HP Deskjet 6600 series printer



To find an answer to a question, click the appropriate topic below:

- Notices
- Special features
- Getting started
- Connecting to the printer
- Printing photos from a digital camera
- Printing photos from a computer
- Printing other documents
- Printing tips
- Printer software
- Maintenance
- Troubleshooting
- Optional accessories
- Specifications
- Supplies

Notices

- Notices and acknowledgements
- Terms and conventions
- <u>Accessibility</u>

Notices and acknowledgements

Hewlett-Packard company notices

Reproduction, adaptation, or translation without prior written permission is prohibited, except as allowed under the copyright laws.

The information contained herein is subject to change without notice.

The only warranties for HP products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. HP shall not be liable for technical or editorial errors or omissions contained herein.

Acknowledgements

Microsoft, MS, MS-DOS, and Windows are registered trademarks of Microsoft Corporation.

TrueType is a U.S. trademark of Apple Computer, Inc.

Adobe, AdobeRGB, and Acrobat are trademarks of Adobe Systems Incorporated.

PictBridge is a trademark of the Camera & Imaging Products Association (CIPA).

© 2004 Copyright Hewlett-Packard Development Company, L.P.

Terms and conventions

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

Terms

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

Cautions, warnings, and notes

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



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

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



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

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

Note: For great results use HP products.

Accessibility

Your HP printer provides a number of features that make it accessible for people who have disabilities.

Visual

The printer software is accessible for users with visual impairments or low vision through the use of Windows® accessibility options and features. The printer software also supports most assistive technology such as screen readers, Braille readers, and voice-to-text applications. For users who are color blind, colored buttons and tabs that are used in the software and on the HP printer have simple text or icon labels that convey the appropriate action.

Mobility

For users who have mobility impairments, the printer software functions can be completed through keyboard commands. The software also supports Windows accessibility options such as StickyKeys, ToggleKeys, FilterKeys, and MouseKeys. The printer doors, buttons, paper trays, and paper guides can be operated by users who have limited strength and reach.

Support

More details about the accessibility of this product and HP's commitment to product accessibility are available at the HP Web site www.hp.com/accessibility.

Special features

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

- **Built-in networking capabilities**: Connect to a <u>wired</u> network without using an external print server.
- **Ink-backup mode**: <u>Ink-backup mode</u> lets you continue printing with one print cartridge when the other print cartridge has run out of ink.
- Print Cancel button: Cancel print jobs at the touch of a button.
- Print multiple pages on a single sheet of paper: Use the <u>printer software</u> to print up to 16 pages on a single sheet of paper.
- **Borderless printing**: Use the entire page surface when printing photos and cards by using the <u>borderless printing</u> feature.
- **Digital photo printing**: Use the enhanced <u>digital photo</u> <u>printing</u> capabilities.
- **Six-ink upgradeable printing**: Enhance photo printing with a <u>photo print cartridge</u>.
- **Direct camera printing**: Use the <u>PictBridge port</u> on the front of the printer to print photographs directly from a digital camera.
- Optional Automatic Two-Sided Printing Accessory:
 Purchase a <u>Automatic Two-Sided Printing Accessory</u> to print

two-sided documents automatically.

- Optional Auto Two-Sided Print Accessory with Small Paper Tray: Purchase a Optional Auto Two-Sided Print Accessory with Small Paper Tray to print two-sided documents automatically and load small media from the back of the printer.
- Optional 250-Sheet Plain Paper Tray Accessory:
 Purchase an optional 250-Sheet Plain Paper Tray Accessory
 and expand the printer's paper-handling capability.



Getting started



For an overview of the printer features, see the <u>printer</u> <u>features</u> page.

Click the appropriate topic below for a description of a printer feature:

- Buttons and lights
- Print Cartridge Status lights
- Paper trays
- Photo/envelope feeder
- Print cartridges
- Ink-backup mode
- Automatic Paper Type Sensor
- PictBridge port

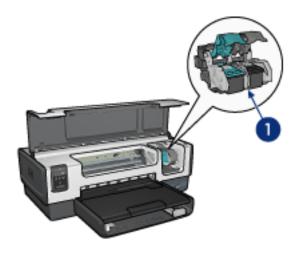
For a description of the optional accessories, see the <u>optional</u> <u>accessories</u> page.

Printer features

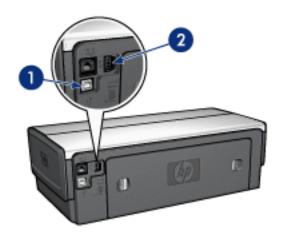
The HP printer has several features to make printing easier and more efficient.



- 1. Buttons and lights
- 2. Paper trays
- 3. Photo/envelope feeder
- 4. PictBridge port



- 1. Print cartridges
- 2. <u>Automatic Paper-Type Sensor</u> (not illustrated)
- 3. <u>Ink-backup mode</u> (not illustrated)

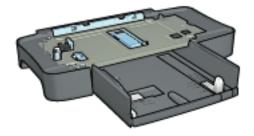


- 1. Rear USB port
- 2. Wired Ethernet port

Optional accessories



Automatic Two-Sided Printing
Accessory
(optional)



250-Sheet Plain
Paper Tray
Accessory (optional)



Auto Two-Sided
Print Accessory
with Small Paper
Tray (optional)

Buttons and lights

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



- 1. Power button and light
- 2. Print Cancel button
- 3. Resume button and light
- 4. Network light
- 5. Report Page button
- 6. Print Cartridge Status lights

For a description of the following buttons and lights, click the appropriate option:

- Report Page button
- Network light
- Print Cartridge Status lights

Power button and light

The Power button turns the printer on and off. It might take a few seconds for the printer to turn on after you press the Power button.

The Power light flashes when the printer is processing.



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

Print Cancel button

Pressing the Print Cancel button cancels the current print job.

Resume button and light

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

Print Cartridge Status lights

The Print Cartridge Status lights indicate the status of the print cartridges.

Status of the Print Cartridge Status lights	Status of the print cartridges
On and solid	Low on ink
Flashing	Service required



1. Print Cartridge Status lights



- 1. The **left** status light represents the tri-color print cartridge.
- **2**. The **right** status light represents the print cartridge that is installed in the compartment on the right side of the print cartridge cradle. That print cartridge can be the black print cartridge, the photo print cartridge, or the gray photo print cartridge.

Paper trays

The printer has two paper trays:

- In tray
- Out tray

In tray

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



1. In tray

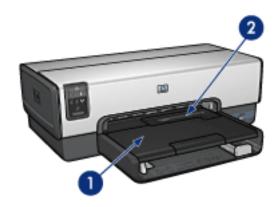
Slide the paper guides firmly against the edges of the media on which you are printing.



- 1. Paper-width guide
- 2. Paper-length guide

Out tray

Printed pages are deposited in the Out tray.



1. Out tray

2. Photo/envelope feeder

Use the <u>photo/envelope feeder</u> to print single envelopes, small photos, and cards.

Raise the Out tray to load paper.



To prevent paper from falling out of the Out tray, pull out the Out-tray extension, and then unfold the Out-tray extension stop.



- 1. Out-tray extension
- 2. Out-tray extension stop

Do not unfold the Out-tray extension stop when printing on legal paper.

After the print job is complete, fold the Out-tray extension stop, and then push the Out-tray extension into the Out tray.



Photo/envelope feeder

Use the photo/envelope feeder to print the following documents:

- Envelopes
- Photos
- Postcards



1. Photo/envelope feeder

Envelopes

Follow these steps to use the photo/envelope feeder for single envelopes:

1. Insert the envelope with the side to be printed on facing down and the flap to the left.



- 2. Push the envelope into the printer as far as it will go without bending.
- 3. Print the <u>envelope</u>.

Photos

Follow these steps to use the photo/envelope feeder to print a single photo:

- 1. Insert the photo paper into the photo/envelope feeder with the side to be printed on facing down.
- 2. Gently push the photo paper into the photo/envelope feeder as far as it will go without bending.



3. Slide the photo/envelope feeder forward as far as it will comfortably go.

Note: If the photo paper touches the back of the paper tray, you have pushed the feeder in as far as it needs to go.



4. Print the photo.

Postcards

Follow these steps to use the photo/envelope feeder to print a single postcard:

- 1. Insert the postcard into the photo/envelope feeder with the side to be printed on facing down.
- 2. Gently push the postcard into the photo/envelope feeder as far as it will go without bending.



3. Slide the photo/envelope feeder forward as far as it will go.



4. Print the postcard.

Print cartridges

Four print cartridges are available for use with the printer.



- 1. Black
- 2. Tri-color
- 3. Photo
- 4. Gray photo

Note: The availability of print cartridges varies by country/region.

Using print cartridges

Everyday printing

Use the black and tri-color print cartridges for everyday print jobs.

Quality color photos

For more vibrant colors when printing color photographs or other special documents, remove the black print cartridge and use a <u>photo print cartridge</u> in combination with the tricolor print cartridge.

Quality black and white photos

For outstanding black and white photographs, remove the black print cartridge and use a gray photo print cartridge in combination with the tri-color print cartridge.

Replacing print cartridges

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

You can find the selection number in three places:

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



1. Selection number label

- Printer documentation: For a list of print cartridge selection numbers, see the reference guide that came with the printer.
- Print Cartridge Ordering Information dialog box: For a list of print cartridge selection numbers, open the printer <u>Toolbox</u>, click the **Estimated Ink Level** tab, and then click the **Print Cartridge Ordering Information** button.

If a print cartridge runs out of ink, the printer can operate in the <u>ink-backup mode</u>.

For information about installing a print cartridge, see the <u>print cartridge installation</u> page.

Ink-backup mode

In the ink-backup mode, the printer operates by using only one print cartridge. The ink back-up mode is initiated when a print cartridge is removed from the print cartridge cradle.

To remove a print cartridge, see the <u>print cartridge</u> <u>installation</u> page.

Ink-backup mode output

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

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

Note: It is recommended that you do not use the photo print cartridge or the gray photo print cartridge for ink-backup mode.

Exiting ink-backup mode

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

To install a print cartridge, see the <u>print cartridge installation</u> page.

Automatic Paper-Type Sensor

The Automatic Paper-Type Sensor automatically selects the appropriate print settings for the media that is being printed on, particularly HP media.

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

Do not place the printer in direct sunlight. Direct sunlight can interfere with the Automatic Paper-Type Sensor.

To use the Automatic Paper-Type Sensor, see the <u>paper-type</u> <u>selection</u> page.

Note: The Automatic Paper-Type Sensor is not available for documents that are printed from the <u>250-Sheet Plain Paper Tray Accessory</u> or the <u>Auto Two-Sided Print Accessory</u> with Small Paper Tray.

Connecting to the printer

- Connecting to a digital camera
- USB
- Wired Ethernet networking
 - Ethernet basics
 - Ethernet network examples
 - o Installing the printer on an Ethernet network
 - o Connecting the printer to an Ethernet network
 - Installing the printer software
 - Ethernet lights
 - Report Page button
 - o Network light
 - o HP Report page
 - Embedded Web server (EWS)
 - Resetting the printer to the factory default settings
 - Networking glossary

Printing photos from a digital camera

Learn how to print photos directly from a digital camera:

- PictBridge description
- PictBridge printing instructions
- PictBridge troubleshooting
- <u>Using the Auto Two-Sided Print Accessory with Small Paper</u> <u>Tray and PictBridge</u>

USB

The printer connects to the computer with a universal serial bus (USB) cable. The computer must be running Windows 98 or later to use a USB cable.



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

Wired Ethernet networking

For setup information, click one of the following options:

- Ethernet basics
- Installing the printer on an Ethernet network

For a description of the printer's Ethernet feature, click one of the following options:

- Ethernet lights
- Report Page button
- Network light
- <u>HP Report page</u>
- Embedded Web server (EWS)

Other information:

- Resetting the printer to the factory defaults
- Troubleshooting
- Glossary

Ethernet basics

The printer's built-in Ethernet feature allows you to connect the printer directly to a 10/100 Base-T Ethernet network without the aid of an external print server.

To install the printer on an Ethernet network, follow the Ethernet installation instructions.

Hardware

Hubs, switches, and routers

On an Ethernet network, devices, such as computers and printers, are each connected to a network <u>hub</u>, <u>switch</u>, or router.

Hubs, switches, and routers may look similar, but there are important differences:

- Hubs are passive. Other devices on the network plug into the hub in order to communicate with one another. A hub does not manage the network.
- A switch allows devices on a network to communicate directly with one another in a smooth and efficient manner. A switch monitors and directs network traffic in order to allow each transmission the most possible bandwidth. By monitoring network traffic, a switch minimizes collisions and maximizes speed.
- Routers primarily connect different networks (for example, connecting a home network to the Internet). Routers are active. Routers have network administration tools, such as

<u>firewalls</u> and <u>DHCP</u>. A router can act as a <u>gateway</u>, while a hub and a switch cannot.

Cables

Use a CAT-5 Ethernet cable to connect the printer to an Ethernet network. Ethernet cables have an RJ-45 plug.



1. **RJ-45** plug

Network communication TCP/IP

Devices on a network communicate with one another using a "language" called a <u>protocol</u>. The printer is designed to operate on networks that use a popular protocol called <u>TCP/IP</u>.

IP address

Each device on a network identifies itself with a unique IP address. Most networks use a software tool, such as DHCP or AutoIP, to automatically assign IP addresses.

Internet connections

Networks may or may not be connected to the Internet.

If you place the printer on a network connected to the Internet, it is recommended that you use a gateway so that

the printer's **IP** address is assigned through **DHCP**.

A gateway can either be a <u>router</u> or a Windows computer running <u>Internet Connection Sharing (ICS)</u>. For more information about ICS, see the documentation that came with the Windows computer.

Ethernet network examples

To see some examples of Ethernet networks, see the <u>Ethernet network examples</u> page.

Printing

Computers on the network send print jobs directly to the printer, which prints them in the order received.

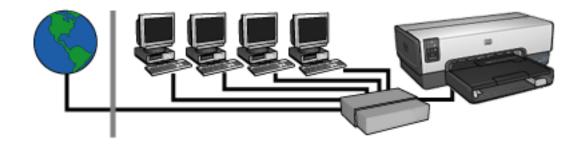
The printer can accept print jobs sent simultaneously from four users.

For example, if five users each send a print job to the printer at the same time, the printer accepts four of the print jobs and rejects the fifth. The user who sent the fifth print job should wait a few minutes and then resend the print job.

Ethernet network examples

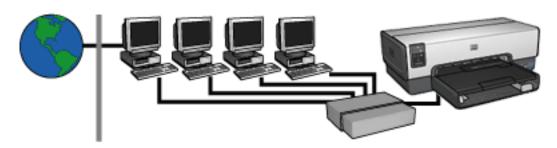
These are some common Ethernet network configurations:

Shared Internet connection with a router acting as a gateway



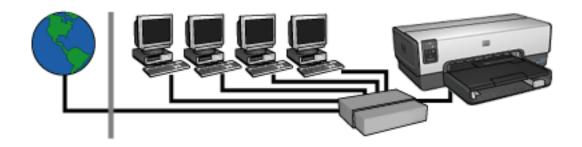
In this example, a <u>router</u> manages the network connections and acts as a <u>gateway</u> between the network and the Internet.

Shared internet connection with a PC acting as a gateway



In this example, the network devices are connected to a https://www.network.com/hub.. A computer on the network acts as the gateway.computer.com/hub. between the network and the Internet. The gateway computer uses Windows Internet Connection Sharing (ICS) to manage the network connections and provide Internet access to the other devices.

DSL or cable Internet connection without a gateway



This example looks similar to the first example. However, in this example, the network devices are connected to a hub, rather than a router. The hub is directly connected to the Internet.



Caution: HP does not recommend this configuration. If possible, use a gateway to manage your network's Internet access in order to limit exposure to viruses and guard against unwanted entry.

Ethernet network without an Internet connection



In this example, the network devices are connected to a hub. Devices use **AutoIP** to obtain IP addresses.

Installing the printer on an Ethernet network

Installing the printer on an Ethernet network is a two-part process.

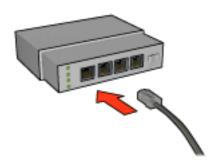
First you must connect the printer to the network. Then you must install the printer software on each computer that will use the printer.

- Connecting the printer to an Ethernet network
- Installing the printer software

Connecting the printer to an Ethernet network

Follow these steps to connect the printer to an Ethernet network:

- If necessary, set up the printer hardware.
 For printer hardware setup instructions, see the setup poster that came with the printer.
- 2. Verify that the printer is powered on.
- 3. Connect the <u>Ethernet cable</u> to an available port on the network hub or router.



Note: Do not plug the Ethernet cable into a port labeled **WAN** or **Uplink**.

4. Connect the Ethernet cable to the Ethernet port on the back of the printer.

5. Do one of the following:

State of the Link light	Task
On	Go to step 6.
Off	Repeat steps 2 through 4. If the lights are still off, then verify the following items: The printer is powered on. The network hub or router is powered on. All cable connections are secure. You are using an Ethernet cable.

- 6. Print an HP Report page.
- 7. Install the <u>printer software</u> on each computer that will use the printer.
 - Caution: It is recommended that the printer and the computers that use it be on the same subnet. Printer installation across subnets can be problematic depending on the type of router used.

Installing the printer software

Before installing the printer software on a networked computer, verify the following items:

- The printer is set up and powered on.
- The network hub, switch, or router is powered on and functioning properly.
- All computers on the network are powered on and connected to the network.
- The printer is installed on the network.

Previous installations

If the printer software was previously installed on the computer, you must use the printer software CD to install an Ethernet version of the printer driver on the computer. Follow the steps below. The printer software installation wizard will guide you through the installation process.



Caution: It is recommended that the printer and the computers that use it be on the same subnet. Printer installation across subnets can be problematic depending on the type of router used.

Software installation

Follow these steps to install the printer software on the computer:

- 1. Close all applications running on the computer.
- 2. Insert the printer software CD in the computer's CD-ROM drive.
- 3. Follow the onscreen instructions. On the **Connection Type** screen, select **Wired Network**.
- 4. After the installation has completed, follow the onscreen instructions to print a test page.

Ethernet lights

The printer's Ethernet lights indicate the status of the printer's Ethernet connection.

Link light

The Link light is solid when the printer is connected to an Ethernet network and powered on.

State of the Link light	State of the printer
On	Connected to an Ethernet network and powered on.
Off	Not connected to an Ethernet network or powered off.

Activity light

The Activity light flashes when the printer is receiving or transmitting data over the Ethernet connection.

State of the Activity light	State of the printer
Flashing	Receiving or transmitting data over the Ethernet connection.
Off	Not receiving or transmitting data over the Ethernet connection.

Report Page button

Use the Report Page button to do the following:

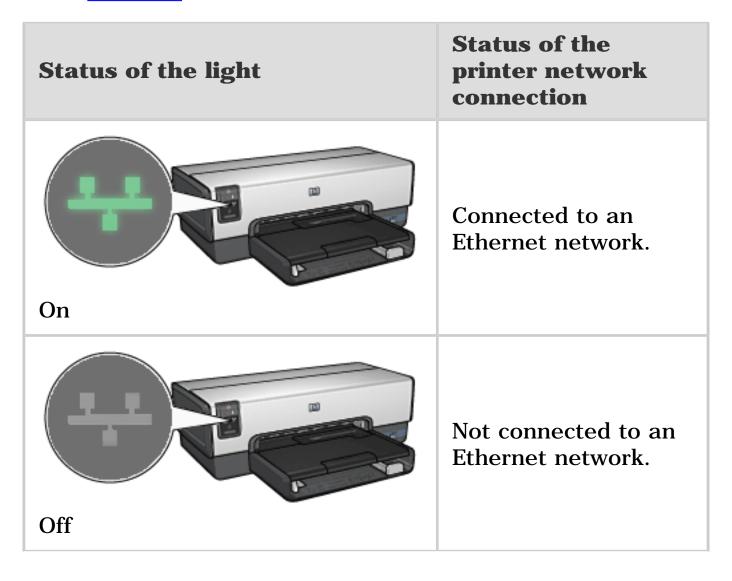
- Print an HP Report page
- Reset the printer to the factory defaults



1. Report Page button

Network light

The Network light illuminates when the printer is connected to an **Ethernet** network.

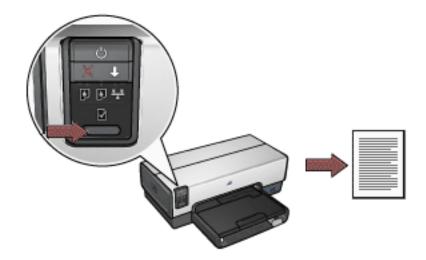


HP Report page

The HP Report page supplies useful information about the printer's <u>wired</u> and <u>PictBridge</u> connections.

Printing an HP Report page

To print an HP Report page, verify that the printer is powered on and idle, and then press the **Report Page** button once.



If the printer has just been connected to a network, wait a few minutes before printing the HP Report page to allow the printer to obtain valid settings.

Selecting the language

The default language for the HP Report page is English. Follow these steps to print the page in another language:

- 1. Press the **Report Page** button to print the English version of the page.
- 2. On the lower portion of the page, find the language that you want.

3. To print the page in that language, follow the instructions that correspond to the language.

For example, to print the page in French, press and hold down the **Report Page** button, press the **Resume** button twice, and then release the **Report Page** button.

Understanding the HP Report page

The HP Report page lists the following information that you might frequently need to know:

General information

General information applies to Ethernet networks:

Item	Meaning
Network Status	 The printer's network status: Ready: The printer is ready to print. Offline: The printer is not connected to a network.
Active Connection Type	 The type of network the printer is connected to: Wired: The printer is connected to an Ethernet network. Disabled: The printer is not connected to a network.

URL	The address to use in order to open the printer's embedded Web server .
Hardware Address (MAC)	The printer's Media Access Control (MAC) address.
Firmware Revision	Revision number of the printer's internal software. This item may be requested by HP Service and Support.
Host Name	The printer's <u>host name</u> on the network.
IP Address	The printer's current <u>IP address</u> on the network.
Subnet Mask	The printer's <u>subnet mask</u> .
Default Gateway	The printer's gateway address.
Configuration Source	How the printer obtained its IP address: • Automatic: AutoIP or DHCP • Manual: Static IP address
DNS Server	The IP address of the printer's domain name server. Not Specified means that no IP address has been set. This setting does not apply to the printer.

mDNS	The printer's mDNS service name on the network. This name is used by Apple Rendezvous to identify the printer on Mac OS X v10.2.3 and higher.
Admin Password	 Indicates whether the printer's embedded Web server is password protected. Set: A password is required. Not Set: A password is not required.
Link Config	The network link configuration: • 10T-Full • 10T-Half • 100TX-Full • 100TX-Half

802.11 wireless

The 802.11 wireless information does not apply to the HP Deskjet 6600 series printer.

Miscellaneous

The Miscellaneous section contains information that applies to Ethernet networks and PictBridge connections:

Item	Meaning
Total Packets Transmitted	Number of <u>packets</u> sent without error. This item may be requested by HP Service and Support.
Total Packets Received	Number of <u>packets</u> received without error. This item may be requested by HP Service and Support.
PictBridge Status	 Connected: The printer is connected to a digital camera. Error: Something is wrong with the PictBridge connection.
PictBridge Last Error	The last known error to occur in the printer PictBridge function since the printer was last turned on.

Embedded Web server (EWS)

The embedded Web server (EWS) provides a simple way to manage your printer on a network.



Use the printer's EWS to do the following:

- Check the printer's status.
- Adjust the printer's network configuration.
- Check estimated ink levels in the print cartridges.
- View network statistics.
- Visit HP's Web site for support information and to purchase supplies.



Caution: It is recommended that the printer and the computers that use it be on the same subnet. Printer installation across subnets can be problematic depending on the type of router used.

Before using the EWS, verify that the printer and the computer are powered on and connected to the network.

Follow these steps to open the EWS:

1. Launch your Internet browser.

Use Microsoft Internet Explorer 5.0 or higher or Netscape 4.75 or higher.

2. Enter either the printer's <u>IP address</u> or <u>host name</u> in the browser's address box.

Note: If the printer is on a different <u>subnet</u> than your computer, enter the printer's IP address (for example: http://15.252.32.234) in the browser's address box to open the embedded Web server. Also, if your computer uses a proxy server to access the Internet, you might need to configure your browser to by-pass the proxy server in order to access the EWS.

If you don't know the printer IP address or host name, print an HP Report page.

Note: For instructions on using the printer's EWS, see the online help. To open the online help, click **Help** under the **Other Links** heading.



A Caution: If you lose your connection, you may need to use the new settings to reconnect. If the printer loses its network connection, you may need to reset it to factory defaults and reinstall the software.

Resetting the printer to the factory default settings

Once the printer is configured for a network, its configuration settings are saved in its memory.

Resetting the printer to its factory default settings will clear all the settings from the printer's memory for your network. This should only be done as a last resort when troubleshooting the printer.

Also, resetting the printer to its factory default settings erases the <u>embedded Web server (EWS)</u> administrator password.

Resetting the printer to its factory default settings may require you to reinstall the printer software. Additionally, you will also have to reconfigure the printer's security settings.

Follow these steps to reset the printer to the factory default settings:

- 1. Verify that the printer is powered on.
- 2. Press and hold down the **Report Page** button.
- 3. While holding down the **Report Page** button, press the **Cancel** button three times.
- 4. Release the **Report Page** button.

Networking glossary

numbers a b c d e f g h i j k l m n o p q r s t u v w x y z

numbers

10/100 Base-T: A technical term for Ethernet. 10/100 refers to the speed at which the Ethernet network functions. 10 indicates 10 megabits per second (Mb/s) for normal Ethernet, and 100 indicates 100 Mb/s for Fast Ethernet.

a

AutoIP: A process by which a device on a network automatically assigns an IP address to itself.

b

BOOTP: Bootstrap Protocol (BOOTP) is an Internet protocol that enables a device to discover its own IP address, the IP address of a BOOTP server on the network, and a file to be loaded into memory to boot the machine. This enables the device to boot without requiring a hard or floppy disk drive.

Broadcast packet: A packet sent from one device on a network to all devices on the network.

C

d

DHCP (Dynamic Host Configuration Protocol): A protocol used to automatically assign an IP address to each device on a network.

EAP: Extensible Authentication Protocol (EAP) is a general protocol for authentication that also supports multiple authentication methods, such as token cards, one-time passwords, certificates, and public key authentication.

Ethernet: A popular form of wired computer networking for Local Area Networks.

Ethernet cable: There are two types of Ethernet cables. A straight-through cable is the most common and is used to connect devices on a network to a hub or router. A crossover cable is used to connect two devices that have Ethernet ports but that are not hubs or routers. Use a CAT-5 cable with an RJ-45 plug to connect the printer to an Ethernet network.

f

Firewall: A combination of hardware and software tools that protects a network from unwanted entry.

g

Gateway: A dedicated device (router or computer) that connects two different networks. For example, a computer on an Ethernet network may act as a gateway between the network and the Internet.

h

Host name: The name by which the printer identifies itself on the network. The printer's host name appears on the HP Report page. Use the host name to open the printer's embedded Web server (EWS).

Hub: A simple device that acts as the center of an Ethernet network. Other devices on the network are connected to the hub.

ICS (Internet Connection Sharing): A Windows program that allows a computer to act as a gateway between the Internet and a network. ICS uses DHCP to assign IP addresses. See Windows documentation for more information about ICS.

Internet Sharing: A Macintosh OSX program that allows a computer to act as a gateway between the Internet and a network. See Macintosh documentation for more information about Internet Sharing.

IP address (Internet Protocol address): A unique number that identifies a device on a network. The IP address is often automatically assigned by DHCP or AutoIP. However, a device can be manually assigned a static IP address.

j

k

I

LAN (Local Area Network): A high-speed type of computer network that connects devices that are a relatively short distance from one another. An Ethernet network is one type of LAN.

m

MAC address (Media Access Control address): The hardware address for a device on a network. The printer's MAC address appears on the HP Report page.

Mb/s (megabits per second): The measure for the rate at which a network functions. For example, 1 Mb/s equals 1,000,000 bits per second (or 125,000 bytes per second).

mDNS: As an alternative to a Domain Name Server, a device

issues a Multicast Domain Name Server (mDNS) notification to provide information regarding its service. The notification includes the type of service (such as printing), the name of the service (such as "your printer"), IP and port addresses, and other necessary information. Each device on the network receives the notification and stores the information in a personal DNS server.

n

0

p

Packet: A message sent from one device on a network to other devices on the network.

Protocol: A language that devices on a network use to communicate with each other. A popular network protocol is TCP/IP.

q

r

RJ-45: The type of plug at the end of an Ethernet cable.

Router: A complex networking device that directs packets from one network to another network. A router can act as a gateway between a LAN and the Internet.

S

Static IP address: An IP address that is manually assigned to a device on a network. A static IP address remains fixed until changed manually. Alternative methods for assigning IP address are DHCP and AutoIP.

Subnet: A small network that acts as part of a large network. It is recommended that the printer and the

computers that use the printer all be on the same subnet.

Subnet mask: A number that identifies the IP addresses that belong to a subnet.

Switch: A network device that manages network traffic in order to minimize collisions and maximize speed.

t

TCP/IP: Transmission Control Protocol/Internet Protocol (TCP/IP) is the network communication protocol used on the Internet. The printer's built-in networking feature supports LANs that use TCP/IP.

u

Unicast packet: A packet sent from one device on a network to another device on the network.

V

W

X

y

Z

PictBridge

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



1. PictBridge port

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

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

PictBridge printing

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

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



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

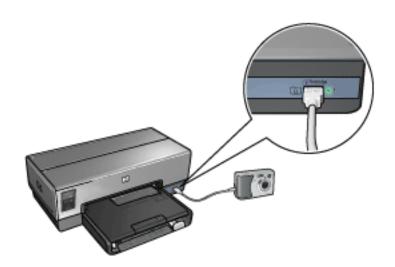
Printing

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

- 1. Load photo paper into the printer.
 - For instructions about loading photo paper, select one of the following options:
 - Small photos
 - Large photos
 - Small photos from the Auto Two-Sided Print Accessory with Small Paper Tray
- 2. Connect your camera to the PictBridge port on the front of the printer using the USB cable supplied with your camera.

3. Turn on your camera, and then set it to PictBridge mode. If you do not know how to set the camera to PictBridge mode, see the documentation that came with the camera.

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



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

PictBridge problems

Images in a connected digital camera do not print

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

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

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

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

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

- EXIF/JPEG
- JPEG

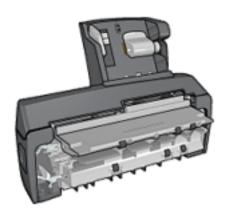
Before you connect the digital camera to the PictBridge port on the printer, select a few photos on the camera for printing.

PictBridge lights are flashing

State of the lights	Task
Connection light and the Error light are flashing	The printer has lost connection with the camera while printing. Check the USB connection.
Connection light is on and the Error light is flashing	The camera has lost power. Replace the camera batteries or connect it to a power supply.
Connection light is on and the Error light flashes twice	The camera has requested an unsupported command.

Using the Auto Two-Sided Print Accessory with Small Paper Tray when printing from a digital camera

In order to use the Auto Two-Sided Print Accessory with Small Paper Tray when printing directly from a digital camera, you might need to configure the printer to feed paper from the accessory rather than the In tray.



Configuring the printer to feed paper from the accessory

Follow these steps to configure the printer to feed paper from the accessory:

- 1. Press and hold down the **Report Page** button.
- 2. While holding down the **Report Page** button, press the **Cancel** button twice.
- 3. Release the **Report Page** button.

After configuring the printer to feed paper from the accessory, <u>load the photo paper into the accessory</u> and then follow the <u>PictBridge printing instructions</u>.

Note: For printing PictBridge photos, the printer only needs to be configured to feed paper from the Auto Two-Sided Print Accessory with Small Paper Tray once. After being configured, the printer will attempt to print from the accessory until the printer is configured to use the In tray for PictBridge photos.

Re-configuring the printer to feed paper from the In tray

Follow these steps to re-configure the printer to feed paper from the In tray for PictBridge photos:

- 1. Press and hold down the **Report Page** button.
- 2. While holding down the **Report Page** button, press the **Cancel** button twice, and then press the **Resume** button once.
- 3. Release the **Report Page** button.

Printing photos from a computer

Select the type of photograph that you want to print:

Borderless Photos



photo



Small borderless Large borderless photo



Panoramic borderless photo

Photos with a white border



white border



Small photowith a Large photowith a white border



Panoramic photo with a white border

Enhancing your photos

Learn how to enhance your photographs by using the printer's photo printing features.

PictBridge

Use the printer **PictBridge port** to print photos directly from a digital camera.

Enhancing your photos

The printer software offers several features to make printing digital photos easier and improve photo quality:

- Get the best combination of speed and quality by using PhotoREt.
- Use the <u>HP digital photography options</u> to touch up photos.
- Achieve the highest resolution with <u>Maximum dpi</u>.
- Print an <u>Exif-formatted</u> photo if you have Exif-enabled software.
- Use <u>HP Everyday Photo Paper</u>, <u>Semi-gloss</u> to save money and ink when printing photos.

Learn how to add professional touches to your digital photographs:

- Use the <u>photo print cartridge</u> for great colors.
- Use these software options to improve printed colors:
- Advanced color settings
- Color management
- Use the <u>gray photo print cartridge</u> for outstanding black-andwhite photos.
- Print black-and-white photos.
- Print to the edges of the photo paper with <u>borderless</u> printing.

To prevent photo paper from curling, follow the <u>photo paper</u> storage guidelines.

PhotoREt

PhotoREt offers the best combination of print speed and quality for your image.

Follow these steps to print with PhotoREt technology:

- 1. Open the **Printer Properties** dialog box.
- 2. Click the **Printing Shortcuts** tab or the **Paper/Quality** tab.
- 3. Click **Best** in the **Print quality** drop-down list.
- 4. Select any other print settings that you want, and then click **OK**.

HP digital photography options

The printer has several features to enhance the quality of digital photographs.

Opening the HP digital photography options dialog box

Follow these steps to open the **HP digital photography options** dialog box:

- 1. Open the <u>Printer Properties</u> dialog box.
- 2. Click the **Printing Shortcuts** tab or the **Paper/Quality** tab, and then click the **HP digital photography** button.

Using the HP digital photography options dialog box

Use the **HP digital photography options** dialog box to set these options:



- 1. **Red eye removal**: Click **On** to remove or reduce red-eye in the photograph.
- 2. **Contrast enhancement**: Adjust the contrast to your preference. Click **Automatic** to allow the printer driver to automatically balance the contrast.
- 3. **Digital flash**: Adjust the exposure in dark areas of photos to bring out detail. Click **Automatic** to allow the printer driver to automatically balance lightness and darkness.
- 4. **SmartFocus**: Enhance the image quality and clarity. Click **On** to allow the printer driver to automatically sharpen details in the image.
- 5. **Sharpness**: Adjust the image sharpness to your preference. Click **Automatic** to allow the printer driver to automatically set the level of sharpening for the image.
- 6. **Smoothing**: Soften an image. Click **Automatic** to allow the printer driver to automatically set the level of smoothing for the image.

Maximum dpi

The **Maximum dpi** print quality setting offers 4800 x 1200 optimized dpi printing.

The 4800 x 1200 optimized dpi print mode is the highest quality resolution for this printer. When 4800 x 1200 optimized dpi is selected in the printer driver, the tri-color print cartridge prints in the 4800 x 1200 optimized dpi mode (up to 4800 x 1200 optimized dpi color and 1200-input dpi). If a photo print cartridge is also installed, the print quality is enhanced. A photo print cartridge can be purchased separately if it is not included with your printer.

Note: Use an HP premium photo paper when printing in the Maximum dpi print quality setting in order to enhance color matching and detail in the photo.

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

- 1. Open the **Printer Properties** dialog box.
- 2. Click the **Paper/Quality** tab.
- 3. Click Maximum dpi in the Print quality drop-down list.

Note: The **Maximum dpi** setting temporarily uses a lot of disk space and may print slowly.

4. Select any other print settings that you want, and then click **OK**.

Exif Print

Exif Print (Exchangeable Image File Format 2.2) is an international digital imaging standard that simplifies digital photography and enhances printed photographs. When a photograph is taken with an Exif Print-enabled digital camera, Exif Print captures information such as exposure time, type of flash, and color saturation, and stores it in the image file. The HP Deskjet printer software then uses this information to automatically perform image-specific enhancements, to create outstanding photographs.

Printing Exif Print-enhanced photos requires the following equipment:

- A digital camera that supports Exif Print
- Exif Print-enabled photo software

Follow these steps to print Exif Print-enhanced photos:

- Open the file that you want the Exif Print-enabled photo software to print.
- 2. Open the **Printer Properties** dialog box.
- 3. Click the **Printing Shortcuts** tab or the **Paper/Quality** tab.

Note: On the **Printing Shortcuts** tab, select either **Photo printing-borderless** or **Photo printing-with white borders**.

4. Click **Normal** or **Best** in the **Print quality** drop-down list.

5. Select any other print settings that you want, and then click \mathbf{OK} .

The printer software automatically optimizes the printed image.

Printing borderless photos

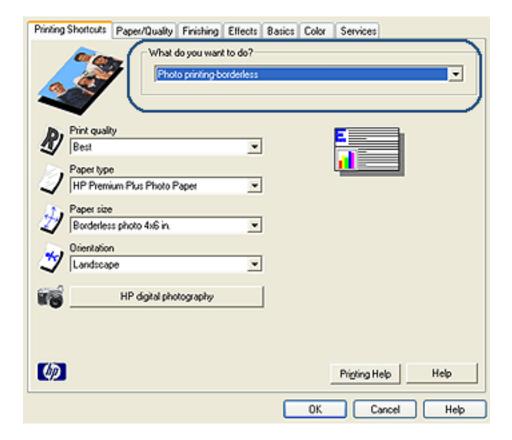
Use borderless printing to print to the edges of certain paper types and on a range of standard and custom paper sizes from $101 \times 152 \text{ mm}$ (4x6 in) photo paper to a 210 x 594 mm (8.5 x 23.4 in) custom photo size.

Guidelines

- Do not print borderless documents in <u>ink-backup mode</u>.
 Always have two print cartridges installed in the printer.
- Open the file in a software application and assign the image size. Ensure that the size corresponds to the paper size on which you want to print the image.

Printing

- 1. Open the file that you want to print.
- 2. Open the **Printer Properties** dialog box.
- 3. On the **Printing Shortcuts** tab, click **Photo printing-borderless** in the drop-down list.



- 4. Select the appropriate print setting for the photo that you want to print.
- 5. If you want to use them, set the <u>HP digital photography</u> options.
- 6. Select any other print settings that you want, and then click **OK**.

If you printed on photo paper that has a tear-off tab, remove the tab to make the document completely borderless.



Photo print cartridge

The photo print cartridge, used in conjunction with the tricolor print cartridge, provides six-ink, virtually grain-free photos that have exceptional fade resistance.



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

Installing the photo print cartridge

To install the photo print cartridge, remove the black print cartridge from the printer, and then install the photo print cartridge in the compartment on the right of the print cartridge cradle.

For more information, see the <u>print cartridge installation</u> page.

Using the photo print cartridge

Follow these steps to print in six-ink color print mode:

- 1. Open the **Printer Properties** dialog box.
- 2. Click the **Printing Shortcuts** tab or the **Paper/Quality** tab.

Note: On the **Print Shortcuts** tab, select either **Photo printing-borderless** or **Photo printing-with white borders**.

3. Find the appropriate drop-down list:

Tab	Drop-down list
Printing Shortcuts	Paper type
Paper/Quality	Type is

Note: You do not need to set the print quality on both tabs.

- 4. Click the appropriate photo paper type in the drop-down list.
- 5. Click **Normal**, **Best**, or **Maximum dpi** in the **Print quality** drop-down list.
- 6. Select any other print settings that you want, and then click **OK**.

Storing the photo print cartridge

To maintain the health of the print cartridge, follow the <u>print</u> <u>cartridge storage guidelines</u>.

Using advanced color settings

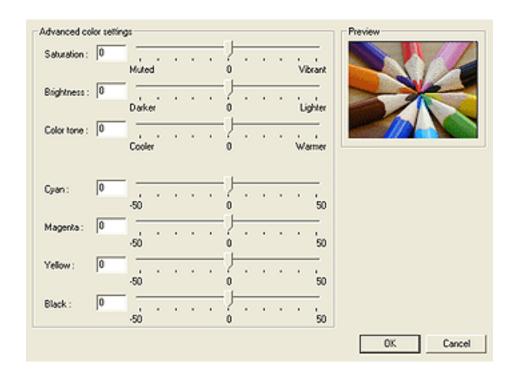
Use the Advanced Color Settings dialog box to adjust how printed colors appear on your printout.

Adjusting these settings causes the printed colors to differ from the colors that appear on your computer monitor.

Follow these steps to specify advanced color settings:

- 1. Open the **Printer Properties** dialog box.
- 2. Click the **Color** tab.
- 3. Click the **Advanced color settings** button.

The **Advanced color settings** dialog box appears.



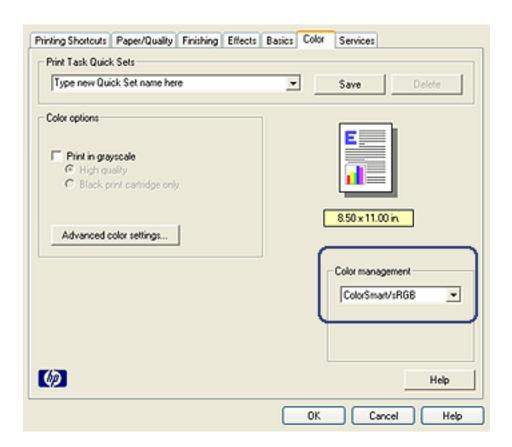
- 4. Adjust the following settings as appropriate:
 - General color settings: Adjust the Saturation,
 Brightness, and Color tone to affect how overall colors are printed.
 - Specific color settings: Adjust the Cyan, Magenta,
 Yellow, and Black sliders to specify the level of each color that is used in printing.
- 5. After specifying the color settings, click **OK**.
- 6. Select any other print settings that you want, and then click **OK**.

Color management

Color management defines the range of colors that can be printed. The printer software translates the colors of your document from their current color settings to the colormanagement option that is selected.

Follow these steps to select a color-management option:

- Open the <u>Printer Properties</u> dialog box.
- 2. Click the **Color** tab.



- 3. Click one of the following options in the **Color management** drop-down list:
 - ColorSmart/sRGB: ColorSmart/sRGB is an appropriate option for most print jobs. It is used for most Web-based documents and current imaging devices.
 - AdobeRGB: When printing from a professional application with AdobeRGB, turn off the color management in the application and allow the printer software to manage the color space. Use the AdobeRGB setting for documents or photos that were originally created in the AdobeRGB color space.
 - Managed by application: This option allows the application from which you are printing manage the color of the document.
- 4. Select any other print settings that you want, and then click **OK**.

Gray photo print cartridge

The gray photo print cartridge, used in conjunction with the tri-color print cartridge, prints high-quality black-and-white photographs.



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

Installing the gray photo print cartridge

To install the gray photo print cartridge, remove the black print cartridge from the printer, and then install the gray photo print cartridge in the compartment on the right of the print cartridge cradle.

For more information, see the <u>print cartridge installation</u> page.

Using the gray photo print cartridge

To use the gray photo print cartridge, follow the <u>steps to print a black-and-white photo</u>.

Storing the gray photo print cartridge

To maintain the health of the print cartridge, follow the <u>print</u> <u>cartridge storage guidelines</u>.

Printing black-and white-photos

You can perform the following tasks with the printer:

- Print a black-and-white photo
- Print a color photo in black-and-white

For great black-and-white photos, install a <u>gray photo print</u> <u>cartridge</u> and a tri-color printer cartridge in the printer.

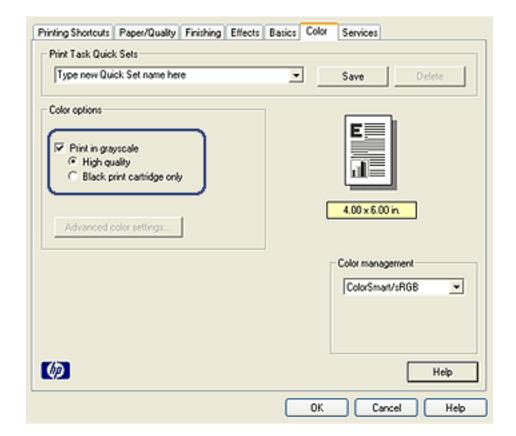
Printing a black-and-white photo

To print a photo that is already black and white, simply follow the instructions for the <u>type and size of photo</u> that you want to print.

Printing a color photo in black and white

Follow these steps to print a color photo in black and white:

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



- 3. Select the **Print in grayscale** check box.
- 4. Click the **High quality** option.
- 5. Select any other print settings that you want, and then click **OK**.

Storing and handling photo paper

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

Storage

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

Handling

- Always hold photo paper by its edges. Fingerprints on photo paper can reduce print quality.
- Verify that the photo paper is not curled. If the photo paper is curled, place the paper in a plastic bag and gently bend it the opposite direction of the curl until the paper lies flat. If the problem persists, use photo paper that is not curled.

Saving money when printing photos

HP Everyday Photo Paper

To save money and ink when printing photos, use **HP Everyday Photo Paper, Semi-gloss** and set the **Print quality** to **Normal**.

HP Everyday Photo Paper, Semi-gloss is designed to create quality photos with less ink.

Note: For higher-quality photos, use HP Premium Plus Photo paper and set the **Print quality** to **Best** or Maximum dpi.

Small borderless photos

Guidelines

- For high-quality results, use a <u>photo print cartridge</u> in combination with the tri-color print cartridge.
- For maximum fade resistance, use HP Premium Plus Photo Paper and install a photo print cartridge in the printer.
- To learn how to use the photo printing features, see the photo enhancing page.
- Use <u>HP Everyday Photo Paper, Semi-gloss</u> to save money and ink when printing photos.
- Verify that the photo paper that you are using is flat. For information about preventing photo paper from curling, see the <u>photo paper storage instructions</u>.
- Do not exceed the In-tray capacity: up to 25 sheets.

Preparing to print

To print a single photo, use the <u>photo/envelope feeder</u>.

To print multiple photos, follow these steps:

- 1. Verify that the printer is turned on.
- 2. Remove the Out tray, and then remove all of the paper from the In tray.
- 3. Slide the paper-width guide all the way to the left, and then pull out the paper-length guide.
- 4. Verify that the photo paper is flat.

If the photo paper is not flat, see the <u>photo paper storage</u> instructions.

5. Place the photo paper in the In tray with the side to be printed on facing down. If you are using a photo paper that has a tear-off tab, verify that the tab is pointing away from the printer.



- 6. Slide the paper guides firmly against the paper.
- 7. Replace the Out tray.

Printing

Note: If your software program includes a photo printing feature, follow the instructions that are provided with the software program. Otherwise, follow these instructions.

- 1. Open the **Printer Properties** dialog box.
- 2. On the **Printing Shortcuts** tab, select **Photo printing-borderless** as the type of document, and then select the following options:
 - Print quality: Normal or Best
 - Paper size: The appropriate borderless photo paper size
 - Paper type: The appropriate photo paper type
 - Orientation: Portrait or Landscape

- 3. Set the following options as appropriate:
 - HP digital photography options
 - Advanced color settings
 - o Color management
 - o **Grayscale quality**
- 4. Select any other print settings that you want, and then click **OK**.

Large borderless photos

Guidelines

- For high-quality results, use a <u>photo print cartridge</u> in combination with the tri-color print cartridge.
- For maximum fade resistance, use HP Premium Plus Photo Paper and install a photo print cartridge in the printer.
- To learn how to use the photo printing features, see the photo enhancing page.
- Use <u>HP Everyday Photo Paper, Semi-gloss</u> to save money and ink when printing photos.
- Verify that the photo paper that you are using is flat. For information about preventing photo paper from curling, see the <u>photo paper storage instructions</u>.
- Do not exceed the In-tray capacity: up to 25 sheets.

Preparing to print

- 1. Verify that the printer is turned on.
- 2. Raise the Out tray, and then remove all of the paper from the In tray.
- 3. Slide the paper-width guide all the way to the left, and then pull out the paper-length guide.
- 4. Verify that the photo paper is flat.

 If the photo paper is not flat, see the <u>photo paper storage</u> instructions.

5. Place the photo paper in the In tray with the side to be printed on facing down.



- 6. Slide the paper guides firmly against the paper.
- 7. Lower the Out tray.

Printing

Note: If your software program includes a photo printing feature, follow the instructions that are provided with the software program. Otherwise, follow these instructions.

- 1. Open the **Printer Properties** dialog box.
- 2. On the **Printing Shortcuts** tab, select **Photo printing-borderless** as the type of document, and then select the following options:
 - Print quality: Normal or Best
 - Paper size: The appropriate borderless photo paper size
 - Paper type: The appropriate photo paper type
 - Orientation: Portrait or Landscape
- 3. Set the following options as appropriate:
 - HP digital photography options
 - Advanced color settings

- o Color management
- o Grayscale quality
- 4. Select any other print settings that you want, and then click **OK**.

Panoramic borderless photos

Guidelines

- For high-quality results, use a <u>photo print cartridge</u> in combination with the tri-color print cartridge.
- For maximum fade resistance, use HP Premium Plus Photo Paper and install a photo print cartridge in the printer.
- To learn how to use the photo printing features, see the photo enhancing page.
- Use <u>HP Everyday Photo Paper, Semi-gloss</u> to save money and ink when printing photos.
- Verify that the photo paper that you are using is flat. For information about preventing photo paper from curling, see the <u>photo paper storage instructions</u>.
- Do not exceed the In-tray capacity: up to 25 sheets.

Preparing to print

- 1. Verify that the printer is turned on.
- 2. Raise the Out tray, and then remove all of the paper from the In tray.
- 3. Slide the paper-width guide all the way to the left, and then pull out the paper-length guide.
- 4. Verify that the photo paper is flat.

 If the photo paper is not flat, see the <u>photo paper storage</u> instructions.

5. Place the photo paper in the In tray with the side to be printed on facing down.



6. Slide the paper guides firmly against the paper.

Note: Some panoramic paper sizes may extend beyond the edge of the In tray. When printing on such papers, be sure to slide the paper width-guide firmly against the edge of the paper.

7. Lower the Out tray.

Printing

Note: If your software program includes a photo printing feature, follow the instructions that are provided with the software program. Otherwise, follow these instructions.

- 1. Open the <u>Printer Properties</u> dialog box.
- 2. On the **Printing Shortcuts** tab, click **Photo printing-borderless** as the type of document, and then select the following options:
 - Print quality: Normal or Best
 - Paper size: The appropriate the panoramic borderless photo paper size
 - Paper type: The appropriate photo paper type
 - Orientation: Portrait or Landscape

- 3. Set the following options as appropriate:
 - HP digital photography options
 - Advanced color settings
 - o Color management
 - o Grayscale quality
- 4. Select any other print settings that you want, and then click **OK**.

Small photos with a white border

Guidelines

- For high-quality results, use a <u>photo print cartridge</u> in combination with the tri-color print cartridge.
- For maximum fade resistance, use HP Premium Plus Photo Paper and install a photo print cartridge in the printer.
- To learn how to use the photo printing features, see the photo enhancing page.
- Use <u>HP Everyday Photo Paper, Semi-gloss</u> to save money and ink when printing photos.
- Verify that the photo paper that you are using is flat. For information about preventing photo paper from curling, see the <u>photo paper storage instructions</u>.
- Do not exceed the In-tray capacity: up to 25 sheets.

Preparing to print

To print a single photo, use the <u>photo/envelope feeder</u>.

To print multiple photos, follow these steps:

- 1. Verify that the printer is turned on.
- 2. Remove the Out tray, and then remove all of the paper from the In tray.
- 3. Slide the paper-width guide all the way to the left, and then pull out the paper-length guide.
- 4. Verify that the photo paper is flat.

If the photo paper is not flat, see the <u>photo paper storage</u> instructions.

5. Place the photo paper in the In tray with the side to be printed on facing down. If you are using a photo paper that has a tear-off tab, verify that the tab is pointing away from the printer.



- 6. Slide the paper guides firmly against the paper.
- 7. Replace the Out tray.

Printing

Note: If your software program includes a photo printing feature, follow the instructions that are provided with the software program. Otherwise, follow these instructions.

- 1. Open the **Printer Properties** dialog box.
- 2. On the **Printing Shortcuts** tab, click **Photo printing-with white borders** as the type of document, and then select the following options:
 - Print quality: Normal or Best
 - Paper size: The appropriate photo paper size
 - Paper type: The appropriate photo paper type
 - Orientation: Portrait or Landscape

- 3. Set the following options as appropriate:
 - HP digital photography options
 - Advanced color settings
 - o Color management
 - o **Grayscale quality**
- 4. Select any other print settings that you want, and then click **OK**.

Large photos with a white border

Guidelines

- For high-quality results, use a <u>photo print cartridge</u> in combination with the tri-color print cartridge.
- For maximum fade resistance, use HP Premium Plus Photo Paper and install a photo print cartridge in the printer.
- To learn how to use the photo printing features, see the photo enhancing page.
- Use <u>HP Everyday Photo Paper, Semi-gloss</u> to save money and ink when printing photos.
- Verify that the photo paper that you are using is flat. For information about preventing photo paper from curling, see the <u>photo paper storage instructions</u>.
- Do not exceed the In-tray capacity: up to 25 sheets.

Preparing to print

- 1. Verify that the printer is turned on.
- 2. Raise the Out tray, and then remove all of the paper from the In tray.
- 3. Slide the paper-width guide all the way to the left, and then pull out the paper-length guide.
- 4. Verify that the photo paper is flat.

 If the photo paper is not flat, see the <u>photo paper storage</u> instructions.

5. Place the photo paper in the In tray with the side to be printed on facing down.



- 6. Slide the paper guides firmly against the paper.
- 7. Lower the Out tray.

Printing

Note: If your software program includes a photo printing feature, follow the instructions that are provided with the software program. Otherwise, follow these instructions.

- 1. Open the **Printer Properties** dialog box.
- 2. On the **Printing Shortcuts** tab, click **Photo printing-with white borders** as the type of document, and then select the following options:
 - Print quality: Normal or Best
 - Paper size: The appropriate photo paper size
 - Paper type: The appropriate photo paper type
 - Orientation: Portrait or Landscape
- 3. Set the following options as appropriate:
 - HP digital photography options
 - Advanced color settings

- o Color management
- o Grayscale quality
- 4. Select any other print settings that you want, and then click **OK**.

Panoramic photos with a white border

Guidelines

- For high-quality results, use a <u>photo print cartridge</u> in combination with the tri-color print cartridge.
- For maximum fade resistance, use HP Premium Plus Photo Paper and install a photo print cartridge in the printer.
- To learn how to use the photo printing features, see the photo enhancing page.
- Use <u>HP Everyday Photo Paper</u>, <u>Semi-gloss</u> to save money and ink when printing photos.
- Verify that the photo paper that you are using is flat. For information about preventing photo paper from curling, see the <u>photo paper storage instructions</u>.
- Do not exceed the In-tray capacity: up to 25 sheets.

Preparing to print

- 1. Verify that the printer is turned on.
- 2. Raise the Out tray, and then remove all of the paper from the In tray.
- 3. Slide the paper-width guide all the way to the left, and then pull out the paper-length guide.
- Verify that the photo paper is flat.
 If the photo paper is not flat, see the <u>photo paper storage</u> instructions.

5. Place the photo paper in the In tray with the side to be printed on facing down.



6. Slide the paper guides firmly against the paper.

Note: Some panoramic paper sizes may extend beyond the edge of the In tray. When printing on such papers, be sure to slide the paper width-guide firmly against the edge of the paper.

7. Lower the Out tray.

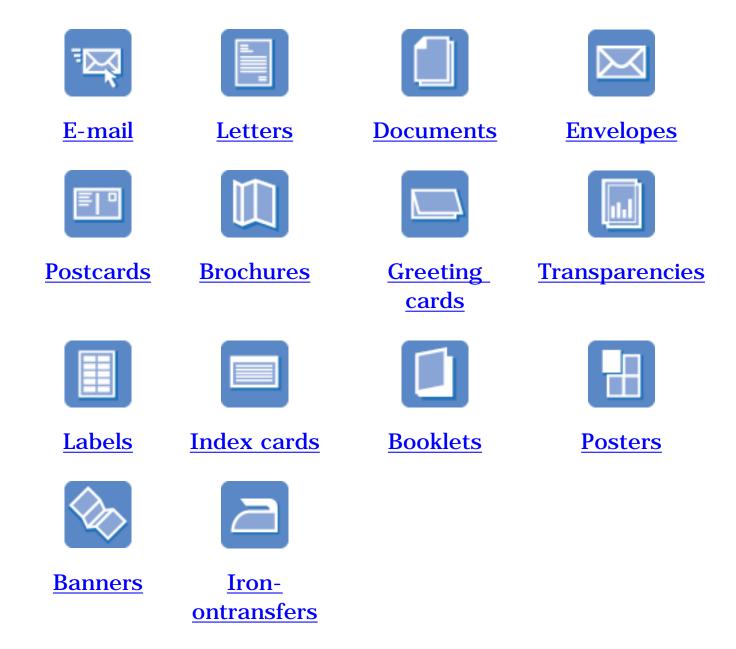
Printing

Note: If your software program includes a photo printing feature, follow the instructions that are provided with the software program. Otherwise, follow these instructions.

- 1. Open the **Printer Properties** dialog box.
- 2. On the **Printing Shortcuts** tab, click **Photo printing-with white borders** as the type of document, and then select the following options:
 - o Print quality: Normal or Best
 - Paper size: The appropriate photo paper size
 - Paper type: The appropriate photo paper type
 - Orientation: Portrait or Landscape

- 3. Set the following options as appropriate:
 - HP digital photography options
 - Advanced color settings
 - o Color management
 - o Grayscale quality
- 4. Select any other print settings that you want, and then click **OK**.

Printing other documents



Printing tips

Minimize your cost and effort while maximizing the quality of your printouts by using these <u>printing tips</u>.

Printer software

Learn about the printer software.

Email

Guidelines

Do not exceed the In-tray capacity: up to 150 sheets.

Preparing to print

- 1. Verify that the printer is turned on.
- 2. Raise the Out tray.
- 3. Slide the paper-width guide all the way to the left, and then pull out the paper-length guide.
- 4. Place plain paper in the In tray, pushing the paper into the printer until it stops.
- 5. Slide the paper guides firmly against the paper.



6. Lower the Out tray.

Printing

- 1. Open the <u>Printer Properties</u> dialog box.
- 2. On the **Printing Shortcuts** tab, click **General everyday printing** or **Fast/economical printing**, and then specify

the following print settings:

- Paper size: The appropriate paper size
- Paper type: Automatic or Plain paper
- 3. Select the following print settings as appropriate:
 - o **Print quality**
 - o <u>Paper source</u>
 - Grayscale printing
- 4. Select any other print settings that you want, and then click **OK**.

Letters

Guidelines

- Learn how to add a watermark to the letter.
- For help printing on an envelope, see the **envelope** page.
- Do not exceed the In-tray capacity: up to 150 sheets.

Preparing to print

- 1. Verify that the printer is turned on.
- 2. Raise the Out tray.
- 3. Slide the paper-width guide all the way to the left, then pull out the paper-length guide.
- 4. Place plain paper in the In tray, pushing the paper into the printer until it stops.
- 5. Slide the paper guides firmly against the paper.





2. Legal paper

Note: If you are using letterhead, verify that the letterhead is facing down and towards the interior of the printer.

6. Lower the Out tray.

Do not extend the Out-tray extension stop when printing on legal paper.

Printing

- 1. Open the <u>Printer Properties</u> dialog box.
- 2. On the **Printing Shortcuts** tab, click **Presentation** printing or **General everyday printing**, and then specify the following print settings:
 - Paper size: The appropriate paper size
 - Paper type: Automatic or Plain paper
- 3. Select the following print settings as appropriate:
 - Print quality
 - Paper source
- 4. Select any other print settings that you want, and then click **OK**.

Documents

Guidelines

- Learn how to add a <u>watermark</u> to your document.
- Learn how to print the <u>first page of the document on a different paper type</u>.
- Save paper with <u>two-sided printing</u>.
- For draft documents, use <u>Fast/economical</u> printing.
- Do not exceed the In-tray capacity: up to 150 sheets.

- 1. Verify that the printer is turned on.
- 2. Raise the Out tray.
- 3. Slide the paper-width guide all the way to the left, then pull out the paper-length guide.
- 4. Place plain paper in the In tray, pushing the paper into the printer until it stops.
- 5. Slide the paper guides firmly against the paper.





2. Legal paper

6. Lower the Out tray.

Do not extend the Out-tray extension stop when printing on legal paper.

Printing

- 1. Open the **Printer Properties** dialog box.
- 2. On the Printing Shortcuts tab, click General everyday printing or Presentation printing, and then specify the following print settings:
 - Paper size: The appropriate paper size
 - Paper type: Automatic or Plain paper
- 3. Select the following print settings as appropriate:
 - Print quality
 - Paper source
 - Two-sided printing
- 4. Select any other print settings that you want, and then click **OK**.

Envelopes

Guidelines

- Avoid using envelopes that have the following qualities:
- Have clasps or windows
- Have thick, irregular, or curled edges
- Are shiny or embossed
- Are wrinkled, torn, or otherwise damaged
- Align the envelope edges before inserting them in the In tray.
- Do not exceed the In-tray capacity: up to 20 envelopes.

Preparing to print

If you are printing on a single envelope, use the <u>photo/envelope feeder</u>.

If you are printing on multiple envelopes, follow these steps:

- 1. Verify that the printer is turned on.
- 2. Remove the Out tray, and then remove all paper from the In tray.
- Slide the paper-width guide all the way to the left, and then pull out the paper-length guide.
- 4. Place the envelopes, with the sides to be printed on facing down and the flaps to the left, into the In tray and to the right. Push the envelopes into the printer until they stop.



- 5. Slide the paper guides firmly against the envelopes.
- 6. Replace the Out tray.

- 1. Open the **Printer Properties** dialog box.
- 2. Click the **Paper/Quality** tab, then select the following print settings:
 - Size is: The appropriate envelope size
 - Type is: Automatic or Plain paper
- 3. Select any other print settings that you want, and then click **OK**.

Postcards



If the optional Auto Two-Sided Print Accessory with Small Paper Tray is attached to the printer, follow the <u>steps for printing</u> <u>postcards with the Auto Two-Sided Print</u> <u>Accessory with Small Paper Tray</u>.

Guidelines

- Use only cards and small media that meet the printer papersize specifications. For specifications, see the reference guide that came with the printer.
- Do not exceed the In-tray capacity: up to 60 cards.

Preparing to print

To print a single card, use the **photo/envelope feeder**.

To print multiple cards, follow these steps:

- 1. Verify that the printer is turned on.
- 2. Remove the Out tray, then remove all paper from the In tray.
- 3. Slide the paper-width guide all the way to the left, then pull out the paper-length guide.
- 4. Place the cards, with the sides to be printed on facing down and one of the short sides pointing towards the printer, into In tray and to the right. Push the cards into the printer until they stop.



- 5. Slide the paper guides firmly against the cards.
- 6. Replace the Out tray.

- 1. Open the **Printer Properties** dialog box.
- 2. On the **Printing Shortcuts** tab, click **Postcard printing**, and then specify the following print settings:
 - Paper size: The appropriate paper size
 - Paper type: Automatic or Plain paper
 - Paper source: Upper tray
- 3. Select any other print settings that you want, and then click **OK**.

Brochures

Guidelines

- Learn to print <u>borderless brochures</u>.
- For great results, use HP Brochure & Flyer Paper.
- Do not exceed the In-tray capacity: up to 25 sheets.

Preparing to print

- 1. Verify that the printer is turned on.
- 2. Raise the Out tray.
- 3. Slide the paper-width guide all the way to the left, then pull out the paper-length guide.
- 4. Place brochure paper in the In tray, pushing the paper into the printer until it stops.
- 5. Slide the paper guides firmly against the paper.



6. Lower the Out tray.

- 1. Open the **Printer Properties** dialog box.
- 2. On the **Printing Shortcuts** tab, click **Presentation printing**, and then specify the following print settings:
 - Paper size: The appropriate paper size
 - Paper type: Automatic or appropriate brochure paper type
- 3. Select the following print settings as appropriate:
 - Print quality
 - Grayscale printing
 - Two-sided printing
- 4. Select any other print settings that you want, and then click **OK**.

Greeting cards

Guidelines

- Unfold prefolded cards, and then place them in the In tray.
- For great results, use HP Greeting Card Paper.
- Do not exceed the In-tray capacity: up to 30 cards.

Preparing to print

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



7. Lower the Out tray.

Note: If your software program includes a greeting card printing feature, follow the instructions that are provided with the software program. Otherwise, follow the instructions below.

- 1. Open the **Printer Properties** dialog box.
- 2. Click the **Paper/Quality** tab, and then specify the following print settings:
 - Size is: The appropriate card size
 - Source is: Upper tray
 - Type is: The appropriate card type
- 3. Select any other print settings that you want, and then click **OK**.

Transparencies

Guidelines

- For great results, use HP Premium Inkjet Transparency Film.
- Do not exceed the In-tray capacity: up to 30 transparencies.

- 1. Verify that the printer is turned on.
- 2. Raise the Out tray, and then remove all paper from the In tray.
- Slide the paper-width guide all the way to the left, then pull out the paper-length guide.
- 4. Place the transparencies in the In tray, with the side to printed on facing down and the adhesive strip facing up and toward the printer.



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

- 1. Open the **Printer Properties** dialog box.
- 2. On the **Printing Shortcuts** tab, click **Presentation printing**, and then specify the following print settings:
 - Paper size: The appropriate paper size
 - Paper type: Automatic or appropriate transparency film
 - Paper source: Upper tray
- 3. Select the following print settings as appropriate:
 - Print quality
 - Grayscale printing
- 4. Select any other print settings that you want, and then click **OK**.

Labels

Guidelines

- Use only labels that are designed specifically for inkjet printers.
- Use only full sheets of labels.
- Verify that the labels are not sticky, wrinkled, or pulling away from the protective backing.
- Do not exceed the In-tray capacity: up to 30 sheets of labels (use only letter-size or A4-size sheets).

- 1. Verify that the printer is turned on.
- 2. Raise the Out tray, and then remove all paper from the In tray.
- 3. Slide the paper-width guide all the way to the left, and then pull out the paper-length guide.
- 4. Fan the edges of the label sheets to separate them, and then align the edges.
- 5. Place the label sheets in the In tray with the label side facing down. Push the sheets into the printer until they stop.



- 6. Slide the paper guides firmly against the edge of the sheets.
- 7. Lower the Out tray.

Note: If your software program includes a label printing feature, follow the instructions that are provided with the software program. Otherwise, follow the instructions below.

- 1. Open the **Printer Properties** dialog box.
- 2. On the **Printing Shortcuts** tab, click **General everyday printing**, and then specify the following print settings:
 - Paper size: The appropriate paper size
 - Paper type: Automatic or Plain paper
 - Paper source: Upper tray
- 3. Select the following print settings as appropriate:
 - o **Print quality**
 - Grayscale printing
- 4. Select any other print settings that you want, and then click **OK**.

Index cards and other small media

Guidelines

- Use only cards and small media that meet the printer papersize specifications. For specifications, see the reference guide that came with the printer.
- Do not exceed the In-tray capacity: up to 60 cards.

Preparing to print

To print a single card, use the <u>photo/envelope feeder</u>.

To print multiple cards, follow these steps:

- 1. Verify that the printer is turned on.
- 2. Remove the Out tray, then remove all paper from the In tray.
- 3. Slide the paper-width guide all the way to the left, then pull out the paper-length guide.
- 4. Place the cards, with the sides to be printed on facing down and one of the short sides pointing towards the printer, into In tray and to the right. Push the cards into the printer until they stop.



- 5. Slide the paper guides firmly against the cards.
- 6. Replace the Out tray.

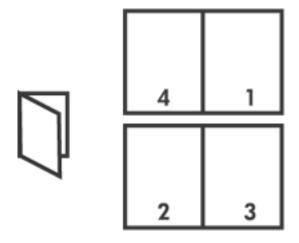
- 1. Open the **Printer Properties** dialog box.
- 2. Click the **Paper/Quality** tab, and then specify the following print settings:
 - Size is: The appropriate paper size
 - Type is: The appropriate paper type
 - Source is: Upper tray
- 3. Select any other print settings that you want, and then click **OK**.

Booklets



If an optional two-sided printing accessory is attached to the printer, then follow the <u>steps to print a</u> booklet automatically.

Booklet printing automatically arranges and resizes the pages of a document so that when the pages are folded into a booklet, the page order is correct.



Guidelines

Do not exceed the In-tray capacity: up to 150 sheets.

- 1. Verify that the printer is turned on.
- 2. Raise the Out tray.
- 3. Slide the paper-width guide all the way to the left, and then pull out the paper-length guide.

- 4. Place plain paper in the In tray, pushing the paper into the printer until it stops.
- 5. Slide the paper guides firmly against the paper.



6. Lower the Out tray.

Printing

- 1. Open the <u>Printer Properties</u> dialog box.
- 2. Select the **Printing Shortcuts** tab, and then click **Two-sided, duplex, printing** in the drop-down list.
- 3. In the **Print on both sides** drop-down list, click one of the following binding options:
 - Left edge booklet
 - Right edge booklet
- 4. Select any other print settings that you want, and then click **OK**.

5. When prompted, reload the printed pages in the In tray as shown below.



6. Click **Continue** to finish printing the booklet.

Posters

Guidelines

 After the sections of a poster have been printed, trim the edges of the sheets, and then tape the sheets together.





Do not exceed the In-tray capacity: up to 150 sheets.

- 1. Verify that the printer is turned on.
- 2. Raise the Out tray.
- 3. Slide the paper-width guide all the way to the left, and then pull out the paper-length guide.
- 4. Place plain paper in the In tray, pushing the paper into the printer until it stops.
- 5. Slide the paper guides firmly against the paper.



6. Lower the Out tray.

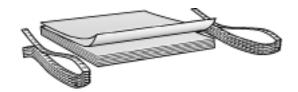
Printing

- 1. Open the <u>Printer Properties</u> dialog box.
- 2. Click the **Paper/Quality** tab, and then specify the following print settings:
 - Size is: The appropriate size
 - Source is: Upper tray
 - Type is: Automatic or Plain paper
- 3. Click the **Finishing** tab, and then specify the following print settings:
 - Poster printing: 2 x 2, 4 sheets, 3 x 3, 9 sheets, 4 x
 4, 16 sheets, or 5 x 5, 25 sheets
- 4. Click the **Basics** tab, and then specify the following print settings:
 - Orientation: The appropriate orientation
- 5. Select any other print settings that you want, and then click **OK**.

Banners

Guidelines

- Use HP Banner Paper for great results.
- Remove any perforated strips from the banner paper before loading it in the In tray.



Do not exceed the In-tray capacity: up to 20 sheets.

- 1. Verify that the printer is turned on.
- 2. Remove the Out tray, and then remove all paper from the In tray.
- 3. Slide the paper width-guide all the way to the left, and then pull out the paper-length guide.
- 4. Place the banner paper in the In tray so that the unattached edge is on top of the paper stack and pointing toward the printer.



1. Unattached edge

5. Slide the paper-width guide firmly against the paper.

Note: Leave the Out tray off of the printer when printing a banner.

Printing

- 1. Open the **Printer Properties** dialog box.
- 2. Click the **Paper/Quality** tab, and then specify the following print settings:
 - Size is: Letter or A4
 - Source is: Upper tray
 - Type is: HP Banner Paper
- 3. Select any other print settings that you want, and then click **OK**.

Iron-on transfers

Guidelines

- Use HP Iron-on Transfers for great results.
- When printing a mirror image, the text and the pictures are horizontally reversed from what appears on the computer screen.



Do not exceed the In tray capacity: Up to 20 sheets.

- 1. Verify that the printer is turned on.
- 2. Raise the Out tray.
- 3. Slide the paper-width guide all the way to the left, and then pull out the paper-length guide.
- 4. Place iron-on transfer paper with the side to be printed on facing down in the In tray.
- 5. Push the paper into the printer until it stops.
- 6. Slide the paper guides firmly against the paper.



7. Lower the Out tray.

Printing

Note: If your software program includes an iron-on transfer printing feature, follow the instructions that are provided with the software program. Otherwise, follow the instructions below. Also, some iron-on transfer paper types do not require you to print a mirror image.

- 1. Open the **Printer Properties** dialog box.
- 2. Click the **Paper/Quality** tab, and then specify the following print settings:
 - Size is: The appropriate paper size
 - Source is: Upper Tray
 - Type is: HP Iron-on Transfer
 - Print Quality: Normal or Best
- 3. Click the **Basics** tab, and then specify the following print settings:
 - Orientation: Mirror Image (if required for the paper type you are using)
- 4. Select any other print settings that you want, and then click **OK**.
 - Use the What's This? help to learn about the features that you see in the **Printer Properties** dialog box.

Printing tips

Save time

- Use the <u>Printing Shortcuts</u> tab.
- Create <u>print task quick sets</u> for documents you print often.
- Use the <u>250-Sheet Plain Paper Tray Accessory</u> to reload the printer less often.
- Set the <u>printer default settings</u> for options that you use often.
- Print from front to back.
- Print <u>collated copies</u>.

Same money

- Use <u>Fast/economical printing</u>.
- Print a two-sided document either <u>automatically</u> or <u>manually</u>.
- Print <u>multiple pages on a single sheet of paper</u>.

Enhance the quality of printouts

- <u>Preview</u> the document before printing it.
- Select the right <u>paper type</u>.
- Select the right <u>print quality</u>.
- Resize the document as needed.
- Add a watermark.

- Print a <u>borderless brochure</u>.
- Print the first page of a document on a <u>different paper type</u>.
- Print on a <u>custom paper size</u>.

Printing shortcuts

The **Printing Shortcuts** tab makes it easy to set the printing options for the documents that you want to print.



Use the **Printing Shortcuts** tab for the following print tasks:

- General everyday printing
- Photo printing-borderless
- Photo printing-with white borders
- <u>Two-sided</u>, <u>duplex</u>, <u>printing</u>
- Presentation printing
- Fast/economical printing
- Postcard printing

Print task quick sets

Use print task quick sets to print with or save print settings that you use often.

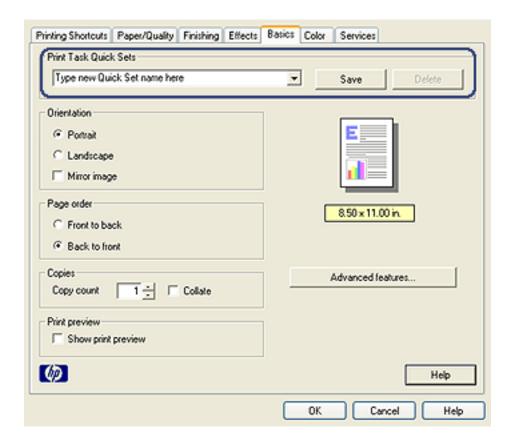
For example, if you frequently print on envelopes, you can create a print task that contains the paper size, print quality, and orientation setting that you normally use for envelopes. After creating the print task, simply select it when printing on envelopes rather than setting each of the print settings separately.

Create your own print task or use the specially designed print tasks that are available in the **Print Task Quick Sets** dropdown list.

Using a print task quick set

Follow these steps to use a print task quick set:

- 1. Open the <u>Printer Properties</u> dialog box.
- 2. Select the print task that you want to use from the drop-down list.



3. Click OK.

Note: To restore default print settings, click **Default print settings** in the **Print Task Quick Sets** drop-down list, and click **OK**.

Creating a print task quick set

Follow these steps to create a print task quick set:

Note: The printer software can save up to 25 print task quick sets.

- Open the <u>Printer Properties</u> dialog box.
- 2. Select the options that you want to include in the new print task.
- 3. Type a name for the new print task in the **Print Task Quick Sets** drop-down list, and then click **Save**.

The print task quick set is added to the drop-down list.

Note: If you add more options to the print task, you must rename the print task, and then click **OK**.

Deleting a print task quick set

Follow these steps to delete a print task quick set:

- 1. Open the **Printer Properties** dialog box.
- 2. Select the print task that you want to delete from the drop-down list, and then click **Delete**.

Note: Some print task quick sets cannot be deleted.

Using the 250-Sheet Plain Paper Tray Accessory

If the 250-Sheet Plain Paper Tray Accessory is not installed on the printer, follow the <u>installation steps</u>.

Note: The 250-Sheet Plain Paper Tray Accessory is not available in all countries/regions.

Follow these steps to use the 250-Sheet Plain Paper Tray Accessory:

- 1. Open the **Printer Properties** dialog box.
- 2. Click the **Printing Shortcuts** tab or the **Paper/Quality** tab.
- 3. Find the appropriate drop-down list:

Tab	Drop-down list
Printing Shortcuts	Paper source
Paper/Quality	Source is

Note: You do not need to set the paper source on both tabs.

- 4. Select one of the following options in the drop-down list:
 - Upper tray: prints from the In tray.
 - Lower tray: prints from the 250-Sheet Plain Paper Tray Accessory.
 - Upper, then lower: prints from the In tray. If the In tray is empty, the printer prints from the 250-Sheet Plain Paper Tray Accessory.
 - Lower, then upper: prints from the 250-Sheet Plain Paper Tray Accessory. If the accessory is empty, the printer prints from the In tray.

Printing in grayscale

For instructions about printing black-and-white photos, see the <u>black-and-white photo printing</u> page.

Follow these steps to print in grayscale:

- 1. Open the **Printer Properties** dialog box.
- 2. Click the **Printing Shortcuts** tab, and then click either **Presentation printing** or **Fast/economical printing**.
- 3. In the **Print in grayscale** drop-down list, click one of the following:
 - High quality: Use this option for high-quality printouts.
 - Black only: Use this option for fast, economical printing.
- 4. Select any other print settings that you want, and then click **OK**.

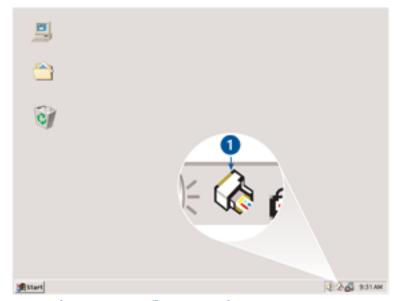
Setting the printer default settings

The printer uses the default settings for all documents unless you open the <u>Printer Properties</u> dialog box and specify other settings.

To save time when printing, set the printer default settings to options that you use often. That way, you do not have to specify the options every time you use the printer.

Follow these steps to change the printer default settings:

1. Click the printer task tray icon.



1. Printer task tray icon

The **Printer Properties** dialog box appears.

- 2. Select the options that you want to use as the default settings.
- 3. Click **OK**.

A dialog box appears stating that the new settings will be used every time you print. If you do not want to see this dialog box again, select **Don't show me this message again**.

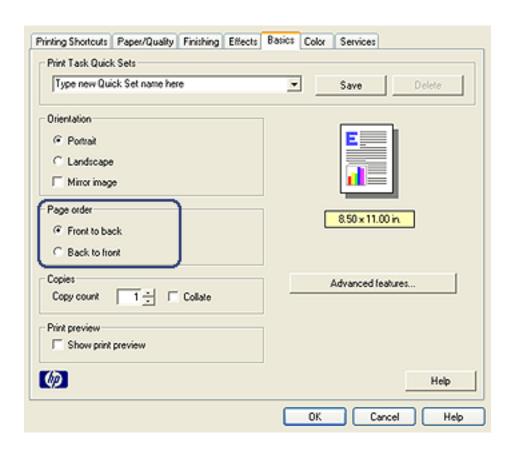
4. Click **OK** to save the new default print settings.

Setting the page order

Setting the page order determines the order in which your document will be printed. Frequently, it is convenient to have the first page of a document printed last so that the complete document is lying face-up in the Out tray.

Follow these steps to set the page order:

- 1. Open the **Printer Properties** dialog box.
- Click the **Basics** tab.



- 3. Select one of the following options:
 - Front to back: Prints the first page of the document last. This setting saves time because you do not have to reorder the printed pages. It is the appropriate setting for most print jobs.
 - Back to front: Prints the last page of the document last.
 This setting is required when printing the first page of a document on a different paper type.
- 4. Select any other print settings that you want, and then click **OK**.

Use the What's This? help to learn about the features that you see in the **Printer Properties** dialog box.

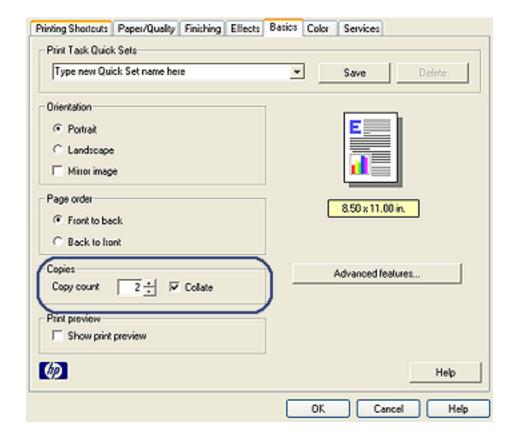
Printing collated copies

If you are printing several copies of a document at one time, use collation so that you do not have to re-arrange the copies after printing.

Note: Some software programs do not allow you use the printer software to specify the number of copies to print. If the program that you are using allows you to specify the number of copies to print, then specify the number of copies to print in the application.

Follow these steps to print collated copies:

- 1. Open the <u>Printer Properties</u> dialog box.
- 2. Click the **Basics** tab.



- 3. Type the number of copies that you want to print in the **Copy count** box.
- 4. Select the **Collate** check box.
- 5. Select any other print settings that you want, and then click **OK**.

Fast/economical printing

Use Fast/economical printing to produce draft-quality printouts quickly.

Follow these steps to use Fast/economical printing:

- 1. Open the <u>Printer Properties</u> dialog box.
- 2. On the **Printing Shortcuts** tab, select **Fast/economical printing** from the drop-down list.
- 3. Specify the printing settings that you want to use.
- 4. After specifying the print settings, click **OK**.

Use the What's This? help to learn about the features that you see in the **Printer Properties** dialog box.

Automatic two-sided printing

To print a two-sided document automatically, one of the following accessories must be attached to the printer:



Automatic Two-Sided Printing Accessory



Auto Two-Sided Print Accessory with Small Paper Tray

The two-sided printing accessories only support certain paper types. For a list of supported paper types, see the documentation that came with the accessory.

If a two-sided printing accessory is not attached to the printer or you are printing on an unsupported paper type, use <u>manual two-sided printing</u>.

Note: You can also use the two-sided printing <u>print task</u> <u>quick sets</u> for automatic two-sided printing.

Binding type

Select the type of binding that you want for the two-sided document, and then follow the steps for that binding:





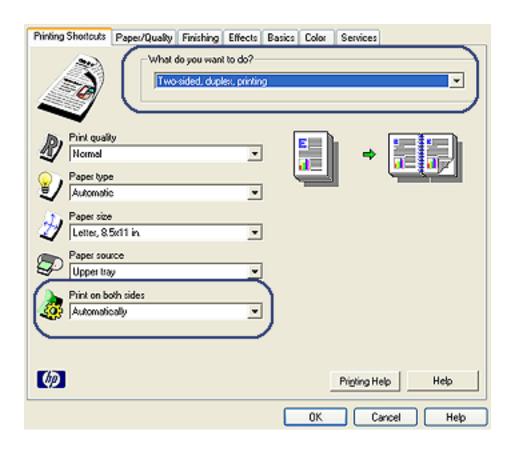
Book binding Tablet binding

Note: Book binding is the most common type of binding.

Book binding

Follow these steps to print a two-sided document with a book binding:

- 1. Open the **Printer Properties** dialog box.
- 2. Click the **Printing Shortcuts** tab, and then click **Two-sided, duplex, printing** in the drop-down list.



3. In the **Print on both sides** drop-down list, click **Automatically**.

4. Select any other print settings that you want, and then click **OK**.

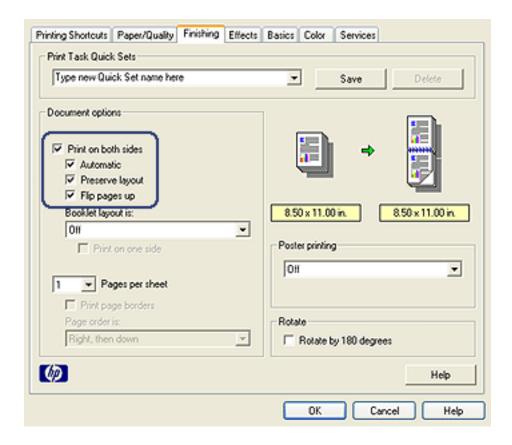
After the first side of the page is printed, the printer pauses while the ink dries. When the ink is dry, the paper is pulled back into the duplexer and the reverse side of the page is printed.

Do not remove the paper from the printer until both sides of the page have been printed.

Tablet binding

Follow these steps to print a two-sided document with a tablet binding:

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



- 3. Select the **Print on both sides** check box.
- 4. Select the **Automatic** check box.
- 5. Select the **Preserve layout** check box.
- 6. Select the **Flip pages up** check box.
- 7. Select any other print settings that you want, and then click **OK**.

After the first side of the page is printed, the printer pauses while the ink dries. When the ink is dry, the paper is pulled back into the duplexer and the reverse side of the page is printed.

Do not remove the paper from the printer until both sides of the page have been printed.

Manual two-sided printing



If an optional two-sided printing accessory is attached to the printer, then follow the <u>automatic two-sided</u> printing instructions.

Binding type

Select the type of binding that you want for the two-sided document, and then follow the steps for that binding:





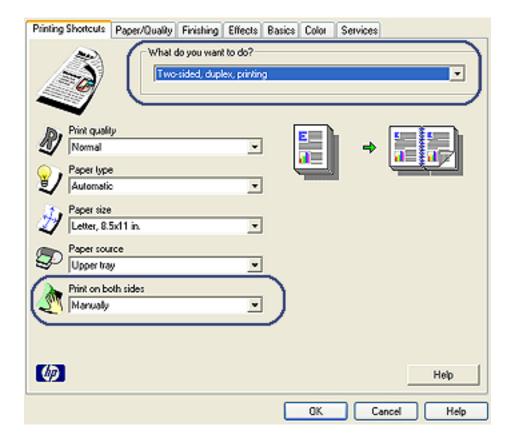
Book binding Tablet binding

Note: Book binding is the most common type of binding.

Book binding

Follow these steps to print a two-sided document with a book binding:

- 1. Open the **Printer Properties** dialog box.
- 2. Click the **Printing Shortcuts** tab, and then click **Two-sided, duplex, printing**.



- 3. In the **Print on both sides** drop-down list, click **Manually**.
- 4. Select any other print settings that you want, and then click **OK**.

The printer prints the odd-numbered pages first.

5. After the odd-numbered pages have been printed, reload the printed pages, with the printed side facing up.

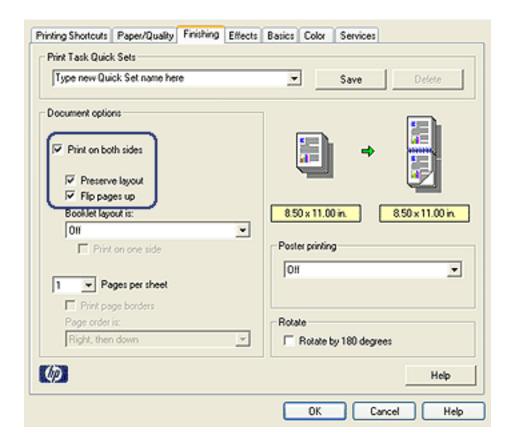


6. Click **Continue** to print the even-numbered pages.

Tablet binding

Follow these steps to print a two-sided document with a tablet binding:

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



- 3. Select the **Print on both sides** check box.
- 4. Select the **Preserve layout** check box.
- 5. Select the **Flip pages up** check box.
- 6. Select any other print settings that you want, and then click **OK**.

The printer prints the odd-numbered pages first.

7. After the odd-numbered pages have been printed, reload the printed pages, with the printed side facing up according to the document's orientation:

o **Portrait**



Landscape



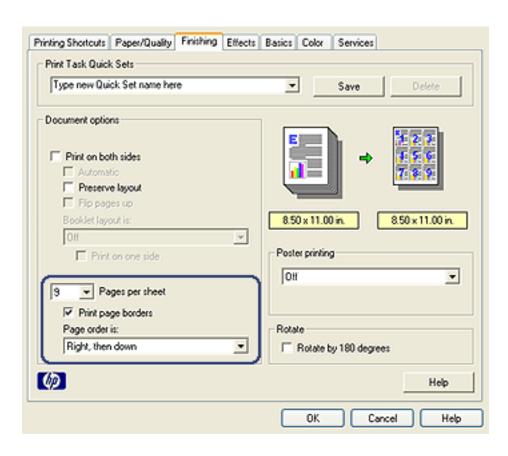
8. Click **Continue** to print the even-numbered pages.

Printing multiple pages on a single sheet of paper

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

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

- Open the <u>Printer Properties</u> dialog box.
- 2. Click the **Finishing** tab.



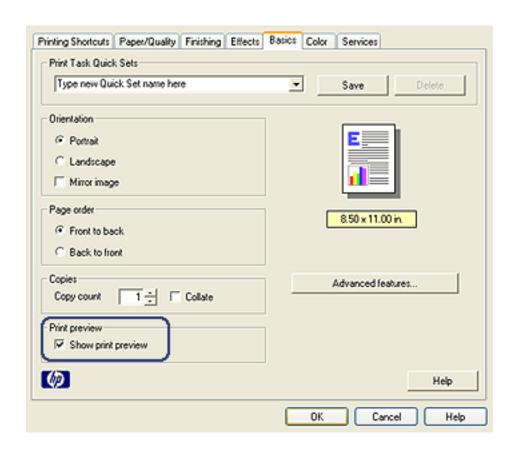
- 3. In the **Pages per sheet** drop-down list, click the number of pages that you want to appear on each sheet of paper.
- 4. If you want a border to appear around each page image that is printed on the sheet of paper, select the **Print page borders** check box.
- 5. Select a layout for each sheet of paper from the **Page order is** drop-down list.
- 6. Select any other print settings that you want, and then click **OK**.

Print preview

To save time and money when printing, preview the document on your computer before printing it. If the print preview does not look the way that you want it to, close the preview window and make the necessary adjustments to your document.

Follow these steps view a preview of a document:

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



3. Select the **Show print preview** check box.

4. Select any other print settings that you want, and then click **OK**.

Before the document prints, a preview appears.

- 5. Do one of the following:
 - Click File, and then click Print to HP Deskjet to print the document.
 - Click **File**, and then click **Cancel Printing** to cancel the print job. Adjust the print settings as needed before trying to print the document.

Selecting a paper type

Using the Automatic Paper-Type Sensor

The <u>Automatic Paper-Type Sensor</u> automatically selects the print settings that are appropriate for the media that you are printing on, particularly when used with HP paper and media.

Note: The **Automatic Paper-Type Sensor** cannot be used for documents that are printed from the <u>250-Sheet Plain Paper Tray Accessory</u>.

Follow these steps to use the Automatic Paper-Type Sensor:

- 1. Open the **Printer Properties** dialog box.
- 2. Click the **Printing Shortcuts** tab or the **Paper/Quality** tab.
- 3. Find the appropriate drop-down list:

Tab	Drop-down list
Printing Shortcuts	Paper type
Paper/Quality	Type is

Note: You do not need to set the paper type on both tabs.

- 4. Click **Automatic** in the drop-down list.
- 5. Select any other print settings that you want, and then click **OK**.

Selecting a specific paper type

When printing a higher-quality document, it is recommended that you select a specific paper type.

Follow these steps to select a specific paper type:

- 1. Open the **Printer Properties** dialog box.
- 2. Click the **Printing Shortcuts** tab or the **Paper/Quality** tab.
- 3. Find the appropriate drop-down list:

Tab	Drop-down list
Printing Shortcuts	Paper type
Paper/Quality	Type is

Note: You do not need to set the paper type on both tabs.

- 4. Click the paper type in the drop-down list.
- 5. Select any other print settings that you want, and then click **OK**.

Selecting a print quality

Follow these steps to select a print quality:

- 1. Open the <u>Printer Properties</u> dialog box.
- 2. Click the **Printing Shortcuts** tab or the **Paper/Quality** tab.
- 3. Select one of the following from the **Print quality** drop-down list:

Note: The print quality options that are available on the **Printing Shortcuts** tab vary depending on the type of document you are printing.

- Use printer default: prints in the Normal mode.
- FastDraft: prints at the fastest printing speed.
- Fast normal: prints more quickly than the Normal mode and at a higher print quality than FastDraft.
- Normal: provides the best balance between print quality and speed. This is the appropriate setting for most documents.
- Best: provides high-quality printing.
- Maximum dpi: provides the highest quality printing but requires longer to print than Best and requires a large amount of disk space.

Resizing a document

Use the printer software for either of these tasks:

- Print a document on a <u>paper size different</u> from the size for which it is formatted.
- Shrink or enlarge text and graphics on the printed page.

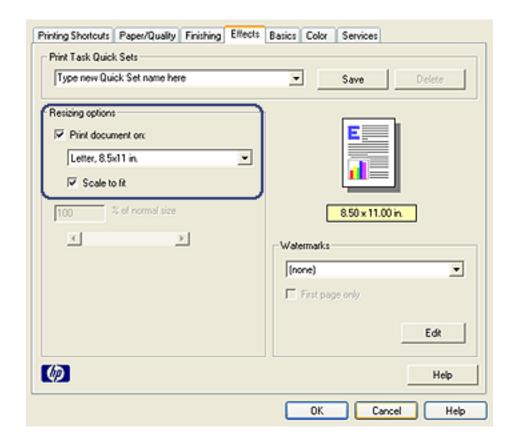
Printing on different paper size

Use this feature to print a document that is formatted for one paper size on another paper size. Doing this can be useful if you do not have the correct paper size available.

For example, if you have created a document that is formatted for letter-size paper, but you do not have any letter-size paper available, you can print the document on another paper size that is available.

Follow these steps to resize the document for a different paper size:

- 1. Open the <u>Printer Properties</u> dialog box.
- 2. Click the **Effects** tab.



3. Click **Print document on**, and then select the target paper size from the drop-down list.

The target paper size is the size of the paper on which you are printing, not the size for which the document was formatted.

4. Do one of the following:

Objective	Action
Shrink or enlarge the document to fit on the target paper size.	Click Scale to fit .
Print the document at its original size on the selected paper size.	Do not click Scale to fit .

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

Shrinking or enlarging text and graphics

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

Follow these steps to shrink or enlarge text and graphics:

- 1. Open the **Printer Properties** dialog box.
- 2. Click the **Effects** tab.
- 3. In the **% of normal size** box, type the percentage by which you want to shrink or enlarge the text and graphics.
 - One hundred percent represents the actual size of the text and graphics. Type a number less than 100 to shrink the text and graphics. Type a number greater than 100 to enlarge the text and graphics.
- 4. Select any other print settings that you want, and then click **OK**.

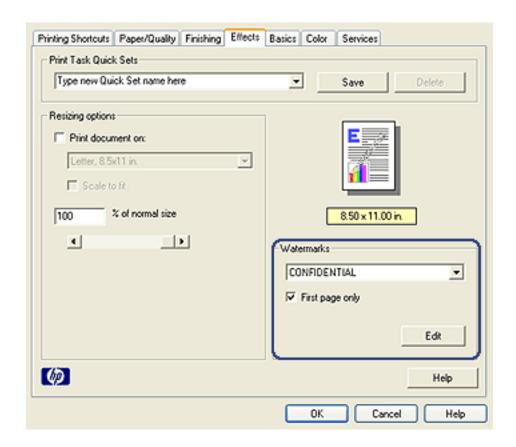
Watermarks

Watermarks appear as background printing on documents.

Applying an existing watermark to a document

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

- 1. Open the <u>Printer Properties</u> dialog box.
- 2. Click the **Effects** tab.



3. Select a watermark from the **Watermarks** drop-down list. If you do not want to use one of the listed watermarks, create a new watermark.

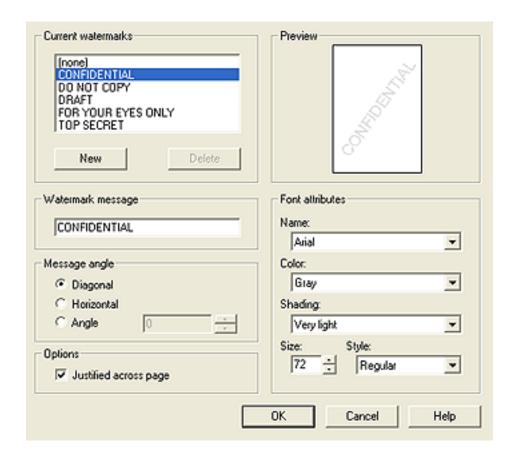
- 4. Make one of the following selections:
 - If you want the watermark to appear on the first page only, click **First page only**.
 - If you want the watermark to appear on all printed pages, leave First page only clear.
- 5. Print the document according to the instructions for the paper type.

Creating or changing a watermark

Follow these steps to create or change a watermark:

- 1. Open the <u>Printer Properties</u> dialog box.
- 2. Click the **Effects** tab.
- 3. Click the **Edit** button.

The Watermark Details dialog box appears.



- 4. Make one of the following selections:
 - Click the New button.
 - Select an existing watermark to change.
- 5. Type the watermark message, message angle, and font attributes.
- 6. After you have set the watermark details, click **OK**.

For instructions about applying watermarks, follow the <u>steps</u> <u>for applying an existing watermark to a document</u>.

Use the What's This? help to learn about the features that you see in the **Printer Properties** dialog box.

Printing a borderless brochure

You can print a borderless brochure on glossy brochure paper.

For instructions about printing a borderless photo, see the borderless photo page.

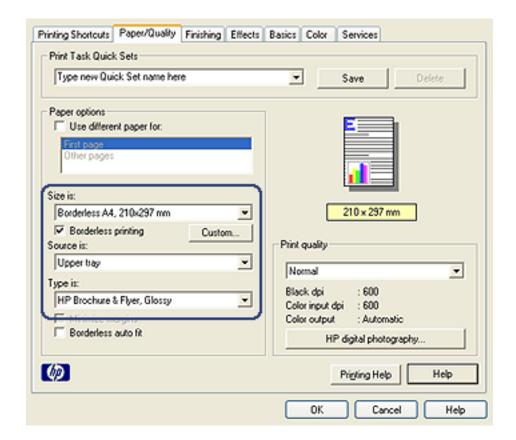
Guidelines

- Do not print borderless documents in <u>ink-backup mode</u>.
 Always have two print cartridges installed in the printer.
- Open the file in a software application and assign the image size. Ensure that the size corresponds to the paper size on which you want to print the image.

Printing

Follow these steps to print a borderless document:

- 1. Open the file that you want to print.
- 2. Open the **Printer Properties** dialog box.
- 3. Click the **Paper/Quality** tab.



- 4. Select one of the borderless paper sizes in the **Size is** dropdown list. Verify that the paper size matches the size of the paper that is loaded in the In tray.
- 5. Verify that the **Borderless Printing** check box is selected.
- 6. Click the glossy brochure paper type in the **Type is** drop-down list.
 - Do not select **Automatic**.
- 7. Select any other print settings that you want, and then click **OK**.

Printing a different first page



If the 250-Sheet Plain Paper Tray Accessory is attached to the printer, follow the steps to print a different first page with the 250-Sheet Plain Paper Tray Accessory.

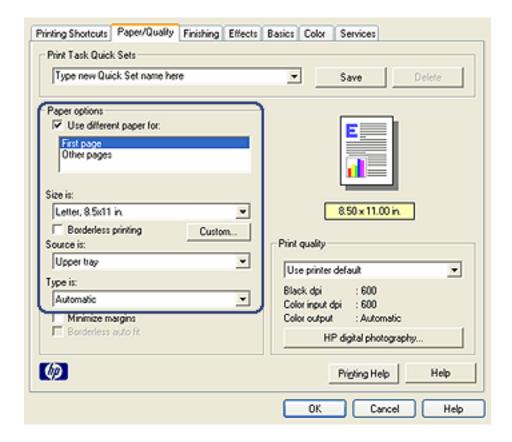
Load paper

- 1. Load the paper for the body of the document in the <u>In tray</u>. For instructions about loading a specific paper type, go to the <u>printing other documents</u> page, and then select the appropriate document type.
- 2. Load the paper for the first page on top of the paper stack in the In tray.

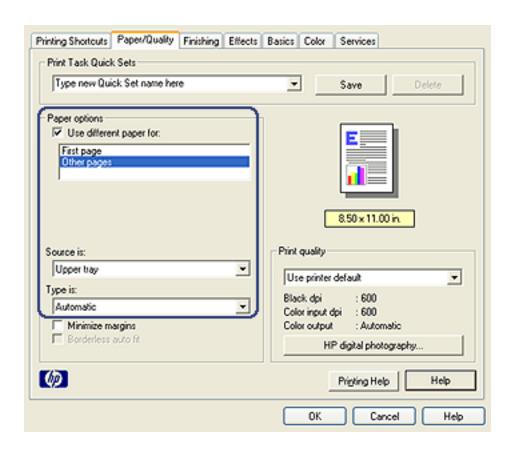
Printing

Follow these steps to print a document with a different first page:

- 1. Open the **Printer Properties** dialog box.
- 2. Click the **Paper/Quality** tab.
- 3. Select the **Use different paper for** check box.
- 4. Click First page.



- 5. Select the paper type and paper size for the first page.
- 6. Click **Upper tray** in the **Source is** box.
- 7. Click **Other pages**.



- 8. Click **Upper tray** in the **Source is** box.
- 9. Select the paper type for the other pages in the **Type is** drop-down list.
- 10. Select any other print settings that you want, and then click **OK**.

Note: Do not print the document in reverse order.

Setting a custom paper size

Use the **Custom paper size** dialog box to print on a special paper size.

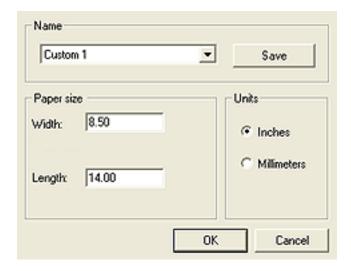
Note: Use the Custom paper size dialog box to create borderless panoramic paper sizes. The printer can print borderless documents on paper sizes from 101 x 152 mm (4x6 in) to 210 x 594 mm (8.5 x 23.4 in).

Defining a custom paper size

Follow these steps to define a custom paper size:

- 1. Open the **Printer Properties** dialog box.
- 2. Click the **Paper/Quality** tab.
- 3. Click the **Custom** button.

The **Custom paper size** dialog box appears.



4. Click a custom paper size name in the **Name** drop-down list.

Note: To create a borderless panoramic custom paper size, click the **Custom borderless panorama** custom paper size name.

5. Type the paper dimensions in the **Width** and **Length** boxes.

The minimum and maximum paper dimensions appear beneath each of the boxes.

- 6. Click the unit of measurement: **Inches** or **Millimeters**.
- 7. Click **Save** to save the custom paper size.
- 8. Click **OK** to exit the **Custom paper size** dialog box.

Selecting a paper source

The printer offers three sources for paper:







In tray

250-Sheet Plain
PaperTray
Accessory

Auto Two-Sided Print
Accessorywith Small
Paper Tray

Follow these steps to select a paper source:

- 1. Open the **Printer Properties** dialog box.
- 2. Click the **Printing Shortcuts** tab or the **Paper/Quality** tab.
- 3. Find the appropriate drop-down list:

Tab	Drop-down list
Printing Shortcuts	Paper source
Paper/Quality	Source is

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

- 4. Select one of the following options in the drop-down list:
 - Upper tray: prints from the In tray.
 - Lower tray: prints from the 250-Sheet Plain Paper Tray Accessory.
 - Upper, then lower: prints from the In tray. If the In tray is empty, then the printer prints from the 250-Sheet Plain Paper Tray Accessory.
 - Lower, then upper: prints from the 250-Sheet Plain Paper Tray Accessory. If the accessory is empty, then the printer prints from the In tray.
 - Rear tray: prints from the Auto Two-Sided Print Accessory with Small Paper Tray. This option appears only if the accessory is attached to the printer.

Printer software

Learn how to use these software features:

- Use the <u>Printer Properties</u> dialog box to select printing options.
- Use the <u>Printing Shortcuts</u> tab to specify print settings quickly.
- Use the What's This? help to learn more about specific printing options.
- The <u>Device Status box</u> box displays useful information.

Printer Properties dialog box

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

To change the print settings, open the **Printer Properties** dialog box.

Printer Preferences dialog box

The **Printer Properties** dialog box is also referred to as the **Printing Preferences** dialog box.

Opening the Printer Properties dialog box

Follow these steps to open the **Printer Properties** dialog box:

- 1. Open the file that you want to print.
- 2. Click **File**, click **Print**, and then click **Properties** or **Preferences**.

The **Printer Properties** dialog box appears.

What's This? help

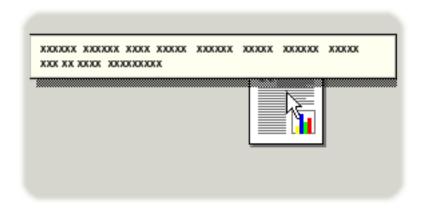
Use the What's This? help to learn about the features that you see in the **Printer Properties** dialog box.

Using What's This? help

Use **What's This? help** to learn more about the available printing options.

- 1. Move the cursor over the feature that you want to learn more about.
- 2. Click the right mouse button.
 - The **What's This?** box appears.
- 3. Move the cursor over the **What's This?** box, and then click the left mouse button.

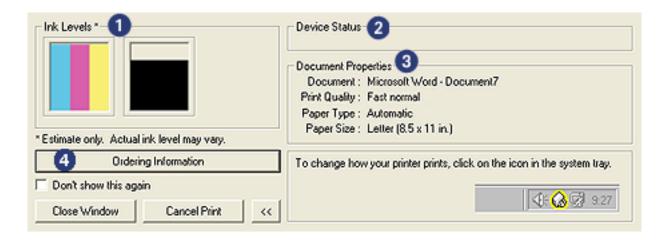
An explanation of the feature appears.





Device Status window

The **Device Status window** appears each time the printer prints a file.



The following items appear in the **Device Status window**:

- 1. Ink levels: Approximate ink level of each print cartridge.
- 2. **Device status**: The status of the printer. For example, **Spooling** or **Printing**.
- 3. **Document properties**: Information about the current print job:
 - Document: Name of the document that is currently printing
 - Print quality: Print quality setting that is being used
 - Paper type: Type of paper in use
 - Paper size: Size of paper in use

4. **Ordering information**: Link to the HP Web site for ordering printer supplies and accessories.

If you do not want to see the **Device Status window** every time you print, select the **Don't show this again** check box.

To cancel a print job, click **Cancel print**.

To close the **Device Status window**, click **Close window**.

Maintenance

- Installing print cartridges
- Aligning print cartridges
- Calibrating color
- Automatically cleaning print cartridges
- Manually cleaning the print cartridges
- Printing a test page
- View estimated ink levels
- Removing ink from skin and clothing
- Maintaining print cartridges
- Maintaining the printer body
- Printer toolbox

Installing print cartridges

Print cartridges

Print cartridge combinations

For printing most documents, use the tri-color print cartridge and the black print cartridge. When printing photos, you can use either the <u>photo print cartridge</u> or the <u>gray photo print cartridge</u> along with the tri-color print cartridge cradle.

Always install the tri-color print cartridge in the *left* print cartridge cradle compartment.

Install the black, photo, or gray photo print cartridge in the *right* print cartridge cradle compartment.

Selection numbers

Before buying replacement print cartridges, verify the correct selection numbers in the reference guide that came with the printer.

You can also find the selection number on the print cartridge that you are replacing.



1. Selection number label

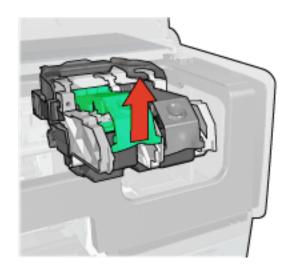
Ink back-up mode

The printer can operate with only one print cartridge installed. For more information, see the <u>ink back-up mode</u> page.

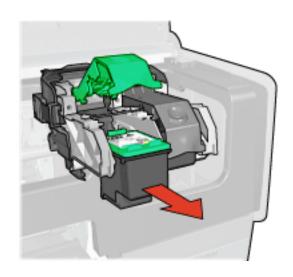
Installation instructions

Follow these steps so install a print cartridge:

- 1. Verify that the printer is turned on.
- 2. Load a stack of letter-size or A4-size plain, white paper in the In tray.
- 3. Open the printer cover.
- 4. Wait until the print cartridge cradle is idle and silent, and then lift the print cartridge latch to the open position.



5. Slide the print cartridge out of the print cartridge cradle.



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



1. Remove the pink tape only

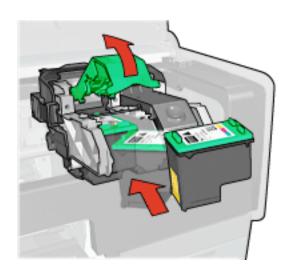
Caution: Do not touch the print cartridge ink nozzles or copper contacts. Touching these parts will result in clogs, ink failure, and bad electrical connections. Do not remove the copper strips. They are required electrical contacts.



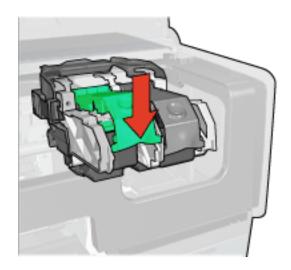
1. Do not touch the copper strips

7. Hold the print cartridge so that the copper strips are on the bottom and facing toward the printer, and then slide the print cartridge into the cradle as shown.

Note: After you insert the print cartridge, verify that the copper contacts of the print cartridge touch the back of the print cartridge cradle.



8. Push down on the print cartridge latch until it snaps closed.



9. Close the printer cover.

The printer automatically prints a calibration page.

For information about storing print cartridges, see the **print** cartridge storage page.

For information about recycling empty print cartridges, see the print cartridge recovery page.



Marning: Keep both new and used print cartridges out of the reach of children.

Aligning print cartridges

The printer automatically aligns the print cartridges after a new print cartridge is installed. You can also align the print cartridges at other times to ensure optimal print quality.

To align the print cartridges:

- 1. Load letter-size or A4-size plain white paper in the In tray.
- 2. Open the printer <u>Toolbox</u>.
- 3. Click **Align the Device**.
- 4. Click **Align**, and then follow the onscreen instructions.

Calibrating color

Perform a color calibration only if the colors in photographs that are printed with the <u>photo print cartridge</u> and the tricolor print cartridge consistently look incorrect.

Before performing a color calibration, <u>align the print</u> <u>cartridges</u>, and then reprint your photograph. If the color is still incorrect, then perform a color calibration.

To calibrate color:

- 1. Load letter-size or A4-size plain white paper in the In tray.
- 2. Verify that a <u>photo print cartridge</u> and a tri-color print cartridge are installed in the printer.
- 3. Open the printer <u>Toolbox</u>.
- 4. Click Calibrate Color.
- 5. Click Calibrate, and then follow the onscreen instructions.

Automatically cleaning print cartridges

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

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

- 1. Open the printer <u>Toolbox</u>.
- Click Clean the Print Cartridges.
- Click **Clean**, and then follow the onscreen instructions.

If your documents are still missing lines or dots after cleaning, replace the print cartridges.



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

Manually cleaning the print cartridges

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

Gathering cleaning supplies

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

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

Be careful not to get <u>ink on your hands or clothing</u> as you clean.

Preparing to clean

- 1. Press the **Power** button to turn on the printer, and then raise the printer cover.
- 2. Remove the print cartridges and place them on a piece of paper with the nozzle plate facing up.



1. Nozzle plate



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

Cleaning instructions

- 1. Lightly moisten a cotton swab with distilled water and squeeze any excess water from the swab.
- Wipe the print cartridge copper contacts with the cotton swab.



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



1. Clean only the copper contacts

Repeat this process until no ink residue or dust appears on the swab that you use to clean the contacts.

3. Insert the print cartridges in the printer, and then close the printer cover.

Printing a test page

Follow these steps to print a test page:

- 1. Open the printer **Toolbox**.
- 2. Click the **Print a Test Page** button, and then follow the onscreen instructions.

View estimated ink levels

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

- 1. Open the printer <u>Toolbox</u>.
- 2. Click the **Estimated Ink Level** tab.

Removing ink from skin and clothing

Follow these instructions to remove ink from skin and clothing:

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



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

Maintaining print cartridges

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

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

Storing print cartridges

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

If a print cartridge protector came with the photo print cartridge or the gray photo print cartridge, use the protector to store the print cartridge. If you store a print cartridge in an airtight plastic container, make sure that the ink nozzles face down but are not in contact with the container.

Inserting the print cartridge into the print cartridge protector

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



Removing the print cartridge from the print cartridge protector

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



 \triangle

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

Maintaining the printer body

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

When cleaning your printer, keep these tips in mind:

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

Printer toolbox

The printer Toolbox contains a number of useful tools to enhance the printer performance.

Use the printer tools to perform the following tasks:

- Clean the print cartridges
- Align the print cartridges
- Calibrate color
- Print a test page
- View estimated ink levels

To use the tools, open the <u>Printer Properties</u> dialog box, click the **Services** tab, and then click the **Service this device** button.

Troubleshooting

- Ethernet problems
- Printer is not printing
- Paper jam
- Paper problems
- Print quality is poor
- Document is misprinted
- Photos are not printing correctly
- Banners are not printing correctly
- Borderless printing problems
- Error messages
- Printer lights are on or flashing
- Document prints slowly
- <u>PictBridge problems</u>
- If you continue to have problems

Ethernet problems

Printer does not print

Print an **HP Report page**.

If the HP Report page **does not** print, verify the following:

- The printer is set up and powered on.
- The <u>print cartridges are installed</u> correctly.
- The printer is on and the paper tray is loaded.
- The printer is free of paper jams.

If any of these items are problems, then see the <u>printer is</u> <u>not printing page</u>.

If the HP Report page **does** print, try the following steps:

Link light

If the printer still does not print, then look at the Link light on the back of the printer:

State of the Link light	Task
On	Resend the document, then look at the <u>Activity</u> light.
Off	 Verify the following: The Ethernet cable is securely connected to the printer. The network hub, switch, or router is on and working properly. The printer is connected to the network.

Activity light

Follow these steps if the Link light is on, but the printer does not print:

- 1. Wait until the printer is idle.
- 2. Try to reprint the document.
- 3. Look at the Activity light on the back of the printer.

State of the Activity light	Task
Flashing	The Ethernet connection is operating correctly. Try these solutions again.
Off	 Verify the following: The printer is selected in the application from which you are trying to print. The computer is connected to the network. A personal software firewall might be blocking communication between the printer and the computer. Follow these steps.

Cannot open the printer's embedded Web server (EWS)

Verify the following:

- You are not using a phone cord to connect the printer to the network
- The <u>Ethernet cable</u> is securely connected to the printer.
- The network <u>hub</u>, <u>switch</u>, or <u>router</u> is on and working properly.
- The computer that you are using is connected to the network.

If you still cannot access the printer's EWS, then follow these steps:

- 1. Print an HP Report page.
- 2. Find the printer's <u>IP address</u>.
- Launch your Internet browser.
 Use Microsoft Internet Explorer 5.0 or higher or Netscape 4.75 or higher.
- 4. Enter the printer's IP address in the address box, then press **Enter**.

A personal software firewall is blocking communication between the printer and the computer

The personal software firewall is a security program that protects a computer from intrusion. However, the personal firewall might block communication between the computer and the printer.

If you cannot communicate with the printer, try disabling the personal firewall. If you are still unable to communicate with the printer, then 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 then re-enable the firewall. To assign the printer a static IP address, see the reference guide that came with the printer.

Printer is not printing

Verify the following

- The printer is connected to the power source.
- The cable connections are secure.
- The printer is turned on.
- The print cartridges are correctly installed.
- The paper or other media is correctly loaded in the In tray.
- The printer cover is closed.
- The rear access door or optional duplexer is attached.

Check the printer lights

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

For more information, see <u>printer lights are on or flashing</u>.

Check the printer cable connection

If the printer cable is attached to a USB hub, a printing conflict might exist. Use one of these methods for solving the conflict:

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

If the printer still does not print

Select the topic below that best describes the problem:

- Paper jam
- Out of paper message
- Printer ejects paper

Paper jam

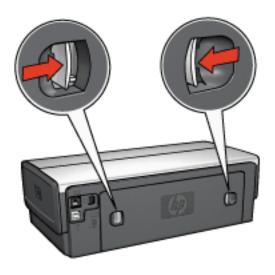
Do not clear a paper jam from the front of the printer.

Follow these steps to remove a paper jam:

1. Press the **Resume** button.

If the paper jam does not clear, then go to the next step.

2. Push the two latch handles on the rear access door toward each other, and then remove the door.



3. Remove any paper that is inside the printer by pulling it out from the back of the printer.

If you are printing labels, verify that a label did not become detached from the label sheet while passing through the printer.

4. Replace the rear access door.



5. Press the **Resume** button.

Accessories?



If the Two-Sided Printing Accessory is attached to the printer, follow these <u>steps to clear a paper jam from the Two-Sided</u>

<u>Printing Accessory.</u>



If the Auto Two-Sided Print Accessory with Small Paper Tray is attached to the printer, follow these steps to clear a paper jam Auto Two-Sided Print Accessory with Small Paper Tray.

Paper problems

Printer prints on multiple sheets at once Paper weight

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

Paper is loaded improperly

The printer might print on multiple sheets of paper at once if the paper is loaded too far toward the back of the printer. Reload paper into the paper tray, pushing the paper until you feel resistance.

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

Printer will not feed paper

Try one or more of the following solutions:

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

Printer ejects the paper

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

- Move the printer away from direct sunlight. The printer may have been placed in direct sunlight, which can affect the <u>Automatic Paper-Type Sensor</u>.
- Select a paper type other than Automatic.
- If you are performing a <u>color calibration</u>, install both the tricolor and photo <u>print cartridges</u>.
- If you are printing a borderless document and the Resume light and Print Cartridge Status light are flashing, follow the <u>borderless printing guidelines</u>.

Other paper problems

- For information about clearing a paper jam, see the <u>paper</u> jam page.
- If an out-of-paper message appears, see the <u>error</u> <u>messages</u> page.

Print quality is poor

For help with photo print quality, see the <u>photo</u> <u>troubleshooting</u> page.

Streaks and missing lines

If your printed pages are missing lines or dots, or if streaks appear, the print cartridges might be <u>low on ink</u> or might need to be <u>cleaned</u>.

Print is faded

- Verify that neither of the print cartridges is low on ink.
 - If a print cartridge is low on ink, consider <u>replacing the print</u> <u>cartridge</u> when the print quality lessens.
 - If the print cartridge is not low on ink, <u>clean the print</u> <u>cartridge</u>.
- Verify that a black print cartridge is installed.
 - If the black text and images on your printouts are faded, you might be printing with only the tri-color print cartridge. Insert a black print cartridge, in addition to the tri-color print cartridge, for optimal black print quality.
- Verify that the protective piece of plastic tape has been removed from the print cartridges.



1. Plastic tape

Consider selecting a higher print quality.

Blank pages print

- The protective piece of plastic tape might still be attached to the print cartridges. Verify that the plastic tape has been removed from the print cartridges.
- The print cartridges might be out of ink. Replace one or both empty print cartridges.
- The printer might be in direct sunlight. Direct sunlight can adversely affect the Automatic Paper-Type Sensor. Move the printer out of direct sunlight.
- You might be trying to print a borderless document with only the black print cartridge installed. When printing a borderless document, always have the tri-color print cartridge and another print cartridge installed.

Too much or too little ink appears on the page Adjust the ink volume and dry time

- Open the <u>Printer Properties</u> dialog box.
- 2. Click the **Basics** tab.
- 3. Click the **Advanced features** button.

The **Advanced features** dialog box appears.

4. Move the Ink volume slider toward Light or Heavy.

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

5. Click **OK**, and then click **OK** again.

Select a specific paper type

- 1. Open the <u>Printer Properties</u> dialog box.
- 2. Click the **Paper/Quality** tab.
- 3. In the **Type is** field, select an appropriate paper type. Do not select **Automatic**.

Document is misprinted

Text and images are misaligned

If the text and images on your printouts are misaligned, then <u>align</u> the print cartridges.

Document is printed off-center or at an angle

- 1. Verify that the paper is correctly placed in the In tray or optional lower tray.
- 2. Verify that the paper guides fit firmly against the edge of the paper.
- 3. Reprint the document.

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

Open the <u>Printer Properties</u> and confirm the following options:

Tab	Setting
Basics	Orientation : Verify the appropriate orientation.
Paper/Quality	Size is : Verify the appropriate paper size.
Effects	Scale to fit : Select to scale text and graphics to the paper.
Finishing	Poster printing : Verify that Off is selected.

Envelope is printed at an angle

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

Document does not reflect the new print settings

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

Photos are not printing correctly

Check the paper tray

- 1. Place the photo paper in the In tray with the side to be printed on facing down.
- 2. Slide the paper forward until it stops.
- 3. Slide the paper guide firmly against the edge of the paper.

Check the printer properties

Open the <u>Printer Properties</u> dialog box and verify the following options:

Tab	Setting
Paper/Quality	Size is: The appropriate size Type is: The appropriate photo paper type Print quality: Best

Colors are tinted or incorrect

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

- 1. Align the print cartridges using plain, white paper.
- 2. Reprint the photograph on photo paper.
- 3. If colors continue to appear tinted or incorrect, <u>calibrate</u> the color.

A <u>photo print cartridge</u> and tri-color print cartridge must be installed for color calibration.

- 4. Reprint the photograph.
- 5. If colors continue to appear tinted or incorrect, then open the Printer Properties dialog box, click the **Color** tab, and then click the **Advanced color settings** button.
- 6. On the <u>Advanced color settings</u> dialog box, adjust the colors as appropriate. The following are guidelines to follow:
 - If the colors are too yellow, move the Color tone slider towards Cooler.
 - If the colors are too blue, move the Color tone slider towards Warmer.
- 7. Reprint the photograph.
- 8. If colors continue to appear tinted or incorrect, <u>align</u> the print cartridges.

Part of the photo is faded Fading occurs on the edges of a photo





Verify that the photo paper is not curled. If the photo paper is curled, place the paper in a plastic bag and gently bend it

the opposite direction of the curl until the paper lies flat. If the problem persists, then use photo paper that is not curled.

For instructions about preventing photo paper from curling, see the <u>photo paper storage</u> page.

Fading occurs near the edges of a photo



If fading occurs approximately 25 to 64 mm (1 to 2.5 inches) from the edge of a photo, try the following:

- Install a <u>photo print cartridge</u> and a tri-color print cartridge in the printer.
- Rotate the image 180 degrees.
- Open the <u>Printer Properties</u> dialog box, click the Paper/Quality tab, and then set the <u>Print quality</u> to Maximum dpi.

Use the What's This? help to learn about the features that you see in the **Printer Properties** dialog box.

Banners are not printing correctly

Check the paper tray

- Unfold and refold the paper when several sheets feed into the printer at one time.
- Confirm that the unattached edge of the banner paper stack is on top and pointing into the printer.
- Verify that the correct paper for banner printing is in use.

Check the printer properties

Open the <u>Printer Properties</u> dialog box and verify the following settings:

Tab	Setting
Paper/Quality	Size is : The appropriate banner size Type is : HP Banner Paper

Check the software

- Verify that the software program that you are using prints banners. Not all software programs print banners.
- If gaps appear at the ends of the sheets, verify that the printer software is operating correctly.

Borderless printing problems

When printing borderless photos or documents, follow these guidelines:

- Verify that the paper size that is specified in the **Paper size** drop-down list on the **Printing Shortcuts** tab matches the size of the paper loaded in the In tray.
- Select the appropriate paper type that is in the **Paper type** drop-down list on the **Printing Shortcuts** tab.
- If printing in grayscale, select **High quality** under **Print in grayscale** on the **Color** tab.
- Do not print borderless documents in <u>ink-backup mode</u>.
 Always have two print cartridges installed in the printer.

Part of the photo is faded Fading occurs on the edges of a photo





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

the problem persists, then use photo paper that is not curled.

For instructions about preventing photo paper from curling, see the photo paper storage page.

Fading occurs near the edges of a photo



If fading occurs approximately 25 to 64 mm (1 to 2.5 inches) from the edge of a photo, try the following:

- Install a <u>photo print cartridge</u> and a tri-color print cartridge in the printer.
- Rotate the image 180 degrees.
- Open the <u>Printer Properties</u> dialog box, click the Paper/Quality tab, and then set the <u>Print quality</u> to Maximum dpi.

Use the What's This? help to learn about the features that you see in the **Printer Properties** dialog box.

Streaks appear in a light portion of a photo



If streaks appear in a light portion approximately 64 mm (2.5 inches) from one of the long edges of a photograph, try the following:

- Install a <u>photo print cartridge</u> in the printer.
- Rotate the image 180 degrees.

Use the What's This? help to learn about the features that you see in the **Printer Properties** dialog box.

Image is printed at an angle



Follow these steps if the image is printed at an angle:

- 1. Remove all paper from the In tray.
- 2. Load the photo paper correctly in the In tray.
- 3. Verify that the paper guides fit firmly against the media.

Printout has an unwanted border For most photo paper types





If the printout has an unwanted border, then try the following solutions:.

- Align the print cartridges
- Open the <u>Printer Properties</u> dialog box, click the **Paper/Quality** tab, and verify that the selected paper size matches both the paper size that the photo is formatted for and the size of the paper that loaded in the printer.
- Open the <u>Printer Properties</u> dialog box, click the Paper/Quality tab, and then select the Borderless auto fit check box.

If printing a two-sided document, print the document manually rather than automatically.

For photo paper with a tear-off tab

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



If the border appears above the tear-of tab, then <u>align the</u> print cartridges.



Ink smears

Use HP Photo Paper.

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

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

- 1. Open the **Printer Properties** dialog box.
- Click the Basic tab, and then click the Advanced features button.

The **Advanced features** dialog box appears.

- 3. Move the **Dry time** slider toward **More**.
- 4. Move the **Ink volume** slider toward **Light**.

Note: The colors in the image might become lighter.

5. Click OK.

If the problem persists, try the following steps:

- 1. Remove the borderless printing media, and then load plain paper in the In tray.
- 2. Press and hold down the **Power** button, and then press the **Resume** button. The printer prints a self-test page.
- 3. Repeat step 2 until the back side of the self-test page contains no ink smears.

Error messages

Out of paper message

If the In tray or optional lower tray contains paper

- 1. Verify the following:
 - There is sufficient paper in the paper tray (at least ten sheets).
 - The paper tray is not overly full.
 - The paper stack is touching the back of the paper tray.
- 2. Slide the paper guides so that they fit *firmly* against the edges of the paper.
- 3. Press the **Resume** button to continue printing.

If the In tray or optional lower tray is empty

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

The error message 'there was an error writing to USB port' appears

If you are using a USB printer cable, the printer might not be receiving correct data from another USB device or USB hub. Connect the printer directly to the USB port on the computer.

The error message 'there was an error writing to LPT1' appears

The printer is connected to the computer with a USB cable but the cable may not have been attached before installing the software.

Uninstall, and then reinstall, the software.

The error message 'two-way communication cannot be established' or 'printer not responding' appears

The printer might not be able to communicate with the computer if the USB cable is too long.

If you receive this error message, ensure the USB cable is not greater than five meters (approximately 16 feet, 5 inches) in length. Connect the printer directly to the USB port on the computer and not to a USB hub.

Printer lights are on or flashing

What the lights indicate

The printer lights indicate the printer status.

Power light is flashing

The printer is preparing to print.

The light stops flashing when the printer has received all data.

Resume light is flashing

There might be a paper jam

Follow these instructions to clear a paper jam.

Print cartridge status light is on or flashing

If the light is on and not flashing

Check to see if a print cartridge is low on ink.

If a print cartridge is low on ink, consider <u>replacing the print</u> <u>cartridge</u>.

If neither print cartridge is low on ink, press the **Resume** button. If the Print Cartridge Status light remains on, turn off, then turn on the printer.

If the light is on and flashing

Verify that the correct print cartridges are installed.

If you were printing a borderless document when the light started flashing, follow these <u>guidelines</u>.

Otherwise, follow these steps:

- 1. Open the printer's top cover, remove the black or photo print cartridge, then close the cover.
- 2. Do one of the following:
 - o If the light is flashing: Open the top cover, replace the print cartridge you removed, then remove the tri-color print cartridge. Go to step 3.
 - If the light is off: There is a problem with the print cartridge you removed. Go to step 3.
- 3. Manually clean the print cartridge.

After cleaning the print cartridge, reinsert it into the printer.

If the print cartridge status light continues to flash, <u>replace</u> the <u>print cartridge</u>.

All lights are flashing

Restart the printer.

1. Press the **Power** button to turn off the printer, then press the **Power** button to restart the printer.

Proceed to step 2 if the lights continue to flash.

- 2. Press the **Power** button to turn off the printer.
- 3. Disconnect the printer power cord from the electrical outlet.
- 4. Reconnect the printer power cord to the electrical outlet.
- 5. Press the **Power** button to turn on the printer.

Power-cord light

The light on the power cord illuminates when electricity is flowing through the cord. If the light is off, then the cord is not receiving power.

Document prints slowly

Multiple software applications are open

The computer does not have sufficient resources for the printer to print at its optimum speed.

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

Complex documents, graphics, or photographs are printing

Documents containing graphics or photographs print slower than text documents.

If your computer does not have enough memory or disk space to print the document under normal conditions, you can use Low Memory Mode. Using this option may reduce the quality of the printout. Low Memory Mode also disables 4800 x 1200 optimized dpi printing.

To activate Low Memory Mode:

- 1. Open the <u>Printer Properties</u> dialog box.
- 2. Click the **Basics** tab, and then click the **Advanced Features** button.
- 3. Select **Low Memory Mode**, and then click **OK**.
- 4. Print the document.

Best or maximum dpi print mode is selected

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

Printer driver is outdated

An outdated printer driver might be installed.

For information about updating the printer driver, visit the HP Web site www.hp.com/support.

Computer does not meet system requirements

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

- 1. Verify that the computer hard disk space, RAM, and processor speed meet the system requirements.
 - For the system requirements, see the reference guide that came with the printer.
- 2. Make space available on the hard drive by deleting unneeded files.

Printer is in ink-backup mode

The printer might print more slowly if it is in ink-backup mode.

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

If you continue to have problems

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

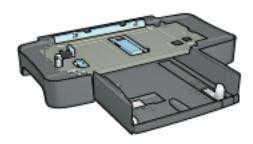
If you still have problems after restarting your computer, go to HP customer support at www.hp.com/support.

Optional accessories

The following optional accessories are available to be used with your HP printer.



Automatic Two-Sided Printing Accessory



250-Sheet Plain
Paper Tray



Auto Two-Sided
Print Accessory
with Small Paper
Tray

If an accessory is not included with your printer, it can be purchased separately from an authorized HP dealer.

For accessory part numbers, see the <u>accessory supply list</u>.

Note: The availability of accessories varies by country/region.

Automatic Two-Sided Printing Accessory (duplexer)

The duplexer is a special hardware device that enables the printer to automatically print on both sides of a page.

Using a duplexer with your printer has several advantages. It allows you to do the following tasks:

- Print on both sides of a page without manually reloading the page.
- Use less paper by printing on both sides of paper sheets.
- Create professional-looking brochures, reports, newsletters, and other special items.

If the duplexer is not packaged with your printer, it can be purchased separately from an authorized HP dealer.

Note: The duplexer is not available in all countries/regions.

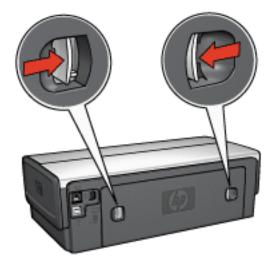


The duplexer only supports certain paper types. For a list of supported paper types, see the <u>duplexer specifications</u>.

Installing the duplexer

Follow these steps to attach the duplexer to your printer:

1. Push the two latch handles on the printer's rear access door toward each other, and then remove the door.



Note: Do not discard the rear access door. In order to print, either the duplexer or the rear access door must be attached to the printer.

2. Insert the duplexer in the back of the printer until both sides snap into place.



Note: Do not press the buttons on either side of the duplexer when installing it in the printer. Use the buttons only when removing the duplexer from the printer.

Enabling the duplexer

Follow these step to enable the duplexer:

- 1. Open the printer **Toolbox**.
- 2. Click the **Configuration** tab.
- Click Automatic Two-Sided Printing Module or Auto Two-Sided Print Accessory with small paper tray, and then click Apply.
- 4. Click **OK** in the confirmation box that appears.
- 5. Click the **X** in the upper-right corner to close the screen.

Note: After the duplexer is enabled, it is not necessary to re-enable it every time you print.

Printing a booklet automatically

To print a booklet automatically, one of the following accessories must be attached to the printer:



Automatic Two-Sided Printing Accessory



Auto Two-Sided Print Accessory with Small Paper Tray

The two-sided printing accessories only support certain paper types. For a list of supported paper types, see the specifications for either the <u>Automatic Two-Sided Printing</u> <u>Accessory</u> or the <u>Auto Two-Sided Print Accessory with Small Paper Tray</u>.

If a two-sided printing accessory is not attached to the printer or you are printing on an unsupported paper type, use <u>manual two-sided printing</u>.

Guidelines

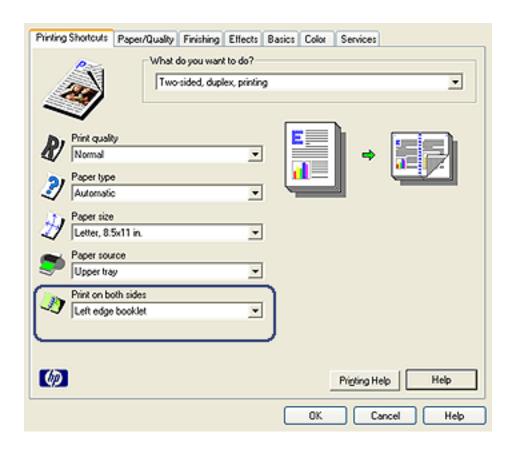
Do not exceed the In-tray capacity: up to 150 sheets.

Printing

Load paper in the printer paper tray, and then follow these steps to print a booklet automatically:

1. Open the <u>Printer Properties</u> dialog box.

2. Click the **Printing Shortcuts** tab, and then select **Two-sided, duplex, printing** from the drop-down list.



- 3. From the **Print on both sides** drop-down list, select one of the following binding options:
 - Left edge booklet
 - Right edge booklet
- 4. Select any other print settings that you want, and then click **OK**.

After the first side of the page is printed, the printer pauses while the ink dries. When the ink is dry, the paper is pulled back into the duplexer and the reverse side of the page is printed.

Note: Do not remove the paper from the printer until both sides of the page have been printed.

Automatic two-sided printing problems

Paper jam occurs inside the Automatic Two-Sided Printing Accessory

Paper jam

Follow these steps to remove a paper jam from the duplexer.

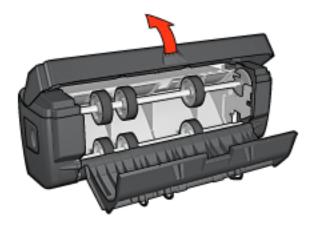
- 1. Turn off the printer.
- 2. Press the buttons on the left and right sides of the duplexer, and then remove it from the printer.



Warning: Remove the duplexer before opening it when clearing a paper jam.



- 3. Remove any paper inside the printer.
- 4. Open the duplexer.



- 5. Remove any paper from inside the duplexer.
- 6. Close the duplexer, and then re-attach the duplexer to the printer.

Option for two-sided printing cannot be selected

The printer driver cannot sense the duplexer until a print job is sent to the printer. Print a single sided document, and then print the two-sided document. The option for using the duplexer will appear in the printer software.

If the option for the duplexer still does not appear, then verify that the following conditions exist:

- The duplexer is attached to the printer.
- The duplexer is <u>enabled</u> in the printer software.
- The media type and size selected on the Paper/Quality tab are supported by the duplexer.

For a list of supported media types and sizes, see the specifications for your duplexer:

- Automatic Two-Sided Printing Accessory
- Auto Two-Sided Print Accessory with Small Paper Tray

Only one side of the page prints when the twosided printing option is enabled

Verify that the following conditions exist:

- The <u>correct print options</u> are set in both the printer software and the software program that you are using.
- The photo paper is not curled, if you are printing on twosided photo paper. Photo paper should be flat before printing. See <u>storing and handling photo paper</u> for more information.
- The media type and size that is selected on the Paper/Quality tab are supported by the <u>duplexer</u>.

If the media type or size is not supported by the duplexer, you can print the document by using the <u>manual two-sided</u> <u>printing instructions</u>.

Note: Do not try to print a two-sided document on single-sided paper, such as single-sided photo paper.

Binding margin is in the wrong place

- 1. Open the <u>Printer Properties</u> dialog box.
- 2. Click the **Finishing** tab.
- 3. Verify that the following conditions exist:
 - Flip pages up is not selected for binding along the side (book binding).
 - Flip pages up is selected for binding along the top (tablet binding).

For more information, see <u>two-sided printing</u>.

Paper size changes when the two-sided printing option is selected

The paper size is not supported by the <u>duplexer</u>.

Colors look faded

If the colors look faded, try printing the two-sided document by using the <u>manual two-sided printing instructions</u>.

Automatic Two-Sided Printing Accessory specifications

Dimensions when attached to printer

124.6 mm (4.9 in) tall x 320.5 mm (12.62 in) wide x 77.7 mm (3.06 in) deep

Skew (second side of printed page)

Plain paper: +/- .009 mm/mm (.009 in/in)

Cards: +/- .006 mm/mm (.006 in/in)

Envelopes: +/- .012 mm/mm (.012 in/in)

Media weight

Letter/A4: 60 to 90 g/m² (16 to 24 lb)

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

Specialty paper: Up to 160 g/m² (44 lb bond)

Media sizes

Size range: 81 x 117 mm to 216 x 297 mm (3.2 x 4.6 in to

8.5 x 11 in)

Paper:

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

• Executive: 184 x 267 mm (7.25 x 10.5 in)

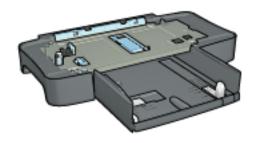
- A4: 210 x 297 mm
- A5: 148 x 210 mm
- B5: 182 x 257 mm

Cards:

- 127 x 203 mm (5 x 8 in)
- 102 x 152 mm (4 x 6 in)
- A6: 105 x 148.5 mm
- Hagaki: 100 x 148 mm

250-Sheet Plain Paper Tray Accessory

The 250-Sheet Plain Paper Tray Accessory expands the paper capacity of your printer to 400 sheets. It is useful for high-volume printing and for occasions when you want to use the In tray for special media such as letterhead paper, but still have plain paper readily available.



The 250-Sheet Plain Paper Tray Accessory only supports certain paper size. For a list of supported paper sizes, see the 250-Sheet Plain Paper Tray Accessory specifications.

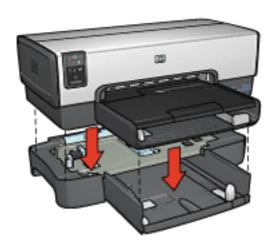
If the 250-Sheet Plain Paper Tray Accessory is not included with your printer, it can be purchased separately from an authorized HP dealer.

Note: The 250-sheet Plain Paper Tray Accessory is not available in all countries/regions.

Installing the 250-Sheet Plain Paper Tray Accessory

Follow these steps to install the 250-Sheet Plain Paper Tray Accessory:

- 1. Turn off the printer.
- 2. Select a location for the printer and place the 250-Sheet Plain Paper Tray Accessory in this location.
- 3. Carefully lift the printer and orient it above the paper tray.

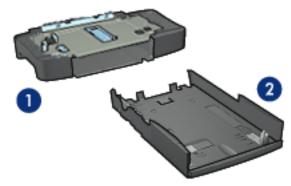


4. Gently place the printer on top of the paper tray.

Loading the 250-Sheet Plain Paper Tray Accessory

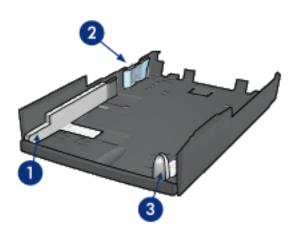
Two parts

The 250-Sheet Plain Paper Tray Accessory has two parts.



- 1. Base
- 2. Lower tray

The lower tray has three size adjusters.



- 1. Paper-width guide
- 2. Paper-width fence 3. Paper-length guide

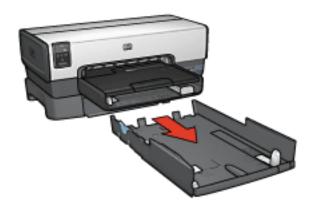
Note: When changing the paper size in the paper tray, you must set all three paper guides.

Setting the paper size

When changing the paper size in the paper tray, all three paper guides must be set to the correct setting.

Follow these steps to set the paper size:

1. Remove the lower tray from the base.



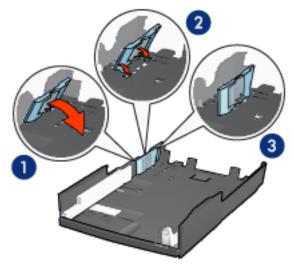
2. Slide the paper-width guide until the arrow is even with the correct setting.



1. Align the arrows

Note: To print on legal-sized paper, set the paper-width guide to **LTR**.

3. Set the paper-width fence by carefully inserting it into the appropriate slots.



- 1. Tilt the fence forward.
- 2. Insert the fence into the appropriate slots
- 3. Tilt the fence back until it locks into place

Note: To print on legal-sized paper, set the paper-width fence to **LTR**.

4. Set the paper-length guide by pulling it until the arrow lines up with the paper size.



1. Align the arrows

Note: To print on legal-sized paper, pull the paper-length guide all the way out.

Loading paper

Follow these steps to load paper:

- 1. Remove the lower tray from the base.
- 2. Verify that <u>all three paper guides are set</u> to the correct setting.
- 3. Insert the paper into the lower tray.



4. Insert the lower tray in the base until it locks into place.



Printing a different first page with the 250-Sheet Plain Paper Tray Accessory

Guidelines

The <u>250-Sheet Plain Paper Tray Accessory</u> is not included with your printer, but can be purchased separately from an authorized HP dealer. The accessory is not available in all countries/regions.

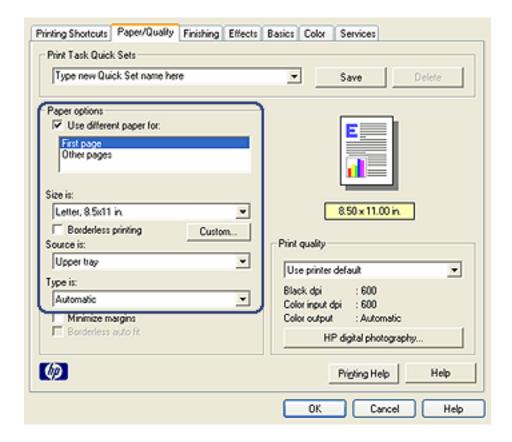
Load paper

- 1. Load the paper for the body of the document in the 250-Sheet Plain Paper Tray Accessory.
- 2. Load the paper for the first page in the In tray.

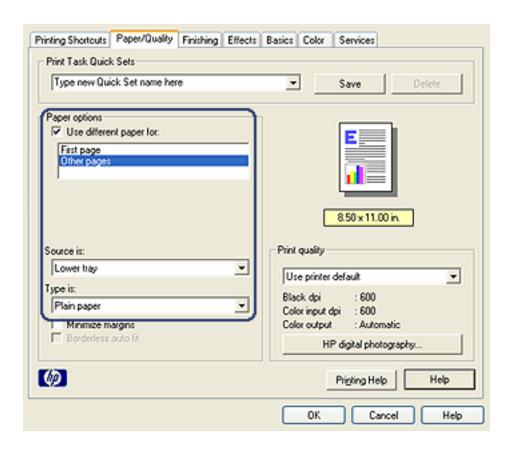
Printing

Follow these steps to print a document with a cover page:

- 1. Open the **Printer Properties** dialog box.
- 2. Click the **Paper/Quality** tab.
- 3. Select the **Use different paper for** check box.
- 4. Click First page.



- 5. Select the paper type and paper size for the first page.
- 6. Click **Upper tray** in the **Source is** box.
- 7. Click **Other pages**.



- 8. Click **Lower tray** in the **Source is** box.
- 9. Click the paper type for the other pages in the **Type is** drop-down list.

Do **not** select **Automatic**.

10. Select any other print settings that you want, and then click **OK**.

Do not print the document in reverse order.

250-Sheet Plain Paper Tray Accessory specifications

Dimensions

448 mm (17.64 in) wide x 65 mm (2.56 in) high x 384 mm (15.12 in) deep

Weight

1.99 kg (4.40 lb)

Media weight

Letter/A4 paper: 60 to 105 g/m2 (16 to 28 lbs)

Media sizes

US Letter: 216 x 279 mm (8.5 x 11 in)

Executive: 184 x 267 mm (7.25 x 10.5 in)

A4: 210 x 297 mm

A5: 148 x 210 mm

B5: 182 x 257 mm

Auto Two-Sided Print Accessory with Small Paper Tray

The Auto Two-Sided Print Accessory with Small Paper Tray is a hardware device that contains a rear tray for small media and a duplexer for two-sided printing on both full-size and small media.



- <u>Postcards</u> and other small media can be printed on two sides automatically when they are fed from the rear tray.
- <u>Photo paper</u> and <u>envelopes</u> can be printed on one side by using the small paper tray.
- Print <u>two-sided documents automatically</u>.

If the Auto Two-Sided Print Accessory with Small Paper Tray is not included with your printer, it can be purchased separately from an authorized HP dealer.

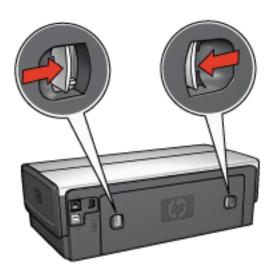
The accessory only supports certain paper types. For a list of supported paper types, see the <u>Auto Two-Sided Print</u> <u>Accessory with Small Paper Tray specifications</u>.

Note: The Auto Two-Sided Print Accessory with Small Paper Tray is not available in all countries/regions.

Installing the Auto Two-Sided Print Accessory with Small Paper Tray

Use these steps to install the Auto Two-Sided Print Accessory with Small Paper Tray:

1. Push the two latch handles on the printer rear access door toward each other, and then remove the door.



Do not discard the rear access door. In order to print, the accessory or the rear access door must be attached to the printer.

2. Insert the accessory into the back of the printer until both sides snap into place.



Note: Do not press the buttons on either side of the accessory when installing it into the printer. Use the buttons only when removing the accessory from the printer.

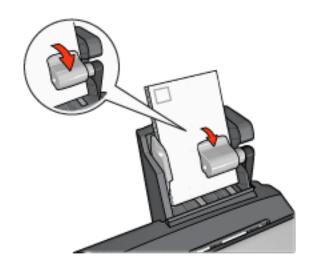
Printing postcards

Guidelines

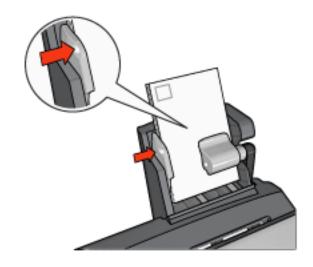
- Use only cards that meet the specifications for the Auto Two-Sided Print Accessory with Small Paper Tray. For more information, see the <u>Auto Two-Sided Print Accessory with</u> <u>Small Paper Tray specifications</u>.
- When printing a large number of cards, remove the printed material from the printer's Out tray about halfway through the print job.
- Do not exceed the maximum capacity for the rear tray: 100 cards.

Preparing to print

- 1. Slide the paper-width guide to the left.
- Pull the paper lever forward and insert the cards.The address side of the cards should face outward.



- 3. Release the paper lever.
- 4. Slide the paper-width guide against the edge of the cards.



Printing

- 1. Open the **Printer Properties** dialog box.
- 2. On the **Printing Shortcuts** tab, click **Postcard printing**, and then specify the following print settings:
 - Paper Size: The appropriate paper size
 - Paper Type: Plain paper
 - Paper Source: Rear tray
 - Select any other print settings that you want, and then click **OK**.

Use the What's This? help to learn about the features that you see in the **Printer Properties** dialog box.

Small photos

Guidelines

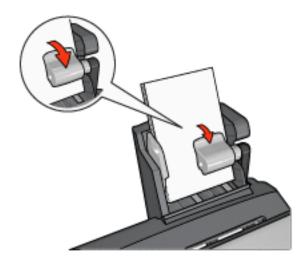
- For high-quality results, <u>use a photo print cartridge</u> in combination with the tri-color print cartridge.
- For maximum fade resistance, use HP Premium Plus Photo Paper and install a photo print cartridge in the printer.
- To learn how to use the photo printing features, see the photo enhancing page.
- Use <u>HP Everyday Photo Paper, Semi-gloss</u> to save money and ink when printing photos.
- Verify that the photo paper that you are using is flat. For information about preventing photo paper from curling, see the <u>photo paper storage instructions</u>.
- Do not exceed the maximum capacity of the rear tray: 20 sheets of photo paper.

Preparing to print

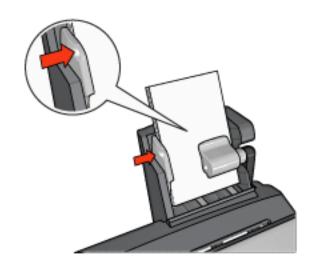
- 1. Slide the paper-width guide to the left.
- 2. Pull the paper lever forward and insert the photo paper.

 The side of the photo paper to be printed on should face outward.

Note: If the photo paper has a tear-off tab, the tab must point up rather than leading into the printer.



- 3. Release the paper lever.
- 4. Slide the paper-width guide against the edge of the photo paper.



Printing

- 1. Open the <u>Printer Properties</u> dialog box.
- 2. On the **Printing Shortcuts** tab, click **Photo printing-borderless** or **Photo printing-with white borders** as the type of document, and then select the following options:
 - Print quality: Normal or Best
 - Paper size: The appropriate photo paper size
 - Paper source: Rear tray

- Paper type: The appropriate photo paper type
- Orientation: Portrait or Landscape
- 3. Set the following options as appropriate:
 - o HP digital photography options
 - Advanced color settings
 - o Color management
 - o **Grayscale quality**
- 4. Click **OK** to print the photographs.

Use the What's This? help to learn about the features that you see in the **Printer Properties** dialog box.

Envelopes

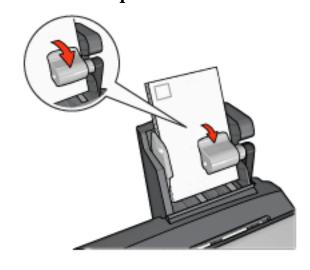
Guidelines

- Avoid using envelopes that have the following qualities:
- Have clasps or windows
- Have thick, irregular, or curled edges
- Are shiny or embossed
- Are wrinkled, torn, or otherwise damaged
- Align the envelope edges before inserting them in the rear tray.
- Do not exceed the maximum capacity of the rear tray capacity: 10 envelopes.

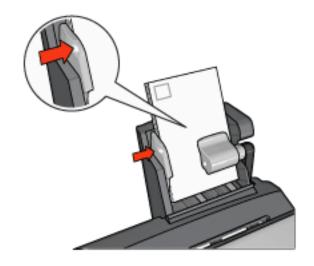
Preparing to print

- 1. Slide the paper-width guide to the left.
- 2. Pull the paper lever forward and insert the envelopes.

 Insert the envelopes with the address side facing outward and the flap to the left.



- 3. Release the paper lever.
- 4. Slide the paper-width guide against the edge of the envelopes.



Printing

- 1. Open the **Printer Properties** dialog box.
- 2. Click the **Paper/Quality** tab, and then specify the following print settings:
 - Size is: The appropriate envelope size
 - Type is: The appropriate paper type
 - Source is: Rear tray
- 3. Select any other print settings that you want, and then click **OK**.

Use the What's This? help to learn about the features that you see in the **Printer Properties** dialog box.

Problems with the Auto Two-Sided Print Accessory with Small Paper Tray

Paper jam

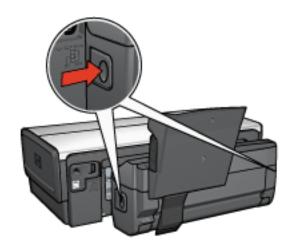
Do **not** clear a paper jam from the front of the printer.

Follow these steps to remove a paper jam from the Auto Two-Sided Print Accessory with Small Paper Tray.

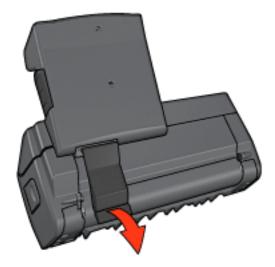
- Turn off the printer.
- 2. Press the buttons on the left and right sides of the accessory, and then remove it from the printer.



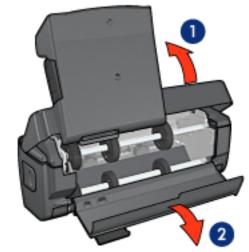
Marning: Remove the Auto Two-Sided Print Accessory with Small Paper Tray before opening it when clearing a paper jam.



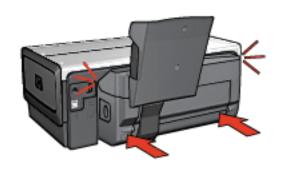
- 3. Remove any paper that is inside the printer.
- 4. Lift the back lever on the accessory, and then unhook the Small Paper Tray.



5. Tilt the Small Paper Tray forward and open the lower door of the accessory.



- 1. Tilt the Small Paper Tray
- 2. Open the lower door
- 6. Remove any paper that is inside the accessory.
- 7. Close the accessory, and then secure the back lever to close the accessory.
- 8. Re-attach the accessory to the printer.



Option for two-sided printing cannot be selected

The printer driver cannot sense the duplexer until a print job is sent to the printer. Print a single sided document, and then print the two-sided document. The option for using the duplexer will appear in the printer software.

If the option for the duplexer still does not appear, then verify that the following conditions exist:

- The duplexer is attached to the printer.
- The duplexer is <u>enabled</u> in the printer software.
- The media type and size selected on the Paper/Quality tab are supported by the duplexer.

For a list of supported media types and sizes, see the specifications for your duplexer:

- Automatic Two-Sided Printing Accessory
- Auto Two-Sided Print Accessory with Small Paper Tray

Paper size changes when the two-sided printing option is selected

The paper size is not supported by the <u>duplexer</u>.

Binding margin is in the wrong place

1. Open the **Printer Properties** dialog box.

- 2. Click the **Finishing** tab.
- 3. Verify that the following conditions exist:
 - Flip pages up is not selected for binding along the side (book binding).
 - Flip pages up is selected for binding along the top (tablet binding).

For more information, see two-sided printing.

Only one side of the page prints when the twosided printing option is enabled

Verify that the following conditions exist:

- The <u>correct print options</u> are set in both the printer software and the software program that you are using.
- The photo paper is not curled, if you are printing on twosided photo paper. Photo paper should be flat before printing. See <u>storing and handling photo paper</u> for more information.
- The media type and size that is selected on the Paper/Quality tab are supported by the <u>duplexer</u>.

If the media type or size is not supported by the duplexer, you can print the document by using the <u>manual two-sided</u> <u>printing instructions</u>.

Note: Do not try to print a two-sided document on single-sided paper, such as single-sided photo paper.

Colors look faded

If the colors look faded, try printing the two-sided document by using the <u>manual two-sided printing instructions</u>.

Auto Two-Sided Print Accessory with Small Paper Tray specifications

Dimensions when attached to printer

219.3 mm (8.63 in) tall x 320.5 mm (12.62 in) wide x 142.1 mm (5.6 in) deep

Duplexing specifications

For duplexing specifications, including skew, media weight, and media sizes for paper fed into the printer through the printer In tray, see the <u>Automatic Two-Sided Printing</u> Accessory specifications.

Small paper tray specifications

Media thickness: 7-12 mils

Media sizes:

Size range:

Width: 89 to 105 mm (3.5 to 4.13 in)

Length: 117 to 305 mm (4.6 to 12 in)

• Cards:

- \circ 10x15 cm, 10x15 cm with tab
- o 4x6 in, 4x6 in with tab
- o A6, 105x148 mm
- Index card, 4x6 in.
- o L, 89x127 mm

- Photo paper:
- \circ 10x15 cm, 10x15 cm with tab
- o 4x6 in, 4x6 in. with tab
- o A6, 105x148 mm
- L, 89x127 mm, L, 89x127 mm with tab
- \circ Panoramic 4x10 in, 4x11 in, 4x12 in
- Envelopes:
- No. 10 Envelope, 4.12x9.5 in
- Japanese envelope No. 4, 90x205 mm
- Hagaki:
- Hagaki, 100x148 mm

Tray capacities:

- Photo paper:
- 4x6, L size: Up to 80 sheets
- Panoramic: Up to 5 sheets
- Hagaki:
- Photo: Up to 80 cards
- Cards:
- o **4x6**: Up to 100
- o A6: Up to 100
- Envelopes:
- o No. 10: Up to 10
- Japanese envelope No. 4: Up to 10

Supplies

- Paper
- <u>USB cables</u>
- <u>Accessories</u>
- Print cartridges

Note: The availability of supplies and accessories varies by country/region.

Paper

To order media such as HP Premium Paper, HP Premium Inkjet Transparency Film, HP Iron-On Paper, or HP Greeting Cards, go to www.hp.com.

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

USB cables

Note: The availability of supplies varies by country/region.

C6518A HP USB A-B 2 M cable

Accessories

If an accessory is not included with your printer, it can be purchased separately from an authorized HP dealer.

Note: The availability of accessories varies by country/region.

Automatic Two-Sided Printing Accessory

Q5712A Automatic Two-Sided Printing Accessory

Auto Two-Sided Print Accessory with Small Paper Tray

Q3032A Auto Two-Sided Print Accessory with Small Paper Tray

250-Sheet Plain Paper Tray Accessory

Q3447A 250-Sheet Plain Paper Tray Accessory

Specifications

- Printer specifications
- Environmental statement
- Print cartridge recovery

Printer specifications

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

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

Environmental statement

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

Reduction and elimination

Paper use: The printer's <u>two-sided printing</u> capability reduces paper usage and the resulting demands on natural resources. In addition, the <u>print cancel button</u> allows the user to save paper by quickly canceling a print job as needed. Finally, this equipment is suitable for using recycled paper (in accordance with EN 12281:2002).

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

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

Recycling

Design for recycling has been incorporated into this printer. The number of materials has been kept to a minimum while ensuring proper functionality and reliability. Dissimilar materials have been designed to separate easily. Fasteners and other connections are easy to locate, access, and remove using common tools. High-priority parts have been designed to gain access to quickly for efficient disassembly and repair.

Printer packaging: The packaging materials for this printer

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

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

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

- Extended warranty: Details can be found in the reference guide that came with your printer.
- Product take-back: To return this product to HP at the end of its useful life, go to www.hp.com/recycle. To return empty print cartridges to HP, see <u>print cartridge recovery</u>.

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

Energy consumption

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

Print cartridge recovery

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

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

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

Returned cartridges are separated for purification into raw materials for use in other industries to manufacture new products. Examples of products made from recycled HP print cartridge materials include automobile parts, trays used in microchip fabrication processes, copper wire, steel plates, and the precious materials used in electronics. Depending on the model, HP is able to recycle up to 65% of the print cartridge by weight. The remaining parts that cannot be recycled (ink, foam, and composite parts) are disposed of in an environmentally responsible manner.