

# user's guide

hp color inkjet printer cp1160



i n v e n t

# user's guide

## hp color inkjet printer cp1160

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# terms and conventions

The following terms and word conventions are used in the onscreen User's Guide.

## terms

The hp color inkjet printer cp1160 is referred to as **hp cp1160** or **printer**.

## symbols

The > symbol guides you through a series of software steps.  
For example:

Click **File** > **Print** > **Setup**, then select **Properties**.

## cautions and warnings

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

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

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



**Warning!** Keep ink cartridges out of the reach of children.

## icons

A **Note** icon indicates that additional information is provided. For example:



For best results use HP products.

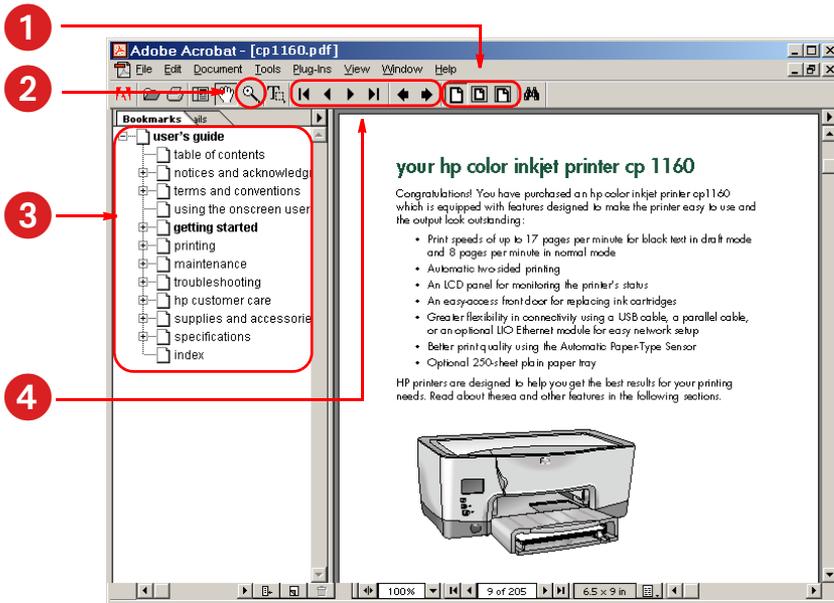
A **Mouse** icon indicates that additional information is available through the **What's This?** help feature.



To find more information about options on each tab screen, point to an option and click the right mouse button to display the **What's This?** dialog box. Click **What's This?** to view more information about the selected option.

# using the onscreen user's guide

This onscreen User's Guide is viewed through Adobe Acrobat Reader 4.0.



## 1. **View Buttons:** Click these buttons to change page views:

- View the page in actual size
- Fit the page in the window.
- Fit the page width in the window.

## 2. **Zoom:** Use to zoom in on a page.

## 3. **Bookmarks:** Click a bookmark to view a topic.

## 4. **Navigation Buttons:** Click these buttons to navigate:

-  Go to the first page of the document.
-  Go back one page.
-  Go forward one page.
-  Go to the last page of the document.
-  Go to the previous view.
-  Go to the next view.

# getting started

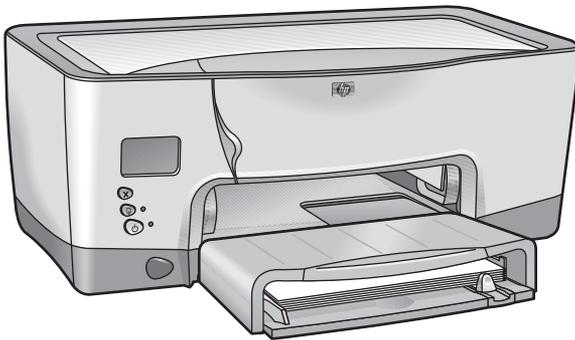
- [your hp color inkjet printer cp1160](#)
- [printer features](#)
- [LCD panel](#)
- [buttons and lights](#)
- [infrared lens](#)
- [paper tray](#)
- [ink delivery system](#)
- [automatic paper-type sensor](#)
- [automatic two-sided printing module \(duplexer\)](#)
- [connectivity](#)

# your hp color inkjet printer cp1160

Congratulations! You have purchased an hp color inkjet printer cp1160 which is equipped with features designed to make the printer easy to use and the output look outstanding:

- Print speeds of up to 17 pages per minute for black text in draft mode and 8 pages per minute in normal mode
- Automatic two-sided printing
- An LCD panel for monitoring the printer's status
- An easy-access front door for replacing ink cartridges
- Greater flexibility in connectivity using a USB cable, a parallel cable, or an optional LIO Ethernet module for easy network setup
- Better print quality using the Automatic Paper-Type Sensor
- Optional 250-sheet plain paper tray

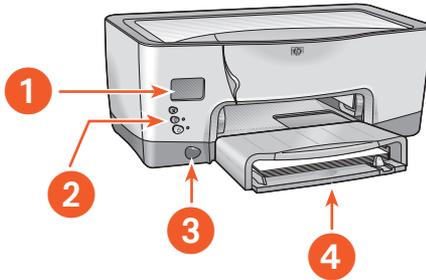
HP printers are designed to help you get the best results for your printing needs. Read about these and other features in the following sections.



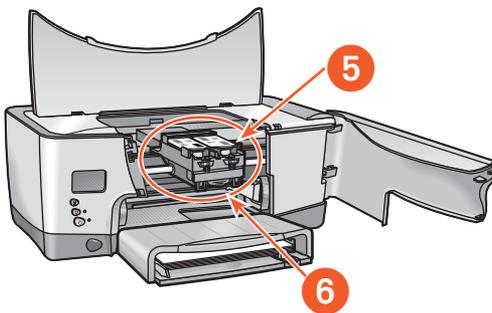
During the initial start up of this printer, the ink is automatically filled into the printer's ink distribution system. This operation typically takes nine to ten minutes to complete. The user will notice movement of the printing mechanism and may notice an odor during this operation. These are not indications that the printer is malfunctioning. This operation occurs only upon initial start up of the printer, and not during subsequent use or startups.

# printer features

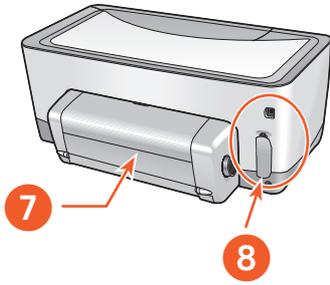
The printer has several features designed to make it easy to use. To learn about a feature, click the name of the feature below:



1. [LCD panel](#)
2. [buttons and lights](#)
3. [infrared lens](#)
4. [paper tray](#)



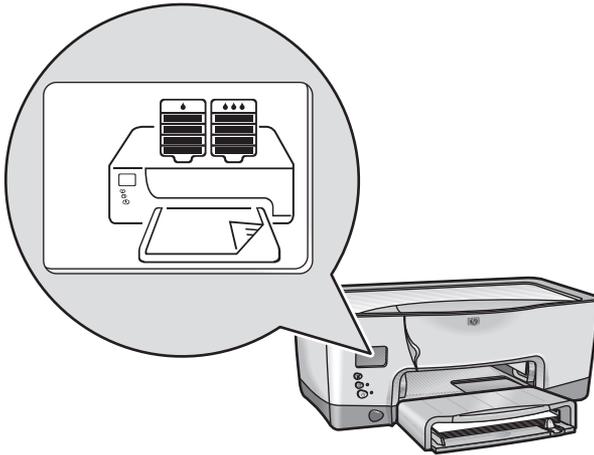
5. [ink delivery system](#)
6. [automatic paper type sensor](#)



- 7. automatic two-sided printing module (duplexer)
- 8. connectivity

# LCD panel

The LCD panel displays icons to show the printer's status.



Each icon represents one of the following:

- An operating condition of the printer (such as an error)
- A physical part of the printer (such as the paper tray)

By combining these types of icons, the LCD panel shows the printer's status.

## operating condition icons

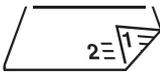
The LCD panel displays icons that show the printer's operating condition.



The printer needs attention. Other icons on the LCD panel flash when the alert icon appears to indicate that attention is needed.



The printer is busy. It may be receiving data. This icon represents a normal operating condition.



The printer is printing a two-sided document.



The printer is printing a banner.



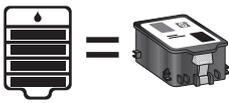
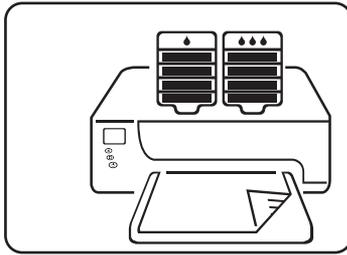
The printer has established an infrared link with another device.



The printer has encountered a communication problem either with a direct connection to an individual computer or with a network.

## ink cartridges

The LCD panel displays one icon for each ink cartridge.



1



2

1. black ink cartridge
2. tri-color ink cartridge

14

When replacing ink cartridges and printheads, purchase ink cartridges and printheads with selection no. 14.

For more information, see [ink cartridge selection numbers](#).

## ink level gauge

The Ink Level Gauge shows you when one or both of the ink cartridges are functioning properly, very low on ink, or out of ink.



Full.



Half full.



Very low on ink. Last portion of ink level flashes. Replace soon.



Out of ink. Replace immediately.

## expired ink

The LCD panel indicates when an ink cartridge will expire soon or is expired.



Will expire soon. Ink level may vary. Replace soon.



Expired. Ink level may vary. Replace immediately.

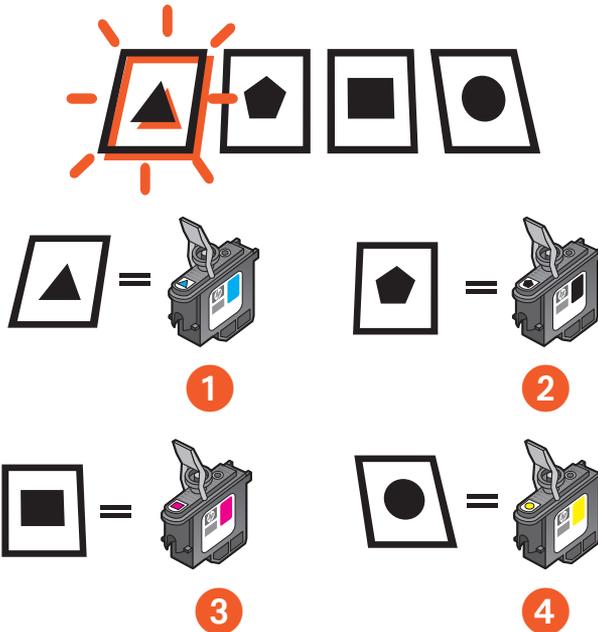
For an explanation of ink expiration, see [expired ink cartridges](#).

To see instructions for replacing an ink cartridge, see [replacing ink cartridges](#).

## printheads

The printhead icons appear when a printhead needs to be replaced. The printhead that needs to be replaced flashes.

For a description of the printheads, see [printheads](#).



1. cyan
2. black
3. magenta
4. yellow

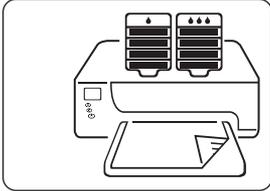
14

When replacing ink cartridges and printheads, purchase ink cartridges and printheads with selection no. 14.

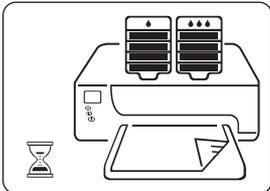
For more information, see [printhead selection numbers](#).

## normal operation conditions

Under normal operating conditions, the LCD panel displays the printer and the ink cartridge icons (ink levels may vary).

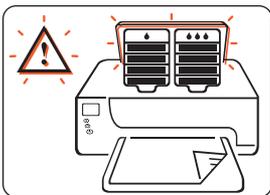


When the printer is receiving data, the hourglass icon appears (ink levels may vary).



## error messages

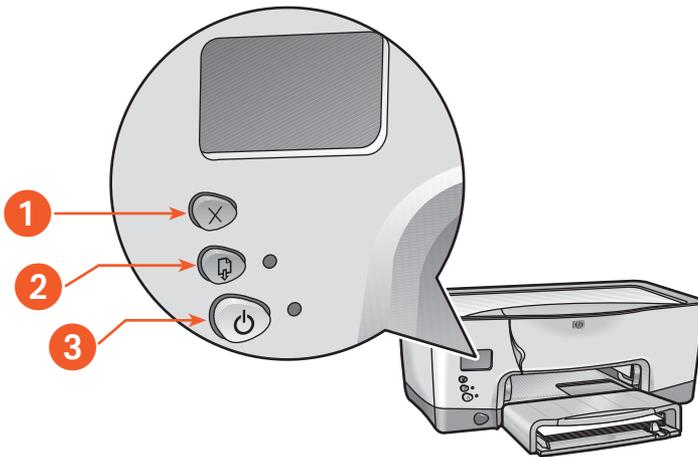
When the printer encounters an error, the alert icon appears and one or more icons flash to indicate the source of the error. In the example below, the top printer door has been left open for too long.



For more information on error messages, see [LCD panel error messages](#).

# buttons and lights

The printer buttons let you turn the printer on and off, cancel a print job, or resume printing. The lights give you visual cues about the status of the printer.



1. cancel button
2. resume button and light
3. power button and light

## cancel button

Pressing this button cancels the current print job.

## resume button and light

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.

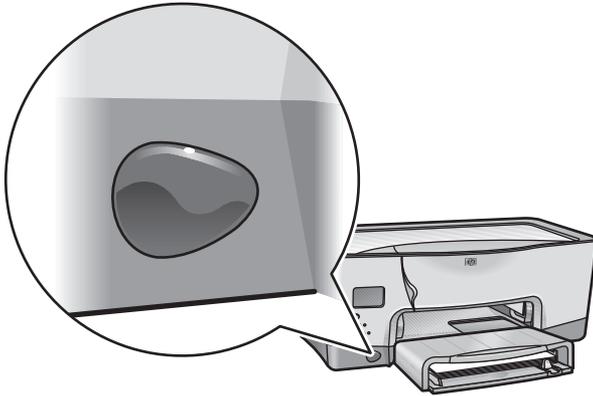
## power button and light

The **Power** button turns the printer on and off. It may take a few seconds for the printer to turn on after pressing the **Power** button. The green light next to the **Power** button flashes when the printer is busy.

**Caution!** Always use the Power button on the front of the printer 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 may cause printer failure.

## infrared lens

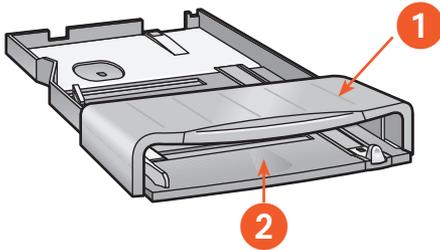
The printer has a special Infrared (Ir) lens. The Infrared lens allows printing from an infrared sending device such as a Palm device, laptop, or notebook computer.



For a full description of infrared printing, see [infrared printing](#).

## paper tray

The printer comes with a 150-sheet capacity paper tray. The paper tray can be removed from the printer.



1. paper tray top
2. put paper here for printing

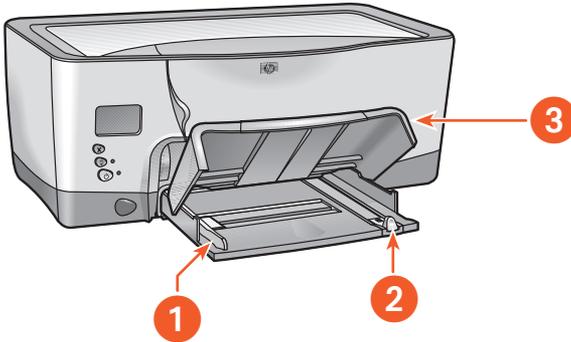


Additionally, the printer can also use an optional 250-sheet plain paper tray.

## loading the paper tray

The paper tray holds paper or other media to be printed. The length and width guides adjust to the size of the media being used.

For ease of loading, the paper tray top raises. Lower the top when printing.



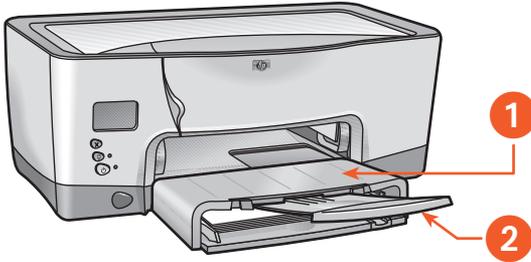
1. paper width guide
2. paper length guide
3. paper tray top up

To load a specific media type, see [printing](#).

## output

The printer deposits printed pages on top of the paper tray.

Pull the paper tray extension out to prevent the paper from falling off the tray. When the print job finishes, push the tray extension back into its storage slot.



1. printed pages are deposited here
2. paper tray extension

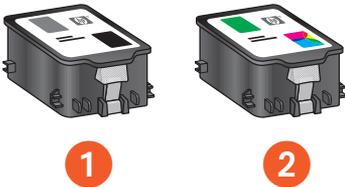
# ink delivery system

The printer's ink delivery system consists of these parts:

- Ink cartridges
- Printheads
- Print carriage

## ink cartridges

Ink cartridges supply ink to the printer.



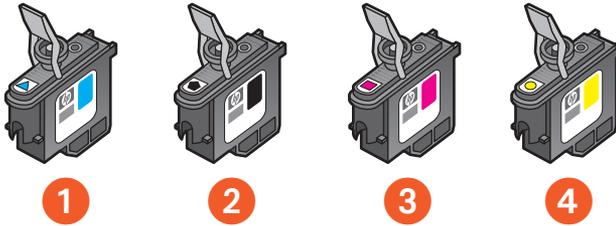
1. black ink cartridge
2. tri-color ink cartridge

For installation instructions, see [replacing ink cartridges](#).

For storage instructions, see [maintaining ink cartridges](#).

## printheads

The printer uses four printheads. The printheads apply ink to printable media.



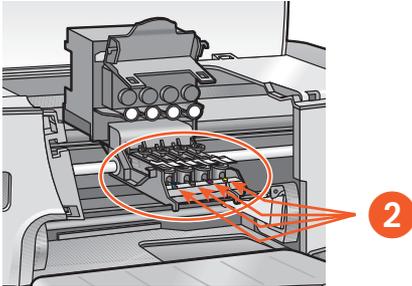
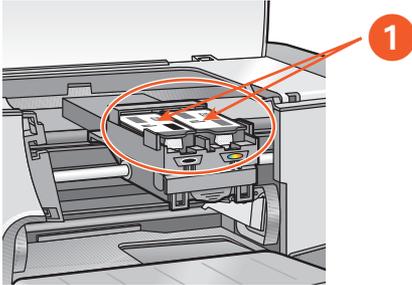
1. cyan
2. black
3. magenta
4. yellow

For installation instructions, see [replacing printheads](#).

**Caution!** After installing printheads, do not open the print carriage unless a printhead needs to be replaced. Opening the print carriage needlessly can damage the printheads.

## print carriage

The print carriage is the main operating feature of the printer's ink delivery system. It holds the two ink cartridges and the four printheads.



1. ink cartridges
2. printheads

**Caution!** Do not open the print carriage unless a printhead needs to be replaced or you are asked to by an HP support agent. Opening the print carriage needlessly can damage the printheads.

## automatic paper-type sensor

The Automatic Paper-Type Sensor automatically determines the correct paper type and adjusts the print settings for most paper or media placed in the paper tray.

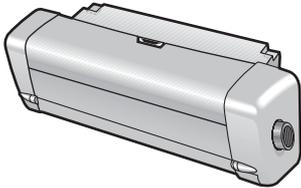
This feature, particularly when used with HP paper and media, provides better printing results.

When the Automatic Paper-Type Sensor is engaged, the printer scans the first page of a document with a blue optical sensor light to determine the best paper type setting. Once determined, the page is printed.

To see instructions for using the Automatic Paper-Type Sensor, see [using the automatic paper-type sensor](#).

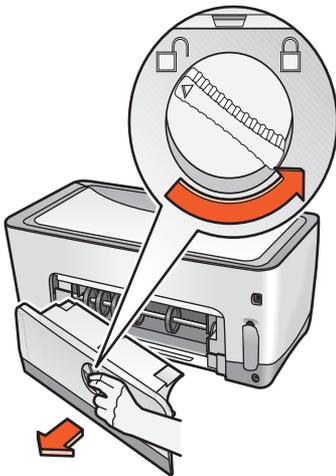
# automatic two-sided printing module (duplexer)

The Automatic Two-Sided Printing Module (duplexer) is a special hardware feature that enables the printer to automatically print on both sides of a page.



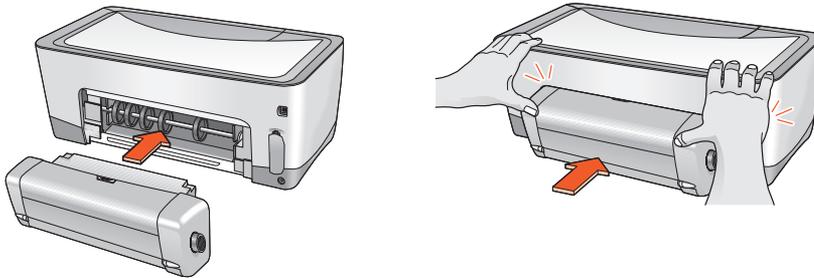
## installing the duplexer

1. Turn the latch counter-clockwise on the printer's Rear Access Door and remove the door.



Do not discard the Rear Access Door. In order to print, the duplexer or the Rear Access Door must be attached to the printer.

2. Insert the duplexer in the back of the printer until both sides snap into place.  
Do not press the buttons on either side of the duplexer when installing it in the printer. Use these buttons only when removing the duplexer from the printer.



If you encounter a problem using the duplexer, see [two-sided printing problems](#).

For Automatic Two-Sided Printing Module specifications, see [automatic two-sided printing module specifications](#).

## supported paper types

Not all paper types, weights, and sizes can be used with the duplexer. Use one of the paper types listed below when using the duplexer.

- hp plain paper
- hp bright white inkjet paper
- hp premium inkjet heavyweight paper
- hp felt-textured greeting card paper
- hp professional brochure paper, glossy or matte
- hp photo quality inkjet paper, semi-gloss or matte

## printing with the duplexer

For two-sided printing instructions, see [two-sided printing](#).

# connectivity

The printer offers a number of options for connectivity, including:

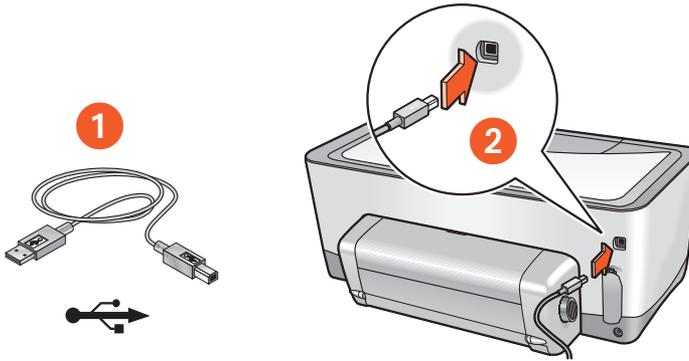
- USB
- parallel
- network connections



For the latest updates on connectivity for your hp cp1160, visit [www.hp.com](http://www.hp.com).

## USB

The printer can connect to your computer with a USB cable if your computer is running Windows 98, Me, or 2000.



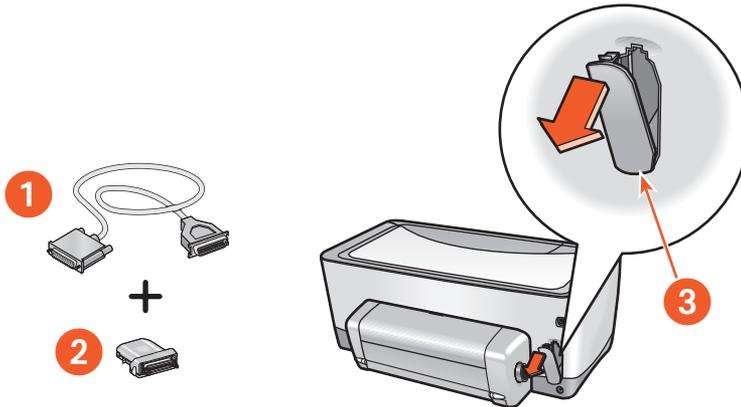
1. USB cable
2. USB receptacle

For instructions on connecting the printer with a USB cable, see the Setup poster that came with the printer.

For supply numbers, see [interface cables](#).

## parallel

The printer can connect to your computer with a parallel cable via a parallel cable adapter and the LIO slot.



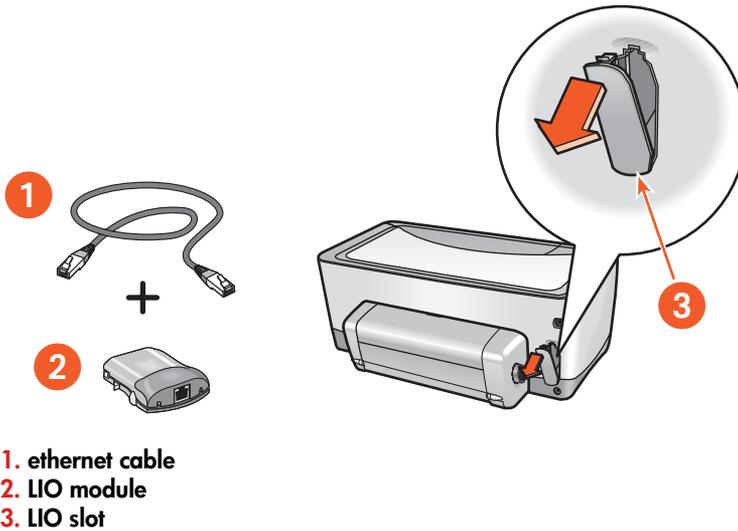
1. centronix parallel cable (IEEE 1284)
2. parallel cable adapter
3. LIO slot

For instructions on connecting with a parallel cable, see the Setup poster that came with the printer.

For supply numbers, see [interface cables](#).

## network connections

The printer can connect to a network with an LIO module.



For instructions on connecting with an LIO module, see the Setup poster that came with the printer or the documentation that came with the LIO module.

HP offers a number of LIO modules to connect the printer to several different types of networks via the LIO slot.

For available LIO modules, see [LIO modules](#).

To see more information on the printer's networking feature:

1. Insert the CD that came with the printer into your computer's CD-ROM drive.
1. Click **View Documentation**.
2. Click **Networking**.
3. Select one of the following options:
  - **Network Basics Tutorial** - A brief introduction to networks and network printing.
  - **Network User's Guide** - Setup and configuration information for LIO print servers.
  - **Network Troubleshooting** - Troubleshooting steps for LIO network printing connections.

You can also visit HP's Website:

- **Technical support:** [http://www.hp.com/support/net\\_printing](http://www.hp.com/support/net_printing)
- **Product information:** <http://www.hp.com/go/networkprinting>

# printing

For an explanation of the printer software, click the following:

- [printer properties](#)

For instructions about printing functions, click the appropriate topic below:

- [changing default printer properties](#)
- [printing a document](#)
- [two-sided printing](#)
- [using the automatic paper-type sensor](#)
- [watermarks](#)

For instructions on printing on a specific type of media, click the appropriate media type below:

- [plain paper](#)
- [envelopes](#)
- [transparencies](#)
- [labels](#)
- [index cards and other small media](#)
- [photographs](#)
- [greeting cards](#)
- [posters](#)
- [banners](#)
- [iron-on transfers](#)

For instructions on infrared printing, click the following:

- [infrared printing](#)

# printer properties

The printer is controlled by software installed on your computer. Use the printer software, also called the “printer driver”, to change the print settings for a document.

## displaying the printer properties dialog box

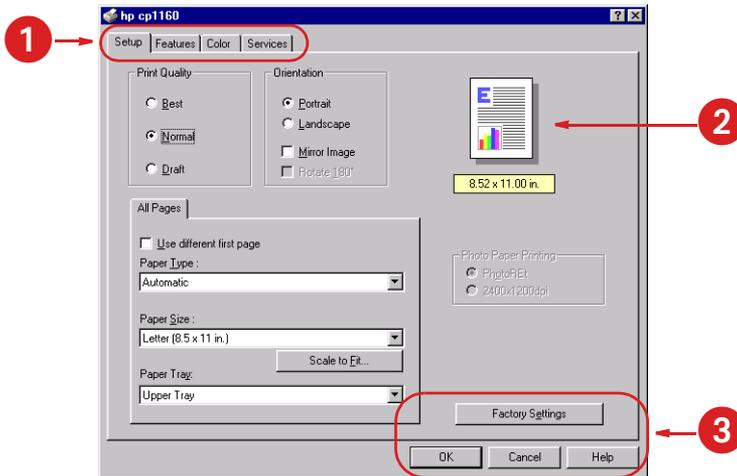
Follow these steps to display the Printer Properties dialog box:

1. Open the file you want to print.
2. Follow one of these paths to select the Printer Properties dialog box depending on the software program you are using:
  - Click **File > Print**, then select **Properties**.
  - Click **File > Print Setup**, then select **Properties**.
  - Click **File > Print > Setup**, then select **Properties**.

The Printer Properties dialog box appears.

## using the printer properties dialog box

The Printer Properties dialog box has several tools to make it easy to use.



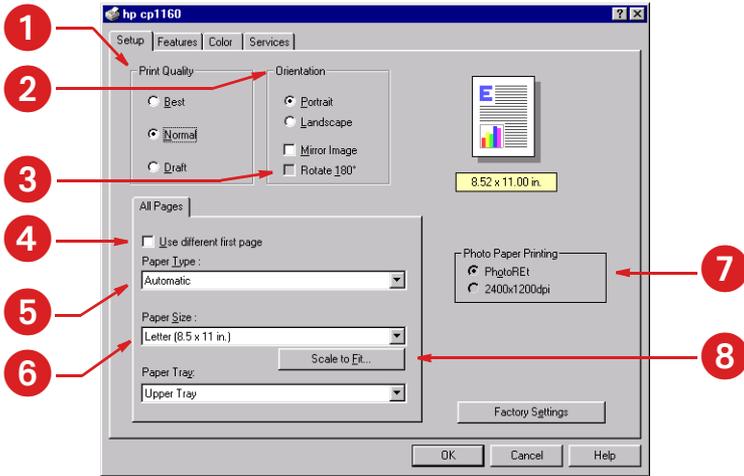
- 1. Tabs:** Click a tab to see its contents. To see a description of a specific tab, see [setup](#), [features](#), [color](#), or [services](#).
- 2. Preview:** Shows how changes to the print settings affect the document.
- 3. Buttons:**
  - **OK:** Saves and applies settings.
  - **Cancel:** Closes dialog box without saving new settings.
  - **Help:** Opens online help.
  - **Factory Settings:** Restores default print settings.

The Printer Properties dialog box may display an **Apply** button. The **Apply** button saves changes to settings without closing the dialog box.

# tabs

## setup

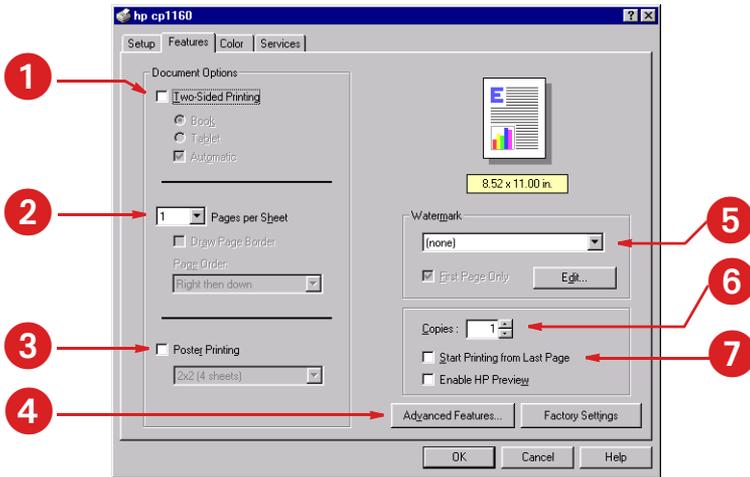
The Setup tab allows you to set these options:



1. **Print Quality:** Quality and print speed.
2. **Orientation:** Page layout.
3. **Rotate 180°:** Use with envelopes and Hagaki cards.
4. **Use Different First Page:** Paper type, paper size, and paper tray for the first page of a document.
5. **Paper Type:** The type of paper used.
6. **Paper Size:** The size of paper used.
7. **Photo Paper Printing:** Quality of photo printing on certain photo papers.
8. **Scale to Fit:** Size of text and images on a page.

## features

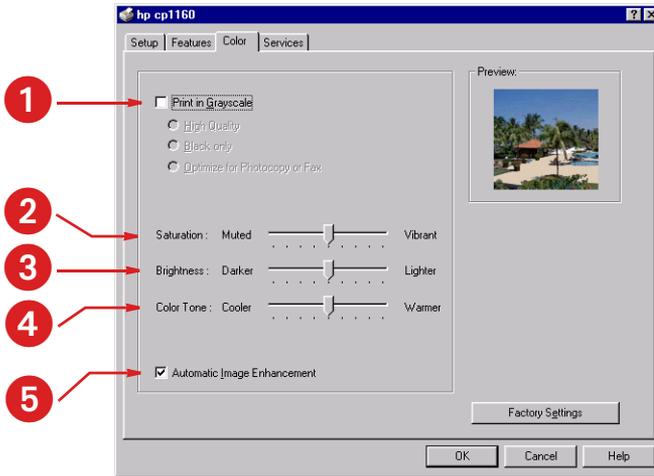
The Features tab allows you to set these options:



1. **Two-Sided Printing:** See [two-sided printing](#).
2. **Pages per Sheet:** Number of pages printed on each sheet of paper.
3. **Poster Printing:** Number of sheets of paper used to print a poster.
4. **Advanced Features:** Ink volume and dry time.
5. **Watermark:** See [watermarks](#).
6. **Copies:** Number of copies printed.
7. **Start Printing from Last Page:** Print order.

## color

The Color tab allows you to set these options:



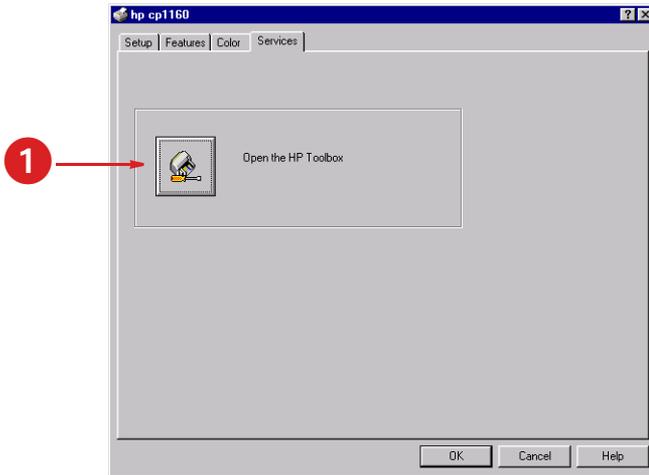
1. **Print in Grayscale:** Print in shades of gray.
2. **Saturation:** Intensity of printed colors.
3. **Brightness:** Lightness or darkness of printed colors.
4. **Color Tone:** Warmth or coolness of printed colors.
5. **Automatic Image Enhancement:** Automatic Contrast Enhancement and Fixed Resolution Enhancement.



To find more information about options on each tab screen, point to an option and click the right mouse button to display the **What's This?** dialog box. Click **What's This?** to view more information about the selected option.

## services

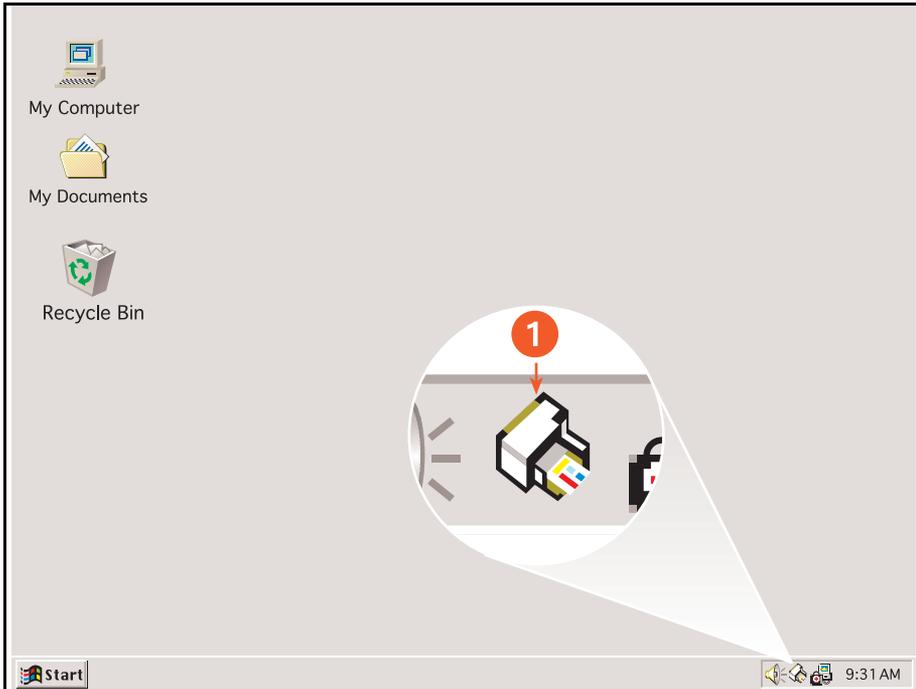
The Services tab allows you to open the Toolbox.



- 1. Open the HP Toolbox:** Click this button to open the Toolbox. To see a description of the Toolbox, see [toolbox](#).

# changing default printer properties

The taskbar icon allows you to adjust default printer properties. Default printer properties apply to all documents that you print.



## 1. taskbar icon

## setting default print quality and two-sided printing

1. Click the **taskbar icon**.

The Default Printer Settings dialog box appears.

2. Select from the available print options:
  - Print Quality: **Best**, **Normal**, or **Draft**.
  - Automatic Two-Sided Printing: Check to use the duplexer.
3. Click outside of the dialog box.

A dialog box appears advising that the selections made determine what printer properties the printer will use when printing. If you do not want to see this dialog box again, select **Don't show me this message again**.

4. Click **OK**.

## setting default printer properties

1. Double-click the **taskbar icon**.

The Printer Properties dialog box appears.

2. Select from the available print options.
3. Click **OK**.

A dialog box appears advising that the selections made determine what printer properties the printer will use when printing. If you do not want to see this dialog box again, select **Don't show me this message again**.

4. Click **OK**.

To see a description of the Printer Properties dialog box, see [printer properties](#).

## selecting a default printer

Use this feature to select a default printer if you have more than one printer installed on your computer.

1. Right-click the **taskbar icon**.  
A list of available printers appears.
2. Select the printer you want.

# printing a document

Follow these instructions to print a document:

1. Open the file you want to print.
2. Follow one of these paths to open the Printer Properties dialog box:
  - Click **File > Print**, then select **Properties**.
  - Click **File > Print Setup**, then select **Properties**.
  - Click **File > Print > Setup**, then select **Properties**.

The Printer Properties dialog box appears.

3. Select the **Setup** tab to choose print quality options, paper source (if applicable), page orientation, automatic paper-type sensor or a specific paper type, paper size, and photo paper printing.
4. Select the **Features** tab to choose two-sided printing, watermarks, multiple pages per sheet, and poster printing.
5. Select the **Color** tab to make color and contrast adjustments.
6. Select the **Services** tab to open the Toolbox.
7. Click **OK** to return to the Print or Print Setup screen.
8. Click **OK** to print.

# two-sided printing

Use one of the following methods to print two-sided documents:

- [automatic two-sided printing](#)
- [manual two-sided printing](#)

## automatic two-sided printing

To print two-sided documents automatically, the duplexer must be attached to the printer.

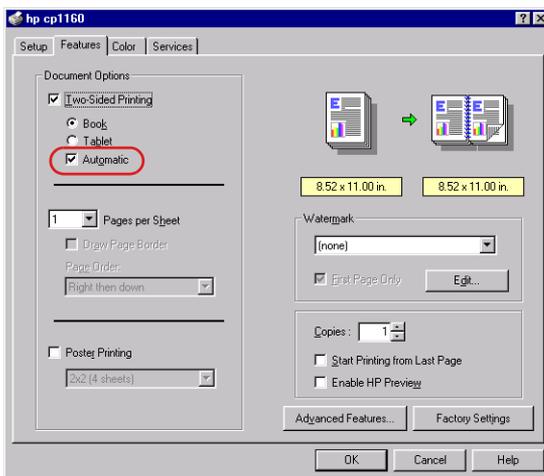
The duplexer only works with certain media types. For a list of supported media types, see [duplexer media types](#).

If you want to print a two-sided document on a media type not supported by the duplexer, see [manual two-sided printing](#).

## printing instructions

Follow these instructions to print a two-sided document:

1. Open the Printer Properties dialog box, then select the **Features** tab.
2. Check **Two-Sided Printing**.  
The Two-Sided Printing Margin dialog box appears.
3. Select the appropriate page content option, then click **OK** to return to the Features tab.
4. Select the **Automatic** box.



5. Select **Book** or **Tablet**.
6. Change any other desired print settings, then click **OK**.

When the first side prints, the printer pauses while the first side of the printed page dries. Once dry, the second side of the page is printed and released to the top of the paper tray.

For a description of the duplexer, see [automatic two-sided printing module \(duplexer\)](#).

If you encounter a problem while printing a two-sided document, see [two-sided printing problems](#).

## manual two-sided printing

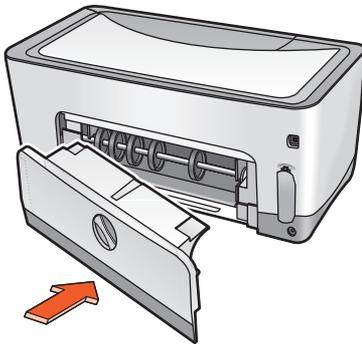
Use the manual two-sided printing feature if:

- The duplexer is not attached to the printer
- You want to print a two-sided document on a media type the duplexer does not support

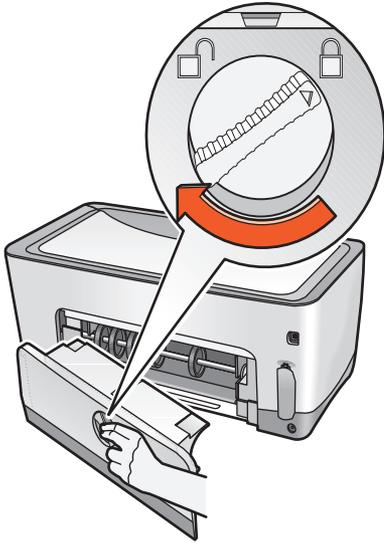
### rear access door

If the duplexer is not attached to the printer, the printer cannot feed paper unless the Rear Access Door is attached.

1. Push the Rear Access Door into place.



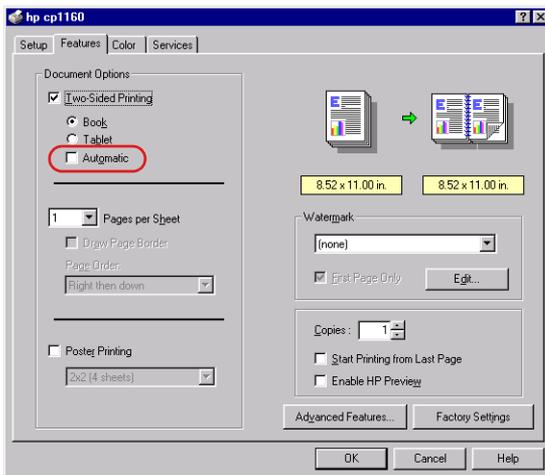
2. Turn the latch to the right to attach the Rear Access Door to the printer.



## printing instructions

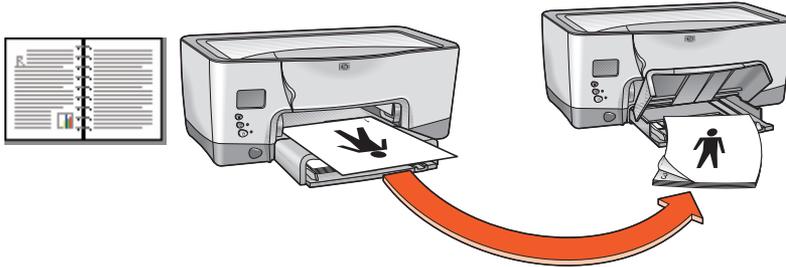
Follow these instructions to print a two-sided document manually:

1. Open the Printer Properties dialog box, then select the **Features** tab.
2. Check **Two-Sided Printing**.  
The Two-Sided Printing Margin dialog box appears.
3. Select the appropriate page content option, then click **OK** to return to the Features tab.
4. Deselect the **Automatic** box.

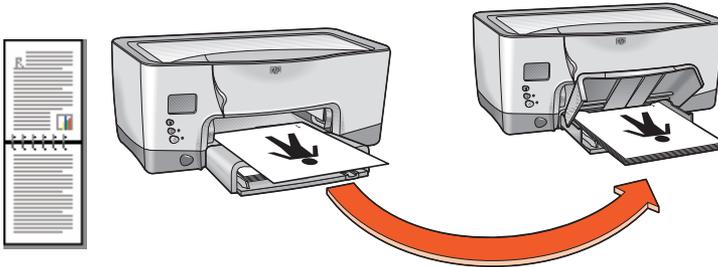


5. Select **Book** or **Tablet**.
6. Change any other desired print settings, then click **OK**.

- The printer automatically prints odd-numbered pages first. Once the odd-numbered pages are printed, a message appears prompting you to reload the paper so that the even-numbered pages can be printed.



#### book binding



#### tablet binding

- Reload the paper, then click **Continue**.

# using the automatic paper-type sensor

## activating the automatic paper-type sensor

Open the file you want to print, follow the basic printing procedures and select the following option:

tab	setting
Setup	Paper Type: <b>Automatic</b>

## turning off the automatic paper-type sensor

Open the file you want to print, follow the basic printing procedures and select the following option:

tab	setting
Setup	Paper Type: Any paper type <i>other than</i> <b>Automatic</b> .

For a description of the Automatic Paper-Type Sensor, see [automatic paper-type sensor](#).

# watermarks

Watermarks appear as background printing on documents.

## applying an existing watermark to a document

Follow these steps to apply an existing watermark to a document:

1. Open the Printer Properties dialog box.
2. Click the **Features** tab.
3. Select the watermark you want from the **Current Watermarks** list.
4. Do one of the following:
  - If you want the watermark to appear on the first page only, select **First Page Only**.
  - If you want the watermark to appear on all printed pages, leave **First Page Only** unchecked.
5. Print the document according to the instructions for the paper type.  
For printing instructions about specific paper types, see [printing](#).

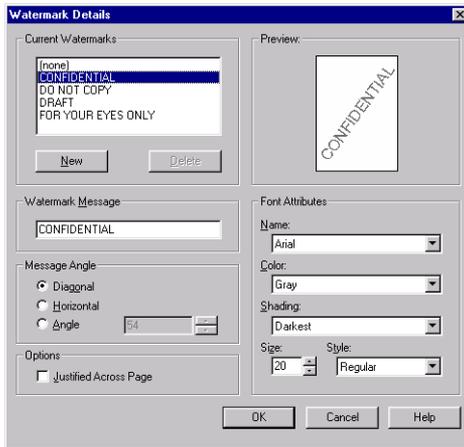
## creating or changing a watermark

Follow these steps to create or change a watermark:

1. Open the Printer Properties dialog box.
2. Click the **Features** tab.

3. Click the **Edit** button.

The Watermark Details dialog box appears.



4. Do one of the following:
  - To create a watermark, click **New**.
  - To change a watermark, select the watermark.
5. Create or change the watermark message, message angle, and font attributes as you want.
6. After you have set the watermark details, click **OK**.
7. Apply the watermark.

See [applying an existing watermark to a document](#).



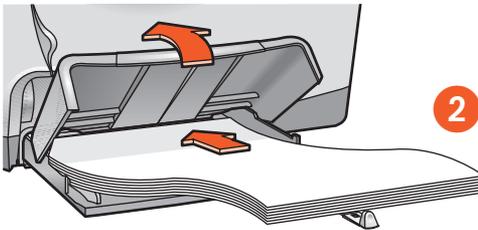
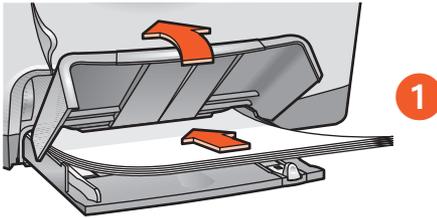
To find more information about options on each tab screen, point to an option and click the right mouse button to display the **What's This?** dialog box. Click **What's This?** to view more information about the selected option.

# plain paper



## preparing to print

1. Raise the top of the paper tray.
2. Slide out both paper guides.
3. Do one of the following:
  - For **executive**, **A4**, and **B5** sized paper, place the paper in the tray.
  - For **legal-sized** paper, pull out the paper length guide, then place the paper in the tray.
4. Slide the paper guides snugly against the paper.
5. Lower the top of the paper tray, then pull out the paper tray extension.



1. executive, A4, and B5 paper sizes
2. legal-sized paper



## printing on plain paper

1. Open the Printer Properties dialog box, then select the following setting:

tab	setting
Setup	• Paper Type: <b>Automatic</b> , or <b>Plain Paper</b>

2. Select any other desired print settings.
3. After you have selected the print settings, click **OK**.

For basic printing instructions, see [printing a document](#).

If you encounter a problem while printing, see [troubleshooting](#).

# envelopes

Print a single envelope using the envelope slot, or print multiple envelopes using the paper tray.



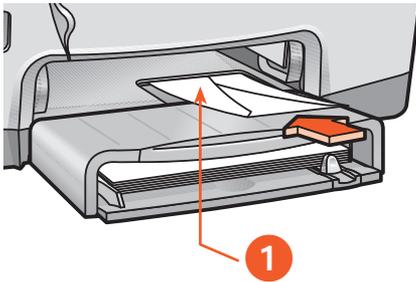
## printing guidelines

- Avoid using envelopes that have clasps or windows.
- Avoid using envelopes that are shiny or embossed, envelopes with thick, irregular, or curled edges, or envelopes that are wrinkled, torn, or otherwise damaged.
- Align the envelope edges before inserting them in the paper tray.



## preparing to print a single envelope

1. Place the envelope—with the flap side on the left and facing up—into the single envelope slot.
2. Push the envelope forward until it stops.

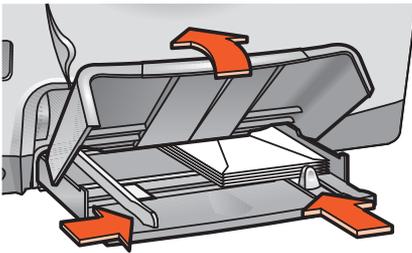


1. flap



## preparing to print multiple envelopes

1. Raise the top of the tray.
2. Slide out both paper guides and remove all paper from the tray.
3. Place no more than 15 envelopes—with the flap side on the left and facing up—in the tray.
4. Push the envelopes forward until they stop.
5. Slide the paper guides snugly against the edges of the envelopes.



6. Lower the top of the tray, then pull out the paper tray extension.



## printing the envelopes

If your software program includes an envelope-printing feature, follow the instructions provided with the software program.

1. Open the Printer Properties dialog box, then select the following settings:

tab	setting
Setup	<ul style="list-style-type: none"><li>• Paper Type: <b>Automatic</b> or <b>Plain Paper</b></li><li>• Paper Size: Appropriate envelope size</li><li>• Orientation: Appropriate envelope orientation</li></ul>

2. Select any other desired print settings.
3. After you have selected the print settings, click **OK**.

For basic printing instructions, see [printing a document](#).

If you encounter a problem while printing, see [troubleshooting](#).

# transparencies



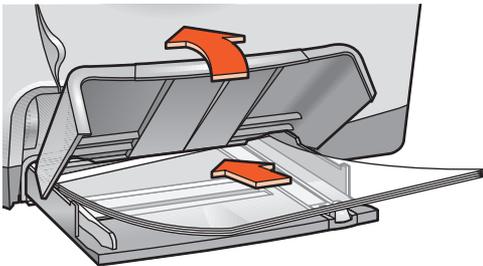
## printing guidelines

For best results use **hp premium plus transparency film**.



## preparing to print

1. Raise the top of the paper tray.
2. Slide out both paper guides, then remove all paper from the tray.
3. Fan the edges of the transparency sheets to separate them, then align the edges.
4. Place no more than 30 transparency sheets in the tray with the rough side down and the adhesive strip toward the printer.



5. Carefully push the transparencies forward until they stop so that none of the adhesive strips catch on one another.
6. Slide the paper guides snugly against the transparency sheets.
7. Lower the top of the paper tray, then pull out the paper tray extension.



## printing transparencies

1. Open the Printer Properties dialog box, then select the following setting:

tab	setting
Setup	• Paper Type: <b>Automatic</b> , or appropriate transparency film

2. Select any other desired print settings.
3. After you have selected the print settings, click **OK**.

The printer may wait for transparencies to dry before releasing them to the top of the tray.

For basic printing instructions, see [printing a document](#).

If you encounter a problem while printing, see [troubleshooting](#).

# labels



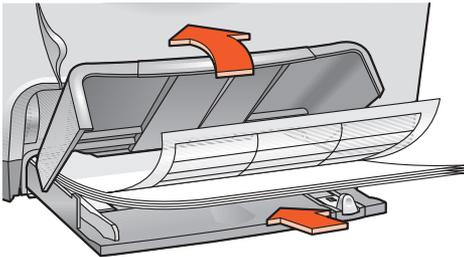
## printing guidelines

- Use only paper labels that are designed specifically for inkjet printers.
- Use only full sheets of labels.
- Verify that the labels are not sticky, wrinkled, or pulling away from the protective backing.
- Do not use plastic or clear labels. The ink will not dry on these labels.



## preparing to print

1. Raise the top of the paper tray.
2. Slide out both paper guides, then remove all paper from the tray.
3. Fan the edges of the label sheets to separate them, then align the label edges.
4. Load no more than 30 label sheets—label side down—in the tray.
5. Slide the paper guides snugly against the sheets.



6. Lower the top of the paper tray, then pull out the paper tray extension.



## printing labels

If your software program includes a label-printing feature, follow the instructions provided with the software program.

1. Open the Printer Properties dialog box, then select the following settings:

tab	setting
Setup	<ul style="list-style-type: none"><li>• <b>Paper Type:</b> <b>Automatic</b>, or the appropriate paper type</li><li>• <b>Paper Size:</b> Choose <b>A4</b> or <b>Letter (8.5 x 11 in)</b></li><li>• <b>Orientation:</b> Appropriate orientation</li></ul>
Features	<ul style="list-style-type: none"><li>• <b>Two-Sided Printing:</b> Unchecked</li></ul>

2. Select any other desired print settings.
3. After you have selected the print settings, click **OK**.

For basic printing instructions, see [printing a document](#).

If you encounter a problem while printing, see [troubleshooting](#).

# index cards and other small media



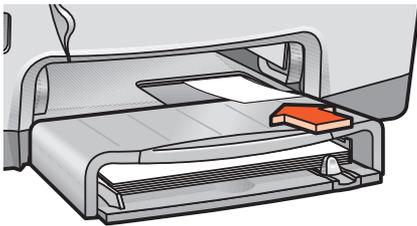
## printing guidelines

Use only cards and small media that meet the printer's paper size specifications. For the printer's paper size specifications, see [size specifications](#).



## preparing to print a single index card and other small media

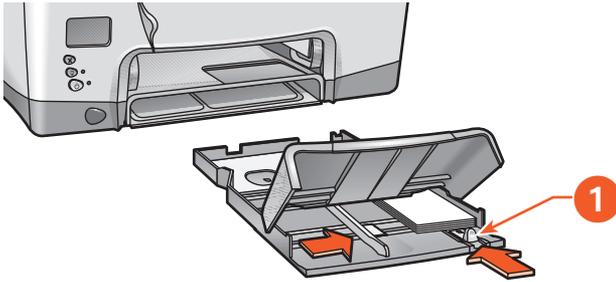
1. Place the card into the single envelope slot.
2. Push the card forward until it stops.



## preparing to print multiple index cards and other small media

1. Pull out the paper tray, then raise the top of the paper tray.
2. Slide out both paper guides, then remove all paper from the tray.
3. Align the card edges.
4. Place no more than 60 cards in the tray.

5. Push the cards forward until they stop.
6. Slide the paper length guide all the way in, then slide the fine length guide snugly against the media.



**1. fine paper length guide**

7. Slide the paper width guide snugly against the media.
8. Lower the top of the paper tray, insert the paper tray into the printer, then pull out the paper tray extension.



## printing index cards and other small media

If your software program includes a card-printing feature, follow the instructions provided by the software program.

1. Open the Printer Properties dialog box, then select the following settings:

tab	setting
Setup	<ul style="list-style-type: none"><li>• <b>Paper Type:</b> <b>Automatic</b> or <b>Plain Paper</b></li><li>• <b>Paper Size:</b> Appropriate card size</li><li>• <b>Orientation:</b> Appropriate orientation</li></ul>
Features	<ul style="list-style-type: none"><li>• <b>Two-Sided Printing:</b> Unchecked for cards smaller than 5in. × 8 in.</li></ul>

2. Select any other desired print settings.
3. After you have selected the print settings, click **OK**.

If an **out of paper** message appears, verify the cards are positioned properly in the paper tray.

For basic printing instructions, see [printing a document](#).

If you encounter a problem while printing, see [troubleshooting](#).

# photographs



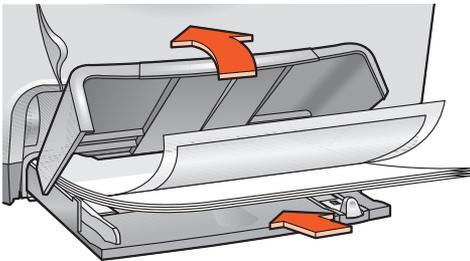
## printing guidelines

- The photo must be in an electronic format (digital) before it can be printed. Take a digital picture, scan a photo, or have your local camera shop provide an electronic file of the photo.
- Use PhotoREt for most photo paper printing.
- Use **hp premium plus photo paper** or **hp premium photo paper** for best results.



## preparing to print

1. Raise the top of the paper tray.
2. Slide out both paper guides, then remove all paper from the tray.
3. Fan the edges of the photo paper to separate them, then align the photo paper edges.
4. Place no more than 20 sheets of photo paper—printable side down—in the tray.
5. Slide the paper guides snugly against the edges of the photo paper.



6. Lower the top of the paper tray, then pull out the paper tray extension.



## printing photographs

1. Open the Printer Properties dialog box, then select the following settings:

tab	setting
Setup	<ul style="list-style-type: none"><li>• <b>Paper Type:</b> <b>Automatic</b> or the appropriate photo paper type</li><li>• <b>Photo Paper Printing:</b><ul style="list-style-type: none"><li>- <b>PhotoREt</b> for best print speed and quality, or</li><li>- <b>2400 x 1200 dpi</b> for source images greater than 600 dpi (requires 400 MB or more hard disk space and takes longer to print)</li></ul></li><li>• <b>Paper Size:</b> Appropriate paper size</li></ul>
Features	<ul style="list-style-type: none"><li>• <b>Two-Sided Printing:</b> Unchecked</li></ul>

2. Select any other desired print settings.
3. After you have selected the print settings, click **OK**.

For basic printing instructions, see [printing a document](#).

If you encounter a problem while printing, see [troubleshooting](#).

# greeting cards



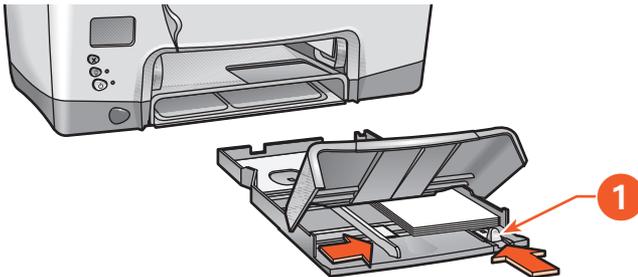
## printing guidelines

Unfold pre-folded cards before placing them in the paper tray.



## preparing to print

1. Pull out the paper tray, then raise the top of the paper tray.
2. Slide out both paper guides, then remove all paper from the tray.
3. Fan the edges of the greeting cards to separate them.
4. Align the edges of the cards, then place no more than 5 cards in the tray.
5. Push the cards forward until they stop.
6. Slide the paper width guide snugly against the edges of the cards.
7. Slide the paper length guide all the way in, then slide the fine length guide snugly against the cards.



### 1. fine paper length guide

8. Lower the top of the paper tray, insert the paper tray into the printer, then pull out the paper tray extension.



## printing greeting cards

If your software program includes a greeting card-printing feature, follow the instructions provided with the software program.

1. Open the Printer Properties dialog box, then select the following settings:

tab	setting
Setup	<ul style="list-style-type: none"><li>• <b>Paper Type:</b> <b>Automatic</b>, or appropriate greeting card paper</li><li>• <b>Paper Size:</b> Appropriate paper size</li></ul>

2. Select any other desired print settings.
3. After you have selected the print settings, click **OK**.

If an **out of paper** message appears, verify that the greeting cards are positioned properly in the paper tray.

For basic printing instructions, see [printing a document](#).

If you encounter a problem while printing, see [troubleshooting](#).

# posters



## preparing to print

1. Raise the top of the paper tray.
2. Slide out both paper guides, then remove all paper from the tray.
3. Fan the edges of the sheets to separate them, then align the edges.
4. Place the paper in the tray.
5. Slide the paper guides snugly against the paper.
6. Lower the top of the paper tray, then pull out the paper tray extension.

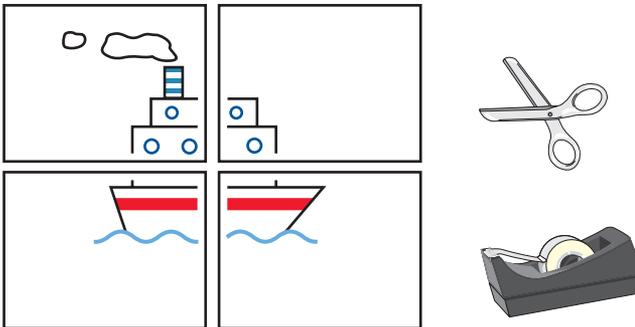


## printing posters

1. Open the Printer Properties dialog box, then select the following settings:

tab	setting
Setup	<ul style="list-style-type: none"><li>• Paper Type: <b>Automatic</b> or <b>Plain Paper</b></li><li>• Paper Size: Appropriate size</li><li>• Orientation: Appropriate orientation</li></ul>
Features	<ul style="list-style-type: none"><li>• Poster Printing: Select this option, then select <b>2x2</b>, <b>3x3</b>, or <b>4x4</b></li></ul>

2. Select any other desired print settings.
3. After you have selected the print settings, click **OK**.
4. After the poster has printed, trim the edges on the sheets then tape the sheets together.



For basic printing instructions, see [printing a document](#).

If you encounter a problem while printing, see [troubleshooting](#).

# banners



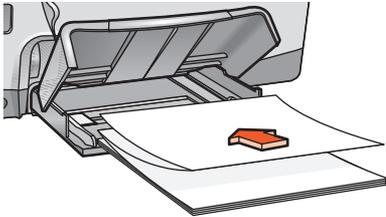
## printing guidelines

- See the printer Release Notes for specific printing information.
- Use **hp banner paper** for best results.



## preparing to print

1. Raise the top of the paper tray.
2. Slide out both paper guides, then remove all paper from the tray.
3. Select up to 20 sheets of banner paper. Remove and discard any perforated strips.
4. Place the banner paper in the paper tray with the unattached edge of the paper facing the printer.



5. Slide the paper guides snugly against the paper.
6. Lower the top of the paper tray, then pull out the paper tray extension.



## printing banners

If your software program includes a banner-printing feature, follow the instructions provided with the software program.

1. Open the Printer Properties dialog box, then select the following settings:

tab	setting
Setup	<ul style="list-style-type: none"><li>• Paper Type: <b>hp banner paper</b> or other banner paper</li><li>• Print Quality: <b>Normal</b></li><li>• Paper Size: <b>Banner [A4 (210 x 297 mm)]</b> or <b>Banner [Letter (8.5 x 11 in.)]</b></li></ul>

2. Select any other desired print settings.
3. After you have selected the print settings, click **OK**.

For basic printing instructions, see [printing a document](#).

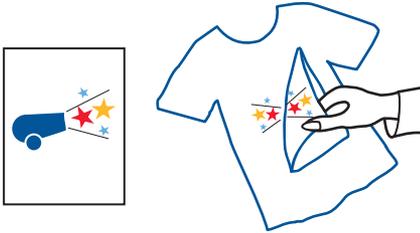
If you encounter a problem while printing, see [troubleshooting](#).

# iron-on transfers



## printing guidelines

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



- Use **hp iron-on t-shirt transfer paper** for best results.



## preparing to print

1. Raise the top of the paper tray.
2. Slide out both paper guides, then remove all paper from the tray.
3. Fan the edges of the iron-on transfer paper to separate them, then align the edges.
4. Place the iron-on transfer paper in the tray with the printable side down.
5. Slide the paper guides snugly against the transfer paper.
6. Lower the top of the paper tray, then pull out the paper tray extension.



## printing iron-on transfers

If your software program includes an iron-on transfer-printing feature, follow the instructions provided with the software program.

1. Open the Printer Properties dialog box, then select the following settings:

tab	setting
Setup	<ul style="list-style-type: none"><li>• Paper type: <b>Automatic</b> or <b>hp iron-on t-shirt transfers</b></li><li>• Print Quality: <b>Normal</b> or <b>Best</b></li><li>• Paper Size: <b>A4 (210 x 297 mm)</b> or <b>Letter (8.5 x 11 in.)</b></li><li>• Orientation: <b>Mirror Image</b></li></ul>

2. Select any other desired print settings.
3. After you have selected the print settings, click **OK**.

For basic printing instructions, see [printing a document](#).

If you encounter a problem while printing, see [troubleshooting](#).

# infrared printing



For more information on infrared printing visit HP's website at: [www.hp.com/support/cp1160](http://www.hp.com/support/cp1160).

## infrared printing with a laptop or notebook computer

### setting up a laptop or notebook in Windows 98 and Me

If the operating system you are using is Windows 98 or Me, the computer's BIOS settings may need to be reconfigured for infrared printing. Use one of the following methods to locate instructions for configuring the laptop or notebook:

- See the instructions that came with the laptop or notebook.
  - Log onto the laptop manufacturer's Website or contact its customer support.
  - Log onto the Infrared Data Association (IrDA) website at: <http://www.irda.org>
1. Click **Start** > **Settings** > **Control Panel**.  
The Control Panel screen appears.
  2. Do one of the following:
    - Double-click the **Infrared** icon.
    - Click the **Infrared** icon at the end of the taskbar if it is displayed.
  3. Select the **Options** tab.
  4. Select the **Enable infrared communications** box.
  5. Click **OK**.

### selecting the port in Windows 98 or Me

1. Click **Start** > **Settings** > **Printers** to open the Printers window.
2. Right-click **hp cp1160** to view the shortcut menu.
3. Select **Properties**.
4. Select the **Details** tab.
5. Select **IR Local Port** in the Print to the following port box.
6. Click **OK**.

### printing in Windows 98 or Me

1. Locate the infrared lens on the laptop or notebook.  
See the operating manual that came with the computer for the location of the infrared lens.
2. Align the computer's infrared lens with the printer's infrared lens.  
The computer should be positioned no more than one meter (three feet) from the printer and within a 30-degree total angle from the printer's infrared lens.
3. Remove any obstacles between the two devices.
4. Send a file to print following normal print procedures.  
The infrared icon appears on the LCD panel.



If the laptop or notebook is moved out of the printer's infrared lens range at any time during the printing process, the infrared icon disappears, and the printer stops printing. Realign the devices within 3-30 seconds, and the print job will resume.

## selecting the port in Windows 2000

1. Click **Start** > **Settings** > **Printers** to open the Printers window.
2. Right-click **hp cp1160** to view the shortcut menu.
3. Select **Properties**.
4. Select the **Ports** tab.
5. Select **IR Local Port** in the Print to the following port box.
6. Click **OK**.

## printing in Windows 2000

1. Locate the infrared lens on the laptop or notebook.  
See the operating manual the came with your computer for the location of the infrared lens.
2. Align the computer's infrared lens with the printer's infrared lens.  
The computer should be positioned no more than one meter (three feet) from the printer and within a 30-degree total angle from the printer's infrared lens.
3. Remove any obstacles between the two devices.
4. Send a file to print following normal print procedures.  
The infrared icon appears on the LCD panel.



If the laptop or notebook is moved out of the printer's infrared lens range at any time during the printing process, the infrared icon disappears, and the printer stops printing. Realign the devices within 3-30 seconds, and the print job will resume.

## displaying the infrared icon on the taskbar

The infrared icon appears on the taskbar after you configure your laptop or notebook for infrared printing. If the icon does not appear, follow these instructions to activate it:

1. Click **Start > Settings > Control Panel**.
2. Double-click the **Infrared** icon.  
The Infrared Monitor dialog box appears.
3. Select the **Preferences** tab.
4. Click the **Display the Infrared Monitor icon on the taskbar** box.
5. Click **OK**.

## infrared printing with a Palm device

1. Locate the infrared lens on the Palm device.
2. Align the Palm device's infrared lens with the printer's infrared lens.  
The Palm device should be positioned no more than one meter (three feet) from the printer and within a 30-degree total angle from the printer's infrared lens.
3. Remove any obstacles between the Palm device and printer.
4. Do one of the following:
  - Use the **Beam** command to print a single calendar appointment, one or more business cards, to-do list items, or memos.
  - Use the **Print** command to send one or more items such as calendar appointments, email messages, phone lists, or to-do lists to the printer.

The infrared light projects a solid beam on the printer during the information transfer process. When the information transfer is complete, the light turns off.



Printing, rather than beaming, requires a printing program which enhances the appearance of your printed information. Follow the specific procedures provided with the printing program when printing.

## infrared printing with a Windows CE device

1. Locate the infrared lens on the Windows CE device.  
See the device's operating manual for the location of the infrared lens.
2. Align the infrared lens on the Windows CE device with the printer's infrared lens.  
The Windows CE device should be positioned no more than one meter (three feet) from the printer and within a 30-degree total angle from the printer's infrared lens.
3. Remove any obstacles between the CE device and the printer.
4. Open the file you want to print.
5. Open the Printer Properties dialog box.
6. Choose **PCL inkjet** in the Printer box.
7. Select **IRDA** in the Port box.
8. Click **OK**.  
The infrared icon projects a solid beam on the printer during the information transfer process. When information transfer is complete, the icon disappears.

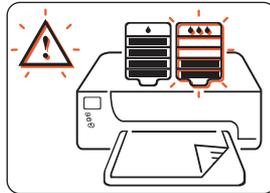
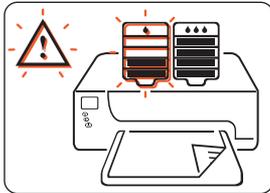
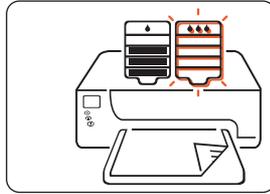
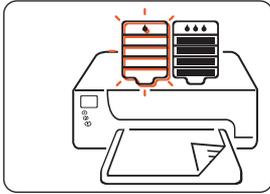
# maintenance

- replacing ink cartridges
- replacement alternatives
- maintaining ink cartridges
- ink cartridge selection numbers
- replacing printheads
- cleaning printheads
- printhead selection numbers
- maintaining the printer body
- toolbox

# replacing ink cartridges

## LCD panel messages

When it is time to replace an ink cartridge, one of the following messages appears on the LCD panel (ink levels may vary):



For ink cartridge replacement alternatives, see [replacement alternatives](#).

For information on HP's ink cartridge recycling program, see [hp inkjet product recovery program](#).

## selection numbers

14

When replacing ink cartridges and printheads, purchase ink cartridges and printheads with selection no. 14.

For more information, see [ink cartridge selection numbers](#).

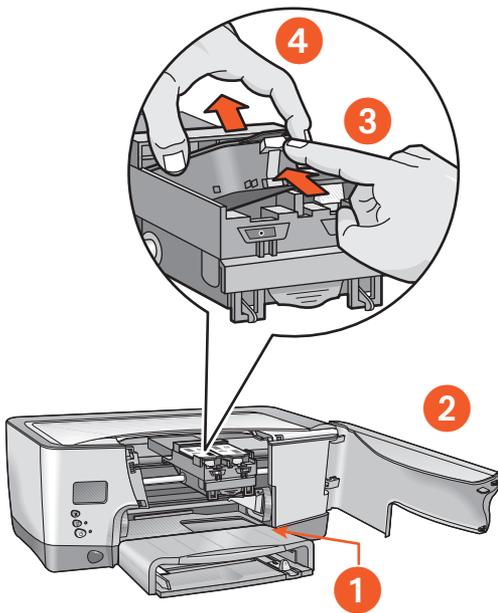
**Caution!** To avoid damaging the printer, remove an ink cartridge or a printhead only when a replacement is available. If an ink cartridge or a printhead is removed without being replaced:

- Close the print carriage and the printer doors.
- Replace the ink cartridge or printhead within 24 hours.
- Never remove an ink cartridge *and* a printhead at the same time.

## replacing an ink cartridge

To replace an ink cartridge:

1. Verify that the top of the paper tray is down.
2. Verify that the printer is turned on.
3. Open the printer's front door.  
The carriage moves to the center of the printer.
4. Press the **Release** button on the ink cartridge to be replaced, lift the ink cartridge out of the carriage, then discard it.



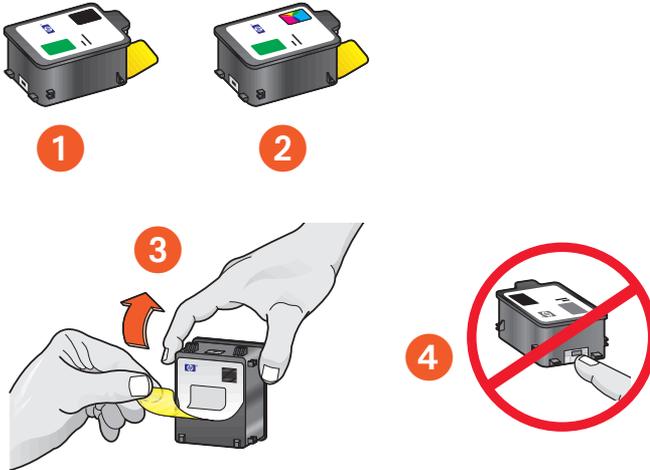
1. paper tray (in down position)
2. open front door
3. press release button
4. lift out cartridge



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

- Remove the replacement ink cartridge from its packaging, then carefully pull the tab to remove the foil seal from the bottom of the cartridge.

**Caution!** Do not touch the ink cartridge copper contacts or the surfaces around the ink wells. Touching these parts may adversely affect the performance of the ink cartridge.



- black cartridge
- color cartridge
- foil seal—remove only the foil seal
- copper contacts—do not touch or remove the copper contacts



### ink removal

Follow these guidelines if you get ink on the following:

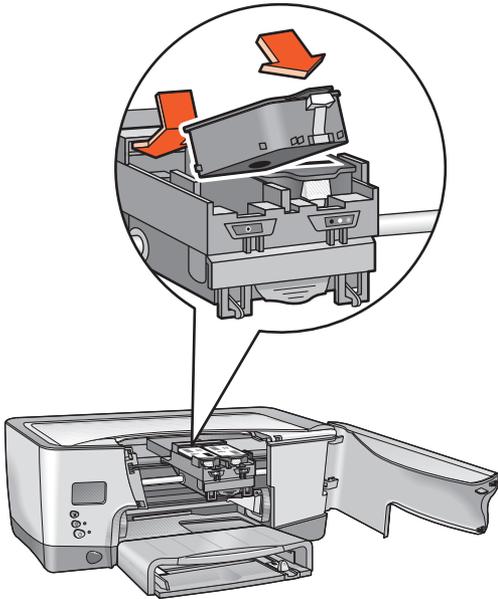
**Skin:** Wash with a gritty soap.

**White fabric:** Wash with chlorine bleach and **cold** water.

**Color fabric:** Wash with sudsy ammonia and **cold** water.

Warm or hot water may set the ink color into the fabric.

6. Insert the ink cartridge firmly into the print carriage, then press it down until it snaps into place.



7. Close the front door.

If the LCD panel continues to show a problem with the ink cartridge, remove the cartridge from the printer, then reinstall it. Also verify the correct selection number.

If you continue to have a problem, see [contacting hp services and support](#).

# replacement alternatives

## hp supplies

To get the best performance from your printer, HP recommends using only genuine HP supplies. For the correct selection numbers, see [ink cartridge selection numbers](#).

**Caution!** Damage that results from modifying or refilling HP ink cartridges or the use of non-HP ink is specifically excluded from the warranty coverage for the printer and printer supplies.

## non-hp ink cartridges

The Ink Level Gauge may not work properly with a non-HP ink cartridge. If you choose to print with a non-HP ink cartridge, you may not know when the cartridge is running low or empty. Printing with an empty ink cartridge may seriously damage the printheads.

Any damage resulting from the use of a non-HP ink cartridge is not the responsibility of Hewlett-Packard.

## refilled ink cartridges

To install a refilled HP ink cartridge, you must override the Ink Level Gauge. See the caution statement in [overriding the ink level gauge](#).

## overriding the ink level gauge

Overriding the Ink Level Gauge disables the printer's ink level tracking feature.

**Caution!** If you use the override sequence described below, you will disable the Ink Level Gauge for your ink cartridge. If you choose to continue printing with an ink cartridge that has had its Ink Level Gauge disabled, you may not know when the cartridge is running low or empty. Printing with an empty cartridge may seriously damage your printheads. Damage that results from continued use of an ink cartridge with a disabled Ink Level Gauge is not the responsibility of HP. Damage that results from the use of non-HP ink is not the responsibility of HP.

The Ink Level Gauge automatically resets when a different ink cartridge is installed in the printer.

Overriding the Ink Level Gauge does not affect ink cartridge expiration dates. The printer cannot use an expired ink cartridge.

Follow these steps to override the Ink Level Gauge:

**if you installed a black ink cartridge**

1. Press and hold down the **Power** button.
2. While holding down the **Power** button:
  - Press the **Cancel** button twelve times
  - Press the **Resume** button once.
3. Release the **Power** button.

**if you installed a tri-color ink cartridge**

1. Press and hold down the **Power** button.
2. While holding down the **Power** button:
  - Press the **Cancel** button twelve times.
  - Press the **Resume** button three times.
3. Release the **Power** button.



Always install an ink cartridge before performing an Ink Level Gauge override.

# maintaining ink cartridges

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

- Keep all ink cartridges in the original sealed packages until they are needed. Ink cartridges should be stored at room temperature (60–78 degrees F or 15.6–26.6 degrees C).
- If the protective tape has been removed from the ink cartridge, do not attempt to reattach it. Reattaching the tape may damage the ink cartridge. Place the cartridge in an airtight, plastic container.
- Once ink cartridges are installed in the print carriage, do not remove them.

**Caution!** Always use the Power button to turn off the printer. Do not unplug the printer until printing is complete, the print carriage returns to the home position on the right side of the printer, and the printer has been turned off. Ink cartridges dry out if not stored in the home position.

## expired ink cartridges

To protect against deteriorated print quality and damage to your printer, the printer monitors the age of the ink cartridges. When a cartridge has reached its expiration date, the cartridge stops working and the printer ceases to operate until the cartridge is replaced. If installed prior to the “Must Install Before” date (see the back of the ink cartridge packaging) hp no. 14 ink cartridges will expire 18 months after installed in the printer. If installed after the “Must Install Before” date, the cartridges will expire in less than 18 months. The expiration period is the maximum time in which an ink cartridge can be used, it is not a warranty period.

It is recommended that you do not stockpile ink cartridges.

To see the expiration date for an installed ink cartridge, print a [diagnostic page](#).

**Caution!** To avoid damaging the printer, remove an ink cartridge or a printhead only when a replacement is available. If an ink cartridge or a printhead is removed without being replaced:

- Close the print carriage and the printer doors.
- Replace the ink cartridge or printhead within 24 hours.
- Never remove an ink cartridge *and* a printhead at the same time.

# ink cartridge selection numbers

**14**

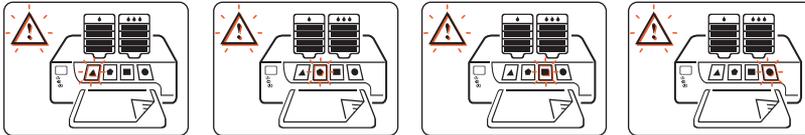
When replacing ink cartridges and printheads, purchase ink cartridges and printheads with selection no. 14.

selection no.	selection color	product number	product name
14	Black	C5011A	hp 14 black ink cartridge
14	Tri-color	C5010A	hp 14 tri-color ink cartridge

# replacing printheads

## LCD panel messages

When a printhead fails, one of the following messages appears on the LCD panel (ink levels may vary):



The printer will continue to print; however the failed printhead may affect print quality and speed. If several printheads fail, the printer may stop printing.

If you notice poor print quality, but a printhead icon is not flashing, print a Diagnostic Page to gauge printhead performance.

For instructions on printing a Diagnostic Page, see [diagnostic page](#).

## selection numbers

14

When replacing ink cartridges and printheads, purchase ink cartridges and printheads with selection no. 14.

For more information, see [printhead selection numbers](#).

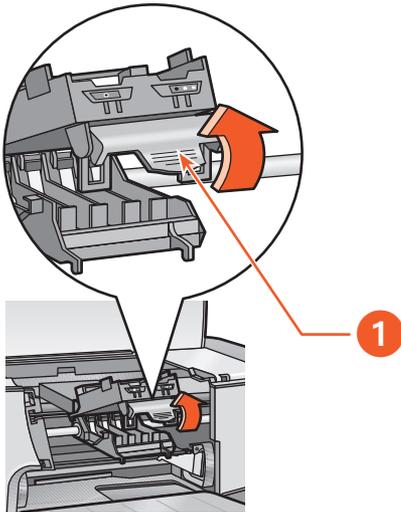
**Caution!** To avoid damaging the printer, remove an ink cartridge or a printhead only when a replacement is available. If an ink cartridge or a printhead is removed without being replaced:

- Close the print carriage and the printer doors.
- Replace the ink cartridge or printhead within 24 hours.
- Never remove an ink cartridge *and* a printhead at the same time.

## replacing a printhead

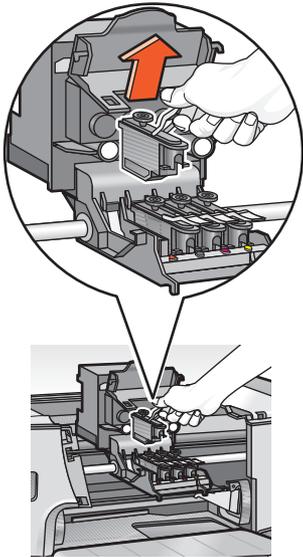
To replace a printhead:

1. Verify that the printer is turned on.
2. Open the printer doors.  
The print carriage moves to the center of the printer.
3. Lift the print carriage latch, then open the print carriage.



**1. latch**

4. Grip the handle of the failed printhead, then lift the printhead out of the print carriage.



#### ink removal

Follow these guidelines if you get ink on the following:

**Skin:** Wash with a gritty soap.

**White fabric:** Wash with chlorine bleach and **cold** water.

**Color fabric:** Wash with sudsy ammonia and **cold** water.

Warm or hot water may set the ink color into the fabric.

5. Unwrap the new printhead, then remove the protective plastic tape.

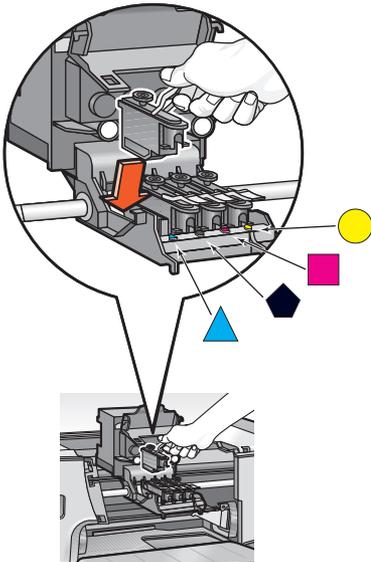


1. ink nozzles
2. plastic tape—remove only the plastic tape
3. copper contacts—do not touch or remove the copper contacts
4. do not touch the printhead tower

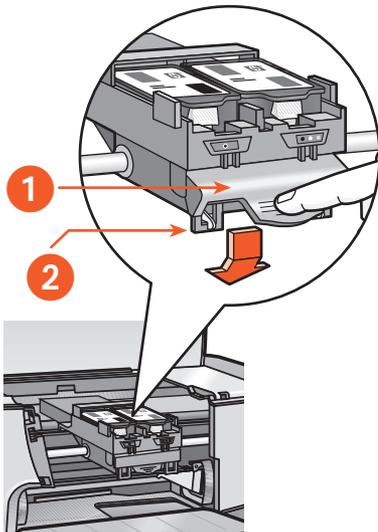


**Warning!** Keep both new and used printheads out of the reach of children.

6. Holding the printhead handle, gently push the printhead into place in the print carriage.



7. Close the print carriage, then press the print carriage latch into position until it clicks.



1. print carriage latch
2. verify that the loops catch the hooks

8. Close the top printer door, then the front door.  
The printer aligns the printheads.
9. Wait for a calibration page to print.

# cleaning printheads

If your printed pages are missing lines or dots, or if they contain ink streaks, the printheads may need to be cleaned.

During the cleaning process, the printer also verifies the health of each printhead. If a printhead has failed, its icon flashes on the LCD panel.

Follow these steps to clean the printheads:

1. Open the **Toolbox**.
2. Click **Print a Diagnostic Page**.  
A Diagnostic Page prints.
3. If the Diagnostic Page indicates a problem with a printhead, then proceed to step 4.  
For instructions on using a Diagnostic Page, see [diagnostic page](#).
4. Click **Clean the Printheads**.
5. Follow the onscreen instructions.



If you have questions about the cleaning feature, point to the Clean the Printheads option and click the right mouse button to display the **What's This?** dialog box. Click **What's This?** for more information.

**Caution!** Only clean printheads when it is necessary. Unnecessary cleaning wastes ink.

For a description of the Toolbox, see [toolbox](#).

# printhead selection numbers

**14** When replacing ink cartridges and printheads, purchase ink cartridges and printheads with selection no. 14.

selection no.	selection color	product number	product name
14	Black	C4920A	hp 14 black printhead
14	Cyan	C4921A	hp 14 cyan printhead
14	Magenta	C4922A	hp 14 magenta printhead
14	Yellow	C4923A	hp 14 yellow printhead

# maintaining the printer body

## printer case exterior

Follow these guidelines when cleaning the outside of the printer:

- Use water only. Do not use household cleaners or detergents.
- Use a soft damp cloth to remove dust, smudges, stains, and spilled ink from the printer case exterior.

## printer interior

**Caution!** Do not clean the printer's interior. Keep all liquids away from the interior.

If streaks appear on printouts, see [cleaning printheads](#).

## print carriage rod

**Do not** lubricate the rod on which the print carriage moves. It is normal to hear noise as the carriage moves back and forth on the rod when the printer is new.

## handling and storage

Handle and store the printer in an upright, level position for maximum performance and reliability.

# toolbox

The Toolbox contains a number of useful tools to calibrate the printer, clean the printheads, print a test page, and print a diagnostic page.

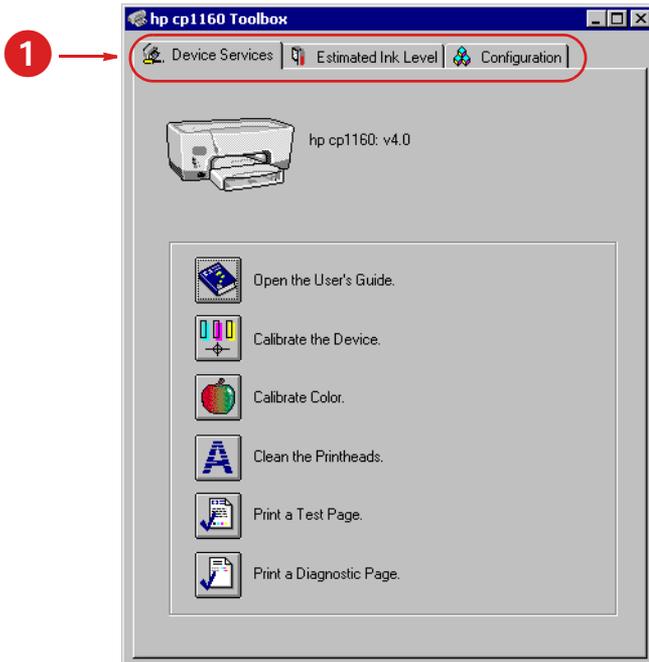
## displaying the toolbox

Use one of the following methods to open the Toolbox:

- Click **Start > Programs > Hewlett-Packard > hp cp1160 > Toolbox**.
- Right-click the **taskbar icon**, then select **Open Toolbox**.  
For instructions for using the taskbar icon, see [changing default printer properties](#).
- Select the **Services** tab in the Printer Properties box, then click **Open the hp toolbox**.

## toolbox navigation

The Toolbox has several tabs. Each tab displays a certain group of tools. Click a tab to view its contents.



1. For a description of a specific tab, see [device services](#), [estimated ink level](#), [configuration](#), or [warning information tab](#).

Depending on how your printer was installed, the Toolbox may not display all the tabs shown above.

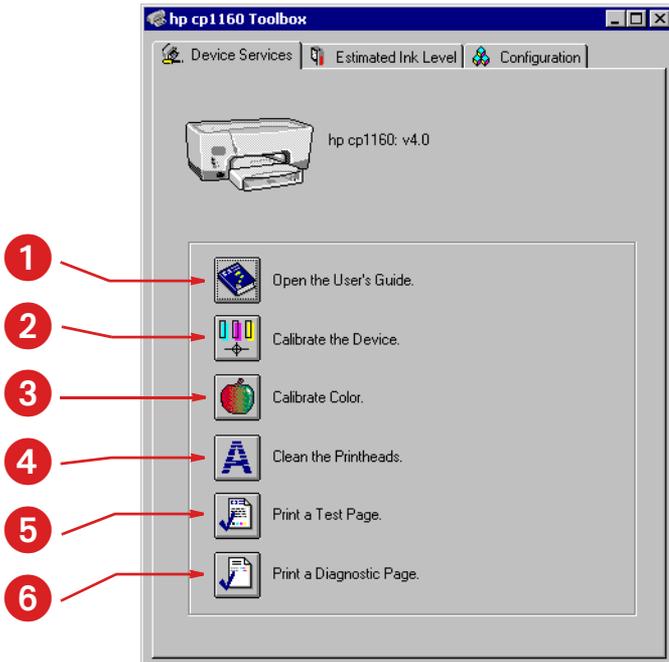


To find more information about options on each tab screen, point to an option and click the right mouse button to display the **What's This?** dialog box. Click **What's This?** to view more information about the selected option.

## toolbox tabs

### device services

The Device Services tab displays the following tools:



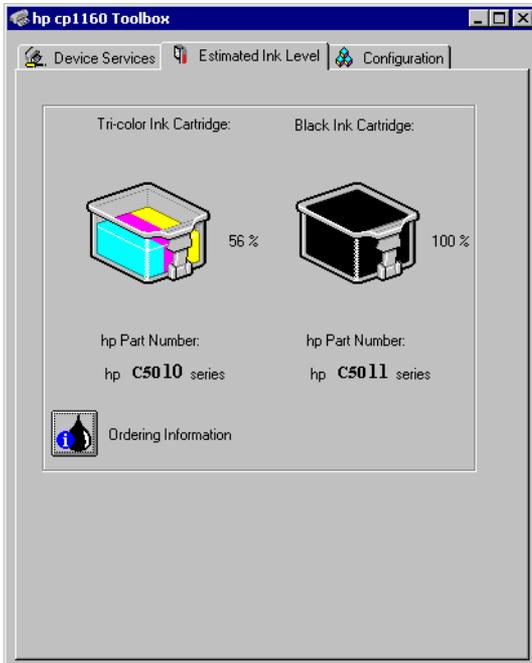
1. **Open the User's Guide:** View onscreen User's Guide.
2. **Calibrate the Device:** Calibrates the printer and aligns the printheads.
3. **Calibrate Color:** Adjusts color to correct problems with tint.
4. **Clean the Printheads:** Cleans the printheads.
5. **Print a Test Page:** Verifies that the printer and computer are communicating.
6. **Print a Diagnostic Page:** Prints a Diagnostic Page. For instructions about using a Diagnostic Page, see [diagnostic page](#).

## estimated ink level

Depending on how your printer was installed, the Estimated Ink Level tab may not be available in the Toolbox.

The Estimated Ink Level tab displays the following:

- Approximate ink level for each ink cartridge
- Access button to HP online ordering



Depending on how the printer is connected to your computer, the ink levels may not display here.

Print a Diagnostic Page to see a more precise ink level for each ink cartridge.

For instructions on printing a Diagnostic Page, see [diagnostic page](#).

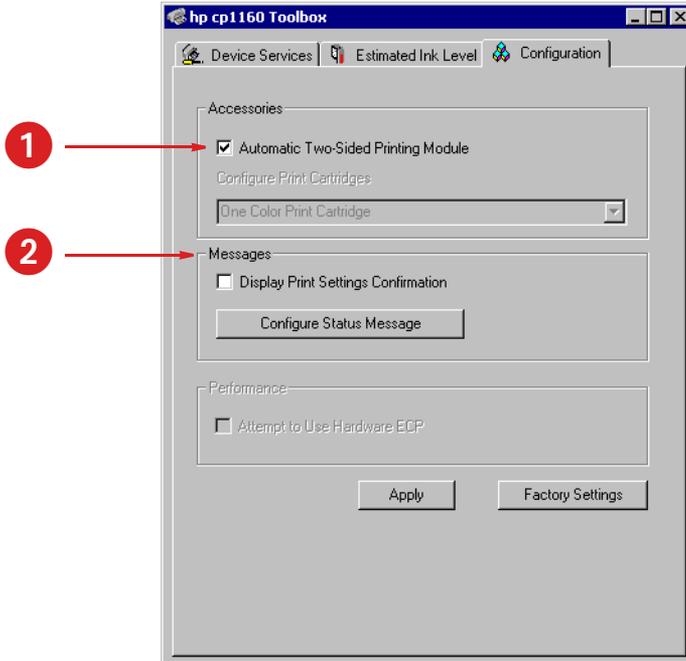


The Estimated Ink Level feature does not function with refilled ink cartridges.

## configuration

Depending on how your printer was installed, the Configuration tab may not be available in the Toolbox.

The Configuration tab displays the following settings:



1. **Automatic Two-Sided Print Module:** Activate or deactivate the duplexer.
2. **Messages:** Activate or set system messages.

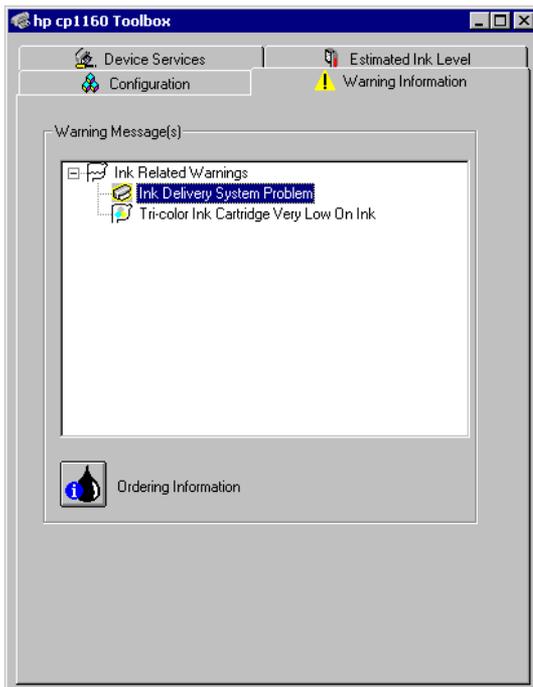
## warning messages indicators

### warning information tab

Depending on the communication capability between the printer and the computer, a fourth tab may appear in the Toolbox when the printer is in a warning condition.

The Warning Information tab displays:

- A warning message describing the condition
- Access button to HP online ordering



## taskbar icon

The taskbar icon appears at the end of the taskbar. The color and appearance of the icon indicate the status of warning messages.

- When the taskbar icon is blinking and outlined in yellow, unread warning messages have been issued.
- When the taskbar icon is no longer blinking but is outlined in yellow, previously read warning messages are pending.
- When the taskbar icon is no longer outlined in yellow, warning issues are resolved.

# troubleshooting

Use one of the following methods to find a solution to a problem:



To interpret an error message, see [LCD panel error messages](#)



To point and click on a printer part, see [printer diagram](#)



To print and interpret a Diagnostic Page, see [diagnostic page](#).



If you observe a specific problem with the printer, click the topic below which best describes the problem:

- [printer is not printing](#)
- [problems with printouts](#)
- [printer is too slow](#)
- [two-sided printing problems](#)
- [communication error](#)
- [infrared printing problems](#)
- [printer hardware problems](#)

# LCD panel error messages

The alert icon always flashes in conjunction with at least one other icon. From the menu below, click the icon that is flashing with the alert icon.

## ink cartridge icons are flashing



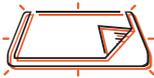
black



tri-color

(ink levels may vary)

## paper icons are flashing



paper tray



two-sided  
printing



banner

## printhead icons are flashing



cyan



black



magenta

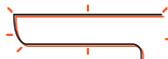


yellow

## door icons are flashings



top door



front door

## communication icon is flashing

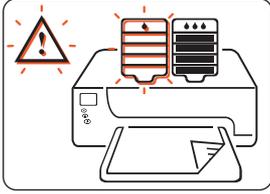


communication

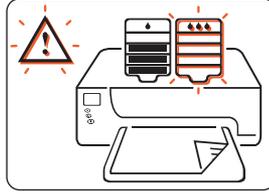
If the alert icon is displayed but not flashing, see [contacting hp services and support](#).

## ink cartridge icons are flashing

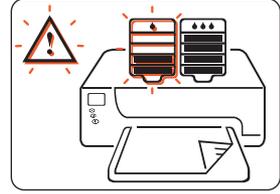
Click the LCD panel display to view the appropriate problem solution (ink levels may vary).



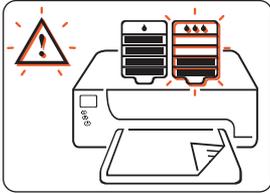
Out of Black Ink



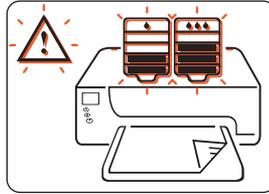
Out of Tri-color Ink



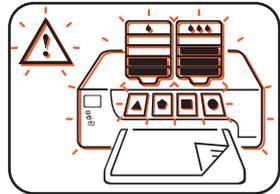
Black Ink Expired



Tri-color Ink Expired



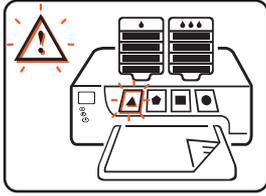
Print Carriage Stall



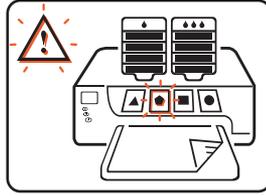
Ink Delivery System Error

## printhead icons are flashing

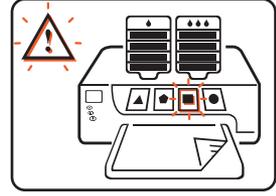
Click the LCD panel display to view the appropriate problem solution (ink levels may vary).



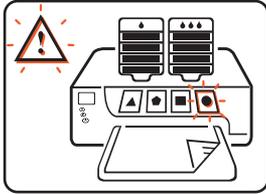
Cyan Printhead Failed



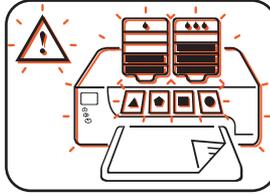
Black Printhead Failed



Magenta Printhead Failed



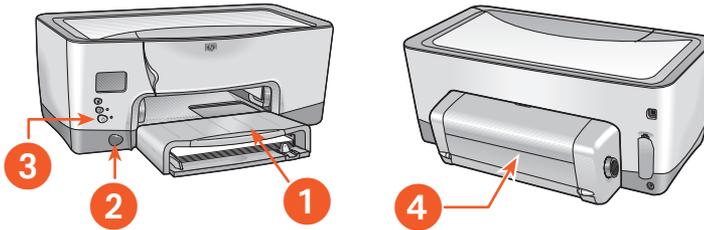
Yellow Printhead Failed



Ink Delivery System Error

# printer diagram

Click the printer part with which you are having a problem.

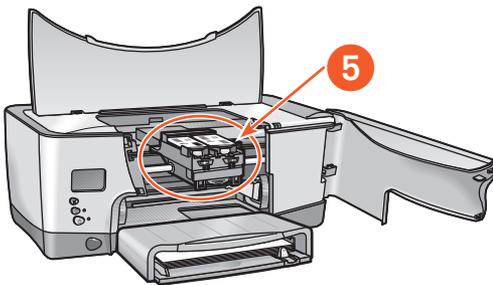


1 paper tray

2 infrared printer feature

3 power button

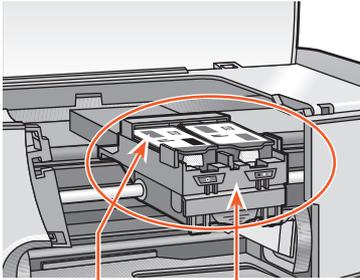
4 duplexer



5 ink delivery system

## ink delivery system

From the list below, click the printer part with which you having a problem.

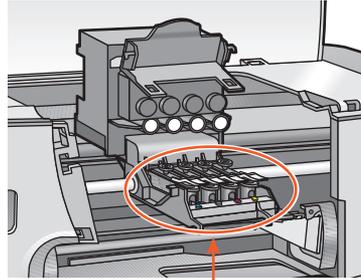


1

2

1 ink cartridges

2 print carriage



3

3 printheads

## diagnostic page

The Diagnostic Page provides detailed information concerning the status of the ink cartridges and printheads.

Print a Diagnostic Page when you:

- Encounter print quality problems
- Want to view information about printheads and ink cartridges
- Want to check ink levels
- Want to see the printer serial number
- Plan to call HP Services and Support (if possible)

# printing a diagnostic page

Follow these steps to print a Diagnostic Page:

## from the printer driver

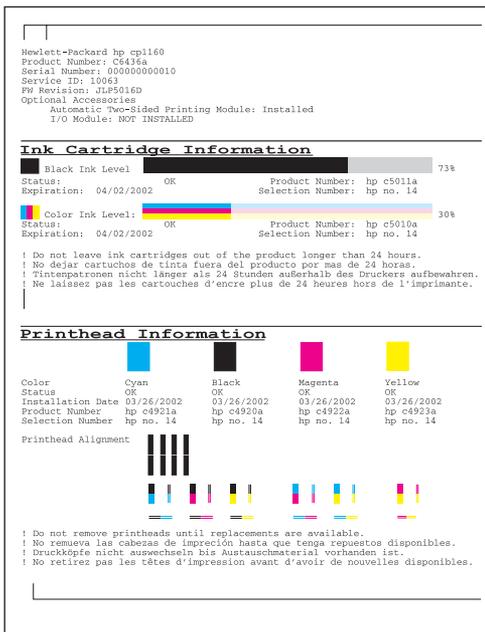
1. Open the **Toolbox**.
2. Click **Print a Diagnostic Page**.

The page prints.

## or from the printer

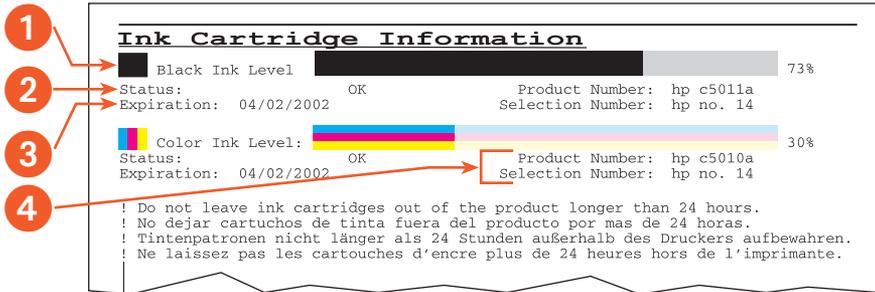
1. Press and hold down the **Power** button.
2. While holding down the **Power** button, press the **Cancel** button once.
3. Release the **Power** button.

The page prints.



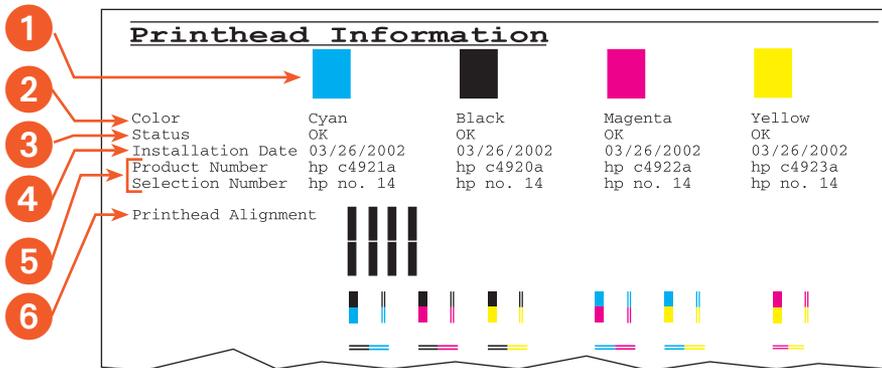
## ink cartridge information

The Diagnostic Page provides the following information about the ink cartridges:



- 1. Ink Level:** The precise ink level for each cartridge.
- 2. Status:**
  - **OK** = Cartridge is working.
  - **Replace Soon** = Cartridge will expire soon, is low on ink, or very low on ink.
  - **IDS Failure - Call HP** = Call HP Services and Support.
- 3. Expiration:** The expiration date for each cartridge. The cartridge must be replaced by this date for the printer to continue operating.
- 4. Product Number and Selection Number:** See [ink cartridge selection numbers](#).

# printhead information



- 1. Color Block:** If any block is not solid, see [print quality](#).
- 2. Color:**
  - **C** = Cyan
  - **K** = Black
  - **M** = Magenta
  - **Y** = Yellow
- 3. Status:**
  - **OK** = Printhead is working.
  - **Replace Now** = Printer may not work with printhead.
  - **Disabled** = Printhead is temporarily out of service. See [disabled printheads](#).
  - **IDS Failure - Call HP** = Call HP Services and Support.
- 4. Installation Date:** Week each printhead was installed.
- 5. Product Number and Selection Number:** See [printhead selection numbers](#).
- 6. Printhead Alignment:** If any of the bars are not aligned, see [printhead alignment](#).

## print quality

Follow these steps if one or more of the Color Blocks is not solid:

1. Load clean, plain white paper in the paper tray.  
Using paper with printing on either side will undermine the cleaning process.
2. Open the **Toolbox**.
3. Click **Clean the Printheads**, then follow the onscreen instructions.  
If one of the printheads has failed, the printhead icon flashes on the LCD panel. Replace the printhead. To reset the LCD panel, turn the printer off, then turn it back on.

For instructions on replacing a printhead, see [replacing printheads](#).

## disabled printheads

When a printhead has failed and shows a status of **Replace Now**, one or more of the other printheads may have a status of **Disabled**. The Disabled status is temporary.

Once the failed printhead is replaced, the disabled printheads will operate and have a status of **OK**.

Do not replace a printhead with a status of **Disabled**. Only replace a printhead with the status of **Replace Now**.

## printhead alignment

Follow these steps if any of the bars on the Diagnostic Page are not aligned:

1. Load clean, white plain paper in the paper tray.  
Using paper with printing on either side will undermine the calibration process.
2. Open the **Toolbox**.
3. Click **Calibrate the Printer**.  
Follow the onscreen instructions to align the printheads.
4. Reprint the Diagnostic Page.  
If the alignment is not corrected, calibrate the printer again. If the problem continues, call [HP Services and Support](#).

# printer is not printing

Verify the following:

- The printer is connected to the power source.
- The cable connections are secure.
- The printer is turned on.
- The media is correctly placed in the paper tray.
- The printer's top cover is closed.
- The duplexer or Rear Access Door is attached.
- If the **Power** light is blinking, the printer is in the process of printing.
- If the **Resume** light is blinking, press the **Resume** button.

Select the topic that best describes the problem:

- [ink cartridge needs to be replaced](#)
- [printheads need to be replaced](#)
- [paper problems](#)
- [ink delivery system not working](#)
- [USB problems](#)

If none of the above solves the problem, then uninstall and reinstall the printer software.

For instructions on uninstalling and reinstalling the printer software, see [uninstall and reinstall instructions](#).

## **ink cartridge needs to be replaced**

If an ink cartridge expires or runs out of ink, it needs to be replaced.

For instructions on replacing an ink cartridge, see [replacing ink cartridges](#).

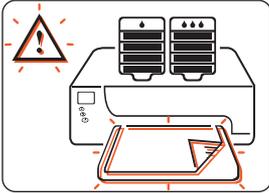
## **printheads need to be replaced**

If multiple printheads fail, the printer may stop printing.

For instructions on replacing printheads, see [replacing printheads](#).

## paper problems

If you see this display on the LCD panel, then click the appropriate topic below:



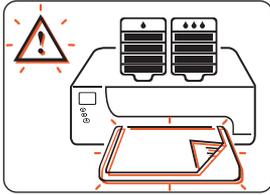
- [paper jam](#)
- [out of paper](#)

Otherwise, click the topic below that best describes the problem:

- [printer ejects the paper](#)
- [blank pages are printing](#)

## paper jam

Occasionally paper jams in the printer. When this happens the following display appears on the LCD panel.

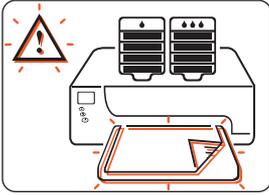


Follow each of the following steps until the paper jam is cleared.

1. Press the **Resume** button.
2. Remove the paper from the paper tray.
3. Detach the removable paper tray(s), remove any paper stuck in the paper tray slot, replace the tray(s), then press the **Resume** button.
4. Open the printer front door, remove any visible paper, close the door, then press the **Resume** button.
5. Remove the duplexer, then remove any visible paper jam in the printer.
6. Open the duplexer rear access door, then remove any paper from the duplexer.
7. Re-attach the duplexer, then press the **Resume** button.

## out of paper

When the printer either runs out of paper or cannot locate paper, the following display appears on the LCD panel:



### if the paper tray is loaded

1. Adjust the length guide so that the paper stack touches the back of the paper tray
2. Press the **Resume** button.

### if the paper tray is empty

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

For instructions on loading the paper tray, see [printing](#), then select the particular media.

### **printer ejects the paper**

The printer may have been placed in direct sunlight which can affect the Automatic Paper-Type Sensor. Move the printer away from direct sunlight.

### **blank pages are printing**

The printer may process pages containing no text or images if a facsimile (fax) is being printed.

Follow these steps to save a fax file in graphic format:

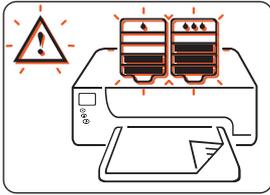
1. Save the fax in a graphic format with a TIF file name extension.
2. Copy and insert the graphic in a word processing document.
3. Save the document.
4. Print the document in the word processing program.

## ink delivery system not working

- print carriage stalls
- ink delivery system error occurs

## print carriage stalls

When the print carriage stalls, the following display appears on the LCD panel.

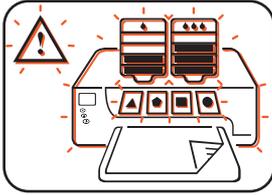


Follow these steps to fix a carriage stall.

1. Press the **Resume** button.
2. If the carriage is still stalled, press the **Cancel** button.
3. If the carriage is still stalled, open the front door, then open the top door.
4. Verify that the ink cartridges are installed correctly. If a cartridge is not securely seated in the print carriage, remove it, then reinstall it.  
For instructions on installing print cartridges, see [replacing ink cartridges](#).
5. Remove any paper you see in the printer.
6. Close the top door, then close the front door.
7. If the printer still does not print, then press the **Cancel** button, turn off the printer, turn it back on, then resend your document.

## ink delivery system error occurs

When the printer encounters a major error with the ink delivery system, the following display appears on the LCD panel.



Call HP for help.

For information on contacting HP, see [contacting hp services and support](#).

## USB problems

- the error message “there was an error writing to lpt1” appears
- the error message “there was an error writing to <name of usb port>” appears
- conflicting USB cable connections

### the error message “there was an error writing to lpt1” appears

The USB cable may not have been attached before installing the software. Uninstall the software, then reinstall it.

Follow these steps to uninstall then reinstall the printer software.

1. Disconnect the USB cable from the printer.
2. Follow one of these methods to uninstall the software:
  - Select **Start > Programs > Hewlett-Packard > hp cp1160 > uninstaller**.
  - Select **Start > Settings > Control Panel**, then double-click **Add/Remove Programs**. Select the hp cp1160 software, then select the option to remove the hp cp1160 software from your PC.
3. Connect the USB cable from the computer to the printer.  
The USB installation screen appears.
4. Insert the CD-ROM that came with the printer into your computer’s CD-ROM drive.
5. Follow the onscreen instructions.  
See the Reference Guide for more information.

**the error message “there was an error writing to <name of usb port>” appears**

The printer may not be receiving correct data from another USB device or the hub. Connect the printer directly to the USB port on the computer.

**conflicting USB cable connections**

A printing conflict may arise when the printer and several USB devices are attached to a hub. There are two methods for solving the conflict:

- Attach the printer’s USB cable directly to the computer.
- If the printer is attached to a hub, do not use other USB devices attached to the hub while printing.

## uninstall and reinstall instructions

Follow these steps to uninstall then reinstall the printer software on your computer:

1. Follow one of these methods to uninstall the software:
  - Select **Start > Programs > Hewlett-Packard > hp cp1160 > uninstaller**.
  - Select **Start > Settings > Control Panel**, then double-click **Add/Remove Programs**. Select the hp cp1160 software, then select the option to remove the hp cp1160 software from your PC.
2. Close all virus protection programs or other software running on the computer.
3. Insert the CD-ROM that came with the printer into your computer's CD-ROM drive.
4. Follow the onscreen installation instructions.

## downloaded software

Follow these steps to install software if you have downloaded printer software from the Web:

1. Locate the directory where the file was downloaded.
2. Double-click the filename to expand the file.
3. Select **Start > Run**.
4. Click the **Browse** button, then locate the **Setup.exe** file for the printer software.
5. Click **OK**.
6. Follow the onscreen installation instructions.

# problems with printouts

Click the topic below that best describes the problem:

- [print quality is poor](#)
- [document is printed off-center or at an angle](#)
- [parts of the document are missing or printed in the wrong place](#)
- [printout does not reflect new print settings](#)
- [photos are not printing correctly](#)
- [banner does not print correctly](#)

## print quality is poor

Click the topic below that best describes the problem:

- [color is tinted](#)
- [text and images are misaligned](#)

If the print quality of a printout is not as good as you expected, see the following:

- [problems with the automatic paper-type sensor](#)
- [a printhead may be failing](#)

### **color is tinted**

If the color on your printouts is tinted incorrectly, then calibrate the printer's color.

Follow these steps to calibrate the printer's color:

1. Open the **Toolbox**.
2. Click **Calibrate Color**.
3. Follow the onscreen instructions.

For a description of the Toolbox, see [toolbox](#).

### **text and images are misaligned**

If the text and images on your printouts are misaligned, then calibrate the printer to align the printheads.

Follow these steps to calibrate the printer:

1. Open the **Toolbox**.
2. Click **Calibrate the Device**.
3. Follow the onscreen instructions.

For a description of the Toolbox, see [toolbox](#).

## problems with the automatic paper-type sensor

The Automatic Paper-Type Sensor scans each sheet of paper before printing and determines the best print setting. Several factors can affect the Automatic Paper-Type Sensor and reduce print quality.

### **check the paper**

If you are using the Automatic Paper-Type Sensor, verify that the paper is not wrinkled or scratched. Replace the paper if it is damaged.

### **turn off the automatic paper sensor**

If the print quality does not improve, turn off the Automatic Paper-Type Sensor.

For instructions on turning off the Automatic Paper-Type Sensor, see [turning off the automatic paper-type sensor](#).

## **a printhead may be failing**

A failing, but usable, printhead may cause poor print quality. Print a Diagnostic Page to see if a printhead needs to be replaced.

For instructions on printing a Diagnostic Page, see [diagnostic page](#).

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

1. Verify that the paper is correctly placed in the paper tray.
2. Verify that the paper guides fit snugly against the paper.
3. Reprint the document.

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

Follow the basic printing instructions and verify the following options:

tab	setting
Setup	<ul style="list-style-type: none"><li>• <b>Paper Size:</b> Verify the appropriate paper size and margins</li><li>• <b>Scale to Fit:</b> Select to scale text and graphics to fit on the paper</li><li>• <b>Orientation:</b> Verify the appropriate orientation</li></ul>
Features	<ul style="list-style-type: none"><li>• <b>Poster Printing:</b> Deselect this option if not printing a poster</li></ul>

For basic printing instructions, see [printing a document](#).

## printout does not reflect new print settings

The printer's default settings may differ from the software application's print settings. Select the appropriate print settings within the software application.

## photos are not printing correctly

### check the paper tray

1. Verify that the photo media is placed in the paper tray with the print side down.
2. Slide the paper forward until it stops.
3. Slide the paper guides snugly against the paper, then push in the tray.

### check the printer properties

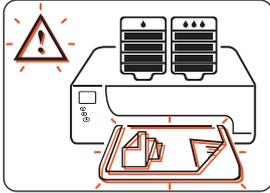
Follow the basic printing instructions and verify the following options:

tab	setting
Setup	<ul style="list-style-type: none"><li>• Paper Type: an <b>hp photo paper</b></li><li>• Paper Size: Appropriate size</li><li>• Print Quality: <b>Best</b></li></ul>

For basic printing instructions, see [printing a document](#).

## banner does not print correctly

When the printer encounters a problem printing a banner, the following display appears on the LCD panel.



### check the paper tray

- Unfold and refold the paper when several sheets feed into the printer at once.
- Confirm that the unattached edge of the banner paper stack is facing the printer.
- Verify that the correct paper for banner printing is used.

### check the printer properties

Follow the basic printing instructions and verify the following setting:

tab	setting
Setup	• <b>Paper Size:</b> Appropriate size

For basic printing instructions, see [printing a document](#).

## check the software

- Verify that the software application you are using prints banners. Not all software applications print banners.
- If gaps appear at the ends of the sheets, verify that the printer software is operating correctly.
- Click **Start > Programs > Hewlett-Packard > hp cp1160 > Release Notes** to view Release Notes for known software issues.

# printer is too slow

Several variables can slow the printer's performance. Click the topic below that best describes the printer's performance:

- [multiple software applications are open](#)
- [complex documents, graphics, or photographs are printing](#)
- [automatic paper type option is enabled](#)
- [two-sided documents are printing](#)

If none of the above topics describes the printer's performance, then review the following:

- [printer software is outdated](#)
- [computer does not meet system requirements](#)
- [a printhead may be failing](#)

## **multiple software applications are open**

If too many software applications are open, the printer cannot print at its normal speed.

Close all unnecessary software applications, then print the document again.

## complex documents, graphics, or photographs are printing

Documents containing graphics or photographs print slower than text documents. To print faster:

Open the Printer Properties dialog box, then select one of the following settings:

tab	setting
Setup	Photo Paper Printing: Select <b>PhotoREt</b> .
Color	Low Memory Mode: Select this option.

For a description of the Printer Properties dialog box, see [printer properties](#).

## **automatic paper type option is enabled**

When the automatic option is enabled, it takes a few seconds for the printer to scan the first page of the print job to determine the appropriate paper type.

To increase the print speed, turn off the Automatic Paper-Type Sensor.

For instructions on turning off the Automatic Paper-Type Sensor, see [turning off the automatic paper-type sensor](#).

## **two-sided documents are printing**

Print two-sided documents takes more time than printing single-sided documents.

## **printer software is outdated**

An outdated driver may be installed.

Log onto HP's Website to download the most recent software updates for the printer.

For information about HP's Website, see [hp e-support](#).

## **computer does not meet system requirements**

1. Verify the computer's RAM and processor speed.  
For more information, see [system requirements](#).
2. Increase space on the hard drive.  
If your computer has less than 100 MB available on the hard drive, the printer processing time will be longer.

## **a printhead may be failing**

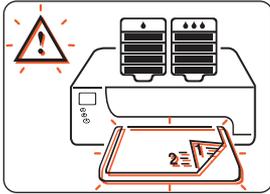
A failing, but usable, printhead may slow printer performance. Print a Diagnostic Page to see if your printer has a failing printhead.

For instructions on printing a Diagnostic Page, see [diagnostic page](#).

If you continue to have problems with the printer, then see [contacting hp services and support](#).

# two-sided printing problems

Click the topic below if you see this display on the LCD panel:



- [paper jam occurs inside the automatic two-sided printing module](#)

Select the topic that best describes the problem with the printer software:

- [option for two-sided printing cannot be selected](#)
- [paper size changes when the two-sided printing option is selected](#)

Select the topic that best describes the problem with a printout:

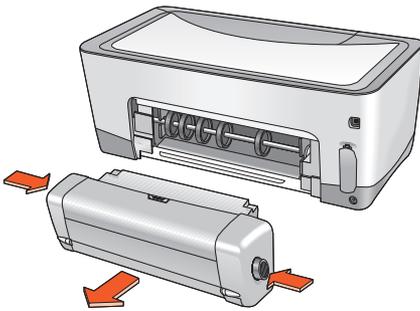
- [binding margin is in the wrong place](#)
- [only one side of the page prints when the two-sided printing option is selected](#)

If the duplexer is not attached to the printer, click below to see instructions for manual two-sided printing:

- [manual two-sided printing](#)

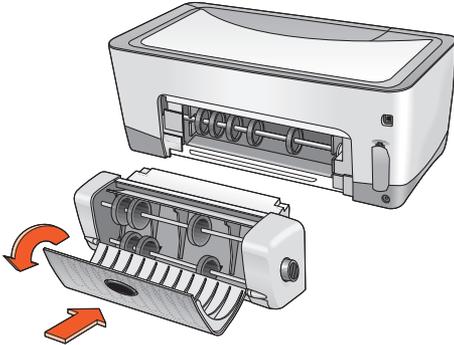
## paper jam occurs inside the automatic two-sided printing module

1. Remove the paper from the paper tray.
2. Press the **Resume** button on the front of the printer.  
Proceed to step 3 if the paper jam is not cleared.
3. Turn off the printer.
4. Press the buttons on the left and right sides of the duplexer, then remove the duplexer from the printer.

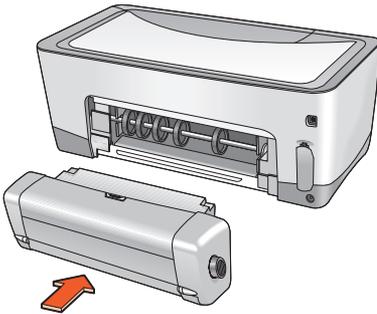


5. Remove any paper jam in the printer.

6. Press the button on top of the duplexer, then lower the access door.



7. Remove any paper from the duplexer, then close the access door.
8. Push the duplexer into the printer until it snaps into place.



9. Turn on the printer, then reprint the document.

## option for two-sided printing cannot be selected

An unsupported paper type or size may be selected in the Setup tab.

On the **Setup** tab, verify that a paper type and size supported by the duplexer is selected. Supported media types include:

- hp plain paper
- hp bright white inkjet paper
- hp premium inkjet heavyweight paper
- hp felt-textured greeting card paper
- hp professional brochure paper, glossy or matte
- hp photo quality inkjet paper, semi-gloss or matte

For supported media sizes, see [media size](#).

For a description of the Printer Properties dialog box, see [printer properties](#).

## paper size changes when the two-sided printing option is selected

The paper size selected in the Setup tab is not supported by the duplexer.

On the **Setup** tab in the Printer Properties dialog box, verify that a paper size supported by the duplexer is selected.

For supported media sizes, see [media size](#).

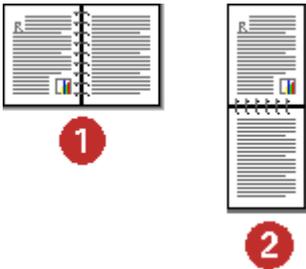
For a description of the Printer Properties dialog box, see [printer properties](#).

## binding margin is in the wrong place

You may have chosen an incorrect paper orientation.

On the **Features** tab of the Printer Properties dialog box, verify that:

- **Book** is selected for binding along the side
- **Tablet** is selected for binding along the top



1. **book**
2. **tablet**

For a description of the Printer Properties dialog box, see [printer properties](#).

## **only one side of the page prints when the two-sided printing option is selected**

Use the following solutions:

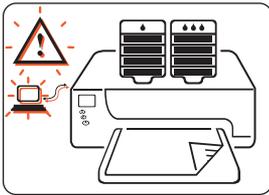
- Print the document using the manual two-sided printing feature.
- Use a media type supported by the duplexer.
- Use a media size supported by the duplexer.

# communication error

Select the topic that best describes the problem:

- [local connection](#)
- [network connection](#)

When there is a communication problem, the following display appears on the LCD panel.



## local connection

Follow these steps if the printer encounters a communication problem over a local connection:

1. Verify that all cables are firmly attached to the printer and the computer.
  - If you are not using a USB connection, verify that the parallel cable adapter is firmly attached to the printer. Verify that the parallel adapter is firmly attached to the parallel adapter.
  - If you are using a USB connection, verify that the USB cable is firmly attached to the printer and the computer.
2. Press the **Cancel** button to cancel the print job.
3. Resend your document.

## network connection

Follow these steps if the printer encounters a communication problem over a network connection:

1. Press the **Power** button to turn the printer off.
2. Press the **Power** button to turn the printer back on.
  - If the communication error display does not reappear on the LCD panel, then resend your document.
  - If the communication error display does appear on the display then there may be a problem with the LIO module. Check the module or contact your network administrator.

To see a troubleshooting guide for the printer's networking feature:

1. Insert the CD that came with the printer in the computer's CD-ROM drive.
2. Click **Networking**.
3. Select **Network Troubleshooting**.

Troubleshooting steps for LIO network printing connections appear.

If you continue to have problems with the printer, see [contacting hp services and support](#).

# infrared printing problems

Select the topic that best describes the problem:

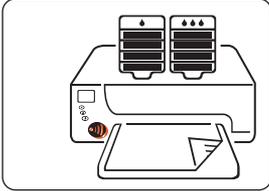
- printer stopped printing
- printer is taking too long to print
- infrared icon is not displayed
- single Palm Pilot calendar appointment prints



For more information on infrared printing visit HP's website at:  
[www.hp.com/support/cp1160](http://www.hp.com/support/cp1160).

## printer stopped printing

When the printer has established an infrared link with another device, the following display appears on the LCD panel.



When the Infrared Printing Feature encounters an interruption, the infrared icon disappears from the LCD panel.

If the device is moved out of the printer's infrared lens range, and the printer stops printing, then realign both devices within 30 seconds and the print job will resume.

## printer is taking too long to print

Position the device closer to the printer's infrared lens, then verify the following:

- An infrared port is selected on the laptop or notebook.
- The device and the printer are correctly aligned.
- The device is IrDA-compliant.
- Look for an IrDA symbol or see the device's user guide for information.
- There is no bright light shining directly into either devices' infrared lens.

## **infrared icon is not displayed**

Perform one or more of these options:

- Follow the instructions that came with the laptop or notebook to configure infrared printing.
- Log onto the laptop or notebook manufacturer's Website or contact the manufacturer's support telephone number.
- Log onto the Infrared Data Association (IrDA) website at:  
<http://www.irda.org>.
- Download the infrared driver from the Microsoft Windows 98/2000 software CD or from the Microsoft Website at:  
<http://www.microsoft.com>.

## single Palm Pilot calendar appointment prints

The Palm Pilot may not have an enhanced printing application installed. Install an enhanced printing application to print more than one calendar appointment at a time.



An enhanced printing application may not be available in your region.

For a full description of the infrared printing feature, see [infrared printing](#).

If you continue to have problems with the printer, see [contacting hp services and support](#).

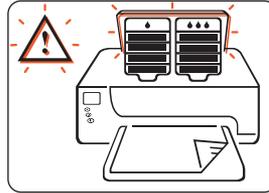
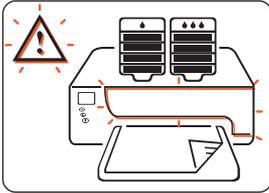
# printer hardware problems

Click the topic below that best describes the problem:

- [printer door time out](#)
- [printer does not turn on](#)

## printer door time out

In order to protect the ink delivery system, the printer doors can remain open for only 15 minutes. After 15 minutes, the print carriage goes to its rest position and one of the following displays appears on the LCD panel.



To access the print carriage, close the doors, then reopen them.

**Caution!** Do not try to force the carriage out of its rest position. It will damage the printer.

## printer does not turn on

Follow these steps when the power cord and cable are connected to the printer, but the printer does not turn on:

1. Disconnect the power cord from the electrical outlet.
2. Wait about 10 seconds.
3. Reconnect the power cord to the electrical outlet.
4. Press the **Power** button to turn the printer on.

# hp services and support

- [contacting hp services and support](#)
- [hp printer and software limited warranty statement](#)
- [hp inkjet printhead and ink cartridge product warranty information](#)

# contacting hp services and support

HP Services and Support provides expert advice on using your HP printer or solving problems with your printer.

## support process

HP support process works most effectively if you look for help in the following order:

1. Use the onscreen User's Guide.
2. Access HP e-support.  
Use your Internet connection any time of the day to:
  - Check HP's Web support pages for product help
  - Read the HP user community forum messages or post a question
  - Send HP an email

For more information, see [hp e-support](#).

3. Contact HP support by phone during hours of operation.

For more information, see [hp support by phone](#).

Support options and availability vary by product, country/region, and language.

## hp e-support

HP e-support offers online support as long as you own your HP printer. Get instant access to support information, helpful printing tips, and the latest updates for your printer software (also referred to as the printer driver)—24 hours a day, seven days a week, at no cost to you.

## hp support Websites

If you have access to the Internet, you can obtain a wide variety of information about your printer.

Visit our Website for the latest printer software and support information at [www.hp.com/cposupport/loc/regional.html](http://www.hp.com/cposupport/loc/regional.html) or [www.hp.com/support/cp1160](http://www.hp.com/support/cp1160).

## **hp support email**

One-to-one email gives direct answers to your questions from an HP service technician. Email support is a great way to ask technical questions or obtain an answer that is tailored to your specific need.

Enter your question on a Web form and receive an email reply. Responses are normally provided within 48 hours, excluding holidays.

## hp support by phone

HP provides telephone support free of charge during the printer's phone support period. (Standard phone company charges do apply.)

### free phone support period

The list below shows the phone support period for your region.

region	phone support*
North America— Including Canada	1 year
Asia Pacific— Including Japan	1 year
Europe	1 year
Latin America	1 year

\* Standard phone company charges apply.

## before placing a call

Before placing a call for help, try these other free support options:

- Onscreen User's Guide
- Setup poster
- HP e-support

If you cannot solve the problem using these resources, call an HP service technician while you are in front of your computer and printer. For faster service, please be prepared to provide information about the steps you have taken to solve the problem.

HP needs the following information to assist you:

- The printer's model number
- The printer's serial number (see [diagnostic page](#))
- The computer's operating system
- The version of the printer driver (also referred to as the printer software)
- Messages displayed at the time the situation occurred
- Answers to these questions:
  - Has this situation happened before? Can you re-create it?
  - When did this happen?
  - Did you add any new hardware or software around the time this situation began?

## support phone numbers

If you need help solving a problem, contact HP support using one of the phone numbers in the table below. If the phone number for your region is not listed, please refer to HP's Website:

<http://www.hp.com/cps-support/guide/psd/expectations.html>

for this region...	use this phone number...
Africa/Middle East	41 22 780 71 11
Argentina (Buenos Aires)	11 4778 8380
Argentina (Outside Buenos Aires)	0810 555 5520
Australia	03 8877 8000
Austria	0660 6386
Belgium (Dutch)	02 626 8806
Belgium (French)	02 626 8807
Brazil, inside Greater Sao Paulo	11 3747 7799 11 4197 4998
Brazil, outside Greater Sao Paulo	0800 15 7751 0800 13 0999
Canada	905 206 4663
Chile	800 36 0999
China	010 6564 5959
Colombia	9 800 91 9477
Czech Republic	02 471 7327
Denmark	39 29 4099
Finland	0203 47 288
France	01 43 62 34 34
Germany	0180 52 58 143 (0.12 DM/30 sec. unit or € 0.06/30 sec. unit)
Greece	01 6189890
Hong Kong	3002 8555
Hungary	36 1 252 4505

<b>for this region...</b>	<b>use this phone number...</b>
India	11 682 6035
Indonesia	21 350 3408
Ireland	01 662 5525
Israel	09 952 4848
Italy	02 264 10350
Japan	0570 000511
Korea (Seoul)	02 3270 0700
Korea, (outside Seoul)	080 999 0700
Malaysia	03 295 2566
Mexico (Mexico City)	5258 9922
Mexico (Outside Mexico City)	01 800 472 6684
Netherlands	0 20 606 8751
New Zealand	09 356 6640
Norway	22 11 6299
Peru	0 800 10111
Philippines	2 867 3551
Poland	22 37 5065
Portugal	1 441 7 199
Russia, Moscow	095 923 50 01
Singapore	272 5300
Spain	902 321 123
Sweden	08 619 2170
Switzerland	0 848 80 11 11
Taiwan	2 2717 0055
Thailand	2 6614000
Turkey	1 216 579 71 71

for this region...	use this phone number...
United Kingdom	0870 842 2339
U.S.	1 (208) 323 2551
Venezuela (Caracas)	207 8488
Venezuela (Outside Caracas)	800 10 111
Vietnam	08 823 4530

### after the free phone support period

After the free phone support period, you can receive help from HP for a fee. Prices are subject to change without notice.

HP e-support is always available at no cost. For more information, see [hp e-support](#).

- For calls in the United States that may last less than 10 minutes, call (900) 555-1500. The charge is US\$2.50 per minute, starting from the time you connect to a service technician. Charges will not exceed US\$25.
- For calls in the United States that may last longer than ten minutes, call (800) 999-1148. The fee is US\$25 per call, charged to your Visa or MasterCard.
- For calls in Canada, call (877) 621-4722.

If HP determines during the call that your printer needs to be repaired and the printer is covered under the limited warranty, you will not be charged for the phone support service.

## obtaining hp repair

If your HP printer needs to be repaired, call HP phone support. A trained HP service technician will diagnose the problem and coordinate the repair process.

For a list of HP support phone numbers, see [support phone numbers](#).

HP support will direct you to the best solution, whether it is an authorized service provider or an HP facility. This service is free during your printer's limited warranty period. After the warranty period, you will be quoted a repair cost.

## obtaining a warranty extension

If you would like to extend your warranty coverage beyond the limited warranty period, use one of the following options:

- Consult your reseller to get extended coverage. To find HP resellers in the U.S., visit HP's service locator at [www.hp.com/service\\_locator](http://www.hp.com/service_locator).
- If your reseller does not offer service contracts, call HP directly and ask about our HP service agreements. In the U.S. call (800) 446-0522; in Canada call (800) 268-1221. For HP service agreements outside of the U.S. and Canada, contact your local HP sales office.

# hp printer and software limited warranty statement

region	software	printer
North America (including Canada)	90 days	1 year
Asia Pacific (including Japan)	90 days	1 year
Europe	90 days	1 year
Latin America	90 days	1 year

## A. extent of limited warranty

1. Hewlett-Packard (HP) warrants to the end-user customer that the HP products specified above will be free from defects in materials and workmanship for the duration specified above, which duration begins on the date of purchase by the customer. Customer is responsible for maintaining proof of date of purchase.
2. For software products, HP's limited warranty applies only to a failure to execute programming instructions. HP does not warrant that the operation of any product will be uninterrupted or error free.
3. HP's limited warranty covers only those defects which arise as a result of normal use of the product, and do not apply to any:
  - Improper or inadequate maintenance or modification;
  - Software, interfacing, media, parts, or supplies not provided or supported by HP; or
  - Operation outside the product's specifications.

4. For HP printer products, the use of a non-HP ink cartridge or a refilled ink cartridge does not affect either the warranty to the customer or any HP support contract with the customer. However, if printer failure or damage is attributable to the use of a non-HP or refilled ink cartridge, HP will charge its standard time and materials charges to service the printer for the particular failure or damage.
5. If HP receives, during the applicable warranty period, notice of a defect in any software, media, or ink cartridge covered by HP's warranty, HP shall replace the defective product. If HP receives notice of a defect in any hardware product covered by HP's warranty during the applicable warranty period, HP shall either repair or replace the defective product at HP's option.
6. If HP is unable to repair or replace, as applicable, a defective product covered by HP's warranty, HP shall, within a reasonable time after being notified of the defect, refund the purchase price of the product.
7. HP shall have no obligation to repair, replace, or refund until the customer returns the defective product to HP.
8. Any replacement product may be either new or like-new, provided that it has functionality at least equal to that of the product being replaced.
9. HP's limited warranty is valid in any country where the covered HP product is distributed by HP except for the Middle-East, Africa, Argentina, Brazil, Mexico, Venezuela, and France's "Departements D'Outre-Mer"; for those excepted areas, the warranty is valid only in the country of purchase. Contracts for additional warranty services, such as on-site service, may be available from any authorized HP service facility where the product is distributed by HP or by an authorized importer.

## **B. limitations of warranty**

1. TO THE EXTENT ALLOWED BY LOCAL LAW, NEITHER HP NOR ITS THIRD PARTY SUPPLIERS MAKE ANY OTHER WARRANTY OR CONDITION OF ANY KIND, WHETHER EXPRESS OR IMPLIED, WITH RESPECT TO THE HP PRODUCTS, AND SPECIFICALLY DISCLAIM THE IMPLIED WARRANTIES OR CONDITIONS OF MERCHANTABILITY, SATISFACTORY QUALITY, AND FITNESS FOR A PARTICULAR PURPOSE.

## **C. limitations of liability**

1. To the extent allowed by local law, the remedies provided in this Warranty Statement are the customer's sole and exclusive remedies.
2. TO THE EXTENT ALLOWED BY LOCAL LAW, EXCEPT FOR THE OBLIGATIONS SPECIFICALLY SET FORTH IN THIS WARRANTY STATEMENT, IN NO EVENT WILL HP OR ITS THIRD PARTY SUPPLIERS BE LIABLE FOR DIRECT, INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, WHETHER BASED ON CONTRACT, TORT, OR ANY OTHER LEGAL THEORY AND WHETHER ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

## **D. local law**

1. This Warranty Statement gives the customer specific legal rights. The customer may also have other rights which vary from state to state in the United States, from province to province in Canada, and from country to country elsewhere in the world.

2. To the extent that this Warranty Statement is inconsistent with local law, this Warranty Statement shall be deemed modified to be consistent with such local law. Under such local law, certain disclaimers and limitations of this Warranty Statement may not apply to the customer. For example, some states in the United States, as well as some governments outside the United States (including provinces in Canada), may:
  - Preclude the disclaimers and limitations in this Warranty Statement from limiting the statutory rights of a consumer (e.g., the United Kingdom);
  - Otherwise restrict the ability of a manufacturer to enforce such disclaimers or limitations; or
  - Grant the customer additional warranty rights, specify the duration of implied warranties which the manufacturer cannot disclaim, or not allow limitations on the duration of implied warranties.
3. FOR CONSUMER TRANSACTIONS IN AUSTRALIA AND NEW ZEALAND, THE TERMS IN THIS WARRANTY STATEMENT, EXCEPT TO THE EXTENT LAWFULLY PERMITTED, DO NOT EXCLUDE, RESTRICT, OR MODIFY, AND ARE IN ADDITION TO, THE MANDATORY STATUTORY RIGHTS APPLICABLE TO THE SALE OF HP PRODUCTS TO SUCH CUSTOMERS.

# hp inkjet printhead and ink cartridge product warranty information

## hp inkjet products limited warranty

All HP Inkjet products are warranted to be free from defects in material and workmanship during the warranty period.

## warranty period

The Inkjet product is warranted until the End-of-Warranty date, which is printed on each product. Refer to the individual product inserts for the location of the End-of-Warranty date.

## hp inkjet supplies warranty limitations

The warranty does not cover empty or refilled products, printer expired products, or products that have been tampered with or misused.

## install-by date

Every HP Inkjet product features an Install-by-date printed on the product's box. The product must be installed by this date for the best printing results.

## returning an hp inkjet product

If a problem occurs with an HP Inkjet product, contact HP Services and Support.

## using non-hp inkjet products

If a non-HP Inkjet product is found to be the direct cause of printer failure or damage, HP will not cover the repair related to that non-HP product.

## hp inkjet product recovery program

Customers interested in recycling their genuine HP inkjet cartridges can participate in HP's empty inkjet cartridge return and recycle program. HP offers this program in the United States, Puerto Rico, France, Germany, and Singapore, more countries than any other inkjet 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 request a postage-paid return envelopes or bulk boxes via the web at [www.hp.com/go/recycle](http://www.hp.com/go/recycle) or by calling 1-888-447-0145 (in the U.S. only). Customers will be asked for their name, phone number, address, and how many bulk boxes or envelopes they would like. Postage-paid envelopes and/or bulk boxes will be shipped within two days.

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.

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 inkjet cartridge materials include automobile parts, trays used in microchip fabrication processes, copper wire, steel plates and the precious metals 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 & composite parts) are disposed of in an environmentally responsible manner.

# supplies and accessories

- [supply and accessory part numbers](#)
- [paper and media part numbers](#)
- [how to order](#)

# supply and accessory part numbers

Refer to these part numbers when ordering HP supplies and accessories:

## ink cartridges

See [ink cartridge selection numbers](#)

## printheads

See [printhead selection numbers](#)

## interface cables

HP IEEE 1284-Compliant Parallel Interface Cable:

- 2 meter length: C2950A
- 3 meter length: C2951A

HP USB-Compliant Interface Cable: C6518A

## LIO modules

hp jetdirect 250m print server/internet connector: J6042A

hp jetdirect 200m print server/internet connector: J6039A

## optional 250-sheet plain paper tray

hp pt4395 250-sheet plain paper tray: C6501A

## power cords

US, Canada, Brazil, Latin America, Saudi Arabia: 8120-6260

Japan: 8121-0585

UK, Singapore, Malaysia, Middle East, Hong Kong: 8120-8882

South Africa: 8120-8886

India: 8121-0564

Australia: 8120-8879

Argentina: 8120-8878

Korea: 8120-8884

Europe, Jordan, Lebanon, North Africa, Russia, Baltic republics: 8120-6262

Thailand, Indonesia, Brazil, Caribbean,  
Latin America: 8121-0587 or T503082

China, Taiwan, Philippines: 8121-0586

Chile: 8120-8880

Denmark: 8120-8881

Israel: 8120-8883

Switzerland: 8120-8885

# paper and media part numbers

Refer to these part numbers when ordering HP paper and other media:

## hp bright white inkjet paper

A4 (210 × 297 mm), 200 sheets: C5977A

A4 (210 × 297 mm), 500 sheets: C1825A

US letter, 200 sheets: C5976A

US letter, 500 sheets: C1824A

## hp premium inkjet paper

A4 (210 × 297 mm), 200 sheets: 51634Z

US letter, 200 sheets: 51634Y

## hp professional brochure and flyer paper, matte

US letter, 50 sheets: C6955A

## hp photo paper, two-sided, satin/glossy

Asian A4 (210 × 297 mm), 20 sheets: C6765A

European A4 (210 × 297 mm), 20 sheets: C1847A

US letter, 20 sheets: C1846A

## hp premium photo paper, glossy

Asian A4 (210 × 297 mm), 15 sheets: C6043A

European A4 (210 × 297 mm), 15 sheets: C6040A

US letter, 15 sheets: C6039A

## hp premium plus photo paper, glossy

Asian A4 (210 × 297 mm), 20 sheets: C6933A

European A4 (210 × 297 mm), 20 sheets: C6832A

US letter, 20 sheets: C6831A

### **hp premium plus photo paper, matte**

European A4 (210 × 297 mm), 20 sheets: C6951A

US letter, 20 sheets: C6950A

### **hp premium plus photo paper, glossy snapshot**

European A4 (4 × 6 in finished size), 20 sheets: C6945A

US letter (4 × 6 in finished size), 20 sheets: C6944A

### **hp premium inkjet transparency film**

A4 (210 × 297 mm), 20 sheets: C3832A

A4 (210 × 297 mm), 50 sheets: C3835A

US letter, 20 sheets: C3828A

US letter, 50 sheets: C3834A

### **hp premium inkjet rapid-dry transparencies**

A4 (210 × 297 mm), 50 sheets: C6053A

US letter, 50 sheets: C6051A

### **hp banner paper**

A4 (210 × 297 mm), 100 sheets: C1821A

US letter, 100 sheets: C1820A

### **hp matte greeting cards, white/quarter-fold**

A4 (210 × 297 mm), 20 sheets, 20 envelopes: C6042A

US letter, 20 sheets, 20 envelopes: C1812A

### **hp felt-textured greeting cards, ivory/half-fold**

US letter, 20 sheets, 20 envelopes: C6828A

### **hp iron-on t-shirt transfers**

Asian A4 (210 × 297 mm), 10 sheets: C6050A

European A4 (210 × 297 mm), 10 sheets: C6065A

US letter, 10 sheets: C6049A

## how to order

To purchase printer supplies or accessories directly from HP, visit [www.hp.com](http://www.hp.com).

You can also purchase supplies and accessories from your nearest HP dealer.

Not all supplies and accessories are available in all regions.

# specifications

To see specifications for the printer and printer accessories, click the appropriate heading below:

- [printer specifications](#)
- [automatic two-sided printing module specifications](#)
- [infrared printing specifications](#)
- [minimum printing margins](#)
- [system requirements](#)
- [environmental statement](#)
- [regulatory notices](#)

# printer specifications

## hp color inkjet printer cp1160

### black text print speed \*

Draft: Up to 17 pages per minute  
Normal: Up to 8 pages per minute  
Best: Up to 4 pages per minute

### mixed text with color graphics print speed\*

Draft: Up to 16 pages per minute  
Normal: Up to 7 pages per minute  
Best: Up to 4 pages per minute

\*These are approximate figures. Exact speed varies with system configuration, software program, and document complexity.

### black TrueType™ text resolution (depending on paper type)

Draft: 600 x 300 dpi  
Normal: 1200 x 600 dpi  
Best: 1200 x 600 dpi

### color resolution (depending on paper type)

Draft: 600 x 300 dpi + PhotoREt  
Normal: 2400 x 1200 dpi + PhotoREt  
Best: 2400 x 1200 dpi + PhotoREt

### photo paper printing resolution

PhotoREt  
2400 x 1200 dpi (with some photo papers)

### print technology

Drop-on-Demand thermal inkjet printing

### **software compatibility**

MS Windows compatible (95, 98, Me, 2000, and NT 4.0)  
MS-DOS software programs

### **duty cycle**

5,000 pages per month

### **memory**

8 MB built-in RAM

### **processor**

96 MHz processor

### **user interface**

Icon-driven LCD panel  
Cancel Button  
Resume Button and Light  
Power Button and Light

### **connectivity**

Built in: Universal Serial Bus 2.0 fullspeed compliant  
IrDA version 1.1, 4 MBps

Via LIO modules: Centronics Parallel, IEEE 1284-compatible,  
optional 10/100BaseT Ethernet

### **dimensions**

Without Automatic Two-Sided Printing Module:

488 mm wide x 184.6 mm high x 379.5mm deep  
19.21 in wide x 7.27 in high x 14.94 in deep

With Automatic Two-Sided Printing Module:

488 mm wide x 184.6 mm high x 433.5 mm deep  
19.21 in wide x 7.27 in high x 17.06 in deep

## **weight**

Without Automatic Two-Sided Printing Module:

6.88 kg (15.17 lb) without print cartridges

With Automatic Two-Sided Printing Module:

7.45kg (16.42 lb) without print cartridges

## **operating environment**

Maximum operating conditions:

Temperature: 41 to 104 degree F, 5 to 40 degrees C

Humidity: 15 to 80 percent RH non-condensing

Recommended operating conditions for best print quality:

Temperature: 59 to 95 degrees F or 15 to 35 degrees C

Humidity: 20 to 80 percent RH non-condensing

Storage conditions:

Temperature: -40 to 158 degrees F, -40 to 70 degrees C

## **maximum weight capacity**

50 lbs. distributed weight

## **power consumption**

2 watts maximum when off

4 watts average non-printing

40 watts average when printing

## **power requirements**

Input Voltage: 100 to 240 Vac ( $\pm 10\%$ )

Input Frequency: 50/60 Hz (+3 Hz)

Accommodates the worldwide range of AC line voltages and frequencies.

## declared noise emissions in accordance with ISO 9296

### Best Mode:

Sound power level, LWAd without duplexer: 5.6 B

Sound power level, LWAd with duplexer: 5.7 B

Sound pressure level, LpAm (bystander positions) without duplexer: 43 dB

Sound pressure level, LpAm (bystander positions) with duplexer: 44 dB

### Normal Mode:

Sound power level, LWAd without duplexer: 6.1 B

Sound power level, LWAd with duplexer: 6.3 B

Sound pressure level, LpAm (bystander positions) without duplexer: 48 dB

Sound pressure level, LpAm (bystander positions) with duplexer: 50 dB

## alignment

### Skew:

± .006 mm/mm (.006 in/in) on plain paper

± .009 mm/mm (.009 in/in) on plain paper with duplexer

± .010 mm/mm (.010 in/in) on hp transparency films

## media weight

U.S. Letter Paper: 60 to 90 g/m<sup>2</sup> (16 to 24 lb)

Legal Paper: 75 to 90 g/m<sup>2</sup> (20 to 24 lb)

Banner Paper: 60 to 90 g/m<sup>2</sup> (16 to 24 lb)

Envelopes: 75 to 90 g/m<sup>2</sup> (20 to 24 lb)

Cards: Up to 200 g/m<sup>2</sup> (110 lb index max)

## media handling

Sheets: up to 150

Banners: up to 20 sheets

Envelopes: up to 15

Cards: up to 60 cards

Greeting cards: up to 5 cards

Transparencies: up to 30

Labels: up to 30 sheets of labels (use only U.S. Letter- or A4-sized sheets)

Photo paper: up to 20 sheets

Output capacity:

Draft: up to 35 sheets

Normal: up to 50 sheets

Best: up to 50 sheets

## media size

Paper:

U.S. Letter 216 x 279 mm (8.5 x 11 in)

Legal 216 x 356 mm (8.5 x 14 in)

Executive 184 x 279 mm (7.25 x 10.5 in)

A4 210 x 297 mm

A5 148 x 210 mm

B5-JIS 182 x 257 mm

Banner:

U.S. Letter 216 x 279 mm (8.5 x 11 in)

A4 210 x 297 mm

Envelopes:

U.S. No. 10 105 x 241 mm (4.12 x 9.5 in)

Invitation A2 111 x 146 mm (4.38 x 5.75 in)

DL 110 x 220 mm

C6 114 x 162 mm

Index/Greeting Cards:

76 x 127 mm (3 x 5 in)

102 x 152 mm (4 x 6 in)

127 x 203 mm (5 x 8 in)

A6: 105 x 148.5 mm

Hagaki: 100 x 148 mm

Labels:

U.S. Letter 216 x 279 mm (8.5 x 11 in)

A4 210 x 297 mm

Photo (with tear-off tab) 102 x 152 mm (4 x 6 in)

# automatic two-sided printing module specifications

## duty cycle

5,000 sides of pages per month

## dimensions

324 mm (12.75 in) long x 133 mm (5.25 in) wide x 111 mm (4.37 in) high

## weight

0.79 kg (1.75 lbs)

## declared noise emissions in accordance with ISO 9296

Best Mode:

Sound power level, LWAd: 5.7 B

Sound pressure level, LpAm (bystander positions): 44 dB

Normal Mode:

Sound power level, LWAd: 6.3 B

Sound pressure level, LpAm (bystander positions): 50 dB

## media weight

U.S. Letter and A4 paper: 60 to 90 g/m<sup>2</sup> (16 to 24 lb)

Cards: up to 160 g/m<sup>2</sup> (90 lb index maximum)

## minimum printing margins

Letter and Executive:

Left and right margins 6.4 mm (0.25 in)  
Top and bottom margins 11.7 mm (0.46 in)

A4:

Left and right margins 3.4 mm (0.134 in)  
Top and bottom margins 11.7 mm (0.46 in)

A5, B5, 5 x 8 in Card, and User Defined Size:

Left and right margins 3.17 mm (0.125 in)  
Top and bottom margins 11.7 mm (0.46 in)

## media size

Paper:

U.S. Letter 216 x 279 mm (8.5 x 11 in)  
Executive 184 x 279 mm (7.25 x 10.5 in)  
A4 210 x 297 mm  
A5 148 x 210 mm  
B5 182 x 257 mm

Cards:

127 x 203 mm (5 x 8 in)

## media type

hp plain paper or HP bright white inkjet paper:

hp photo quality inkjet paper, matte finish:

hp photo quality inkjet paper, semi gloss:

hp premium inkjet heavyweight paper:

hp felt-textured greeting card paper, ivory/half-fold:

hp professional brochure & flyer paper, two-sided gloss

hp professional brochure & flyer paper, two-sided, matte finish

# infrared printing specifications

## range

1 meter (3 feet)  
30 degree cone

## supported operating systems

Some operating systems supported by infrared technology include:

- Windows 2000
- Windows 98
- Windows CE
- Palm

## supported devices

Some of the devices supported by infrared technology include:

- Laptop or notebook computer with infrared capability (including the HP Omnibook)
- Some personal digital assistants (including the Palm product line)
- Some Windows CE devices (including the HP Jornada)
- Cellular phones with infrared capability

## supported protocols

- IrLPT
- OBEX

# minimum printing margins

The printer cannot print outside a designated area of the page so your document content must be contained within the printable area.

## **A4 paper**

Left and Right Margins: 3.4 mm (0.134 in)

Top Margin: 1.8 mm (0.07 in)

Bottom Margin: 11.7 mm (0.46 in)

## **letter, legal, and executive paper**

Left and Right Margins: 6.4 mm (0.25 in)

Top Margin: 1.8 mm (0.07 in)

Bottom Margin: 11.7 mm (0.46 in)

## **A5, B5, and user defined paper**

Left and Right Margins: 3.2 mm (0.125 in)

Top Margin: 1.8 mm (.07 in)

Bottom Margin: 11.7 mm (0.46 in)

## **cards (3 x 5 in, 4 x 6, 5 x 8, and A6)**

Left and Right Margins: 3.2 mm (0.125 in)

Top Margin: 1.8 mm (0.07 in)

Bottom Margin: 11.7 mm (0.46 in)

## **Hagaki postcards**

Left and Right Margins: 3.2 mm (0.125 in)

Top Margin: 1.8 mm (0.07 in)

Bottom Margin: 11.7 mm (0.46 in)

## **envelopes**

Left and Right Margins: 3.2 mm (0.125 in)

Top Margin: 1.8 mm (0.07 in)

Bottom Margin: 11.7 mm (0.46 in)

**banners - A4 (210 x 297 mm [8.27 x 11.7 in])**

Left and Right Margins: 3.4 mm (0.134 in)

Top Margin: 1.8 mm (0.07 in)

Bottom Margin: 11.7 mm (0.46 in)

Between Page Margin: 0.0 mm (0.0 in)

**banners - letter (216 x 279 mm [8.5 x 11 in])**

Left and Right Margins: 6.4 mm (0.25 in)

Top Margin: 1.8 mm (0.07 in)

Bottom Margin: 11.7 mm (0.46 in)

Between Page Margin: 0.0 mm (0.0 in)

**photo with tear-off tab**

Left and Right Margins: 3.2 mm (0.125 in)

Top Margin: 3.2 mm (0.125 in)

Bottom Margin: 3.2 mm (0.125 in)

# system requirements

Your computer must meet the following minimum requirements:

## **Microsoft Windows NT 4.0 or 2000**

Minimum Processor Speed: Pentium 133 MHz  
Required RAM: 64 MB  
Required Free Hard Disk Space: 40 MB\*

## **Microsoft Windows 95, 98, or Me**

Minimum Processor Speed: Pentium 150 MHz  
Required RAM: 32 MB  
Required Free Hard Disk Space: 40 MB\*

## **DOS 3.3 or better**

Minimum Processor Speed: 486  
Required RAM: 4 MB  
Required Free Hard Disk Space: 40 MB\*

\* If you are printing photographs, you must have at least 100 MB free hard disk space. If you are printing at 2400 x 1200 dpi, you must have at least 400 MB free hard disk space.

# 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. Hewlett-Packard has also developed processes to minimize the negative impact of the disposal of the printer at the end of its printing life.

## reduction and elimination

**Paper use:** The printer's automatic/manual two-sided printing capability reduces paper usage and the resulting demands on natural resources. This printer is suited for the use of recycled papers according to DIN 19 309.

**Ozone:** Ozone-depleting chemicals such as CFCs have been eliminated from Hewlett-Packard 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. Plastic parts have been primarily designed in no more than two colors to enhance recycling options. A few small parts are colored specifically to highlight customer access points.

**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.

**Hazardous materials:** This hp product contains the following materials that may require special handling at end-of-life:

- Lead in solder
- A lithium battery located on the motherboard

### **Battery Specifications**

**Battery Part Number:** Panasonic CR2032

**Battery Material:** Lithium

**Battery type:** Button/Coin Cell Battery

**Quantity per product:** 1

**Weight:** about 3 gram

**Lithium type:** solid

**Battery manufacturers:** Panasonic, Japan



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

- **Extended warranty:** HP SupportPack provides coverage for the HP hardware and product and all HP supplied internal components. HP SupportPack must be purchased by the customer within 30 days of purchase. Contact the nearest HP dealer about this service.
- **Spare parts and consumables** are available for five (5) years after production has stopped.
- **Product take-back:** To return this product and print cartridges to HP at the end of its useful life, call your local HP Sales or Service Office for instructions.

## energy consumption

This printer was designed with energy conservation in mind. This printer averages 4 watts in stand-by mode. Not only does this save natural resources, but it also saves money without affecting the high performance of the printer.

This product qualifies for the ENERGY STAR Program (U.S. and Japan). ENERGY STAR is a voluntary program established to encourage the development of energy-efficient office products.



ENERGY STAR is a US registered service mark of the US EPA. As an ENERGY STAR partner, Hewlett-Packard Company has determined that this product meets ENERGY STAR Guidelines for energy efficiency.

**Energy consumption in off-mode:** When the printer is off, a minimal 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.

# regulatory notices

## hewlett-packard company

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

- This device may not cause harmful interference, and
- This device must accept any interference received, including interference that may cause undesired operation.
- Pursuant to Part 15.21 of the FCC Rules, any changes or modifications to this equipment not expressly approved by Hewlett-Packard Company may cause harmful interference, and void your authority to operate this equipment. Use of a shielded data cable is required to comply with the Class B limits of Part 15 of the FCC Rules.

For further information, contact:

Hewlett-Packard Company  
Manager of Corporate Product Regulations  
3000 Hanover Street  
Palo Alto, Ca 94304  
(650) 857-1501

## note

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

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

## LED indicator statement

The display LEDs meet the requirements of EN 60825-1.

この装置は、情報処理装置等電波障害自主規制協議会（VCCI）の基準に基づくクラスB情報技術装置です。この装置は、家庭環境で使用することを目的としていますが、この装置がラジオやテレビジョン受信機に近接して使用されると受信障害を引き起こすことがあります。  
取り扱い説明書に従って正しい取り扱いをして下さい。

### 사용자 안내문 (B급 기기)

이 기기는 비업무용으로 전자파장애검정을 받은 기기로서, 주거지역에서는 물론 모든 지역에서 사용할 수 있습니다.

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