

# User Guide



# HP OfficeJet 7110



# HP Officejet 7110 Wide Format ePrinter

User Guide

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## Safety information



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

1. Read and understand all instructions in the documentation that comes with the printer.
2. Observe all warnings and instructions marked on the product.
3. Unplug this product from wall outlets before cleaning.
4. Do not install or use this product near water, or when you are wet.
5. Install the product securely on a stable surface.
6. Install the product in a protected location where no one can step on or trip over the line cord, and the line cord cannot be damaged.
7. If the product does not operate normally, see [Maintain the printer on page 18](#).
8. There are no user-serviceable parts inside. Refer servicing to qualified service personnel.



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# Table of contents

<b>1 Get started</b> .....	<b>1</b>
Accessibility .....	2
HP EcoSolutions (HP and the Environment) .....	3
Manage Power .....	3
Optimize Printing Supplies .....	3
Understand the printer parts .....	5
Front view .....	5
Printing supplies area .....	5
Control panel .....	6
Back view .....	6
Select print paper .....	8
Recommended papers for printing .....	8
Recommended papers for photo printing .....	9
Tips for selecting and using paper .....	10
Load paper .....	11
Load standard-size paper .....	11
Load envelopes .....	12
Load cards and photo paper .....	12
Load custom-size paper .....	13
Turn the printer off .....	14
Update the printer .....	15
Install the accessories .....	16
Install the automatic two-sided printing accessory (duplexer) .....	16
Turn on accessories in the printer driver .....	16
To turn on accessories (Windows) .....	16
To turn on accessories on (Mac OS X) .....	16
Maintain the printer .....	18
Clean the exterior .....	18
Restore factory defaults .....	18
Open the HP printer software (Windows) .....	19

<b>2 Print</b> .....	<b>19</b>
Print documents .....	20
Print documents (Windows) .....	20
Print documents (Mac OS X) .....	20
Print brochures .....	21
Print brochures (Windows) .....	21
Print brochures (Mac OS X) .....	21
Print on envelopes .....	23
Print on envelopes (Windows) .....	23
Print on envelopes (Mac OS X) .....	23
Print photos .....	25
Print photos on photo paper (Windows) .....	25
Print photos on photo paper (Mac OS X) .....	25
Print on special and custom-sized paper .....	27
Print on special or custom-sized paper (Mac OS X) .....	27
Set up custom sizes (Mac OS X) .....	27
Print borderless documents or photos .....	29
Print borderless documents or photos (Windows) .....	29
Print borderless documents or photos (Mac OS X) .....	29
Print on both sides (duplexing) .....	31
Perform two-sided printing (Windows) .....	31
Perform two-sided printing (Mac OS X) .....	31
Tips for print success .....	32
<b>3 HP ePrint</b> .....	<b>34</b>
Set up HP ePrint .....	36
Set up HP ePrint using the embedded web server .....	36
Set up HP ePrint using the HP printer software .....	36
Use HP ePrint .....	38
Print using HP ePrint .....	38
Find the printer's email address .....	38
Turn off HP ePrint .....	38
Remove Web Services .....	39
<b>4 Work with ink cartridges</b> .....	<b>39</b>
Information on ink cartridges and the printhead .....	40
Check the estimated ink levels .....	41
Printing with black or color ink only .....	42
Replace the ink cartridges .....	43
Store printing supplies .....	45

Anonymous usage information storage .....	46
<b>5 Solve a problem .....</b>	<b>46</b>
HP support .....	48
Obtain electronic support .....	48
HP support by phone .....	48
Before you call .....	49
Phone support period .....	49
Telephone support numbers .....	49
After the phone support period .....	50
General troubleshooting tips and resources .....	51
Solve printer problems .....	52
The printer shuts down unexpectedly .....	52
Alignment fails .....	52
The printer is not responding (nothing prints) .....	52
The printer prints slowly .....	53
Solution 1: Use a lower print quality setting .....	53
Solution 2: Check the ink levels .....	53
Solution 3: Contact HP support .....	54
The printer is making some unexpected noises .....	54
Blank or partial page printed .....	54
Something on the page is missing or incorrect .....	55
Placement of the text or graphics is wrong .....	55
Print quality troubleshooting .....	57
Solution 1: Make sure you are using original HP ink cartridges .....	57
Solution 2: Check the ink levels .....	57
Solution 3: Check the paper loaded in the input tray .....	58
Solution 4: Check the paper type .....	58
Solution 5: Check the print settings .....	58
Solution 6: Print and evaluate a print quality report .....	59
Solution 7: Contact HP support .....	60
Solve paper-feed problems .....	62
Solve problems using HP ePrint and HP websites .....	64
Solve problems using HP ePrint .....	64
Solve problems using HP websites .....	65
Configure your firewall software to work with the printer .....	66
Solve printer management problems .....	67
Embedded web server cannot be opened .....	67
Solve network problems .....	69
Solve Ethernet network problems .....	69
Solve wireless problems .....	69



Basic wireless troubleshooting .....	70
Advanced wireless troubleshooting .....	71
Step 1: Make sure your computer is connected to your network .....	71
Step 2: Make sure that the printer is connected to your network .....	72
Step 3: Make sure your computer is not connected over a Virtual Private Network (VPN) .....	74
Step 4: Make sure the printer is online and ready .....	74
Step 5: Make sure the HP printer labeled (Network) is set as the default printer driver (Windows only) .....	75
Step 6: Check to see if the firewall software is blocking communication ...	75
After resolving the problems .....	75
Reset the Printer Network Settings .....	76
Troubleshoot installation issues .....	77
Hardware installation suggestions .....	77
HP software installation suggestions .....	77
Understand the Printer Status Report .....	79
Understand the network configuration page .....	81
Printhead maintenance .....	84
Clean the printhead .....	84
Align the printhead .....	85
Uninstall and reinstall the HP software .....	86
Clear jams .....	88
Clear paper jams .....	88
Avoid paper jams .....	89
Control panel lights reference .....	91
<b>Appendix A Technical information .....</b>	<b>97</b>
Warranty information .....	98
Hewlett-Packard limited warranty statement .....	99
Ink cartridge warranty information .....	99
Printer specifications .....	101
Physical specifications .....	101
Product features and capacities .....	101
Processor and memory specifications .....	102
System requirements .....	102
Network protocol specifications .....	102
Embedded web server specifications .....	102
Paper specifications .....	102
Understand specifications for supported paper .....	103
Understand supported sizes .....	103
Understand supported paper types and weights .....	105

Set minimum margins .....	106
Guidelines for printing on both sides of a page .....	107
Print resolution .....	107
HP ePrint and HP website specifications .....	108
HP ePrint specifications .....	108
HP website specifications .....	108
Environmental specifications .....	109
Electrical specifications .....	109
Acoustic emission specifications .....	109
Regulatory information .....	110
Regulatory model number .....	110
FCC statement .....	111
Notice to users in Korea .....	111
VCCI (Class B) compliance statement for users in Japan .....	111
Notice to users in Japan about the power cord .....	112
Noise emission statement for Germany .....	112
GS Declaration (Germany) .....	112
European Union Regulatory Notice .....	112
Regulatory information for wireless products .....	113
Exposure to radio frequency radiation .....	113
Notice to users in Brazil .....	114
Notice to users in Canada .....	114
Notice to users in Taiwan .....	115
Notice to users in Mexico .....	115
Notice to users in Japan .....	115
Environmental product stewardship program .....	116
European Union Commission Regulation 1275/2008 .....	116
Paper use .....	116
Plastics .....	116
Material safety data sheets .....	117
Recycling program .....	117
HP inkjet supplies recycling program .....	117
Disposal of waste equipment by users in private households in the European Union .....	118
Power consumption .....	119
Chemical Substances .....	119
Battery information .....	119
Battery disposal in Taiwan .....	119
Attention California users .....	119
Battery disposal in the Netherlands .....	120
RoHS notices (China only) .....	120
RoHS notices (Ukraine only) .....	120

Third-party licenses .....	121
<b>Appendix B HP supplies and accessories .....</b>	<b>131</b>
Order printing supplies online .....	132
Supplies .....	133
Ink cartridges .....	133
HP paper .....	133
<b>Appendix C Network setup .....</b>	<b>133</b>
Change basic network settings .....	135
View and print network settings .....	135
Turn the wireless radio on and off .....	135
Change advanced network settings .....	136
Set link speed .....	136
View IP settings .....	136
Change IP settings .....	136
Reset network settings .....	137
Set up the printer for wireless communication .....	138
Before you begin .....	138
Set up the printer on your wireless network .....	138
Set up the printer using the HP printer software .....	139
Set up the printer using WiFi Protected Setup (WPS) .....	139
Set up the printer using the embedded web server (EWS) .....	140
Change the connection type .....	140
To change from an Ethernet connection to a wireless connection .....	141
To change from a USB connection to a wireless connection .....	141
To change from a wireless connection to a USB or Ethernet connection .....	141
Test the wireless connection .....	142
Guidelines for ensuring wireless network security .....	142
Overview of security settings .....	142
Add hardware addresses to a wireless router (MAC filtering) .....	142
To add hard addresses to a wireless router or wireless access point .....	143
Other wireless security guidelines .....	143
Guidelines for reducing interference on a wireless network .....	143
HP wireless direct printing .....	144
Turn on HP wireless direct printing .....	144
Print from a wireless-capable mobile device .....	145
Print from a wireless-capable computer .....	145
Print from a wireless-capable computer (Windows) .....	145
Print from a wireless-capable computer (Mac OS X) .....	146

<b>Appendix D Printer management tools .....</b>	<b>146</b>
Toolbox (Windows) .....	147
Open the Toolbox .....	147
HP Utility (Mac OS X) .....	148
To open HP Utility .....	148
Embedded web server .....	149
About cookies .....	149
To open the embedded web server .....	149
 <b>Appendix E How do I? .....</b>	 <b>150</b>
 <b>Appendix F Errors (Windows) .....</b>	 <b>150</b>
Low on ink .....	152
Cartridge Problem .....	153
Replace the ink cartridge .....	154
Paper Mismatch .....	155
The cartridge cradle cannot move .....	156
Paper Jam .....	157
The printer is out of paper .....	158
Printer Offline .....	159
Printer Paused .....	160
Document failed to print .....	161
Printer failure .....	162
Door or cover open .....	163
Previously used ink cartridge installed .....	164
Ink cartridges depleted .....	165
Ink cartridge failure .....	166
Printer supply upgrade .....	167
Printer supply upgrade successful .....	168
Printer supply upgrade problem .....	169
Non-HP ink cartridges installed .....	170
Using Original HP Cartridges has its Rewards .....	171
Counterfeit Cartridge Advisory .....	172
Used, Refilled or Counterfeit Cartridge Detected .....	173
Use SETUP cartridges .....	174
Do not use SETUP cartridges .....	175
Not enough ink at startup .....	176
Use black ink only? .....	177
Use color ink only? .....	178
Incompatible ink cartridges .....	179

Unable to Communicate with Printer .....	180
Ink sensor failure .....	181
Ink sensor warning .....	182
Problem with printer preparation .....	183
Color cartridge out of ink .....	184
Black cartridge out of ink .....	185
Problem with ink system .....	186
<b>Index .....</b>	<b>187</b>

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# 1 Get started

This guide provides details about how to use the printer and how to resolve problems.

- [Accessibility](#)
- [HP EcoSolutions \(HP and the Environment\)](#)
- [Understand the printer parts](#)
- [Select print paper](#)
- [Load paper](#)
- [Turn the printer off](#)
- [Update the printer](#)
- [Install the accessories](#)
- [Maintain the printer](#)
- [Open the HP printer software \(Windows\)](#)



**NOTE:** If you are using the printer with a computer running Windows XP Starter Edition, Windows Vista Starter Edition, Windows 7 Starter Edition, or Windows 8 Starter Edition, some features might not be available. For more information, see [System requirements on page 102](#).

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# Accessibility

The printer provides a number of features that make it accessible for people with disabilities.

## **Visual**

The HP software provided with the printer is accessible for users with visual impairments or low vision by using your operating system's accessibility options and features. The 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 used in the HP software have simple text or icon labels that convey the appropriate action.

## **Mobility**

For users with mobility impairments, the HP software functions can be executed through keyboard commands. The HP 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 with limited strength and reach.

## **Support**

For more details about the accessibility of this printer and HP's commitment to product accessibility, visit HP's website at [www.hp.com/accessibility](http://www.hp.com/accessibility).

For accessibility information for Mac OS X, visit the Apple website at [www.apple.com/accessibility](http://www.apple.com/accessibility).

# HP EcoSolutions (HP and the Environment)

Hewlett-Packard is committed to helping you optimize your environmental footprint and empowering you to print responsibly—at home or in the office.

For more detailed information about environmental guidelines HP follows during the manufacturing process, see [Environmental product stewardship program on page 116](#). For more information about HP's environmental initiatives, visit [www.hp.com/ecosolutions](http://www.hp.com/ecosolutions).

This section contains the following topics:

- [Manage Power](#)
- [Optimize Printing Supplies](#)

## Manage Power

To conserve electricity, the printer comes with the following features:

### Sleep mode

Power usage is reduced while in Sleep mode. After initial setup of printer, the printer will enter Sleep mode after 5 minutes of inactivity.

To change the setting, complete the following steps:

1. Open the EWS. For more information, see [Embedded web server on page 149](#).
2. Click the **Settings** tab.
3. In the **Power Management** section, click **Energy Save Mode** and select the desired option.
4. Click **Apply**.

### Auto-off

This feature turns the printer off after 2 hours of inactivity to help reduce energy use. Auto-Off turns the printer off completely, so you must use the Power button to turn the printer back on. If your printer supports this energy saving feature, Auto-Off is automatically enabled or disabled depending on printer capabilities and connection options. Even when Auto-Off is disabled, the printer enters Sleep mode after 5 minutes of inactivity to help reduce energy use.

- Auto-Off is enabled when the printer is turned on, if the printer does not have network, fax or Wi-Fi Direct capability, or is not using these capabilities.
- Auto-Off is disabled when a printer's wireless or Wi-Fi Direct capability is turned on or when a printer with fax, USB, or Ethernet network capability establishes a fax, USB, or Ethernet network connection.

## Optimize Printing Supplies

To optimize printing supplies such as ink and paper, try the following:

- Recycle used original HP ink cartridges through HP Planet Partners. For more information, visit [www.hp.com/recycle](http://www.hp.com/recycle).
- Optimize paper usage by printing on both sides of the paper. If the printer has an HP automatic two-sided printing accessory (duplexer), see [Print on both sides \(duplexing\) on page 31](#). Otherwise, you can first print just the odd pages, flip the pages over, and then print just the even pages.



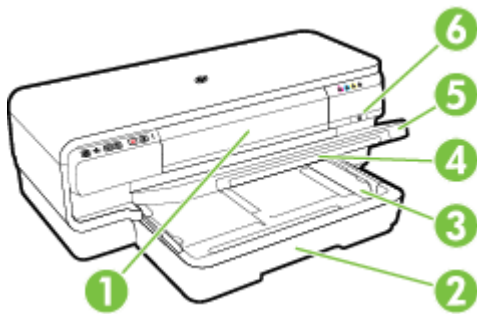
- Save ink and paper when printing web content with HP Smart Print. For more information, visit [www.hp.com/go/smartprint](http://www.hp.com/go/smartprint).
- Change the print mode to a draft setting. The draft setting uses less ink.
- Do not clean the printhead unnecessarily. Doing so wastes ink and shortens the life of the cartridges.


# Understand the printer parts

This section contains the following topics:

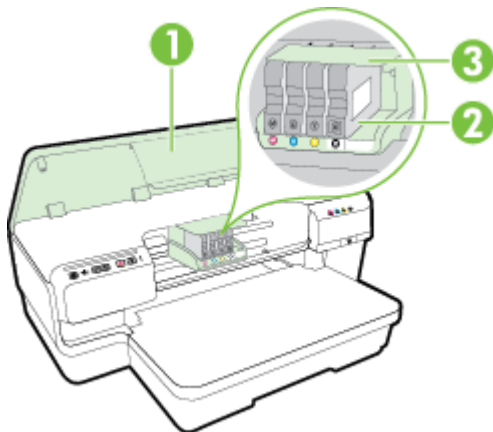
- [Front view](#)
- [Printing supplies area](#)
- [Control panel](#)
- [Back view](#)

## Front view



- 
- |   |  |
|---|--|
| 1 | Ink cartridge access door  |
| 2 | Input tray   |
| 3 | Paper guides   |
| 4 | Tray extender  |
| 5 | Output tray  |
| 6 | Power button  and light |
- 

## Printing supplies area



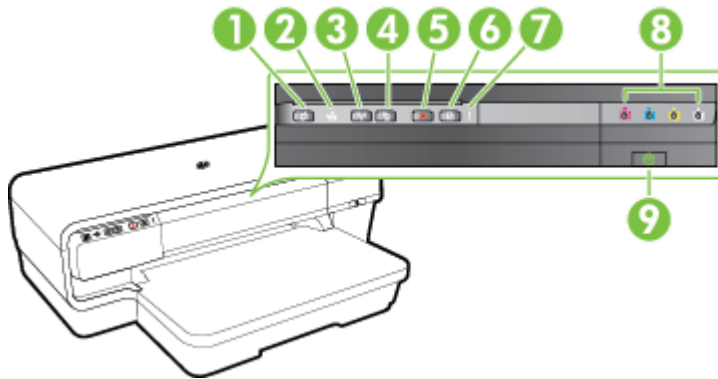
- 
- |   |                           |
|---|---------------------------|
| 1 | Ink cartridge access door |
|---|---------------------------|
-


2	Ink cartridges
3	Printhead assembly


 **NOTE:** Printing supplies should be kept in the printer to prevent possible print quality issues or printhead damage. Avoid removing supplies for extended periods of time. Do not turn off the printer when a cartridge is missing.


## Control panel

For more information, see [Control panel lights reference on page 91](#).





1 ePrint button  and light

2 Ethernet light 

3 Wireless button  and light


4 Network Information button 

5 Cancel button 

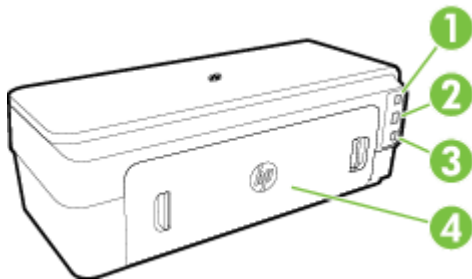
6 Resume button  and light

7 Alert light 

8 Ink cartridge lights

9 Power button  and light

## Back view



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1	USB port
2	Ethernet network port
3	Power input
4	Rear access panel

---

# Select print paper

The printer is designed to work well with most types of office paper. It is best to test a variety of print paper types before buying large quantities. Use HP paper for optimum print quality. Visit the HP website at [www.hp.com](http://www.hp.com) for more information about HP paper.



HP recommends plain papers with the ColorLok logo for printing everyday documents. All papers with the ColorLok logo are independently tested to meet high standards of reliability and print quality, and produce documents with crisp, vivid color, bolder blacks, and that dry faster than ordinary plain papers. Look for papers with the ColorLok logo in a variety of weights and sizes from major paper manufacturers.

This section contains the following topics:

- [Recommended papers for printing](#)
- [Recommended papers for photo printing](#)
- [Tips for selecting and using paper](#)

## Recommended papers for printing


If you want the best print quality, HP recommends using HP papers that are specifically designed for the type of project you are printing.

Depending on your country/region, some of these papers might not be available.

HP Brochure Paper	These papers are glossy-coated or matte-coated on both sides for two-sided use. They are the perfect choice for producing professional quality marketing materials such as brochures and mailers, as well as business graphics for report covers and calendars.
HP Professional Paper	
HP Brochure and Flyer Paper	
HP Tri-fold Brochure Paper	
HP Premium Presentation Paper	These papers are heavy two-sided matte papers perfect for presentations, proposals, reports, and newsletters. They are heavyweight for an impressive look and feel.
HP Professional Paper	
HP Bright White Inkjet Paper	HP Bright White Inkjet Paper delivers high-contrast colors and sharp text. It is opaque enough for two-sided color usage with no showthrough, which makes it ideal for newsletters, reports, and flyers. It features ColorLok Technology for less smearing, bolder blacks, and vivid colors.
HP Printing Paper	HP Printing Paper is a high-quality multifunction paper. It produces documents that look and feel more substantial than documents printed on standard multipurpose or copy paper. It features ColorLok Technology for less smearing, bolder blacks, and vivid colors.
HP Office Paper	HP Office Paper is a high-quality multifunction paper. It is suitable for copies, drafts, memos and other everyday documents. It features ColorLok Technology for less smearing, bolder blacks, and vivid colors.
HP Office Recycled Paper	HP Office Recycled Paper is a high-quality multifunction paper made with 30% recycled fiber. It features ColorLok Technology for less smearing, bolder blacks, and vivid colors.

HP Premium Plus Photo Paper	HP's best photo paper is heavyweight for producing professional quality photos. Features an instant-dry finish for easy handling without smudging. It resists water, smears, fingerprints, and humidity. It is available in several sizes, including A4, 8.5 x 11 inch, 10 x 15 cm (4 x 6 inch), 13 x 18 cm (5 x 7 inch), and two finishes – glossy or soft-gloss (satin matte). It is acid-free for longer lasting documents.
HP Advanced Photo Paper	This thick photo paper features an instant-dry finish for easy handling without smudging. It resists water, smears, fingerprints, and humidity. Your prints have a look and feel comparable to a store processed photo. It is available in several sizes, including A4, 8.5 x 11 inch, 10 x 15 cm (4 x 6 inch), 13x18 cm (5 x7 inch), A3, and two finishes – glossy or soft-gloss (satin matte). It is acid-free for longer lasting documents.
HP Everyday Photo Paper	Print colorful, everyday snapshots at a low cost, using paper designed for casual photo printing. This affordable photo paper dries quickly for easy handling. Get sharp, crisp images when you use this paper with any inkjet printer. Available in semi-gloss finish in 8.5 x 11 inch, A4, 4 x 6 inch, and 10 x 15 cm. It is acid-free for longer lasting documents.

To order HP papers and other supplies, go to [www.hp.com](http://www.hp.com) . Go to **Shop for Products & Services**, and select **Ink & Toner** .

 **NOTE:** At this time, some portions of the HP website are available in English only.


## Recommended papers for photo printing

For the best print quality, HP recommends using HP papers that are specifically designed for the type of project you are printing.

Depending on your country/region, some of these papers might not be available.

HP Premium Plus Photo Paper	HP's best photo paper is heavyweight for producing professional quality photos. Features an instant-dry finish for easy handling without smudging. It resists water, smears, fingerprints, and humidity. It is available in several sizes, including A4, 8.5 x 11 inch, 10 x 15 cm (4 x 6 inch), 13 x 18 cm (5 x 7 inch), and two finishes – glossy or soft-gloss (satin matte). It is acid-free for longer lasting documents.
HP Advanced Photo Paper	This thick photo paper features an instant-dry finish for easy handling without smudging. It resists water, smears, fingerprints, and humidity. Your prints have a look and feel comparable to a store processed photo. It is available in several sizes, including A4, 8.5 x 11 inch, 10 x 15 cm (4 x 6 inch), 13x18 cm (5 x7 inch), A3, and two finishes – glossy or soft-gloss (satin matte). It is acid-free for longer lasting documents.
HP Everyday Photo Paper	Print colorful, everyday snapshots at a low cost, using paper designed for casual photo printing. This affordable, photo paper dries quickly for easy handling. Get sharp, crisp images when you use this paper with any inkjet printer. Available in semi-gloss finish in 8.5 x 11 inch, A4, 4 x 6 inch, and 10 x 15 cm. It is acid-free for longer lasting documents.
HP Photo Value Packs	HP Photo Value Packs conveniently package original HP ink cartridges and HP Advanced Photo Paper to save you time and take the guesswork out of printing affordable, lab-quality photos with your HP printer. Original HP inks and HP Advanced Photo Paper have been designed to work together so your photos are long lasting and vivid, print after print. Great for printing out an entire vacation's worth of photos or multiple prints to share.

To order HP papers and other supplies, go to [www.hp.com](http://www.hp.com) . Go to **Shop for Products & Services** and select **Ink & Toner** .

 **NOTE:** At this time, some portions of the HP website are available in English only.

## Tips for selecting and using paper

For the best results, observe the following guidelines.

- Always use paper that conforms to the printer specifications. For more information, see [Paper specifications on page 102](#).
- Load only one type of paper at a time into a tray.
- When loading the trays, make sure the paper is loaded correctly. For more information, see [Load paper on page 11](#).
- Do not overload the tray. For more information, see [Load paper on page 11](#).
- To prevent jams, poor print quality, and other printing problems, avoid loading the following paper in the trays:
  - Multipart forms
  - Media that is damaged, curled, or wrinkled
  - Media with cutouts or perforations
  - Media that is heavily textured, embossed, or does not accept ink well
  - Media that is too lightweight or stretches easily
  - Media that contains staples or clips

# Load paper

This section provides instructions for loading paper into the printer.

- [Load standard-size paper](#)
- [Load envelopes](#)
- [Load cards and photo paper](#)
- [Load custom-size paper](#)

## Load standard-size paper

Use these instructions to load standard-size paper.

1. Lift the output tray.
2. Slide the paper guides out as far as possible.



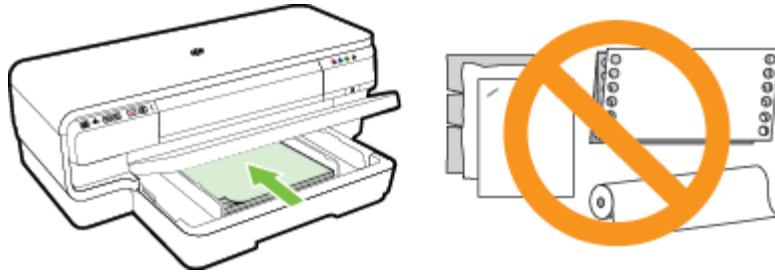
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**NOTE:** If the paper is too long, pull the input tray to extend it.

---

3. Load the paper in portrait orientation and with the side to be printed facing down.

Make sure the stack of paper aligns with the right and back edges of the tray and does not exceed the line marking in the tray.

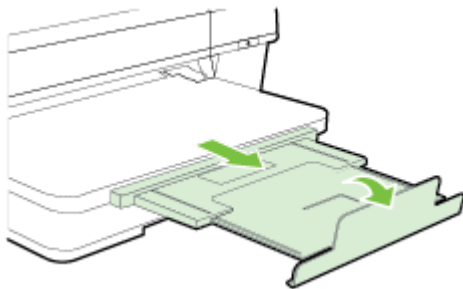


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**NOTE:** Do not load paper while the printer is printing.

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4. Slide the paper guides in the tray to adjust them for the paper size that you have loaded.
5. Lower the output tray.
6. Pull out the output tray extension.



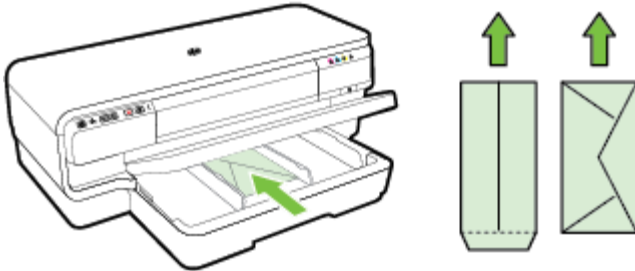


## Load envelopes


Use these instructions to load envelopes.

1. Lift the output tray.
2. Slide the paper guides out as far as possible.
3. Insert the envelopes print-side down and load according to the graphic.

Make sure the stack of envelopes does not exceed the line marking in the tray.

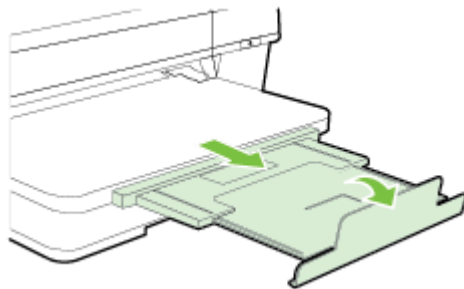


---

 **NOTE:** Do not load paper envelopes while the printer is printing.

---

4. Slide the paper guides in the tray to adjust them for the envelope size that you have loaded.
5. Lower the output tray.
6. Pull out the output tray extension.



## Load cards and photo paper

Use these instructions to load cards and photo paper.

1. Lift the output tray.
2. Slide the paper guides out as far as possible.
3. Insert the paper print-side down along the right edge of the main tray.

Make sure the stack of paper aligns with the right and back edges of the tray and does not exceed the line marking in the tray. If the photo paper has a tab along one edge, make sure the tab is pointing towards the front of the printer.

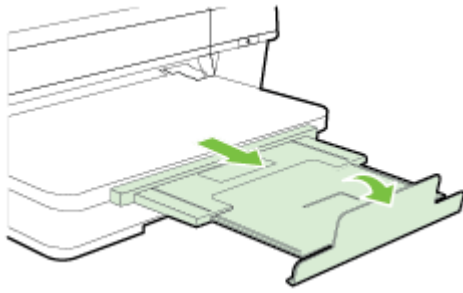
---

 **NOTE:** Do not load cards or photo paper while the printer is printing.

---

4. Slide the paper guides in the tray to adjust them for the paper size that you have loaded.

5. Lower the output tray.
6. Pull out the output tray extension.



## Load custom-size paper

Use these instructions to load custom-size paper.

---

**CAUTION:** Use only custom-size paper that is supported by the printer. For more information, see [Paper specifications on page 102](#).

---

1. Lift the output tray.
2. Slide the paper guides out as far as possible.
3. Insert the paper print-side down along the right of the main tray.

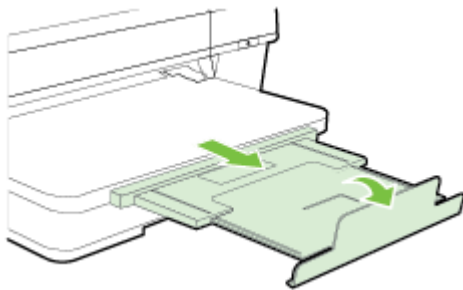
Make sure the stack of paper aligns with the right and back edges of the tray, and does not exceed the line marking in the tray.

---


**NOTE:** Do not load paper while the printer is printing.

---

4. Slide the paper guides in the tray to adjust them for the paper size that you have loaded.
5. Lower the output tray.
6. Pull out the output tray extension.



## Turn the printer off

Always turn off the printer by pressing the  (Power) button located on the printer. Wait until the power light turns off before unplugging the power cord or turning off a power strip.

---

**⚠ CAUTION:** If you incorrectly turn the printer off, the print carriage might not return to the correct position, causing printhead problems and print quality issues.

**CAUTION:** HP recommends that you replace any missing cartridges as soon as possible to avoid print quality issues, possible extra ink usage, or damage to the ink system. Never turn off the printer when ink cartridges are missing.

---


# Update the printer


HP is always working to improve the performance of its printers and bring you the latest features. If the printer is connected to a network and Web Services has been enabled, you can check for and install printer updates.

To update the printer, complete the following steps:

1. Open the EWS. For more information, see [Embedded web server on page 149](#).
2. Click the **Web Services** tab.
3. In the **Web Services Settings** section, click **Product Update**, click **Check Now**, and follow the on-screen instructions.
4. If the printer update option is not available, follow these instructions:
  - a. In the **Web Services Settings** section, click **Setup**, click **Continue**, and follow the on-screen instructions.
  - b. If prompted, choose to allow the printer to check for and install printer updates.

---

 **NOTE:** If a printer update is available, the printer downloads and installs the update, and then restarts.

 **NOTE:** If prompted for proxy settings and if your network uses proxy settings, follow the on-screen instructions to set up a proxy server. If you do not have the details, contact your network administrator or the person who set up the network.

---

## Install the accessories

This section contains the following topics:

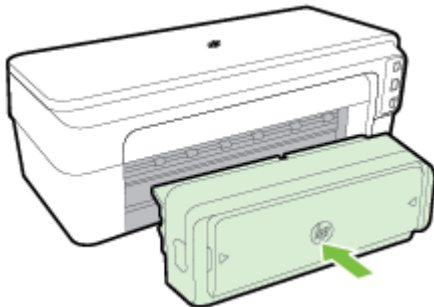
- [Install the automatic two-sided printing accessory \(duplexer\)](#)
- [Turn on accessories in the printer driver](#)

### Install the automatic two-sided printing accessory (duplexer)

You can print on both sides of a sheet of paper automatically. For information on using the duplexer, see [Print on both sides \(duplexing\)](#) on page 31.

To install the duplexer:

Slide the duplexer into the back of the printer until the unit locks into place. Do not press the buttons on either side of the duplexer when installing the unit; use them only for removing the unit from the printer.



### Turn on accessories in the printer driver

- [To turn on accessories \(Windows\)](#)
- [To turn on accessories on \(Mac OS X\)](#)

#### To turn on accessories (Windows)

1. Click **Start** , and then click **Printers, Printers and Faxes** , or **Devices and Printers** .  
- Or -  
Click **Start** , click **Control Panel** , and then double-click **Printers** .  
- Or -  
On the **Start** screen, click **Control Panel** , and then click **View devices and printers** .
2. Right-click the printer icon, and then click **Properties** .
3. Select the **Device Settings** tab. Click the accessory that you want to turn on, click **Installed** from the drop-down menu, and then click **OK** .

#### To turn on accessories on (Mac OS X)

Mac OS X automatically turns on all accessories in the printer driver when you install the printer software. If you add a new accessory later, follow these steps:

1. Open the **System Preferences** and then select **Print & Fax** or **Print & Scan**.
2. Select the printer from list of printers, and then click **Options & Supplies**.
3. Click the **Driver** tab.
4. Select the options you want to install, and then click **OK**.


# Maintain the printer

This section provides instructions for keeping the printer in top working condition. Perform these maintenance procedures as necessary.

- [Clean the exterior](#)
- [Restore factory defaults](#)

## Clean the exterior

---



 **WARNING!** Before cleaning the printer, turn off the power and unplug the power cord from the electrical socket.

---

Use a soft, damp, lint-free cloth to wipe dust, smudges, and stains off of the case. Keep fluids away from the interior of the printer, as well as from the printer control panel.

## Restore factory defaults

This section provides instructions about how to restore your printer back to the factory defaults.

- ▲ On the printer control panel, press and hold the  (Resume) button and the  ( **Wireless** ) button , approximately five seconds, and then release the buttons.

## Open the HP printer software (Windows)

Open the HP printer software by doing one of the following:

- From the computer desktop, click **Start**, select **Programs** or **All Programs**, click **HP**, click the folder for the printer, and then select the icon with the printer's name.
- On the **Start** screen, right-click an empty area on the screen, click **All Apps** on the app bar, and then click the icon with the printer's name.







---

## 2 Print

Most print settings are automatically handled by the software application. Change the settings manually only when you want to change print quality, print on specific types of paper, or use special features. For more information, see [Select print paper on page 8](#).

Choose a print job to continue:

---

	<a href="#">Print documents on page 20</a>
	<a href="#">Print brochures on page 21</a>
	<a href="#">Print on envelopes on page 23</a>
	<a href="#">Print photos on page 25</a>
	<a href="#">Print on special and custom-sized paper on page 27</a>
	<a href="#">Print borderless documents or photos on page 29</a>

---



# Print documents

Follow the instructions for your operating system.

- [Print documents \(Windows\)](#)
- [Print documents \(Mac OS X\)](#)



---

**TIP:** This printer includes HP ePrint, a free service from HP that allows you to print documents on your HP ePrint-enabled printer anytime, from any location, without any additional software or printer drivers. For more information, see [Use HP ePrint on page 38](#).

---

## Print documents (Windows)

1. Load paper in the tray. For more information, see [Load paper on page 11](#).
2. On the **File** menu in your software application, click **Print**.
3. Make sure the printer you want to use is selected.
4. To change settings, click the button that opens the **Properties** dialog box.

Depending on your software application, this button might be called **Properties**, **Options**, **Printer Setup**, **Printer**, or **Preferences**.

5. Change the paper orientation on the **Layout** tab, and paper source, media type, paper size, and quality settings on the **Paper/Quality** tab.  
  
To print in black and white, click the **Advanced** button, and then select **Black Ink Only** from the **Print in Grayscale** drop-down list under **Printer Features**.
6. Click **OK**.
7. Click **Print** or **OK** to begin printing.

## Print documents (Mac OS X)

1. Load paper in the tray. For more information, see [Load paper on page 11](#).
2. From the **File** menu in your software application, click **Print**.
3. Make sure the printer you want to use is selected in the **Format For** pop-up menu.

If you do not see print options in the **Print** dialog, do the following:

- **Mac OS X v10.6:** Click the blue disclosure triangle next to the printer selection.
- **OS X Lion:** Click **Show Details**.

4. Select a paper size from the pop-up menu.

If the **Paper Size** pop-up menu is not in the **Print** dialog, click the **Page Setup** button. When you are done selecting the paper size, click **OK** to close **Page Setup** and return to the **Print** dialog.


5. Click **Print**.

# Print brochures

Follow the instructions for your operating system.

- [Print brochures \(Windows\)](#)
- [Print brochures \(Mac OS X\)](#)


---

 **TIP:** This printer includes HP ePrint, a free service from HP that allows you to print documents on your HP ePrint-enabled printer anytime, from any location, without any additional software or printer drivers. For more information, see [Use HP ePrint on page 38](#).

---

## Print brochures (Windows)

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 **NOTE:** To set print settings for all print jobs, make the changes in the HP software provided with the printer. For more information on the HP software, see [Printer management tools on page 146](#).

---

1. Load paper in the tray. For more information, see [Load paper on page 11](#).
2. On the **File** menu in your software application, click **Print**.
3. Make sure the printer you want to use is selected.
4. To change settings, click the button that opens the **Properties** dialog box.

Depending on your software application, this button might be called **Properties**, **Options**, **Printer Setup**, **Printer**, or **Preferences**.

5. Change the paper orientation on the **Layout** tab, and paper source, media type, paper size, and quality settings on the **Paper/Quality** tab.

To print in black and white, click the **Advanced** button, and then select **Black Ink Only** from the **Print in Grayscale** drop-down list under **Printer Features**.

6. Click **OK**.
7. Click **Print** or **OK** to begin printing.

## Print brochures (Mac OS X)

1. Load paper in the tray. For more information, see [Load paper on page 11](#).
2. From the **File** menu in your software application, click **Print**.
3. Make sure the printer you want to use is selected in the **Format For** pop-up menu.

If you do not see print options in the **Print** dialog, do the following:

- **Mac OS X v10.6:** Click the blue disclosure triangle next to the printer selection.
- **OS X Lion:** Click **Show Details**.

4. Select a paper size from the pop-up menu.

If the **Paper Size** pop-up menu is not in the **Print** dialog, click the **Page Setup** button. When you are done selecting the paper size, click **OK** to close **Page Setup** and return to the **Print** dialog.

5. Click **Paper Type/Quality** from the pop-up menu, and then select the following settings:

- **Paper Type:** The appropriate brochure paper type
  - **Quality: Normal** or **Best**
6. Select any other print settings that you want, and then click **Print** to begin printing.

# Print on envelopes

Avoid envelopes with the following characteristics:

- Very slick finish
- Self-stick adhesives, clasps, or windows
- Thick, irregular, or curled edges
- Areas that are wrinkled, torn, or otherwise damaged

Make sure the folds of envelopes you load in the printer are sharply creased.



---

**NOTE:** For more information about printing on envelopes, see the documentation available with the software program you are using.

---

Follow the instructions for your operating system.

- [Print on envelopes \(Windows\)](#)
- [Print on envelopes \(Mac OS X\)](#)

## Print on envelopes (Windows)

1. Load envelopes print-side down in the tray. For more information, see [Load paper on page 11](#).
2. On the **File** menu in your software application, click **Print**.
3. Make sure the printer you want to use is selected.
4. To change settings, click the button that opens the **Properties** dialog box.

Depending on your software application, this button might be called **Properties**, **Options**, **Printer Setup**, **Printer**, or **Preferences**.

5. On the **Layout** tab, change the orientation to **Landscape**.
6. Click **Paper/Quality**, and then select the appropriate envelope type from the **Paper Size** drop-down list.



---

**TIP:** You can change more options for the print job by using the features available on the other tabs in the dialog box.

---

7. Click **OK**, and then click **Print** or **OK** to begin printing.

## Print on envelopes (Mac OS X)

1. Load envelopes print-side down in the tray. For more information, see [Load paper on page 11](#).
2. From the **File** menu in your software application, click **Print**.
3. Make sure the printer you want to use is selected in the **Format For** pop-up menu.

If you do not see print options in the **Print** dialog, do the following:

- **Mac OS X v10.6:** Click the blue disclosure triangle next to the printer selection.
- **OS X Lion:** Click **Show Details**.

4. Select a paper size from the pop-up menu.

If the **Paper Size** pop-up menu is not in the **Print** dialog, click the **Page Setup** button. When you are done selecting the paper size, click **OK** to close **Page Setup** and return to the **Print** dialog.

5. Select the **Orientation** option.
6. Select any other print settings that you want, and then click **Print** to begin printing.


# Print photos

Do not leave unused photo paper in the input tray. The paper might start to curl, which could impair the quality of your printout. Photo paper should be flat before printing.

Follow the instructions for your operating system.

- [Print photos on photo paper \(Windows\)](#)
- [Print photos on photo paper \(Mac OS X\)](#)

---

 **TIP:** This printer includes HP ePrint, a free service from HP that allows you to print documents on your HP ePrint-enabled printer anytime, from any location, and without any additional software or printer drivers. For more information, see [Use HP ePrint on page 38](#).

---

## Print photos on photo paper (Windows)

1. Load paper in the tray. For more information, see [Load paper on page 11](#).
2. On the **File** menu in your software application, click **Print**.
3. Make sure the printer you want to use is selected.
4. To change settings, click the option that opens the printer **Properties** dialog box.

Depending on your software application, this option might be called **Properties**, **Options**, **Printer Setup**, **Printer**, or **Preferences**.

5. On the **Paper/Quality** tab, select the appropriate photo paper type from the **Media** drop-down menu.



---

**NOTE:** **Maximum DPI** is only supported for color printing on HP Premium Plus Photo Papers and HP Advanced Photo Papers.

---

6. Click **Advanced**, and then select **Best** or **Maximum DPI** from the **Output Quality** drop-down menu.
7. To print the photo in black and white, click the **Print in Grayscale** drop-down menu, and then select one of the following options:
  - **High-Quality Grayscale:** uses all the available colors to print your photo in grayscale. This creates smooth and natural shades of gray.
8. Click **OK**, and then click **Print** or **OK** to begin printing.

## Print photos on photo paper (Mac OS X)

1. Load photo paper print-side down in the tray. For more information, see [Load paper on page 11](#).
2. From the **File** menu in your software application, click **Print**.
3. Make sure the printer you want to use is selected.

If you do not see print options in the **Print** dialog, do the following.

- **Mac OS X v10.6:** Click the blue disclosure triangle next to the printer selection.
- **OS X Lion:** Click **Show Details**.

4. Select a paper size from the pop-up menu.

If the **Paper Size** pop-up menu is not in the **Print** dialog, click the **Page Setup** button. When you are done selecting the paper size, click **OK** to close **Page Setup** and return to the **Print** dialog.

5. Click **Paper Type/Quality** from the pop-up menu, and then select the following settings:
  - **Paper Type:** The appropriate photo paper type
  - **Quality: Best** or **Maximum dpi**
6. If necessary, change the photo and color options:
  - a. Click the disclosure triangle beside **Color Options** and select the appropriate **Photo Fix** options:
    - **Off:** Applies no automatic adjustments to the image.
    - **Basic:** Automatically focuses the image; moderately adjusts image sharpness.
  - b. To print the photo in black and white, click **Grayscale** from the **Color** pop-up menu, and then select one of the following options:
    - **High Quality:** Uses all the available colors to print your photo in grayscale. This creates smooth and natural shades of gray.
7. Select any other print settings that you want, and then click **Print** to begin printing.

# Print on special and custom-sized paper

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

Use only custom-sized paper that is supported by the printer. For more information, see [Paper specifications on page 102](#).



---

**NOTE:** Defining custom-sized paper sizes is only available in the HP printing software in Mac OS X.

---

- [Print on special or custom-sized paper \(Mac OS X\)](#)
- [Set up custom sizes \(Mac OS X\)](#)

## Print on special or custom-sized paper (Mac OS X)



---

**NOTE:** Before you can print on custom-sized paper, you must set up the custom sizes in the HP software provided with the printer. For instructions, see [Set up custom sizes \(Mac OS X\) on page 27](#).

---

1. Load the appropriate paper in the tray. For more information, see [Load paper on page 11](#).
2. From the **File** menu in your software application, click **Print**.
3. Make sure the printer you want to use is selected in the **Format For** pop-up menu.

If you do not see print options in the **Print** dialog, do the following:

- **Mac OS X v10.6:** Click the blue disclosure triangle next to the printer selection.
  - **OS X Lion:** Click **Show Details**.
4. Select a paper size from the pop-up menu.  
  
If the **Paper Size** pop-up menu is not in the **Print** dialog, click the **Page Setup** button. When you are done selecting the paper size, click **OK** to close **Page Setup** and return to the **Print** dialog.
  5. Click **Paper Handling** from the pop-up menu.
  6. Under **Destination Paper Size**, click **Scale to fit paper size**, and then select the custom size.
  7. Select any other print settings that you want, and then click **Print** to begin printing.

## Set up custom sizes (Mac OS X)

1. Load paper in the tray. For more information, see [Load paper on page 11](#).
2. From the **File** menu in your software application, click **Page Setup**, and then make sure the printer you want to use is selected in the **Format For** pop-up menu.

- OR -

From the **File** menu in your software application, click **Print**, and then make sure the printer you want to use is selected.

3. Select **Manage Custom Sizes** in the **Paper Size** pop-up menu.





---

**NOTE:** If you do not see these options in the **Print** dialog, click the disclosure triangle next to the **Printer** pop-up menu or click **Show Details** .

---

4. Click the **+** on the left side of the screen, double-click **Untitled**, and type a name for the new custom size.
5. In the **Width** and **Height** boxes, type the dimensions, and then set the margins, if you want to customize them.
6. Click **OK** .

# Print borderless documents or photos

Borderless printing lets you print to the edges of certain photo media types and a range of standard media sizes.

Before printing, open the file and make sure the size of the document or image matches the size of the media loaded in the printer.



---

**NOTE:** Borderless printing is only available in some applications.

---

Follow the instructions for your operating system.

- [Print borderless documents or photos \(Windows\)](#)
- [Print borderless documents or photos \(Mac OS X\)](#)

## Print borderless documents or photos (Windows)

1. Load paper in the tray. For more information, see [Load paper on page 11](#).
2. On the **File** menu in your software application, click **Print**.
3. Make sure the printer you want to use is selected.
4. To change settings, click the button that opens the **Properties** dialog box.

Depending on your software application, this button might be called **Properties**, **Options**, **Printer Setup**, **Printer**, or **Preferences**.

5. Click the **Paper/Quality** tab, and then click the **Advanced** button.
6. In the **Borderless Printing** option, click **Print Borderless**, and then click the **OK** button.
7. In the **Media** drop-down list, select the appropriate paper type.
8. Click **OK**, and then click **Print** or **OK** to begin printing.

## Print borderless documents or photos (Mac OS X)

1. Load paper in the tray. For more information, see [Load paper on page 11](#).
2. From the **File** menu in your software application, click **Print**.
3. Make sure the printer you want to use is selected.

If you do not see print options in the **Print** dialog, do the following.

- **Mac OS X v10.6:** Click the blue disclosure triangle next to the printer selection.
  - **OS X Lion:** Click **Show Details**.
4. Select a paper size from the pop-up menu.

If the **Paper Size** pop-up menu is not in the **Print** dialog, click the **Page Setup** button. When you are done selecting the paper size, click **OK** to close **Page Setup** and return to the **Print** dialog.

5. Click **Paper Type/Quality** from the pop-up menu, and then select the following settings:

- **Paper Type:** The appropriate paper type
- **Quality: Best** or **Maximum dpi**



**NOTE:** If you do not see these options, click the disclosure triangle next to the **Printer** pop-up menu or click **Show Details** .


---


6. Make sure the **Print Borderless** check box is selected.
7. If necessary, click the disclosure triangle beside **Color Options** and select the appropriate **Photo Fix** options:
  - **Off:** Applies no automatic adjustments to the image.
  - **Basic:** Automatically focuses the image; moderately adjusts image sharpness.
8. Select any other print settings that you want, and then click **Print** to begin printing.


# Print on both sides (duplexing)

You can print on both sides of a sheet of media automatically by using the automatic two-sided printing accessory (duplexer).

---

 **NOTE:** Two-sided printing requires an automatic two-sided printing accessory (duplexer) to be installed on the printer.

 **NOTE:** You can perform manual duplexing by first printing only the odd pages, flipping the pages over, and then printing only the even pages.

 **TIP:** If the top and bottom margins in your document are smaller than 16 mm (0.63 inches), the document might not print out correct.

---

- [Perform two-sided printing \(Windows\)](#)
- [Perform two-sided printing \(Mac OS X\)](#)

## Perform two-sided printing (Windows)

1. Load the appropriate media. For more information, see [Load paper on page 11](#).
2. Make sure the duplexer is installed correctly. For more information, see [Install the automatic two-sided printing accessory \(duplexer\) on page 16](#).
3. With a document open, click **Print** on the **File** menu, and then under the **Print on Both Sides** options on the **Layout** tab, select either **Flip on Long Edge** or **Flip on Short Edge**.
4. Change any other settings, and then click **OK**.
5. Print your document.

## Perform two-sided printing (Mac OS X)

1. Load the appropriate media. For more information, see [Load paper on page 11](#).
2. Make sure the duplexer is installed correctly. For more information, see [Install the automatic two-sided printing accessory \(duplexer\) on page 16](#).
3. From the **File** menu in your software application, click **Print**.
4. Make sure the printer you want to use is selected in the **Format For** pop-up menu.

If you do not see print options in the **Print** dialog, do the following:

- **Mac OS X v10.6:** Click the blue disclosure triangle next to the printer selection.
- **OS X Lion:** Click **Show Details**.

5. Select a paper size from the pop-up menu.

If the **Paper Size** pop-up menu is not in the **Print** dialog, click the **Page Setup** button. When you are done selecting the paper size, click **OK** to close **Page Setup** and return to the **Print** dialog.

6. Click the **Layout** pop-up menu, and then select the appropriate binding options for the document from the **Two-Sided** pop-up menu.
7. Select any other print settings that you want, and then click **Print** to begin printing.

## Tips for print success

For good printing experience, HP ink cartridges should be correctly installed, have sufficient ink, and working properly; and paper should be properly loaded with correct print settings.

### Ink tips


- If the print quality is not acceptable, see [Print quality troubleshooting on page 57](#) for more information.

- Use original HP ink cartridges.
- Install both the black and color cartridges correctly.

For more information, see [Replace the ink cartridges on page 43](#).

- Check the estimated ink levels in the cartridges to make sure there is sufficient ink.

For more information, see [Check the estimated ink levels on page 41](#).

- Always turn off the printer with  (the Power button) to allow the printer to protect the nozzles.

### Paper loading tips

For more information, also see [Load paper on page 11](#).

- Load a stack of paper (not just one page). All the paper in the stack should be of the same size and type to avoid a paper jam.
- Load paper with the print-side down in the main tray.
- Ensure that paper loaded in the input tray lays flat and the edges are not bent or torn.
- Adjust the paper-width guides in the input tray to fit snugly against all paper. Make sure the guides do not bend the paper in the tray.

### Printer settings tips (Windows)

- To change default print settings, click **Set Preferences** under **Print, Scan & Fax** in the HP printer software.

For more information to open the printer software, see [Open the HP printer software \(Windows\) on page 19](#).

- To select the number of pages to print per sheet, on the **Layout** tab of the printer driver, select the appropriate option from the **Pages per Sheet** drop-down list.
- If you want to change the page orientation, set it in your application interface.
- To view more printing settings, on the **Layout** or **Paper/Quality** tab of the printer driver, click the **Advanced** button to open the **Advanced Options** dialog box.

- **Print in Grayscale:** Allows you to print a black and white document using the black ink only. Select **Black Ink Only**, and then click the **OK** button.
- **Pages per Sheet Layout:** Helps you specify the order of the pages if you print document in more than two pages per sheet.



---

**NOTE:** The preview on the **Layout** tab cannot reflect what you select from the **Pages per Sheet Layout** drop-down list.

---

- **Borderless Printing:** Select this feature to print photos without border. Not all paper types support this feature. You will see an alert icon beside the option if the selected paper type in the **Media** drop-down list does not support it.
- **Preserve Layout:** This feature only works with the duplex printing. If the image is larger than the printable area, select this feature to scale the page content to be within the smaller margins so that extra pages are not created.
- **HP Real Life Technologies:** This feature smooths and sharpens images and graphics for improved print quality.
- **Booklet:** Allows you to print multiple-page document as a booklet. It places two pages on each side of a sheet that can then be folded into a booklet in half size of the paper. Select a binding method from the drop-down list, and then click **OK**.
  - **Booklet-LeftBinding:** The binding side after folded into a booklet appears at the left side. Select the option if your reading habit is from left to right.
  - **Booklet-RightBinding:** The binding side after folded into a booklet appears at the right side. Select the option if your reading habit is from right to left.



---

**NOTE:** The preview on the **Layout** tab cannot reflect what you select from the **Booklet** drop-down list.

---

- **Page Borders:** Allows you to add the borders to the pages if you print the document with two or more pages per sheet.



---

**NOTE:** The preview on the **Layout** tab cannot reflect what you select from the **Page Borders** drop-down list.

---

- You can use printing shortcut to save setting time. A printing shortcut stores the setting values that are appropriate for a particular kind of job, so that you can set all the options with a single click. To use it, go to the **Printing Shortcut** tab, select one printing shortcut, and then click **OK**.

To add a new printing shortcut, after making settings on the **Layout** or **Paper/Quality** tab, click the **Printing Shortcut** tab, click **Save As** and enter a name, and then click **OK**.

To delete a printing shortcut, select it, and then click **Delete**.



---

**NOTE:** You cannot delete the default printing shortcuts.

---

## Printer settings tips (OS X)

- On the Print dialog, use the **Paper Size** pop-up menu to select the size of paper loaded in the printer.
- On the Print dialog, choose the **Paper Type/Quality** pop-up menu and select the appropriate paper type and quality.
- To print a black and white document using only black ink, choose the **Paper Type/Quality** from the pop-up menu and choose **Grayscale** from the Color pop-up menu.

## Notes

- Original HP ink cartridges are designed and tested with HP printers and papers to help you easily produce great results, time after time.



**NOTE:** HP cannot guarantee the quality or reliability of non-HP supplies. Product service or repairs required as a result of using a non-HP supply will not be covered under warranty.

If you believe you purchased original HP ink cartridges, go to:

[www.hp.com/go/anticounterfeit](http://www.hp.com/go/anticounterfeit)

---

- Ink level warnings and indicators provide estimates for planning purposes only.



**NOTE:** When you receive a low-ink warning message, consider having a replacement cartridge available to avoid possible printing delays. You do not need to replace the cartridges until print quality becomes unacceptable.

---

- Software settings selected in the print driver only apply to printing, they do not apply to copying or scanning.
- You can print your document on both sides of the paper.

---

# 3 HP ePrint

HP ePrint is a free service from HP that allows you to print to your HP ePrint-enabled printer anywhere you can send an email. Just send your documents and photos to the email address assigned to your printer when you enable Web Services. No additional drivers or software are needed.

Once you have signed up for an account on ePrintCenter ( [www.eprintcenter.com](http://www.eprintcenter.com) ), you can sign in to view your HP ePrint job status, manage your HP ePrint printer queue, control who can use your printer's HP ePrint email address to print, and get help for HP ePrint.



**NOTE:** To use HP ePrint, the printer must be connected to an active network providing Internet access. You cannot use these web features if the printer is connected using a USB cable.

---

This section contains the following topics:


- Set up HP ePrint
- Use HP ePrint
- Remove Web Services



# Set up HP ePrint

To set up HP ePrint, use one of the following methods:

---

 **NOTE:** Before you set up HP ePrint, make sure your printer is connected using either an Ethernet or wireless connection.

---

- [Set up HP ePrint using the embedded web server](#)
- [Set up HP ePrint using the HP printer software](#)


## Set up HP ePrint using the embedded web server


You can use the printer embedded web server (EWS) to set up and manage HP ePrint.

To set up HP ePrint, complete the following steps:

1. Open the EWS. For more information, see [Embedded web server on page 149](#).
2. Click the **Web Services** tab.
3. In the **Web Services Settings** section, click **Setup**, click **Continue**, and follow the on-screen instructions to accept the terms of use.
4. If prompted, choose to allow the printer to check for and install printer updates.

---

 **NOTE:** If a printer update is available, the printer downloads and installs the update, and then restarts. Repeat the instructions from step 1 to set up HP ePrint.

 **NOTE:** If prompted for proxy settings and if your network uses proxy settings, follow the on-screen instructions to set up a proxy server. If you do not have the proxy details, contact your network administrator or the person who set up the network.

---

5. When the printer is connected to the server, the printer prints an information page. Follow the instructions on the information page to finish the setup.

## Set up HP ePrint using the HP printer software


If you do not set up HP ePrint when you installed the HP software on your computer, you can still use the software to set up HP ePrint.


To set up HP ePrint, complete the following steps for your operating system:

### Windows

1. Open the HP printer software. For more information, see [Open the HP printer software \(Windows\) on page 19](#).
2. In the window that appears, select **Print, Scan & Fax**, and then select **ePrint Setup** under **Print**. The printer's embedded web server opens.
3. Click the **Web Services** tab.
4. In the **Web Services Settings** section, click **Setup**, click **Continue**, and follow the on-screen instructions to accept the terms of use.
5. If prompted, choose to allow the printer to check for and install printer updates.

---

 **NOTE:** If a printer update is available, the printer will download and install the update, and then restart. You will have to repeat the instructions from step 1 to set up HP ePrint.

 **NOTE:** If prompted for proxy settings and if your network uses proxy settings, follow the on-screen instructions to set up a proxy server. If you do not have the proxy details, contact your network administrator or the person who set up the network.

---

6. When the printer is connected to the server, the printer prints an information page. Follow the instructions on the information page to finish the setup.

## Mac OS X


- ▲ To set up and manage Web Services in Mac OS X, you can use the printer's embedded web server (EWS). For more information, see [Set up HP ePrint using the embedded web server on page 36](#).

## Use HP ePrint

To use HP ePrint, make sure to have the following:

- An Internet- and email-capable computer or mobile device
- An HP ePrint-capable printer on which Web Services has been enabled

---

 **TIP:** For more information about managing and configuring HP ePrint settings and to learn about the latest features, visit ePrintCenter ( [www.eprintcenter.com](http://www.eprintcenter.com) ).

---

- [Print using HP ePrint](#)
- [Find the printer's email address](#)
- [Turn off HP ePrint](#)

## Print using HP ePrint

To print documents using HP ePrint, complete the following steps:

1. On your computer or mobile device, open your email application.


---

 **NOTE:** For information about using the email application on your computer or mobile device, see the documentation provided with the application.

---

2. Create a new email message, and then attach the file that you want to print. For a list of files that can be printed using HP ePrint, as well as guidelines to follow when using HP ePrint, see [Set up HP ePrint using the embedded web server on page 36](#).
3. Enter the printer's email address in the "To" line of the email message, and then select the option to send the email message.


---

 **NOTE:** The HP ePrint server does not accept email print jobs if there are multiple email addresses included in the "To" or "Cc" fields. Only enter the email address of your HP printer in the "To" field. Do not enter any additional email addresses in the other fields.

---

## Find the printer's email address

---

 **NOTE:** Make sure you have created an ePrint account.

---

To sign up for an account on ePrintCenter, visit ePrintCenter at [www.eprintcenter.com](http://www.eprintcenter.com) .

---


To obtain the printer's email address, press the  (HP ePrint) button on the printer control panel.

The printer prints an information page that contains the printer email address.

## Turn off HP ePrint

1. Open the EWS. For more information, see [Embedded web server on page 149](#).
2. Click the **Web Services** tab, and then click **ePrint** in the **Web Services Settings** section.
3. Click **Turn Off ePrint**.

---

 **NOTE:** To remove all Web Services, see [Remove Web Services on page 39](#).

---

# Remove Web Services

To remove Web Services, complete the following steps:

1. Open the EWS. For more information, see [Embedded web server on page 149](#).
2. Click the **Web Services** tab, and then click **Remove Web Services** in the **Web Services Settings** section.
3. Click **Remove Web Services**.
4. Click **Yes** to remove Web Services from your printer.

---

## 4 Work with ink cartridges

To ensure the best print quality from the printer, you need to perform some simple maintenance procedures.

---

 **TIP:** If you have problems printing documents, see [Print quality troubleshooting on page 57](#).

---

This section contains the following topics:

- [Information on ink cartridges and the printhead](#)
- [Check the estimated ink levels](#)
- [Printing with black or color ink only](#)
- [Replace the ink cartridges](#)
- [Store printing supplies](#)
- [Anonymous usage information storage](#)

# Information on ink cartridges and the printhead



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

- The instructions in this user guide are for replacing ink cartridges, and are not intended for first time installation.

---

**⚠ CAUTION:** While ink cartridges are not damaged when left outside of the printer, the printhead does need to have all cartridges installed at all times after the printer is set up and in use. Leaving one or more cartridge slots empty for an extended period may lead to print quality problems and possibly damage the printhead. If you have recently left a cartridge out of the printer for an extended period, or if you have had a recent paper jam, and have noticed poor print quality, clean the printhead. For more information, see [Clean the printhead on page 84](#).

---

- Keep all ink cartridges in the original sealed packages until they are needed.
- Be sure to turn off the printer properly. For more information, see [Turn the printer off on page 14](#).
- Store ink cartridges at room temperature (15-35° C or 59-95° F).
- Always turn off the printer by pressing the  (Power) button. Wait until the Power light turns off before unplugging the power cord or turning off a power strip. If you improperly turn off the printer, the print carriage might not return to the correct position, and that can cause problems with the printhead and print quality issues.
- Do not clean the printhead unnecessarily. This wastes ink and shortens the life of the cartridges.
- Handle ink cartridges carefully. Dropping, jarring, or rough handling during installation can cause temporary printing problems.
- If you are transporting the printer, do the following to prevent ink leaking from the printer or other damage from occurring to the printer:
  - Make sure you turn off the printer by pressing the  (Power) button. Wait until all sounds of internal motion stop before unplugging the printer. For more information, see [Turn the printer off on page 14](#).
  - Make sure you leave the ink cartridges installed.
  - Place the printer sitting flat in the box during packing. During transportation, the printer should be stored in the same position (sitting flat) and should not be placed on its side, back, front, or inverted.


## Related topics


- [Check the estimated ink levels on page 41](#)
- [Clean the printhead on page 84](#)


## Check the estimated ink levels

You can check the estimated ink levels from the printer software. For information about using these tools, see [Printer management tools on page 146](#). You can also print the Printer Status page to view this information (see [Understand the Printer Status Report on page 79](#)).

---

 **NOTE:** Ink level alerts and indicators provide estimates for planning purposes only. When you receive a low-ink alert, consider having a replacement cartridge available to avoid possible printing delays. You do not have to replace the cartridges until you are prompted.

 **NOTE:** If you have installed a refilled or remanufactured cartridge, or a cartridge that has been used in another printer, the ink level indicator might be inaccurate or unavailable.

 **NOTE:** Ink from the cartridges is used in the printing process in a number of different ways, including in the initialization process, which prepares the printer and cartridges for printing, and in printhead servicing, which keeps print nozzles clear and ink flowing smoothly. In addition, some residual ink is left in the cartridge after it is used. For more information, see [www.hp.com/go/inkusage](http://www.hp.com/go/inkusage).

---

## Printing with black or color ink only

For regular usage, this product is not designed to print using only the black cartridge when the color cartridges are out of ink.

However, your printer is designed to let you print as long as possible when your cartridges start to run out of ink.

When there is sufficient ink in the printhead, the printer will offer you the use of black ink only when one or more of the color cartridges are out of ink, and the use of color ink only when the black cartridge is out of ink.

- The amount that you can print using black or color ink only is limited, so have replacement ink cartridges available when you are printing with black or color ink only.
- When there is no longer sufficient ink to print you will get a message that one or more cartridges are depleted, and you will need to replace the depleted cartridges before you resume printing.


---

**⚠ CAUTION:** While ink cartridges are not damaged when left outside of the printer, the printhead does need to have all cartridges installed at all times after the printer is set up and in use. Leaving one or more cartridge slots empty for an extended period may lead to print quality problems and possibly damage the printhead. If you have recently left a cartridge out of the printer for an extended period, or if you have had a recent paper jam, and have noticed poor print quality, clean the printhead. For more information, see [Clean the printhead on page 84](#).

---

# Replace the ink cartridges


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 **NOTE:** For information on recycling used ink supplies, see [HP inkjet supplies recycling program on page 117](#).


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If you do not already have replacement ink cartridges for the printer, see [Order printing supplies online on page 132](#).

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 **NOTE:** At this time, some portions of the HP website are available in English only.

 **NOTE:** Not all cartridges are available in all countries/regions.

 **CAUTION:** While ink cartridges are not damaged when left outside of the printer, the printhead does need to have all cartridges installed at all times after the printer is set up and in use. Leaving one or more cartridge slots empty for an extended period may lead to print quality problems and possibly damage the printhead. If you have recently left a cartridge out of the printer for an extended period, or if you have had a recent paper jam, and have noticed poor print quality, clean the printhead. For more information, see [Clean the printhead on page 84](#).

---

## To replace the ink cartridges

Use these steps to replace the ink cartridges.

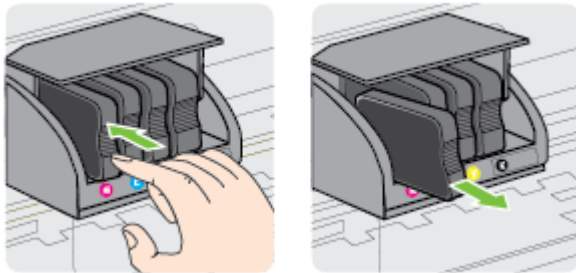
1. Make sure the printer is turned on.
2. Open the ink cartridge access door.

---

 **WARNING!** Wait until the print carriage stops moving before proceeding.

---

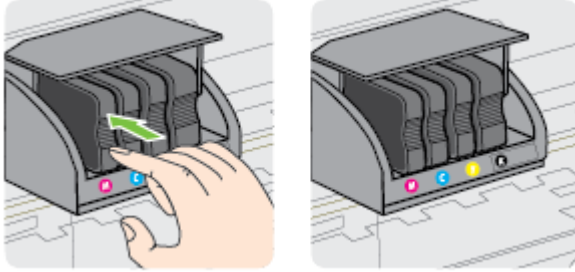
3. Press the front of the ink cartridge to release it, and then remove it from the slot.



4. Remove the new ink cartridge from its packaging.



5. Using the color-coded letters for help, slide the ink cartridge into the empty slot until it is securely installed in the slot.



Make sure that you insert the ink cartridge into the slot that has the same colored letter as the color you are installing.



6. Repeat steps 3 through 5 for each ink cartridge you are replacing.
7. Close the ink cartridge access door.

#### Related topics

- [Order printing supplies online on page 132](#)

## Store printing supplies

Ink cartridges can be left in the printer for extended periods of time. However, to assure optimal ink cartridge health, be sure to turn off the printer properly. For more information, [Turn the printer off on page 14](#).

## Anonymous usage information storage

The HP cartridges used with this printer contain a memory chip that assists in the operation of the printer. In addition, this memory chip stores a limited set of anonymous information about the usage of the printer, which might include the following: the date when the cartridge was first installed, the date when the cartridge was last used, the number of pages printed using the cartridge, the page coverage, frequency of printing, the printing modes used, any printing errors that might have occurred, and the printer model.



This information helps HP design future printers to meet our customers' printing needs. The data collected from the cartridge memory chip does not contain information that can be used to identify a customer or user of the cartridge or their printer.

HP collects a sampling of the memory chips from cartridges returned to HP's free return and recycling program (HP Planet Partners: [www.hp.com/hpinfo/globalcitizenship/environment/recycle/](http://www.hp.com/hpinfo/globalcitizenship/environment/recycle/)). The memory chips from this sampling are read and studied in order to improve future HP printers. HP partners who assist in recycling this cartridge might have access to this data, as well.


Any third party possessing the cartridge might have access to the anonymous information on the memory chip. If you prefer to not allow access to this information, you can render the chip inoperable. However, after you render the memory chip inoperable, the cartridge cannot be used in an HP printer.

If you are concerned about providing this anonymous information, you can make this information inaccessible by turning off the memory chip's ability to collect the printer's usage information.


### To disable the usage information function

- ▲ On the printer control panel, press and hold the  (Resume) button and the  (Network Information) button until the ink cartridge lights blink, approximately five seconds, and then release the buttons.

---

 **NOTE:** To re-enable the usage information function, open the embedded web server (EWS), click the **Settings** tab, click the option that shows usage information or cartridge chip info in the **Preferences** section, select the option to turn on, and then click **Apply**.

For more information about how to open the EWS, see [Embedded web server on page 149](#).

 **NOTE:** You can continue to use the cartridge in the HP printer if you turn off the memory chip's ability to collect the printer's usage information.

---

---

## 5 Solve a problem

The information in [General troubleshooting tips and resources on page 51](#) suggests solutions to common problems. If your printer is not operating correctly and those suggestions did not solve your problem, try using the HP support services to obtain assistance.

This section contains the following topics:

- [HP support](#)
- [General troubleshooting tips and resources](#)
- [Solve printer problems](#)
- [Print quality troubleshooting](#)
- [Solve paper-feed problems](#)
- [Solve problems using HP ePrint and HP websites](#)
- [Configure your firewall software to work with the printer](#)
- [Solve printer management problems](#)
- [Solve network problems](#)
- [Troubleshoot installation issues](#)
- [Understand the Printer Status Report](#)
- [Understand the network configuration page](#)
- [Printhead maintenance](#)
- [Uninstall and reinstall the HP software](#)
- [Clear jams](#)
- [Control panel lights reference](#)

# HP support

## If you have a problem, follow these steps

1. Check the documentation that came with the printer.
2. Visit the HP online support website at [www.hp.com/support](http://www.hp.com/support). This website provides information and utilities that can help you correct many common printer problems. HP online support is available to all HP customers. It is the fastest source for up-to-date printer information and expert assistance and includes the following features:
  - Fast access to qualified online support specialists
  - HP software and driver updates for the HP printer
  - Valuable troubleshooting information for common problems
  - Proactive printer updates, support alerts, and HP news grams that are available when you register the printer

For more information, see [Obtain electronic support on page 48](#).

3. Call HP support. Support options and availability vary by printer, country/region, and language. For more information, see [HP support by phone on page 48](#).
  - [Obtain electronic support](#)
  - [HP support by phone](#)

## Obtain electronic support

To find support and warranty information, go to the HP website at [www.hp.com/support](http://www.hp.com/support). This website provides information and utilities that can help you correct many common printer problems. If prompted, select your country/region, and then click **Contact HP** for information about calling for technical support.

This website also offers technical support, drivers, supplies, ordering information and other options such as:

- Access online support pages.
- Send HP an email message for answers to your questions.
- Connect with an HP technician by using online chat.
- Check for HP software updates.

You can also obtain support from the HP software for Windows or Mac OS X, which provide easy, step-by-step solutions to common printing problems. For more information, see [Printer management tools on page 146](#).

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

## HP support by phone

The phone support numbers and associated costs listed here are those in effect at time of publication and are applicable only for calls made on a land line. Different rates may apply for mobile phones.

For the most current HP list of telephone support numbers and call costs information, see [www.hp.com/support](http://www.hp.com/support). This website provides information and utilities that can help you correct many common printer problems.

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



**NOTE:** HP does not provide telephone support for Linux printing. All support is provided online at the following website: <https://launchpad.net/hplip>. Click the **Ask a question** button to begin the support process.

The HPLIP website does not provide support for Windows or Mac OS X. If you are using these operating systems, see [www.hp.com/support](http://www.hp.com/support). This website provides information and utilities that can help you correct many common printer problems.

This section contains the following topics:

- [Before you call](#)
- [Phone support period](#)
- [Telephone support numbers](#)
- [After the phone support period](#)

## Before you call

Call HP support while you are in front of the computer and the printer. Be prepared to provide the following information:

- Model number
- Serial number (located on the back or bottom of the printer)
- Messages that appear when the situation occurs
- Answers to these questions:
  - Has this situation happened before?
  - Can you re-create it?
  - Did you add any new hardware or software to your computer at about the time that this situation began?
  - Did anything else occur prior to this situation (such as a thunderstorm or moving the printer)?

## Phone support period

One year of phone support is available in North America, Asia Pacific, and Latin America (including Mexico). To determine the duration of phone support in Europe, the Middle East, and Africa, go to [www.hp.com/support](http://www.hp.com/support). Standard phone company charges apply.

## Telephone support numbers

In many locations, HP provides toll free telephone support during the warranty period. However, some of the support numbers might not be toll free.

For the most current list of telephone support numbers, see [www.hp.com/support](http://www.hp.com/support). This website provides information and utilities that can help you correct many common printer problems.



Africa (English speaking)	(0027)112345872	Lietuva	+370 5 210 3333
Afrique (francophone)	0033 1 4993 9230	Jamaica	1-800-711-2884
	021 672 280 الجزائر	日本	0120-96-1665
Algérie	021 67 22 80		0800 222 47 الأردن
Argentina (Buenos Aires)	54-11-4708-1600	한국	1588-3003
Argentina	0-800-555-5000	Luxembourg (Français)	900 40 006 0.15 €/min
Australia	1300 721 147	Luxemburg (Deutsch)	900 40 007 0.15 €/Min
Australia (out-of-warranty)	1902 910 910	Madagascar	262 262 51 21 21
Österreich	0820 874 417 doppelter Ortsanruf	Magyarország	06 40 200 629 7.2 HUF/perc vezetékes telefonra
Белоруссия	(375) 17 328 4640	Malaysia	1800 88 8588
	172 12 049 البحرين	Maurice	262 262 210 404
België (Nederlands)	078 600 019 0.0546 euro/min piekuren 0.0273 euro/min daluren	México (Ciudad de México)	55-5258-9922
Belgique (Français)	078 600 020 0,0546 euro/min heures de pointe 0,0273 euro/min heures creuses	México	01-800-472-68368
България	0 700 1 0404	Maroc	0801 005 010
Hrvatska	0800 223213	Nederland	+31 0900 2020 165 0.10 €/Min
Brasil (Sao Paulo)	55-11-4004-7751	New Zealand	0800 441 147
Brasil	0-800-709-7751	Nigeria	(01) 271 2320
Canada	1-(800)-474-8836 (1-800 hp invent)	Norge	815 62 070 starter på 0.59 Kr per min., deretter 0.39 Kr per min. Fra mobiltelefon gjelder mobillefontakster.
Central America & The Caribbean	www.hp.com/ia/soporte		24791773 عُمان
Chile	800-360-999	Panamá	1-800-711-2884
中国	800-820-6616	Paraguay	009 800 54 1 0006
中国	400-885-6616	Perú	0-800-10111
Colombia (Bogotá)	571-606-9191	Philippines	2 867 3551
Colombia	01-8000-51-4746-8368	Poliska	(22) 583 43 73 Koszt połączenia - z tel. stacjonarnego jak za 1 impuls wg taryfy operatora,- z tel. komórkowego wg taryfy operatora.
Costa Rica	0-800-011-1046	Portugal	808 201 492 Custo: 8 céntimos no primeiro minuto e 3 céntimos restantes minutos
Česká republika	420 810 222 222 1.53 CZN/min	Puerto Rico	1-877-232-0589
Danmark	70 20 28 45 Opkald: 0,145 (kr. pr. min.) Pr. min. man-lar 06.00-19.30: 0,25 Pr. min. avenge tidspunkter: 0,125		00974 - 44761936 قطر
Eesti	372 6813 823	República Dominicana	1-800-711-2884
Ecuador (Andinatel)	1-999-119 ☎ 800-711-2884	La Réunion	0820 890 323
Ecuador (Pacifitel)	1-800-225-528 ☎ 800-711-2884	România	0801 033 390 (021 204 7090) 0.029 pe minut
	02 691 0602 مصر	Россия	800 500 9268
El Salvador	800-6160		800 897 1415 السعودية
España	902 010 059 Coste horario normal (de 8:00 a 20:00) 6.73 cta/min Coste horario reducido 4.03 cta/min Coste de establecimiento de llamada 8.33 cts	Singapore	+65 6272 5300
France	0969 320 435 Tarif local	Srbija	0700 301 301
Deutschland	069 29 993 434 0,14 €/Min aus dem deutschen Festnetz - bei Anrufen aus Mobilfunknetzen können andere Preise gelten	Slovenská republika	0850 111 256 miestna tarifa
Ελλάδα	801-11-75400 0.30 Ευρώ/λεπτό	Slovenija	01 432 2001
Κύπρος	800 9 2654	South Africa (RSA)	0860 104 771 Calls at Local Rate
Guatemala	1-800-711-2884	Suomi	0203 667 67 0.0147€/min
香港特別行政區	(852) 2802 4098	Sverige	0771-20 47 65 0.23 kr/min
India	1-800-425-7737	Schweiz (Deutsch)	0848 672 672 8Rp./Min
India	91-80-28526900	Suisse (Français)	0848 672 672 0.08CHF/min
Indonesia	+62 (21) 350 3408	Svizzera	0848 672 672 0.08CHF/min
	+971 4 224 9189 العراق	臺灣	0800-010055 (免費)
	+971 4 224 9189 اليمن	ไทย	+66 (2) 353 9000
Ireland	1890 923 902 Calls cost Cost 5.1 cent peak / 1.3 cent off-peak per minute	Trinidad & Tobago	1-800-711-2884
	1-700-503-048 ישראל	Tunisie	23 927 000
Italia	848 800 871 costo telefonico locale	Türkiye	0(212) 444 0307 Yerel numara: 444 0307 0,08 TL/dk. yerel numara (Istanbul, Bursa, Ankara ve Izmir) ve 0,10 TL ulusal ücret
Казакстан	+7 7172 978 177	Україна	38 (044) 230-51-06
	(965) 6767 0099 الكويت		600 54 47 47 الإمارات العربية المتحدة
Latvija	8000 80 12	United Kingdom	0844 369 0369 0.50 £ p/min
	00961 1 217970 لبنان	United States	1-(800)-474-6836
		Uruguay	0004-054-177
		Venezuela (Caracas)	58-212-278-8666
		Venezuela	0-800-474-68368
		Việt Nam	+84 88234530

### After the phone support period

After the phone support period, help is available from HP at an additional cost. Help may also be available at the HP online support Web site: [www.hp.com/support](http://www.hp.com/support). Contact your HP dealer or call the support phone number for your country/region to learn more about support options.

# General troubleshooting tips and resources



**NOTE:** Many of the following steps require HP software. If you did not install the HP software, you can install it using the HP software CD included with the printer, or download the HP software from the HP support website, [www.hp.com/support](http://www.hp.com/support). This website provides information and utilities that can help you correct many common printer problems.


---

Check or do the following before you begin troubleshooting:

- Try turning the printer off and then on again.
- For a paper jam, see [Clear jams on page 88](#).
- For paper-feed problems, such as the paper skew and paper pick, see [Solve paper-feed problems on page 62](#).
- Power light is on and not blinking. When the printer is turned on for the first time, it takes approximately 9 minutes to initialize it after the ink cartridges are installed.
- Power cord and other cables are working, and are firmly connected to the printer. Make sure the printer is connected firmly to a functioning alternating current (AC) power outlet, and is turned on. For voltage requirements, see [Electrical specifications on page 109](#).
- Media is loaded correctly in the input tray and is not jammed in the printer.
- All packing tapes and materials are removed.
- The printer is set as the current or default printer. For Windows, set it as the default in the Printers folder. For Mac OS X, set it as the default in the **Print & Fax** or **Print & Scan** section of the **System Preferences**. See your computer's documentation for more information.
- **Pause Printing** is not selected if you are using a computer running Windows.
- You are not running too many programs when you are performing a task. Close programs that you are not using or restart the computer before attempting the task again.



# Solve printer problems

 **TIP:** You can visit the HP online support website at [www.hp.com/support](http://www.hp.com/support) for information and utilities that can help you correct many common printer problems.

---

This section contains the following topics:

- [The printer shuts down unexpectedly](#)
- [Alignment fails](#)
- [The printer is not responding \(nothing prints\)](#)
- [The printer prints slowly](#)
- [The printer is making some unexpected noises](#)
- [Blank or partial page printed](#)
- [Something on the page is missing or incorrect](#)
- [Placement of the text or graphics is wrong](#)

## The printer shuts down unexpectedly

### Check the power and power connections

- Make sure the printer is connected firmly to a functioning alternating current (AC) power outlet. For voltage requirements, see [Electrical specifications on page 109](#).

## Alignment fails

If the alignment process fails, make sure you have loaded unused, plain white paper into the input tray. The alignment fails when you have colored paper loaded in the input tray.

If the alignment process fails repeatedly, you may need to clean the printhead, or you might have a defective sensor. To clean the printhead, see [Clean the printhead on page 84](#).

If cleaning the printhead does not solve the problem, contact HP support. Go to [www.hp.com/support](http://www.hp.com/support). This website provides information and utilities that can help you correct many common printer problems. If prompted, select your country/region, and then click **Contact HP** for information on calling for technical support.

## The printer is not responding (nothing prints)

### There are print jobs stuck in the print queue

- Open the print queue, cancel all documents, and then reboot the computer. Try to print after the computer reboots. Refer to the Help system for the operating system for more information.

### Check the printer setup

- For more information, see [General troubleshooting tips and resources on page 51](#).

## Check the HP software installation

- If the printer is turned off when printing, an alert message should appear on your computer screen; otherwise, the HP software provided with the printer might not be installed correctly. To resolve this, uninstall the HP software completely, and then reinstall the HP software. For more information, see [Uninstall and reinstall the HP software on page 86](#).

## Check the cable connections

- Make sure both ends of the USB cable or Ethernet cable are secure.
- If the printer is connected to a network, check the following:
  - Check the Link light on the back of the printer.
  - Make sure you are not using a phone cord to connect the printer.

## Check any personal firewall software installed on the computer

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

## The printer prints slowly

Try the following solutions if the printer is printing very slowly.

- [Solution 1: Use a lower print quality setting](#)
- [Solution 2: Check the ink levels](#)
- [Solution 3: Contact HP support](#)

### Solution 1: Use a lower print quality setting

The print quality was set to a higher setting.

Check the print quality setting. **Best** and **Maximum dpi** provide the best quality but are slower than **Normal** or **Draft**. **Draft** provides the fastest print speed.

If this did not solve the issue, try the next solution.


### Solution 2: Check the ink levels

The ink cartridges might have insufficient ink. Insufficient ink may cause the printhead to overheat. When the printhead overheats, the printer slows down to allow it to cool.

Check the estimated ink levels in the ink cartridges.



**NOTE:** Ink level alerts and indicators provide estimates for planning purposes only. When you receive a low-ink alert, consider having a replacement cartridge available to avoid possible printing delays. You do not need to replace the ink cartridges until prompted to do so.

 **CAUTION:** While ink cartridges are not damaged when left outside of the printer, the printhead does need to have all cartridges installed at all times after the printer is set up and in use. Leaving one or more cartridge slots empty for an extended period may lead to print quality problems and possibly damage the printhead. If you have recently left a cartridge out of the printer for an extended period, or if you have had a recent paper jam, and have noticed poor print quality, clean the printhead. For more information, see [Clean the printhead on page 84](#).

---

For more information, see:

- [Check the estimated ink levels on page 41](#)

If this did not solve the issue, try the next solution.

### **Solution 3: Contact HP support**

There was a problem with the printer.


Contact HP support for service.


Go to: [www.hp.com/support](http://www.hp.com/support). This website provides information and utilities that can help you correct many common printer problems.

If prompted, choose your country/region, and then click **Contact HP** for information on calling for technical support.

## **The printer is making some unexpected noises**

You might hear some unexpected noises made by the printer. These are the servicing sounds when the printer performs automatic servicing functions to maintain the health of the printheads.

 **NOTE:** To prevent any potential damage to your printer:

Do not turn off the printer while the printer is performing any servicing. If you are turning off the printer, wait for the printer to come to a complete stop before turning it off using the  (Power) button. For more information, see [Turn the printer off on page 14](#).



Make sure all ink cartridges are installed. If any of the ink cartridges are missing, the printer will perform extra servicing to protect the printheads.

---

## **Blank or partial page printed**

### **Clean the printhead**

- Complete the printhead cleaning procedure. For more information, see [Clean the printhead on page 84](#). The printhead may need to be cleaned if the printer was turned off incorrectly.

 **NOTE:** Incorrectly turning off the printer can cause print quality problems like blank or partial pages. Printhead cleaning can solve these problems, but turning off the printer correctly can prevent them in the first place. Always turn the printer off by pressing the  (Power) button on the printer. Wait until the power light goes out before unplugging the power cord or turning off a power strip.

---

### **Check the paper settings**

- Make sure you select the correct print quality settings in the printer driver for the paper loaded in the trays.
- Make sure the page settings in the printer driver match the page size of paper loaded in the tray.

### More than one page is being picked

- For more information, see [Solve paper-feed problems on page 62](#).

### There is a blank page in the file

- Check the file to make sure there is no blank page.

## Something on the page is missing or incorrect


### Check the Print Quality Diagnostic page

- Print a Print Quality Diagnostic page to help you decide whether to run any maintenance tools to improve the print quality of your printouts. For more information, see [Print quality troubleshooting on page 57](#).

### Check the margin settings

- Make sure the margin settings for the document do not exceed the printable area of the printer. For more information, see [Set minimum margins on page 106](#).

---

 **TIP:** If the top and bottom margins in your document are smaller than 16 mm (0.63 inches), the document might not print out correct.

---

### Check the color print settings

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

### Check the printer location and length of USB cable

- High electromagnetic fields (such as those generated by USB cables) can sometimes cause slight distortions to printouts. Move the printer away from the source of the electromagnetic fields. Also, it is recommended that you use a USB cable that is less than 3 meters (9.8 feet) long to minimize the effects of these electromagnetic fields.

### Check the paper size

- Make sure the selected paper size matches the actual loaded paper size.

## Placement of the text or graphics is wrong

### Check how the paper is loaded

- Make sure the paper guides fit snugly against the edges of the stack of paper, and make sure the tray is not overloaded. For more information, see [Load paper on page 11](#).

### Check the paper size

- Content on a page might be cut off if the document size is larger than the paper that you are using.
- Make sure the paper size selected in the printer driver matches the size of paper loaded in the tray.

### Check the margin settings

- If the text or graphics are cut off at the edges of the page, make sure the margin settings for the document do not exceed the printable area of your printer. For more information, see [Set minimum margins on page 106](#).

### Check the page-orientation setting


- Make sure the paper size and page orientation selected in the application match the settings in the printer driver. For more information, see [Change basic network settings on page 135](#).

### Check the printer location and length of USB cable

- High electromagnetic fields (such as those generated by USB cables) can sometimes cause slight distortions to printouts. Move the printer away from the source of the electromagnetic fields. Also, it is recommended that you use a USB cable that is less than 3 meters (9.8 feet) long to minimize the effects of these electromagnetic fields.

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

---

 **TIP:** You can visit the HP online support website at [www.hp.com/support](http://www.hp.com/support) for information and utilities that can help you correct many common printer problems.

---

# Print quality troubleshooting

Try the solutions in this section to resolve print quality problems in your printout.

- [Solution 1: Make sure you are using original HP ink cartridges](#)
- [Solution 2: Check the ink levels](#)
- [Solution 3: Check the paper loaded in the input tray](#)
- [Solution 4: Check the paper type](#)
- [Solution 5: Check the print settings](#)
- [Solution 6: Print and evaluate a print quality report](#)
- [Solution 7: Contact HP support](#)


## Solution 1: Make sure you are using original HP ink cartridges

Non-HP ink cartridges were being used.

Check to see if your ink cartridges are original HP ink cartridges.

HP recommends that you use original HP ink cartridges. Original HP ink cartridges are designed and tested with HP printers to help you easily produce great results, time after time.

---

 **NOTE:** HP cannot guarantee the quality or reliability of non-HP supplies. Printer service or repairs required as a result of using a non-HP supply are not covered under warranty.

If you believe you purchased original HP ink cartridges, go to:

[www.hp.com/go/anticounterfeit](http://www.hp.com/go/anticounterfeit)


---


If this did not solve the issue, try the next solution.

## Solution 2: Check the ink levels

The ink cartridges might have insufficient ink.

---

 **NOTE:** Ink level alerts and indicators provide estimates for planning purposes only. When you receive a low-ink alert, consider having a replacement cartridge available to avoid possible printing delays. You do not need to replace the ink cartridges until print quality becomes unacceptable.

 **CAUTION:** While ink cartridges are not damaged when left outside of the printer, the printhead does need to have all cartridges installed at all times after the printer is set up and in use. Leaving one or more cartridge slots empty for an extended period may lead to print quality problems and possibly damage the printhead. If you have recently left a cartridge out of the printer for an extended period, or if you have had a recent paper jam, and have noticed poor print quality, clean the printhead. For more information, see [Clean the printhead on page 84](#).

---

Check the estimated ink levels in the ink cartridges. For more information, see [Check the estimated ink levels on page 41](#).

If this did not solve the issue, try the next solution.

### Solution 3: Check the paper loaded in the input tray

The paper was loaded incorrectly, or it was wrinkled or too thick.

Make sure the paper is loaded correctly and that it is not wrinkled or too thick.

- Load paper with the print side facing down. For example, if you are loading glossy photo paper, load the paper with the glossy side down.
- Make sure the paper lays flat in the input tray and is not wrinkled. If the paper is too close to the printhead during printing, the ink might be smeared. This can happen if the paper is raised, wrinkled, or very thick, such as a mailing envelope.

For more information, see:

- [Load paper on page 11](#)

If this did not solve the issue, try the next solution.

### Solution 4: Check the paper type

The wrong kind of paper was loaded in the input tray.

HP recommends that you use HP papers or any other paper type with ColorLok technology that is appropriate for the printer. All papers with the ColorLok logo are independently tested to meet high standards of reliability and print quality, and produce documents with crisp, vivid color, bolder blacks and dry faster than ordinary plain papers.

Always make sure the paper you are printing on is flat. For best results when printing images, use HP Advanced Photo Paper.

Store specialty paper in its original packaging inside a resealable plastic bag on a flat surface in a cool, dry place. When you are ready to print, remove only the paper you plan to use immediately. When you have finished printing, return any unused photo paper to the plastic bag. This prevents the photo paper from curling.



---

**NOTE:** For this issue, there is not a problem with your ink supplies. Therefore, replacing the ink cartridges is not necessary.

---

For more information, see:

- [Select print paper on page 8](#)

If this did not solve the issue, try the next solution.

### Solution 5: Check the print settings

The print settings were set incorrectly.

Check the print settings.

- Check the print settings to see if the color settings are incorrect.

For example, check to see if the document is set to print in grayscale. Or, check to see if advanced color settings such as saturation, brightness, or color tone, are set to modify the appearance of colors.

- Check the print quality setting and make sure it matches the type of paper loaded in the printer.

You might need to choose a lower print quality setting if colors are running into each other. Or, choose a higher setting if you are printing a high-quality photo, and then make sure photo paper such as HP Advanced Photo Paper is loaded in the input tray.



---

**NOTE:** On some computer screens, colors might appear differently than they do when printed on paper. In this case, there is nothing wrong with the printer, print settings, or ink cartridges. No further troubleshooting is required.

---

For more information, see:

- [Select print paper on page 8](#)

If this did not solve the issue, try the next solution.

## Solution 6: Print and evaluate a print quality report

Print quality problems can have many causes: software settings, a poor image file, or the printing system itself. If you are unhappy with the quality of your prints, a Print Quality Diagnostic page can help you determine if the printing system is working correctly.

### To print a print quality report

- **Control panel:** Press and hold the (Power) button, press the (Cancel) button seven times, press the (Resume) button two times, and then release the (Power) button.
- **Embedded web server:** Click the **Tools** tab, click **Print Quality Toolbox** under **Utilities**, and then click the **Print Quality Report** button.
- **HP Utility (Mac OS X):** In the **Information And Support** section, click **Print Quality Diagnostics**, and then click **Print**.



**HP Officejet 7110 Wide Format Series  
Print Quality Diagnostic Page**

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**Printer Information**

Product model number: CR768A  
Product serial number: CN17B1F22005R1  
Service ID: 21206  
Firmware Version: EBL2FA1127BR  
Pages printed: Tray 1=10, Total=10  
Ink cartridge level\*: K=80, Y=80, M=90, C=90

\*Estimates only. Actual ink levels may vary.

**Test Pattern 1**

If the lines are not straight and connected, align the printheads.



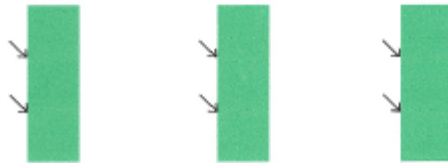
**Test Pattern 2**

If you see thin white lines across any of the colored blocks, clean the printhead.



**Test Pattern 3**

If you see dark lines or white gaps where the arrows are pointing, align printhead.



If defects are seen on the page, follow the steps below:

1. If the lines in Test Pattern 1 are not straight and connected, align the printer. For more information, see [Align the printhead on page 85](#).
2. If you see white lines in any of the color blocks in Test Pattern 2, clean the printhead. For more information, see [Clean the printhead on page 84](#).
3. If you see white or dark lines where the arrows are pointing in Test Pattern 3, align the printer. For more information, see [Align the printhead on page 85](#).

If there are no defects, then the printer and ink system are working properly. If you still see print quality problems in your output, double-check your software settings and paper as described in the previous solutions.

## **Solution 7: Contact HP support**


There was a problem with the printer.

Contact HP support for service.

Go to: [www.hp.com/support](http://www.hp.com/support) . This website provides information and utilities that can help you correct many common printer problems.

If prompted, choose your country/region, and then click **Contact HP** for information on calling for technical support.

# Solve paper-feed problems

 **TIP:** You can visit the HP online support website at [www.hp.com/support](http://www.hp.com/support) for information and utilities that can help you correct many common printer problems.

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## Paper is not supported for the printer or tray

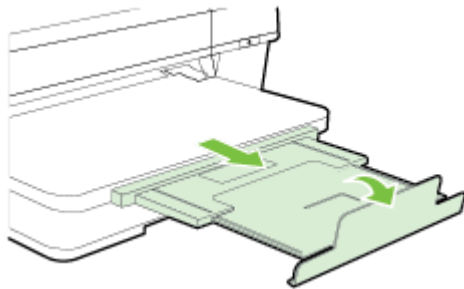
- Use only paper that is supported for the printer and the tray being used. For more information, see [Paper specifications on page 102](#).

## Paper is not picked up from a tray

- Make sure paper is loaded in the tray. For more information, see [Load paper on page 11](#). Fan the paper before loading.
- Make sure the paper guides are set to the correct markings in the tray for the paper size you are loading. Also make sure the paper guides are snug, but not tight, against the stack.
- Make sure paper in the tray is not curled. Uncurl paper by bending it in the opposite direction of the curl.

## Media is not coming out correctly

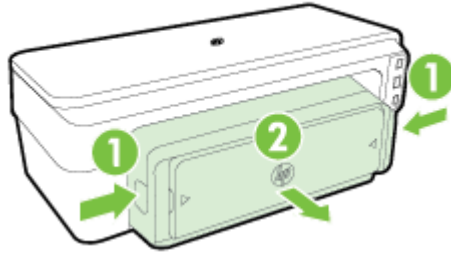
- Make sure the output tray extension is fully extended; otherwise, printed pages may fall off the printer.



- Remove excess paper from the output tray. There is a limit to the number of sheets the tray can hold.

## Pages are skewing

- Make sure the paper loaded in the trays is aligned to the paper guides. If needed, pull out the trays from the printer and reload the paper correctly, making sure that the paper guides are aligned correctly.
- Load paper into the printer only when it is not printing.
- Remove and replace the automatic two-sided printing accessory (duplexer).
  - Push the button on either side of the duplexer, and then remove the unit.



— Reinsert the duplexer into the printer.

### **Multiple pages are being picked up**

- Fan the paper before loading.
- Make sure the paper guides are set to the correct markings in the tray for the paper size you are loading. Also make sure the paper guides are snug, but not tight, against the stack.
- Make sure the tray is not overloaded with paper.
- Use HP paper for optimum performance and efficiency.

# Solve problems using HP ePrint and HP websites

This section provides solutions to common problems using HP ePrint and HP websites.

- [Solve problems using HP ePrint](#)
- [Solve problems using HP websites](#)

## Solve problems using HP ePrint

If you are having problems using HP ePrint, check the following:

- Make sure the printer is connected to the Internet using an Ethernet or wireless connection.



**NOTE:** You cannot use these web features if the printer is connected using a USB cable.

---

- Make sure the latest printer updates have been installed on the printer. For more information, see [Update the printer on page 15](#).
- Make sure HP ePrint is enabled on the embedded web server (EWS). For more information, see [Set up HP ePrint using the embedded web server on page 36](#).
- Make sure the network hub, switch, or router is turned on and working correctly.
- If you are connecting the printer using an Ethernet cable, make sure you are not connecting the printer using a phone cord or a crossover cable to connect the printer to the network and that the Ethernet cable is securely connected to the printer. For more information, see [Solve Ethernet network problems on page 69](#).
- If you are connecting the printer using a wireless connection, make sure the wireless network is functioning properly. For more information, see [Solve wireless problems on page 69](#).
- If you are using HP ePrint, check the following:
  - Make sure the printer's email address is correct.
  - Make sure that the printer's email address is the only address listed in the "To" line of the email message. If other email addresses are listed in the "To" line, the attachments you are sending might not print.
  - Make sure you are sending documents that meet the HP ePrint requirements. For more information, see [HP ePrint specifications on page 108](#).
- If your network uses proxy settings when connecting to the Internet, make sure the proxy settings you are entering are valid:
  - Check the settings being used by the Web browser you are using (such as Internet Explorer, Firefox, or Safari).
  - Check with the IT administrator or person who set up your firewall.

If the proxy settings used by your firewall have changed, you must update these settings in either the printer control panel. If these settings are not updated, you will not be able to use HP ePrint.

For more information, see [Set up HP ePrint using the embedded web server on page 36](#).



**TIP:** For additional help on setting up and using HP ePrint, visit ePrintCenter ( [www.eprintcenter.com](http://www.eprintcenter.com) ).

---

## Solve problems using HP websites

If you are having problems using HP websites from your computer, check the following:

- Make sure the computer that you are using is connected to the Internet.
- Make sure the web browser meets the minimum system requirements. For more information, see [HP website specifications on page 108](#).
- If your web browser uses any proxy settings to connect to the Internet, try turning off these settings. For more information, see the documentation provided with your web browser.

# Configure your firewall software to work with the printer

A personal firewall, which is security software running on your computer, can block network communication between your printer and your computer.

If you are having problems such as:

- Printer not found when installing HP software
- Unable to print, print job stuck in queue or printer goes offline
- Unable to see printer status on your computer

The firewall might be preventing your printer from notifying computers on your network where it can be found.

If you are using the HP software on a computer running Windows and cannot find the printer during installation (and you know the printer is on the network)—or if you have already successfully installed HP software and experience problems—check the following:

- If you have just installed the HP software, try turning off your computer and the printer, and then turning them both on again.
- Keep your security software up to date. Many security software vendors provide updates that correct known issues and provide the latest defenses against new security threats.
- If your firewall has "High," "Medium," or "Low" security settings, use the "Medium" setting when your computer is connected to your network.
- If you have changed any firewall settings from default, try going back to the default setting.
- If your firewall has a setting called "trusted zone," use this setting when your computer is connected to your network.
- If your firewall has a setting to "not show alert messages," you should disable this. When installing the HP software and using the HP printer you may see alert messages from your firewall software that provide options to "allow," "permit" or "unblock." You should allow any HP software that causes an alert. Also, if the alert has a "remember this action" or "create a rule for this" selection, select it. This is how the firewall learns what can be trusted on your network.
- Do not have more than one firewall enabled at the same time on your computer. An example would be having both the Windows firewall provided by the operating system and a third party firewall enabled at the same time. Having more than one firewall enabled at the same time will not make you computer any safer and may cause problems.

For more information about using your printer with personal firewall software, visit [www.hp.com/go/wirelessprinting](http://www.hp.com/go/wirelessprinting), and then click **Firewall Help** in the **Wireless Network Help** section.



**NOTE:** At this time, some portions of this site are not available in all languages.

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# Solve printer management problems

This section provides solutions to common problems that involve managing the printer. This section contains the following topic:

- [Embedded web server cannot be opened](#)



---

**NOTE:** To use the embedded EWS, the printer must be connected to a network using either an Ethernet or a wireless connection. You cannot use the embedded web server if the printer is connected to a computer with a USB cable.

---

## Embedded web server cannot be opened

### Check your network setup

- Make sure you are not using a phone cord or a crossover cable to connect the printer to the network.
- Make sure the network cable is securely connected to the printer.
- Make sure the network hub, switch, or router is turned on and working correctly.

### Check the computer

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



---

**NOTE:** To use the EWS, the printer must be connected to a network using either an Ethernet or a wireless connection. You cannot use the embedded web server if the printer is connected to a computer with a USB cable.

---

### Check your web browser

- Make sure the web browser meets the minimum system requirements. For more information, see [Embedded web server specifications on page 102](#).
- If your web browser uses any proxy settings to connect to the Internet, try turning off these settings. For more information, see the documentation available with your web browser.
- Make sure JavaScript and cookies are enabled in your web browser. For more information, see the documentation available with your web browser.

### Check the printer IP address

- To check the IP address of the printer, obtain the IP address by printing a network configuration page. Press the (Network Information) button to print the network configuration page.
- Ping the printer using the IP address from the command prompt (Windows) or from Network Utility (Mac OS X). (Network Utility is located in the **Utilities** folder in the **Applications** folder at the top level of the hard disk.)

For example, if the IP address is 123.123.123.123, type the following at the command prompt (Windows):

```
C:\>ping 123.123.123.123
```


Or



In Network Utility (Mac OS X), click the **Ping** tab, type the 123.123.123.123 in the box, and then click **Ping**.

If a reply appears, the IP address is correct. If a time-out response appears, the IP address is incorrect.

---

 **TIP:** You can visit the HP online support website at [www.hp.com/support](http://www.hp.com/support) for information and utilities that can help you correct many common printer problems.

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# Solve network problems

This section provides solutions to common problems when you are unable to connect or use the printer over your network.

This section contains the following topics:

- [Solve Ethernet network problems](#)
- [Solve wireless problems](#)
- [Reset the Printer Network Settings](#)


## Solve Ethernet network problems

If you are unable to connect the printer to your Ethernet network, verify that:

- Make sure the Wireless light on the printer does not turn on.
- All cable connections to the computer and the printer are secure.
- The network is operational and the network hub, switch, or router is turned on.
- For computers running Windows, all applications, including virus protection programs, spyware protection programs, and firewalls, are closed or disabled.
- The printer is installed on the same subnet as the computers that use the printer.
- If the installation program cannot discover the printer, print the network configuration page, and enter the IP address manually in the installation program. For more information, see [Understand the network configuration page on page 81](#).
- Reinstall the HP software. For more information, see [Uninstall and reinstall the HP software on page 86](#).

Assigning the printer with a static IP address might resolve some installation problems, such as a conflict with a personal firewall. (Not recommended)

---

 **TIP:** You can visit the HP online support website at [www.hp.com/support](http://www.hp.com/support) for information and utilities that can help you correct many common printer problems.

---


## Solve wireless problems


This section provides information about solving problems you might encounter when connecting the printer to your wireless network.

Follow these suggestions in order, starting with those listed in the “Basic wireless troubleshooting” section. If you still encounter problems, follow the suggestions provided in the “Advanced wireless troubleshooting” section.


- [Basic wireless troubleshooting](#)
- [Advanced wireless troubleshooting](#)
- [After resolving the problems](#)

---


 **TIP:** For more information about troubleshooting wireless problems, visit [www.hp.com/go/wirelessprinting](http://www.hp.com/go/wirelessprinting).

 **NOTE:** After you resolve the problem, follow the instructions in [After resolving the problems on page 75](#).


## Basic wireless troubleshooting

 **NOTE:** If you have already configured the printer for wireless connection but the wireless light is still blinking, restart components of the wireless network.

To restart the components, turn off the router and the printer, and then turn them back on in this order: router first and then the printer. If you still are unable to connect, turn off the router, printer, and your computer. Sometimes, turning off the power and then turning it back on recovers from a network communication issue.

 **NOTE:** If you have not configured the printer for wireless connection, use the HP software to complete the setup. For more information, see [Set up the printer using the embedded web server \(EWS\) on page 140](#).


Perform the following steps in the order presented.


 **TIP:** If you are using a computer running Windows, use the HP Print and Scan Doctor to help diagnose and get assistance in installing and using HP printers on home network. To use this tool, visit the HP Wireless Printing Center [www.hp.com/go/wirelessprinting](http://www.hp.com/go/wirelessprinting), and then click **Print and Scan Doctor** in the **Quick Links** section.




### Step 1 - Make sure the wireless (802.11) light is turned on

- The Wireless light in the printer control panel indicates the status of the wireless capabilities.

#### To turn on the printer wireless capabilities

Press the  ( **Wireless** ) button to turn on the printer wireless capabilities.

 **NOTE:** If your printer supports Ethernet networking, make sure that an Ethernet cable has not been connected to the printer. Connecting an Ethernet cable turns off the printer wireless capabilities.

Light description/Light pattern	Explanation
The Power light is on but the Wireless light is off. 	The wireless capabilities are turned off.
The Power light is on and the Wireless light is on but blinking. 	The wireless capabilities are turned on but the printer is not connected to a network.
The Power light is on and the Wireless light is on and solid. 	The wireless capabilities are turned on but the printer is connected to a network.

## Step 2 - Move the printer closer to the wireless router

- If you have configured the printer for wireless connection and the wireless light is solid, but the printer still has trouble staying connected, or you have print or scan communication issues, try moving the printer closer to the wireless router.

## Step 3 - Run the Wireless Network Test


- For wireless networking issues, run the Wireless Network Test. If a problem is detected, the printed test report includes recommendations that might help solve the problem. For more information about how to print the wireless test page, see [Test the wireless connection on page 142](#).

## Advanced wireless troubleshooting

If you have tried the suggestions provided in [Basic wireless troubleshooting on page 70](#) and are still unable to use the printer over the network with a computer or mobile devices for print, try the following steps in the order presented:

- [Step 1: Make sure your computer is connected to your network](#)
- [Step 2: Make sure that the printer is connected to your network](#)
- [Step 3: Make sure your computer is not connected over a Virtual Private Network \(VPN\)](#)
- [Step 4: Make sure the printer is online and ready](#)
- [Step 5: Make sure the HP printer labeled \(Network\) is set as the default printer driver \(Windows only\)](#)
- [Step 6: Check to see if the firewall software is blocking communication](#)

---

 **TIP:** If you are using a computer running Windows, use the HP Print and Scan Doctor to help diagnose and get assistance in installing and using HP printers on home network. To use this tool, visit the HP Wireless Printing Center [www.hp.com/go/wirelessprinting](http://www.hp.com/go/wirelessprinting), and then click **Print and Scan Doctor** in the **Quick Links** section.

---


### Step 1: Make sure your computer is connected to your network

Make sure your computer is connected to your network—either the Ethernet network or the wireless network. If the computer is not connected to the network, you cannot use the printer over the network.

#### To check an Ethernet connection

- ▲ Many computers have indicator lights beside the port where the Ethernet cable from the router connects to your computer. Usually there are two indicator lights, one that is on and another that blinks. If your computer has indicator lights, check to see if the indicator lights are on. If the lights are not on, try reconnecting the Ethernet cable to the computer and the router. If you still do not see lights, there might be a problem with the router, the Ethernet cable, or your computer.

---

 **NOTE:** Mac computers do not have indicator lights. To check the Ethernet connection on a Macintosh computer, click **System Preferences** in the Dock, and then click **Network**. If the Ethernet connection is working correctly, **Built-in Ethernet** appears in the list of connections, along with the IP address and other status information. If **Built-in Ethernet** does not appear in the list, there might be a problem with the router, the Ethernet cable, or your computer. For more information, click the Help button in the window.

---

## To check a wireless connection

1. Make sure that your computer's wireless has been turned on. (For more information, see the documentation that came with your computer.)
2. If you are not using a unique network name (SSID), then it is possible that your wireless computer could be connected to a nearby network that is not yours.

The following steps can help you determine if your computer is connected to your network.

### Windows

- a. From the computer desktop, click **Start** , click **Control Panel** , point to **Network and Internet**, and then click **View network status and tasks**.

- Or -

From the computer desktop, click **Start** , select **Settings** , click **Control Panel** , double-click **Network Connections**.

- Or -

Right-click an empty area on the **Start** screen, click **All Apps** on the app bar, click **Control Panel** , click **Network and Sharing Center**, and then click **View network status and tasks**.

Leave the network dialog box open while you continue to the next step.

- b. Disconnect the power cord from the wireless router. The connection status of your computer should change to **Not Connected**.
- c. Reconnect the power cord to the wireless router. The connection status should change to **Connected**.

### Mac OS X

- ▲ Click the **AirPort** icon in the menu bar at the top of the screen. From the menu that appears, you can determine if the AirPort is turned on and which wireless network your computer is connected to.



---

**NOTE:** For more detailed information about your AirPort connection, click **System Preferences** in the Dock, and then click **Network** . If the wireless connection is working correctly, a green dot appears next to AirPort in the list of connections. For more information, click the Help button in the window.

---

If you are unable to get your computer connected to your network, contact the person who set up your network or the router manufacturer as there might be a hardware issue with either your router or computer.



---

**TIP:** If you are using a computer running Windows, use the HP Print and Scan Doctor to help diagnose and get assistance in installing and using HP printers on home network. To use this tool, visit the HP Wireless Printing Center [www.hp.com/go/wirelessprinting](http://www.hp.com/go/wirelessprinting) , and then click **Print and Scan Doctor** in the **Quick Links** section.

---

## Step 2: Make sure that the printer is connected to your network

If your printer is not connected to the same network as your computer, you cannot use the printer over the network. Follow the steps described in this section to find out if your printer is actively connected to the correct network.



**NOTE:** If your wireless router or Apple AirPort Base Station is using a hidden SSID, your printer cannot automatically detect the network.

### A: Make sure the printer is on the network

1. If the printer supports Ethernet networking and is connected to an Ethernet network, make sure an Ethernet cable is not plugged into the back of the printer. If an Ethernet cable is plugged into the back, then wireless connectivity is disabled.
2. If the printer is connected to a wireless network, run the Wireless Network Test. For more information about how to print the wireless test page, see [Test the wireless connection on page 142](#).
3. After the page has been printed, check the wireless connection status, the Network Name (SSID), and the IP address:

---

#### Connected

The Connected is listed in the **Connectivity** area, the Diagnostics Results section, which indicates if the printer is connected to your network — either your Ethernet network or your wireless network.

- If the Connected is Ready, the printer is actively connected to a network.
- If the Connected is Offline, the printer is not connected to a network.

---

#### Network Name (SSID)

The Network Name (SSID) is listed in the Current Configuration section, which shows the network name what your printer choose for connecting the wireless network.

---

#### IP Address

The IP Address is listed in the Current Configuration section, which indicates your printer has the valid IP address.

The IP address is the one used to open your printer's embedded web server (EWS).

---

For information about connecting the printer to a wireless network, see [Set up the printer using the embedded web server \(EWS\) on page 140](#).

### B: Check to see if you can access the EWS

- ▲ After you establish that the computer and the printer both have active connections to a network, you can verify if they are on the same network by accessing the printer's EWS. For more information, see [Embedded web server on page 149](#).

#### To access the EWS

- a. On your computer, open the EWS. For more information, see [Embedded web server on page 149](#).



**NOTE:** If you are using a proxy server in your browser, you might need to disable it to access the EWS.

- b. If you can open the EWS, try using the printer over the network (such as to print) to see if your network setup was successful.

If you cannot open the EWS or are still having problems using the printer over the network, continue to the next section regarding firewalls.

### C: Reconfigure wireless settings to make sure the connection is established

- ▲ If the printer is still not connected to your network, you need to reconfigure wireless settings in HP printer software on the computer. For more information about the configuration, see [Basic wireless troubleshooting on page 70](#).



**NOTE:** Make sure an Ethernet cable is not plugged into the back of the printer. If it is plugged into the back, then wireless connectivity is disabled.

---

### Step 3: Make sure your computer is not connected over a Virtual Private Network (VPN)

A Virtual Private Network (VPN) is a computer network that uses the Internet to provide a remote, secure connection to an organization's network. However, most VPN services do not allow you to access local devices (like your printer) on your local network while your computer is connected to the VPN.

To connect to the printer, disconnect from the VPN.



**TIP:** To use the printer while connected to the VPN, you can connect the printer to your computer with a USB cable. The printer uses its USB and network connections at the same time.

---

For more information, contact your network administrator or the person who set up the wireless network.

### Step 4: Make sure the printer is online and ready

If you have the HP software installed, you can check the printer's status from your computer to see if the printer is paused or offline, preventing you from using it.

To check the printer's status, complete the following steps:

#### Windows

1. Click **Start** , and then click **Printers, Printers and Faxes** , or **Devices and Printers** .  
- Or -  
Click **Start** , click **Control Panel** , and then double-click **Printers** .  
- Or -  
On the **Start** screen, click **Control Panel** , and then click **View devices and printers** .
2. If the printers on your computer are not being displayed in Details view, click the **View** menu, and then click **Details** .
3. Do one of the following, depending on the printer status:
  - a. If the printer is **Offline**, right-click the printer, and click **Use Printer Online** .
  - b. If the printer is **Paused**, right-click the printer, and click **Resume Printing** .
4. Try using the printer over the network.

#### Mac OS X

1. Click **System Preferences** in the Dock, and then click **Print & Fax** or **Print & Scan** .
2. Select the printer, and then click **Open Print Queue** .

3. If the print job is on hold, click **Resume**.
4. If the printer is paused, click **Resume Printer**.

If you can use the printer after performing the steps above but find that the symptoms persist as you continue to use the printer, your firewall might be interfering.


If you still cannot use the printer over the network, continue to the next section for additional troubleshooting help.

### Step 5: Make sure the HP printer labeled (Network) is set as the default printer driver (Windows only)

If you install the HP software again, the installer might create a second version of the printer driver in your **Printers, Print & Fax, Devices and Printers, View devices and printers** folder. If you have difficulties printing or connecting to the printer, make sure the correct version of the printer driver is set as the default.

1. Click **Start**, and then click **Printers, Printers and Faxes**, or **Devices and Printers**.  
- Or -  
Click **Start**, click **Control Panel**, and then double-click **Printers**.  
- Or -  
On the **Start** screen, click **Control Panel**, and then click **View devices and printers**.
2. Right-click the printer icon for the version of the printer driver that is connected wirelessly, and select **Set as Default Printer**.

---


 **NOTE:** If there is more than one icon in the folder for the printer, right-click the printer icon for the version of the printer driver that is connected wirelessly, and select **Set as Default Printer**.

---

### Step 6: Check to see if the firewall software is blocking communication

Temporarily turn off the firewall security software running on your computer, and then try to print, scan, or fax to see if the communication is established.

---

 **TIP:** If you are using a computer running Windows, use the HP Print and Scan Doctor to help diagnose and get assistance in installing and using HP printers on home network. To use this tool, visit the HP Wireless Printing Center [www.hp.com/go/wirelessprinting](http://www.hp.com/go/wirelessprinting), and then click **Print and Scan Doctor** in the **Quick Links** section.

Alternatively, the Firewall Help also provides the detailed information about firewall troubleshooting. For more information, visit the HP Wireless Printing Center [www.hp.com/go/wirelessprinting](http://www.hp.com/go/wirelessprinting), and then click **Firewall Help** in the **Wireless Network Help** section.

---

### After resolving the problems

After you resolve any problems and have successfully connected the printer to your wireless network, complete the following steps for your operating system:

#### Windows

1. On the computer desktop, click **Start**, select **Programs** or **All Programs**, click **HP**, select your printer name, and then click **Printer Setup & Software**.  
- Or -



On the **Start** screen, click **Printer Setup & Software**.




2. Click **Connect a new printer**, and then select the type of connection you want to use.

### Mac OS X

1. Open HP Utility. For more information, see [HP Utility \(Mac OS X\)](#) on page 148.
2. Click the **Applications** icon on the HP Utility toolbar, double-click **HP Setup Assistant**, and then follow the on-screen instructions.

## Reset the Printer Network Settings

To reset the printer network settings, complete the following steps:

1. Press and hold the  (**Wireless**) button and the  (Cancel) button for three seconds.
2. Press the  (Network Information) button to print the network configuration page and verify that the network settings have been reset. By default, the network name (SSID) is "HP-Print-\*\*-Officejet 7110", where "\*\*\*" is a random number generated by the printer, and the communication mode is "infrastructure."



---

**NOTE:** Previously configured wireless settings are removed after you reset the printer network settings. You have to reconnect the printer to the wireless network using the Wireless Setup Wizard. For more information, see [Set up the printer using the embedded web server \(EWS\)](#) on page 140.



**TIP:** You can visit the HP online support website at [www.hp.com/support](http://www.hp.com/support) for information and utilities that can help you correct many common printer problems.

---

# Troubleshoot installation issues

If the following topics do not help, see [HP support on page 48](#) for information about HP support.

- [Hardware installation suggestions](#)
- [HP software installation suggestions](#)

## Hardware installation suggestions

### Check the printer

- Make sure that all packing tape and material have been removed from outside and inside the printer.
- Make sure that the printer is loaded with paper.
- Make sure that no lights are on or blinking except the Power light, which should be on.

### Check the hardware connections

- Make sure that any cords and cables that you are using are in good working order.
- Make sure that the power cord is connected securely to both the printer and to a working power outlet.

### Check the ink cartridges

- Make sure that all of the ink cartridges are firmly installed and aligned in their correct, color-coded slot. A correctly installed ink cartridge should not move when pulled slightly. The printer cannot work if all the ink cartridges are not installed.

## HP software installation suggestions

### Check the computer system

- Make sure that your computer is running one of the supported operating systems.
- Make sure that the computer meets at least the minimum system requirements.
- In Windows Device Manager, make sure that the USB drivers have not been disabled.
- If you are using a computer running Windows, and the computer cannot detect the printer, run the uninstallation utility (`util\ccc\uninstall.bat` on the installation CD) to perform a complete uninstallation of the printer driver. Restart your computer, and reinstall the printer driver.

### Verify installation preliminaries

- Make sure to use the installation CD that contains the correct HP software for your operating system.
- Before installing HP software, make sure that all other programs are closed.
- If the computer does not recognize the path to the CD-ROM drive that you type, make sure that you are specifying the correct drive letter.
- If the computer cannot recognize the installation CD in the CD-ROM drive, inspect the installation CD for damage. You can download the printer driver from the HP website [www.hp.com/support](http://www.hp.com/support). This website provides information and utilities that can help you correct many common printer problems.



---

**NOTE:** After correcting any problems, run the installation program again.

---

# Understand the Printer Status Report

Use the printer status report to view current printer information and ink cartridge status. Also use the printer status report to help you troubleshoot problems with the printer.

The printer status report also contains a log of recent events.

If you need to call HP, print the printer status report before calling.

## To print the Printer Status Report

- Press and hold the **X** (Cancel) button for three seconds.

**Printer Status Report**

**1 Product Information**

1. Model Name: HP Officejet 7110 Wide Format  
 2. Model Number: H812a  
 3. Serial Number: CN17B1F22002R1  
 4. Product Number: CR788A  
 5. Service ID: 21206  
 6. Printer Zone (PX): 0  
 7. Firmware Version: EBL3FA1127BR  
 8. FW Patch Version: 0  
 9. Country/Region: US J 1  
 10. Duplexer: Not installed

**2 Print Usage Information**

11. Total Pages Printed: 11  
 12. Borderless Pages Printed: 0

**3 Ink Delivery System Information**

18. Ink: 187  
 19. Ink Supply:  
 20. Estimated Ink Level

	Magenta	Cyan	Yellow	Black
	[ Magenta bar ]	[ Cyan bar ]	[ Yellow bar ]	[ Black bar ]
21. Ink Number:	HP 833 SETUP	HP 833 SETUP	HP 833 SETUP	HP 832 SETUP
22. End of Warranty Date (Y-M-D):	2013/02/26	2013/02/26	2013/02/26	2013/02/26
23. First Installation Date (Y-M-D):	2011/07/23	2011/07/23	2011/07/23	2011/07/23
24. Ink Zone:	1	1	1	1
25. USE:	0	0	0	0
26. HP:	1	1	1	1
27. Supported Ink Cartridges*:	HP 833XL HP 833	HP 833XL HP 833	HP 833XL HP 833	HP 832XL HP 832

\*\*Not all cartridges are available in all regions.

**4 Additional Assistance**

For more information about how to change settings and diagnose problems, see the user documentation for your device. This documentation is available on your computer after you install the software—either from the HP Officejet 7100 Wide Format Printer Software (Windows) or the Help Viewer (Mac OS).

**Wireless Network Test**  
 To verify your product is setup correctly for Wireless, run the Wireless Network Test. You can access this test from the device control panel.

- 1. Product Information:** Shows printer information (such as the printer name, model number, serial number, and firmware version number), the accessories that are installed (such as the duplexer), and the number of pages printed from the trays and accessories.
- 2. Print Usage Information:** Shows summary information about pages printed from the printer.

- 3. Ink Delivery System Information:** Shows the estimated ink levels (represented in graphical form as gauges) and the part numbers and Warranty expiration dates of the ink cartridges.



**NOTE:** Ink level warnings and indicators provide estimates for planning purposes only. When you receive a low-ink warning message, consider having a replacement cartridge available to avoid possible printing delays. You do not need to replace cartridges until prompted to do so.


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- 4. Additional Assistance:** Shows where to find more help for using your printer.

## Understand the network configuration page

If the printer is connected to a network, you can print a network configuration page to view the network settings for the printer and a list of networks detected by your printer. You can use the network configuration page to help troubleshoot network connectivity problems. If you need to call HP, it is often useful to print this page before calling.

### To print the network configuration page from the printer control panel

- Press the  (Network Information) button to print the network configuration page.

## HP Network Configuration Page

<b>1</b>	<b>WPS PIN</b> 00009990 (good for 5 minutes from the time this report was printed)
<b>2</b>	<b>General Information</b> Network Status: Offline Active Connection Type: None URL(s) for Embedded Web Server: http://0.0.0.0 Firmware Revision: EBL2FA1127BR Hostname: HP2847D2 Serial Number: CN17B1F22005R1
<b>3</b>	<b>802.3 Wired</b> Hardware Address (MAC): b4:99:ba:28:47:d2 Link Configuration: None
<b>4</b>	<b>802.11 Wireless</b> Hardware Address (MAC): b4:99:ba:28:57:ba Status: Disabled Communication Mode: Infrastructure Network Name (SSID): Not Set
<b>5</b>	<b>Wireless Direct</b> Status: On Security: Off Network Name (SSID): HP-Print-BA-Officejet 7110 Hardware Address (MAC): 10:1f:7467:10:b4 URL for Embedded Web Server: http://192.168.223.1 Channel: 6 <b>IPv4</b> IP Address: 192.168.223.1 Subnet Mask: 255.255.255.0 Default Gateway: 192.168.223.1 Configuration Source: Manual Primary DNS Server: 0.0.0.0 Secondary DNS Server: 0.0.0.0 Total Packets Transmitted: 67 Total Packets Received: 1318
<b>6</b>	<b>Port 9100</b> Status: Enabled <b>Bonjour</b> Status: Enabled Service Name: Officejet 7110 [2847D2] <b>SLP</b> Status: Enabled <b>Microsoft Web Services</b> <b>WS Discovery</b> Status: Enabled <b>WS Print</b> Status: Enabled <b>IPP</b> Status: Enabled

To print instructions for setting up the printer using a wireless connection, press the Wireless button on the printer control panel twice.

- 1. WPS PIN:** Shows the WPS PIN for you to set up the printer on your wireless network using the PIN Method.
- 2. General Information:** Shows information about the current status and active connection type of the network and other information, such as the URL of the embedded web server.
- 3. 802.3 Wired:** Shows information about the active Ethernet network connection, such as the IP address, subnet mask, default gateway, as well as the hardware address of the printer.

4. **802.11 Wireless:** Shows information about your wireless network connection, such as the host name, IP address, subnet mask, default gateway, and server. It also indicates the network name (SSID), the relative signal strengths and the channels being used. You can check the network list to view if your own network signal strength is good and change the wireless communication setup using embedded web server (EWS). For more information, see [Set up the printer using the embedded web server \(EWS\) on page 140](#).
5. **Wireless Direct:** Shows information about your Wireless Direct Printing connection, such as the network name (SSID), IP address, subnet mask, default gateway, and server.
6. **Miscellaneous:** Shows information about more advanced network settings.
  - **Port 9100:** The printer supports raw IP printing through TCP Port 9100. This HP-proprietary TCP/IP port on the printer is the default port for printing. It is accessed by HP software (for example, the HP Standard Port).
  - **Bonjour:** Bonjour services (which use mDNS, or Multicast Domain Name System) are typically used on small networks for IP address and name resolution (through UDP port 5353), where a conventional DNS server is not used.
  - **SLP:** Service Location Protocol (SLP) is an Internet standard network protocol that provides a framework to allow networking applications to discover the existence, location, and configuration of networked services in enterprise networks. This protocol simplifies discovery and use of network resources such as printers, web servers, fax machines, video cameras, files systems, backup devices (tape drives), databases, directories, mail servers, calendars.
  - **Microsoft Web Services:** Enable or disable the Microsoft Web Services Dynamic Discovery (WS Discovery) protocols or Microsoft Web Services for Devices (WSD) Print services supported on the printer. Disable unused print services to prevent access through those services.



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**NOTE:** For more information about WS Discovery and WSD Print, visit [www.microsoft.com](http://www.microsoft.com).

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- **IPP:** Internet Printing Protocol (IPP) is a standard network protocol for remote printing. Unlike other remote IP-based protocols, IPP supports access control, authentication, and encryption, allowing for more secure printing.



# Printhead maintenance

If you are experiencing problems with printing, you might have a problem with the printhead. You should perform the procedures in the following sections only when directed to do so for resolving print quality issues.

Performing the aligning and cleaning procedures unnecessarily can waste ink and shorten the life of the cartridges.

This section contains the following topics:

- [Clean the printhead](#)
- [Align the printhead](#)

## Clean the printhead

If your printed output is streaked or has any incorrect or missing colors, the printhead might need to be cleaned.

There are two stages of cleaning. Each stage lasts about two minutes, uses one sheet of paper, and uses an increasing amount of ink. After each stage, review the quality of the printed page. You should only initiate the next phase of cleaning if the print quality is poor.

If print quality still seems poor after you complete both stages of cleaning, try aligning the printer. If print quality problems persist after cleaning and aligning, contact HP support. For more information, see [HP support on page 48](#).



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**NOTE:** Cleaning uses ink, so clean the printheads only when necessary. The cleaning process takes a few minutes. Some noise might be generated in the process. Before cleaning the printheads, make sure you load paper. For more information, see [Load paper on page 11](#).

Not turning the printer off correctly can cause print quality problems. For more information, see [Turn the printer off on page 14](#).

---

### To clean the printhead from the embedded web server (EWS)

1. Open the EWS. For more information, see [Embedded web server on page 149](#).
2. Click the **Tools** tab, and then click **Print Quality Toolbox** in the **Utilities** section.
3. Click **Clean Printhead** and follow the on-screen instructions.

### To clean the printhead from Toolbox (Windows)

1. Load Letter, A4, or Legal unused plain white paper into the main input tray. For more information, see [Load standard-size paper on page 11](#).
2. Open Toolbox. For more information, see [Open the Toolbox on page 147](#).
3. From the **Device Services** tab, click the icon to the left of **Clean Printheads**.
4. Follow the on-screen instructions.

### To clean the printhead from HP Utility (Mac OS X)



1. Open HP Utility. For more information, see [HP Utility \(Mac OS X\) on page 148](#).
2. In the **Information And Support** section, click **Clean Printheads**.
3. Click **Clean**, and then follow the on-screen instructions.

## Align the printhead

The printer automatically aligns the printhead during the initial setup.

You might want to use this feature when the printer status page shows streaking or white lines through any of the blocks of color or if you are having print quality issues with your printouts.

### To align the printhead from the printer control panel

1. Load letter, A4, or legal unused plain white paper into the main input tray.
2. On the printer control panel, press and hold the  (Power) button.
3. Press the  (Resume) button three times.

### To align the printhead from the embedded web server (EWS)

1. Open the EWS. For more information, see [Embedded web server on page 149](#).
2. Click the **Tools** tab, and then click **Print Quality Toolbox** in the **Utilities** section.
3. Click **Align Printer** and follow the on-screen instructions.

### To align the printhead from Toolbox (Windows)

1. Load Letter, A4, or Legal unused plain white paper into the main input tray. For more information, see [Load standard-size paper on page 11](#).
2. Open Toolbox. For more information, see [Open the Toolbox on page 147](#).
3. From the **Device Services** tab, click the icon to the left of **Align Printheads**.
4. Follow the on-screen instructions.


### To align the printhead from HP Utility (Mac OS X)

1. Open HP Utility. For more information, see [HP Utility \(Mac OS X\) on page 148](#).
2. In the **Information And Support** section, click **Align**.
3. Click **Align**, and then follow the on-screen instructions.

# Uninstall and reinstall the HP software

If your installation is incomplete, or if you connected the USB cable to the computer before prompted by the HP software installation screen, you might need to uninstall and then reinstall the HP software that came with the printer. Do not simply delete the printer application files from your computer. Make sure to remove them correctly using the uninstall utility provided when you installed the HP software.

## To uninstall from a Windows computer, method 1

1. Disconnect the printer from your computer. Do not connect it to your computer until after you have reinstalled the HP software.
2. On the computer desktop, click **Start**, select **Programs** or **All Programs**, click **HP**, click the printer name, and then click **Uninstall**.
3. Follow the on-screen instructions.
4. If you are asked whether you would like to remove shared files, click **No**.  
Other programs that use these files might not work correctly if the files are deleted.
5. Restart your computer.
6. To reinstall the HP software, insert the HP software CD into your computer's CD drive, and follow the on-screen instructions.
7. Connect the printer when the HP software prompts you to connect it to the computer.
8. Press the  (Power) button to turn the printer on.

After connecting and turning on the printer, you might have to wait several minutes for all of the Plug and Play events to complete.

9. Follow the on-screen instructions.

## To uninstall from a Windows computer, method 2



**NOTE:** Use this method if **Uninstall** is not available in the Windows Start menu.

1. On the computer desktop, click **Start**, select **Settings**, click **Control Panel**, and then click **Add/Remove Programs**.  
- Or -  
Click **Start**, click **Control Panel**, and then click **Uninstall a Program** or double-click **Programs and Features**.  
- Or -  
On the **Start** screen, click **Control Panel**, and then click **Uninstall a program**.
2. Select the HP printer software, and then click **Uninstall**.  
Follow the on-screen instructions.
3. Disconnect the printer from your computer.
4. Restart your computer.



---

**NOTE:** It is important that you disconnect the printer before restarting your computer. Do not connect the printer to your computer until after you have reinstalled the HP software.

---

5. Insert the HP software CD into your computer's CD drive and then start the Setup program.
6. Follow the on-screen instructions.

#### **To uninstall from a Mac computer**

1. Double-click the **HP Uninstaller** icon (located in the **Hewlett-Packard** folder in the **Applications** folder at the top level of the hard disk), and then click **Continue**.
2. When prompted, type the correct administrator's name and password, and then click **OK**.
3. Follow the on-screen instructions.
4. When the **HP Uninstaller** finishes, restart your computer.

# Clear jams

Occasionally, paper becomes jammed during a job.

This section contains the following topics:

- [Clear paper jams](#)
- [Avoid paper jams](#)

## Clear paper jams

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**CAUTION:** To prevent possible damage to the printhead, clear paper jams as soon as possible.

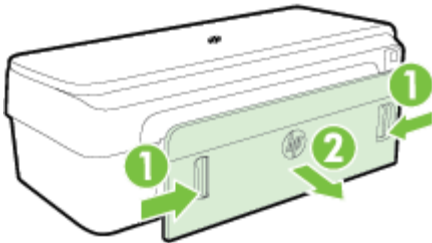
**TIP:** If you notice poor print quality, clean the printhead. For more information, see [Clean the printhead on page 84](#).

---

### To clear a jam

Use these steps to clear a paper jam.

1. Remove all papers from the output tray.
2. Push the handle on either side of the rear access panel (or duplexer,) and then pull the panel (or duplexer) towards you.



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**CAUTION:** Trying to clear a paper jam from the front of the printer can damage the print mechanism. Always access and clear paper jams through the rear access panel.

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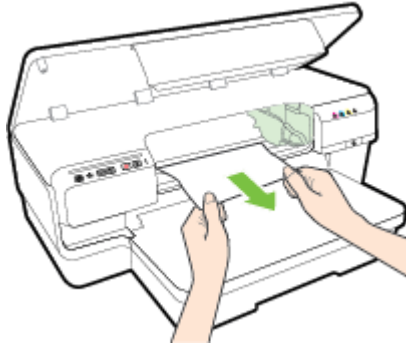
3. Gently pull the paper out of the rollers.

**CAUTION:** If the paper tears when you are removing it from the rollers, check the rollers and wheels for torn pieces of paper that might be remaining inside the printer. If you do not remove all the pieces of paper from the printer, more paper jams are likely to occur.

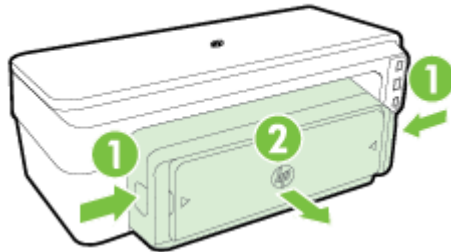
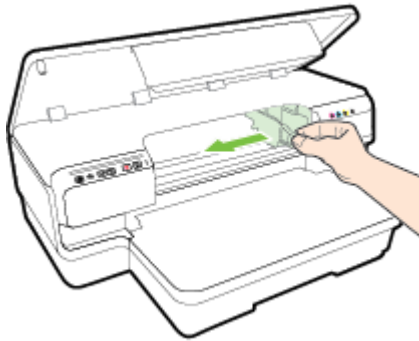
---

4. Replace the rear access panel (or the duplexer). Gently push the door (or the duplexer) forward until it snaps into place.
5. Check the front of the printer.
  - a. Open the ink cartridge access door.

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



- c. Move the carriage to the left, locate any jammed paper inside the printer on the right side of the carriage, free any paper scraps or wrinkled paper, and pull the paper towards you through the top of the printer.



---

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

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6. After clearing the jam, close all covers, turn on the printer (if you turned it off) and resend the print job.

## Avoid paper jams

To help avoid paper jams, follow these guidelines.

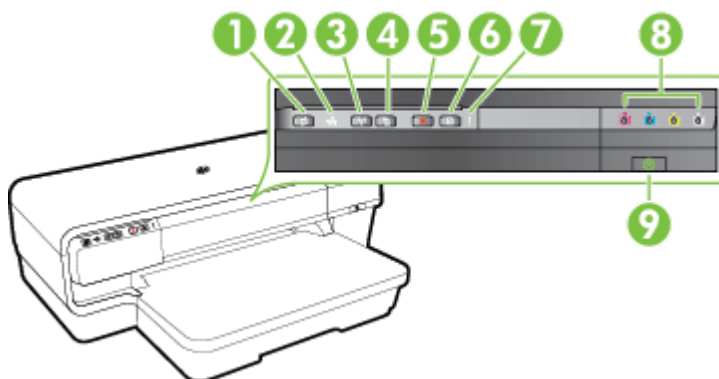
- Remove printed papers from the output tray frequently.
- Make sure that you are printing with paper that is not wrinkled, folded, or damaged.









- Prevent curled or wrinkled paper by storing all unused paper flat in a resealable bag.
- Do not use paper that is too thick or too thin for the printer.
- Ensure that paper loaded in the input tray lays flat and the edges are not bent or torn.
- Make sure that the tray is loaded correctly and is not too full. For more information, see [Load paper on page 11](#).
- Do not combine different paper types and paper sizes in the input tray; the entire stack of paper in the input tray must be the same size and type.
- Adjust the paper guides in the input tray to fit snugly against all paper. Make sure the paper guides does not bend the paper in the input tray.
- Do not force paper too far forward in the input tray.
- If you are printing on both sides of a page, do not print highly saturated images on light weight paper.
- Use paper types that are recommended for the printer. For more information, see [Paper specifications on page 102](#).
- Make sure that the printer is clean.

# Control panel lights reference




The control panel lights indicate the status and are useful for diagnosing printing problems. This section contains information about the lights, what they indicate, and what action to take if necessary.

For more information, visit the HP website [www.hp.com/support](http://www.hp.com/support) for the latest troubleshooting information, printer fixes, and updates. This website provides information and utilities that can help you correct many common printer problems.








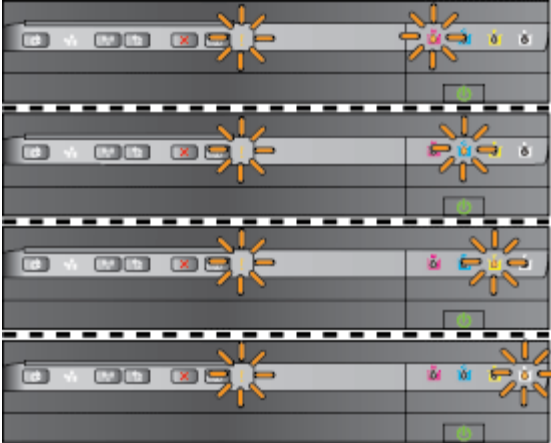
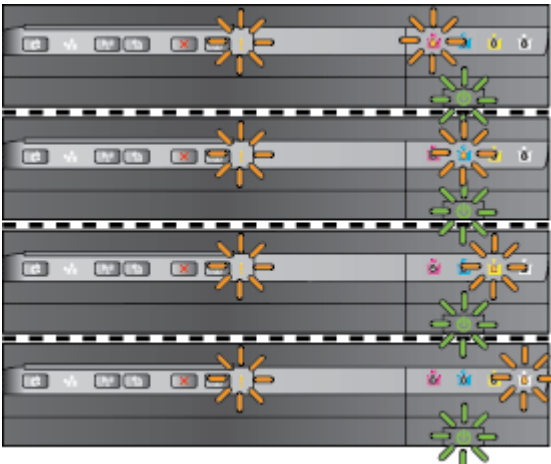

1	ePrint button  and light
2	Ethernet light 
3	Wireless button  and light
4	Network Information button 
5	Cancel button 
6	Resume button  and light
7	Alert light 
8	Ink cartridge lights
9	Power button  and light

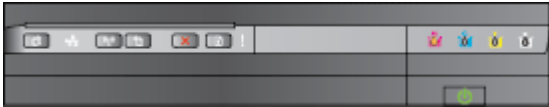






## Interpreting control panel lights




Light description/Light pattern	Explanation and recommended action
<p>All lights are off.</p> 	<p>The printer is off.</p> <ul style="list-style-type: none"> <li>• Connect the power cable.</li> <li>• Press the  (Power) button.</li> </ul>
<p>The Power light is on.</p> 	<p>The printer is ready.</p> <ul style="list-style-type: none"> <li>• No action is required.</li> </ul>



Light description/Light pattern	Explanation and recommended action
<p>The Power light blinks.</p> 	<p>The printer is turning on or off, or is processing a print job.</p> <ul style="list-style-type: none"> <li>No action is required.</li> </ul> <p>The printer is pausing for the ink to dry.</p> <ul style="list-style-type: none"> <li>Wait for the ink to dry.</li> </ul>
<p>The Power light is on, and the Alert light and the Resume light blink.</p> 	<p>Print paper is jammed in the printer.</p> <ul style="list-style-type: none"> <li>Remove all paper from the output tray. Locate and clear the jam. For more information, see <a href="#">Clear jams on page 88</a>.</li> </ul> <p>The paper width setting does not match the paper loaded.</p> <ul style="list-style-type: none"> <li>Change the paper setting in the print driver to match the paper loaded. For more information, see <a href="#">Print on special and custom-sized paper on page 27</a></li> </ul> <p>The printer is out of paper.</p> <ul style="list-style-type: none"> <li>Load paper and press the  (Resume) button.</li> </ul> <p>The printer carriage has stalled.</p> <ul style="list-style-type: none"> <li>Open the top cover and remove any obstructions (such as jammed paper).</li> <li>Press the  (Resume) button to continue printing.</li> <li>If the error persists, turn the printer off, and then on again.</li> </ul>
<p>The Power light is on and the Alert light blinks.</p> 	<p>A front cover, cleanout, duplexer, or jam door is not closed completely.</p> <ul style="list-style-type: none"> <li>Make sure all covers are completely closed.</li> </ul>

Light description/Light pattern	Explanation and recommended action
<p>The Power light is on, the Alert light blinks, and the ink cartridge lights blink one after the other, from left to right.</p>	<p>The printhead is missing or faulty</p> <ul style="list-style-type: none"> <li>• Turn off the printer, and then turn it on again.</li> <li>• If the error persists, contact HP support for service or replacement. For more information, see <a href="#">HP support on page 48</a>.</li> </ul>
	<ul style="list-style-type: none"> <li>• The printhead is incompatible. <ul style="list-style-type: none"> <li>— Turn off the printer, and then turn it on again.</li> <li>— If the error persists, contact HP support for service or replacement. For more information, see <a href="#">HP support on page 48</a>.</li> </ul> </li> </ul>
<p>The Power light and the Alert light blink, and the ink cartridge lights blink one after the other, from left to right.</p>	<ul style="list-style-type: none"> <li>• The ink cartridge is faulty, needs attention, incorrect, or incompatible. <ul style="list-style-type: none"> <li>— Ensure the ink cartridge is properly installed, and then try to print. Remove and re-insert the ink cartridge a few times if necessary.</li> <li>— If the error persists, replace the ink cartridge.</li> </ul> </li> </ul>
	<p>One or more of the ink cartridges are missing.</p> <ul style="list-style-type: none"> <li>• Install the indicated ink cartridge, and then try to print. Remove and re-insert the ink cartridge a few times if necessary.</li> <li>• If the error persists, replace the indicated ink cartridge.</li> </ul>
<p>The Power light is on, the Alert light and one or more of the ink cartridge lights blink.</p>	<p>Ink level is depleted.</p> <ul style="list-style-type: none"> <li>• Replace the indicated ink cartridge. For ordering information, see <a href="#">Supplies on page 133</a>.</li> </ul>
	<p><b>NOTE:</b> You do not need to replace the ink cartridges until you are prompted to.</p>

Light description/Light pattern	Explanation and recommended action
<p>The Power light is on and one or more of the ink cartridge lights are on.</p> 	<p>One or more of the ink cartridges are low on ink and will need to be replaced soon.</p> <p><b>NOTE:</b> Ink level alerts and indicators provide estimates for planning purposes only. When you receive a low-ink alert, consider having a replacement cartridge available to avoid possible printing delays.</p>
<p>The Power light is on, and the Resume light and one or more ink cartridge lights blink.</p> 	<p>One or more ink cartridges are out of ink.</p> <ul style="list-style-type: none"> <li>If the black ink cartridge or one or more color ink cartridges are out of ink, continue to print using the remaining ink cartridges, but the printer will print more slowly. Also, the quality of printed documents might be affected. For more information, see <a href="#">Printing with black or color ink only on page 42</a>.</li> <li>If both the black ink cartridge and a color ink cartridge are out of ink, purchase new ink cartridges and replace the depleted ones when prompted to do so. For information on how to install new cartridges, see <a href="#">Replace the ink cartridges on page 43</a>.</li> </ul> <p>One or more used, refilled, or counterfeit ink cartridges are detected.</p> <ul style="list-style-type: none"> <li>Either replace the refilled or non-HP cartridges with original HP ink cartridges, or press the  (Resume) button to continue using the cartridge. For more information, see <a href="#">Replace the ink cartridges on page 43</a>.</li> </ul>
<p>All lights blink.</p> 	<p>A non-recoverable error has occurred. Unplug the power cord, and then plug the power cord back in, and try printing.</p>
<p>The HP ePrint light is off.</p> 	<p>HP ePrint has not been set up.</p> <ul style="list-style-type: none"> <li>To set up HP ePrint, press the  (HP ePrint) button, and then follow the instructions on the information page that prints.</li> </ul> <p>HP ePrint has been set up but has been turned off.</p> <ul style="list-style-type: none"> <li>To turn on HP ePrint, press the  (HP ePrint) button.</li> </ul> <p>HP ePrint is turned on but is unable to connect.</p> <ul style="list-style-type: none"> <li>HP ePrint is unable to connect, possibly because the server is unavailable or</li> </ul>

Light description/Light pattern	Explanation and recommended action
	<p>the network is not functioning properly.</p> <p>If your network uses proxy settings when connecting to the Internet, make sure the proxy settings you are entering are valid. For more information, see the getting started guide provided with the printer or check with the IT administrator or person who set up your network.</p> <p>Press the  (HP ePrint) button to try connecting again.</p> <ul style="list-style-type: none"> <li>— If the printer can connect, the HP ePrint light turns on, and the printer prints an information page.</li> <li>— If the printer still cannot connect, the HP ePrint light blinks and then turns off, and the printer prints an information page.</li> </ul> <p>HP ePrint has been set up but has been turned off because the printer has not been updated.</p> <ul style="list-style-type: none"> <li>• If a mandatory update for the printer is available but has not been installed, HP ePrint is turned off. After the update has been installed, HP ePrint turns on automatically.</li> </ul> <p>For more information about installing the printer update, press the  (HP ePrint) button.</p>
<p>The HP ePrint light is on.</p> 	<p>HP ePrint is turned on.</p> <p>If you press the  (HP ePrint) button once, the printer prints an information page that includes the email address you will use for printing documents using HP ePrint.</p> <p>To turn off HP ePrint, press and hold the  (HP ePrint) button. The light blinks for five seconds before turning off.</p>
<p>The HP ePrint light blinks.</p> 	<p>HP ePrint is trying to connect.</p> <p>The HP ePrint light blinks when you turn on or turn off HP ePrint.</p> <p>If HP ePrint is able to connect successfully, the light blinks and then turns on. If HP ePrint cannot connect, the light blinks and then turns off.</p>



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# A Technical information

This section contains the following topics:

- [Warranty information](#)
- [Printer specifications](#)
- [Regulatory information](#)
- [Environmental product stewardship program](#)
- [Third-party licenses](#)

## Warranty information

This section contains the following topics:

- [Hewlett-Packard limited warranty statement](#)
- [Ink cartridge warranty information](#)

## Hewlett-Packard limited warranty statement

HP product	Duration of limited warranty
Software Media	90 days
Printer	1 year
Print or Ink cartridges	Until the HP Ink is depleted or the "end of warranty" date printed on the cartridge has been reached, whichever occurs first. This warranty does not cover HP Ink products that have been refilled, remanufactured, refurbished, misused, or tampered with.
Printheads (only applies to products with customer replaceable printheads)	1 year
Accessories	1 year unless otherwise stated

### A. Extent of limited warranty

- Hewlett-Packard (HP) warrants to the end-user customer that the HP products specified above will be free from defects in materials and workmanship for the duration specified above, which duration begins on the date of purchase by the customer.
- For software products, HP's limited warranty applies only to a failure to execute programming instructions. HP does not warrant that the operation of any product will be interrupted or error free.
- HP's limited warranty covers only those defects that arise as a result of normal use of the product, and does not cover any other problems, including those that arise as a result of:
  - Improper maintenance or modification;
  - Software, media, parts, or supplies not provided or supported by HP;
  - Operation outside the product's specifications;
  - Unauthorized modification or misuse.
- For HP printer products, the use of a non-HP cartridge or a refilled cartridge does not affect either the warranty to the customer or any HP support contract with the customer. However, if printer failure or damage is attributable to the use of a non-HP or refilled cartridge or an expired ink cartridge, HP will charge its standard time and materials charges to service the printer for the particular failure or damage.
- If HP receives, during the applicable warranty period, notice of a defect in any product which is covered by HP's warranty, HP shall either repair or replace the product, at HP's option.
- If HP is unable to repair or replace, as applicable, a defective product which is covered by HP's warranty, HP shall, within a reasonable time after being notified of the defect, refund the purchase price for the product.
- HP shall have no obligation to repair, replace, or refund until the customer returns the defective product to HP.
- Any replacement product may be either new or like-new, provided that it has functionality at least equal to that of the product being replaced.
- HP products may contain remanufactured parts, components, or materials equivalent to new in performance.
- HP's Limited Warranty Statement is valid in any country where the covered HP product is distributed by HP. Contracts for additional warranty services, such as on-site service, may be available from any authorized HP service facility in countries where the product is distributed by HP or by an authorized importer.

### B. Limitations of warranty

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

### C. Limitations of liability

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

### D. Local law

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

#### HP Limited Warranty

The name and address of the HP entity responsible for the performance of the HP Limited Warranty in your country is as follows:

**United Kingdom:** Hewlett-Packard Ltd Cain Road Bracknell GB-Berks RG12 1HN

**Eire:** Hewlett-Packard Ireland Limited, 63-74 Sir John Rogerson's Quay, Dublin 2

**Malta:** Hewlett-Packard International Trade B.V. Malta Branch, 48, Amery Street, Silema SLM 1701, MALTA

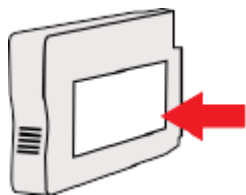
You may have additional statutory rights against the seller based on your purchase agreement. Those rights are not in any way affected by this HP Limited Warranty.

## Ink cartridge warranty information

The HP cartridge warranty is applicable when the product is used in its designated HP printing device. This warranty does not cover HP ink products that have been refilled, remanufactured, refurbished, misused, or tampered with.



During the warranty period the product is covered as long as the HP ink is not depleted and the end of warranty date has not been reached. The end of warranty date, in YYYY-MM format, may be found on the product as indicated:



# Printer specifications

This section contains the following topics:

- [Physical specifications](#)
- [Product features and capacities](#)
- [Processor and memory specifications](#)
- [System requirements](#)
- [Network protocol specifications](#)
- [Embedded web server specifications](#)
- [Paper specifications](#)
- [Print resolution](#)
- [HP ePrint and HP website specifications](#)
- [Environmental specifications](#)
- [Electrical specifications](#)
- [Acoustic emission specifications](#)

## Physical specifications

### Printer size (width x height x depth)

- 585 x 189 x 419 mm (23 x 7.4 x 16.5 inches)

### Printer weight (does not include printing supplies)

- 8.1 kg (17.9 lb)

## Product features and capacities

Feature	Capacity
Connectivity	<ul style="list-style-type: none"><li>• USB 2.0-compliant high speed</li><li>• Wireless (802.11b/g/n <sup>1</sup>) network</li><li>• Ethernet(802.3) network</li></ul> <p><sup>1</sup> This product supports the 802.11n 2.4 GHz frequency band.</p>
Print method	Drop-on-demand thermal inkjet printing
Ink cartridges	Four ink cartridges (one each for black, cyan, magenta, and yellow)  <b>NOTE:</b> Not all ink cartridges are supported in all countries/regions.
Printheads	One printhead

Feature	Capacity
Supply yields	Visit <a href="http://www.hp.com/go/learnabouteinksupplies/">www.hp.com/go/learnabouteinksupplies/</a> for more information on estimated ink cartridge yields.
Printer languages	HP PCL 3
Font support	US fonts: CG Times, CG Times Italic, Universe, Universe Italic, Courier, Courier Italic, Letter Gothic, Letter Gothic Italic.
Duty cycle	Up to 12,000 pages per month

## Processor and memory specifications

### Printer processor

- ARM R4

### Printer memory

- 128 MB built-in RAM

## System requirements

Software and system requirements are located in the Readme file.



**NOTE:** For the most current information about supported operating systems and system requirements, visit [www.hp.com/support](http://www.hp.com/support).

## Network protocol specifications

Software and system requirements are located in the Readme file.

## Embedded web server specifications

### Requirements

- A TCP/IP-based network (IPX/SPX-based networks are not supported)
- A web browser (either Microsoft Internet Explorer 7.0 or higher, Mozilla Firefox 3.0 or higher, Safari 3.0 or higher, or Google Chrome 5.0 or higher)
- A network connection (cannot be used with a printer connected to a computer using a USB cable)
- An Internet connection (required for some features)



**NOTE:** You can open the embedded web server without being connected to the Internet. However, some features are not available.



**NOTE:** The embedded web server must be on the same side of a firewall as the printer.

## Paper specifications

Use these tables to determine the correct paper to use with your printer, and determine what features work with your paper.

- [Understand specifications for supported paper](#)
- [Set minimum margins](#)
- [Guidelines for printing on both sides of a page](#)

## Understand specifications for supported paper

Use the tables to determine the correct paper to use with your printer, and to determine what features work with your paper.

- [Understand supported sizes](#)
- [Understand supported paper types and weights](#)

### Understand supported sizes

 **TIP:** If you are using the duplexer, the minimum top and bottom margins must be at least 16 mm (0.63 inches).

Paper size	Input tray	Duplexer
<b>Standard paper sizes</b>		
10 x 15 cm *	✓	
2L *	✓	
U.S. Letter (216 x 279 mm; 8.5 x 11 inches)	✓	✓
8.5 x 13 inches (216 x 330 mm)	✓	✓
U.S. Legal (216 x 356 mm; 8.5 x 14 inches)	✓	✓
A4 (210 x 297 mm; 8.3 x 11.7 inches) *	✓	✓
U.S. Executive (184 x 267 mm; 7.25 x 10.5 inches)	✓	✓
U.S. Statement (140 x 216 mm; 5.5 x 8.5 inches)	✓	
B5 (JIS) (182 x 257 mm; 7.17 x 10.12 inches) *	✓	✓
6 X 8 inches	✓	✓
A5 (148 x 210 mm; 5.8 x 8.3 inches) *	✓	
Edge-to-Edge A4 *	✓	
Edge-to-Edge Letter *	✓	
<b>B sizes</b>		
11 x 14 inches *	✓	✓
12 x 12 inches *	✓	
B4 (JIS) (257 x 364 mm)	✓	✓
Tabloid (11 x 17 inches) *	✓	✓

Paper size	Input tray	Duplexer
Super B (13 x 19 inches) *	✓	
A3 (297 x 420 mm; 11.69 x 16.54 inches) *	✓	✓
A3+ (330 x 483 mm; 12.99 x 18.98 inches) *	✓	
Edge-to-Edge Tabloid (11 x 17 inches)*	✓	
Edge-to-Edge A3*	✓	
<b>Envelopes</b>		
U.S. #10 Envelope (105 x 241 mm; 4.12 x 9.5 inches)	✓	
Monarch Envelope (98 x 191 mm; 3.88 x 7.5 inches)	✓	
No. 6 ¾ Envelope (92 x 165 mm; 3.63 x 6.5 inches)	✓	
Card Envelope (111 x 152 mm; 4.4 x 6 inches)	✓	
A2 Envelope (111 x 146 mm; 4.37 x 5.75 inches)	✓	
DL Envelope (110 x 220 mm; 4.3 x 8.7 inches)	✓	
C5 Envelope (162 x 229 mm; 6.4 x 9 inches)		
C6 Envelope (114 x 162 mm; 4.5 x 6.4 inches)	✓	
Japanese Envelope Chou #3 (120 x 235 mm; 4.7 x 9.3 inches)	✓	
Japanese Envelope Chou #4 (90 x 205 mm; 3.5 x 8.1 inches)	✓	
<b>Cards</b>		
Index card (76.2 x 127 mm; 3 x 5 inches)	✓	
Index card (102 x 152 mm; 4 x 6 inches)	✓	
Index card (127 x 203 mm; 5 x 8 inches)	✓	
A6 card (105 x 148.5 mm; 4.13 x 5.83 inches)*	✓	
A6 card (105 x 148.5 mm; 4.13 x 5.83 inches) *	✓	
A4 index card (210 x 297 mm; 8.3 x 11.7 inches)	✓	
Letter index card (8.5 x 11 inches)	✓	
Hagaki (100 x 148 mm; 3.9 x 5.8 inches) **	✓	
Also supports Borderless printing.		
Ofuku Hagaki (200 x 148 mm; 7.8 x 5.8 inches) **	✓	
<b>Photo paper</b>		
Photo paper (76.2 x 127 mm; 3 x 5 inches)	✓	
Photo paper (102 x 152 mm; 4 x 6 inches) *		

Paper size	Input tray	Duplexer
Photo paper (5 x 7 inches) *	✓	
Photo paper (8 x 10 inches) *	✓	
Photo paper (8.5 x 11 inches) *	✓	
Photo L (89 x 127 mm; 3.5 x 5 inches) *	✓	
Photo 2L (127 x 178 mm) *	✓	
Cabinet size (120x165mm)*	✓	
13 x 18 cm *	✓	
<b>Brochures</b>		
B5 (JIS) (182 x 257 mm; 7.17 x 10.12 inches) *	✓	✓
11 x 14 inches*	✓	✓
Tabloid (11 x 17 inches) *	✓	✓
A3 (297 x 420 mm; 11.69 x 16.54 inches) *	✓	✓
<b>Other paper</b>		
<b>NOTE:</b> Defining custom-size paper sizes is only available in the HP printing software in Mac OS X.		
Custom-sized paper between 76.2 to 330 mm wide and 127 to 1118 mm long (3 to 13 inches wide and 5 to 44 inches long)	✓	

\*These sizes can be used for borderless printing.

\*\* The printer is compatible with plain and inkjet hagaki from Japan Post only. It is not compatible with photo hagaki from Japan Post.

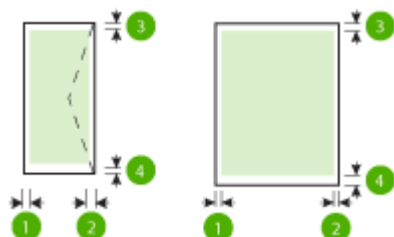
### Understand supported paper types and weights

Tray	Type	Weight	Capacity
Input tray	Paper	60 to 105 g/m <sup>2</sup> (16 to 28 lb bond)	Up to 250 sheets of 20lb HP Multipurpose Paper  (25 mm or 1 inch stacked)
	Photo paper	280 gsm (75 lb bond)	Up to 60 sheets of 280 gsm HP Premium Plus Photo Paper  (17 mm or 0.67 inch stacked)
	Envelopes	75 to 90 g/m <sup>2</sup> (20 to 24 lb bond envelope)	Up to 30 sheets  (17 mm or 0.67 inch stacked)
	Cards	Up to 200 g/m <sup>2</sup> (110 lb index)	Up to 80 cards

Tray	Type	Weight	Capacity
	Brochures	180 gsm	Up to 65 sheets of 180 gsm HP Brochure and Flyer Paper Matte
Duplexer	Plain and brochure	60 to 180 g/m <sup>2</sup> (16 to 48 lb bond)	Not applicable
Output-tray	All supported paper		Up to 75 sheets of plain paper (text printing)

## Set minimum margins

The document margins must match (or exceed) these margin settings in portrait orientation.



Paper	(1) Left margin	(2) Right margin	(3) Top margin	(4) Bottom margin
U.S. Letter	3.3 mm (0.13 inch)	3.3 mm (0.13 inch)	3.3 mm (0.13 inch)	3.3 mm (0.13 inch)
U.S. Legal				Windows and 12mm (0.47 inch) Mac and Linux
A4				
U.S. Executive				
U.S. Statement				
8.5 x 13 inch				
B5				
A5				
Cards				
Custom-sized paper				
Photo paper				

Paper	(1) Left margin	(2) Right margin	(3) Top margin	(4) Bottom margin
11 x 14 inches	5 mm (0.197 inch) <sup>1</sup>	5 mm (0.197 inch) <sup>1</sup>	5 mm (0.197 inch) <sup>2</sup>	5 mm (0.197 inch) <sup>2</sup>
12 x 12 Inches				
B4 (JIS)				
Tabloid				
Super B				
A3				
A3+				
Edge-to-Edge Tabloid				
Edge-to-Edge A3				
Envelopes	3.3 mm (0.13 inch)	3.3 mm (0.13 inch)	16.5 mm (0.65 inch)	16.5 mm (0.65 inch)

<sup>1</sup> The margins for plain and brochure paper are 13 mm (0.51 inch) for simplex and duplex.

<sup>2</sup> The margins for plain paper are 16 mm (0.63 inch) for simplex and 22 mm (0.87 inch) for duplex. For brochure paper, the margins are 16 mm (0.63 inch) for simplex and duplex.

## Guidelines for printing on both sides of a page

- Always use paper that conforms to the printer specifications. For more information, see [Paper specifications on page 102](#).
- Specify two-sided printing options in your application or in the printer driver.
- Do not print on both sides of envelopes, photo paper, glossy paper, or paper lighter than 16 lb bond (60 g/m<sup>2</sup>) or heavier than 28 lb bond (105 g/m<sup>2</sup>). Jams might occur with these paper types.
- Several kinds of papers require a specific orientation when you print on both sides of a page. These include letterhead, preprinted paper, and paper with watermarks and prepunched holes. When you print from a computer running Windows, the printer prints the first side of the paper first. Load the paper with the print side facing down.
- For auto-duplexing, when printing finishes on one side of the paper, the printer holds the paper and pauses while the ink dries. Once the ink dries, the paper is pulled back into the printer and the second side is printed. When printing is complete, the paper is dropped onto the output tray. Do not grab it before printing is complete.
- You can print on both sides of supported custom-size paper by turning the paper over and feeding it into the printer again. For more information, see [Paper specifications on page 102](#).

## Print resolution

**Table A-1 Print resolution**

<b>Draft mode</b>	<ul style="list-style-type: none"> <li>• Color Input/Black Render: 300x300dpi</li> <li>• Output (Black/Color): Automatic</li> </ul>
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**Table A-1 Print resolution (continued)**

<b>Normal mode</b>	<ul style="list-style-type: none"><li>• Color Input/Black Render: 600x600dpi</li><li>• Output (Black/Color): Automatic</li></ul>
<b>Best mode</b>	<ul style="list-style-type: none"><li>• Color Input/Black Render: 600x600dpi</li><li>• Output (Black/Color): Automatic</li></ul>
<b>Max DPI mode</b>	<ul style="list-style-type: none"><li>• Color Input/Black Render: 1200x1200dpi</li><li>• Output: Automatic (Black), 4800x1200 optimized dpi (Color)</li></ul>

## HP ePrint and HP website specifications

This section contains the following topics:

- [HP ePrint specifications](#)
- [HP website specifications](#)

### HP ePrint specifications

- An Internet connection using either an Ethernet or wireless connection.
- Maximum size of email and attachments: 5 MB
- Maximum number of attachments: 10



**NOTE:** The HP ePrint server does not accept email print jobs if there are multiple email addresses included in the "To" or "Cc" fields. Only enter the email address of your HP printer in the "To" field. Do not enter any additional email addresses in the other fields.

- Supported file types:
  - PDF
  - HTML
  - Standard text file formats
  - Microsoft Word, PowerPoint
  - Image files, such as PNG, JPEG, TIFF, GIF, BMP



**NOTE:** You might be able to use other types of files with HP ePrint. However, HP cannot guarantee that they correct functionality with the printer because they have not been fully tested.

### HP website specifications

- A web browser (either Microsoft Internet Explorer 6.0 or higher, Mozilla Firefox 2.0 or higher, Safari 3.2.3 or higher, or Google Chrome 3.0) with the Adobe Flash plug-in (version 10 or higher).
- An Internet connection

## Environmental specifications

### Operating environment

- Operating temperature: 5° to 40° C (41° to 104° F)  
Recommended operating conditions: 15° to 32° C (59° to 90° F)  
Recommended relative humidity: 25 to 75% noncondensing

### Storage environment

- Storage temperature: -40° to 60° C (-40° to 140° F)  
Storage relative humidity: Up to 90% noncondensing at a temperature of 60° C (140° F)

## Electrical specifications

### Power supply

- Universal power adapter (external)

### Power requirements

- Input voltage: 100 to 240 VAC ( $\pm 10\%$ ), 50/60 Hz ( $\pm 3$  Hz) (Worldwide); 200 to 240 VAC, 50/60 Hz (China and India only)  
Output voltage: +32Vdc / +12Vdc (1094mA / 250mA)

### Power consumption

- 30 watts printing (Fast Draft Mode)

## Acoustic emission specifications

Print in Draft mode, noise levels per ISO 7779

- Sound pressure (bystander position)
  - LpAm 54 (dBA) (mono Draft print)
- Sound power
  - LwAd 6.7 (BA)

# Regulatory information

The printer meets product requirements from regulatory agencies in your country/region.

This section contains the following topics:

- [Regulatory model number](#)
- [FCC statement](#)
- [Notice to users in Korea](#)
- [VCCI \(Class B\) compliance statement for users in Japan](#)
- [Notice to users in Japan about the power cord](#)
- [Noise emission statement for Germany](#)
- [GS Declaration \(Germany\)](#)
- [European Union Regulatory Notice](#)
- [Regulatory information for wireless products](#)
  - [Exposure to radio frequency radiation](#)
  - [Notice to users in Brazil](#)
  - [Notice to users in Canada](#)
  - [Notice to users in Taiwan](#)
  - [Notice to users in Mexico](#)
  - [Notice to users in Japan](#)

## Regulatory model number

For regulatory identification purposes, your product is assigned a Regulatory Model Number. The Regulatory Model Number for your product is SNPRC-1103-02. This regulatory number should not be confused with the marketing name (HP Officejet 7110 Wide Format ePrinter) or product number (CR768A).

## FCC statement

### FCC statement

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

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

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

For further information, contact:

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

Modifications (part 15.21)

The FCC requires the user to be notified that any changes or modifications made to this device that are not expressly approved by HP may void the user's authority to operate the equipment.

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

## Notice to users in Korea

B 급 기기 (가정용 방송통신기기)	이 기기는 가정용(B급)으로 전자파적합등록을 한 기기로서 주로 가정에서 사용하는 것을 목적으로 하며, 모든 지역에서 사용할 수 있습니다.
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## VCCI (Class B) compliance statement for users in Japan

この装置は、クラスB情報技術装置です。この装置は、家庭環境で使用することを目的としていますが、この装置がラジオやテレビジョン受信機に近接して使用されると、受信障害を引き起こすことがあります。取扱説明書に従って正しい取り扱いをして下さい。

VCCI-B

## Notice to users in Japan about the power cord

製品には、同梱された電源コードをお使い下さい。  
同梱された電源コードは、他の製品では使用出来ません。

## Noise emission statement for Germany

### Geräuschemission

LpA < 70 dB am Arbeitsplatz im Normalbetrieb nach DIN 45635 T. 19

## GS Declaration (Germany)

### GS-Erklärung (Deutschland)

Das Gerät ist nicht für die Benutzung im unmittelbaren Gesichtsfeld am Bildschirmarbeitsplatz vorgesehen. Um störende Reflexionen am Bildschirmarbeitsplatz zu vermeiden, darf dieses Produkt nicht im unmittelbaren Gesichtsfeld platziert werden.

## European Union Regulatory Notice

Products bearing the CE marking comply with the following EU Directives:

- Low Voltage Directive 2006/95/EC
- EMC Directive 2004/108/EC
- Ecodesign Directive 2009/125/EC, where applicable

CE compliance of this product is valid if powered with the correct CE-marked AC adapter provided by HP.

If this product has wired and/or wireless telecommunications functionality, it also complies with the essential requirements of the following EU Directive:

- R&TTE Directive 1999/5/EC

Compliance with these directives implies conformity to applicable harmonized European standards (European Norms) that are listed in the EU Declaration of Conformity issued by HP for this product or product family and available (in English only) either within the product documentation or at the following web site:

[www.hp.com/go/certificates](http://www.hp.com/go/certificates) (type the product number in the search field).

The compliance is indicated by one of the following conformity markings placed on the product:



For non-telecommunications products and for EU harmonized telecommunications products, such as Bluetooth® within power class below 10mW.



For EU non-harmonized telecommunications products (If applicable, a 4-digit notified body number is inserted between CE and !).

Please refer to the regulatory label provided on the product.

The telecommunications functionality of this product may be used in the following EU and EFTA countries: Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Liechtenstein, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovak Republic, Slovenia, Spain, Sweden, Switzerland, and United Kingdom.

The telephone connector (not available for all products) is intended for connection to analogue telephone networks.

### Products with wireless LAN devices

- Some countries may have specific obligations or special requirements about the operation of Wireless LAN networks such as indoor use only or restrictions of the channels available. Please make sure that the country settings of the wireless network are correct.

### France

- For 2.4-GHz Wireless LAN operation of this product, certain restrictions apply: This product may be used indoors for the entire 2400-MHz to 2483.5-MHz frequency band (channels 1 to 13). For outdoor use, only the 2400-MHz to 2454-MHz frequency band (channels 1 to 7) may be used. For the latest requirements, see [www.arcep.fr](http://www.arcep.fr).

The point of contact for regulatory matters is:

Hewlett-Packard GmbH, Dept./MS: HQ-TRE, Herrenberger Strasse 140, 71034 Boeblingen, GERMANY

## Regulatory information for wireless products

This section contains the following regulatory information pertaining to wireless products:

- [Exposure to radio frequency radiation](#)
- [Notice to users in Brazil](#)
- [Notice to users in Canada](#)
- [Notice to users in Taiwan](#)
- [Notice to users in Mexico](#)
- [Notice to users in Japan](#)

### Exposure to radio frequency radiation

#### Exposure to radio frequency radiation



**Caution** The radiated output power of this device is far below the FCC radio frequency exposure limits. Nevertheless, the device shall be used in such a manner that the potential for human contact during normal operation is minimized. This product and any attached external antenna, if supported, shall be placed in such a manner to minimize the potential for human contact during normal operation. In order to avoid the possibility of exceeding the FCC radio frequency exposure limits, human proximity to the antenna shall not be less than 20 cm (8 inches) during normal operation.

## Notice to users in Brazil

### Aviso aos usuários no Brasil

Este equipamento opera em caráter secundário, isto é, não tem direito à proteção contra interferência prejudicial, mesmo de estações do mesmo tipo, e não pode causar interferência a sistemas operando em caráter primário. (Res.ANATEL 282/2001).

## Notice to users in Canada

### Notice to users in Canada/Note à l'attention des utilisateurs canadiens

Under Industry Canada regulations, this radio transmitter may only operate using an antenna of a type and maximum (or lesser) gain approved for the transmitter by Industry Canada. To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (e.i.r.p.) is not more than that necessary for successful communication.

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

**WARNING!** Exposure to Radio Frequency Radiation The radiated output power of this device is below the Industry Canada radio frequency exposure limits. Nevertheless, the device should be used in such a manner that the potential for human contact is minimized during normal operation.

To avoid the possibility of exceeding the Industry Canada radio frequency exposure limits, human proximity to the antennas should not be less than 20 cm (8 inches).

Conformément au Règlement d'Industrie Canada, cet émetteur radioélectrique ne peut fonctionner qu'avec une antenne d'un type et d'un gain maximum (ou moindre) approuvé par Industrie Canada. Afin de réduire le brouillage radioélectrique potentiel pour d'autres utilisateurs, le type d'antenne et son gain doivent être choisis de manière à ce que la puissance isotrope rayonnée équivalente (p.i.r.e.) ne dépasse pas celle nécessaire à une communication réussie.

Cet appareil est conforme aux normes RSS exemptes de licence d'Industrie Canada. Son fonctionnement dépend des deux conditions suivantes : (1) cet appareil ne doit pas provoquer d'interférences nuisibles et (2) doit accepter toutes interférences reçues, y compris des interférences pouvant provoquer un fonctionnement non souhaité de l'appareil.

**AVERTISSEMENT** relatif à l'exposition aux radiofréquences. La puissance de rayonnement de cet appareil se trouve sous les limites d'exposition de radiofréquences d'Industrie Canada. Néanmoins, cet appareil doit être utilisé de telle sorte qu'il soit mis en contact le moins possible avec le corps humain.

Afin d'éviter le dépassement éventuel des limites d'exposition aux radiofréquences d'Industrie Canada, il est recommandé de maintenir une distance de plus de 20 cm entre les antennes et l'utilisateur.

## Notice to users in Taiwan

### 低功率電波輻射性電機管理辦法

#### 第十二條

經型式認證合格之低功率射頻電機，非經許可，公司、商號或使用者均不得擅自變更頻率、加大功率或變更設計之特性及功能。

#### 第十四條

低功率射頻電機之使用不得影響飛航安全及干擾合法通信；經發現有干擾現象時，應立即停用，並改善至無干擾時方得繼續使用。

前項合法通信，指依電信法規定作業之無線電通信。低功率射頻電機須忍受合法通信或工業、科學及醫藥用電波輻射性電機設備之干擾。

## Notice to users in Mexico

### **Aviso para los usuarios de México**

La operación de este equipo está sujeta a las siguientes dos condiciones: (1) es posible que este equipo o dispositivo no cause interferencia perjudicial y (2) este equipo o dispositivo debe aceptar cualquier interferencia, incluyendo la que pueda causar su operación no deseada.

Para saber el modelo de la tarjeta inalámbrica utilizada, revise la etiqueta regulatoria de la impresora.

## Notice to users in Japan

この機器は技術基準適合証明又は工事設計認証を受けた無線設備を搭載しています。



# Environmental product stewardship program

Hewlett-Packard is committed to providing quality products in an environmentally sustainable manner:

- Design for recycling has been incorporated into this product.
- The number of materials has been kept to a minimum while ensuring proper functionality and reliability.
- Dissimilar materials have been designed to separate easily.
- Fasteners and other connections are easy to locate, access, and remove using common tools.
- High priority parts have been designed to access quickly for efficient disassembly and repair.

For more information, visit [www.hp.com/ecosolutions](http://www.hp.com/ecosolutions)

This section contains the following topics:

- [European Union Commission Regulation 1275/2008](#)
- [Paper use](#)
- [Plastics](#)
- [Material safety data sheets](#)
- [Recycling program](#)
- [HP inkjet supplies recycling program](#)
- [Disposal of waste equipment by users in private households in the European Union](#)
- [Power consumption](#)
- [Chemical Substances](#)
- [Battery information](#)
- [RoHS notices \(China only\)](#)
- [RoHS notices \(Ukraine only\)](#)

## European Union Commission Regulation 1275/2008

For product power data, including the power consumption of the product in networked standby if all wired network ports are connected and all wireless network ports are activated, please refer to section P14 'Additional Information' of the product IT ECO Declaration at [www.hp.com/hpinfo/globalcitizenship/environment/productdata/itecodesktop-pc.html](http://www.hp.com/hpinfo/globalcitizenship/environment/productdata/itecodesktop-pc.html).

## Paper use

This product is suited for the use of recycled paper according to DIN 19309 and EN 12281:2002.

## Plastics

Plastic parts over 25 grams are marked according to international standards that enhance the ability to identify plastics for recycling purposes at the end of product life.

## **Material safety data sheets**

Material safety data sheets (MSDS) can be obtained from the HP Web site at:

[www.hp.com/go/msds](http://www.hp.com/go/msds)

## **Recycling program**

HP offers an increasing number of product return and recycling programs in many countries/regions, and partners with some of the largest electronic recycling centers throughout the world. HP conserves resources by reselling some of its most popular products. For more information regarding recycling of HP products, please visit:

[www.hp.com/hpinfo/globalcitizenship/environment/recycle/](http://www.hp.com/hpinfo/globalcitizenship/environment/recycle/)

## **HP inkjet supplies recycling program**

HP is committed to protecting the environment. The HP Inkjet Supplies Recycling Program is available in many countries/regions, and lets you recycle used print cartridges and ink cartridges free of charge. For more information, go to the following Web site:

[www.hp.com/hpinfo/globalcitizenship/environment/recycle/](http://www.hp.com/hpinfo/globalcitizenship/environment/recycle/)

# Disposal of waste equipment by users in private households in the European Union



English	<p><b>Disposal of Waste Equipment by Users in Private Households in the European Union</b></p> <p>This symbol on the product or on its packaging indicates that this product must not be disposed of with your other household waste. Instead, it is your responsibility to dispose of waste equipment by handing it over to a designated collection point for the recycling of waste electrical and electronic equipment. The separate collection and recycling of your waste equipment at the time of disposal will help to conserve natural resources and ensure that it is recycled in a manner that protects human health and the environment. For more information about where you can drop off your waste equipment for recycling, please contact your local city office, your household waste disposal service or the shop where you purchased the product.</p>
English	<p><b>Évacuation des équipements usagés par les utilisateurs dans les foyers privés au sein de l'Union européenne</b></p> <p>La présence de ce symbole sur le produit ou sur son emballage indique que vous ne pouvez pas vous débarrasser de ce produit de la même façon que vos déchets courants. Au contraire, vous êtes responsable de l'évacuation de vos équipements usagés et, à cet effet, vous êtes tenu de les remettre à un point de collecte agréé pour le recyclage des équipements électriques et électroniques usagés. La séparation et le recyclage séparés de vos équipements usagés permettent de préserver les ressources naturelles et de s'assurer que vos équipements sont recyclés dans le respect de la santé humaine et de l'environnement. Pour plus d'informations sur les lieux de collecte des équipements usagés, veuillez contacter votre mairie, votre service de traitement des déchets ménagers ou le magasin où vous avez acheté le produit.</p>
English	<p><b>Entsorgung von Elektrogeräten durch Benutzer in privaten Haushalten in der EU</b></p> <p>Dieses Symbol auf dem Produkt oder dessen Verpackung gibt an, dass das Produkt nicht zusammen mit dem Restmüll entsorgt werden darf. Es obliegt daher Ihrer Verantwortung, das Gerät an einer entsprechenden Stelle für die Entsorgung oder Wiederverwertung von Elektrogeräten aller Art abzugeben (z.B. ein Wertstoffhof). Die separate Sammlung und das Recyceln Ihrer alten Elektrogeräte zum Zeitpunkt ihrer Entsorgung trägt zum Schutz der Umwelt bei und gewährleistet, dass sie auf eine Art und Weise recycelt werden, die keine Gefährdung für die Gesundheit des Menschen und der Umwelt darstellt. Weitere Informationen darüber, wo Sie alte Elektrogeräte zum Recyceln abgeben können, erhalten Sie bei den örtlichen Behörden, Wertstoffhöfen oder dort, wo Sie das Gerät erworben haben.</p>
English	<p><b>Smaltimento di apparecchiature da rottamare da parte di privati nell'Unione Europea</b></p> <p>Questo simbolo che appare sul prodotto o sulla confezione indica che il prodotto non deve essere smaltito assieme agli altri rifiuti domestici. Gli utenti devono provvedere allo smaltimento delle apparecchiature da rottamare portandole al luogo di raccolta indicato per il riciclaggio delle apparecchiature elettriche ed elettroniche. La raccolta e il riciclaggio separati delle apparecchiature da rottamare aiutano a conservare le risorse naturali e a garantire che esse vengano riciclate in modo che protegga la salute e l'ambiente. Per ulteriori informazioni sui punti di raccolta della apparecchiature da rottamare, contattate il proprio comune di residenza, il servizio di smaltimento dei rifiuti locali o il negozio presso il quale è stato acquistato il prodotto.</p>
English	<p><b>Eliminación de residuos de aparatos eléctricos y electrónicos por parte de usuarios domésticos en la Unión Europea</b></p> <p>Este símbolo en el producto o en el embalaje indica que no se puede desechar el producto junto con los residuos domésticos. Por el contrario, si debe eliminar este tipo de residuos, es responsabilidad del usuario entregarlo en un punto de recogida designado o reciclado de aparatos electrónicos y eléctricos. El reciclaje y la recogida por separado de estos residuos en el momento de la eliminación ayudará a preservar recursos naturales y a garantizar que se recicla de forma que proteja la salud y el medio ambiente. Si desea información adicional sobre los lugares donde puede dejar estos residuos para su reciclado, póngase en contacto con las autoridades locales de su ciudad, con el servicio de gestión de residuos domésticos o con la tienda donde adquirió el producto.</p>
English	<p><b>Likvidācija vairojuma līdzekļu izstrādātājiem privātajos mājokļos Eiropas Savienībā</b></p> <p>Tāpat zina, ka produkti neba jānoņem kopā ar citiem mājokļa atkritumiem, bet jānodrošina atsevišķa likvidācija. Atbildētājam jānodrošina, ka produkti tiek nogādāti pie atbilstošas iestādes, kas nodrošina atkritumu sadzīves atbilstošu pārvaldību. Atbilstošas iestādes ir: vietējās pašvaldības, atkritumu apsaimniekotāji, atbilstoši nolikuma noteikumi, kas attiecas uz atkritumu apsaimniekošanu, vai tieši tie, kurus izstrādātājs ir norādījis uz iepakojuma.</p>
English	<p><b>Bortskaffelse af affaldsdytter for brugere i private husholdninger i EU</b></p> <p>Dette symbol på produktet eller på dets emballage indikerer, at produktet ikke må bortskaffes sammen med andet husholdningsaffald. I stedet er det dit ansvar at bortskaffe affaldsdytter ved at aflevere det på det til bemednede indsamlingssted med henblik på genbrug af elektrisk og elektronisk affaldsdytter. Den separate indsamling og genbrug af dit affaldsdytter på idetpunktet for bortskaffelse er med til at bevare naturlige ressourcer og sikre, at genbrug finder sted på en måde, der beskytter menneskers helbred samt miljøet. Hvis du vil vide mere om, hvor du kan aflevere dit affaldsdytter til genbrug, kan du kontakte kommunen, det lokale renovatøranseser eller den forening, hvor du købte produktet.</p>
English	<p><b>Afvoer van afgedankte apparatuur door gebruikers in particuliere huishoudens in de Europese Unie</b></p> <p>Dit symbool op het product of de verpakking geeft aan dat dit product niet mag worden afgevoerd met het huishoudelijk afval. Het is uw verantwoordelijkheid uw afgedankte apparatuur of te leveren in een aangewezen inzamelpunt voor de verwerking van afgedankte elektrische en elektronische apparatuur. De gescheiden inzameling en verwerking van uw afgedankte apparatuur draagt bij tot het sparen van natuurlijke bronnen en tot het hergebruik van materiaal op een wijze die de volkgezondheid en het milieu beschermt. Voor meer informatie over waar u uw afgedankte apparatuur kunt inleveren voor recycling kunt u contact opnemen met het gemeentehuis in uw woonplaats, de reinigingsdienst of de winkel waar u het product hebt aangekocht.</p>
English	<p><b>Eracajapidamistes kasutuselt kõrvaldatavate seadmete käitlemine Euroopa Liidus</b></p> <p>Kui tootel või toote pakendil on see sümbol, ei tohi seda toodet ühistele kodumajapidamiste jäätmetega üheskoos ära visata. Selle asemel peab kasutaja toote toimetama eraldi kogumispunkti, kus toimub kasutatud elektriliste ja elektroniliste seadmete eraldi kogumine ja käitlemine. Eraldi kogumine ja käitlemine aitab säästa looduslikke ressursse ja tagab, et kasutatud seadmed on ära visatud viisil, mis ei kahjusta inimeste tervist ega keskkonda. Kui soovite teada, kus saate oma kasutatud seadmed ära viia, võite ühendust võtta kohaliku omavalitsuse, olemasolevate jäätmevõttopi punktide või kaupluste, kust te seadme ostate.</p>
English	<p><b>Hävittävien laitteiden käsittely kotitalouksissa Euroopan unionin alueella</b></p> <p>Tämä tuoteella tai sen pakkausella oleva merkki osoittaa, että tuotetta ei saa hävittää talousjätteen mukana. Käytäjän velvollisuus on huolehtia siitä, että hävitettävä laite toimitetaan sähkö- ja elektroniikkalaitteiden keräyspisteeseen. Hävitettävien laitteiden erillinen keräys ja kierrätys säästää luonnonvaroja. Näin toimilla varmistetaan myös, että kierrätys tapahtuu tavalla, joka suojelee ihmisten terveyttä ja ympäristöä. Saat tarvittaessa lisätietoja jätteiden kierrätyspaikoista paikallisilta viranomaisilta, jätteenhoitajilta tai tuotteen jällemyyjältä.</p>
English	<p><b>Απορριψη χρηστών οικιακών στην Ευρωπαϊκή Ένωση</b></p> <p>Το παρόν σύμβολο στον εξοπλισμό ή στη συσκευασία του υποδηλώνει ότι το προϊόν αυτό δεν πρέπει να πεταχτεί μαζί με άλλα οικιακά απορρίμματα. Αντίθετα, ευθύνει ο χρήστης να απορριψίσει τις άχρηστες συσκευές σε μια καθορισμένη μονάδα συλλογής, απορριμμάτων για την ανακύκλωση άχρηστων ηλεκτρικών και ηλεκτρονικών εξοπλισμών. Η χωριστή συλλογή και ανακύκλωση των άχρηστων συσκευών θα συμβάλει στη διατήρηση των φυσικών πόρων και στη διασφάλιση ότι θα ανακυκλωθούν με έναν τρόπο, ώστε να προστατευτεί η υγεία των ανθρώπων και το περιβάλλον. Για περισσότερες πληροφορίες σχετικά με το πού μπορείτε να απορριψίσετε τις άχρηστες συσκευές με ανακύκλωση, επικοινωνήστε με τις κατά τόπους αρμόδιες αρχές ή με το κατάστημα από το οποίο αγοράστήκατε το προϊόν.</p>
English	<p><b>A hulladékok megkezelése a magánháztartásokban az Európai Unióban</b></p> <p>Ez a szimbólum arra utal, hogy az eszköz nem kerülhet együtt a egyéb háztartási hulladékkal. Az Ön feladata, hogy a készülék hulladékgyűjtő állomásra olyan külön gyűjtőhelyre, amely az elektronikus hulladékokat és az elektronikus berendezéseket újrahasznosításra foglalkoztat. A hulladékokat külön gyűjtőhelyre kell szállítani, ahol a hulladékokat külön kezelni szokták, például a hulladékot újrahasznosítják a hulladékokat, továbbá a helyi önkormányzatok, a háztartási hulladék begyűjtésével foglalkozó vállalatok vagy a termék forgalmazójához.</p>
English	<p><b>Lietaisju atbrīvošana no nedrāzīgām lietaisju Savienības privātajos mājokļos</b></p> <p>Šis simbols norāda, ka šis ierīce nedrīkst tikt ar citiem mājokļa atkritumiem. Jūs esat atbildīgs par atbrīvošanu no nedrāzīgām ierīcēm, ko nododot nodrāzīgā savākšanas vieta, lai tiku veikta nedrāzīgā un elektroniskā atkritumu atbrīvošana. Speciāla savākšana un atbrīvošana palīdzēs palīdzēt dabas resursu un nodrošināt lauku atbrīvošanu, kas saglabā cilvēku veselību un apstādina. Lai iegūtu papildu informāciju par to, kur atbrīvojat ierīcē, var nodrāzīt nedrāzīgā ierīcē, lūdz, uzreiz vai tieši, mājokļa atbrīvošanas atkritumu savākšanas dienestu vai veikali, kurā iegādājāties šo ierīci.</p>
English	<p><b>Europa Sąjungos vartotojų ir privačių namų ūki atliekamas įrangos išmetimas</b></p> <p>Šis simbolis ant produkto arba jo pakuotės nurodo, kad produktas negali būti išmetamas kartu su kitomis namų ūki atliekomis. Jūs privalote išmesti savo atliekamą įrangą atitinkamose ir atliekamas elektronikos ir elektronikos įrangos perdirbimo punktuose. Jei atliekamą įrangą bus atskirti surinkti ir perdirbti, bus išsaugomi natūralūs išteklių ir užtikrinama, kad įrangą bus perdirbti saugiai ir aplinkai draugiškai būdais. Dėl informacijos apie tai, kur galite išmesti atliekamą įrangą, kreipkitės į atliekamą įrangos tvarkymo, namų ūki atliekų išvežimo tarnybą arba į produktų, kuriuos perkate produktą.</p>
English	<p><b>Użytkozia zuzyczonego sprzetu przez uzytkownikow domowych w Unii Europejskiej</b></p> <p>Sybol ten umieszczonej na produkcie lub opakowaniu oznacza, że tego produktu nie należy wyrzucać razem z innymi odpadami domowymi. Użytkownik jest odpowiedzialny za dostarczenie zużytego sprzętu do wyznaczonego punktu gromadzenia zużytych urządzeń elektrycznych i elektronicznych. Gromadzenie osobno i recykling tego typu odpadów przyczynia się do ochrony zasobów naturalnych i jest bezpieczny dla zdrowia i środowiska naturalnego. Dodatkze informacje o miejscu i sposobu utylizacji zużytych urządzeń można uzyskać u odpowiednich władz lokalnych, w przedsiębiorstwie zajmującym się usuwaniem odpadów lub w miejscu zakupu produktu.</p>
English	<p><b>Descarte de equipamentos por usuários em residências da União Europeia</b></p> <p>Este símbolo no produto ou na embalagem indica que o produto não pode ser descartado junto com o lixo doméstico. No entanto, é sua responsabilidade levar os equipamentos a serem descartados a um ponto de coleta designado para o reciclagem de equipamentos eletro-eletrônicos. A coleta separada e o reciclagem dos equipamentos no momento do descarte ajudam na conservação das recursos naturais e garantem que os equipamentos serão reciclados de forma a proteger a saúde das pessoas e o meio ambiente. Para obter mais informações sobre onde descartar equipamentos para reciclagem, entre em contato com o escritório local de sua cidade, o serviço de limpeza pública de seu bairro ou a loja em que adquiriu o produto.</p>
English	<p><b>Postup používatelů v krajnách Európskej únie pri vyhazovaní zariadenia v domácom používaní do odpadu</b></p> <p>Tento symbol na produkte alebo na jeho obale znamená, že nemie je vyhodiť s inými komunálnymi odpadmi. Namiesto toho máte povinnosť odovzdať toto zariadenie na zberom mieste, kde sa zbierajú odpadové zariadenia. Samostatná zber a recyklácia odpadových zariadení prispievajú k ochrane prírody a životného prostredia. Špeciálne zberanie a recyklácia pomáhajú chrániť prírodné zdroje a zabezpečujú taký spôsob recyklácie, ktorý bude chrániť ľudské zdravie a životné prostredie. Ďalšie informácie o spravovaní zariadení a recyklácii získate za miestnom obecnom úrade, na mieste zberného miesta alebo komunálneho odpadu alebo v predajni, kde ste produkt kúpili.</p>
English	<p><b>Ravnjenje z odpadno opremo v gospodinjstvih znotraj Evropske unije</b></p> <p>Ta znak na izdelku ali embalaži izkazuje pomeni, da izdelka ne smete odložiti skupaj z drugimi gospodinjstvi odpadki. Odbadno opremo ste dolžni oddati na določenem zbirnem mestu za recikliranje odpadne elektrike in elektronske opreme. Z ločevim zbiranjem in recikliranjem odpadne opreme ob odložitvi boste pomagali ohraniti naravne vire in zagotovili, da bo odpadna oprema reciklirana na okolju priazen način, da se varuje zdravje ljudi in okolje. Več informacij o mestih, kjer lahko oddate odpadno opremo za recikliranje, lahko dobite na obči in, v komunalnem podjetju ali trgovini, kjer ste izdelek kupili.</p>
English	<p><b>Kassering av förbrukningsmaterial, för hem- och privat användare i EU</b></p> <p>Symbolen eller produktförpackningen med den här symbolen för tecken kasseras med vanligt hushållsavfall. I stället har du ansvar för att produkten lämnas till en behörig återvinningstjänst för hantering av e- och elektronikutrustning. Genom att lämna kasserade produkter till återvinning hjälper du till att bevara våra gemensamma naturresurser. Dessutom skyddas både miljön och människors hälsa när produkterna återvinns på rätt sätt. Kommunala myndigheter, sophanteringstjänster eller butiker där varan köptes kan ge mer information om var du lämnar kasserade produkter för återvinning.</p>
English	<p><b>Изхвърляне на оборудване за отпадъци от потребители в частни домакинства в Европейския съюз</b></p> <p>Този символ върху продукта или опаковката му показва, че продуктът не трябва да се изхвърля заедно с домашните отпадъци. Вместо това отговорността да изхвърлите оборудването за отпадъци като потребители е да предоставите на отпадъците на природни ресурси и гарантите за рециклиране, извършено така, че да не застрашава човешкото здраве и околната среда. За повече информация къде можете да оставите оборудването за отпадъци за рециклиране се свържете със съответния офис в града ви, фирмата за събиране на отпадъци или магазин, от който сте закупили продукта.</p>
English	<p><b>Ínláturaraug áchpamaminteluoz uzate de către utilizatorii casnici din Uniunea Europeană</b></p> <p>Acest simbol este pe produs sau pe ambalajul produsului indică faptul că acest produs nu trebuie aruncat alături de celelalte deșeururi casnice. În loc să procedați astfel, aveți responsabilitatea de a livra echipamentul uzat la punctul de colectare desemnat pentru reciclarea deșeurilor electrice și a echipamentelor electronice. Colectarea și reciclarea separată a echipamentului uzat ajută atât doborât și la conservarea resurselor naturale și asigură reciclarea echipamentului într-o manieră care protejează sănătatea umană și mediul. Pentru informații suplimentare despre locul în care se poate pune echipamentul uzat pentru reciclare, luați legătura cu primăria locală, cu serviciul de salubritate sau cu vânzătorul de la care ați achiziționat produsul.</p>

## Power consumption

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Additional ENERGY STAR qualified imaging product model information is listed at:

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## Chemical Substances

HP is committed to providing our customers with information about the chemical substances in our products as needed to comply with legal requirements such as REACH (*Regulation EC No 1907/2006 of the European Parliament and the Council*). A chemical information report for this product can be found at: [www.hp.com/go/reach](http://www.hp.com/go/reach).

## Battery information

This section contains the following topics:

- [Battery disposal in Taiwan](#)
- [Attention California users](#)
- [Battery disposal in the Netherlands](#)

### Battery disposal in Taiwan



廢電池請回收

Please recycle waste batteries.

### Attention California users

#### California Perchlorate Material Notice

Perchlorate material - special handling may apply. See:  
<http://www.dtsc.ca.gov/hazardouswaste/perchlorate/>

This product's real-time clock battery or coin cell battery may contain perchlorate and may require special handling when recycled or disposed of in California.

## Battery disposal in the Netherlands



Dit HP Product bevat een lithium-manganees-dioxide batterij. Deze bevindt zich op de hoofdprintplaat. Wanneer deze batterij leeg is, moet deze volgens de geldende regels worden afgevoerd.

## RoHS notices (China only)

Figure A-1 Toxic and hazardous substance table

有毒有害物质表						
根据中国《电子信息产品污染控制管理办法》						
零件描述	有毒有害物质和元素					
	铅	汞	镉	六价铬	多溴联苯	多溴联苯醚
外壳和托盘*	0	0	0	0	0	0
电线*	0	0	0	0	0	0
印刷电路板*	X	0	0	0	0	0
打印系统*	X	0	0	0	0	0
显示器*	X	0	0	0	0	0
喷墨打印机墨盒*	0	0	0	0	0	0
驱动光盘*	X	0	0	0	0	0
扫描仪*	X	X	0	0	0	0
网络配件*	X	0	0	0	0	0
电池板*	X	0	0	0	0	0
自动双面打印系统*	0	0	0	0	0	0
外部电源*	X	0	0	0	0	0

0: 指此部件的所有均一材质中包含的这种有毒有害物质, 含量低于SJ/T11363-2006 的限制  
X: 指此部件使用的均一材质中至少有一种包含的这种有毒有害物质, 含量高于SJ/T11363-2006 的限制  
注: 环保使用期限的参考标识取决于产品正常工作的温度和湿度等条件  
\*以上只适用于使用这些部件的产品

## RoHS notices (Ukraine only)

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## Third-party licenses

LICENSE.aes-pubdom--crypto

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/\* rijndael-alg-fst.c

\*

\* @version 3.0 (December 2000)

\*

\* Optimised ANSI C code for the Rijndael cipher (now AES)

\*

\* @author Vincent Rijmen <vincent.rijmen@esat.kuleuven.ac.be>

\* @author Antoon Bosselaers <antoon.bosselaers@esat.kuleuven.ac.be>

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/\* HMAC-SHA-224/256/384/512 implementation  
\* Last update: 06/15/2005  
\* Issue date: 06/15/2005  
\*  
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LICENSE.open\_ssl--open\_ssl

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by Eric Young (eay@cryptsoft.com).

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=====

This product includes cryptographic software written by Eric Young ([eyay@cryptsoft.com](mailto:eyay@cryptsoft.com)). This product includes software written by Tim

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=====

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/\* FIPS 180-2 SHA-224/256/384/512 implementation

\* Last update: 02/02/2007

\* Issue date: 04/30/2005

\*

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LICENSE.zlib--zlib

-----

zlib.h -- interface of the 'zlib' general purpose compression library  
version 1.2.3, July 18th, 2005

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Jean-loup Gailly Mark Adler

jloup@gzip.org madler@alumni.caltech.edu


The data format used by the zlib library is described by RFCs (Request for Comments) 1950 to 1952 in the files <http://www.ietf.org/rfc/rfc1950.txt> (zlib format), [rfc1951.txt](http://www.ietf.org/rfc/rfc1951.txt) (deflate format) and [rfc1952.txt](http://www.ietf.org/rfc/rfc1952.txt) (gzip format).

---

## B HP supplies and accessories

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

---

 **NOTE:** Not all cartridges are available in all countries/regions.

This section contains the following topics:

- [Order printing supplies online](#)
- [Supplies](#)



## Order printing supplies online

To order supplies online or create a printable shopping list, open the HP software that came with your printer and click **Shopping**. Select **Shop for Supplies Online**. The HP software uploads, with your permission, printer information, including model number, serial number, and estimated ink levels. The HP supplies that work in your printer are pre-selected. You can change quantities, add or remove items, and then print the list or purchase online at the HP Store or other online retailers (options differ by country/region). Cartridge information and links to online shopping also appear on ink alert messages.

You can also order online by visiting [www.hp.com/buy/supplies](http://www.hp.com/buy/supplies). If prompted, select your country/region, follow the prompts to select your printer, and then the supplies you need.



**NOTE:** Ordering cartridges online is not supported in all countries/regions. However, many countries have information on ordering by telephone, locating a local store and printing a shopping list. In addition, you can select the 'How to Buy' option at the top of the [www.hp.com/buy/supplies](http://www.hp.com/buy/supplies) page to obtain information about purchasing HP products in your country.

---

# Supplies

- [Ink cartridges](#)
- [HP paper](#)

## Ink cartridges

Ordering cartridges online is not supported in all countries/regions. However, many countries have information on ordering by telephone, locating a local store and printing a shopping list. In addition, you can select the How to Buy option at the top of the [www.hp.com/buy/supplies](http://www.hp.com/buy/supplies) page to obtain information about purchasing HP products in your country.

Use only the replacement cartridges that have the same cartridge number as the ink cartridge you are replacing. You can find the cartridge number in the following places:

- In the embedded web server, click the **Tools** tab, and then, under **Product Information** click **Ink Gauge**. For more information, see [Embedded web server on page 149](#).
- On the label of the ink cartridge you are replacing.
- On the printer status page (see [Understand the Printer Status Report on page 79](#)).



**NOTE:** Ink level warnings and indicators provide estimates for planning purposes only. When you receive a low-ink warning message, consider having a replacement cartridge available to avoid possible printing delays. You do not need to replace cartridges until prompted to do so.

## HP paper

To order paper such as HP Premium Paper, go to [www.hp.com](http://www.hp.com).



HP recommends plain papers with the ColorLok logo for printing everyday documents. All papers with the ColorLok logo are independently tested to meet high standards of reliability and print quality, and produce documents with crisp, vivid color, bolder blacks, and that dry faster than ordinary plain papers. Look for papers with the ColorLok logo in a variety of weights and sizes from major paper manufacturers.

# C Network setup

You can manage network settings for the printer through the printer control panel as described in the next section. Additional advanced settings are available in the embedded web server, a configuration and status

tool you access from your web browser using an existing network connection to the printer. For more information, see [Embedded web server on page 149](#).

This section contains the following topics:

- [Change basic network settings](#)
- [Change advanced network settings](#)
- [Set up the printer for wireless communication](#)
- [HP wireless direct printing](#)

# Change basic network settings

The control panel options enable you to set up and manage a wireless connection and to perform a variety of network management tasks. This includes viewing the network settings, restoring the network defaults, turning the wireless radio on and off, and changing the network settings.


This section contains the following topics:

- [View and print network settings](#)
- [Turn the wireless radio on and off](#)

## View and print network settings


You can display a summary of the network settings on the HP software that came with the printer. You can print a more detailed network configuration page, which lists all of the important network settings such as the IP address, link speed, DNS, and mDNS. For more information, see [Understand the network configuration page on page 81](#).

## Turn the wireless radio on and off

The wireless radio is on by default, as indicated by the blue light on the front of the printer. To stay connected to a wireless network, the radio must stay on. However, if your printer is connected to an Ethernet network or you have a USB connection, the radio is not used. In this case you might want to turn the radio off. To turn the wireless radio off, press and hold the  ( **Wireless** ) button until the light goes off.

# Change advanced network settings

---

 **CAUTION:** Network settings are provided for your convenience. However, you should not change some of these settings (such as the link speed, IP settings, default gateway, and firewall settings).

---

This section contains the following topics:

- [Set link speed](#)
- [View IP settings](#)
- [Change IP settings](#)
- [Reset network settings](#)

## Set link speed

You can change the speed at which data is transmitted over the network. The default is **Automatic**.

1. Open the embedded web server (EWS). For more information, see [Embedded web server on page 149](#).
2. Click the **Network** tab, and then click **Advanced** in the **Wired (802.3)** section.
3. In the **Link Settings** section, click **Manual**.
4. Click to select the link speed that matches your network hardware:
  - **2. 10-Full**
  - **3. 10-Half**
  - **4. 100-Full**
  - **5. 100-Half**

## View IP settings


To view the IP address of the printer:

- Print the network configuration page. For more information, see [Understand the network configuration page on page 81](#).
- Or, open the HP software (Windows), click the **Network Settings** tab, click the **Wired** or **Wireless** tab (depending on the current connection), and then click **IP Settings**.

## Change IP settings

The default IP setting for the IP settings is **Automatic**, which sets the IP settings automatically. However, you might want to manually change settings such as the IP address, subnet mask, or the default gateway.

---



 **CAUTION:** Be careful when manually assigning an IP address. If you enter an invalid IP address during the installation, your network components cannot connect with the printer.

---

1. Open the embedded web server. For more information, see [Embedded web server on page 149](#).
2. Click the **Network** tab, and then click **IPv4 Configuration** in the **Wired (802.3)** section.
3. In the **IP Address Configuration** section, click **Manual**.

4. A message appears warning that changing the IP address removes the printer from the network. Click **OK** to continue.
5. Change the IP settings:
  - **Manual IP Address**
  - **Manual Subnet Mask**
  - **Manual Default Gateway**
6. Click **Apply**.

## Reset network settings

To reset the administrator password and network settings, press and hold the  (**Wireless**) button and the  (Cancel) button for three seconds.



**NOTE:** Print the network configuration page and verify that the network settings have been reset. For more information, see [Understand the network configuration page on page 81](#).

By default, the network name (SSID) is “HP-Print-\*\*-Officejet 7110”, where “\*\*” is a random number generated by the printer.

---

# Set up the printer for wireless communication

You can set up the printer for wireless communication.

This section contains the following topics:

- [Before you begin](#)
- [Set up the printer on your wireless network](#)
- [Change the connection type](#)
- [Test the wireless connection](#)
- [Guidelines for ensuring wireless network security](#)
- [Guidelines for reducing interference on a wireless network](#)



---

**NOTE:** If you encounter problems connecting the printer, see [Solve wireless problems on page 69](#).



**TIP:** For more information about setting up and using the printer wirelessly, visit the HP Wireless Printing Center ( [www.hp.com/go/wirelessprinting](http://www.hp.com/go/wirelessprinting) ).

---

## Before you begin

Before you begin setting up the wireless connection, check the following:

- The printer is not connected to the network using a network cable.
- The wireless network is set up and functioning correctly.
- The printer and the computers that use the printer are on the same network (subnet).

While connecting the printer, you might be prompted to enter the wireless network name (SSID) and a wireless password.

- The wireless network name is the name of your wireless network.
- The wireless password prevents other people from connecting to your wireless network without your permission. Depending on the level of security required, your wireless network might use either a WPA key or WEP passphrase.

If you have not changed the network name or the security passkey since setting up your wireless network, you can sometimes find them on the back or side of the wireless router.

If you cannot find the network name or the security passkey or cannot remember this information, see the documentation available with your computer or with the wireless router. If you still cannot find this information, contact your network administrator or the person who set up the wireless network.



---

**TIP:** If you are using a computer running Windows, use the HP Print and Scan Doctor to help diagnose and get assistance in installing and using HP printers on your home network. To use this tool, visit the HP Wireless Printing Center ( [www.hp.com/go/wirelessprinting](http://www.hp.com/go/wirelessprinting) ), and then click **Print and Scan Doctor** in the **Quick Links** section.


---


## Set up the printer on your wireless network

To set up the printer on your wireless network, use one of the following methods:

- [Set up the printer using the HP printer software](#)
- [Set up the printer using WiFi Protected Setup \(WPS\)](#)
- [Set up the printer using the embedded web server \(EWS\)](#)

---

 **NOTE:** Make sure you have installed the HP software that came with the printer and the printer network drives. For more information about how to installed the drives, see [After resolving the problems on page 75](#).

 **NOTE:** If you have already been using the printer with a different type of connection, such as a USB connection, follow the instructions in [Change the connection type on page 140](#) to set up the printer on your wireless network.

---

## Set up the printer using the HP printer software


In addition to enabling key printer features, you can use the HP printer software that came with your printer to set up wireless communication.



If you have already been using the printer with a different type of connection, such as a USB connection, follow the instructions in [Change the connection type on page 140](#) to set up the printer on your wireless network.

## Set up the printer using WiFi Protected Setup (WPS)

Wi-Fi Protected Setup (WPS) allows you to quickly set up the printer on your wireless network, without having to enter the wireless network name (SSID), wireless password (WPA passphrase, WEP key), or other wireless settings.


---

 **NOTE:** Only set up wireless using WPS if your wireless network uses WPA data encryption. If your wireless network uses WEP or is not using any encryption at all, use one of the other methods provided in this section to set up the printer on your wireless network.


 **NOTE:** To use WPS, make sure your wireless router or wireless access point supports WPS. Routers that support WPS often have a  ( **WPS** ) button or a button labeled “WPS”.

---

You can use one of the following methods to set up the printer using WPS:

- **Push Button Method:** Use the  ( **WPS** ) or WPS button, if available, on your router.
- **PIN Method:** Enter the PIN generated by the printer in the router's configuration software.


### To connect the printer using the Push Button Method

1. On the printer control panel, press and hold the  ( **Wireless** ) button for 3 seconds. The wireless light starts blinking.
2. On the wireless router or wireless access point, press and hold the WPS button for 3 seconds.

Wait for about 2 minutes. If the printer connects successfully, the wireless light stops blinking but remains lit.



## To connect the printer using the PIN Method

1. Print the network configuration page and locate the pin for WPS. For more information, see [Understand the network configuration page on page 81](#).  
A WPS PIN is printed at the top of the page.
2. On the printer control panel, press and hold the  ( **Wireless** ) button for 3 seconds. The Wireless light starts blinking.
3. Open the configuration utility or software for the wireless router or wireless access point, and then enter the WPS PIN.



---

**NOTE:** For more information about using the configuration utility, see the documentation provided with the router or wireless access point.

---

Wait for about 2 minutes. If the printer connects successfully, the wireless light stops blinking but remains lit.

## Set up the printer using the embedded web server (EWS)

If the printer is connected to a network, you can use the printer's embedded web server (EWS) to set up wireless communication.

1. Open the EWS. For more information, see [Embedded web server on page 149](#).
2. On the **Home** tab, click **Wireless Setup Wizard** in the **Setup** box.
3. Follow the on-screen instructions.



---

**TIP:** You can also set up wireless communication by entering or changing individual wireless settings. To change these settings, on the **Network** tab, click **Advanced** in the **Wireless (802.11)** section on the left, change the wireless settings, and then click **Apply**.

---

## Change the connection type

After you have installed the HP software and connected the printer to your computer or to a network, you can use the HP software to change the connection type (for example, from a USB connection to a wireless connection).



---

**NOTE:** If you are changing to a wireless connection, make sure that an Ethernet cable has not been connected to the printer. Connecting an Ethernet cable turns off the printer's wireless capabilities. Also, you might be prompted to temporarily connect a USB cable during the setup process.

---

To change the connection type, do one of the following:

- [To change from an Ethernet connection to a wireless connection](#)
- [To change from a USB connection to a wireless connection](#)
- [To change from a wireless connection to a USB or Ethernet connection](#)

## To change from an Ethernet connection to a wireless connection

### Windows

1. On the computer desktop, click **Start** , select **Programs** or **All Programs** , click **HP**, select your printer name, and then click **Printer Setup & Software**.  
  
- Or -  
On the **Start** screen, click **Printer Setup & Software**.
2. Click **Connect a new printer** , and then select the type of connection you want to use.
3. Follow the display instructions to complete the setup.

### Mac OS X

1. Open HP Utility. For more information, see [HP Utility \(Mac OS X\) on page 148](#).
2. Click the **Applications** icon on the HP Utility toolbar.
3. Double-click **HP Setup Assistant** , and then follow the on-screen instructions.

## To change from a USB connection to a wireless connection

Follow the instructions for your operating system.

### Windows

1. On the computer desktop, click **Start** , select **Programs** or **All Programs** , click **HP**, select your printer name, and then click **Printer Setup & Software**.  
  
- Or -  
On the **Start** screen, click **Printer Setup & Software**.
2. Click **Convert a USB connected printer to wireless** .
3. Follow the display instructions to complete the setup.

### Mac OS X

1. Open HP Utility. For more information, see [HP Utility \(Mac OS X\) on page 148](#).
2. Click the **Applications** icon on the HP Utility toolbar.
3. Double-click **HP Setup Assistant** , and then follow the on-screen instructions.

## To change from a wireless connection to a USB or Ethernet connection

To change from a wireless connection to a USB or Ethernet connection, connect the USB or Ethernet cable to the printer.




**NOTE:** If you are using a computer with Mac OS X, add the printer to the print queue. Click **System Preferences** in the Dock, click **Print & Fax** or **Print & Scan** in the **Hardware** section, click **+**, and then select the printer.

---

## Test the wireless connection

Print the wireless test page for information about the printer's wireless connection. The wireless test page provides information about the printer's status, hardware (MAC) address, and IP address. If the printer is connected to a network, the test page displays details about the network settings.

To print the wireless test page, press the  (Network Information) button when the network is enabled.

## Guidelines for ensuring wireless network security

The following information can help you keep your wireless network and wireless printer secure from unauthorized use.

For more information, visit [www.hp.com/go/wirelessprinting](http://www.hp.com/go/wirelessprinting).

This section contains the following topics:

- [Overview of security settings](#)
- [Add hardware addresses to a wireless router \(MAC filtering\)](#)
- [Other wireless security guidelines](#)

### Overview of security settings

To help improve the security of the wireless network and prevent unauthorized access, the printer supports many common types of network authentication, including WEP, WPA, and WPA2.


- **WEP:** Provides security by encrypting data sent over radio waves from one wireless device to another wireless device. Devices on a WEP-enabled network use WEP keys to encode data. If your network uses WEP, you must know the WEP key(s) it uses.
- **WPA:** Increases the level of over-the-air data protection and access control on existing and future wireless networks. It addresses all known weaknesses of WEP, the original native security mechanism in the 802.11 standard. WPA uses the Temporal Key Integrity Protocol (TKIP) for encryption and employs 802.1X authentication with one of the standard Extensible Authentication Protocol (EAP) types available today.
- **WPA2:** Provides enterprise and consumer wireless users with a high level of assurance that only authorized users can access their wireless networks. WPA2 provides the Advanced Encryption Standard (AES). AES is defined in counter cipher-block chaining mode (CCM) and supports the Independent Basic Service Set (IBSS) to enable security between client workstations operating connected wirelessly without a wireless router (such as a Linksys wireless router or Apple AirPort Base Station).

### Add hardware addresses to a wireless router (MAC filtering)

MAC filtering is a security feature in which a wireless router or wireless access point is configured with a list of hardware addresses (also called "MAC addresses") of devices that are allowed to gain access to the network through the router.

If the router filters hardware addresses, then the printer's hardware address must be added to the router's list of accepted hardware addresses. If the router does not have the hardware address of a printer attempting to access the network, the router denies the printer access to the network.

---


 **CAUTION:** This method is not recommended, however, because your MAC addresses can easily be read and falsified by unwanted users outside your network.

---

## To add hard addresses to a wireless router or wireless access point

1. Print the network configuration page, and then locate the printer's hardware address. For more information, see [Understand the network configuration page on page 81](#).


---

 **NOTE:** The printer maintains separate hardware addresses for the Ethernet connection and for wireless connection. Both hardware addresses are listed on the printer's network configuration page.

---

2. Open the configuration utility for the wireless router or wireless access point, and add the printer's hardware address to the list of accepted hardware addresses.

---

 **NOTE:** For more information about using the configuration utility, see the documentation provided with the router or wireless access point.

---

## Other wireless security guidelines

To keep the wireless network secure, follow these guidelines:

- Use a wireless password with at least 20 random characters. You can use up to 64 characters in a wireless password.
- Avoid any common words or phrases, easy sequences of characters (such as all 1s), and personally-identifiable information for wireless passwords. Always use random strings composed of uppercase and lowercase letters, numbers, and if allowed, special characters such as punctuation.
- Change the default wireless password provided by the manufacturer for administrator access to the access point or wireless router. Some routers let you change the administrator name as well.
- Turn off administrative access over wireless if possible. If you do this, you need to connect to the router with an Ethernet connection when you want to make configuration changes.
- Turn off remote administrative access over the Internet on your router, if possible. You can use Remote Desktop to make an encrypted connection to a computer running behind your router and make configuration changes from the local computer you are accessing over the Internet.
- To avoid accidentally connecting to another party's wireless network, turn off the setting to automatically connect to non-preferred networks. This is disabled by default in Windows XP.

## Guidelines for reducing interference on a wireless network

The following tips will help reduce the chances for interference in a wireless network:

- Keep the wireless devices away from large metal objects, such as filing cabinets, and other electromagnetic devices, such as microwaves and cordless telephones, as these objects can disrupt radio signals.
- Keep the wireless devices away from large masonry structures and other building structures as these objects can absorb radio waves and lower signal strength.
- Position the access point or wireless router in a central location in line of sight with the wireless devices on the network.
- Keep all wireless devices on the network within range of one another.

# HP wireless direct printing

With HP wireless direct printing, you can print wirelessly from a computer, smart phone, tablet, or other wireless-capable device—without connecting to an existing wireless network.

When using HP wireless direct printing, note the following guidelines:

- Make sure your computer or mobile device has the necessary software:
  - If you are using a computer, make sure you have installed the HP printer software provided with the printer.
- If you are using a mobile device, make sure you have installed a compatible printing app. For more information about mobile printing, visit [www.hp.com/global/us/en/eprint/mobile\\_printing\\_apps.html](http://www.hp.com/global/us/en/eprint/mobile_printing_apps.html).
- Make sure HP wireless direct printing is turned on in the printer and, if necessary, security is enabled. For more information, see [Turn on HP wireless direct printing on page 144](#).
- Up to five computers and mobile devices can use the same HP wireless direct printing connection.
- HP wireless direct printing can be used while the printer is also connected to a computer using USB cable or to a network (using a wireless or Ethernet connection).
- HP wireless direct printing cannot be used to connect a computer, mobile device, or printer to the Internet.



[Click here to go online for more information.](#)

For more information about wireless printing, see [Set up the printer using the embedded web server \(EWS\) on page 140](#).



---

**NOTE:** At this time, these websites might not be available in all languages.

---

This section contains the following topics:

- [Turn on HP wireless direct printing](#)
- [Print from a wireless-capable mobile device](#)
- [Print from a wireless-capable computer](#)

## Turn on HP wireless direct printing

1. Open the EWS. For more information, see [Embedded web server on page 149](#).
2. Click the **Network** tab.
3. In the **Wireless Direct Printing** section, click **Status**.
4. Select **On (with security)** or **On (without security)** from the **Wireless Direct Printing Status**.



---

**TIP:** If you would like to use HP wireless direct printing with greater security and if the computer or mobile device supports WPA2 encryption, select the option that will enable security. With security enabled, only users with the password can connect wirelessly to the printer. Without enabling security, anyone with a wireless device within the wireless range of the printer can connect to the printer.

---

5. Click **Apply**.

## Print from a wireless-capable mobile device

Make sure you have installed a compatible printing app on your mobile device. For more information, visit [www.hp.com/global/us/en/eprint/mobile\\_printing\\_apps.html](http://www.hp.com/global/us/en/eprint/mobile_printing_apps.html).

1. Make sure you have turned on HP wireless direct printing on the printer. For more information, see [Turn on HP wireless direct printing on page 144](#).
2. Turn on the wireless connection in your mobile device. For more information, see the documentation provided with the mobile device.
3. From the mobile device, search for and connect to the HP wireless direct printing name, such as HP-Print-\*\*-Officejet 7110 series (where \*\* are the unique characters to identify your printer).

If HP wireless direct is turned on with security, enter the password when prompted.

4. From your mobile device's print app, confirm your HP printer is the default printer, and then print your document.

## Print from a wireless-capable computer

Follow the instructions for your operating system.

- [Print from a wireless-capable computer \(Windows\)](#)
- [Print from a wireless-capable computer \(Mac OS X\)](#)

### Print from a wireless-capable computer (Windows)

1. Make sure you have turned on HP wireless direct printing on the printer. For more information, see [Turn on HP wireless direct printing on page 144](#).
2. Turn on the wireless connection in your computer. For more information, see the documentation provided with the computer.
3. From the computer, click the wireless icon on your task tray, select the HP wireless direct printing name, such as HP-Print-\*\*-Officejet 7110 series (where \*\* are the unique characters to identify your printer).

If HP wireless direct is turned on with security, enter the password when prompted.

4. If the printer has been installed and connected to your computer with a USB cable, enable HP wireless direct printing in the HP printer software. Proceed to step 5 if the printer has been installed and connected to the computer over a network (Ethernet or wireless).
  - a. From the computer desktop, click **Start**, select **Programs** or **All Programs**, click **HP**, click the folder for the printer, and then select **Printer Setup & Software**.  
  
- Or -  
  
On the **Start** screen, right-click an empty area on the screen, click **All Apps** on the app bar, and then click the icon with the printer's name.
  - b. Select **Connect New Printer**.

- c. When the **Connection Options** software screen appears, select **Wireless**.  
Select the printer from the list of detected printers, such as HP-Print-\*\*-Officejet 7110 series (where \*\* are the unique characters to identify your printer).
  - d. Follow the on-screen instructions.
5. Print your document.

### **Print from a wireless-capable computer (Mac OS X)**

1. Make sure you have turned on HP wireless direct printing on the printer. For more information, see [Turn on HP wireless direct printing on page 144](#).
2. Turn on AirPort. For more information, see the documentation provided by Apple.
3. Click the AirPort icon and select the HP wireless direct printing name, such as HP-Print-\*\*-Officejet 7110 series (where \*\* are the unique characters to identify your printer).  
If HP wireless direct is turned on with security, enter the password when prompted.
4. Add the printer.
  - a. In **System Preferences**, select **Print & Fax** or **Print & Scan**, depending on your operating system.
  - b. Click + below the list of printers at the left.
  - c. Select the printer from the list of detected printers (the word “Bonjour” is listed the right column beside the printer name), and click **Add**.
5. Print your document.

---

## **D Printer management tools**

This section contains the following topics:

- [Toolbox \(Windows\)](#)
- [HP Utility \(Mac OS X\)](#)
- [Embedded web server](#)

# Toolbox (Windows)

The Toolbox provides maintenance information about the printer.



---

**NOTE:** The Toolbox can be installed from the HP Software CD if the computer meets the system requirements.

---

- [Open the Toolbox](#)

## Open the Toolbox

1. Open the HP printer software by doing one of the following:
  - From the computer desktop, click **Start** , select **Programs** or **All Programs** , click **HP**, click the folder for the printer, and then select the icon with the printer's name.
  - On the **Start** screen, right-click an empty area on the screen, click **All Apps** on the app bar, and then click the icon with the printer's name.
2. In the window that appears, select **Print, Scan & Fax** or **Print & Scan**, and then select **Maintain Your Printer** under **Print** .



# HP Utility (Mac OS X)

HP Utility contains tools to configure print settings, calibrate the printer, order supplies online, and find website support information.



**NOTE:** The features available in HP Utility vary depending on the selected printer.

Ink level warnings and indicators provide estimates for planning purposes only. When you receive a low-ink warning message, consider having a replacement cartridge available to avoid possible printing delays. You do not need to replace cartridges until prompted to do so.

---


## To open HP Utility

Double-click the HP Utility icon. This icon is located in the **Hewlett-Packard** folder in the **Applications** folder at the top level of the hard disk.

# Embedded web server

When the printer is connected to a network, you can use the printer's home page (embedded web server or EWS) to view status information, change settings, and manage it from your computer.

---

 **NOTE:** For a list of system requirements for the embedded web server, see [Embedded web server specifications on page 102](#).

To view or change some settings, you might need a password.

You can open and use the embedded web server without being connected to the Internet. However, some features are not available.

---


This section contains the following topics:

- [About cookies](#)
- [To open the embedded web server](#)

## About cookies

The embedded web server (EWS) places very small text files (cookies) on your hard drive when you are browsing. These files let the EWS recognize your computer the next time you visit. For example, if you have configured the EWS language, a cookie helps remember which language you have selected so that the next time you access the EWS, the pages are displayed in that language. Though some cookies are cleared at the end of each session (such as the cookie that stores the selected language), others (such as the cookie that stores customer-specific preferences) are stored on the computer until you clear them manually.


---

 **NOTE:** The cookies that the EWS stores on your computer are only used for saving settings on your computer or for sharing information between the printer and the computer. These cookies are not sent to any HP websites.

---

You can configure your browser to accept all cookies, or you can configure it to alert you every time a cookie is offered, which allows you to decide which cookies to accept or refuse. You can also use your browser to remove unwanted cookies.

---

 **NOTE:** Depending on your printer, if you disable cookies, you also disable one or more of the following features:


---

- Starting where you left the application (especially useful when using setup wizards)
- Remembering the EWS browser language setting
- Personalizing the EWS Home page

For information about how to change your privacy and cookie settings and how to view or delete cookies, see the documentation available with your web browser.

## To open the embedded web server

---


 **NOTE:** The printer must be on a network and must have an IP address. The IP address and hostname for the printer are listed on the status report. For more information, see [Understand the network configuration page on page 81](#).

---

- In a supported web browser on your computer, type the IP address or hostname assigned to the printer.

For example, if the IP address is 123.123.123.123, type the following address into the web browser:  
`http://123.123.123.123.`

---

 **TIP:** After opening the embedded web server, bookmark it so that you can return to it quickly.

**TIP:** If you are using the Safari web browser in Mac OS X, you can also use the Bonjour bookmark to open the EWS without typing the IP address. To use the Bonjour bookmark, open Safari, and then from the **Safari** menu, click **Preferences**. On the **Bookmarks** tab, in the **Bookmarks bar** section, select **Include Bonjour**, and then close the window. Click the **Bonjour** bookmark, and then select your networked device to open the EWS.

---

---

## E How do I?

- [Get started on page 1](#)
- [Change basic network settings on page 135](#)
- [Use HP ePrint on page 38](#)
- [Work with ink cartridges on page 39](#)
- [Maintain the printer on page 18](#)

---

## F Errors (Windows)

- [Low on ink](#)
- [Cartridge Problem](#)
- [Replace the ink cartridge](#)
- [Paper Mismatch](#)
- [The cartridge cradle cannot move](#)

- [Paper Jam](#)
- [The printer is out of paper](#)
- [Printer Offline](#)
- [Printer Paused](#)
- [Document failed to print](#)
- [Printer failure](#)
- [Door or cover open](#)
- [Previously used ink cartridge installed](#)
- [Ink cartridges depleted](#)
- [Ink cartridge failure](#)
- [Printer supply upgrade](#)
- [Printer supply upgrade successful](#)
- [Printer supply upgrade problem](#)
- [Non-HP ink cartridges installed](#)
- [Using Original HP Cartridges has its Rewards](#)
- [Counterfeit Cartridge Advisory](#)
- [Used, Refilled or Counterfeit Cartridge Detected](#)
- [Use SETUP cartridges](#)
- [Do not use SETUP cartridges](#)
- [Not enough ink at startup](#)
- [Use black ink only?](#)
- [Use color ink only?](#)
- [Incompatible ink cartridges](#)
- [Unable to Communicate with Printer](#)
- [Ink sensor failure](#)
- [Ink sensor warning](#)
- [Problem with printer preparation](#)
- [Color cartridge out of ink](#)
- [Black cartridge out of ink](#)
- [Problem with ink system](#)

## Low on ink

The ink cartridge identified in the message is low on ink.

Ink level warnings and indicators provide estimates for planning purposes only. When you receive a low ink warning message, consider having a replacement cartridge available to avoid possible printing delays. You do not need to replace cartridges until prompted to do so.

For information about replacing ink cartridges, see [Replace the ink cartridges on page 43](#). For information about ordering ink cartridges, see [Order printing supplies online on page 132](#). For information about recycling used ink supplies, see [HP inkjet supplies recycling program on page 117](#).



**NOTE:** Ink from the cartridges is used in the printing process in a number of different ways, including in the initialization process, which prepares the printer and cartridges for printing. In addition, some residual ink is left in the cartridge after it is used. For more information, see [www.hp.com/go/inkusage](http://www.hp.com/go/inkusage).

---

# Cartridge Problem

The ink cartridge identified in the message is missing, damaged, incompatible, or inserted into the wrong slot in the printer.



---

**NOTE:** If the cartridge is identified in the message as incompatible, see [Order printing supplies online on page 132](#) for information about obtaining cartridges for the printer.

---

To solve this problem, try the following solutions. Solutions are listed in order, with the most likely solution first. If the first solution does not solve the problem, continue trying the remaining solutions until the issue is resolved.

- Solution 1: Turn the printer off and on
- Solution 2: Install the ink cartridges correctly
- Solution 3: Replace the ink cartridge

## **Solution 1: Turn the printer off and on**

Turn off the printer, and then turn it on again.

If the problem persists, try the next solution.

## **Solution 2: Install the ink cartridges correctly**

Make sure all of the ink cartridges are properly installed:

1. Gently pull open the ink cartridge access door.
2. Remove the ink cartridge by pushing it in to release it, and then pulling it firmly toward you.
3. Insert the cartridge into the slot. Press firmly on the cartridge to ensure proper contact.
4. Close the ink cartridge access door and check if the error message has gone away.

## Replace the ink cartridge

Replace the indicated ink cartridge. For more information, see [Replace the ink cartridges on page 43](#).



**NOTE:** If your cartridge is still under warranty, contact HP support for service or replacement. For more information about ink cartridge warranty, see ink cartridge warranty information. If the problem persists after you replace the cartridge, contact HP support. For more information, see [HP support on page 48](#).

---

## Paper Mismatch

The paper size or type selected in the printer driver does not match the paper loaded in the printer. Make sure that the correct paper is loaded in the printer, and then print the document again. For more information, see [Load paper on page 11](#).




**NOTE:** If the paper loaded in the printer is the correct size, change the selected paper size in the printer driver, and then print the document again.

---



## The cartridge cradle cannot move

Something is blocking the ink cartridge cradle (the part of the printer that holds the ink cartridges).

To clear the obstruction, press the  (Power) button to turn off the printer, and then check the printer for jams.

For more information, see [Clear jams on page 88](#).

# Paper Jam

Paper has become jammed in the printer.

Before you try to clear the jam, check the following:

- Make sure that you have loaded paper that meets specifications and is not wrinkled, folded, or damaged.
- Make sure that the printer is clean.
- Make sure that the trays are loaded correctly and are not too full. For more information, see [Load paper on page 11](#).

For instructions on clearing jams, as well as more information about how to avoid jams, see [Clear jams on page 88](#).

## **The printer is out of paper**

The default tray is empty.

Load more paper. For more information, see [Load paper on page 11](#).

## Printer Offline

The printer is currently offline. While offline, the printer cannot be used.

To change the printer's status, complete the following steps.

1. Click **Start** , and then click **Printers, Printers and Faxes** , or **Devices and Printers** .  
- Or -  
Click **Start** , click **Control Panel** , and then double-click **Printers**.  
- Or -  
On the **Start** screen, click **Control Panel** , and then click **View devices and printers**.
2. If the printers listed in the dialog box are not being displayed in Details view, click the **View** menu, and then click **Details** .
3. If the printer is Offline, right-click the printer, and click **Use Printer Online**.
4. Try using the printer again.

# Printer Paused

The printer is currently paused. While paused, new jobs are added to the queue but are not printed.

To change the printer's status, complete the following steps.

1. Click **Start** , and then click **Printers, Printers and Faxes** , or **Devices and Printers** .

- Or -

Click **Start** , click **Control Panel** , and then double-click **Printers**.

- Or -

On the **Start** screen, click **Control Panel** , and then click **View devices and printers**.

2. If the printers listed in the dialog box are not being displayed in Details view, click the **View** menu, and then click **Details** .
3. If the printer is paused, right-click the printer, and click **Resume Printing**.
4. Try using the printer again.



## Document failed to print

The printer could not print the document because a problem occurred in the printing system.

For information about solving printing problems, see [Solve printer problems on page 52](#).

## Printer failure

There was a problem with the printer. Usually, you can resolve such problems by completing the following steps:


1. Press the  (Power) button to turn off the printer.
2. Unplug the power cord, and then plug in the power cord again.
3. Press the  (Power) button to turn on the printer.

If this problem persists, write down the error code provided in the message, and then contact HP support. For more information, see [HP support on page 48](#).

## Door or cover open

Before the printer can print documents, all doors and covers must be closed.

---

 **TIP:** When completely closed, most doors and covers snap into place.

---

If the problem persists after you've securely closed all doors and covers, contact HP support. For more information, see [HP support on page 48](#).



## Previously used ink cartridge installed

The ink cartridge identified in the message was previously used in a different printer.

You can use ink cartridges in different printers, but if the cartridge was left outside of a printer for an extended period of time, the print quality of your documents might be affected. Also, if you use ink cartridges that have been used in a different printer, the ink level indicator might be inaccurate or unavailable.

If the print quality is unsatisfactory, try cleaning the printheads. For more information, see [Clean the printhead on page 84](#).



**NOTE:** Ink from the cartridges is used in the printing process in a number of different ways, including in the initialization process, which prepares the printer and cartridges for printing, and in printhead servicing, which keeps print nozzles clear and ink flowing smoothly. In addition, some residual ink is left in the cartridge after it is used. For more information, see [www.hp.com/go/inkusage](http://www.hp.com/go/inkusage).

---

For more information, see [Supplies on page 133](#).

## **Ink cartridges depleted**

The cartridges listed in the message must be replaced to resume printing. HP recommends that you do not remove an ink cartridge until a replacement is ready to install.

See [Replace the ink cartridges on page 43](#)

## **Ink cartridge failure**

The cartridges listed in the message are damaged or have failed.

See [Replace the ink cartridges on page 43](#)

## **Printer supply upgrade**

The cartridge listed in the message can only be used to upgrade one printer. Click OK to use it on this printer. If you do not wish to proceed with the supply upgrade for this printer, click Cancel Print and then remove the cartridge.

## **Printer supply upgrade successful**

The supply upgrade was successful. The cartridges listed in the message can now be used in the printer.

## Printer supply upgrade problem

The supply upgrade was not successful. The cartridges listed in the message can still be used in this printer. Replace the Supply Upgrade cartridge. For more information, see [Replace the ink cartridges on page 43](#).

## **Non-HP ink cartridges installed**

HP cannot guarantee the quality or reliability of non-HP supplies. Printer service or repairs required as a result of using a non-HP supply will not be covered under warranty. If you believe you purchased original HP ink cartridges, visit HP at [www.hp.com/go/anticounterfeit](http://www.hp.com/go/anticounterfeit) for more information or to report fraud.

## **Using Original HP Cartridges has its Rewards**

HP rewards loyal customers for using original HP supplies. Click the button below the message to view Rewards online. Reward may not be available in all regions.




## Counterfeit Cartridge Advisory

The installed cartridge is not a new, original HP cartridge. Contact the store where this cartridge was purchased. To report suspected fraud, visit HP at [www.hp.com/go/anticounterfeit](http://www.hp.com/go/anticounterfeit) . To continue using the cartridge, click **Continue**.

## Used, Refilled or Counterfeit Cartridge Detected

The original HP ink in the cartridge has been depleted. The solution for this problem is to replace the ink cartridge or click OK to continue using the cartridge. For more information about replacing the cartridge, see [Replace the ink cartridges on page 43](#). HP rewards loyal customers for using original HP supplies. Click the button below the message to view Rewards online. Rewards may not be available in all regions.

---

 **WARNING!** HP's ink cartridge warranty does not cover non-HP ink or cartridges. HP's printer warranty does not cover repairs or service due to use of non-HP cartridges or ink. HP does not guarantee the quality or reliability of non-HP ink. Information about non-HP ink levels will not be available.

---

## Use SETUP cartridges

When you first setup the printer, you must install the cartridges that shipped in the box with the printer. These cartridges are labeled SETUP, and they calibrate your printer before the first print job. Failure to install the SETUP cartridges during the initial product setup causes an error. If you installed a set of regular cartridges, remove them and install the SETUP cartridges to complete printer setup. After printer setup is complete, the printer can use regular cartridges.

if you still receive error messages and the printer cannot complete ink system initialization, contact HP support. For more information, see [HP support on page 48](#).

[Click here to go online for more information .](#)

## **Do not use SETUP cartridges**

SETUP cartridges cannot be used after the printer has been initialized. Remove and install non-SETUP cartridges. For more information, see [Replace the ink cartridges on page 43](#).

## Not enough ink at startup

The used cartridges listed in the message might not have enough ink to complete one-time startup processes.

Solution: Install new cartridges or click **OK** to use installed cartridges.

If startup cannot complete with installed cartridges, new cartridges will be needed. For information on how to install new cartridges, see [Replace the ink cartridges on page 43](#).


## Use black ink only?

The cartridges listed in the message are out of ink.

Solutions: To print in color, replace the empty cartridges. For information about how to install new cartridges, see [Replace the ink cartridges on page 43](#).

To temporarily print using Black ink only, click **Use Black Only**. The printer will replace color with grayscale. The empty cartridges will need to be replaced soon.

---

 **CAUTION:** Do not remove the empty color cartridge to print in Use Black Only mode.

---

## Use color ink only?

The black cartridge is out of ink.

Solutions: To temporarily replace black with color, click Use Color Only. Black will be simulated. Text and photo quality will differ from those printed when using all cartridges. The black cartridge will need to be replaced soon.

To print with black, replace the black ink cartridge. For information about how to install new cartridges, see [Replace the ink cartridges on page 43](#).

---

 **CAUTION:** Do not remove the empty black cartridge to print in Use Color Only mode.

---

## Incompatible ink cartridges

The ink cartridge is not compatible with your printer.

Solution: Remove this cartridge immediately and replace with a compatible ink cartridge. For information about how to install new cartridges, see [Replace the ink cartridges on page 43](#).




## Unable to Communicate with Printer

The computer cannot communicate with the printer because one of the following events has occurred:

- The printer has been turned off.
- The cable connecting the printer, such as a USB cable or a network (Ethernet) cable, has been disconnected..
- If the printer is connected to a wireless network, the wireless connection has been broken.

To solve this problem, try the following solutions:

- Make sure the printer is turned on and that the  (Power button) light is on.
- Make sure the power cord and other cables are working and are firmly connected to the printer.
- Make sure the power cord is connected firmly to a functioning, alternating current (AC) power outlet.
- If the printer is connected to a network, make sure the network is functioning properly. For more information, see [Solve Ethernet network problems on page 69](#).
- If the printer is connected to a wireless network, make sure the wireless network is functioning properly. For more information, see [Solve wireless problems on page 69](#).

## **Ink sensor failure**

The ink sensor has failed and the printer can no longer print.

Contact HP support. For more information, see [www.hp.com/support](http://www.hp.com/support).

## **Ink sensor warning**

The ink sensor is reporting an unexpected condition. This could be caused by the cartridge, or the sensor may have failed. If the sensor has failed, it can no longer sense when your cartridges are out of ink. Printing with an empty cartridge will cause air to enter the ink system, which causes poor print quality. Significant amounts of ink will be used up to recover from this condition, which will deplete much of the ink supply for all cartridges.

Solution: Click OK to continue printing or replace the cartridge. For information about how to install new cartridges, see [Replace the ink cartridges on page 43](#).

## Problem with printer preparation

The printer clock has failed and ink preparation may not be complete. The estimated Ink Level gauge might be inaccurate.

Solution: Check the print quality of your print job. If it is not satisfactory, running the printhead cleaning procedure from the toolbox might improve it. For more information, see [Clean the printhead on page 84](#).


## Color cartridge out of ink

The cartridges listed in the message are out of ink.

Solutions: To print in color, replace the empty cartridges. For information about how to install new cartridges, see [Replace the ink cartridges on page 43](#).

To temporarily print using black ink only, click Cancel Print and then re-send the print job. The **Use black ink only?** message appears before the job prints. The empty cartridges will need to be replaced soon.

---

 **CAUTION:** Do not remove the empty color cartridge to print in Use Black Only mode.

---

## Black cartridge out of ink

The black cartridge is out of ink.

Solutions: Replace the black ink cartridge. For information about how to install new cartridges, see [Replace the ink cartridges on page 43](#).

To temporarily replace black with color, click Cancel Print and re-send the print job. The **Use color ink only?** message appears before the job prints. The black cartridge will need to be replaced soon.

---

 **CAUTION:** Do not remove the empty black cartridge to print in Use Color Only mode.

---

## Problem with ink system

Please remove the ink cartridges and examine them for any sign of leaks. If any cartridges have leaks, contact HP support. Do not use cartridges that are leaking.

If there are no leaks, re-install cartridges and close the printer cover. Turn the printer off then on again. If you get this message a second time, contact HP support.

For more information about contacting HP support, see [HP support on page 48](#).

---

# Index

## A

- accessibility 2
- accessories
  - installation 16
  - printer status report 79
  - turn on and off in driver 16
  - warranty 99
- acoustic emissions 109
- after the support period 50
- align printhead 85

## B

- B sizes
  - sizes supported 103
- blank pages, troubleshoot
  - print 54
- both sides, print on 31
- Brochures
  - sizes supported 105

## C

- capacity
  - trays 105
- cards
  - sizes supported 104
  - tray supporting 105
- cartridges. *See* ink cartridges
- clean
  - exterior 18
  - printhead 84
  - scanner glass 18
- Configure
  - firewall 66
- connection type
  - change 140
- connectors, locating 6
- control panel
  - illustration 91
  - lights, understanding 91

- custom-size paper
  - sizes supported 105
- custom-sized paper
  - Mac OS 27
  - print on 27
- customer support
  - electronic 48
- cut-off pages, troubleshoot 55

## D

- diagnostic page 59
- double-sided printing 31
- driver
  - accessories settings 16
  - warranty 99
- duplexer
  - installation 16
  - turn on and off in driver 16
- duty cycle 102

## E

- electrical specifications 109
- embedded web server
  - about 149
  - opening 149
  - troubleshoot, cannot be opened 67
- envelopes
  - sizes supported 104
  - tray supporting 105
- environmental specifications 109
- environmental sustainability program 116
- EWS. *See* embedded web server

## F

- Firewall
  - configure 66
- firewalls, troubleshoot 53

- fonts supported 102

## G

- glass, scanner
  - clean 18

## H

- head 84
- HP software
  - uninstall from Windows 86
- HP Utility (Mac OS X)
  - opening 148
- humidity specifications 109

## I

- ink cartridge access door, locating 5
- Ink cartridges
  - warranty 99
- ink cartridges 6
  - check ink levels 41
  - lights 91
  - locating 5
  - ordering online 132
  - part numbers 133
  - replace 43
  - supported 101
  - tips 40
  - yields 102
- ink delivery
  - expiration dates 80
  - part numbers 80
  - status 80
- ink levels, check 41
- input tray
  - capacity 105
  - paper sizes supported 103
  - paper types and weights supported 105



- installation
  - accessories 16
  - duplexer 16
  - hardware installation suggestions 77
  - HP software installation suggestions 77
  - troubleshooting issues 77
- IP address
  - checking for printer 67
- IP settings 136
- J**
- jams
  - clear 88
  - paper 88, 89
  - paper to avoid 10
- L**
- language, printer 102
- lights on control panel
  - illustration 91
  - understanding 91
- lights reference 91
- link speed, setting 136
- M**
- Mac OS 21
  - custom-sized paper 27
  - Print borderless 29
  - Print photos 25
  - print settings 20
  - turn accessories on and off in driver 16
- Mac OS X
  - HP Utility 148
- maintain
  - printhead 84
- maintenance
  - align printhead 85
  - check ink levels 41
  - clean printhead 84
  - diagnostic page 59
  - print quality report 59
  - printhead 84
  - replace ink cartridges 43
- margins
  - setting, specifications 106
- media
  - duplexing 31
  - print on custom-sized 27
- memory
  - specifications 102
- missing or incorrect information,
  - troubleshoot 55
- model number 79
- multi-feeds, troubleshoot 63
- N**
- networks
  - advanced settings 136
  - connector illustration 6
  - firewalls, troubleshoot 53
  - IP settings 136
  - link speed 136
  - settings, change 135
  - solve problems 69
  - view and print settings 135
  - wireless communication setup 138
  - wireless settings 81
- noise information 109
- O**
- operating environment
  - specifications 109
- operating systems supported 102
- output tray
  - locating 5
  - paper supported 106
- P**
- pages per month (duty cycle) 102
- paper
  - clear jams 88
  - HP, order 133
  - jams 88, 89
  - load tray 11
  - selecting 10
  - skewed pages 62
  - specifications 102, 103
  - supported sizes 103
  - troubleshoot feeding 62
  - types and weights supported 105
- paper-feed problems, troubleshoot 62
- PCL 3 support 102
- phone support 48
- phone support period
  - period for support 49
- photo paper
  - sizes supported 104
- ports, specifications 101
- power
  - specifications 109
  - troubleshoot 52
- power input, locating 6
- print
  - diagnostic page 59
  - double-sided 31
  - print quality report 59
  - printer status report 79
  - troubleshoot 52
- Print borderless
  - Mac OS 29
  - Windows 29
- Print brochures
  - print 21
- Print envelope 23
- Print envelopes
  - Mac OS 23
- Print photos
  - Mac OS 25
  - Windows 25
- print quality report 59
- print settings
  - print quality 57
- printer control panel
  - locating 5
  - network settings 135
- printer driver
  - accessories settings 16
  - warranty 99
- printer software (Windows)
  - opening 19
- printer status report
  - information on 79
  - print 79
- printhead
  - clean 84
- printhead, align 85
- printheads
  - lights 91
  - ordering online 132
  - supported 101
- printing
  - slow, troubleshoot 53
- processor specifications 102

**R**

radio interference  
 reducing 143  
 regulatory information 113  
 radio, turn off 135  
 rear access panel  
 clear jams 88  
 illustration 6  
 recycle  
 ink cartridges 117  
 regulatory information 110, 113  
 regulatory model number 110  
 replace ink cartridges 43  
 report  
 wireless test 142  
 reports  
 diagnostic 59  
 print quality 59  
 printhead 84

**S**

scanner glass  
 clean 18  
 security  
 wireless communication 142  
 serial number 79  
 settings  
 network 135  
 skew, troubleshoot  
 print 62  
 software  
 accessories settings 16  
 warranty 99  
 sound pressure 109  
 specifications  
 acoustic emissions 109  
 electrical 109  
 operating environment 109  
 paper 102, 103  
 physical 101  
 processor and memory 102  
 storage environment 109  
 system requirements 102  
 status  
 network configuration page 81  
 printer status report 79  
 storage environment specifications 109  
 supplies  
 ordering online 132

printer status report 79  
 yields 102  
 support 48  
 system requirements 102

**T**

temperature specifications 109  
 text  
 troubleshoot 55  
 Toolbox (Windows)  
 about 147  
 opening 147  
 tray 2  
 turn on and off in driver 16  
 trays  
 capacities 105  
 clear jams 88  
 load paper 11  
 locating 5  
 paper guides illustration 5  
 paper sizes supported 103  
 paper types and weights  
 supported 105  
 troubleshoot feeding 62  
 turn on and off in driver 16  
 troubleshoot  
 blank pages printed 54  
 cut-off pages, incorrect text or  
 graphics placement 55  
 embedded web server 67  
 firewalls 53  
 jams, paper 89  
 missing or incorrect  
 information 55  
 multiple pages are picked 63  
 network configuration page 81  
 nothing prints 52  
 paper not picked up from tray 62  
 paper-feed problems 62  
 power 52  
 print 52  
 printer status report 79  
 skewed pages 62  
 tips 51  
 troubleshooting  
 Ethernet network 69  
 hardware installation  
 suggestions 77

HP software installation  
 suggestions 77  
 installation issues 77  
 lights 91  
 solve network problems 69  
 wireless problems 69  
 two-sided printing 31

**U**

uninstall HP software  
 Windows 86  
 USB connection  
 port, locating 5, 6  
 specifications 101

**V**

view  
 network settings 135  
 voltage specifications 109

**W**

warranty 99  
 websites  
 accessibility information 2  
 customer support 48  
 environmental programs 116  
 order supplies and accessories 131  
 supply yield data sheet 102  
 Windows 23  
 borderless 29  
 print brochures 21  
 Print photos 25  
 print settings 20  
 system requirements 102  
 turn accessories on and off in  
 driver 16  
 uninstall HP software 86  
 wireless communication  
 advanced wireless  
 troubleshooting 71  
 basic wireless troubleshooting 70  
 radio, turn off 135  
 reducing interference 143  
 regulatory information 113  
 security 142  
 set up 138  
 wireless test report  
 print 142



