

HP Deskjet 5400 series



**User's guide**

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## Terms and conventions

The following terms and conventions are used in this user's guide.

### Terms

The HP Deskjet printer is also referred to as the **HP printer** or **printer**.

### Cautions and warnings

A **Caution** indicates possible damage to the HP Deskjet printer or to other equipment. For example:



**Caution** Do not touch the print cartridge ink nozzles or copper contacts. Touching these parts will result in clogs, ink failure, and bad electrical connections.

A **Warning** indicates possible harm to you or to others. For example:



**Warning** Keep both new and used print cartridges out of the reach of children.

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# 1 Welcome

To find an answer to a question, select one of the following topics:



- [Special features](#)
- [Get started](#)
- [Connect to the printer](#)
- [Print photos](#)
- [Print photos from a digital camera](#)
- [Print other documents](#)
- [Printing tips](#)
- [Printer software](#)
- [Maintenance](#)
- [Troubleshooting](#)
- [Supplies](#)
- [Specifications](#)
- [Environmental information](#)

# 2 Special features

Congratulations! You have purchased an HP Deskjet printer that is equipped with several exciting features:

- **Borderless printing:** Use the entire page surface when printing [photos](#) and [brochures](#) with the borderless printing feature.
- **Six-ink upgradeable printing:** Enhance photo printing with a [photo print cartridge](#) (purchased separately).
- **Ink-backup mode:** Use [ink-backup mode](#) to continue printing with one print cartridge when the other print cartridge has run out of ink.
- **Printing from a digital camera:** Print photos directly from a digital camera using the [PictBridge](#) port.
- **Panoramic printing:** Print panoramic photos [with borders](#) or [without borders](#).
- **Real Life technologies:** HP [Real Life technologies](#) make it easy for you to get better photos. Automatic red-eye removal and adaptive lighting to enhance detail in shadows are just a few of the many technologies included.
- HP Vivera Inks deliver true-to-life photo quality and exceptional fade resistance resulting in vivid colors that last. HP Vivera Inks are specially-formulated and scientifically tested for quality, purity and fade resistance.

# 3 Get started

- Printer features
- Buttons and lights
- Paper trays
- Print cartridges
- Ink-backup mode

## Printer features

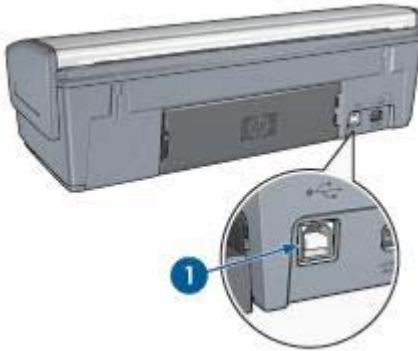
The printer has several features to make printing easier and more efficient.



1	Buttons and lights
2	PictBridge port
3	Paper trays



1	Print cartridges
2	Ink-backup mode



1	USB port
---	----------

## Buttons and lights

Use the printer buttons to turn the printer on and off, cancel a print job, and restart a job. The printer lights give you visual cues about the status of the printer.



1	Power button and light
2	Print Cancel button
3	Resume button and light
4	PictBridge lights

### Power button and light

Use the Power button to turn the printer on and off. It can take a few seconds for the printer to turn on after you press the Power button.





1	Power button
---	--------------

The Power light flashes when the printer is processing.

**Caution** Always use the Power button to turn the printer on and off. Using a power strip, surge protector, or a wall-mounted switch to turn the printer on and off might cause printer failure.

### Print Cancel and Resume buttons

The printer also has a Print Cancel button and a Resume button and light.



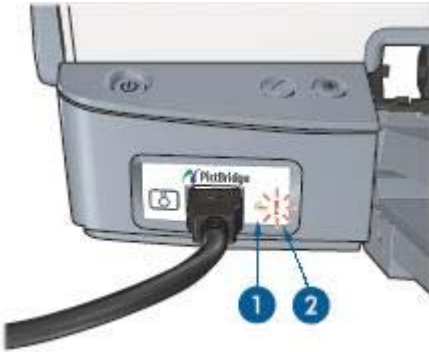
1	Print Cancel button
2	Resume button and light

Pressing the Print Cancel button cancels the current print job.

The Resume light flashes when an action is required, such as loading paper or clearing a paper jam. When the problem is solved, press the Resume button to continue printing.

### PictBridge lights

Plug a PictBridge-enabled camera into the printer PictBridge port using a digital camera USB cable to print digital photographs.



1	Connection light
2	Error light

When the camera is connected correctly, the green Connection light is illuminated. The printer Power light flashes and the Connection light remains lit solid when printing from the camera. If the camera is not PictBridge-compatible or is not in PictBridge mode, the amber Error light flashes.

## Paper trays

For information about the paper trays, select one of these topics.

### Unfold the paper trays

Follow these steps to unfold the paper trays:

1. Lower the In tray.



2. Lower the Out tray.



3. Pull out the Out-tray extension.



### In tray

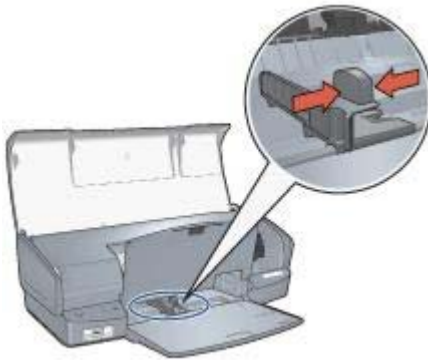
The In tray holds paper or other media.



1	In tray
---	---------

### Paper guide

Print on different sizes of media by sliding the paper guide to the right or to the left.



### Out tray

Printed pages are deposited in the Out tray.



1	Out tray
---	----------

Raise the Out tray to load paper or other media. Lower the Out tray before printing.

To prevent paper from falling out of the Out tray, fully pull out the Out-tray extension. If you are printing in the Fast draft mode, unfold the Out-tray extension stop.



1	Out-tray extension
2	Out-tray extension stop

## Fold the paper trays

Follow these steps to fold the paper trays:

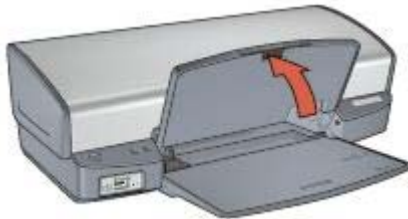
1. Remove paper or other media from the paper trays.
2. If the Out-tray extension stop is raised, lower it and then push it into the Out-tray extension.



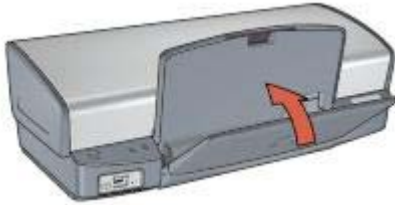
3. Push the Out-tray extension into the Out tray.



4. Raise the Out tray.



5. Raise the In tray.



## Print cartridges

Three print cartridges can be used with the printer.



1	Black print cartridge
2	Tri-color print cartridge
3	Photo print cartridge

### Use print cartridges

The print cartridges can be used in the following ways:

- **Everyday printing:** Use the black and tri-color print cartridges for everyday print jobs.
- **Quality color photos:** For more vibrant colors when printing color photographs or other special documents, remove the black print cartridge and install a photo print cartridge. The photo print cartridge, in combination with the tri-color print cartridge, provides you with virtually grain-free photos.

### Replace print cartridges

When buying print cartridges, look for the print cartridge selection number.

You can find the selection number in three places:

- **Selection number label:** Look at the label on the print cartridge that you are replacing.



1	Selection number label
---	------------------------

- Printer documentation: For a list of print cartridge selection numbers, see the reference guide that came with the printer.
- HP Printer Utility: Open the [HP Printer Utility](#), and then select the **Supplies Status** pane.

If a print cartridge runs out of ink, the printer can operate in [ink-backup mode](#).

For information about installing a replacement print cartridge, see the [print cartridge installation](#) page.

## Ink-backup mode

Use the ink-backup mode to operate the printer with only one print cartridge. The ink-backup mode is initiated when a print cartridge is removed from the print cartridge cradle.

### Ink-backup mode output

Printing in ink-backup mode slows the printer and affects the quality of printouts.

Installed print cartridge	Result
Black print cartridge	Colors print as grayscale.
Tri-color print cartridge	Colors print but black is grayed and is not a true black.
Photo print cartridge	Colors print as grayscale.



**Note** HP does not recommend using the photo print cartridge for ink-backup mode.

### Exit ink-backup mode

Install two print cartridges in the printer to exit ink-backup mode.

For instructions about installing a print cartridge, see the [print cartridge installation](#) page.

# 4 Connect to the printer

- USB
- Networking

## USB

The printer connects to the computer with a universal serial bus (USB) cable.

For instructions about connecting the printer with a USB cable, see the setup poster that came with the printer.



**Note** A USB cable might not be packaged with your printer.

## Networking

The printer can be connected to a network through a networked computer or by using an HP Jetdirect Print Server.

### Connect through a networked computer

The printer can be connected directly to a computer on a network and then shared with other computers on the network.

For instructions about sharing the printer on a network, open **System Preferences** and then double-click **Sharing**.

### Use an HP Jetdirect print server

The printer can be connected to a network by using an HP Jetdirect print server.

For instructions about using an HP Jetdirect print server, see the printer software CD and the documentation that came with the print server.



**Note** HP Jetdirect print servers are not available in all countries/regions.



# 5 Print photos

The printer software offers several features that make printing digital photos easier and improve photo quality.

Learn how to perform the following tasks:

- Print a [borderless photo](#).
- Print a photo with a [border](#).
- Use [HP Real Life technologies](#) to touch up photos.
- Use the [photo print cartridge](#) for great colors and virtually grain-free photos.
- Achieve the highest printing resolution with [maximum dpi](#).
- Improve printed colors with [color options](#).
- Prevent photo paper from curling by following the [photo paper storage and handling guidelines](#).
- Use HP Everyday Photo Paper to [save money and ink](#) when printing photos.

## Print borderless photos

Use borderless printing to print to the edges of certain paper types and to print on a range of paper sizes—from 4 x 6 inch photo paper to a 210 x 594 mm (8.5 x 23.4 inch) custom photo size.

### Guidelines

- For high-quality results, use a [photo print cartridge](#) in combination with the tri-color print cartridge.
- Do not print borderless photos in [ink-backup mode](#). Always have two print cartridges installed in the printer.
- Open the file in a software program such as Adobe Photoshop and assign the photo size. Ensure that the size corresponds to the paper size on which you want to print the photo.
- For maximum fade resistance, use HP Premium Plus Photo Paper.
- Verify that the photo paper that you are using is flat. For information about preventing photo paper from curling, see the [photo paper storage instructions](#).
- Do not exceed the In tray capacity: 30 sheets of photo paper.

### Prepare to print

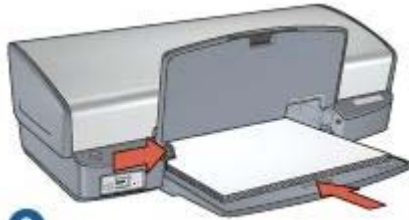
Show me how to load photo paper.

1. Raise the Out tray.
2. Slide the paper guide all the way to the left.
3. Verify that the photo paper is flat.
4. Place the photo paper in the In tray, with the side to be printed on facing down. If you are using photo paper with a tear-off tab, verify that the tab is pointing away from the printer.
5. Slide the paper guide firmly against the edge of the paper stack.



1

1 | Small photos



2

2 | Large photos



**Note** Some panoramic paper sizes might extend beyond the edge of the In tray.

6. Lower the Out tray.

### Print

1. Open the [Page Setup](#) dialog box.
2. Choose the appropriate borderless paper size in the **Paper Size** menu, and then click **OK**.
3. Open the [Print](#) dialog box.
4. Select the **Paper Type/Quality** pane, and then select the following settings:
  - **Paper Type**: The appropriate photo paper type
  - **Quality**: **Best** or **Maximum dpi**
5. Select the **Real Life Digital Photography** pane, and then set the [HP Real Life technologies](#) as appropriate.
6. Select any other print settings that you want, and then click **Print**.  
If you printed on photo paper that has a tear-off tab, remove the tab to make the document completely borderless.

## Print photos with a border

Follow these instructions to print photos with a white border.

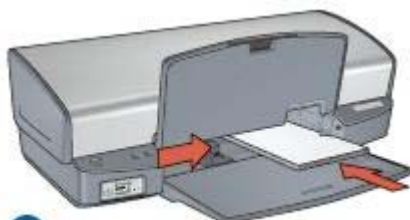
## Guidelines

- For high-quality results, use a [photo print cartridge](#) in combination with the tri-color print cartridge.
- For maximum fade resistance, use HP Premium Plus Photo Paper.
- Open the file in a software program such as Adobe Photoshop and assign the photo size. Ensure that the size corresponds to the paper size on which you want to print the photo.
- Verify that the photo paper that you are using is flat. For information about preventing photo paper from curling, see the [photo paper storage instructions](#).
- Do not exceed the In tray capacity: 30 sheets of photo paper.

## Prepare to print

Show me how to load photo paper.

1. Raise the Out tray.
2. Slide the paper guide all the way to the left.
3. Verify that the photo paper is flat.
4. Place the photo paper in the In tray with the side to be printed on facing down.
5. Slide the paper guide firmly against the edge of the paper stack.



1

1 | Small photos



2

2 | Large photos

6. Lower the Out tray.

## Print

1. Open the [Page Setup](#) dialog box, and then select the following settings:
  - **Paper Size:** The appropriate paper size
  - **Orientation:** The appropriate orientation
2. Click **OK**.
3. Open the [Print](#) dialog box.
4. Select the **Paper Type/Quality** pane, and then select the following settings:
  - **Paper Type:** The appropriate photo paper type
  - **Quality:** **Best** or **Maximum dpi**
5. Select the **Real Life Digital Photography** pane, and then set the [HP Real Life technologies](#) as appropriate.
6. Select any other print settings that you want, and then click **Print**.

## HP Real Life technologies

HP Real Life technologies make it easy for you to get better photos. Automatic red-eye removal and adaptive lighting to enhance detail in shadows are just a few of the technologies included.

### Open HP Real Life technologies

Follow these steps to access the HP Digital Photography Real Life technologies:

1. Open the [Print](#) dialog box.
2. Select the **Real Life Digital Photography** pane.

### Use HP Real Life technologies

Choose from the following items:

- **Summary:** View all the current settings at a glance.
- **Auto Red-eye Removal:** Click **On** to automatically remove or reduce red-eye in the photograph.
- **Adaptive Lighting:** Adjust the exposure in dark areas of photos to bring out detail. Click **Automatic** to allow the printer software to automatically balance lightness and darkness.
- **Photo Brightening:** Automatically enhance colors and contrast for washed-out photos. Click **Automatic** to allow the printer software to intelligently brighten your photo, focusing only on areas that need adjustment.
- **SmartFocus:** Enhance the image quality and clarity of low resolution images such as those downloaded from the Internet. Click **On** to allow the printer software to sharpen details in the image automatically.
- **Smoothing:** Soften an image. Click **Auto** to allow the printer software to set the level of smoothing for the image automatically.
- **Sharpness:** Adjust the image sharpness to your preference. Click **Auto** to allow the printer software to set the level of sharpening for the image automatically.

## Photo print cartridge

The photo print cartridge, when used in conjunction with the tri-color print cartridge, provides virtually grain-free photos. It offers exceptional fade resistance for photos that are printed on HP Premium Plus Photo Paper.



The photo print cartridge can be purchased separately if it is not included with your printer.

### Install the photo print cartridge

To install the photo print cartridge, remove the black print cartridge from the printer, and then [install](#) the photo print cartridge in the right side of the print cartridge cradle.



**Note** To protect a print cartridge when it is not in the printer, follow these [storage guidelines](#).

### Use the photo print cartridge

1. Open the [Print](#) dialog box.
2. Select the **Paper Type/Quality** pane.
3. Choose the appropriate photo paper type in the **Paper Type** menu.
4. In the **Quality** menu, select **Normal**, **Best**, or **Maximum dpi**.
5. Select any other print settings that you want, and then click **Print**.

### Store the photo print cartridge

Follow these [guidelines](#) when storing the photo print cartridge.

## Color options

Use color options to adjust color levels in your photos and change color brightness, tone, and saturation.

When you adjust color options, the printed colors in your photos differ from the colors that appear on your computer monitor.

Follow these steps to set color options:

1. Open the [Print](#) dialog box.
2. Select the **Paper Type/Quality** pane.
3. Click the **Color Options** tab.
4. Adjust the **Saturation**, **Brightness**, and **Color Tone** sliders to affect how overall colors are printed.

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

## Maximum dpi

The maximum dpi print quality setting offers 4800 x 1200 optimized dots per inch (dpi) printing.

The 4800 x 1200 optimized dpi is the highest quality resolution for this printer. When 4800 x 1200 optimized dpi is selected in the printer software, the tri-color print cartridge prints in the 4800 x 1200 optimized dpi mode (up to 4800 x 1200 optimized dpi color and 1200-input dpi).

If a [photo print cartridge](#) is also installed, the print quality is enhanced. A photo print cartridge can be purchased separately if it is not included with the printer.



**Note** Using maximum dpi increases the printing time and requires a large amount of disk space.

Follow these steps to print in the 4800 x 1200 optimized dpi mode:

1. Open the [Print](#) dialog box.
2. Select the **Paper Type/Quality** pane.
3. In the **Paper Type** pull-down menu, click **Photo Paper**, and then click the appropriate photo paper type.
4. In the **Quality** pull-down menu, click **Maximum dpi**.
5. Select any other print settings that you want, and then click **Print**.



**Note** Use an HP premium photo paper when printing in the maximum dpi mode to enhance color matching and detail in the photo.

## Store and handle photo paper

Follow these instructions to maintain the quality of HP brand photo paper.

### Storage

- Keep unused photo paper in a plastic bag. Store the packaged photo paper on a flat surface in a cool place.
- When you are ready to print, remove only the paper that you plan to use immediately from the plastic bag. When you have finished printing, return any unused photo paper to the plastic bag.
- Do not leave unused photo paper in the paper tray. The paper might start to curl, which can reduce the quality of your photos.

### Handling

- Always hold photo paper by its edges. Fingerprints on photo paper can reduce print quality.
- If the corners of the photo paper curl more than 10 mm (0.4 inch), flatten the paper by putting it in the storage bag, and then gently bending it in the opposite direction of the curl until the paper lies flat.  
Photo paper should be flat before it is printed on.

## Save money when printing photos

To save money and ink when printing photos, use HP Everyday Photo Paper and set the [print quality](#) to **Normal**.

HP Everyday Photo Paper is designed to create quality photos with less ink.



**Note** For higher-quality photos, use HP Premium Plus Photo Paper and set the print quality to **Best** or [Maximum dpi](#).

# 6 Print photos from a digital camera

Learn how to print photos directly from a digital camera.

- [About PictBridge](#)
- [PictBridge printing](#)

## About PictBridge

With a PictBridge-enabled camera, you do not need a computer to print digital photographs. Just plug the camera into the printer's PictBridge port.



**Note** Do not plug other USB devices into the PictBridge port.



**Note** When two PictBridge devices communicate, they provide only the services that they have in common. For example, some cameras might allow photos formatted as either TIFFs or JPEGs to be printed over a PictBridge connection, but, since the printer does not support TIFFs over a PictBridge connection, only JPEGs can be printed.

When a camera is connected to the PictBridge port, the default printer settings will print a 4 x 6 inch borderless photo with portrait orientation. For detailed information on printing from the camera, consult the documentation that came with your camera.

## PictBridge printing

In order to print photos directly from a digital camera, you need the following items:

- A PictBridge-compatible camera
- A digital camera USB cable





Check the documentation that came with your camera to ensure that your camera supports PictBridge.

Follow these steps to print photos from a PictBridge-compatible camera:

1. Load photo paper into the printer.  
For instructions about loading photo paper, click one of the following options:
  - [Print borderless photos](#)
  - [Print photos with a border](#)
2. Connect your camera to the PictBridge port on the front of the printer using the USB cable supplied with your camera.
3. Turn on your camera, and then set it to PictBridge mode.  
If you do not know how to set the camera to PictBridge mode, see the documentation that came with the camera.



**Note** When the camera is connected correctly, the Connection light is illuminated. The Connection light blinks green when printing from the camera. If the camera is not PictBridge-compatible or is not in PictBridge mode, the Error light flashes.



1	Connection light
2	Error light

After you successfully connect the camera to the printer, you can print your photos. Be sure the size of the paper loaded in the printer matches the setting on your camera. Refer to the documentation that came with your camera for detailed information on printing from the camera.

# 7 Print other documents



E-mail



Letters



Documents



Envelopes



Brochures



Greeting cards



Postcards



Transparencies



Labels



Index cards



Iron-on transfers

**Printing tips:** Minimize your cost and effort while maximizing the quality of your printouts with [printing tips](#).

**Printer software:** Learn about the [printer software](#).

## E-mail

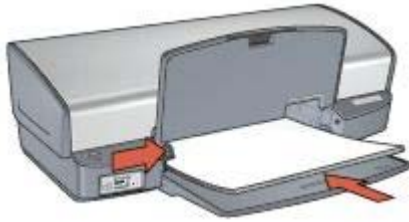
To print e-mail, use the Paper Type/Quality pane in the Print dialog box to select the paper type and print quality.

### Guidelines

Do not exceed the In tray capacity: 100 sheets of plain paper.

### Prepare to print

1. Raise the Out tray.
2. Slide the paper guide all the way to the left.
3. Place plain paper in the In tray, pushing the paper into the printer until it stops.
4. Slide the paper guide firmly against the edge of the paper stack.



5. Lower the Out tray.

### Print

1. If necessary, open the [Page Setup](#) dialog box and set the paper size, scaling, and orientation options.
2. Open the [Print](#) dialog box.
3. Select the **Paper Type/Quality** pane.
4. In the **Paper Type** pull-down menu, click **Plain Paper**.
5. Select any other print settings that you want, and then click **Print**.

## Letters

To print letters, use the Paper Type/Quality pane in the Print dialog box to select the paper type and print quality.

### Guidelines

- For help printing on an envelope, see [envelopes](#).
- Do not exceed the In tray capacity: 100 sheets of paper.

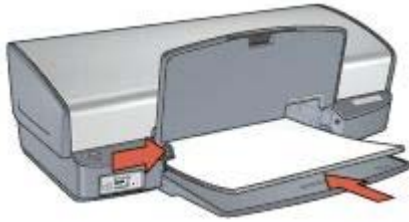
### Prepare to print

1. Raise the Out tray.
2. Slide the paper guide all the way to the left.
3. Place the paper in the In tray, pushing the paper into the printer until it stops.



**Note** If you are using letterhead paper, verify that the letterhead is facing down and toward the interior of the printer.

4. Slide the paper guide firmly against the edge of the paper stack.



5. Lower the Out tray.

### Print

1. If necessary, open the [Page Setup](#) dialog box and set the paper size, scaling, and orientation options.
2. Open the [Print](#) dialog box.
3. Select the **Paper Type/Quality** pane.
4. In the **Paper Type** pull-down menu, click **Plain Paper**.
5. In the **Quality** pull-down menu, select the appropriate print quality.
6. Select any other print settings that you want, and then click **Print**.

## Documents

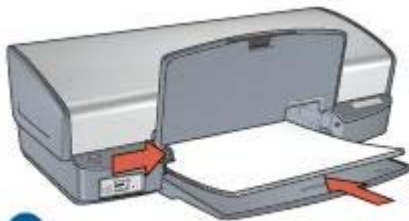
To print documents, use the Paper Type/Quality pane in the Print dialog box to select the paper type and print quality.

### Guidelines

Do not exceed the In tray capacity: 100 sheets of paper.

### Prepare to print

1. Raise the Out tray.
2. Slide the paper guide all the way to the left.
3. Place plain paper in the In tray, pushing the paper into the printer until it stops.
4. Slide the paper guide firmly against the edge of the paper stack.



1 | Letter or A4 paper



2 | Legal paper (extends over the edge of the In tray)

5. Lower the Out tray.

### Print

1. If necessary, open the [Page Setup](#) dialog box and set the paper size, scaling, and orientation options.
2. Open the [Print](#) dialog box.
3. Select the **Paper Type/Quality** pane.
4. In the **Paper Type** pull-down menu, click **Plain Paper**.
5. In the **Quality** pull-down menu, select the appropriate print quality.
6. Select any other print settings that you want, and then click **Print**.

## Envelopes

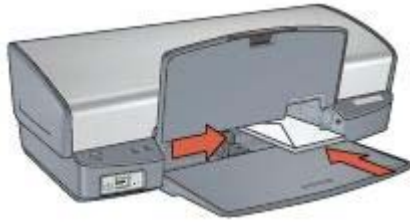
To print envelopes, use the Paper Type/Quality pane in the Print dialog box to select the paper type and print quality. You can print a single envelope or multiple envelopes.

### Guidelines

- Avoid using envelopes that have the following features:
  - Clasps or windows
  - Thick, irregular, or curled edges
  - Shiny or embossed coatings
  - Wrinkles, tears, or other damage
- Align the envelope edges before inserting the envelopes in the In tray.
- Do not exceed the In tray capacity: 10 envelopes.

### Prepare to print

1. Raise the Out tray, and then remove all paper from the In tray.
2. Slide the paper guide all the way to the left.
3. Place the envelopes in the In tray, as far to the right as possible.  
The side to be printed on should face down and the flap should be on the left.
4. Push the envelopes into the printer until they stop.
5. Slide the paper guide firmly against the edge of the envelope stack.



6. Lower the Out tray.

### Print

1. If necessary, open the [Page Setup](#) dialog box and set the paper size, scaling, and orientation options.
2. Open the [Print](#) dialog box.
3. Select the **Paper Type/Quality** pane.
4. In the **Paper Type** pull-down menu, click **Plain Paper**.
5. Select any other print settings that you want, and then click **Print**.

## Brochures

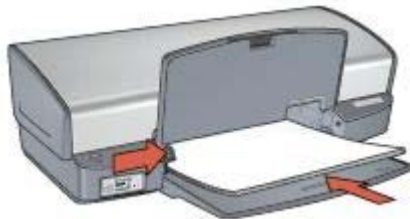
To print a brochure, use the Paper Type/Quality pane in the Print dialog box to select the paper type and print quality. For great results, use HP brochure paper.

### Guidelines

- Do not print borderless documents in [ink-backup mode](#). Always have two print cartridges installed in the printer.
- Open the file in a software program and assign the brochure size. Ensure that the size corresponds to the paper size on which you want to print the brochure.
- Do not exceed the In tray capacity: 20 sheets of brochure paper.

### Prepare to print

1. Raise the Out tray.
2. Slide the paper guide all the way to the left.
3. Place brochure paper in the In tray, pushing the paper into the printer until it stops.
4. Slide the paper guide firmly against the edge of the paper stack.



5. Lower the Out tray.

### Print borderless brochures

1. Open the [Page Setup](#) dialog box.
2. Click the appropriate borderless paper size in the **Paper Size** menu.
3. Click **OK**.
4. Open the [Print](#) dialog box.
5. Select the **Paper Type/Quality** pane, and then specify the following settings:
  - **Paper Type**: The appropriate brochure paper type
  - **Quality**: **Normal** or **Best**
6. Select any other print settings that you want, and then click **Print**.

### Print brochures with borders

1. Open the [Page Setup](#) dialog box.
2. Click the appropriate paper size in the **Paper Size** menu.
3. Click **OK**.
4. Open the [Print](#) dialog box.
5. Select the **Paper Type/Quality** pane, and then specify the following settings:
  - **Paper Type**: The appropriate brochure paper type
  - **Quality**: **Normal** or **Best**
6. Select any other print settings that you want, and then click **Print**.

## Greeting cards

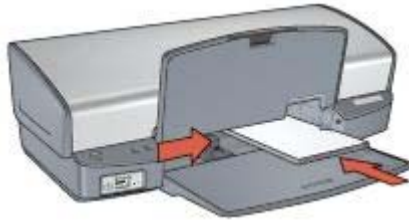
To print greeting cards, use the Paper Type/Quality pane in the Print dialog box to select the paper type and print quality. For great results, use HP Greeting Card Paper.

### Guidelines

- Unfold prefolded cards, and then place them in the In tray.
- Do not exceed the In tray capacity: 20 cards.

### Prepare to print

1. Raise the Out tray, and then remove all paper from the In tray.
2. Slide the paper guide all the way to the left.
3. Fan the edges of the greeting cards to separate them, and then align the edges.
4. Place the greeting cards in the In tray, with the side to be printed on facing down.
5. Push the cards into the printer until they stop.
6. Slide the paper guide firmly against the edge of the cards.



7. Lower the Out tray.

### Print

1. Open the [Page Setup](#) dialog box, and then select the following settings:
  - **Paper Size:** The appropriate card size
  - **Orientation:** The appropriate orientation
2. Click **OK**.
3. Open the [Print](#) dialog box.
4. Select the **Paper Type/Quality** pane, and then specify the following settings:
  - **Paper Type:** The appropriate card type
  - **Quality:** **Normal** or **Best**
5. Select any other print settings that you want, and then click **Print**.

## Postcards

To print postcards, use the Paper Type/Quality pane in the Print dialog box to select the paper type and print quality.

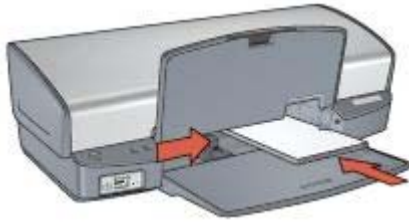
### Guidelines

- Use only cards that meet the paper size specifications for the printer. For specifications, see the reference guide that came with the printer.
- Do not exceed the In tray capacity: 30 cards.

### Prepare to print

1. Raise the Out tray.
2. Slide the paper guide all the way to the left.
3. Place the cards in the In tray, as far to the right as possible.  
The side to be printed on should face down and the short edge should point toward the printer.
4. Push the cards into the printer until they stop.
5. Slide the paper guide firmly against the edge of the cards.





6. Lower the Out tray.

### Print

1. Open the [Page Setup](#) dialog box, and then select the following settings:
  - **Paper Size:** The appropriate card size
  - **Orientation:** The appropriate orientation



**Note** To print a borderless card, select the borderless photo size that matches the card size.

2. Click **OK**.
3. Open the [Print](#) dialog box.
4. Select the **Paper Type/Quality** pane, and then specify the following settings:
  - **Paper Type:** The appropriate card type
  - **Quality:** **Normal**, **Best**, or **Maximum dpi**
5. If you want to use them, set the [HP Real Life technology options](#).
6. Select any other print settings that you want, and then click **Print**.



**Note** If an out-of-paper message appears, verify that the cards are positioned correctly in the paper tray.

## Transparencies

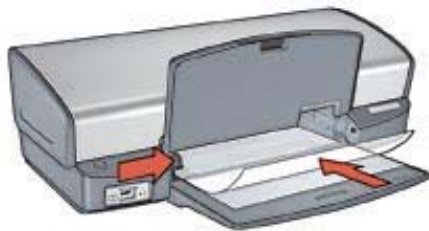
To print transparencies, use the Paper Type/Quality pane in the Print dialog box to select the paper type and print quality. For great results, use HP Premium Inkjet Transparency Film.

### Guidelines

Do not exceed the In tray capacity: 30 transparencies.

### Prepare to print

1. Raise the Out tray, and then remove all paper from the In tray.
2. Slide the paper guide all the way to the left.
3. Place the transparencies in the In tray.  
The side to be printed on should face down and the adhesive strip should face up and toward the printer.



4. Carefully push the transparencies into the printer until they stop, so that none of the adhesive strips catch on one another.
5. Slide the paper guide firmly against the edge of the transparencies.
6. Lower the Out tray.

### Print

1. If necessary, open the [Page Setup](#) dialog box and set the paper size, scaling, and orientation options.
2. Open the [Print](#) dialog box.
3. Select the **Paper Type/Quality** pane, and then specify the following settings:
  - **Paper Type:** The appropriate transparency type
  - **Quality:** **Normal** or **Best**
4. Select any other print settings that you want, and then click **Print**.

## Labels

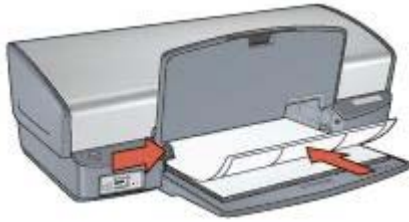
To print labels, use the Paper Type/Quality pane in the Print dialog box to select the paper type and print quality. For great results, use HP Address Labels.

### Guidelines

- Use only paper, plastic, or clear labels that are designed specifically for inkjet printers.
- Use only full sheets of labels.
- Avoid using labels that are sticky, wrinkled, or pulling away from the protective backing.
- Do not exceed the In tray capacity: 20 sheets of labels (use only Letter or A4-size sheets).

### Prepare to print

1. Raise the Out tray, and then remove all paper from the In tray.
2. Slide the paper guide all the way to the left.
3. Fan the edges of the label sheets to separate them, and then align the edges.
4. Place the label sheets in the In tray with the label side facing down.
5. Push the sheets into the printer until they stop.
6. Slide the paper guide firmly against the edge of the sheets.



7. Lower the Out tray.

### Print

1. Open the [Page Setup](#) dialog box, and then select the following settings:
  - **Paper Size:** **A4** or **US Letter**
  - **Orientation:** The appropriate orientation
2. Click **OK**.
3. Open the [Print](#) dialog box.
4. Select the **Paper Type/Quality** pane.
5. In the **Paper Type** pull-down menu, click **Plain Paper**.
6. Select any other print settings that you want, and then click **Print**.

## Index cards and other small media

To print index cards and other small media, use the Paper Type/Quality pane in the Print dialog box to select the paper type and print quality.

### Guidelines

- Use only cards and small media that meet the paper size specifications for the printer. For specifications, see the reference guide that came with the printer.
- Do not exceed the In tray capacity: 30 cards.

### Prepare to print

1. Raise the Out tray, and then remove all paper from the In tray.
2. Slide the paper guide all the way to the left.
3. Place the cards in the In tray, as far to the right as possible.  
The side to be printed on should face down and the short edge should point toward the printer.
4. Push the cards into the printer until they stop.
5. Slide the paper guide firmly against the edge of the cards.



6. Lower the Out tray.

### Print

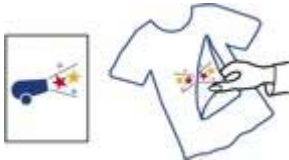
1. Open the [Page Setup](#) dialog box, and then select the following settings:
  - **Paper Size:** The appropriate card size
  - **Orientation:** The appropriate orientation
2. Click **OK**.
3. Open the [Print](#) dialog box.
4. Select the **Paper Type/Quality** pane, and then specify the appropriate paper type.
5. Select any other print settings that you want, and then click **Print**.

## Iron-on transfers

To print iron-on transfers, use the Paper Type/Quality pane in the Print dialog box to select the paper type and print quality. For great results, use HP Iron-on Transfers.

### Guidelines

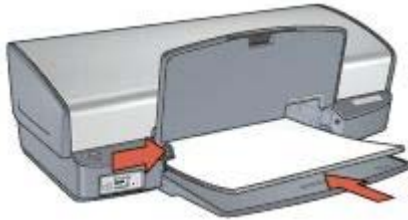
- When printing a mirror image, the text and the pictures are horizontally reversed from what appears on the computer screen.



- Do not exceed the In tray capacity: 12 iron-on transfers.

### Prepare to print

1. Raise the Out tray, and then remove all paper from the In tray.
2. Slide the paper guide all the way to the left.
3. Place the iron-on transfer paper in the In tray, with the side to be printed on facing down.
4. Push the paper into the printer until it stops.
5. Slide the paper guide firmly against the edge of the paper stack.



6. Lower the Out tray.

### **Print**

1. Open the [Page Setup](#) dialog box, and then select the following settings:  
**Paper Size: A4 or US Letter**
2. Click **OK**.
3. Open the [Print](#) dialog box.
4. Select the **Paper Type/Quality** pane.
5. In the **Paper Type** pull-down menu, select **Speciality paper**, and then click **HP Iron-on Transfer**.
6. Select any other print settings that you want, and then click **Print**.

# 8 Printing tips

## Save time

Set the **order** that the pages print.

## Save money

- Print **multiple pages on a single sheet of paper**.
- Use **HP Everyday Photo Paper** to save money and ink when printing photos.

## Enhance the quality of printouts

- Select the correct **paper type**.
- Select the correct **print quality**.
- **Resize** the document as needed.

## Select a print quality

Follow these steps to select a print quality:

1. Open the **Print** dialog box.
2. Select the **Paper Type/Quality** pane.
3. Select one of the following settings from the **Quality** pull-down menu:
  - **Fast draft**: Prints at the fastest printing speed while using the least amount of ink.
  - **Fast normal**: Prints more quickly than Normal mode and at a higher print quality than Fast draft.
  - **Normal**: Provides the best balance between print quality and speed. This is the appropriate setting for most documents.
  - **Best**: Provides high-quality printing.
  - **Maximum dpi**: Provides the highest quality printing, but requires longer to print than **Best** and uses a larger amount of available memory.
4. Select any other print settings that you want, and then click **Print**.

## Set the page order

The page order determines the order in which your multipage documents print.

To set the page order, follow these steps:

1. Open the **Print** dialog box.
2. Select the **Paper Handling** pane.
3. Select one of the following options:
  - Select the **Reverse Page Order** check box to print the first page of the document last.  
This setting saves time because you do not have to reorder the printed pages. It is the appropriate setting for most print jobs.
  - Clear the **Reverse Page Order** check box to print the last page of the document last.
4. Select any other print settings that you want, and then click **Print**.



**Note** The reverse page order feature is only available in Mac OS X 10.3 and later.

## Print multiple pages on a single sheet of paper

Use the printer software to print multiple pages of a document on a single sheet of paper. The printer software automatically resizes the document text and images to fit on the printed page.

Follow these steps to print multiple pages of a document on a single sheet of paper:

1. Open the [Print](#) dialog box.
2. Select the **Layout** pane.
3. In the **Pages per Sheet** menu, select the number of pages that you want to appear on each sheet of paper.
4. In the **Layout Direction** menu, select the relevant option for arranging the pages on a single sheet.
5. If you want a border to appear around each page image, select the border type from the **Border** menu.
6. Select any other print settings that you want, and then click **Print**.

## Select a paper type

Follow these steps to select a paper type:

1. Open the [Print](#) dialog box.
2. Select the **Paper Type/Quality** pane.
3. In the **Paper Type** pull-down menu, click the specific paper type.
4. Select any other print settings that you want, and then click **Print**.

## Resize a document

Use this feature to shrink or enlarge printed text and graphics without changing the paper size.

To shrink or enlarge text and graphics:

1. Open the [Page Setup](#) dialog box.
2. In the **Scale** box, type the percentage by which you want to shrink or enlarge the document.
  - Type a number from 25 to 99 to reduce a document image.
  - Type a number from 101 to 400 to enlarge a document image.
3. Click **OK**, and then print the document.

## Print preview

Use the print preview function to view a printout on your computer before printing a document. If the preview does not look correct, you can cancel the print job and adjust the print settings as needed.

To preview a printed document, follow these steps:

1. Open the [Print](#) dialog box.

2. Click the **Preview** button.  
A preview appears of the printed document.
3. Do one of the following:
  - Click **Print** to print the document.
  - Click **Cancel** to cancel the print job. Adjust the print settings as needed before trying to print the document again.



# 9 Printer software

- [Print settings](#)
- [Manage the printer \(Mac OS X 10.3\)](#)
- [Manage the printer \(Mac OS X 10.2\)](#)
- [View and change the status of a print job \(Mac OS X 10.3\)](#)
- [View and change the status of a print job \(Mac OS X 10.2\)](#)

## Print settings

The printer is controlled by software that is installed on your computer. Use the printer software, also known as the *printer driver*, to change the print settings for a document.

To specify the document paper size, scaling, and orientation, use the [Page Setup](#) dialog box.

To specify other print settings for a document, and to send the document to the printer, use the [Print](#) dialog box.

- [Page Setup dialog box](#)
- [Print dialog box](#)

## Page Setup dialog box

Use the Page Setup dialog box to modify the document layout.

To use the **Page Setup** dialog box, open the software program that was used to create the document, click **File**, and then click **Page Setup**.

Use the Page Setup dialog box to perform the following tasks:

- Select your printer so that a complete list of supported paper sizes appears in the Paper Size pull-down menu.
- Set the paper size for a document.
- Resize a document.
- Specify the document orientation.

## Print dialog box

Use the Print dialog box to modify print settings for the document that you are printing. The options that are available depend on the pane that is selected.

To open the **Print** dialog box, open the document that you want to print, click **File**, and then click **Print**.

Use the menu and buttons for these functions:

1. **Printer:** Select the printer.
2. **Presets:** Select a group of saved print options.
3. **Pane Menu:** Toggle between print setting panes, an application-specific pane, and a summary of print settings for the document.
4. **?:** Open MacHelp.
5. **Preview:** View an online preview of the printed document.

6. **Save as PDF:** Convert the document to Adobe PDF format.
7. **Fax:** Send the document as a fax.



**Note** The **Fax** option is available only in Mac OS X 10.3 and later.

8. **Cancel:** Close the Print dialog box without printing the document.
9. **Print:** Print the document.

## Manage the printer (Mac OS X 10.3)

Use Printer Setup Utility to manage the printer. Managing the printer includes the following tasks:

- Add a printer
- Set a default printer
- Delete a printer

### Add a printer

Follow these steps to add a printer to your computer:

1. In Finder, click **Applications**, click **Utilities**, and then double-click **Printer Setup Utility**.
2. Click **Add**.  
The Add Printer dialog box appears.
3. Select the connection type for the printer (for example, USB).
4. Select the printer name from the list.
5. Click **Add**.

### Set a default printer

Follow these steps to set the printer as the default printer:

1. In Finder, click **Applications**, click **Utilities**, and then double-click **Printer Setup Utility**.
2. Select the printer, and then click **Make Default**.  
The printer name appears in bold text to indicate that it is the default printer.

### Delete a printer

Follow these steps to delete a printer from your computer:

1. In Finder, click **Applications**, click **Utilities**, and then double-click **Printer Setup Utility**.
2. Click the name of the printer that you want to delete.
3. Click **Delete**.

## Manage the printer (Mac OS X 10.2)

Use Print Center to manage the printer. Managing the printer includes the following tasks:

- Add a printer
- Set a default printer
- Delete a printer

### Add a printer

Follow these steps to add a printer to your computer:

1. In Finder, click **Applications**, click **Utilities**, and then double-click **Print Center**.
2. Click **Add Printer**.  
The Add Printer dialog box appears.
3. Select the connection type for the printer (for example, USB).
4. Select the printer name from the printer list.
5. Click **Add**.

### Set a default printer

Follow these steps to set the printer as the default printer:

1. In Finder, click **Applications**, click **Utilities**, and then double-click **Print Center**.
2. Select the printer, and then click **Make Default**.  
The printer name appears in bold text to indicate that it is the default printer.

### Delete a printer

Follow these steps to delete a printer from your computer:

1. In Finder, click **Applications**, click **Utilities**, and then double-click **Print Center**.
2. Click the name of the printer that you want to delete.
3. Click **Delete**.

## View and change the status of a print job (Mac OS X 10.3)

When printing a document with background printing, use Printer Setup Utility to view the status of the document as it is printing.

Follow these steps to check the status of a print job:

1. In Finder, click **Applications**, click **Utilities**, and then double-click **Printer Setup Utility**.
2. Double-click the printer name to display the print queue.
3. 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.
  - **Stop Jobs**: Pause all print jobs in the print queue.

## View and change the status of a print job (Mac OS X 10.2)

When printing a document with background printing, use Print Center to view the status of the document as it is printing.

Follow these steps to check the status of a print job:

1. In Finder, click **Applications**, click **Utilities**, and then double-click **Print Center**.
2. Double-click the printer name to display the print queue.
3. 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.
- **Stop Jobs**: Pause all print jobs in the print queue.

# 10 Maintenance

- Install print cartridges
- Set the auto-off feature
- Align the print cartridges
- Calibrate color
- Calibrate print quality
- Automatically clean print cartridges
- Print a test page
- View estimated ink levels
- Maintain the printer body
- Remove ink from your skin and clothing
- Manually clean print cartridges
- Maintain print cartridges
- HP Printer Utility

## Install print cartridges

When you need to replace print cartridges, make sure you have the correct print cartridges for your printer, and then install them in the print cartridge cradle.

### Print cartridge combinations

For printing most documents, use the tri-color print cartridge and the black print cartridge. When printing photos, use the photo print cartridge along with the tri-color print cartridge.

Always install the tri-color print cartridge in the left side of the print cartridge cradle.

Install the black or photo print cartridge in the right side of the print cartridge cradle.



**Note** To easily identify the correct side of the cradle in which to install the print cartridge, match the symbol on the print cartridge with the symbol above the print cartridge cradle.

### Selection numbers

When buying replacement print cartridges, look for the print cartridge selection number.

You can find the selection number in three places:

- Selection number label: Look at the label on the print cartridge that you are replacing.



1	Selection number label
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- Printer documentation: For a list of print cartridge selection numbers, see the reference guide that came with the printer.
- HP Printer Utility: Open the [HP Printer Utility](#), and then select **Supplies Status**.

### **Ink-backup mode**

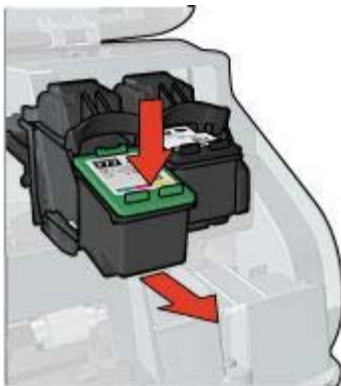
The printer can operate with only one print cartridge installed. For more information, see [Ink-backup mode](#).

### **Installation instructions**

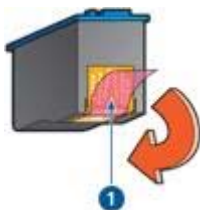
Show me how to install a print cartridge.

Follow these steps to install a print cartridge:


1. Verify that the printer is turned on.
2. Load Letter or A4 plain, white paper in the In tray.
3. Open the printer cover.
4. Wait until the print cartridge cradle moves to the right side of the printer and is idle and quiet.
5. Press down on the print cartridge, and then slide it out of the print cartridge cradle.



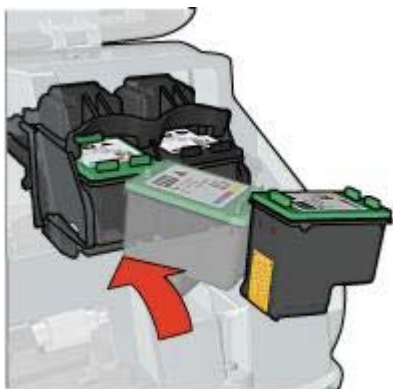
6. Remove the replacement print cartridge from its packaging and carefully remove the plastic tape.



1	Remove plastic tape
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 **Caution** Do not touch the print cartridge ink nozzles or copper contacts. Touching these parts will result in clogs, ink failure, and bad electrical connections. Do not remove the copper strips. They are required electrical contacts.

7. Hold the print cartridge so that the copper strips are on the bottom and facing toward the printer.
8. Slide the print cartridge at a slight upward angle into the cradle until the cartridge snaps into place.



9. Close the printer cover.  
*Align the print cartridges for optimum print quality.*

For information about storing print cartridges, see [Maintain blue cartridges](#).

For information about recycling empty print cartridges, see [Print cartridge recovery](#).



**Warning** Keep both new and used print cartridges out of the reach of children.

## Set the auto-off feature

Select the auto-off feature to automatically place the printer into idle mode after 30 minutes and to turn back on automatically when print jobs are sent to the printer. Selecting auto-off cancels the [FEMP](#) energy savings mode.

Follow these steps to activate the auto-off feature:

1. Open the [HP Printer Utility](#).
2. Select **Power Management**.
3. Follow the onscreen instructions.

## Align the print cartridges

After installing a print cartridge, align the print cartridges to ensure the best print quality.

To align print cartridges:

1. Load Letter or A4 plain, white paper in the In tray.
2. Open the [HP Printer Utility](#).
3. Select **Align**.
4. Click the **Align** button, and then follow the onscreen instructions.

## Calibrate color

Perform a color calibration if the colors in photos that are printed with the [photo print cartridge](#) consistently look incorrect.

Before performing a color calibration, [align the print cartridges](#), and then reprint the photo. If the color is still incorrect, perform a color calibration.

Both a photo print cartridge and a tri-color print cartridge must be installed for color calibration.

To calibrate color:

1. Load Letter or A4 plain, white paper in the In tray.
2. Verify that a photo print cartridge is installed in the printer.
3. Open the [HP Printer Utility](#).
4. Select **Calibrate Color**.
5. Click the **Calibrate** button, and then follow the onscreen instructions.

## Calibrate print quality

Perform a print quality calibration if light or dark horizontal lines appear in documents that are printed with the tri-color and black print cartridges.

Before performing a print quality calibration, [clean the print cartridges](#), and then reprint the document. If the lines still occur, perform a print quality calibration.

Follow these steps to calibrate print quality:

1. Load Letter or A4 plain, white paper in the In tray.
2. Verify that both a black and a tri-color [print cartridge](#) are installed in the printer.
3. Open the [HP Inkjet Utility](#).
4. Select the **Calibrate Print Quality** pane.



5. Click **Calibrate**, and then follow the onscreen instructions.

## Automatically clean print cartridges

If your printed pages are missing lines or dots, or if they contain ink streaks, the print cartridges might be [low on ink](#) or might need to be cleaned.

If the print cartridges are not low on ink, follow these steps to clean the print cartridges automatically:

1. Open the [HP Printer Utility](#).
2. Select **Clean**.
3. Click the **Clean** button, and then follow the onscreen instructions.

If your documents are still missing lines or dots after cleaning, [replace the print cartridges](#).



**Caution** Clean print cartridges only when necessary. Unnecessary cleaning wastes ink and shortens the life of the cartridge.



**Note** This feature might not be available in your operating environment.

## Print a test page

Follow these instructions to print a test page:

1. Open the [HP Printer Utility](#).
2. Select **Test**.
3. Click the **Print Test Page** button.

## View estimated ink levels

Follow these instructions to view the estimated ink levels of the print cartridges that are installed in the printer:

1. Open the [HP Printer Utility](#).
2. Select **Supplies Status**.

If you need to replace a print cartridge, note the print cartridge selection number that is displayed.

## Maintain the printer body

Because the printer ejects ink onto the paper in a fine mist, ink smudges will eventually appear on the printer case and adjacent surfaces. To remove smudges, stains, or dried ink from the exterior of the printer, use a soft cloth moistened with water.

When cleaning the printer, keep these tips in mind:

- *Do not* clean the interior of the printer. Keep all fluids away from the interior.
- *Do not* use household cleaners or detergent. If a household cleaner or detergent has been used on the printer, wipe the exterior surfaces with a soft cloth moistened with water.
- *Do not* lubricate the support rod that the print cartridge cradle uses to slide back and forth. Noise is normal when the cradle moves back and forth.

## Remove ink from your skin and clothing

Follow these instructions to remove ink from your skin and clothing:

Surface	Remedy
Skin	Wash the area with an abrasive soap.
White fabric	Wash the fabric in <i>cold</i> water and use chlorine bleach.
Color fabric	Wash the fabric in <i>cold</i> water and use sudsy ammonia.



**Caution** Always use cold water to remove ink from fabric. Warm or hot water can set the ink into the fabric.

## Manually clean print cartridges

If the printer is used in a dusty environment, a small amount of debris can accumulate on the print cartridge contacts.

### Gather cleaning supplies

You will need the following items to clean the print cartridges.

- Distilled water (tap water can contain contaminants that can damage the print cartridge)
- Cotton swabs or other soft, lint-free material that will not stick to the print cartridge

Be careful not to get **ink on your hands or clothing** as you clean.

### Prepare to clean

1. Open the printer cover.
2. Wait until the print cartridge cradle moves to the right side of the printer and is idle and quiet.
3. Remove the print cartridges and place them on a piece of paper, with the copper strips facing up.




**Caution** Do not leave the print cartridges outside the printer for more than 30 minutes.

### Cleaning instructions

1. Moisten a cotton swab with distilled water and squeeze any excess water from the swab.

2. Wipe the print cartridge copper contacts with the cotton swab.

 **Caution** Do not touch the print cartridge ink nozzles. Touching the ink nozzles will result in clogs, ink failure, and bad electrical connections.



1	Ink nozzles (do not touch)
2	Copper contacts

3. Repeat this process until no ink residue or dust appears on the swab.
4. [Insert the print cartridges](#) in the printer, and then close the printer cover.

## Maintain print cartridges

The following tips will help maintain HP print cartridges and ensure consistent print quality:

- Keep all print cartridges in their sealed packages until they are needed. Print cartridges should be stored at room temperatures (15° to 35° C or 59° to 95° F).
- Do not remove the plastic tape covering the ink nozzles until you are ready to install the print cartridge in the printer. If the plastic tape has been removed from the print cartridge, do not attempt to reattach it. Reattaching the tape damages the print cartridge.

Follow these instructions to [store print cartridges](#).

### Store print cartridges

When print cartridges are removed from the printer, store them in an airtight plastic container or in the print cartridge protector that comes with the photo print cartridge.

If you store the print cartridge in an airtight plastic container, make sure that the ink nozzles are face down but are not in contact with the container.

### Insert the print cartridge into the print cartridge protector

Slide the print cartridge at a slight angle into the protector, and snap it securely in place.



### Remove the print cartridge from the print cartridge protector

Press down and back on the top of the protector to release the print cartridge. Slide the print cartridge out of the protector.



**Caution** Do not drop the print cartridge. Dropping the print cartridge can damage it.

## HP Printer Utility

The HP Printer Utility contains tools to perform the following tasks:

- Print a test page.
- Clean the print cartridges.
- View estimated ink levels in the print cartridges.
- Align the print cartridges.
- Calibrate color.
- Calibrate print quality.
- Configure the auto-off feature.
- Find product support on the HP Web site.
- Find information about the print cartridges used with your printer.
- Use the HP Web site to register your printer.

For more information about the HP Printer Utility, see the following topics:

- [Open the HP Printer Utility](#)
- [HP Printer Utility panes](#)

### Open the HP Printer Utility

To open the HP Printer Utility, follow the instructions for your operating system.

### Mac OS X 10.3

1. In Finder, click **Applications**, click **Utilities**, and then double-click **Printer Setup Utility**.
2. Select the printer, and then click **Utility**.  
The HP Printer Utility appears.

### Mac OS X 10.2

1. In Finder, click **Applications**, click **Utilities**, and then double-click **Print Center**.
2. Select the printer, and then click **Configure**.  
The HP Printer Utility appears.

## HP Printer Utility panes

Select the appropriate pane to view the HP Printer Utility options:

- **Supplies Status:** View [estimated ink levels](#) and print cartridge information.
- **HP Support:** Open the HP Web site, where you can find support for the printer and register the printer.
- **Clean:** [Clean the print cartridges](#).
- **Device Information:** Printer configuration information.
- **Align:** [Align the print cartridges](#).
- **Test:** [Print a test page](#).
- **Calibrate Color:** [Adjust color](#) to correct problems with tint.
- **Calibrate Print Quality:** Remove [light or dark horizontal lines](#) that might appear in documents.
- **Power Management:** Set the printer [auto-off](#) feature.

# 11 Troubleshooting

- Printer does not print
- Paper jam
- Paper problems
- Printer is stalled
- Print cartridge problems
- Photos do not print correctly
- PictBridge problems
- Print quality is poor
- Document is misprinted
- Problems with borderless documents
- Error messages
- Printer lights are on or flashing
- Document prints slowly
- If you continue to have problems

## Printer does not print

### Verify the following

Verify the following conditions if the printer is not printing:

- The printer is connected to the power source.
- The cable connections are secure.
- The printer is turned on.
- The print cartridges are the [correct print cartridges](#) for the printer and are [properly installed](#).
- The paper or other media is correctly loaded in the In tray.
- The printer cover is closed.
- The rear access door is attached.

### Check the printer lights

The printer lights indicate the printer status and alert you to potential problems.

For more information, see [Printer lights are on or flashing](#).

### Check the printer cable connection

If the printer cable is attached to a USB hub, a printing conflict might exist. Two methods are available for solving the conflict:

- Attach the printer USB cable directly to your computer.
- When printing, do not use other USB devices that are attached to the hub.

### Check the print queue

The printer will not print if a print job is stalled in the print queue. To resolve a print job that is stalled in the print queue, check the status of the print queue for either [Mac OS X 10.3](#) or [Mac OS X 10.2](#).

### If the printer still does not print

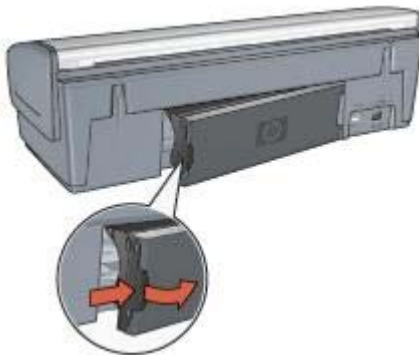
1. Select the topic below that best describes the problem:
  - [Paper jam](#)
  - [Out-of-paper message](#)
  - [Printer ejects paper](#)
  - [Printer is stalled](#)
2. If the printer still does not print, shut down, and then restart your computer.

## Paper jam

Show me how to install a print cartridge.

Follow these steps to remove a paper jam:

1. Press the [Resume](#) button.  
If the paper jam does not clear, then go to the next step.
2. Turn off the printer.
3. Remove the rear access door. Press the handle to the right, and then pull out the door.



4. Remove any paper that is inside the printer by pulling it out from the back of the printer.  
If you are printing labels, verify that a label did not become detached from the label sheet while passing through the printer.
5. Replace the rear access door securely.



6. If the paper jam cannot be removed from the back of the printer, raise the printer cover, remove the paper jam from the front of the printer, and then lower the cover.



**Caution** Remove the paper jam carefully as it is possible to damage the printer when removing paper from the front.

7. Turn on the printer, and then press the **Resume** button.
8. Reprint the document.



**Note** If paper jams occur frequently, try using a heavier paper. See the reference guide for paper weight specifications.

## Paper problems

### Printer does not feed paper

Try one or more of the following solutions:

- Reduce the number of sheets in the In tray.
- Remove the paper from the In tray, and then reload it.
- Use a different type of paper.

### Printer ejects paper

If the printer ejects the paper, try one of the following solutions:

- If you are performing a [color calibration](#), install both the tri-color and the photo print cartridges.
- Verify that the protective piece of plastic tape has been removed from the print cartridges.
- If you are printing a borderless document and the Resume light and a Print Cartridge Status light are flashing, you might be trying to print a borderless document with only the black print cartridge installed. When printing a borderless document, always have the tri-color print cartridge and a black or photo print cartridge installed.

### Out-of-paper message

If an out-of-paper message appears, follow these [guidelines](#).

### Paper jam

For information about clearing a paper jam, see the [paper jam](#) page.



## Printer prints on multiple sheets at once

If the printer prints on multiple sheets at once, follow these [guidelines](#).

## Printer prints on multiple sheets at once

If the printer prints on multiple sheets at once, check the following:

### Paper weight

The printer might print on multiple sheets of paper at once if the paper is under the recommended paper weight. Use paper that is within the recommended specifications. For paper weight specifications, see the reference guide that came with the printer.

### Paper might be loaded improperly

The printer might print on multiple sheets of paper at once if the paper is loaded too far toward the back of the printer or if the paper guide is not positioned firmly against the paper. Reload the paper into the In tray, pushing the paper until you feel resistance, and then slide the paper guide firmly against the edge of the paper stack.

The printer might also print on multiple sheets at once if different paper types are loaded in the In tray. For example, photo paper might be mixed with plain paper. Empty the In tray and load only the paper type that is appropriate for the document that you are printing.

## Printer is stalled

If the printer stalls while printing a document, press the **Resume** button. If the printer does not start printing again, raise the printer cover, and then disconnect the power cable from the back of the printer.



**Caution** First, check for any loose or broken parts in the printer. If you find loose or broken parts, go to [www.hp.com/support](http://www.hp.com/support) or contact HP. Support phone numbers are listed in the reference guide that came with the printer or at [www.hp.com/support](http://www.hp.com/support).

If there are no loose or broken parts, follow these steps:

1. Check for and remove any obstacles, such as packing tape or materials, that prevent the print cartridges from moving back and forth.
2. Make sure the print cartridges are **installed** securely in the print cartridge cradle.
3. Make sure the tri-color print cartridge is **installed** in the left side of the cradle and the black or photo print cartridge is installed in the right side of the cradle.
4. Check for and clear any [paper jam](#).
5. Lower the printer cover.
6. Connect the power cable to the back of the printer, and then turn on the printer.
  - If the Resume light is not flashing, continue printing the document.
  - If the Resume light is flashing, press the **Resume** button.  
If the light still flashes, repeat the steps.

## Print cartridge problems

### Incorrect print cartridge

The printer can only print when the correct print cartridges are installed. If you receive a print cartridge error message, one or both of the print cartridges cannot be used in the printer.

To verify that you have the correct print cartridges:

1. Open the printer cover.
2. Read the selection number on the print cartridge label.



1	Selection number label
2	Warranty date

3. Check the list of print cartridges that can be used in the printer.  
Open the [HP Printer Utility](#), and then select the **Supplies Status** pane.
4. Check the warranty date on the print cartridge.
5. If the print cartridge has the wrong selection number, or if the warranty date has expired, [install a new print cartridge](#).
6. Close the printer cover.  
If the Resume light is not flashing, then the problem is solved.  
If the Resume light is flashing, visit HP Technical Support at [www.hp.com/support](http://www.hp.com/support).

### Print cartridge problem message

If you receive a message about a problem with one of the print cartridges, follow these steps:

1. Raise the printer cover and remove the print cartridge that was named in the error message.
2. [Reinstall](#) the print cartridge.  
If the Resume light is not flashing, the problem is solved.  
If the Resume light is flashing, go to the next step.
3. [Manually clean](#) the print cartridge.
4. Reinsert the print cartridge in the printer and close the printer cover.  
If the Resume light is still flashing, the print cartridge is faulty and must be [replaced](#).



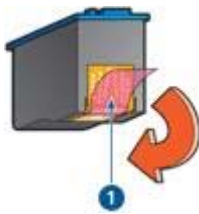
**Note** You can print with one print cartridge in **ink-backup mode** if you do not have a replacement print cartridge available.

5. If the Resume light continues to flash after replacing the print cartridge, visit HP Technical Support at [www.hp.com/support](http://www.hp.com/support).

### Printing in ink-backup mode message

When the printer detects that only one print cartridge is installed, ink-backup mode is initiated. This printing mode lets you print with a single print cartridge, but it slows the printer and affects the quality of printouts.

If you receive the ink-backup mode message and two print cartridges are installed in the printer, verify that the plastic tape has been removed from each print cartridge. When the protective piece of plastic tape covers the print cartridge contacts, the printer cannot detect that the print cartridge is installed.



- |   |                     |
|---|---------------------|
| 1 | Remove plastic tape |
|---|---------------------|

### Print cartridge is in the wrong slot message

If you receive this error message, the print cartridge is installed in the wrong side of the print cartridge cradle.

Always install the tri-color print cartridge in the *left* print cartridge cradle compartment. Install the black or photo print cartridge in the *right* print cartridge cradle compartment.



**Note** To easily identify the correct side of the cradle in which to install the print cartridge, match the symbol on the print cartridge with the symbol above the print cartridge cradle.

## Photos do not print correctly

### Check the paper tray

1. Verify that the photo paper is placed in the In tray with the side to be printed on facing down.  
Verify that the photo paper is flat.
2. Slide the paper forward until it stops.
3. Slide the paper guide firmly against the edge of the paper.  
Do not press the guide so firmly against the paper that the paper bends or curls.

### Check the printer settings

1. Open the [Page Setup](#) dialog box.
2. In the **Page Attributes** pane, verify the following settings:
  - **Paper Size**: The appropriate paper size
  - **Orientation**: The appropriate orientation
3. Open the [Print](#) dialog box.
4. In the **Paper Type/Quality** pane, verify the following settings:
  - **Paper Type**: The appropriate photo paper type
  - **Quality**: **Best** or **Maximum dpi**
5. Use the [HP Real Life technologies](#) for photo enhancement.

### Colors are tinted or incorrect

If colors in photos appear tinted or incorrect, follow these steps:

1. Verify that neither print cartridge is [low on ink](#).  
If neither print cartridge is low on ink, proceed to step 2.
2. [Align](#) the print cartridges.
3. Reprint the photo.
4. If colors are still tinted or incorrect, [calibrate the color](#).  
Both a photo print cartridge and a tri-color print cartridge must be installed for color calibration.
5. Reprint the photo.
6. If colors continue to appear tinted or incorrect, open the [Print](#) dialog box, select the **Paper Type/Quality** pane, and then select **Color Options**.
7. Adjust the colors.  
Here are some guidelines to follow:
  - If the colors are too yellow, move the **Color Tone** slider toward **Cooler**.
  - If the colors are too blue, move the **Color Tone** slider toward **Warmer**.
8. Reprint the photo.

### Horizontal lines appear on a photo



If light or dark horizontal lines appear on photos, follow this procedure:

1. [Clean](#) the print cartridges.
2. Reprint the photo.

3. If horizontal lines still occur, perform a [print quality calibration](#).  
A black and a tri-color print cartridge must be installed for print quality calibration.
4. Reprint the photo.

### **Part of the photo is faded**

If part of the photo is faded, follow these [guidelines](#).

### **Part of the photo is faded**

Fading might occur on the edges or near the edges of a photo.

#### **Fading occurs on the edges of a photo**



Verify that the photo paper is not curled. If the photo paper is curled, place the paper in a plastic bag and gently bend it in the opposite direction of the curl until the paper lies flat. If the problem persists, then use photo paper that is not curled.

For instructions about preventing photo paper from curling, see [Store and handle photo paper](#).

#### **Fading occurs near the edges of a photo**



If fading occurs approximately 25 to 63 mm (1.0 to 2.5 inches) from the edge of a photo, install a [photo print cartridge](#) and a tri-color print cartridge in the printer.

# PictBridge problems

## Images in a connected digital camera do not print

There are several reasons why images in a connected digital camera do not print:

- The digital camera is not PictBridge-compatible.
- The digital camera is not in PictBridge mode.
- The images are not in a supported format.
- You did not select any photos on the camera for printing.

Check the documentation that came with your camera to ensure it supports PictBridge.


If the camera does support PictBridge, make sure the camera is set to PictBridge mode. For instructions on setting the camera to PictBridge mode, see the documentation that came with the camera.

Verify that the digital camera is saving photos in a file format that the PictBridge transfer feature supports:



- EXIF/JPEG
- JPEG

Before you connect the digital camera to the PictBridge port on the printer, select some photos on the camera for printing.

## PictBridge lights are flashing

State of the lights	Task
<p>Connection light and the Error light are flashing</p> 	<p>The printer has lost connection with the camera while printing. Check the USB connection.</p>
<p>Connection light is on and the Error light is flashing</p>	<p>The camera has lost power. Replace the camera batteries or connect it to a power supply.</p>

(continued)

State of the lights	Task
	
<p data-bbox="224 506 657 558">Connection light is on and the Error light flashes twice</p> 	<p data-bbox="690 680 1010 732">The camera has requested an unsupported command.</p>

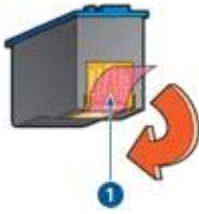
## Print quality is poor

### Streaks and missing lines

If your printed pages are missing lines or dots or if streaks appear, the print cartridges might be [low on ink](#) or might need to be [cleaned](#).

### Print is faded

- Verify that neither of the print cartridges is [low on ink](#).  
If a print cartridge is low on ink, consider replacing the print cartridge. For the correct part numbers, see the reference guide that came with the printer.
- Verify that a black print cartridge is installed.  
If the black text and images on your printouts are faded, you might be printing with only the tri-color print cartridge. Insert a black print cartridge, in addition to the tri-color print cartridge, for optimal black print quality.
- Verify that the protective piece of plastic tape has been removed from the print cartridges.

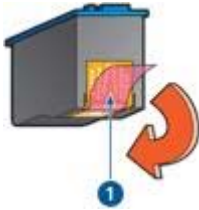


1 Remove plastic tape

- Consider selecting a higher [print quality](#).

### Blank pages print

- The protective piece of plastic tape might still be attached to the print cartridges. Verify that the plastic tape has been removed from the print cartridges.



1 Remove plastic tape

- The print cartridges might be [out of ink](#). Replace one or both empty print cartridges.
- You might be trying to print a borderless document with only the black print cartridge installed. When printing a borderless document, always have the tri-color print cartridge and a black or photo print cartridge installed.

### Too much or too little ink appears on the page

Follow these steps to adjust the ink density:

1. Open the [Print](#) dialog box, and then select the **Color** pane.
2. Select the **Paper Type/Quality** pane.
3. Click the **Ink** tab.
4. Move the **Ink Density** slider toward **Light** or **Heavy**.



**Note** If you increase the ink volume, move the **Dry time** slider toward **More** to avoid smearing the ink.

5. Click **Print**.



# Document is misprinted

## Text and images are misaligned

If the text and images on your printouts are misaligned, then [align](#) the print cartridges.

## Document is printed off-center or at an angle

1. Verify that the paper is correctly placed in the In tray.
2. Verify that the paper guide fits firmly against the edge of the paper.
3. Reprint the document.

## Parts of the document are missing or printed in the wrong place

- Open the [Page Setup](#) dialog box and verify the following settings:
- **Paper Size:** Verify the appropriate paper size.
  - **Scale:** Verify the scale setting for text or graphics to fit on the paper.
  - **Orientation:** Verify the appropriate orientation.

## Envelope is printed at an angle

1. Slide the flap inside the envelope before loading it in the printer.
2. Confirm that the paper guide fits firmly against the edge of the envelope.
3. Reprint the envelope.

## Document does not reflect the new print settings

The printer settings might differ from the software program print settings. Select the appropriate print settings within the software program.

# Problems with borderless documents

## Borderless printing guidelines

When printing borderless photos or brochures, follow these guidelines:

- Verify that the paper size specified in the [Page Setup](#) dialog box matches the size of the paper loaded in the In tray.
- Select the appropriate [paper type](#) in the Paper Type/Quality pane.
- Do not print borderless documents in [ink-backup mode](#). Always have two print cartridges installed in the printer when printing borderless documents.

### Streaks appear in a light portion of a photo



If streaks appear in a light portion of a photo, approximately 63 mm (2.5 inches) from one of the long edges of the photo, install a [photo print cartridge](#) in the printer.

### Horizontal lines appear on a photo



If light or dark horizontal lines appear on photos:

1. [Clean](#) the print cartridges.
2. Reprint the photo.
3. If the lines still occur, perform a [print quality calibration](#).  
Both a black and a tri-color print cartridge must be installed for print quality calibration.
4. Reprint the photo.

## Image is printed at an angle



Verify that no problem exists with the source image. For example, if you are printing a scanned image, verify that the image was not crooked when it was scanned.

If the problem is not caused by the source image, follow these steps:

1. Remove all paper from the In tray.
2. Load the paper correctly in the In tray.
3. Verify that the paper guide fits firmly against the edge of the paper.
4. Follow loading instructions for the paper type.

## Ink smears

Follow these guidelines if ink smears appear on the back of the photos, or if the paper sticks together:

- Use an HP photo paper.
- Verify that the photo paper is not curled. If the photo paper is curled, place the paper in a plastic bag and gently bend it the opposite direction of the curl until the paper lies flat.

If the paper is not curled, then follow these steps:

1. Open the [Print](#) dialog box.
2. Select the **Paper Type/Quality** pane.
3. Click the **Ink** tab.
4. Move the **Ink Density** slider toward **Light**.



**Note** The colors in the image might become lighter.

5. Click **Print**.

If the problem persists, try the following steps:

1. Remove the photo paper, and then load plain paper in the In tray.
2. Press and hold down the **Print Cancel** button until the printer starts printing a self-test page, and then release the button.
3. Repeat step 2 until the self-test page contains no ink smears.

**Part of the photo is faded**

If part of the photo is faded, follow these [guidelines](#).

**Photo has unwanted border**

If the photo has an unwanted border, follow these [guidelines](#).

**Part of the photo is faded**

Fading can occur on different parts of a photo.

**Fading occurs on the edges of a photo**



Verify that photo paper is not curled. If the photo paper is curled, place the paper in a plastic bag and gently bend it in the opposite direction of the curl until the paper lies flat. If the problem persists, then use photo paper that is not curled.

For instructions about preventing photo paper from curling, see [Storing and handling photo paper](#).

**Fading occurs near the edges of a photo**



If fading occurs approximately 25 to 63 mm (1.0 to 2.5 inches) from the edge of a photo, install a [photo print cartridge](#) in the printer.

## Photo has an unwanted border

The following conditions can create an unwanted border.

### For most paper types



If the photo has an unwanted border, try one of the following solutions:

- [Align the print cartridges.](#)
- Verify that no problem exists with the source image. For example, if you are printing a scanned image, verify that the image was not crooked when it was scanned.

### For photo paper with a tear-off tab

If the border appears below the tear-off tab, remove the tab.



If the border appears above the tear-off tab:

- [Align the print cartridges.](#)
- Verify that no problem exists with the source image. For example, if you are printing a scanned image, verify that the image was not crooked when it was scanned.



## Error messages

### Out of paper message

If you receive an out of paper message, follow these [guidelines](#).

### Print cartridge problem message

The Resume light flashes when a print cartridge is low on ink, improperly installed, or malfunctioning.

For instructions about correcting the problem, see [Print cartridge problems](#).

### "Printing in ink-backup mode"

When the printer detects that only one print cartridge is installed, ink-backup mode is initiated. This printing mode lets you print with a single print cartridge, but it slows the printer and affects the quality of printouts.

If you receive the ink-backup mode message and two print cartridges are installed in the printer, verify that the protective piece of plastic tape has been removed from each print cartridge. When plastic tape covers the print cartridge contacts, the printer cannot detect that the print cartridge is installed.

## Out-of-paper message

Follow the appropriate steps for the condition that exists.

### If the In tray contains paper

1. Verify the following:
  - A sufficient amount of paper is in the In tray (at least ten sheets).
  - The In tray is not overly full.
  - The paper stack is touching the back of the In tray.
2. Slide the paper guide so it fits firmly against the edge of the paper.
3. Press the **Resume** button to continue printing.

### If the In tray is empty

1. Load paper in the tray.
2. Press the **Resume** button to continue printing.

## Printer lights are on or flashing

### What the lights indicate

The printer lights indicate the printer status.



1	Power light
2	Resume light

### Power light is flashing



1	Power light
---	-------------

If the Power light is flashing, the printer is preparing to print. The light stops flashing when the printer has received all data.

## Resume light is flashing



1	Resume light
---	--------------

If the Resume light is flashing, check the following conditions:

- The printer might be out of paper.  
Place paper in the In tray, and then press the **Resume** button.
- There might be a paper jam.  
Follow these instructions to [clear a paper jam](#).
- The print cartridges are the [correct print cartridges](#) for the printer and are [properly installed](#).
- A print cartridge might be [low on ink](#).  
If a print cartridge is low on ink, consider replacing the print cartridge.
- The printer might be stalled.  
Follow these instructions to correct a [stalled printer](#).

## Both lights are flashing

The printer might need to be restarted.

1. Press the **Power** button to turn off the printer, and then press the **Power** button to restart the printer.  
Proceed to step 2 if the lights continue to flash.
2. Press the **Power** button to turn off the printer.
3. Disconnect the printer power cord from the electrical outlet.
4. Reconnect the printer power cord to the electrical outlet.
5. Press the **Power** button to turn on the printer.

## Document prints slowly

### Multiple software programs are open

The computer resources are insufficient for the printer to print at its optimum speed.

To increase printer speed, close all unnecessary software programs when printing.



**Complex documents, graphics, or photos are printing**

Documents containing graphics or photos print more slowly than text documents.

**Best or maximum dpi print mode is selected**

The printer prints more slowly when Best or Maximum dpi is selected as the print quality. To increase the printer speed, select a different print quality mode.

**Printer is in ink-backup mode**

The printer might print more slowly if it is in [ink-backup mode](#).

To increase the print speed, use two print cartridges in the printer.

**Printer software is outdated**

Outdated printer software might be installed.

For information about updating the printer software, visit HP's Web site at [www.hp.com/go/mac-connect](http://www.hp.com/go/mac-connect).

**Computer does not meet system requirements**

If your computer does not have enough RAM or a large amount of free space on the hard drive, the printer processing time will be longer.

1. Verify that the computer hard disk space, RAM, and processor speed meet the system requirements.  
The system requirements are listed in the reference guide that came with the printer.
2. Make space available on the hard drive by deleting unwanted files.

## If you continue to have problems

If you continue to have problems after investigating the troubleshooting topics, shut down your computer and then restart it.

If you still have questions after restarting your computer, visit HP Technical Support at [www.hp.com/support](http://www.hp.com/support).

# 12 Supplies

- Paper
- USB cables

## Paper

To order media such as HP Premium Paper, HP Premium Inkjet Transparency Film, HP Iron-On Paper, or HP Greeting Cards, go to [www.hp.com](http://www.hp.com).

Choose your country/region, and then select Buy or Shopping.

## USB cables

C6518A HP USB A–B 2-meter cable

# 13 Specifications

- [Printer specifications](#)

## Printer specifications

See the reference guide that came with your printer for complete printer specifications, including this information:

- Types, sizes, and weights of paper and other printing media that can be used with your printer
- Print speeds and resolutions
- Power requirements
- Computer operating system requirements

# 14 Environmental information

- [Environmental statement](#)
- [Print cartridge recovery](#)

## Environmental statement

Hewlett-Packard continuously improves the design processes of its deskjet printers to minimize the negative impact on the office environment and on the communities where printers are manufactured, shipped, and used.

### Reduction and elimination

**Paper use:** The [Print Cancel](#) button allows the user to save paper by quickly canceling a print job as needed. This equipment is suitable for using recycled papers (in accordance with EN 12281:2002).

**Recycled paper:** All paper documentation for this printer is printed on recycled paper.

**Ozone:** Ozone-depleting chemicals such as CFCs have been eliminated from Hewlett-Packard's manufacturing processes.

### Recycling

Design for recycling has been incorporated into this printer. 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.

**Printer packaging:** The packaging materials for this printer have been selected to provide maximum protection for the least cost possible, while attempting to minimize environmental impact and facilitate recycling. The rugged design of the HP Deskjet printer assists in minimizing both packaging materials and damage rates.

**Plastic parts:** All major plastics and plastic parts are marked according to international standards. All plastic parts used in the printer housing and chassis are technically recyclable and all use a single polymer.

**Product longevity:** To ensure the longevity of your HP Deskjet printer, HP provides the following:

- **Extended warranty:** Details can be found in the reference guide that came with your printer.
- **Replacement parts and consumables** are available for a limited period after production has stopped.
- **Product take-back:** To return this product to HP at the end of its useful life, go to [www.hp.com/recycle](http://www.hp.com/recycle). To return empty print cartridges to HP, see [print cartridge recovery](#).



**Note** The extended warranty and product take-back options are not available in all countries/regions.

## Recycling information for the European Union

**Important recycling information for our customers in the European Union:** To preserve the environment, this product must be recycled after its useful life as required by law. The symbol below indicates that this product may not be disposed in the general trash. Please return the product for proper recovery/disposal to the authorized collection location nearest to you. For more information regarding return and recycling of HP products generally, please visit [www.hp.com/hpinfo/globalcitizenship/environment/recycle/index.html](http://www.hp.com/hpinfo/globalcitizenship/environment/recycle/index.html).



## Energy consumption

This printer was designed with energy conservation in mind. Not only does this save natural resources, but it also saves money without affecting the high performance of the printer. The printer meets the Federal Energy Management Program (FEMP) requirements, the US government energy savings initiative aimed at reducing power when the printer is turned OFF.

**Energy consumption in standby mode:** See the reference guide for energy consumption specifications.

**Energy consumption in off-mode:** When the printer is off, an amount of energy is still being consumed. Energy consumption can be prevented by turning the printer power off, then disconnecting the end of the printer power cord from the electrical source.

## Print cartridge recovery

Customers interested in recycling their genuine HP print cartridges can participate in HP's Planet Partner's Program for inkjet cartridges. HP offers this program in more countries/regions than any other inkjet cartridge manufacturer in the world. This program is provided as a free service to HP customers as an environmentally sound solution for these products at end-of-life.

To participate, simply follow the directions provided on HP's Web site at this address: [www.hp.com/recycle](http://www.hp.com/recycle). This service is not available in all countries/regions. Customers may be asked for their name, phone number, and address.

Because HP's unique recycling processes are very sensitive to material contamination, we cannot take back and recycle cartridges from other manufacturers. The end products of the recycling process are used in the manufacture of new products, and HP must ensure the composition of the material is consistent. To do that, we recycle only HP original cartridges. This program does not extend to refilled cartridges.

Returned cartridges are separated for purification into raw materials for use in other industries to manufacture new products. Examples of products made from recycled HP print cartridge materials include automobile parts, trays used in microchip

fabrication processes, copper wire, steel plates, and the precious materials used in electronics. Depending on the model, HP is able to recycle up to 65% of the print cartridge by weight. The remaining parts that cannot be recycled (ink, foam, and composite parts) are disposed of in an environmentally responsible manner.

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