HP Ink Tank 110 series

User Guide

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Printer parts
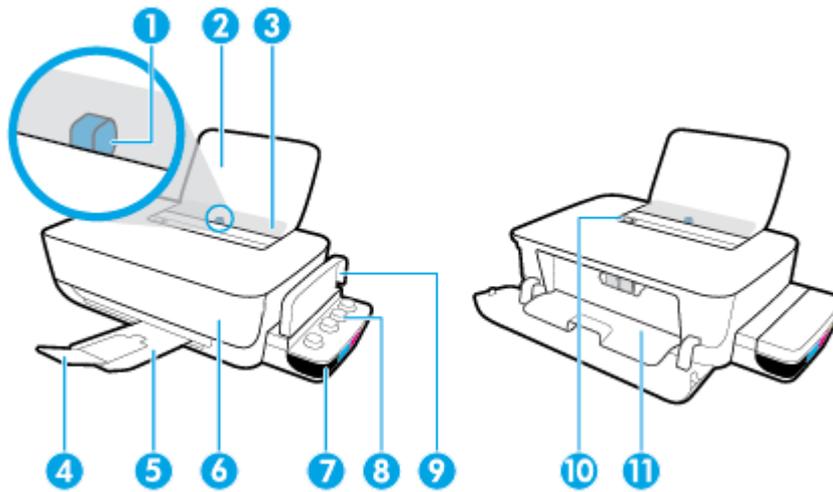
1	Paper-width guide
2	Input tray
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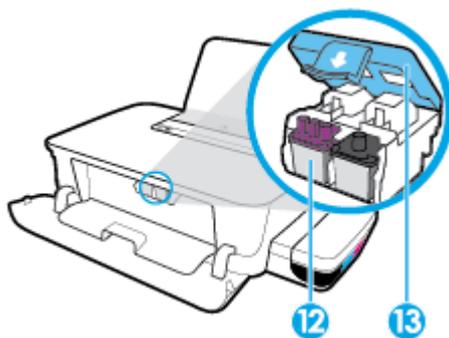
12	Printhead
13	Printhead latch
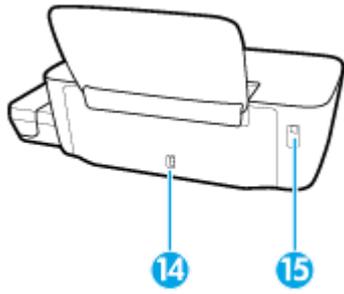
14	Power connection
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Get to know the ink tank system

Term	Definition
Printheads	The printheads are the components in the print mechanism that apply ink to the paper. There are two printheads: a black ink printhead and a tri-color ink printhead. **NOTICE:** After you have set up the printer, do not open the printhead latch unless instructed to do so.
Printhead latch	The printhead latch on the carriage secures the printheads in the carriage. Make sure the printhead latch is properly closed to avoid problems such as carriage jams. **NOTICE:** After you have set up the printer, do not open the printhead latch unless instructed to do so.
Ink tanks	Ink tanks are external ink reservoirs located at the right side of the printer. There are four ink tanks. Each ink tank corresponds to an individual color: black, cyan, magenta, and yellow.
Ink tank caps	Ink tank caps are rubber plugs that seal each ink tank.
Priming	Priming is the process of filling the ink supply tubes that run between the ink tanks and the printheads. It is required to complete the priming process during printer setup.
Alignment	Alignment is a process of aligning the printheads to improve print quality. For more information about alignment, see "To align the printheads" from Printing issues on page 55.
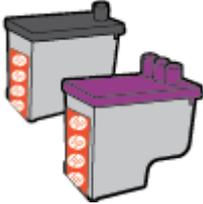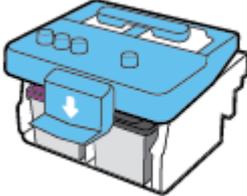
Control panel features

Overview of buttons and lights
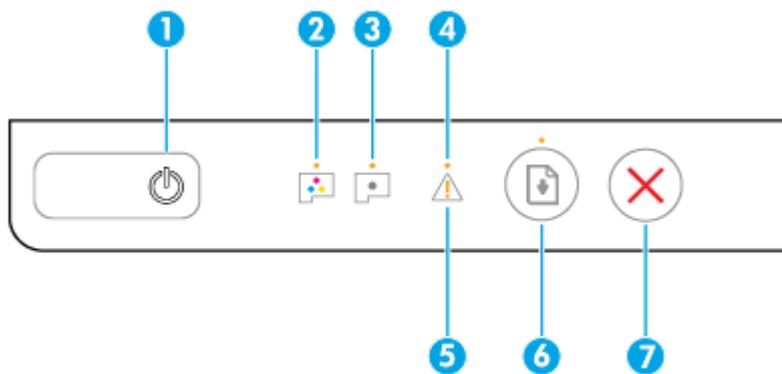
Feature	Description
1	**Power** button: Turns the printer on or off.
2	**Color Printhead** light: Indicates color printhead problems.
3	**Black Printhead** light: Indicates black printhead problems.
4	**Error** light: Indicates an error.
5	**Warning** light: Indicates a warning or alert.
6	**Resume** button: Resumes a job after a disruption (for example, after loading paper or clearing a paper jam). **Resume** light: Indicates that you must press the **Resume** button to continue printing after resolving a warning or error state.
7	**Cancel** button: Stops the current operation.

NOTE: For more information about buttons and lights on the control panel, see .

Status lights

- Power button light
- Printhead lights
- Printhead priming status indicators
- Error light, Warning light, and Resume light
- Ink system maintenance

Power button light

Status	Description
On	The printer is on.
Off	The printer is off.
Dimmed	The printer is in Sleep mode. The printer automatically enters Sleep mode after 5 minutes of inactivity. After 2 hours of inactivity, the printer automatically turns off if not connected to a computer.
Blinking	The printer is processing a job. To cancel the job, press the **Cancel** button (✕).
Fast blinking	– The printhead access door is open. You must close the door to continue printing. – The printer is in an error state. You can resolve the error by following the onscreen messages from the computer. If you do not see any onscreen messages, try printing a document to generate an onscreen message.

- Status indications during printer firmware updates

Status	Description
Blinking	The printer firmware update is in progress.
On	The printer firmware update is complete.

Printhead lights

- **Power** button light is on; and **Printhead** light of the printhead having an error is blinking quickly.

  All other control panel lights are blinking quickly.

Cause	Solution
One of the following might have occurred: – The corresponding printhead is missing. – The corresponding printhead is installed incorrectly. – The corresponding printhead still has orange plastic tape or the plug on it. – The corresponding printhead is incompatible or damaged.	– If one of the printheads is missing, insert the corresponding printhead. – If both printheads are installed in the printer, remove the corresponding printhead, make sure there is no plug or plastic tape on it, and then reinsert the printhead securely. **NOTICE:** After you have set up the printer, do not open the printhead latch unless instructed to do so. For more information, see Fix printhead problems on page 51. – Make sure that you are using the correct HP printheads for your printer.

- **Power** button light is on; and both **Printhead** lights are blinking quickly.

  All other control panel lights are blinking quickly.

Cause	Solution
One of the following might have occurred: – Both printheads are missing. – Both printheads are installed incorrectly. – Both printheads still have orange plastic tapes or plugs on them. – Both printheads are incompatible or damaged.	– If there are no printheads installed in the printer, install the printheads. – If both printheads are installed in the printer, remove the printheads, make sure there is no plug or plastic tape on them, and then reinsert the printheads securely. **NOTICE:** After you have set up the printer, do not open the printhead latch unless instructed to do so. – Make sure that you are using the correct HP printheads for your printer. – If the error persists, contact HP support for help. For more information, see HP support on page 64.

Printhead priming status indicators

- **Error** light and **Warning** light are blinking.

Cause	Solution
The printer has reached the maximum number of primes allowed.	Contact HP support for help. For more information, see HP support on page 64.

Error light, Warning light, and Resume light

- **Printhead** lights and **Error** light are off.

  Warning light and **Resume** light are blinking quickly.

Cause	Solution
One of the following might have occurred: – The printer receives a printing job, and detects that there is no paper in the input tray. – There is a paper jam.	– Load paper, and then press the **Resume** button ( ) to continue printing. For information about how to load paper, see Load media on page 11. – Clear the jam, and then press the **Resume** button ( ) to continue printing. For more information, see Jams and paper-feed issues on page 45.

- **Warning** light is off.

  Printhead lights, **Error** light, and **Resume** light are blinking quickly.

Cause	Solution
The carriage inside the printer has stalled.	Open the front door and the printhead access door, and make sure the printhead latch is properly closed and the print carriage is not obstructed. If needed, slide the print carriage to the right side of the printer. Close the printhead access door and the front door, and then press the **Resume** button ( ) to continue printing. See Jams and paper-feed issues on page 45 for more information. **NOTICE:** After you have set up the printer, do not open the printhead latch unless instructed to do so.

- **Error** light is off.

  Warning light is blinking.

  Other control panel lights remain unchanged.

Cause	Solution
The printer is in an error state.	Reset the printer by completing the following steps: **1.** Turn off the printer. **2.** Unplug the power cord. **3.** Wait a minute, and then plug the power cord back in. **4.** Turn on the printer. If the problem persists, contact HP.

Ink system maintenance

Warning light is on.

Error light and **Resume** light are off.

Cause	Solution
One or more ink tanks are low on ink, or ink system maintenance is required.	Do the following to clear the error: ● Check the ink tanks and add more ink if needed. For more information about refilling ink tanks, see Fill ink tanks on page 32. ● Open the printhead access door completely, and then close it immediately. This process helps remove ink buildup and maintains the best print quality throughout the life of the printer. **NOTICE:** After you have set up the printer, do not open the printhead latch unless instructed to do so.

Load media

Select a paper size to continue.

To load full-size paper

1. Raise the input tray.
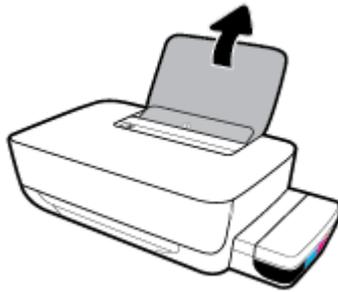
2. Slide the paper-width guide to the left.
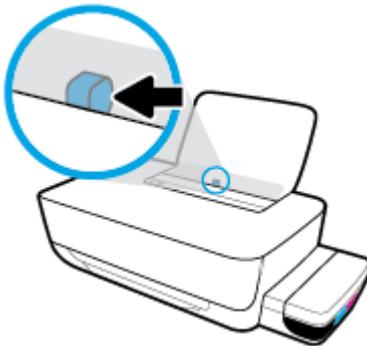
3. Insert a stack of paper into the input tray with the short edge down and the print side up, and slide the stack of paper down until it stops.

4. Slide the paper-width guide to the right until it stops at the edge of the paper.
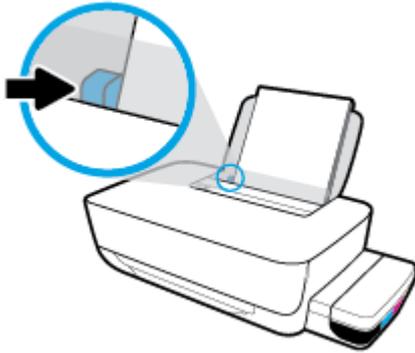
5. Pull out the output tray and the tray extender.

To load small-size paper

1. Raise the input tray.
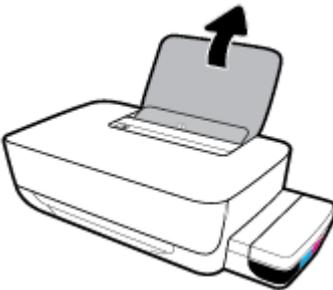
2. Slide the paper-width guide to the left.
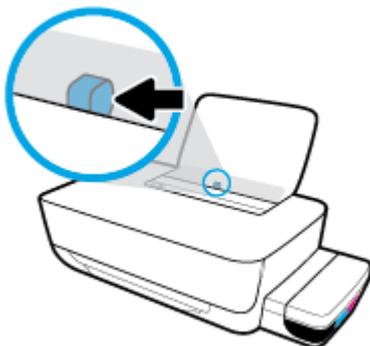
3.   Insert a stack of small-size paper (like photo paper) into the far-right side of the input tray with the short edge down and the print side up, and slide the stack of paper down until it stops.
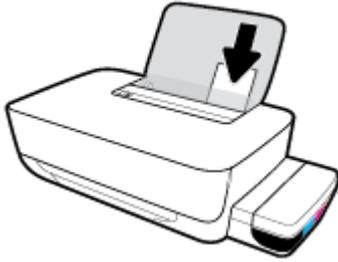
4.   Slide the paper-width guide to the right until it stops at the edge of the paper.
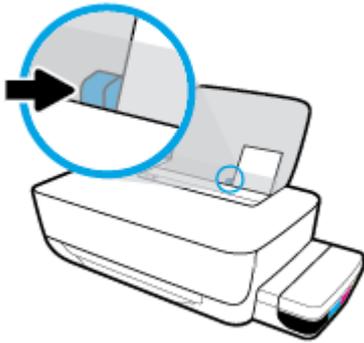
5.   Pull out the output tray and the tray extender.

To load envelopes

1.   Raise the input tray.
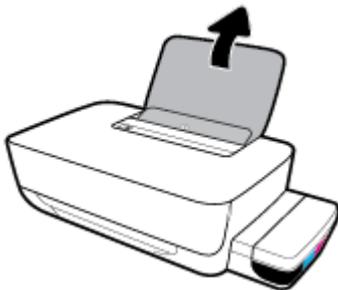
2. Slide the paper-width guide to the left.
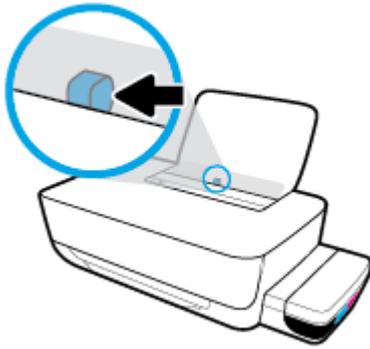
3. Insert one or more envelopes into the far-right side of the input tray and slide the stack of envelopes down until it stops.

The side to be printed on should face up. For envelope with flap on the long edge, insert the envelope vertically with the flap on the left side and facing down. For envelope with the flap on the short edge, insert the envelope vertically with the flap on the top and facing down.
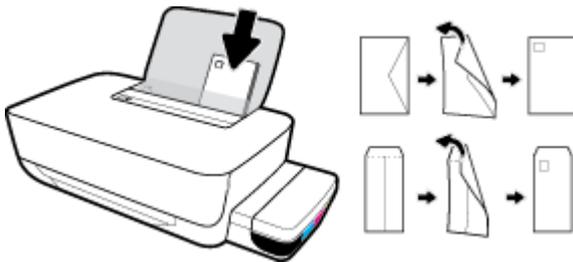
4. Slide the paper-width guide to the right against the stack of envelopes until it stops.
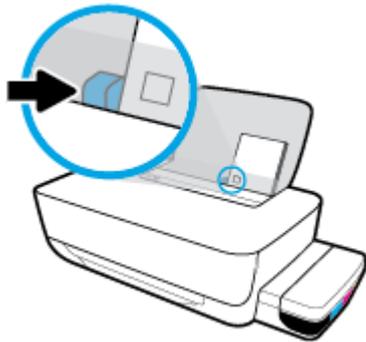
5. Pull out the output tray and the tray extender.

Paper basics

The printer is designed to work well with most types of office paper. It is best to test a variety of print paper types before buying large quantities. Use HP paper for optimum print quality. Visit the HP website at www.hp.com for more information about HP paper.

HP recommends plain papers with the ColorLok logo for printing everyday documents. All papers with the ColorLok logo are independently tested to meet high standards of reliability and print quality, and produce documents with crisp, vivid color, bolder blacks, and that dry faster than ordinary plain papers. Look for papers with the ColorLok logo in a variety of weights and sizes from major paper manufacturers.

This section contains the following topics:

Recommended papers for printing

If you want the best print quality, HP recommends using HP papers that are specifically designed for the type of project you are printing.

Depending on your country/region, some of these papers might not be available.

Photo printing

*   **HP Premium Plus Photo Paper**

    HP Premium Plus Photo Paper is HP's highest-quality photo paper for your best photos. With HP Premium Plus Photo Paper, you can print beautiful photos that are instant-dry so you can share them right off the printer. It is available in several sizes, including A4, 8.5 x 11 inches, 4 x 6 inches (10 x 15 cm), 5 x 7 inches (13 x 18 cm), and in two finishes - glossy or soft gloss (semi-gloss). Ideal for framing, displaying, or gifting your best photos and special photo projects. HP Premium Plus Photo Paper delivers exceptional results with professional quality and durability.

*   **HP Advanced Photo Paper**

    This glossy photo paper features an instant-dry finish for easy handling without smudging. It resists water, smears, fingerprints, and humidity. Your prints have a look and feel comparable to a store-processed photo. It is available in several sizes, including A4, 8.5 x 11 inches, 10 x 15 cm (4 x 6 inches), 13 x 18 cm (5 x 7 inches). It is acid-free for longer lasting documents.

*   **HP Everyday Photo Paper**

    Print colorful, everyday snapshots at a low cost, using paper designed for casual photo printing. This affordable photo paper dries quickly for easy handling. Get sharp, crisp images when you use this paper with any inkjet printer. It is available in glossy finish in several sizes, including A4, 8.5 x 11 inches, 5 x 7 inches, and 4 x 6 inches (10 x 15 cm). It is acid-free for longer lasting documents.

*   **HP Photo Value Packs**

    HP Photo Value Packs conveniently package original HP ink cartridges and HP Advanced Photo Paper to save you time and take the guesswork out of printing affordable, lab-quality photos with your HP

printer. Original HP inks and HP Advanced Photo Paper have been designed to work together so your photos are long lasting and vivid, print after print. Great for printing out an entire vacation's worth of photos or multiple prints to share.

Business documents

- **HP Premium Presentation Paper 120g Matte** or **HP Professional Paper 120 Matt**

  This paper is a heavy two-sided matte paper perfect for presentation, proposals, reports, and newsletters. It is heavyweight for an impressive look and feel.

- **HP Brochure Paper 180g Glossy** or **HP Professional Paper 180 Glossy**

  These papers are glossy-coated on both sides for two-sided use. They are the perfect choice for near-photographic reproductions and business graphics for report covers, special presentations, brochures, mailers, and calendars.

- **HP Brochure Paper 180g Matte** or **HP Professional Paper 180 Matte**

  These papers are matte-coated on both sides for two-sided use. They are the perfect choice for near-photographic reproductions and business graphics for report covers, special presentations, brochures, mailers, and calendars.

Everyday printing

All the papers listed for everyday printing feature ColorLok Technology for less smearing, bolder blacks, and vivid colors.

- **HP Bright White Inkjet Paper**

  HP Bright White Inkjet Paper delivers high-contrast colors and sharp text. It is opaque enough for two-sided color usage with no show-through, which makes it ideal for newsletters, reports, and flyers.

- **HP Printing Paper**

  HP Printing Paper is a high-quality multifunction paper. It produces documents that look and feel more substantial than documents printed on standard multipurpose or copy paper. It is acid-free for longer lasting documents.

- **HP Office Paper**

  HP Office Paper is a high-quality multifunction paper. It is suitable for copies, drafts, memos, and other everyday documents. It is acid-free for longer lasting documents.

- **HP Office Recycled Paper**

  HP Office Recycled Paper is a high-quality multifunction paper made with 30% recycled fiber.

Order HP paper supplies

The printer is designed to work well with most types of office paper. Use HP paper for optimum print quality.

To order HP papers and other supplies, go to www.hp.com . At this time, some portions of the HP website are available in English only.

HP recommends plain papers with the ColorLok logo for printing and copying of everyday documents. All papers with the ColorLok logo are independently tested to meet high standards of reliability and print quality, and produce documents with crisp, vivid color, bolder blacks and shorter dry-time than ordinary plain papers. Look for papers with the ColorLok logo in a variety of weights and sizes from major paper manufacturers.

Open the HP printer software (Windows)

After installing the HP printer software, double-click the printer icon on the desktop or do one of the following to open the printer software:

- **Windows 10**: From the computer desktop, click **Start**, select **HP** from the app list, and then select the icon with the printer name.

- **Windows 8.1**: Click the down arrow in lower left corner of the Start screen, and then select the printer name.

- **Windows 8**: Right-click an empty area on the Start screen, click **All Apps** on the app bar, and then select the printer name.

- **Windows 7**: From the computer desktop, click **Start**, select **All Programs**, click **HP**, click the folder for the printer, and then select the icon with the printer name.

NOTE:

- If you have not installed the HP printer software, enter 123.hp.com in a web browser on your computer to download and install the HP printer software.

- You can also use the HP printer software CD (if provided), or download the software from www.support.hp.com.

Sleep mode

To conserve energy, the printer automatically goes to sleep when it is not being used. Keep in mind the following important points about Sleep mode:

- Power usage is reduced while in Sleep mode.

- After initial setup of printer, the printer will enter Sleep mode after 5 minutes of inactivity.

- The **Power** button light is dimmed and other lights on the printer control panel are off in Sleep mode.

- Pressing any button on the control panel, or sending a print job can wake up the printer from Sleep mode.

Quiet mode

Quiet mode slows down printing to reduce overall noise without affecting print quality. Quiet mode only works for printing with **Normal** print quality on plain paper. To reduce printing noise, turn on Quiet mode. To print at normal speed, turn Quiet mode off. Quiet mode is off by default.

NOTE: In Quiet mode, if you print on plain paper with the **Draft** or **Best** print quality, or if you print photos or envelopes, the printer works in the same way as when Quiet mode is off.

To turn Quiet mode on or off from the printer software (Windows)

1. Open the HP printer software. For more information, see Open the HP printer software (Windows) on page 17.

2. Click the **Quiet Mode** tab.

3. Click **On** or **Off**.

4. Click **Save Setting**.

To turn Quiet mode on or off from the printer software (OS X and macOS)

1. Open HP Utility.

   NOTE: HP Utility is located in the **HP** folder in the **Applications** folder.

2. Select the printer.

3. Click **Quiet Mode** .

4. Select **On** or **Off** .

5. Click **Apply Now**.

Auto-Off

This feature turns the printer off after 2 hours of inactivity to help reduce energy use. **Auto-Off turns the printer off completely, so you must use the Power button to turn the printer back on.** If your printer supports this energy-saving feature, Auto-Off is automatically enabled or disabled depending on printer capabilities and connection options. Even when Auto-Off is disabled, the printer enters Sleep mode on page 18 after 5 minutes of inactivity to help reduce energy use.

- Auto-Off is always enabled if the printer does not have network or fax capability.

- Auto-Off is disabled when a printer's wireless or Wi-Fi Direct capability is turned on or when a printer with fax, USB, or Ethernet network capability establishes a fax, USB, or Ethernet network connection.

3 Print

- [Print from your computer](#)
- [Tips for print success](#)

Print from your computer

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Print documents

Before printing documents, make sure you have paper loaded in the input tray and the output tray is open. For more information about loading paper, see Load media on page 11.

To print a document (Windows)

1. From your software, select **Print**.

2. Make sure your printer is selected.

3. Click the button that opens the **Properties** dialog box.

   Depending on your software application, this button might be called **Properties**, **Options**, **Printer Setup**, **Printer Properties**, **Printer**, or **Preferences**.

4. Select the appropriate options on the **Printing Shortcuts** or **Printing Shortcut** tab.

   To change other print settings, click the other tabs.

   For more printing tips, see Printer settings tips on page 28.

   📝 **NOTE:**   If you change the paper size, be sure to load the correct paper in the input tray.

5. Click **OK** to close the **Properties** dialog box.

6. Click **Print** or **OK** to begin printing.

To print documents (OS X and macOS)

1. From the **File** menu in your software, choose **Print**.

2. Make sure your printer is selected.

3. Set the print options.

   If you do not see options on the Print dialog, click **Show Details**.

   - Choose the appropriate paper size in the **Paper Size** pop-up menu.

     📝 **NOTE:**   If you change the paper size, ensure that you have loaded the correct paper.

   - Select the orientation.

   - Enter the scaling percentage.

4. Click **Print**.

To print on both sides of the page (Windows)

1.   From your software, select **Print**.

2.   Make sure your printer is selected.

3.   Click the button that opens the **Properties** dialog box.

     Depending on your software application, this button might be called **Properties**, **Options**, **Printer Setup**, **Printer Properties**, **Printer**, or **Preferences**.

4.   On the **Printing Shortcuts** or **Printing Shortcut** tab, select the **Two-sided (Duplex) Printing** shortcut, and then select an option from the **Print On Both Sides Manually** drop-down list.

     To change other print settings, click the other tabs.

     For more printing tips, see .

     📝 **NOTE:**   If you change the paper size, be sure to load the correct paper in the input tray.

5.   Click **OK** to close the **Properties** dialog box.

6.   Click **Print** or **OK** to begin printing.

To print on both sides of the page (OS X and macOS)

1.   From the **File** menu in your software, choose **Print**.

2.   In the Print dialog, choose **Paper Handling** from the pop-up menu and set **Page Order** to **Normal**.

3.   Set **Pages to Print** to **Odd Only**.

4.   Click **Print**.

5.   After all of the odd numbered pages have printed, remove the document from the output tray.

6.   Reload the document so that the end that came out of the printer is now going into the printer and the blank side of the document is facing toward the front of the printer.

7.   In the Print dialog, return to the **Paper Handling** pop-up menu and set the page order to **Normal** and the pages to print to **Even Only**.

8.   Click **Print**.

Print photos

Before printing photos, make sure you have photo paper loaded in the input tray and the output tray is open. For more information about loading paper, see .

To print a photo on photo paper (Windows)

1.   From your software, select **Print**.

2.   Make sure your printer is selected.

3.   Click the button that opens the **Properties** dialog box.

     Depending on your software application, this button might be called **Properties**, **Options**, **Printer Setup**, **Printer Properties**, **Printer**, or **Preferences**.

4. Select the appropriate options on the **Printing Shortcuts** or **Printing Shortcut** tab.

   To change other print settings, click the other tabs.

   For more printing tips, see .

   📝 **NOTE:** If you change the paper size, be sure to load the correct paper in the input tray.

5. Click **OK** to close the **Properties** dialog box.

6. Click **Print** or **OK** to begin printing.

📝 **NOTE:** After the printing is finished, remove unused photo paper from the input tray. Store the photo paper so it does not start to curl, which could reduce the quality of your printout.

To print a photo from the computer (OS X and macOS)

1. From the **File** menu in your software, choose **Print**.

2. Make sure your printer is selected.

3. Set the print options.

   If you do not see options on the Print dialog, click **Show Details**.

   - Choose the appropriate paper size in the **Paper Size** pop-up menu.

     📝 **NOTE:** If you change the paper size ensure that you have loaded the correct paper.

   - Select the orientation.

4. From the pop-up menu, choose **Paper Type/Quality**, and then choose the following settings:

   - **Paper Type**: The appropriate photo paper type

   - **Quality**: Select the option that provides the best quality or maximum dpi.

   - Click the **Color Options** disclosure triangle, and then choose the appropriate **Photo Fix** option.

     – **Off**: applies no changes to the image.

     – **On**: automatically focuses the image; moderately adjusts image sharpness.

5. Select any other print settings you want, and then click **Print**.

Print envelopes

Before printing envelopes, make sure you have envelopes loaded in the input tray and the output tray is open. You can load one or more envelopes into the input tray. Do not use shiny or embossed envelopes or envelopes that have clasps or windows. For more information about loading envelopes, see .

📝 **NOTE:** For details on how to format text for printing on envelopes, refer to the documentation of the application that you are using.

To print an envelope (Windows)

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

2. Make sure your printer is selected.

3.   Click the button that opens the **Properties** dialog box.

Depending on your software application, this button might be called **Properties**, **Options**, **Printer Setup**, **Printer Properties**, **Printer**, or **Preferences**.

4.   Select the appropriate options on the **Printing Shortcuts** or **Printing Shortcut** tab.

To change other print settings, click the other tabs.

For more printing tips, see .

NOTE: If you change the paper size, be sure to load the correct paper in the input tray.

5.   Click **OK** to close the **Properties** dialog box.

6.   Click **Print** or **OK** to begin printing.

To print envelopes (OS X and macOS)

1.   From the **File** menu in your software, choose **Print**.

2.   Make sure your printer is selected.

3.   Select the appropriate envelope size from the **Paper Size** pop-up menu.

If you do not see options on the Print dialog, click **Show Details**.

NOTE: If you change the paper size, ensure that you have loaded the correct paper.

4.   From the pop-up menu, choose **Paper Type/Quality**, and verify the paper type setting is set to **Plain Paper**.

5.   Click **Print**.

Print using the maximum dpi

Use maximum dots per inch (dpi) to print high-quality, sharp images on photo paper.

Printing in maximum dpi takes longer than printing with other settings and requires a large amount of disk space.

For supported print resolutions, visit the printer support website at www.support.hp.com.

To print in maximum dpi mode (Windows)

1.   From your software, select **Print**.

2.   Make sure your printer is selected.

3.   Click the button that opens the **Properties** dialog box.

Depending on your software application, this button might be called **Properties**, **Options**, **Printer Setup**, **Printer Properties**, **Printer**, or **Preferences**.

4.   Select the appropriate options.

Windows 10, Windows 8.1, and Windows 8

● Click the **Paper/Quality** tab. From the **Paper Size** drop-down list, select the appropriate paper size. From the **Paper Type** drop-down list, select the appropriate paper type.

● Click the **Advanced** tab, and then select **Print in Max DPI**.

Windows 7

● Click the **Paper/Quality** tab. From the **Media** drop-down list, select the appropriate paper type.

● Click the **Advanced** button. Select the appropriate paper size from the **Paper Size** drop-down list. In the **Printer Features** area, select **Yes** from the **Print in Max DPI** drop-down list. Then click **OK** to close the **Advanced Options** dialog.

For more printing tips, see .

5. Confirm the orientation on the **Layout** tab, and then click **OK** to print.

To print using maximum dpi (OS X and macOS)

1. From the **File** menu in your software, choose **Print**.

2. Make sure your printer is selected.

3. Set the print options.

   If you do not see options on the Print dialog, click **Show Details**.

   ● Choose the appropriate paper size in the **Paper Size** pop-up menu.

   > **NOTE:** If you change the paper size ensure that you have loaded the correct paper.

   ● Select the orientation.

4. From the pop-up menu, choose **Paper Type/Quality**, and then choose the following settings:

   ● **Paper Type**: The appropriate paper type

   ● **Quality**: **Maximum dpi**

5. Select any other print settings that you want, and then click **Print**.

Tips for print success

To print successfully, the HP printheads should be functioning properly, the ink tanks should be filled with sufficient ink, the paper should be loaded correctly, and the printer should have the appropriate settings.

- Printhead and ink tips

- Paper loading tips

- Printer settings tips

Printhead and ink tips

- Use original HP printheads.

- Install both the black and tri-color printheads correctly.

  For more information, see Fix printhead problems on page 51.

- Check the ink levels on the ink tanks to make sure there is sufficient ink.

  For more information, see Ink levels on page 31.

- If the print quality is not acceptable, see Printing issues on page 55 for more information.

📝 **NOTE:** Original HP printheads and ink are designed and tested with HP printers and papers to help you easily produce great results, time after time.

HP cannot guarantee the quality or reliability of non-HP supplies. Product service or repairs required as a result of using a non-HP supply will not be covered under warranty.

Paper loading tips

- Load a stack of paper (not just one page). All of the paper in the stack should be in the same size and of the same type to avoid a paper jam.

- Load the paper with side to be printed on facing up.

- Ensure that paper loaded in the input tray lays flat, and the edges are not bent or torn.

- Adjust the paper-width guide in the input tray to fit snugly against all paper. Make sure the paper-width guide does not bend the paper in the input tray.

  For more information, see Load media on page 11.

Printer settings tips

Printer settings tips (Windows)

- To change default print settings, open the HP printer software, click **Print** , and then click **Set Preferences**. For information how to open the printer software, see Open the HP printer software (Windows) on page 17.

- You can use printing shortcuts to save time setting desired printing preferences. A printing shortcut stores the settings that are appropriate for a particular type of job, so that you can set all the options with a single click. To use a shortcut, go to the **Printing Shortcuts** or **Printing Shortcut** tab, select the desired shortcut, and then click **OK**.

  To add a new printing shortcut, set the desired printing preferences on the **Paper/Quality**, **Layout**, or **Advanced** tab, select the **Printing Shortcuts** or **Printing Shortcut** tab, click **Save As** and enter a name, and then click **OK**.

  To delete a printing shortcut, select it, and then click **Delete**.

  NOTE: You cannot delete the default printing shortcuts.

- To understand paper and paper tray settings:

    - **Paper Size**: Select the paper size you loaded in the input tray.

    - **Paper Source**: Select the paper tray you loaded the paper into.

    - **Paper Type** or **Media**: Select the paper type you are using.

- To understand color or black and white settings:

    - **Color**: Uses ink from all cartridges for full color prints.

    - **Black & White** or **Black Ink Only**: Uses the black ink only for normal or lower quality black and white prints.

    - **High Quality Grayscale**: Uses ink from both the color and black cartridges to produce a wider range of black and gray tones for high quality black and white prints.

- To understand print quality settings:

  The print quality is measured in print resolution dots per inch (dpi). Higher dpi produces clearer and more detailed prints, but slows print speed and might use more ink.

    - **Draft**: Lowest dpi typically used when ink levels are low or when high quality prints are not needed.

    - **Normal**: Suitable for most print jobs.

    - **Best**: Better dpi than **Normal**.

    - **Print in Max DPI**: Highest dpi setting available for print quality.

    - **HP Real Life Technologies**: This feature smooths and sharpens images and graphics for improved print quality.

- To understand page and layout settings:

- **Orientation**: Select **Portrait** for vertical prints or **Landscape** for horizontal prints.

- **Print on Both Sides Manually**: Manually flip the pages after one side of the paper prints out so that you can print on both sides of the paper.

  ○ **Flip on Long Edge**: Select it if you want to flip pages by the long edge of the paper when printing on both sides of the paper.

  ○ **Flip on Short Edge**: Select it if you want to flip pages by the short edge of the paper when printing on both sides of the paper.

- **Booklet Layout** or **Booklet**: Allows you to print a multiple-page document as a booklet. It places two pages on each side of a sheet that can then be folded into a booklet in half size of the paper.

  ○ **Left binding** or **Booklet-LeftBinding**: The binding side after folded into a booklet appears at the left side. Select this option if your reading habit is from left to right.

  ○ **Right binding** or **Booklet-RightBinding**: The binding side after folded into a booklet appears at the right side. Select this option if your reading habit is from right to left.

- **Borderless** or **Page Borders**: Allows you to add or remove borders to the pages if you print the document with two or more pages per sheet.

- **Pages per Sheet Layout**: Helps you specify the order of the pages if you print the document with more than two pages per sheet.

- **Pages to Print**: Allows you to print the odd pages only, print the even pages only, or print all pages.

- **Reverse page order** or **Page Order**: Allows you to print pages from front to back or in reverse order.

Printer settings tips (OS X and macOS)

- On the Print dialog, use the **Paper Size** pop-up menu to select the size of paper loaded in the printer.

- On the Print dialog, choose the **Paper Type/Quality** pop-up menu and select the appropriate paper type and quality.

- To print a black and white document using only black ink, choose the **Paper Type/Quality** from the pop-up menu and choose **Grayscale** from the Color pop-up menu.

4 Manage ink and printhead

This section contains the following topics:

- [Ink levels](#)
- [Fill ink tanks](#)
- [Order ink supplies](#)
- [Replace printheads (cartridges)](#)
- [Print with black ink only](#)
- [Tips for working with ink and printhead](#)
- [Move printer](#)

Ink levels

Use the ink level lines on the ink tanks to determine when to fill the tanks and how much ink should be added.
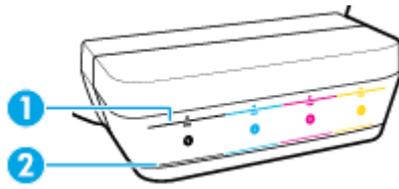

| 1 | Maximum line: The actual ink level should not be higher than the maximum line. |
| 2 | Minimum line: The actual ink level should not be lower than the minimum line. |

Match the color of the ink bottle to the color on the tank when you fill the tanks, and seal the rubber ink tank caps properly after that.

The ink level in each tank will be a little bit below the maximum fill line when you first fill the tanks.
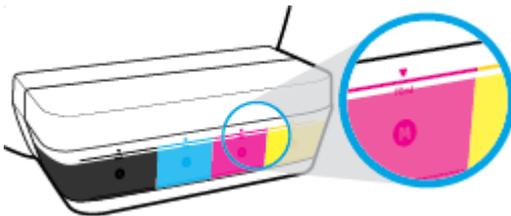
If you notice any ink level reaches the minimum line during daily printing, refill that tank with correct ink. Printing with ink level below the minimum line may cause damage to your printer.
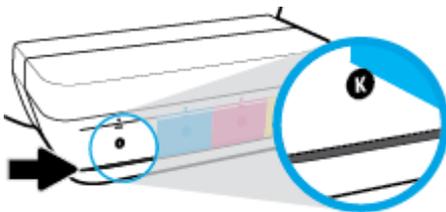
When you refill the ink tanks, fill the ink to the maximum lines only. Any ink level above the maximum line may cause ink leakage.
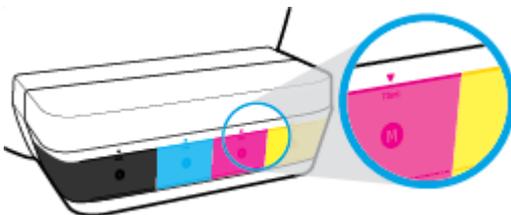
NOTE: Product service or repairs required as a result of filling the ink tanks improperly and/or using non-HP ink will not be covered under warranty.

Fill ink tanks

To fill the ink tanks

1. Lift the ink tank lid.
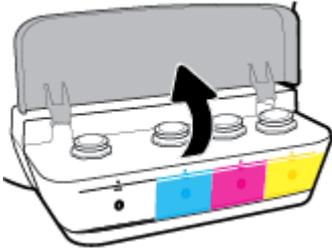
2. Remove the cap of the ink tank you plan to refill.
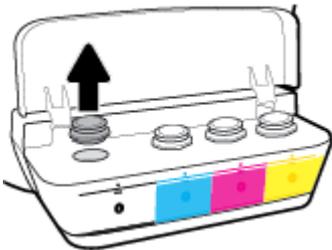
3. Twist to remove the cap of the ink bottle, remove the seal from the bottle, install the cap back onto the bottle, and then pull open the top part of the cap.
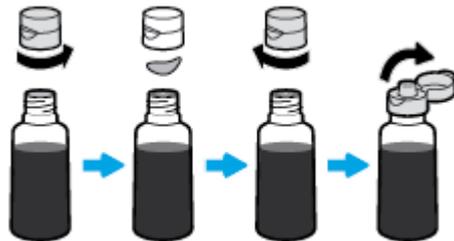
**4.** Hold the ink bottle on tank nozzle and refill the ink tank to the maximum line only. If ink doesn't drain immediately, remove and reinsert bottle on tank.

⚠ **CAUTION:** You should not squeeze the ink bottle during this process.
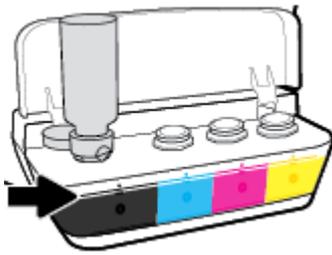
📝 **NOTE:** If there is leftover ink in the bottle, store the bottle in an upright position in a cool and dry location.

5. Close the ink tank cap securely.

6. Repeat steps 2 to 5 to refill other ink tanks.

7. Close the ink tank lid.
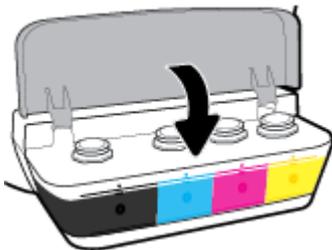
Precautions for working with ink bottles

Use the following tips to work with ink bottles:

● Keep the ink bottles beyond the reach of children.

● Open the ink bottle only when you plan to fill the ink tanks.

- Do not tilt, shake, or squeeze the ink bottle when it is open to prevent ink leaks.

- Store the ink bottles in a cool, dark place.

Order ink supplies

Before ordering ink bottles, visually check the labels on the ink bottles to locate the ink bottle numbers.

To order original HP supplies for the printer, go to www.hp.com/buy/supplies . If prompted, choose your country/region, and then follow the prompts to find the right ink bottles for your printer.

NOTE: Ordering ink bottles online is not supported in all countries/regions. If it is not available in your country/region, you may still view supplies information and print a list for reference when shopping at a local HP reseller.

Replace printheads (cartridges)

To replace the printheads (cartridges)

1. Check that power is on.

2. Remove the printhead.

    a. Open the front door of the printer.
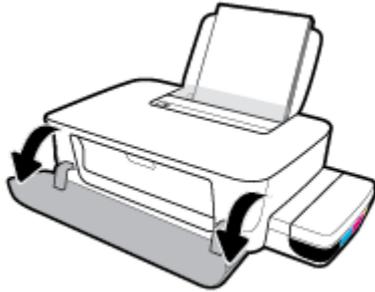
    b. Open the printhead access door. Press and hold the **Resume** button ( ) for about three seconds. Wait for the print carriage to move to the center and stop moving.

    > **NOTICE:** The instructions here are only applicable in this section. After you have set up the printer, do not open the printhead latch unless instructed to do so.
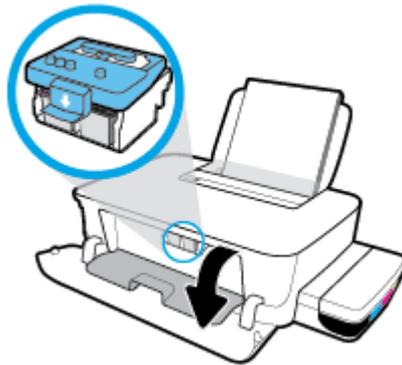
    c. Push down to open the printhead latch.

d. Press down to release the printhead from the carriage.
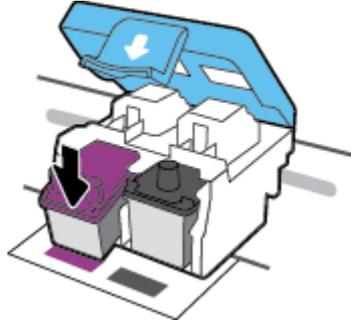
e. Remove the printhead that you want to replace from its slot.
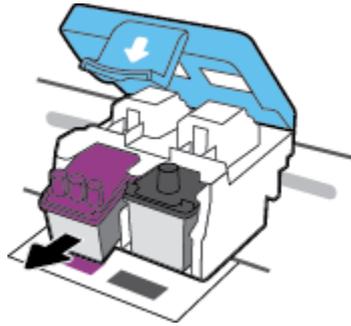
3. Insert a new printhead.

a. Remove the printhead from the packaging.
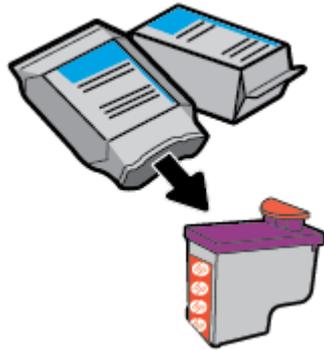
b. Remove the plug from top of the printhead and the plastic tape from contacts.
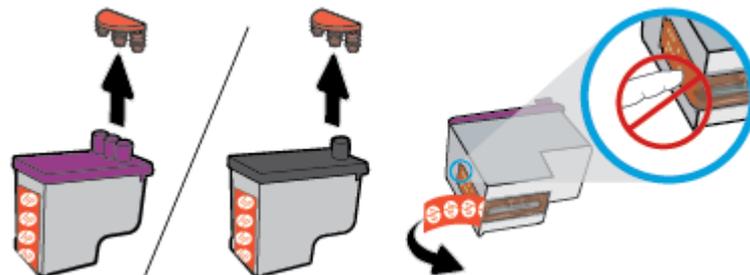
📝 **NOTE:** Do not touch the electrical contacts on the printhead.

c. Slide the printhead into the slot until it clicks into place.
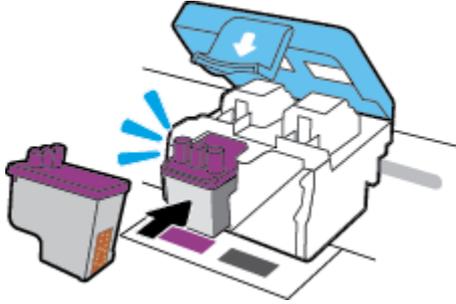
d. Repeat steps 2d to 3c to replace the other printhead.

e. Close the printhead latch. Make sure the printhead latch is properly closed to avoid problems such as carriage jams.
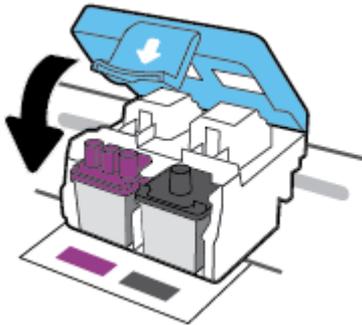
f. Close the printhead access door.
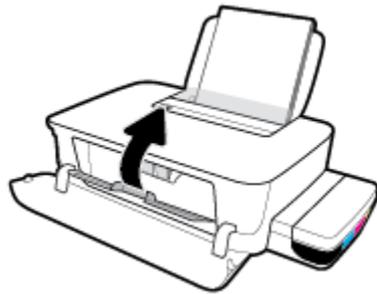
g. Close the front door of the printer.
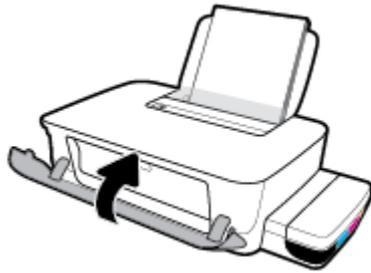
NOTE: The HP printer software prompts you to align the printheads when you print a document after installing the new printheads. For more information about alignment, see "To align the printheads" from Printing issues on page 55.

Print with black ink only

Before printing with black ink only, make sure the actual ink levels in all tanks are no lower than the minimum ink lines. Printing with any ink level lower than the minimum line may cause damage to your printer.

To print with black ink only(Windows)

1. From your software, select **Print**.

2. Make sure your printer is selected.

3. Click the button that opens the **Properties** dialog box.

   Depending on your software application, this button might be called **Properties**, **Options**, **Printer Setup**, **Printer Properties**, **Printer**, or **Preferences**.

4. Select the appropriate options.

   #### Windows 10 and Windows 8.1

   a. Click **Paper/Quality** tab.

   b. Under **Print in Grayscale**, select **Black Ink Only** from the list, and then click **OK**.

   #### Windows 8 and Windows 7

   a. On the **Layout** or **Paper/Quality** tab, click the **Advanced** button to open the **Advanced Options** dialog box.

   b. From the **Print in Grayscale** drop-down list, select **Black Ink Only**, and then click **OK**.

To print with black ink only (OS X and macOS)

1. From the **File** menu in your software, choose **Print**.

2. Make sure your printer is selected.

3. Set the print options.

   If you do not see options on the Print dialog, click **Show Details**.

   📝 **NOTE:**   Locations for the options can vary from one application to another.

4. From the pop-up menu, choose **Color Matching**, and then select **Vendor Mathing**.

5. From the pop-up menu, choose **Paper Type/Quality**.

6. From **Color Option** menu, choose **Grayscale**, and then click **Print**.

Tips for working with ink and printhead

Printhead tips

Use the following tips to work with printheads:

- To protect the printheads from drying out, always turn the printer off using the **Power** button, and wait until the **Power** button light goes out.

- Do not open or untape printheads until you are ready to install them. Leaving tape on the printheads reduces ink evaporation.

- Insert the new printheads into the correct slots. Match the color and icon of each printhead to the color and icon for each slot. Make sure the printheads snap into place, and then close the printhead latch. After you have set up the printer, do not open the printhead latch unless instructed to do so.

- Align the printer for best print quality. See Printing issues on page 55 for more information.

Ink tips

Use the following tips to work with ink:

- Make sure the ink tanks are filled with ink and the ink levels are above the minimum line before printing.

- Refill the ink tanks when the ink level reaches the minimum line. Printing with the ink level below the minimum line may cause damage to your printer.

- Do not make the ink level be above the maximum line by overfilling the ink tanks or tilting the printer. The ink level higher than the maximum line can cause ink leaks and ink mixing.

Move printer

To prevent damage to the printer or ink leakage, follow these instructions.

If you are moving the printer within your home or office, keep the printhead latch closed, and keep the printer level.

If you are moving the printer outside your home or office, visit www.support.hp.com or contact HP support.

5   Connect your printer

The printer provides a rear USB 2.0 High Speed port for connection to a computer.

If the printer software has been installed, the printer will operate as a plug-and-play device. If the software has not been installed, follow the steps below to connect the printer with the USB cable.

To connect the printer with the USB cable

1. Enter 123.hp.com in a web browser on your computer to download and install the HP printer software. You can also use the HP printer software CD (if provided), or download the software from www.support.hp.com .

    NOTE: Do not connect the USB cable to the printer until you are prompted to do so.

2. Follow the onscreen instructions. When you are prompted, connect the printer to the computer by selecting **USB** on the **Connection Options** screen.

3. Follow the onscreen instructions.

6 Solve a problem

This section contains the following topics:

- [Jams and paper-feed issues](#)

- [Printhead issues](#)

- [Printing issues](#)

- [Printer hardware issues](#)

- [HP support](#)

Jams and paper-feed issues

What do you want to do?

- Clear a paper or print carriage jam

- Learn how to avoid paper jams

- Solve paper-feed problems

Clear a paper or print carriage jam

Solve paper jam issues.	Use an HP online troubleshooting wizard
	Get step-by-step instructions for clearing paper jams and resolving issues with paper or the paper feed.
Resolve a print carriage jam.	Use an HP online troubleshooting wizard
	If something is blocking the print carriage or it does not move easily, get step-by-step instructions.

NOTE: The HP online troubleshooting wizards may not be available in all languages.

Read general instructions in the Help for clearing paper or print carriage jams

Paper jams can occur in several locations.

NOTE: Do not use any tools or other devices to remove jammed paper. Always use caution when removing jammed paper from inside the printer.

To clear a paper jam from the input tray

1. Press the **Cancel** button (✕) to cancel printing. If this does not clear the error, complete the following steps to clear the jam manually.

2. Pull the paper gently out of the input tray.
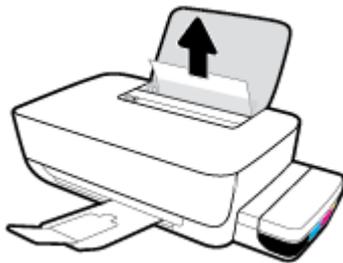
3. Make sure there is no foreign object in the paper path, and then reload paper.

   NOTE: The input tray shield can prevent foreign debris from falling into the paper path and causing serious paper jams. Do not remove the input tray shield.

To clear a paper jam from the output tray

1. Press the **Cancel** button (✕) to cancel printing. If this does not clear the error, complete the following steps to clear the jam manually.

2. Pull the paper gently out of the output tray.

To clear paper or other objects from the printhead (cartridge) access area

1. Press the **Cancel** button (✕) to cancel printing. If this does not clear the error, complete the following steps to clear the jam manually.

2. Close the output tray extender, and then rotate the output tray clockwise to stow it in the printer.

3. Open the front door of the printer.

4. Open the printhead access door.

5. Make sure the print carriage is not obstructed.
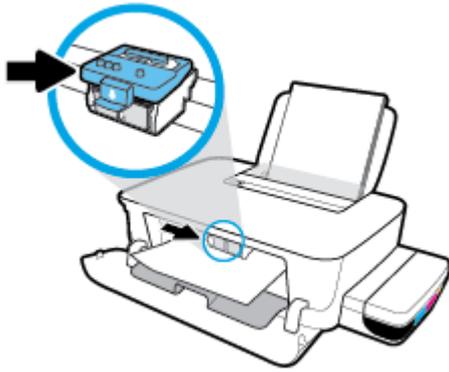
Remove any jammed paper or other objects blocking the carriage. You might need to slide the carriage to the right side.

6. Make sure the printhead latch is properly closed.

> **NOTICE:** After you have set up the printer, do not open the printhead latch unless instructed to do so.

7. Close the printhead access door, and then close the front door.

8. Pull out the output tray and the tray extender.

To clear a paper jam inside of the printer

> **NOTE:** To prevent ink from leaking, make sure the ink tank caps are firmly closed.

1. Press the **Cancel** button (✕) to cancel printing. If this does not clear the error, complete the following steps to clear the jam manually.

2. Press the **Power** button (⏻) to turn off the printer.

3. Gently turn the printer onto its back side and locate the cleanout door on the bottom of the printer. Pull both tabs on the cleanout door to open it.
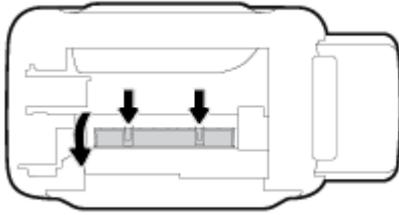
4. Remove the jammed paper.
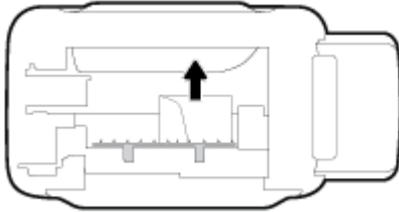
5. Close the cleanout door. Gently push the door towards the printer until both latches snap into place.
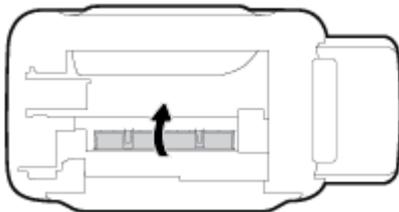
6. Turn the printer upright, and then press the **Power** button (⏻) to turn on the printer.

Learn how to avoid paper jams

To help avoid paper jams, follow these guidelines.

- Do not overfill the input tray, but make sure that you have at least 5 pages loaded in the tray for best results.

- Keep your printer free of dust and debris by removing the paper and closing the input tray when you are not using the printer.

- Remove printed papers from the output tray frequently.

- Ensure that paper loaded in the input tray lays flat, and the edges are not bent or torn.

- Do not combine different paper types and paper sizes in the input tray; the entire stack of paper in the input tray must be the same size and type.

  Use HP paper for optimum performance. See Paper basics on page 15 for more information about HP paper.

- Adjust the paper-width guide in the input tray to fit snugly against all paper. Make sure the paper-width guide does not bend the paper in the input tray.

- Do not force paper too far down in the input tray.

- Do not add paper while the printer is printing. If the printer is about to run out of paper, wait until the out of paper message appears before adding paper.

Solve paper-feed problems

What kind of problem are you having?

- **Paper is not picked up from the input tray**

  - Make sure paper is loaded in the input tray. For more information, see Load media on page 11.

  - Adjust the paper-width guide in the input tray to fit snugly against all paper. Make sure the paper-width guide does not bend the paper in the input tray.

  - Make sure paper in the input tray is not curled. Uncurl paper by bending it in the opposite direction of the curl.

  - Clean the paper rollers. For more information, see Clean the paper rollers on page 49.

- **Pages are skewing**

  - Make sure the paper is loaded in the far-right side of the input tray and the paper-width guide fits snugly against the left side of the paper.

  - Load paper into the printer only when it is not printing.

- **Multiple pages are being picked up**

  - Adjust the paper-width guide in the input tray to fit snugly against all paper. Make sure the paper-width guide does not bend the paper in the input tray.

  - Make sure the input tray is not overloaded with paper.

  - Make sure the pieces of the loaded paper are not sticking together.

  - Use HP paper for optimum performance and efficiency.

  - Clean the paper rollers. For more information, see Clean the paper rollers on page 49.

Clean the paper rollers

To clean the paper rollers manually

1. Gather the following materials:

   - A long, lint-free cotton swab

   - Distilled, filtered, or bottled water (tap water might damage the printer)

2. Press the **Power** button ( ) to turn off the printer.

3. Disconnect the power cord from the rear of the printer.

4. Disconnect the USB cable, if it is not already disconnected.

5. Raise the input tray.

6. Lift and hold the input tray shield.

    NOTE: Do not remove the input tray shield. The input tray shield prevents foreign debris from falling into the paper path and causing paper jams.

7. Look down through the open input tray and find the gray paper pick rollers. You might need a flashlight to illuminate the area.

8. Dampen a long cotton swab with bottled or distilled water, and then squeeze any excess water from the cloth.

9. Press the swab against the rollers, and then rotate them upward with your fingers. Apply a moderate amount of pressure to remove dust or dirt buildup.

10. Lower the input tray shield.

11. Allow the rollers to dry for 10 or 15 minutes.

12. Reconnect the power cord to the rear of the printer.

13. Reconnect the USB cable to the printer if necessary.

14. Press the Power button to turn on the printer.

Printhead issues

Identify whether a printhead has a problem

To identify whether a printhead has a problem, check the status of the **Printhead** lights. For more information, see Status lights on page 7.

Fix printhead problems

NOTICE: The instructions here are only applicable in this section. After you have set up the printer, do not open the printhead latch unless instructed to do so.

If an error occurs after a printhead is installed, or if a message indicates a printhead problem, try removing the printhead, verifying the protective piece of plastic tape and plug have been removed from each printhead and then reinserting the printhead. If the problem is still not resolved, contact HP support for assistance. For more information, see HP support on page 64.

To verify that a printhead is properly installed

1. Make sure the printer is turned on.

2. Close the output tray extender, and then rotate the output tray clockwise to stow it in the printer.

3. Remove and reinsert the printhead.

   a. Open the front door of the printer.
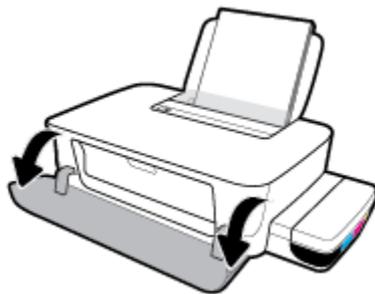
b. Open the printhead access door. Press and hold the **Resume** button (![icon]) for about three seconds. Wait for the print carriage to move to the center and stop moving.

NOTICE: After you have set up the printer, do not open the printhead latch unless instructed to do so.

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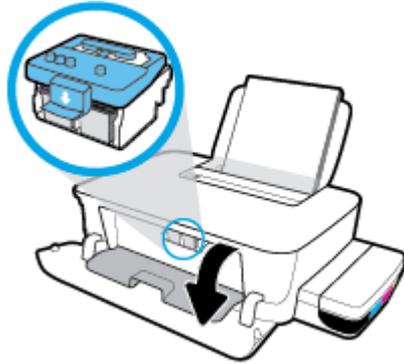
c. Push down to open the printhead latch.
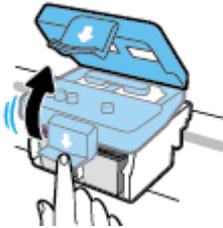
d. Press down to release the printhead from the carriage.
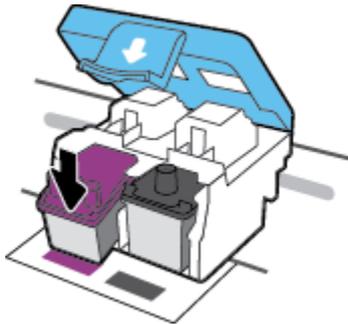
e. Remove the printhead from the carriage.
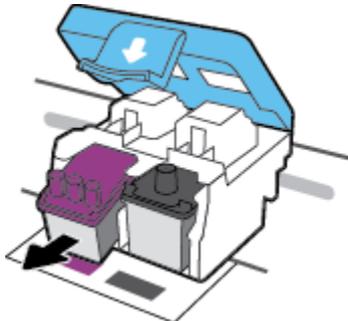
f. Check if there is a plug on top of the printhead or plastic tape on the printhead contacts. Remove any plug and tape from the printhead.
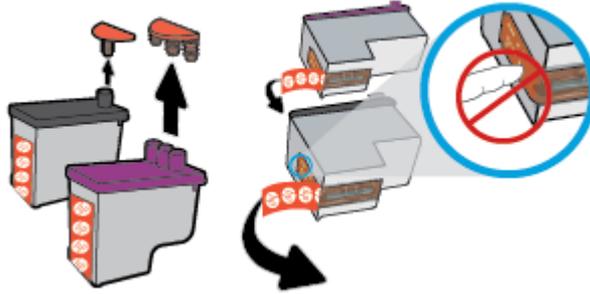
NOTE: Do not touch the electrical contacts on the printhead.

g. Slide the printhead into the slot until it clicks into place.
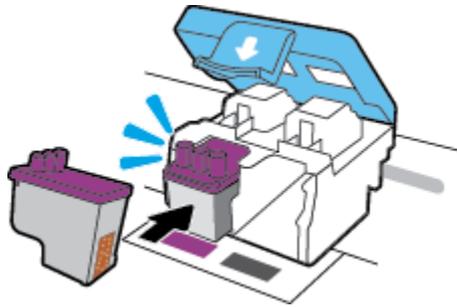
h. Close the printhead latch. Make sure the printhead latch is properly closed to avoid problems such as carriage jams.
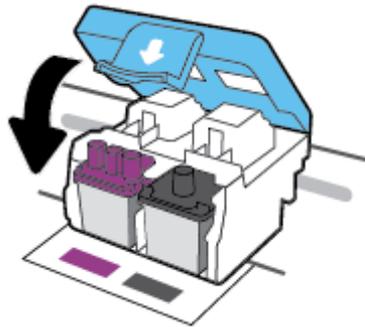
i. Close the printhead access door.
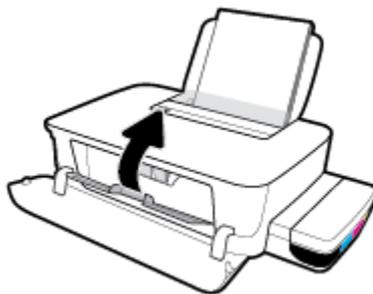
j. Close the front door of the printer.
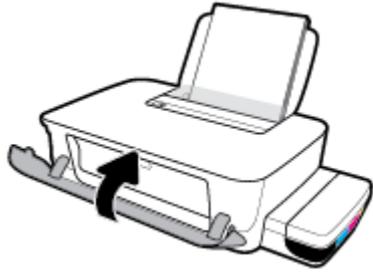
4. Pull out the output tray and the tray extender.

Printing issues

What do you want to do?

Fix problems with page not printing (unable to print)

HP Print and Scan Doctor	The HP Print and Scan Doctor is a utility that will try to diagnose and fix the issue automatically. **NOTE:** This utility is only available for Windows operation systems.
Troubleshoot problems with print jobs not printing.	Use an HP online troubleshooting wizard Get step-by-step instructions if the printer is not responding or printing.

NOTE: The HP Print and Scan Doctor and the HP online troubleshooting wizards may not be available in all languages.

Read general instructions in the Help for unable to print issues

To resolve print issues (Windows)

Make sure that the printer is turned on and that there is paper in the input tray. If you are still unable to print, try the following in order:

1. Check for error messages from the printer software and resolve them by following the on-screen instructions.

2. Disconnect the USB cable between your computer and the printer, and then reconnect the USB cable.

3. Verify that the printer is not paused or offline.

    To verify that the printer is not paused or offline

    a. Depending upon your operating system, do one of the following:

        ● **Windows 10**: From the Windows **Start** menu, select **Windows System** from the app list, select **Control Panel**, and then click **View devices and printers** under **Hardware and Sound**.

        ● **Windows 8.1** and **Windows 8**: Point to or tap the upper-right corner of the screen to open the Charms bar, click the **Settings** icon, click or tap **Control Panel**, and then click or tap **View devices and printers**.

        ● **Windows 7**: From the Windows **Start** menu, click **Devices and Printers**.

    b. Double-click or right-click your printer and select **See what's printing** to open the print queue.

    c. On the **Printer** menu, make sure there are no check marks next to **Pause Printing** or **Use Printer Offline**.

    d. If you have made any changes, try to print again.

4. Verify that the printer is set as the default printer.

    To verify that the printer is set as the default printer

    a. Depending upon your operating system, do one of the following:

- **Windows 10**: From the Windows **Start** menu, select **Windows System** from the app list, select **Control Panel**, and then click **View devices and printers** under **Hardware and Sound**.

- **Windows 8.1** and **Windows 8**: Point to or tap the upper-right corner of the screen to open the Charms bar, click the **Settings** icon, click or tap **Control Panel**, and then click or tap **View devices and printers**.

- **Windows 7**: From the Windows **Start** menu, click **Devices and Printers**.

b. Make sure the correct printer is set as the default printer.

The default printer has a check mark in a black or green circle next to it.

c. If the wrong printer is set as the default printer, right-click the correct printer and select **Set as Default Printer**.

d. Try using your printer again.

5. Restart the print spooler.

To restart the print spooler

a. Depending upon your operating system, do one of the following:

Windows 10

i. From the Windows **Start** menu, select **Windows Administrative Tools** from the app list, and then select **Services**.

ii. Right-click the **Print Spooler**, and then click **Properties**.

iii. On the **General** tab, next to **Startup type**, make sure that **Automatic** is selected.

iv. If the service is not already running, under **Service status**, click **Start**, and then click **OK**.

Windows 8.1 and Windows 8

i. Point to or tap the upper-right corner of the screen to open the Charms bar, and then click the **Settings** icon.

ii. Click or tap **Control Panel**, and then click or tap **System and Security**.

iii. Click or tap **Administrative Tools**, and then double-click or double-tap **Services**.

iv. Right-click or touch and hold **Print Spooler**, and then click **Properties**.

v. On the **General** tab, next to **Startup type**, make sure that **Automatic** is selected.

vi. If the service is not already running, under **Service status**, click or tap **Start**, and then click or tap **OK**.

Windows 7

i. From the Windows **Start** menu, click **Control Panel**, **System and Security**, and then **Administrative Tools**.

ii. Double-click **Services**.

iii. Right-click the **Print Spooler**, and then click **Properties**.

iv. On the **General** tab, next to **Startup type**, make sure that **Automatic** is selected.

v. If the service is not already running, under **Service status**, click **Start**, and then click **OK**.

b. Make sure the correct printer is set as the default printer.

The default printer has a check mark in a black or green circle next to it.

c. If the wrong printer is set as the default printer, right-click the correct printer and select **Set as Default Printer**.

d. Try using your printer again.

6. Restart the computer.

7. Clear the print queue.

To clear the print queue

a. Depending upon your operating system, do one of the following:

- **Windows 10**: From the Windows **Start** menu, select **Windows System** from the app list, select **Control Panel**, and then click **View devices and printers** under **Hardware and Sound**.

- **Windows 8.1** and **Windows 8**: Point to or tap the upper-right corner of the screen to open the Charms bar, click the **Settings** icon, click or tap **Control Panel**, and then click or tap **View devices and printers**.

- **Windows 7**: From the Windows **Start** menu, click **Devices and Printers**.

b. Double-click the icon for your printer to open the print queue.

c. On the **Printer** menu, click **Cancel all documents** or **Purge Print Document**, and then click **Yes** to confirm.

d. If there are still documents in the queue, restart the computer and try printing again after the computer has restarted.

e. Check the print queue again to make sure it is clear, and then try to print again.

To resolve print issues (OS X and macOS)

1. Check for error messages and resolve.

2. Disconnect and reconnect the USB cable.

3. Verify that the product is not paused or offline.

To verify that the product is not paused or offline

a. In **System Preferences**, click **Printers & Scanners** .

b. Click the **Open Print Queue** button.

c. Click a print job to select it.

Use the following buttons to manage the print job:

- **Delete**: Cancel the selected print job.

- **Hold**: Pause the selected print job.

- **Resume**: Continue a paused print job.

- **Pause Printer**: Pause all print jobs in the print queue.

    d. If you have made any changes, try to print again.

4. Restart the computer.

Fix print quality issues

Step-by-step instructions for resolving most print quality issues.	Troubleshoot print quality issues online

Read general instructions in the Help for resolving print quality issues

> **NOTE:** To protect the printheads from drying out, always turn the printer off using the **Power** button, and wait until the **Power** button light goes out.

To improve print quality (Windows)

1. Make sure you are using original HP printheads and ink.

- Make sure all ink tanks are filled above the minimum line.

- Consider refilling the ink tanks if the ink is reaching the minimum line.

2. Check the paper type.

- For best print quality, use high quality HP paper, or papers that adhere to the ColorLok® standard. For more information, see Paper basics on page 15.

- Always make sure the paper you are printing on is flat. For best results when printing images, use HP Advanced Photo Paper.

- Store specialty paper in its original packaging inside a resealable plastic bag on a flat surface in a cool, dry place. When you are ready to print, remove only the paper you plan to use immediately. When you have finished printing, return any unused photo paper to the plastic bag. This prevents the photo paper from curling.

3. Check the printer software to see that the print settings are appropriate for the paper type you are using. For more information about print settings, see Printer settings tips on page 28.

4. Align the printheads.

To align the printheads

a. Load letter or A4 unused plain white paper into the input tray.

b. Open the printer software. For more information, see Open the HP printer software (Windows) on page 17.

c. In the printer software, click **Print** and then click **Maintain Your Printer** to access the printer toolbox.

The printer toolbox appears.

d. Click **Align Cartridges** on the **Device Services** tab.

The printer prints an alignment page.

e. Follow the onscreen instructions to align the cartridges. Recycle or discard the cartridge alignment sheet later.

5. Print a diagnostics page if ink tanks are not low on ink.

To print a diagnostics page

a. Load letter or A4 unused plain white paper into the input tray.

b. Open the printer software. For more information, see Open the HP printer software (Windows) on page 17.

c. In the printer software, click **Print** and then click **Maintain Your Printer** to access the printer toolbox.

d. Click **Print Diagnostic Information** on the **Device Reports** tab to print a diagnostics page.

6. Review the Cyan, Magenta, Yellow, and Black Boxes along with other content on the diagnostics page.
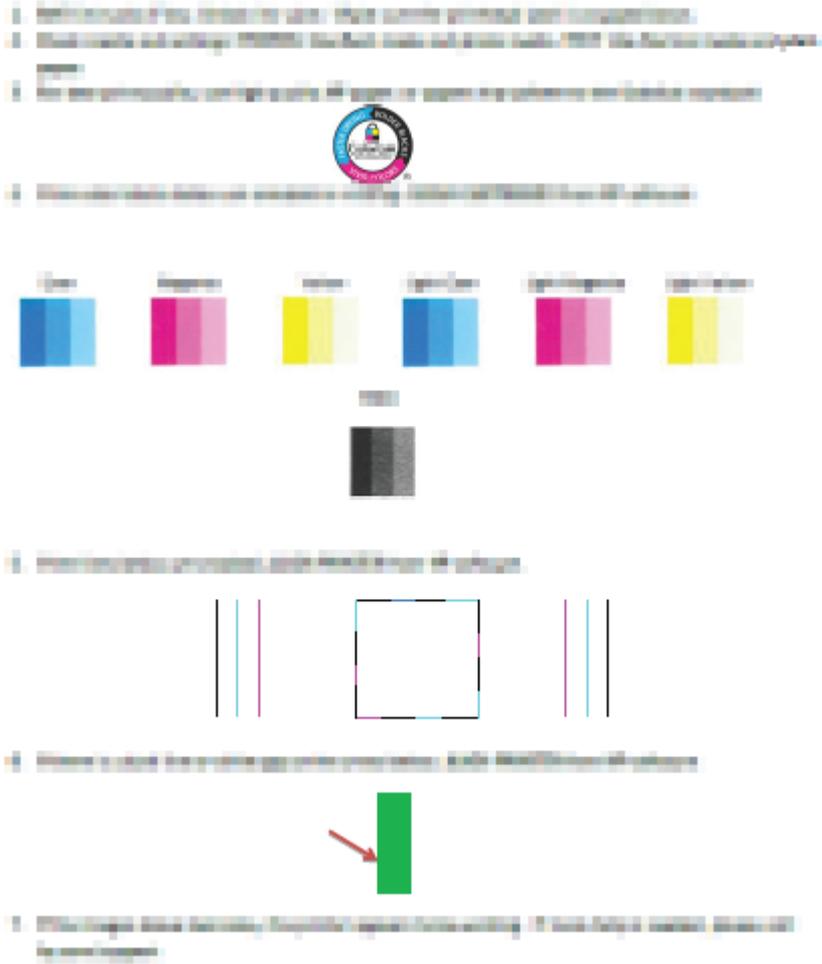
7. Clean the printheads, if the diagnostic page shows steaks or missing portions of the color and black boxes.

To clean the printheads

⚠ **CAUTION:** Clean the printheads only when necessary. Unnecessary cleaning wastes ink and shortens the life of the printheads.

a. Load letter or A4 unused plain white paper into the input tray.

b. Open the printer software. For more information, see Open the HP printer software (Windows) on page 17.

c. In the printer software, click **Print** and then click **Maintain Your Printer** to access the **Printer Toolbox**.

d. Click **Clean Cartridges** on the **Device Services** tab. Follow the onscreen instructions.

8. If print quality problems persist after cleaning and aligning printheads, contact HP support. For more information, see HP support on page 64.

To improve print quality (OS X and macOS)

1. Make sure you are using original HP printheads and ink.

   ● Make sure all ink tanks are filled above the minimum line.

   ● Consider refilling the ink tanks if the ink is reaching the minimum line.

2. Check the paper type.

   ● For best print quality, use high quality HP paper, or papers that adhere to the ColorLok® standard. For more information, see Paper basics on page 15.

   ● Always make sure the paper you are printing on is flat. For best results when printing images, use HP Advanced Photo Paper.

   ● Store specialty paper in its original packaging inside a resealable plastic bag on a flat surface in a cool, dry place. When you are ready to print, remove only the paper you plan to use immediately. When you have finished printing, return any unused photo paper to the plastic bag. This prevents the photo paper from curling.

3. Make sure you have selected the appropriate paper type and print quality in the **Print** dialog.

4. Align the printheads.

   ### To align the printhead from the software

   a. Load Letter or A4 plain, white paper in the input tray.

   b. Open HP Utility.

   > **NOTE:** HP Utility is located in the **HP** folder in the **Applications** folder.

   c. Select your printer from the list of devices at the left of the window.

   d. Click **Align**.

   e. Click **Align** and follow the onscreen instructions.

   f. Click **All Settings** to return to the **Information and Support** pane.

5. Print a test page.

   ### To print a test page

   a. Load Letter or A4 plain, white paper in the input tray.

   b. Open HP Utility.

   > **NOTE:** HP Utility is located in the **HP** folder in the **Applications** folder.

   c. Select your printer from the list of devices at the left of the window.

d. Click **Test Page**.

e. Click the **Print Test Page** button, and follow the onscreen instructions.

6. If the diagnostic page shows steaks or missing portions of the text or colored boxes, clean the printhead automatically.

To automatically clean the printhead

a. Load Letter or A4 plain, white paper in the input tray.

b. Open HP Utility.

> **NOTE:** HP Utility is located in the **HP** folder in the **Applications** folder.

c. Select your printer from the list of devices at the left of the window.

d. Click **Clean Printheads**.

e. Click **Clean**, and follow the onscreen instructions.

> **CAUTION:** Clean the printhead only when necessary. Unnecessary cleaning wastes ink and shortens the life of the print head.

> **NOTE:** If print quality still seems poor after you complete cleaning, try aligning the printhead. If print quality problems persist after cleaning and aligning, contact HP support. For more information, see HP support on page 64.

f. Click **All Settings** to return to the **Information and Support** pane.

Printer hardware issues

Close printhead access door

- Printhead door must be closed to begin printing.
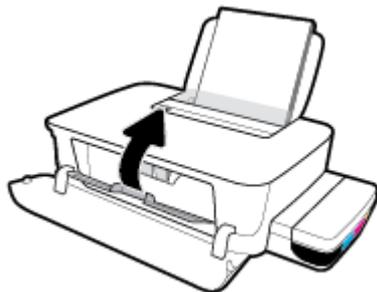
The printer shuts down unexpectedly

- Check the power and power connections.

- Make sure the printer's power cord is connected firmly to a functioning power outlet.

📝 **NOTE:** When Auto-Off is enabled, the printer will automatically turn off after 2 hours of inactivity to help reduce energy use. For more information, see Auto-Off on page 20.

Resolve printer failure

- Turn the printer off, then on. If that does not resolve the problem, contact HP support.

HP support

For the latest product updates and support information, visit the printer support website at www.support.hp.com. HP online support provides a variety of options for help with your printer:

	Drivers & downloads: Download software drivers and updates, as well as product manuals and documentation that came in the box with your printer.
	HP Support Forums: Visit HP Support Forums for answers to common questions and issues. You can view questions posted by other HP customers, or sign in and post your own questions and comments.
	Troubleshooting: Use HP online tools to detect your printer and find recommended solutions.

Contact HP

If you need help from an HP technical support representative to solve a problem, visit the Contact Support website. The following contact options are available at no cost for in-warranty customers (HP agent-assisted support for out-of warranty customers may require a fee):

	Chat with an HP support agent online.
	Call an HP support agent.

When contacting HP support, be prepared to provide the following information:

- Product name (located on the printer, such as HP Ink Tank 115)

- Product number (located inside the front door)

- Serial number (located on the back or bottom of the printer)

Register printer

By taking just a few quick minutes to register, you can enjoy quicker service, more efficient support, and product support alerts. If you did not register your printer while installing the software, you can register now at http://www.register.hp.com.

Additional warranty options

Extended service plans are available for the printer at additional costs. Go to www.support.hp.com , select your country/region and language, then explore the extended warranty options available for your printer.

A Technical information

This section provides technical specifications and regulatory information for the printer. The information here is subject to change without notice.

This section contains the following topics:

- Specifications
- Regulatory notices
- Environmental product stewardship program

Specifications

For more information, visit HP support website at www.support.hp.com .

System requirements

- Software and system requirements can be found in the Readme file, which is available on the HP printer software CD (if provided). You can also visit www.support.hp.com for the latest updates.

Environmental specifications

- Recommended operating temperature range: 15℃ to 30℃ (59℉ to 86℉)

- Allowable operating temperature range: 5℃ to 40℃ (41℉ to 104℉)

- Humidity: 15% to 80% RH non-condensing; 28℃ maximum dewpoint

- Nonoperating (Storage) temperature range: -40℃ to 60℃ (-40℉ to 140℉)

- In the presence of high electromagnetic fields, it is possible the output from the printer may be slightly distorted

- HP recommends using a USB cable less than or equal to 3 m (10 feet) in length to minimize injected noise due to potential high electromagnetic fields

Input tray capacity

- Plain paper sheets (80 g/m2 [20lb]): Up to 60

- Envelopes: Up to 5

- Index cards: Up to 20

- Photo paper sheets: Up to 20

Output tray capacity

- Plain paper sheets (80 g/m2 [20lb]): Up to 25

- Envelopes: Up to 5

- Index cards: Up to 20

- Photo paper sheets: Up to 20

Paper size

- For a complete list of supported media sizes, see the printer software.

Paper weights

- Plain Paper: 64 to 90 g/m² (16 to 24 lb)

- Envelopes: 75 to 90 g/m² (20 to 24 lb)

- Cards: Up to 200 g/m² (110-lb index maximum)

- Photo Paper: Up to 300 g/m² (145 lb)

Print specifications

- Print speeds vary according to the complexity of the document

- Method: drop-on-demand thermal inkjet

- Language: PCL3 GUI

Print resolution

- For supported print resolutions, visit the printer support website at www.support.hp.com.

Acoustic information

- If you have Internet access, you can access acoustic information from the HP website.

Regulatory notices

The printer meets product requirements from regulatory agencies in your country/region.

This section contains the following topics:

Regulatory model identification number

For regulatory identification purposes, your product is assigned with a Regulatory Model Number. The regulatory model number should not be confused with the marketing names or product numbers.

FCC statement

The United States Federal Communications Commission (in 47 CFR 15.105) has specified that the following notice be brought to the attention of users of this product.

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

- Reorient or relocate the receiving antenna.

- Increase the separation between the equipment and the receiver.

- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

- Consult the dealer or an experienced radio/TV technician for help.

NOTE: If the product has an Ethernet / LAN port with metallic casing then use of a shielded interface cable is required to comply with the Class B limits of Part 15 of FCC rules.

Modifications (part 15.21)

Any changes or modifications made to this device that are not expressly approved by HP may void the user's authority to operate the equipment.

For further information, contact: Manager of Corporate Product Regulations, HP Inc. 1501 Page Mill Road, Palo Alto, CA 94304, U.S.A.

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

European Union Regulatory Notice

$$\mathrm{C}\,\mathrm{E}$$

Products bearing the CE marking comply to applicable EU Directives and related European Harmonised Standards. The full Declaration of Conformity can be found at the following website:

www.hp.eu/certificates (Search with the product model name or its Regulatory Model Number (RMN), which may be found on the regulatory label.)

The point of contact for regulatory matters is HP Deutschland GmbH, HQ-TRE, 71025, Boeblingen, Germany.

Products with external AC Adapters

CE compliance of this product is valid only if powered with the correct CE-marked AC adapter provided by HP.

Environmental product stewardship program

HP is committed to providing quality products in an environmentally sound manner. Design for recycling has been incorporated into this product. The number of materials has been kept to a minimum while ensuring proper functionality and reliability. Dissimilar materials have been designed to separate easily. Fasteners and other connections are easy to locate, access, and remove using common tools. High priority parts have been designed to access quickly for efficient disassembly and repair.

For more information, visit HP's Commitment to the Environment Web site at:

www.hp.com/hpinfo/globalcitizenship/environment

- Eco-Tips
- European Union Commission Regulation 1275/2008
- Paper
- Plastics
- Safety data sheets
- Recycling program
- HP inkjet supplies recycling program
- Power consumption
- Disposal of waste equipment by users
- Waste disposal for Brazil
- Chemical substances
- Declaration of the Presence Condition of the Restricted Substances Marking (Taiwan)
- The Table of Hazardous Substances/Elements and their Content (China)
- Restriction of hazardous substance (India)
- Restriction on hazardous substances statement (Turkey)
- EPEAT
- SEPA Ecolabel User Information (China)
- China Energy Label for Printer, Fax and Copier

Eco-Tips

HP is committed to helping customers reduce their environmental footprint. Please visit the HP Environmental Programs and Initiatives website for more information on HP's environmental initiatives.

www.hp.com/hpinfo/globalcitizenship/environment/

European Union Commission Regulation 1275/2008

For product power data, including the power consumption of the product in networked standby if all wired network ports are connected and all wireless network ports are activated, please refer to section P14

'Additional Information' of the product IT ECO Declaration at www.hp.com/hpinfo/globalcitizenship/environment/productdata/itecodesktop-pc.html.

Paper

This product is suited for the use of recycled paper according to DIN 19309 and EN 12281:2002.

Plastics

Plastic parts over 25 grams are marked according to international standards that enhance the ability to identify plastics for recycling purposes at the end of product life.

Safety data sheets

Safety Data Sheets, product safety and environmental information are available at www.hp.com/go/ecodata or on request.

Recycling program

HP offers an increasing number of product return and recycling programs in many countries/regions, and partners with some of the largest electronic recycling centers throughout the world. HP conserves resources by reselling some of its most popular products. For more information regarding recycling of HP products, please visit:

www.hp.com/hpinfo/globalcitizenship/environment/recycle/

HP inkjet supplies recycling program

HP is committed to protecting the environment. The HP Inkjet Supplies Recycling Program is available in many countries/regions, and lets you recycle used print cartridges and ink cartridges free of charge. For more information, go to the following website:

www.hp.com/hpinfo/globalcitizenship/environment/recycle/

Power consumption

HP printing and imaging equipment marked with the ENERGY STAR® logo is certified by the U.S. Environmental Protection Agency. The following mark will appear on ENERGY STAR certified imaging products:

Additional ENERGY STAR certified imaging product model information is listed at: www.hp.com/go/energystar

Disposal of waste equipment by users

This symbol means do not dispose of your product with your other household waste. Instead, you should protect human health and the environment by handing over your waste equipment to a designated collection point for the recycling of waste electrical and electronic equipment. For more information, please contact your household waste disposal service, or go to http://www.hp.com/recycle.

Waste disposal for Brazil

Este produto eletrônico e seus componentes não devem ser descartados no lixo comum, pois embora estejam em conformidade com padrões mundiais de restrição a substâncias nocivas, podem conter, ainda que em quantidades mínimas, substâncias impactantes ao meio ambiente. Ao final da vida útil deste produto, o usuário deverá entregá-lo à HP. A não observância dessa orientação sujeitará o infrator às sanções previstas em lei.

Após o uso, as pilhas e/ou baterias dos produtos HP deverão ser entregues ao estabelecimento comercial ou rede de assistência técnica autorizada pela HP.

Para maiores informações, inclusive sobre os pontos de recebimento, acesse:

Não descarte o produto eletronico em lixo comum

www.hp.com.br/reciclar

Chemical substances

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

Declaration of the Presence Condition of the Restricted Substances Marking (Taiwan)

限用物質含有情況標示聲明書

Declaration of the Presence Condition of the Restricted Substances Marking

單元 Unit	限用物質及其化學符號 Restricted substances and its chemical symbols					
	鉛 Lead (Pb)	汞 Mercury (Hg)	鎘 Cadmium (Cd)	六價鉻 Hexavalent chromium (Cr^{+6})	多溴聯苯 Polybrominated biphenyls (PBB)	多溴二苯醚 Polybrominated diphenyl ethers (PBDE)
外殼和紙匣 (External Casings and Trays)	O	O	O	O	O	O
電線 (Cables)	O	O	O	O	O	O
印刷電路板 (Printed Circuit Boards)	—	O	O	O	O	O
列印引擎(Print Engine)	—	O	O	O	O	O
列印機組件 (Print Assembly)	—	O	O	O	O	O
噴墨印表機墨水匣 (Print Supplies)	O	O	O	O	O	O
列印機配件 (Print Accessory)	—	O	O	O	O	O

備考 1. 〝超出 0.1 wt %〞及〝超出 0.01 wt %〞係指限用物質之百分比含量超出百分比含量基準值。

Note 1: "Exceeding 0.1 wt %" and "exceeding 0.01 wt %" indicate that the percentage content of the restricted substance exceeds the reference percentage value of presence condition.

備考 2. 〝O〞係指該項限用物質之百分比含量未超出百分比含量基準值。

Note 2: "O" indicates that the percentage content of the restricted substance does not exceed the percentage of reference value of presence.

備考 3. 〝—〞係指該項限用物質為排除項目。

Note 3: The "–" indicates that the restricted substance corresponds to the exemption.

若要存取產品的最新使用指南或手冊，請前往 www.support.hp.com。選取**搜尋您的產品**，然後依照畫面上的指示繼續執行。

To access the latest user guides or manuals for your product, go to www.support.hp.com. Select **Find your product**, and then follow the onscreen instructions.

The Table of Hazardous Substances/Elements and their Content (China)

产品中有害物质或元素的名称及含量

根据中国《电器电子产品有害物质限制使用管理办法》 ⑩

部件名称	有害物质					
	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr(VI))	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
外壳和托盘	0	0	0	0	0	0
电线	0	0	0	0	0	0
印刷电路板	X	0	0	0	0	0
打印系统	X	0	0	0	0	0
显示器	X	0	0	0	0	0
喷墨打印机墨盒	0	0	0	0	0	0
驱动光盘	X	0	0	0	0	0
扫描仪	X	0	0	0	0	0
网络配件	X	0	0	0	0	0
电池板	X	0	0	0	0	0
自动双面打印系统	0	0	0	0	0	0
外部电源	X	0	0	0	0	0

本表格依据 SJ/T 11364 的规定编制。

0：表示该有害物质在该部件所有均质材料中的含量均在 GB/T 26572 规定的限量要求以下。

X：表示该有害物质至少在该部件的某一均质材料中的含量超出 GB/T 26572 规定的限量要求。

此表中所有名称中含 "X" 的部件均符合欧盟 RoHS 立法。

注：环保使用期限的参考标识取决于产品正常工作的温度和湿度等条件。

Restriction of hazardous substance (India)

This product, as well as its related consumables and spares, complies with the reduction in hazardous substances provisions of the "India E-waste Rule 2016." It does not contain lead, mercury, hexavalent chromium, polybrominated biphenyls or polybrominated diphenyl ethers in concentrations exceeding 0.1 weight % and 0.01 weight % for cadmium, except where allowed pursuant to the exemptions set in Schedule 2 of the Rule.

Restriction on hazardous substances statement (Turkey)

Türkiye Cumhuriyeti: EEE Yönetmeliğine Uygundur

EPEAT

Most HP products are designed to meet EPEAT. EPEAT is a comprehensive environmental rating that helps identify greener electronics equipment. For more information on EPEAT go to www.epeat.net. For information

on HP's EPEAT registered products go to www.hp.com/hpinfo/globalcitizenship/environment/pdf/epeat_printers.pdf.

SEPA Ecolabel User Information (China)

中国环境标识认证产品用户说明

噪声大于 63.0 dB(A) 的办公设备不宜放置于办公室内，请在独立的隔离区域使用。

如需长时间使用本产品或打印大量文件，请确保在通风良好的房间内使用。

如您需要确认本产品处于零能耗状态，请按下电源关闭按钮，并将插头从电源插座断开。

您可以使用再生纸，以减少资源耗费。

China Energy Label for Printer, Fax and Copier

复印机、打印机和传真机能源效率标识实施规则

依据"复印机、打印机和传真机能源效率标识实施规则"，该打印机具有中国能效标识。标识上显示的能效等级和操作模式值根据"复印机、打印机和传真机能效限定值及能效等级"标准（"GB 21521"）来确定和计算。

1. 能效等级

   产品能效等级分 3 级，其中 1 级能效最高。能效限定值根据产品类型和打印速度由标准确定。能效等级则根据基本功耗水平以及网络接口和内存等附加组件和功能的功率因子之和来计算。

2. 能效信息

   喷墨打印机

   – 操作模式功率

     睡眠状态的能耗按照 GB 21521 的标准来衡量和计算。该数据以瓦特 (W) 表示。

   – 待机功率

     待机状态是产品连接到电网电源上功率最低的状态。该状态可以延续无限长时间，且使用者无法改变此状态下产品的功率。对于"成像设备"产品，"待机"状态通常相当于"关闭"状态，但也可能相当于"准备"状态或者"睡眠"状态。该数据以瓦特 (W) 表示。

   – 睡眠状态预设延迟时间

     出厂前由制造商设置的时间决定了该产品在完成主功能后进入低耗模式（例如睡眠、自动关机）的时间。该数据以分钟表示。

   – 附加功能功率因子之和

     网络接口和内存等附加功能的功率因子之和。该数据以瓦特 (W) 表示。

标识上显示的能耗数据是根据典型配置测量得出的数据，此类配置包含登记备案的打印机依据复印机、打印机和传真机能源效率标识实施规则所选的所有配置。因此，该特定产品型号的实际能耗可能与标识上显示的数据有所不同。

要了解规范的更多详情，请参考最新版的 GB 21521 标准。

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