HP Business Inkjet 2800

User's Guide

HP Business Inkjet 2800 series printer

User's Guide

Safety Information

Always follow basic safety precautions
when using this product to reduce risk of
injury from fire or electric shock.

1 Read and understand all instructions in
the documentation that comes with the
printer.

2 Use only a grounded electrical outlet
when connecting this product to a power
source. If you do not know whether the
outlet is grounded, check with a
qualified electrician.

3 Observe all warnings and instructions
marked on the product.

4 Unplug this product from wall outlets
before cleaning.

5 Do not install or use this product
near water, or when you are wet.

6 Install the product securely on a
stable surface.

7 Install the product in a protected
location where no one can step on or
trip over the line cord, and the line cord
cannot be damaged.

8 If the product does not operate
normally, see Maintaining and
troubleshooting.

9 There are no user-serviceable parts
inside. Refer servicing to qualified
service personnel.

Contents

5 Control panel

6 Maintaining and troubleshooting

A HP supplies and accessories

B Support and warranty

C Printer specifications

D Regulatory information

1 Getting started

Thank you for buying the printer. This guide provides details about how to use the printer and to resolve printer and printing problems.

Finding other resources for the product

You can obtain product information and further troubleshooting resources that are not included in this guide from the following resources:

Resource	Description	Location
Setup poster	Provides illustrated setup information.	A printed version of this document is provided with the printer. Also, an electronic version is available as an Adobe® Acrobat® Portable Document Format (PDF) file on the Starter CD.
Getting started guide	Provides instructions for setting up the printer and information about the warranty and safety issues.	Included as a printed guide in the box with the printer.
Readme file and release notes	Provide late-breaking information and troubleshooting tips.	Included on the Starter CD.
Embedded Web server (network connection)	Allows you to view status information, change settings, and manage the printer from any computer on the network. See Embedded Web server (EWS).	Available through any standard Web browser.
Toolbox (Microsoft® Windows®)	Provides information about printhead health. See Toolbox (Windows) for more information.	Available if you choose an installation option that includes the Toolbox.
Printer-driver onscreen Help (Windows)	Provides an explanation of the features in the printer driver.	Available from the printer driver.
HP Instant Support	Helps you quickly identify, diagnose, and resolve printing problems. See HP Instant Support for more information.	Available through any standard Web browser or through the Toolbox (Windows).
HP Jetdirect Administrator's Guide	Provides information for configuring and troubleshooting the HP Jetdirect print server that is installed in the printer.	Included on the Starter CD.
Control-panel	Provides status, error, and warning information about printer operation.	See Control panel.
Configuration page	Provides information about the printer hardware (such as the firmware version and model number), printer settings, and accessories that are installed (such as memory and trays). If the printer is connected to a network, an additional network configuration page is available.	See Understanding and printing the configuration page.

Resource	Description	Location
System tests and printouts (such the demo page printout and paper-path test)	Provides information to help diagnose problems in the print mechanism and paper path. ● Demo page printout ● Paper-path test	See Administer the printer.
HP websites	Provides the latest printer software, product and support information.	http://www.hp.com/support/businessinkjet2800 http://www.hp.com
HP telephone support	Lists information to contact HP. During the warranty period, this support is often free of charge.	See Telephone support numbers.

Understanding the printer parts

Front view
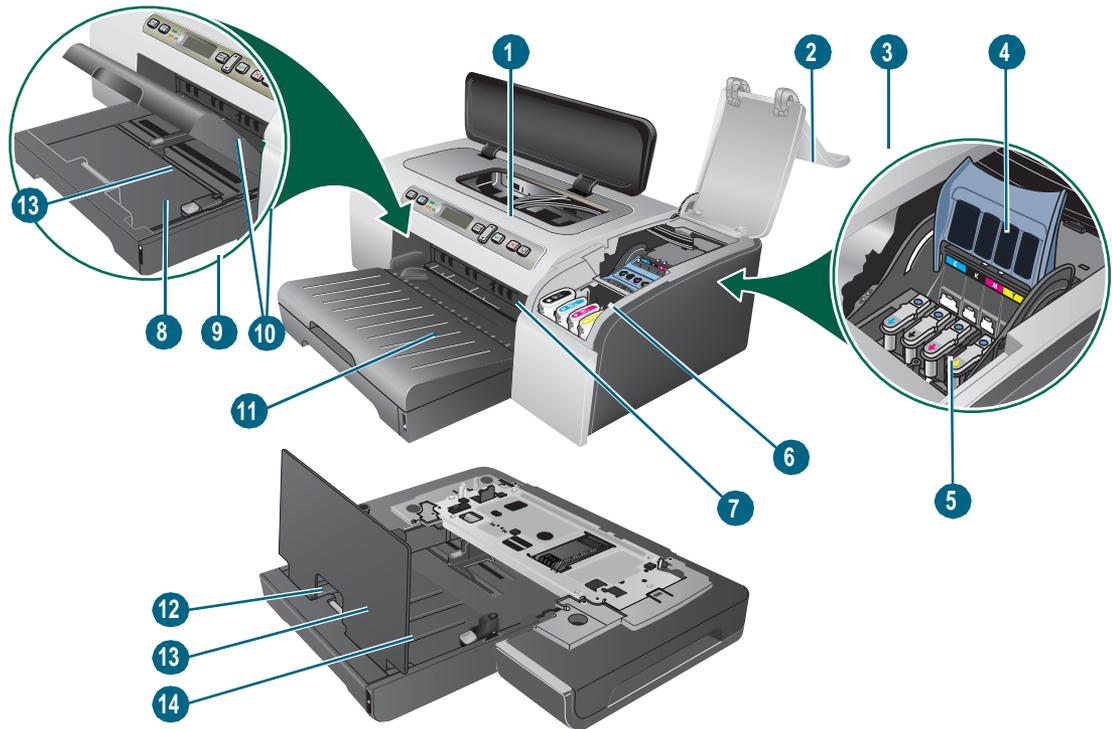
1   Control panel

2   Printhead cover

3   Ink cartridge cover

4   Printhead latch

5   Printheads

6   Ink cartridges

7   Front manual feed slot

8   Tray 1

9   Stack indicator

10 Guides

11 Output tray

12 Tray 2

13 Tray extension lock

14 Tray 2 Cover

Control panel

See Control panel for more information.
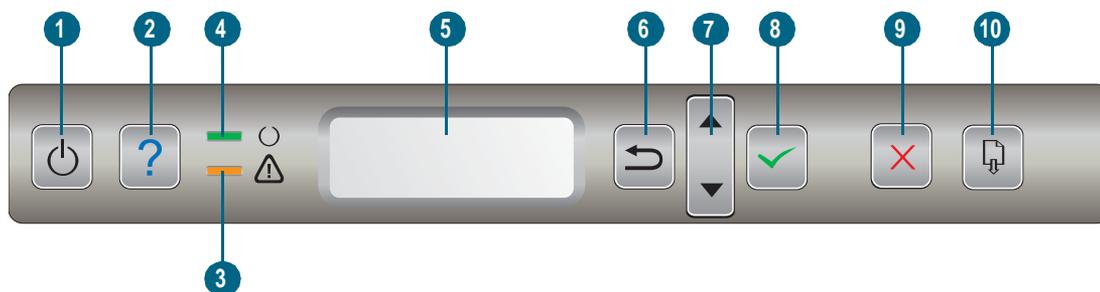
1   ␃ (Power button)

2   ? (Help button)

3   ⚠ (Attention light)

4   ⎈ (Ready light)

5   Control-panel display

6   ↵ (Back button)

7   ▲ (Up Arrow button) and ▼ (Down Arrow button)

8   ✓ (Select button)

9   ✗ (Cancel button)

10   ⇩ (Resume button)

Back view

1. Parallel (IEEE 1284) connector
2. USB connector
3. Power input
4. Guide
5. Rear access panel
6. Rear manual feed slot
7. Auto-duplex unit (HP Business Inkjet 2800dt and HP Business Inkjet 2800dtn printers)
8. HP Jetdirect print server (HP Business Inkjet 2800dtn printer)

2 Installing accessories

Installing tray 2

Tray 2 comes with the HP Business Inkjet 2800dt and HP Business Inkjet 2800dtn printers. It can hold up to 250 sheets of plain paper.

To install tray 2

1 Unpack the tray, remove the packing tapes and materials, and move the tray to the prepared location.

2 Turn off the printer, and disconnect the power cord.

3 Set the printer on top of the tray.

WARNING! Be careful to keep your fingers and hands clear of the bottom of the printer.

4 Connect the power cord and turn on the printer.

5 Enable the tray in the printer driver. See Enabling accessories in the printer driver.

Installing the auto-duplex unit

You can print on both sides of a sheet of paper automatically when the auto-duplex unit is installed on the printer. The auto-duplex unit comes with the HP Business Inkjet 2800dt and HP Business Inkjet 2800dtn printers. For information on using it, see Enabling accessories in the printer driver and Printing on both sides (duplexing).

To install an auto-duplex unit

1   Push the buttons on both sides of the rear access panel and remove the panel from the printer.

2   Slide the auto-duplex unit into the printer until the unit locks into place.

Note   Do not press the buttons on either side of the auto-duplex unit when installing; use them only for removing the unit from the printer.
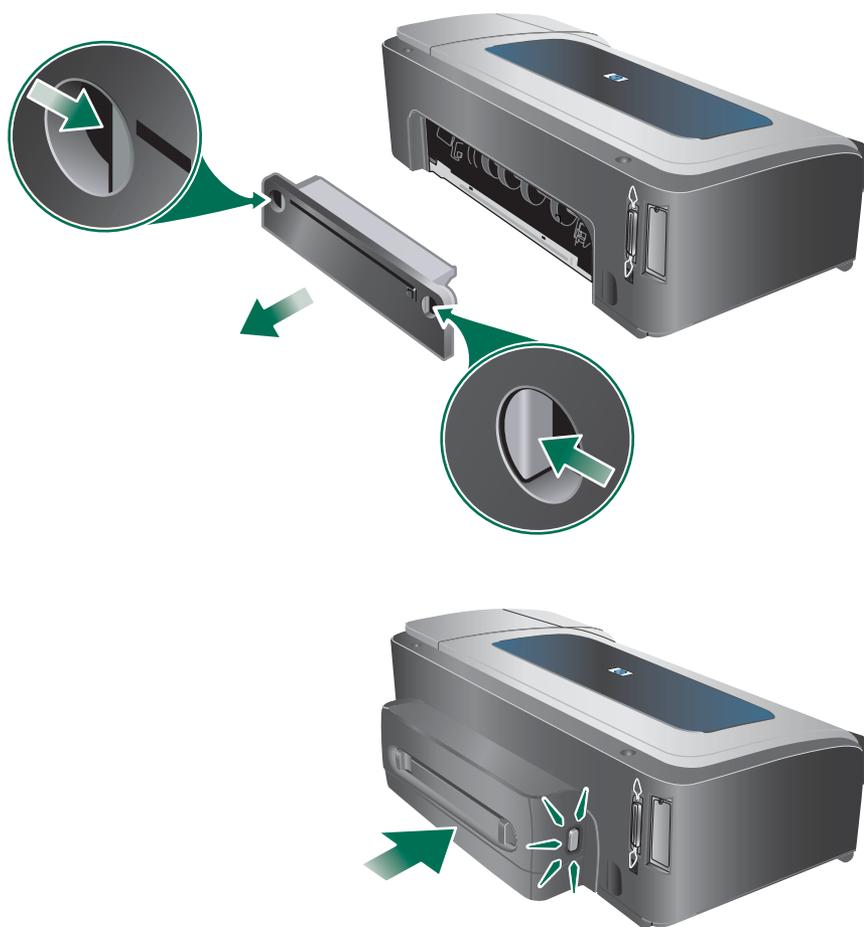
3   Enable the auto-duplex unit in the printer driver. See Enabling accessories in the printer driver.

Installing the HP Jetdirect print server

Your printer can be shared in a network environment by connecting it directly to the network with an HP Jetdirect print server. The print server can be used in both client-server and peer-to-peer printing configurations. It can provide better performance than printing through non-network connections, and can also provide flexibility in preparing a location for the printer.

An HP Jetdirect print server is preinstalled in the HP Business Inkjet 2800dtn printer. For a list of print servers that can be purchased for the printer, see Accessories.

To install the HP Jetdirect print server

CAUTION The HP Jetdirect print server card contains electronic components that can be damaged by static electricity. If possible, wear a grounding wrist strap (or similar device). Handle the print server card carefully at all times. Avoid touching electronic components or circuit paths. Failure to follow these recommendations could result in damage to the parts.

1 Turn off the printer, and disconnect the power cord and any other cables.

2 Use a Phillips screwdriver to loosen and remove the retaining screw that hold the cover for the empty EIO slot. Remove the cover.

3 Firmly insert the HP Jetdirect print server card into the EIO slot.

4 Insert and tighten the retaining screws that came with the print server card.

5 Connect a network cable between the print server card and the network.

To verify that the print server has been installed correctly

1 Connect the power cord and turn on the printer.

2 Print a configuration page. See Understanding and printing the configuration page. Two pages should print. The second page is the network configuration page for the print server card. If the page does not print, uninstall and reinstall the print server card to ensure that it is completely seated in the slot.

To obtain more information

If you encounter any problems or difficulty printing over a network, see the following resources.

Document	Description
HP Jetdirect Administrator's Guide	This guide, which is included on the Starter CD, provides detailed information about setting up and using an HP Jetdirect print server.
	The guide also provides information about the following topics:
	● HP software solutions for HP Jetdirect print servers
	● TCP/IP configurations
	● Line Printer Daemon (LPD) services on the print server
	● File Transfer Protocol (FTP) printing
	● Configuration page messages and troubleshooting
	● Embedded Web server, a Web-based tool for configuring and managing network devices
Documentation for the operating system and network operating system	This documentation came with your computer or your network operating system and provides basic information about network printing issues.

In addition to these resources, printer information and configuration features are available through HP Web Jetadmin. See HP Web Jetadmin software or visit http://www.hp.com/support/businessinkjet2800 for more information.

Installing memory modules

If you often print complex graphics or PostScript® (PS) documents, or if you print with the auto-duplex unit, you might want to add more memory to the printer.

Note   Adding memory gives the printer the ability to process these more complex print jobs, but might not increase processing speed.

The printer contains 96 MB of built-in memory and has two DIMM slots that accept 64 MB, 128 MB, or 256 MB of RAM (see Accessories for ordering information.) You can find out how much memory is installed from the printer configuration page. Note that the printer only recognizes up to 544 MB of printer memory. As such, if you have installed two 256 MB RAM, the total printer usable memory is only 544 MB.

CAUTION   The DIMMs contain electronic components that can be damaged by static electricity. To prevent the buildup of static electricity, maintain frequent contact with any bare sheet metal surface on the printer. If possible, wear a grounding wrist strap (or similar device). Handle the DIMMs carefully at all times. Avoid touching electronic components or circuit paths. Failure to follow these recommendations could result in damage to the parts.

To install a DIMM

1   Print the printer configuration page to find out how much memory is available in the printer. See Understanding and printing the configuration page.

2   Turn off the printer, and disconnect the power cord and any other cables.

3   On the left side of the printer, remove the side cover.

4   On an empty DIMM slot, push the DIMM locks outward to release the locks.

5   Remove the DIMM from the antistatic package.

6   Align the DIMM so that the notches on the lower edge line up with the raised marks in the DIMM slot.

7   Insert and press the DIMM into the slot until the DIMM snaps into place.

8   Replace the side cover.

9   Connect the power cord and any cables, and turn on the printer.

10 Enable the DIMMs in the printer driver. See Enabling accessories in the printer driver.

To verify that the DIMM is installed correctly

1   Make sure the power cord and any cables are connected and the printer is turned on.

2   Make sure that READY appears on the control-panel display. If an error message appears, a DIMM might have been installed incorrectly.

3   Print the printer configuration page. In the memory section, compare the memory amount with the amount on the configuration page that you printed before installing the DIMM. If the amount of memory has not increased, one of the following problems might have occurred:

   •   The DIMM might not be installed correctly. Remove the DIMM and repeat the installation procedure.

   •   The DIMM might be defective. Try a new DIMM.

Enabling accessories in the printer driver

Note The Mac OS automatically turns on the auto-duplex unit and tray 2 in the printer driver when you install the printer software. However, you will need to manually enable the DIMMs.

To enable accessories on Windows computers

After installing the printer software on Windows computers, tray 2 and the auto-duplex unit must be enabled in the printer driver in order for them to work.

1   Click **Start**, point to **Settings**, and then click **Printers** or **Printers and Faxes**.

2   Right-click the printer icon, and then click **Properties**, **Document Defaults**, or **Printing Preferences**.

3   Click the **Configure**, **Device Settings**, or **Device Options** tab. The name of the tab depends on the printer driver and the operating system.

4   On the selected tab, click **Automatic Configuration**, click **Update now...**, and then click **OK**.

3   Using the printer

Selecting print media

The printer is designed to work well with most types of office paper. It is best to test a variety of print media types before buying large quantities. Use HP media for optimum print quality. See HP supplies and accessories.

Tips for selecting and using print media

For the best results, observe the following guidelines.

- Always use media that conforms to the printer specifications. See Understanding specifications for supported media.

- Select the appropriate media type and size from the printer driver. See Changing print settings.

- Load only one type of media of the same size at a time into a tray.

- For tray 1 and tray 2, load media print-side down and aligned against the right and back edges of the tray. See Loading media.

Note   Tray 2 is designed to hold only plain paper.

- Do not overload the trays. See Understanding specifications for supported media.

- To prevent jams, poor print quality, and other printer problems, avoid the following media:
  - Multipart forms
  - Media that is damaged, curled, or wrinkled
  - Media with cutouts or perforations
  - Media that is heavily textured, embossed, or does not accept ink well
  - Media that is too lightweight or stretches easily

For more information on printing on supported media, see Printing on special and custom-size media.

Cards and envelopes

- Avoid envelopes that have a very slick finish, self-stick adhesives, clasps, or windows. Also avoid cards and envelopes with thick, irregular, or curled edges, or areas that are wrinkled, torn, or otherwise damaged.

- Use tightly constructed envelopes, and make sure the folds are sharply creased.

- Load envelopes into the printer according to the icon on the tray.

Photo paper

- Use the **Best** mode to print photographs. Note that in this mode, printing takes longer and more memory may be required from your computer and printer.

- Remove each sheet as it prints and set it aside to dry. Allowing wet media to stack up may cause smearing.

Transparencies

- Insert transparencies with the rough side down and the adhesive strip pointing towards the back of the printer.

- Use the **Best** mode to print transparencies. This mode provides longer drying time and ensures that the ink dries completely before the next page is delivered to the output tray. Allowing wet media to stack up may cause smearing.

Custom-size media

- Use only custom-size media supported by the printer.

- If your application supports custom-size media, set the media size in the application before printing the document. If not, set the size in the printer driver. You might need to reformat existing documents to print them correctly on custom-size media.

Understanding specifications for supported media

This section provides information regarding the sizes, types, and weights of media that the printer supports. It also provides information on the tray capacity.

Note   Tray 2 and auto-deplex unit comes with the HP Business Inkjet 2800dt and HP Business Inkjet 2800dtn printers.

Supported media sizes

* These media sizes support manual duplex. See Printing on both sides (duplexing).

Media size	Tray 1	Tray 2	Front manual feed slot	Rear manual feed slot	Auto-duplex unit
Standard paper sizes					
U.S. Letter (216 by 279 mm; 8.5 by 11 inches)	✔	✔	✔	✔	✔
U.S. Legal (216 by 356 mm; 8.5 by 14 inches)	✔	✔	✔	✔	✔
A4 (210 by 297 mm; 8.3 by 11.7 inches)	✔	✔	✔	✔	✔
U.S. Executive (184 by 267 mm; 7.25 by 10.5 inches)	✔	✔	✔	✔	✔
U.S. Statement (140 by 216 mm; 5.5 by 8.5 inches)	✔		✔	✔	
A5 (148 by 210 mm; 5.8 by 8.3 inches)	✔			✔	
A6 (105 by 148 mm; 4.1 by 5.8 inches)	✔			✔	

Media size	Tray 1	Tray 2	Front manual feed slot	Rear manual feed slot	Auto-duplex unit
JIS B4 (257 by 364 mm; 10.1 by 14.3 inches)	✔	✔	✔	✔	✔
JIS B5 (182 by 257 mm; 7.2 by 10.1 inches)	✔	✔	✔	✔	✔
Tabloid (279 by 432 mm; 11 by 17 inches)	✔	✔	✔	✔	✔
A3 (297 by 420 mm; 11.7 by 16.5 inches)	✔	✔	✔	✔	✔
Super B, A3 Nobi (330 by 483 mm; 13.0 by 19.0 inches)	✔	✔	✔	✔	✔
Envelopes					
U.S. #10 Envelope (105 by 241 mm; 4.12 by 9.5 inches)	✔			✔	
Monarch Envelope (98 by 191 mm; 3.88 by 7.5 inches)	✔			✔	
HP Greeting Card Envelope (111 by 152 mm; 4.38 by 6 inches)	✔		✔	✔	
Envelope A2 (111 by 146 mm; 4.37 by 5.75 inches)	✔		✔	✔	
DL Envelope (110 by 220 mm; 4.3 by 8.7 inches)	✔		✔	✔	
C5 Envelope (162 by 229 mm; 6.4 by 9 inches)	✔		✔	✔	
C6 Envelope (114 by 162 mm; 4.5 by 6.4 inches)	✔		✔	✔	
Envelope Kaku #2 (240 by 332 mm; 9.4 by 13.1 inches)	✔		✔	✔	
Japanese Envelope Chou #3 (120 x 235 mm; 4.7 by 9.3 inches)	✔		✔	✔	
Japanese Envelope Chou #4 (90 x 205 mm; 3.5 by 8.1 inches)	✔				
Cards					
Index card (102 by 152 mm; 4 by 6 inches)	✔			✔	
Index card (127 by 203 mm; 5 by 8 inches)	✔			✔	
4 x 6 Index card with tab (102 by 152 mm; 4 by 6 inches)	✔		✔	✔	
Hagaki (100 by 148 mm; 3.9 by 5.8 inches)	✔		✔	✔	
Ofuku Hagaki (148 by 200 mm; 5.8 by 7.9 inches)	✔			✔	
Custom-size media					
Between 90 to 330 mm wide and 146 to 483 mm long (3.54 to 13.0 inches wide and 5.75 to 19.0 inches long)	✔				
Between 182 to 330 mm wide and 257 to 483 mm long (7.2 to 13.0 inches wide and 10.1 to 19.0 inches long)		✔			✔

Media size	Tray 1	Tray 2	Front manual feed slot	Rear manual feed slot	Auto-duplex unit
Between 110 to 330 mm wide and 220 to 483 mm long (4.33 to 13.0 inches wide and 8.65 to 19.0 inches long)			✔		
Between 96 to 330 mm wide and 146 to 483 mm long (3.77 to 13.0 inches wide and 5.75 to 19.0 inches long)				✔	

Supported media types and weights

Tray	Type	Weight	Capacity
Tray 1	Paper	60 to 90 g/m^2 (16 to 24 lb bond)	Up to 150 sheets of plain paper (13 mm or 0.5 inch stacked)
	Envelopes	75 to 90 g/m^2 (20 to 24 lb bond envelope)	Up to 22 sheets (13 mm or 0.5 inch stacked)
	Cards	Up to 200 g/m^2 (110 lb index)	Up to 5 cards
	Transparencies or labels		Up to 30 sheets (8 mm or 0.3 inch stacked)
	Special Media		Up to 50 sheets (13mm or 0.5 inch stacked)
Tray 2	Plain paper only	60 to 90 g/m^2 (16 to 24 lb bond)	Up to 250 sheets of plain paper (25 mm or 1 inch stacked)
Front manual feed	Paper	60 to 90 g/m^2 (16 to 24 lb bond)	Up to 10 sheets
	Envelopes	75 to 90 g/m^2 (20 to 24 lb)	One sheet at a time
	Transparencies		Up to 8 sheets
	Special media		Up to 6 sheets
Rear manual feed	Paper	60 to 270 g/m^2 (16 to 72 lb bond)	One sheet at a time
	Envelopes	75 to 90 g/m^2 (20 to 24 lb)	One sheet at a time
	Cards	Up to 200 g/m^2 (Up to 110 lb index)	One sheet at a time
	Transparencies		One sheet at a time
	Special media		One sheet at a time
Auto-duplex unit	Paper	60 to 90 g/m^2 (16 to 24 lb bond)	N.A.
	Two-sided special media		N.A.
Output tray	All supported media		Up to 100 sheets of plain paper (text printing)

Setting minimum margins

The document margins must match (or exceed) these minimum margin settings in portrait orientation.
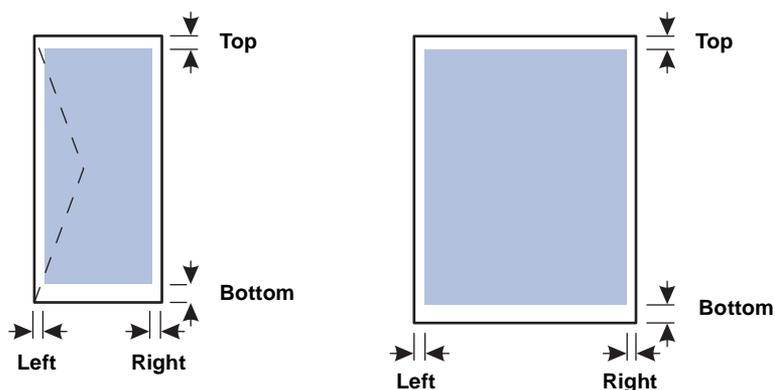
Media	Left margin	Right margin	Top margin	Bottom margin
U.S. Letter, A4, U.S. Executive, U.S. Statement, Hagaki, Ofuku Hagaki, JIS B4, JIS B5, Index Card (5 by 8 inches), A5, A6 cards	3.3 mm (0.13 inch)	3.3 mm (0.13 inch)	11.7 mm (0.46 inch)	11.7 mm (0.46 inch); 3.0 mm (0.12 inch with minimized margins)
U.S. Legal, Tabloid, A3, Super B, A3 Nobi, custom-size media	5.1 mm (0.2 inch)	5.1 mm (0.2 inch)	11.7 mm (0.46 inch)	11.7 mm (0.46 inch); 3.0 mm (0.12 inch with minimized margins)
U.S. #10 Envelope, Monarch Envelope, HP Greeting Card Envelope, Envelope A2, DL Envelope, C5 Envelope, C6 Envelope, Japanese Envelope Chou #3, Japanese Envelope Chou #4	3.2 mm (0.13 inch)	3.2 mm (0.13 inch)	11.7 mm (0.46 inch)	11.7 mm (0.46 inch)
Envelope Kaku #2	5.1 mm (0.2 inch)	5.1 mm (0.2 inch)	11.7 mm (0.46 inch)	11.7 mm (0.46 inch)
Photo media (4 by 6 inches, or 101.6 by 152.4 mm) with tear-off tab	3.0 mm (0.12 inch)	3.0 mm (0.12 inch)	3.0 mm (0.12 inch)	3.0 mm (0.12 inch)

Note   When you are using the auto-duplex unit, the minimum top and bottom margin must match or exceed 12.7 mm (0.5 inch).

Loading media

To load tray 1 or tray 2

1   If you are loading tray 1, raise the output tray and pull tray 1 out of the printer by grasping under the front of the tray 1.
If you are loading tray 2, pull out tray 2 and raise its cover.

2   If you are loading A3 or larger sized media, extend the tray by pressing the tray extension lock near the front of the tray and pulling both ends of the tray in opposite directions until it is fully extended.

Tray 1
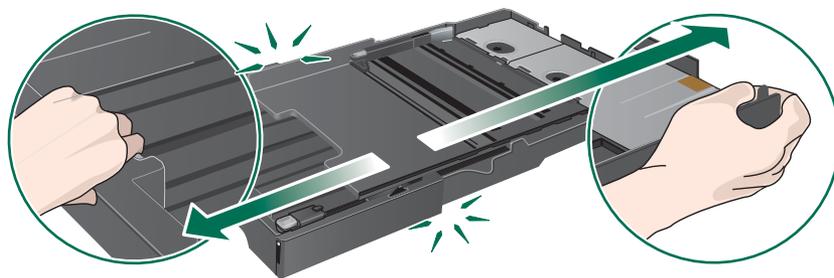
3   Press the button of the media width guide and slide the guide to the left. Press the button of the media length guide and slide the guide towards you.

4   Insert the media print-side down along the right of the tray. Make sure the stack of media aligns with the right and back edges of the tray, and does not spill over the edges.

5   Press the buttons of the media guides and slide the guides to the edges of the loaded media.

Tray 1
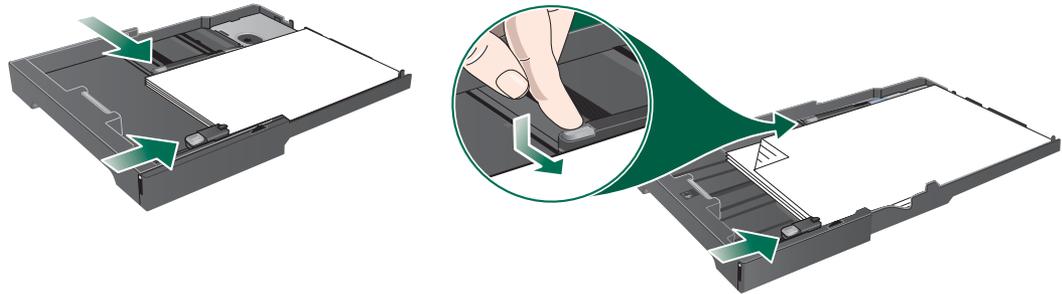
6   If you removed tray 1, gently reinsert it into the printer and lower the output tray to its original position.
If you removed tray 2, lower the tray cover and gently reinsert tray 2.

CAUTION   If you have extended the tray, do not press the tray extension lock when inserting the tray. Pressing it will cause the tray to be retracted when you push in the tray. The longer media in the tray will be folded; this will cause problem during printing.

7   If you have extended tray 1 or tray 2, extend the output tray by grasping under the front of the output tray and pulling out the media extension.

8   When printing, select the appropriate media type and size from the printer driver. See Changing print settings.

Changing print settings

You can change print settings (such as media size or type) from an application or the printer driver. Changes made from an application take precedence over changes made from the printer driver. However, after the application is closed, the settings return to the defaults configured in the printer driver.

Note   To set print settings for all print jobs, make the changes in the printer driver.

For more information about printer driver features in Windows, see the printer driver online help. For more information about printing from a specific application, see the documentation for that application.

To change settings from an application for current jobs (Windows)

1   Open the document you want to print.

2   On the **File** menu, click **Print**, and then click **Setup** or **Properties**.
    (Specific options may vary depending on the application you are using.)

3   Change any other desired settings and click **OK**, **Print**, or a similar command.

To change default settings for all future jobs (Windows)

1   Click **Start**, point to **Settings**, and then click **Printers** or **Printers and Faxes**.

2   Right-click the printer icon, and then choose **Properties**, **Document Defaults**, or **Printing Preferences**.

3   Change any other desired settings and click **OK**.

To change settings (Mac OS)

1   On the **File** menu, click **Page Setup**.

2   Change any desired settings and click **OK**.

3   On the **File** menu, click **Print**.

4   Change any desired settings and click **Print**.

Canceling a print job

You can cancel a print job using one of the following ways.

- **Control panel**

  Press the $\times$ (Cancel button). This will clear the job that the printer is currently processing. It does not affect jobs waiting to be processed.

- **Windows**

  Double-click the printer icon that appears in the lower right corner of the computer screen. Select the print job, and then press the Delete key on the keyboard.

- **Mac OS X (10.1.5 and later)**

  Click the **Print Center** icon, and then double-click the printer icon. Select the print job and click **Delete**.

Printing with the front or rear manual feed slot

1 **For Windows:**

   a Open the printer driver.

   b On the **Paper/Quality** tab, select the manual feed option from the **Source is** drop-down list.

   c Change any other desired settings and click **OK**.

   d Print your document.

   For Mac OS:

   a On the **File** menu, click **Page Setup**.

   b Select the media size.

   c On the **File** menu, click **Print**.

   d In the **Copies & Pages** panel, select the manual feed option.

   e Open the **Paper Type/Quality** panel.

   f Click the **Paper** tab and select the media type.

   g Change any other desired settings and click **OK** or **Print**.

2 Wait for the Resume light to blink.

3 If you are using the front manual feed slot, do the following:

   a Remove any printouts on the output tray.

   b Insert media, print-side down along the right of the slot until the media reaches the maximum depth. For envelopes, insert them according to the icon on the tray. See Supported media types and weights.

   c Slide the media width guide to the edge of the loaded media.

   d Press ⬇ (Resume button) to print.

4 If you are using the rear manual feed slot, do the following:

  a If the auto-duplex unit is installed, replace with the rear access panel.

  b Slide the media width guide to the required media width.
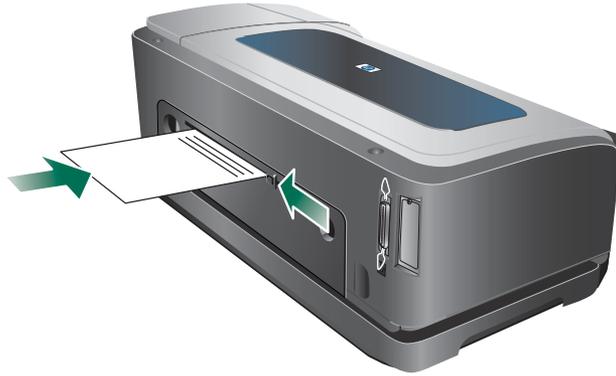
  c Insert a sheet of media print-side up into the left side of the slot until the printer grips the media.

  d Press ⃟ (Resume button) to print.

  e If you are printing more than one page, press ⃟ (Resume button) to print after inserting each sheet.

Printing on both sides (duplexing)

You can print on both sides of a sheet of media, either automatically by using the auto-duplex unit or manually by turning the media over and feeding it into the printer again.

Guidelines for printing on both sides of a page

- Always use media that conforms to the printer specifications. See Understanding specifications for supported media.

- Specify duplex options in your application or in the printer driver.

- Do not print on both sides of transparencies, envelopes, photo paper, glossy media. Jams might occur with these media types.

- Several kinds of media require a specific orientation when you print on both sides of a page, such as letterhead, preprinted paper, and paper with watermarks. When you print from a computer running Windows, the printer prints the first side of the media first. When you print from a computer using the Mac OS, the printer prints the second side first. Load the media with the front side facing down.

- When printing finishes on one side of the media, the printer holds the media and pauses while the ink dries. Once the ink dries, the media is pulled back into the printer and the second side is printed. When printing is complete, the media is dropped onto the output tray. Do not grab it before printing is complete.

- You can print on both sides of supported custom-size media by using the printer's manual duplex capabilities. (For a list of supported custom sizes, see Understanding specifications for supported media.)

To perform duplexing (Windows)

Note   For automatic-duplexing, ensure the auto-duplex unit is properly installed and enabled. See Enabling accessories in the printer driver. The printer will print on one side (simplex) of the media if the auto-duplex unit is not installed.

1   Load the appropriate media. See Guidelines for printing on both sides of a page and Loading media.

2   With a document open, on the **File** menu, click **Print**, and then choose **Properties**, **Document Defaults**, or **Printing Preferences**.

3   Click the **Finishing** tab.

4   Select the **Print on Both Sides** check box.

5   For automatic duplexing, ensure that **Use auto-duplex unit** is selected.
    For manual duplexing, ensure the option is cleared. See Enabling accessories in the printer driver.

6   To automatically resize each page to match the document's onscreen layout, ensure **Preserve Layout** is selected. Clearing this option may result in unwanted page breaks.

7   Select or clear the **Flip Pages Up** check box depending on which way you want the binding. See the graphics in the printer driver for examples.

8   Change any other desired settings and click **OK**.

9   Print your document.

Note   If you are using a computer running Windows NT 4.0, click **Continue** in the dialog box that appears to print the document. Otherwise, the printer does not start printing.

10 For manual duplexing, after the first side of the document is printed, follow the onscreen instructions and reload the paper into the tray (blank-side down) or the front manual feed (blank-side up) to complete printing.

To perform automatic duplexing (Mac OS)

Note   For automatic-duplexing, ensure the auto-duplex unit is properly installed and enabled. See Enabling accessories in the printer driver.

1   Load the appropriate media. See Guidelines for printing on both sides of a page and Loading media.

2   On the **File** menu, click **Print**.

3   Open the **Duplex** or **Layout** panel.

4   Select the option to print on both sides.

5   Select the desired binding orientation by clicking the appropriate icon.

6   Change any other desired settings and click **Print**.

Printing on special and custom-size media

This section provides information on how to print on media such as envelopes, photo paper, postcards, and transparencies, as well as custom-size media.

To print on special media (Windows)

1   Load the appropriate media. See Loading media.

2   With a document open, on the **File** menu, click **Print**, and then click **Setup** or **Properties**.

3   Click the **Paper/Quality** tab.

4   Select the media type from the **Type is** drop-down list.

5   Select the media size from the **Size is** drop-down list.
-Or
Click **Custom**, enter the dimensions of the media, and click **OK**.

6   Select the tray in which the media is loaded from the **source is** drop-down list.

7   Change any other desired settings and click **OK**.

8   Print your document.

To print on special media (Mac OS)

1   Load the appropriate media. See Loading media.

2   On the **File** menu, click **Page Setup**.

3   Select the media size.

4   To set a custom media size, complete the following steps:

   a   Click **Custom Paper Size** in the **Settings** pull-down menu.

   b   Click **New**, and then type a name for the size in the **Paper Size Name** box.

   c   In the **Width** and **Height** boxes, type the dimensions and set the margins.

   d   Click **Done** or **OK**.

5   On the **File** menu, click **Print**.

6   Open the **Color** panel.

7   Click the **Paper** tab and select the media type.

8   Change any other desired settings and click **Print**.

4 Configuring and managing the printer

Managing the printer

Overview of printer management tasks

The following table lists the printer tools that can be used to manage the printer. It lists the most common tools that are used for administrator functions.

For more information about the administrator tools listed in the table, see Overview of printer management tools.

If you want to...	...use these tools.*				
	Control panel	Embedded Web server (EWS)	Toolbox (Windows)	HP Web Jetadmin software	myPrintMileage
Monitor the printer					
● Operation and status	✔	✔	✔	✔	
● Media and supplies	✔	✔	✔	✔	✔
● Jobs and printer usage		✔			✔
Administer the printer					
● Printer security		✔		✔	
● Configure job-accounting options		✔			
● Set language	✔	✔			
● Set PowerSave mode time	✔				
● Change tray and media-handling settings	✔	✔			
● Set up alerts and notifications		✔		✔	✔
● Upgrade firmware on the printer				✔	
● Reset the HP Jetdirect print server	✔				
Configure network options					
● Configure I/O timeout	✔	✔			
● Configure network parameters	✔	✔		✔	

*Windows users can use the control panel, EWS, Toolbox, HP Web Jetadmin, and myPrintMileage. Mac OS users can use the control panel and EWS.

Monitor the printer

Use this tool...	...to obtain the following information.
Control panel	Status of jobs that are being processed, the operating status of the printer, and the status of ink cartridges and printheads. See Control panel for more information.
Embedded Web server (EWS)	● *Printer status information:* Click the **Information** tab, and then click an option available on the left pane. ● *Ink cartridge and printhead status:* Click the **Information** tab, and then click **Ink Supplies** in the left pane. ● *Accumulated ink and media usage:* Click the **Information** tab, and then click **Usage** in the left pane. ● *Total number of pages and ink used by each user of the printer:* Click the **Settings** tab, click **Job Accounting** in the left pane, and then click the **Users** tab in the right pane. ● *Usage information:* Click the **Settings** tab, and then click **Job Accounting** in the left pane.
Toolbox (Windows)	● *Ink cartridge information:* The ink-level information appears on the **Printer Status** tab. Click **Ink Cartridge Information** for information about replacement ink cartridges and expiration date.
HP Web Jetadmin software	Supplies information and network status. See HP Web Jetadmin software.
myPrintMileage	Supplies usage of the printer. See myPrintMileage.

Administer the printer

This section contains information about administering the printer and modify printer settings.

Use this tool...	...to do the following.
Control panel	● *Set the control-panel language:*
	1 Press ✓ (Select button) on the control panel.
	2 Press ▼ (Down Arrow button) until CONFIGURE DEVICE is highlighted, and then press ✓ (Select button).
	3 Press ▼ (Down Arrow button) until SYSTEM SETUP is highlighted, and then press ✓ (Select button).
	4 Press ▼ (Down Arrow button) until the language option is highlighted, then press ✓ (Select button), and change the desired settings.
	● *Change tray and media-handling settings:* Press ✓ (Select button). Press ▼ (Down Arrow button) until PAPER HANDLING is highlighted, then press ✓ (Select button), and change the desired settings.
	● *Perform printer maintenance tasks:* Press ✓ (Select button). Press ▲ (Up Arrow button) until MAINTENANCE is highlighted, then press ✓ (Select button), and change the desired settings.
	● *Reset the HP Jetdirect print server:* Press ⏻ (Power button) to turn off the printer. While holding ↤ (Back button) and ▯ (Resume button), turn on the printer.
Embedded Web server	● *Modify the administrator password:* Click the **Settings** tab, and click **Security** in the left pane.
	● *Change job accounting settings:* Click the **Settings** tab, click **Job Accounting** in the left pane, and then click the **Options** tab.
	● *Set the language in the control panel and EWS:* Click the **Settings** tab, and then click **Language** in the left pane.
	● *Change tray and media-handling settings:* Click the **Settings** tab, and then click **Paper Handling** in the left pane.
	● *Perform printer maintenance tasks:* Click the **Settings** tab, and then click **Diagnostic** in the left pane.
	● *Set up EWS alerts and notifications:* Click the **Settings** tab, and then click **Alerts** in the left pane.
HP Web Jetadmin software	Remotely install, configure, and monitor status (including levels for supplies); conduct remote diagnostics; and troubleshoot problems. Go to http://www.hp.com/go/webjetadmin.
myPrintMileage	Keep track of supplies usage of the printer so that you can forecast and plan the purchase of supplies. See myPrintMileage.

Configure network options

This section contains information about configuring the printer's network settings.

For information about opening and using specific management tools, see Overview of printer management tools.

For a list of current settings, print a configuration page. See Understanding and printing the configuration page. If the printer is connected to a network with an HP Jetdirect print server, you can use a variety of common network protocols such as TCP/IP.

By factory default, all supported network protocols are turned on. However, turning off unused protocols can provide such benefits as decreasing network traffic that the printer generates and preventing unauthorized users from printing to the printer.

Use this tool...	...to do the following.
Control panel	*Configure the I/O timeout:* Press ✓ (Select button). Press ▼ (Down Arrow button) until CONFIGURE DEVICE is highlighted, then press ✓ (Select button); press ▼ (Down Arrow button) until I/O is highlighted, then press ✓ (Select button).
Embedded Web server	● *Configure network parameters:* Click the **Networking** tab. ● *Set a static IP address:* Click the **Networking** tab, select **Manual** from the **IP Configuration Method** drop-down list, enter the static IP address in the **IP Address** box, enter the Host Name, Subnet Mask, and Default Gateway, if needed, and click **Apply**. **Note:** It is not recommended that you assign a static IP address to the printer. However, a static IP address might resolve certain setup and printing problems, such as a conflict with a personal firewall.
HP Web Jetadmin software	Remotely configure network settings. See HP Web Jetadmin software.

Overview of printer management tools

Embedded Web server (EWS)

When the printer is connected to a network, you can use the printer's EWS to view status information, change settings, and manage the printer at your computer.

Note For a list of system requirements for the EWS, see Printer specifications.

Some settings might be restricted by the requirement for an EWS password.

You can open and use the EWS without being connected to the Internet. However, some features will not be available.

To open the EWS

You can open the EWS in the following ways:

To open the EWS from the Toolbox (Windows) or the HP Inkjet Toolbox (Mac OS), the printer must be on a network and must have an IP address.

- **Web browser**

  In a supported Web browser on your computer, type the IP address that has been assigned to the printer. For example, if the IP address is 123.123.123.123, type the following address into the Web browser:

  http://123.123.123.123.

  The IP address for the printer is listed on the configuration page; see Understanding and printing the configuration page.

  After you open the EWS, you can bookmark it so that you can return to it quickly in the future.

- **Toolbox (Windows)**

  1 Open the Toolbox. For instructions, see Toolbox (Windows).

  2 Click the **Information** tab, and then click **Launch EWS**.

EWS pages

The EWS contains pages that you can use to view product information and change printer settings. The pages also contain links to other e-services.

Pages	Contents
Information	Shows status information about the printer, its ink supplies and usage, and a log of printer events (such as errors).
Settings	Shows the settings that have been configured for the printer and gives you the ability to change these settings.
Networking	Shows network status and the network settings that have been configured for the printer. These pages only appear if the printer is connected to a network. See Configure network options for more information. See also the *HP Jetdirect Administrator's Guide* on the Starter CD for more information.
Other Links	Connects you to other resources, including e-services, such as HP Instant Support, myPrintMileage, and online ordering of supplies. For more information, see HP Instant Support and myPrintMileage. You can also add or customize up to five links to the websites of your choice. These links appear on the left pane throughout the EWS pages.

HP Web Jetadmin software

The HP Web Jetadmin software is a Web-based management solution for remotely installing, configuring (both individually or in batch mode), monitoring status (including levels for supplies), conducting remote diagnostics, and troubleshooting a wide variety of HP and non-HP network peripherals.

After the HP Web Jetadmin software has been installed, you can gain access to it from anywhere within your intranet by using a standard Web browser.

To get more information or to download the software, go to http://www.hp.com/go/webjetadmin.

Toolbox (Windows)

The Toolbox provides status and maintenance information about the printer. It also provides links to this guide for help in performing basic printing tasks and solving problems.

Note

If the Toolbox was not installed with the other printer software components, you can install it using the installation program on the Starter CD.

To monitor a printer on a shared port (for example, \\portname\printername) from a client machine, the Toolbox must be running on the server machine as well as on the client machine.

To open the Toolbox

1   From the **Start** menu at your computer, point to **Programs**.

2   Point to the printer name, and then click the Toolbox icon.

Toolbox tabs

The Toolbox contains tabs that you can use to view product information.

Tabs	Contents
Printer Status	● **Selected printer** Displays a list of installed printers that are supported by the Toolbox. ● **Ink Level Information** Shows estimated ink levels for each cartridge. ● **Order Supplies** Provides access to a website where you can order printing supplies for the printer online. ● **Ink Cartridge Information** Shows order numbers and expiration dates for the installed ink cartridges. ● **Preferences** Gives you the ability to set advanced Toolbox settings, such as selecting which printer error messages appear, specifying whether you want to be notified by an audio alert when an error occurs, as well as the types of error messages that you want to see. Also, you can turn on myPrintMileage AutoSend, a service that HP provides to help you keep track of your device usage to help you forecast device usage and plan the purchase of supplies. See myPrintMileage for more information.
Information	● **Printer Information** Provides links to myPrintMileage and shows the printer hardware and printhead health information. See myPrintMileage for more information. ● **Help Information** Provides links to HP Instant Support and HP Customer Support, as well as to this guide for help in performing tasks and troubleshooting. It also provides instructions that guide you through registering the printer onscreen. See HP Instant Support for more information.

HP Instant Support

HP Instant Support is a suite of Web-based troubleshooting tools that help you quickly identify, diagnose, and resolve printing problems.

It provides the following information about your device:

- **Easy access to troubleshooting tips**

  Provides tips that are customized for your device.

- **Resolution of specific device errors**

  Provides immediate access to information that can help you resolve error messages specific to your device.

  To see a description of the problem, as well as recommendations for solving or preventing the problem, click the link within the message. To see a list of past device errors, click **Alerts** on the left side of the HP Instant Support page.

- **Notification of device driver and firmware updates**

  Alerts you when there is a firmware or driver update, a message appears on the HP Instant Support home page. Click the link within the message to go directly to the download section of the HP website.

- **Obtaining support services**

  Provides a list of the support services that are available for your device.

- **Managing ink and media usage (myPrintMileage)**

  Helps you manage and forecast printer supplies usage.

- **Self diagnostic testing for your device**

  Runs a diagnostic test of your device. Select **Printer** on the **Self Help** menu on the Instant Support page to start diagnosing the devices. HP Instant Support checks the computer, and a list of configured devices appears. When you select the device that you want to diagnose, HP Instant Support can help you with such tasks as making sure that you have the latest device driver available and gaining access to reports about the device status and detailed device-diagnostic information.

  If any errors are detected during this process, you are given the option to perform updates to the device drivers or Jetdriver firmware or to perform detailed diagnostic tests on the device.

- **Knowledge database**

  Use the HP knowledge database to quickly find answers to your questions.

Security and privacy

When you use HP Instant Support, detailed device information, such as the serial number, error conditions, and status, is sent to HP. HP respects your privacy and manages this information according to the guidelines that are outlined in the HP Online Privacy Statement (http://www.hp.com/country/us/eng/privacy.htm).

Note   To view all the data that is sent to HP, select **Source** (for Internet Explorer) or **Page Source** (for Netscape) from the **View** menu in your Web browser.

To gain access to HP Instant Support

- **Toolbox (Windows)**

  Click the **Information** tab, and then click **HP Instant Support**.

- **Embedded Web server**

  In a Web browser, type the IP address assigned to the device (this information is listed on the configuration page; see Understanding and printing the configuration page). In the **Other Links** section of the **Information** or **Settings** tab, click **HP Instant Support**.

Note   Do not bookmark the Web pages that are used to open HP Instant Support. If you bookmark the site and connect to it by using the bookmark, the pages will not contain the current information.

myPrintMileage

myPrintMileage is a service that HP provides to help you keep track of your device usage to help you forecast device usage and plan the purchase of supplies. It consists of two parts:

- myPrintMileage website
- myPrintMileage AutoSend, a utility that periodically updates the device usage information on the myPrintMileage website

To use myPrintMileage, you must have the following:

- Internet connection
- Device connected

Note   HP recommends that you enable myPrintMileage to send data for three to six months to allow a meaningful amount of data to accumulate on the myPrintMileage website.

To use the Print accounting features, you must register for the service through the myPrintMileage site.

On the myPrintMileage website, you can see the following items:

- Print analysis, such as the amount of ink you have used, whether you use more black or color ink, and the estimated number of pages you can print with the remaining amount of ink.
- Print accounting, which allows you to generate reports showing usage data, cost per page, or cost per job for a specific time period; export this data as Microsoft Excel spreadsheet files; and configure the e-mail alerts and notifications to receive print accounting reports.

To gain access to myPrintMileage

- **Embedded Web server**

  Click **myPrintMileage** in the **Other Links** section.

- **Toolbox (Windows)**

  On the **Information** tab, click **myPrintMileage**, and then follow the onscreen instruction.

- **Windows taskbar**

  Right-click the **Toolbox** icon in the Windows taskbar, click **myPrintMileage**, and then select **View my print usage**.

Note   Do not bookmark the Web pages that are used to open myPrintMileage. If you bookmark the site and connect to it by using the bookmark, the pages will not contain the current information.

Understanding and printing the configuration page

Use the configuration page to view current printer settings, ink supply status, and printhead health; to help troubleshoot printer problems. The configuration page also contains a log of recent events. If the printer is connected to a network, an additional network configuration page prints; this page shows the network settings for the printer.

If you need to call HP, it is often useful to print the configuration page before calling.

1 Printer Information: Shows general printer information, such as the firmware version number, model name, and amount of memory that is installed.

2 Ink Cartridge Status: Shows the estimated ink levels (represented in graphical form as gauges).

3 Printhead Status: Shows the printhead health status and whether the printhead needs to be replaced.

4 Event Log: Shows a log of recent events that have occurred.

For more information on HP Ink Supplies, see HP Inkjet Supplies - Warranty Quick Reference.

To print a configuration page

- **Control panel**

  1 Ensure the printer is turned on.

  2 Press ✓ (Select button) on the control panel.

  3 Ensure INFORMATION MENU is highlighted, and then press ✓ (Select button).

  4 Press ▼ (Down Arrow button) until the option to print configuration page is highlighted, and then press ✓ (Select button).

  5 Press ▼ (Down Arrow button) until the option to print configuration page is highlighted, and then press ✓ (Select button) to print.

- **Toolbox (Windows)**

  On the **Printer Status** tab, click **Ink Cartridge Information**, and then click **Print**.

Upgrading the firmware in the printer

HP provides firmware upgrades for products. These upgrades provide additional or improved functionality. When a firmware upgrade for the printer is available, a notification message appears on the HP Instant Support homepage. You can open the download site from the homepage. You can also obtain information about available upgrades at http://www.hp.com/support/businessinkjet2800.

Use the methods in the following sections to upgrade the firmware. See the readme file associated with the firmware upgrade for details.

You do not need to keep the firmware upgrade file after you have performed the upgrade.

CAUTION   Do not cancel the firmware upgrade after you have started it. Canceling the process can damage the firmware in the printer.

To upgrade the firmware by using the MS-DOS prompt (Windows only)

Note   To upgrade the firmware using this procedure, the printer must be connected directly to the computer using a parallel cable.

1 Download the firmware upgrade file from the HP website and store it on the hard disk of your computer.

2 Open an MS-DOS command window.

3 Type **copy /b path\filename portname** at the command prompt.

- **path** is the *location* of the firmware upgrade file
- **filename** is the *name* of the firmware upgrade file that you downloaded from the website
- **portname** is the appropriate printer port (for example, *LPT1*)

4 Press Enter. The firmware upgrade file is copied onto the printer, replacing the old firmware file.

Configuring the printer (Windows)

You can connect the printer directly to a computer, or you can share the printer among other users on a network.

Note
You must have administrator privileges to install a printer driver in Windows 2000 or Windows XP.

Direct connection

You can connect the printer directly to your computer using a USB cable or an IEEE 1284-compliant bidirectional parallel cable.

Note
Windows NT 4.0 does not support USB.

Do not connect a USB and a parallel cable to printer at the same time.

If you install the printer software and connect a printer to a computer running Windows, you can connect additional printers to the same computer with USB cables without reinstalling the printing software.

Installing printer software and sharing the printer

When setting up the printer, HP recommends that you connect the printer **after** installing the software because the installation program is designed to provide you with the easiest setup experience.

However, if you have connected the cable first, see To connect the printer before the installing software.

To install the software before connecting the printer (recommended)

It is recommended to install the Toolbox, which provides status and maintenance information about your printer, and online help tools for solving printer problems. If you do not install the Toolbox, you will not see printer error messages on your computer screen and will not have access to the myPrintMileage website. See Toolbox (Windows) for more information.

1   Close any running applications.

2   Insert the Starter CD into the CD drive. The CD menu runs automatically.

    If the CD menu does not start automatically, click **Start**, and then click **Run**. Browse to the CD-ROM drive for the computer, click **Autorun.exe**, and then click **Open**. In the **Run** dialog box, click **OK**.

3   On the CD menu, click **Install Printer Driver**.

4   Follow the instructions on the screen to complete the installation.

5   When prompted, connect the USB or parallel cable to the computer and the printer. The **Found New Hardware** wizard appears on the computer screen and the printer icon is created in the Printers folder.

Note
You can also share the printer with other computers using a simple form of networking known as locally shared networking. See To share the printer on a locally shared network.

To connect the printer before the installing software

If you connected the printer to the computer before installing the printer software, the **Found New Hardware** wizard appeared on the computer screen.

If you have turned on the printer, do not turn off the printer or unplug the cable from the printer while the installation program is running. If you do so, the installation program will not finish.

1 In the **Found New Hardware** dialog box that provides the option for selecting a method to locate the driver, select the advanced option and click **Next**.

Do not allow the Found New Hardware wizard to perform an automatic search for the driver.

2 Select the check box for specifying the driver location, and ensure that the other check boxes are clear.

3 Insert the Starter CD into the CD-ROM drive.
   If the CD menu appears, close the CD menu.

4 Browse to locate the root directory on the Starter CD (for example, D), and then click **OK**.

5 Click **Next**, and then follow the instructions on the screen.

6 Click **Finish** to close the Found New Hardware wizard.
   The wizard automatically starts the installation program (this might take a short while).
   For Windows 98 and Windows Me, you must complete the installation program at this point if you wish to install a non-English driver.

7 Complete the installation process.

The setup program provides options to install non-driver components such as the Toolbox, which you are recommended to install. For instructions about installing these components, see To install the software before connecting the printer (recommended).

You can also share the printer with other computers using a simple form of networking known as locally shared networking. See To share the printer on a locally shared network.

To share the printer on a locally shared network

In a locally shared network, the printer is connected directly to the USB or parallel connector of a selected computer (known as the server) and is shared by other computers (clients).

When sharing a directly connected printer, use the computer with the newest operating system as the server. For example, if you have a computer running Windows 2000 and another computer running an older version of Windows, use the computer running Windows 2000 as the server.

Use this configuration only in small groups or when usage is low. The computer that is connected to the printer is slowed down when many users print to the printer.

1 From the Windows desktop, click **Start**, point to **Settings**, and then click **Printers** or **Printers and Faxes**.

2 Right-click the printer icon, click **Properties**, and then click the **Sharing** tab.

3 Click the option to share the printer, and give the printer a share name.

4 If you are sharing the printer with client computers that use other versions of Windows, you can click **Additional Drivers** to install their drivers as a convenience to them.
   This optional step requires you to have the Starter CD in your CD drive.

Network connection

If the printer has network capability, the printer can be shared in a network environment by connecting it directly to the network. This type of connection offers the ability to manage the printer using the embedded Web server from any computer on the network.

Installing printer software and sharing the printer

Choose the installation option for the type of network you have:

- **Client/server network:** If your network has a computer acting as a dedicated print server, install the printer software on the server (To install the software on a network), and then install the printer software on the client computers (To install the printing software on client computers).

- **Peer-to-peer network:** If you have a peer-to-peer network (a network without a dedicated print server), install the software on the computers that will be using the printer (To install the software on a network).

In addition, you can connect to a network printer in both types of networks using the **Add Printer** wizard in Windows (To install the printer driver using Add Printer).

To install the software on a network

Use the following steps to install the printer software in the following networking scenarios:

- Your network has a computer acting as a dedicated print server

- You have a peer-to-peer network (a network without a dedicated print server)

1   Connect the printer to the network.

2   Close any programs that are open.

3   Insert the Starter CD into the CD-ROM drive. The CD menu starts automatically.

    If the CD menu does not start automatically, click **Start**, and then click **Run**. Browse to the CD-ROM drive for the computer, click **Autorun.exe**, and then click **Open**. In the **Run** dialog box, click **OK**.

4   Click **Install Printer Driver** and follow the instructions on the screen to complete the installation.

Note
If you are installing the software on a dedicated print server, select the option to share the printer when prompted, and then select to install printer drivers for Windows clients. The installation program installs the driver for the server and copies the client drivers to a location on the server for users (clients).

To share the printer with Windows client computers, see To install the printing software on client computers.

To install the printing software on client computers

After the printer drivers have been installed on the computer that is acting as the print server, the printing functionality can be shared. Individual Windows users who want to use the network printer must install the software on their computers (clients).

A client computer can connect to the printer in the following ways:

- In the **Printers** folder, double-click the **Add Printer** icon and follow the instructions for a network installation. (See To install the printer driver using Add Printer.)

- On the network, browse to the printer and drag it to your **Printers** folder.

- Add the printer and install the software from the INF file on your network.

  On the Starter CD, the INF files are stored in folders that use the following format: <CD drive>:\Setup\Drivers\<driver>\<operating system>\<language>.

  For example, if your CD drive letter is D, then D:\Setup\Drivers\PCL6\Win2k_XP\English would contain the English PCL 6 INF file for Windows 2000 and Windows XP.

To install the printer driver using Add Printer

1 From the Windows desktop, click **Start**, point to **Settings**, and then click **Printers**. Or, click **Start**, click **Control Panel**, and then click **Printers and Faxes**.

2 Double-click **Add Printer**, and then click **Next**.

3 Select **Network Printer** or **Network Printer Server**.

4 Click **Next**.

5 Do one of the following:

- Type in the network path or queue name of the shared printer and click **Next**. Click **Have Disk** when prompted to select the printer model.

- Click **Next**, and then locate the printer in the **Shared printers** list.

6 Click **Next**, and then follow the instructions on the screen to complete the installation.

Configuring the printer (Mac OS)

You can use the printer with a single Macintosh computer using a USB cable, or you can share the printer among other users on a network.

To install the software for network or direct connection

1   Connect the printer to the computer with the USB cable or to the network with a network cable.

2   Insert the Starter CD into the CD-ROM drive.

3   Click **Install Driver** and follow the instructions on the screen for your connection type.

4   Complete the installation:

    a   Open the Print Center, which is located in the Applications\Utilities folder.

    b   Click **Add Printer**.

    c   For a direct connection, select **USB** from the menu.
    -Or-
    For a network connection on an IP network, on the pop-up menu, select **IP Printing**, and then type the IP address for the printer, or select **Rendezvous**.

    d   Select the printer from the printer list, and then click **Add**. A mark appears beside the printer name, indicating that this printer is now the default printer.

    e   Close the Print Center.

5   If necessary, share the printer with other Macintosh computer users.

- **Direct connection**
  Share the printer with the other Macintosh computer users. See To share the printer on a locally shared network for more information.

- **Network connection**
  Individual Macintosh computer users who want to use the network printer must install the printer software on their computers.

To share the printer on a locally shared network

When you connect the printer directly, you can still share the printer with other computers using a simple form of networking known as locally shared networking. Use this configuration only in small groups or when usage is low. The computer that is connected to the printer is slowed down when many users print to the printer.

Basic requirements for sharing in a Macintosh environment include the following items:

- The Macintosh computers must be communicating on the network using TCP/IP, and the Macintosh computers must have IP addresses. (AppleTalk is not supported.)

- The printer that is being shared must be connected to a built-in USB port on the host Macintosh computer.

- Both the host Macintosh computer and the client Macintosh computers that are using the shared printer must have printer-sharing software installed and the printer driver or PPD for the printer that is installed. (You can run the installation program to install the printer sharing software and associated Help files.)

- The client Macintosh computers should have the appropriate HP printer drivers installed.

- The client Macintosh computers must be PowerMac computers.

For more information about USB printer sharing, see the support information that is available on the Apple website (http://www.apple.com) or the Mac Help on the computer.

To share among computers with the same operating system

Use the following steps to share the printer among Macintosh computers with the same operating system:

1 Turn on printer sharing on the computer that is connected to the printer (the host).

   - **Mac OS X (10.2.x and later):** Open **System Preferences**, click **Sharing**, click **Services**, and then select the **Printer Sharing** check box.

2 To print from the other Macintosh computers (the clients) on the network, preselect the printer in USB Printer Sharing (Mac OS 9, version 9.1 and later) or Sharing (Mac OS X, version 10.2.x and later). Then, choose the neighborhood where the printer is shared and select the printer.

3 To print from the other Macintosh computers (the clients) on the network, preselect the printer in Sharing. Then, choose the neighborhood where the printer is shared and select the printer.

To share among computers with different operating systems

Use the following steps to share with Mac OS 9 (9.1 and later) computers when the host computer is running the Mac OS X (10.1.5 and later).

Note Printers connected using USB cables can only be shared between the Mac OS 9 (9.1 and later) and the Mac OS X (10.1.5 and later) through the Classic environment in the Mac OS X.

1 On the Mac OS X (10.1.5 and later) host computer, open **System Preferences**, make sure that printer sharing is off, and then quit **System Preferences**.

2 Locate the Mac OS 9 (9.1 and later) System Folder, open **Control Panel**, and then open **USB Printer Sharing**. (If the Classic environment is not already running, it starts.)

3 Click the **Start/Stop** tab, and then click **Start**.

4 When **USB Printer Sharing On** appears, click the **My Printers** tab.

5 Select the check box next to the device that you want to share.

6 Close the control panel.

Uninstalling the printer software

To uninstall the software for Windows computers

If you are using Windows 2000 or Windows XP, you must have administrator privileges to uninstall the printer software.

1 From the Windows desktop, click **Start**, point to **Programs**, followed by the printer name, and then click the uninstall option.

2 Follow the onscreen instructions to remove the software.

Alternatively, do the following.

1 If the computer is connected directly to the computer using a USB or parallel cable, disconnect the printer.

2 Close any running applications.

3 From the **Start** menu, open the Control Panel.

4 Double-click **Add/Remove Programs**.

5 Select the printing software that you wish to remove.

6 Click the button for adding or removing software.

7 Follow the onscreen instructions to remove the software.

Note   If the uninstallation process fails, restart the computer and complete the steps above to uninstall the software.

If the software was not successfully installed or the uninstaller could not be found, complete the following steps to run the scrubber utility. (The scrubber utility is not available for computers running Windows NT 4.0.)

8 Disconnect the printer from the computer.

9 On the computer, restart Windows.

10 Insert the Starter CD in the CD drive. If the CD menu appears, exit the CD menu.

11 Locate the scrubber utility on the Starter CD and run the utility.

   - For Windows 98 and Windows Me, use the scrub9x.exe file located in the Utils\Scrubber\Win9x_Me folder.
   - For Windows 2000 and Windows XP, use the scrub2k.exe file located in the Utils\Scrubber\Win2k_XP folder.

To uninstall the software for Macintosh computers

1 If the computer is connected directly to the computer using a USB cable, disconnect the printer.

2 Delete the printer queue from the Printer Center.

5 Control panel

The control panel allows you to change printer settings, view printer status and printer messages, and diagnose printer problems. Additional menu items can appear in the control panel, depending on the options installed in the printer.

Understanding control-panel messages

This section briefly explains some of the messages that may appear on the control-panel display. Follow instructions on the display or the computer screen to resolve the messages, or turn off the printer and turn it on again. If the message persists, see Finding other resources for the product.

Types of control-panel messages

The following types of messages may appear on the control-panel display when the printer is turned on.

- **Status messages**
  Reflect the current state of the printer and require no action from users. For example, `PROCESSING JOB`, `CANCELING JOB`, or `READY`.

- **Warning messages**
  Describe events that require attention but do not prevent the printing. For example, `INK LOW IN BLACK CARTRIDGE`.

- **Error messages**
  Describe events that require action, such as loading media or clearing a media jam. If an error code is displayed, turn off the printer and turn it on again. If the message persists, write down the error code and go to HP Instant Support for details (see HP Instant Support). In case of a device failure, contact HP (see Obtaining HP telephone support).

Control-panel messages

The following table describes some of the common control-panel messages.

For information on:

- Replacing the printheads or ink cartridges: See Replacing the ink cartridges and Maintaining the printheads.
- Loading paper: See Loading media.

Message	Description
CLOSE ALL COVERS	The printer cannot print because one or more of the covers is open. Ensure all covers are properly closed.
ENSURE REAR ACCESS PANEL IS PROPERLY CLOSED	The rear access panel is not closed properly. Push it in firmly until it locks into place.
[TRAY X OR ACCESSORY] NOT AVAILABLE...	The tray or auto-duplex unit is not available. To use media from another tray or print without duplexing, press 🔁 (Resume button). To cancel the print job, press ✕ (Cancel button).
CARRIAGE STALL...	Something is preventing the carriage from moving. Open the top cover, clear the obstruction, and then press 🔁 (Resume button) to continue printing.
LOAD [SIZE] MEDIA IN TRAY [X]. PRESS RESUME TO CONTINUE. LOAD [TYPE][SIZE] MEDIA IN TRAY [X]. PRESS RESUME TO CONTINUE.	The specified tray is either empty or contains media whose type and/or size are different from what have been selected for the print job. Load the correct media into the tray, and press 🔁 (Resume button) to continue printing.
PAPER JAM...	Media is jammed in the printer. See Clearing jams.
PRINTED PAGE IS DRYING. PRESS RESUME TO CONTINUE.	The printer is waiting for the printed page to dry before continuing to print. You can remove the page from the output tray (handle it carefully to avoid smearing the ink), and press 🔁 (Resume button) to start printing the next page.
REMOVE PRINTED PAGES FROM OUTPUT TRAY. PRESS RESUME TO CONTINUE	The output tray is full. Remove the printed pages and press 🔁 (Resume button) to continue printing.
REPLACE INCOMPATIBLE OR FAULTY [COLOR] PRINTHEAD REPLACE INCOMPATIBLE OR FAULTY [COLOR] INK CARTRIDGE	The printhead or ink cartridge is either incompatible or faulty. Replace with a HP printhead or ink cartridge to continue printing.
INSTALL [COLOR] PRINTHEAD INSTALL [COLOR] INK CARTRIDGE	The printhead or ink cartridge is either missing or not installed correctly. Ensure the printhead or ink cartridge is in its correct color-coded slot, and press down firmly to ensure proper contact.
INK LOW IN [COLOR] CARTRIDGE	The ink cartridge is running low on ink and will need to be replaced soon. Press 🔁 (Resume button) to clear this message.
REPLACE EMPTY [COLOR] INK CARTRIDGE REPLACE EXPIRED [COLOR] INK CARTRIDGE	The ink cartridge is either empty or has expired. Replace with a HP ink cartridge to continue printing.

Message	Description
`[COLOR] INK CARTRIDGE IS EXPIRING SOON`	When the ink cartridge expires, replace with a new HP ink cartridge.
	Press ▯ (Resume button) to clear this message.
`NON-HP [COLOR] INK CARTRIDGE...`	A non-HP ink cartridge has been detected.
	Replace with a HP ink cartridge.
	To continue printing with non-HP ink cartridge, press and hold ⏻ (Power button), press ▯ (Resume button) three times, and release ⏻ (Power button). However, print quality and ink level information may be affected.
	HP recognizes customer's choice, but cannot guarantee the quality or reliability of non-HP ink cartridges. Printer services or repairs required as a result of using non-HP ink cartridges will not be covered under warranty.
	If you believe you have purchased a genuine HP ink cartridge, visit http://www.hp.com/go/anticounterfeit.
`INSUFFICIENT MEMORY`	More data has been received from the computer than fits in the printer's memory. You may try to compress your file before printing or use a lower print quality. Alternatively, you can add extra DIMMs to increase the printer's memory.
	Press ▯ (Resume button) to clear this message.
`POWERING OFF`	The printer is preparing to turn off. Please wait.
`PROCESSING JOB...`	The printer is performing some tasks. Please wait.
`READY`	The printer is ready to accept print jobs.

Understanding control-panel menus

Information menu

This menu contains printer information pages that give details about the printer and its configuration. To print an information page, scroll to the desired page and press ✓ (Select button).

Message	Description
PRINT MENU MAP	This item prints a map of the printer menu structure.
PRINT CONFIGURATION PAGE	This item prints a page describing the current printer configuration (such as firmware version, model, accessories installed, I/O support, or other details). If an HP Jetdirect print server is installed, a second page will be printed, which displays the settings for the HP Jetdirect print server.
PRINT DIAGNOSTIC PAGE	This item prints a diagnostic page describing the current printer configuration, printhead information, and technical information.
PRINT DEMO	This item prints a demonstration page.
PRINT PCL FONT LIST	This item prints the available PCL fonts.
PRINT PS FONT LIST	This item prints the available PS (emulated PostScript) fonts.
SHOW IP ADDRESS	This item displays the printer's default IP address.

Paper Handling menu

These settings control the default media options. However, settings made in the software application from which you print or in the printer driver override control panel settings for the current print job.

Message	Value or Submenu	Description
TRAY 1 SIZE	NOT SET SUPER B (13 X 19 IN.) A3 NOBI A3 A4 A5 A6 B4 (JIS) B5 (JIS) EXECUTIVE LEGAL LETTER STATEMENT 11 X 17 ENVELOPE #10 ENVELOPE A2 ENVELOPE C5 ENVELOPE C6 ENVELOPE DL JAPANESE ENVELOPE KAKU #2 ENVELOPE MONARCH JAPANESE ENVELOPE CHOU #3 JAPANESE ENVELOPE CHOU #4 HP GREETING CARD ENVELOPE 4 X 6 IN. WITH TAB 4 X 6 IN. 5 X 8 IN. OFUKU HAGAKI HAGAKI CARD CUSTOM	This item allows you to select the media size loaded in Tray 1. Default = NOT SET
TRAY 1 TYPE	NOT SET PLAIN PAPER HP PREMIUM PAPER HP HEAVYWEIGHT PREMIUM PAPER HP PREMIUM TRANSPARENCY FILM HP PREMIUM PLUS TRANSPARENCY FILM HP EVERYDAY PHOTO PAPER, MATTE FINISH HP EVERYDAY PHOTO PAPER, SEMI GLOSS HP COLORFAST PHOTO PAPER, GLOSSY HP PREMIUM + PHOTO PAPER, GLOSSY HP PREMIUM + PHOTO PAPER, MATTE HP PREMIUM PHOTO PAPER, GLOSSY HP PHOTO PAPER, GLOSSY HP BROCHURE & FLYER, GLOSS HP BROCHURE & FLYER, MATTE	This item allows you to select the media type loaded in Tray 1. Default = NOT SET

Message	Value or Submenu	Description
TRAY 2 SIZE	NOT SET SUPER B (13 X 19 IN.) A3 NOBI A3 A4 B4 (JIS) B5 (JIS) EXECUTIVE LEGAL LETTER STATEMENT 11 X 17 CUSTOM	This item allows you to select the media size loaded in Tray 2. Default = NOT SET
TRAY 2 TYPE	NOT SET PLAIN PAPER	This item shows the media type for Tray 2. Default = NOT SET
DEFAULT TRAY	TRAY 1 TRAY 2	This item allows you to set the default tray. If a tray is not selected in the printer driver, the printer will draw media from this tray. Default = TRAY 2
AUTOMATIC MEDIA TYPE SENSE	OFF ON	This item allows you to enable the media type sensor. Default = OFF
FAST NORMAL PRINT SPEED	HIGH LOW	This item helps to improve the printing speed when Fast Normal print quality is selected. Default = HIGH
OUTPUT RAMP EXTENSION	ON OFF	This item enables the printer's output ramp to be extended to hold the paper before releasing it onto the output tray. Default = OFF

Configure Device menu

Items in this menu affect printer behavior. Configure the printer according to your printing needs.

Message	Value or Submenu	Description
PRINT PS/PCL6 ERRORS	OFF ON	This item allows you to print a list of PS/PCL6 errors. Default = OFF
UNATTENDED PRINTING	OFF ON	This item sets the printer to pause during large print jobs (after every 100 pages) so that you can clear the output tray. Default = OFF
SYSTEM SETUP	PERSONALITY	This item sets the default personality to automatic switching, PCL5, PCL6, or PostScript emulation. Default = AUTO
	LANGUAGE	This item sets the default language. Select it from the list of supported languages. Default = ENGLISH
I/O	I/O TIMEOUT	This item sets the length of time (from 5 to 300 seconds) that the printer waits for remaining data for a print job. If that time is exceeded, the printer prints the print job. Default = 15
	EIO	This item allows you to access submenus for the HP Jetdirect print server, if one is installed. For details, see Changing networking parameters from the control panel.
RESTORE FACTORY SETTINGS	YES NO	This item restores all values to the printer's predetermined factory values.

Resetting the printer

You may need to reset the printer in the following circumstances:

- You want to restore the printer's default settings.
- Communication between the printer and computer has been interrupted.

CAUTION   When you use the restore factory settings option on this menu, you can lose printer configuration settings.

Note   This option does not reset an HP Jetdirect print server to its default settings if one is installed in the printer. To reset the HP Jetdirect print server, see Resetting the HP Jetdirect print server.

Printing menu

The items in this menu are used when printing from MS-DOS®, UNIX, and Linux. If your computer is running Windows or Mac OS, configure these settings using the printer driver.

Message	Value or Submenu	Description
COPIES	1 - 100	This item sets the number of copies to print. Default = 1
DEFAULT PAPER SIZE	LETTER A4	This item allows you to set the default media size. Default = LETTER
DEFAULT PAPER TYPE	PLAIN PAPER HP PREMIUM PAPER HP HEAVYWEIGHT PREMIUM PAPER HP PREMIUM TRANSPARENCY FILM HP PREMIUM PLUS TRANSPARENCY FILM HP EVERYDAY PHOTO PAPER, MATTE FINISH HP EVERYDAY PHOTO PAPER, SEMI GLOSS HP COLORFAST PHOTO PAPER, GLOSSY HP PREMIUM + PHOTO PAPER, GLOSSY HP PREMIUM + PHOTO PAPER, MATTE HP PREMIUM PHOTO PAPER, GLOSSY HP PHOTO PAPER, GLOSSY HP BROCHURE & FLYER, GLOSS HP BROCHURE & FLYER, MATTE	This item allows you to set the default media type. Default = PLAIN PAPER
DEFAULT QUALITY LEVEL	FAST FAST NORMAL NORMAL BEST	This item allows you to select the default level for print quality. This setting is used if the print job contains no print-quality selection. Default = NORMAL
DUPLEX	OFF ON	This item appears only when an auto-duplex unit is installed. Set the value to ON to print on both sides (duplex) or OFF to print on one side of a sheet of paper. For more information, see Printing on both sides (duplexing). Default = OFF
OVERRIDE A4/LETTER	NO YES	This item sets the printer to print an A4 job on letter-size paper when no A4 paper is loaded, or to print a letter-size job on A4 paper when no letter-size paper is loaded. Default = NO
PCL	FORM LENGTH ORIENTATION FONT NUMBER FONT PITCH FONT POINT SIZE SYMBOL SET ISE FONTS APPEND CR TO LF	This item allows you to configure settings for printer control language (PCL) when using the PCL 5c or PCL 6 printer personality.

Maintenance menu

Print Quality menu

This menu allows you to adjust aspects of print quality, including calibration, printhead alignment, and quality level.

Message	Value or Submenu	Description
ALIGN PRINTHEADS	N.A.	This item begins the printhead alignment process.
COLOR CALIBRATION	N.A.	This item begins the color calibration process.
LINEFEED CALIBRATION	N.A.	This item begins the linefeed calibration process.
CLEAN PRINTHEADS	N.A.	This item begins the printhead cleaning process.

Diagnostics menu

This menu allows you to view the printer's event log.

Message	Description
SHOW EVENT LOG	This item displays the last 10 events on the control panel, starting with the most recent event.

Paper Path Test menu

This menu allows you to test various components of the printer so you can identify and solve problems.

Message	Description
START TEST SOURCE DUPLEX COPIES	The items on this menu let you test the paper handling features of the printer. If you have difficulty printing from one of the trays, or printing on both sides of the page, run this test to verify that the paper path is working properly.

Changing networking parameters from the control panel

The EIO (enhanced input/output) submenu appears on the I/O menu only when an HP Jetdirect print server is installed. If the printer contains an HP Jetdirect print server, you can configure basic networking parameters using the EIO menu. Network printer administrators can also use HP Web Jetadmin or the embedded Web server to configure these and other parameters remotely.

Note   The items available on the menu vary depending on the particular print server that is installed.

EIO menu

This menu allows you to configure the networking parameters for the printer. To check the printer's current network settings, print a configuration page. See Understanding and printing the configuration page.

Message	Value or Submenu	Description
CFG NETWORK	NO YES	Selects whether or not you want to use the EIO Jetdirect menu items. You must change this option to YES each time you want to use the EIO Jetdirect menu.
TCP/IP IPX/SPX ATALK DLC/LLC	ON OFF	Selects whether to enable or disable a protocol. Select OFF to disable a protocol.
CFG TCP/IP	NO YES	Selects whether to use the TCP/IP menu and set the TCP/IP protocol parameters.
		In the TCP/IP menu, you can specify BOOTP=YES or DHCP=YES for TCP/IP parameters to be automatically configured by a BootP or DHCP server when the printer is turned on.
		If you specify BOOTP=NO and DHCP=NO, you can choose AUTO IP=YES to have a link-local address 169.254.x.x assigned automatically.
		If you specify BOOTP=NO, DHCP=NO, and AUTO IP=NO, you can manually set the following TCP/IP parameters from the control panel: ● IP address (IP) ● Subnet Mask (SM) ● Syslog Server (LG) ● Default Gateway (GW) ● Idle Timeout period (default is 270 seconds; 0 disables the timeout)
		When setting IP numbers, press ▲ (Up Arrow button) to increase the number by 1. Press ▼ (Down Arrow button) to decrease the number by 1. Press ✓ (Select button) to make your selection.

Message	Value or Submenu	Description
CFG IPX/SPX	NO YES	Selects whether to use the IPX/SPX menu and set the IPX/SPX protocol parameters.
		In the IPX/SPX menu, you can specify the frame type parameter used on your network. ● The default is AUTO, which automatically sets and limits the frame type to the first one detected. ● For Ethernet networks, frame type selections include EN_8023, EN_II, EN_8022, and EN_SNAP. ● For Token Ring networks, frame type selections include TR_8022 and TR_SNAP. In the submenu for Token Ring cards, you can also specify the NetWare Source Routing parameter, which can be AUTO (default), OFF, SINGLE R, or ALL RT.
WEB	HTTPS HTTP/HTTPS	For configuration management, specify whether the embedded Web server will accept communications using HTTPS (Secure HTTP) only, or both HTTP and HTTPS. ● HTTPS: For secure, encrypted communications, only HTTPS access is accepted. The print server will appear as a secure site. ● HTTP/HTTPS: Access using either HTTP or HTTPS is permitted.
SECURITY	KEEP RESET	Specify whether the current security settings on the print server will be saved or reset to factory defaults. ● KEEP (default): The current security settings are maintained. ● RESET: Security settings are reset to factory defaults.
CFG LINK	NO YES	Selects whether you want to manually configure the HP Jetdirect 10/100Base-TX print server's network link speed and communication mode.
		The HP Jetdirect settings must match the network. The default setting is NO, which bypasses the link configuration menu items. If you specify YES, you can select one of the following link configuration menu items: ● AUTO (default): The print server automatically configures itself to match the link speed and communication mode of the network. If it fails, 100TX HALF will be set. ● 10T HALF: 10 Mbps, half-duplex operation ● 10T FULL: 10 Mbps, full-duplex operation ● 100TX HALF: 100 Mbps, half-duplex operation ● 100TX FULL: 100 Mbps, full-duplex operation

Novell NetWare frame type parameters

The HP Jetdirect print server automatically selects a NetWare frame type. Select a frame type manually only when the print server selects an incorrect frame type. To identify the frame type chosen by the HP Jetdirect print server, print a configuration page from the control panel. See Understanding and printing the configuration page.

The following frame types are supported:

- Ethernet_802.3
- Ethernet_II
- Ethernet_802.2
- Ethernet_SNAP

Disabling network protocols (optional)

By factory default, all supported network protocols are enabled. Disabling unused protocols has the following benefits:

- It decreases printer-generated network traffic.
- It prevents unauthorized users from printing to the printer.
- It provides only pertinent information on the Configuration page.
- It allows the control panel to display protocol-specific error and warning messages.

To disable network protocols

Note   Do not disable the IPX/SPX protocol if Windows 98, Windows NT, Windows Me, Windows 2000, or Windows XP users will be printing to the printer.

1   Press ✓ (Select button) on the control panel to enter the menus.

2   Press ▼ (Down Arrow button) to highlight CONFIGURE DEVICE, and then press ✓ (select button).

3   Press ▼ (Down Arrow button) to highlight I/O, and then press ✓ (Select button).

4   Press ▼ (Down Arrow button) to highlight EIO SUBMENU, and then press ✓ (Select button).

5   Press ▼ (Down arrow button) to highlight the network protocol you want to disable, and then press ✓ (Select button).

6   Press ▼ (Down Arrow button) to highlight OFF, and then press ✓ (Select button).

7   Press ✗ (Cancel button) to return to the READY state.

Resetting the HP Jetdirect print server

Resetting the HP Jetdirect print server restores the factory default values of the Jetdirect print server.

Note   When you restore the factory default values for the HP Jetdirect print server, all previously stored EIO settings are lost.

To reset the HP Jetdirect print server

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

2   While holding ⏎ (Back button) and ⎙ (Resume button), turn on the printer.

Printing control-panel menu map

You can print a menu map of the settings that can be accessed through the control panel.

1   Press ✓ (Select button) on the control panel.

2   Press ▼ (Down Arrow button) to highlight INFORMATION, and then press ✓ (Select button).

3   Press ✓ (Select button) to select PRINT MENU MAP.

Changing printer settings from the control panel

The control panel is one of three ways to set options in the printer. You can also change options from the printer driver and the software applications from which you print. Printer driver and application settings override control panel settings for the current print job. Application settings override default printer driver settings.

Menu items in the control panel are numbered from 1 to 9. If a menu has more than nine items, the additional items will appear with a letter value from A to Z. However, the numbers and letter values are not included in the procedures in this guide.

For more information about any control panel menu or item, press ? (Help button).

To access the menus and settings

1   Press ✓ (Select button) on the control panel to enter the menus.

2   Navigate to the menu or submenu that contains the setting you want to change.

   * Press ▼ (Down Arrow button) or ▲ (Up Arrow button) to highlight the desired menu. (Hold down either of these buttons to auto-scroll through the selections.) Press ✓ (Select button) to access the desired menu. Repeat this procedure to access submenus.

   * Press ▼ (Down Arrow button) or ▲ (Up Arrow button) to highlight the desired setting, and then press ✓ (Select button) to save the setting. An asterisk (*) appears next to the setting in the display, indicating that the new setting is now the default.

3   Press ✗ (Cancel button) to exit the menus and return the printer to the READY state. If no button is pressed for 30 seconds, the printer returns automatically to the READY state.

6 Maintaining and troubleshooting

Replacing the ink cartridges

You can check the ink levels from the control panel or the embedded Web server. For information about using these tools, see Overview of printer management tools.

After removing a cartridge from its package, install it right away. Do not remove a cartridge from the printer for long periods of time.

CAUTION   HP recognizes customer's choice, but cannot guarantee the quality or reliability of non-HP ink cartridges. Printer services or repairs required as a result of using non-HP or refilled ink cartridges is not covered under warranty.

Note   To find out which ink cartridges work with your printer, see Supplies.

To replace an ink cartridge

1   Ensure the printer is turned on.

2   Lift to open the ink cartridge cover.

3 Remove the ink cartridge that requires replacement by grasping it between your thumb and forefinger and pulling it firmly toward you.

4 Remove the new ink cartridge from its package.

5 Insert the cartridge into its own color-coded slot. Press down firmly on the cartridge to ensure proper contact.

6 Close the ink cartridge cover.

Maintaining the printheads

If printed characters are incomplete, or dots or lines are missing from printouts, this may be caused by clogged ink nozzles and you might need to clean the printheads. To find out which printheads work with your printer, see Supplies.

When the quality of printouts deteriorates, complete the following:

● Check the health of the printheads.

● Initiate the automatic printhead cleaning process.

● Manually clean the printhead contacts.

● Replace the printheads, if the problems persist after cleaning.

CAUTION   HP is not responsible for damage to the printer that results from modifying the printheads.

To check printhead health

Note   If any printhead status is bad, clean or replace the printhead.

● **From the configuration page**

Check the printhead health section of the configuration page. See Understanding and printing the configuration page.

● **From the embedded Web server**

1 Open the embedded Web server. See To open the EWS.

2 Click the **Information** tab.

3 Click **Ink Supplies** in the left pane.

To align the printheads

Whenever you replace a printhead, the printer automatically aligns the printheads to ensure the best print quality. However, if the appearance of your printed pages indicates that the printheads are misaligned, you can align them manually.

- **From the control panel**

    1   Press ✓ (Select button) on the control panel.

    2   Press ▲ (Up Arrow button) until MAINTENANCE is highlighted, and then press ✓ (Select button).

    3   Ensure PRINT QUALITY is highlighted, and then press ✓ (Select button).

    4   Ensure ALIGN PRINTHEADS is highlighted, and then press ✓ (Select button).

- **From the Embedded Web server**

    1   Open the embedded Web server. See To open the EWS.

    2   Click the **Settings** tab.

    3   Click **Diagnostic** in the left pane.

    4   In the **Printheads** section, select the option to align printheads from the drop-down list.

To clean printheads automatically

Note   Clean the printheads only when necessary; cleaning uses ink and shortens the life of the printheads. There are three levels of cleaning available. After one level of cleaning, perform the next level of cleaning only if the results are not satisfactory.

- **From the control panel**

    1   Press ✓ (Select button) on the control panel.

    2   Press ▲ (Up Arrow button) until MAINTENANCE is highlighted, and then press ✓ (Select button).

    3   Ensure PRINT QUALITY is highlighted, and then press ✓ (Select button).

    4   Press ▲ (Up Arrow button) until the option to clean printheads is highlighted, and then press ✓ (Select button).

- **From the Embedded Web server**

    1   Open the embedded Web server. See To open the EWS.

    2   Click the **Settings** tab.

    3   To clean the printheads, click **Diagnostic** in the left pane. Then, select the appropriate cleaning level from the drop-down list in the **Printheads** section.

To replace the printheads

Only replace printheads after you have attempted to clean the printheads. See To clean printheads automatically and To clean the printhead contacts manually.

1 Ensure the printer is plugged in and turned on.

2 Lift the ink cartridge cover, and then lift the printhead cover.

3 Lift to open the printhead latch.
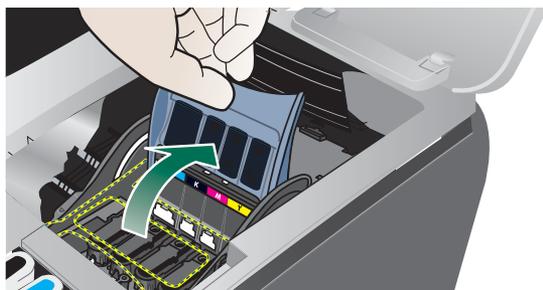
4 Lift the handle of a printhead and use it to pull the printhead out of its slot.
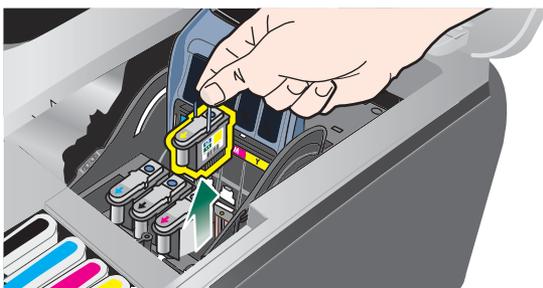
5 Remove the new printhead from its package, and then remove the protective tape.
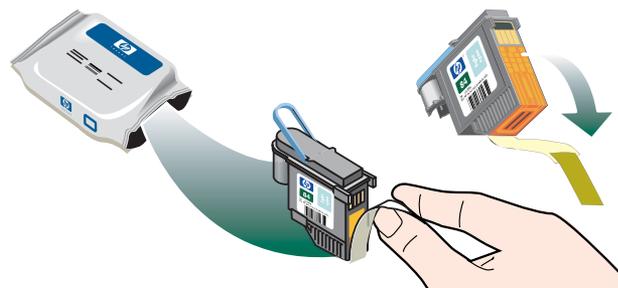
6 Insert the printhead into its color-coded slot. Press down firmly on the printhead to ensure proper contact.
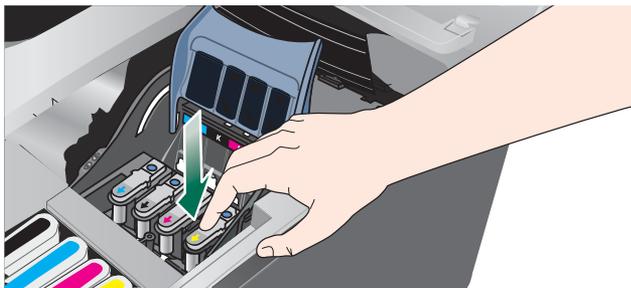
7   Close the printhead latch. Press down to ensure it is in the lock position.
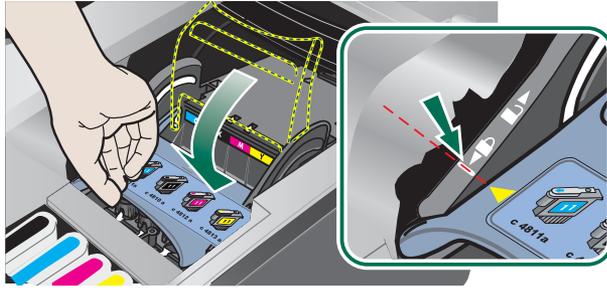
8   Close the covers.

9   Wait while the printer initializes the printheads and prints two alignment pages.

To clean the printhead contacts manually

To find out which printheads are compatible with your printer, see Supplies.

CAUTION   Clean the printhead contacts only *after* you have attempted to clean the printheads automatically. See To clean printheads automatically. Printhead contacts contain sensitive electronic components that can be damaged easily.

1   Ensure the printer is plugged in and turned on.

2   Lift the ink cartridge cover and printhead cover.

3   Wait two or three seconds, and then unplug the printer power cord.

4   Lift to open the printhead latch.
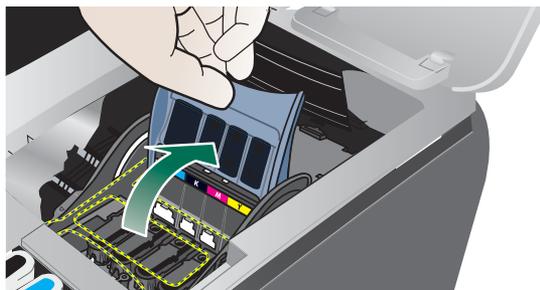
5   Lift the handle of a printhead and use it to pull the printhead out of its slot.
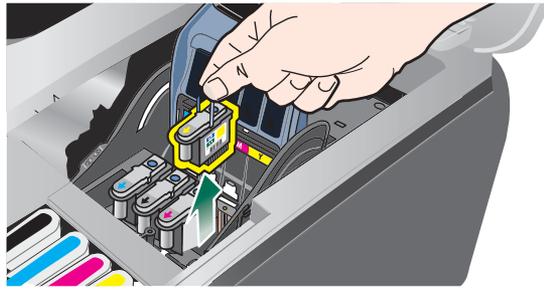
6 Carefully remove any ink from the contact pads on the printhead using a dry cotton swab or a soft, dry, lint-free cloth that will not come apart or leave fibers behind.
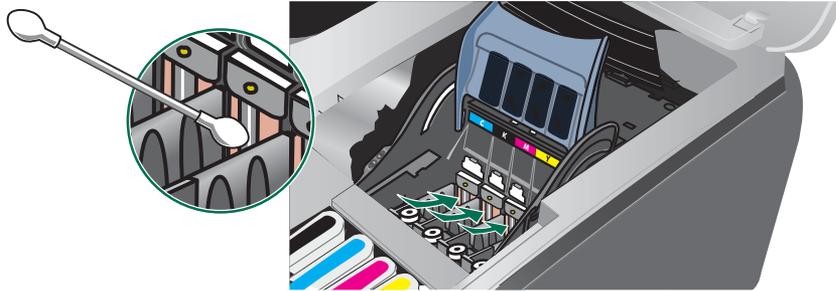
CAUTION Only wipe the contact pads. Wiping the nozzles (located on the underside of the printhead) can cause severe damage to the printhead.
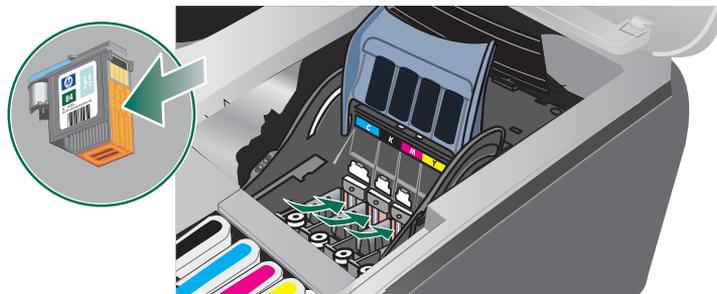
7 Insert the printhead into its color-coded slot. Press down firmly on the printhead to ensure proper contact.

CAUTION Avoid using drinking water or alcohol, which could damage the printheads.

8 After cleaning, place the printhead on a sheet of paper or paper towel.

9 Clean the contact points in the printhead slot inside the printer with a dampened cotton swab. Before re-inserting the printheads, make sure all the electrical contacts have had at least five minutes to dry.

10 Plug in the power cord and turn on the printer. The control panel should still indicate that a printhead is missing.

11 If you are replacing a printhead, remove the new printhead from its package, and then remove the protective tape.

12 Insert the printhead into its color-coded slot. Press down firmly on the printhead to ensure proper contact.

13 Close the printhead latch. Ensure it is in the lock position.

14 Where necessary, repeat the above steps for the remaining printheads.

15 Wait while the printer initializes the printheads and prints an alignment page. If the printer does not print an alignment page, replace the printhead you have cleaned.

Calibrating the color

Whenever you replace a printhead, the printer automatically calibrates the colors to ensure the best print quality. If you are not satisfied with the appearance of the colors, you can calibrate colors manually.

- **From the control panel**

    1 Press ✓ (Select button) on the control panel.

    2 Press ▲ (Up Arrow button) until MAINTENANCE is highlighted, and then press ✓ (Select button).

    3 Ensure PRINT QUALITY is highlighted, and then press ✓ (Select button).

    4 Press ▼ (Down Arrow button) until COLOR CALIBRATION is highlighted, and then press ✓ (Select button).
       A color calibration page prints.

    5 Follow the instructions on the control-panel display to complete the process.

Calibrating the linefeed

If regular horizontal bands appear in printed text or graphics, calibrate the linefeed.

To calibrate the linefeed

1 Press ✓ (Select button) on the control panel.

2 Press ▲ (Up Arrow button) until MAINTENANCE is highlighted, and then press ✓ (Select button).

3 Ensure PRINT QUALITY is highlighted, and then press ✓ (Select button).

4 Press ▼ (Down Arrow button) until LINEFEED CALIBRATION is highlighted, and then press ✓ (Select button).
   Two linefeed calibration pages print.

5 Follow the instructions on the control-panel display to complete the process.

   a On the calibration page, find the box that has the fewest horizontal bands across it, and note its number.

   b Press ▲ (Up Arrow button) or ▼ (Down Arrow button) to select the number of the box, and then press ✓ (Select button).

Troubleshooting tips and resources

Use the following tips and resources to resolve printing problems.

- For paper jam, see Clearing jams.
- For paper-feed problems, such as the paper skew and paper pick, see Resolving paper-feed problems.

Some printer problems can be resolved by resetting the printer.

To reset the printer

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

2 Disconnect the power cord from the printer.

3 Wait about 20 seconds, and then reconnect the power cord.

4 Press ⏻ (Power button) to turn on the printer.

General troubleshooting tips

Ensure the following:

- Power light is on and not blinking. When the printer is first turned on, it takes approximately 45 seconds to warm up.
- Make sure the printer is in the Ready state.
- No error messages appear on the computer screen.
- Power cord and other cables are working and firmly connected to the printer. Make sure the printer is connected firmly to a functioning alternating current (AC) power outlet and is turned on. See Printer specifications for voltage requirements.
- Media is loaded correctly in the tray and is not jammed in the printer.
- Printheads and ink cartridges are properly installed in their correct color-coded slots. Press down firmly on each one to ensure proper contact. Ensure you have removed the tape from each printhead.
- Printhead latch and all covers are closed.
- Rear access panel or auto-duplex unit is locked into place.
- All packing tapes and materials are removed from the printer.
- Printer can print a configuration page. See Understanding and printing the configuration page.
- The printer is set as the current or default printer. For Windows, set the printer as the default in the Printers folder. For Mac OS, set the printer as the default in the Chooser or the Print Center. See your computer's documentation for more information.
- **Pause Printing** is not selected if you are using a computer running Windows.
- You are not running too many programs when you are performing a task. Close programs that you are not using or restart the computer before attempting the task again.

Resetting the control panel language

1   Press ⏻ (Power button) to turn off printer.

2   Press and hold ⏻ (Power button) and then press ✓ (Select button) once.

3   Release ⏻ (Power button).

    The printer will initialize and prompt for language selection.

4   Scroll using ▲ (Up Arrow button) or ▼ (Down Arrow button) and press ✓ (Select button) to select the language.

Resolving printing problems

Printer shuts down unexpectedly

Check power and power connections

Make sure the printer is connected firmly to a functioning alternating current (AC) power outlet. See Printer specifications for voltage requirements.

All printer lights are blinking

A non-recoverable error has occurred

Reset the printer. See To reset the printer.

If the problem persists, contact HP. See Support and warranty.

Printer is not responding (nothing prints)

Check printer setup

See General troubleshooting tips.

Check the printhead initialization

When printheads are installed or replaced, the printer automatically prints two alignment pages to align the printheads. This process takes about eight minutes. You can print documents only after the automatic alignment pages have been printed.

Check the printer software installation

If the printer is turned off when printing, an alert message should appear on your computer screen; otherwise, the printer software might not be installed correctly. To resolve this, uninstall the software completely, and then reinstall the printer software. See Uninstalling the printer software.

Check cable connections

- Make sure both ends of the cable (USB, parallel, or network) are secure.
- If the printer is connected to a network, check the following:
  - Check the Link light on the back of the printer.
  - Make sure you are not using a phone cord to connect the printer.
  - The network hub, switch, or router is on and working properly.

Check printer setup for network environment

Ensure the correct printer driver and printer driver port are being used. For more information about network connections, see Configuring the printer (Windows), Configuring the printer (Mac OS), or the documentation provided by your network vendors.

Check any personal firewall software installed on the computer

The personal software firewall is a security program that protects a computer from intrusion. However, the firewall might block communication between the computer and the printer. If there is a problem communicating with the printer, try temporarily disabling the firewall. If the problem persists, the firewall is not the source of the communication problem. Re-enable the firewall.

If disabling the firewall allows you to communicate with the printer, you might want to assign the printer a static IP address and re-enable the firewall. See Configure network options.

Printer does not accept printhead

Inspect the printhead

Remove the printhead and make sure the protective tape has been removed completely from the printhead.

Clean the printhead

Complete the printhead cleaning procedure. See To clean printheads automatically.

Turn off the printer after removing the printhead

After removing the printhead, turn the printer off, and then turn on the printer without the printhead installed. After the printer has restarted, reinsert the printhead.

Printer takes a long time to print

Check the system configuration

Make sure the computer meets the minimum system requirements for the printer.
See Printer specifications.

Check the port setting

The port setting configuration in your system might not be set to ECP.

See the documentation that came with the computer for information on how to change
the port setting, or contact the computer manufacturer.

Check the printer software settings

The printer prints slower when **Best** or **Maximum dpi** is selected as the print quality.
To increase the print speed, select different print settings in the printer driver.
See Changing print settings.

Blank page printed

Check media settings

● Make sure the page settings in the printer driver matches the width and length of media
  loaded in the tray. See Changing print settings.

Check the parallel port on your computer

If you are using a parallel cable, make sure the printer is connected directly to the parallel
port. Avoid sharing the port with other devices, such as a Zip drive or other printers.

Placement of the text or graphics is wrong

Check how the media is loaded

Make sure the media width and length guides fit snugly against the edges of the stack
of media, and make sure the tray is not overloaded. See Loading media.

Check the media size

● Content on a page might be cut off if the document size is larger than the media that you
  are using.

● Make sure the media size selected in the printer driver matches the size of media loaded
  in the tray.

● If you are using a computer running Windows, select **Emulate LaserJet Margins** in the
  printer driver to print Laser Jet formatted document.

Check margin settings

If the text or graphics are cut off at the edges of the page, make sure the margin settings
for the document do not exceed the printable area of your printer. See Setting minimum
margins.

Check the page-orientation setting

Make sure the media size and page orientation selected in the application match the settings in the printer driver.

Check the Preserve Layout setting (Windows)

If you are using an auto-duplex unit to do automatic duplex printing, ensure **Preserve Layout** is selected in the printer driver. Clearing this option may result in unwanted page breaks. See Printing on both sides (duplexing).

Check the printer location and length of USB cable

If the solutions do not work, the problem may be caused by the inability of the application to interpret print settings properly. See the release notes for known software conflicts; or refer to the application's documentation, or contact the software manufacturer for specific help.

Poor print quality and unexpected printouts

Check the printheads and ink cartridges

Replace any clogged or worn printheads or low ink cartridges (see Maintaining the printheads), and try to print again.

Check the paper quality

The paper might be too moist or too rough. Make sure the media used meets HP specifications (see Selecting print media), and try to print again.

Check the type of media loaded in the printer

- Make sure the tray supports the type of media you have loaded. See Understanding specifications for supported media.

- Make sure you have selected the tray in the printer driver that contains the media you want to use. See Changing print settings.

Check the printer location and length of USB cable

See Check the printer location and length of USB cable.

Meaningless characters print

If an interruption occurs to a job that is printing, the printer might not recognize the rest of the job.

Cancel the print job and wait for the printer to return to the ready state. If the printer does not return to the ready state, cancel all jobs, and wait again. When the printer is ready, resend the job. If prompted by the computer to retry the job, click **Cancel**.

Check cable connections

If the printer and computer are connected with a USB or parallel cable, the problem may be due to a poor cable connection.

Make sure the cable connections at both ends are secure. If the problem persists, turn off the printer, disconnect the cable from the printer, turn on the printer without connecting the cable, and delete any remaining jobs from the print spooler. When the Power light is on and not flashing, reconnect the cable.

Check the document file

The document file may be damaged. If you can print other documents from the same application, try printing a backup copy of your document, if available.

Ink is smearing

Check print settings

- When you print documents that use much ink, allow more time to dry before handling the printouts. This is especially true for transparencies. In the printer driver, select the **Best** print quality, also increase the ink drying time and reduce the ink saturation using the ink volume under the advanced features (Windows) or ink features (Mac OS) in the printer software. However, note that decreasing ink saturation might give printouts a "washed-out" quality.

- Color documents that have rich, blended colors can wrinkle or smear when printed using the **Best** print quality. Try using the other print mode to reduce ink, or use HP Premium Paper designed for printing vivid color documents. See Changing print settings.

Check the media type

Some types of media do not accept ink well, ink will dry more slowly and smearing may occur. See Selecting print media.

Check the margin settings

If you are using a computer running Windows, make sure the option to minimize margins is not selected.

Clean the inside of the auto-duplex unit

After extensive printing, ink might be deposited on the inside of the auto-duplex unit causing ink to smear when printing on both sides of the paper. To remove the deposited ink, use a lint free cloth to clean the inside of the auto-duplex unit.
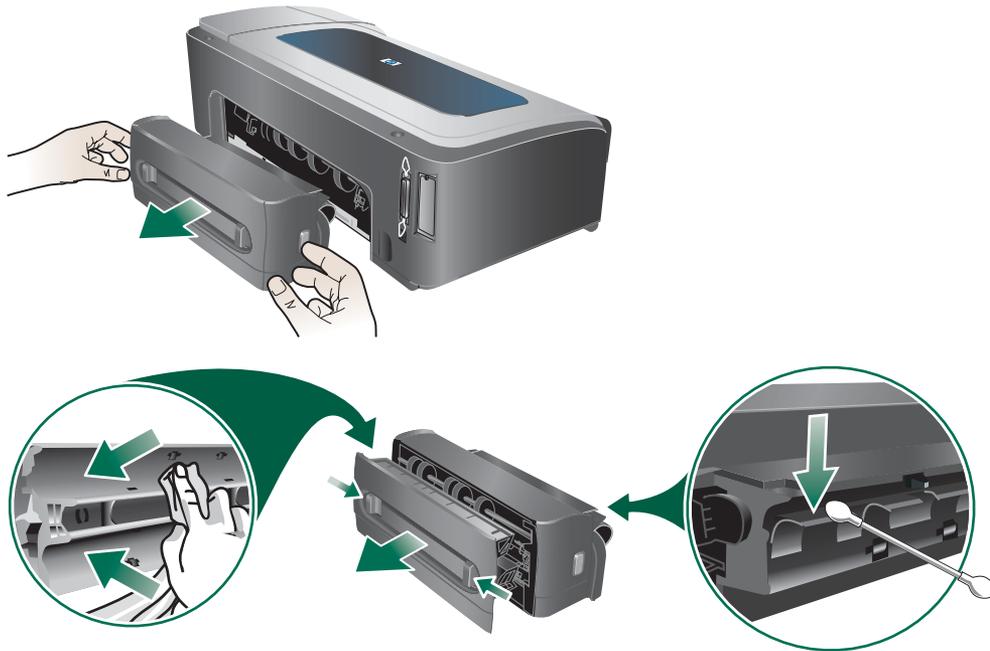
Enable the printer's output ramp

When printing in **Fast Normal** (default) or **Fast** print mode, the printer does not use the output ramp to hold each printed page before releasing it onto the output tray. If the printer starts printing the next page while the printed page is still drying on the output tray, the newly printed page might rub against the printed page on the output tray, causing ink to smear. Severity of smearing depends on the amount of ink used on each printed page.

To prevent the printed pages from rubbing against each other, print using the **Normal** or **Best** print mode. Alternatively, enable the OUTPUT RAMP EXTENSION on the printer control panel. See Paper Handling menu.

Ink is not filling the text or graphics completely

Check the ink cartridges

Ink cartridges might have run out of ink. Replace any empty cartridge. Or try removing and reinstalling the cartridges, make sure they snap firmly into place. See Replacing the ink cartridges.

Check the media type

Some media types are not suitable for use with the printer. See Selecting print media.

Output is faded or dull colored

Check the print mode

The **Fast Normal** and **Fast** modes in the printer driver allow you to print at a faster rate, they are good for printing drafts. To get better result, select **Normal** or **Best**. See Changing print settings.

Check the paper type setting

When printing on transparencies or other special media, select the corresponding media type in the printer driver. See Printing on special and custom-size media.

Check the ink cartridges

If lines in the text or image are broken or do not print properly, one or more of the ink cartridges may have run out of ink or are defective. Replace these cartridges with new ones.

Colors are printing as black and white

Check print settings

Make sure **Print in Grayscale** is not selected in the printer driver.

Wrong colors are printing

Check print settings

Make sure **Print in Grayscale** is not selected in the printer driver.

Check the printheads

Whenever print quality noticeably decreases, you may need to clean the printheads. See Maintaining the printheads.

Printout shows bleeding colors

Check print settings

Some media type settings (such as **Transparency Films** and **Photo Papers**) and print quality settings (such as **Best**) require more ink than others. Choose different print settings in the printer driver, make sure you select the correct media type. See Changing print settings.

Check ink cartridges

Make sure ink cartridges have not been tampered with. Refilling processes and the use of incompatible inks can disrupt the intricate printing system and result in reduced print quality and damage to the printer. HP does not guarantee or support refilled ink cartridges. For ordering information, see HP supplies and accessories.

Colors do not line up properly

Check printheads

The printheads are automatically aligned when a printhead is replaced. However, you might notice improvement in the print quality by performing the alignment procedure yourself. See Maintaining the printheads.

Check graphics placement

Use the zoom or print preview feature of your software to check for gaps in the placement of graphics on the page.

Lines or dots are missing from text or graphics

Check printheads

The printheads or printhead contact pads might need cleaning. See Maintaining the printheads.

Resolving paper-feed problems

This section provides solutions to common paper-feed problems.

For information on resolving jams, see Clearing jams.

Tray cannot be inserted

- With the tray removed from the printer, turn the printer off and then on again. Reinsert the tray.
- Make sure the tray is aligned with the printer opening.
- Check for jammed paper.

Media is not supported for the printer or tray

Use only media that is supported for the printer and the tray being used. See Understanding specifications for supported media.

Media is not picked up from tray 1 or tray 2

- Make sure the media guides are set to the correct markings in the trays for the media size you are loading. Also make sure the guides are snug, but not tight, against the stack.
- Make sure media in the tray is not curled. Uncurl paper by bending it in the opposite direction of the curl.
- Make sure the tray is inserted properly.

Media is not coming out correctly

- Make sure the output tray extension is extended, otherwise, printed pages may fall off the printer.
- Remove excess media from the output tray. There is a limit to the number of sheets the tray can.
- If the auto-duplex unit is not installed properly during a duplex job, media may exit through the rear of the printer. Reinstall the auto-duplex unit or close its cover.

Pages are skewing

- Make sure the media length and width guides in the trays are adjusted snugly against the media, but do not crinkle or bend it.
- Avoid loading media of different types or sizes in a tray.
- Make sure media in the tray is not curled. Uncurl paper by bending it in the opposite direction of the curl.

Multiple pages are being picked up

- Make sure the media guides are set to the correct markings in the trays for the media size you are loading. Also make sure the guides are snug, but not tight, against the stack.

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

- When you load paper, avoid fanning the stack. Fanning paper can cause static electricity to build up and intensify multiple-pick problems.

- When reinserting a tray into the printer, do so gently. Forceful insertion with a full stack of paper may cause sheets to slide up within the printer, causing the printer to jam or pick multiple sheets at one time.

Resolving printer management problems

Embedded Web server (EWS) cannot be opened

Check your network setup

- Make sure you are not using a phone cord to connect the printer to the network.

- Make sure the network cable is securely connected to the printer.

- Make sure the network hub, switch, or router is on and working properly.

Check the computer

Make sure the computer that you are using is connected to the network.

Check your Web browser

Make sure the Web browser meets the minimum system requirements.
See Printer specifications.

Check the printer IP address

- Print a configuration page, and then locate the printer's IP address on the second page. See Understanding and printing the configuration page.

- Ping the printer using the IP address from an MS-DOS prompt. For example, if the IP address is 123.123.123.123, type the following at the MS-DOS prompt:

    C:\Ping 123.123.123.123

    If the a reply appears, the IP address is correct.

Troubleshooting installation issues

If you had trouble installing the printer, check these items:

Problems printing alignment page

When printheads are installed or replaced, the printer automatically prints two alignment pages to align the printheads. This process takes about eight minutes. The alignment pages may be discarded after they are printed. If the printer does not print the pages, see General troubleshooting tips, or align the printheads manually (see To align the printheads).

Problems installing software

Verify the computer requirements

Make sure the computer meets the system requirements. See System requirements (Minimum).

Verify installation preliminaries

- Before installing software on a Windows computer, ensure all other programs are closed.

- If the computer does not recognize the path to the CD drive that you type, ensure you are specifying the correct drive letter.

- If the computer cannot recognize the Starter CD in the CD drive, inspect the CD for damage. You can download the printer driver from http://www.hp.com/support/businessinkjet2800.

Reinstall the printer software

If you are using Windows and the computer cannot detect the printer, run the Scrubber utility (located in the Utils\Scrubber folder on the Starter CD) to perform a clean printer driver uninstallation. Restart your computer, and re-install the printer driver. See Uninstalling the printer software.

Problems connecting to a network

After correcting any of the following, run the setup program again.

General network troubleshooting

If you are unable to install the printer software on the computer, verify that:

- All cable connections to the computer and the printer are secure.

- The network is operational and the network hub is turned on.

- All applications, including virus protection programs and personal firewalls, are closed or disabled.

- Make sure the printer is installed on the same subnet as the computers that will be using the printer.

- If the installation program cannot discover the printer, print the configuration page and enter the IP address manually in the installation program. See Understanding and printing the configuration page.

- Ping the printer using the IP address from an MS-DOS prompt. For example, if the IP address is 123.123.123.123, type the following at the MS-DOS prompt:

  C:\Ping 123.123.123.123

  If the a reply appears, the IP address is correct.

- If you are using a computer running Windows, make sure that the network ports created in the printer driver match the printer IP address:

  1 Print a configuration page. See Understanding and printing the configuration page.

  2 From the Windows desktop, click **Start**, point to **Settings**, and then click **Printers** or **Printers and Faxes**.

  3 Right-click the printer icon, click **Properties**, and then click the **Ports** tab.

  4 Select the TCP/IP port for the printer, and then click **Configure Port**.

  5 Compare the IP address listed in the dialog box and make sure it matches the IP address listed on the configuration page. If the IP addresses are different, change the IP address in the dialog box to match the address on the configuration page.

  6 Click **OK** twice to save the settings and close the dialog boxes.

Problems connecting to a wired network

- If the Link light on the network connector does not turn on, make sure that all of the General troubleshooting tips conditions are met.

- Though it is not recommended that you assign the printer with a static IP address, you might resolve some installation problems (such as a conflict with a personal firewall) by assigning the printer with a static IP address. For more information, see Configure network options.

Clearing jams

To avoid jams

- Make sure tray 2 is properly inserted, and the printer and trays are placed on a flat surface.

- Make sure that nothing is blocking the paper path.

- Do not overload the trays. See Understanding specifications for supported media.

- Load paper properly. See Loading media.

- Do not use media that is curled or crumpled.

- Always use media that conforms with specifications. See Selecting print media.

- Make sure the output tray is not overly full when you send a job to print.

- Make sure media is aligned against the right side of the tray.

- Make sure the media length and width guides are adjusted snugly against the media, but do not crinkle or bend it.

- If you have extended the tray, do not press the tray extension lock while inserting the tray. Pressing it will cause the tray to retract when you push in the tray and cause paper jam.

To clear a jam

1   Remove all media from the output tray.

2   Check the rear access panel or the auto-duplex unit.

   a   Push the button on either side of the rear access panel or the auto-duplex unit and remove the unit.
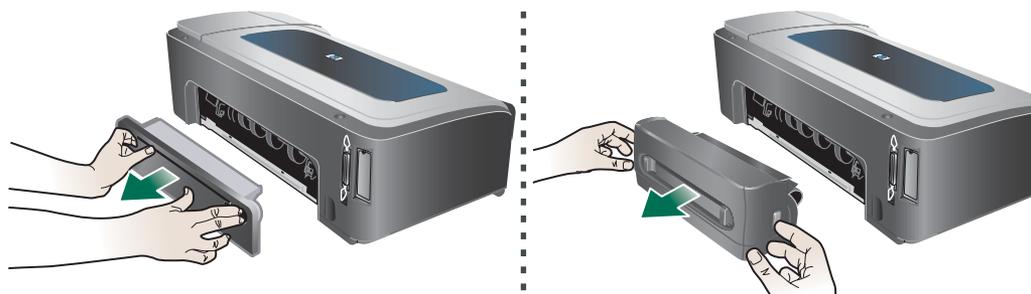
   b   Locate any jammed media inside the printer, grasp it with both hands and pull it towards you.

   c   If the jam is not there, push the buttons in front of the auto-duplex unit and remove the cover. If the jam is inside, carefully remove it. Close the cover.

   d   Reinsert the rear access panel or the auto-duplex unit into the printer.

3   If you cannot locate the jam, lift the output tray and check for a jam in tray 1. If media is jammed in the tray, do the following:

    a Pull out tray 1.

    b Pull the paper towards you.

    c Ensure the media is properly aligned in the tray, reinsert the tray and lower the output tray.

4   If you have not found the jam and have tray 2 installed, pull out the tray and remove the jammed media, if possible. If not, do the following:

    a Ensure the printer is turned off, and disconnect the power cord.

    b Lift the printer off tray 2.

    c Remove the jammed media from the bottom of the printer or from tray 2.

    d Reposition the printer on top of tray 2.

5   Open the top cover. If there is paper remaining inside the printer, ensure the carriage has moved to the right of the printer, free any paper scraps or wrinkled media and pull the media towards you through the top of the printer.

WARNING!   Do not reach into the printer when the printer is on and the carriage is stuck. When you open the top cover, the carriage should return to its position on the right side of the printer. If it does not move to the right, turn off the printer before you remove any jam.

6   After clearing the jam, close all covers, turn on the printer (if you turned it off), and then press (Resume button) to continue printing.

The printer will continue printing the next page. You will need to resend any page that was jammed in the printer.

A HP supplies and accessories

This section provides information on HP supplies and accessories for the printer. The information is subject to changes, visit HP website (http://www.hpshopping.com) for the latest updates. You may also make purchase through the website.

Ordering printing supplies online

Besides the HP website, you may order printing supplies through the embedded Web server (EWS) or the Toolbox (Windows).

System requirements for ordering printing supplies

To use the Toolbox, ensure you have the following:

● Internet access

● Printer connected to your computer using a USB or parallel cable, or connected to the network

● Toolbox installed on your computer (supported for Windows only)

To use the EWS, ensure you have the following:

● Printer connected to the network

● Web browser installed on your computer (either Netscape Navigator 4.8 or Microsoft Internet Explorer 5.0 or later)

To order printing supplies

1 From the Toolbox (Windows): On the **Printer Status** tab, click **Order Supplies**. Your default web browser starts and displays a website. From the EWS: On the **Information** tab, click **Order Supplies**.

2 Follow the instructions on the website to select and order printing supplies.

Accessories

Accessories and cables

250-sheet input tray	C8261A
HP auto-duplex unit	C8258A
HP IEEE-1284 A-B Parallel Cable (2 meter)	C2950A
HP IEEE-1284 A-B Parallel Cable (3 meter)	C2951A
HP USB A-B (2 meter)	C6518A

Memory modules

HP 64 MB SDRAM DIMM	Q1887A
HP 128 MB SDRAM DIMM	C9121A

Network interfaces

HP Jetdirect 620N print server/Internet connector (EIO module; Fast Ethernet)	J7934A
HP Jetdirect 625N print server/Internet connector (EIO module; Gigabit)	J7960A
HP Jetdirect 170X external print server via USB (Fast Ethernet)	J3258B
HP Jetdirect 175X external print server via USB (Fast Ethernet)	J6035B
HP Jetdirect 310X external print server via USB (Fast Ethernet)	J6038A
HP Jetdirect 500X external print server via USB (Fast Ethernet)	J3264A J3265A
HP Jetdirect 680N wireless 802.11b EIO print server	J6058A
HP Jetdirect EW2400 external Fast Ethernet wired and wireless 802.11g print server	J7951A
HP BT3100 Bluetooth wireless printer adapter (USB 1.0 or parallel interfaces)	J6072A
HP Print Server Appliance 4250	J7941A

Supplies

Ink supplies

Ink cartridges

HP 10 Black	C4844A
HP 11 Cyan	C4836A
HP 11 Magenta	C4837A
HP 11 Yellow	C4838A

Printheads

HP 11 Black	C4810A
HP 11 Cyan	C4811A
HP 11 Magenta	C4812A
HP 11 Yellow	C4813A

HP Media

Plain paper

HP Bright White Inkjet Paper		
500 sheets	Letter (8.5 by 11 inches)	HPB1124
500 sheets	A4 (210 by 297 mm)	C1825A
200 sheets	A3 (297 by 420 mm)	C1858A
250 sheets	Tabloid (11 by 17 inches)	B1724
250 sheets	Letter (8.5 by 11 inches)	B250
HP Office Paper		
2500 sheets	Letter (8.5 by 11 inches)	25005
10-ream carton	Letter (8.5 by 11 inches)	C8511
10-ream carton	Legal (8.5 by 14 inches)	C8514
	Tabloid (11 by 17 inches)	C1117
HP Office Recycled Paper		
500 sheets	Letter (8.5 by 11 inches)	E1120
500 sheets	Letter (8.5 by 11 inches)	E1420

HP Multipurpose Paper		
5-ream carton	Letter (8.5 by 11 inches)	M115R
250 sheets	Letter (8.5 by 11 inches)	25011
500 sheets	Letter (8.5 by 11 inches)	M1120
500 sheets	Letter (8.5 by 11 inches)	MR311
500 sheets	Legal (8.5 by 14 inches)	M1420

Photo paper

HP Premium Plus Photo Paper		
20 sheets, glossy	Letter (8.5 by 11 inches)	C6831A
50 sheets, glossy	Letter (8.5 by 11 inches)	Q1785A
20 sheets, glossy	4 by 6 inches	Q1977A
20 sheets, matte	Letter (8.5 by 11 inches)	C6950A
20 sheets, matte	A4 (210 by 297 mm)	C6951A
20 sheets, glossy	A4 (210 by 297 mm)	C6832A
25 sheets, glossy	A3 (297 by 420 mm) (Asia/Pacific)	Q5497A
20 sheets, glossy	A3 (297 by 420 mm) (Europe)	Q5496A
25 sheets, glossy	Tabloid (11 by 17 inches)	Q5495A
HP Premium Photo Paper		
100 sheets, matte	Letter (8.5 by 11 inches)	C6563A
100 sheets, glossy	Letter (8.5 by 11 inches)	C5477A
50 sheets, glossy	Letter (8.5 by 11 inches)	C6979A
15 sheets, glossy	A4 (210 by 297 mm)	Q2519A
20 sheets, glossy	A3 (297 by 420 mm)	C6059A
20 sheets, glossy	Tabloid (11 by 17 inches)	C6058A
HP Photo Paper		
20 sheets, two-sided glossy	Letter (8.5 by 11 inches)	C1846A
20 sheets, two-sided glossy	A4 (210 by 297 mm)	C1847A
20 sheets, one-sided glossy	A4 (210 by 297 mm)	C6765A
HP Everyday Photo Paper		
100 sheets, two-sided, matte	Letter (8.5 by 11 inches)	C7007A
25 sheets, two-sided, matte	Letter (8.5 by 11 inches)	C6983A
25 sheets, two-sided, semi-gloss	A4 (Asia/Pacific) (210 by 297 mm)	C7006A
25 sheets, one-sided, semi-gloss	A4 (210 by 297 mm)	Q5451A
25 sheets, one-sided, semi-gloss	Letter (8.5 by 11 inches)	Q5498A
100 sheets, one-sided, semi-gloss	10 by 16.3 mm (Europe)	Q5441A

Business communication paper

HP Brochure and Flyer Paper		
50 sheets, two-sided, glossy	Letter (8.5 by 11 inches)	C6817A
50 sheets, matte	Letter (8.5 by 11 inches)	C6955A
100 sheets, tri-fold, two-sided, glossy	Letter (8.5 by 11 inches)	C7020A
100 sheets, tri-fold, matte	Letter (8.5 by 11 inches)	Q5443A
100 sheets, tri-fold, matte	A4 (210 by 297 mm)	Q6590A
50 sheets, tri-fold, two-sided, glossy	A4 (210 by 297 mm)	Q2525A
50 sheets, two-sided, glossy	A4 (210 by 297 mm)	C6818A
100 sheets, matte	A4 (210 by 297 mm)	Q6592A
100 sheets, matte	Letter (8.5 by 11 inches)	Q5445A
150 sheets, two-sided, glossy	Letter (8.5 by 11 inches)	Q1987A
50 sheets, matte	A3 (297 by 420 mm)	Q6591A
50 sheets, two-sided, glossy	A3 (297 by 420 mm)	C6821A
50 sheets, two-sided, glossy	Tabloid (11 by 17 inches)	C6820A
HP Premium Presentation Paper		
150 sheets	Letter (8.5 by 11 inches)	Q5449A
150 sheets	A4 (210 by 297 mm)	Q6593A
100 sheets	A3 (297 by 420 mm)	Q6594A
100 sheets	Tabloid (11 by 17 inches)	Q6595A
HP Premium Inkjet Transparency Film		
20 sheets	Letter (8.5 by 11 inches)	C3828A
50 sheets	Letter (8.5 by 11 inches)	C3834A
20 sheets	A4 (210 by 297 mm)	C3832A
50 sheets	A4 (210 by 297 mm)	C3835A
HP Premium Plus Inkjet Transparency Film		
20 sheets	A4 (210 by 297 mm)	C7031A
20 sheets	Letter (8.5 by 11 inches)	C7030A
50 sheets	A4 (210 by 297 mm)	C7029A
50 sheets	Letter (8.5 by 11 inches)	C7028A
HP Premium Inkjet Paper		
200 sheets	Letter (8.5 by 11 inches)	51634Y
200 sheets, coated, matte	A4 (210 by 297 mm)	51634Z
100 sheets, coated, heavyweight	A4 (210 by 297 mm)	C1853A
100 sheets	A3 (297 by 420 mm)	C1856A
100 sheets	Tabloid (11 by 17 inches)	C1855A

B Support and warranty

If the printer is not operating properly and the suggestions in Maintaining and troubleshooting do not solve the problem, try using one of the following support services to obtain assistance.

Obtaining electronic support

You can obtain support from HP from the following electronic sources:

● **Web**

Visit the printer website on hp.com for the latest software, product, operating system, and support information:
http://www.hp.com/support/businessinkjet2800

● **Toolbox (Windows)**

The Toolbox provides easy, step-by-step solutions to common printing problems. See Toolbox (Windows).

Obtaining HP telephone support

During the warranty period, you may obtain assistance from the HP Customer Care Center.

Before you call

To assist our Customer Care Center representatives to serve you better, prepare the following information before calling.

1   Print the printer configuration page. See Understanding and printing the configuration page for instructions on how to print this page. If the printer does not print, get the following information ready.

   a   model number and serial number. (Check the back of the printer.)

   b   printer model

2   Check the operating system that you are using, such as Windows 98 SE.

3   If the printer is connected to the network, check the network operating system, such as Windows NT Server 4.0.

4   Note how the printer is connected to your system, such as parallel, USB, or network.

5   Obtain the printer driver and version number of the printer software, such as HP Business Inkjet 2800 Series Version: 62.43.12.0. (To find the printer driver version number, open the printer settings or properties dialog box and click the About tab.)

6   If you have a problem printing from a particular application, note the application and version number.

Telephone support numbers

In many location, HP provides toll free telephone support during the warranty period. However, some of the support numbers listed below may not be toll free.

For the most current list of telephone support numbers, see http://www.hp.com/support.

Country/Region	Telephone number
Albania	*
Algeria	213 17 63 80
Anguila	1-800-8722881
Argentina	0-810-555-5520
Aruba	800-8000
Australia	(03) 8877 8000
Austria	08 1000 1000
Bahamas	1-800-711-2884
Bahrain	+971 4 366 2020
Barbados	001-800-8722881
Belgium	078 600 600
Belize	811
Bermuda	1-800-711-2884
Bolivia	0-800-1110
Bosnia-Hercogovina	*
Brazil	Outside São Paolo: 0800-157751 Greater Sao Paolo: (11) 4689-2012
Brit. Virgin Islands	001-800-8722881
Bulgaria	*
Canada	(905) 206-4663 (877) 621-4722
Cayman Islands	1-800-711-2884
Chile	800-3600999
China	021-38814518
Colombia	01-8000-114726
Costa Rica	0-800-011-0524
Croatia	*
Cyprus	800 9 2649
Czech Republic	2 61 307 310
Denmark	70 11 77 00
Dominican Republic	1-800-711-2884
Ecuador	Andinatel 999119 Pacifictel 1-800-225528
Egypt	202 532 5222

Country/Region	Telephone number
El Salvador	800-1-785
Finland	0203 53232
France	0826 10 4949
Germany	01805 258 143
HP bietet während der Gewährleistungsfrist vielerorts gebührenfreien telefonischen Support an. Die nachfolgend aufgelisteten Rufnummern sind jedoch unter Umständen nicht gebührenfrei. Zur weiteren Klärung oder um zusätzliche Information zu erhalten, können Sie Kontakt mit der Online-Kundenbetreuung von HP (http://www.hp.com/cpso-support/guide/psd/cscemea.html) aufnehmen.	
Gibraltar	0870 842 2339
Greece	801 11 22 55 47
Guatemala	1-800-999-5105
Guyana	165
Haiti	183
Honduras	800-0-123
Hong Kong	85 (2) 2802 4098
Hungary	1 382 1111
Iceland	507 10 00
India	+91-80-8526900 or 1 600 447-737 Support in Hindi & English
Indonesia	+62 (21) 350 3408
Ireland	1890 946 500
Israel	9 830 4848
Italy	02 3859 1212
Jamaica	0-800-711-2884
Japan	0570-000-511(Navi Dial, Japan Domestic Only) 81-3-3335-9800
Jordan	+971 4 366 2020
Kazakhstan	*
Korea, Republic of	1588 3003
Kuwait	+971 4 366 2020
Lebanon	+971 4 366 2020
Liechtenstein	0848 802 020
Luxembourg	27 303 303
Macedonia	*

Country/Region	Telephone number
Malaysia	+1800 805 405
Malta	*
Mexico	Mexico City: 52-58-9922 Outside Mexico City: 01-800-472 6684
Moldova	*
Monaco	+33 (0) 173018475
Morocco	22 40 47 47
Netherlands	0900 117 0000
New Zealand	+64 (9) 356 6640
Nicaragua	174
Nigeria	*
Norway	800 62 800
Oman	+971 4 366 2020
Panama	001-800-711-2884
Peru	0-800-10111
Philippines	(2) 867 3551
Poland	(22) 5666 000
Portugal	213 164 164
Puerto Rico	1 877 232 0589
Qatar	+971 4 366 2020
Romania	(21) 315 4442
Russia	Moscow: 095 797 3520 St. Petersburg: 812 346 7997
San Marino	02 3859 1212
Saudi Arabia	800 897 1444
Serbia and Montenegro	*
Singapore	6272 5300
Slovakia	2 5752 5752
Slovenia	*
South Africa (RSA), Republic of	086 000 1030
Spain	902 010 333
Suriname	156
Sweden	077 130 3000
Switzerland	0848 80 20 20
Syria	+971 4 366 2020
Taiwan	886-2-8722-8000 886-800-010-055
Thailand	(2) 353 9000

Country/Region	Telephone number
Trinidad & Tobago	1-800-711-2884
Tunisia	71 89 12 22
Turkey	212 444 71 71
United Kingdom	0870 842 2339
Ukraine	Kiev: 44 4903520
United Arabic Emirates (UAE)	800 4520 04 366 2020
United States	1-800 HP INVENT
Vatican City	02 3859 1212
Vietnam	(8) 823 4530
West Africa (English-speaking countries/regions)	*
West Africa (French-speaking countries/regions)	+351 213 17 63 80
Yemen	+971 4 366 2020

* For support information, call your HP service provider.

Hewlett-Packard limited warranty statement

HP product	Duration of Limited Warranty
Software	1 year
Accessories	1 year
Ink cartridges	6 months*
Printheads	1 year*
Printer peripheral hardware (see below for details)	1 year
*For more detailed warranty information, see http://www.hp.com/support/inkjet_warranty.	

Extent of limited warranty

1   Hewlett-Packard 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.

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 that arise as a result of normal use of the product, and does not cover any other problems, including those that arise as a result of:

   a Improper maintenance or modification;

   b Software, media, parts, or supplies not provided or supported by HP; or

   c Operation outside the product's specifications.

   d Unauthorized modification or misuse.

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 product which is covered by HP's warranty, HP shall either repair or replace the product, at HP's option.

6   If HP is unable to repair or replace, as applicable, a defective product which is covered by HP's warranty, HP shall, within a reasonable time after being notified of the defect, refund the purchase price for 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 products may contain remanufactured parts, components, or materials equivalent to new in performance.

10 HP's Limited Warranty Statement is valid in any country/region where the covered HP product is distributed by HP. Contracts for additional warranty services, such as on-site service, are available from any authorized HP service facility in countries/regions where the product is distributed by HP or by an authorized importer.

Limitations of warranty

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

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 SHALL 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.

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/region to country/region 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:

   a Preclude the disclaimers and limitations in this Warranty Statement from limiting the statutory rights of a customer (e.g. the United Kingdom);

   b Otherwise restrict the ability of a manufacturer to enforce such disclaimers or limitations; or

   c Grant the customer additional warranty rights, specify the duration of implied warranties which the manufacturer cannot disclaim, or 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 THE HP PRODUCTS TO SUCH CUSTOMERS.

HP Inkjet Supplies - Warranty Quick Reference

Is your product covered under warranty?

If you believe your ink supply or printhead is defective, you may return it for a refund or replacement provided that ALL of the following are true:

● Ink supply: It is not out of ink.

● Printhead: It has not exceeded its warranted usage:

   – Black printhead: 530 ml

   – Color printhead: 200 ml

Note

To determine the volume of ink that has passed through the printhead currently installed in your printer, see "Accumulated ink usage (ml)" located under the "Printhead Status" section of the configuration page.

● Ink supply: It has not been refilled, remanufactured, or otherwise tampered with.

● Printhead or ink supply: Its "end of warranty" date has not passed. Look at the illustration below to find the date location for your product.

End of warranty date locations
Date format: YYYYMMDD

Figure 1: New printheads   **Figure 2: Older printheads**   **Figure 3: Ink supplies**
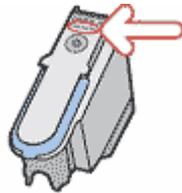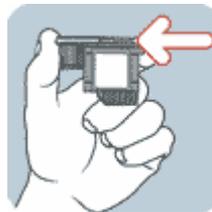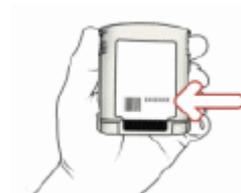
Install-By Date

Make sure to install your product before the install-by date printed on the supply package. Installing before or on the install-by date ensures that you will have at least the following before the end-of-warranty date:

• Printhead: one year (subject to accumulated ink usage limit)

• Ink supply: six months

HP Inkjet Supplies - Expiration

As ink ages, it loses water. When ink is old enough, it can damage the printheads or other parts of the printing system. In normal use, most cartridges will run out of ink long before the ink is old enough to cause damage. However, to prevent any possibility of damage, HP printers that use the cartridges listed above are designed to stop printing with the cartridges before the ink gets too old.   See "Expiration date (Y-M-D)" located under the "Ink Cartridge Status" section of the configuration date

- Expiration has nothing to do with the product warranty. For information about the warranty on your ink cartridge, see http://www.hp.com/support/inkjet_warranty.

- Expiration prevents damage from old ink. When ink cartridges expire, they stop working and must be replaced.

How do you return a product?

There are two ways to return a product under warranty:

- Visit the retailer where you bought the product (subject to the retailer's return policy)

- If you cannot return the product to the retailer, call the support phone number listed on the product insert that came in the box with the product

C Printer specifications

Printer specifications

For media and media-handling specifications, see Selecting print media.

Physical specifications		
Available models and physical dimensions	Size (width by depth by height)	676 by 498 by 199 mm (26.6 by 19.6 by 7.8 inches) ● With auto-duplex unit: 676 by 588 by 199 mm (26.6 by 23.1 by 7.8 inches) ● With tray 2: 676 by 498 by 264 mm (26.6 by 19.6 by 10.4 inches) ● With tray 2 and auto-duplex unit: 676 by 588 by 264 mm (26.6 by 23.1 by 10.4 inches)
	Weight (does not include printheads or ink cartridges)	13.5 kg (29.7 lb) ● With auto-duplex unit: 15.5 kg (34.1 lb) ● With tray 2: 17.0 kg (37.4 lb) ● With tray 2 and auto-duplex unit: 19.0 kg (41.9 lb)
Product features and capacities		
Connectivity		● IEEE 1284-compliant bidirectional parallel (all models) ● USB 2.0-compliant full speed (all models) ● HP Jetdirect Internal Print Server for Fast Ethernet 10/100Base-TX in EIO slot (included with HP Business Inkjet 2800dtn printer) ● 2 DIMM slots (100 pin, SDRAM, PC 100 or greater)
Print method		Drop-on-demand thermal inkjet printing
Ink cartridges		4 ink cartridges (1 each for black, cyan, magenta, and yellow)
Printheads		4 printheads (1 each for black, cyan, magenta, and yellow)
Supply yields (based on 5% coverage)	Ink cartridges	1,750 pages
	Printheads	● Black: 16,000 pages ● Cyan, magenta, and yellow: 24,000 pages
Color calibration		● ColorSync ● ICC Profiles ● PANTONE®* *PANTONE, Inc's check-standard trademark for color.*
Device languages		● PCL 5c ● PCL 6 ● PostScript 3 emulation ● Automatic language switching

| Font support | ● 45 TrueType and 35 PostScript fonts built-in (all PostScript emulation, PCL 5c, and PCL 6 accessible) |
| | ● Intellifont and TrueType rasterizer built into PCL 5c and PCL 6 |

| Duty cycle | Up to 12,000 pages per month |

| Advanced security*

*Applies to full-feature HP Jetdirect products with firmware version *x*.24.*yy* or later — EIO (615n, 620n, and later), External (en3700) | ● SNMP v3
● SSL/TLS (HTTPS) |

Processor and memory specifications

| Device processor | ● Motorola 32-bit ColdFire 4e RISC (256 MHz) |

| Device memory | ● 96 MB built-in RAM |

Operating system and network protocol specifications

Operating system compatibility	● Windows 98, Windows Me, Windows NT 4.0, Windows 2000, Windows XP (Professional and Home Editions), and Windows Server 2003
	● Mac OS X (10.1.5 and later)
	● OS/2[1]
	● Linux[2]
	● UNIX[3]
	● MS-DOS printer driver support through third-party applications
	[1]For information about using the IBM PostScript 3 emulation printer driver for IBM OS/2, see http://www7.software.ibm.com/2bcprod.nsf.
	[2]For information about using Linux with HP printers, see http://www.linuxprinting.org.
	[3]Printer installation software for UNIX® (HP-UX, Sun Solaris) networks is available for download at http://www.hp.com.

System requirements (Minimum) **Note:** Graphic- intensive, complex, and large files might require more hard disk space.	● **Windows 98:** Pentium® 90 MHz, 16 MB RAM, 130 MB free hard disk space
	● **Windows Me:** Pentium® 150 MHz, 32 MB RAM, 130 MB free hard disk space
	● **Windows 2000:** Pentium 300 MHz, 64 MB RAM, 160 MB free hard disk space
	● **Windows XP 32-bit edition:** Pentium 233 MHz, 64 MB RAM, 160 MB free hard disk space
	● **Windows Server 2003:** Pentium 233 MHz, 128 MB RAM, 160 MB free hard disk space
	● **iMac:** 600 MHz, 128 MB RAM
	● **Power Mac G3 or later** 400 MHz, 128 MB RAM
	● **iBook** 366 MHz, 128 MB RAM

Network operating system compatibility	- Windows 98, Windows Me, Windows NT 4.0, Windows 2000, Windows XP 32-bit (Professional and Home Editions), Windows XP 64-bit Edition - Novell NetWare 4.x, 5.x, 6, NDS, and NDPS - HP-UX 10.20, 11.x - Solaris, 2.6, 7, 8 (SPARC systems only) - RedHat Linux 7.1 and later - SuSE Linux 7.1 and later - Mac OS X (10.1.5 and later) - IBM OS/2 Warp 4.x* - IBM AIX 3.2.5 and later* - MPE-iX* - Microsoft Windows Terminal Server Edition 4.0 - Microsoft Windows 2003 Server Terminal Services (formerly known as Microsoft Windows XP Server Terminal Services) - Microsoft Windows 2000 Server Terminal Services with Citrix MetaFrame 1.8 - Microsoft Windows 2003 Server Terminal Services with Citrix MetaFrame 1.8 - Microsoft Windows NT and Windows 2000 Server Terminal Services with Citrix V1.8 MetaFrame 1.8 - Microsoft Windows NT and Windows 2000 Server Terminal Services with Citrix XP MetaFrame XP - Microsoft Windows 2000 Server Terminal Services* Contact your network operating system vendor for software, documentation, and support.
Compatible network protocols	- TCP/IP - IPX/SPX - AppleTalk* - DLC/LLC - IP Direct Mode - LPD - FTP Printing - IPP - NDS - Bindery - NCP - NDPS - iPrint Telnet - SLP - IGMP - BOOTP/DHCP - WINS - SNMP - HTTP *AppleTalk is not supported on Token Ring print servers. - Not all protocol and operating system combinations are supported. For more information, go to http://www.hp.com and http://www.hp.com/support/businessinkjet2800.

Network management	HP Web Jetadmin plug-ins	
	Embedded Web server	**Features** ● Ability to remotely configure and manage network devices ● Job accounting ● HP myPrintMileage **System requirements** ● TCP/IP-based network ● A Web browser (either Netscape Navigator 4.8 or Microsoft Internet Explorer 5.0 or later) ● Network connection. (You cannot use the embedded Web server when the printer is connected directly to a computer.) ● Internet connection (for some features) You can open and use the embedded Web server without being connected to the Internet. However, some features will not be available. ● Must be on the same side of a firewall as the printer

Functional specifications

Speed (U.S. Letter and A4)	**DRAFT mode:** ● Black text: 24 pages per minute (ppm) ● Mixed text with color graphics: 21 ppm **FAST mode:** ● Black text: 28 ppm ● Mixed text with color graphics: 23 ppm **FAST NORMAL mode:** ● Black text: 12.5 ppm ● Mixed text with color graphics: 12 ppm **NORMAL mode:** ● Black text: 6.5 ppm ● Mixed text with color graphics: 5 ppm **BEST mode:** ● Black text: 4 ppm ● Mixed text with color graphics: 4 ppm **Laser-quality speed*:** ● Black text: 7 ppm ● Mixed text with color graphics: 5.5 ppm *The "laser-quality speed" comparison has the page-per-minute speeds of the HP Business Inkjet 2800 series printer against the benchmark of the HP Color LaserJet 4600 at comparable print quality. This comparison is based solely on HP's internal testing.
Resolution	**Black:** ● Up to 1,200 by 600 dpi with pigmented black ink **Color:** ● HP enhanced Color Layering Technology with PhotoREt III for photo quality (up to 4,800 by 1,200-optimized dpi on HP premium photo papers, 1,200 by 1,200-input dpi)

Environmental specifications		
Operating environment	Operating temperature	5° to 40° C (41° to 104° F)
	Recommended operating conditions	15° to 35° C (59° to 95° F)
	Recommended relative humidity	20 to 80 percent noncondensing
Storage environment	Storage temperature	-40° to 70° C (-40° to 158° F)
	Storage relative humidity	Up to 90 percent noncondensing at a temperature of 65° C (149° F)

Electrical specifications	
Power supply	Built-in universal power supply
Power requirements	● Input voltage: 110 to 240 VAC (± 10 percent), 50 to 60 Hz
Maximum allowable power consumption	● Printing: 65 watts ● Standby mode: less than 45 watts ● Off mode: less than 1 watt

Acoustic emission specifications (print in Draft mode, noise levels per ISO 7779)	
Sound pressure (bystander position)	LpAm 51 dB(A)
Sound power	LwAm 64 dB(A)

D Regulatory information

FCC statement

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

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

Shielded cables

Use of a shielded data cable is required to comply with the Class B limits of Part 15 of the FCC Rules.

Pursuant to Part 15.21 of the FCC Rules, any changes or modifications to this equipment not expressly approved by the Hewlett-Packard Company, may cause harmful interference and void the FCC authorization to operate this equipment.

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

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and 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.

EMI statement (Korea)

사용자 안내문 (B 급기기)

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

VCCI statement (Japan)

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。

Regulatory model number

For regulatory identification purposes, your product is assigned a Regulatory Model Number. The Regulatory Model Number for your product is **SNPRC-0402**. The regulatory number should not be confused with the product name (HP Business Inkjet 2800) or product number (C8163A, C8164A and C8174A).

Power cord statement

The power cord cannot be repaired. If it is defective, it should be discarded or returned to the supplier.

LED classification

CLASS 1 LED PRODUCT
LED KLASSE 1
APPARECCHIO LED DI CLASSE 1
PRODUCT CLASY 1 Z DIODAMI (EWHECYCMILED)
Appareil à Diode Electriuminescente de Classe 1
ZARIZENI LED TRIY 1
KLASS 1 LED APPARAT
LUOKAN 1 LED
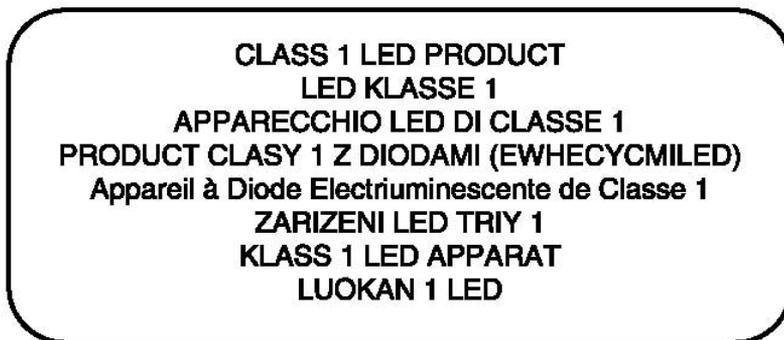
Declaration of conformity

<div style="border: 1px solid black; padding: 1em;">

DECLARATION OF CONFORMITY
according to ISO/IEC Guide 22 and EN 45014

Manufacturer's Name:	Hewlett-Packard Singapore (Pte) Ltd
Manufacturer's Address:	Imaging and Printing Manufacturing Operations Singapore
	60 Alexandra Terrace, #07-01, The Comtech, Singapore 118502

declares, that the product

Product Name:	HP Business Inkjet 2800, HP Business Inkjet 2800dt
	HP Business Inkjet 2800dtn
Product Number:	C8163A, C8164A, C8174A.
Regulatory Model Number[1]:	SNPRC-0402
Product Accessory Number:	C8261A / 250 sheet Tray 2
	C8258A / HP auto-duplexer unit
	J7934A / HP Jetdirect 620N EIO
Product Options:	All

conforms to the following Product Specifications:

Safety:	IEC 60950:1999 / EN 60950:2000
	EN 60825-1:1994+A1:2002
EMC:	CISPR 22:1997 / EN 55022:1998 Class B [2][3]
	CISPR 24:1997 + A1 / EN 55024:1998 + A1
	IEC 61000-3-2:2000 / EN 61000-3-2:2000
	IEC 61000-3-3:1994 +A1 / EN 61000-3-3:1995 + A1
	FCC Title 47 CFR, Part 15 Class B / VCCI-2 [2]
	ICES-003 Issue 4

Supplementary Information:

The product herewith complies with the requirements of the Low Voltage Directive 73/23/EEC and the EMC Directive 89/336/EEC, and carries the CE marking accordingly.

(1) This product is assigned a Regulatory model number that stays with the regulatory aspects of the design. The Regulatory Model Number is the main product identifier in the regulatory documentation and test reports, this number should not be confused with the marketing name or the product numbers.

(2)The product was tested in a typical configuration with Hewlett Packard personal computer systems.

(3)Excepting clause 9.5 which was not applied.

Singapore, 16 August 2004
<div style="text-align:right">

Chan Kum Yew
Director, Quality
</div>

Local Contact for regulatory topics only:

European Contact: Hewlett-Packard GmbH, HQ-TRE, Herrenberger Strasse 140, 71034 Boeblingen, Germany

USA Contact: Hewlett-Packard Company, HPCC, 20555 S.H. 249 Houston, Texas, 77070

Australia Contact: Hewlett Packard Australia Ltd, Product Regulations Manager, 31-41 Joseph Street, Blackburn, Victoria 3130, Australia.

</div>

Environmental sustainability program

Hewlett-Packard is committed to providing quality products in an environmentally sound manner. HP continuously improves the design processes of its products to minimize the negative impact on the office environment and on the communities where products are manufactured, shipped, and used. HP has also developed processes to minimize the negative impact of the disposal of the product at the end of its printing life.

For more information about the HP environmental sustainability program, see http://www.hp.com/hpinfo/globalcitizenship/environment/index.html.

Reduction and elimination

Paper use

The two-sided (duplex) printing and N-up printing features of this product (which you can use to print multiple pages of a document on one sheet of paper) can reduce paper usage and the resulting demands on natural resources. See this guide for more information about using these features.

Ink use

The Fast mode of this product uses less ink, which might extend the life of the cartridges. See the printer driver onscreen Help for more information.

Ozone-depleting chemicals

Ozone-depleting chemicals, such as chlorofluorocarbons (CFCs), have been eliminated from HP manufacturing processes.

Power consumption

Power usage drops significantly while in PowerSave mode, which saves natural resources and saves money without affecting the high performance of this product. This product qualifies for ENERGY STAR®, which is a voluntary program to encourage the development of energy-efficient office products.

ENERGY STAR® is a U.S. registered service mark owned by the U.S. government. As an ENERGY STAR® Partner, Hewlett-Packard Company has determined this product meets ENERGY STAR® guidelines for energy efficiency. For more information, see http://www.energystar.gov.

Hazardous materials

This HP product contains the following materials that might require special handling at end-of-life:

- Lead in the solder

Recycling

Design for recycling has been incorporated into this product:

- The number of materials has been kept to a minimum while ensuring proper functionality and reliability.
- Dissimilar materials have been designed to separate easily.
- Fasteners and other connections are easy to locate, gain access to, and remove by using common tools.
- High-priority parts have been designed so that you can reach them quickly for efficient disassembly and repair.

Product packaging

The packaging materials for this product 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 product assists in minimizing both packaging materials and damage rates.

HP printing supplies

In many countries/regions, the printing supplies for this product (for example, printheads) can be returned to HP through the HP Printing Supplies Returns and Recycling Program. An easy-to-use and free take-back program is available in more than 48 countries/regions.

Material safety data sheets

Material safety data sheets (MSDSs) can be obtained from the following HP website: http://www.hp.com/go/msds.

End-of-life returns

At the end of the product life, you can return the product to HP.

Index