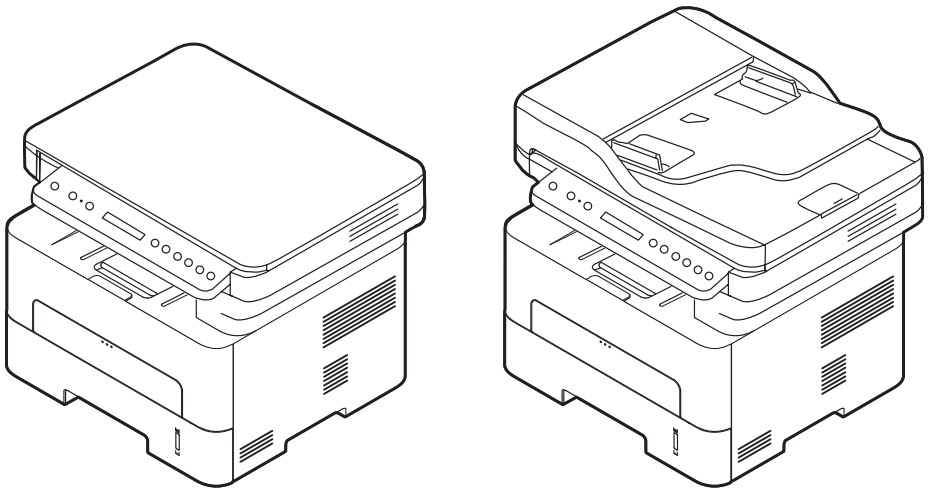
HP Laser MFP 300, 330 series
HP Laser MFP 30000 series

User Guide



support.hp.com

HP Laser MFP 300, 330 series
HP Laser MFP 30000 series
User Guide

SUMMARY

This guide provides configuration, use, maintenance, troubleshooting, safety and environmental information.

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Introduction

This chapter provides information you need to know before using the machine.

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- Features by model 8
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Key benefits

Check key benefits before getting started to use the product.

Environmentally friendly

- To save paper, you can print multiple pages on one single sheet of paper.
- To save electricity, this machine automatically conserves electricity by substantially reducing power consumption when not in use.
- We recommend using recycled paper for saving energy.

Wide range of functionality and application support

- Supports various paper sizes.
- Print watermark: You can customize your documents with words, such as “Confidential”.
- Print posters: The text and pictures of each page of your document are magnified and printed across the multiple sheets of paper and can then be taped together to form a poster.

Convenience

- HP Scan is an application to help users scan, compile, and save documents in multiple formats, including. epub format.
- If you have Internet access, you can get help, support application, machine drivers, manuals, and order information from the HP website (support.hp.com).

Features by model

Some features and optional goods may not be available depending on model or country.

Operating System

Operating System	Laser MFP 323d	Laser MFP 323sdn, 323dnw, 323sdnw, 32330sdnw, 351sdn, 355sdnw
Windows	●	●
Linux	●	●
macOS	● (AirPrint)	● (AirPrint)

Software

Software	Laser MFP 323d	Laser MFP 323sdn, 323dnw, 323sdnw, 32330sdnw, 351sdn, 355sdnw
SPL print driver	●	●
HP Easy Printer Manager	-	-
HP Embedded Web Server	-	●
HP MFP Scan	●	●
HP Smart	●	●
OCR	●	●

Variety feature

Features	Laser MFP 323d	Laser MFP 323sdn, 323dnw, 323sdnw, 32330sdnw, 351sdn, 355sdnw
Hi-Speed USB 2.0	●	●
Network Interface Ethernet 10/100 Base TX wired LAN	-	●
Network Interface 802.11b/g/n 2.4GHz Wireless LAN	-	● (323dnw, 323sdnw, 355sdnw 32330sdnw only)
Double-sided printing	●	●
Mopria	-	●
AirPrint	●	●
Automatic Document Feeder (ADF)	-	323dnw: - 323sdn, 323sdnw: ● 32330sdnw: ● 351sdn, 355sdnw: ●

(●: Supported, Blank: Not supported)

Useful to know

Review common issues and solutions.

The machine does not print.

- Open the print queue list and remove the document from the list (see "Cancel a print job" on page 63).
- Remove the driver and install it again (see "Installing the software" on page 23).
- Select your machine as your default machine in your Windows.

Where can I purchase accessories or supplies?

- Inquire at a HP distributor or your retailer.
- Visit the HP website (https://store.hp.com). You can view product service information.

The status LED flashes or remains constantly on.

- Turn the product off and on again.
- Check the meanings of LED indications in this manual and troubleshoot accordingly (see "Understanding the status LED" on page 112).

A paper jam has occurred.

- Open and close the scanner (see "Machine overview" on page 17).
- Check the instructions on removing jammed paper in this manual and troubleshoot accordingly (see "Clearing paper jams" on page 109).

Printouts are blurry.

- The toner level might be low or uneven. Shake the toner cartridge (see "Redistributing toner" on page 94).
- Try a different print resolution setting (see "Open printing preferences" on page 64).
- Replace the toner cartridge (see "Replacing the toner cartridge" on page 96).

Where can I download the machine's driver?

- You can get help, support application, machine drivers, manuals, and order information from the HP website support.hp.com.

About this user's guide

This user's guide provides information for your basic understanding of the machine as well as detailed steps to explain machine usage.

- Do not discard this manual, and keep it for future reference.
- Read the safety information before using the machine.
- If you have a problem using the machine, refer to the troubleshooting chapter.
- Terms used in this user's guide are explained in the glossary chapter.
- All illustrations in this user's guide may differ from your machine depending on its options or model you purchased.
- The screenshots in this user's guide may differ from your machine depending on the machine's firmware/driver version.
- The procedures in this user's guide are mainly based on Windows 10.

Conventions

Some terms in this guide are used interchangeably, as below:

- Document is synonymous with original.
- Paper is synonymous with media, or print media.
- Machine refers to printer or MFP.

General icons

Icon	Text	Description
	**Warning**	Used to alert users to the possibility of personal injury.
	**Caution**	Gives users information to protect the machine from possible mechanical damage or malfunction.
	**Note**	Provides additional information or detailed specification of the machine function and feature.

Safety information

These warnings and precautions are included to prevent injury to you and others, and to prevent any potential damage to your machine. Be sure to read and understand all of these instructions before using the machine. After reading this section, keep it in a safe place for future reference.

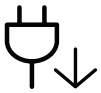
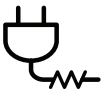
Important safety symbols

Explanation of all icons and signs used in this chapter

	**Warning**	Hazards or unsafe practices that may result in severe personal injury or death.
	**Caution**	Hazards or unsafe practices that may result in minor personal injury or property damage.

Operating environment

 Warning

	Do not use if the power cord is damaged or if the electrical outlet is not grounded. This could result in electric shock or fire.
	Do not place anything on top of the machine (water, small metal or heavy objects, candles, lit cigarettes, etc.). This could result in electric shock or fire.
	• If the machine gets overheated, it releases smoke, makes strange noises, or generates an odd odor, immediately turn off the power switch and unplug the machine. • The user should be able to access the power outlet in case of emergencies that might require the user to pull the plug out. This could result in electric shock or fire.
	Do not bend, or place heavy objects on the power cord. Stepping on or allowing the power cord to be crushed by a heavy object could result in electric shock or fire.
	Do not remove the plug by pulling on the cord; do not handle the plug with wet hands. This could result in electric shock or fire.

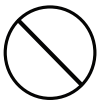
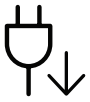
⚠ Caution

	During an electrical storm or for a period of non-operation, remove the power plug from the electrical outlet. This could result in electric shock or fire.
	Be careful, the paper output area is hot. Burns could occur.
	If the machine has been dropped, or if the cabinet appears damaged, unplug the machine from all interface connections and request assistance from qualified service personnel. Otherwise, this could result in electric shock or fire.
	If the machine does not operate properly after these instructions have been followed, unplug the machine from all interface connections and request assistance from qualified service personnel. Otherwise, this could result in electric shock or fire.
	If the plug does not easily enter the electrical outlet, do not attempt to force it in. Call an electrician to change the electrical outlet, or this could result in electric shock.
	Do not allow pets to chew on the AC power, telephone or PC interface cords. This could result in electric shock or fire and/or injury to your pet.

Operating method

⚠ Caution

	Do not forcefully pull the paper out during printing. It can cause damage to the machine.
	Be careful not to put your hand between the machine and paper tray. You may get injured.
	Be care when replacing paper or removing jammed paper. New paper has sharp edges and can cause painful cuts.

	When printing large quantities, the bottom part of the paper output area may get hot. Do not allow children to touch. Burns can occur.
	When removing jammed paper, do not use tweezers or sharp metal objects. It can damage the machine.
	Do not allow too many papers to stack up in the paper output tray. It can damage the machine.
	Do not block or push objects into the ventilation opening. This could result in elevated component temperatures which can cause damage or fire.
	Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.
	This machine's power reception device is the power cord. To switch off the power supply, remove the power cord from the electrical outlet.

Installation/Moving

Warning

	Do not place the machine in an area with dust, humidity, or water leaks. This could result in electric shock or fire.
	Place the machine in the environment where it meets the operating temperature and humidity specification. Do not use the machine when it is below freezing temperature or has recently been moved from a location below freezing temperature. Doing so may damage the machine. Only operate the machine when the internal temperature of the machine is within the operating temperature and humidity specifications. Otherwise, quality problems can occur and cause damage to the machine. See "General specifications" on page 133.

⚠ Caution

	Before moving the machine, turn the power off and disconnect all cords. The information below are only suggestions based on the units weight. If you have a medical condition that prevents you from lifting, do not lift the machine. Ask for help, and always use the appropriate amount of people to lift the device safety. Then lift the machine: • If the machine weighs under 20 kg (44.09 lbs), lift with 1 person. • If the machine weighs 20 kg (44.09 lbs) - 40 kg (88.18 lbs), lift with 2 people. • If the machine weighs more than 40 kg (88.18 lbs), lift with 4 or more people. The machine could fall, causing injury or machine damage.
	Choose a flat surface with enough space for ventilation to place the machine. Also consider the space required to open the cover and trays. The place should be well-ventilated and be far from direct light, heat, and humidity.
	When using the machine for a long period of time or printing a large number of pages in a non-ventilated space, it could pollute the air and be harmful to your health. Place the machine in a well-ventilated space or open a window to circulate the air periodically.
	Do not place the machine on an unstable surface. The machine could fall, causing injury or machine damage.
	Use only No.26 AWG[a] or larger, telephone line cord, if necessary. Otherwise, it can cause damage to the machine.
	Make sure you plug the power cord into a grounded electrical outlet. Otherwise, this could result in electric shock or fire.
	Use the power cord supplied with your machine for safe operation. If you are using a cord which is longer than 2 meters (6 feet) with a 110V machine, then the gauge should be 16 AWG or larger. Otherwise, it can cause damage to the machine, and could result in electric shock or fire.
	Do not put a cover over the machine or place it in an airtight location, such as a closet. If the machine is not well-ventilated, this could result in fire.
	Do not overload wall outlets and extension cords. This can diminish performance, and could result in electric shock or fire.
	The machine should be connected to the power level which is specified on the label. If you are unsure and want to check the power level you are using, contact the electrical utility company.

a. AWG: American Wire Gauge

Maintenance/Checking

⚠ Caution

	Unplug this product from the wall outlet before cleaning the inside of the machine. Do not clean the machine with benzene, paint thinner or alcohol; do not spray water directly into the machine. This could result in electric shock or fire.
	When you are working inside the machine replacing supplies or cleaning the inside, do not operate the machine. You could get injured.
	Keep cleaning supplies away from children. Children could get hurt.
	Do not disassemble, repair or rebuild the machine by yourself. It can damage the machine. Call a certified technician when the machine needs repairing.
	To clean and operate the machine, strictly follow the user's guide provided with the machine. Otherwise, you could damage the machine.
	Keep the power cable and the contact surface of the plug clean from dust or water. Otherwise, this could result in electric shock or fire.
	• Do not remove any covers or guards that are fastened with screws. • Fuser units should only be repaired by a certified service technician. Repair by non-certified technicians could result in fire or electric shock. • The machine should only be repaired by a HP service technician.

Supply usage

⚠ Caution

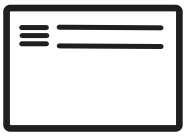
	Do not disassemble the toner cartridge. Toner dust can be dangerous if inhaled or ingested.
	Do not burn any of the supplies such as toner cartridge or fuser unit. This could cause an explosion or uncontrollable fire.
	When storing supplies such as toner cartridges, keep them away from children. Toner dust can be dangerous if inhaled or ingested.
	Using recycled supplies, such as toner, can cause damage to the machine. In case of damage due to the use of recycled supplies, a service fee will be charged.
	For supplies that contain toner dust (toner cartridge, waste toner bottle, imaging unit, etc.) follow the instructions below. • When disposing of the supplies, follow the instructions for disposal. Refer to the reseller for disposal instructions. • Do not wash the supplies. • For a waste toner bottle, do not reuse it after emptying the bottle. If you do not follow the instructions above, it may cause machine malfunction and environmental pollution. The warranty does not cover damages caused by a user's carelessness.
	When toner gets on your clothing, do not use hot water to wash it. Hot water sets toner into fabric. Use cold water.
	When changing the toner cartridge or removing jammed paper, be careful not to let toner dust touch your body or clothes. Toner dust can be dangerous if inhaled or ingested.

Machine overview

Identify the machine components.

Components

The actual component may differ from the illustration below. Some components may change depending on the circumstances.

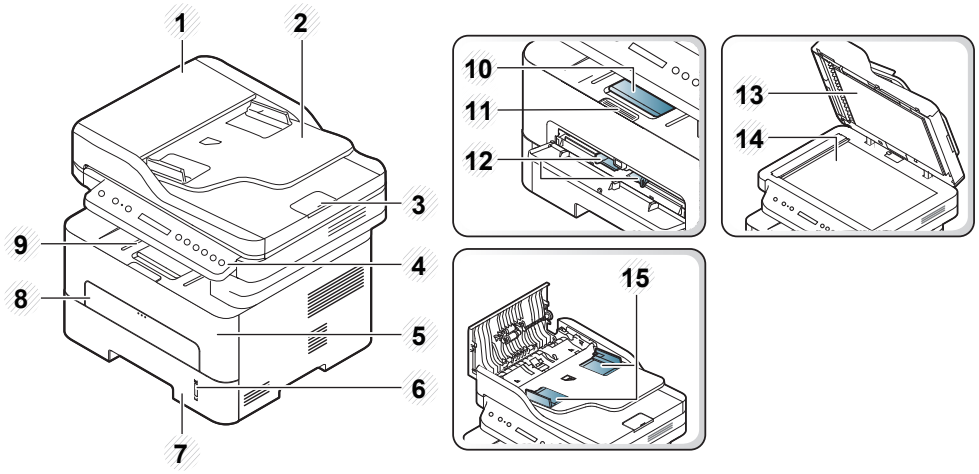
	Machine[a]
	Setup guide and Reference guide
	Power cord
	Misc. accessories[b]

a. This illustration may differ from your machine depending on your model. There are various types of machines.

b Miscellaneous accessories included with your machine may vary by country of purchase and specific model.

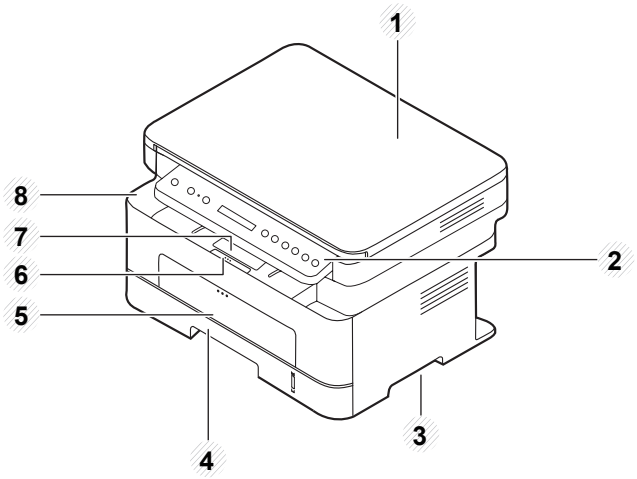
Front view - Type A

- This illustration may differ from your machine depending on your model. There are various types of machines.
- Some features and optional goods may not be available depending on model or country (see "Features by model" on page 8).



1	Document feeder cover
2	Document feeder input tray
3	Document feeder output support
4	Control Panel
5	Front cover
6	Paper level indicator
7	Tray 2
8	Tray 1
9	Output tray
10	Output support
11	Push-release of the front cover
12	Paper width guide on a manual feeder
13	Scanner lid
14	Scanner glass
15	Paper width guide on a document feeder

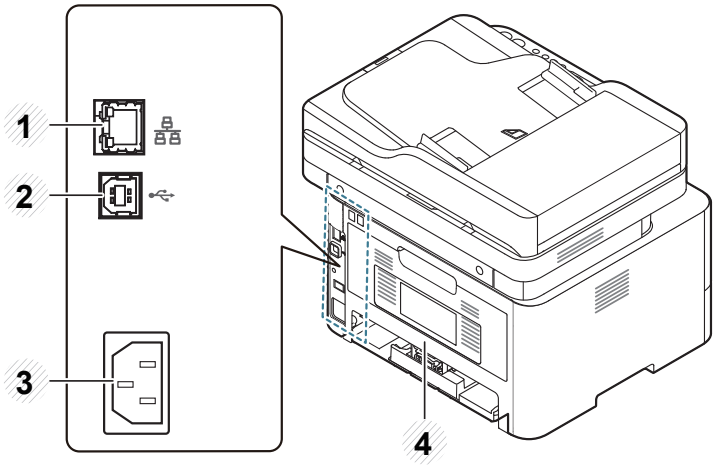
Front view - Type B



1	Scanner lid
2	Control Panel
3	Handle
4	Tray 2
5	Tray 1
6	Push-release of the front cover
7	Output support
8	Output tray

Rear view

- This illustration may differ from your machine depending on your model. There are various types of machines.
- Some features and optional goods may not be available depending on model or country (see "Features by model" on page 8).



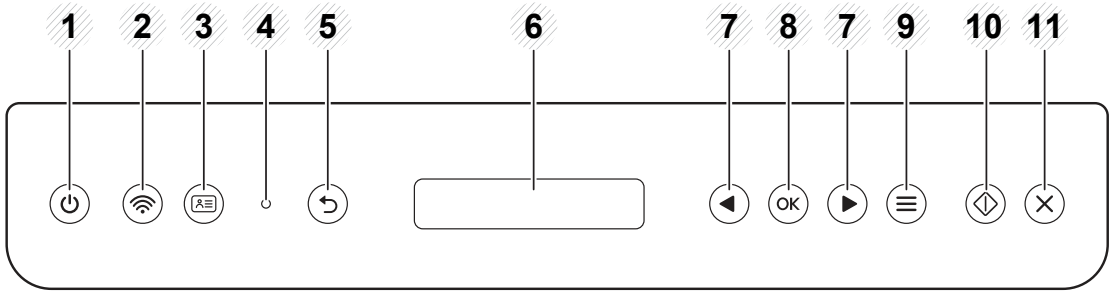
1	Network port[a]
2	USB port
3	Power receptacle
4	Rear cover

a. MFP 323sdn, 323dnw, 323sdnw, 351sdn, 355sdnw only.

Control panel overview

Identify the buttons and features on the control panel.

- This control panel may differ from your machine depending on its model. There are various types of control panels.
- Some features and optional goods may not be available depending on model or country (see "Features by model" on page 8).

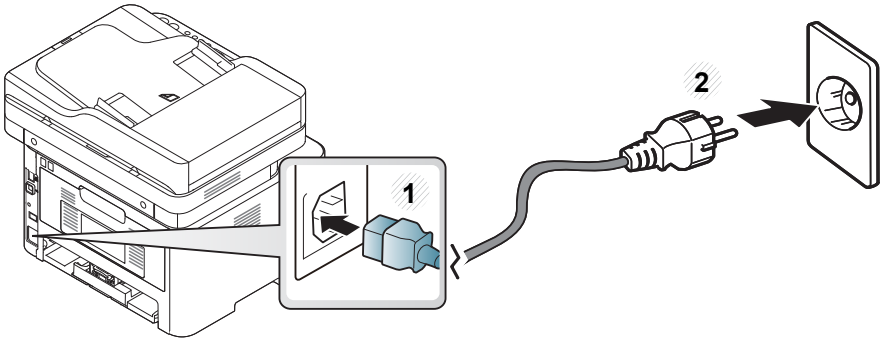


1	Power/Wake Up		Turns the power on or off, or wakes up the machine from the power save mode. If you need to turn the machine off, press this button for more than three seconds.
2	Wireless (Wireless model only)		Press this button, access to the Wi-Fi menu. Or press and hold this button for about 3 seconds or more seconds, access to PBC mode.
3	ID Copy		Allows you to copy both sides of an ID card like a driver's license on a single side of paper (see "Copy ID card" on page 76).
4	Status LED		Indicates the status of your machine (see "Understanding the status LED" on page 112).
5	Back		Sends you back to the upper menu level.
6	Display screen		Shows the current status and displays prompts during an operation.
7	Left/Right Arrows		Scrolls through the options available in the selected menu and increases or decreases values.
8	OK		Confirms the selection on the screen.
9	Menu		Opens Menu mode and scrolls through the available menus (see "Menu overview" on page 25).
10	Start		Starts a job.
11	Stop/Clear		Stops an operations at any time.

Turning on the machine

This document provides the procedures to remove and replace the toner cartridge.

1 Connect the machine to the electricity supply first.
Turn the switch on if the machine has a power switch.



Illustrations on this user guide may differ from your machine depending on its options or models. Check your machine type (see "Machine overview" on page 17).

2 Power is turned on automatically.
Or press the (**Power**) button on the control panel.

If you want to turn the power off, press and hold the (**Power**) button for about 3 seconds.

Installing the software

After you have set up your machine and connected it to your computer, you must install the printer software. You need to download software packages from the HP website to install the printer software.

1 Go to 123.hp.com to download the HP Easy Start.

2 Enter your printer's model number.

3 Follow the instructions to complete the setup.

For HP's all-inclusive help for the printer, go to support.hp.com.

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

A locally connected machine is a machine directly attached to your computer using the cable. If your machine is attached to a network, skip the following steps below and go on to installing a network connected machine's driver.

Only use a USB cable no longer then 3 meters (118 inches).

Menu overview and basic setup

This chapter provides information about the overall menu structure and the basic setup options.

- Menu overview 25
- Machine basic settings 30
- Media and tray 32

Menu overview

The control panel provides access to various menus to set up the machine or use the machine's functions.

- Some menus may not appear on the display depending on options or models. If so, it is not applicable to your machine.
- Some menu names may differ from your machine depending on its options or the models.
- The menus are described in the Useful Setting Menus chapter (see "Useful setting menus" on page 82).

Access the menu

1 Select Menu until the **Menu** you want appears on the bottom line of the display and press **OK**.

2 Press the **Arrows** until the needed menu item appears and press **OK**.

3 If the setting item has sub menus, repeat Step 3.

4 Press **OK** to save the selection.

5 Press the **Cancel** button to return to the ready mode.

Copy Feature menu

Option	Sub option
Original Size	A4, A5, B5(JIS), Letter, Legal, Executive, Folio, Officio
Reduce/Enlarge	25% ~ 400%
Duplex	1 > 1 sided, 1 > 2 sided, 1 > 2 Sided Rot.
Darkness	Normal Dark+1- Dark+5 Light+5- Light+1
Original Type	Text Text/Photo Photo
Collation	On Off
Layout	Normal 2-Up 4-Up ID Copy
Adjust Bkgd.	Off Auto Enhance Lev.1 Enhance Lev.2 Erase Lev.1- Erase Lev.4

Copy Setup menu

Option	Sub option
Change Default	Original Size Copies Reduce/Enlarge Duplex Darkness Original Type Collation

Print Setup menu

Option	Sub option
Orientation	Portrait Landscape
Duplex	Off Long Edge Short Edge
Copies	1-999
Resolution	Standard High Resol.
Clear Text	Off Minimum Medium Maximum
Auto CR	LF LF+CR
SkipBlankPages	OFF ON
Emulation	Setup

System Setup menu

Option	Sub option
Machine Setup	Language Power Save Auto Power Off [a] Wakeup Event System Timeout Job Timeout Altitude Adj. Auto Continue [b] Paper Substit. [b] Toner Save

Option	Sub option
Paper Setup	Paper Size Paper Type Paper Source Margin Tray Confirm
Report	Configuration Network Conf. Supplies Info. Usage Counter
Maintenance	CLR Empty Msg. [c] Supplies Life Image Mgr. TonerLow Alert ImU.Low Alert Serial Number

a. This option may not appear on the display depending on models. If so, it is not applicable to your machine.

b. This option only appears if **Paper Mismatch** is enabled.

c. This option only appears when small amount of toner is left in the cartridge.

Network menu (Network model only)

Option	Sub option
TCP/IP (IPv4)	DHCP BOOTP Static
TCP/IP (IPv6)	IPv6 Protocol DHCPv6 Config
Ethernet	Ethernet Speed
Wi-Fi	Wi-Fi On/Off WPS Wi-Fi Direct Wi-Fi Signal Wi-Fi Default

Option	Sub option
Protocol Mgr.	HTTP WINS SNMPv1/v2t UPnP(SSDP) MDNS SLP
Network Conf.	N/A
Clear Settings	N/A

Machine basic settings

Review default settings for the printer.

You can change the machine's setting from HP Embedded Web Server. If your machine is connected to the network, you can set the machine's setting from HP Embedded Web Server > Settings tab > Machine Settings (see "Using HP Embedded Web Server" on page 48).

Machine's default settings

After installation is complete, you may want to set the machine's default settings.

To change the machine's default settings, follow these steps:

It may be necessary to press **OK** to navigate to lower-level menus for some models.

1 Select the **Menu** button on the control panel.

2 Press **System Setup** > **Machine Setup**.

3 Select the option you want, then press **OK**.

4 Select the sub option you want, then press **OK**.

5 Press **OK** to save the selection.

6 Press the **Cancel** button to return to ready mode.

Altitude adjustment

Print quality is affected by atmospheric pressure, which is determined by the height of the machine above sea level. The following information will guide you on how to set your machine for the best print quality.

Before you set the altitude value, determine the altitude where you are.

- Normal: 0 ~ 1,000 m (3,280 ft)
- High 1: 1,000 m (3,280 ft) ~ 2,000 m (6,561 ft)
- High 2: 2,000 m (6,561 ft) ~ 3,000 m (9,842 ft)
- High 3: 3,000 m (9,842 ft) ~ 4,000 m (13,123 ft)
- High 4: 4,000 m (13,123 ft) ~ 5,000 m (16,404 ft)



- If your machine is connected to the network, you can set the machine's setting from HP Embedded Web Server > Settings tab > Machine Settings (see "Using HP Embedded Web Server" on page 48).
- You can also set the altitude in the **System Setup** option on the machine's display.

Media and tray

This chapter provides information on how to load print media into your machine.

Selecting print media

You can print on a variety of print media, such as plain paper, envelopes, labels, and transparencies. Always use print media that meets the guidelines for use with your machine.

Guidelines for select the print media

Print media that does not meet the guidelines outlined in this user's guide may cause the following problems:

- Poor print quality
- Increased paper jams
- Premature wear on the machine.

Properties, such as weight, composition, grain, and moisture content, are important factors that affect the machine's performance and the output quality. When you choose print materials, consider the following:

- The type, size, and weight of the print media for your machine are described in print media specifications (see "Print media specifications" on page 134).
- Desired outcome: The print media you choose should be appropriate for your project.
- Brightness: Some print media are whiter than others and produce sharper, more vibrant images.
- Surface smoothness: The smoothness of the print media affects how crisp the printing looks on the paper.



- Some print media may meet all of the guidelines in this user's guide and still not produce satisfactory results. This may be the result of the sheets characteristics, improper handling, unacceptable temperature and humidity levels, or other variables over which cannot be controlled.
- Before purchasing large quantities of print media, ensure that it meets the requirements specified in this user's guide.



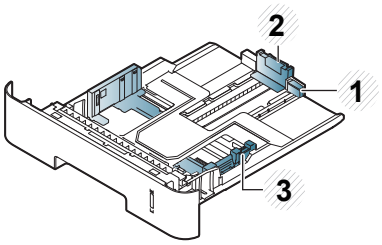
- Using print media that does not meet these specifications may cause problems or require repairs. Such repairs are not covered by HP's warranty or service agreements.
- The amount of paper put into the tray may differ according to media type used (see "Print media specifications" on page 134).
- Make sure not to use the inkjet photo paper with this machine. It could cause damage to the machine.
- Using flammable print media can cause a fire.
- Use designated print media (see "Print media specifications" on page 134).

The use of flammable media or foreign materials left in the printer may lead to overheating of the unit and, in rare cases may cause a fire.

The amount of paper put into the tray may differ according to media type used (see "Print media specifications" on page 134).

Tray overview

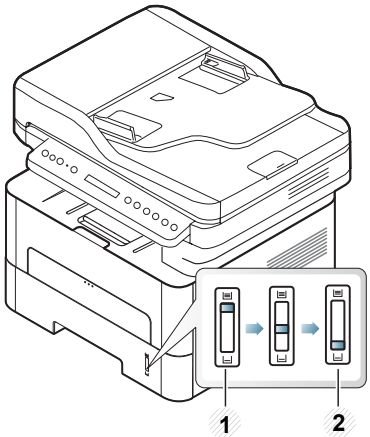
To change the size, you need to adjust the paper guides.



1. Paper width guide
2. Paper length guide
3. Paper width guide

If you do not adjust the guide, it may cause paper registration, image skew, or jamming of the paper.

The paper quantity indicator shows the amount of paper in the tray.



1. Full
2. Emptype

Illustrations on this user guide may differ from your machine depending on its options or models. Check your machine type (see "Machine overview" on page 17).

- If you do not adjust the guide, it may cause paper registration, image skew, or jamming of the paper.

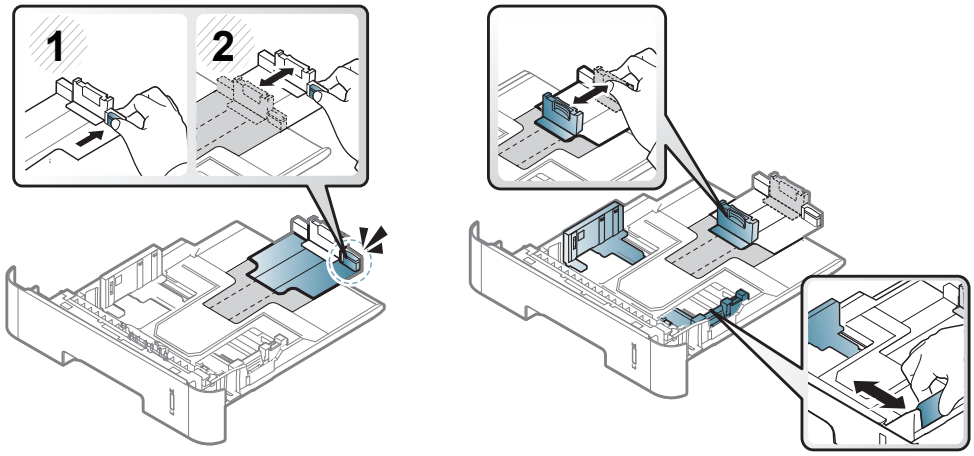
Loading paper in the tray

Available paper type for duplex printing A4 only.

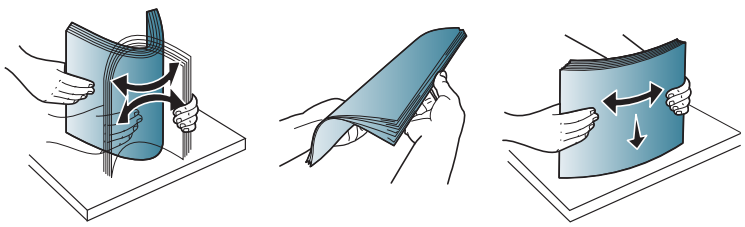
This document provides the procedures to load paper in the tray.

Illustrations on this user guide may differ from your machine depending on its options or models. Check your machine type (see "Machine overview" on page 17).

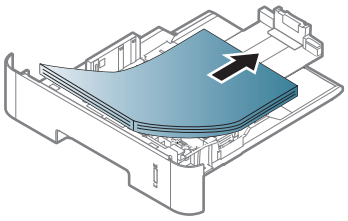
1 Open the tray. Then, adjust the tray size to the media size you are loading.



2 Flex or fan the edge of the paper stack to separate the pages before loading papers.



3 Place the paper with the side you want to print facing down.



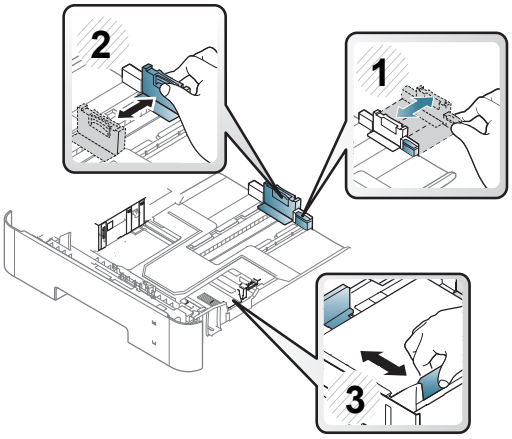
- If you do not adjust the guide, it may cause paper registration, image skew, or jamming of the paper.
- Do not push the paper width guide too far causing the media to warp.
- If you do not adjust the paper width guide, it may cause paper jams.



- Do not use a paper with a leading-edge curl, it may cause a paper jam or the paper can be wrinkled.



4 Squeeze the paper width guide and slide it to the edge of the paper stack without causing it to bend.



5 When you print a document, set the paper type and size for the tray (see "Set the paper size and type" on page 40).

Printing on special media

The table below shows the special media usable in tray.

To change the paper setting set in the machine, set the paper type from the Printing **Preferences window** > **Paper tab** > **Paper Type** (see "Open printing preferences" on page 64).

- When using special media, we recommend you feed one sheet at a time (see "Print media specifications" on page 134).
- Illustrations on this user's guide may differ from your machine depending on its options or models.
- Check your machine type (see "Machine overview" on page 17).

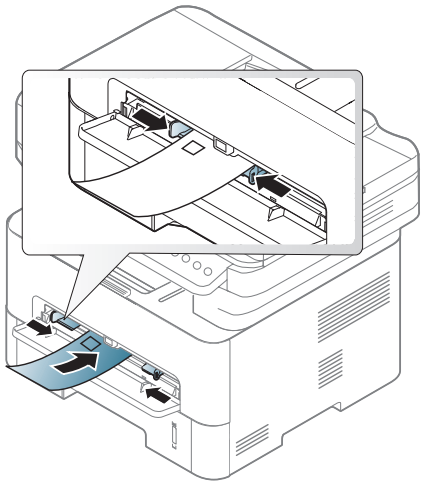
Types	Tray 1	Tray 2	Duplex Printing in Tray 2
Plain	●	●	●
Mid weight (Thick)	●	●	●
Light (Thin)	●	●	●
Cotton	●	-	-
Colored	●	-	-
Pre-Printed	●	-	-
Recycled	●	●	●
Envelope	●	-	-
Thick Envelope	●	-	-
Label	●	-	-
Heavy weight(Cardstock)	●	●	-
Bond	●	●	-
Intermediate(Archive)	●	●	-
Custom	●	-	-
Extra Heavy weigh(Thicker)	●	-	-

Sizes	Tray 1	Tray 2	Duplex Printing in Tray 2
Letter	●	●	-
Legal	●	●	-
Oficio	●	●	-
Folio	●	●	-
A4	●	●	●
B5(ISO)	●	●	-
B5(JIS)	●	●	-
Executive	●	●	-
A5	●	●	-
A6	●	●	-
Monarch Envelope	●	-	-
DL Envelope	●	-	-
C5 Envelope	●	-	-
C6 Envelope	●	-	-
No 10 Envelope	●	-	-
PostCard 4x6	●	-	-
Custom	Min. 76.2 x 216 mm Max. 127 x 356 mm	Min. 105 x 216 mm Max. 148.5 x 356 mm	-
Paper weight	60 ~ 220 g/m² (16 ~ 58 lb)	60 ~ 220 g/m² (16 ~ 43 lb)	60 ~ 105 g/m² (16 ~ 28 lb)

(●: Supported, Blank: Not supported)

Envelope

Printing successfully on envelopes depends upon the quality of the envelopes.
To print an envelope, place it as shown in the following figure.



- When selecting envelopes, consider the following factors:
  - **Weight:** should not exceed 90 g/m^2 otherwise; jams may occur.
  - **Construction:** should lie flat with less than 6 mm curl and should not contain air.
  - **Condition:** should not be wrinkled, nicked, nor damaged.
  - **Temperature:** should resist the heat and pressure of the machine during operation.
- Use only well-constructed envelopes with sharp and well-creased folds.
- Do not use stamped envelopes.
- Do not use envelopes with clasps, snaps, windows, coated lining, self-adhesive seals, or other synthetic materials.
- Do not use damaged or poorly made envelopes.
- Be sure the seam at both ends of the envelope extends all the way to the corner of the envelope.

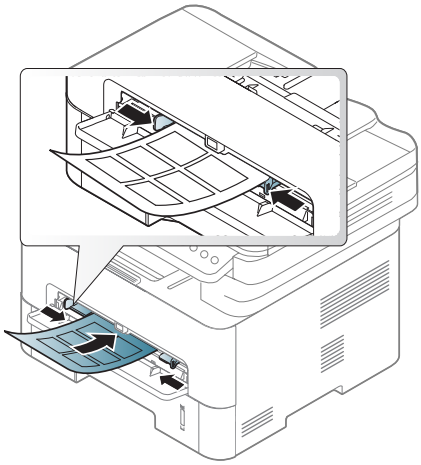


1. Acceptable
2. Unacceptable

- Envelopes with a peel-off adhesive strip or with more than one flap that folds over to seal must use adhesives compatible with the machine's fusing temperature for 0.1 second about 170°C (338 °F). The extra flaps and strips might cause wrinkling, creasing, or jams, and may even damage the fuser.
- For the best print quality, position margins no closer than 15 mm from the edges of the envelope.
- Avoid printing over the area where the envelope's seams meet.

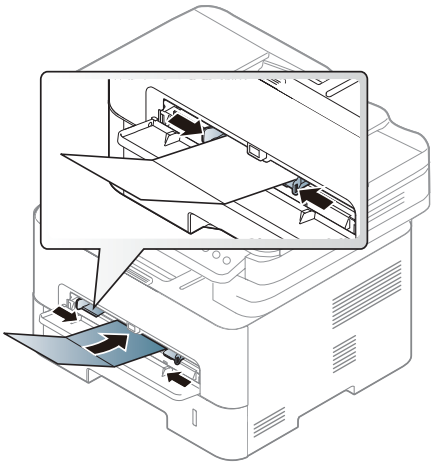
Labels

To avoid damaging the machine, use only labels designed for use in laser printers.



- When selecting labels, consider the following factors:
  - **Adhesives:** Should be stable at your machine's fusing temperature about 170°C (338°F).
  - **Arrangement:** Only use labels with no exposed backing between them. Labels can peel off sheets that have spaces between the labels, causing serious jams.
  - **Curl:** Must lie flat with no more than 13 mm of curl in any direction.
  - **Condition:** Do not use labels with wrinkles, bubbles, or other indications of separation.
- Make sure that there is no exposed adhesive material between labels. Exposed areas can cause labels to peel off during printing, which can cause paper jams. Exposed adhesive can also cause damage to machine components.
- Do not run a sheet of labels through the machine more than once. The adhesive backing is designed for only a single pass through the machine.
- Do not use labels that are separating from the backing sheet or are wrinkled, bubbled, or otherwise damaged.

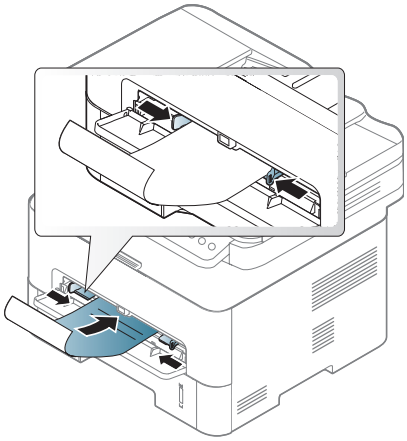
Card stock/Custom-sized paper



- In the software application, set the margins to at least 6.4 mm (0.25 inches) away from the edges of the material.

Preprinted paper

When loading preprinted paper, the printed side should be facing up with an uncurled edge at the front. If you experience problems with paper feeding, turn the paper around. Note that print quality is not guaranteed.



- Must be printed with heat-resistant ink that will not melt, vaporize, or release hazardous emissions when subjected to the machine's fusing temperature for 0.1 second (about 170°C (338°F)).
- Preprinted paper ink must be non-flammable and should not adversely affect machine rollers.
- Before you load preprinted paper, verify that the ink on the paper is dry. During the fusing process, wet ink can come off preprinted paper, reducing print quality.

Set the paper size and type

After loading paper in the paper tray, set the paper size and type.

The paper setting in the machine and driver should match to print without a paper mismatch error.

To change the paper setting set in the machine, set the paper type from the **Printing Preferences** window > **Paper** tab > **Paper Type** (see "Open printing preferences" on page 64).

Then, set the paper type from the **Printing preferences** window > **Paper** tab > **Paper Type** (see "Open printing preferences" on page 64).

It may be necessary to press OK to navigate to lower-level menus for some models.

1 Select the **Menu** button on the control panel.

2 Press **System Setup** > **Paper Setup** > **Paper Size** or **Paper Type**.

3 Select the tray and the option you want.

4 Press **OK** to save the selection.

5 Press the **Cancel** button to return to ready mode.

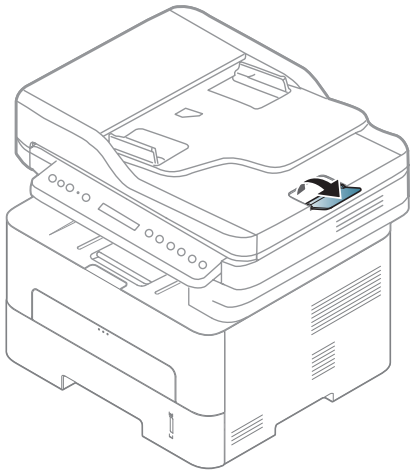
If you want to use special-sized paper such as billing paper, select the **Paper** tab > **Size** > **Edit...** and set **Custom Paper Size Settings** in the **Printing Preferences** (see "Open printing preferences" on page 64).

Use the output support

Use the output support to align the printed pages.

The surface of the output tray may become hot if you print a large number of pages at once. Make sure that you do not allow children near it.

The printed pages stack on the output support, and the output support will help the printed pages to align. The printer sends output to the output tray by default.



Illustrations on this user's guide may differ from your machine depending on its options or models. Check your machine type (see "Machine overview" on page 17).

Prepare originals

Learn how to prepare originals.

- Do not load paper smaller than 76 x 149 mm (3x 5.85 inches) or larger than 216 x 356 mm (8.5 x 14 inches).
- Do not attempt to load the following s of paper, in order to prevent paper jam, low print quality and machine damage.
  - Carbon-paper or carbon-backed paper
  - Coated paper
  - Onion skin or thin paper
  - Wrinkled or creased paper
  - Curled or rolled paper
  - Torn paper

- Remove all staples and paper clips before loading.
- Make sure any glue, ink, or correction fluid on the paper is completely dry before loading.
- Do not load originals that include different sizes or weights of paper.
- Do not load booklets, pamphlets, transparencies, or documents with other unusual characteristics.

Load originals

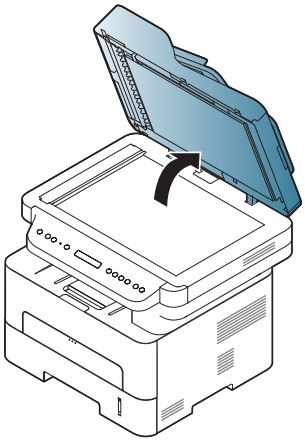
You can use the scanner glass to load an original for copying and scanning.

Illustrations on this user's guide may differ from your machine depending on its options or models. Check your machine type (see "Machine overview" on page 17).

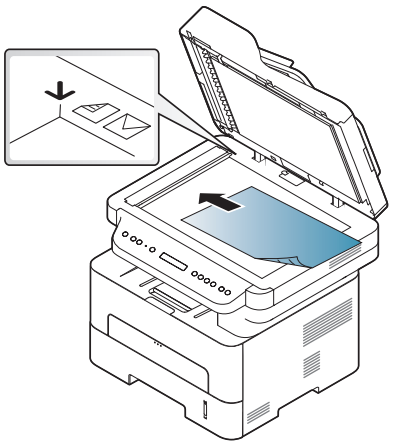
Load originals on the scanner glass

Using the scanner glass, you can copy or scan originals. You can get the best scan quality, especially for colored or gray-scaled images.

1 Lift and open the scanner lid.



2 Place the original face down on the scanner glass. Align it with the registration guide at the top left corner of the glass.



3 Close the scanner lid.

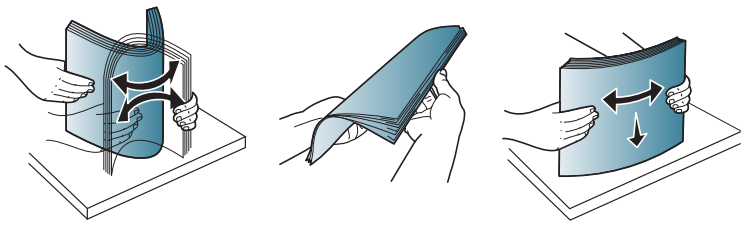
- Leaving the scanner lid open while copying may affect copy quality and toner consumption.
- Dust on the scanner glass may cause black spots on the printout. Always keep it clean.
- If you are copying a page from a book or magazine, lift the scanner lid until its hinges are caught by the stopper and then close the lid. If the book or magazine is thicker than 30 mm, start copying with the scanner lid open.

- Be careful not to break the scanner glass. You may get hurt.
- Do not put hands while closing the scanner lid. The scanner lid may fall on your hands and get hurt.
- Do not look the light from inside of the scanner while copying or scanning. It is harmful to eyes.

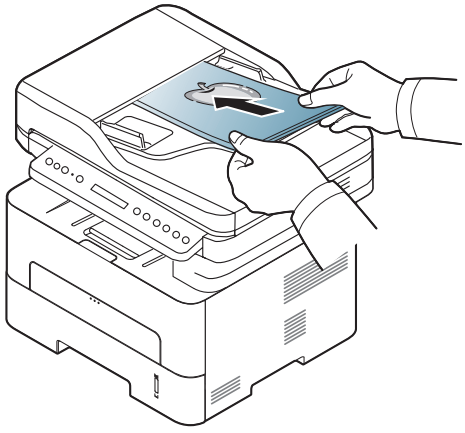
In the document feeder (ADF model only)

Using the document feeder, you can load up to 40 sheets of paper (80 g/m2, 21 lbs bond) for one job.

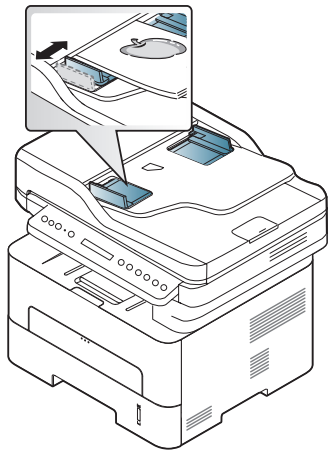
1 Flex or fan the edge of the paper stack to separate the pages before loading originals.



2 Load the original face up into the document feeder input tray. Make sure that the bottom of the original stack matches the paper size marked on the document input tray.



3 Adjust the document feeder width guides to the paper size.



Dust on the document feeder glass may cause black lines on the printout. Always keep the glass clean (see "Clean the machine" on page 103).

Using a Network-Connected Machine (Network Models only)

This chapter gives you step-by-step instructions for setting up a network connected machine and software.



Supported optional devices and features may differ according to your model.

- Wired network setup 46
- Using HP Embedded Web Server 48
- HP Web Jetadmin 51
- Wireless network setup 52
- HP Smart app 59

Wired network setup

Learn how to configure wired network settings.

Printing a network configuration report

You can print **Network Configuration Report** from the machine's control panel that will show the current machine's network settings. This will help you to set up a network.

- Press the **Menu** button (≡) on the control panel and select **Network** > **Network Conf..**
  Using this Network Configuration Report, you can find your machine's MAC address and IP address.
  For example:

```
MAC Address: 00:15:99:41:A2:78
```

```
MAC Address: IP Address: 169.254.192.192
```

Setting IP address

First, you have to set up an IP address for network printing and managements. In most cases a new IP address will be automatically assigned by a DHCP (Dynamic Host Configuration Protocol) server located on the network.

When you install the printer driver, do not configure both IPv4 and IPv6. We recommend to configure either IPv4 or IPv6.

IPv4 configuration

You can set TCP/IPv4 from the control panel for a DHCPv4 server on your network.

You can also set the TCP/IPv4 from Embedded Web Server. When the Embedded Web Server window is displayed, move the mouse cursor over the Settings menu of the top menu bar and then click Network Settings.

If you have a DHCPv4 server on your network, you can set one of the following options for default dynamic host configuration.

1 Press the **Menu** button (≡) on the control panel.

2 Select **Network** > **TCP/IP (IPv4)** > **DHCP** on the control panel.

3 Press **OK** to select the required value you want.

IPv6 configuration

You can activate and set the TCP/IPv6 from the control panel.

You can also set the TCP/IPv4 from Embedded Web Server. When the Embedded Web Server window is displayed, move the mouse cursor over the Settings menu of the top menu bar and then click Network Settings.

IPv6 is supported properly only in Windows Vista or higher.

The machine supports the following IPv6 addresses for network printing and managements.

- **Link-local Address:** Self-configured local IPv6 address (Address starts with FE80).
- **Stateless Address:** Automatically configured IPv6 address by a network router.
- **Stateful Address:** IPv6 address configured by a DHCPv6 server.
- **Manual Address:** Manually configured IPv6 address by a user.

In the IPv6 network environment, follow the next procedure to use the IPv6 address.

Activating IPv6

Learn how to activate IPv6 from the control panel.

1 Press the **Menu** button ☰ on the control panel.

2 Press **Network** > **TCP/IP (IPv6)** > **IPv6 Protocol**.

3 Select **On** and press **OK**.

4 Turn the machine off and turn it on again.

DHCPv6 address configuration

If you have a DHCPv6 server on your network, you can set one of the following options for default dynamic host configuration.

1 Press the **Menu** button ☰ on the control panel.

2 Select **Network** > **TCP/IP (IPv6)** > **DHCPv6 Config**.

3 Press **OK** to select the required value you want.

Using HP Embedded Web Server

There are several programs available to setup the network settings easily in a network environment. For the network administrator especially, managing several machines on the network is possible.

- Internet Explorer 8.0 or higher is the minimum requirement for HP Embedded Web Server.
- Before using the programs below, set the IP address first.
- Some features and optional goods may not be available depending on model or country (see "Features by model" on page 8).

HP Embedded Web Server

The web server embedded on your network machine allows you to do the following tasks:

- Check the supplies information and status.
- Customize machine settings.
- Configure the network parameters necessary for the machine to connect to various network environments.

Accessing HP Embedded Web Server

You can access HP Embedded Web Server from a web browser.

1 Access a web browser, such as Internet Explorer, from Windows.
Enter the machine IP address of your printer (http://xxx.xxx.xxx.xxx) in the address field and press the **Enter** key or click **Go**.

2 Your machine's embedded website opens.

Logging into HP Embedded Web Server

Before configuring options in HP Embedded Web Server, you need to log-in as an administrator.

You can still use HP Embedded Web Server without logging in but you won't have access to **Settings** tab and **Security** tab.

1 Click **Login** on the upper right of the HP Embedded Web Server website.

2 If it's your first time logging into **HP Embedded Web Server** you need to log-in as an administrator.
- ID: admin
- Password: Enter the PIN number in the EWS Information section of the network configuration report (see "Printing a network configuration report" on page 46).

If you have changed the admin password, enter the updated password.

We recommend you to set the default password for security reasons. You can change your ID and password from **Security** > **System Security** > **System Administrator**.

HP Embedded Web Server overview

Learn settings available from HP Embedded Web Server.

Some tabs may not appear depending on your model.

Information tab

This tab gives you general information about your machine. You can check things, such as remaining amount of toner. You can also print reports, such as an error report.

- **Active Alerts:** Shows the alerts that have occurred in the machine and their severity.
- **Supplies:** Shows how many pages are printed and amount of toner left in the cartridge.
- **Usage Counters:** Shows the usage count by print types: simplex and duplex.
- **Current Settings:** Shows the machine's and network's information.
- **Print information:** Prints reports such as system related reports, e-mail address, and font reports.
- **Security Information:** Shows the machine's security information.

Settings tab

This tab allows you to set configurations provided by your machine and network. You need to log-in as an administrator to view this tab.

- **Machine Settings tab:** Sets options provided by your machine.
- **Network Settings tab:** Shows options for the network environment. Sets options such as TCP/IP and network protocols.

Security tab

This tab allows you to set system and network security information. You need to log-in as an administrator to view this tab.

- **System Security:** Sets the system administrator's information and also enables or disables machine features.
- **Network Security:** Sets settings for IPv4/IPv6 filtering.

Maintenance tab

This tab allows you to maintain your machine by upgrading firmware and setting contact information for sending emails. You can also connect to HP website or download drivers by selecting the **Link** menu.

- **Firmware Upgrade:** Upgrade your machine's firmware.
- **Contact Information:** Shows the contact information.
- **Link:** Shows links to useful sites where you can download or check information.

Setting the system administrator's information

This setting is necessary for using the e-mail notification option.



Some menus may not appear in the display depending on options or models. If so, it is not applicable to your machine.

1 Access a web browser, such as Internet Explorer, from Windows.
Enter the machine IP address of your printer (http://xxx.xxx.xxx.xxx) in the address field and press the **Enter** key or click **Go**.

2 Your machine's embedded website opens.

3 From the **Security** > **System Security** > **System Administrator**.

4 Enter the name of the administrator, phone number, location, and email address.

5 Click **Apply**.

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.

Wireless network setup

Learn how to configure wireless network settings.

Wireless networking may not be available depending on the model (See "Features by model" on page 8).

Wireless networks require higher security, so when an access point is first set up, a network name (SSID), the type of security used, and a Network Password are created for the network. Ask your network administrator about this information before proceeding with the machine installation.

Introduce wireless set up methods

You can set wireless settings either from the machine or the computer. Choose the setting method from the below table.

- Some wireless network installation types may not be available depending on the model or country.
- It is strongly recommended that you set the password on Access Points. If you do not set the password on Access Points, they might be exposed to illegal access from unknown machines including PCs, smart phones and printers. Refer to the Access Point user' guide for password settings.

Setup method	Connecting method	Description and Reference
With Access Point	From the computer	• See "Setup via USB cable" on page 54. • See "Access point without a USB cable" on page 55. • See "Setup using a network cable" on page 55.
With Access Point	From the machine's control panel	• See "Use the WPS settings" on page 53. • See "Use the Wi-Fi Networks" on page 53.
With Access Point	From the HP Smart app	See "Connect using the HP Smart app" on page 59.
Wi-Fi Direct setup	From mobile device	See "Set the Wi-Fi Direct for mobile printing" on page 57.

Restore the wireless network settings

You can revert the wireless network settings to the default values.

1 Press the **Menu** button on the control panel.

2 Select **Network** > **Wi-Fi** > **Wi-Fi Default** > **Restore**....

The machine starts restoring default wireless network settings.

Use the WPS settings

If your machine and access point (or wireless router) support Wi-Fi Protected Setup (WPS), then you can easily configure the wireless network settings through the WPS menu without the need for a computer.

Items to prepare:

- Check if the access point (or wireless router) supports Wi-Fi Protected Setup (WPS).
- Check if your machine supports Wi-Fi Protected Setup (WPS).

1 Press the **Menu** button on the control panel.

2 Select **Network** > **Wi-Fi** > **WPS** > **PBC.**

The machine starts connecting to the wireless network.

3 **Within 2 minutes**, press the **WPS (PBC)** button on the access point (or wireless router).
a. The machine is connecting to the access point (or wireless router).
b. When the machine is successfully connected to the wireless network, the LED light stays on.

4 Continue to install the software.

Use the Wi-Fi Networks

Before starting, you will need to know the network name (SSID) of your wireless network and the network key if it is encrypted. This information was set when the access point (or wireless router) was installed. If you do not know about your wireless environment, please ask the person who set up your network.

1 Choose one of the following to start.
- Press the **Menu** button on the control panel. Select **Network** > **Wi-Fi** > **Wi-Fi Settings**.
- Press the Wireless button , access to the Wi-Fi menu.

2 Press **OK** to select the setup method you want.
- **Wizard (recommended)**: In this mode, the setup is automatic. The machine will display a list of available networks from which to choose. After a network is chosen then printer will prompt for the corresponding security key.
- **Custom**: In this mode, users can give or edit manually their own SSID, or choose the security option in detail.

3 Follow the instructions to set up the wireless network.

Setup using Windows

If you use a Windows computer, you can set up the connection using USB cable or access point.

Setup via USB cable

You can set up the wireless connection using USB cable.

Items to prepare

- Access point
- Network-connected computer
- You need to download software packages from the HP website to install the printer software.
  For HP's all-inclusive help for the printer, go to support.hp.com.
- A machine installed with a wireless network interface
- USB cable

1 Check whether the USB cable is connected to the machine.

2 Turn on your computer, access point, and machine.

3 Download printer driver software from the HP website. (support.hp.com)

4 Unzip the driver package and run the driver installer.

5 Review and accept the installation agreements in the installation window. Then, click **Next**.

6 Select Wireless on the Printer Connection Type screen. Then, click **Next**.

7 On the A**re you setting up your printer for the first time?** screen, select **Yes, I will set up my printer's wireless network**. Then, click **Next**.
If your printer is already connected on the network, select **No, my printer is already connected to my network**.

8 Select **Using a USB cable** on the **Select the Wireless Setup Method** screen. Then, click **Next**.

9 After searching, the window shows the wireless network devices. Select the name (SSID) of the access point you want to use and click **Next**.

10 When the wireless network set up is completed, disconnect the USB cable between the computer and machine. Click **Next**.

11 Select the components to be installed.

12 Follow the instructions in the installation window.

Access point without a USB cable

If you do not a USB cable, you can set up the wireless connection using access point.

Items to prepare

- Wi-Fi-enabled PC running Windows 7 or higher and an access point (router)
- You need to download software packages from the HP website to install the printer software.
  For HP's all-inclusive help for the printer, go to support.hp.com.
- A machine installed with a wireless network interface

1 Turn on your computer, access point, and machine.

2 Download printer driver software from the HP website. (support.hp.com)

3 Unzip the driver package and run the driver installer.

4 Review and accept the installation agreements in the installation window. Then, click **Next**.

5 Select Wireless on the Printer Connection Type screen. Then, click **Next**.

6 On the **Are you setting up your printer for the first time?** screen, select **Yes, I will set up my printer's wireless network**. Then, click **Next**.
If your printer is already connected on the network, select **No, my printer is already connected to my network**.

7 Select Using a direct wireless connection on the Select the Wireless Setup Method screen. Then, click **Next**.

If the wireless setup fails when using the 'Using a direct wireless connection' method, select the ' Using a USB Cable' method.

---

8 When the wireless network set up is completed, click **Next**.

9 Follow the instructions in the installation window.

Setup using a network cable

Your machine is a network compatible machine. To enable your machine to work with your network, you will need to perform some configuration procedures.

See your network administrator, or the person that set up your wireless network, for information about your network configuration.

Items to prepare

- Access point
- Network-connected computer
- You need to download software packages from the HP website to install the printer software.
  For HP's all-inclusive help for the printer, go to support.hp.com.
- A machine installed with a wireless network interface
- Network cable

Print a network configuration report

- You can identify the network settings of your machine by printing a network configuration report.
  (see "Report" on page 88).

Configure the machine's wireless network

Before starting you will need to know the network name (SSID) of your wireless network and the network key if it is encrypted. This information was set when the access point (or wireless router) was installed. If you do not know about your wireless environment, please ask the person who set up your network.

To configure wireless parameters, you can use HP Embedded Web Server.

Setup using a network cable from HP Embedded Web Server

Before starting wireless parameter configuration, check the cable connection status.

1 Check whether or not the network cable is connected to the machine. If not, connect the machine with a standard network cable.

2 Start a web browser such as Internet Explorer, Safari, or Firefox and enter your machine's new IP address in the browser window.
For example:



3 Click **Login** on the upper right of the HP Embedded Web Server website.

4 If it's your first time logging in to HP Embedded Web Server, you need to log in as an administrator. Type in default **ID (admin)**. Default password is none. We recommend you to set the default password for security reasons. You can change your ID and password from **Security** > **System Security** > **System Administrator**.

5 When the **HP Embedded Web Server** window opens, click **Network Settings**.

6 Click **Wi-Fi** > **Wizard**.

7 Select the one **Network Name(SSID)** in the list.

8 Click **Next**.
If the wireless security setting window appears, enter the registered password (network password) and click **Next**.

9 The confirmation window appears, please check your wireless setup. If the setup is right, click **Apply**.

Set the Wi-Fi Direct for mobile printing

Wi-Fi Direct is a secure and easy-to-use peer-to-peer connection between a Wi-Fi Direct-enabled printer and mobile device.

With Wi-Fi Direct, you can connect your printer to a Wi-Fi Direct network while concurrently connecting to an access point. You can also use a wired network and a Wi-Fi Direct network simultaneously so multiple users can access and print documents both from Wi-Fi Direct and from a wired network.

- You cannot connect your mobile device to the internet through the printer's Wi-Fi Direct.
- The supported protocol list may differ from your model, Wi-Fi Direct networks do NOT support IPv6, network filtering, IPSec, WINS, and SLP services.
- The maximum number of devices that can be connected via Wi-Fi Direct is 4.

Set up Wi-Fi Direct

You can enable Wi-Fi Direct feature by one of the following methods.

From the machine

1 Press the **Menu** button on the control panel and select **Network** > **Wi-Fi** > **Wi-Fi Direct** from the display screen.

2 Tap **Wi-Fi Direct** and enable **Wi-Fi Direct**.

From the network-connected computer

If your printer is using a network cable or a wireless access point, you can enable and configure Wi-Fi Direct from HP Embedded Web Server.

1 Access HP Embedded Web Server and select **Settings** > **Network Settings** > **Wi-Fi** > **Wi-Fi Direct™**.

2 Enable **Wi-Fi Direct™** and set other options.

Set up the mobile device

After setting up Wi-Fi Direct from the printer, you need to set up your mobile device.

- After setting up Wi-Fi Direct from the printer, refer to the user manual of the mobile device you are using to set its Wi-Fi Direct.
- After setting up Wi-Fi Direct, you need to download the mobile printing application (For example: HP Smart) to print from your smartphone.



- When you have found the printer you want to connect to from your mobile device, select the printer and the printer's LED will blink. Press the Wireless button on the printer and it will be connected to your mobile device. If you don't have Wireless button, press the option you want when the Wi-Fi connection confirmed window appears from the display screen and it will be connected to your mobile device.
- If your mobile device does not support Wi-Fi Direct, you need to enter the "Network Key" of a printer instead of pushing the Wireless button.

HP Smart app

HP Smart helps you to set up, scan, print, share, and manage your HP printer. You can share documents and images through email, text messages, and popular cloud and social media services (such as iCloud, Google Drive, Dropbox, and Facebook). You can also set up new HP printers, as well as monitor and order supplies.

- The HP Smart app might not be available in all languages. Some features might not be available with all printer models.
- If HP Smart app does not work well on your Windows devices, update the printer firmware and try again.

- **To install the HP Smart app:** To install the app on your device, go to 123.hp.com and follow the onscreen instructions to access your device's app store.
- **Connect to printer:** Make sure that the printer is turned on and is connected to the same network as your device. Then HP Smart will automatically detect the printer.

For more information about using HP Smart for printing, scanning, accessing printer features, and troubleshooting issues, go to:

- **iOS/Android:** www.hp.com/go/hpsmart-help

Connect using the HP Smart app

You can use the HP Smart app to set up the printer on your wireless network.

1 Make sure your mobile device is connected to your wireless network and you know the password of your wireless network.

2 Check if the printer is in the Auto Wireless Connect (AWC) setup mode.
If this is the first time you set up the printer, the printer is ready for setup after the printer is powered on. It keeps searching for the HP Smart app to connect within 2 hours, and then stops searching.
To put the control panel to the Auto Wireless Connect (AWC) setup mode, press and hold the Wireless button for at least 20 seconds until the Status and the Power LED start blinking together.

3 **iOS/Android**: Open the HP Smart app. On the home screen, tap the Plus icon and then select the printer. If the printer is not in the list, tap **Add a new printer**. Follow the onscreen instructions to add the printer to your network.

Change the default printer setting from the HP Smart app

You can set the printer setting from the HP Smart app.

1. Open the HP Smart app.
2. Tap the Plus icon if you need to change to a different printer, or add a new printer.
3. Tap **Printer Settings**.
4. Select the option you want, and then change the setting.

Print using the HP Smart app

Using the HP Smart app, you can print from an Android or iOS device.

1. Open the HP Smart app.
2. Tap the Plus icon if you need to change to a different printer, or add a new printer.
3. Tap a printing option.
4. Select the photo or document you want to print.
5. Tap **Print**.

Scan using the HP Smart app

You can use the HP Smart app to scan documents or photos using your device camera. HP Smart includes editing tools that allow you to adjust the scanned image before saving or sharing. You can print, save your scans locally or in cloud storage, and share them via email, SMS, Facebook, Instagram, etc.

1. Open the HP Smart app.
2. Tap the Plus icon if you need to change to a different printer, or add a new printer.
3. Select a scan option, and then tap **Camera**. The built-in camera will open. Scan your photo or document using the camera.
4. When you have finished adjusting the scanned document or photo, save, share, or print it.

Get help from the HP Smart app

The HP Smart app provides alerts for printer issues (jams and other problems), links to help content, and options to contact support for additional assistance.

Printing

This chapter provides information about the overall print options.



You need to download software packages from the HP website to install the printer software. For HP's all-inclusive help for the printer, go to support.hp.com.

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- Cancel a print job 63
- Open printing preferences 64
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- Use help 66
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Basic print

Learn how to print from your computer.

Before printing, check whether your computer's OS support the software (see "Features by model" on page 8).

Printing

The following Printing Preferences window is for Notepad in Windows. Your **Printing Preferences** window may differ, depending on your operating system or the application you are using.

1 Open the document you want to print.

2 Select **Print** from the **File** menu.

3 Select your machine from the **Select Printer** list.

4 The basic print settings including the number of copies and print range are selected within the **Print** window.

To take advantage of the advanced printing features, click **Properties** or **Preferences** from the **Print** window (see "Open printing preferences" on page 64).

5 To start the print job, click **OK** or **Print** in the **Print** window.

Cancel a print job

Learn how to cancel a print job from your computer or the control panel.

If the print job is waiting in the print queue or print spooler, cancel the job as follows:

- You can access this window by simply double-clicking the machine icon () in the Windows task bar.
- You can also cancel the current job by pressing ⊗ (**Cancel**) on the control panel.

Open printing preferences

If you want to know more about printer features, open the Printing Preferences window.

- The **Printing Preferences** window that appears in this user's guide may differ depending on the machine in use. However, the composition of the **Printing Preferences** window is similar.
- When you select an option in **Printing Preferences**, you may see a warning mark or . An mark means you can select that certain option but it is not recommended, and an mark means you cannot select that option due to the machine's setting or environment.

1 Open the document you want to print.

2 Select **Print** from the file menu. The **Print** window appears.

3 Select your machine from the **Select Printer**.

4 Click **Properties** or **Preferences**. Click or tap the tabs in the print driver to configure the available options.

Use a favorite setting

The **Favorites** option, which is visible on each preferences tab except for the HP tab, allows you to save the current preferences for future use.

To save a **Favorites** item, follow these steps:

1. Change the settings as needed on each tab.
2. Enter a name for the item in the **Favorites** input box.
3. Click **Save**.
4. Enter name and description, and then select the desired icon.
5. Click **OK**. When you save **Favorites**, all current driver settings are saved.



To use a saved setting, select it in the Favorites tab. The machine is now set to print according to the settings you have selected. To delete saved settings, select it in the Favorites tab and click Delete.

Use help

Click the option you want to know on the Printing Preferences window and press **F1** on your keyboard.

Printing features

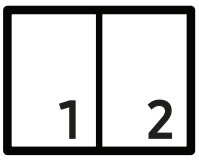
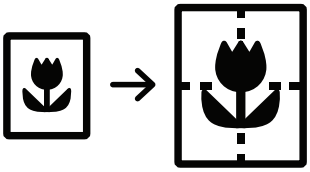
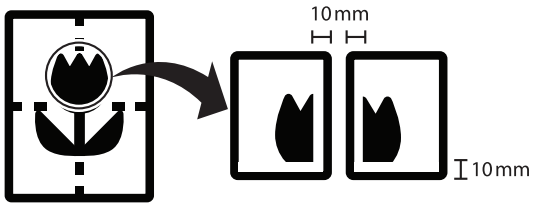
You can use advanced printing features when using your machine.

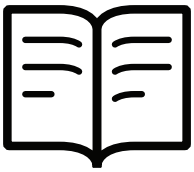
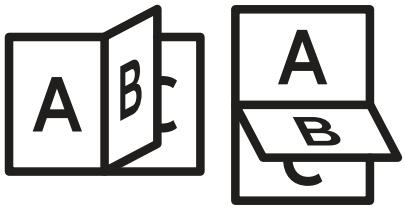
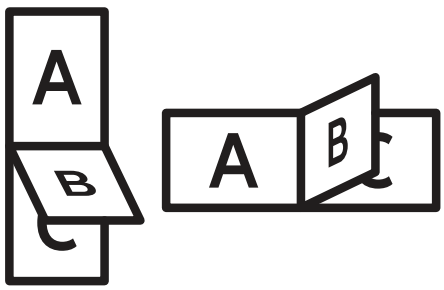
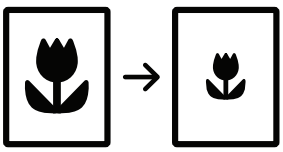
- This feature may not be available depending on model or optional goods (see "Features by model" on page 8).
- You need to download software packages from the HP website to install the printer software. For HP's all-inclusive help for the printer, go to support.hp.com.

Understand special printer features

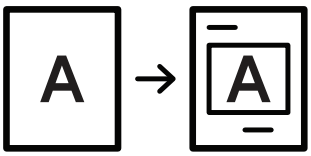
To take advantage of the printer features provided by your printer driver, click Properties or Preferences in the application's Print window to change the print settings. The machine name that appears in the printer properties window may differ depending on the machine in use.

- Some menus may not appear on the display depending on options or models. If so, it is not applicable to your machine.
- Select the Help menu or click the Help button ? from the window or press F1 on your keyboard and click on any option you want to know about (see "Use help" on page 66).

Item	Description
Multiple Pages per Side 	Selects the number of pages to print on a single sheet of paper. To print more than one page per sheet, the pages will be reduced in size and arranged in the order you specify. You can print up to 16 pages on one sheet.
Poster Printing 	Prints a single-page document onto 4 (Poster 2x2), 9 (Poster 3x3), or 16 (Poster 4x4) sheets of paper, for the purpose of pasting the sheets together to form one poster-size document. Select the **Poster Overlap** value. Specify **Poster Overlap** in millimeters or inches by selecting the radio button on the upper right of **Basic** tab to make it easier to paste the sheets together. 

Item	Description
Booklet Printing 	Prints your document on both sides of a sheet of paper and arranges the pages so that the paper can be folded in half after printing to produce a booklet. • The Booklet Printing option is not available for all paper sizes. Select the available paper Size option under the Paper tab to see what paper sizes are available. • If you select an unavailable paper size, this option can be automatically canceled. Select only available paper (paper without ⚠ or ⊗ mark).
Double-sided Printing	Print on both sides of a sheet of paper (duplex). Before printing, decide how you want your document oriented. Skip Blank Pages feature does not work when you select the duplex option. • **None**: Disables this feature. • **Long Edge**: This option is the conventional layout used in book binding.  • **Short Edge**: This option is the conventional layout used in calendars. 
Paper Options 	Changes the size of a document to appear larger or smaller on the printed page by entering in a percentage by which to enlarge or decrease the document.

Item	Description
Watermark 	The watermark option allows you to print text over an existing document. For example, you use it when you want to have large gray letters reading **"DRAFT"** or **"CONFIDENTIAL"** printed diagonally across the first page or all pages of a document.
Watermark **(Creating a watermark)**	1. To change the print settings from your software application, access Printing Preferences (see "Open printing preferences" on page 64). 2. From the **Advanced** tab, select **Edit...** from the **Watermark** drop-down list. 3. Enter a text message in the **Watermark Message** box. You can enter up to 256 characters. When the **First Page Only** box is checked, the watermark prints on the first page only. 4. Select watermark options. You can select the font name, style, size, and shade from the **Font Attributes** section, as well as set the angle of the watermark from the **Watermark Alignment and Angle** section. 5. Click **Add** to add a new watermark to the **Current Watermarks** list. 6. When you finish editing, click **OK** or **Print** until you exit the **Print** window.
Watermark **(Editing a watermark)**	1. To change the print settings from your software application, access **Printing Preferences** (see "Open printing preferences" on page 64). 2. Click the **Advanced** tab, select **Edit...** from the **Watermark** drop-down list. 3. Select the watermark you want to edit from the **Current Watermarks** list and change the watermark message and options. 4. Click **Update** to save the changes. 5. Click **OK** or Print until you exit the Print window.
Watermark **(Deleting a watermark)**	1. To change the print settings from your software application, access **Printing Preferences**. 2. Click the **Advanced** tab, select **Edit** from the **Watermark** drop-down list. The **Edit Watermarks** window appears. 3. Select the watermark you want to delete from the **Current Watermarks** list and click **Delete**. 4. Click **OK** or **Print** until you exit the **Print** window.

Item	Description
Overlay 	An overlay is text and/or images stored in the computer hard disk drive (HDD) as a special file format that can be printed on any document. Overlays are often used to take the place of letterhead paper. Rather than using preprinted letterhead, you can create an overlay containing exactly the same information that is currently on your letterhead. To print a letter with your company's letterhead, you do not need to load preprinted letterhead paper in the machine: just print the letterhead overlay on your document. To use a page overlay, you must create a new page overlay containing your logo or image. • The overlay document size must be the same as the document you print with the overlay. Do not create an overlay with a watermark. • The resolution of the overlay document must be the same as that of the document you will print with the overlay.
Overlay **(Creating a new page overlay)**	1. Create or open a document containing text or an image for use in a new page overlay. Position the exactly as you wish them to appear when printed as an overlay. 2. To save the document as an overlay, access **Printing Preferences**. 3. Click the **Advanced** tab, and select **Create** from the **Overlay** drop-down list. 4. In the **Save As** window, type a name up to eight characters in the **File name** box. Select the destination path, if necessary (The default is C:\Formover). 5. Click **Save**. 6. Click **OK** or **Print** until you exit the **Print** window. When a confirming message window appears, click **Yes**. 7. The file is not printed. Instead, it is stored on your computer hard disk drive.

Item	Description
Overlay **(Using a page overlay)**	1. Create or open the document you want to print. 2. To change the print settings from your software application, access **Printing Preferences**. 3. Click **Advanced** tab. 4. Select the **Print Overlay** from the **Overlay** drop-down list. 5. If you have stored the overlay file you want to use in an external source, you can also load the file when you access the Open window. After you select the file, click **Open**. The file appears in the **Overlay List** box and is available for printing. Select the overlay from the **Overlay List** box. 6. If necessary, check **Confirm Page Overlay When Printing** box. If this box is checked, a message window appears each time you submit a document for printing, asking you to confirm your wish to print an overlay on your document. If this box is not checked and an overlay has been selected, the overlay automatically prints with your document. 7. Click **OK** or **Print** until you exit the **Print** window. The selected overlay prints on your document.
Overlay **(Deleting a page overlay)**	1. In the **Printing Preferences** window, click the **Advanced** tab. 2. Select **Print Overlay** from the **Overlay** drop-down list. 3. Select the overlay you want to delete from the **Overlay List** box. 4. Click **Delete**. 5. When a confirming message window appears, click **Yes**. 6. Click **OK** or **Print** until you exit the **Print** window. You can delete page overlays that you no longer use.

Copy

Make copies with the printer, learn how to copy an ID card, and change the settings for each copy.

- Basic copy 73
- Change the settings for each copy 74
- Copy ID card 76

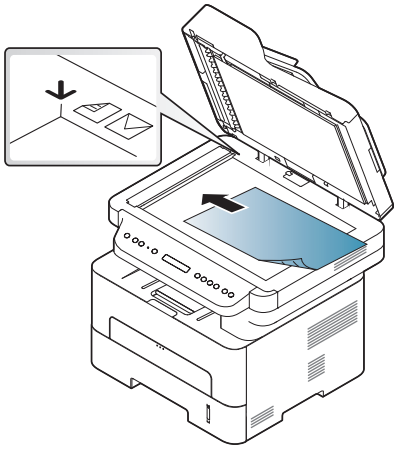
Basic copy

Learn how to make a copy.

- Accessing menus may differ from model to model (see "Menu overview and basic setup" on page 24 or "Control panel overview" on page 21).
- Depending on models or options, some menus may not be supported (see "Features by model" on page 8).

1 Select Menu > **Copy Feature** on the control panel.

2 Place a single document (see "Load originals" on page 42).



3 If you want to customize the copy settings including **Reduce/Enlarge, Darkness, Original**, and more by using the control panel buttons.

4 Enter the number of copies using the arrow or number keypad, if necessary.

5 Press **Start** .

If you need to cancel the copying job during the operation, press **Cancel** and the copying will stop.

Change the settings for each copy

Your machine provides default settings for copying so that you can quickly and easily make a copy.

However, if you want to change the options for each copy, use the copy function buttons on the control panel.

- If you press **Cancel** while setting the copy options, all of the options you have set for the current copy job will be canceled and returned to their default status. Or, they will automatically return to their default status after the machine completes the copy in progress.
- Accessing menus may differ from model to model (see "Menu overview" on page 25).
- It may be necessary to press **OK** to navigate to lower-level menus for some models.

Darkness

If you have an original containing faint marking and dark images, you can adjust the brightness to make a copy that is easier to read.

1 Select the **Darkness** button on the control panel.

2 Select the option you want and press **OK**.
For example, the **Light+5** being the lightest, and the **Dark+5** being the darkest.

3 Press **Cancel** to return to ready mode.

Original Type

The original setting is used to improve the copy quality by selecting the document for the current copy job.

1 Select **Menu** > **Copy Feature** > **Original Type** on the control panel.

2 Select the option you want and press **OK**.

- **Text**: Use for originals containing mostly text.
- **Text/Photo**: Use for originals with mixed text and photographs.

If texts in the printout is blurry, select Text to get the clear texts.

- **Photo**: Use when the originals are photographs.

3 Press **Cancel** to return to ready mode.

Reduced or enlarged copy

You can reduce or enlarge the size of a copied image from 25% to 400% when you copy original documents from the scanner glass.

- This feature may not be available depending on model or optional goods (see "Features by model" on page 8).
- If the machine set to Eco mode, reduce and enlarge features are not available.

To select from the predefined copy sizes

1. Select **Menu** > **Copy Feature** > **Reduce/Enlarge** on the control panel.
2. Select the option you want and press **OK**.
3. Press **Cancel** to return to ready mode.

To scale the copy by directly entering the scale rate

1. Select **Menu** > **Copy Feature** > **Original Type** on the control panel.
2. Enter the copy size you want using the numeric keypad.
3. Press **OK** to save the selection.
4. Press **Cancel** to return to ready mode.

When you make a reduced copy, black lines may appear at the bottom of your copy.

Copy ID card

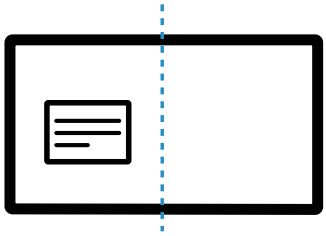
Your machine can print 2-sided originals on one sheet.

The machine prints one side of the original on the upper half of the paper and the other side on the lower half without reducing the size of the original. This feature is helpful for copying a small-sized item such as business card.

- The original must be placed on the scanner glass to use this feature.
- For better image quality, Select **Menu** > **Copy Feature** > **Original Type** > **Photo**.

1 Press **ID Copy** on the control panel.

2 Place the front side of an original facing down on the center of first half of the scanner glass as shown. Then, close the scanner lid.

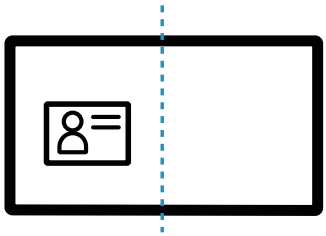


3 **Place Front Side and Press [Start]** appears on the display.

4 Press **Start** .
Your machine begins scanning the front side and shows **Place Back Side and Press [Start]**.

5 Turn the original over and place it on the center of first half of scanner glass as shown. Then, close the scanner lid.

6 Press **Start** .



- If you do not press the **Start** button , only the front side will be copied.
- If the original is larger than the printable area, some portions may not be printed.

Scan

This chapter provides information about the overall print options.

- The maximum resolution that can be achieved depends upon various factors, including computer speed, available disk space, memory, the size of the image being scanned, and bit depth settings. Thus, depending on your system and what you are scanning, you may not be able to scan at certain resolutions, especially using enhanced dpi.
- You need to download software packages from the HP website to install the printer software. For HP's all-inclusive help for the printer, go to support.hp.com.

- Basic scanning method 78
- Scan from HP MFP Scan program 79
- Scan from image editing program 80
- Scan using the WIA driver 81

Basic scanning method

You can scan the originals with your machine via a USB cable or the network.



This feature may not be available depending on model or optional goods (see "Features by model" on page 8).

The following methodologies can be used for scanning your documents:

- **HP MFP Scan**: You can use this program to scan images or documents.
- **Scan to WSD**: Scans the originals and saves the scanned data on a connected computer if the computer supports the Web Service for Device (WSD) feature.
- **TWAIN**: TWAIN is the one of the preset imaging applications. Scanning an image launches the selected application, enabling you to control the scanning process. This feature can be used via the local connection or the network connection.
- **WIA**: WIA stands for Windows Images Acquisition. To use this feature, your computer must be connected directly with the machine via a USB cable.

Scan from HP MFP Scan program

HP MFP Scan is an application to help users scan, compile, and save documents in multiple formats, including .epub format. Whether you're a student needing to organize research from the library or a stay-at-home mom sharing scanned pictures from last year's birthday party, HP MFP Scan will provide you with the necessary tools.



Click the Help button from the window, and then click on any option you want to know about.

1 Place a single document face down on the document glass (see "Load originals" on page 42).

2 Make sure that the machine is connected to the network and powered on. Also, your machine's IP address should have been set (see "Setting IP address" on page 46).

3 Run **HP MFP Scan**.

4 Click **Advanced Scan** from the Home screen.

5 Select the type of scanning or a favorite and then make adjustments to the image.

6 Click **Scan** to scan a final image or Prescan to get another preview image.

7 Press **Save** to save the scanned image.

Scan from image editing program

You can scan and import documents in the image editing software such as Adobe Photoshop, if the software is TWAIN-compliant.

Follow the steps below to scan with TWAIN-compliant software:

1. Make sure that the machine is connected to your computer and powered on.
2. Place a single document face down on the document glass (see "Load originals" on page 42).
3. Open an application, such as Adobe Photoshop.
4. Click **File** > **Import**, and select the scanner device.
5. Set the scan options.
6. Scan and save your scanned image.

Scan using the WIA driver

Your machine supports the Windows Image Acquisition (WIA) driver for scanning images. WIA is one of the standard components provided by Microsoft Windows 7 and works with digital cameras and scanners. Unlike the TWAIN driver, the WIA driver allows you to scan and easily adjust images without using additional software:

1. Make sure that the machine is connected to your computer and powered on.
2. Place a single document face down on the document glass (see "Load originals" on page 42).
3. Click **Start** > **Control Panel** > **Hardware and Sound** > Devices and Printers.
4. Right-click on device driver icon in **Printers and Faxes** > **Start Scan**.
5. New Scan application appears.
6. Choose your scanning preferences and click **Preview** to see how your preferences affect the picture.
7. Scan and save your scanned image.

Useful setting menus

This chapter explains how to browse the current status of your machine, and the method of setting for advanced machine setup.

- Copy settings 83
- System setup settings 86
- Network setup 89

Copy settings

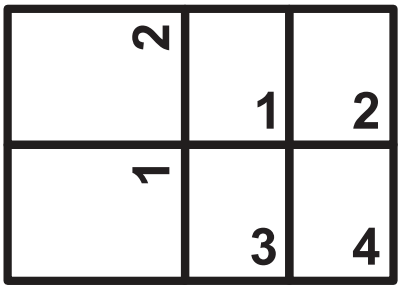
Learn copy feature and copy setup options.

Copy feature

Some menus may not appear in the display depending on options or models. If so, it is not applicable to your machine (see "Menu overview" on page 25).

To change the menu options:

In copy mode, press **Menu** > **Copy Feature** on the control panel.

Item	Description
Original	Sets the image size.
Reduce/Enlarge	Reduces or enlarges the size of a copied image.
Darkness	Adjusts the brightness level to make a copy that is easier to read, when the original contains faint markings and dark images.
Original Type	Improves the copy quality by selecting the document type for the current copy job.
Collation	Set the machine to sort the copy job. For example, if you make 2 copies of a 3 page original, one complete 3 page document will print followed by a second complete document.
Layout	Adjusts the layout format such as Normal, ID copy, 2/4-Up.
Layout > 2-Up or Layout > 4-Up	Reduces the size of the original images and prints 2 or 4 pages onto one sheet of paper. 
Layout > ID Copy	prints one side of the original on the upper half of the paper and the other side on the lower half without reducing the size of the original. This feature is helpful for copying a small-sized item such as business card.

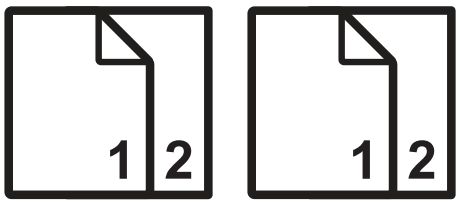
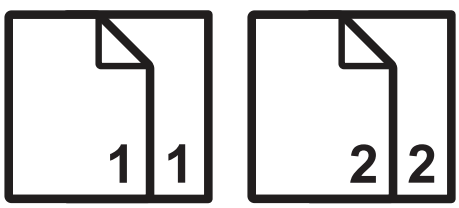
Item	Description
Adjust Bkgd.	Prints an image without its background. This copy feature removes the background color and can be helpful when copying an original containing color in the background, such as a newspaper or a catalog. • **Off**: Does not use this feature. • **Auto**: Optimizes the background. • **Enhance Lev.1~2**: The higher the number is, the more vivid the background is. • **Erase Lev.1~4**: The higher the number is, the lighter the background is.

Copy setup

Some menus may not appear in the display depending on options or models. If so, it is not applicable to your machine (see "Machine overview" on page 17).

To change the menu options:

In copy mode, press **Menu** (≡) > **Copy Feature** on the control panel.

Item	Description
Change Default	Resets the value or setting to the printer's out-of-box state.
Change Default > Original Size	Improves the copy quality by selecting the document size for the current copy job.
Change Default > Copies	You can enter the number of copies using the number keypad.
Change Default > Collation	Set the machine to sort the copy job. For example, if you make 2 copies of a 3 page original, one complete 3 page document will print followed by a second complete document. • **On**: Prints output in sets to match the sequence of originals.  • **Off**: Prints output sorted into stacks of individual pages. 

Item	Description
Change Default > Reduce/ Enlarge	Reduces or enlarges the size of a copied image.
Change Default > Darkness	Adjusts the brightness level to make a copy that is easier to read, when the original contains faint markings and dark images.
Change Default > Original Type	Improves the copy quality by selecting the document type for the current copy job.

System setup settings

Learn machine setup, paper setup, sound volume, report, or maintenance options.

Machine setup

Some menus may not appear in the display depending on options or models. If so, it is not applicable to your machine (see "Menu overview" on page 25).

To change the menu options:

Press **Menu** > **System Setup** > **Machine Setup** on the control panel.

Item	Description
Language	Sets the language of the text that appears on the control panel display.
Power Save	Sets how long the machine waits before going to power save mode. When the machine does not receive data for an extended period of time, power consumption is automatically lowered.
Wakeup Event	You can set the condition to wake up from power-save mode. • **On**: The machine wakes up from the power save mode on the following cases: – Pressing any button – Opening or closing the paper tray • **Off**: The machine wakes up from power save mode only when a button on the control panel is pressed.
System Timeout	Sets the time that the machine remembers previously used copy settings. After the timeout, the machine restores the default copy settings.
Job Timeout	Sets the length of time the printer waits before printing the last page of a print job that does not end with a command to print the page.
Altitude Adj.	Optimize print quality according to the machine's altitude.

Item	Description
Auto Continue	Determine whether or not the machine continues printing when it detects the paper does not match the paper settings. • **Off**: If a paper mismatch occurs, the machine waits until you insert the correct paper. • **After 0 Sec**: Even though a paper mismatch occurs, the machine continues printing. • **After 30 Sec**: If a paper mismatch occurs, an error message will display. The machine waits for about 30 second, then automatically clear the message and continue printing.
Paper Substit.	Automatically substitutes the printer driver's paper size to prevent the paper mismatch between Letter and A4. For example, if you have A4 paper in the tray but you set the paper size to Letter in the printer driver, the machine prints on A4 paper and vice versa.
Toner Save	Activating this mode extends the life of your toner cartridge and reduces your cost per page beyond what one would experience in the normal mode, but it reduces print quality.

Paper setup

Some menus may not appear in the display depending on options or models. If so, it is not applicable to your machine (see "Menu overview" on page 25).

To change the menu options:

Press **Menu** > **System Setup** > **Paper Setup** on the control panel.

Item	Description
Paper Size	Sets the paper size as A4, Letter, or other paper sizes, according to your requirements.
Paper Type	Chooses the type of the paper for each tray.
Paper Source	Selects from which tray the paper is used.
Margin	Sets the margins for the document.
Tray Confirm.	Activates the tray confirmation message. If you open and close a tray, a window opens asking you confirm the paper size and type. This message can be turned off if found to be annoying.

Report

Some menus may not appear in the display depending on options or models. If so, it is not applicable to your machine (see "Menu overview" on page 25).

To change the menu options:

Press **Menu** ☰ > **System Setup** > **Report** on the control panel.

Item	Description
Configuration	Prints a report on the machine's overall configuration.
Supplies Info.	Prints supplies' information page.
PCL Font List	Prints the PCL font list.
Network Conf.	Prints information on your machine's network connection and configuration.
Usage Counter	Prints a usage page. The usage page contains the total number of pages printed.

Maintenance

Some menus may not appear in the display depending on options or models. If so, it is not applicable to your machine (see "Menu overview" on page 25).

To change the menu options:

Press **Menu** ☰ > **System Setup** > **Maintenance** on the control panel.

Item	Description
CLR Empty Msg	When toner cartridge is empty, this option appears. You can clear the empty message.
Supplies Life	Shows the supply life indicators.
Image Mgr.	Allows you to adjust the color setting such as contrast level, color registration, color density, etc. **Custom Color**: adjusts contrast, color by color. • **Default**: optimizes colors automatically. • **Print Density**: allows you to manually adjust the color contrast for each cartridge. It is recommended to use the Default setting for best color quality.
Serial Number	Shows the machine's serial number. When you call for service or register as a user on the HP website, you can find this.
TonerLow Alert	Customizes the level to alert toner low or toner empty.
ImgU.Low Alert	Allows you to set the alarm for when the imaging unit is low.

Network setup

Learn network setup options.

Some menus may not appear in the display depending on options or models. If so, it is not applicable to your machine (see "Menu overview" on page 25).

To change the menu options:

Press **Menu** > **Network** on the control panel.

Item	Description
TCP/IP (IPv4)	Selects the appropriate protocol and configure parameters to use the network environment. There are many of parameters to be set. If you are not sure, leave as is, or consult the network administrator.
TCP/IP (IPv6)	Selects this option to use the network environment through IPv6.
Wi-Fi	Selects this option to use the Wi-Fi network.
Ethernet	Configure the network transmission speed and active port.
Clear Settings	Reverts the network settings to the default values. (Reboot required.)
Network Conf.	This list shows information on your machine's network connection and configuration.
Protocol Mgr.	You can activate or deactivate the protocols.

Maintenance

This chapter provides information about purchasing supplies, accessories and maintenance parts available for your machine.

- Ordering supplies 91
- Available supplies 92
- Storing the toner cartridge 93
- Redistributing toner 94
- Replacing the toner cartridge 96
- Replacing the imaging unit 99
- Monitor the supplies life 101
- Set the toner low alert 102
- Clean the machine 103

Ordering supplies

To order HP-authorized supplies, accessories, and maintenance parts, contact your local HP dealer or the retailer where you purchased your machine.

You can also visit https://store.hp.com, and then select your country/region to obtain the contact information for service.



Available accessories may differ from country to country. Contact your sales representatives to obtain the list of available supplies, and maintenance parts.

Available supplies

When supplies reach the end of their life spans, you can order the followings of supplies for your machine:

Toner

Product Name	Cartridge number	Product Number	Region	Yield	Printer compatibility
HP W1810A Black Original Laser Toner Cartridge	181A	W1810A	China, India	1,500	• MFP 323 • MFP 355
HP W1810X Black Original Laser Toner Cartridge	181X	W1810X	China, India	3,000	• MFP 323 • MFP 355
HP W1820XC Black Contract Original Laser Toner Cartridge	-	W1820XC	China(sMPS)	4,000	MFP 32330

Imaging Drum

Customer Facing Long Product Name	Selectability	Product Number	Region	Printer compatibility
HP W1816A Black Original Laser Imaging Drum	181A	W1816A	China, India	• MFP 323 • MFP 355
HP W1816AC Black Contract Original Laser Imaging Drum	-	W1816AC	China(Bidding)	MFP 351
HP W1826AC Black Contract Original Laser Imaging Drum	-	W1826AC	China(sMPS)	MFP 32330

Depending on the options, percentage of image area and job mode used, the toner cartridge's lifespan may differ.

- HP does not recommend using non-genuine HP toner cartridge such as refilled or remanufactured toner. HP cannot guarantee non-genuine HP toner cartridge's quality. Service or repair required as a result of using non-genuine HP toner cartridges will not be covered under the machine's warranty.

Storing the toner cartridge

Toner cartridge contain components that are sensitive to light, temperature and humidity. HP suggests users follow these recommendations to ensure optimal performance, highest quality, and longest life from your new HP toner cartridge.

Store this cartridge in the same environment in which the printer will be used. This should be in controlled temperature and humidity conditions. The toner cartridge should remain in its original and unopened package until installation – if original packaging is not available, cover the top opening of the cartridge with paper and store in a dark cabinet.

Opening the cartridge package prior to use dramatically shortens its useful shelf and operating life. Do not store on the floor. If the toner cartridge is removed from the printer, follow the instructions below to store the toner cartridge properly.

- Store the cartridge inside the protective bag from the original package.
- Store lying flat (not standing on end) with the same side facing up as if it were installed in the machine.
- Do not store supplies in any of the following conditions:
  - Temperature greater than 40°C (104°F).
  - Humidity range less than 20% or greater than 80%.
  - An environment with extreme changes in humidity or temperature.
  - Direct sunlight or room light.
  - Dusty places.
  - A car for a long period of time.
  - An environment where corrosive gases are present.
  - An environment with salty air.

Handling instructions

- Do not touch the surface of the photo conductive drum in the cartridge.
- Do not expose the cartridge to unnecessary vibrations or shock.
- Never manually rotate the drum, especially in the reverse direction; this can cause internal damage and toner spillage.

Toner cartridge usage

HP does not recommend or approve the use of non-HP brand toner cartridges in your printer including generic, store brand, refilled, or remanufactured toner cartridges.



HP's printer warranty does not cover damage to the machine caused by the use of a refilled, remanufactured, or non-HP brand toner cartridges.

Estimated cartridge life

Estimated cartridge life (the life of the toner cartridge yield) depends on the amount of toner that print jobs require. The actual print yield may vary depending on the print density of the pages you print on, operating environment, percentage of image area, printing interval, media type and/or media size. For example, if you print a lot of graphics, the consumption of the toner is higher and you may need to change the cartridge more often.

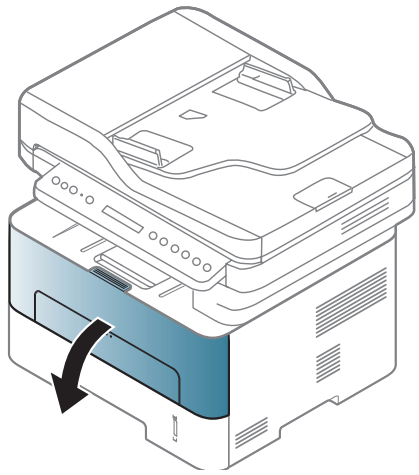
Redistributing toner

You can temporarily improve print quality by redistributing the remaining toner in the cartridge. In some cases, white streaks or light printing will still occur even after you have redistributed the toner.

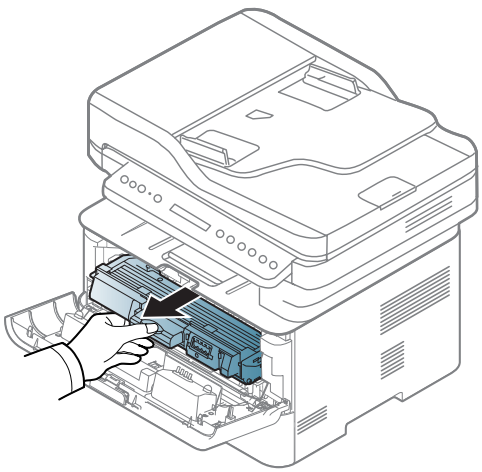
Illustrations in this user's guide may differ from your machine depending on the model and options installed. Check your machine type (see "Machine overview" on page 17).

- To prevent damage to the toner cartridge, do not expose it to light for more than a few minutes. Cover it with a piece of paper, if necessary.
- Do not touch the green area of the toner cartridge. Use the handle on the cartridge to avoid touching this area.
- If toner gets on your clothing, wipe it off with a dry cloth and wash clothing in cold water. Hot water sets toner into fabric.

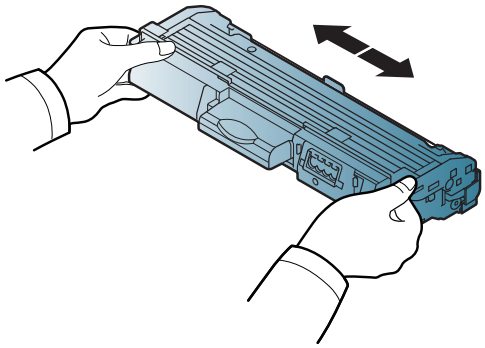
1 Open the front cover.



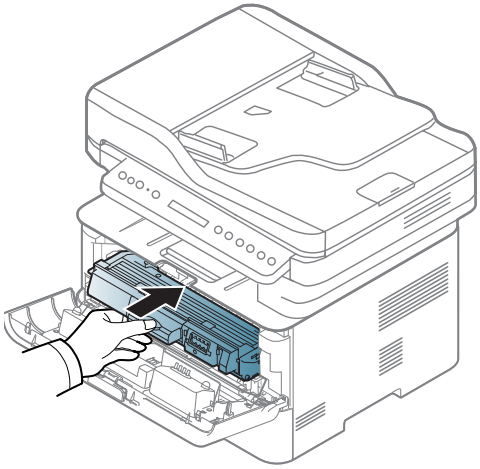
2 Pull the toner cartridge out from the machine.



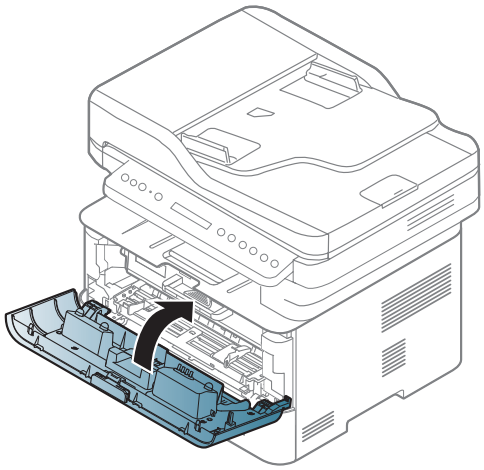
3 Pull the toner cartridge out from the machine.



4 Hold the toner cartridge by the handle and slowly insert the cartridge into the opening in the machine.



5 Close the front cover. Ensure that the cover is securely closed.



Replacing the toner cartridge

When a toner cartridge approaches the end of useful life, you can continue printing with the current cartridge until redistributing the toner no longer yields acceptable print quality.

When the toner cartridge needs to be replaced, check the type of the toner cartridge for your machine (see "Available supplies" on page 92).

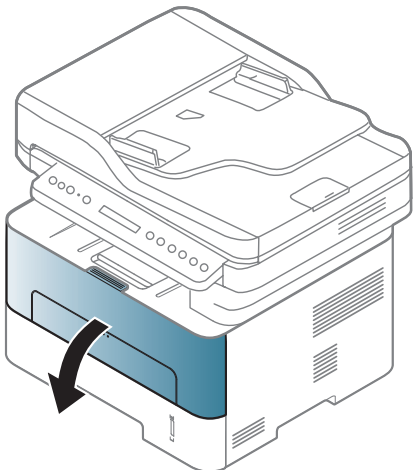
- Shake the toner cartridge thoroughly, it will increase the initial print quality.
- Illustrations in this user's guide may differ from your machine depending on the model and options installed. Check your machine type (see "Machine overview" on page 17).

- To prevent damage to the toner cartridge, do not expose it to light for more than a few minutes. Cover it with a piece of paper, if necessary.
- Do not touch the green area of the toner cartridge. Use the handle on the cartridge to avoid touching this area.
- Do not use sharp objects such as a knife or scissors to open the toner cartridge package. They might scratch the drum of the cartridge.
- If toner gets on your clothing, wipe it off with a dry cloth and wash clothing in cold water. Hot water sets toner into fabric.

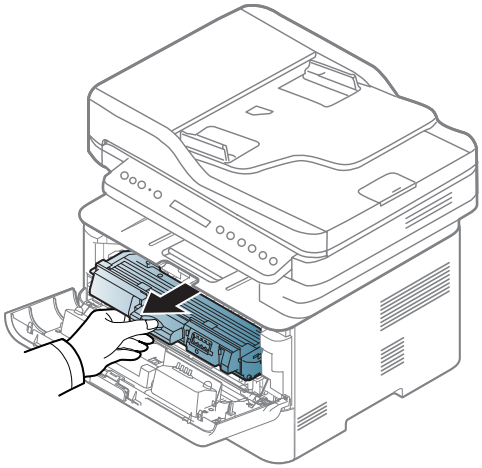
Toner cartridge

When a toner cartridge has reached the end of life, the machine will stop printing.

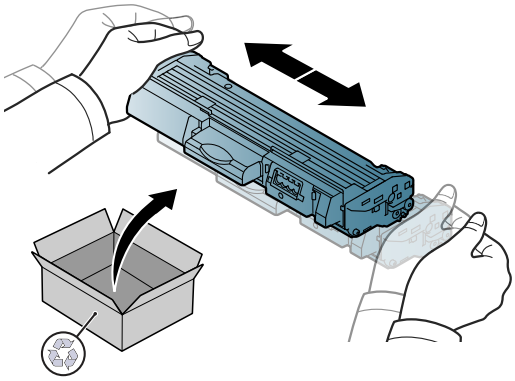
1 Open the front cover.



2 Pull the toner cartridge out from the machine.

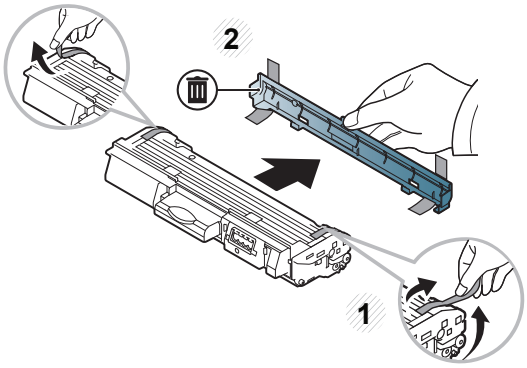


3 Remove the new toner cartridge from its bag. And, thoroughly shake side to side the cartridge five or six times to distribute the toner evenly inside the cartridge.

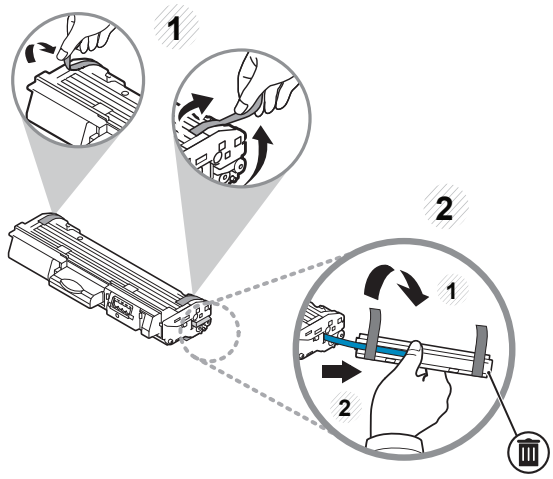


4 Remove the tapes and cap from the toner cartridge as shown below.

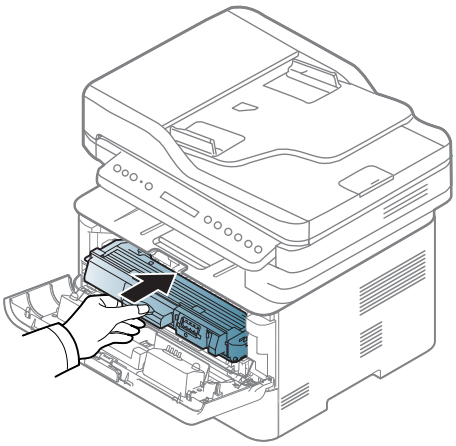
W1810A, W1810X, W1810XC



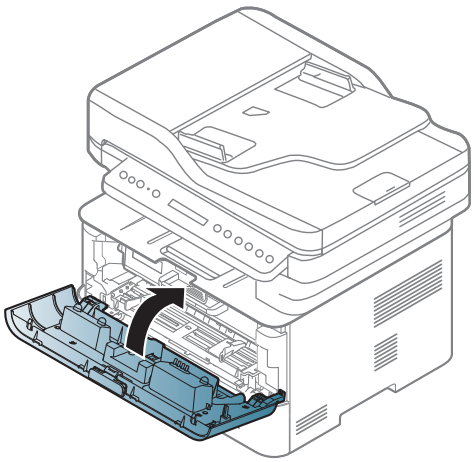
W1820XC



5 Hold the toner cartridge by the handle and slowly insert the cartridge into the opening in the machine.



6 Close the front cover.
Make sure that the cover is securely closed.



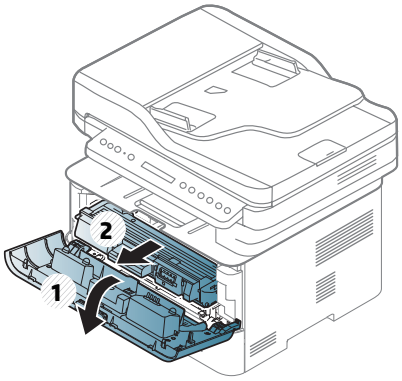
Replacing the imaging unit

When a imaging unit has reached the end of life, the machine will stop printing.

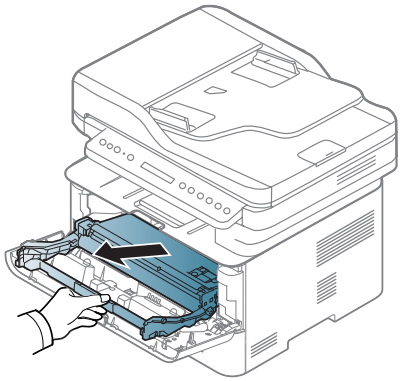
- To prevent damage to the imaging unit, do not expose it to light for more than a few minutes. Cover it with a piece of paper, if necessary.
- Do not touch the green area of the imaging unit. Use the handle on the imaging unit to avoid touching this area.
- Do not use sharp objects such as a knife or scissors to open the imaging unit package. They might scratch the imaging unit.
- If toner gets on your clothing, wipe it off with a dry cloth and wash clothing in cold water. Hot water sets toner into fabric.

Imaging unit

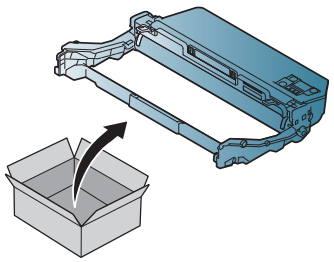
1 Open the front cover.



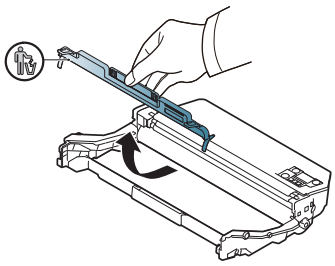
2 Pull the toner cartridge out from the machine.



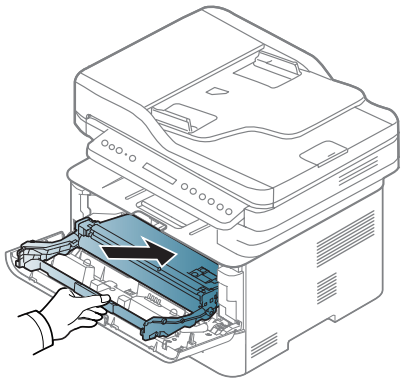
3 Pull the imaging unit out of the machine.



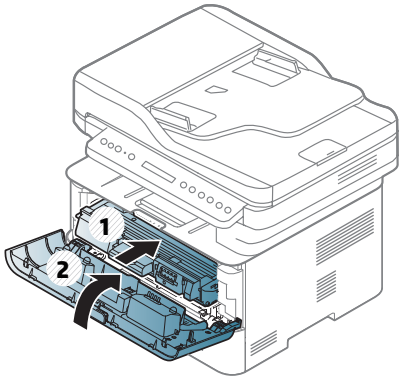
4 Remove the new imaging unit from its bag. And, remove the protecting cap from the imaging unit as shown below.



5 Hold the imaging unit by the handle and slowly insert it into the opening in the machine.



6 Hold the toner cartridge by the handle and slowly insert the cartridge into the opening in the machine.



7 Close the front cover.
Make sure that the cover is securely closed.

Monitor the supplies life

If you experience frequent paper jams or printing problems, check the number of pages the machine has printed or scanned. Replace the corresponding parts, if necessary.

1 Select **Menu** > **System Setup** > **Report** on the control panel.

2 Select the option you want and press **OK**.

- **Total**: Displays the total number of pages printed.
- **Platen Scan**: Displays the number of pages scanned by using scanner glass.
- **Supplies Info**: Prints the supply information page.

3 Press **Cancel** to return to ready mode.

Set the toner low alert

If the amount of toner in the cartridge is low, a message or LED informing the user to change the toner cartridge appears. You can set the option for whether or not this message or LED appears.

- Accessing menus may differ from model to model (see "Menu overview" on page 25).
- It may be necessary to press **OK** to navigate to lower-level menus for some models.

1 Select **Menu** > **System Setup** > **Maintenance** > **Toner Low Alert** on the control panel.

2 Select the option you want.

3 Press **OK** to save the selection.

Clean the machine

If printing quality problems occur or if you use your machine in a dusty environment, you need to clean your machine regularly to keep it in the best printing condition and use your machine longer.

- Cleaning the cabinet of the machine with cleaning materials containing large amounts of alcohol, solvents, or other strong substances can discolor or distort the cabinet.
- If your machine or the surrounding area is contaminated with toner, we recommend you use a cloth or tissue dampened with water to clean it. If you use a vacuum cleaner, toner blows in the air and might be harmful to you.

Cleaning the outside or the display screen

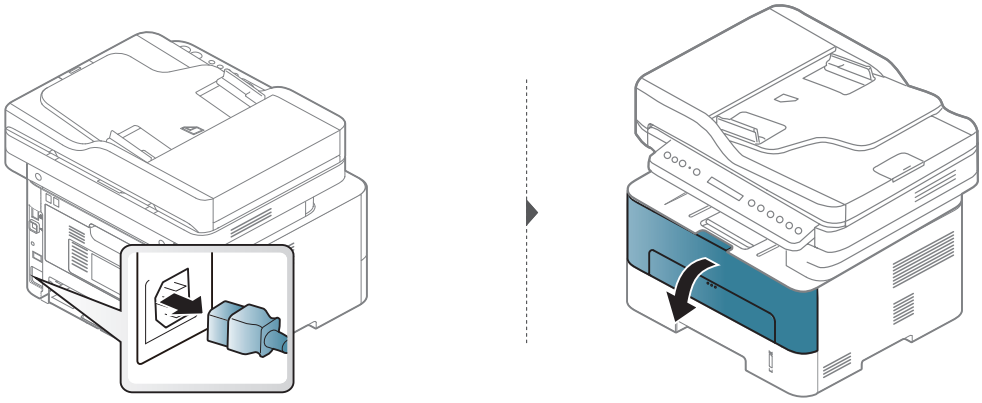
Clean the machine cabinet or the display screen with a soft, lint-free cloth. Dampen the cloth slightly with water, but be careful not to let any water drip onto or into the machine.

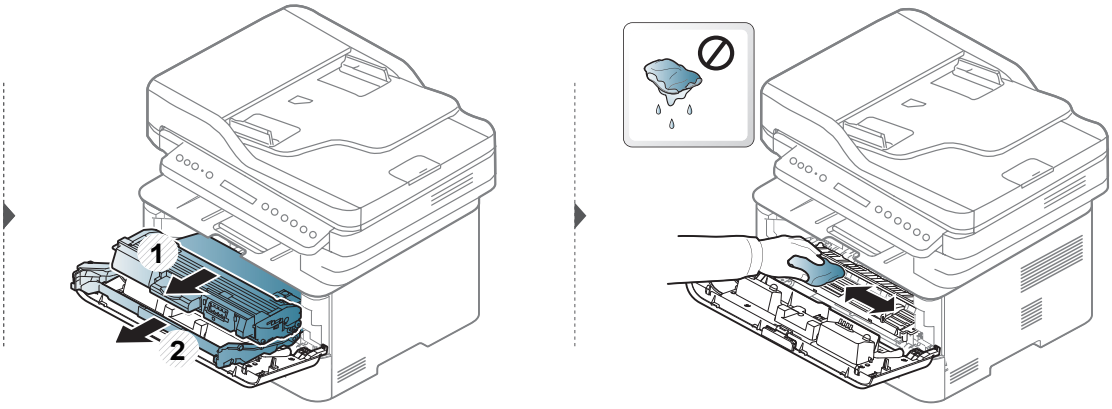
Cleaning the inside

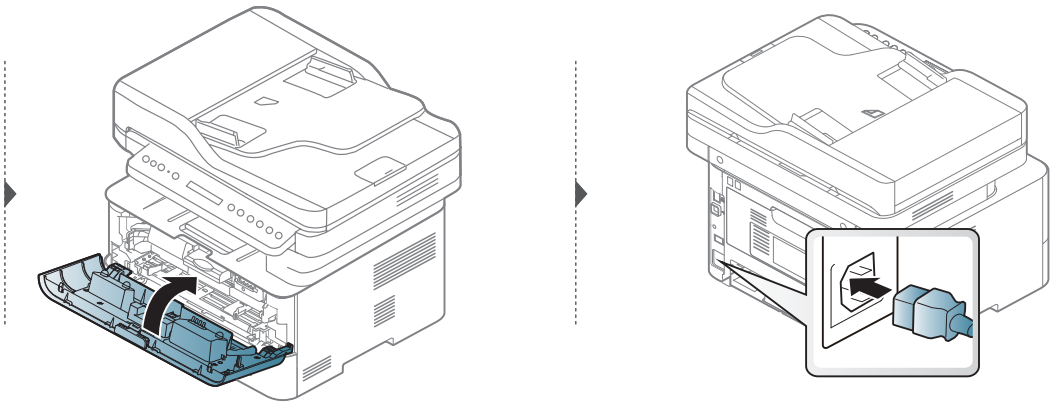
During the printing process, paper, toner, and dust particles can accumulate inside the machine.
This buildup can cause print quality problems, such as toner specks or smearing. Cleaning the inside of the machine clears and reduces these problems.

- To prevent damage to the toner cartridge, do not expose it to light for more than a few minutes. Cover it with a piece of paper, if necessary.
- Do not touch the green area of the toner cartridge. Use the handle on the cartridge to avoid touching this area.
- Use a dry lint free cloth when cleaning the inside of the machine, be careful not to damage the transfer roller or any other inside parts. Do not use solvents such as benzene or thinner. Printing quality problems can occur and cause damage to the machine.

- Use a dry lint-free cloth to clean the machine.
- Turn the machine off and unplug the power cord. Wait for the machine to cool down. If your machine has a power switch, turn the power switch off before cleaning the machine.
- Illustrations in this user's guide may differ from your machine depending on the model and options installed. Check your machine type (see "Machine overview" on page 17).

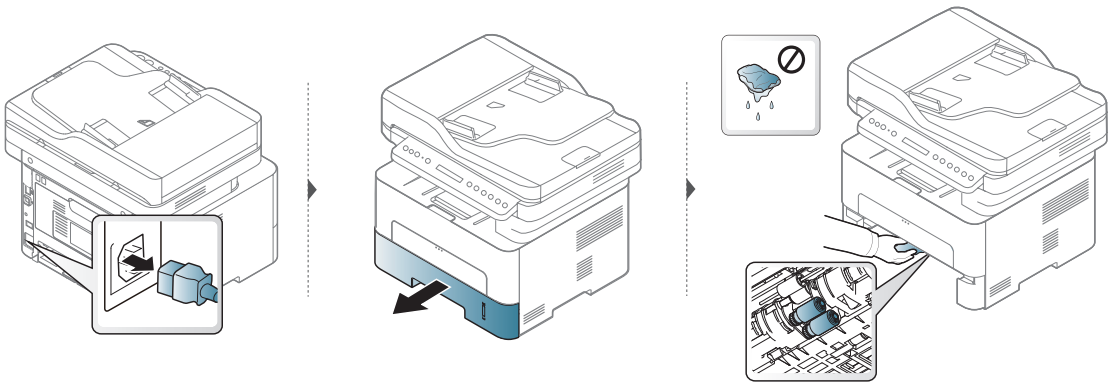


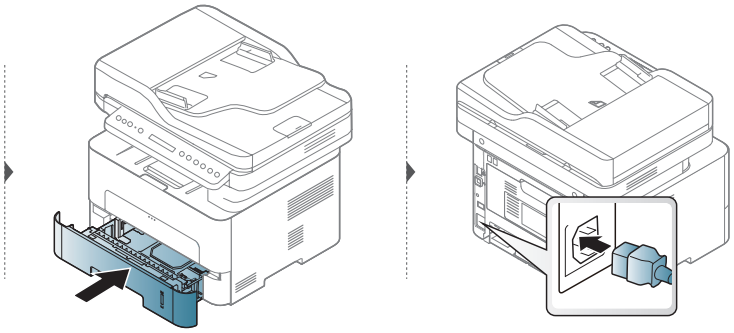

1
2



Clean the pickup roller

- Turn the machine off and unplug the power cord. Wait for the machine to cool down. If your machine has a power switch, turn the power switch off before cleaning the machine.
- Illustrations on this user's guide may differ from your machine depending on its options or models. Check your machine type (see "Machine overview" on page 17).





Clean the scanner

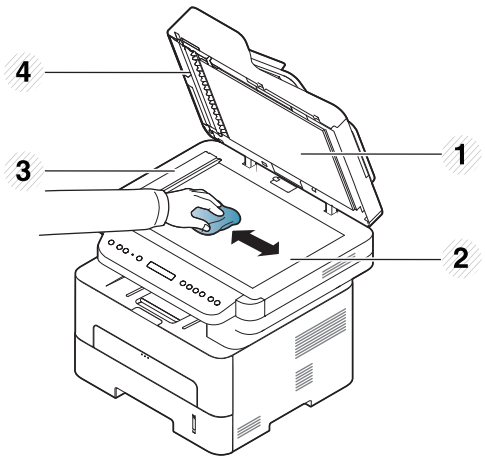
Keeping the scanner clean helps ensure the best possible copies. We suggest that you clean the scanner at the start of each day and during the day as needed.

- Turn the machine off and unplug the power cord. Wait for the machine to cool down. If your machine has a power switch, turn the power switch off before cleaning the machine.
- Illustrations on this user's guide may differ from your machine depending on its options or models. Check your machine type (see "Machine overview" on page 17).

1 Slightly dampen a soft, lint-free cloth or paper towel with water.

2 Lift and open the scanner lid.

3 Wipe the surface of the scanner until it is clean and dry..



1. Scanner lid
2. Scanner glass
3. Document feeder glass
4. White Sheet

4 Close the scanner lid.

Troubleshooting

This chapter gives helpful information for what to do if you encounter an error.



If your machine has a display screen, check the message on the display screen first to solve the error.

- Tips for avoiding paper jams 108
- Clearing paper jams 109
- Understanding the status LED 112
- A “Low Toner” or “Very Low Toner” message appears in supplies information report 114
- Understanding display messages 115
- Paper feeding problems 118
- Power and cable connecting problems 119
- Solving other problems 120
- Printing quality problems 123
- Copying problems 129
- Scanning problems 130
- Operating system problems 131

Tips for avoiding paper jams

By selecting the correct media types, most paper jams can be avoided. To avoid paper jams, refer to the following guidelines:

- Ensure that the adjustable guides are positioned correctly (see "Tray overview" on page 33).
- Do not overload the tray. Ensure that the paper level is below the paper capacity mark on the inside of the tray.
- Do not remove paper from the tray while your machine is printing.
- Flex, fan, and straighten paper before loading.
- Do not use creased, damp, or highly curled paper.
- Do not mix paper types in a tray.
- Use only recommended print media (see "Print media specifications" on page 134).

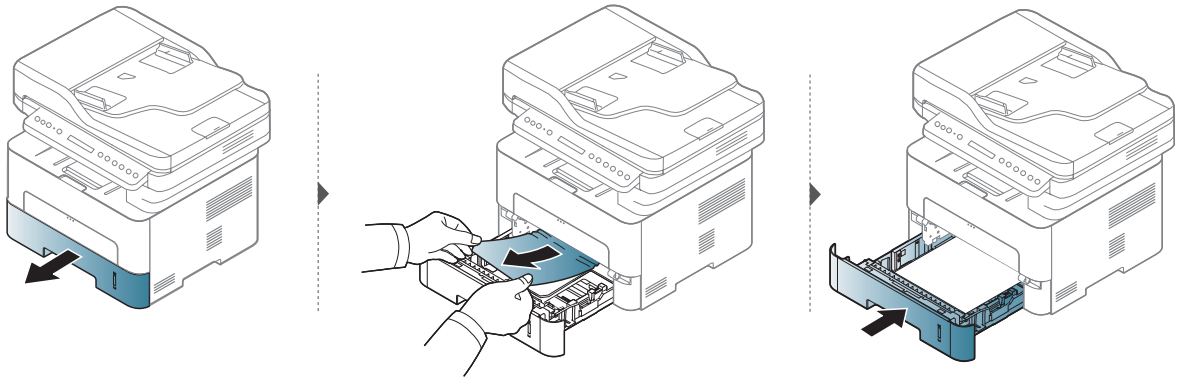
Clearing paper jams

Learn how to clear paper jams from the printer.

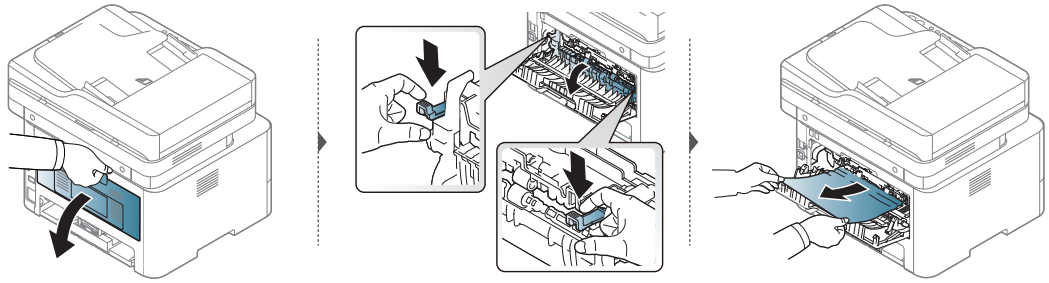
To avoid tearing the paper, pull the jammed paper out slowly and gently.

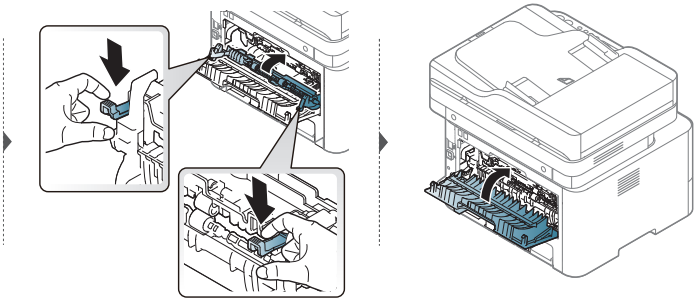
In Tray

Illustrations in this user's guide may differ from your machine depending on the model and options installed. Check your machine type (see "Machine overview" on page 17).



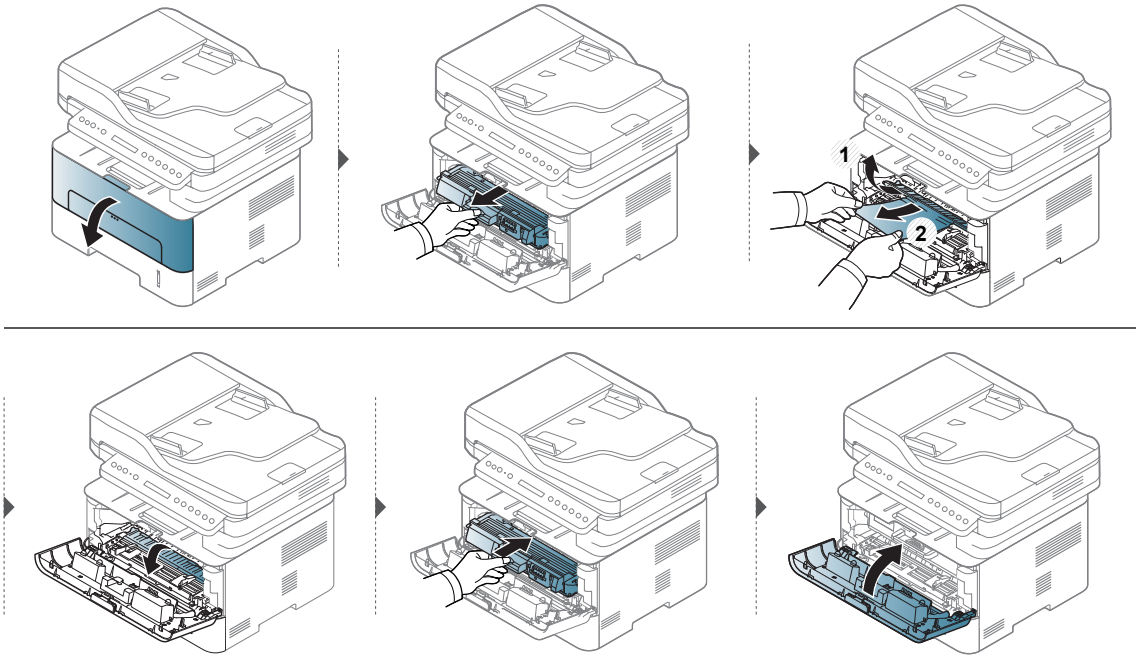
In the exit area



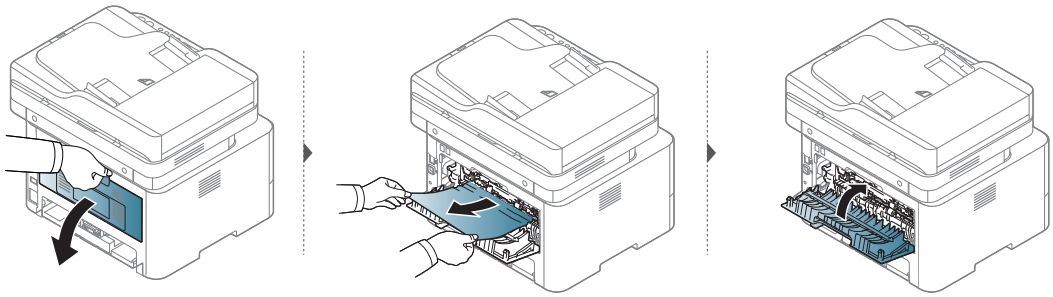


Inside the machine

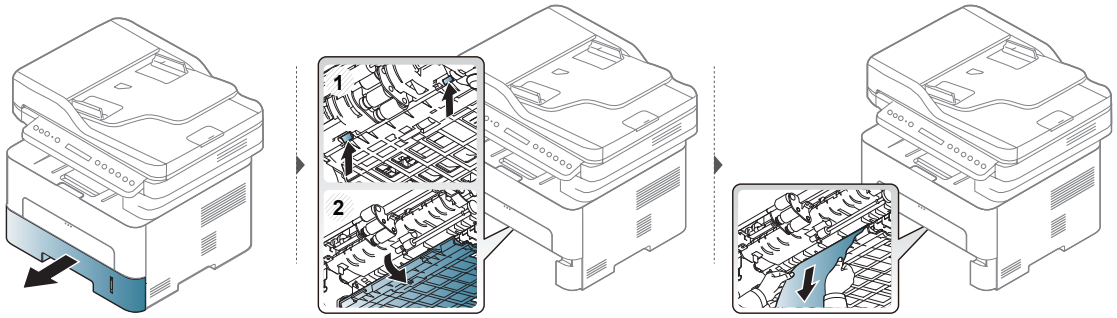
- The fuser area is hot. Take care when removing paper from the machine.
- Illustrations in this user's guide may differ from your machine depending on the model and options installed. Check your machine type (see "Machine overview" on page 17).

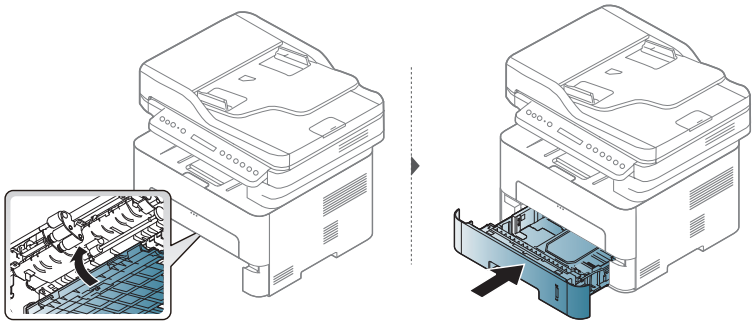


In the duplex unit area



If you do not see the paper in this area, stop and go to next step:





Understanding the status LED

The color of the LED indicates the machine's current status.

- Some LEDs may not be available depending on model or country (see "Control panel overview" on page 21).
- To resolve the error, look at the error message and its instructions from the troubleshooting part (see "Troubleshooting" on page 107).
- If the problem persists, call a service representative.

Status LED

Status			Description
Status	Off		• The machine is off-line. • The machine is in a power save mode.
	Green	Blinking	When the backlight blinks, the machine is receiving or printing data.
		On	The machine is on-line and can be used.
	Orange	Blinking	• A minor error has occurred and the machine is waiting for the error to be cleared. Check the display message. When the problem is cleared, the machine resumes. For some models that does not support the display screen on the control panel, this feature is not applicable. • Small amount of toner is left in the cartridge. The estimated cartridge life of toner is close. Prepare a new cartridge for replacement. You may temporarily increase the printing quality by redistributing the toner (see "Redistributing toner" on page 94).
		On	• A paper jam has occurred (see "Clearing paper jams" on page 109"). • A toner cartridge has almost reached its estimated cartridge life[a]. It is recommended to replace the toner cartridge (see "Replacing the toner cartridge" on page 96). • There is no paper in the tray. Load paper in the tray. • The machine has stopped due to a major error. Check the display message (see "Understanding display messages" on page 115). • An imaging unit has almost reached its estimated cartridge life[b]. It is recommended to replace the imaging unit (see "Replacing the imaging unit" on page 99).

Status			Description
Wireless LED	Blue	Blinking	The machine is connecting to a wireless network.
	Blue	On	The machine is connected to a wireless network.
	Dark	Off	The machine is disconnected from a wireless network.
	White	Blinking	The machine is slow blinking in power save mode.
	White	On	The machine is in ready mode.
Power/ Wake Up	Blue	On	The machine is in power save mode.
		Off	The machine is in ready mode or machine's power is off.

a. Estimated cartridge life means the expected or estimated toner cartridge life, which indicates the average capacity of print-outs and is designed pursuant to ISO/IEC 19752. The number of pages may be affected by operating environment, percentage of image area, printing interval, graphics, media and media size. Some amount of toner may remain in the cartridge even when red LED is on and the printer stops printing.

b. When the imaging unit has reached its end of life, the machine will stop printing. In this case, you can choose to stop or continue printing from the SyncThru™Web Service (**Settings** > **Machine Settings** > **System** > **Setup** > **Supplies Management**> **Imaging Unit Stop**).
Turning off this option and continuing to print may damage the device's system.

* Network models only

A “Low Toner” or “Very Low Toner” message appears in supplies information report

Understand “Low Toner” or “Very Low Toner” message displayed in the supplies information report

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

Continue printing with the current cartridge until redistributing the toner no longer yields acceptable print quality. To redistribute the toner, remove the toner cartridge from the printer and gently rock the cartridge back and forth about its horizontal axis. For graphical representation, see cartridge replacement instructions. Reinsert the toner cartridge into the printer and close the cover.

Very Low Toner: The printer indicates when the Toner cartridge level is very low. Actual cartridge life remaining may vary. Consider having a replacement available to install when print quality is no longer acceptable. The 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 Toner**, HP’s Premium Protection Warranty on that toner cartridge has ended.

To print the supplies information report:

1. Select **Menu** ☰ > **System Setup** > **Report** > **Supplies Info**. on the control panel.
2. Press **OK**.
   The machine begins printing.

Understanding display messages

Messages appear on the control panel display to indicate the machine's status or errors. Refer to the tables below to understand the messages' and their meaning, and correct the problem, if necessary.

- If a message is not in the table, reboot the power and try the printing job again. If the problem persists, call a service representative.
- When you call for service, provide the service representative with the contents of display message.
- Some messages may not appear on the display depending on the options or models.
- [error number] indicates the error number.
- [tray type] indicates the tray number.

Paper Jam-related messages

Message	Meaning	Suggested solutions
Document jam Remove jam	The loaded original document has jammed in the document feeder.	Clear the jam.
Paper Jam in tray	Paper has jammed in the paper feed area.	Clear the jam (see "In Tray" on page 109).
Paper Jam in Manual Feeder	Paper has jammed in the manual feeder.	Clear the jam.
Paper Jam inside machine	Paper has jammed inside the machine.	Clear the jam (see "Inside the machine" on page 110).
Paper Jam in exit area	Paper has jammed in the paper exit area.	Clear the jam (see "In the exit area" on page 109).
• **Paper Jam bottom of duplex** • **Paper Jam top of duplex**	Paper has jammed in the duplex area.	Clear the jam (see "In the duplex unit area" on page 111).

Toner-related messages

Message	Meaning	Suggested solutions
• **Install Toner**	A toner cartridge is not installed.	Install a toner cartridge.
• **Not Compatible Toner cartridge**	The toner cartridge you have installed is not for your machine.	Install a HP-genuine toner cartridge, designed for your machine.
• **Prepare new cartridge**	Small amount of toner is left in the indicated cartridge. The estimated cartridge life of toner is close.	Prepare a new cartridge for a replacement. You may temporarily increase the printing quality by redistributing the toner (see "Redistributing toner" on page 94).
• **Replace new cart**	The toner cartridge has almost reached its estimated cartridge life[a].	• You can choose **Stop** or **Continue** as shown on the control panel. If you select **Stop**, the printer stops printing and you cannot print any more without changing the cartridge. If you select **Continue**, the printer keeps printing but the printing quality cannot be guaranteed. • Replace the toner cartridge for the best print quality when this message appears. Using a cartridge beyond this stage can result in printing quality issues (see "Replacing the toner cartridge" on page 96). ⚠ HP does not recommend using a non-genuine HP toner cartridge such as refilled or remanufactured. HP cannot guarantee a non-genuine HP toner cartridge's quality. Service or repair required as a result of using non-genuine HP toner cartridges will not be covered under the machine warranty.
	The toner cartridge has reached its estimated cartridge life[a].	If the machine stops printing, replace the toner cartridge (see "Replacing the toner cartridge" on page 96).

a. Estimated cartridge life means the expected or estimated toner cartridge life, which indicates the average capacity of print-outs and is designed pursuant to ISO/IEC 19752 (see "Available supplies" on page 92). The number of pages may be affected by operating environment, percentage of image area, printing interval, media, percentage of image area, and media size. Some amount of toner may remain in the cartridge even when replace new cartridge appears and the machine stops printing.

Imaging unit-related messages

Message	Meaning	Suggested solutions
• **Install Imaging Unit**	Imaging unit is not installed.	Install an imaging unit.
• **Invalid Imaging Unit**	The imaging unit you have installed is not for your machine.	Install a HP genuine imaging unit, designed for your machine.
• **Prepare New Imaging Unit**	The imaging unit has almost reached its estimated cartridge life. Replace the imaging unit as soon as possible.	Prepare a new imaging unit for a replacement. (see "Replacing the imaging unit" on page 99).
• **Replace Imaging Unit**	The imaging unit has reached its estimated cartridge life.	Prepare a new imaging unit for a replacement. (see "Replacing the imaging unit" on page 99).

Tray-related messages

Message	Meaning	Suggested solutions
• **Output bin full Remove paper**	The output tray is full.	Remove papers from the output tray, the printer resumes printing.
• **Paper Empty in [tray type]**	There is no paper in tray or manual feeder.	Load paper in tray (see "Loading paper in the tray" on page 34).
• **Tray Paper mismatch** • **Manual Paper mismatch**	The paper size specified in the printer properties does not match the paper you are loading.	Load the required size paper.

Network-related messages

Message	Meaning	Suggested solutions
• **Network Problem: IP Conflict**	The network IP address you have set is being used by someone else.	Check the IP address and reset it if necessary (see Advanced Guide).

Misc. messages

Message	Meaning	Suggested solutions
• **Door of scanner is open**	The document feeder cover is not securely latched.	Close the cover until it locks into place.
• **Error [error number] Turn off then on**	The machine unit cannot be controlled.	Reboot the power and try the printing job again. If the problem persists, please call for service.
• **Memory Full Remove Job**	The memory is full.	Print or remove the received fax job in **Secure Receive** (see Advanced Guide).

Paper feeding problems

Learn how to solve paper feeding problems.

Condition	Suggested solutions
Paper jams during printing.	Clear the paper jam.
Paper sticks together.	• Check the maximum paper capacity of the tray . • Make sure that you are using the correct type of paper. • Remove paper from the tray and flex or fan the paper. • Humid conditions may cause some paper to stick together.
Multiple sheets of paper do not feed.	Different types of paper may be stacked in the tray. Load paper of only one type, size, and weight.
Paper does not feed into the machine.	• Remove any obstructions from inside the machine. • Paper has not been loaded correctly. Remove paper from the tray and reload it correctly. • There is too much paper in the tray. Remove excess paper from the tray. • The paper is too thick. Use only paper that meets the specifications required by the machine.
The paper keeps jamming.	• There is too much paper in the tray. Remove excess paper from the tray. If you are printing on special materials, feed manually in the tray. • An incorrect type of paper is being used. Use only paper that meets the specifications required by the machine. • There may be debris inside the machine. Open the top cover and remove any debris.

Power and cable connecting problems

Reboot the power. If the problem persists, please call for service.

Condition	Suggested solutions
The machine is not receiving power, or the connection cable between the computer and the machine is not connected properly.	1. Connect the machine to the electricity supply first. 2. Check the USB cable or network cable in the machine's rear. 3. Disconnect the USB cable or network cable in the machine's rear and then, reconnect it.

Solving other problems

Learn how to solve printing, copying, scanning, faxing, or operating system problems.

Printing problems

Learn how to solve printing problems.

Condition: the machine does not print.

Possible cause	Description
The machine is not receiving power.	Connect the machine to the electricity supply first. If the machine has a Power button ⏻ on the control, press it.
The machine is not selected as the default machine.	Select your machine as your default machine in Windows.
The cover is not closed.	Close the cover.
Paper is jammed.	Clear the paper jam (see "Clearing paper jams" on page 109).
No paper is loaded.	Load paper (see "Loading paper in the tray" on page 34).
The toner cartridge is not installed.	Install the toner cartridge (see "Replacing the toner cartridge" on page 96). Make sure the protect cover and sheets are removed from the toner cartridge (see "Replacing the toner cartridge" on page 96).
A system error occurs	Contact your service representative.
The connection cable between the computer and the machine is not connected properly.	Disconnect the machine cable and reconnect it (see "Machine overview" on page 17).
The connection cable between the computer and the machine is defective.	If possible, attach the cable to another computer that is working properly and print a job. You can also try using a different machine cable.
The port setting is incorrect.	Check the Windows printer settings to make sure that the print job is sent to the correct port. If the computer has more than one port, make sure that the machine is attached to the correct one.
The machine may be configured incorrectly.	Check the Printing Preferences to ensure that all of the print settings are correct.
The printer driver may be incorrectly installed.	Uninstall and reinstall the machine's driver.
The machine is malfunctioning.	Check the display message on the control panel to see if the machine is indicating a system error. Contact a service representative.
The document size is so big that the hard disk space of the computer is insufficient to access the print job.	Get more hard disk space and print the document again.
The output tray is full.	Once the paper is removed from the output tray, the machine resumes printing.

Condition: The machine selects print materials from the wrong paper source.

Possible cause	Description
The paper option that was selected in the Printing Preferences may be incorrect.	For many software applications, the paper source selection is found under the Paper tab within the Printing Preferences (see "Open printing preferences" on page 64). Select the correct paper source. See the printer driver help screen (see "Use help" on page 66).

Condition: A print job is extremely slow.

Possible cause	Description
The job may be very complex.	Reduce the complexity of the page or try adjusting the print quality settings.

Condition: Half the page is blank.

Possible cause	Description
The page orientation setting may be incorrect.	Change the page orientation in your application (see "Open printing preferences" on page 64). See the printer driver help screen (see "Use help" on page 66).
The paper size and the paper size settings do not match.	Ensure that the paper size in the printer driver settings matches the paper in the tray. Or, ensure that the paper size in the printer driver settings matches the paper selection in the software application settings you use (see "Open printing preferences" on page 64).

Condition: The machine prints, but the text is wrong, garbled, or incomplete.

Possible cause	Description
The machine cable is loose or defective.	Disconnect the machine cable and reconnect. Try a print job that you have already printed successfully. If possible, attach the cable and the machine to another computer that you know works and try a print job. Finally, try a new machine cable.
The wrong printer driver was selected.	Check the application's printer selection menu to ensure that your machine is selected.
The software application is malfunctioning.	Try printing a job from another application.
The operating system is malfunctioning.	Exit Windows and reboot the computer. Turn the machine off and back on again.

Condition: Pages print, but they are blank.

Possible cause	Description
The toner cartridge is defective or out of toner.	Redistribute the toner, if necessary. If necessary, replace the toner cartridge. • See "Redistributing toner" on page 94. • See "Replacing the toner cartridge" on page 96.
The file may have blank pages.	Check the file to ensure that it does not contain blank pages.
Some parts, such as the controller or the board, may be defective.	Contact a service representative.

Condition: The machine does not print PDF files correctly. Some parts of graphics, text, or illustrations are missing.

Possible cause	Description
Incompatibility between the PDF file and the Acrobat products.	Printing the PDF file as an image may enable the file to print. Turn on Print As Image from the Acrobat printing options. It will take longer to print when you print a PDF file as an image.

Condition: The print quality of photos is not good. Images are not clear.

Possible cause	Description
The resolution of the photo is very low.	Reduce the photo size. If you increase the photo size in the software application, the resolution will be reduced.

Condition: Before printing, the machine emits vapor near the output tray.

Possible cause	Description
Using damp paper can cause vapor during printing.	This is not a problem. Just keep printing.

Condition: The machine does not print special-sized paper, such as billing paper.

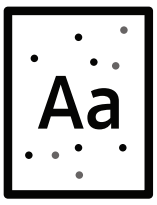
Possible cause	Description
Paper size and paper size setting do not match.	Set the correct paper size in the Custom in Paper tab in Printing Preferences (see "Open printing preferences" on page 64).

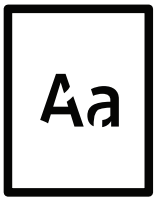
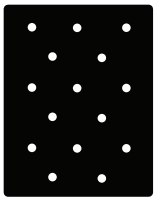
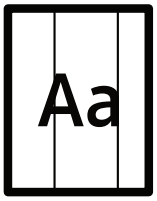
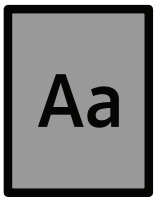
Condition: The printed billing paper is curled.

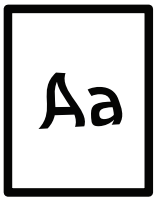
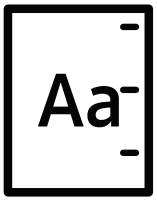
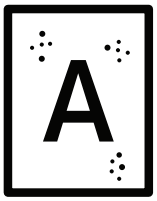
Possible cause	Description
The paper type setting does not match.	Change the printer option and try again. Go to Printing Preferences, click the Paper tab, and set type to Heavy 90-120 g (see "Open printing preferences" on page 64).

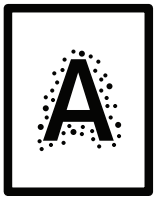
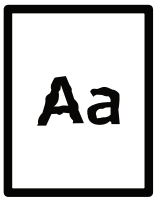
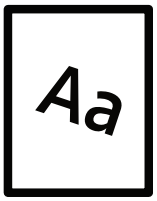
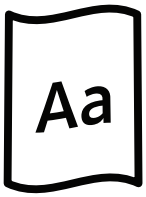
Printing quality problems

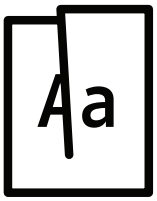
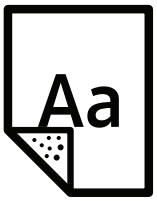
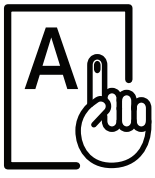
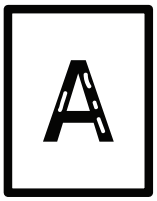
If the inside of the machine is dirty or paper has been loaded improperly, there might be a reduction in print quality. See the table below to clear the problem.

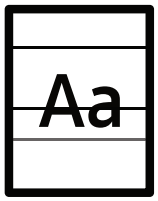
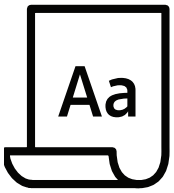
Condition	Suggested Solutions
Light or faded print 	• If a vertical white streak or faded area appears on the page, the toner supply is low. Install a new toner cartridge (see "Replacing the toner cartridge" on page 96). • The paper may not meet paper specifications; for example, the paper may be too moist or rough. • If the entire page is light, the print resolution setting is too low or the toner save mode is on. Adjust the print resolution and turn the toner save mode off. See the help screen of the printer driver. • A combination of faded or smeared defects may indicate that the toner cartridge needs cleaning. Clean the inside of your machine (see "Clean the machine" on page 103). • The surface of the LSU part inside the machine may be dirty. Clean the inside of your machine (see "Clean the machine" on page 103). If these steps do not correct the problem, contact a service representative.
The top half of the paper is printed lighter than the rest of the paper 	The toner might not adhere properly to this type of paper. • Change the printer option and try again. Go to **Printing Preferences**, click the **Paper** tab, and set the paper type to **Recycled** (see "Open printing preferences" on page 64).
Toner specks 	• The paper may not meet specifications; for example, the paper may be too moist or rough. • The transfer roller may be dirty. Clean the inside of your machine (see "Clean the machine" on page 103). • The paper path may need cleaning. Contact a service representative (see "Clean the machine" on page 103).

Condition	Suggested Solutions
Dropouts 	If faded areas, generally rounded, occur randomly on the page: • A single sheet of paper may be defective. Try reprinting the job. • The moisture content of the paper is uneven or the paper has moist spots on its surface. Try a different brand of paper. • The paper lot is bad. The manufacturing processes can cause some areas to reject toner. Try a different kind or brand of paper. • Change the printer option and try again. Go to **Printing Preferences**, click the **Paper** tab, and set type to **Thick** (see "Open printing preferences" on page 64). If these steps do not correct the problem, contact a service representative.
White Spots 	If white spots appear on the page: • The paper is too rough and a lot of dirt from paper falls to the inner components within the machine, so the transfer roller may be dirty. Clean the inside of your machine (see "Clean the machine" on page 103). • The paper path may need cleaning. Clean the inside of your machine (see "Clean the machine" on page 103). If these steps do not correct the problem, contact a service representative.
Vertical lines 	If black vertical streaks appear on the page: • The surface (drum part) of the toner cartridge inside the machine has probably been scratched. Remove the toner cartridge and install a new one (see "Replacing the toner cartridge" on page 96). If white vertical streaks appear on the page: • The surface of the LSU part inside the machine may be dirty. Clean the inside of your machine (see "Clean the machine" on page 103). If these steps do not correct the problem, contact a service representative.
Black background 	If the amount of background shading becomes unacceptable: • Change to a lighter weight paper. • Check the environmental conditions: very dry conditions or a high level of humidity (higher than 80 % RH) can increase the amount of background shading. • Remove the old toner cartridge and install a new one (see "Replacing the toner cartridge" on page 96). • Thoroughly redistribute the toner (see "Redistributing toner" on page 94).

Condition	Suggested Solutions
Toner smear 	• Clean the inside of the machine (see "Clean the machine" on page 103). • Check the paper type and quality. • Remove the toner cartridge and install a new one (see "Replacing the toner cartridge" on page 96).
Vertical repetitive defects 	If marks repeatedly appear on the printed side of the page at even intervals: • The toner cartridge may be damaged. If you still have the same problem, remove the toner cartridge and, install a new one (see "Replacing the toner cartridge" on page 96). • Parts of the machine may have toner on them. If the defects occur on the back of the page, the problem will likely correct itself after a few more pages. • The fusing assembly may be damaged. Contact a service representative.
Background scatter 	Background scatter results from bits of toner randomly distributed on the printed page. • The paper may be too damp. Try printing with a different batch of paper. Do not open packages of paper until necessary so that the paper does not absorb too much moisture. • If background scatter occurs on an envelope, change the printing layout to avoid printing over areas that have overlapping seams on the reverse side. Printing on seams can cause problems. Or select **Thick** from the **Printing Preferences** window (see "Open printing preferences" on page 64). • If background scatter covers the entire surface area of a printed page, adjust the print resolution through your software application or in Printing Preferences (see "Open printing preferences" on page 64). Ensure the correct paper type is selected. For example: If **Heavy 90-120 g** is selected, but **Plain** actually used, an overcharging can occur causing this copy quality problem. • If you are using a new toner cartridge, redistribute the toner first (see "Redistributing toner" on page 94).

Condition	Suggested Solutions
Toner particles are around bold characters or pictures  	The toner might not adhere properly to this type of paper. • Change the printer option and try again. Go to **Printing Preferences**, click the **Paper** tab, and set the paper type to **Recycled** (see "Open printing preferences" on page 64). • Ensure the correct paper type is selected. For example: If **Heavy 90-120 g** is selected, but **Plain** actually used, an overcharging can occur causing this copy quality problem.
Misformed characters  	• If characters are improperly formed and producing hollow images, the paper stock may be too slick. Try different paper.
Page skew  	• Ensure that the paper is loaded properly. • Check the paper type and quality. • Ensure that the guides are not too tight or too loose against the paper stack.
Curl or wave  	• Ensure that the paper is loaded properly. • Check the paper type and quality. Both high temperature and humidity can cause paper curl. • Turn the stack of paper over in the tray. Also try rotating the paper 180° in the tray.

Condition	Suggested Solutions
Wrinkles or creases 	• Ensure that the paper is loaded properly. • Check the paper type and quality. • Turn the stack of paper over in the tray. Also try rotating the paper 180° in the tray.
Back of printouts are dirty 	• Check for leaking toner. Clean the inside of the machine (see "Clean the machine" on page 103).
Solid color or black pages 	• The toner cartridge may not be installed properly. Remove the cartridge and reinsert it. • The toner cartridge may be defective. Remove the toner cartridge and install a new one (see "Replacing the toner cartridge" on page 96). • The machine may require repairing. Contact a service representative.
Loose toner 	• Clean the inside of the machine (see "Clean the machine" on page 103). • Check the paper type, thickness, and quality. • Remove the toner cartridge and then, install a new one (see "Replacing the toner cartridge" on page 96). If the problem persists, the machine may require repair. Contact a service representative.
Character voids 	Character voids are white areas within parts of characters that should be solid black: • You may be printing on the wrong surface of the paper. Remove the paper and turn it around. • The paper may not meet paper specifications.

Condition	Suggested Solutions
Horizontal stripes 	If horizontally aligned black streaks or smears appear: • The toner cartridge may be installed improperly. Remove the cartridge and reinsert it. • The toner cartridge may be defective. Remove the toner cartridge and install a new one (see "Replacing the toner cartridge" on page 96). If the problem persists, the machine may require repairing. Contact a service representative.
Curl 	If the printed paper is curled or paper does not feed into the machine: • Turn the stack of paper over in the tray. Also try rotating the paper 180° in the tray. • Change the printer's paper option and try again. Go to **Printing Preferences**, click the **Paper** tab, and set type to **Thin** (see "Open printing preferences" on page 64).
• **An unknown image repetitively appears on a few sheets** • **Loose toner** • **Light print or contamination occurs**	Your machine is probably being used at an altitude of 1,000 m (3,281 ft) or above. The high altitude may affect the print quality, such as loose toner or light imaging. Change the altitude setting for your machine.

Copying problems

Learn how to solve scanning problems.

Condition	Suggested solutions
Copies are too light or too dark.	• Adjust the darkness in copy feature to lighten or darken the backgrounds of copies.
Smears, lines, marks, or spots appear on copies.	• If the defects are on the original, adjust darkness in copy feature to lighten the background of your copies. • Adjust background in copy setup removes the background color. • If there are no defects on the original, clean the scanner (see "Clean the machine" on page 103).
Copy image is skewed.	• Ensure that the original is aligned with the registration guide. • The transfer roller may be dirty. Clean the inside of your machine (see "Clean the machine" on page 103).
Blank copies print out.	Ensure that the original is face down on the scanner glass. If these steps do not correct the problem, contact a service representative.
Image rubs off the copy easily.	• Replace the paper in the tray with paper from a new package. • In high humidity areas, do not leave paper in the machine for extended periods of time.
Frequent copy paper jams occur.	• Fan the paper, then turn it over in the tray. Replace the paper in the tray with a fresh supply. Check/adjust the paper guides, if necessary. • Ensure that the paper is the proper type and weight (see "Print media specifications" on page 134). • Check for copy paper or pieces of copy paper remaining in the machine after a paper jam has been cleared.
Toner cartridge produces fewer copies than expected before running out of toner.	• Your originals may contain pictures, solids, or heavy lines. For example, your originals may be forms, newsletters, books, or other documents that use more toner. • The scanner lid may be left open while copies are being made. • Turn the machine off and back on.

Scanning problems

Learn how to solve scanning problems.

Condition	Suggested solutions
The scanner does not work.	• Make sure that you place the original to be scanned face down on the scanner glass (see "Load originals" on page 42). • There may not be enough available memory to hold the document you want to scan. Try the Prescan function to see if that works. Try lowering the scan resolution rate. • Check that the machine printer cable is connected properly. • Make sure that the machine printer cable is not defective. Switch the printer cable with a known good cable. If necessary, replace the printer cable. • Check that the scanner is configured correctly. Check scan setting in the application you want to use to make certain that the scanner job is being sent to the correct port (for example, USB001).
The unit scans very slowly.	• Check if the machine is printing received data. If so, scan the document after the received data has been printed. • Graphics are scanned more slowly than text.
Message appears on your computer screen: • Device can't be set to the H/W mode you want. • Port is being used by another program. • Port is disabled. • Scanner is busy receiving or printing data. When the current job is completed, try again. • Invalid handle. • Scanning has failed.	• There may be a copying or printing job in progress. Try your job again when that job is finished. • The selected port is currently being used. Restart your computer and try again. • The machine printer cable may be improperly connected or the power may be off. • The scanner driver is not installed or the operating environment is not set up properly. • Ensure that the machine is properly connected and the power is on, then restart your computer. • The USB cable may be improperly connected or the power may be off.

Operating system problems

Learn how to solve operating system problems.

Common Windows problems

Condition	Suggested solutions
"File in Use" message appears during installation.	Exit all software applications. Remove all software from the startup group, then restart Windows. Reinstall the printer driver.
"General Protection Fault", "Exception OE", "Spool 32", or "Illegal Operation" messages appear.	Close all other applications, reboot Windows and try printing again.
"Fail To Print", "A printer timeout error occurred" message appear.	These messages may appear during printing. Just keep waiting until the machine finishes printing. If the message appears in ready mode or after printing has completed, check the connection and/or whether an error has occurred.
Machine information is not displayed when you click the device in the **Devices and Printers.**	Check the **Printer properties**. Click the **Ports** tab. (**Control Panel** > **Devices and Printers** > Right-click on your printer icon and select **Printer properties**) If the port is set to File or LPT, uncheck them and select TCP/IP, USB, or WSD.



Refer to the Microsoft Windows User's Guide that came with your computer for further information on Windows error messages.

Appendix

This chapter provides product specifications and information concerning applicable regulations.

- General specifications 133
- Print media specifications 134
- System requirements 136

General specifications

Review general specifications for the printer.

The specification values listed below are subject to change without notice.
See support.hp.com for possible changes in information.

Items		Description
Dimension[a]	**Width × Depth × Height**	• **MFP 323d, 323dnw:** 401 x 362 x 311 mm (15.8 x 14.3 x 12.2 in.) • **MFP 323sdn, 323sdnw, 351sdn, 355sdnw 32330sdnw:** 401 x 362 x 367 mm (15.8 x 14.3 x 14.4 in.)
Weight[b]	**Machine with consumables**	• **MFP 323d, 323dnw:** 10.1 kg (22.3lb) • **MFP 323sdn, 323sdnw, 351sdn, 355sdnw 32330sdnw:** 11.3 kg(24.9 lb)
Noise Level[ac]	**Ready mode**	Background Noise Level
	Print mode	Less than 53 dB (A)
Temperature		-20 to 40°C (-4 to 104 °F)
Humidity	**Operation**	20 to 80% RH
Power rating[c]	**Average operating mode**	Less than 445 W
	Ready mode	44 W, Sleep 0.9 W
	Power save mode	Less than 0.8 W
	Power off mode[d]	Less than 0.1 W

a. Dimensions are measured without other accessories.

b. Weight is measured without other accessories.

c. See the rating label on the machine for the correct voltage (V), frequency (hertz) and of current (A) for your machine.

d. Power consumption can be completely avoided only when the power cable is not connected.

Print media specifications

Use print media that meets these specifications.

Media Type			
Types	Tray 1	Tray 2	Duplex Printing in Tray 2
Plain	●	●	●
Mid weight (Thick)	●	●	●
Light (Thin)	●	●	●
Cotton	●	-	-
Colored	●	-	-
Pre-Printed	●	-	-
Recycled	●	●	●
Envelope	●	-	-
Thick Envelope	●	-	-
Label	●	-	-
Heavy weight(Cardstock)	●	●	-
Bond	●	●	-
Intermediate(Archive)	●	●	-
Custom	●	-	-
Extra Heavy weigh(Thicker)	●	-	-

Media Type			
Sizes	Tray 1	Tray 2	Duplex Printing in Tray 2
Letter	●	●	-
Legal	●	●	-
Oficio	●	●	-
Folio	●	●	-
A4	●	●	●
B5(ISO)	●	●	-
B5(JIS)	●	●	-
Executive	●	●	-
A5	●	●	-
A6	●	●	-
Monarch Envelope	●	-	-
DL Envelope	●	-	-
C5 Envelope	●	-	-
C6 Envelope	●	-	-
No 10 Envelope	●	-	-
PostCard 4x6	●	-	-
Custom	Width: 76.2 x 216 mm Length: 127 x 356 mm	Width: 105 x 216 mm Length: 148.5 x 356 mm	-
Paper weight	60 ~ 220 g/m^2 (16 ~ 58 lb)	60 ~ 220 g/m^2 (16 ~ 43 lb)	60 ~ 105 g/m^2 (16 ~ 28 lb)

System requirements

Before installing printer software, make sure your computer meets these system requirements.

Printer software is occasionally updated due to release of new operating system and etc. If needed, download the latest version from the HP website support.hp.com.

Microsoft® Windows®

Windows 10, 32-bit and 64-bit Windows 11, 32-bit and 64-bit	The HP V4 printer-specific print driver is installed for this operating system as part of the software installation.
Windows Server 2016, 64-bit Windows Server 2019, 64-bit	The HP printer-specific print driver is installed for this operating system as part of the software installation.

Mac OS

Direct printing using Apple's AirPrint is supported for iOS and from Mac computers running OS X 10.7 Lion and newer. Use AirPrint to print directly to the printer from an iPad, iPhone (3GS or later), or iPod touch (third generation or later) in the mobile applications (Mail, Photos, Safari, iBooks, Select third-party applications).

- Check the box your machine came in for the "XXXX" mark. If so, you can print directly from Mac OS.
- AirPrint allows you to print directly from Mac OS. The USB-only models without wired or Wi-Fi network functionality do not support Mac OS.
- To use AirPrint, the printer must be connected to the same network (sub-net) as the Apple device.
- Before using AirPrint with a USB connection, verify the version number. AirPrint versions 1.3 and earlier do not support USB connections.

