

HP LaserJet Managed E50045

User Guide

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1 Printer overview

For more information

- Warning icons
- Printer views
- <u>Printer specifications</u>
- Printer hardware setup and software installation

The following information is correct at the time of publication.

For video assistance, see www.hp.com/videos/LaserJet.

For current information, see www.hp.com/support/ljE50045.

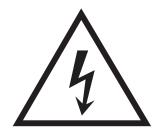
HP's all-inclusive help for the printer includes the following information:

- Install and configure
- Learn and use
- Solve problems
- Download software and firmware updates
- Join support forums
- Find warranty and regulatory information

ENWW For more information

Warning icons

Warning icon definitions: The following warning icons may appear on HP products. Apply appropriate caution where applicable.



Caution: Electric shock



Caution: Hot surface



Caution: Keep body parts away from moving parts



Caution: Sharp edge in close proximity

Printer views

- Printer front view
- Printer back view
- Interface ports
- Control-panel view

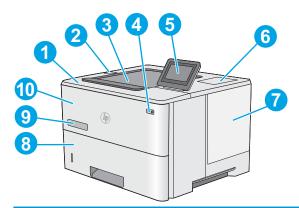
Printer front view

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Model name

Tray 1

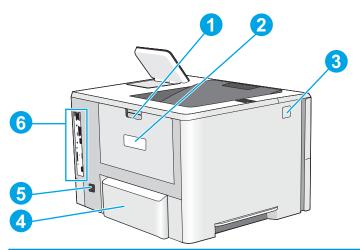


Top cover (access to the toner cartridge) 2 Easy-access USB port Insert a USB flash drive for printing without a computer or to update the printer firmware. **NOTE:** An administrator must enable this port before use. 3 Standard output bin 4 On/off button 5 Control panel with color touchscreen display 6 Hardware integration pocket for connecting accessory and third-party devices NOTE: To use the hardware integration pocket (HIP), install the HP internal USB ports accessory (B5L28A). The USB port inside the HIP is not functional otherwise. 7 Formatter cover 8 Tray 2

ENWW Printer views

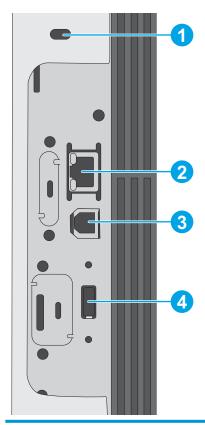
3

Printer back view



1	Rear door (access for clearing jams)	
2	Serial number and product number label	
3	Top-cover-release button	
4	Dust cover for Tray 2 (flips up when legal-size paper is loaded)	
5	Power connection	
6	Formatter (contains the interface ports)	

Interface ports



Slot for a cable-type security lock

Local area network (LAN) Ethernet (RJ-45) network port

Hi-Speed USB 2.0 printing port

USB port for connecting external USB devices (this port might be covered)

NOTE: For easy-access USB printing, use the USB port near the control panel.

ENWW Printer views

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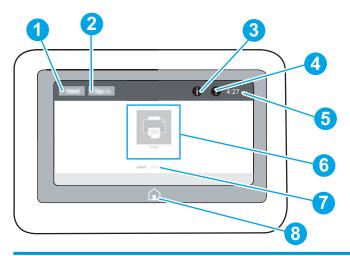
Control-panel view

The Home screen provides access to the printer features and indicates the current status of the printer.

Return to the Home screen at any time by selecting the Home button.



NOTE: The features that appear on the Home screen can vary, depending on the printer configuration.



1	Reset button	Select the Reset button to clear changes, release the printer from a paused state, display the Message Center if there are errors, and restore the default settings.	
2	Sign In or Sign Out button	Select the Sign In button to access secured features.	
		Select the Sign Out button to sign out of the printer. The printer restores all options to the default settings.	
		NOTE: This button displays only if the administrator has configured the printer to require permission for access to features.	
3	Information 🔒 button	Select the Information button to access a screen that provides access to several types of printer information. Select the following buttons on the Information screen for printer information:	
		Display Language: Change the language setting for the current user session.	
		Sleep Mode: Place the printer into sleep mode.	
		• Wi-Fi Direct: View information for how to connect directly to the printer using a phone, tablet, or other device with Wi-Fi.	
		• Wireless: View or change wireless connection settings (wireless accessory equipped models only).	
		Ethernet: View or change Ethernet connection settings.	
		 HP Web Services: View information to connect and print to the printer using HP Web Services (ePrint). 	
4	Help ? button	Select the Help button to open the embedded help system.	
5	Current time	Displays the current time.	
6	Applications area	Select any of the icons to open the application. Swipe the screen sideways to access more applications.	

appear and the order in which they appear.

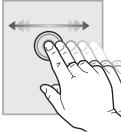
NOTE: The available applications vary by printer. The administrator can configure which applications

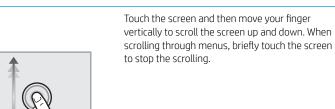
7	Home-screen page indicator	Indicates the number of pages on the Home screen or in an application. The current page is highlighted. Swipe the screen sideways to scroll between pages.
8	Home 🏠 button Select the Home button to return to the Home screen.	

How to use the touchscreen control panel

Use the following actions to use the printer touchscreen control panel.

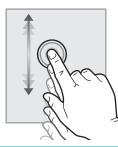
Action	Description	Example
Touch	Touch an item on the screen to select that item or open that menu. Also, when scrolling through menus, briefly touch the screen to stop the scrolling.	Touch the Settings icon to open the Settings app.
Swipe	Touch the screen and then move your finger horizontally to scroll the screen sideways.	Swipe until the Settings app displays.





Scroll through the Settings app.

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Scroll

ENWW Printer views

Printer specifications

- IMPORTANT: The following specifications are correct at the time of publication, but they are subject to change. For current information, see www.hp.com/support/ljE50045.
 - <u>Technical specifications</u>
 - Supported operating systems
 - Printer dimensions
 - Power consumption, electrical specifications, and acoustic emissions
 - Operating-environment range

Technical specifications

Model name		E50045dw
Product number		3GN19A
Paper handling	Tray 1 (100-sheet capacity)	~
	Tray 2 (550-sheet capacity)	~
	1 x 550-sheet paper feeder	Optional
	NOTE: Each printer model accepts up to three optional 1 x 550-sheet feeders (Trays 3, 4, and 5).	
	Printer cabinet/stand	Optional
	Automatic duplex printing	~
Connectivity	10/100/1000 Ethernet LAN connection with IPv4 and IPv6	~
	Hi-Speed USB 2.0	~
	Easy-access USB port for printing without a computer and upgrading the firmware	~
	Hardware Integration Pocket for connecting accessory and third-party devices	~
	HP Internal USB Ports	Optional
	HP Jetdirect 3000w NFC/Wireless Accessory for printing from mobile devices	Optional
	Integrated HP near-field communication (NFC) and Wi- Fi Direct functionality for printing from mobile devices	~
	HP Jetdirect 2900nw Print Server accessory for wireless connectivity	Optional
Memory	512 MB memory, expandable to 1.5 GB by adding 1 GB DIMM	~
Mass storage	4 GB embedded Multi-Media Controller (eMMC)	~
	320 GB HP Secure High-Performance Hard Disk	Optional

Model name		E50045dw
Product number		3GN19A
Security	HP Trusted Platform Module for encrypting all data that passes through the printer	Optional
Control-panel display and input	Color touchscreen control panel	~
Print	Prints 45 pages per minute (ppm) on letter and 43 ppm on A4-size paper	~
	Easy-access USB printing (no computer required)	~
	Store jobs in the printer memory to print later or print privately	~

Supported operating systems

Linux: For information and print drivers for Linux, go to www.hp.com/go/linuxprinting.

UNIX: For information and print drivers for UNIX®, go to www.hp.com/go/unixmodelscripts.

The following information applies to the printer-specific HP PCL 6 print drivers, and HP print drivers for macOS.

Windows: Go to the printer-support website for this printer: www.hp.com/support/ljE50045 to download and install the HP print driver.

macOS: Mac computers are supported with this printer. Download HP Easy Start from <u>123.hp.com/LaserJet</u> to install the HP print driver.

- 1. Go to 123.hp.com/LaserJet.
- 2. Follow the steps provided to download the printer software.

Table 1-1 Supported operating systems and print drivers

Operating system	Print driver installed (from the software on the web)	Notes
Windows 7, 32-bit and 64-bit	The PCL 6 printer-specific print driver is available for download from the printer-support website. Download the driver, and then use the Microsoft Add Printer tool to install it.	
Windows 8, 32-bit and 64-bit	The PCL 6 printer-specific print driver is available for download from the printer-support website. Download the driver, and then use the Microsoft Add Printer tool to install it.	
Windows 8.1, 32-bit and 64-bit	The PCL 6 printer-specific print driver is available for download from the printer-support website. Download the driver, and then use the Microsoft Add Printer tool to install it.	

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Table 1-1 Supported operating systems and print drivers (continued)

Operating system	Print driver installed (from the software on the web)	Notes
Windows 10, 32-bit and 64-bit	The PCL 6 printer-specific print driver is available for download from the printer-support website. Download the driver, and then use the Microsoft Add Printer tool to install it.	
Windows Server 2008 R2, SP 1, 64-bit	The PCL 6 printer-specific print driver is available for download from the printer-support website. Download the driver, and then use the Microsoft Add Printer tool to install it.	
Windows Server 2012, 64-bit	The PCL 6 printer-specific print driver is available for download from the printer-support website. Download the driver, and then use the Microsoft Add Printer tool to install it.	
Windows Server 2012 R2, 64-bit	The PCL 6 printer-specific print driver is available for download from the printer-support website. Download the driver, and then use the Microsoft Add Printer tool to install it.	
Windows Server 2016, 64-bit	The PCL 6 printer-specific print driver is available for download from the printer-support website. Download the driver, and then use the Microsoft Add Printer tool to install it.	
macOS 10.11 El Capitan, macOS 10.12 Sierra, macOS 10.13 High Sierra	Download HP Easy Start from 123.hp.com/ LaserJet, and then use it to install the print driver.	



NOTE: Supported operating systems can change. For a current list of supported operating systems, go to www.hp.com/support/ljE50045 for HP's all-inclusive help for the printer.



NOTE: For details on client and server operating systems and for HP UPD driver support for this printer, go to www.hp.com/go/upd. Under Additional information, click the links.

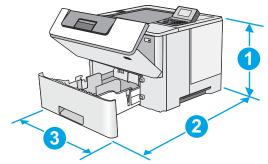
Table 1-2 Minimum system requirements

Windows		macOS	
•	Internet connection	•	Internet connection
•	Dedicated USB 1.1 or 2.0 connection or a network connection	•	Dedicated USB 1.1 or 2.0 connection or a network connection
•	2 GB of available hard-disk space	•	1.5 GB of available hard-disk space
•	1 GB RAM (32-bit) or 2 GB RAM (64-bit)		

Printer dimensions

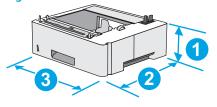
Figure 1-1 Dimensions for the dw model

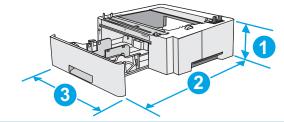




	Printer fully closed	Printer fully opened
1. Height	296 mm (11.7 in)	296 mm (11.7 in)
2. Depth	Tray 2 dust cover closed: 376 mm (14.8 in)	569 mm (22.4 in)
	Tray 2 dust cover open: 444 mm (17.5 in)	
3. Width	410 mm (16.1 in)	410 mm (16.1 in)
Weight	12 kg (26.5 lb)	

Figure 1-2 Dimensions for the 1 x 550-sheet paper feeder

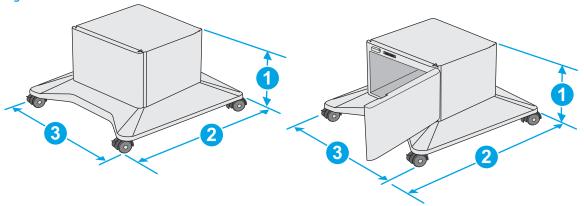




1. Height	130 mm (5.1 in)
2. Depth	Tray closed: 376 mm (14.8 in)
	Tray opened: 569 mm (22.4 in)
3. Width	410 mm (16.1 in)
Weight	1.4 kg (3 lb)

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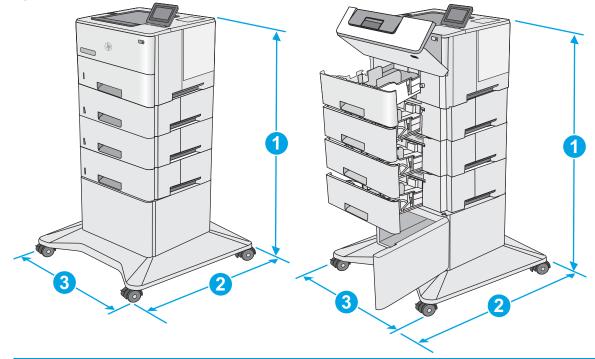
Figure 1-3 Dimensions for the cabinet/stand



1. Height	381 mm (15.0 in)
2. Depth	Door closed: 632 mm (24.9 in)
	Door opened and rear castors rotated: 865 mm (34.0 in)
3. Width	Door closed: 600 mm (23.6 in)
	Door opened and rear castors rotated: 630 mm (24.8 in)
Weight	9.0 kg (20 lb)

These values are subject to change. For current information, go to www.hp.com/support/ljE50045.

Figure 1-4 Dimensions for the printer with three 1 x 550-sheet paper feeders and the cabinet/stand



	Printer and accessories fully closed	Printer and accessories fully opened
1. Height	1067 mm (42.0 in)	1067 mm (42.0 in)
2. Depth	632 mm (24.9 in)	865 mm (34.0 in)

	Printer and accessories fully closed	Printer and accessories fully opened
3. Width	600 mm (23.6 in)	630 mm (24.8 in)
Weight	25.2 kg (55.5 lb)	

These values are subject to change. For current information, go to www.hp.com/support/ljE50045.

Power consumption, electrical specifications, and acoustic emissions

See www.hp.com/support/ljE50045 for current information.

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

Operating-environment range

Table 1-3 Operating-environment specifications

Environment	Recommended	Allowed
Temperature	17° to 25°C (62.6° to 77°F)	15° to 30°C (59° to 86°F)
Relative humidity	30% to 70% relative humidity (RH)	10% to 80% RH
Altitude	Not applicable	0 to 3000 m (0 to 9,842 ft)

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Printer hardware setup and software installation

For basic setup instructions, see the Hardware Installation Guide that came with the printer. For additional instructions, go to HP support on the Web.

Go to www.hp.com/support/ljE50045 for HP's all-inclusive help for the printer. Find the following support:

- Install and configure
- Learn and use
- Solve problems
- Download software and firmware updates
- Join support forums
- Find warranty and regulatory information

2 Paper trays

For more information

- Load paper to Tray 1 (multipurpose tray)
- Load paper to Trays 2, 3, 4, and 5
- Load and print envelopes

The following information is correct at the time of publication.

For video assistance, see www.hp.com/videos/LaserJet.

For current information, see www.hp.com/support/ljE50045.

HP's all-inclusive help for the printer includes the following information:

- Install and configure
- Learn and use
- Solve problems
- Download software and firmware updates
- Join support forums
- Find warranty and regulatory information

ENWW For more information

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Load paper to Tray 1 (multipurpose tray)

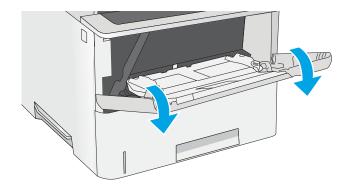
Introduction

The following information describes how to load paper in Tray 1. This tray holds up to 100 sheets of 75 g/m² (20 lb) paper.

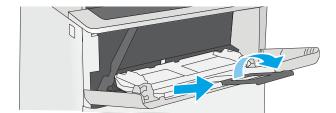
NOTE: Select the correct paper type in the print driver before printing..

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

Grasp the handle on either side of Tray 1, and pull it forward to open it.



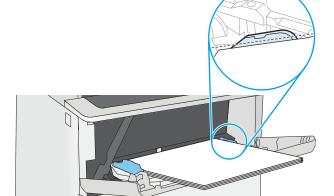
Pull out the tray extension to support the paper.



Spread the paper guides to the correct size, and then load paper in the tray. For information about how to orient the paper, see <u>Tray 1 paper</u> orientation on page 17.

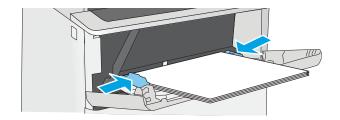
Make sure that the paper fits under the fill line on the paper guides.

NOTE: The maximum stack height is 10 mm (0.4 in), or approximately 100 sheets of 75g paper.



Adjust the side guides so that they lightly touch the paper stack, but do not bend it.

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Chapter 2 Paper trays **ENWW**

Tray 1 paper orientation

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



NOTE: The Alternative Letterhead Mode settings affects the way to load letterhead or preprinted paper. This setting is disabled by default. When using this mode, load paper as for automatic duplex printing. For more information, see Use alternative letterhead mode on page 17.

Paper type	Single-sided printing	Duplex printing and Alternative Letterhead Mode	
Letterhead, preprinted, or prepunched	Face-up	Face-down	
	Top edge leading into the printer	Bottom edge leading into the printer	

Use alternative letterhead mode

Use the Alternative Letterhead Mode feature to load letterhead or preprinted paper into the tray the same way for all jobs, whether printing to one side of the sheet of paper or to both sides. When using this mode, load paper as for automatic duplex printing.

To use the feature, enable it by using the printer control-panel menus.

Enable Alternative Letterhead Mode by using the printer control-panel menus

- From the Home screen on the printer control panel, swipe from right to left until the Settings menu displays. Touch the Settings icon to open the menu.
- 2. Open the following menus:
 - Manage Trays
 - Alternative Letterhead Mode
- Select Enabled, and then touch the Save button or press the OK button. 3.

Load paper to Trays 2, 3, 4, and 5

Introduction

The following information describes how to load paper in Tray 2 and the optional 550-sheet trays (part number F2A72A). These trays hold up to 550 sheets of 75 g/m^2 (20 lb) paper.

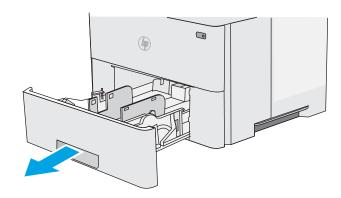
NOTE: The procedure to load paper for the 550-sheet trays is the same as for Tray 2. Only Tray 2 is shown here.

NOTE: The paper guides may be locked before use and may not be adjustable.

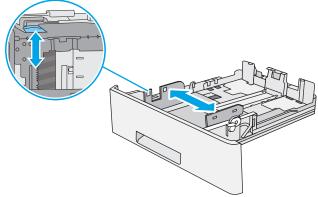
CAUTION: Do not extend more than one paper tray at a time.

1. Open the tray.

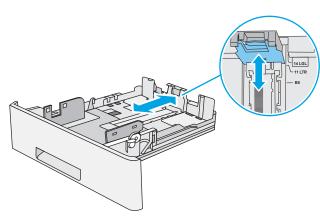
NOTE: Do not open this tray while it is in use.



Before loading paper, adjust the paper-width guides by squeezing the adjustment latches and sliding the guides to the size of the paper being used.



3. Adjust the paper-length guide by squeezing the adjustment latch and sliding the guide to the size of the paper being used.



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4. To load legal-size paper into the tray, squeeze the lever on the back of the tray that is to the left of center, and then extend the tray back to the correct paper size.

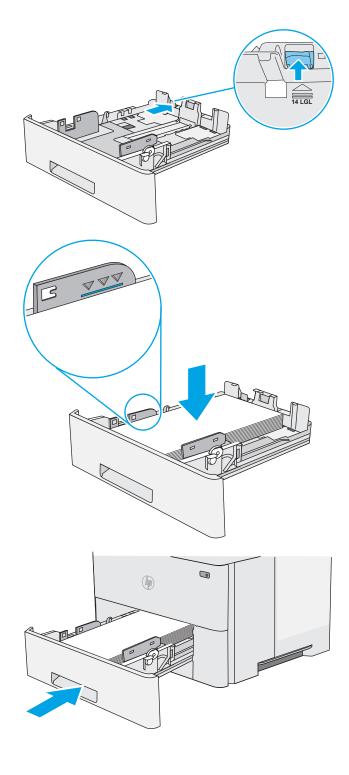
NOTE: This step does not apply to other paper sizes.

 Load paper into the tray. For information about how to orient the paper, see <u>Tray 2 and the 550-sheet trays</u> paper orientation on page 20.

NOTE: Do not adjust the paper guides tightly against the paper stack. Adjust them to the indentations or markings in the tray.

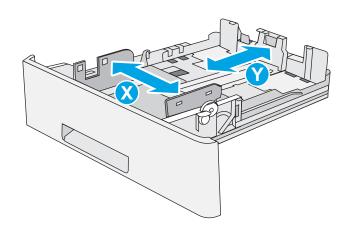
NOTE: To prevent jams, adjust the paper guides to the correct size and do not overfill the tray. Be sure that the top of the stack is below the tray full indicator, as shown in the enlargement in the illustration.

6. Close the tray.



- The tray configuration message displays on the 7. printer control panel.
- If the paper size and type shown is not correct, 8. select Modify to choose a different paper size or type.

For custom-size paper, specify the X and Y dimensions for the paper when the prompt displays on the printer control panel.



Tray 2 and the 550-sheet trays paper orientation

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



NOTE: The Alternative Letterhead Mode settings affects the way to load letterhead or preprinted paper. This setting is disabled by default. When using this mode, load paper as for automatic duplex printing. For more information, see <u>Use alternative letterhead mode on page 20</u>.

Paper type	Single-sided printing	Duplex printing and Alternative Letterhead Mode
Letterhead, preprinted, or prepunched	Face-down	Face-up
	Top edge at the front of the tray	Bottom edge at the front of the tray

Use alternative letterhead mode

Use the Alternative Letterhead Mode feature to load letterhead or preprinted paper into the tray the same way for all jobs, whether printing to one side of the sheet of paper or to both sides. When using this mode, load paper as for automatic duplex printing.

To use the feature, enable it by using the printer control-panel menus.

Enable Alternative Letterhead Mode by using the printer control-panel menus

- From the Home screen on the printer control panel, swipe from right to left until the Settings menu displays. Touch the Settings icon to open the menu.
- 2. Open the following menus:

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- Manage Trays
- Alternative Letterhead Mode
- Select Enabled, and then touch the Save button or press the OK button.

Load and print envelopes

Introduction

The following information describes how to print and load envelopes. Use only Tray 1 to print on envelopes. Tray 1 holds up to 10 envelopes.

To print envelopes using the manual feed option, follow these steps to select the correct settings in the print driver, and then load the envelopes into the tray after sending the print job to the printer.

Print envelopes

- 1. From the software program, select the **Print** option.
- 2. Select the printer from the list of printers, and then click or tap the **Properties** or **Preferences** button to open the print driver.
- NOTE: The name of the button varies for different software programs.
- NOTE: To access these features from a Windows 8 or 8.1 Start screen, select **Devices**, select **Print**, and then select the printer.
- 3. Click or tap the Paper/Quality tab.
- 4. In the **Paper size** drop-down list, select the correct size for the envelopes.
- 5. In the **Paper type** drop-down list, select **Envelope**.
- 6. In the Paper source drop-down list, select Manual feed.
- 7. Click the **OK** button to close the **Document Properties** dialog box.
- 8. In the **Print** dialog box, click the **OK** button to print the job.

Envelope orientation

Load envelopes in Tray 1 face up, with the short, postage end leading into the printer.



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3 Supplies, accessories, and parts

For more information

- Order supplies, accessories, and parts
- Replace the toner cartridge

The following information is correct at the time of publication.

For video assistance, see www.hp.com/videos/LaserJet.

For current information, see www.hp.com/support/ljE50045.

HP's all-inclusive help for the printer includes the following information:

- Install and configure
- Learn and use
- Solve problems
- Download software and firmware updates
- Join support forums
- Find warranty and regulatory information

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Order supplies, accessories, and parts

Ordering

Order supplies and paper	www.hp.com/go/suresupply
Order genuine HP parts or accessories	www.hp.com/buy/parts
Order through service or support providers	Contact an HP-authorized service or support provider.
Order using the HP Embedded Web Server (EWS)	To access, in a supported Web browser on your computer, enter the printer IP address or host name in the address/URL field. The EWS contains a link to the HP SureSupply website, which provides options for purchasing Original HP supplies.

Supplies and accessories

In order to purchase toner cartridges, contact your managed service representative. Make sure that you know your product model number, which appears on the product label on the printer rear door.

Item	Description	Cartridge number	Part number
Accessories			
1 x 550-sheet paper feeder	Optional 550-sheet paper feeder	Not applicable	F2A72A
	NOTE: The printer supports up to three 1 x 550-sheet paper feeders.		
Printer stand and cabinet	Optional stand with storage cabinet to support the printer	Not applicable	F2A73A
	Recommended when using multiple optional paper feeders.		
FIPS 500GB Hard-disk drive	Optional hard drive	Not applicable	B5L29A
1 GB DDR3 Memory DIMM	Optional DIMM for expanding the memory	Not applicable	G6W84A
HP Internal USB ports	Two optional USB ports for connecting third-party devices	Not applicable	B5L28A
HP Internal USB Port	HP Internal USB Ports accessory	Not applicable	F2A87A
HP Trusted Platform Module	Automatically encrypts all data that passes through the printer	Not applicable	F5S62A
	Includes installation instructions		
HP Jetdirect 2900nw Print Server	USB wireless print server accessory	Not applicable	J8031A
HP Jetdirect 3000w NFC/Wireless Accessory	Wi-Fi direct accessory for "touch" printing from mobile devices	Not applicable	J8030A
NOTE: For use in the Hardware Integration Pocket. The HP Jetdirect 3000w NFC/Wireless Accessory requires the HP Internal USB ports accessory (B2L28A). The J8031A can also be connected via the rear host USB port. in that case, the HIP is not used.			

Customer self-repair parts

Customer Self-Repair (CSR) parts are available for many HP LaserJet printers to reduce repair time. More information about the CSR program and benefits can be found at www.hp.com/go/csr-support and www.hp.com/go/csr-support and www.hp.com/go/csr-support and

Genuine HP replacement parts can be ordered at www.hp.com/buy/parts or by contacting an HP-authorized service or support provider. When ordering, one of the following will be needed: part number, serial number (found on back of printer), product number, or printer name.

- Parts listed as **Mandatory** self-replacement are to be installed by customers, unless you are willing to pay HP service personnel to perform the repair. For these parts, on-site or return-to-depot support is not provided under the HP printer warranty.
- Parts listed as **Optional** self-replacement can be installed by HP service personnel at your request for no additional charge during the printer warranty period.

Item	Description	Self-replacement options	Part number
Solid State Memory Drive kit	Replacement solid-state memory drive	Mandatory	5851-6415
Hard Disk Drive kit	Replacement hard-disk drive	Mandatory	5851-6417
FIPS HDD 500GB Kit (US government only)	Replacement hard-disk drive	Mandatory	B5L29-67903
USB Wireless Print Server kit	Replacement HP Jetdirect 2900nw Print Server	Mandatory	5851-6421
NFC Accessory kit	Replacement HP Jetdirect 3000w NFC/ Wireless Accessory	Mandatory	5851-6429
1GB DDR3 Memory DIMM	Replacement memory DIMM	Mandatory	5851-6422
HP Internal USB Ports Kit	Replacement internal USB ports	Mandatory	B5L28-67902
Secure Hard Disk Drive kit	Replacement HP Secure High-Performance Hard Disk Drive	Mandatory	B5L29-67903
Transfer Roller Service Kit	Replacement transfer roller	Mandatory	F2A76-67905
Tray 1 Pick Up and Separation Roller Kit	Replacement rollers for Tray 1	Mandatory	F2A76-67906
Tray 2-x Roller Kit	Replacement rollers for Tray 2, 3, 4, and 5	Mandatory	F2A76-67907
1x550-sheet paper feeder	Replacement paper feeder	Mandatory	F2A72-67901
Printer stand and cabinet	Replacement printer stand and cabinet	Mandatory	F2A73-67901

Replace the toner cartridge

Introduction

The following information provides details about the toner cartridge for the printer, and it includes instructions to replace it.

- Toner-cartridge information
- Remove and replace the cartridge

Toner-cartridge information

This printer indicates when the toner cartridge level is low and very low. The actual toner cartridge life remaining can vary. Consider having a replacement cartridge available to install when print quality is no longer acceptable.

To purchase cartridges or check cartridge compatibility for the printer, go to HP SureSupply at www.hp.com/go/ suresupply. Scroll to the bottom of the page and verify that the country/region is correct.

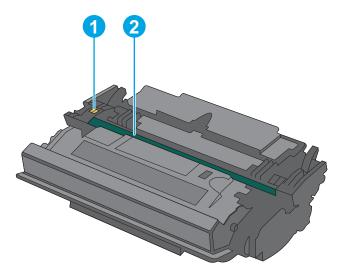


NOTE: High-yield toner cartridges contain more toner than standard cartridges for increased page yield. For more information, go to www.hp.com/go/learnaboutsupplies.

Do not remove the toner cartridge from its package until it is time to replace it.

⚠ CAUTION: To prevent damage to the toner cartridge, do not expose it to light for more than a few minutes. Cover the green imaging drum if the toner cartridge must be removed from the printer for an extended period of time.

The following illustration shows the toner-cartridge components.

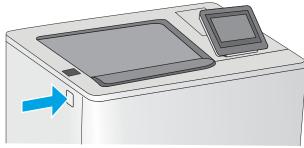


1	Memory chip	
2	Imaging drum	
	CAUTION: Do not touch the imaging drum. Fingerprints can cause print-quality problems.	

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

Remove and replace the cartridge

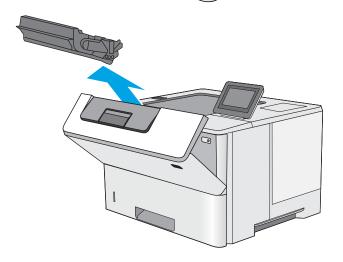
Press the top-cover-release button on the left side of the printer.



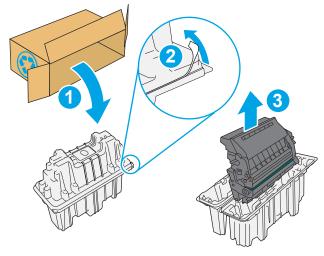
Open the front door.



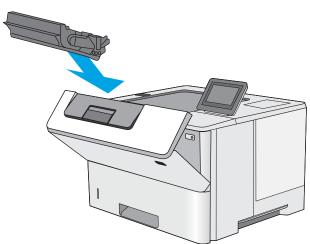
Grasp the handle of the used toner cartridge and pull out to remove it.



4. Remove the new toner cartridge from its protective shell by tearing off the plastic strip and opening the package. Save all packaging for recycling the used toner cartridge.



5. Align the toner cartridge with its slot, and then insert the toner cartridge into the printer.

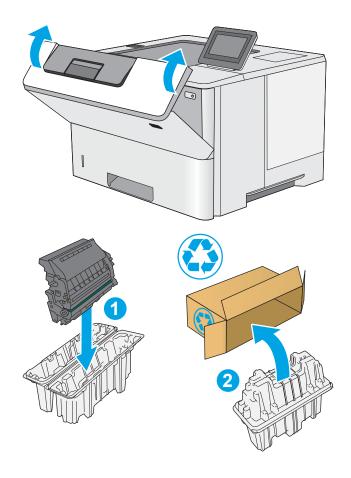


6. Close the front door.

Pack the used toner cartridge into the box that the new cartridge came in, or use a large cardboard box and fill it with several cartridges that you need to recycle. See the enclosed recycling guide for information about recycling.

In the U.S., a pre-paid shipping label is included in the box. In other countries/regions, go to www.hp.com/recycle to print a pre-paid shipping label.

Adhere the pre-paid shipping label to the box, and return the used cartridge to HP for recycling.



4 Print

For more information

- Print tasks (Windows)
- Print tasks (macOS)
- Store print jobs on the printer to print later or print privately
- Print from the USB port

The following information is correct at the time of publication.

For video assistance, see www.hp.com/videos/LaserJet.

For current information, see www.hp.com/support/ljE50045.

HP's all-inclusive help for the printer includes the following information:

- Install and configure
- Learn and use
- Solve problems
- Download software and firmware updates
- Join support forums
- Find warranty and regulatory information

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Print tasks (Windows)

How to print (Windows)

The following procedure describes the basic printing process for Windows.

- 1. From the software program, select the **Print** option.
- 2. Select the printer from the list of printers. To change settings, click the **Properties** or **Preferences** button to open the print driver.
- NOTE: The name of the button varies for different software programs.
- NOTE: In Windows 10, 8.1, and 8, these applications will have a different layout with different features from what is described below for desktop applications. To access the print feature from a Start screen app, complete the following steps:
 - Windows 10: Select Print, and then select the printer.
 - Windows 8.1 or 8: Select **Devices**, select **Print**, and then select the printer.

For the HP PCL-6 V4 driver, the HP AiO Printer Remote application downloads additional driver features when **More settings** is selected.

- NOTE: For more information, click the Help (?) button in the print driver.
- Click the tabs in the print driver to configure the available options. For example, set the paper orientation
 on the Finishing tab, and set the paper source, paper type, paper size, and quality settings on the Paper/
 Quality tab.
- 4. Click the **OK** button to return to the **Print** dialog box. Select the number of copies to print from this screen.
- 5. Click the **Print** button to print the job.

Automatically print on both sides (Windows)

Use this procedure for printers that have an automatic duplexer installed. If the printer does not have an automatic duplexer installed, or to print on paper types that the duplexer does not support, print on both sides manually.

- 1. From the software program, select the **Print** option.
- 2. Select the printer from the list of printers, and then click the **Properties** or **Preferences** button to open the print driver.
 - NOTE: The name of the button varies for different software programs.
 - NOTE: In Windows 10, 8.1, and 8, these applications will have a different layout with different features from what is described below for desktop applications. To access the print feature from a Start screen app, complete the following steps:
 - **Windows 10:** Select **Print**, and then select the printer.
 - Windows 8.1 or 8: Select Devices, select Print, and then select the printer.

For the HP PCL-6 V4 driver, the HP AiO Printer Remote application downloads additional driver features when **More settings** is selected.

- 3. Click the **Finishing** tab.
- 4. Select **Print on both sides**. Click **OK** to close the **Document Properties** dialog.
- 5. In the **Print** dialog, click **Print** to print the job.

Manually print on both sides (Windows)

Use this procedure for printers that do not have an automatic duplexer installed or to print on paper that the duplexer does not support.

- 1. From the software program, select the **Print** option.
- 2. Select the printer from the list of printers, and then click the **Properties** or **Preferences** button to open the print driver.
 - NOTE: The name of the button varies for different software programs.
 - NOTE: In Windows 10, 8.1, and 8, these applications will have a different layout with different features from what is described below for desktop applications. To access the print feature from a Start screen app, complete the following steps:
 - **Windows 10:** Select **Print**, and then select the printer.
 - Windows 8.1 or 8: Select Devices, select Print, and then select the printer.

For the HP PCL-6 V4 driver, the HP AiO Printer Remote application downloads additional driver features when **More settings** is selected.

- 3. Click the **Finishing** tab.
- 4. Select **Print on both sides (manually)**, and then click **OK** to close the **Document Properties** dialog.
- 5. In the **Print** dialog, click **Print** to print the first side of the job.
- 6. Retrieve the printed stack from the output bin, and place it in Tray 1.
- 7. If prompted, select the appropriate control panel button to continue.

Print multiple pages per sheet (Windows)

- 1. From the software program, select the **Print** option.
- 2. Select the printer from the list of printers, and then click the **Properties** or **Preferences** button to open the print driver.
 - NOTE: The name of the button varies for different software programs.
 - NOTE: In Windows 10, 8.1, and 8, these applications will have a different layout with different features from what is described below for desktop applications. To access the print feature from a Start screen app, complete the following steps:
 - **Windows 10:** Select **Print**, and then select the printer.
 - Windows 8.1 or 8: Select Devices, select Print, and then select the printer.

For the HP PCL-6 V4 driver, the HP AiO Printer Remote application downloads additional driver features when **More settings** is selected.

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- 3. Click the **Finishing** tab.
- 4. Select the number of pages per sheet from the **Pages per sheet** drop-down.
- 5. Select the correct **Print page borders**, **Page order**, and **Orientation** options. Click **OK** to close the **Document Properties** dialog.
- 6. In the **Print** dialog, click **Print** to print the job.

Select the paper type (Windows)

- 1. From the software program, select the **Print** option.
- 2. Select the printer from the list of printers, and then click the **Properties** or **Preferences** button to open the print driver.
- NOTE: The name of the button varies for different software programs.
- NOTE: In Windows 10, 8.1, and 8, these applications will have a different layout with different features from what is described below for desktop applications. To access the print feature from a Start screen app, complete the following steps:
 - **Windows 10:** Select **Print**, and then select the printer.
 - Windows 8.1 or 8: Select Devices, select Print, and then select the printer.

For the HP PCL-6 V4 driver, the HP AiO Printer Remote application downloads additional driver features when **More settings** is selected.

- 3. Click the **Paper/Quality** tab.
- 4. Select the paper type from the **Paper type** drop-down list.
- Click **OK** to close the **Document Properties** dialog. In the **Print** dialog, click **Print** to print the job.
 If the tray needs to be configured, a tray configuration message displays on the printer control panel.
- 6. Load the tray with the specified type and size of paper, and then close the tray.
- 7. Touch the OK button to accept the detected type and size, or touch the Modify button to choose a different paper size or type.
- 8. Select the correct type and size, and then touch the OK button.

Additional print tasks

Go to www.hp.com/support/ljE50045.

Instructions are available for performing specific print tasks, such as the following:

- Create and use printing shortcuts or presets
- Select the paper size, or use a custom paper size
- Select the page orientation
- Create a booklet
- Scale a document to fit a specific paper size
- Print the first or last pages of the document on different paper
- Print watermarks on a document

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Print tasks (macOS)

How to print (macOS)

The following procedure describes the basic printing process for macOS.

- Click the File menu, and then click the Print option.
- 2. Select the printer.
- Click Show Details or Copies & Pages, and then select other menus to adjust the print settings.
- NOTE: The name of the item varies for different software programs.
- Click the Print button.

Automatically print on both sides (macOS)

- NOTE: This information applies to printers that include an automatic duplexer.
- NOTE: This feature is available if you install the HP print driver. It might not be available if you are using AirPrint.
 - 1. Click the **File** menu, and then click the **Print** option.
 - **2.** Select the printer.
 - 3. Click **Show Details** or **Copies & Pages**, and then click the **Layout** menu.
 - NOTE: The name of the item varies for different software programs.
 - 4. Select a binding option from the **Two-Sided** drop-down list.
 - 5. Click the **Print** button.

Manually print on both sides (macOS)

- NOTE: This feature is available if you install the HP print driver. It might not be available if you are using AirPrint.
 - 1. Click the **File** menu, and then click the **Print** option.
 - 2. Select the printer.
 - 3. Click **Show Details** or **Copies & Pages**, and then click the **Manual Duplex** menu.
 - NOTE: The name of the item varies for different software programs.
 - 4. Click the **Manual Duplex** box, and select a binding option.
 - 5. Click the **Print** button.
 - 6. Go to the printer, and remove any blank paper that is in Tray 1.
 - 7. Retrieve the printed stack from the output bin and place it with the printed-side facing down in the input tray.
 - 8. If prompted, touch the appropriate control panel button to continue.

Print multiple pages per sheet (macOS)

- 1. Click the **File** menu, and then click the **Print** option.
- 2. Select the printer.
- 3. Click **Show Details** or **Copies & Pages**, and then click the **Layout** menu.
 - NOTE: The name of the item varies for different software programs.
- 4. From the Pages per Sheet drop-down list, select the number of pages that you want to print on each sheet.
- 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.
- 7. Click the **Print** button.

Select the paper type (macOS)

- 1. Click the **File** menu, and then click the **Print** option.
- 2. Select the printer.
- 3. Click Show Details or Copies & Pages, and then click the Media & Quality menu or the Paper/Quality menu.
- NOTE: The name of the item varies for different software programs.
- 4. Select from the **Media & Quality** or **Paper/Quality** options.
 - NOTE: This list contains the master set of options available. Some options are not available on all printers.
 - **Media Type**: Select the option for the type of paper for the print job.
 - **Print Quality**: Select the resolution level for the print job.
 - Edge-To-Edge Printing: Select this option to print close to the paper edges.
- 5. Click the **Print** button.

Additional print tasks

Go to www.hp.com/support/ljE50045.

Instructions are available for performing specific print tasks, such as the following:

- Create and use printing shortcuts or presets
- Select the paper size, or use a custom paper size
- Select the page orientation
- Create a booklet
- Scale a document to fit a specific paper size
- Print the first or last pages of the document on different paper

Print watermarks on a document

ENWW Print tasks (macOS) 37

Store print jobs on the printer to print later or print privately

Introduction

The following information provides procedures for creating and printing documents that are stored on the printer. These jobs can be printed at a later time or printed privately.

- Create a stored job (Windows)
- Create a stored job (macOS)
- Print a stored job
- Delete a stored job
- Information sent to printer for Job Accounting purposes

Create a stored job (Windows)

Store jobs on the printer for private or delayed printing.

- 1. From the software program, select the **Print** option.
- 2. Select the printer from the list of printers, and then select **Properties** or **Preferences** (the name varies for different software programs).
- NOTE: The name of the button varies for different software programs.
- NOTE: In Windows 10, 8.1, and 8, these applications will have a different layout with different features from what is described below for desktop applications. To access the print feature from a Start screen app, complete the following steps:
 - **Windows 10:** Select **Print**, and then select the printer.
 - **Windows 8.1 or 8:** Select **Devices**, select **Print**, and then select the printer.

For the HP PCL-6 V4 driver, the HP AiO Printer Remote application downloads additional driver features when **More settings** is selected.

- 3. Click the **Job Storage** tab.
- 4. Select a **Job Storage Mode** option.
 - **Proof and Hold**: Print and proof one copy of a job, and then print more copies.
 - **Personal Job**: The job does not print until you request it at the printer control panel. For this jobstorage mode, you can select one of the **Make Job Private/Secure** options. If you assign a personal identification number (PIN) to the job, you must provide the required PIN at the control panel. If you encrypt the job, you must provide the required password at the control panel. The print job is deleted from memory after it prints and is lost if the printer loses power.
 - Quick Copy: Print the requested number of copies of a job and store a copy of the job in the printer memory so you can print it again later.
 - **Stored Job**: Store a job on the printer and allow other users to print the job at any time. For this jobstorage mode, you can select one of the **Make Job Private/Secure** options. If you assign a personal identification number (PIN) to the job, the person who prints the job must provide the required PIN at

the control panel. If you encrypt the job, the person who prints the job must provide the required password at the control panel.

5. To use a custom user name or job name, click the **Custom** button, and then enter the user name or the job name.

Select which option to use if another stored job already has that name:

- Use Job Name + (1-99): Append a unique number to the end of the job name.
- Replace Existing File: Overwrite the existing stored job with the new one.
- Click the OK button to close the Document Properties dialog box. In the Print dialog box, click the Print button to print the job.

Create a stored job (macOS)

Store jobs on the printer for private or delayed printing.

- 1. Click the **File** menu, and then click the **Print** option.
- 2. In the **Printer** menu, select the printer.
- 3. By default, the print driver displays the **Copies & Pages** menu. Open the menus drop-down list, and then click the **Job Storage** menu.
- 4. In the **Mode** drop-down list, select the type of stored job.
 - **Proof and Hold**: Print and proof one copy of a job, and then print more copies.
 - **Personal Job**: The job does not print until someone requests it at the printer control panel. If the job has a personal identification number (PIN), provide the required PIN at the control panel. The print job is deleted from memory after it prints and is lost if the printer loses power.
 - Quick Copy: Print the requested number of copies of a job and store a copy of the job in the printer memory to print it again later.
 - Stored Job: Store a job on the printer and allow other users to print the job at any time. If the job has a personal identification number (PIN), the person who prints the job must provide the required PIN at the control panel.
- To use a custom user name or job name, click the Custom button, and then enter the user name or the job name.

Select which option to use if another stored job already has that name.

- Use Job Name + (1-99): Append a unique number to the end of the job name.
- **Replace Existing File**: Overwrite the existing stored job with the new one.
- 6. If you selected the **Stored Job** or **Personal Job** option in step 4, you can protect the job with a PIN. Type a 4-digit number in the **Use PIN to Print** field. When other people attempt to print this job, the printer prompts them to enter this PIN number.
- 7. Click the **Print** button to process the job.

Print a stored job

Use this procedure to print a document that is in a job storage folder on the printer.

- 1. From the Home screen on the printer control panel, select Print, and then select Print from Job Storage.
- 2. Under Stored Jobs to Print, select Choose, and then select the folder where the document is saved.
- 3. Select the document, and then touch Select.
 - If the document is private, enter the four-digit PIN in the Password field, and then select OK.
- 4. To adjust the number of copies, select the box to the left of the Print button, and then select the number of copies from the keypad that opens. Select the Close button to close the keypad.
- 5. Select Print to print the document.

Delete a stored job

You can delete documents that have been saved to when printer when they are no longer needed. You can also adjust the maximum number of jobs for the printer to store.

- Delete a job that is stored on the printer
- Change the job storage limit

Delete a job that is stored on the printer

Follow these steps to delete a job that is stored in the printer memory.

- 1. From the Home screen on the printer control panel, select Print.
- 2. Select Print from Job Storage.
- 3. Select Choose, and then select the name of the folder where the job is stored.
- 4. Select the name of the job.
- 5. Select the Trash $\overline{\mathbf{m}}$ button to delete the job.
 - If the job is private or encrypted, enter the PIN or password, and then select OK.
- **6.** Select Delete Jobs on the confirmation prompt.

Change the job storage limit

When a new job is stored in the printer memory, the printer overwrites any previous jobs with the same user and job name. If a job is not already stored under the same user and job name, and the printer needs additional space, the printer might delete other stored jobs starting with the oldest. Follow these steps to change the number of jobs that the printer can store:

- 1. From the Home screen on the printer control panel, select Settings.
- 2. Open the following menus:
 - Copy/Print or Print
 - Manage Stored Jobs
 - Temporary Job Storage Limit

- 3. Use the keypad to enter the number of jobs that the printer stores.
- **4.** Select Done to save the setting.

Information sent to printer for Job Accounting purposes

Printing jobs sent from drivers on the client (e.g., PC) may send personally identifiable information to HP's Printing and Imaging devices. This information may include, but is not limited to, user name and client name from which the job originated that may be used for job accounting purposes, as determined by the Administrator of the printing device. This same information may also be stored with the job on the mass storage device (e.g., disk drive) of the printing device when using the job storage feature.

Print from the USB port

Introduction

This printer features easy-access USB printing, for quickly printing files without sending them from a computer. The printer accepts standard USB flash drives in the USB port near the control panel. It supports the following types of files:

- .pdf
- .prn
- .pcl
- .ps
- .cht

Enable the USB port for printing

The USB port is disabled by default. Before using this feature, enable the USB port. Use one of the following methods to enable the port:

Method one: Enable the USB port from the printer control-panel menus

- 1. From the Home screen on the printer control panel, swipe until the Settings menu displays. Touch the Settings icon to open the menu.
- Open the following menus:
 - USB Settings
 - Print From USB Drive Settings
 - Enable Print From USB Drive
- 3. Select the Enabled option.

Method two: Enable the USB port from the HP Embedded Web server (network-connected printers only)

- Open the HP Embedded Web Server (EWS):
 - a. From the Home screen on the printer control panel, touch the Information ① icon, and then touch the Network 器 icon to display the IP address or host name.
 - **b.** Open a web browser, and in the address line, type the IP address or host name exactly as it displays on the printer control panel. Press the Enter key on the computer keyboard. The EWS opens.



- NOTE: If the web browser displays a message indicating that accessing the website might not be safe, select the option to continue to the website. Accessing this website will not harm the computer.
- 2. Open the Copy/Print tab.
- 3. On the left side of the screen, click **Retrieve from USB Setup**.

- 4. Select the Enable Retrieve from USB check box.
- 5. Click Apply.

Print from a USB flash drive

- 1. Insert the USB flash drive into the easy-access USB port.
- NOTE: The port might be covered. For some printers, the cover flips open. For other printers, pull the cover straight out to remove it.
- 2. From the Home screen on the printer control panel, select Print.
- 3. Select Print from USB Drive.
- **4.** Touch Choose, and then select the name of the document to print. Touch Select.
- NOTE: The document might be in a folder. Open folders as necessary.
- 5. To adjust the number of copies, touch the number of copies field in the bottom-left corner of the screen. Use the keypad to enter the number of copies to print.
- **6.** Select Print to print the document.

ENWW Print from the USB port 4:

5 Manage the printer

For more information

- Advanced configuration with HP Embedded Web Server (EWS)
- Configure IP network settings
- Printer security features
- Energy-conservation settings
- HP Web Jetadmin
- Software and firmware updates

The following information is correct at the time of publication.

For video assistance, see www.hp.com/videos/LaserJet.

For current information, see www.hp.com/support/ljE50045.

HP's all-inclusive help for the printer includes the following information:

- Install and configure
- Learn and use
- Solve problems
- Download software and firmware updates
- Join support forums
- Find warranty and regulatory information

ENWW For more information

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Advanced configuration with HP Embedded Web Server (EWS)

Introduction

- How to access the HP Embedded Web Server (EWS)
- HP Embedded Web Server features

Use the HP Embedded Web Server to manage printing functions from a computer instead of the product control panel.

- View product status information
- Determine the remaining life for all supplies and order new ones
- View and change tray configurations
- View and change the product control-panel menu configuration
- View and print internal pages
- Receive notification of product and supplies events
- View and change network configuration

The HP Embedded Web Server works when the product is connected to an IP-based network. The HP Embedded Web Server does not support IPX-based product connections. Internet access is not needed to open and use the HP Embedded Web Server.

When the product is connected to the network, the HP Embedded Web Server is automatically available.

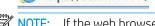


NOTE: The HP Embedded Web Server is not accessible beyond the network firewall.

How to access the HP Embedded Web Server (EWS)

- From the Home screen on the printer control panel, touch the Information (1) icon, and then touch the Network - icon to display the IP address or host name.
- Open a web browser, and in the address line, type the IP address or host name exactly as it displays on the printer control panel. Press the Enter key on the computer keyboard. The EWS opens.





NOTE: If the web browser displays a message indicating that accessing the website might not be safe, select the option to continue to the website. Accessing this website will not harm the computer.

To use the HP Embedded Web Server, the browser must meet the following requirements:

- Windows: Microsoft Internet Explorer 5.01 or later or Netscape 6.2 or later
- macOS: Safari or Firefox using Bonjour or an IP address
- Linux: Netscape Navigator only
- HP-UX 10 and HP-UX 11: Netscape Navigator 4.7

HP Embedded Web Server features

- <u>Information tab</u>
- General tab
- Print tab
- <u>Troubleshooting tab</u>
- Security tab
- HP Web Services tab
- Networking tab
- Other Links list

Information tab

Table 5-1 HP Embedded Web Server Information tab

Menu	Description	
Device Status	Shows the product status and shows the estimated life remaining of HP supplies. The page also shows the type and size of paper set for each tray. To change the default settings, click the Change Settings link.	
Job Log	Shows a summary of all jobs the product has processed.	
Configuration Page	Shows the information found on the configuration page.	
Supplies Status Page	Shows the status of the supplies for the product.	
Event Log Page	Shows a list of all product events and errors. Use the HP Instant Support link (in the Other Links area on all HP Embedded Web Server pages) to connect to a set of dynamic Web pages that help solve problems. These pages also show additional services available for the product.	
Usage Page	Shows a summary of the number of pages the product has printed, grouped by size, type, and paper print path.	
Device Information	Shows the product network name, address, and model information. To customize these entries, click the Device Information menu on the General tab.	
Control Panel Snapshot	Shows an image of the current screen on the control panel display.	
Print	Upload a print-ready file from the computer to print. The product uses the default print settings to print the file.	
Printable Reports and Pages	Lists the internal reports and pages for the product. Select one or more items to print or view.	

General tab

Table 5-2 HP Embedded Web Server General tab

Menu	Description
Alerts	Setup email alerts for various product and supplies events.

Table 5-2 HP Embedded Web Server General tab (continued)

Menu	Description	
Control Panel Administration Menu	Shows the menu structure of the Administration menu on the control panel.	
	NOTE: Configure settings on this screen, or the HP Embedded Web Server provides more advanced configuration options than are available through the Administration menu.	
AutoSend	Configure the product to send automated emails regarding product configuration and supplies to specific email addresses.	
Edit Other Links	Add or customize a link to another Web site. This link displays in the Other Links area on all HP Embedded Web Server pages.	
Ordering Information	Enter information about ordering replacement toner cartridges. This information displays on the supplies status page.	
Device Information	Name the product and assign an asset number to it. Enter the name of the primary contact who will receive information about the product.	
Language	Set the language in which to display the HP Embedded Web Server information.	
Date and Time	Set the date and time or synchronize with a network time server.	
Energy Settings	Set or edit a wake time, sleep time, and sleep delay for the product. Set a different schedule for each day of the week and for holidays.	
	Set which interactions with the product cause it to wake from sleep mode.	
Backup and Restore	Create a backup file that contains product and user data. If necessary, use this file to restore data to the product.	
Restore Factory Settings	Restore product settings to the factory defaults.	
Solution Installer	Install third-party software programs that can enhance the product functionality.	
Firmware Upgrade	Download and install product firmware upgrade files.	
Statistics Services	Provides connection information about third-party job-statistics services.	

Print tab

Table 5-3 HP Embedded Web Server Print tab

Menu	Description	
Retrieve from USB Setup	Enable or disable the Retrieve from USB menu on the control panel.	
Manage Stored Jobs	Enable or disable the ability to store jobs in the product memory.	
	Configure job-storage options.	
Adjust Paper Types	Override the factory-default mode settings if print quality problems occur when using a specific paper type.	
Restrict Color	Permit or restrict color printing.	
(Color products only)	Specify permissions for individual users or for jobs that are sent from specific software programs.	
General Print Settings	Configure settings for all print jobs.	
Manage Trays	Configure settings for paper trays.	

Troubleshooting tab

Table 5-4 HP Embedded Web Server Troubleshooting tab

Menu	Description	
General Troubleshooting	Select from a variety of reports and tests to help solve problems with the product.	
Online Help	Obtain QR codes and Web links to solution pages for the product.	
Diagnostic Data	Export product information to a file that can be useful for detailed problem analysis.	
NOTE: This item is available only if an administrator password is set from the Security tab.		
Calibration/Cleaning	Enable the automatic cleaning feature, create and print the cleaning page, and select an	
(Color products only)	option to calibrate the product immediately.	
Firmware Upgrade	Download and install product firmware upgrade files.	
Restore Factory Settings	Restore product settings to factory defaults.	

Security tab

Table 5-5 HP Embedded Web Server Security tab

Menu	Description	
General Security	Settings for general security, including the following:	
	 Configure an administrator password to restrict access to certain features on the product. 	
	Set PJL password for processing PJL commands.	
	Set file system access and firmware upgrade security.	
	 Enable or disable the Host USB port on the control panel or the USB connectivity port on the formatter for printing directly from a computer. 	
	View the status of all security settings.	
Access Control	Configure access to product functions for specific individuals or groups, and select the method individuals use to sign in to the product.	
Protect Stored Data	Configure and manage the internal hard drive for the product.	
	Configure settings for jobs that are stored on the product hard drive.	
Certificate Management	Install and manage security certificates for access to the product and the network.	
Web Service Security	Allow resources on this product to be accessed by web pages from different domains. If no sites are added to the list, then all sites are trusted.	
Self Test	Verify that the security functions are running according to expected system parameters.	

HP Web Services tab

Use the HP Web Services tab to configure and enable HP Web Services for this product. It is necessary to Enable HP Web Services to use the HP ePrint feature.

Table 5-6 HP Embedded Web Server HP Web Services tab

Menu	Description	
Web Services Setup	Connect this product to HP Connected on the Web by enabling HP Web Services.	
Web Proxy	Configure a proxy server if there are issues enabling HP Web Services or connecting the product to the Internet.	
HP-ePrint Debugging	Enable features for solving problems with connecting to HP ePrint services.	

Networking tab

Use the **Networking** tab to configure and secure network settings for the product when it is connected to an IP-based network. This tab does not display if the product is connected to other types of networks.

Table 5-7 HP Embedded Web Server Networking tab

Menu	Description	
TCP/IP Settings	Configure TCP/IP settings for IPv4 and IPv6 networks.	
	NOTE: The configuration options available depend on the print server model.	
Network Settings	Configure IPX/SPX, AppleTalk, DLC/LLC, and SNMP settings, depending on the print server model.	
Other Settings	Configure general printing protocols and services supported by the print server. The available options depend on the print server model, but can include firmware update, LPD queues, USB settings, support information, and refresh rate.	
AirPrint	Enable, set up, or disable network printing from Apple supported products.	
Select Language	Change the language displayed by the HP Embedded Web Server. This page displays if the Web pages support multiple languages. Optionally, select supported languages through language-preference settings in the browser.	
Settings	View and restore current security settings to factory-default values.	
	Configure security settings using the Security Configuration Wizard.	
	NOTE: Do not use the Security Configuration Wizard to configure security settings using network-management applications, such as HP Web Jetadmin.	
Authorization	Control configuration management and use of this product, including the following:	
	 Set or change the administrator password to control access to configuration parameters. 	
	 Request, install, and manage digital certificates on the HP Jetdirect print server. 	
	 Limit host access to this product through an Access Control List (ACL) (for selected print servers on IPv4 networks only). 	
Mgmt. Protocols	Configure and manage security protocols for this product, including the following:	
	 Set the security management level for the HP Embedded Web Server, and control traffic over HTTP and HTTPS. 	
	 Configure the SNMP (Simple Network Management Protocol) operation. Enable or disable the SNMP v1/v2c or SNMP v3 agents on the print server. 	
	 Control access through protocols that may not be secure, such as printing protocols, print services, discovery protocols, name resolution services, and configuration—management protocols. 	

Table 5-7 HP Embedded Web Server Networking tab (continued)

Menu	Description	
802.1X Authentication	Configure 802.1X authentication settings on the Jetdirect print server as required for client authentication on the network, and reset the 802.1X authentication settings to factory-	
(For selected HP Jetdirect models only)	default values.	
	CAUTION: When changing the 802.1X authentication settings; the product might lose its connection. To reconnect, it might be necessary to reset the print server to a factory-default state and reinstall the product.	
IPsec/Firewall	View or configure a Firewall policy or an IPsec/Firewall policy.	
(For selected HP Jetdirect models only)		
Announcement Agent	Enable or disable the HP Device Announcement Agent, set the configuration server, and configure mutual authentication using certificates.	
(For selected HP Jetdirect models only)	comigure mutuat authentication using certificates.	
Network Statistics	Display network statistics that are collected and stored on the HP Jetdirect print server.	
Protocol Info	View a list of network-configuration settings on the HP Jetdirect print server for each protocol.	
Configuration Page	View the HP Jetdirect configuration page, which contains status and configuration information.	

Other Links list



NOTE: Configure which links display in the Other Links list by using the Edit Other Links menu on the General tab. The following are the default links.

Table 5-8 HP Embedded Web Server Other Links list

Menu	Description
Product Support	Connect to the support site for the product to search for help on various topics.
Shop for Supplies	Connect to the HP SureSupply Web site for information on purchasing original HP supplies, such as toner cartridges and paper.
HP Instant Support	Connect to the HP Web site to find solutions to product problems.

Configure IP network settings

- Printer sharing disclaimer
- View or change network settings
- Rename the printer on a network
- Manually configure IPv4 TCP/IP parameters from the control panel
- Manually configure IPv6 TCP/IP parameters from the control panel
- Link speed and duplex settings

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.

View or change network settings

Use the HP Embedded Web Server to view or change IP configuration settings.

- 1. Open the HP Embedded Web Server (EWS):
 - a. From the Home screen on the printer control panel, touch the Information (1) icon, and then touch the Network 器 icon to display the IP address or host name.
 - **b.** Open a web browser, and in the address line, type the IP address or host name exactly as it displays on the printer control panel. Press the Enter key on the computer keyboard. The EWS opens.

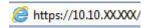


- NOTE: If the web browser displays a message indicating that accessing the website might not be safe, select the option to continue to the website. Accessing this website will not harm the computer.
- 2. Click the **Networking** tab to obtain network information. Change settings as needed.

Rename the printer on a network

To rename the printer on a network so that it can be uniquely identified, use the HP Embedded Web Server.

- 1. Open the HP Embedded Web Server (EWS):
 - a. From the Home screen on the printer control panel, touch the Information (i) icon, and then touch the Network 器 icon to display the IP address or host name.
 - **b.** Open a web browser, and in the address line, type the IP address or host name exactly as it displays on the printer control panel. Press the Enter key on the computer keyboard. The EWS opens.



- NOTE: If the web browser displays a message indicating that accessing the website might not be safe, select the option to continue to the website. Accessing this website will not harm the computer.
- Open the General tab.

- 3. On the **Device Information** page, the default printer name is in the **Device Name** field. You can change this name to uniquely identify this printer.
 - NOTE: Completing the other fields on this page is optional.
- 4. Click the **Apply** button to save the changes.

Manually configure IPv4 TCP/IP parameters from the control panel

Use the control-panel Settings menus to manually set an IPv4 address, subnet mask, and default gateway.

- 1. From the Home screen on the printer control panel, select Settings.
- 2. Open the following menus:
 - Networking
 - Ethernet
 - TCP/IP
 - IPV 4 Settings
 - Config Method
- 3. Select the Manual option, and then select OK.
- **4.** Open the Manual Settings menu.
- 5. Select the IP Address, Subnet Mask, or Default Gateway option.
- Touch the first field to open a keypad. Enter the correct digits for the field, and then select OK.Repeat the process for each field to be configured.

Manually configure IPv6 TCP/IP parameters from the control panel

Use the control-panel Settings menus to manually set an IPv6 address.

- 1. From the Home screen on the printer control panel, select Settings.
- 2. To enable manual configuration, open the following menus:
 - Networking
 - Ethernet
 - TCP/IP
 - IPV6 Settings
- 3. Select Enable, select On, and then select OK.
- 4. To configure the address, open the Address menu, and then touch the field to open a keypad.
- 5. Use the keypad to enter the address, and then select OK.

Link speed and duplex settings

- NOTE: This information applies only to Ethernet networks. It does not apply to wireless networks.
 - The link speed and communication mode of the print server must match the network hub. For most situations, leave the printer in automatic mode. Incorrect changes to the link speed and duplex settings might prevent the printer from communicating with other network devices. To make changes, use the printer control panel.
- NOTE: The printer setting must match the setting for the network device (a network hub, switch, gateway, router, or computer).
- NOTE: Making changes to these settings causes the printer to turn off and then on. Make changes only when the printer is idle.
 - 1. From the Home screen on the printer control panel, swipe until the Settings menu displays. Touch the Settings icon to open the menu.
 - 2. Open the following menus:
 - Networking
 - Ethernet
 - Link Speed
 - 3. Select one of the following options:
 - Auto: The print server automatically configures itself for the highest link speed and communication mode allowed on the network.
 - 10T Half: 10 megabytes per second (Mbps), half-duplex operation
 - 10T Full: 10 Mbps, full-duplex operation
 - 10T Auto: 10 Mbps, automatic-duplex operation
 - 100TX Half: 100 Mbps, half-duplex operation
 - 100TX Full: 100 Mbps, full-duplex operation
 - 100TX Auto: 100 Mbps, automatic-duplex operation
 - 1000T Full: 1000 Mbps, full-duplex operation
 - **4.** Select OK. The printer turns off and then on.

Printer security features

Introduction

The printer includes several security features to restrict who has access to configuration settings, to secure data, and to prevent access to valuable hardware components.

- Security statements
- IP Security
- Assign or change the system password using the HP Embedded Web Server
- Encryption support: HP High Performance Secure Hard Disks
- Lock the formatter

Security statements

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

IP Security

IP Security (IPsec) is a set of protocols that control IP-based network traffic to and from the printer. IPsec provides host-to-host authentication, data integrity, and encryption of network communications.

For printers that are connected to the network and have an HP Jetdirect print server, you can configure IPsec by using the **Networking** tab in the HP Embedded Web Server.

Assign or change the system password using the HP Embedded Web Server

Assign an administrator password for access to the printer and the HP Embedded Web Server so that unauthorized users cannot change the printer settings.

- 1. Open the HP Embedded Web Server (EWS):
 - a. From the Home screen on the printer control panel, touch the Information (1) icon, and then touch the Network 朵 icon to display the IP address or host name.
 - **b.** Open a web browser, and in the address line, type the IP address or host name exactly as it displays on the printer control panel. Press the Enter key on the computer keyboard. The EWS opens.



- NOTE: If the web browser displays a message indicating that accessing the website might not be safe, select the option to continue to the website. Accessing this website will not harm the computer.
- Click the Security tab.
- 3. Open the **General Security** menu.
- 4. In the area labeled **Set the Local Administrator Password**, enter the name to associate with the password in the **Username** field.
- 5. Enter the password in the **New Password** field, and then enter it again in the **Verify Password** field.

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- NOTE:
- To change an existing password, first enter the existing password in the **Old Password** field.
- 6. Click the **Apply** button.
 - NOTE: Make note of the password and store it in a safe place. The administrator password cannot be recovered. If the administrator password is lost or forgotten, contact HP Support at support.hp.com for the assistance required to completely reset the printer.

Some features on the printer control panel can be secured so that unauthorized people cannot use them. When a feature is secured, the printer prompts you to sign in before you can use it. You can also sign in without waiting for a prompt by selecting Sign In from the printer control panel.

Typically, the credentials for signing in to the printer are the same as for signing in to the network. Consult the network administrator for this printer if you have questions about which credentials to use.

- From the Home screen on the printer control panel, select Sign In. 1.
- 2. Follow the prompts to enter the credentials.
- NOTE: To maintain security for the printer, select Sign Out when you have finished using the printer.

Encryption support: HP High Performance Secure Hard Disks

The hard disk provides hardware-based encryption so you can securely store sensitive data without impacting printer performance. This hard disk uses the latest Advanced Encryption Standard (AES) and has versatile timesaving features and robust functionality.

Use the **Security** menu in the HP Embedded Web Server to configure the disk.

Lock the formatter

The formatter has a slot that you can use to attach a security cable. Locking the formatter prevents someone from removing valuable components from it.

Energy-conservation settings

Introduction

- Print with EconoMode
- Set the Sleep/Auto Off After Inactivity setting
- Set the sleep timer and configure the printer to use 1 watt or less of power
- Set the sleep schedule
- Set the Delay Shut Down setting

Configure sleep settings to reduce power usage when the printer is idle.

Print with EconoMode

This printer has an EconoMode option for printing drafts of documents. Using EconoMode can use less toner. However, using EconoMode can also reduce print quality.

HP does not recommend the full-time use of EconoMode. If EconoMode is used full-time, the toner supply might outlast the mechanical parts in the toner cartridge. If print quality begins to degrade and is no longer acceptable, consider replacing the toner cartridge.



NOTE: If this option is not available in the print driver, set it using the printer control panel.

Configure EconoMode from the print driver

- From the software program, select the **Print** option.
- 2. Select the printer, and then click the **Properties** or **Preferences** button.
- 3. Click the **Paper/Quality** tab.
- Click the **EconoMode** check box to enable the feature, and then click **OK**.

Configure EconoMode from the printer control panel

- From the Home screen on the printer control panel, open the Settings menu.
- Open the following menus:
 - Copy/Print or Print
 - **Default Print Options**
 - Economode
- Select On or Off to enable or disable the feature.

Set the Sleep/Auto Off After Inactivity setting

Use the control panel menus to set the amount of idle time before the printer enters sleep mode.

Complete the following procedure to change the Sleep/Auto Off After setting:

- 1. On the printer control panel, open the Setup menu.
- 2. Open the following menus:
 - System Setup
 - Energy Settings
 - Sleep/Auto Off After
- 3. Use the arrow keys to select the time for the Sleep/Auto Off delay, and then press the OK button.

Select the time for the Sleep/Auto Off After delay.

Set the sleep timer and configure the printer to use 1 watt or less of power

The sleep settings affect how much power the printer uses, the wake/sleep time, how quickly the printer enters sleep mode, and how quickly the printer wakes up from sleep mode.

To configure the printer to use 1 watt or less of power while in sleep mode, enter times for both the Sleep after Inactivity and Auto Off after sleep settings.

- 1. From the Home screen on the printer control panel, select Settings.
- 2. Open the following menus:
 - General
 - Energy Settings
 - Sleep Settings
- 3. Select Sleep after Inactivity to specify the number of minutes the printer is inactive before it enters sleep mode. Enter the appropriate time period.
- **4.** Select Auto Off after sleep to put the printer into a deeper power save mode after a period of sleep. Enter the appropriate time period.
 - NOTE: By default, the printer will wake from Auto Off in response to any activity other than USB or Wi-Fi. For greater energy settings, you can set it to wake only to the power button by selecting Shut down (wake on power button only).
- 5. Select Done to save the settings.

Set the sleep schedule

Use the Sleep Schedule feature to configure the printer to automatically wake or go into Sleep mode at specific times on specific days of the week.

- 1. From the Home screen on the printer control panel, select Settings.
- 2. Open the following menus:
 - General
 - Energy Settings
 - Sleep Schedule

- 3. Select the New Event button, and then select the type of event to schedule: Wake Event or Sleep Event.
- **4.** For a wake or sleep event, configure the time and the days of the week for the event. Select Save to save the setting.

Set the Delay Shut Down setting

Use the control panel menus to select whether or not the printer delays shutting down after the power button is pressed.

Complete the following procedure to change the Delay Shut Down setting:

- 1. On the printer control panel, open the Setup menu.
- 2. Open the following menus:
 - System Setup
 - Energy Settings
 - Delay Shut Down
- 3. Select one of the delay options:
 - No Delay: The printer shuts down after a period of inactivity determined by the Shut Down After setting.
 - When Ports Are Active: When this option is selected the printer will not shut down unless all ports are inactive. An active network link or fax connection will prevent the printer from shutting down.

HP Web Jetadmin

HP Web Jetadmin is an award-winning, industry-leading tool for efficiently managing a wide variety of networked HP products, including printers, multifunction printers, and digital senders. This single solution allows you to remotely install, monitor, maintain, troubleshoot, and secure your printing and imaging environment — ultimately increasing business productivity by helping you save time, control costs, and protect your investment.

HP Web Jetadmin upgrades are periodically made available to provide support for specific product features. Go to www.hp.com/go/webjetadmin for more information.

Software and firmware updates

HP regularly updates features that are available in the printer firmware. To take advantage of the most current features, update the printer firmware. Download the most recent firmware update file from the Web:

Go to www.hp.com/support/ljE50045. Click **Drivers & Software**.

6 Solve problems

For more information

- Customer support
- Control panel help system
- Restore factory settings
- A "Cartridge is low" or "Cartridge is very low" message displays on the printer control panel
- Printer does not pick up paper or misfeeds
- Clear paper jams
- Improve print quality

The following information is correct at the time of publication.

For video assistance, see www.hp.com/videos/LaserJet.

For current information, see www.hp.com/support/ljE50045.

HP's all-inclusive help for the printer includes the following information:

- Install and configure
- Learn and use
- Solve problems
- Download software and firmware updates
- Join support forums
- Find warranty and regulatory information

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Customer support

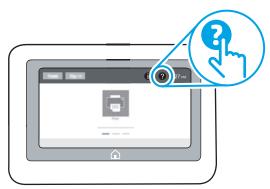
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Get telephone support for your country/region Have the printer name, serial number, date of purchase, and problem description ready	Country/region phone numbers are on the flyer that was in the box with the printer or at support.hp.com .
Get 24-hour Internet support, and download software utilities and drivers	www.hp.com/support/ljE50045
Order additional HP service or maintenance agreements	www.hp.com/go/carepack
Register the printer	www.register.hp.com

Chapter 6 Solve problems ENWW

Control panel help system

The printer has a built-in Help system that explains how to use each screen. To open the Help system, touch the Help ? button in the upper-right corner of the screen.



For some screens, the Help opens to a global menu where you can search for specific topics. You can browse through the menu structure by touching the buttons in the menu.

Some Help screens include animations that show specific procedures, such as clearing paper jams.

If the printer alerts of an error or warning, touch the Help ? button to open a message that describes the problem. The message also contains instructions to help solve the problem.

Restore factory settings

Introduction

Use one of the following methods to restore the printer to the original settings from the factory.

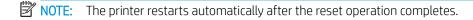
NOTE: Restoring factory settings sets most of the printer settings to their factory defaults. However, some settings are not changed, such as language, date, time, and some network configuration settings.

Method one: Restore factory settings from the printer control panel

- 1. From the Home screen on the printer control panel, swipe until the Settings menu displays. Touch the Settings icon to open the menu.
- 2. Open the following menus:
 - General
 - Reset Factory Settings
- 3. Touch Reset.

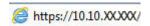
A verification message advises that completing the reset function might result in loss of data.

4. Select Reset to complete the process.



Method two: Restore factory settings from the HP Embedded Web Server (network-connected printers only)

- 1. Open the HP Embedded Web Server (EWS):
 - a. From the Home screen on the printer control panel, touch the Information ① icon, and then touch the Network 器 icon to display the IP address or host name.
 - **b.** Open a web browser, and in the address line, type the IP address or host name exactly as it displays on the printer control panel. Press the Enter key on the computer keyboard. The EWS opens.



- NOTE: If the web browser displays a message indicating that accessing the website might not be safe, select the option to continue to the website. Accessing this website will not harm the computer.
- 2. Open the **General** tab.
- 3. On the left side of the screen, click **Reset Factory Settings**.
- Click the Reset button.

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NOTE: The printer restarts automatically after the reset operation completes.

A "Cartridge is low" or "Cartridge is very low" message displays on the printer control panel

Cartridge is low: The printer indicates when a toner cartridge level is low. Actual toner cartridge life remaining may vary. Consider having a replacement available to install when print quality is no longer acceptable. The toner cartridge does not need to be replaced now.

Cartridge is very low: The printer indicates when the toner cartridge level is very low. Actual toner cartridge life remaining may vary. Consider having a replacement available to install when print quality is no longer acceptable. The toner cartridge does not need to be replaced now unless the print quality is no longer acceptable.

Once an HP toner cartridge has reached Very Low, HP's Premium Protection Warranty on that toner cartridge has

Printer does not pick up paper or misfeeds

Introduction

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The following solutions can help solve problems if the printer is not picking up paper from the tray or is picking up multiple sheets of paper at one time. Either of these situations can result in paper jams.

- The printer does not pick up paper
- The printer picks up multiple sheets of paper

The printer does not pick up paper

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

- 1. Open the printer and remove any jammed sheets of paper. Verify that no torn remnants of paper remain inside the printer.
- 2. Load the tray with the correct size of paper for the job.
- 3. Make sure the paper size and type are set correctly on the printer control panel.

- 4. Make sure the paper guides in the tray are adjusted correctly for the size of paper. Adjust the guides to the appropriate indentation in the tray. The arrow on the tray guide should line up exactly with the marking on the tray.
- NOTE: Do not adjust the paper guides tightly against the paper stack. Adjust them to the indentations or markings in the tray.

The following images show examples of the paper-size indentations in the trays for various printers. Most HP printers have markings similar to these.

Figure 6-1 Size markings for Tray 1 or the multipurpose tray

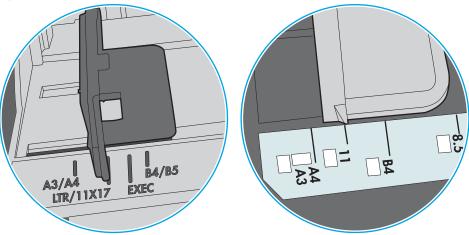
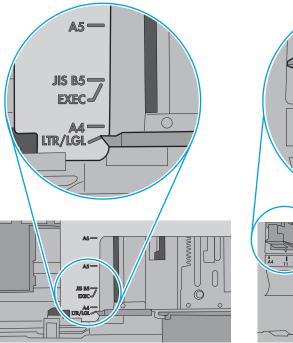
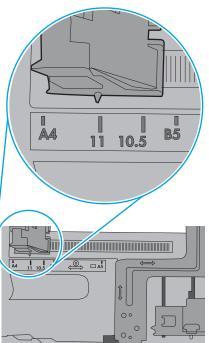


Figure 6-2 Size markings for cassette trays



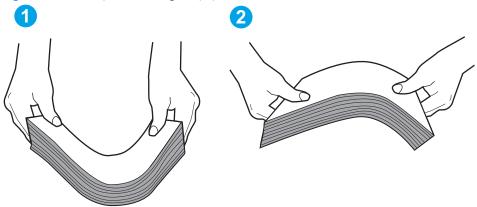


5. Verify that the humidity in the room is within specifications for this printer and that paper is being stored in unopened packages. Most reams of paper are sold in moisture-proof wrapping to keep paper dry.

In high-humidity environments, paper at the top of the stack in the tray can absorb moisture, and it might have a wavy or uneven appearance. If this happens, remove the top 5 to 10 sheets of paper from the stack.

In low-humidity environments, excess static electricity can cause sheets of paper to stick together. If this happens, remove the paper from the tray, and flex the stack by holding it at each end and bringing the ends up to form a U shape. Then, rotate the ends down to reverse the U shape. Next, hold each side of the stack of paper, and repeat this process. This process releases individual sheets without introducing static electricity. Straighten the paper stack against a table before returning it to the tray.

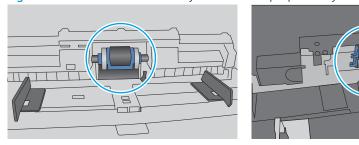
Figure 6-3 Technique for flexing the paper stack



- 6. Check the printer control panel to see if it is displaying a prompt to feed the paper manually. Load paper, and continue.
- 7. The rollers above the tray might be contaminated. Clean the rollers with a lint-free cloth dampened with warm water. Use distilled water, if it is available.
 - CAUTION: Do not spray water directly on to the printer. Instead, spray water on the cloth or dab the cloth in water and wring it out before cleaning the rollers.

The following image shows examples of the roller location for various printers.

Figure 6-4 Roller locations for Tray 1 or the multipurpose tray



The printer picks up multiple sheets of paper

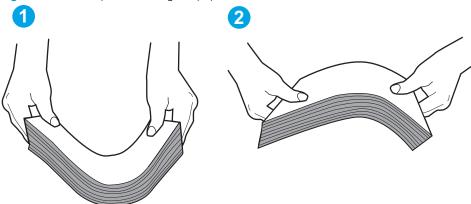
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If the printer picks up multiple sheets of paper from the tray, try these solutions.

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.

NOTE: Fanning the paper introduces static electricity. Instead of fanning the paper, flex the stack by holding it at each end and bringing the ends up to form a U shape. Then, rotate the ends down to reverse the U shape. Next, hold each side of the stack of paper, and repeat this process. This process releases individual sheets without introducing static electricity. Straighten the paper stack against a table before returning it to the tray.

Figure 6-5 Technique for flexing the paper stack



- 2. Use only paper that meets HP specifications for this printer.
- 3. Verify that the humidity in the room is within specifications for this printer, and that paper is being stored in unopened packages. Most reams of paper are sold in moisture-proof wrapping to keep paper dry.
 - In high-humidity environments, paper at the top of the stack in the tray can absorb moisture, and it might have a wavy or uneven appearance. If this happens, remove the top 5 to 10 sheets of paper from the stack.
 - In low-humidity environments, excess static electricity can cause sheets of paper to stick together. If this happens, remove the paper from the tray, and flex the stack as described above.
- 4. Use paper that is not wrinkled, folded, or damaged. If necessary, use paper from a different package.

5. Make sure the tray is not overfilled by checking the stack-height markings inside the tray. If it is overfilled, remove the entire stack of paper from the tray, straighten the stack, and then return some of the paper to the tray.

The following images show examples of the stack-height markings in the trays for various printers. Most HP printers have markings similar to these. Also make sure that all sheets of paper are below the tabs near the stack-height marks. These tabs help hold the paper in the correct position as it enters the printer.

Figure 6-6 Stack-height markings

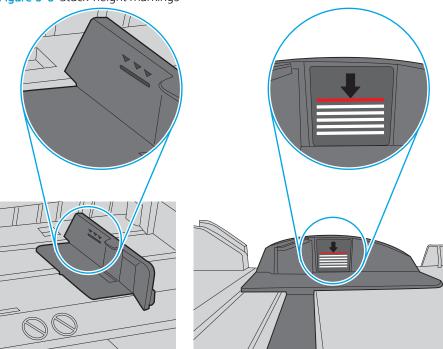
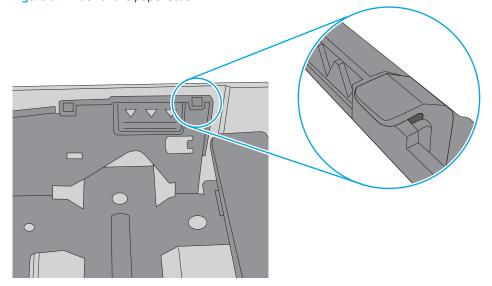


Figure 6-7 Tab for the paper stack

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- 6. Make sure the paper guides in the tray are adjusted correctly for the size of paper. Adjust the guides to the appropriate indentation in the tray. The arrow on the tray guide should line up exactly with the marking on the tray.
- NOTE: Do not adjust the paper guides tightly against the paper stack. Adjust them to the indentations or markings in the tray.

The following images show examples of the paper-size indentations in the trays for various printers. Most HP printers have markings similar to these.

Figure 6-8 Size markings for Tray 1 or the multipurpose tray

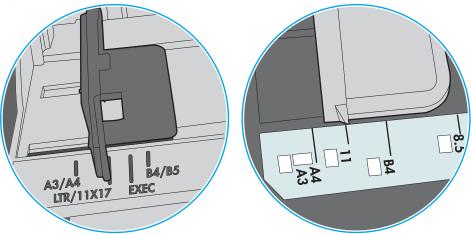
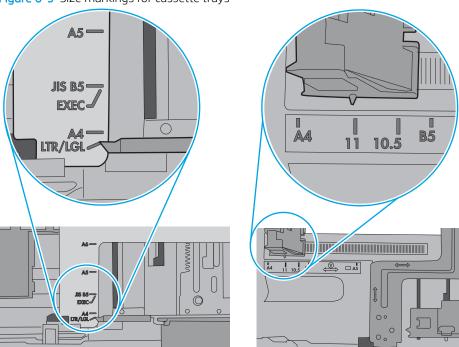


Figure 6-9 Size markings for cassette trays



7. Make sure the printing environment is within recommended specifications.

Clear paper jams

Introduction

The following information includes instructions for clearing paper jams from the printer.

- Jam locations
- Auto-navigation for clearing paper jams
- Experiencing frequent or recurring paper jams?
- <u>13.A1 tray 1 paper jam</u>
- 13.A2, 13.A3, 13.A4, 13.A5 tray 2, tray 3, tray 4, tray 5 paper jam
- <u>Clear paper jams in the toner-cartridge area</u>
- 13.B rear door and fuser area paper jam
- 13.E1 output bin paper jam
- 13.C, 13.D, 13.B paper jam in the duplexer

Jam locations

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1	Output bin
2	Top cover and toner-cartridge area
3	Tray 1
4	Tray 2 and the optional 1 x 550-sheet feeders
	NOTE: Remove Tray 2 to access jams in the duplexer.

Auto-navigation for clearing paper jams

The auto-navigation feature assists in clearing jams by providing step-by-step instructions on the control panel. When you complete a step, the printer displays instructions for the next step until you have completed all steps in the procedure.

Experiencing frequent or recurring paper jams?

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

- NOTE: To see a video that demonstrates how to load paper in a way that reduces the number of paper jams, click here.
 - 1. Use only paper that meets HP specifications for this printer.
 - 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 printer.
 - 7. If you are printing on heavy, embossed, or perforated paper, use the manual feed feature and feed sheets one at a time.
 - **8.** Open the Trays menu on the printer control panel. Verify that the tray is configured correctly for the paper type and size.
 - Make sure the printing environment is within recommended specifications.

13.A1 tray 1 paper jam

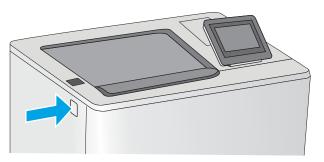
Use the following procedure to clear paper jams in Tray 1. When a jam occurs, the control panel displays an animation that assists in clearing the jam.

 If most of the sheet of paper is visible in the tray, slowly pull the jammed paper out of the printer. Make sure that the entire sheet is removed. If it tears, continue with the following steps to find the remnants.

If most of the sheet of paper has been pulled inside the printer, continue with the following steps.

2. Press the top-cover-release button on the left side of the printer.



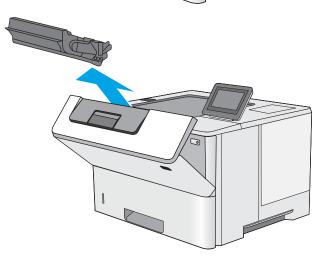


3. Open the front door.

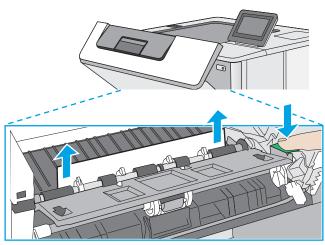


4. Remove the toner cartridge.

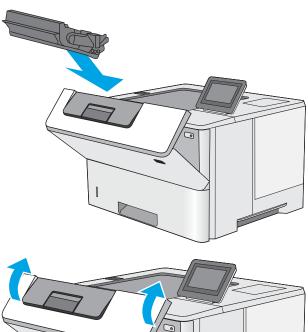
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5. Lift the jam-access cover and slowly remove any jammed paper. Be careful not to tear the paper.



6. Reinsert the toner cartridge.

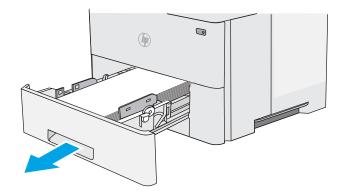


7. Close the front door.

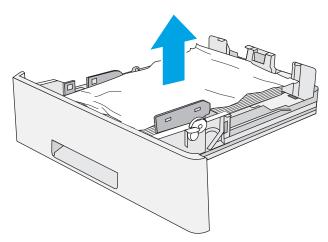
13.A2, 13.A3, 13.A4, 13.A5 tray 2, tray 3, tray 4, tray 5 paper jam

Use the following procedure to check for paper in all possible jam locations related to Tray 2 and the 550-sheet trays. When a jam occurs, the control panel displays an animation that assists in clearing the jam.

1. Remove the tray from the printer.

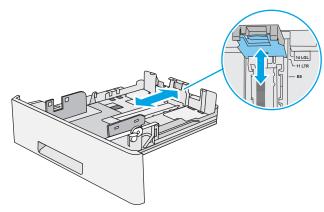


2. Remove the paper from the tray, and discard any damaged paper.

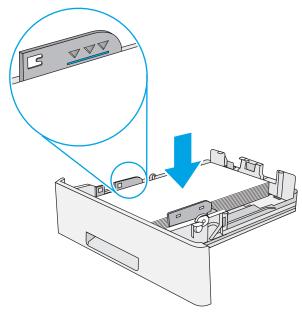


3. Verify that the rear paper guide is adjusted to the indentation for the correct paper size. If necessary, pinch the release and move the rear paper guide to the correct position. It should click into place.

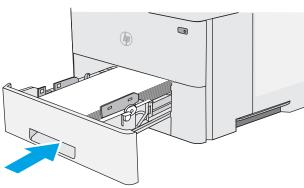
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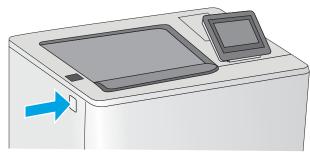
4. Load the paper into the tray. Make sure that the stack is flat at all four corners and that the top of the stack is below the maximum-height indicators.



5. Reinsert and close the tray.



6. Press the top-cover-release button on the left side of the printer.

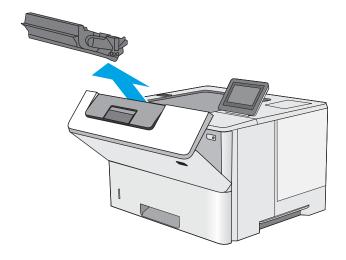


7. Open the front door.

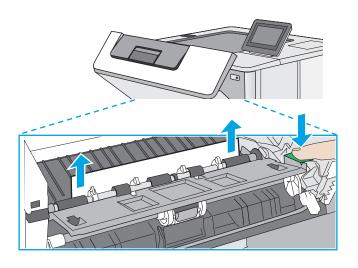


8. Remove the toner cartridge.

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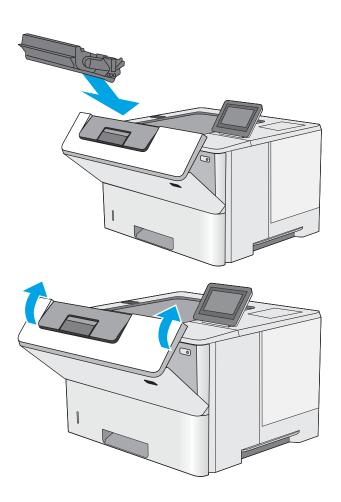


9. Lift the jam-access cover and slowly remove any jammed paper. Be careful not to tear the paper.



10. Reinsert the toner cartridge.

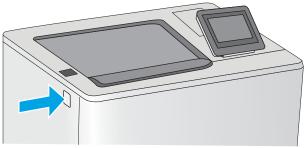
11. Close the front door.



Clear paper jams in the toner-cartridge area

Use the following procedure to check for paper in all possible jam locations in the toner-cartridge area. When a jam occurs, the control panel displays an animation that assists in clearing the jam.

1. Press the top-cover-release button on the left side of the printer.

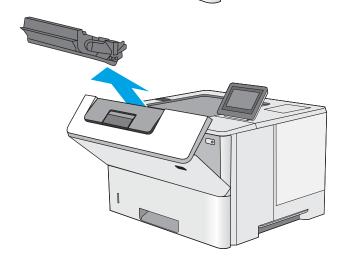


2. Open the front door.

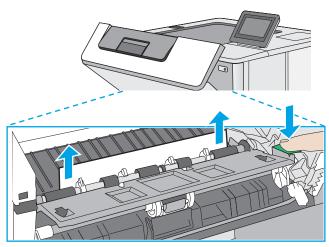


3. Remove the toner cartridge.

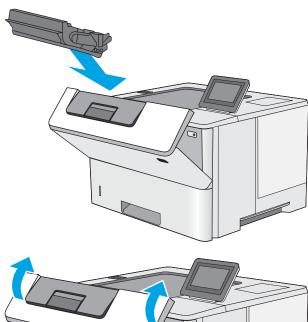
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4. Lift the jam-access cover and slowly remove any jammed paper. Be careful not to tear the paper.



5. Reinsert the toner cartridge.



6. Close the front door.



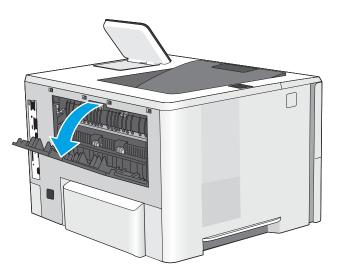
13.B rear door and fuser area paper jam

Use the following procedure to clear paper jams in the rear door and fuser area. When a jam occurs, the control panel displays an animation that assists in clearing the jam.

NOTE: The fuser is hot while the printer is in use. Wait for the fuser to cool before clearing jams.

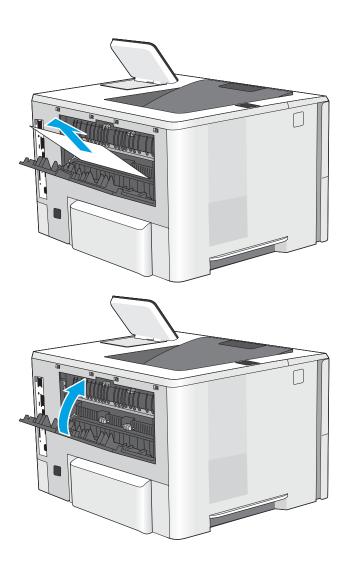
1. Open the rear door.

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2. Remove any jammed paper.

3. Close the rear door



13.E1 output bin paper jam

Use the following procedure to check for paper in all possible jam locations in the output bin. When a jam occurs, the control panel displays an animation that assists in clearing the jam.

1. If paper is visible in the output bin, grasp the leading edge and remove it.

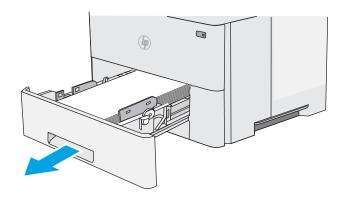


13.C, 13.D, 13.B paper jam in the duplexer

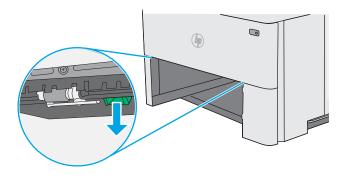
Use the following procedure to check for paper in all possible jam locations in the automatic duplexer. When a jam occurs, the control panel displays an animation that assists in clearing the jam.

1. Remove Tray 2 from the printer.

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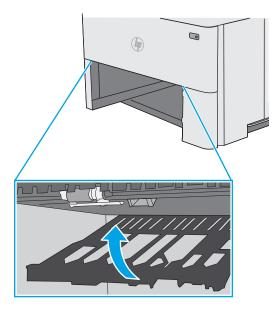


2. Pull forward on the green tab inside the tray area to release the duplex pan.

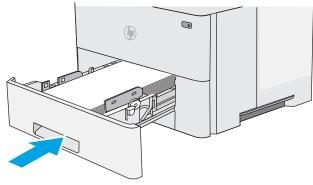


3. Remove any jammed paper.

4. Close the duplex pan.



5. Reinsert and close the tray.

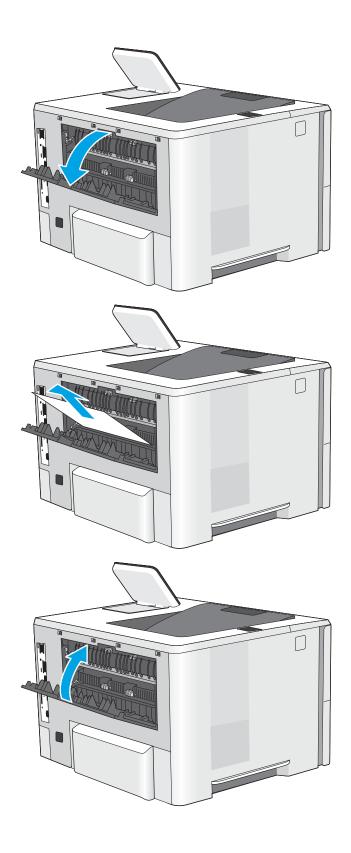


6. Open the rear door.

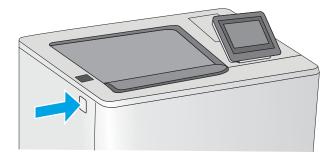
7. Remove any jammed paper.

8. Close the rear door

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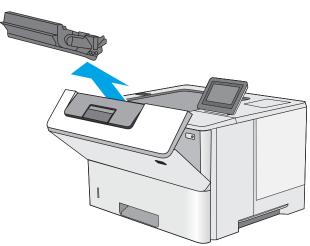
9. Press the top-cover-release button on the left side of the printer.



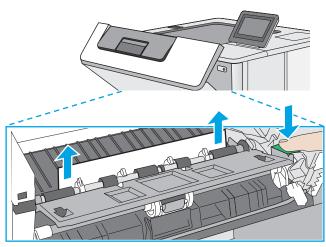
10. Open the front door.



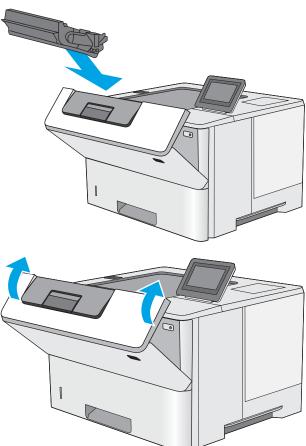
11. Remove the toner cartridge.



12. Lift the jam-access cover and slowly remove any jammed paper. Be careful not to tear the paper.



13. Reinsert the toner cartridge.



14. Close the front door.

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Improve print quality

Introduction

- Print from a different software program
- Check the paper-type setting for the print job
- Check toner-cartridge status
- Print a cleaning page
- Visually inspect the toner cartridge or cartridges
- Check paper and the printing environment
- Try a different print driver

If the printer is having print-quality problems, try the following solutions in the order presented to resolve the issue.

Print from a different software program

Try printing from a different software program. If the page prints correctly, the problem is with the software program from which you were printing.

Check the paper-type setting for the print job

Check the paper type setting when printing from a software program and the printed pages have smears, fuzzy or dark print, curled paper, scattered dots of toner, loose toner, or small areas of missing toner.

Check the paper type setting on the printer

- 1. Open the tray.
- 2. Verify that the tray is loaded with the correct type of paper.
- 3. Close the tray.
- **4.** Follow the control panel instructions to confirm or modify the paper type settings for the tray.

Check the paper type setting (Windows)

- 1. From the software program, select the **Print** option.
- 2. Select the printer, 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.

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- 7. Select the option for the type of paper you are using, and click the **OK** button.
- 8. Click the **OK** button to close the **Document Properties** dialog box. In the **Print** dialog box, click the **OK** button to print the job.

Check the paper type setting (macOS)

- 1. Click the **File** menu, and then click the **Print** option.
- 2. In the **Printer** menu, select the printer.
- 3. By default, the print driver displays the **Copies & Pages** menu. Open the menus drop-down list, and then click the **Finishing** menu.
- 4. Select a type from the **Media Type** drop-down list.
- 5. Click the **Print** button.

Check toner-cartridge status

Follow these steps to check the estimated life remaining in the toner cartridges and if applicable, the status of other replaceable maintenance parts.

Step one: Print the supplies status page

- 1. From the Home screen on the printer control panel, select the Reports menu.
- 2. Select the Configuration/Status Pages menu.
- 3. Select Supplies Status Page, and then select Print to print the page.

Step two: Check supplies status

1. Look at the supplies status report to check the percent of life remaining for the toner cartridges and, if applicable, the status of other replaceable maintenance parts.

Print quality problems can occur when using a toner cartridge that is at its estimated end of life. The supplies status page indicates when a supply level is very low. After an HP supply has reached the very low threshold, HP's premium protection warranty on that supply has ended.

The toner cartridge does not need to be replaced now unless the print quality is no longer acceptable. Consider having a replacement available to install when print quality is no longer acceptable.

If you determine that you need to replace a toner cartridge or other replaceable maintenance parts, the supplies status page lists the genuine HP part numbers.

2. Check to see if you are using a genuine HP cartridge.

A genuine HP toner cartridge has the word "HP" on it, or has the HP logo on it. For more information on identifying HP cartridges go to www.hp.com/go/learnaboutsupplies.

Print a cleaning page

During the printing process paper, toner, and dust particles can accumulate inside the printer and can cause printquality issues such as toner specks or spatter, smears, streaks, lines, or repeating marks.

Follow these steps to clean the printer's paper path.

- 1. From the Home screen on the printer control panel, select the Support Tools menu.
- 2. Select the following menus:
 - Maintenance
 - Calibration/Cleaning
 - Cleaning Page
- 3. Select Print to print the page.

A **Cleaning...** message displays on the printer control panel. The cleaning process takes a few minutes to complete. Do not turn the printer off until the cleaning process has finished. When it is finished, discard the printed page.

Visually inspect the toner cartridge or cartridges

Follow these steps to inspect each toner cartridge.

- 1. Remove the toner cartridges from the printer, 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.
- CAUTION: Do not touch the imaging drum. 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 toner cartridge.
- 5. Reinstall the toner cartridge, and print a few pages to see if the problem has resolved.

Check paper and the printing environment

Step one: Use paper that meets HP specifications

Some print-quality problems arise from using paper that does not meet HP specifications.

- Always use a paper type and weight that this printer supports.
- 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 does not contain metallic material, such as glitter.
- 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.

Step two: Check the environment

The environment can directly affect print quality and is a common cause for print-quality or paper-feeding issues. Try the following solutions:

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- Move the printer away from drafty locations, such as open windows or doors, or air-conditioning vents.
- Make sure the printer is not exposed to temperatures or humidity outside of printer specifications.
- Do not place the printer in a confined space, such as a cabinet.
- Place the printer on a sturdy, level surface.
- Remove anything that is blocking the vents on the printer. The printer requires good air flow on all sides, including the top.
- Protect the printer from airborne debris, dust, steam, grease, or other elements that can leave residue inside the printer.

Step three: Set the individual tray alignment

Follow these steps when text or images are not centered or aligned correctly on the printed page when printing from specific trays.

- 1. From the Home screen on the printer control panel, select the Settings menu.
- 2. Select the following menus:
 - Copy/Print or Print
 - Print Quality
 - Image Registration
- 3. Select Tray, and then select the tray to adjust.
- 4. Select Print Test Page, and then follow the instructions on the printed pages.
- 5. Select Print Test Page again to verify the results, and then make further adjustments if necessary.
- **6.** Select Done to save the new settings.

Try a different print driver

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Try a different print driver when printing from a software program and the printed pages have unexpected lines in graphics, missing text, missing graphics, incorrect formatting, or substituted fonts.

Download any of the following drivers from the HP website: www.hp.com/support/liE50045.

HP PCL.6 driver	This product-specific print driver is for Windows XP 32 bit, Vista 32 bit, and Server 2008 32 bit operating systems. Not all features or page sizes are supported.
HP PCL 6 driver	This product-specific print driver is for Windows 7, 8, 8.1, 10, Server 2008 64 bit, Server 2008 R2, Server 2012, Server 2012 R2, and Server 2016 operating systems.
HP PCL-6 V4 driver	This product-specific print driver is for Windows 7, 8, 8.1, 10, Server 2008 64 bit, Server 2008 R2, Server 2012, Server 2012 R2, and Server 2016 operating systems.

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 6	•	Recommended for printing in all Windows environments
	•	Provides the overall best speed, print quality, and printer feature support for most users
	•	Developed to align with Windows Graphic Device Interface (GDI) for best speed in Windows environments
	•	Might not be fully compatible with third-party and custom software programs that are based on PCL 5 $$

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