## quick help hp deskjet 9xx series <br> table of contents

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## learn to print

- introducing the hp deskjet series printer
- terms and conventions
- notices and acknowledgments
- learning about printer features
- using paper trays
- printing with the hp deskjet printer


## introducing the hp deskjet series printer

Congratulations! You have purchased an HP Deskjet printer which is equipped with several new features:

- Expanded print capability allows you to print information from devices other than your desktop computer using the infrared printing feature. This feature may not be available in all printer models.
- Increased print speeds up to 17 pages per minute for black text and 13 pages per minute for text containing color or color graphics. Print speeds may vary with printer models.
- Greater flexibility in printing two-sided documents using the Automatic Two-Sided Printing Module. This feature may not be available in all printer models.
- Better print performance using the Automatic Paper-Type Sensor.
- Excellent photo quality through HP's PhotoREt III, ColorSmart III printing technology.
HP Deskjet printers are designed to help you get the best results for your printing needs. Read about these and other features in the following sections.


1. hp deskjet printer 2. two-sided printing module

## terms and conventions

The following terms and word conventions are used in Quick Help.

## terms

The HP Deskjet 990cxi/cse, HP Deskjet 980cxi, HP Deskjet 960cxi/960cse series printers are referred to as HP Deskjet 9xx or HP Deskjet.

## symbols

The > symbol guides you through a series of soffware steps.
For example:
Click Macintosh HD > Utilities > hp deskjet > hp deskjet utility to open the hp deskjet $9 x x$ utility screen.

## cautions and warnings

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

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

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

AWarning! Keep print 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.

## notices and acknowledgments

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## learning about printer features

## buttons and lights

The HP Deskjet 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 state of the printer.


1. cancel button 2. print cartridge light and status symbol
2. Resume light and button 4. Power light and button

## cancel button

Pressing this button cancels the current print job.
print cartridge status symbol and light
The light above the Print Cartridge Status symbol flashes when you need to check the status of the print cartridges.

## resume button and light

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

## power button and light

The Power button turns the printer on and off. It takes approximately five seconds for the printer to turn on after pressing the Power button. The green light above the Power button flashes when printing is in progress.

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 wallmounted switch to turn the printer on and off may cause premature printer failure.

See also:
print cartridge part numbers

## paper trays

The printer has an In tray and an Out tray. Place paper or other media in the In tray for printing. Printed pages are deposited in the Out tray.

## infrared lens

The HP Deskjet printer has a special Infrared (Ir) lens. The Infrared lens allows printing from an infrared sending device such as a Palm Pilot, or PowerBook computer. The infrared printing feature may not be available in all printer models.


See also:
infrared printing feature

## automatic two-sided printing module

The Automatic Two-Sided Printing Module is a special hardware feature that enables the printer to automatically print on both sides of the media. If this feature is not included with your printer, it can be purchased separately.


See also:
automatic two-sided printing module

## manual two-sided printing

Manual Two-Sided Printing is a feature that enables the printer to print both sides of a page when the Rear Access Door is attached.

See also:
manual two-sided printing

## automatic paper-type sensor

The Automatic Paper-Type Sensor automatically determines the correct paper type for most paper or media placed in the printer's In tray. This feature, particularly when used with HP paper and media, assists in obtaining the best printing results. The feature can be used with both HP and non-HP media; however, it is optimized for HP media. Because Automatic is the default printer setting, the printer is able to quickly select the appropriate paper type.
This feature is not recommended for printed or lined paper and media.

See also:
automatic paper-type sensor

## using paper trays

## in tray

The In tray holds paper or other media to be printed.


1. in tray pulled out 2. paper length guide 3. paper width guide

2. out tray 2. in tray pushed in

## out tray

Change the position of the Out tray for different printing needs.


1. single envelope slot 2 . out tray down 3. out tray extension

2. out tray up

Out tray down. Leave the tray in the down position for most types of printing and single envelope printing.
Out tray extension. Pull the tray extension out when printing a large number of pages. Also extend the tray when you are printing in draft mode to prevent the paper from falling out of the tray. When the print job finishes, push the tray extension back into its storage slot.
Out tray up. Place the tray in the up position to properly load banner paper. It must remain in the up position to print banners.

Do not use the Out tray extension with legal-sized paper. It may cause a paper jam.

## printing with the hp deskjet printer

The printer is controlled by software installed on your computer. The printer software, also called the printer driver, provides dialog boxes which communicate your print requests to the printer. Select the printer you are using as the default printer before printing.

## selecting the default printer using the Chooser

Use one of the following methods to select the HP Deskjet 9xx printer you are using as the default printer in the Chooser.

## USB connection

1. Select Chooser from the Apple menu.
2. Select hp deskjet $x x$ in the upper left window of the Chooser screen.
3. Select deskjet $9 x x$ in the right window of the Chooser screen.
4. Close the Chooser.

## AppleTalk network connection

1. Turn on both the computer and printer and verify that they are connected to the AppleTalk network.


You must use an external print server, such as an HP Jetdirect 300X External Print Server, to connect the printer to the AppleTalk network.
2. Select Chooser from the Apple menu.
3. Select the Active option next to AppleTalk.
4. Click the hp deskjet icon in the upper left window of the Chooser screen.
5. Select a zone where the printer is located in the AppleTalk Zones window.
6. Select deskjet $9 x x$ in the right window of the Chooser screen.
7. Close the Chooser.

## selecting the default printer using other options

Other options allow you to select a default printer without using the Chooser. Try one of these options:

- Click the printer icon on the menu bar, then select hp deskjet 9xx.
- Click the control strip icon on the edge of the desktop to expand the control strip. Click the printer icon on the control strip, then select hp deskjet 9 xx .
- Drag the document you want to print to the hp deskjet $9 x x$ printer icon on the desktop.
- Click the deskjet 9xx icon on the desktop, then click Printing on the menu bar. Select Set Default Printer.
The Print command sends your documents to the hp deskjet 9xx printer until you select a new default printer. If you change printers, verify that the formatting and pagination does not change in the document before you print it.


## selecting print settings

The following instructions provide the most common method of selecting page layout and print options. The software program you are using may vary from the method provided.

## controlling page layout

1. Open the file you want to print.
2. Click File > Page Setup to display the hp deskjet 9xx Page Setup screen.
3. Select the following options:

- Paper size: Choose the paper size, envelopes, or other media you have in the In tray.
- Scaling (\%): Enter a number from 5 to 999. Numbers smaller than 100 reduce the image size, and numbers greater than 100 enlarge it. Changing the scaling size may also change pagination.
- Orientation: Choose the appropriate orientation icon for the document you are printing.
- Mirror Image: Select this option if appropriate.
- Rotate 180 degrees: Select this option if appropriate.
- Two-Sided Safe Margins: Select this option to adjust margins for twosided printing.

4. Click OK to save the layout options.

## selecting print options

1. Open the file you want to print.
2. Click File > Print to display the hp deskjet 9xx screen.

The General default option screen appears. Select the number of copies to print, which pages are to be printed, and the print order on this screen. You can also view the current print options which are displayed across the bottom of the screen.
3. Click the arrows in the General field to view a list of additional options.
4. Select Paper Type/Quality to choose print quality options, paper type, ink density, and drying time.
5. Select Layout to choose multiple pages per sheet and two-sided printing.
6. Select Color to choose options for color, grayscale, and black and white image and text resolution.

- ColorSmart III allows you to adjust the ink saturation, brightness, and color tone for print images. The ColorSmart III option also allows you to disable image enhancements.
- ColorSync is used to match colors with other computers using the ColorSync matching system.
- Grayscale prints in shades of gray. You are able to optimize printing for fax and photocopy prints with this setting.
- Black \& White prints only black and white with no gray or color. Black only is not recommended for use with glossy paper.

7. Select Background Printing to choose foreground or background print options and print time.

- Select Background to continue working on a document while printing takes place.
- Select Foreground for faster printing; however, you cannot work on other tasks until printing is complete.
Other features are also available with Background printing. Double-click the hp deskjet 9xx printer icon on the desktop for:


## - Deleting a print request

- Click the job title or icon, then click the Trash icon, or
- Drag the document's icon to the Trash icon on the desktop. These methods delete only the print job and not the document.


## - Holding/Pausing a print request

- Click the job title or icon, then click the Pause button. The print request pauses until you again select its title then click the Resume button.
- Drag the document icon to the Waiting to Print list of documents.
- Marking a print request urgent
- Click the job title or icon, then click the small clock.
- Click Urgent in the dialog box that appears. This action moves the print request to the top of the list.
- Sorting/changing the order of print request
- Select the column heading for the column you want to sort or change.
- Select the Print Time column heading to view and change print order.
- Drag and drop the print job title in the Name column to the desired print order position in the list.
- Stopping and restarting printing
- Select Stop Print Queue from the Printing menu option to stop printing.
- Select Start Print Queue from the Printing menu option to resume printing.
- Changing printers
- To move a print job from one printer to another printer of the same type, drag the print request icon to the desired printer icon.
- If the printers are not the same type, the printer software will not allow you to move a print request to an incompatible printer.
using the buttons in the print dialog box
The buttons at the bottom of the Print dialog box include:
Default: returns the print settings to the system default.
Edit Settings...: allows you to edit saved print settings.
Save Current Settings...: allows you to assign a name to the settings and save them under that name.

Preview: allows you to view your document before you print it so you can see how the document will print with the current settings.
Cancel: cancels settings you have entered and closes the Print dialog box. OK: starts printing.

## desktop printing

Desktop printing allows you to print several documents at once, or to print a document that is formatted for printing on a particular printer. Use one of the following methods to print documents from the desktop:

- Drag the icons of the documents you want to print to the printer icon on the desktop.
- Select the icons of the documents you want to print, then click File > Print. Select print options from the hp deskjet 9xx screen, then click OK.


## printing on paper and other media

- envelopes
- transparencies
- labels
- business cards, index cards, and other small media
- photographs
- greeting cards
- posters
- banners
- iron-on transfers
- manual two-sided printing


## envelopes

Print a single envelope using the envelope slot, or print a stack of envelopes using the In tray.

## printing a single envelope

preparing to print

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.


## printing envelopes

If your software program includes an envelope printing feature, do not follow these instructions. Follow the instructions provided by the software program.

1. Open the file you want to print.
2. Click File > Page Setup.
3. Select the following options:

- Page Size: Appropriate envelope size
- Scaling (\%): Appropriate percentage (100 is the default)
- Orientation: Portrait

4. Click OK.
5. Click File $>$ Print.

The hp deskjet $9 x x$ screen appears displaying the General option screen. Click the arrows in the General field to select the following options.
6. Select Paper Type/Quality, then choose the following:

- Paper Type: plain paper
- Print Quality: Normal

7. Select Layout, then choose the following:

- Pages Per Sheet: 1 (Normal)
- Print Both Sides: Unchecked

8. Click OK to print.

## printing guidelines

- Verify that the Out tray is in the down position.
- 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.


## printing stacks of envelopes

preparing to print

1. Pull out the In 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. Slide the tray forward until it stops.


## printing envelopes

If your software program includes an envelope printing feature, do not follow these instructions. Follow the instructions provided by the software program.

1. Open the file you want to print.
2. Click File > Page Setup.
3. Select the following options:

- Page Size: Appropriate envelope size
- Scaling (\%): Appropriate percentage (100 is the default)
- Orientation: Portrait

4. Click OK.
5. Click File $>$ Print.

The hp deskjet $9 x x$ screen appears displaying the General option screen. Click the arrows in the General field to select the following options.
6. Select Paper Type/Quality, then choose the following:

- Paper Type: plain paper
- Print Quality: Normal

7. Select Layout, then choose the following:

- Pages Per Sheet: 1 (Normal)
- Print Both Sides: Unchecked

8. Click OK to print.

## printing guidelines

- Never place more than 15 envelopes in the $\ln$ tray at one time.
- Align the envelope edges before inserting them.
- 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.

For best results use HP products.

## transparencies

## preparing to print

1. Pull out the In tray.
2. Slide out both paper guides and 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. Push the transparencies forward until they stop.
6. Slide the paper guides snugly against the transparency paper and slide the tray forward until it stops.

## printing transparencies

1. Open the file you want to print.
2. Click File > Page Setup.
3. Select the following options:

- Page Size: Appropriate size
- Scaling (\%): Appropriate (100 is the default)
- Orientation: Appropriate orientation


## 4. Click OK.

5. Click File > Print.

The hp deskjet 9xx screen appears displaying the General option screen. Click the arrows in the General field to select the following options.
6. Select Paper Type/Quality, then choose the following:

- Paper Type: hp premium inkjet transparency film
- Print Quality: Normal or Best

7. Select Layout, then choose the following:

- Pages Per Sheet: 1 (Normal)
- Print Both Sides: Unchecked

8. Click OK to print.

## printing guidelines

For best results use hp premium inkjet transparency film.


For best results use HP products.

## labels

## preparing to print

1. Pull out the In tray.
2. Slide out both paper guides and 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 20 label sheets—label side down-in the tray.
5. Slide the paper guides snugly against the sheets and push in the tray.


## printing labels

1. Open the file you want to print.
2. Click File > Page Setup.
3. Select the following options:

- Page Size: A4 Letter or US Letter
- Scaling (\%): Appropriate percentage (100 is the default)
- Orientation: Appropriate orientation

4. Click OK.
5. Click File $>$ Print.

The hp deskjet $9 x x$ screen appears displaying the General option screen. Click the arrows in the General field to select the following options.
6. Select Paper Type/Quality, then choose the following:

- Paper Type: plain paper
- Print Quality: Normal

7. Select Layout, then choose the following:

- Pages Per Sheet: 1 (Normal)
- Print Both Sides: Unchecked

8. Click $O K$ to print.

## printing guidelines

- Use only paper labels that are designed specifically for inkjet printers.
- Never place more than 20 sheets of labels in the In tray at one time.
- Use only full sheets of labels.
- Make sure the sheets are not sticky, wrinkled, or pulling away from the protective backing.
- Do not use plastic or clear labels. The ink will not dry when used with these labels.

For best results use HP products.

## business cards, index cards, and other small media

## preparing to print

1. Pull out the In tray, then raise the Out tray.
2. Slide out both paper guides and remove all paper from the tray.
3. Align the media edges.
4. Place no more than 45 cards or other small media in the tray.
5. Push the cards or media forward until they stop, then lower the Out tray.
6. Slide the paper length guides snugly against the edges of the media.
7. Slide the colored fine length guide snugly against the media.
8. Slide the paper width guides snugly against the media.

9. Push in the In tray.
printing business cards, index cards, and other small media
10. Open the file you want to print.
11. Click File $>$ Page Setup.
12. Select the following options:

- Page Size: Appropriate card size
- Scaling (\%): Appropriate percentage (100 is the default)
- Orientation: Portrait

4. Click OK.
5. Click File $>$ Print.

The hp deskjet 9xx screen appears displaying the General option screen. Click the arrows in the General field to select the following options.
6. Select Paper Type/Quality, then choose the following:

- Paper Type: plain paper
- Print Quality: Normal

7. Select Layout, then choose the following:

- Pages Per Sheet: 1 (Normal)
- Print Both Sides: Unchecked

8. Click OK to print.

## printing guidelines

If an out of paper message appears, verify the media is positioned properly in the In tray.


For best results use HP products.

## photographs

## preparing to print

1. Pull out the In tray.
2. Slide out both paper guides and 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-print side down-in the tray.
5. Slide the paper guides snugly against the edges of the photo paper and slide in the tray.


## printing photographs

1. Open the file you want to print.
2. Click File > Page Setup.
3. Select the following options:

- Page Size: Appropriate paper size
- Scaling (\%): Appropriate percentage (100 is the default)
- Orientation: Appropriate orientation

4. Click OK.
5. Click File $>$ Print.

The hp deskjet $9 x x$ screen appears displaying the General option screen. Click the arrows in the General field to select the following options.
6. Select Paper Type/Quality, then choose the following:

- Paper Type: Appropriate photo paper
- Print Quality: Best

7. Select Layout, then choose the following:

- Pages Per Sheet: 1 (Normal)
- Print Both Sides: Unchecked

8. Click $O K$ to print.

## printing guidelines

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

See also:
problems with printouts

## greeting cards

## preparing to print

1. Pull out the In tray, then raise the Out tray.
2. Slide out both paper guides and 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, then lower the Out tray.
6. Slide the paper guides snugly against the edges of the cards and slide in the tray.


## printing greeting cards

1. Open the file you want to print.
2. Click File > Page Setup.
3. Select the following options:

- Page Size: Appropriate card size
- Scaling (\%): Appropriate percentage (100 is the default)
- Orientation: Portrait

4. Click OK.
5. Click File > Print.

The hp deskjet $9 x x$ screen appears displaying the General option screen. Click the arrows in the General field to select the following options.
6. Select Paper Type/Quality, then choose the following:

- Paper Type: Appropriate greeting card paper
- Print Quality: Normal

7. Select Layout, then choose the following:

- Pages Per Sheet: 1 (Normal)
- Print Both Sides: Select if appropriate

8. Click OK to print.

## printing guidelines

- Unfold pre-folded cards, then place them in the In tray.
- If an out of paper message appears, verify the media is positioned properly in the In tray.

For best results use HP products.

See also:
manual two-sided printing

## posters

## preparing to print

1. Pull out the In tray.
2. Slide out both paper guides and 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 and slide in the tray.

## printing posters

1. Open the file you want to print.
2. Click File > Page Setup.
3. Select the following options:

- Page Size: Appropriate size
- Scaling (\%): Appropriate percentage (100 is the default)
- Orientation: Appropriate orientation

4. Click OK.
5. Click File $>$ Print.

The hp deskjet $9 x x$ screen appears displaying the General option screen. Click the arrows in the General field to select the following options.
6. Select Paper Type/Quality, then choose the following:

- Paper Type: plain paper
- Print Quality: Normal

7. Select Layout, the choose the following:

- Tiling (in Multiple Pages Per Sheet drop-down list): Select this option
- Tiling Size: $2 \times 2,3 \times 3$, or $4 \times 4$
- Print Border: Appropriate
- Print Both Sides: Unchecked

8. Click OK to print.

## printing guidelines

Trim the edges on the sheets and tape the sheets together after printing.


For best results use HP products.

## banners

## preparing to print

1. Pull out the In tray.
2. Slide out both paper guides and remove all paper from the tray.
3. Raise the Out tray and slide the paper guides snugly against the paper. Leave the Out tray up.
4. Select up to 20 sheets of banner paper. Remove and discard any perforated strips.
5. Place the banner paper in the In tray with the unattached edge of the paper facing the printer.
6. Push in the tray.


## printing banners

1. Open the file you want to print.
2. Click File > Page Setup.
3. Select the following options:

- Page Size: US Letter Banner or A4 Letter Banner
- Scaling (\%): Appropriate percentage (100 is the default)
- Orientation: Appropriate orientation


## 4. Click OK.

5. Click File $>$ Print.

The hp deskjet 9xx screen appears displaying the General option screen. Click the arrows in the General field to select the following options.
6. Select Paper Type/Quality, then choose the following:

- Paper Type: plain paper
- Print Quality: Normal

7. Select Layout, then choose the following:

- Pages Per Sheet: 1 (Normal)
- Print Both Sides: Unchecked

8. Click OK to print.

## printing guidelines

Use hp banner paper for best results.


For best results use HP products.

See also:
problems with printouts

## iron-on transfers

## preparing to print

1. Pull out the In tray.
2. Slide out both paper guides and 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 and push in the tray.


## printing iron-on transfers

1. Open the file you want to print.
2. Click File > Page Setup.
3. Select the following options:

- Page Size: Appropriate size
- Scaling (\%): Appropriate percentage (100 is the default)
- Orientation: Appropriate orientation


## 4. Click OK.

5. Click File $>$ Print.

The hp deskjet 9xx screen appears displaying the General option screen. Click the arrows in the General field to select the following options.
6. Select Paper Type/Quality, then choose the following:

- Paper Type: hp premium inkjet paper
- Print Quality: Best

7. Select Layout, then choose the following:

- Pages Per Sheet: 1 (Normal)
- Print Both Sides: Unchecked

8. Click OK to print.

## printing guidelines

- When printing a document with a mirror-image, the text and pictures are horizontally reversed from what you see on the computer screen.
- Use hp iron-on t-shirt transfers for best results.


For best results use HP products.

## manual two-sided printing

## preparing to print

1. Pull out the In tray.
2. Remove all paper from the Out tray.
3. Place paper in the In tray.
4. Slide the paper guides snugly against the edges of the paper.
5. Push in the tray.

## printing manually

1. Open the file you want to print.
2. Click File > Page Setup.
3. Select the following options:

- Page Size: Appropriate size
- Scaling (\%): Appropriate percentage (100 is the default)
- Orientation: Appropriate orientation

4. Click OK.
5. Click File $>$ Print.

The hp deskjet 9xx screen appears displaying the General option screen.
Click the arrows in the General field to select the following options.
6. Select Paper Type/Quality, then choose the following:

- Paper Type: Appropriate type
- Print Quality: Normal

7. Select Layout, then choose the following:

- Pages Per Sheet: 1 (Normal)
- Print Both Sides: Select this option
- Binding: Appropriate book or tablet style icon
- Manual: Select this option

8. Click OK to print.

Follow the instructions displayed on your screen when prompted to reload the paper.


Book binding


Tablet binding
9. Click Continue when the paper is properly reloaded.

## printing guidelines

- Print two-sided documents using one of the following methods:
- Attach the Rear Access Door for manual two-sided printing
- Attach the Automatic Two-Sided Printing Module for automatic twosided printing.
- 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.


For best results use HP products.

## See also:

automatic two-sided printing module

## special features

- infrared printing feature
- automatic two-sided printing module
- automatic paper-type sensor


## infrared printing feature

## using infrared printing with a PowerBook

If your PowerBook is equipped with infrared technology that uses the IrDA protocol, you can establish a wireless TCP/IP or AppleTalk connection. Use one of the following methods to locate instructions for using infrared communication with the PowerBook:

- See the reference guide or instructions that came with the Powerbook.
- Log onto the PowerBook Website or contact customer support.
- Log onto the Infrared Data Association (IrDA) website at: http://www.irda.org.


## printing from a PowerBook

1. Turn on the printer.
2. Locate the infrared lens on the PowerBook.
3. Align the PowerBook'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.
4. Remove any obstacles between the two devices.

The infrared light begins to blink when the devices are correctly aligned.
5. Send the file to print following normal print procedures.

The infrared light on the printer displays a solid beam during the transfer process. When printing is complete, the light begins to blink.


If the PowerBook is moved out of range of the printer's infrared lens at any time during the printing process, the infrared light turns off and the printer stops printing. Realign the devices within 3-30 seconds, and the print job will resume.

## infrared printing with a Palm Pilot

1. Locate the infrared lens on the Palm Pilot.
2. Align the Palm Pilot's infrared lens with the printer's infrared lens.

The Palm Pilot 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 Pilot 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 by the printing program when printing.

## infrared printing with an hp photosmart digital camera

1. Locate the infrared lens on the digital camera.

See the camera's operating manual for the location of the infrared lens.
2. Align the camera's infrared lens with the printer's infrared lens.

The camera 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 camera and printer.
4. Send a photo to print following normal sending or sharing procedures of the camera. See the camera's operating manual for instructions. The infrared light projects a solid beam on the printer during the information transfer process. When the information transfer is completed, the light turns off.

## automatic two-sided printing module

## preparing to print

1. Pull out the In tray.
2. Slide out both paper guides and remove all paper from the tray.
3. Place one of the following paper types in the tray:

- hp plain paper
- hp bright white inkjet paper
- hp premium inkjet heavyweight paper
- hp textured greeting card paper
- hp professional brochure paper, glossy or matte
- hp premium plus photo paper, glossy or matte

$\stackrel{\square}{\square=3}$Not all paper types, weights, and sizes can be used with the Automatic Two-Sided Printing Module. Use one of the paper types listed above when using the Automatic Two-Sided Printing Module.
4. Push the paper forward until it stops.
5. Slide the paper guides snugly against the edges of the paper and push in the In tray.

## printing with the automatic two-sided printing module

1. Open the file you want to print.
2. Click File > Page Setup.
3. Select the following options:

- Page Size: Appropriate size
- Scaling (\%): Appropriate percentage (100 is the default)
- Orientation: Appropriate orientation
- Two-Sided Safe Margins: Select this option


## 4. Click OK.

5. Click File $>$ Print.

The hp deskjet 9xx screen appears displaying the General option screen. Click the arrows in the General field to select the following options.
6. Select Paper Type/Quality, then choose the following:

- Paper Type: Appropriate type
- Print Quality: Normal

7. Select Layout, then choose the following:

- Pages Per Sheet: 1 (Normal)
- Print Both Sides: Select this option
- Binding: Appropriate book or tablet style icon
- Automatic: Select this option

8. Click OK to print.

The printer pauses while the first side of the printed page dries. Once it is dry, the other side of the page is printed and released into the Out tray.

See also:
manual two-sided printing

## automatic paper-type sensor

The Automatic Paper-Type Sensor automatically determines the correct paper type for most paper or media placed in the In tray. This feature, particularly when using HP paper and media, provides the best printing results.

## using the automatic paper-type sensor

1. Open the file you want to print.
2. Click File $>$ Print.

The hp deskjet $9 x x$ screen appears displaying the General option screen. Click the arrows in the General field to select the following options.
3. Select Paper Type/Quality, then choose the following:

- Paper Type: Automatic
- Print Quality: Normal or appropriate option

4. Click OK to print.

An blue optical sensor light scans the first page one or more times to determine the best paper type setting. Once determined, the page is printed.


The Automatic Paper-Type Sensor works best with HP media so your printer can quickly select the appropriate paper type.

## turning off the automatic paper-type sensor

1. Open the file you want to print.
2. Click File $>$ Print.

The hp deskiet $9 x x$ screen appears displaying the General option screen. Click the arrows in the General field to select the following options.
3. Select Paper Type/Quality, then choose the following:

- Paper Type: Any paper type other than Automatic
- Print Quality: Normal or appropriate option

4. Click OK to print.

## product maintenance

- print cartridge status light
- replacing print cartridges
- automatically cleaning print cartridges
- manually cleaning print cartridges
- cleaning the printer case
- refilling print cartridges
- maintaining print cartridges
- print cartridge part numbers
- using the hp deskjet utility


## print cartridge status light

## understanding the print cartridge status light

The Print Cartridge Status light flashes when one or both of the print cartridges are low on ink, improperly installed, or malfunctioning. This light also flashes if the wrong print cartridge type is used.


## 1. print cartridge status light

If the ink level is low in a print cartridge, the Print Cartridge Status light stops flashing when the printer's top cover is opened. If the problem is not related to low ink, the light continues to flash after the cover is opened.

## checking the print cartridge status

Open the printer's top cover when the Print Cartridge Status light flashes. The yellow arrow on the print cartridge cradle points to one of five Print Cartridge Status icons revealing the exact nature of the problem.


1. tri-color print cartridge problem icon 2. black cartridge problem icon
2. tri-color print cartridge low-ink icon 4. black cartridge low-ink icon
3. cartridges OK icon 6 . yellow indicator arrow
troubleshooting problems with the tri-color or black print cartridge
If the yellow arrow points to a print cartridge problem icon, the print cartridge is either missing, improperly installed, defective, or is the wrong print cartridge for the printer. To correct the problem:
4. Insert the proper print cartridge if one is missing.

The printer needs both a black print cartridge and a color print cartridge.
2. Remove and reinsert the print cartridge if both print cartridges are installed.
3. Verify that the correct print cartridges are installed if there is still a problem.
4. Replace the cartridges if the problem persists.
solving problems with low ink
If the arrow points to the color or the black low ink icon, replace the relevant print cartridge.
verifying that the problem is solved
If the arrow points to the print cartridge OK icon, both print cartridges are operational and the problem is solved.

See also:
print cartridge part numbers

## replacing print cartridges

Before buying replacement print cartridges, verify the correct part numbers. When a print cartridge is empty, leave the empty print cartridge in the print cartridge cradle until it is replaced. The printer requires both print cartridges.

AWarning! Keep both new and used print cartridges out of the reach of children.

To replace a print cartridge:

1. Verify that the Out tray is down.
2. Press the Power button to turn on the printer.
3. Open the top cover.

The cradle moves to the center of the printer.
4. Raise the cradle latch.
5. Lift the print cartridge out of the print cartridge cradle and discard it.


1. out tray (in down position) 2. press Power button 3. open top cover
2. raise cradle latch 5 . lift out cartridge
3. Remove the replacement print cartridge from its packaging and carefully remove the protective vinyl tape.

Caution! Do not touch the print cartridge ink nozzles or copper contacts. Touching these parts will result in clogs, ink failure, and bad electrical connections. In addition, do not remove the copper strips. They are required electrical contacts.


1. black print cartridge 2. tri-color print cartridge 3 . ink nozzles 4 . copper contacts-do not touch or remove the copper contacts 5 . protective vinyl tape-remove only the protecfive vinyl tape
2. Insert the print cartridge firmly into the cradle.
3. Secure the cradle latch.

You hear a click when the latch is fully secured.
9. Close the top cover.

- A calibration page prints. The printer generates a calibration page to test print quality each time a print cartridge is installed.
- If you are in the middle of printing and stop to change a print cartridge, the calibration page prints after the print job is complete.
If the Print Cartridge Status light continues to blink after installing a new print cartridge, check the part number on the cartridge to make sure the correct cartridge is installed.

See also:
print cartridge part numbers

## automatically cleaning print cartridges

If your printed pages are missing lines or dots, or if they contain ink streaks, the print cartridges need to be cleaned.
Print cartridges are cleaned automatically using the following procedure:

1. Click Macintosh HD > Utilities > hp deskjet > hp deskjet utility.
2. Select the Clean panel, then click the Clean button.

Follow the on-screen directions.
If your printouts are still missing lines or dots after cleaning, the ink level may be low in one or both of the print cartridges. If so, one or both print cartridges may need to be replaced.

If ink streaks still appear on your printouts after cleaning, the print cartridges and print cartridge cradle may need to be cleaned manually.

Only clean print cartridges when it is necessary. Unnecessary cleaning wastes ink and shortens the life of the cartridge.

See also:
using the hp deskjet utility replacing print cartridges
cleaning the printer case

## manually cleaning print cartridges

If the printer is used in a dusty environment, a small amount of debris may accumulate inside the case. Debris can include dust, hair, carpet, or clothing fibers. When it gets on the print cartridges and cradle, it can cause ink streaks and smudges on printed pages. Ink streaking is easily corrected by manually cleaning the cartridges and cradle.

## gathering cleaning supplies

You will need the following items to clean the print cartridges and cradle:

- Distilled or bottled water. Tap water contains contaminants that damage print cartridges.
- Cotton swabs or other soft, lint-free material that will not stick to the cartridges.
Be careful not to get ink on your hands or clothing as you clean.


## preparing to clean

Remove the print cartridges from the printer before cleaning.

1. Press the Power button to turn on the printer; raise the top cover.

The print cartridges move to the center of the printer.
2. Disconnect the power cord from the back of the printer.
3. Remove the print cartridges and place them on a piece of paper with the ink nozzle plate facing up.
See the illustration in "cleaning the print cartridges and print cartridge cradle" for the location of the ink nozzle plate.

Do not leave the cartridges outside the printer for more than 30 minutes.
Caution! Do not touch the print cartridge ink nozzles or copper contacts. Do not remove the copper strips.

## cleaning the print cartridges and print cartridge cradle

1. Dip the end of a clean cotton swab into the distilled water and remove any excess water.
2. Clean the face and edges of the first print cartridge with the swab, as shown in the following illustration.
Do Not wipe the nozzle plate.

3. nozzle plate 2. clean these areas
4. Inspect the face and edges of the print cartridge for fibers.

Repeat steps 1 and 2 above if fibers are still present.
4. Repeat the cleaning process for the other print cartridge.
5. Wipe the underside of the print cartridge cradle walls using clean, moistened cotton swabs.
Repeat this process until no ink residue appears on a clean swab.


1. print carridge cradle 2 . cradle wall
2. Reinsert the print cartridges and close the printer's top cover.
3. Reconnect the power cord to the back of the printer.
4. Print a test page.
a. Click Macintosh HD > Utilities > hp deskjet > hp deskjet utility.
b. Select the Test panel, then click the Test button.
5. Repeat the cleaning procedure if smeared ink still appears on the printouts.

## cleaning the printer case

The printer ejects ink onto paper in a fine mist, and small amounts of ink may be deposited on the printer case over time. Follow these guidelines when cleaning the outside of the printer:

- Use a soft damp cloth to remove dust, smudges, stains, and spilled ink from the printer case exterior. Use water only. Do not use household cleaners or detergents.
- Do not clean the printer's interior. Keep all liquids away from the interior.
- Do not lubricate the rod on which the print cartridge cradle moves. It is normal to hear noise as the cradle moves back and forth on the rod when the printer is new. The noise decreases with use.

The printer should be handled and stored in an upright, level position for maximum performance and reliability.

## refilling print cartridges

Do not refill HP print cartridges. Refilling print cartridges causes the electronic and mechanical components of the print cartridge to exceed their normal life cycle. It also creates many potential problems, such as:

- Poor print quality. Non-HP inks can contain elements that clog the cartridge nozzles and cause inconsistent print quality. Non-HP inks can also contain elements that corrode the cartridges' electrical components, resulting in poor printouts.
- Potential damage. Ink from a refilled cartridge can leak onto the electrical components in the printer. This can cause severe printer damage, resulting in downtime and repair costs.

Caution! Damage that results from modifying or refilling HP print cartridges is specifically excluded from HP printer's warranty coverage.

To get the best performance from your printer, Hewlett-Packard recommends using only genuine factory-filled HP print cartridges.

See also:
print cartridge part numbers

## maintaining print cartridges

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

- Keep all print cartridges in their sealed packages until they are needed. Print cartridges should be stored at room temperature (60-78 degrees $F$ or 15.6-26.6 degrees C).
- If print cartridges have been removed from their sealed packages and not used, store the cartridges in an airtight plastic container. Store print cartridges with the nozzle-side up. Do not allow anything to touch the nozzles.
- If the vinyl tape has been removed from the print cartridge, do not attempt to reattach it. Reattaching the tape will damage the print cartridge.
- Once print cartridges are installed in the printer, leave them in the print cartridge cradle unless they are being manually cleaned. This prevents ink from evaporating or clogging the print cartridges.

Caution! Do not unplug the printer until printing is complete and the print cartridge cradle returns to the home position on the right side of the printer. Print carrridges dry out if not stored in the home position.

## print cartridge part numbers

When replacing print cartridges for your HP Deskjet 9xx series printer, buy print cartridges with the following part numbers:

- Black: HP 51645 Series or HP No. 45
- Tri-Color: HP C6578 Series or HP No. 78


## using the hp deskjet utility

The hp deskjet Utility provides options which affect printing style and output. It contains a number of useful tools to calibrate the printer, clean the print cartridges, print a test page, and find Website support information.

## accessing the hp deskjet utility

1. Locate the Macintosh HD icon on the desktop.
2. Click Macintosh HD > Utilities > hp deskjet > hp deskjet utility.

## viewing the hp deskjet utility panels

There are seven panels on the Utility screen. Select the panels to view the options available:

- The WOW! panel allows you to print a sample page to view the output quality of the printer.
- The Ink Level panel verifies the ink levels on the print cartridges.
- The Test panel allows you to print a test page.
- The Clean panel allows you to clean the print cartridges when your printed output is streaked or poor.
- The Calibrate panel aligns the print cartridges to improve print quality.
- The Support panel provides a Website address where you can find information about HP products and supplies, and support for the HP product you are using.
- The Register panel allows you to access the HP Website to register your HP Deskjet printer.


## solve a problem

- printer lights are flashing
- printer is not printing
- printer is too slow
- problems with printouts
- problems with the infrared printing feature
- problems with the automatic two-sided printing module
- problems with the automatic paper-type sensor


## printer lights are flashing

Flashing lights indicate the printer status.

## power light

The printer may be receiving data and is preparing to print. The light stops flashing when the printer has finished receiving data.

## resume light

printer may be out of paper

1. Place paper in the In tray.
2. Press the Resume button on the front of the printer.
a paper jam occurs when the rear access door is used
3. Remove the paper from the In and Out trays.
4. Press the Resume button.

If you are printing labels, verify that a label is not stuck inside the printer.
3. Print the document if the paper jam is cleared.

If the paper jam is not clear, proceed to step 4.
4. Open and remove the Rear Access Door.
5. Remove the paper jam from the printer.
6. Replace and close the Rear Access Door.
7. Press the Resume button.
manually printing the first side of a two-sided document

1. Follow the onscreen instructions for inserting the paper to print the second side.
2. Press the Resume button.

## print cartridge light

- The top cover is open. Close the top cover.
- There may be a problem with one of the print cartridges.


## all lights are flashing

The printer may need to be restarted.

1. Press the Power button to turn off the printer.
2. Press the Power button to turn on the printer.

Proceed to step 3 if the lights continue to flash.
3. Press the Power button to turn off the printer.
4. Disconnect the printer from the power source.
5. Reconnect the printer to the power source.
6. Press the Power button to turn on the printer.

See also:
print cartridge status light
If you continue to have problems, contact HP Customer Care.

## printer is not printing

## paper does not come out of the printer

Follow these instructions to correct the problem.
check the printer
Verify the following:

1. The printer is connected to the power source.
2. The cable connections are secure.
3. The printer is turned on.
4. The media is correctly placed in the In tray.
5. The printer's top cover is closed.
6. The Rear Access Door is attached.
check the printer lights
7. Lift the printer cover to verify that the print cartridges are properly installed if the Print Cartridge Status light is blinking.
8. If the Power light is blinking, the printer is in the process of printing.
9. If the Resume light is blinking, press the Resume button. reinstall the printer software
See the Quick Start setup poster for more information.

## paper jams when using the rear access door

1. Remove the paper from the In and Out trays.
2. Press the Resume button on the front of the printer.
3. If you are printing labels, verify that a label did not become detached from the label sheet while passing through the printer.
4. Print the document if the paper jam is cleared.

Proceed to step 5 if the paper jam is not cleared.
5. Open the Rear Access Door by turning the knob counter-clockwise and removing the door.

6. Remove the paper jam, then replace the Rear Access Door.
7. Print the document.

See also:
printing with the hp deskjet printer

## printer does not turn on

The printer may have drawn too much power.

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

If you continue to have problems, contact HP Customer Care.

## printer is too slow

The print speed and overall performance of the printer can be affected by several variables.

## computer does not meet system requirements

1. Verify the computer's RAM and processor speed.

See "Product Specifications" for more information.
2. Close all unnecessary soffware programs.

Too many software programs may be running at the same time.
3. 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.

## printer software is outdated

1. Verify the printer driver being used.
2. Log onto HP's Website to download the most recent soffware updates for the printer. See the Quick Reference Guide for Website information.

## complex documents, graphics, or photographs are printing

You are printing a complex document. Documents containing graphics or photographs print slower than text documents.

See also:
printing with the hp deskjet printer
using the hp deskjet utility
product specifications for the hp deskjet 990 series printer
product specifications for the hp deskjet 980 series printer product specifications for the hp deskjet 960 series printer

## 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 instead of a hub, or
- When the printer is attached to a hub, do not use other USB devices also attached to the hub while printing.


## automatic paper type option is enabled

When the Automatic option is enabled, the printer takes a few seconds to scan the first page of the print job. This is done to determine the appropriate paper type. To increase the print speed, turn off the Automatic Paper-Type Sensor.

See also:
automatic paper-type sensor
If you continue to have problems, contact HP Customer Care.

## problems with printouts

## blank pages are printing

The printer may process pages containing no text or images if:

- One or both print cartridges is empty
- The vinyl tape is not removed from the print cartridge
- A fax is being printed
check the print cartridges

1. Raise the printer's top cover to view the Print Cartridge Status icons.
2. Replace the print cartridge if it is empty.
3. Remove the protective piece of vinyl tape if it is still attached to the print cartridge.
save a facsimile (fax) file in graphic format
4. Save the fax in a graphic format with a .tiff file name extension.
5. Copy and insert the graphic in a word processing document.
6. Save the document.
7. Print the document in the word processing program.

See also:
replacing print cartridges
If you continue to have problems, contact HP Customer Care.
document is printed off-center or at an angle

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

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

Follow these instructions to reset paper orientation, page size, print margins, and other options:

1. Open the file you want to print.
2. Click File > Page Setup.
3. Select the following options:

- Page Size: Appropriate size (select Edit Custom Paper Sizes to verify that margins are set within the printable area.)
- Scaling (\%): Appropriate percentage (verify that text and graphics are correctly scaled)
- Orientation: Appropriate orientation

4. Click OK.
5. Click File $>$ Print.

The hp deskjet $9 x x$ series screen appears displaying the General option screen. Click the arrows in the General field to select the following options.
6. Select Paper Type/Quality, then choose the following:

- Paper Type: Appropriate type
- Print Quality: Appropriate quality

7. Select Layout, then choose the following:

- Pages Per Sheet: 1 (Normal)
- Print Both Sides: Unchecked

8. Click OK to print.

See also:
minimum printing margins

## 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 application.

## print quality is poor

Use one or more of the following methods to improve print quality:

1. Verify the print cartridge status and replace empty print cartridges.
2. Use media designed for HP Deskjet printers to improve print quality.
3. Verify that media is loaded correctly with the print side down.
4. Verify that you have selected the correct paper type and quality in the PaperType/Quality option on the Page Setup screen.
5. Select Normal or Best, rather than Draft, in the Paper Type/Quality option in the Page Setup Screen.
6. Align the print cartridges. Select the Calibrate panel on the hp deskjet utility screen, then click the Align button.
7. Decrease ink density or drying time.
a. Click File > Print > Paper Type/Quality.
b. Click the Ink tab.
c. Use the sliders to adjust ink density and ink dry time.

## photos are not printing correctly

1. Confirm that the photo media is placed in the In tray with the print side down.
2. Slide the photo media forward until it stops.
3. Slide the paper guides snugly against the photo media and push in the tray.
4. Open the file you want to print.
5. Click File $>$ Print.

The hp deskjet 9xx series screen appears displaying the General option screen. Click the arrows in the General field to select the following options.
6. Select Paper Type/Quality, then choose the following:

- Paper Type: Appropriate hp photo paper
- Print Quality: Best, then select High Resolution Photo for better print quality

7. Click OK to print.

## banners are not printing correctly

1. Verify that the Out tray is raised.
2. Verify that either A4 Letter Banner or US Letter is selected on the hp deskjet 9xx Page Setup screen.
3. Verify the paper position and type:

- 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.

If you continue to have problems, contact HP Customer Care.

## problems with the infrared printing feature

## connection cannot be established or printer is taking too long to print

Correct the problem by performing one or more of these options:

- Follow the instructions that came with the PowerBook to set it up for infrared printing.
- Verify that the device is IrDA compliant. Look for an IrDA symbol on the device or see the user's guide for information.
- Verify that no bright light is shining directly into either infrared lens.
- Position the device no more than one meter (three feet) from the printer. Align it within a 30 -degree total angle from the printer's infrared lens, then verify the following:
- The device and printer are correctly aligned.
- The path between the two infrared devices is clear of obstacles.
- The devices' infrared lenses are clean and free of dirt and grease.


## infrared light is flashing

The flashing infrared light is not a signal that something is wrong with the infrared print feature. It confirms that a connection has been established between the printer and the laptop or notebook.

## printer stopped printing

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

## printer prints only a single calendar appointment

The Palm Pilot may not have an enhanced printing application installed. You must 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.

See also:
infrared printing feature
If you continue to have problems, contact HP Customer Care.

## problems with the automatic two-sided printing module

## binding margin is in the wrong place

You may have chosen an incorrect paper orientation or binding margin.

1. Click File > Page Setup.
2. Select the following options:

- Orientation: Appropriate orientation
- Two-Sided Safe Margins: Select this option

3. Click OK.
4. Click File > Print.

The hp deskjet $9 x x$ series screen appears displaying the General option screen. Click the arrows in the General field to select the following options.
5. Select Layout, then select the appropriate binding style icon for the document you are printing.
6. Click OK to print.
no page prints
The Rear Access Door or the Automatic Two-Sided Printing Module may not be attached.

1. Attach either the Rear Access Door or the Automatic Two-Sided Printing Module to the back of the printer.
2. Reprint the document.
paper jams occur inside the automatic two-sided printing module
3. Remove the paper from the In and Out trays.
4. 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 button on top of the Automatic Two-Sided Printing Module and lower the Rear Access Door.

5. Remove the paper jam from the module and close the Rear Access Door.
6. Turn on the printer.
7. Reprint the document.

## paper jams occur in the printer when the automatic two-sided printing module is attached

1. Remove the paper from the In and Out trays.
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. Simultaneously press the release buttons located on each side of the Automatic Two-Sided Printing Module.
5. Remove the module.

6. Remove the paper jam and replace the module.

See the Quick Start setup poster for instructions on installing the automatic two-sided printing module.
7. Turn on the printer.
8. Reprint the document.

## automatic option for two-sided printing cannot be selected in the layout dialog box

The Automatic Two-Sided Printing Module may not be enabled.

1. Click File > Page Setup.
2. Select the Two-Sided Safe Margins option.
3. Click OK.
4. Click File > Print.

The hp deskjet 9xx series screen appears displaying the General option screen. Click the arrows in the General field to select the following options.
5. Select Layout, then choose the following:

- Print Both Sides: Select this option
- Binding: Appropriate book or tablet style icon

6. Make other formatting selections, if appropriate, then click Print.

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

Use the following solutions:

- Verify that you have selected the Automatic option in Layout.
- Detach, then reattach the Automatic Two-Sided Printing Module.
- Print the document using the manual two-sided printing feature.
- Use a media type supported by the Automatic Two-Sided Printing Module.
- Use a media size supported by the Automatic Two-Sided Printing Module.
- Turn on Background Printing.

See also:
automatic two-sided printing module
manual two-sided printing
printing with the hp deskjet printer
If you continue to have problems, contact HP Customer Care.

## problems with the automatic paper-type sensor

## print quality is different when the automatic option is selected

The print quality is automatically set to Normal when the Automatic PaperType Option is selected. The print quality may improve when a specific paper type is selected. Follow these instructions to select a specific paper type:

1. Open the file you want to print.
2. Click File > Print.

The hp deskjet 9xx series screen appears displaying the General option screen. Click the arrows in the General field to select the following options.
3. Select Paper Type/Quality, then choose any type other than Automatic in the Paper Type option.
4. Click OK to print.

## optimal paper mode is not used when the automatic option is selected

1. Verify that the paper is free of scratches or wrinkles.

The Automatic Paper-Type Sensor is less accurate if the paper is damaged.
2. Manually select the appropriate paper type.

The Automatic Paper-Type Sensor sets the paper type to Plain Paper if you are using one of these media types:

- Letterhead paper
- Stationary that has a printed pattern on the top edge of the paper
- Dark colored paper
- Paper containing metallic fibers


## 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.

See also:
automatic paper-type sensor
If you continue to have problems, contact HP Customer Care.

## product specifications

- product specifications for the hp deskjet 990 series printer
- product specifications for the hp deskjet 980 series printer
- product specifications for the hp deskjet 960 series printer
- infrared printing specifications
- automatic two-sided printing module specifications
- minimum printing margins
- system requirements


## product specifications for the hp deskjet 990 series printer

hp deskjet 990cxi model no. C6455A
hp deskjet 990cse model no. CC6455B
black text print speed
Draft: Up to 17 pages per minute
mixed text with color graphics print speed
Draft: Up to 13 pages per minute
black truetype text resolution
(depending on paper type)
Draft: $300 \times 300$ dpi
Normal: $600 \times 600$ dpi
Best: $600 \times 600$ dpi
color resolution
(depending on paper type)
Draft: $300 \times 300$ dpi + PhotoRE $\dagger$
Normal: $600 \times 600 \mathrm{dpi}+$ PhotoRE $\dagger$
Best: $600 \times 600$ dpi + PhotoREt
photo paper printing resolution
PhotoREt: $2400 \times 1200$ dpi
print technology
Drop-on-Demand thermal inkjet printing
software compatibility
USB connection: Mac OS version 8.6 or later
AppleTalk connection: Mac OS version 7.6.1 or later
duty cycle
5,000 pages per month
memory
8MB built-in RAM

## buttons/Lights

Cancel button
Print cartridge status light
Resume button and light
Power button and light
Infrared light

## I/O interface

Centronics parallel, IEEE 1284-Compliant with 1284-B receptacle Universal Serial Bus (USB)
IrDA version 1.1, 4 MBps

## dimensions

With Automatic Two-Sided Printing Module:
440 mm wide $\times 196 \mathrm{~mm}$ high $\times 435 \mathrm{~mm}$ deep
17. 32 in wide $\times 7.72$ in high $\times 17.13$ in deep

Without Automatic Two-Sided Printing Module:
440 mm wide $\times 196 \mathrm{~mm}$ high $\times 375 \mathrm{~mm}$ deep
17.32 in wide $\times 7.72$ in high $\times 14.76$ in deep
weight
With Automatic Two-Sided Printing Module:
$6.65 \mathrm{~kg}(14.65 \mathrm{lb})$ 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 noncondensing
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 noncondensing

Storage conditions:
Temperature: -40 to 140 degrees $F$, -40 to 60 degrees $C$
power consumption
2 watts maximum when off
4 watts average non-printing
40 watts average when printing

## power requirements

Input voltage: 100 to $240 \mathrm{Vac}( \pm 10 \%)$
Input frequency: $50 / 60 \mathrm{~Hz}(+3 \mathrm{~Hz})$
Accommodates the worldwide range of AC line voltages and frequencies.
declared noise emissions in accordance with ISO 9296
Sound power level, LWAd (1B=10 dB):
6.0 dB in normal mode

Sound pressure level, LpAm (bystander positions):
49 dB in normal mode
alignment
Skew:
$+/-.006 \mathrm{~mm} / \mathrm{mm}(.006 \mathrm{in} / \mathrm{in})$ on plain paper
$+/-.010 \mathrm{~mm} / \mathrm{mm}(.010 \mathrm{in} / \mathrm{in})$ on hp transparency films

## media weight

paper:
U.S. Letter: 60 to $90 \mathrm{~g} / \mathrm{m}^{2}$ ( 16 to 24 lb )

Legal: 75 to $90 \mathrm{~g} / \mathrm{m}^{2}$ ( 20 to 24 lb )
envelopes: 75 to $90 \mathrm{~g} / \mathrm{m}^{2}$ ( 20 to 24 lb )
cards: Up to $200 \mathrm{~g} / \mathrm{m}^{2}$ ( 110 lb index max)
banner paper: 60 to $90 \mathrm{~g} / \mathrm{m}^{2}$ ( 16 to 24 lb )
media handling
sheets: up to 150
banners: up to 20 sheets
envelopes: up to 15
cards: up to 45 cards
greeting cards: up to 5 cards
transparencies: up to 30
labels: up to 20 sheets of labels (use only U.S. Letter- or A4-sized sheets) photo paper: up to 20 sheets

Out tray capacity:
Draft: up to 35 sheets
Normal: up to 50 sheets
Best: up to 50 sheets
media size
paper:
U.S. Letter: $216 \times 279 \mathrm{~mm}(8.5 \times 11 \mathrm{in})$

Legal: $216 \times 356 \mathrm{~mm}(8.5 \times 14 \mathrm{in})$
Executive: $184 \times 279 \mathrm{~mm}(7.25 \times 10.5 \mathrm{in})$
A4: $210 \times 297 \mathrm{~mm}$
A5: $148 \times 210 \mathrm{~mm}$
B5-JIS: $182 \times 257 \mathrm{~mm}$
user defined:
Width: 77 to 216 mm ( 3.0 to 8.5 in )
Length: 127 to 356 mm ( 5.0 to 14 in)
banner:
U.S. Letter: $216 \times 279 \mathrm{~mm}(8.5 \times 11 \mathrm{in})$

A4: $210 \times 297 \mathrm{~mm}$
envelopes:
U.S. No. 10: $105 \times 241 \mathrm{~mm}(4.3 \times 9.5 \mathrm{in})$

Invitation A2: $111 \times 146 \mathrm{~mm}(4.37 \times 5.75 \mathrm{in})$
DL: $220 \times 110 \mathrm{~mm}$
C6:114×162 mm
index/greeting cards:
$76 \times 127 \mathrm{~mm}(3 \times 5 \mathrm{in})$
$102 \times 152 \mathrm{~mm}(4 \times 6 \mathrm{in})$
$127 \times 203 \mathrm{~mm}(5 \times 8 \mathrm{in})$
AG: $105 \times 148.5 \mathrm{~mm}$
Hagaki: $100 \times 148 \mathrm{~mm}$
labels:
U.S. Letter: $216 \times 279 \mathrm{~mm}(8.5 \times 11 \mathrm{in})$

A4: $210 \times 297 \mathrm{~mm}$
transparencies:
U.S. Letter: $216 \times 279 \mathrm{~mm}(8.5 \times 11 \mathrm{in})$

A4: $210 \times 297 \mathrm{~mm}$
photo (with tear-off tab): $102 \times 152 \mathrm{~mm}(4 \times 6$ in)
print cartridge part numbers
Black: HP 51645 Series or HP No. 45
Tri-Color: HP C6578B Series or HP No. 78

## product specifications for the hp deskjet 980 series printer

hp deskjet 980cxi model no. C6500A
black text print speed
Draft: Up to 15 pages per minute
mixed text with color graphics print speed
Draft: Up to 12 pages per minute
black truetype text resolution
(depending on paper type)
Draft: $300 \times 300$ dpi
Normal: $600 \times 600$ dpi
Best: $600 \times 600$ dpi
color resolution
(depending on paper type)
Draft: $300 \times 300$ dpi + PhotoRE $\dagger$
Normal: $600 \times 600 \mathrm{dpi}+$ PhotoRE $\dagger$
Best: $600 \times 600 \mathrm{dpi}+$ PhotoREt
photo paper printing resolution
PhotoREt: $2400 \times 1200$ dpi
print technology
Drop-on-demand thermal inkjet printing
software compatibility
USB connection: Mac OS version 8.6 or later
AppleTalk connection: Mac OS version 7.6.1 or later
duty cycle
5,000 pages per month
memory
8MB built-in RAM

## buttons/Lights

Cancel button
Print cartridge status light
Resume button and light
Power button and light

## I/O interface

Centronics parallel, IEEE 1284-Compliant with 1284-B receptacle Universal Serial Bus (USB)

## dimensions

With Automatic Two-Sided Printing Module:
440 mm wide $\times 196 \mathrm{~mm}$ high $\times 435 \mathrm{~mm}$ deep
17. 32 in wide $\times 7.72$ in high $\times 17.13$ in deep

Without Automatic Two-Sided Printing Module:
440 mm wide $\times 196 \mathrm{~mm}$ high $\times 375 \mathrm{~mm}$ deep
17.32 in wide $\times 7.72$ in high $\times 14.76$ in deep

## weight

With Automatic Two-Sided Printing Module:
$6.65 \mathrm{~kg}(14.65 \mathrm{lb})$ without print cartridges

## operating environment

Maximum operating conditions:
Temperature: 41 to 104 degrees $F$, 5 to 40 degrees $C$
Humidity: 15 to 80 percent RH noncondensing
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 noncondensing
Storage conditions:
Temperature: -40 to 140 degrees $F,-40$ to 60 degrees $C$
power consumption
2 watts maximum when off
4 watts average non-printing
40 watts average when printing

## power requirements

Input voltage: 100 to $240 \mathrm{Vac}( \pm 10 \%)$
Input frequency: $50 / 60 \mathrm{~Hz}(+3 \mathrm{~Hz})$
Accommodates the worldwide range of ac line voltages and frequencies.
declared noise emissions in accordance with ISO 9296
Sound power level, LWAd ( $1 \mathrm{~B}=10 \mathrm{~dB}$ ):
6.0 dB in normal mode

Sound pressure level, LpAm (bystander positions):
49 dB in normal mode
alignment
Skew:
$+/-.006 \mathrm{~mm} / \mathrm{mm}(.006 \mathrm{in} / \mathrm{in})$ on plain paper
$+/-.010 \mathrm{~mm} / \mathrm{mm}(.010 \mathrm{in} / \mathrm{in})$ on hp transparency films
media weight
paper:
U.S. Letter: 60 to $90 \mathrm{~g} / \mathrm{m}^{2}$ ( 16 to 24 lb )

Legal: 75 to $90 \mathrm{~g} / \mathrm{m}^{2}(20$ to 24 lb$)$
envelopes: 75 to $90 \mathrm{~g} / \mathrm{m}^{2}$ (20 to 24 lb )
cards: Up to $200 \mathrm{~g} / \mathrm{m}^{2}$ ( 110 lb index max)
banner paper: 60 to $90 \mathrm{~g} / \mathrm{m}^{2}$ ( 16 to 24 lb )
media handling
sheets: up to 150
banners: up to 20 sheets
envelopes: up to 15
cards: up to 45 cards
greeting cards: up to 5 cards
transparencies: up to 30
labels: up to 20 sheets of labels (use only U.S. Letter- or A4-sized sheets)
photo paper: up to 20 sheets
OUT tray capacity:
Draft: up to 35 sheets
Normal: up to 50 sheets
Best: up to 50 sheets
media size
paper:
U.S. Letter: $216 \times 279 \mathrm{~mm}(8.5 \times 11 \mathrm{in})$

Legal: $216 \times 356 \mathrm{~mm}(8.5 \times 14 \mathrm{in})$
Executive: $184 \times 279 \mathrm{~mm}(7.25 \times 10.5 \mathrm{in}$ )
A4: $210 \times 297 \mathrm{~mm}$
A5: $148 \times 210 \mathrm{~mm}$
B5-JIS: $182 \times 257 \mathrm{~mm}$
user defined:
Width: 77 to 216 mm ( 3.0 to 8.5 in )
Length: 127 to 356 mm ( 5.0 to 14 in)
banner:
U.S. Letter: $216 \times 279 \mathrm{~mm}(8.5 \times 11 \mathrm{in})$

A4: $210 \times 297 \mathrm{~mm}$
envelopes:
U.S. No. 10: $105 \times 241 \mathrm{~mm}(4.3 \times 9.5 \mathrm{in})$

Invitation A2: $111 \times 146 \mathrm{~mm}(4.37 \times 5.75 \mathrm{in})$
DL: $220 \times 110 \mathrm{~mm}$
C6: $114 \times 162 \mathrm{~mm}$
index/greeting cards:
$76 \times 127 \mathrm{~mm}(3 \times 5 \mathrm{in})$
$102 \times 152 \mathrm{~mm}(4 \times 6 \mathrm{in})$
$127 \times 203 \mathrm{~mm}(5 \times 8 \mathrm{in})$
AG: $105 \times 148.5 \mathrm{~mm}$
Hagaki: $100 \times 148 \mathrm{~mm}$
labels:
U.S. Letter: $216 \times 279 \mathrm{~mm}(8.5 \times 11 \mathrm{in})$

A4: $210 \times 297 \mathrm{~mm}$
transparencies:
U.S. Letter: $216 \times 279 \mathrm{~mm}(8.5 \times 11 \mathrm{in})$

A4: $210 \times 297 \mathrm{~mm}$
photo (with tear-off tab): $102 \times 152 \mathrm{~mm}(4 \times 6$ in)
print cartridge part numbers
Black: HP 51645 Series or HP No. 45
Tri-Color: HP C6578 Series or HP No. 78

## product specifications for the hp deskjet 960 series printer

hp deskjet 960cxi model no. C8932A
hp deskjet 960cse model no. C8932B
black text print speed
Draft: Up to 15 pages per minute
mixed text with color graphics print speed
Draft: Up to 12 pages per minute
black truetype text resolution
(depending on paper type)
Draft: $300 \times 300$ dpi
Normal: $600 \times 600 \mathrm{dpi}$
Best: $600 \times 600$ dpi
color resolution
(depending on paper type)
Draft: $300 \times 300$ dpi + PhotoREt
Normal: $600 \times 600$ dpi + PhotoRE $\dagger$
Best: $600 \times 600 \mathrm{dpi}+$ PhotoREt
photo paper printing resolution
PhotoREt: $2400 \times 1200$ dpi
print technology
Drop-on-demand thermal inkjet printing
software compatibility
USB connection: Mac OS version 8.6 or later
AppleTalk connection: Mac OS version 7.6.1 or later
duty cycle
5,000 pages per month
memory
8MB built-in RAM

## buttons/Lights

Cancel button
Print cartridge status light
Resume button and light
Power button and light

## I/O interface

Centronics parallel, IEEE 1284-Compliant with 1284-B receptacle Universal Serial Bus (USB)

## dimensions

440 mm wide $\times 196 \mathrm{~mm}$ high $\times 375 \mathrm{~mm}$ deep
17.32 in wide $\times 7.72$ in high $\times 14.76$ in deep

## weight

$5.86 \mathrm{~kg}(12.90 \mathrm{lb})$ without print cartridges

## operating environment

Maximum operating conditions:
Temperature: 41 to 104 degrees $F$, 5 to 40 degrees $C$ Humidity: 15 to 80 percent RH noncondensing
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 noncondensing

Storage conditions:
Temperature: -40 to 140 degrees $F,-40$ to 60 degrees $C$
power consumption
2 watts maximum when off
4 watts average non-printing
40 watts average when printing
power requirements
Input voltage: 100 to $240 \mathrm{Vac}( \pm 10 \%)$
Input frequency: $50 / 60 \mathrm{~Hz}(+3 \mathrm{~Hz})$
Accommodates the worldwide range of ac line voltages and frequencies.
declared noise emissions in accordance with ISO 9296
Sound power level, LWAd ( $1 \mathrm{~B}=10 \mathrm{~dB}$ ):
6.0 dB in normal mode

Sound pressure level, LpAm (bystander positions):
49 dB in normal mode

## alignment

Skew:
$+/-.006 \mathrm{~mm} / \mathrm{mm}(.006 \mathrm{in} / \mathrm{in})$ on plain paper
$+/-.010 \mathrm{~mm} / \mathrm{mm}(.010 \mathrm{in} / \mathrm{in})$ on hp transparency films
media weight
paper:
U.S. Letter: 60 to $90 \mathrm{~g} / \mathrm{m}^{2}$ ( 16 to 24 lb )

Legal: 75 to $90 \mathrm{~g} / \mathrm{m}^{2}$ (20 to 24 lb )
envelopes: 75 to $90 \mathrm{~g} / \mathrm{m}^{2}$ ( 20 to 24 lb )
cards: Up to $200 \mathrm{~g} / \mathrm{m}^{2}$ ( 110 lb index max)
banner paper: 60 to $90 \mathrm{~g} / \mathrm{m}^{2}$ ( 16 to 24 lb )
media handling
sheets: up to 150
banners: up to 20 sheets
envelopes: up to 15
cards: up to 45 cards
greeting cards: up to 5 cards
transparencies: up to 30
labels: up to 20 sheets of labels (use only U.S. Letter- or A4-sized sheets) photo paper: up to 20 sheets

OUT tray capacity:
Draft: up to 35 sheets
Normal: up to 50 sheets
Best: up to 50 sheets
media size
paper:
U.S. Letter: $216 \times 279 \mathrm{~mm}(8.5 \times 11 \mathrm{in})$ Legal: $216 \times 356 \mathrm{~mm}(8.5 \times 14 \mathrm{in})$
Executive: $184 \times 279 \mathrm{~mm}(7.25 \times 10.5 \mathrm{in})$
A4: $210 \times 297 \mathrm{~mm}$
A5: $148 \times 210 \mathrm{~mm}$
B5-JIS: $182 \times 257 \mathrm{~mm}$
user defined:
Width: 77 to 216 mm ( 3.0 to 8.5 in )
Length: 127 to 356 mm ( 5.0 to 14 in )
banner:
U.S. Letter: $216 \times 279 \mathrm{~mm}(8.5 \times 11 \mathrm{in})$

A4: $210 \times 297 \mathrm{~mm}$
envelopes:
U.S. No. 10: $105 \times 241 \mathrm{~mm}(4.3 \times 9.5 \mathrm{in})$

Invitation A2: $111 \times 146 \mathrm{~mm}(4.37 \times 5.75 \mathrm{in})$
DL: $220 \times 110 \mathrm{~mm}$
C6: $114 \times 162 \mathrm{~mm}$
index/greeting cards:
$76 \times 127 \mathrm{~mm}(3 \times 5 \mathrm{in})$
$102 \times 152 \mathrm{~mm}(4 \times 6 \mathrm{in})$
$127 \times 203 \mathrm{~mm}(5 \times 8 \mathrm{in})$
AG: $105 \times 148.5 \mathrm{~mm}$

Hagaki: $100 \times 148 \mathrm{~mm}$
labels:
U.S. Letter: $216 \times 279 \mathrm{~mm}(8.5 \times 11 \mathrm{in})$

A4: $210 \times 297 \mathrm{~mm}$
transparencies:
U.S. Letter: $216 \times 279 \mathrm{~mm}(8.5 \times 11 \mathrm{in})$

A4: $210 \times 297 \mathrm{~mm}$
photo (with tear-off tab): $102 \times 152 \mathrm{~mm}(4 \times 6$ in)
print cartridges
Black: HP 51645 Series or HP No. 45
Tri-Color: HP C6758 Series or HP No. 78

## infrared printing specifications

## range

1 meter (3 feet)
30 degree cone
supported operating systems
Some operating systems supported by infrared technology include:

- Mac OS version 8.6
- Palm


## supported devices

Some of the devices supported by infrared technology include:

- PowerBook computers with infrared capability
- Some personal digital assistants (including the Palm product line)
- Digital cameras with infrared capability
- Cellular phones with infrared capability
supported protocols
IrLPT
JetSend
OBEX
See also:
infrared printing feature


# automatic łwo-sided printing module specifications 

Automatic Two-Sided Printing Module model no. C6463A
duty cycle
5,000 sides of pages per month
dimensions
324 mm (12.75 in) long $\times 133 \mathrm{~mm}(5.25 \mathrm{in})$ wide $\times 111 \mathrm{~mm}(4.37 \mathrm{in})$ high weight
$0.79 \mathrm{~kg}(1.75 \mathrm{lbs})$
declared noise emissions in accordance with ISO 9296
Sound power level, LWAd (1B=10 dB):
6.1 dB in normal mode

Sound pressure level, LpAm (bystander positions):
48 dB in normal mode
media weight
U.S. Letter and A4 paper: 60 to $90 \mathrm{~g} / \mathrm{m}^{2}$ ( 16 to 24 lb )

Cards: up to $160 \mathrm{~g} / \mathrm{m}^{2}$ ( 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, $5 \times 8$ 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: $216 \times 279 \mathrm{~mm}(8.5 \times 11 \mathrm{in})$

Executive: $184 \times 279 \mathrm{~mm}(7.25 \times 10.5 \mathrm{in})$
A4: $210 \times 297 \mathrm{~mm}$
A5: $148 \times 210 \mathrm{~mm}$
B5: $182 \times 257 \mathrm{~mm}$
cards:
$127 \times 203 \mathrm{~mm}$ ( $5 \times 8 \mathrm{in}$ )
user defined size:
minimum: $100 \mathrm{~mm} \times 148 \mathrm{~mm}(3.94 \times 5.83 \mathrm{in})$
maximum: $216 \mathrm{~mm} \times 297 \mathrm{~mm}(8.5 \times 11.7 \mathrm{in})$
media type
hp plain paper or hp bright white inkjet paper:
Letter-size: 500 sheets C1824A
A4-size: 500 sheets C1825A
Letter-size: 250 sheets C5976B
A4-size: 250 sheets C5977B
hp photo quality inkjet paper, matte finish:
Letter-size: 100 sheets C7007A
hp photo quality inkjet paper, semi gloss:
Letter-size: 25 sheets C6983A
A4-size: 25 sheets (Europe) C6984A
A4-size: 25 sheets (Asia) C7006A
hp premium inkjet heavyweight paper:
A4-size: 100 sheets C1853A
hp felt-textured greeting card paper, ivory/half-fold:
Letter-size: 20 sheets and 20 envelopes C6828A
hp professional brochure \& flyer paper, two-sided gloss:
Letter-size: 50 sheets C6817A
A4-size: 50 sheets (Europe) C6816A
A4-size: 50 sheets (Asia) C6819A
hp professional brochure \& flyer paper, two-sided matte finish:
Letter-size: 50 sheets C6955A
See also:
automatic two-sided printing module

## 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. When you used nonstandard paper sizes and select the Edit Custom Paper Sizes in the Page Setup screen, the paper width and length must be set appropriately. Follow these instructions to set printing margins:

1. Open the file you want to print.
2. Click File > Page Setup, then select Edit Custom Paper Sizes in the Page Size field.
3. Select the appropriate width and length settings.

Paper width must be between 77 and $215 \mathrm{~mm}(3 \times 8.5 \mathrm{in})$ and paper length must be between 127 and $356 \mathrm{~mm}(5 \times 14 \mathrm{in})$.
4. Click Done.
5. Click OK to save the new settings.

Use these margin settings for the following paper types:

## 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 ( $\mathbf{3} \times 5$ in, $4 \times 6,5 \times 8$, 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 $\times 11.7 \mathrm{in}]$ )
Left and Right Margins: 3.4 mm ( 0.134 in )
Top Margin: 0.0 mm ( 0.00 in )
Bottom Margin: $0.0 \mathrm{~mm}(0.00 \mathrm{in})$
banners-letter ( $216 \times 279 \mathrm{~mm}$ [8.5 $\times 11 \mathrm{in}]$ )
Left and Right Margins: 6.4 mm ( 0.25 in )
Top Margin: 0.0 mm ( 0.00 in )
Bottom Margin: 0.0 mm ( 0.00 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 should meet the following requirements:

## USB connection

PowerPC Mac OS-based computer with a USB port
Mac OS version 8.6 or later
Minimum 32 MB RAM, 64 MB recommended
8 MB (minimum) available hard-disk space

## AppleTalk connection

68030 or 68040 Mac or PowerPC Mac OS-based computer Mac OS version 7.6.1 or later
Minimum 32 MB RAM, 64 MB recommended
8 MB (minimum) available hard-disk space

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