Status tab	95
System tab	95
Print tab	96
Networking tab	96
Use HP Web Jetadmin software	97
Product security features	97
Assign a system password	97
Economy settings	98
Powersave modes	98
Set sleep delay mode	98
Archive print	98
Manage supplies and accessories	98
Print when a print cartridge reaches estimated end of life	98
Supplies messages	98
Enable or disable the At Very Low settings from the control panel	99
Manage print cartridges	99
Print-cartridge storage	99
HP policy on non-HP print cartridges	99
HP fraud hotline and Web site	99
Recycle supplies	100
Print cartridge layout	100
Replacement instructions	101
Replace print cartridges	101
Install memory DIMMs	105
Install memory DIMMs	105
Enable memory	107
Check DIMM installation	108
Memory allocation	108
Clean the product	110
Product updates	110
10 Solve problems	111
Self help	112
Solve problems checklist	113
Factors that affect product performance	115
Restore factory-settings	116
Interpret control panel messages	117
Control panel message types	117
Control panel messages	117
Paper feeds incorrectly or becomes jammed	125

The product does not pick up paper	125
The product picks up multiple sheets of paper	125
Prevent paper jams	125
Clear jams	126
Jam locations	126
Jam in Tray 1	127
Jam in Tray 2	129
Jam in the fuser area	130
Jam in the output bin	131
Solve image quality problems	132
Use the correct paper type setting in the printer driver	132
Change the paper type setting for Windows	132
Change the paper type setting for Mac	132
Adjust color settings in the printer driver	133
Change the color theme for a print job	133
Change the color options	133
Use paper that meets HP specifications	134
Print a cleaning page	135
Calibrate the product to align the colors	135
Check the print cartridges	135
Print the Supplies Status page	136
Interpret the Print Quality Page	137
Inspect the print cartridge for damage	137
Repeating defects	138
Use the printer driver that best meets your printing needs	138
The product does not print or it prints slowly	140
The product does not print	140
The product prints slowly	140
Solve connectivity problems	141
Solve direct-connect problems	141
Solve network problems	141
Poor physical connection	141
The computer is using the incorrect IP address for the product	141
The computer is unable to communicate with the product	142
The product is using incorrect link and duplex settings for the network	142
New software programs might be causing compatibility problems	142
The computer or workstation might be set up incorrectly	142
The product is disabled, or other network settings are incorrect	142
Solve wireless network problems	143
Wireless connectivity checklist	143
The control panel displays the message: The wireless feature on this product has been turned off	144
The product does not print after the wireless configuration completes	144
The product does not print, and the computer has a third-party firewall installed	144

The wireless connection does not work after moving the wireless router or product	144
Cannot connect more computers to the wireless product	145
The wireless product loses communication when connected to a VPN	145
The network does not appear in the wireless networks list	145
The wireless network is not functioning	146
Solve product software problems	147
Product software problems	147
Solve common Mac problems	148
The printer driver is not listed in the Print & Fax list	148
The product name does not appear in the product list in the Print & Fax list	148
The printer driver does not automatically set up the selected product in the Print & Fax list	148
A print job was not sent to the product that you wanted	148
When connected with a USB cable, the product does not appear in the Print & Fax list after the driver is selected.	149
You are using a generic printer driver when using a USB connection	149
Appendix A Supplies and accessories	151
Order parts, accessories, and supplies	152
Part numbers	152
Print cartridges	152
Cables and interfaces	152
Appendix B Service and support	153
Hewlett-Packard limited warranty statement	154
HP's Premium Protection Warranty: LaserJet print cartridge limited warranty statement	155
Data stored on the print cartridge	156
End User License Agreement	157
OpenSSL	159
Customer support	160
Repack the product	161
Appendix C Product specifications	163
Physical specifications	164
Power consumption, electrical specifications, and acoustic emissions	164
Environmental specifications	164
Appendix D Regulatory information	165
FCC regulations	166
Environmental product stewardship program	167
Protecting the environment	167
Ozone production	167

Power consumption	167
Paper use	167
Plastics	167
HP LaserJet print supplies	167
Return and recycling instructions	168
United States and Puerto Rico	168
Multiple returns (more than one cartridge)	168
Single returns	168
Shipping	168
Non-U.S. returns	168
Paper	169
Material restrictions	169
Disposal of waste equipment by users in private households in the European Union	169
Chemical substances	169
Material Safety Data Sheet (MSDS)	169
For more information	170
Declaration of conformity	171
Declaration of Conformity (wireless models)	173
Safety statements	175
Laser safety	175
Canadian DOC regulations	175
VCCI statement (Japan)	175
Power cord instructions	175
Power cord statement (Japan)	175
EMC statement (Korea)	176
Laser statement for Finland	176
GS statement (Germany)	177
Substances Table (China)	177
Restriction on Hazardous Substances statement (Turkey)	177
Additional statements for wireless products	178
FCC compliance statement—United States	178
Australia statement	178
Brazil ANATEL statement	178
Canadian statements	178
European Union regulatory notice	178
Notice for use in France	179
Notice for use in Russia	179
Korean statement	179
Taiwan statement	179
Index	181

1 Product basics

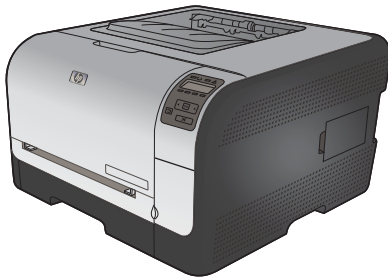
- [Product comparison](#)
- [Environmental features](#)
- [Accessibility features](#)
- [Product views](#)

Product comparison

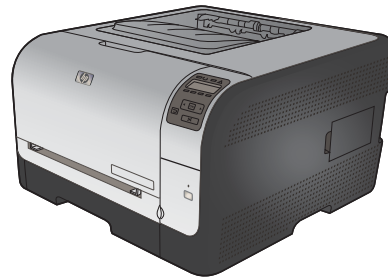
HP LaserJet Pro CP1520 color printer series

- Prints up to 12 pages per minute (ppm) on A4-size paper in monochrome (black and white), and 8 ppm in color
- Single-sheet priority feed slot (Tray 1) and 150-sheet cassette (Tray 2)
- Hi-Speed universal serial bus (USB) 2.0 port
- Built-in networking to connect to 10Base-T/100Base-TX networks

The product is available in the following configurations.



HP Color LaserJet CP1525n CE874A



HP Color LaserJet CP1525nw CE875A

- Prints up to 12 pages per minute (ppm) on A4-size paper in monochrome (black and white), and 8 ppm in color
 - Single-sheet priority feed slot (Tray 1) and 150-sheet cassette (Tray 2)
 - Hi-Speed universal serial bus (USB) 2.0 port
 - Built-in networking to connect to 10Base-T/100Base-TX networks
 - 64-megabyte (MB) random-access memory (RAM) expandable to 320-megabyte.
- HP Color LaserJet CP1525n, plus:
- 802.11b/g/n wireless support capability

Environmental features

Manual duplex printing	Save paper by using the manual duplex printing option.
Print multiple pages per sheet	Save paper by printing two or more pages of a document side-by-side on one sheet of paper. Access this feature through the printer driver.
Recycling	Reduce waste by using recycled paper. Recycle print cartridges by using the HP return process.
Energy savings	Instant on Fusing technology and sleep mode enable this product to quickly go into reduced power states when not printing, thus saving energy.

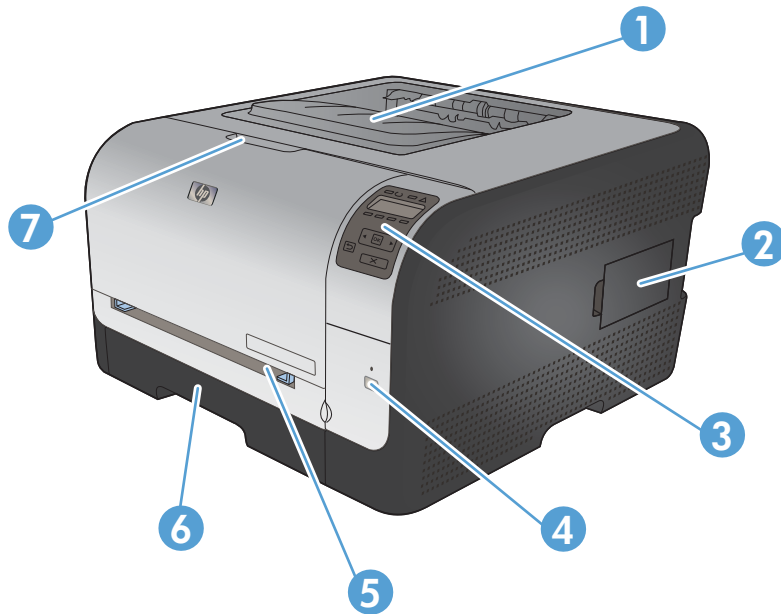
Accessibility features

The product includes several features that aid users with accessibility issues.

- Online user guide that is compatible with text screen-readers.
- Print cartridges can be installed and removed by using one hand.
- All doors and covers can be opened by using one hand.

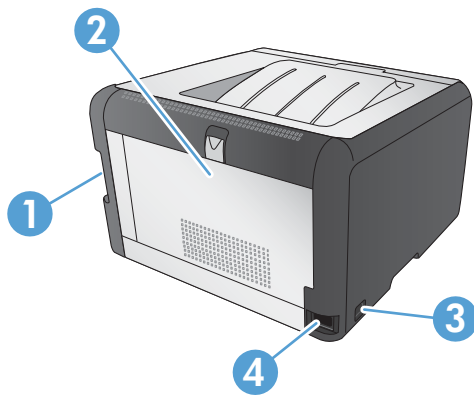
Product views

Front view



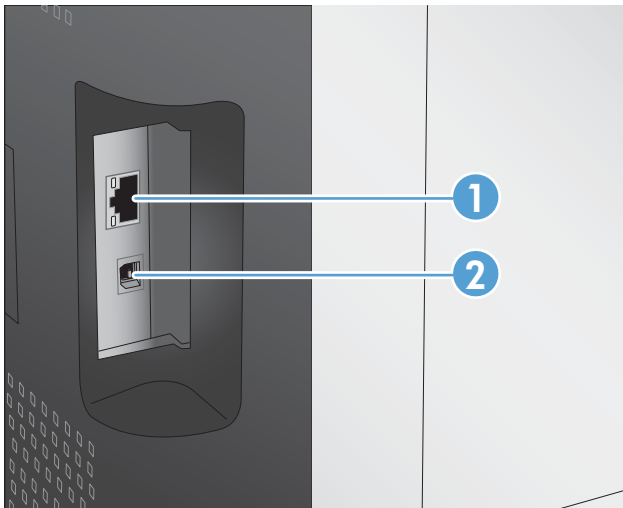
1	Output bin (holds 125 sheets of standard paper)
2	Dual inline memory module (DIMM) door (for adding more memory)
3	Control panel
4	Wireless button and light (wireless model only)
5	Tray 1 -- single-sheet priority feed slot and jam-access door
6	Tray 2 -- 150 sheet cassette
7	Front door (provides access to the print cartridges)

Back view



1	Hi-Speed USB 2.0 port and network port
2	Rear door (for jam access)
3	Power switch
4	Power connection

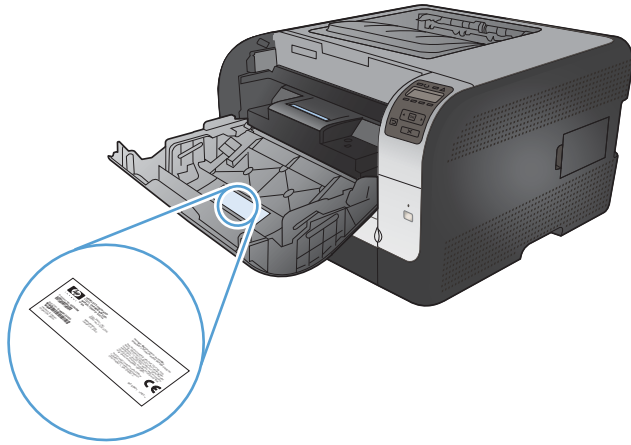
Interface connections



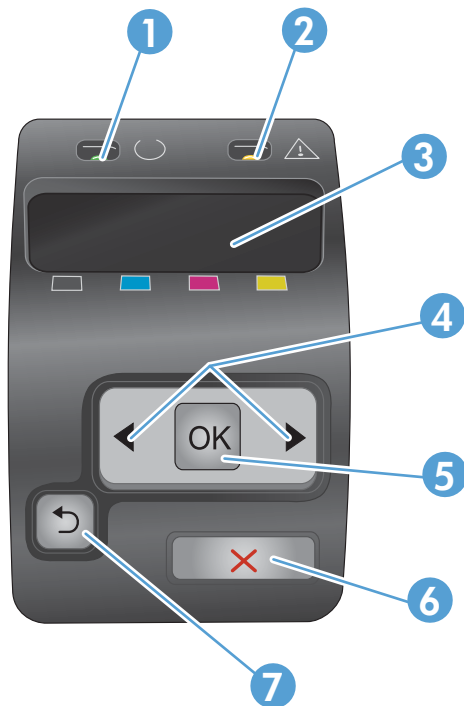
1	Network port (top)
2	USB port (bottom)

Serial number and model number location

The serial number and product model number label is on the inside of the front door.



Control panel layout



1	<p>Ready light (green): The Ready light is on when the product is ready to print. It blinks when the product is receiving print data.</p>
2	<p>Attention light (amber): The Attention light blinks when a print cartridge is empty or the product requires user attention.</p> <p>NOTE: The Attention light does <i>not</i> blink if more than one print cartridge is empty.</p>
3	<p>Control panel display: The display provides information about the product. Use the menus on the display to establish product settings.</p>
4	<p>Right arrow ▶ and Left arrow ◀ buttons: Use these buttons to navigate through the menus or to increase or decrease a value that appears on the display.</p>
5	<p>OK button: Press the OK button for the following actions:</p> <ul style="list-style-type: none"> • Open the control panel menus. • Open a submenu displayed on the control panel display. • Select a menu item. • Clear some errors. • Begin a print job in response to a control panel prompt (for example, when the message [OK] to print appears on the control panel display).
6	<p>Cancel X button: Press this button to cancel a print job whenever the attention light is blinking or to exit the control panel menus.</p>
7	<p>Back arrow ↶ button: Press this button for the following actions:</p> <ul style="list-style-type: none"> • Exit the control panel menus. • Scroll back to a previous menu in a submenu list. • Scroll back to a previous menu item in a submenu list (without saving changes to the menu item).

2 Control panel menus

- [Reports menu](#)
- [Quick Forms menu](#)
- [System Setup menu](#)
- [Service menu](#)
- [Network Setup menu](#)

Reports menu

Use the **Reports** menu to print reports that provide information about the product.

Menu item	Description
Demo page	Prints a color page that demonstrates print quality.
Menu structure	Prints a map of the control panel-menu layout. The active settings for each menu are listed.
Config report	Prints a list of all the product settings. Includes network information when the product is connected to a network.
Supplies status	Prints the status for each print cartridge, including the following information: <ul style="list-style-type: none">• Estimated percentage of cartridge life remaining• Approximate pages remaining• Part numbers for HP print cartridges• Number of pages printed• Information about ordering new HP print cartridges and recycling used HP print cartridges
Network Summary	Prints a list of all product network settings
Usage page	Prints a page that lists PCL pages, PCL 6 pages, PS pages, pages that were jammed or mispicked in the product, monochrome (black and white) or color pages; and reports the page count HP Color LaserJet CP1525nw only: prints a page that lists the information above, and the monochrome (black and white) or color pages printed, number of memory cards inserted, number of PictBridge connections, and the PictBridge page count
PCL font list	Prints a list of all the PCL fonts that are installed.
PS font list	Prints a list of all the PostScript (PS) fonts that are installed
PCL6 font list	Prints a list of all the PCL6 fonts that are installed
Color usage log	Prints a report that shows the user name, application name, and color usage information on a job-by-job basis
Service page	Prints the service report
Diagnostics page	Prints the calibration and color diagnostics pages
Print Quality	Prints a color test page which can be useful for diagnosing print quality defects.

Quick Forms menu

Menu item	Sub-menu item	Description
Notebook Paper	Narrow Rule	Prints pages that have preprinted lines
	Wide Rule	
	Child Rule	
Graph Paper	1/8 inch	Prints pages that have preprinted graph lines
	5 mm	
Checklist	1-Column	Prints pages that have preprinted lines with check boxes
	2-Column	
Music Paper	Portrait	Prints pages that have preprinted lines for writing music
	Landscape	

System Setup menu

In the following table, items that have asterisks (*) indicate the factory default setting.

Menu item	Sub-menu item	Sub-menu item	Description
Language			Select the language for the control panel display messages and the product reports.
Paper Setup	Def. paper size	Letter	Select the size for printing internal reports or any print job that does not specify a size.
		A4	
		Legal	
	Def. paper type	A list of available paper types appears.	Select the paper type for printing internal reports or any print job that does not specify a type.
	Tray 2	Paper type Paper size	Select the default size and type for Tray 2 from the list of available sizes and types.
	Paper out action	Wait forever* Cancel Override	<p>Select how the product should react when a print job requires a size or type that is not available or when a specified tray is empty.</p> <p>Select the Wait forever option to make the product wait until you load the correct paper and press the OK button. This is the default setting.</p> <p>Select the Override option to print on a different size or type after a specified delay.</p> <p>Select the Cancel option to automatically cancel the print job after a specified delay.</p> <p>If you select either the Override or Cancel options, the control panel prompts you to specify the number of seconds to delay. Press the Right arrow ► button to increase the time, up to 3600 seconds. Press the Left arrow ◀ button to decrease the time.</p>
Print quality	Calibrate color	After power on Calibrate now	<p>After power on: Select how soon the product should calibrate after you turn it on. The default setting is 15 minutes.</p> <p>Calibrate now: Makes the product perform a calibration immediately. If a job is processing, the product calibrates after the job is complete. If an error message displays, you must clear the error first.</p>

Menu item	Sub-menu item	Sub-menu item	Description
PowerSave Time	Sleep Delay	15 minutes*	Sets how long the product remains idle before it enters PowerSave mode. The product automatically exits PowerSave mode when you send a print job or press a control panel button.
		30 Minutes	
		1 Hour	
		2 Hours	
		Off	
		1 Minute	
Display contrast	Medium*		Select the level of contrast for the display.
	Darker		
	Darkest		
	Lightest		
	Lighter		
At Very Low	Black Cartridge	Stop	Set how the product behaves when the black print cartridge reaches the very low threshold. <ul style="list-style-type: none"> • Stop: The product stops printing until you replace the print cartridge. • Prompt: The product stops printing and prompts you to replace the print cartridge. You can acknowledge the prompt and continue printing. • Continue: The product alerts you that the print cartridge is very low, but it continues printing.
		Prompt*	
		Continue	
	Color Cartridges	Stop	Set how the product behaves when the one of the color print cartridges reaches the very low threshold. <ul style="list-style-type: none"> • Stop: The product stops printing until you replace the print cartridge. • Prompt: The product stops printing and prompts you to replace the print cartridge. You can acknowledge the prompt and continue printing. • Continue: The product alerts you that the print cartridge is very low, but it continues printing. • Print Black: The product alerts you that the print cartridge is very low, but it continues printing in black only. To configure the product to print in color and use the remaining
	Prompt*		
	Continue		
	Print Black		

Menu item	Sub-menu item	Sub-menu item	Description
			<p>toner in the print cartridge past very low, follow these steps:</p> <ol style="list-style-type: none"> 1. On the product control panel, touch the OK button, and then touch the System Setup button. 2. Touch the At Very Low button, and then touch the Color Cartridges button. Touch the Continue button. <p>When you choose to replace the very low print cartridge, color printing resumes automatically.</p>
User-Defined Low	Black		Type the percentage of life estimated life remaining at which the product alerts you that the print cartridge is low.
	Cyan		
	Magenta		
	Yellow		
Courier font	Regular		Selects a version of the Courier font. The default is Regular .
	Dark		

Service menu

Use this menu to restore default settings, clean the product, and activate special modes that affect print output. Items that have asterisks (*) indicate the factory default setting.

Menu item	Sub-menu item	Description
Cleaning Page		<p>Use this option to clean the product if you see toner specks or other marks on the printed output. The cleaning process removes dust and excess toner from the paper path.</p> <p>When you select this item, the product prompts you to load plain paper in Tray 1 and then press OK to start the cleaning process. Wait until the process is complete. Discard the page that prints.</p>
USB Speed	High* Full	<p>Sets the USB speed to High or Full. For the product to actually operate at high speed, it must have high speed enabled and be connected to an EHCI host controller that is also operating at high speed. This menu item also does not reflect the current operating speed of the product.</p>
Less paper curl	On Off*	<p>If printed pages are consistently curled, use this option to set the product to a mode that reduces curl.</p>
Archive print	On Off*	<p>If you are printing pages that will be stored for a long time, use this option to set the product to a mode that reduces toner smearing and dusting.</p>
Firmware Date		<p>Displays the current firmware datecode.</p>
Restore defaults		<p>Sets all customized copy settings to the factory default values.</p>

Network Setup menu

Use this menu to establish network configuration settings.

Menu item	Sub-menu item	Description
Wireless Menu (wireless products only)	WPS Setup	If your wireless router supports this feature, use this method to set up the product on a wireless network. This is the simplest method.
	Run Network Test	Tests the wireless network and prints a report with the results.
	Turn Wireless On/Off	Enable or disable the wireless network feature.
TCP IP config	Automatic	Select Automatic to automatically configure all the TCP/IP settings.
	Manual	Select Manual to manually configure the IP address, subnet mask, and default gateway. The default setting is Automatic .
Auto Crossover	On	This item is used when you are connecting the product directly to a personal computer using an Ethernet cable (you might have to set this to On or Off depending on the computer being used). The default setting is On .
	Off	
Network services	IPv4	This item is used by the network administrator to limit the network services available on this product. On Off The default setting is On .
	IPv6	
Show IP Address	No	No: The product IP address will not appear on the control panel display. Yes: The product IP address will appear on the control panel display. The default setting is No .
	Yes	
Link Speed	Automatic (Default)	Sets the link speed manually if needed.
	10T Full	After setting the link speed, the product automatically restarts.
	10T Half	
	100TX Full	
	100TX Half	
Restore defaults	Press OK to restore the network configuration settings to the default values.	

3 Software for Windows

- [Supported operating systems for Windows](#)
- [Supported printer drivers for Windows](#)
- [Select the correct printer driver for Windows](#)
- [Change print job settings](#)
- [Change printer-driver settings for Windows](#)
- [Remove software for Windows](#)
- [Supported utilities for Windows](#)
- [Other Windows components and utilities](#)
- [Software for other operating systems](#)

Supported operating systems for Windows

The product supports the following Windows operating systems:

- Windows XP (32-bit, Service Pack 2)
- Windows Server 2003 (32-bit, Service Pack 3)
- Windows Server 2008 (32-bit and 64-bit)
- Windows Vista (32-bit and 64-bit)
- Windows 7 (32-bit and 64-bit)

Supported printer drivers for Windows

- HP PCL 6 (this is the default printer driver)
- HP Universal Print Driver for Windows Postscript
- HP Universal Print Driver for PCL 5

The printer drivers include online Help that has instructions for common printing tasks and also describes the buttons, checkboxes, and drop-down lists that are in the printer driver.

 **NOTE:** For more information about the universal print driver (UPD), see www.hp.com/go/upd.

Select the correct printer driver for Windows

Printer drivers provide access to the product features and allow the computer to communicate with the product (using a printer language). Check the installation notes and readme files on the product CD for additional software and languages.

HP PCL 6 driver description

- Installs from the Add Printer wizard
- Provided as the default driver
- Recommended for printing in all supported Windows environments
- Provides the overall best speed, print quality, and product-feature support for most users
- Developed to align with the Windows Graphic Device Interface (GDI) for the best speed in Windows environments
- Might not be fully compatible with third-party and custom software programs that are based on PCL 5

HP UPD PS driver description

- Available for download from the Web at www.hp.com/support/ljcp1520series
- Recommended for printing with Adobe® software programs or with other highly graphics-intensive software programs
- Provides support for printing from postscript emulation needs, or for postscript flash font support

HP UPD PCL 5 driver description

- Available for download from the Web at www.hp.com/support/ljcp1520series
- Compatible with previous PCL versions and older HP LaserJet products
- The best choice for printing from third-party or custom software programs
- Designed for use in corporate Windows environments to provide a single driver for use with multiple printer models
- Preferred when printing to multiple printer models from a mobile Windows computer

Change print job settings

Tool for changing the settings	Method for changing the settings	Duration of changes	Hierarchy of changes
Software program settings	On the File menu in the software program, click Page Setup or a similar command.	These settings are in effect for the current print job only.	Settings changed here override settings changed anywhere else.
Printer Properties in the software program	<p>The steps vary for each software program. This procedure is most common.</p> <ol style="list-style-type: none">1. On the File menu in the software program, click Print.2. Select the product, and then click Properties or Preferences.3. Change the settings on any of the tabs.	These settings are in effect for the current session of the software program.	Settings changed here override default printer driver settings and default product settings.
Default printer driver settings	<ol style="list-style-type: none">1. Open the list of printers on your computer, and select this product. NOTE: This step varies for each operating system.2. Click Printer, and then click Printing Preferences.3. Change the settings on any of the tabs.	<p>These settings remain in effect until you change them again.</p> <p>NOTE: This method changes the default settings for the printer driver for all software programs.</p>	You can override these settings by changing settings in the software program.
Default product settings	Change product settings on the control panel, or in the product management software that came with your product.	These settings remain in effect until you change them again.	You can override these settings by making changes with any other tool.

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**.

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

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

Windows 7: Click **Start**, and then click **Devices and Printers**.

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**.

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

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

Windows 7: Click **Start**, and then click **Devices and Printers**.

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

Remove software for Windows

Windows XP

1. Click **Start**, and then click **Programs**.
2. Click **HP**, and then click the product name.
3. Click **Uninstall**, and then follow the onscreen instructions to remove the software.

Windows Vista and Windows 7

1. Click **Start**, and then click **All Programs**.
2. Click **HP**, and then click the product name.
3. Click **Uninstall**, and then follow the onscreen instructions to remove the software.

Supported utilities for Windows

- HP Web Jetadmin
- HP Embedded Web Server (The HP EWS is only accessible when the device is network connected, not when the device is connected via USB.)
- HP ToolboxFX

Other Windows components and utilities

- Software installer — automates the printing system installation
- Online Web registration

Software for other operating systems

OS	Software
UNIX	For HP-UX and Solaris networks, go to www.hp.com/support/net_printing to download the HP Jetdirect printer installer for UNIX.
Linux	For information, go to www.hp.com/go/linuxprinting .

4 Use the product with Mac


- [Software for Mac](#)
- [Print with Mac](#)

Software for Mac

Supported operating systems for Mac

The product supports the following Mac operating systems:

- Mac OS X 10.5, 10.6, and later

 **NOTE:** For Mac OS X 10.5 and later, PPC and Intel® Core™ Processor Macs are supported. For Mac OS X 10.6, Intel Core Processor Macs are supported.

Supported printer drivers for Mac

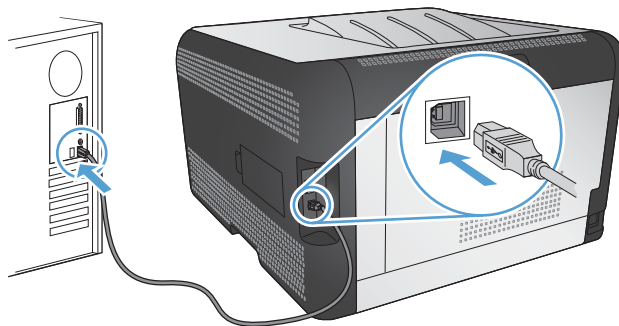
The HP LaserJet software installer provides PostScript® Printer Description (PPD) files, and Printer Dialog Extensions (PDEs) for use with Mac OS X computers. The HP printer PPD and PDE files, in combination with the built-in Apple PostScript printer drivers, provide full printing functionality and access to specific HP printer features.

Install software for Mac operating systems

Install software for Mac computers connected directly to the product

This product supports a USB 2.0 connection. Use an A-to-B type USB cable. HP recommends using a cable that is no longer than 2 m (6.5 ft).

1. Connect the USB cable to the product and the computer.

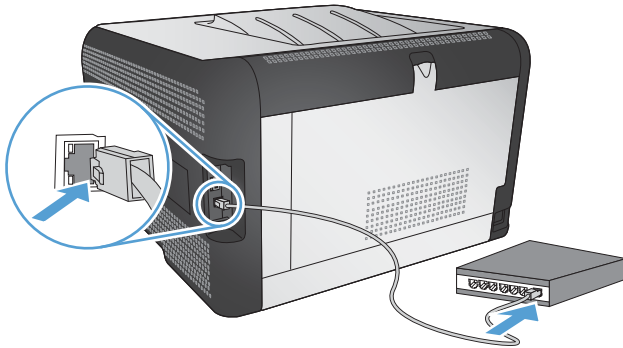


2. Install the software from the CD.
3. Click HP Installer icon, and follow the onscreen instructions.
4. On the Congratulations screen, click the **OK** button.
5. Print a page from any program to make sure that the printing software is correctly installed.

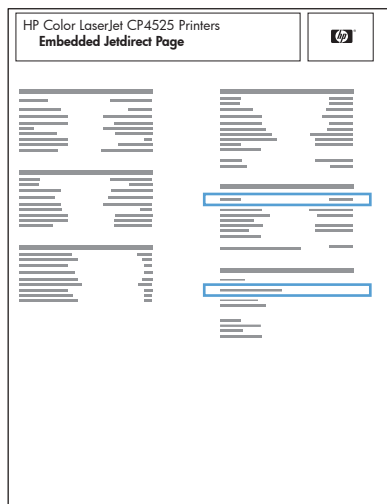
Install software for Mac computers on a wired network (IP)

Obtain the IP address

1. Connect the network cable to the product and to the network.



2. Wait for 60 seconds before continuing. During this time, the network recognizes the product and assigns an IP address or host name for the product.
3. At the product control panel, press the **OK** button.
4. Press the right arrow ► to highlight the **Reports** menu, and then press the **OK** button.
5. Press the right arrow ► to highlight the **Config report** option, and then press the **OK** button.
6. Find the IP address on the Self Test/Configuration page.



Install the software

1. Quit all programs on the computer.
2. Install the software from the CD.
3. Click the HP Installer icon, and follow the onscreen instructions.
4. On the Congratulations screen, click the **OK** button.
5. Print a page from any program to make sure that the printing software is correctly installed.

Install software for Mac computers on a wireless network


Before installing the product software, make sure the product is not connected to the network using a network cable.


If your wireless router does not support Wi-Fi Protected Setup (WPS), obtain the wireless router network settings from your system administrator, or complete the following tasks:

- Obtain the wireless network name or service set identifier (SSID).
- Determine the security password or encryption key for the wireless network.

Connect the product to a wireless network using WPS

If your wireless router supports Wi-Fi Protected Setup (WPS), this is the simplest way to set up the product on a wireless network.

1. Press the WPS button on your wireless router.
2. Press and hold the Wireless  button on the product control panel for two seconds. Release the button when the wireless light starts blinking.
3. Wait up to two minutes while the product establishes a network connection with the wireless router.

 **NOTE:** If this method is not successful, try using the wireless network using USB cable method.

Connect the product to a wireless network using WPS by using the control panel menus

If your wireless router supports Wi-Fi Protected Setup (WPS), this is the simplest way to set up the product on a wireless network.

1. On the front of the product, press the Wireless button. Look at the control panel display to see if the **Wireless Menu** item has opened. If it has not opened, complete these steps:
 - a. On the control panel, press the **OK** button, and select the **Network Setup** menu.
 - b. Select the **Wireless Menu** item.
2. Select the **Wi-Fi Protected Setup** item.
3. Use one of these methods to complete the setup:
 - **Pushbutton:** Select the **Pushbutton** option and follow the instructions on the control panel. Establishing the wireless connection can take a few minutes.
 - **PIN:** Select the **Generate PIN** option. The product generates a unique PIN, which you must type into the wireless router's setup screen. Establishing the wireless connection can take a few minutes.

 **NOTE:** If this method is not successful, try using the wireless network using a USB cable method.

Connect the product to a wireless network using a USB cable

If your wireless router does not support WiFi-Protected Setup (WPS), use this method to set up the product on a wireless network. Using a USB cable to transfer settings makes setting up a wireless

connection easier. After the setup is complete, you can disconnect the USB cable and use the wireless connection.

1. Insert the software CD into the computer CD tray.
2. Follow the on-screen instructions. When prompted, select the **Connect through a wireless network** option. Connect the USB cable to the product when prompted.

△ **CAUTION:** Do not connect the USB cable until the installation program prompts you.


3. When the installation is complete, print a configuration page to make sure that the product has a SSID name.
4. When installation is complete, disconnect the USB cable.

Remove software from Mac operating systems

You must have administrator rights to remove the software.

1. Open **Applications**.
2. Select **Hewlett Packard**.
3. Select **HP Uninstaller**.
4. Select the product from the list of devices, and then click the **Uninstall** button.

Change printer-driver settings for Mac

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
<ol style="list-style-type: none">1. On the File menu, click the Print button.2. Change the settings that you want on the various menus.	<ol style="list-style-type: none">1. On the File menu, click the Print button.2. Change the settings that you want on the various menus.3. On the Presets menu, click the Save As... option and type a name for the preset. <p>These settings are saved in the Presets menu. To use the new settings, you must select the saved preset option every time you open a program and print.</p>	<p>Mac OS X 10.5 and 10.6</p> <ol style="list-style-type: none">1. From the Apple menu , click the System Preferences menu and then click the Print & Fax icon.2. Select the product in the left side of the window.3. Click the Options & Supplies button.4. Click the Driver tab.5. Configure the installed options.

Software for Mac computers

HP Utility for Mac

Use the HP Utility to set up product features that are not available in the printer driver.

You can use the HP Utility when the product uses a universal serial bus (USB) cable or is connected to a TCP/IP-based network.

Open the HP Utility

- From the dock, click **HP Utility**.

-or-

From **Applications**, click **Hewlett Packard**, and then click **HP Utility**.

HP Utility features

Use the HP Utility software to perform the following tasks:


- Obtain information about supplies status.
- Obtain information about the product, such as the firmware version and the serial number.
- Print a configuration page.
- For products connected to an IP-based network, obtain network information and open the HP Embedded Web Server.
- Configure the paper type and size for the tray.
- Transfer files and fonts from the computer to the product.
- Update the product firmware.
- Display the color usage page.




Supported utilities for Macintosh

- Embedded Web Server

Print with Mac

Cancel a print job with Mac

1. If the print job is currently printing, cancel it by pressing the Cancel  button on the product control panel.

 **NOTE:** Pressing the Cancel  button clears the job that the product is currently processing. If more than one process is running, pressing the Cancel  button clears the process that currently appears on the product control panel.

2. You can also cancel a print job from a software program or a print queue.
 - **Software program:** Typically, a dialog box appears briefly on the computer screen, allowing you to cancel the print job.
 - **Print queue:** Open the print queue by double-clicking the product icon in the dock. Highlight the print job, and then click **Delete**.

Change the paper size and type with Mac

1. On the **File** menu in the software program, click the **Print** option.
2. In the **Copies & Pages** menu, click the **Page Setup** button.
3. Select a size from the **Paper Size** drop-down list, and then click the **OK** button.
4. Open the **Finishing** menu.
5. Select a type from the **Media-type** drop-down list.
6. Click the **Print** button.

Create and use printing presets with Mac


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

Create a printing preset

1. On the **File** menu, click the **Print** option.
2. Select the driver.
3. Select the print settings that you want to save for reuse.
4. In the **Presets** menu, click the **Save As...** option, and type a name for the preset.
5. Click the **OK** button.

Use printing presets

1. On the **File** menu, click the **Print** option.
2. Select the driver.
3. In the **Presets** menu, select the printing preset.

 **NOTE:** To use printer-driver default settings, select the **standard** option.

Resize documents or print on a custom paper size with Mac

Mac OS X 10.5 and 10.6

Use one of these methods.

1. On the **File** menu, click the **Print** option.
 2. Click the **Page Setup** button.
 3. Select the product, and then select the correct settings for the **Paper Size** and **Orientation** options.
-

1. On the **File** menu, click the **Print** option.
 2. Open the **Paper Handling** menu.
 3. In the **Destination Paper Size** area, click the **Scale to fit paper size** box, and then select the size from the drop-down list.
-

Print a cover page with Mac

1. On the **File** menu, click the **Print** option.
2. Select the driver.
3. Open the **Cover Page** menu, and then select where to print the cover page. Click either the **Before Document** button or the **After Document** button.
4. In the **Cover Page Type** menu, select the message that you want to print on the cover page.

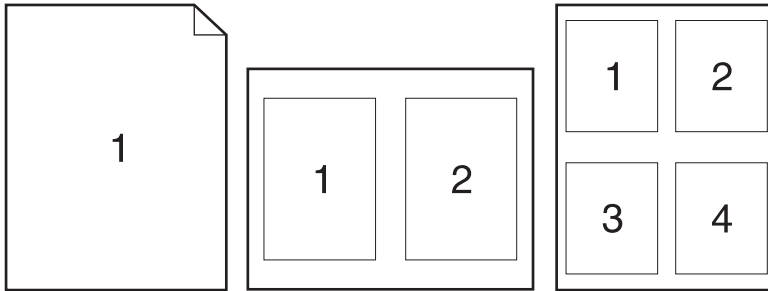


NOTE: To print a blank cover page, select the **standard** option from the **Cover Page Type** menu.

Use watermarks with Mac

1. On the **File** menu, click the **Print** option.
2. Open the **Watermarks** menu.
3. From the **Mode** menu, select the type of watermark to use. Select the **Watermark** option to print a semi-transparent message. Select the **Overlay** option to print a message that is not transparent.
4. From the **Pages** menu, select whether to print the watermark on all pages or on the first page only.
5. From the **Text** menu, select one of the standard messages, or select the **Custom** option and type a new message in the box.
6. Select options for the remaining settings.

Print multiple pages on one sheet of paper with Mac



1. On the **File** menu, click the **Print** option.
2. Select the driver.
3. Open the **Layout** menu.
4. From the **Pages per Sheet** menu, select the number of pages that you want to print on each sheet (1, 2, 4, 6, 9, or 16).
5. In the **Layout Direction** area, select the order and placement of the pages on the sheet.
6. From the **Borders** menu, select the type of border to print around each page on the sheet.

Print on both sides of the page (duplex printing) with Mac

Print on both sides manually

1. Insert enough paper into one of the trays to accommodate the print job.
2. On the **File** menu, click the **Print** option.
3. Open the **Finishing** menu, and click the **Manual Duplex** tab or open the **Manual Duplex** menu.
4. Click the **Manual Duplex** box, and select a binding option.
5. Click the **Print** button. Follow the instructions in the dialog box that displays on the computer before replacing the output stack in Tray 1 for printing the second half.
6. Go to the product, and remove any blank paper that is in Tray 2.
7. Insert the printed stack face-up with the bottom edge feeding into the product first in Tray 2. You *must* print the second side from Tray 2.
8. If prompted, press the appropriate control panel button to continue.

Set the color options with Mac

Use the **Color Options** menu or the **Color/Quality Options** menu to control how colors are interpreted and printed from software programs.

1. On the **File** menu, click the **Print** option.
2. Select the driver.
3. Open the **Color Options** menu or the **Color/Quality Options** menu.
4. Open the **Advanced** menu, or select the appropriate tab.
5. Adjust the individual settings for text, graphics, and photographs.

Use the Services menu with Mac

If the product is connected to a network, use the **Services** menu to obtain product and supply-status information.

1. On the **File** menu, click the **Print** option.
2. Open the **Services** menu.
3. To open the embedded Web server and perform a maintenance task, do the following:
 - a. Select the **Device Maintenance** tab.
 - b. Select a task from the drop-down list.
 - c. Click the **Launch** button.
4. To go to various support Web sites for this product, do the following:
 - a. Select the **Services on the Web** tab.
 - b. Select an option from the menu.
 - c. Click the **Go!** button.

5 Connect the product

- [Supported operating systems for networks](#)
- [Connect with USB](#)
- [Connect to a network](#)

Supported operating systems for networks

The following operating systems support network printing:

- Windows 7 (32-bit)
- Windows Vista (32-bit and 64-bit)
- Windows Server 2008
- Windows XP (32-bit, Service Pack 2)
- Windows Server 2003 (32-bit, Service Pack 3)
- Mac OS X 10.5, 10.6, and higher


 **NOTE:** Most network operating systems support a full software installation.

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 www.microsoft.com.

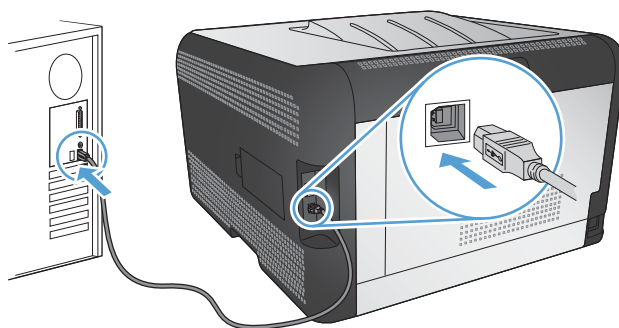
Connect with USB

This product supports a USB 2.0 connection. Use an A-to-B type USB cable. HP recommends using a cable that is no longer than 2 m (6.5 ft).

 **CAUTION:** Do not connect the USB cable until the installation software prompts you to connect it.

CD installation

1. Quit all open programs on the computer.
2. Install the software from the CD, and follow the on-screen instructions.
3. When prompted, select the **Directly connect to this computer using a USB cable** option, and then click the **Next** button.
4. When the software prompts you, connect the USB cable to the product and the computer.



5. At the end of the installation, click the **Finish** button.
6. On the **More Options** screen, you can install more software, or click the **Finish** button.
7. Print a page from any program to make sure that the printing software is correctly installed.

Connect to a network

Supported network protocols

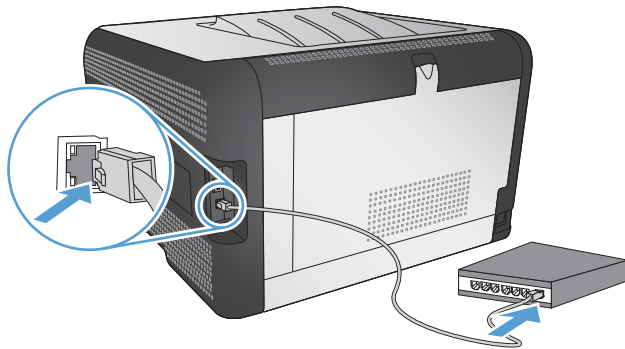
To connect a networking-equipped product to a network, you need a network that uses one or more of the following protocols.

- TCP/IP (IPv4 or IPv6)
- Port 9100
- LPR
- DHCP
- AutoIP
- SNMP
- Bonjour
- SLP
- WSD
- NBNS
- LLMNR

Install the product on a wired network

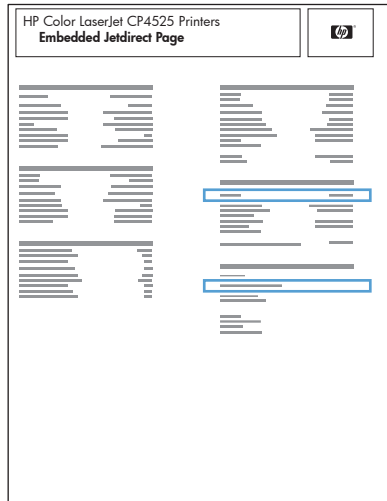
Obtain the IP address

1. Connect the network cable to the product and to the network.



2. Wait for 60 seconds before continuing. During this time, the network recognizes the product and assigns an IP address or host name for the product.
3. At the product control panel, press the **OK** button.
4. Press the right arrow ► to highlight the **Reports** menu, and then press the **OK** button.
5. Press the right arrow ► to highlight the **Config report** option, and then press the **OK** button.

6. Find the IP address on the Self Test/Configuration page.



Install the software

1. Quit all programs on the computer.
2. Install the software from the CD.
3. Follow the onscreen instructions.
4. When prompted, select the **Connect through a wired network** option, and then click the **Next** button.
5. From the list of available printers, select the printer that has the correct IP address.
6. Click the **Finish** button.
7. On the **More Options** screen, you can install more software, or click the **Finish** button.
8. Print a page from any program to make sure that the printing software is correctly installed.

Connect the product to a wireless network (wireless models only)


Before installing the product software, make sure the product is not connected to the network using a network cable.


If your wireless router does not support Wi-Fi Protected Setup (WPS), obtain the wireless router network settings from your system administrator, or complete the following tasks:

- Obtain the wireless network name or service set identifier (SSID).
- Determine the security password or encryption key for the wireless network.

Connect the product to a wireless network using WPS

If your wireless router supports Wi-Fi Protected Setup (WPS), this is the simplest way to set up the product on a wireless network.

1. Press the WPS button on your wireless router.
2. Press and hold the Wireless  button on the product control panel for two seconds. Release the button when the wireless light starts blinking.
3. Wait up to two minutes while the product establishes a network connection with the wireless router.

 **NOTE:** If this method is not successful, try using the wireless network using USB cable method.

Connect the product to a wireless network using WPS by using the control panel menus

If your wireless router supports Wi-Fi Protected Setup (WPS), this is the simplest way to set up the product on a wireless network.

1. On the front of the product, press the Wireless button. Look at the control panel display to see if the **Wireless Menu** item has opened. If it has not opened, complete these steps:
 - a. On the control panel, press the **OK** button, and select the **Network Setup** menu.
 - b. Select the **Wireless Menu** item.
2. Select the **Wi-Fi Protected Setup** item.
3. Use one of these methods to complete the setup:
 - **Pushbutton:** Select the **Pushbutton** option and follow the instructions on the control panel. Establishing the wireless connection can take a few minutes.
 - **PIN:** Select the **Generate PIN** option. The product generates a unique PIN, which you must type into the wireless router's setup screen. Establishing the wireless connection can take a few minutes.

 **NOTE:** If this method is not successful, try using the wireless network using a USB cable method.

Connect the product to a wireless network using a USB cable

If your wireless router does not support WiFi-Protected Setup (WPS), use this method to set up the product on a wireless network. Using a USB cable to transfer settings makes setting up a wireless connection easier. After the setup is complete, you can disconnect the USB cable and use the wireless connection.

1. Insert the software CD into the computer CD tray.
2. Follow the on-screen instructions. When prompted, select the **Connect through a wireless network** option. Connect the USB cable to the product when prompted.

 **CAUTION:** Do not connect the USB cable until the installation program prompts you.

3. When the installation is complete, print a configuration page to make sure that the product has a SSID name.
4. When installation is complete, disconnect the USB cable.

Install the software for a wireless product currently on the network

If the product already has an IP address on a wireless network and you want to install product software on a computer, complete the following steps.

1. From the product control panel, print a configuration page to obtain the product IP address.
2. Install the software from the CD.
3. Follow the on-screen instructions.
4. When prompted, select the **Connect through a wireless network** option, and then click the **Next** button.
5. From the list of available printers, select the printer that has the correct IP address.

Disconnect from the wireless network

If you want to disconnect the product from a wireless network, you can turn off the wireless unit in the product.

1. At the product control panel, press the wireless button.
2. To confirm that the wireless unit is turned off, print a **Network Summary** page from the **Reports** menu, and then verify that it lists the wireless feature as disabled.

Reduce interference on a wireless network

The following tips can reduce interference in a wireless network:

- Keep the wireless devices away from large metal objects, such as filing cabinets, and other electromagnetic devices, such as microwaves and cordless telephones. These objects can disrupt radio signals.
- Keep the wireless devices away from large masonry structures and other building structures. These objects can absorb radio waves and lower signal strength.
- Position the wireless router in a central location in line of sight with the wireless products on the network.

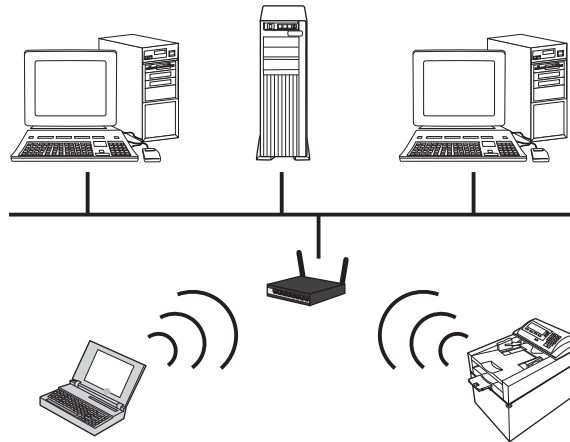
Advanced wireless setup

Wireless communication modes

You can use one of two wireless communication modes: infrastructure or ad-hoc.

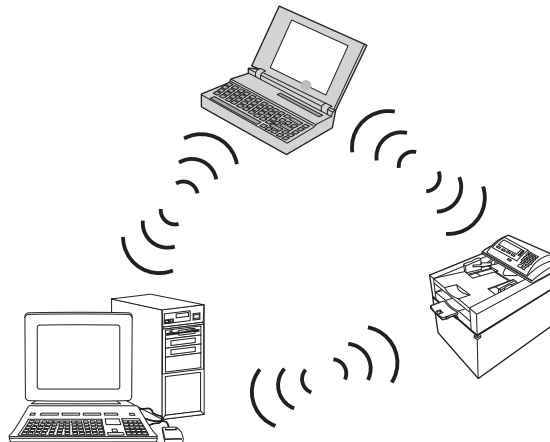
Infrastructure wireless network (recommended)

The product communicates with other devices on the network through a wireless router.



Ad-hoc wireless network

The product communicates directly with other wireless devices without using a wireless router.



All devices on the ad hoc network must have the following:

- 802.11b/g compatibility
- The same SSID
- The same subnet and channel
- The same 802.11 security settings

Wireless security

To make your wireless network easy to distinguish from other wireless networks, use a unique network name (SSID) for your wireless router. Your wireless router might have a default network name, which is typically the manufacturer's name. For information on how to change the network name, see the documentation that came with the wireless router.

To prevent other users from accessing your network, turn on WPA or WEP data encryption.

- **Wired Equivalent Privacy (WEP):** WEP is the original native security mechanism in the 802.11 standard. You create a unique key containing hexadecimal characters, which other users must provide before they can access your network.
- **Wi-Fi Protected Access (WPA):** WPA uses the temporal key integrity protocol (TKIP) for encryption and employs 802.1X authentication. It addresses all known weaknesses of WEP. You create a unique passphrase containing a combination of letters and numbers, which other users must provide before they can access your network.
- **WPA2** provides the advanced encryption standard (AES), and is an improvement over WPA.

Connect the product to an ad-hoc wireless network

You can connect the product wirelessly to a computer through a peer-to-peer (ad-hoc) installation.

1. Make sure the product is not connected to the network with an Ethernet cable.
2. Turn on the product, and then turn on the wireless functionality.
3. Make sure the product is using the factory default network settings. Open the **Service** menu, and then select the **Restore defaults** option.
4. Turn on the product the wireless functionality again.
5. Print a **Network Summary** page and find the wireless network name (SSID). Open the **Reports** menu, and then select the **Network Summary** option.
6. Refresh the list of wireless networks on your computer, and then click the product wireless network name (SSID) and connect to it.
7. After several minutes, print a configuration page, and then find the product IP address.
8. At the computer, insert the product CD, and follow the on-screen instructions to install the software. When prompted, select the **Connect through a wireless network** option.

Configure IP network settings

To configure network parameters on the product, use the product control panel, the embedded Web server, or, for Windows operating systems, the HP ToolboxFX software.

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 product password

Use the HP Embedded Web Server to set a password or change an existing password for a product on a network.

1. Type the product IP address into the address line of a Web browser. Click the **Networking** tab, and click the **Security** 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 **New Password** box and in the **Verify password** box.
3. At the bottom of the window, click the **Apply** button to save the password.

Manually configure IPv4 TCP/IP parameters from the control panel

1. On the control panel, press the **Setup** button.
2. Use the arrow buttons to select the **Network configuration** option, and then press the **OK** button.
3. Use the arrow buttons to select the **TCP/IP configuration** option, and then press the **OK** button.
4. Use the arrow buttons to select the **Manual** option, and then press the **OK** button.
5. Use the alphanumeric buttons to type the IP address, and then press the **OK** button.
6. If the IP address is incorrect, use the arrow buttons to select the **No** option, and then press the **OK** button. Repeat step 5 with the correct IP address, and then repeat step 5 for the subnet mask and default gateway settings.


Link speed and duplex settings

 **NOTE:** This information applies only to Ethernet networks. It does not apply to wireless networks.

NOTE: Incorrect changes to the link speed setting might prevent the product from communicating with other network devices. For most situations, the product should be left in automatic mode. Changes can cause the product to turn off and then on. Changes should be made only while the product is idle.

1. On the control panel, press the **Setup** option.
2. Use the arrow buttons to select the **Network configuration** option, and then press the **OK** button.
3. Use the arrow buttons to select the **Link speed** option, and then press the **OK** button.
4. Use the arrow buttons to select one of the following settings.
 - Automatic
 - 10T Full
 - 10T Half

- 100TX Full
- 100TX Half

 **NOTE:** The setting must match with the network product to which you are connecting (a network hub, switch, gateway, router, or computer).

5. Press the **OK** button. The product turns off and then on.

6 Paper and print media

- [Understand paper use](#)
- [Change the printer driver to match the paper type and size](#)
- [Supported paper sizes](#)
- [Supported paper types](#)
- [Load paper trays](#)

Understand paper 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 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 style="list-style-type: none">• Store envelopes flat.• Use envelopes where the seam extends all the way to the corner of the envelope.• Use peel-off adhesive strips that are approved for use in laser printers.	<ul style="list-style-type: none">• Do not use envelopes that are wrinkled, nicked, stuck together, or otherwise damaged.• Do not use envelopes that have clasps, snaps, windows, or coated linings.• Do not use self-stick adhesives or other synthetic materials.
Labels	<ul style="list-style-type: none">• Use only labels that have no exposed backing between them.• Use labels that lie flat.• Use only full sheets of labels.	<ul style="list-style-type: none">• Do not use labels that have wrinkles or bubbles, or are damaged.• Do not print partial sheets of labels.
Transparencies	<ul style="list-style-type: none">• Use only transparencies that are approved for use in color laser printers.• Place transparencies on a flat surface after removing them from the product.	<ul style="list-style-type: none">• Do not use transparent print media not approved for laser printers.
Letterhead or preprinted forms	<ul style="list-style-type: none">• Use only letterhead or forms approved for use in laser printers.	<ul style="list-style-type: none">• Do not use raised or metallic letterhead.

Media type	Do	Do not
Heavy paper	<ul style="list-style-type: none">Use only heavy paper that is approved for use in laser printers and meets the weight specifications for this product.	<ul style="list-style-type: none">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 style="list-style-type: none">Use only glossy or coated paper that is approved for use in laser printers.	<ul style="list-style-type: none">Do not use glossy or coated paper designed for use in inkjet products.

Change the printer driver to match the paper type and size

 **NOTE:** If you change the page settings in the software program, those settings override any settings in the printer driver.

1. On the **File** menu in the software program, click **Print**.
2. Select the product, and then click the **Properties** or **Preferences** button.
3. Click the **Paper/Quality** tab.
4. Select a size from the **Paper size** drop-down list.
5. Select a paper type from the **Paper type** drop-down list.
6. Click the **OK** button.

Supported paper sizes

This product supports a number of paper sizes, and it adapts to various paper.

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

Table 6-1 Supported paper and print media sizes

Size	Dimensions
Letter	216 x 279 mm (8.5 x 11 inches)
Legal	216 x 356 mm (8.5 x 14 inches)
Executive	184 x 267 mm (7.24 x 10.51 inches)
8.5 x 13	216 x 330 mm (8.5 x 13 inches)
4 x 6	102 x 152 mm (4 x 6 inches)
5 x 8	127 x 203 mm (5 x 8 inches)
A4	210 x 297 mm (8.27 x 11.69 inches)
A5	148 x 210 mm (5.83 x 8.27 inches)
A6	105 x 148 mm (4.13 x 5.83 inches)
B5 (JIS)	182 x 257 mm (7.17 x 10.12 inches)
10 x 15 cm	100 x 150 mm (3.9 x 5.9 inches)
16k	184 x 260 mm (7.24 x 10.23 inches)
	195 x 270 mm (7.68 x 10.62 inches)
	197 x 273 mm (7.75 x 10.75 inches)
Custom	Minimum: 76 x 127 mm (3 x 5 in)
	Maximum: 216 x 356 mm (8.5 x 14.0 in)

Table 6-2 Supported envelopes and postcards

Size	Dimensions
Japanese Postcard	100 x 148 mm (3.94 x 5.83 inches)
Postcard (JIS)	
Double Japan Postcard Rotated	148 x 200 mm (5.82 x 7.87 inches)
Double Postcard (JIS)	
Envelope #10	105 x 241 mm (4.13 x 9.49 inches)
Envelope DL	110 x 220 mm (4.33 x 8.66 inches)
Envelope C5	162 x 229 mm (6.93 x 9.84 inches)
Envelope B5	176 x 250 mm (6.7 x 9.8 inches)
Envelope Monarch	98 x 191 mm (3.9 x 7.5 inches)

Supported paper types

Paper type	Dimensions ¹	Weight	Capacity ²	Paper orientation
Paper, including the following types: <ul style="list-style-type: none"> • Plain • Letterhead • Color • Preprinted • Prepunched • Recycled 	Minimum: 76 x 127 mm (3 x 5 inches) Maximum: 216 x 356 mm (8.5 x 14 inches)	60 to 90 g/m ² (16 to 24 lb)	Tray 1: single sheet only Tray 2: up to 150 sheets of 75 g/m ² (20 lb bond)	Side to be printed on face-up, with the top edge at the back of the tray
Thick paper	Same as for paper	Up to 200 g/m ² (53 lb)	Tray 1: single sheet only Tray 2: up to 15 mm (0.6 inches) stack height	Side to be printed on face-up, with the top edge at the back of the tray
Cover paper	Same as for paper	Up to 200 g/m ² (53 lb)	Tray 1: single sheet only Tray 2: up to 15 mm (.59 inch) stack height	Side to be printed on face-up, with the top edge at the back of the tray
Glossy paper	Same as for paper	Up to 220 g/m ² (59 lb)	Tray 1: single sheet only Tray 2: up to 15 mm (.59 inch) stack height	Side to be printed on face-up, with the top edge at the back of the tray
Photo paper			Tray 2: up to 15 mm (.59 inch) stack height	Side to be printed on face-up, with the top edge at the back of the tray
Transparencies	A4 or Letter	Thickness: 0.12 to 0.13 mm (4.7 to 5.1 mils)	Tray 1: single sheet only Tray 2: up to 50 sheets	Side to be printed on face-up, with the top edge at the back of the tray
Labels ³	A4 or Letter	Thickness: up to 0.23 mm (9 mils)	Tray 1: single sheet only Tray 2: up to 50 sheets	Side to be printed on face-up, with the top edge at the back of the tray
Envelopes	<ul style="list-style-type: none"> • COM 10 • Monarch • DL • C5 • B5 	Up to 90 g/m ² (24 lb)	Tray 1: single envelope only Tray 2: up to 10 envelopes	Side to be printed on face-up, with the stamp-end at the back of the tray
Postcards or index cards	100 x 148 mm (3.9 x 5.8 inches)		Tray 1: single sheet only Tray 2: up to 50 sheets	Side to be printed on face-up, with the top edge at the back of the tray

¹ The product supports a wide range of standard and custom sizes of paper. Check the printer driver for supported sizes.

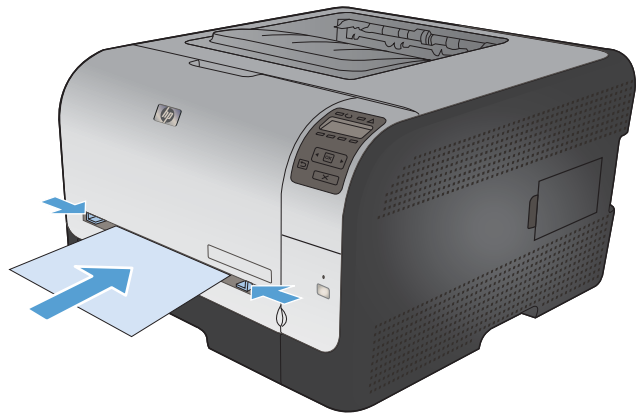
² Capacity can vary depending on paper weight and thickness, and environmental conditions.

³ Smoothness: 100 to 250 (Sheffield)

Load paper trays

Load Tray 1

1. Place a single sheet of paper into the Tray 1 slot, and slide the paper guides so that they are against the sheet.

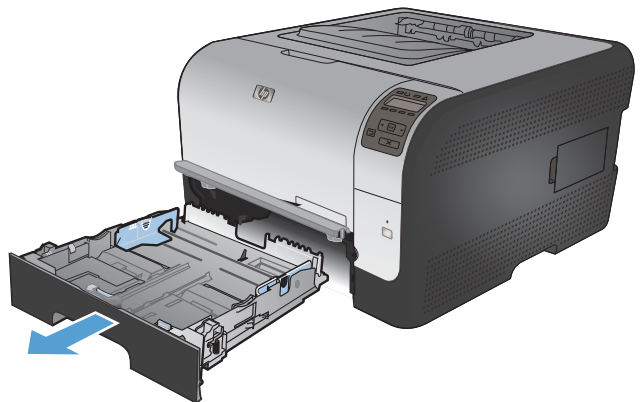


2. Feed the sheet into the tray as far as it will go until the product pulls the paper.

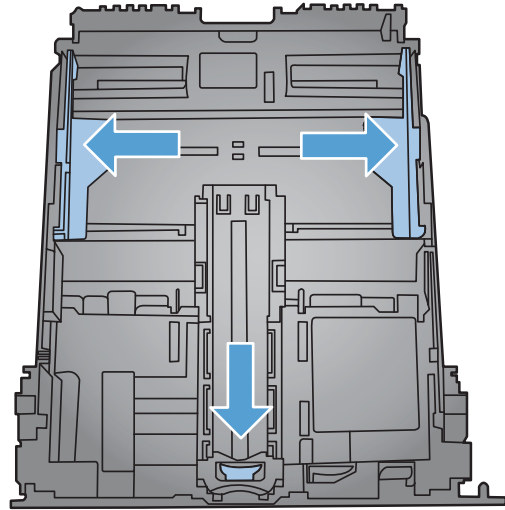
NOTE: Wake the product from Powersave mode before inserting the paper into Tray 1. If the product is in Powersave mode, it will not pull the paper when inserted into Tray 1.

Load Tray 2

1. Pull the tray out of the product.

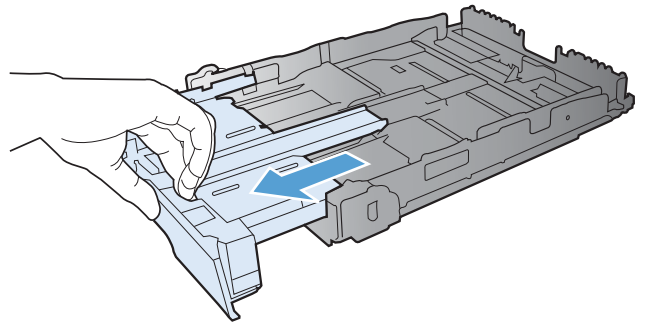


2. Slide open the paper length and width guides.

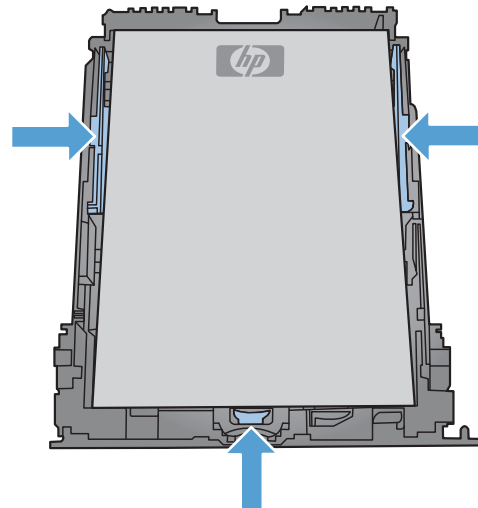


3. To load Legal-size paper, extend the tray by pressing and holding the extension tab while pulling the front of the tray outward.

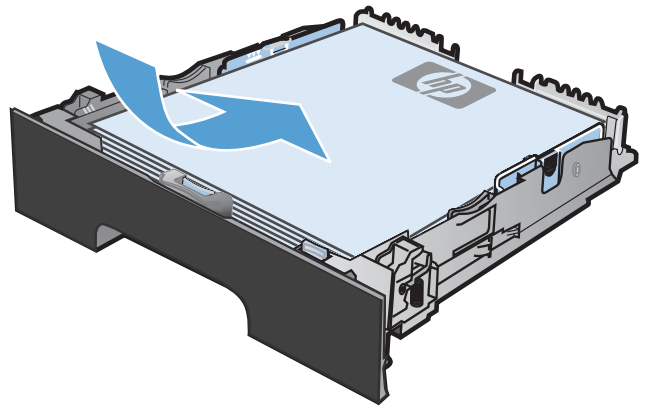
NOTE: When loaded with Legal-size paper, the tray extends from the front of the product approximately 51 mm (2 inches).



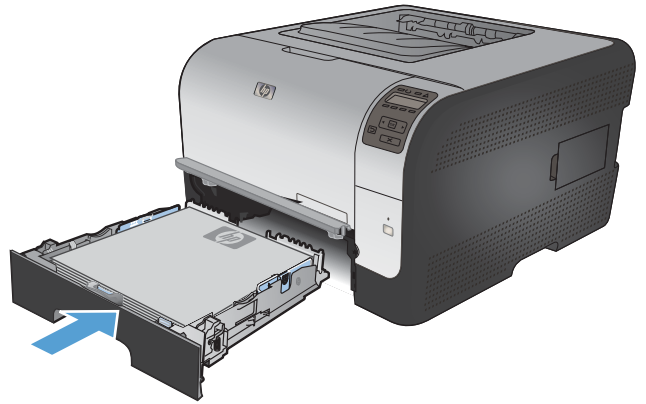
4. Place the paper in the tray and make sure that it is flat at all four corners. Slide the paper length and width guides so that they are against the stack of paper.



5. Push down on the paper to make sure that the paper stack is below the paper limit tabs on the side of the tray.



6. Slide the tray into the product.



Configure trays

By default, the product pulls paper from Tray 1. If Tray 1 is empty, the product pulls paper from Tray 2. Configuring the tray on this product changes the heat and speed settings to obtain the best print quality for the type of paper that you are using. If you are using special paper for all or most print jobs on the product, change this default setting on the product.

The following table lists possible ways you can use the tray settings to meet your printing needs.

Paper use	Configure the product	Print
Load both trays with the same paper, and have the product pick paper from one tray if the other one is empty.	Load paper in Tray 1. No configuration is needed, if the default settings for type and size have not been changed.	From the software program, print the job.
Occasionally use special paper, such as heavy paper or letterhead, from a tray that usually contains plain paper.	Load special paper in Tray 1.	From the software program print dialog, chose the paper type that matches the special paper loaded in the tray before sending the print job.
Frequently use special paper, such as heavy paper or letterhead, from one tray.	Load special paper in Tray 1, and configure the tray for the paper type.	From the software program print dialog, chose the paper type that matches the special paper loaded in the tray before sending the print job.


Configure trays from the control panel

1. Make sure the product is turned on.
2. Perform one of the following tasks:
 - **Control panel:** Open the **System Setup** menu, and open the **Paper Setup** menu. Select the tray that you want to configure.
 - **Embedded Web server:** Click the **Settings** tab, and then click **Paper Handling** in the left panel.
3. Change the desired tray setting, and then press **OK** or click **Apply**.



7 Print tasks

- [Cancel a print job](#)
- [Basic print tasks with Windows](#)
- [Additional print tasks with Windows](#)

Cancel a print job

1. If the print job is currently printing, cancel it by pressing the Cancel  button on the product control panel.



NOTE: Pressing the Cancel  button clears the job that the product is currently processing. If more than one process is running, pressing the Cancel  button clears the process that currently appears on the product control panel.

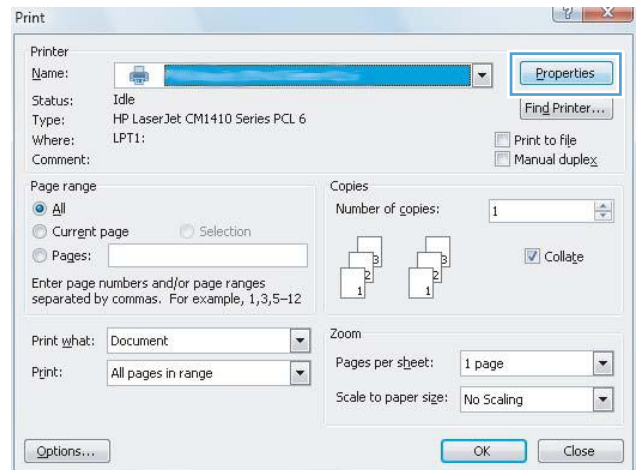
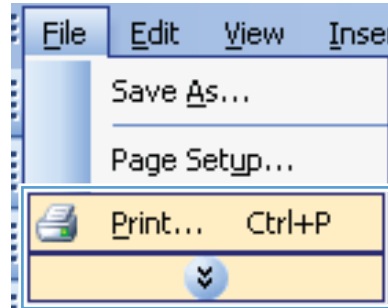
2. You can also cancel a print job from a software program or a print queue.
 - **Software program:** Typically, a dialog box appears briefly on the computer screen, allowing you to cancel the print job.
 - **Print queue:** If a print job is waiting in a print queue (computer memory) or print spooler, delete the job there.
 - **Windows XP, Server 2003, or Server 2008:** Click **Start**, click **Settings**, and then click **Printers and Faxes**. Double-click the product icon to open the window, right-click the print job that you want to cancel, and then click **Cancel**.
 - **Windows Vista:** Click **Start**, click **Control Panel**, and then, under **Hardware and Sound**, click **Printer**. Double-click the product icon to open the window, right-click the print job that you want to cancel, and then click **Cancel**.
 - **Windows 7:** Click **Start**, and then click **Devices and Printers**. Double-click the product icon to open the window, right-click the print job that you want to cancel, and then click **Cancel**.

Basic print tasks with Windows

The methods to open the print dialog from software programs can vary. The procedures that follow include a typical method. Some software programs do not have a **File** menu. See the documentation for your software program to learn how to open the print dialog.

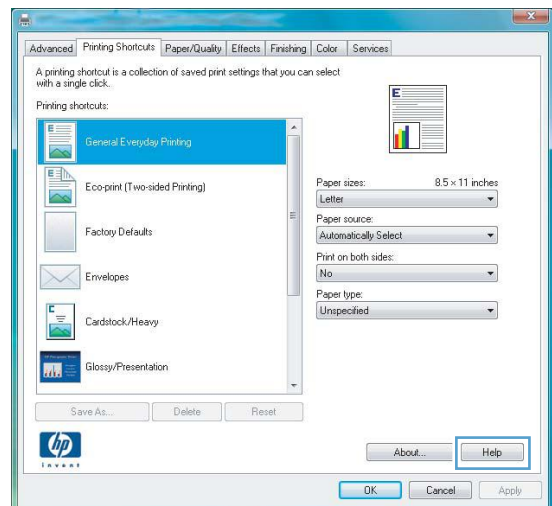
Open the printer driver with Windows

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



Get help for any printing option with Windows

1. Click the **Help** button to open the online Help.



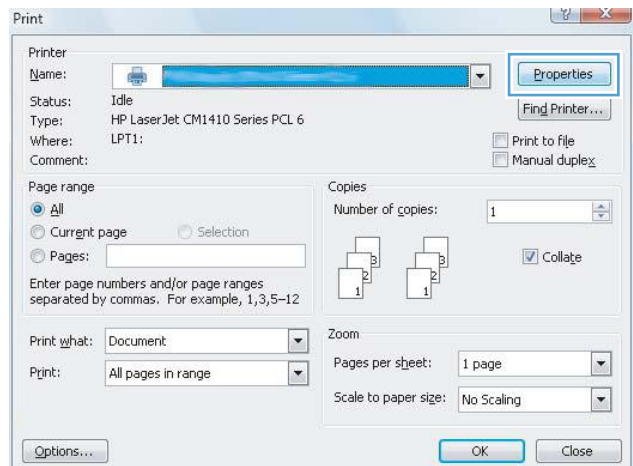
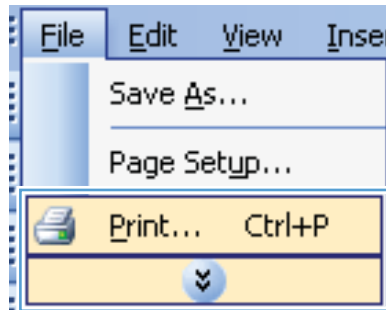
Change the number of print copies with Windows

1. On the **File** menu in the software program, click **Print**.
2. Select the product, and then select the number of copies.

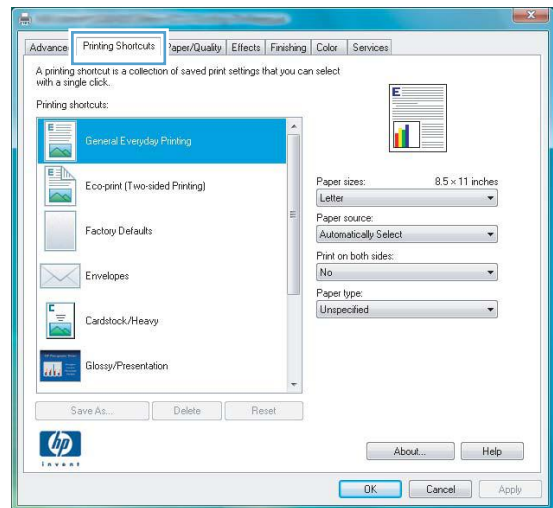
Save custom print settings for reuse with Windows

Use a printing shortcut with Windows

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

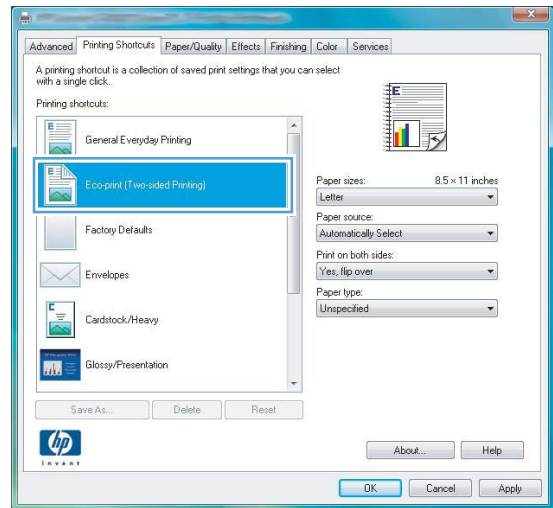


3. Click the **Printing Shortcuts** tab.



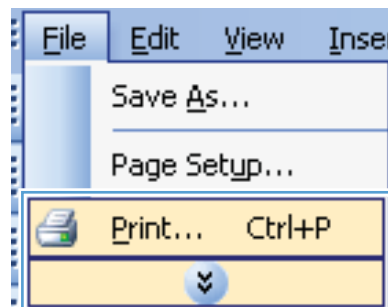
4. Select one of the shortcuts, and then click the **OK** button.

NOTE: When you select a shortcut, the corresponding settings change on the other tabs in the printer driver.

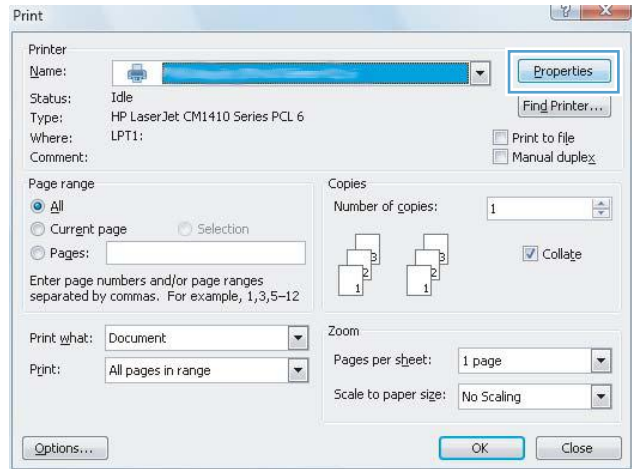


Create printing shortcuts

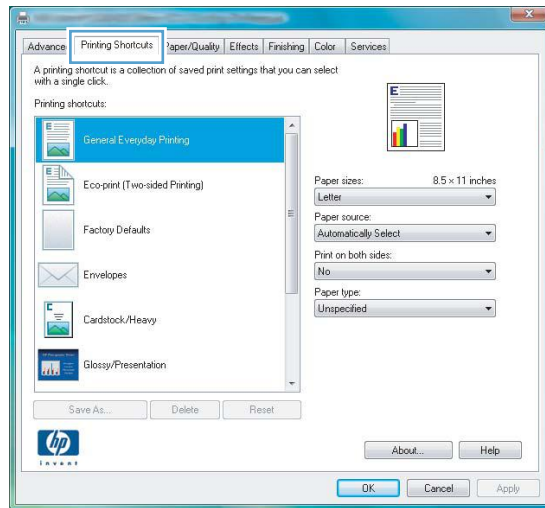
1. On the **File** menu in the software program, click **Print**.



2. Select the product, and then click the **Properties** or **Preferences** button.

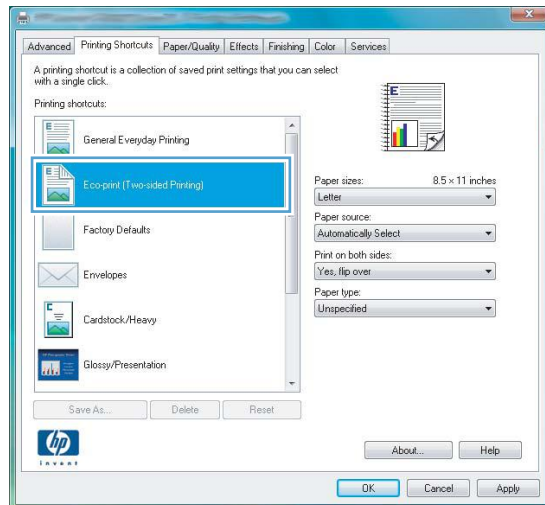


3. Click the **Printing Shortcuts** tab.



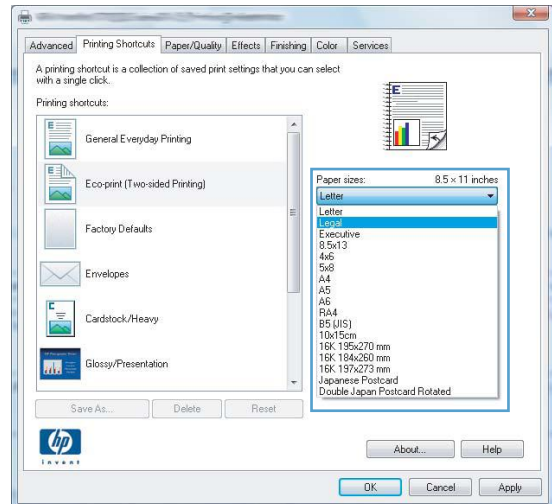
4. Select an existing shortcut as a base.

NOTE: Always select a shortcut before adjusting any of the settings on the right side of the screen. If you adjust the settings and then select a shortcut, or if you select a different shortcut, all your adjustments are lost.

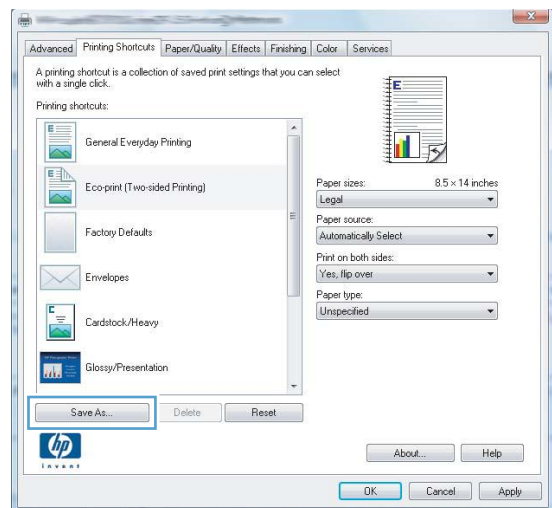


5. Select the print options for the new shortcut.

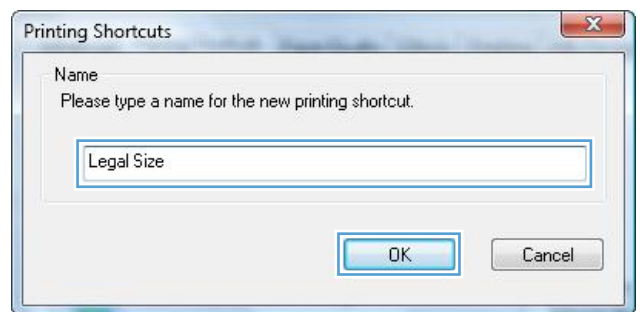
NOTE: You can select the print options on this tab or on any other tab in the printer driver. After selecting options on other tabs, return to the **Printing Shortcuts** tab before continuing with the next step.



6. Click the **Save As** button.



7. Type a name for the shortcut, and click the **OK** button.



Improve print quality with Windows

Select the page size with Windows

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

3. Click the **Paper/Quality** tab.
4. Select a size from the **Paper size** drop-down list.

Select a custom page size with Windows

1. On the **File** menu in the software program, click **Print**.
2. Select the product, and then click the **Properties** or **Preferences** button.
3. Click the **Paper/Quality** tab.
4. Click the **Custom** button.
5. Type a name for the custom size and specify the dimensions.
 - The width is the short edge of the paper.
 - The length is the long edge of the paper.



NOTE: Always load paper into the trays short edge first.

6. Click the **OK** button, and then click the **OK** button on the **Paper/Quality** tab. The custom page size will appear in the list of paper sizes the next time you open the printer driver.

Select the paper type with Windows

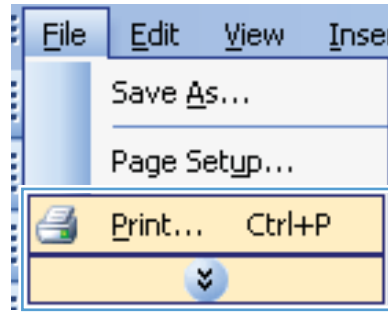
1. On the **File** menu in the software program, click **Print**.
2. Select the product, and then click the **Properties** or **Preferences** button.
3. Click the **Paper/Quality** tab.
4. From the **Paper type** drop-down list, click the **More...** option.
5. Expand the list of **Type is:** options.
6. Expand the category of paper types that best describes your paper, and then click the paper type that you are using.

Select the paper tray with Windows

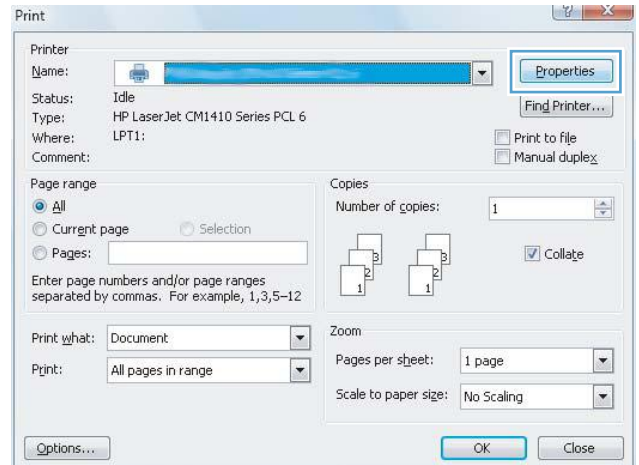
1. On the **File** menu in the software program, click **Print**.
2. Select the product, and then click the **Properties** or **Preferences** button.
3. Click the **Paper/Quality** tab.
4. Select a tray from the **Paper source** drop-down list.

Print on both sides (duplex) with Windows

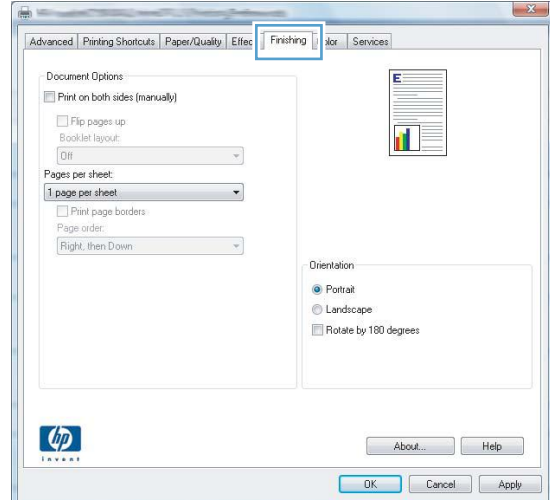
1. On the **File** menu in the software program, click **Print**.



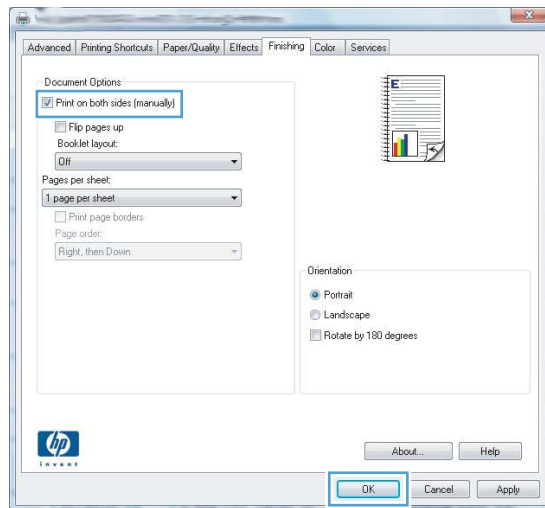
2. Select the product, and then click the **Properties** or **Preferences** button.



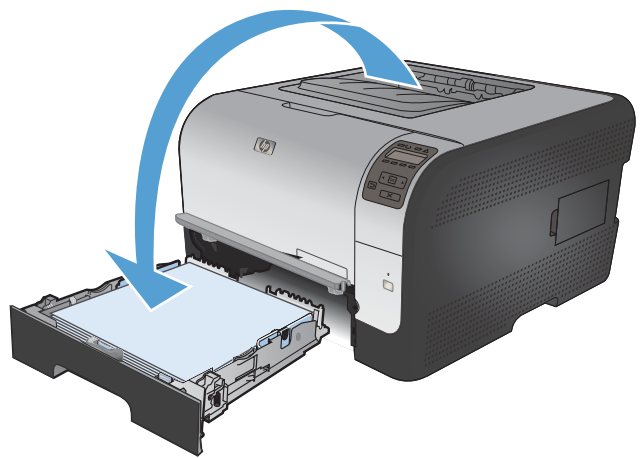
3. Click the **Finishing** tab.



4. Select the **Print on both sides (manually)** check box. Click the **OK** button to print the first side of the job.



5. Retrieve the printed stack from the output bin, and maintaining the same orientation, place it with the printed side facing down in Tray 2.

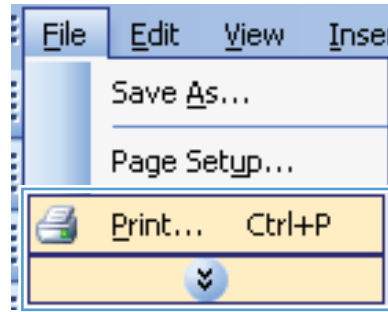


6. On the control panel, press the **OK** button to print the second side of the job.

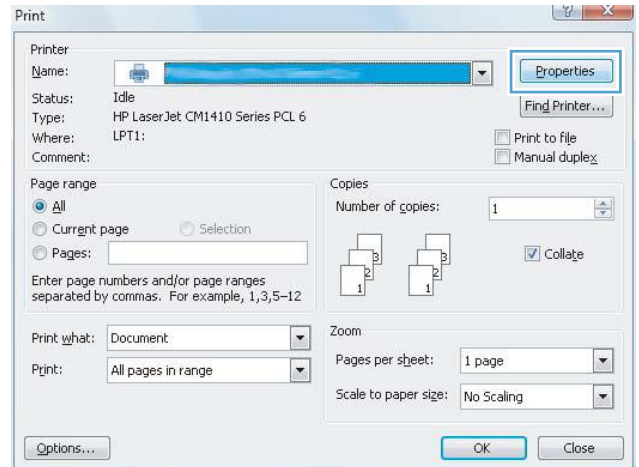


Print multiple pages per sheet with Windows

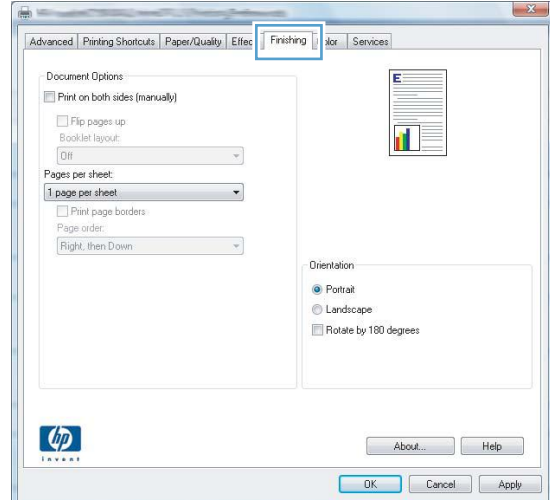
1. On the **File** menu in the software program, click **Print**.



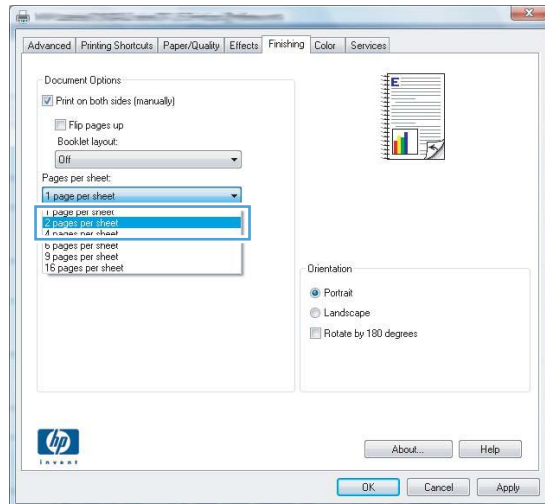
2. Select the product, and then click the **Properties** or **Preferences** button.



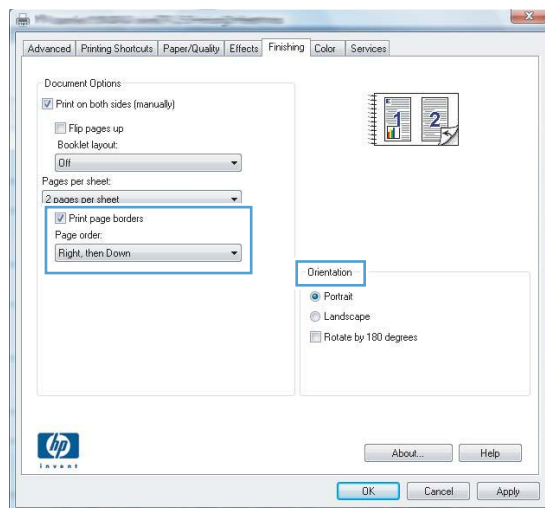
3. Click the **Finishing** tab.



4. Select the number of pages per sheet from the **Pages per sheet** drop-down list.

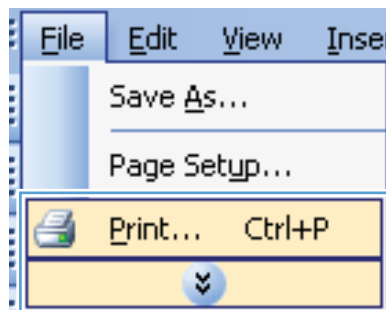


5. Select the correct **Print page borders**, **Page order**, and **Orientation** options.

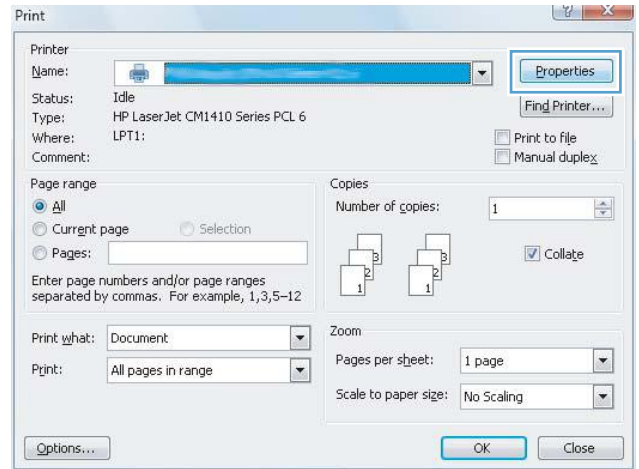


Select page orientation with Windows

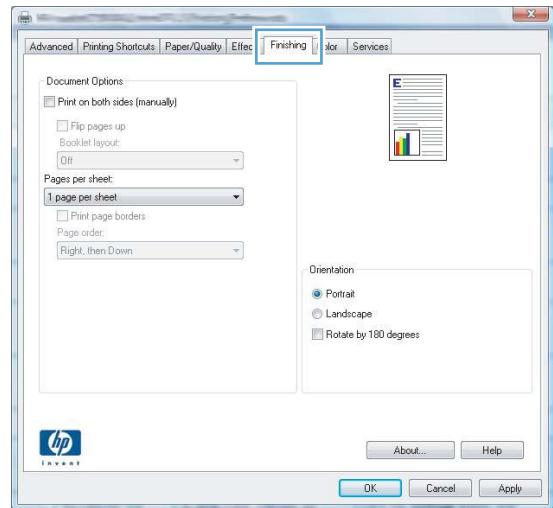
1. On the **File** menu in the software program, click **Print**.



2. Select the product, and then click the **Properties** or **Preferences** button.

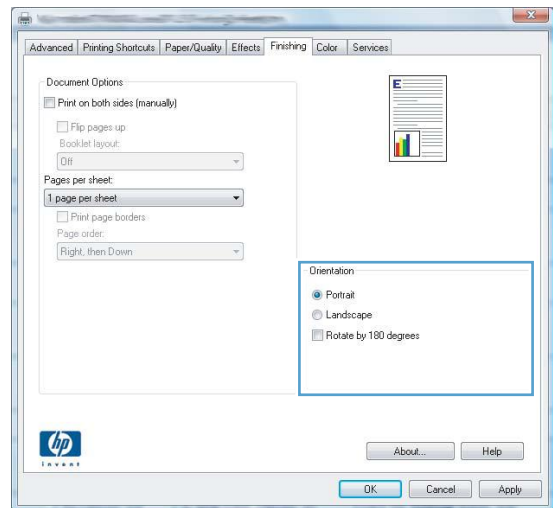


3. Click the **Finishing** tab.



4. In the **Orientation** area, select the **Portrait** or **Landscape** option.

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



Set color options with Windows

1. On the **File** menu in the software program, click **Print**.
2. Select the product, and then click the **Properties** or **Preferences** button.
3. Click the **Color** tab.
4. Click the **HP EasyColor** check box to clear it.
5. In the **Color Options** area, click the **Manual** option, and then click the **Settings** button.
6. Adjust the general settings for Edge Control, and settings for text, graphics, and photographs.

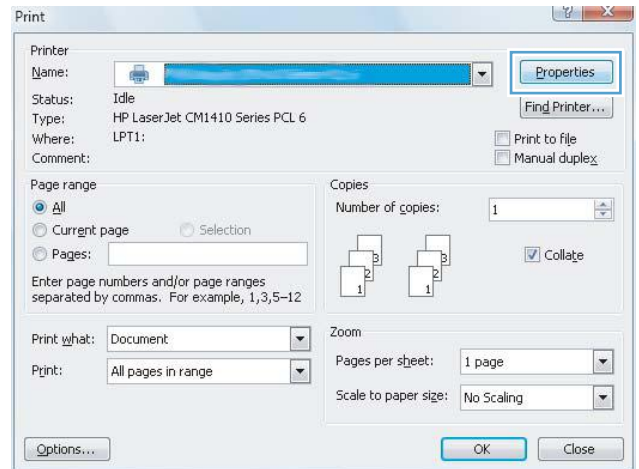
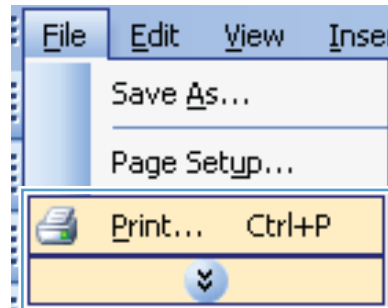
Additional print tasks with Windows

Print colored text as black (grayscale) with Windows

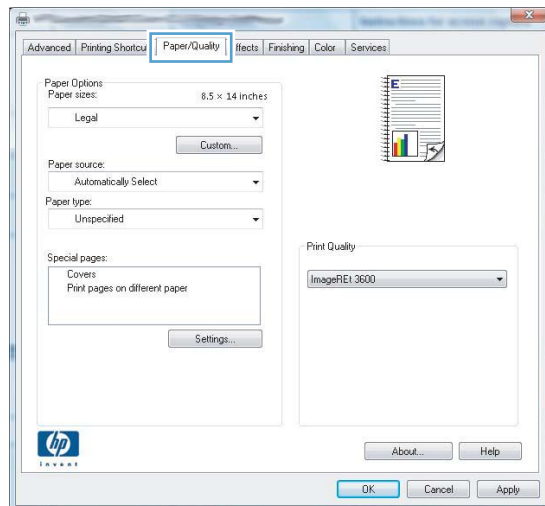
1. On the **File** menu in the software program, click **Print**.
2. Select the product, and then click the **Properties** or **Preferences** button.
3. Click the **Advanced** tab.
4. Expand the **Document Options** section.
5. Expand the **Printer Features** section.
6. In the **Print All Text as Black** drop-down list, select the **Enabled** option.

Print on preprinted letterhead or forms with Windows

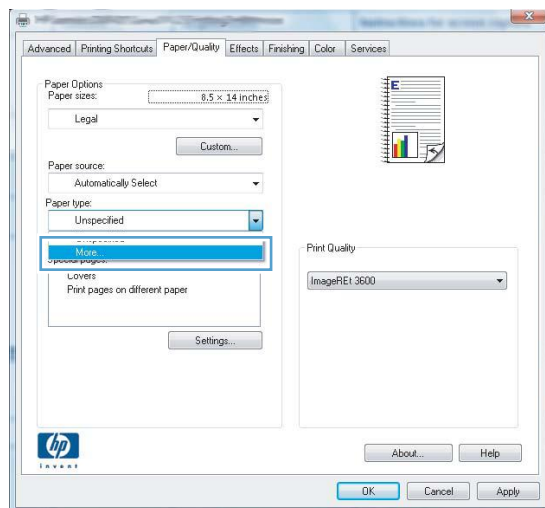
1. On the **File** menu in the software program, click **Print**.
2. Select the product, and then click the **Properties** or **Preferences** button.



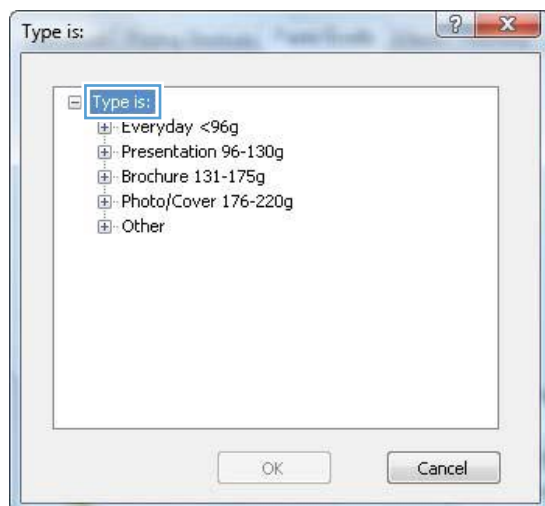
3. Click the **Paper/Quality** tab.



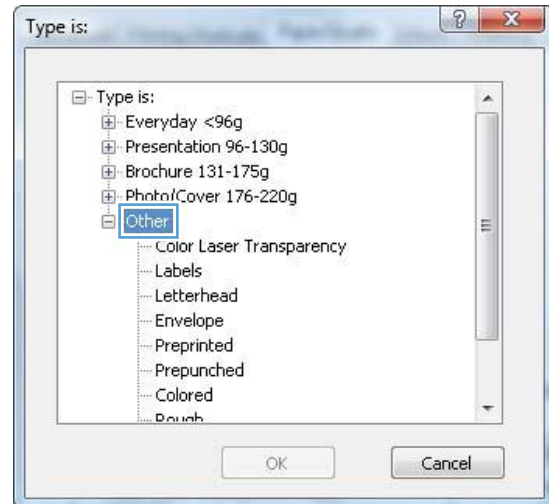
4. From the **Paper type** drop-down list, click the **More...** option.



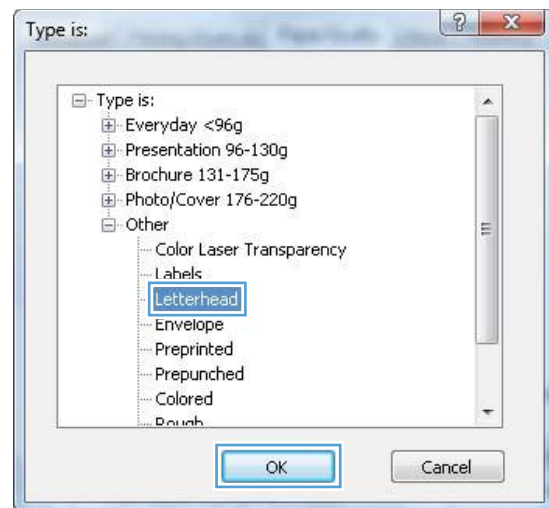
5. Expand the list of **Type is:** options.



6. Expand the list of **Other** options.

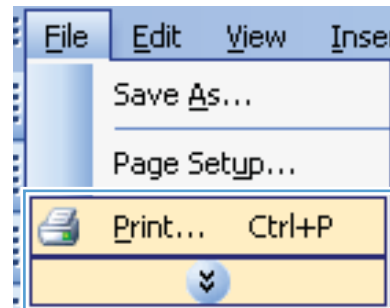


7. Select the option for the type of paper you are using, and click the **OK** button.

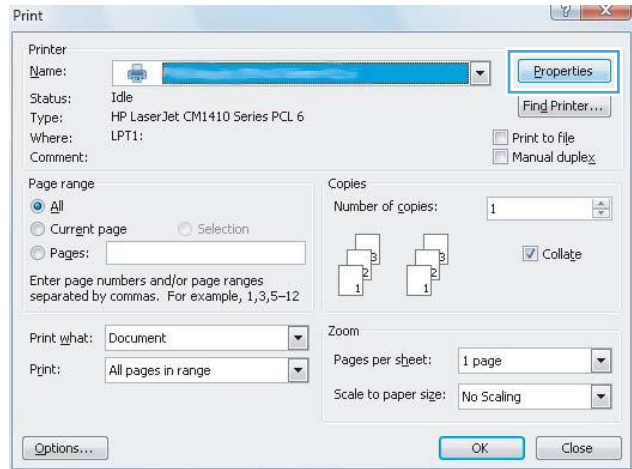


Print on special paper, labels, or transparencies

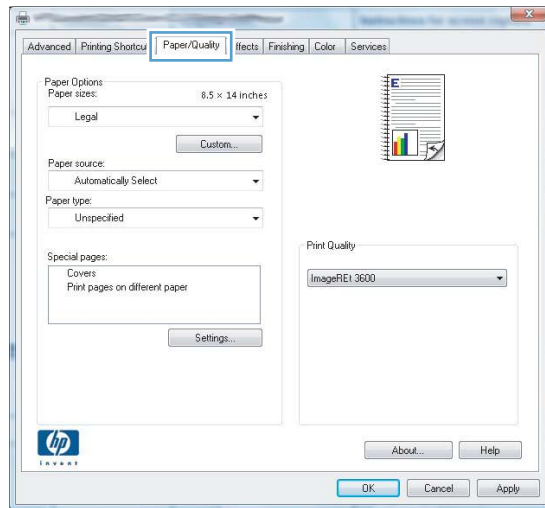
1. On the **File** menu in the software program, click **Print**.



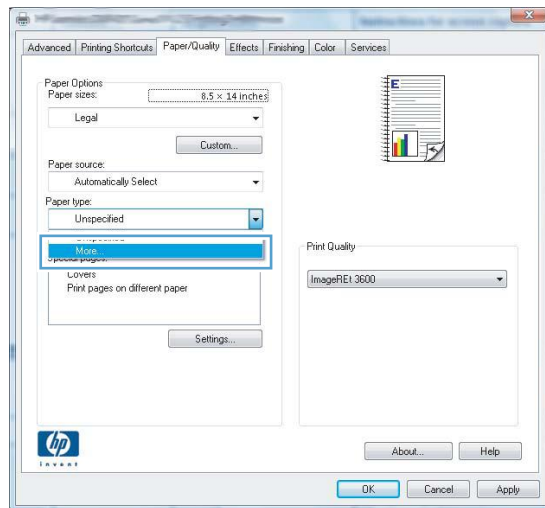
2. Select the product, and then click the **Properties** or **Preferences** button.



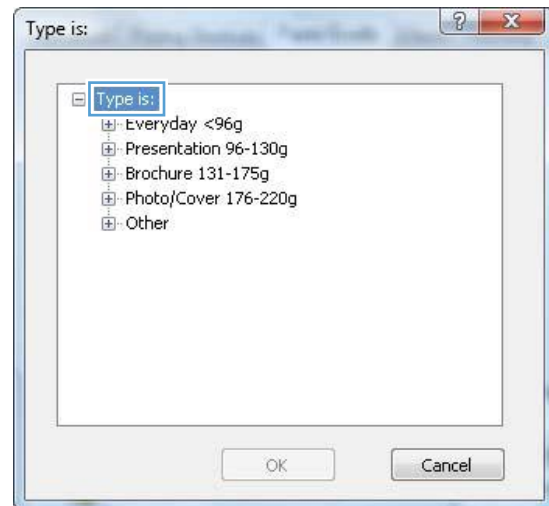
3. Click the **Paper/Quality** tab.



4. From the **Paper type** drop-down list, click the **More...** option.

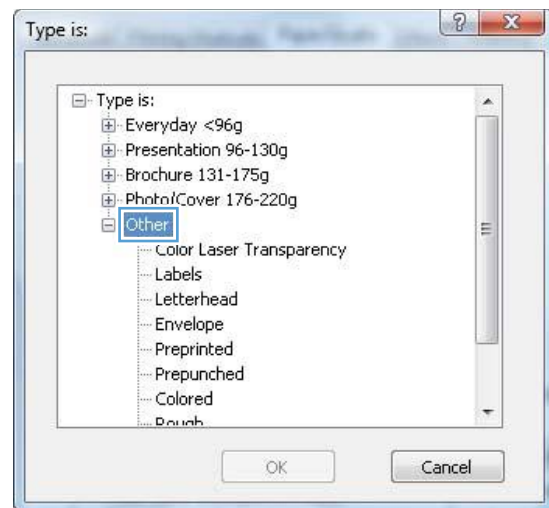


5. Expand the list of **Type is:** options.

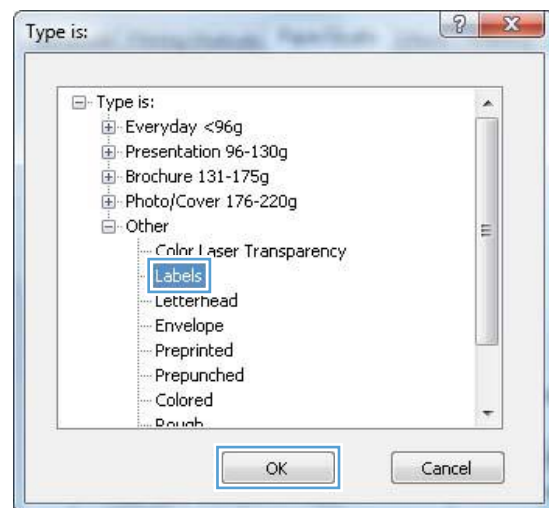


6. Expand the category of paper types that best describes your paper.

NOTE: Labels and transparencies are in the list of **Other** options.

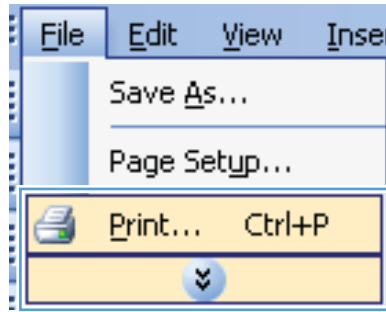


7. Select the option for the type of paper you are using, and click the **OK** button.

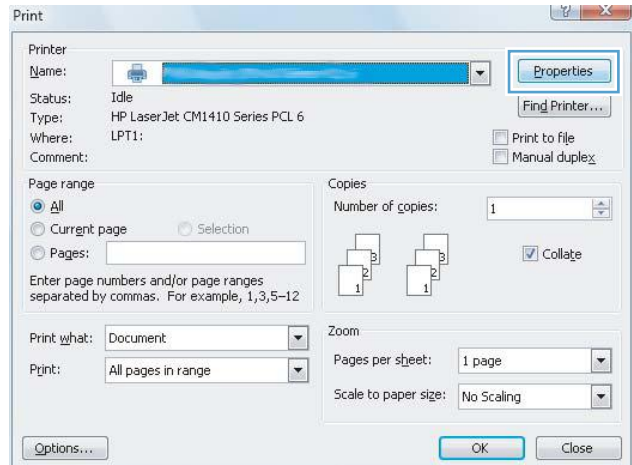


Print the first or last page on different paper with Windows

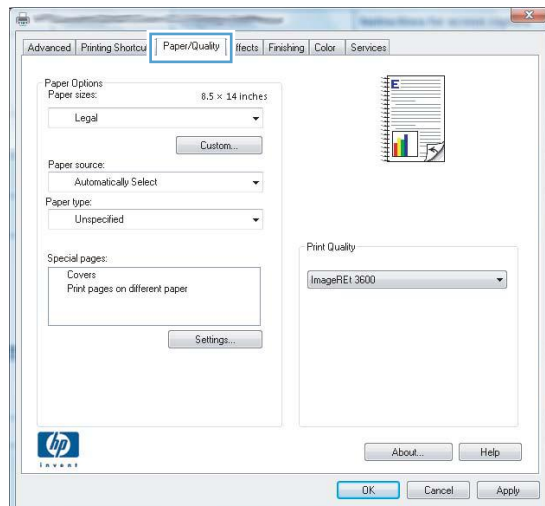
1. On the **File** menu in the software program, click **Print**.



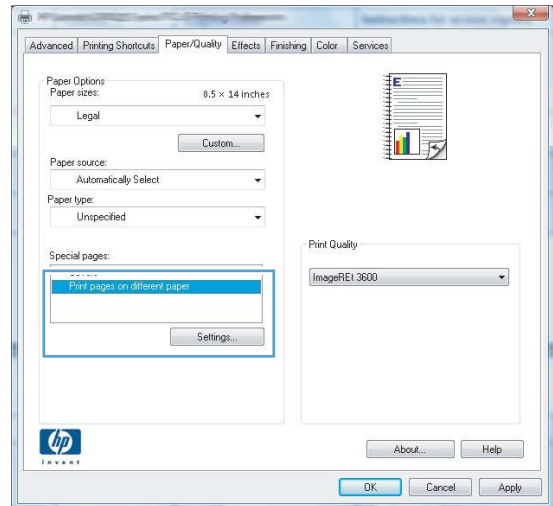
2. Select the product, and then click the **Properties** or **Preferences** button.



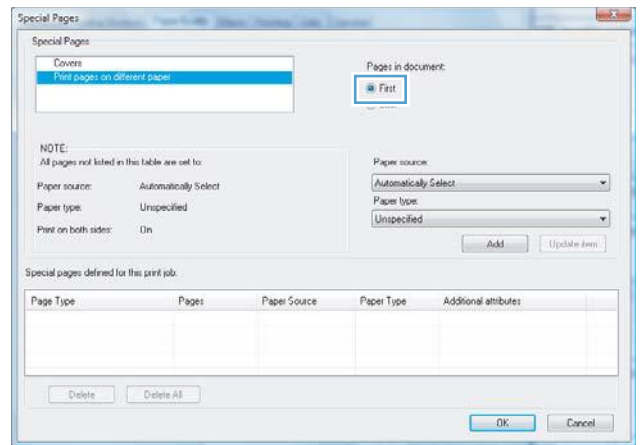
3. Click the **Paper/Quality** tab.



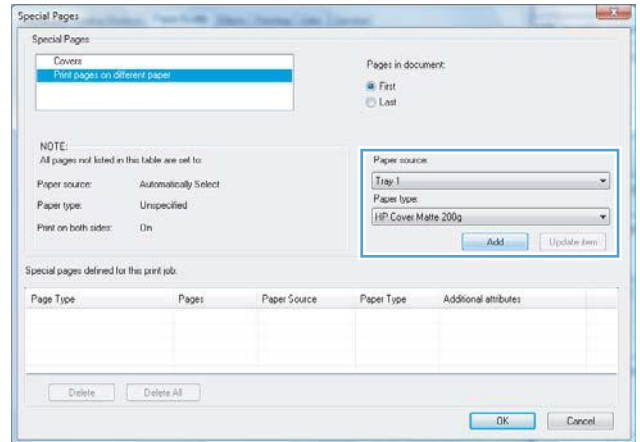
- In the **Special pages** area, click the **Print pages on different paper** option, and then click the **Settings** button.



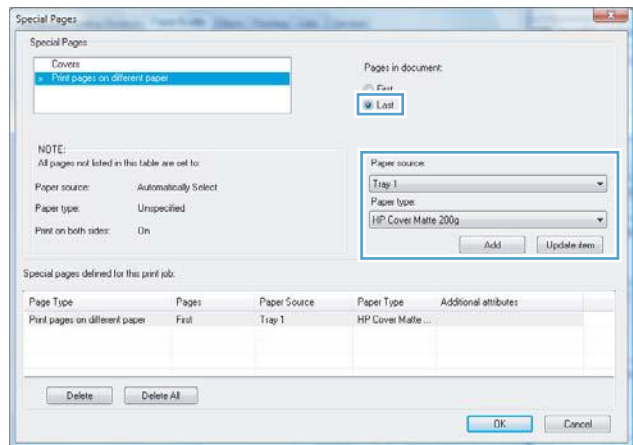
- In the **Pages in document** area, select either the **First** or **Last** option.



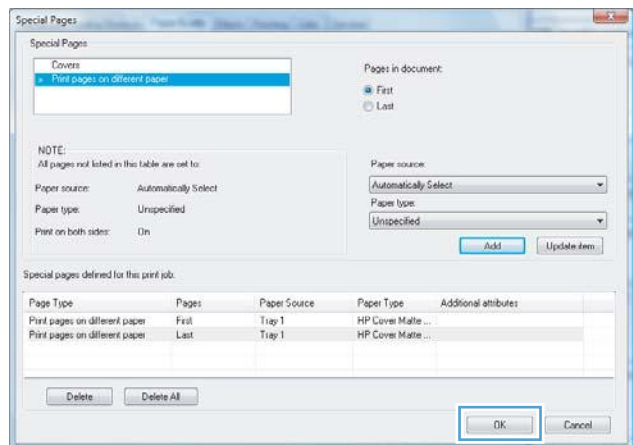
- Select the correct options from the **Paper source** and **Paper type** drop-down lists. Click the **Add** button.



7. If you are printing *both* the first and last pages on different paper, repeat steps 5 and 6, selecting the options for the other page.

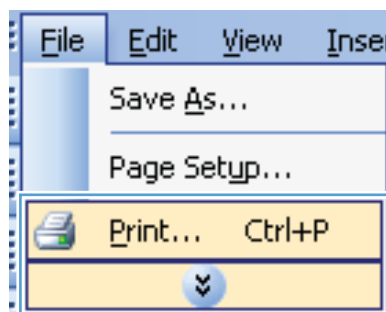


8. Click the **OK** button.

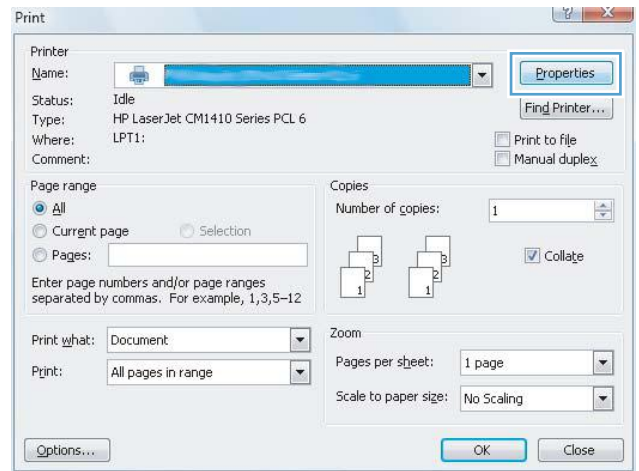


Scale a document to fit page size

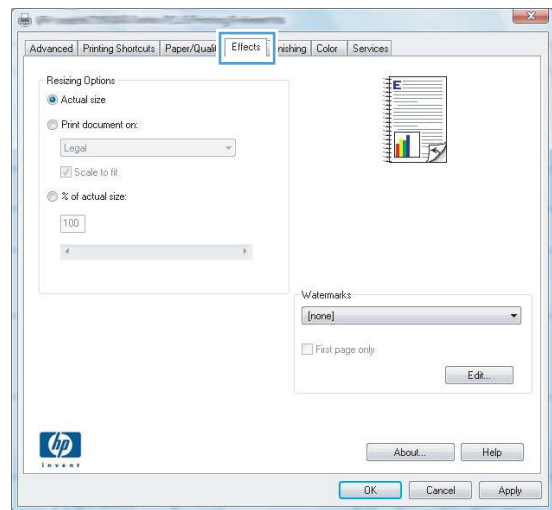
1. On the **File** menu in the software program, click **Print**.



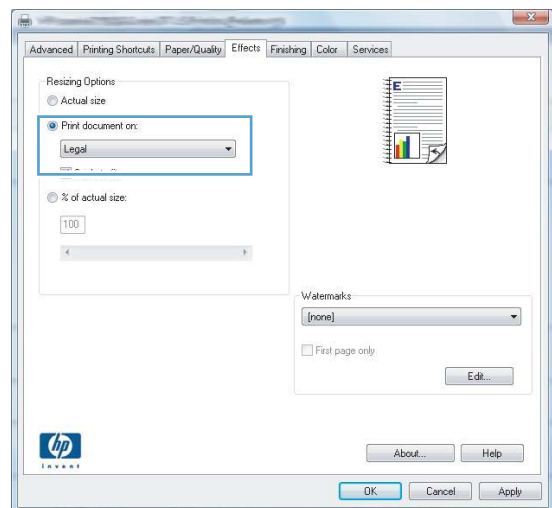
2. Select the product, and then click the **Properties** or **Preferences** button.



3. Click the **Effects** tab.



4. Select the **Print Document On** option, and then select a size from the drop-down list.



Add a watermark to a document with Windows

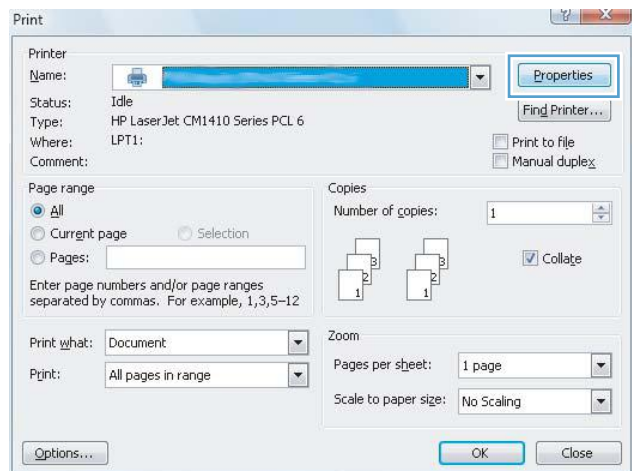
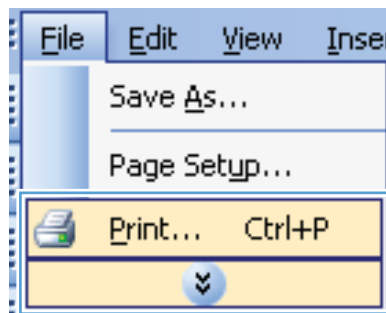
1. On the **File** menu in the software program, click **Print**.
2. Select the product, and then click the **Properties** or **Preferences** button.
3. Click the **Effects** tab.
4. Select a watermark from the **Watermarks** drop-down list.

Or, to add a new watermark to the list, click the **Edit** button. Specify the settings for the watermark, and then click the **OK** button.

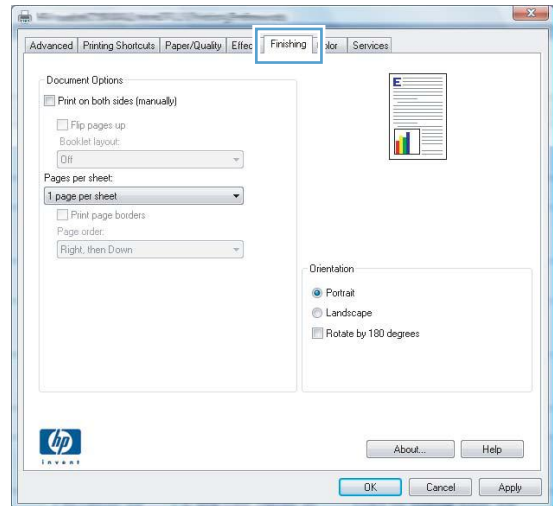
5. To print the watermark on the first page only, select the **First page only** check box. Otherwise, the watermark is printed on each page.

Create a booklet with Windows

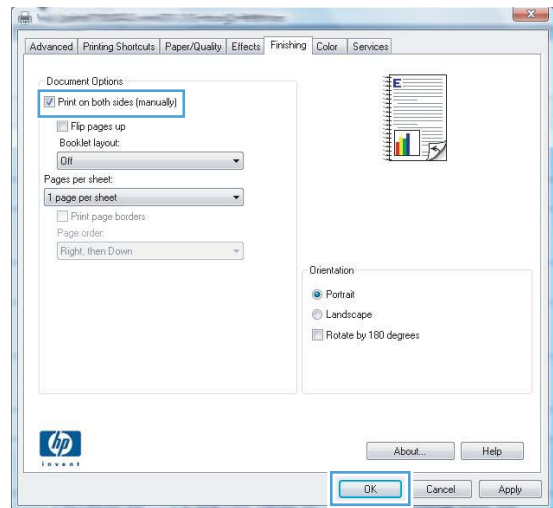
1. On the **File** menu in the software program, click **Print**.
2. Select the product, and then click the **Properties** or **Preferences** button.



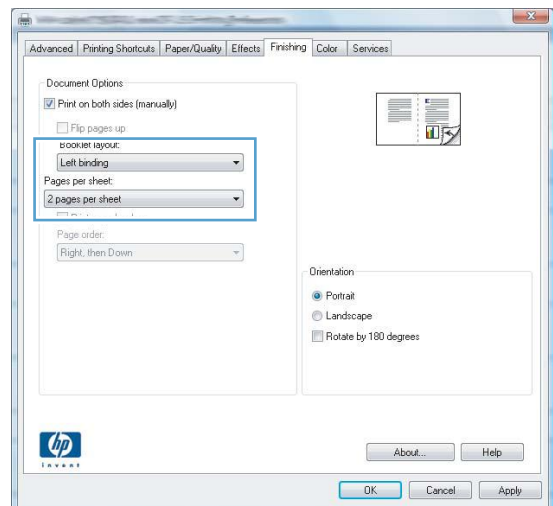
3. Click the **Finishing** tab.



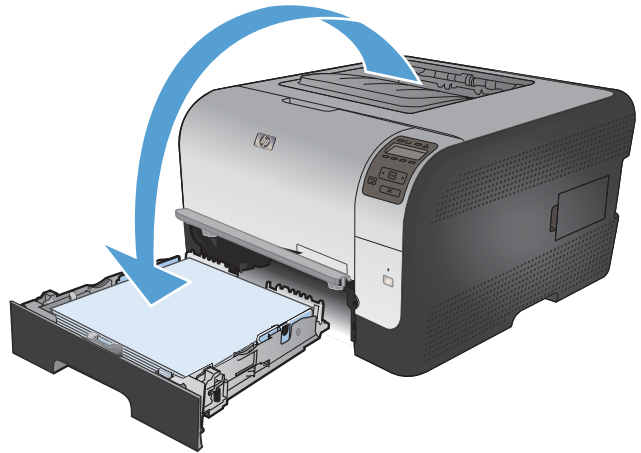
4. Select the **Print on both sides** check box.



5. 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**.



6. Retrieve the printed stack from the output bin, and maintaining the same orientation, place it with the printed side facing down in Tray 2.



7. On the control panel, press the **OK** button to print the second side of the job.



8 Color

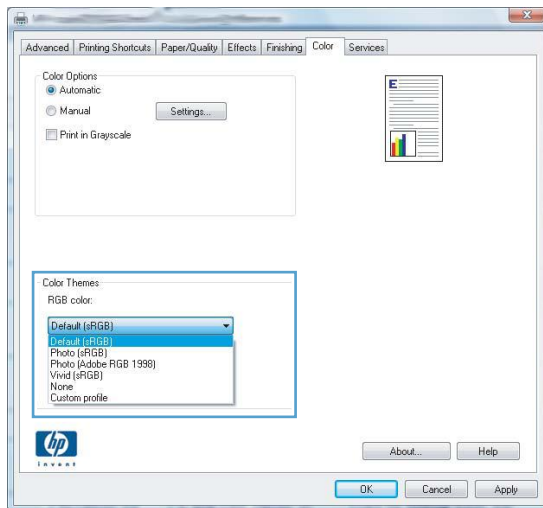
- [Adjust color](#)
- [Use the HP EasyColor option for Windows](#)
- [Match colors](#)

Adjust color

Manage color by changing the settings on the **Color** tab in the printer driver.

Change the color theme for a print job

1. On the **File** menu in the software program, click **Print**.
2. Click **Properties** or **Preferences**.
3. Click the **Color** tab.
4. Select a color theme from the **Color Themes** drop-down list.




- **Default (sRGB):** This theme sets the product to print RGB data in raw device mode. When using this theme, manage color in the software program or in the operating system for correct rendering.
- **Vivid:** The product increases the color saturation in the midtones. Use this theme when printing business graphics.
- **Photo:** The product interprets RGB color as if it were printed as a photograph using a digital mini lab. The product renders deeper, more saturated colors differently than with the Default (sRGB) theme. Use this theme when printing photos.
- **Photo (Adobe RGB 1998):** Use this theme with printing digital photos that use the AdobeRGB color space rather than sRGB. Turn off color management in the software program when using this theme.
- **None:** No color theme is used.

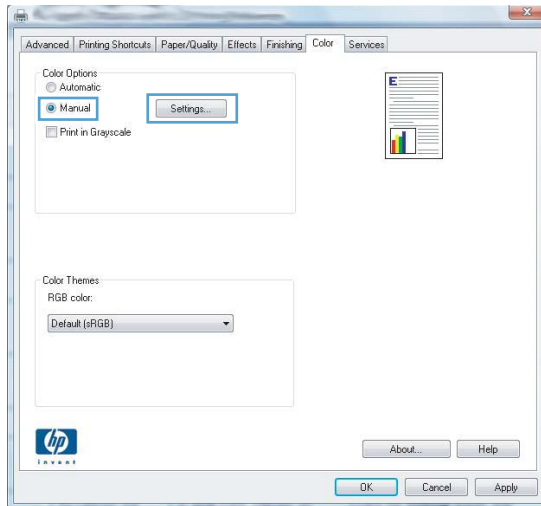
Change the color options

Change the color options settings for the current print job from the color tab of the printer driver.

1. On the **File** menu in the software program, click **Print**.
2. Click **Properties** or **Preferences**.
3. Click the **Color** tab.

4. Click the **Automatic** or **Manual** setting.
 - **Automatic** setting: Select this setting for most color print jobs
 - **Manual** setting: Select this setting to adjust the color settings independent from other settings.

 **NOTE:** Changing color settings manually can impact output. HP recommends that only color graphics experts change these settings.



5. Click the **Print in Grayscale** option to print a color document in black and shades of gray. Use this option to print color documents for photocopying or faxing. You can also use this option to print draft copies or to save color toner.
6. Click the **OK** button.

Manual color options

Use manual color options to adjust the **Neutral Grays**, **Halftone**, and **Edge Control** options for text, graphics, and photographs.

Table 8-1 Manual color options

Setting description	Setting options
<p>Edge Control</p> <p>The Edge Control setting determines the rendering of edges. Edge control has two components: adaptive halftoning and trapping. Adaptive halftoning increases edge sharpness. Trapping reduces the effect of color-plane misregistration by overlapping the edges of adjacent objects slightly.</p>	<ul style="list-style-type: none"> • Off turns off both trapping and adaptive halftoning. • Light sets trapping at a minimal level. Adaptive halftoning is on. • Normal sets trapping at a medium level. Adaptive halftoning is on. • Maximum is the most aggressive trapping setting. Adaptive halftoning is on.

Table 8-1 Manual color options (continued)

Setting description	Setting options
<p>Halftone</p> <p>Halftone options affect color output clarity and resolution.</p>	<ul style="list-style-type: none"> • Smooth provides better results for large, solid-filled print areas and enhances photographs by smoothing color gradations. Select this option when uniform and smooth area fills are important. • Detail is useful for text and graphics that require sharp distinctions among lines or colors, or images that contain a pattern or a high level of detail. Select this option when sharp edges and small details are important.
<p>Neutral Grays</p> <p>The Neutral Grays setting determines the method for creating gray colors used in text, graphics, and photographs.</p>	<ul style="list-style-type: none"> • Black Only generates neutral colors (grays and black) by using only black toner. This guarantees neutral colors without a color cast. This setting is best for documents and grayscale viewgraphs. • 4-Color generates neutral colors (grays and black) by combining all four toner colors. This method produces smoother gradients and transitions to other colors, and it produces the darkest black.

Use the HP EasyColor option for Windows

If you are using the HP PCL 6 printer driver for Windows, the **HP EasyColor** technology automatically improves mixed-content documents that are printed from Microsoft Office programs. This technology scans documents and automatically adjusts photographic images in .JPEG or .PNG format.

HP EasyColor technology enhances the entire image at one time, rather than dividing it into several pieces, which results in improved color consistency, sharper details, and faster printing.

In the following example, the images on the left were created without using the **HP EasyColor** option. The images on the right show the enhancements that result from using the **HP EasyColor** option.



The **HP EasyColor** option is enabled by default in the HP PCL 6 printer driver, so you do not need to make manual color adjustments. To disable the option so you can manually adjust the color settings, open the **Color** tab, and click the **HP EasyColor** check box to clear it.

Match colors

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

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

- Print media
- Printer colorants (inks or toners, for example)
- Printing process (Inkjet, press, or laser technology, for example)
- Overhead lighting
- Personal differences in perception of color
- Software programs
- Printer drivers
- Computer operating systems
- Monitors
- Video cards and drivers
- Operating environment (humidity, for example)

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


For most users, the best method for matching colors is to print sRGB colors.

9 Manage and maintain

- [Print information pages](#)
- [Use HP ToolboxFX](#)
- [Use the HP Embedded Web Server](#)
- [Use HP Web Jetadmin software](#)
- [Product security features](#)
- [Economy settings](#)
- [Manage supplies and accessories](#)
- [Clean the product](#)
- [Product updates](#)

Print information pages

Information pages reside within the product memory. These pages help diagnose and solve problems with the product.

 **NOTE:** If the product language was not correctly set during installation, you can set the language manually so the information pages print in one of the supported languages. Change the language by using the **System Setup** menu on the control panel or the embedded Web server.

Menu item	Description
Demo page	Prints a color page that demonstrates print quality.
Menu structure	Prints a map of the control panel-menu layout. The active settings for each menu are listed.
Config report	Prints a list of all the product settings. Includes network information when the product is connected to a network.
Supplies status	Prints the status for each print cartridge, including the following information: <ul style="list-style-type: none">• Estimated percentage of cartridge life remaining• Approximate pages remaining• Part number• Number of pages printed• Information about ordering new HP print cartridges and recycling used HP print cartridges
Network Summary	Prints a list of all product network settings
Usage page	Prints a page that lists PCL pages, PCL 6 pages, PS pages, pages that were jammed or mispicked in the product, monochrome (black and white) or color pages; and reports the page count HP Color LaserJet CP1525nw only: prints a page that lists the information above, and the monochrome (black and white) or color pages printed, number of memory cards inserted, number of PictBridge connections, and the PictBridge page count
PCL font list	Prints a list of all the PCL fonts that are installed.
PS font list	Prints a list of all the PostScript (PS) fonts that are installed
PCL6 font list	Prints a list of all the PCL6 fonts that are installed
Color usage log	Prints a report that shows the user name, application name, and color usage information on a job-by-job basis
Service page	Prints the service report
Diagnostics page	Prints the calibration and color diagnostics pages
Print Quality	Prints a color test page which can be useful for diagnosing print quality defects.

1. Press **OK** to open the menus.
2. Press the **Left arrow** ◀ or **Right arrow** ▶ button to navigate to **Reports**, and then press **OK**.

3. Press the **Left arrow** ◀ or **Right arrow** ▶ button to navigate to the report you want to print, and then press **OK** to print the report.
4. Press **X** to exit the menus.

Use HP ToolboxFX

The HP ToolboxFX is program you can use to complete the following tasks:

- Check the product status.
- Configure the product settings.
- View troubleshooting information.


You can view the HP ToolboxFX program when the product is directly connected to your computer or is connected to the network. You must perform a recommended software installation to use the HP ToolboxFX program.

 **NOTE:** The HP ToolboxFX program is not supported for Windows Server 2003, Server 2008, Vista Starter, or Mac operating systems.

You do not have to have Internet access to open and use the HP ToolboxFX program.

View the HP ToolboxFX

Open the HP ToolboxFX program in one of these ways:

- In the Windows system tray, double-click the HP ToolboxFX icon (.
- On the Windows **Start** menu, click **Programs** (or **All Programs** in Windows XP and Vista), click **HP**, click the name of this product, and then click the HP ToolboxFX item.

The HP ToolboxFX program contains the following folders:

- Status
- Help
- System settings
- Print settings
- Network Settings

HP ToolboxFX sections

Status

The **Status** folder contains links to the following main pages:

- **Device status.** This page indicates product conditions such as a jam or an empty tray. After you correct a problem, click **Refresh status** to update the product status.
- **Supplies status.** View details such as the estimated percent of life remaining in the print cartridge and the number of pages printed with the current print cartridge. This page also has links for ordering supplies and for finding recycling information.
- **Device configuration.** View a detailed description of the current product configuration, including the amount of memory installed and whether optional trays are installed.
- **Network summary.** View a detailed description of the current network configuration, including the IP address and network status.
- **Reports.** Print the Configuration page and other information pages, such as the Supplies status page.
- **Color usage job log.** View color usage information for the product.

Event log

The event log is a table where the product events are logged for your reference. The log contains codes that correspond to the error messages that appear on the product control panel display. The number in the Page Count column specifies the total number of pages that the product had printed when the error occurred.

Help

The **Help** folder contains links to the following main pages:

- **Color Printing Tools.** Open Microsoft Office Basic Colors or the full palette of color with associated RGB values.

System Settings

The **System Settings** folder contains links to the following main pages:

- **Device Information.** View information such as the product description and a contact person.
- **Paper Setup.** Configure trays or change the product paper-handling settings, such as default paper size and default paper type.
- **Print Quality.** Change the print-quality settings.
- **Print Density.** Change the print-density settings, such as contrast, highlights, midtones, and shadows.
- **Paper Types.** Change the mode settings for each paper type, such as letterhead, prepunched, or glossy paper.
- **System Setup.** Change the system settings, such as jam recovery and auto continue. Change the **Cartridge low threshold** setting, which sets the toner level that causes a low toner alert.

- **Save/Restore Settings.** Save the current settings for the product to a file on your computer. Use this file to load the same settings onto another product or to restore these settings to this product at a later time.
- **Product security.** Set a password to protect the device settings. After a password is set, users are prompted to enter the password before being allowed to change device settings. This password is the same as the embedded Web server password.

Device Information

The Device Information page stores data about your product for future reference. The information that you type in the fields on this page displays on the Configuration page. You can type any character in each of these fields.



NOTE: You must click **Apply** before your changes take effect.

Paper Setup

Use these options to configure your default product settings. These are the same options that are available on the control panel menus.

The following options are available for handling print jobs when the product is out of paper.

- Select the **Wait forever** option to make the product wait until you load the correct paper and press the **OK** button. This is the default setting.
- Select the **Cancel** option to automatically cancel the print job after a specified delay..
- Select the **Override** option to print on a different size or type after a specified delay.

If you select either the **Override** or **Cancel** options, specify the number of seconds to delay. Press the **Right arrow** ► button to increase the time, up to 3600 seconds. Press the **Left arrow** ◀ button to decrease the time.

The **Paper out time** field specifies how long the product waits before acting on your selections. You can specify from 0 to 3600 seconds.

 **NOTE:** You must click **Apply** before your changes take effect.

Print Quality

Use these options to improve the appearance of your print jobs. These are the same options that are available on the control panel menus.

Color Calibration

- **Power On Calibration.** Specify whether the product should calibrate when you turn it on.
- **Calibration Timing.** Specify how frequently the product should calibrate.
- **Calibrate Now.** Set the product to calibrate immediately.

 **NOTE:** You must click **Apply** before your changes take effect.

Print Density

Use these settings to make fine adjustments in the amount of each color of toner that is used for your printed documents.

- **Contrasts.** Contrast is the range of difference between light (highlight) and dark (shadow) colors. To increase the overall range between light and dark colors, increase the **Contrasts** setting.
- **Highlights.** Highlights are colors that are nearly white. To darken highlight colors, increase the **Highlights** setting. This adjustment does not affect midtone or shadow colors.
- **Midtones.** Midtones are colors that are halfway between white and solid density. To darken midtone colors, increase the **Midtones** setting. This adjustment does not affect highlight or shadow colors.
- **Shadows.** Shadows are colors that are nearly solid density. To darken shadow colors, increase the **Shadows** setting. This adjustment does not affect highlight or midtone colors.

Paper Types

Use these options to configure print modes that correspond to the various media types. To reset all modes to factory default settings, select **Restore modes**.

 **NOTE:** You must click **Apply** before your changes take effect.

System Setup

Use these system settings to configure miscellaneous print settings. These settings are not available on the control panel.

 **NOTE:** You must click **Apply** before your changes take effect.

Print Settings

The HP ToolboxFX **Print Settings** tab contains links to the following main pages:

- **Printing.** Change the default product print settings, such as number of copies and paper orientation.
- **PCL5c.** View and change the PCL5c settings.
- **PostScript.** View and change the PS settings.

Printing

Use these options to configure the settings for all print functions. These are the same options that are available on the control panel.

 **NOTE:** You must click **Apply** before your changes take effect.

PCL5c

Use these options to configure the settings when you are using the PCL print personality.

 **NOTE:** You must click **Apply** before your changes take effect.

PostScript

Use this option when you are using the PostScript print personality. When the **Print PostScript error** option is turned on, the PostScript error page automatically prints when PostScript errors occur.

 **NOTE:** You must click **Apply** before your changes take effect.

Network Settings

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

 **NOTE:** You cannot configure wireless network settings by using HP ToolboxFX.

Shop for Supplies

This button, at the top of each page, links to a Web site where you can order replacement supplies. You must have Internet access to use this feature.

Other Links

This section contains links that connect you to the Internet. 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 HP

ToolboxFX program, you must connect before you can visit these Web sites. Connecting might require that you close the HP ToolboxFX program and reopen it.


- **HP Instant Support.** Connects to the HP Instant Support Web site.
- **Support and Troubleshooting.** Connects to the support site for the product where you can search for help with a specific problem.
- **Product Registration.** Connects to the HP product registration Web site.

Use the HP Embedded Web Server

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


An “embedded” Web server resides on a hardware device (such as an HP LaserJet product) or in firmware, rather than as software that is loaded on a network server.

The advantage of an EWS is that it provides an interface to the product that anyone with a network-connected product and computer can use. There is no special software to install or configure, but you must have a supported Web browser on the computer. To gain access to the EWS, type the IP address for the product in the address line of the browser. To find the IP address, print a configuration page.

 **NOTE:** For Macintosh operating systems, you can use the EWS over a USB connection after installing the Macintosh software included with the product.

Open the HP Embedded Web Server

1. In a supported Web browser on your computer, type the IP address for the product in the address/URL field. (To find the IP address, print a configuration page.)

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

2. The embedded Web server has three tabs that contain settings and information about the product: the **Status** tab, the **Settings** tab, and the **Networking** tab. Click the tab that you want to view.

See the following section for more information about each tab.

HP Embedded Web Server features

The following sections describe the basic screens of the embedded Web server.

Status tab


Provides product, status, and configuration information.

- **Device Status:** Shows the product status and shows the life remaining of HP supplies, with 0% indicating that a supply is empty.
- **Supplies Status:** Shows the approximate percent life remaining of HP Supplies, with "--" indicating that the supply is nearing the end of its estimated life, or is too low to determine.
- **Device Configuration:** Shows the information found on the product Configuration page.
- **Network Summary:** Shows the information found on the product Network Configuration page.
- **Reports:** Allows you to print the PCL, PCL6, PS Font Lists, and the supplies status page that the product generates.
- **Color Usage Job Log:** Shows user color print jobs on a job-by-job basis.
- **Event Log:** Shows a list of all product events and errors.

System tab

Provides the ability to configure the product from your computer.

- **Device Information:** Allows you to name the product and assign an asset number to it. Enter the name for the primary contact who will receive information about the product.
- **Paper Setup:** Allows you to change the paper-handling defaults for the product.
- **Print Quality:** Allows you to change the print quality defaults for the product, including calibration settings.
- **Print Density:** Allows you to change the contrasts, highlights, midtones, and shadows values for each supply.
- **Paper Types:** Allows you to configure print modes that correspond to the paper types that the product accepts.
- **System Setup:** Allows you to change the system defaults for the product.
- **Service:** Allows you to start the cleaning procedure on the product.
- **Product Security:** Allows you to set a password for making changes to configuration items.

 **NOTE:** The **Settings** tab can be password-protected. If this product is on a network, always consult with the printer administrator before changing settings on this tab.

Print tab

Provides the ability to configure print settings on the product.

- **Printing:** Allows you to change the printing defaults for the product.
- **PCL 5:** Allows you to change the PCL 5 defaults for the product.
- **PostScript:** Allows you to change the PostScript defaults for the product.

Networking tab

Provides the ability to change network settings from your computer.

Network administrators can use this tab to control network-related settings for the product when it is connected to an IP-based network. This tab does not appear if the product is directly connected to a computer.



NOTE: The **Networking** tab can be password-protected.

Use HP Web Jetadmin software

HP Web Jetadmin is a Web-based software solution for remotely installing, monitoring, and troubleshooting network-connected peripherals. Management is proactive, allowing network administrators the ability to resolve issues before users are affected. Download this free, enhanced-management software at www.hp.com/go/webjetadmin.

Device plug-ins can be installed into HP Web Jetadmin to provide support for specific product features. The HP Web Jetadmin software can automatically notify you when new plug-ins are available. On the **Product Update** page, follow the directions to automatically connect to the HP Web site and install the latest device plug-ins for your product.



NOTE: Browsers must be Java™-enabled. Browsing from a Mac OS is not supported.

Product security features

The product supports security standards and recommended protocols that help you keep the product secure, protect critical information on your network, and simplify the way you monitor and maintain the product.

For in-depth information about HP's secure imaging and printing solutions, visit www.hp.com/go/secureprinting. The site provides links to white papers and FAQ documents about security features.

Assign a system password


Assign a password for the product so that unauthorized users cannot change the product settings.

1. Open the HP Embedded Web Server by entering the product IP address into the address line of a Web browser.
2. Click the **Settings** tab.
3. On the left side of the window, click the **Security** menu.
4. In the **Device Security Settings** area, click the **Configure . . .** button.
5. In the **Device Password** area, type the password in the **New Password** box, and type it again in the **Verify password** box.
6. Click the **Apply** button. Make note of the password and store it in a safe place.

Economy settings

Powersave modes

The adjustable sleep mode feature reduces power consumption when the product has been inactive for an extended period. You can set the length of time before the product enters sleep mode.

 **NOTE:** This mode does not affect product warm-up time.

Set sleep delay mode

1. On the control panel, press the **OK** button and select the **System Setup** menu.
2. Select the **PowerSave Time** menu.
3. Select the **Sleep Delay** sub-menu item.
4. Scroll to and touch the 15 minutes button, and then select the setting that you want to use.

Archive print

Archive print produces output that is less susceptible to toner smearing and dusting. Use archive print to create documents that you want to preserve or archive.

1. On the control panel, press the **OK** button and select the **Service** menu.
2. Use the arrow buttons to select the **Archive print** option, select the **On** or **Off** choice, and then press the **OK** button.

Manage supplies and accessories

Print when a print cartridge reaches estimated end of life


Supplies messages

Supply-related notifications are communicated on the product control panel and on computers that have the full product software installed. If the full product software is not installed, you might not receive all supply-related notifications in a prominent manner. To install the full product software, insert the CD that came with the product and follow the steps for the full install.

A **<Supply> Low** message—where **<Supply>** is the color print cartridge: The product indicates when a supply level is low. Actual cartridge life remaining may vary. Consider having a replacement available to install when print quality is no longer acceptable. The supply does not need to be replaced now.

A **<Supply> Very Low** message. The product indicates when a supply level is very low. Actual cartridge life remaining may vary. Consider having a replacement available to install when print quality is no longer acceptable. The supply does not need to be replaced now unless the print quality is no longer acceptable. Once an HP supply has reached “Very Low”, HP’s premium Protection Warranty on that supply has ended.

Print-quality problems can occur when using a print cartridge that is at its estimated end of life. The supply does not need to be replaced at this point in time unless the print quality is no longer acceptable.

 **NOTE:** Using the **Continue** setting allows printing beyond Very Low without customer interaction and can result in unsatisfactory print quality.

Enable or disable the At Very Low settings from the control panel

You can enable or disable the default setting at any time, and you do not have to re-enable it when you install a new print cartridge.

1. On the control panel, press the **OK** button.
2. Use the arrow buttons to select the **System Setup** menu, and then press the **OK** button.
3. Use the arrow buttons to select the **At Very Low** menu, and then press the **OK** button.
4. Use the arrow buttons to select the **Black Cartridge** menu or the **Color Cartridges** menu, and then press the **OK** button.
5. Select one of the following options.
 - Select the **Continue** option to set the product to alert you that the print cartridge is very low, but to continue printing.
 - Select the **Stop** option to set the product to stop printing until you replace the print cartridge.
 - Select the **Prompt** option to set the product to stop printing and prompt you to replace the print cartridge. You can acknowledge the prompt and continue printing.
 - On the **Color Cartridges** menu only, select **Print Black** (the default option) to alert you when the print cartridge is very low, but to continue printing in black only.

Once an HP supply has reached “very low”, HP’s premium Protection Warranty on that supply has ended.

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.

HP fraud hotline and Web site

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

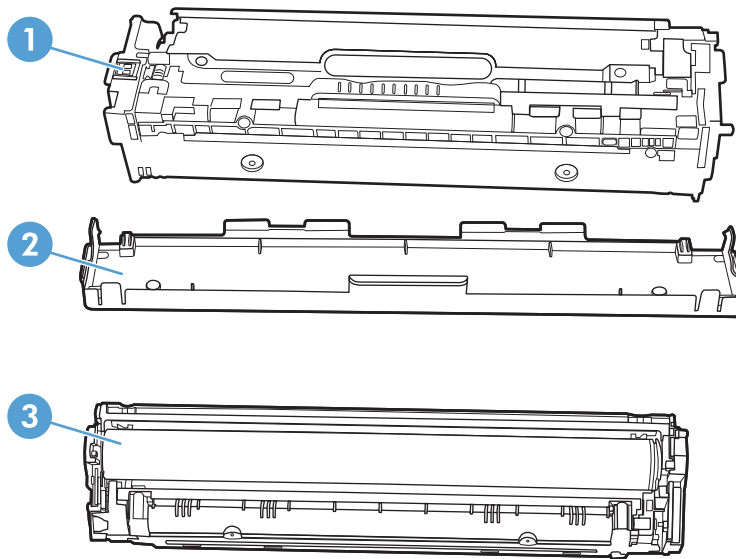
Your print cartridge might not be a genuine HP print cartridge if you notice the following:

- The supplies status page indicates that a non-HP or used supply is installed.
- You are experiencing a high number of problems with the print cartridge.
- The cartridge does not look like it usually does (for example, the packaging differs from HP packaging).

Recycle supplies

To recycle a genuine HP print cartridge, place the used cartridge in the box in which the new cartridge 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.

Print cartridge layout

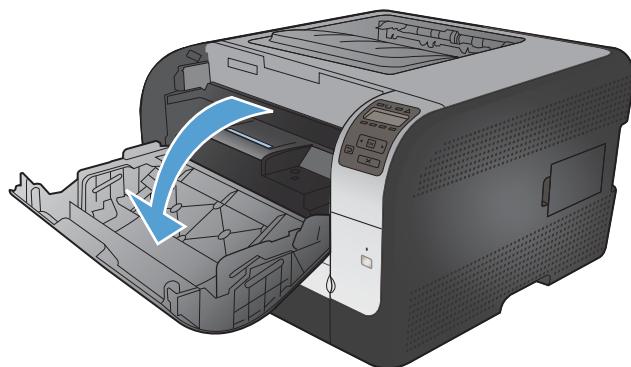


1	Print cartridge memory chip
2	Plastic shield
3	Imaging Drum. Do not touch the imaging drum on the bottom of the print cartridge. Fingerprints on the imaging drum can cause print-quality problems.

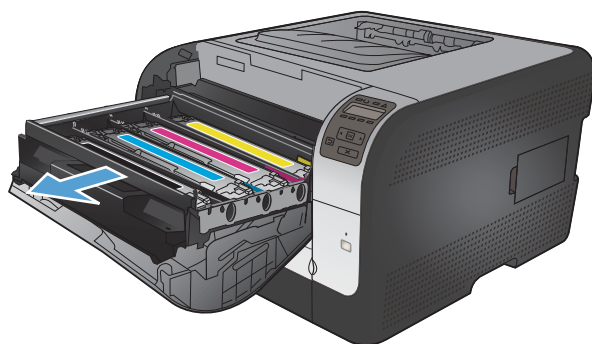
Replacement instructions

Replace print cartridges

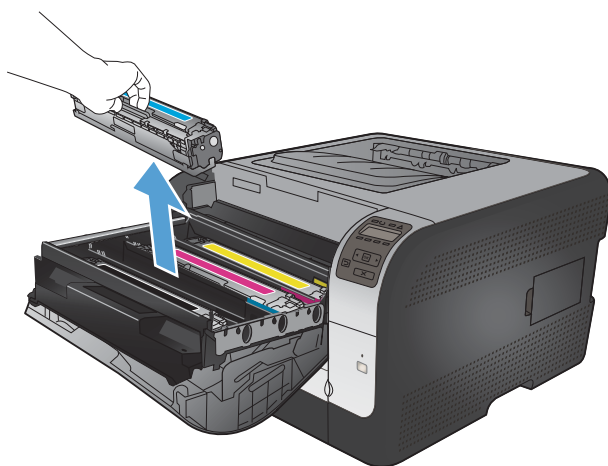
1. Open the front door.



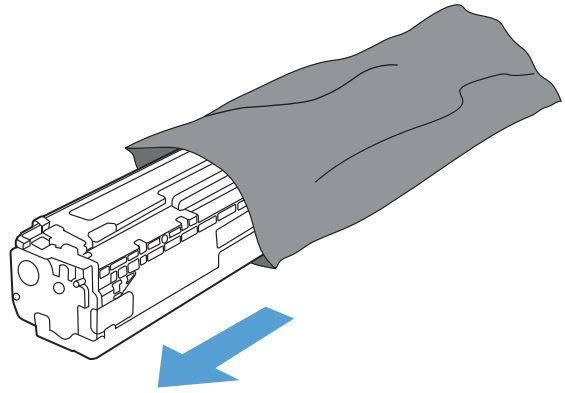
2. Pull out the print cartridge drawer.



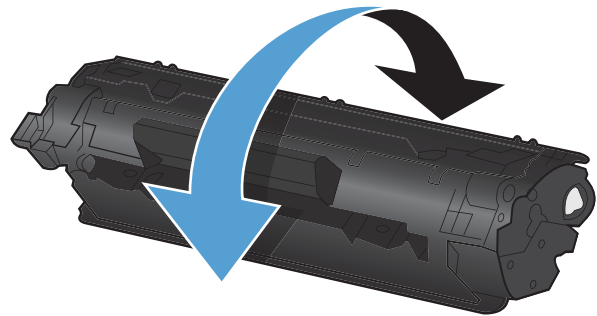
3. Grasp the handle on the old print cartridge and then pull the print cartridge straight up to remove it.



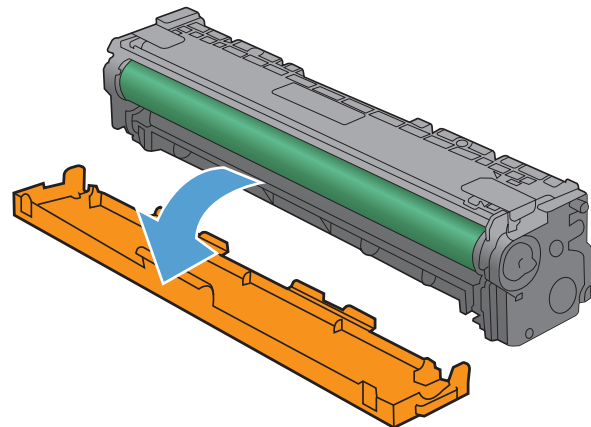
4. Remove the new print cartridge from the packaging.



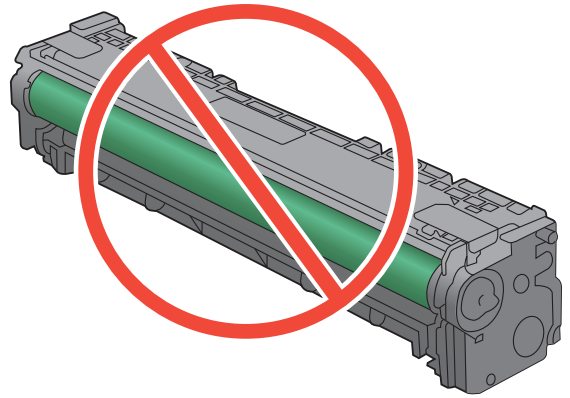
5. Gently rock the print cartridge from front to back to distribute the toner evenly inside the print cartridge.



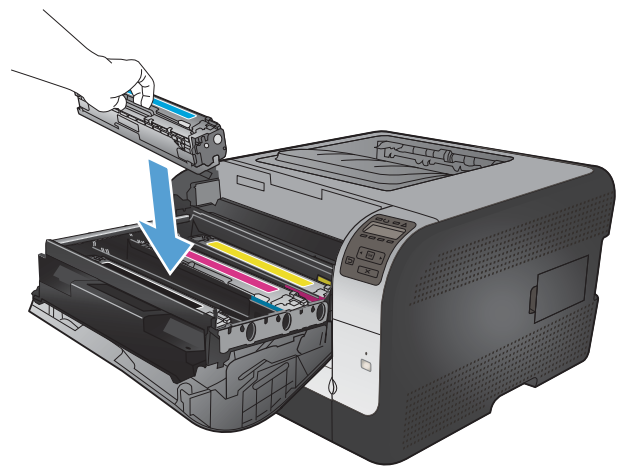
6. Remove the orange, plastic shield from the bottom of the new print cartridge.



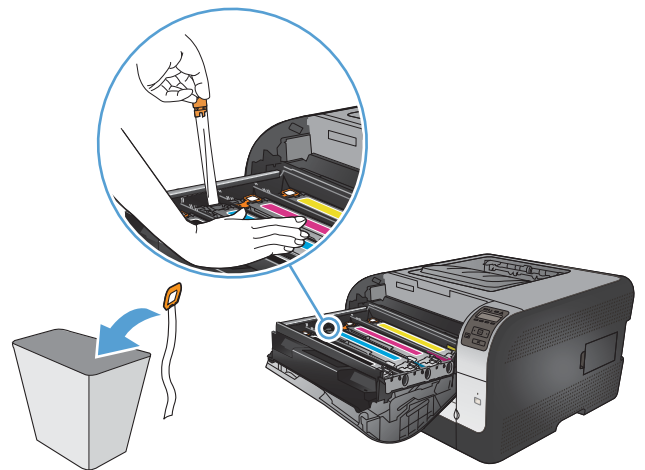
7. Do not touch the imaging drum on the bottom of the print cartridge. Fingerprints on the imaging drum can cause print-quality problems.



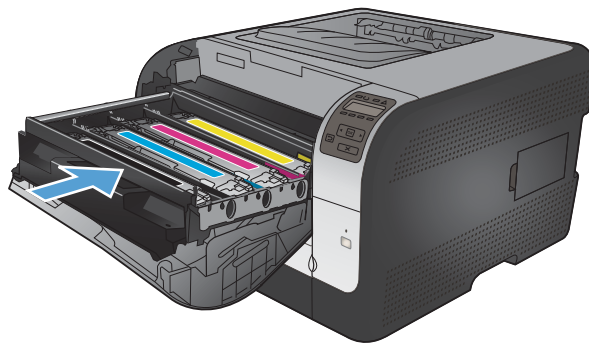
8. Insert the new print cartridge into the product.



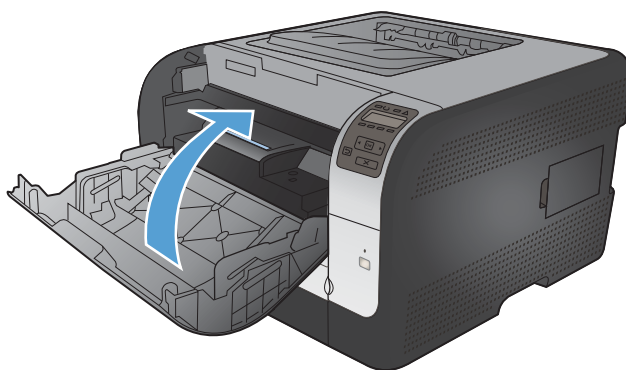
9. Pull the tab on the left side of the print cartridge straight up to completely remove the sealing tape. Discard the sealing tape.



10. Close the print cartridge drawer.



11. Close the front door.



12. Place the old print cartridge and the orange plastic shield in the box for the new print cartridge. Follow the recycling instructions that are included in the box.

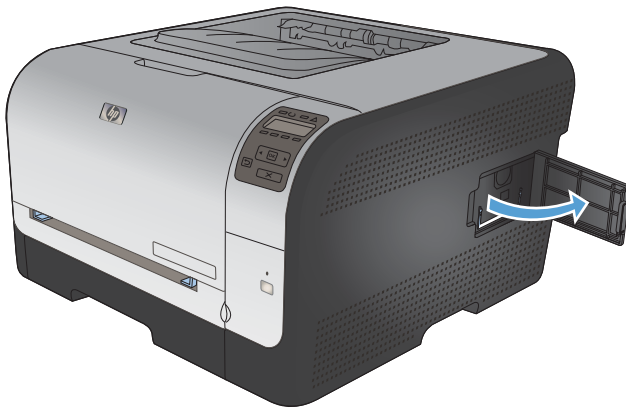
Install memory DIMMs

This product comes with 64-megabyte (MB) random-access memory installed. You can install up to 256-megabyte of memory for the product by adding a dual inline memory module (DIMM). You can also install a font DIMM to allow the product to print characters (for example, Chinese language or the Cyrillic alphabet characters).

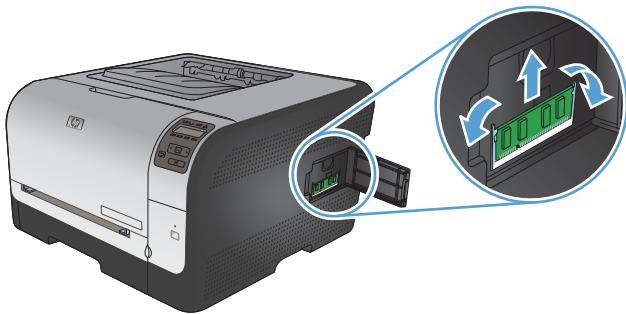
- △ **CAUTION:** Static electricity can damage electronic parts. When handling electronic parts, either wear an antistatic wrist strap, or frequently touch the surface of the antistatic package and then touch bare metal on the product.

Install memory DIMMs

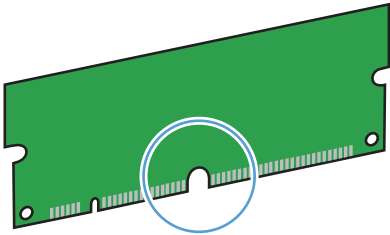
1. Turn the product off, and then disconnect all power and interface cables.
2. On the right side of the product, open the DIMM access door.



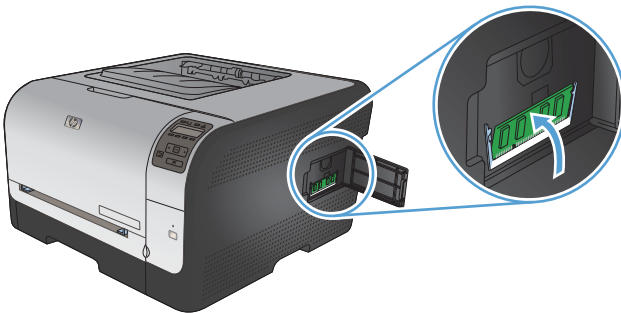
3. To replace a DIMM that is currently installed, spread the latches apart on each side of the DIMM slot, lift the DIMM up at an angle, and pull it out.



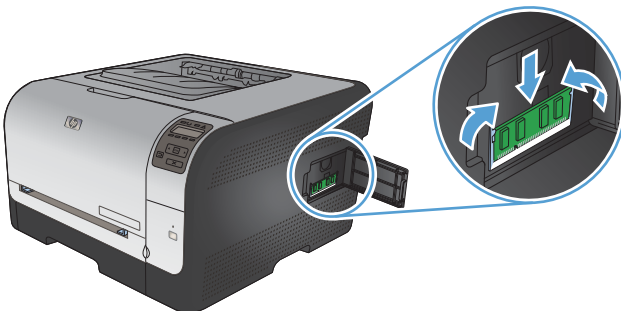
4. Remove the new DIMM from the antistatic package, and then locate the alignment notch on the bottom edge of the DIMM.




5. Holding the DIMM by the edges, align the notch on the DIMM with the bar in the DIMM slot at an angle.

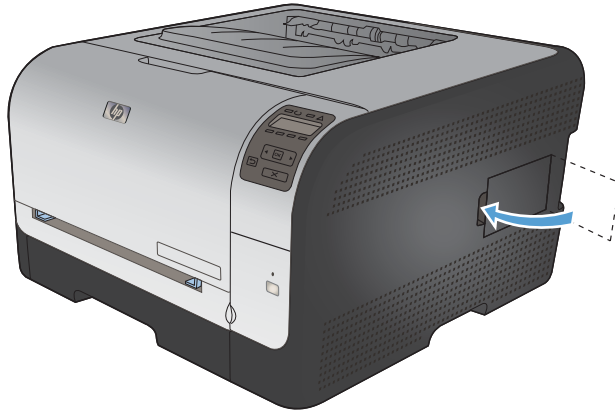


6. Push down on the DIMM until both latches engage the DIMM. When the installation is correct, the metal contacts are not visible.



 **NOTE:** If you have difficulty inserting the DIMM, make sure that the notch on the bottom of the DIMM is aligned with the bar in the slot. If the DIMM still does not go in, make sure that you are using the correct DIMM type.

7. Close the DIMM access door.



8. Reconnect the power cable and USB or network cable, and then turn on the product.

Enable memory

Windows XP, Windows Server 2003, Windows Server 2008, and Windows Vista

1. Click **Start**.
2. Click **Settings**.
3. Click **Printers and Faxes** (using the default Start menu view) or click **Printers** (using the Classic Start menu view).
4. Right-click the product driver icon, and then select **Properties**.
5. Click the **Device Settings** tab.
6. Expand the area for **Installable Options**.
7. Next to **Automatic Configuration**, select **Update Now**.
8. Click **OK**.

NOTE: If the memory is not updated correctly after using the **Update Now** option, you can manually select the total amount of memory installed in the product in the **Installable Options** area.

The **Update Now** option overwrites any existing product configuration settings.


Windows 7

1. Click **Start**.
2. Click **Devices and Printers**.
3. Right-click the product driver icon, and then select **Printer properties**.
4. Click the **Device Settings** tab.
5. Expand the area for **Installable Options**.
6. Next to **Automatic Configuration**, select **Update Now**.
7. Click **OK**.

NOTE: If the memory is not updated correctly after using the **Update Now** option, you can manually select the total amount of memory installed in the product in the **Installable Options** area.

The **Update Now** option overwrites any existing product configuration settings.


Mac OS X 10.5 and 10.6

1. From the Apple menu , click the **System Preferences** menu and then click the **Print & Fax** icon.
2. Select the product in the left side of the window.
3. Click the **Options & Supplies** button.
4. Click the **Driver** tab.
5. Configure the installed options.

Check DIMM installation

After installing the DIMM, make sure that the installation was successful.

1. Turn the product on. Check that the Ready light is illuminated after the product has gone through the startup sequence. If an error message appears, a DIMM might have been incorrectly installed.
2. Print a configuration page.
3. Check the memory section on the configuration page and compare it to the configuration page that was printed before the memory installation. If the amount of memory has not increased, the DIMM might not be installed correctly, or the DIMM might be defective. Repeat the installation procedure. If necessary, install a different DIMM.


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

Memory allocation

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

Use the following guidelines if you use the page description language (PDL) ability to mark resources as permanent. For technical details, see an appropriate PDL reference for PCL or PS.

- Mark resources as permanent only when it is absolutely necessary that they remain in memory while the product is turned on.
- Send permanent resources to the product only at the beginning of a print job and not while the product is printing.

 **NOTE:** Overusing permanent resources or downloading them while the product is printing might affect product performance or the ability to print complex pages.

Clean the product

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

1. At the product control panel, press the **OK** button.
2. Press the right arrow ► to highlight the **Service** menu, and then press the **OK** button.
3. Press the right arrow ► to highlight the **Cleaning Page** option, and then press the **OK** button.

Product updates

Software and firmware updates and installation instructions for this product are available at www.hp.com/support/ljcp1520series. Click **Downloads and drivers**, click the operating system, and then select the download for the product.

10 Solve problems

- [Self help](#)
- [Solve problems checklist](#)
- [Factors that affect product performance](#)
- [Restore factory-settings](#)
- [Interpret control panel messages](#)
- [Paper feeds incorrectly or becomes jammed](#)
- [Solve image quality problems](#)
- [The product does not print or it prints slowly](#)
- [Solve connectivity problems](#)
- [Solve wireless network problems](#)
- [Solve product software problems](#)

Self help

In addition to the information in this guide, other sources are available that provide helpful information.

HP Help and Learn Center	The HP Help and Learn Center and other documentation are on the CD that came with the product or in the HP Program folder on your computer. The HP Help and Learn Center is a product help tool that provides easy access to product information, HP product web support, troubleshooting, and regulatory and safety information.
Quick Reference Topics	Several Quick Reference Topics for this product are available at this Web site: www.hp.com/support/ljcp1520series You can print these topics and keep them near the product. They are a handy reference for procedures that you perform frequently.
Control panel help	The control panel has built-in help that guides you through several tasks, such as replacing print cartridges and clearing jams.

Solve problems checklist

1. Make sure that the product is set up correctly.
 - a. Press the power button to turn on the product or to deactivate the Auto-Off mode.
 - b. Check the power-cable connections.
 - c. 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.
 - d. 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. 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 (HP Color LaserJet CP1525nw only): Make sure the network light is lit. The network light is next to the network port on the back of the product.

If the product remains unable to connect to the network, uninstall and then reinstall the product. If the error persists, contact a network administrator.
3. HP Color LaserJet CP1525n: Check to see if any control panel lights are lit.
HP Color LaserJet CP1525nw: Check to see if any messages appear on the control panel.
4. Make sure that the paper that you are using meets specifications.
5. Make sure that the paper is loaded correctly in the input tray.
6. Make sure that the product software is installed correctly.
7. Verify that you have installed the printer driver for this product, and that you are selecting this product from the list of available printers.
8. Print a configuration page.
 - a. If the page does not print, verify that the input tray contains paper and that the paper is properly loaded.
 - b. Make sure that the print cartridge is installed correctly.

- c.** If the page jams in the product, clear the jam.
 - d.** If the print quality is unacceptable, complete the following steps:
 - Verify that the print settings are correct for the paper that you are using.
 - Solve print-quality problems.
- 9.** Print a small document from a different program that has worked in the past. If this solution works, then 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.** Check the cable connection. Direct the product to the correct port, or reinstall the software, selecting the connection type that you are using.

Factors that affect product performance

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

- 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 you are using
- The USB or network connection
- The product I/O configuration

Restore factory-settings

Restoring the factory-set defaults returns all of the product and network settings to the factory defaults. It will not reset the page count, tray size, or language. To restore the product to the factory-default settings, follow these steps.

△ **CAUTION:** Restoring the factory-set defaults returns all of the settings to the factory defaults, and it also deletes any pages that are stored in the memory. The procedure then automatically restarts the product.

1. On the product control panel, press the **OK** button.
2. Use the arrows buttons to select the **Service** menu, and then press the **OK** button.
3. Use the arrows buttons to select the **Restore defaults** option, and then press the **OK** button.

The product automatically restarts.

Interpret control panel messages

Control panel message types

The control panel messages indicate the current product status or situations that might require action.

Alert and warning messages appear temporarily and might require you to acknowledge the message by pressing the **OK** button to resume or by pressing the **Cancel** **X** button to cancel the job. With certain warnings, the job might not complete or the print quality might be affected. If the alert or warning message is related to printing and the auto-continue feature is on, the product will attempt to resume the printing job after the warning has appeared for 10 seconds without acknowledgement.

Critical error messages can indicate some kind of failure. Turning off and then turning on the power might fix the problem. If a critical error persists, the product might require service.

Status-alert messages appear on the computer screen (in addition to control panel messages) when the product has certain problems. If a status-alert message is available, a **✓** appears in the **Status alert** column in the following table.

Control panel messages

Control panel message	Status alert	Description	Recommended action
10.XXXX Supply error	✓	<p>The e-label for one of the print cartridges cannot be read or is missing.</p> <ul style="list-style-type: none">10.0000 = black e-label error10.0001 = cyan e-label error10.0002 = magenta e-label error10.0003 = yellow e-label error10.1000 = black e-label is missing10.1001 = cyan e-label is missing10.1002 = magenta e-label is missing10.1003 = yellow e-label is missing	<p>Reinstall the print cartridge.</p> <p>Turn the product off and then on.</p> <p>If the problem is not solved, replace the print cartridge.</p>

Control panel message	Status alert	Description	Recommended action
49 Error Turn off then on		The product experienced an internal error.	Turn the product off, wait at least 30 seconds, and then turn the product on and wait for it to initialize. If you are using a surge protector, remove it. Plug the product directly into the wall socket. Turn the product power on. If the message persists, contact HP support.
50.X Fuser error Turn off then on	✓	The product has experienced an error with the fuser.	Turn the product power off, wait at least 30 seconds, and then turn the product power on and wait for it to initialize. Turn off the product, wait at least 25 minutes, and then turn on the product. If you are using a surge protector, remove it. Plug the product directly into the wall socket. Turn the product power on. If the message persists, contact HP support.
51.XX Error Turn off then on	✓	The product has experienced an internal hardware error.	Turn the product power off, wait at least 30 seconds, and then turn the product power on and wait for it to initialize. If you are using a surge protector, remove it. Plug the product directly into the wall socket. Turn the product on. If the message persists, contact HP support.
54.XX Error Turn off then on	✓	The product has experienced an error with one of the internal sensors.	Turn the product power off, wait at least 30 seconds, and then turn the product power on and wait for it to initialize. If you are using a surge protector, remove it. Plug the product directly into the wall socket. Turn the product power on. If the message persists, contact HP support.

Control panel message	Status alert	Description	Recommended action
55.X Error Turn off then on	✓	The product has experienced an internal error.	Turn the product power off, wait at least 30 seconds, and then turn the product power on and wait for it to initialize. If you are using a surge protector, remove it. Plug the product directly into the wall socket. Turn the product power on. If the message persists, contact HP support.
57 Fan error Turn off then on	✓	The product has experienced a problem with its internal fan.	Turn the product power off, wait at least 30 seconds, and then turn the product power on and wait for it to initialize. If you are using a surge protector, remove it. Plug the product directly into the wall socket. Turn the product power on. If the message persists, contact HP support.
59.X Error Turn off then on	✓	The product has experienced a problem with one of the motors.	Turn the product power off, wait at least 30 seconds, and then turn the product power on and wait for it to initialize. If you are using a surge protector, remove it. Plug the product directly into the wall socket. Turn the product power on. If the message persists, contact HP support.
79 Error Turn off then on		The product has experienced an internal firmware error.	Turn the product power off, wait at least 30 seconds, and then turn the product power on and wait for it to initialize. If you are using a surge protector, remove it. Plug the product directly into the wall socket. Turn the product power on. If the message persists, contact HP support.
79 Service error Turn off then on		An incompatible DIMM is installed.	<ol style="list-style-type: none"> 1. Turn the product power off. 2. Install a DIMM that the product supports. 3. Turn the product on. If the message persists, contact HP support.

Control panel message	Status alert	Description	Recommended action
Black Cartridge Low	✓	The print cartridge is nearing the end of its useful life.	Printing can continue, but consider having a replacement supply on hand.
Black in wrong position	✓	A print cartridge is installed in the incorrect slot.	Be sure that each print cartridge is in the correct slot. From front to rear, the print cartridges are installed in this order: black, cyan, magenta, yellow.
Black in wrong position	✓	The print cartridge is installed in the incorrect slot.	Make sure that each print cartridge is installed in the correct slot. From front to back, the print cartridges are installed in this order: black, cyan, magenta, and yellow.
Black Very Low	✓	The print cartridge is at the end of its useful life, and the At Very Low menu item in the System Setup menu is set to Continue .	<p>To ensure optimal print quality, HP recommends replacing the print cartridge at this point. You can continue printing until you notice a decrease in print quality. Actual cartridge life may vary.</p> <p>Once an HP supply has reached “very low”, HP’s premium Protection Warranty on that supply has ended. All print defects or cartridge failures incurred when an HP supply is used in continue at very low mode will not be considered to be defects in materials or workmanship in the supply under the HP Print Cartridge Warranty Statement.</p>
Cyan Cartridge Low	✓	The print cartridge is nearing the end of its useful life.	Printing can continue, but consider having a replacement supply on hand.
Cyan in wrong position	✓	A print cartridge is installed in the incorrect slot.	Be sure that each print cartridge is in the correct slot. From front to rear, the print cartridges are installed in this order: black, cyan, magenta, yellow.
Cyan in wrong position	✓	The print cartridge is installed in the incorrect slot.	Make sure that each print cartridge is installed in the correct slot. From front to back, the print cartridges are installed in this order: black, cyan, magenta, and yellow.

Control panel message	Status alert	Description	Recommended action
Cyan Very Low	✓	The print cartridge is at the end of its useful life, and the At Very Low menu item in the System Setup menu is set to Continue .	<p>To ensure optimal print quality, HP recommends replacing the print cartridge at this point. You can continue printing until you notice a decrease in print quality. Actual cartridge life may vary.</p> <p>Once an HP supply has reached “very low”, HP’s premium Protection Warranty on that supply has ended. All print defects or cartridge failures incurred when an HP supply is used in continue at very low mode will not be considered to be defects in materials or workmanship in the supply under the HP Print Cartridge Warranty Statement.</p>
Device error		An internal error occurred.	Press OK to resume the job.
Press [OK]			
Front door open	✓	The product front door is open.	Close the door.
Genuine HP supply installed		A genuine HP supply was installed. This message will appear briefly after the supply is installed and then be replaced by the message Ready.	No action necessary.
Incorrect supplies	✓	More than one print cartridge is installed in the incorrect slot.	Be sure that each print cartridge is in the correct slot. From top to bottom, the print cartridges are installed in this order: yellow, magenta, cyan, black.
Install <Color> cartridge	✓	The print cartridge is either not installed or not correctly installed in the product.	Install the print cartridge.
Invalid driver	✓	You are using an incorrect printer driver.	Select the correct printer driver.
Press [OK]			
Jam in <location>	✓	The product has detected a jam.	<p>Clear the jam from the location indicated. The job should continue to print. If it does not, try reprinting the job.</p> <p>If the message persists, contact HP support.</p>
Jam in tray #	✓	The product has detected a jam.	<p>Clear the jam from the location indicated, and then press OK.</p> <p>If the message persists, contact HP support.</p>
Clear jam and then Press [OK]			
Load paper	✓	Tray 2 is empty.	Load paper into Tray 2.

Control panel message	Status alert	Description	Recommended action
Load tray # <TYPE> <SIZE>	✓	A tray is configured for the paper type and size that the print job is requesting, but that tray is empty.	Load the correct paper into the tray, or press OK to use paper in a different tray.
Load tray 1 plain <SIZE> Cleaning Page [OK] to start	✓	The product is ready to process the cleaning operation.	Load Tray 1 with plain paper in the size indicated, and then press OK .
Load tray 1 <TYPE> <SIZE>	✓	No trays are configured for the paper type and size that the print job is requesting.	Load the correct paper into Tray 1, or press OK to use paper in a different tray.
Magenta Cartridge Low	✓	The print cartridge is nearing the end of its useful life.	Printing can continue, but consider having a replacement supply on hand.
Magenta in wrong position	✓	A print cartridge is installed in the incorrect slot.	Be sure that each print cartridge is in the correct slot. From front to rear, the print cartridges are installed in this order: black, cyan, magenta, yellow.
Magenta in wrong position	✓	The print cartridge is installed in the incorrect slot.	Make sure that each print cartridge is installed in the correct slot. From front to back, the print cartridges are installed in this order: black, cyan, magenta, and yellow.
Magenta Very Low	✓	The print cartridge is at the end of its useful life, and the At Very Low menu item in the System Setup menu is set to Continue .	To ensure optimal print quality, HP recommends replacing the print cartridge at this point. You can continue printing until you notice a decrease in print quality. Actual cartridge life may vary. Once an HP supply has reached "very low", HP's premium Protection Warranty on that supply has ended. All print defects or cartridge failures incurred when an HP supply is used in continue at very low mode will not be considered to be defects in materials or workmanship in the supply under the HP Print Cartridge Warranty Statement.
Manual duplex Load tray # Press [OK]		The first side of a manual duplex job has printed, and the page needs to be loaded to process the second side.	Load the page in the indicated tray with the side to be printed face up, and the top of the page away from you and then press OK .
Manual feed <TYPE> <SIZE> Press [OK] for available media	✓	The product is set for manual feed mode.	Press OK to clear the message or load the correct paper into Tray 1.
Memory is low Press [OK]	✓	The product memory is almost full.	Press OK to finish the job, or press X to cancel the job. Break the job into smaller jobs that contain fewer pages.

Control panel message	Status alert	Description	Recommended action
Misprint Press [OK]	✓	Paper has been delayed as it moves through the product.	Press OK to clear the message.
Non HP supply installed	✓	A non-HP supply is installed.	If you believe you purchased an HP supply, go to www.hp.com/go/anticounterfeit . Service or repairs that are required as a result of using non-HP supplies are not covered under HP warranty.
Print failure Press [OK] If error repeats turn off then on	✓	The product cannot process the page.	Press OK to continue printing the job, but output might be affected. If the error persists, turn the power off and then on. Resend the print job.
Rear door open	✓	The product rear door is open.	Close the door.
Remove shipping locks from <color> cartridge	✓	A print cartridge shipping lock is installed.	Be sure that the print cartridge shipping lock has been removed.
Remove shipping locks from all cartridges	✓	A print cartridge shipping lock is installed on one or more print cartridges.	Be sure that each print cartridge shipping lock (orange pull tab on the left end of new print cartridges) has been removed.
Replace <color>	✓	The print cartridge is at the end of its useful life, and the At Very Low menu item in the System Setup menu is set to Stop .	To ensure optimal print quality, HP recommends replacing the print cartridge at this point. You can continue printing until you notice a decrease in print quality. Actual cartridge life may vary. Once an HP supply has reached "very low", HP's premium Protection Warranty on that supply has ended. All print defects or cartridge failures incurred when an HP supply is used in continue at very low mode will not be considered to be defects in materials or workmanship in the supply under the HP Print Cartridge Warranty Statement.
Supplies low	✓	More than one supply item is low.	Check the supply level gauges on the control panel, or print a supplies status page to determine which print cartridges are low. Printing will continue until a "Very Low" message displays. Consider having replacement supplies on hand.
Unexpected size in tray # Load [size] Press [OK]	✓	The product has detected paper in the tray that does not match the configuration for the tray.	Load the correct paper into the tray, or configure the tray for the size that you have loaded.

Control panel message	Status alert	Description	Recommended action
<p>Unsupported [color] installed</p> <p>Press [OK] to continue</p>	✓	The product has detected that a print cartridge not made by HP has been installed.	<p>Touch the OK button to continue printing.</p> <p>If you believe you purchased an HP supply, please call the HP Fraud hotline at 1-877-219-3183. Service or repairs that are required as a result of using non-HP supplies is not covered under HP warranty.</p>
Used <color> Cartridge in use	✓	A print cartridge reached the default low threshold while it was installed in a product.	No action necessary.
Used supplies in use	✓	A print cartridge reached the default low threshold while it was installed in a product.	No action necessary.
<p>Used supply installed</p> <p>To accept Press [OK]</p>	✓	A print cartridge reached the default low threshold while it was installed in a product.	Press OK to continue.
Yellow Cartridge Low	✓	The print cartridge is nearing the end of its useful life.	Printing can continue, but consider having a replacement supply on hand.
Yellow in wrong position	✓	A print cartridge is installed in the incorrect slot.	Be sure that each print cartridge is in the correct slot. From front to rear, the print cartridges are installed in this order: black, cyan, magenta, yellow.
Yellow in wrong position	✓	The print cartridge is installed in the incorrect slot.	Make sure that each print cartridge is installed in the correct slot. From front to back, the print cartridges are installed in this order: black, cyan, magenta, and yellow.
Yellow Very Low	✓	The print cartridge is at the end of its useful life, and the At Very Low menu item in the System Setup menu is set to Continue .	<p>To ensure optimal print quality, HP recommends replacing the print cartridge at this point. You can continue printing until you notice a decrease in print quality. Actual cartridge life may vary.</p> <p>Once an HP supply has reached “very low”, HP’s premium Protection Warranty on that supply has ended. All print defects or cartridge failures incurred when an HP supply is used in continue at very low mode will not be considered to be defects in materials or workmanship in the supply under the HP Print Cartridge Warranty Statement.</p>

Paper feeds incorrectly or becomes jammed

- [The product does not pick up paper](#)
- [The product picks up multiple sheets of paper](#)
- [Prevent paper jams](#)
- [Clear jams](#)

The product does not pick up paper

If the product does not pick up paper from the tray, try these solutions.

1. Open the product and remove any jammed sheets of paper.
2. Load the tray with the correct size of paper for your job.
3. Make sure the paper guides in the tray are adjusted correctly for the size of paper. Adjust the guides so they are touching the paper stack without bending it.
4. Check the product control panel to see if the product is waiting for you to acknowledge a prompt to feed the paper manually. Load paper, and continue.

The product picks up multiple sheets of paper

If the product picks up multiple sheets of paper from the tray, try these solutions.

1. Remove the stack of paper from the tray and flex it, rotate it 180 degrees, and flip it over. *Do not fan the paper.* Return the stack of paper to the tray.
2. Use only paper that meets HP specifications for this product.
3. Use paper that is not wrinkled, folded, or damaged. If necessary, use paper from a different package.
4. Make sure the tray is not overfilled. If it is, remove the entire stack of paper from the tray, straighten the stack, and then return some of the paper to the tray.
5. Make sure the paper guides in the tray are adjusted correctly for the size of paper. Adjust the guides so they are touching the paper stack without bending it.

Prevent paper jams

To reduce the number of paper jams, try these solutions.

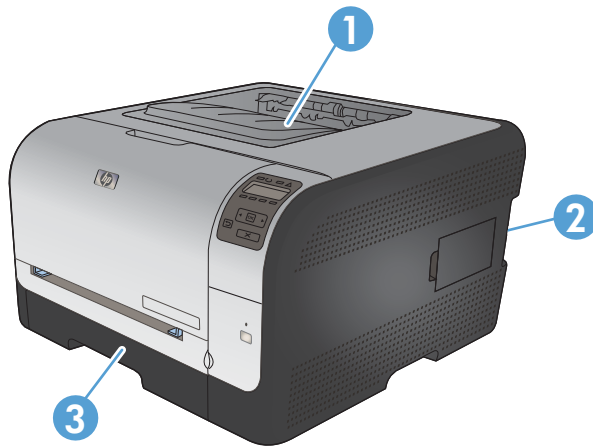
1. Use only paper that meets HP specifications for this product.
2. Use paper that is not wrinkled, folded, or damaged. If necessary, use paper from a different package.
3. Use paper that has not previously been printed or copied on.
4. Make sure the tray is not overfilled. If it is, remove the entire stack of paper from the tray, straighten the stack, and then return some of the paper to the tray.
5. Make sure the paper guides in the tray are adjusted correctly for the size of paper. Adjust the guides so they are touching the paper stack without bending it.

6. Make sure that the tray is fully inserted in the product.
7. If you are printing on heavy, embossed, or perforated paper, use the manual feed feature and feed sheets one at a time.

Clear jams


Jam locations

Use this illustration to find the locations of jams.

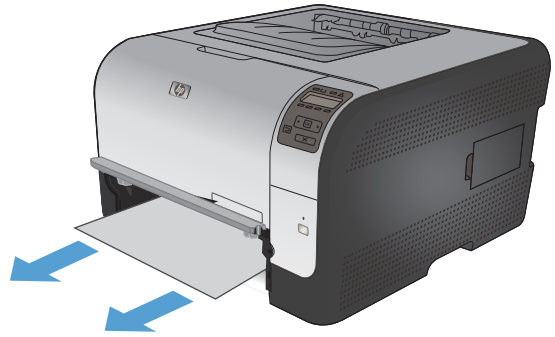


-
- | | |
|---|------------|
| 1 | Output bin |
| 2 | Rear door |
| 3 | Trays |
-

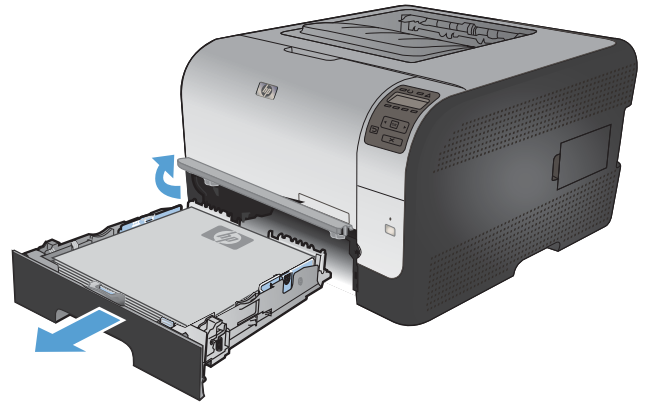
Jam in Tray 1

 **NOTE:** If the sheet tears, remove all fragments before resuming printing.

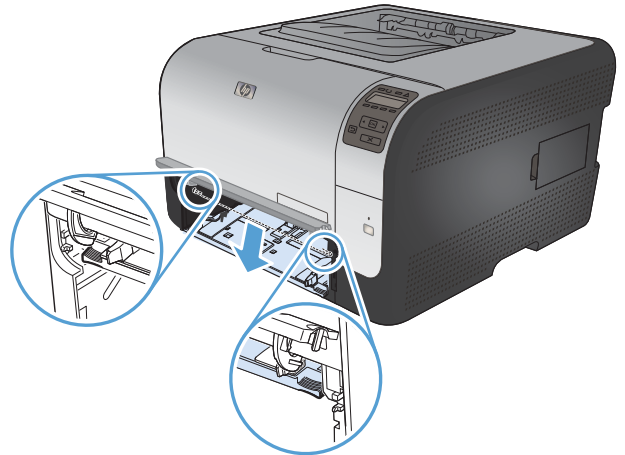
1. If you can see the jammed sheet, remove the jammed sheet by pulling it straight out.



2. If you cannot see the jammed sheet, open the Tray 1 door and pull out Tray 2.

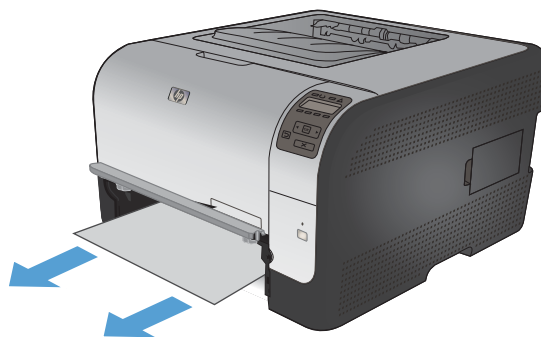


3. Push down on two tabs to release the Tray 1 panel.

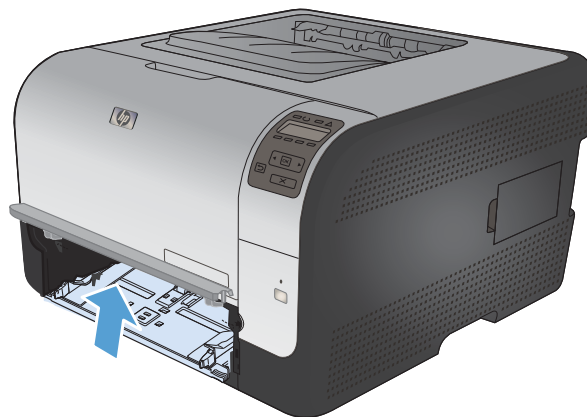


4. Remove the jammed sheet by pulling it straight out.

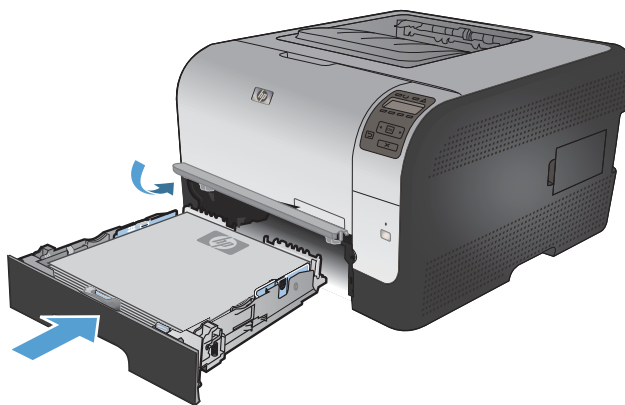
CAUTION: Do not pull up on the jammed sheet. Be sure to pull it straight out.



5. Push up on two tabs to replace the Tray 1 panel.

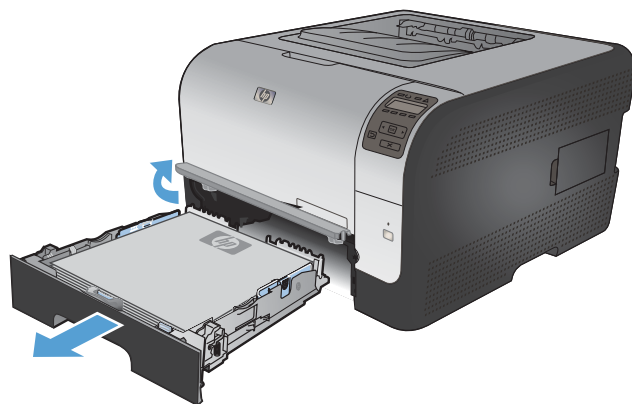


6. Replace Tray 2

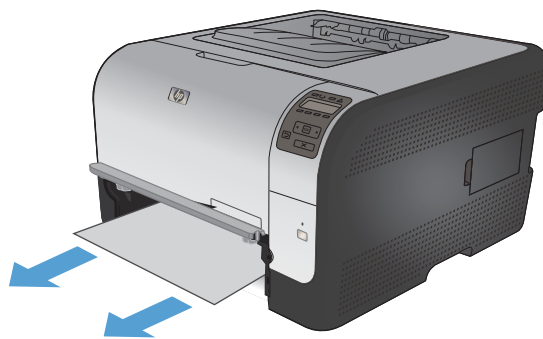


Jam in Tray 2

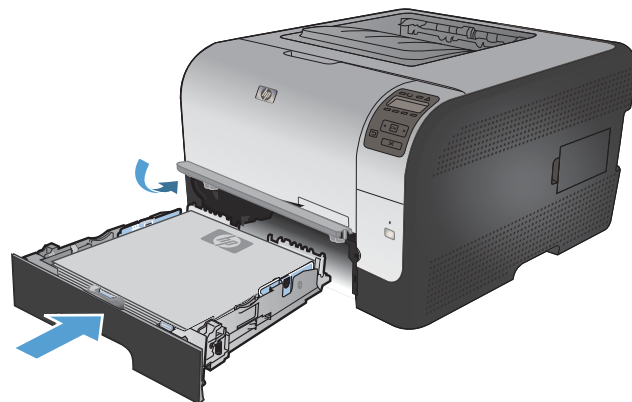
1. Pull out Tray 2 and place it on a flat surface.



2. Remove the jammed sheet by pulling it straight out.



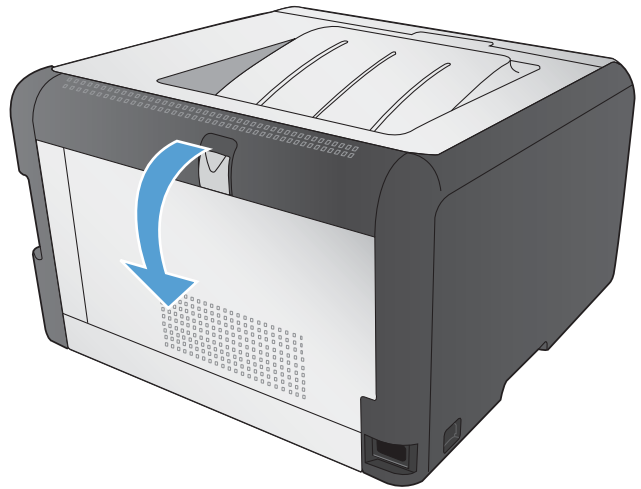
3. Replace Tray 2.



4. Press **OK** to continue printing.

Jam in the fuser area

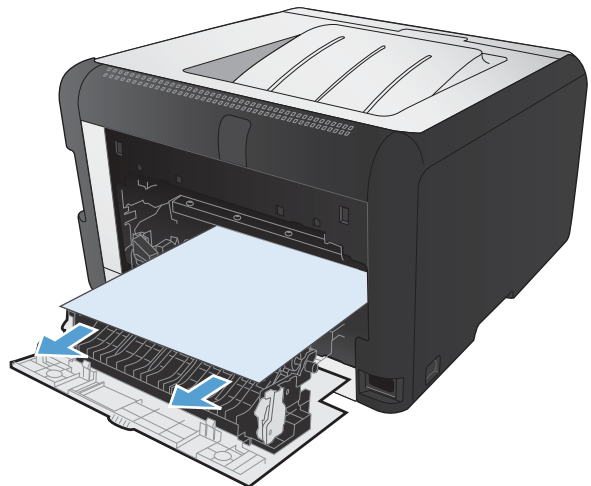
1. Open the rear door.



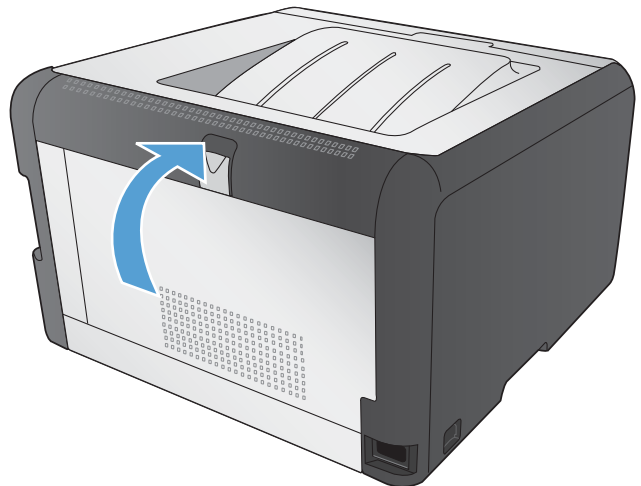
2. Remove any jammed sheets.

NOTE: If the sheet tears, remove all fragments before resuming printing.

CAUTION: Wait until the fuser area has cooled before clearing the jam.



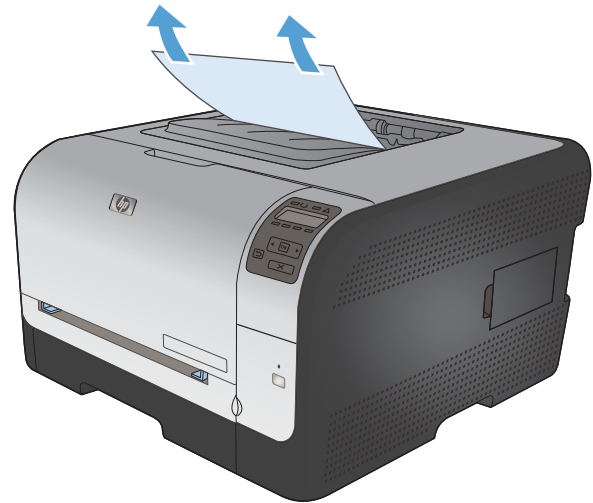
3. Close the rear door.



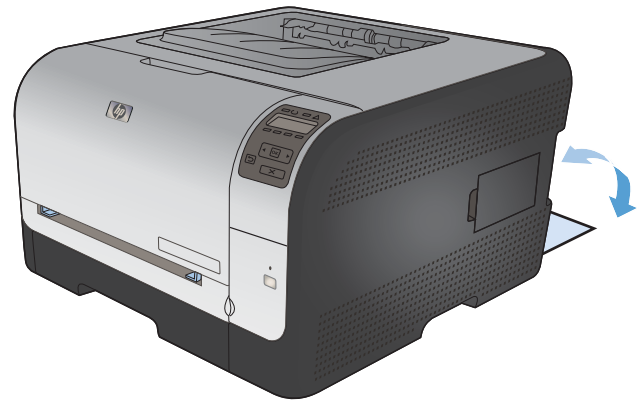
Jam in the output bin

1. Look for jammed paper in the output bin area.
2. Remove any visible paper.

NOTE: If the sheet tears, remove all fragments before resuming printing.



3. Open and then close the rear door to clear the message.



Solve image quality problems

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

- [Use the correct paper type setting in the printer driver](#)
- [Adjust color settings in the printer driver](#)
- [Use paper that meets HP specifications](#)
- [Print a cleaning page](#)
- [Calibrate the product to align the colors](#)
- [Check the print cartridges](#)
- [Use the printer driver that best meets your printing needs](#)

Use the correct paper type setting in the printer driver

Check the paper type setting if you are having any of the following problems:

- Toner is smearing on the printed pages.
- Repeated marks occur on the printed pages.
- Printed pages are curled.
- Toner flakes off the printed pages.
- Printed pages have small unprinted areas.

Change the paper type setting for Windows

1. On the **File** menu in the software program, click **Print**.
2. Select the product, and then click the **Properties** or **Preferences** button.
3. Click the **Paper/Quality** tab.
4. From the **Paper type** drop-down list, click the **More...** option.
5. Expand the list of **Type is:** options.
6. Expand each category of paper types until you find the paper type that you are using.
7. Select the option for the type of paper you are using, and click the **OK** button.

Change the paper type setting for Mac

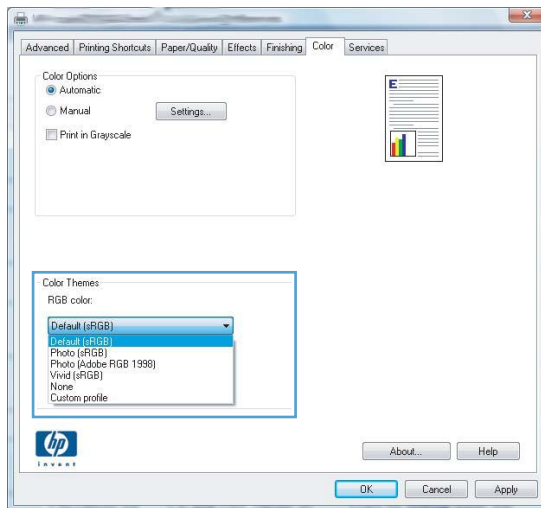
1. On the **File** menu in the software program, click the **Print** option.
2. In the **Copies & Pages** menu, click the **Page Setup** button.
3. Select a size from the **Paper Size** drop-down list, and then click the **OK** button.
4. Open the **Finishing** menu.

5. Select a type from the **Media-type** drop-down list.
6. Click the **Print** button.

Adjust color settings in the printer driver

Change the color theme for a print job

1. On the **File** menu in the software program, click **Print**.
2. Click **Properties** or **Preferences**.
3. Click the **Color** tab.
4. Select a color theme from the **Color Themes** drop-down list.




- **Default (sRGB)**: This theme sets the product to print RGB data in raw device mode. When using this theme, manage color in the software program or in the operating system for correct rendering.
- **Vivid**: The product increases the color saturation in the midtones. Use this theme when printing business graphics.
- **Photo**: The product interprets RGB color as if it were printed as a photograph using a digital mini lab. The product renders deeper, more saturated colors differently than with the Default (sRGB) theme. Use this theme when printing photos.
- **Photo (Adobe RGB 1998)**: Use this theme with printing digital photos that use the AdobeRGB color space rather than sRGB. Turn off color management in the software program when using this theme.
- **None**

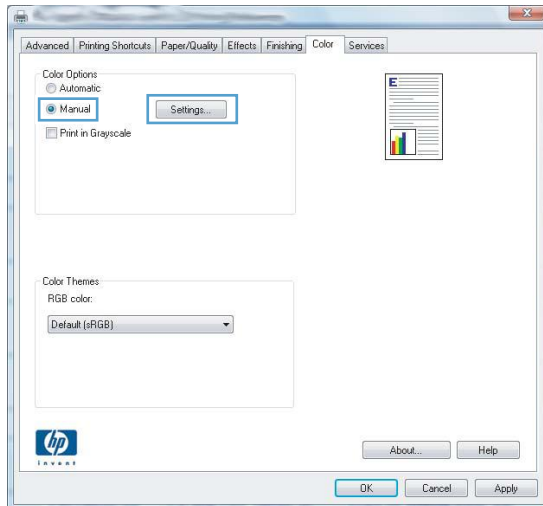
Change the color options

Change the color options settings for the current print job from the color tab of the printer driver.

1. On the **File** menu in the software program, click **Print**.
2. Click **Properties** or **Preferences**.

3. Click the **Color** tab.
4. Click the **Automatic** or **Manual** setting.
 - **Automatic** setting: Select this setting for most color print jobs
 - **Manual** setting: Select this setting to adjust the color settings independent from other settings.

 **NOTE:** Changing color settings manually can impact output. HP recommends that only color graphics experts change these settings.



5. Click the **Print in Grayscale** option to print a color document in black and white. Use this option to print color documents for photocopying or faxing.
6. Click the **OK** button.

Use paper that meets HP specifications

Use different paper if you are having any of the following problems:

- The printing is too light or seems faded in areas.
- Specks of toner are on the printed pages.
- Toner is smearing on the printed pages.
- Printed characters seem misformed.
- Printed pages are curled.

Always use a paper type and weight that this product supports. In addition, follow these guidelines when selecting paper:

- Use paper that is of good quality and free of cuts, nicks, tears, spots, loose particles, dust, wrinkles, voids, staples, and curled or bent edges.
- Use paper that has not been previously printed on.
- Use paper that is designed for use in laser printers. Do not use paper that is designed only for use in Inkjet printers.
- Use paper that is not too rough. Using smoother paper generally results in better print quality.

Print a cleaning page

Print a cleaning page to remove dust and excess toner from the paper path if you are having any of the following problems:

- Specks of toner are on the printed pages.
- Toner is smearing on the printed pages.
- Repeated marks occur on the printed pages.

Use the following procedure to print a cleaning page.

1. At the product control panel, press the **OK** button.
2. Press the right arrow ► to highlight the **Service** menu, and then press the **OK** button.
3. Press the right arrow ► to highlight the **Cleaning Page** option, and then press the **OK** button.

Calibrate the product to align the colors

If the printed output has colored shadows, blurry graphics, or areas that have poor color, you might need to calibrate the product to align the colors. Print the Diagnostics Page from the Reports menu on the control panel to check the color alignment. If the blocks of color on that page are not aligned with each other, you need to calibrate the product.

1. On the product control panel, open the **System Setup** menu.
2. Open the Print quality menu, and select the **Calibrate color** item.
3. Select the **Calibrate now** option.

Check the print cartridges

Check each print cartridge, and replace it if necessary, if you are having any of the following problems:

- The printing is too light or seems faded in areas.
- Printed pages have small unprinted areas.
- Printed pages have streaks or bands.

If you determine that you need to replace a print cartridge, print the Supplies Status Page to find the part number for the correct genuine HP print cartridge.

Type of print cartridge	Steps to resolve the problem
Refilled or remanufactured print cartridge	Hewlett Packard Company cannot recommend the use of non-HP supplies, either new or remanufactured. Because they are not HP products, HP cannot influence their design or control their quality. If you are using a refilled or remanufactured print cartridge and are not satisfied with the print quality, replace the print cartridge with a genuine HP print cartridge that has the words "HP" or "Hewlett-Packard" on it, or has the HP logo on it.
Genuine HP print cartridge	<ol style="list-style-type: none"> <li data-bbox="655 407 1447 489">1. The product control panel or the Supplies status page indicates Very Low status when the print cartridge has reached the end of its estimated life. Replace the print cartridge if print quality is no longer acceptable. <li data-bbox="655 512 1447 617">2. Print a Print Quality Page from the Reports menu on the control panel. If streaks or marks are in one color on the page, you might have a defect in that color cartridge. See the instructions in this document for interpreting the page. Replace the print cartridge if necessary. <li data-bbox="655 640 1447 695">3. Visually inspect the print cartridge for damage. See the instructions that follow. Replace the print cartridge if necessary. <li data-bbox="655 718 1447 793">4. If printed pages have marks that repeat several times at the same distance apart, print a cleaning page. If this does not solve the problem, use the repetitive defects ruler in this document to identify the cause of the problem.

Print the Supplies Status page

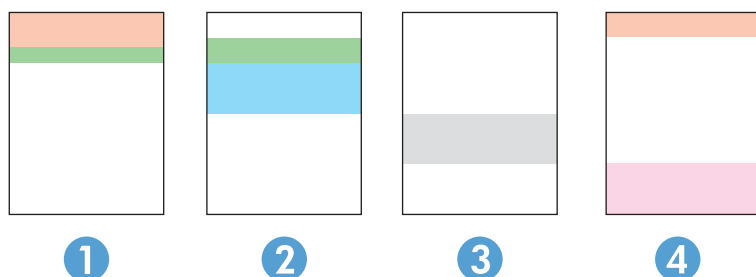
The **Supplies status** page indicates the estimated life remaining in print cartridges. It also lists the part number for the correct genuine HP print cartridge for your product so you can order a replacement print cartridge, as well as other useful information.

1. On the product control panel, open the **Reports** menu.
2. Select the **Supplies status** page to print it.

Interpret the Print Quality Page

1. On the product control panel, open the **Reports** menu.
2. Select the **Print Quality Page** item to print it.

This page contains five bands of color, which are divided into four groups as indicated in the following illustration. By examining each group, you can isolate the problem to a particular print cartridge.



Section	Print-cartridge
1	Yellow
2	Cyan
3	Black
4	Magenta

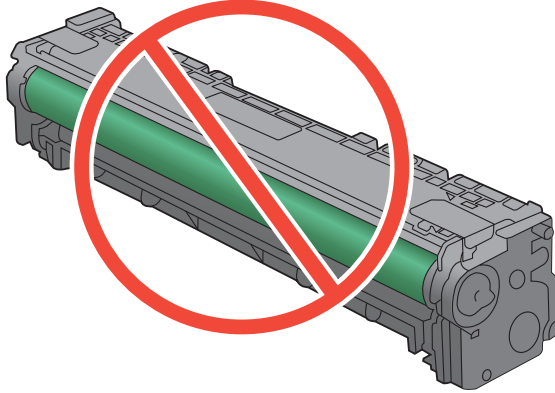
- If dots or streaks appear in only one of the groups, replace the print cartridge that correlates with that group.
- If dots appear in more than one group, print a cleaning page. If this does not solve the problem, determine if the dots are always the same color; for example, if magenta dots appear in all five color bands. If the dots are all the same color, replace that print cartridge.
- If streaks appear in multiple color bands, contact HP. A component other than the print cartridge is probably causing the problem.

Inspect the print cartridge for damage

1. Remove the print cartridge from the product, and verify that the sealing tape has been removed.
2. Check the memory chip for damage.

3. Examine the surface of the green imaging drum on the bottom of the print cartridge.

△ **CAUTION:** Do not touch the green roller (imaging drum) on the bottom of the cartridge. Fingerprints on the imaging drum can cause print-quality problems.



4. If you see any scratches, fingerprints, or other damage on the imaging drum, replace the print cartridge.
5. If the imaging drum does not appear to be damaged, rock the print cartridge gently several times and reinstall it. Print a few pages to see if the problem has resolved.

Repeating defects

If defects repeat at any of the following intervals on the page, a print cartridge might be damaged.

- 22 mm
- 27 mm
- 29 mm
- 76 mm

Use the printer driver that best meets your printing needs

You might need to use a different printer driver if the printed page has unexpected lines in graphics, missing text, missing graphics, incorrect formatting, or substituted fonts.

HP PCL 6 driver

- Provided as the default driver. This driver is automatically installed unless you select a different one.
 - Recommended for all Windows environments
 - Provides the overall best speed, print quality, and product-feature support for most users
 - Developed to align with the Windows Graphic Device Interface (GDI) for the best speed in Windows environments
 - Might not be fully compatible with third-party and custom software programs that are based on PCL 5
-

HP UPD PS driver

- Recommended for printing with Adobe® software programs or with other highly graphics-intensive software programs
- Provides support for printing from postscript emulation needs, or for postscript flash font support

HP UPD PCL 5

- Recommended for general office printing in Windows environments
 - Compatible with previous PCL versions and older HP LaserJet products
 - The best choice for printing from third-party or custom software programs
 - The best choice when operating with mixed environments, which require the product to be set to PCL 5 (UNIX, Linux, mainframe)
 - Designed for use in corporate Windows environments to provide a single driver for use with multiple printer models
 - Preferred when printing to multiple printer models from a mobile Windows computer
-

Download additional printer drivers from this Web site: www.hp.com/support/ljcp1520series.

The product does not print or it prints slowly

The product does not print

If the product does not print at all, try the following solutions.

1. Make sure the product is turned on and that the control panel indicates it is ready.
 - If the control panel does not indicate the product is ready, turn the product off and then on again.
 - If the control panel indicates the product is ready, try sending the job again.
2. If the control panel indicates the product has an error, resolve the error and then try sending the job again.
3. Make sure the cables are all connected correctly. If the product is connected to a network, check the following items:
 - Check the light next to the network connection on the product. If the network is active, the light is green.
 - Make sure that you are using a network cable and not a phone cord to connect to the network.
 - Make sure the network router, hub, or switch is turned on and that it is working correctly.
4. Install the HP software from the CD that came with the product. Using generic printer drivers can cause delays clearing jobs from the print queue.
5. From the list of printers on your computer, right-click the name of this product, click **Properties**, and open the **Ports** tab.
 - If you are using a network cable to connect to the network, make sure the printer name listed on the **Ports** tab matches the product name on the product configuration page.
 - If you are using a USB cable and are connecting to a wireless network, make sure the box is checked next to **Virtual printer port for USB**.
6. If you are using a personal firewall system on the computer, it might be blocking communication with the product. Try temporarily disabling the firewall to see if it is the source of the problem.
7. If your computer or the product is connected to a wireless network, low signal quality or interference might be delaying print jobs.

The product prints slowly

If the product prints, but it seems slow, try the following solutions.

1. Make sure the computer meets the minimum specifications for this product. For a list of specifications, go to this Web site: www.hp.com/support/ljcp1520series.
2. When you configure the product to print on some paper types, such as heavy paper, the product prints more slowly so it can correctly fuse the toner to the paper. If the paper type setting is not correct for the type of paper you are using, change the setting to the correct paper type.
3. If your computer or the product is connected to a wireless network, low signal quality or interference might be delaying print jobs.

Solve connectivity problems

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 5 m (16.4 ft). Try using a shorter cable.
- Verify that the cable is working correctly by connecting it to another product. Replace the cable if necessary.

Solve network problems

Check the following items to verify that the product is communicating with the network. Before beginning, print a configuration page from the product control panel and locate the product IP address that is listed on this page.

- [Poor physical connection](#)
- [The computer is using the incorrect IP address for the product](#)
- [The computer is unable to communicate with the product](#)
- [The product is using incorrect link and duplex settings for the network](#)
- [New software programs might be causing compatibility problems](#)
- [The computer or workstation might be set up incorrectly](#)
- [The product is disabled, or other network settings are incorrect](#)

Poor physical connection

1. Verify that the product is attached to the correct network port using a cable of the correct length.
2. Verify that cable connections are secure.
3. Look at the network port connection on the back of the product, and verify that the amber activity light and the green link-status light are lit.
4. If the problem continues, try a different cable or port on the hub.

The computer is using the incorrect IP address for the product

1. Open the printer properties and click the **Ports** tab. Verify that the current IP address for the product is selected. The product IP address is listed on the product configuration page.
2. If you installed the product using the HP standard TCP/IP port, select the box labeled **Always print to this printer, even if its IP address changes**.
3. If you installed the product using a Microsoft standard TCP/IP port, use the hostname instead of the IP address.
4. If the IP address is correct, delete the product and then add it again.

The computer is unable to communicate with the product

1. Test network communication by pinging the network.
 - a. Open a command-line prompt on your computer. For Windows, click **Start**, click **Run**, and then type `cmd`.
 - b. Type `ping` followed by the IP address for your product.
 - c. If the window displays round-trip times, the network is working.
2. 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.

The product is using incorrect link and duplex settings for the network

Hewlett-Packard recommends leaving this setting in automatic mode (the default setting). If you change these settings, you must also change them for your network.

New software programs might be causing compatibility problems

Verify that any new software programs are correctly installed and that they use the correct printer driver.

The computer or workstation might be set up incorrectly

1. Check the network drivers, printer drivers, and the network redirection.
2. Verify that the operating system is configured correctly.

The product is disabled, or other network settings are incorrect

1. Review the configuration page to check the status of the network protocol. Enable it if necessary.
2. Reconfigure the network settings if necessary.

Solve wireless network problems

- [Wireless connectivity checklist](#)
- [The control panel displays the message: The wireless feature on this product has been turned off](#)
- [The product does not print after the wireless configuration completes](#)
- [The product does not print, and the computer has a third-party firewall installed](#)
- [The wireless connection does not work after moving the wireless router or product](#)
- [Cannot connect more computers to the wireless product](#)
- [The wireless product loses communication when connected to a VPN](#)
- [The network does not appear in the wireless networks list](#)
- [The wireless network is not functioning](#)

Wireless connectivity checklist

- The product and the wireless router are turned on and have power. Also make sure the wireless radio in the product is turned on.
- The service set identifier (SSID) is correct. Print a configuration page to determine the SSID. If you are not sure the SSID is correct, run the wireless setup again.
- With secured networks, make sure the security information is correct. If the security information is incorrect, run the wireless setup again.
- If the wireless network is working correctly, try accessing other computers on the wireless network. If the network has Internet access, try connecting to the Internet over a wireless connection.
- The encryption method (AES or TKIP) is the same for the product as it is for the wireless access point (on networks using WPA security).
- The product is within the range of the wireless network. For most networks, the product must be within 30 m (100 ft) of the wireless access point (wireless router).
- Obstacles do not block the wireless signal. Remove any large metal objects between the access point and the product. Make sure poles, walls, or support columns containing metal or concrete do not separate the product and wireless access point.
- The product is located away from electronic devices that might interfere with the wireless signal. Many devices can interfere with the wireless signal including motors, cordless phones, security system cameras, other wireless networks, and some Bluetooth devices.
- The printer driver is installed on the computer.
- You have selected the correct printer port.
- The computer and product connect to the same wireless network.

The control panel displays the message: The wireless feature on this product has been turned off

- Press the wireless button on the product to open the Wireless menu, and then turn the wireless radio on.

The product does not print after the wireless configuration completes

1. Make sure the product is turned on and in the ready state.
2. Make sure you are connecting to the correct wireless network.
3. Make sure that the wireless network is working correctly.
 - a. Open the **Network configuration** menu, and then open the **Wireless Menu** item.
 - b. Select the **Run Network Test** item to test the wireless network. The product prints a report with the results.
4. Make sure that the correct port or product is selected.
 - a. From the list of printers on your computer, right-click the name of this product, click **Properties**, and then open the **Ports** tab.
 - b. Make sure the box is checked next to **Virtual printer port for USB**.
5. Make sure that your computer is working correctly. If necessary, restart your computer.

The product does not print, and the computer has a third-party firewall installed

1. Update the firewall with the most recent update available from the manufacturer.
2. If programs request firewall access when you install the product or try to print, make sure you allow the programs to run.
3. Temporarily turn off the firewall, and then install the wireless product on the computer. Enable the firewall when you have completed the wireless installation.

The wireless connection does not work after moving the wireless router or product

Make sure that the router or product connects to the same network that your computer connects to.

1. Open the **Reports** menu, and select the **Configuration Report** item to print the report.
2. Compare the service set identifier (SSID) on the configuration report to the SSID in the printer configuration for your computer.
3. If the SSIDs are not the same, the devices are not connecting to the same network. Reconfigure the wireless setup for your product.

Cannot connect more computers to the wireless product

1. Make sure that the other computers are within the wireless range and that no obstacles block the signal. For most networks, the wireless range is within 30 m (100 ft) of the wireless access point.
2. Make sure the product is turned on and in the ready state.
3. Turn off any third-party firewalls on your computer.
4. Make sure that the wireless network is working correctly.
 - a. On the product control panel, open the **Network configuration** menu, and then open the **Wireless Menu** item.
 - b. Select the **Run Network Test** item to test the wireless network. The product prints a report with the results.
5. Make sure that the correct port or product is selected.
 - a. From the list of printers on your computer, right-click the name of this product, click **Properties**, and then open the **Ports** tab.
 - b. Click the **Configure Port** button to verify that the IP address matches the IP address listed on the Run Network Test report.
6. Make sure that your computer is working correctly. If necessary, restart your computer.

The wireless product loses communication when connected to a VPN

- Typically, you cannot connect to a VPN and other networks at the same time.

The network does not appear in the wireless networks list

- Make sure the wireless router is turned on and has power.
- The network might be hidden. However, you can still connect to a hidden network.

The wireless network is not functioning

1. To verify if the network has lost communication, try connecting other devices to the network.
2. Test network communication by pinging the network.
 - a. Open a command-line prompt on your computer. For Windows, click **Start**, click **Run**, and then type `cmd`.
 - b. Type `ping` followed by the service set identifier (SSID) for your network.
 - c. If the window displays round-trip times, the network is working.
3. Make sure that the router or product connects to the same network that your computer connects to.
 - a. Open the **Reports** menu, and select the **Configuration Report** item to print the report.
 - b. Compare the service set identifier (SSID) on the configuration report to the SSID in the printer configuration for your computer.
 - c. If the SSIDs are not the same, the devices are not connecting to the same network. Reconfigure the wireless setup for your product.

Solve product software problems

Product software problems

Problem	Solution
A printer driver for the product is not visible in the Printer folder	<ul style="list-style-type: none">Restart the computer to restart the spooler process. If the spooler has crashed, no printer drivers will appear in the Printers folder.Reinstall the product software. NOTE: Close any applications that are running. To close an application that has an icon in the system tray, right-click the icon, and select Close or Disable.Try plugging the USB cable into a different USB port on the computer.
An error message was displayed during the software installation	<ul style="list-style-type: none">Reinstall the product software. NOTE: Close any applications that are running. To close an application that has an icon in the task bar, right-click the icon, and select Close or Disable.Check the amount of free space on the drive where you are installing the product software. If necessary, free up as much space as you can, and reinstall the product software.If necessary, run the Disk Defragmenter, and reinstall the product software.
The product is in Ready mode, but nothing prints	<ul style="list-style-type: none">Print a Configuration page, and verify the product functionality.Verify that all of the cables are correctly seated and within specifications. This includes the USB and power cables. Try a new cable.

Solve common Mac problems

- [The printer driver is not listed in the Print & Fax list](#)
- [The product name does not appear in the product list in the Print & Fax list](#)
- [The printer driver does not automatically set up the selected product in the Print & Fax list](#)
- [A print job was not sent to the product that you wanted](#)
- [When connected with a USB cable, the product does not appear in the Print & Fax list after the driver is selected.](#)
- [You are using a generic printer driver when using a USB connection](#)

The printer driver is not listed in the Print & Fax list

1. Make sure that the product .GZ file is in the following hard-drive folder: `Library/Printers/PPDs/Contents/Resources`. If necessary, reinstall the software.
2. If the GZ file is in the folder, the PPD file might be corrupt. Delete the file and then reinstall the software.

The product name does not appear in the product list in the Print & Fax list

1. Make sure that the cables are connected correctly and the product is on.
2. Print a configuration page to check the product name. Verify that the name on the configuration page matches the product name in the Print & Fax list.
3. Replace the USB or network cable with a high-quality cable.

The printer driver does not automatically set up the selected product in the Print & Fax list

1. Make sure that the cables are connected correctly and the product is on.
2. Make sure that the product .GZ file is in the following hard-drive folder: `Library/Printers/PPDs/Contents/Resources`. If necessary, reinstall the software.
3. If the GZ file is in the folder, the PPD file might be corrupt. Delete the file and then reinstall the software.
4. Replace the USB or network cable with a high-quality cable.

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

1. Open the print queue and restart the print job.
2. 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 Print & Fax list.

When connected with a USB cable, the product does not appear in the Print & Fax list after the driver is selected.

Software troubleshooting

- Make sure that your Mac operating system is Mac OS X 10.5 or later.

Hardware troubleshooting

1. Make sure that the product is turned on.
2. Make sure that the USB cable is connected correctly.
3. Make sure that you are using the appropriate high-speed USB cable.
4. Make sure 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 computer.
5. Check to see if more than two non-powered USB hubs are connected in a row on the chain. Disconnect all of the devices from the chain, and then connect the cable directly to the USB port on the computer.

 **NOTE:** The iMac keyboard is a non-powered USB hub.

You are using a generic printer driver when using a USB connection

If you connected the USB cable before you installed the software, you might be using a generic printer driver instead of the driver for this product.

1. Delete the generic printer driver.
2. Reinstall the software from the product CD. Do not connect the USB cable until the software installation program prompts you.
3. If multiple printers are installed, make sure that you have selected the correct printer in the **Format For** drop-down menu in the **Print** dialog box.

A Supplies and accessories

- [Order parts, accessories, and supplies](#)
- [Part numbers](#)

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.

Part numbers

Print cartridges

Table A-1 Print cartridges

Part	Part number	Type/size
Print cartridges	CE320A	Black print cartridge with HP ColorSphere toner
	CE321A	Cyan print cartridge with HP ColorSphere toner
	CE322A	Yellow print cartridge with HP ColorSphere toner
	CE323A	Magenta print cartridge with HP ColorSphere toner

 **NOTE:** For information about the yield for the cartridges, see www.hp.com/go/pageyield. Actual yield depends on specific use.

Cables and interfaces

Item	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](#)
- [Data stored on the print cartridge](#)
- [End User License Agreement](#)
- [OpenSSL](#)
- [Customer support](#)
- [Repack the product](#)

Hewlett-Packard limited warranty statement

HP PRODUCT	DURATION OF LIMITED WARRANTY
HP Color LaserJet CP1525n, CP1525nw	One-year product exchange

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.

TO THE EXTENT ALLOWED BY LOCAL LAW, THE ABOVE WARRANTIES ARE EXCLUSIVE AND NO OTHER WARRANTY OR CONDITION, WHETHER WRITTEN OR ORAL, IS EXPRESSED OR IMPLIED AND HP SPECIFICALLY DISCLAIMS ANY IMPLIED WARRANTIES OR CONDITIONS OF MERCHANTABILITY, SATISFACTORY QUALITY, AND FITNESS FOR A PARTICULAR PURPOSE. Some countries/regions, states or provinces do not allow limitations on the duration of an implied warranty, so the above limitation or exclusion might not apply to you. This warranty gives you specific legal rights and you might also have other rights that vary from country/region to country/region, state to state, or province to province.

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.

THE WARRANTY TERMS CONTAINED IN THIS STATEMENT, EXCEPT TO THE EXTENT LAWFULLY PERMITTED, DO NOT EXCLUDE, RESTRICT OR MODIFY AND ARE IN ADDITION TO THE MANDATORY STATUTORY RIGHTS APPLICABLE TO THE SALE OF THIS PRODUCT TO YOU.

HP'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.

TO THE EXTENT ALLOWED BY LOCAL LAW, IN NO EVENT WILL HP OR ITS SUPPLIERS BE LIABLE FOR DIRECT, SPECIAL, INCIDENTAL, CONSEQUENTIAL (INCLUDING LOST PROFIT OR DATA), OR OTHER DAMAGE, WHETHER BASED IN CONTRACT, TORT, OR OTHERWISE.

THE WARRANTY TERMS CONTAINED IN THIS STATEMENT, EXCEPT TO THE EXTENT LAWFULLY PERMITTED, DO NOT EXCLUDE, RESTRICT OR MODIFY AND ARE IN ADDITION TO THE MANDATORY STATUTORY RIGHTS APPLICABLE TO THE SALE OF THIS PRODUCT TO YOU.

Data stored on the print cartridge

The HP print cartridges used with this product contain a memory chip that assists in the operation of the product.

In addition, this memory chip collects a limited set of information about the usage of the product, which might include the following: the date when the print cartridge was first installed, the date when the print cartridge was last used, the number of pages printed using the print cartridge, the page coverage, the printing modes used, any printing errors that might have occurred, and the product model. This information helps HP design future products to meet our customers' printing needs.

The data collected from the print cartridge memory chip does not contain information that can be used to identify a customer or user of the print cartridge or their product.

HP collects a sampling of the memory chips from print cartridges returned to HP's free return and recycling program (HP Planet Partners: www.hp.com/recycle). The memory chips from this sampling are read and studied in order to improve future HP products. HP partners who assist in recycling this print cartridge might have access to this data, as well.

Any third party possessing the print cartridge might have access to the anonymous information on the memory chip. If you prefer to not allow access to this information, you can render the chip inoperable. However, after you render the memory chip inoperable, the memory chip cannot be used in an HP product.

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”).

RIGHTS IN THE SOFTWARE ARE OFFERED ONLY ON THE CONDITION THAT YOU AGREE TO ALL TERMS AND CONDITIONS OF THIS EULA. BY INSTALLING, COPYING, DOWNLOADING, OR OTHERWISE USING THE SOFTWARE, YOU AGREE TO BE BOUND BY THIS EULA. IF YOU DO NOT ACCEPT THIS EULA, DO NOT INSTALL, DOWNLOAD, OR OTHERWISE USE THE SOFTWARE. IF YOU PURCHASED THE SOFTWARE BUT DO NOT AGREE TO THIS EULA, PLEASE RETURN THE SOFTWARE TO YOUR PLACE OF PURCHASE WITHIN FOURTEEN DAYS FOR A REFUND OF THE PURCHASE PRICE; IF THE SOFTWARE IS INSTALLED ON OR MADE AVAILABLE WITH ANOTHER HP PRODUCT, YOU MAY RETURN THE ENTIRE UNUSED PRODUCT.

1. **THIRD PARTY SOFTWARE.** The Software may include, in addition to HP proprietary software (“HP Software”), software under licenses from third parties (“Third Party Software” and “Third Party License”). Any Third Party Software is licensed to you subject to the terms and conditions of the corresponding Third Party License. Generally, the Third Party License is located in a file such as license.txt; you should contact HP support if you cannot find any Third Party License. If the Third Party Licenses include licenses that provide for the availability of source code (such as the GNU General Public License) and the corresponding source code is not included with the Software, then check the product support pages of HP’s website (hp.com) to learn how to obtain such source code.

2. **LICENSE RIGHTS.** You will have the following rights provided you comply with all terms and conditions of this EULA:

a. **Use.** HP grants you a license to Use one copy of the HP Software. “Use” means installing, copying, storing, loading, executing, displaying, or otherwise using the HP Software. You may not modify the HP Software or disable any licensing or control feature of the HP Software. If this Software is provided by HP for Use with an imaging or printing product (for example, if the Software is a printer driver, firmware, or add-on), the HP Software may only be used with such product (“HP Product”). Additional restrictions on Use may appear in the User Documentation. You may not separate component parts of the HP Software for Use. You do not have the right to distribute the HP Software.

b. **Copying.** Your right to copy means you may make archival or back-up copies of the HP Software, provided each copy contains all the original HP Software’s proprietary notices and is used only for back-up purposes.

3. **UPGRADES.** To Use HP Software provided by HP as an upgrade, update, or supplement (collectively “Upgrade”), you must first be licensed for the original HP Software identified by HP as eligible for the Upgrade. To the extent the Upgrade supersedes the original HP Software, you may no longer use such HP Software. This EULA applies to each Upgrade unless HP provides other terms with the Upgrade. In case of a conflict between this EULA and such other terms, the other terms will prevail.

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

Software will agree to this EULA. Upon transfer of the HP Software, your license is automatically terminated.

b. Restrictions. You may not rent, lease or lend the HP Software or Use the HP Software for commercial timesharing or bureau use. You may not sublicense, assign or otherwise transfer the HP Software except as expressly provided in this EULA.

5. PROPRIETARY RIGHTS. All intellectual property rights in the Software and User Documentation are owned by HP or its suppliers and are protected by law, including applicable copyright, trade secret, patent, and trademark laws. You will not remove any product identification, copyright notice, or proprietary restriction from the Software.

6. LIMITATION ON REVERSE ENGINEERING. You may not reverse engineer, decompile, or disassemble the HP Software, except and only to the extent that the right to do so is allowed under applicable law.

7. CONSENT TO USE OF DATA. HP and its affiliates may collect and use technical information you provide in relation to (i) your Use of the Software or the HP Product, or (ii) the provision of support services related to the Software or the HP Product. All such information will be subject to HP's privacy policy. HP will not use such information in a form that personally identifies you except to the extent necessary to enhance your Use or provide support services.

8. LIMITATION OF LIABILITY. Notwithstanding any damages that you might incur, the entire liability of HP and its suppliers under this EULA and your exclusive remedy under this EULA will be limited to the greater of the amount actually paid by you for the Product or U.S. \$5.00. TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, IN NO EVENT WILL HP OR ITS SUPPLIERS BE LIABLE FOR ANY SPECIAL, INCIDENTAL, INDIRECT, OR CONSEQUENTIAL DAMAGES (INCLUDING DAMAGES FOR LOST PROFITS, LOST DATA, BUSINESS INTERRUPTION, PERSONAL INJURY, OR LOSS OF PRIVACY) RELATED IN ANY WAY TO THE USE OF OR INABILITY TO USE THE SOFTWARE, EVEN IF HP OR ANY SUPPLIER HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES AND EVEN IF THE ABOVE REMEDY FAILS OF ITS ESSENTIAL PURPOSE. Some states or other jurisdictions do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

9. U.S. GOVERNMENT CUSTOMERS. If you are a U.S. Government entity, then consistent with FAR 12.211 and FAR 12.212, Commercial Computer Software, Computer Software Documentation, and Technical Data for Commercial Items are licensed under the applicable HP commercial license agreement.

10. COMPLIANCE WITH EXPORT LAWS. You will comply with all laws, rules, and regulations (i) applicable to the export or import of the Software, or (ii) restricting the Use of the Software, including any restrictions on nuclear, chemical, or biological weapons proliferation.

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

(c) 2007 Hewlett-Packard Development Company, L.P.

Rev. 11/06

OpenSSL

This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit (<http://www.openssl.org/>)

THIS SOFTWARE IS PROVIDED BY THE OpenSSL PROJECT ``AS IS" AND ANY EXPRESSED OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE OpenSSL PROJECT OR ITS CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES;

LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

This product includes cryptographic software written by Eric Young (ey@cryptsoft.com). This product includes software written by Tim Hudson (tjh@cryptsoft.com).

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 www.hp.com/support/ .
Have the product name, serial number, date of purchase, and problem description ready.	
Get 24-hour Internet support	www.hp.com/support/ljcp1520series
Get support for products used with a Macintosh computer	www.hp.com/go/macosex
Download software utilities, drivers, and electronic information	www.hp.com/support/ljcp1520series
Order additional HP service or maintenance agreements	www.hp.com/go/carepack
Register your product	www.register.hp.com

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 cartridges.

△ **CAUTION:** It is *extremely important* to remove the print cartridges 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 cartridges, avoid touching the rollers on them, and store the print cartridges so that they are not exposed to light.

2. Remove and retain the power cable, interface cable, and any optional accessories.
3. If possible, include print samples and 50 to 100 sheets of paper 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.

C Product specifications

- [Physical specifications](#)
- [Power consumption, electrical specifications, and acoustic emissions](#)
- [Environmental specifications](#)

Physical specifications

Table C-1 Physical specifications

Height	Depth	Width	Weight
254 mm (10.0 inches)	452 mm (17.8 inches)	399 mm (15.7 inches)	18.43 kg (40.64 lb)

Power consumption, electrical specifications, and acoustic emissions

See www.hp.com/support/ljcp1520series for current information.

- △ **CAUTION:** Power requirements are based on the country/region where the product is sold. Do not convert operating voltages. This will damage the product and void the product warranty.

Environmental specifications

Table C-2 Operating-environment specifications

Environment	Recommended	Allowed
Temperature	17° to 25°C (62.6° to 77°F)	15° to 30°C (59° to 86°F)
Humidity	30% to 70% relative humidity (RH)	10% to 80% RH
Altitude	Not applicable	0 to 3048 m (0 to 10,000 ft)


D Regulatory information

- [FCC regulations](#)
- [Environmental product stewardship program](#)
- [Declaration of conformity](#)
- [Declaration of Conformity \(wireless models\)](#)
- [Safety statements](#)
- [Additional statements for wireless products](#)

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 (O₃).

Power consumption

Power usage drops significantly while in Ready or Sleep 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® 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

Paper use

This product's manual 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 <http://www.hp.com/recycle>.

Return and recycling instructions

United States and Puerto Rico

The enclosed label in the HP LaserJet toner cartridge box is for the return and recycling of one or more HP LaserJet print cartridges after use. Please follow the applicable instructions below.

Multiple returns (more than one cartridge)

1. Package each HP LaserJet print cartridge in its original box and bag.
2. 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 www.hp.com/recycle 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 www.ups.com. If you are returning via USPS label, give the package to a U.S. Postal Service carrier or drop off at a U.S. Postal Service Office. For more information, or to order additional labels or boxes for bulk returns, visit www.hp.com/recycle or call 1-800-340-2445. Requested UPS pickup will be charged normal pickup rates. Information subject to change without notice.

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 www.hp.com/recycle. Select your country/region for information on how to return your HP LaserJet printing supplies.

Paper

This product is capable of using recycled papers when the paper meets the guidelines outlined in the *HP LaserJet Printer Family Print Media Guide*. This product is suitable for the use of recycled paper according to EN12281:2002.

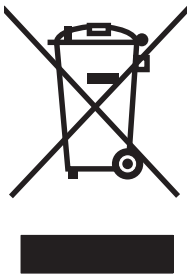
Material restrictions

This HP product contains mercury in the fluorescent lamp of the scanner and/or control panel liquid crystal display that may require special handling at end-of-life.

This HP product does not contain a battery.

For recycling information, you can go to www.hp.com/recycle, or contact your local authorities or the Electronics Industries Alliance: www.eiae.org.

Disposal of waste equipment by users in private households in the European Union



This symbol on the product or on its packaging indicates that this product must not be disposed of with your other household waste. Instead, it is your responsibility to dispose of your waste equipment by handing it over to a designated collection point for the recycling of waste electrical and electronic equipment. The separate collection and recycling of your waste equipment at the time of disposal will help to conserve natural resources and ensure that it is recycled in a manner that protects human health and the environment. For more information about where you can drop off your waste equipment for recycling, please contact your local city office, your household waste disposal service or the shop where you purchased the product.

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: www.hp.com/go/reach.

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 www.hp.com/go/msds or www.hp.com/hpinfo/community/environment/productinfo/safety.

For more information

To obtain information about these environmental topics:

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

Visit www.hp.com/go/environment or www.hp.com/hpinfo/globalcitizenship/environment.

Declaration of conformity

Declaration of Conformity

according to ISO/IEC 17050-1 and EN 17050-1

Manufacturer's Name: Hewlett-Packard Company DoC#: BOISB-0603-03-rel. 1.0

Manufacturer's Address: 11311 Chinden Boulevard
Boise, Idaho 83714-1021, USA

declares, that the product

Product Name: HP Color LaserJet CP1525n

Regulatory Model:²⁾ BOISB-0603-03

Product Options: ALL

Print Cartridges: CE320A, CE321A, CE322A, CE323A


conforms to the following Product Specifications:

SAFETY: IEC 60950-1:2005 / EN60950-1: 2006
IEC 60825-1:2006 / EN 60825-1:2007 (Class 1 Laser/LED Product)
IEC 62311:2007 / EN62311:2008
GB4943-2001

EMC: CISPR22:2005 +A1/ EN55022:2006 +A1 - Class B¹⁾
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
GB9254-2008, GB17625.1-2003

ENERGY USE: Regulation (EC) No. 1275/2008

Supplementary Information:

The product herewith complies with the requirements of the EMC Directive 2004/108/EC and the Low Voltage Directive 2006/95/EC, the EuP Directive 2005/32/EC and carries the CE-Marking  accordingly.

This Device complies with Part 15 of the FCC Rules. Operation is subject to the following two Conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

1. The product was tested in a typical configuration with Hewlett-Packard Personal Computer Systems.
2. For regulatory purposes, 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 USA

September 2010

For Regulatory Topics only, contact:

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 (FAX: +49-7031-14-3143)
www.hp.com/go/certificates

USA Contact

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

Declaration of Conformity (wireless models)

Declaration of Conformity

according to ISO/IEC 17050-1 and EN 17050-1

Manufacturer's Name: Hewlett-Packard Company DoC#: BOISB-0603-04-rel. 1.0

Manufacturer's Address: 11311 Chinden Boulevard
Boise, Idaho 83714-1021, USA

declares, that the product

Product Name: HP Color LaserJet CP1525nw

Regulatory Model:²⁾ BOISB-0603-04

Product Options: ALL

Radio Module³⁾ SDGOB-0892

Print Cartridges: CE320A, CE321A, CE322A, CE323A

conforms to the following Product Specifications:

SAFETY: IEC 60950-1:2005 / EN60950-1: 2006
IEC 60825-1:2006 / EN 60825-1:2007 (Class 1 Laser/LED Product)
IEC 62311:2007 / EN62311:2008
GB4943-2001

EMC: CISPR22:2005 +A1/ EN55022:2006 +A1 - Class B¹⁾
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
GB9254-2008, GB17625.1-2003

Radio³⁾ EN 301 489-1:V1.8.1 / EN 301 489-17:V1.3.2
EN 300 328:V1.7.1
FCC Title 47 CFR, Part 15 Subpart C (Section 15.247) / IC: RSS-210

ENERGY USE: Regulation (EC) No. 1275/2008

Supplementary Information:

The product herewith complies with the requirements of the EMC Directive 2004/108/EEC and the Low Voltage Directive 2006/95/EC, the EuP Directive 2005/32/EC, and carries the CE-Marking  accordingly.

This Device complies with Part 15 of the FCC Rules. Operation is subject to the following two Conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

1. The product was tested in a typical configuration with Hewlett-Packard Personal Computer Systems.
2. For regulatory purposes, these products are assigned a Regulatory model number. This number should not be confused with the product name or the product number(s).
3. This product uses a radio module device which Regulatory Model number is SDGOB-0892 as needed to meet technical regulatory requirements for the countries/regions this product will be sold.

Boise, Idaho USA

September 2010

For Regulatory Topics only, contact:

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 (FAX: +49-7031-14-3143) www.hp.com/go/certificates
USA Contact	Product Regulations Manager, Hewlett-Packard Company, PO Box 15, Mail Stop 160, Boise, Idaho 83707-0015 (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、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。

VCCI-B

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 100-127 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 (가정용 방송통신기기)	이 기기는 가정용(B급)으로 전자파적합등록을 한 기기로서 주로 가정에서 사용하는 것을 목적으로 하며, 모든 지역에서 사용할 수 있습니다.
-----------------------	--

Laser statement for Finland

Luokan 1 laserlaite

Klass 1 Laser Apparat

HP Color LaserJet CP1525n, CP1525nw, laserkirjoitin on käyttäjän kannalta turvallinen luokan 1 laserlaite. Normaalisissa käytössä kirjoittimen suojakotelointi estää lasersäteen pääsyn laitteen ulkopuolelle. Laitteen turvallisuusluokka on määritetty standardin EN 60825-1 (2007) mukaisesti.

VAROITUS !

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

WARNING !

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

HUOLTO

HP Color LaserJet CP1525n, CP1525nw - 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 näkymättömälle lasersäteilylle laitteen ollessa toiminnassa. Älä katso säteeseen.

WARNING !

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

部件名称	有毒有害物质和元素					
	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr(VI))	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
打印引擎	X	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	X	0	0	0	0	0
碳粉盒	X	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

Additional statements for wireless products

FCC compliance statement—United States

Exposure to radio frequency radiation

- △ **CAUTION:** The radiated output power of this device is far below the FCC radio frequency exposure limits. Nevertheless, the device shall be used in such a manner that the potential for human contact during normal operation is minimized.

In order to avoid the possibility of exceeding the FCC radio frequency exposure limits, human proximity to the antenna shall not be less than 20 cm (8 in)) during normal operation.

This device complies with Part 15 of FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

- △ **CAUTION:** Based on Section 15.21 of the FCC rules, changes of modifications to the operation of this product without the express approval by Hewlett-Packard Company may invalidate its authorized use.

Australia statement

This device incorporates a radio-transmitting (wireless) device. For protection against radio transmission exposure, it is recommended that this device be operated no less than 20 cm from the head, neck, or body.

Brazil ANATEL statement

Este equipamento opera em caráter secundário, isto é, não tem direito à proteção contra interferência prejudicial, mesmo de estações do mesmo tipo, e não pode causar interferência a sistemas operando em caráter primário.

Canadian statements

For Indoor Use. This digital apparatus does not exceed the Class B limits for radio noise emissions from digital apparatus as set out in the radio interference regulations of the Canadian Department of Communications. The internal wireless radio complies with RSS 210 of Industry Canada.

Pour l'usage d'intérieur. Le présent appareil numérique n'émet pas de bruits radioélectriques dépassant les limites applicables aux appareils numériques de Classe B prescrites dans le règlement sur le brouillage radioélectrique édicté par le Ministère des Communications du Canada. Le composant RF interne est conforme à la norme CNR-210 d'Industrie Canada.

European Union regulatory notice

The telecommunications functionality of this product may be used in the following EU and EFTA countries/regions:

Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Liechtenstein, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovak Republic, Slovenia, Spain, Sweden, Switzerland, and United Kingdom.

Notice for use in France

For 2.4 GHz Wireless LAN operation of this product certain restrictions apply: This equipment may be used indoor for the entire 2400-2483.5 MHz frequency band (channels 1-13). For outdoor use, only 2400-2454 MHz frequency band (channels 1-9) may be used. For the latest requirements, see www.arcep.fr.

L'utilisation de cet équipement (2.4 GHz Wireless LAN) est soumise à certaines restrictions : Cet équipement peut être utilisé à l'intérieur d'un bâtiment en utilisant toutes les fréquences de 2400-2483.5 MHz (Chaîne 1-13). Pour une utilisation en environnement extérieur, vous devez utiliser les fréquences comprises entre 2400-2454 MHz (Chaîne 1-9). Pour les dernières restrictions, voir, www.arcep.fr.

Notice for use in Russia

Существуют определенные ограничения по использованию беспроводных сетей (стандарта 802.11 b/g) с рабочей частотой 2,4 ГГц: Данное оборудование может использоваться внутри помещений с использованием диапазона частот 2400-2483,5 МГц (каналы 1-13). При использовании внутри помещений максимальная эффективная изотропно-излучаемая мощность (ЭИИМ) должна составлять не более 100мВт.

Korean statement

당해 무선설비는 운용 중 전파혼선 가능성이 있음

Taiwan statement

低功率電波輻射性電機管理辦法

第十二條 經型式認證合格之低功率射頻電機，非經許可，公司、商號或使用者均不得擅自變更頻率、加大功率或變更原設計之特性及功能。

第十四條 低功率射頻電機之使用不得影響飛航安全及干擾合法通信；經發現有干擾現象時，應立即停用，並改善至無干擾時方得繼續使用。前項合法通信，指依電信法規定作業之無線電通信。低功率射頻電機須忍受合法通信或工業、科學及醫療用電波輻射性電機設備之干擾。

Index

A

accessories
 ordering 151, 152
acoustic specifications 164
ad-hoc wireless network
 configuring 40
 description 39
alerts, setting up 89
anticounterfeit supplies 99
archive setting 15
automatic crossover, setting 16

B

batteries included 169
bin, output
 jams, clearing 131
 locating 4
Black in wrong position error
 message 120
booklets
 creating (Windows) 76

C

calibrating color 12, 91
Canadian DOC regulations 175
canceling
 print job 54
cartridge-door release, locating 4
cartridges
 non-HP 99
 recycling 100, 167
 replacing 101
 status, viewing with HP Toolbox
 FX 89
 storage 99
 supplies status page 10, 86
 warranty 155
cartridges, print
 Macintosh status 32
cautions iii

checklists, printing 11
cleaning
 paper path 135
color
 adjusting 80
 calibrating 12, 91
 Edge Control 81
 halftone options 82
 matching 83
 Neutral Grays 82
 printed vs. monitor 83
 printing in grayscale
 (Windows) 67
color alignment, calibrating 135
color options
 HP EasyColor (Windows) 82
 setting (Windows) 66
color settings
 adjusting 133
Color tab settings 32
color usage log 10, 86
configuration page 10, 86
connecting to a wireless
 network 36
connectivity
 solving problems 141
 USB 34
contrast
 display, control panel 13
 print density 91
control panel
 display contrast 13
 language 12
 locating 4
 menu map, printing 10, 86
 message types 117
 messages,
 troubleshooting 117
 Network config. menu 16

 Reports menu 10
 Service menu 15
 System Setup menu 12
conventions, document iii
copies
 changing number of
 (Windows) 56
counterfeit supplies 99
Courier font settings 14
cover pages
 printing (Mac) 30
 printing on different paper
 (Windows) 72
curl, paper
 settings 15
custom print settings
 (Windows) 56
custom-size paper settings
 Macintosh 30
customer support
 online 160
 repacking product 161
Cyan in wrong position error
 message 120

D

declaration of conformity 171
default settings, restoring 15
defaults, restoring 116
defects, repeating 138
demo page 10, 86
density settings 91
device error message 121
device status
 Macintosh Services tab 32
DIMMs
 installing 105
 verifying installation 108
display contrast, setting 13
disposal, end-of-life 169

- document conventions iii
- document feeder
 - locating 4
- double-sided printing (duplexing)
 - Mac 31
- downloading software
 - printing system 17
- drivers
 - changing paper types and sizes 45
 - changing settings (Mac) 27
 - changing settings (Windows) 20
 - presets (Mac) 29
 - settings (Mac) 29
 - settings (Windows) 55
 - supported (Windows) 18
 - usage page 10, 86
- duplex printing (double-sided)
 - settings (Windows) 61

E

- e-mail alerts, setting up 89
- Edge Control 81
- electrical specifications 164
- embedded Web server
 - Networking tab 96
 - Status tab 95
 - System tab 95
- Embedded Web Server (EWS)
 - assigning passwords 97
- end-of-life disposal 169
- engine, cleaning 110
- environmental features 3
- environmental stewardship program 167
- error messages, control panel 117
- errors
 - software 147
- European Union, waste disposal 169
- event log 89

F

- factory defaults, restoring 15
- factory settings, restoring 116
- fan error message 119
- fax
 - factory settings, restoring 116

- Finnish laser safety statement 176
- firewall 36
- first page
 - printing on different paper (Windows) 72
 - use different paper 30
- fonts
 - Courier settings 14
 - DIMMs, installing 105
 - lists, printing 10, 86
 - permanent resources 108
- forms
 - printing (Windows) 67
- fraud hotline 99
- front door, locating 4
- fuser
 - errors 118
 - jams, clearing 130

G

- graph paper, printing 11
- grayscale
 - printing (Windows) 67

H

- help
 - printing options (Windows) 55
- Help tab, HP ToolboxFX 89
- HP Customer Care 160
- HP Easy Color
 - disabling 82
 - using 82
- HP Embedded Web Server
 - accessing 94
- HP Embedded Web server 28
- HP fraud hotline 99
- HP Toolbox FX
 - Status tab 89
- HP ToolboxFX
 - about 88
 - density settings 91
 - Help tab 89
 - Network Settings tab 93
 - opening 88
 - System Settings tab 89
 - System Setup tab 93
- HP Utility 28
- HP Utility, Mac 27
- HP Web Jetadmin 97

- HP-UX software 22

I

- image quality
 - archive setting 15
 - HP ToolboxFX settings 91
 - solving 132
- infrastructure wireless network
 - description 39
- input tray
 - loading 48
 - locating 4
- install supplies message 121
- installing
 - product on wired networks 35
 - software, USB connections 34
 - software, wired networks 25, 36
- interface ports
 - types included 5
- invalid driver error message 121
- IP address
 - obtaining 25, 35

J

- jam-access door, locating 4
- jams
 - causes of 125
 - locations 126
 - output bin, clearing 131
 - paper path, clearing 130
 - tracking number of 10, 86
- jams <location>
 - error messages 121
- jams tray #
 - error messages 121
- Japanese VCCI statement 175
- Jetadmin, HP Web 97

K

- Korean EMC statement 176

L

- labels
 - printing (Windows) 69
- landscape orientation
 - selecting, Windows 64
- language, control panel 12
- laser safety statements 175, 176

- last page
 - printing on different paper (Windows) 72
- letterhead
 - printing (Windows) 67
- license, software 157
- link speed settings 41
- Linux 22
- Linux software 22
- loading paper
 - error messages 122
 - input tray 48
- M**
- Mac
 - changing paper types and sizes 29
 - driver settings 27, 29
 - HP Utility 28
 - problems,
 - troubleshooting 148
 - removing software 27
 - supported operating systems 24
- Macintosh
 - resize documents 30
 - support 160
- Macintosh driver settings
 - custom-size paper 30
 - Services tab 32
 - watermarks 30
- Magenta in wrong position error message 122
- managing network 40
- matching colors 83
- material restrictions 169
- Material Safety Data Sheet (MSDS) 169
- media
 - custom-size, Macintosh settings 30
 - default settings 12
 - first page 30
 - pages per sheet 31
- media jams. *See* jams
- memory
 - error messages 122
 - included 2
 - installing 105

- permanent resources 108
- verifying installation 108
- memory chip, print cartridge
 - description 156
- menu
 - Quick Forms 11
- menus, control panel
 - map, printing 10, 86
 - Network config. 16
 - Reports 10
 - Service 15
 - System Setup 12
- mercury-free product 169
- messages, control panel 117
- misprint error message 123
- multiple pages per sheet
 - printing (Windows) 63
- music paper, printing 11
- N**
- n-up printing
 - selecting (Windows) 63
- network
 - disabling wireless 38
 - link speed settings 41
 - operating systems
 - supported 34
 - password, changing 41
 - password, setting 41
 - settings, changing 40
 - settings, viewing 40
- Network config. menu 16
- Network port
 - locating 5
 - type included 5
- Network Settings tab, HP ToolboxFX 93
- Networking tab, embedded Web server 96
- networks
 - configuration page 10, 86
 - configuring 40
 - embedded Web server,
 - opening 94
 - HP Web Jetadmin 97
 - models supporting 2
 - settings 16
 - settings report 10, 86
- networks, wired
 - installing product 35

- Neutral Grays 82
- non-HP supplies 99
- notebook paper, printing 11
- notes iii
- O**
- obtaining
 - IP address 25, 35
- on/off switch 5
- online support 160
- opening printer drivers (Windows) 55
- operating systems supported 18, 24
- operating systems, supported for networks 34
- ordering
 - supplies and accessories 152
- ordering supplies
 - Web sites 151
- orientation
 - selecting, Windows 64
- output bin
 - jams, clearing 131
 - locating 4
- output quality
 - archive setting 15
 - HP ToolboxFX settings 91
- P**
- packaging product 161
- page count 10, 86
- page sizes
 - scaling documents to fit (Windows) 74
- page too complex error message 123
- pages per minute 2
- pages per sheet
 - selecting (Windows) 63
- paper
 - covers, using different paper 72
 - curl settings 15
 - custom-size, Macintosh settings 30
 - default settings 12, 91
 - default size for tray 51
 - first and last pages, using different paper 72

- first page 30
 - HP ToolboxFX settings 89, 92
 - jams 125
 - pages per sheet 31
 - printing on preprinted letterhead or forms (Windows) 67
 - selecting 134
 - supported sizes 46
 - paper jams. *See* jams
 - paper path
 - jams, clearing 130
 - paper pickup problems
 - solving 125
 - paper size
 - changing 45
 - paper sizes
 - selecting 59
 - selecting custom 60
 - paper type
 - changing 132
 - paper types
 - changing 45
 - selecting 60
 - paper, ordering 152
 - paper, special
 - printing (Windows) 69
 - part numbers 152
 - PCL drivers 18
 - PCL font list 10, 86
 - PCL settings, HP ToolboxFX 93
 - permanent resources 108
 - physical specifications 164
 - portrait orientation
 - selecting, Windows 64
 - ports
 - types included 5
 - PostScript settings, HP ToolboxFX 93
 - power
 - consumption 164
 - power connection, locating 5
 - power switch 5
 - preprinted paper
 - printing (Windows) 67
 - presets (Mac) 29
 - print cartridges
 - checking for damage 137
 - door release, locating 4
 - Macintosh status 32
 - memory chips 156
 - non-HP 99
 - recycling 100, 167
 - replacing 101
 - status, viewing with HP ToolboxFX 89
 - storage 99
 - supplies status page 10, 86
 - warranty 155
 - print cartridges, accessing 4
 - print density settings 91
 - print job
 - canceling 54
 - changing settings 19
 - print media
 - supported 46
 - print quality
 - archive setting 15
 - HP ToolboxFX settings 91
 - improving 132
 - improving (Windows) 59
 - print quality page
 - interpreting 137
 - printing 137
 - printer driver
 - configuring wireless network 38
 - printer drivers
 - choosing 138
 - printer drivers (Mac)
 - changing settings 27
 - settings 29
 - printer drivers (Windows)
 - changing settings 19, 20
 - settings 55
 - supported 18
 - printing
 - settings (Mac) 29
 - settings (Windows) 55
 - printing on both sides
 - settings (Windows) 61
 - printing system software 17
 - problem-solving
 - no response 140
 - slow response 140
 - product registration 93
 - PS Emulation drivers 18
 - PS font list 10, 86
- Q**
- quality
 - archive setting 15
 - HP ToolboxFX settings 91
- R**
- rear door, locating 5
 - recycling
 - HP printing supplies returns and environmental program 168
 - recycling supplies 100
 - registration, product 93
 - removing Mac software 27
 - repacking product 161
 - repeating defects,
 - troubleshooting 138
 - repetitive defects,
 - troubleshooting 138
 - replacement parts, and
 - supplies 152
 - replacing print cartridges 101
 - Reports menu 10
 - resize documents
 - Macintosh 30
 - Windows 74
 - resource saving 108
 - restoring default settings 15
 - restoring factory settings
 - defaults 116
- S**
- safety statements 175, 176
 - saving resources, memory 108
 - scale documents
 - Macintosh 30
 - Windows 74
 - service
 - repacking product 161
 - service error message 119
 - Service menu 15
 - service page 10, 86
 - Services tab
 - Macintosh 32
 - settings
 - driver presets (Mac) 29
 - drivers 20
 - drivers (Mac) 27
 - factory settings, restoring 116
 - HP ToolboxFX 89
 - network report 10, 86

- restoring defaults 15
 - System Setup menu 12
 - shipping lock error
 - message 123
 - shipping product 161
 - shortcuts (Windows)
 - creating 57
 - using 56
 - size specifications, product 164
 - sizes, media
 - default, setting 12
 - sleep delay
 - disabling 98
 - enabling 98
 - software
 - embedded Web server 28
 - HP ToolboxFX 88
 - HP Utility 28
 - installing, USB
 - connections 34
 - installing, wired networks 25, 36
 - Linux 22
 - problems 147
 - software license
 - agreement 157
 - Solaris 22
 - supported operating systems 18, 24
 - uninstalling for Windows 21
 - uninstalling Mac 27
 - UNIX 22
 - Web sites 17
 - Windows 22
 - Solaris software 22
 - solving
 - direct-connect problems 141
 - network problems 141
 - spare parts 152
 - special media
 - guidelines 44
 - special paper
 - guidelines 44
 - printing (Windows) 69
 - specifications
 - electrical and acoustic 164
 - physical 164
 - status
 - alerts, HP Toolbox FX 89
 - HP Utility, Mac 28
 - Macintosh services tab 32
 - supplies, printing report 10, 86
 - viewing with HP Toolbox FX 89
 - Status tab, embedded Web server 95
 - Status tab, HP Toolbox FX 89
 - storing
 - print cartridges 99
 - supplies
 - counterfeit 99
 - non-HP 99
 - ordering 93, 151, 152
 - recycling 100, 167
 - shipping lock error
 - message 123
 - status, viewing with HP Toolbox FX 89
 - status, viewing with HP Utility 28
 - wrong position error
 - message 120, 122, 124
 - supplies status page
 - printing 136
 - supply-status, Services tab
 - Macintosh 32
 - support
 - online 93, 160
 - repacking product 161
 - supported paper 46
 - System Settings tab, HP ToolboxFX 89
 - System Setup menu 12
 - System Setup tab, HP ToolboxFX 93
 - System tab, embedded Web server 95
- T**
- TCP/IP
 - operating systems
 - supported 34
 - settings 16
 - technical support
 - online 160
 - repacking product 161
 - tips iii
 - toner cartridges. See print cartridges
- U**
- ToolboxFX,HP 88
 - transparencies
 - printing (Windows) 69
 - trapping 81
 - tray
 - capacities 47
 - paper types supported 47
 - paper weights 47
 - Tray 1
 - double-sided printing 31
 - jams, clearing 127
 - locating 4
 - settings 12
 - Tray 2
 - capacity 4
 - jams, clearing 129
 - locating 4
 - settings 12
 - trays
 - default paper size 51
 - double-sided printing 31
 - included 2
 - jams, clearing 129
 - load error messages 122
 - locating 4
 - selecting (Windows) 60
 - settings 12, 91
 - troubleshooting
 - control panel messages 117
 - direct-connect problems 141
 - jams 125, 126
 - Mac problems 148
 - network problems 141
 - repeating defects 138
 - two-sided printing
 - settings (Windows) 61
 - types, paper
 - HP ToolboxFX settings 92

- USB port
 - locating 5
 - speed settings 15
 - type included 5

- Y
 - Yellow in wrong position error message 124

W

- warnings iii
- warranty
 - license 157
 - print cartridges 155
 - product 154
- watermarks
 - adding (Windows) 76
- Web sites
 - customer support 160
 - fraud reports 99
 - HP Web Jetadmin,
 - downloading 97
 - Macintosh customer support 160
 - Material Safety Data Sheet (MSDS) 169
 - ordering supplies 151
 - software, downloading 17
- Windows
 - driver settings 20
 - drivers supported 18
 - software components 22
 - supported operating systems 18
- wireless
 - disabling 38
- wireless network
 - ad-hoc 39
 - communication modes 39
 - configuring ad-hoc 40
 - configuring with USB 26, 37
 - configuring with WPS 26, 37
 - infrastructure 39
 - installing the driver 38
 - security 39
- wireless network connection 36
- wireless network interference 38
- WPS
 - configuring wireless network 26, 37



CE873-90901

