HP Officejet 4500 (G510) All-in-One series
User Guide
Copyright information
© 2009 Copyright Hewlett-Packard Development Company, L.P.

Hewlett-Packard Company notices
The information contained in this document is subject to change without notice.
All rights reserved. Reproduction, adaptation, or translation of this material is prohibited without prior written permission of Hewlett-Packard, except as allowed under copyright laws.
The only warranties for HP products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. HP shall not be liable for technical or editorial errors or omissions contained herein.

Acknowledgements
Windows, Windows XP, and Windows Vista are U.S. registered trademarks of Microsoft Corporation.
ENERGY STAR and the ENERGY STAR mark are registered U.S. marks.

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 device.
2. Use only a grounded electrical outlet when connecting this product to a power source. If you do not know whether the outlet is grounded, check with a qualified electrician.
3. Observe all warnings and instructions marked on the product.
4. Unplug this product from wall outlets before cleaning.
5. Do not install or use this product near water, or when you are wet.
6. Install the product securely on a stable surface.
7. Install the product in a protected location where no one can step on or trip over the line cord, and the line cord cannot be damaged.
8. If the product does not operate normally, see Solve a problem.
9. There are no user-serviceable parts inside. Refer servicing to qualified service personnel.

Accessibility
The device provides a number of features that make it accessible for people with disabilities.
Visual
The device software is accessible for users with visual impairments or low vision through the use of your operating system's accessibility options and features. It 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 software and on the device control panel have simple text or icon labels that convey the appropriate action.

Mobility
For users with mobility impairments, the device software functions can be executed through keyboard commands. The software also supports Windows accessibility options such as StickyKeys, ToggleKeys, FilterKeys, and MouseKeys. The device 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 product and HP’s commitment to product accessibility, visit HP’s Web site at www.hp.com/accessibility.
For accessibility information for the Mac OS X, visit the Apple Web site at www.apple.com/accessibility.
Contents

1 Get started

Accessibility........................................................................................................................................... 9
Eco-Tips.............................................................................................................................................. 10
Understand the device parts................................................................................................................. 10
  Front view........................................................................................................................................ 10
  Printing supplies area...................................................................................................................... 11
  Back view........................................................................................................................................ 11
Use the product control panel............................................................................................................. 12
  Overview of buttons and lights........................................................................................................ 12
  Change product settings.................................................................................................................. 13
    Select the mode............................................................................................................................ 13
    Change product settings.............................................................................................................. 14
Types of messages............................................................................................................................. 14
  Status messages............................................................................................................................. 14
  Warning messages......................................................................................................................... 14
  Error messages.............................................................................................................................. 14
  Critical error messages................................................................................................................. 15
Finding the device model number...................................................................................................... 15
Select print media.............................................................................................................................. 15
  Recommended papers for printing and copying........................................................................... 15
  Recommended papers for photo printing..................................................................................... 16
  Tips for selecting and using media.............................................................................................. 17
Load an original on the scanner glass............................................................................................... 18
Load an original in the automatic document feeder (ADF)........................................................... 18
Load media.......................................................................................................................................... 19
Maintain the device............................................................................................................................ 21
  Clean the scanner glass.................................................................................................................. 21
  Clean the exterior ........................................................................................................................... 22
  Clean the automatic document feeder (ADF) (Some models only).......................................... 22
Turn off the device............................................................................................................................ 24

2 Print

Print documents................................................................................................................................. 25
  Print documents (Windows)........................................................................................................... 25
  Print documents (Mac OS X)......................................................................................................... 26
Print brochures................................................................................................................................... 26
  Print brochures (Windows)............................................................................................................. 26
  Print brochures (Mac OS X).......................................................................................................... 27
Print on envelopes............................................................................................................................ 27
  Print on envelopes (Windows)....................................................................................................... 27
  Print on envelopes (Mac OS X).................................................................................................... 28
Print a Web page............................................................................................................................... 28
  Print a Web page (Windows)........................................................................................................ 28
  Print a Web page (Mac OS X)...................................................................................................... 29
Print photos................................................................................................................... 29
print photos on photo paper (Windows)............................................................................ 29
print photos on photo paper (Mac OS X).......................................................................... 30
print on special and custom-sized paper........................................................................ 31
print on special or custom-sized paper (Windows).......................................................... 31
print on special or custom-sized paper (Mac OS X)......................................................... 32
print borderless documents.............................................................................................. 32
print borderless documents (Windows)............................................................................ 33
print borderless documents (Mac OS X).......................................................................... 33

3 Scan
scan an original.................................................................................................................. 35
scan an original from the product control panel............................................................. 35
edit a scanned document using optical character recognition (OCR) software............ 36

4 Copy
copy documents............................................................................................................... 37
change copy settings....................................................................................................... 37

5 Fax
send a fax.......................................................................................................................... 39
send a basic fax.................................................................................................................. 39
send a fax manually from a phone................................................................................... 40
send a fax using monitor dialing...................................................................................... 41
send a fax from memory.................................................................................................. 42
schedule a fax to send later............................................................................................ 42
send a fax to multiple recipients...................................................................................... 43
send a fax in Error Correction Mode............................................................................... 43
receive a fax.................................................................................................................... 44
receive a fax manually...................................................................................................... 44
set up backup fax............................................................................................................ 45
reprint received faxes from memory................................................................................. 46
poll to receive a fax......................................................................................................... 46
forward faxes to another number.................................................................................. 47
set the paper size for received faxes................................................................................ 47
set automatic reduction for incoming faxes...................................................................... 48
block junk fax numbers.................................................................................................. 48
add numbers to the junk fax list.................................................................................... 49
remove numbers from the junk fax list........................................................................... 49
print a Junk Fax Report.................................................................................................. 49
receive faxes to your computer (Fax to PC and Fax to Mac)........................................... 50
fax to PC and Fax to Mac requirements........................................................................ 50
activate Fax to PC and Fax to Mac................................................................................ 50
modify Fax to PC or Fax to Mac settings......................................................................... 51
turn off Fax to PC or Fax to Mac settings....................................................................... 51
Contents

6 Work with ink cartridges
   Information about ink cartridges.................................................................................... 60
   Check the estimated ink levels....................................................................................... 61
   Handle the ink cartridges............................................................................................... 62
   Replace the ink cartridges............................................................................................ 62
   Store printing supplies................................................................................................. 66
   Advanced ink cartridge maintenance............................................................................. 66
      Align the ink cartridges............................................................................................. 66
      Clean the ink cartridges............................................................................................ 68

7 Solve a problem
   HP support..................................................................................................................... 70
      Obtain electronic support............................................................................................ 71
   HP support by phone..................................................................................................... 71
      Before you call............................................................................................................. 71
      Phone support period................................................................................................. 72
      Telephone support numbers....................................................................................... 72
      After the phone support period................................................................................ 74
   General troubleshooting tips and resources................................................................. 74
   Solve printing problems................................................................................................. 75
      The device shuts down unexpectedly.......................................................................... 75
      Error message appears on control-panel display....................................................... 75
      Alignment fails............................................................................................................ 75
      The device is not responding (nothing prints)........................................................... 75
      Device takes a long time to print................................................................................ 76
      Blank or partial page printed....................................................................................... 76
      Something on the page is missing or incorrect......................................................... 77
      Placement of the text or graphics is wrong............................................................... 77
      The device prints half a page, then ejects the paper................................................... 78
Poor print quality and unexpected printouts.................................................................78
  Solution 1: Use genuine HP cartridges.................................................................78
  Solution 2: Check the paper..................................................................................78
  Solution 3: Wait a short period of time (if possible). ....................................................79
  Solution 4: Check the print settings......................................................................79
    Step 1: Check the print quality settings.................................................................80
    Step 2: Check the Print in Grayscale setting..........................................................80
  Solution 5: Check estimated ink levels and replace low or empty ink cartridges.....81
  Solution 6: Print and evaluate a diagnostic report and troubleshoot defects..........81
    Print Quality Diagnostic Report........................................................................82
    Self-Test Report...................................................................................................87
  Solution 7: Clean the ink cartridges.....................................................................89
  Solution 8: Align the ink cartridges.....................................................................89
  Solution 9: Replace the problem ink cartridge......................................................90
  Solution 10: Service the product..........................................................................90

Clean the area around the ink nozzles......................................................................91
Solve paper-feed problems.........................................................................................92
Solve copy problems..................................................................................................94
  No copy came out.................................................................................................94
  Copies are blank.................................................................................................94
  Documents are missing or faded..........................................................................95
  Size is reduced.....................................................................................................95
  Copy quality is poor ............................................................................................95
  Copy defects are apparent....................................................................................95
  The device prints half a page, then ejects the paper.............................................96
  Paper mismatch...................................................................................................96
Solve scan problems..................................................................................................96
  Scanner did nothing.............................................................................................97
  Scan takes too long..............................................................................................97
  Part of the document did not scan or text is missing............................................98
  Text cannot be edited.........................................................................................98
  Error messages appear.........................................................................................99
  Scanned image quality is poor ............................................................................99
  Scan defects are apparent....................................................................................100
Solve fax problems...................................................................................................100
  The fax test failed...............................................................................................101
Solve wired (Ethernet) network problems (some models only)..............................113
  General network troubleshooting........................................................................113
  Network port created does not match device IP address (Windows)....................113
A Technical information

Warranty information.................................................................130
  Hewlett-Packard limited warranty statement............................131
  Ink cartridge warranty information........................................132

Device specifications..................................................................133
  Physical specifications...........................................................133
  Product features and capacities.............................................133
  Processor and memory specifications......................................133
  System requirements............................................................134
  Network protocol specifications (Some models only)..............134
  Embedded Web server specifications (some models only)........135

Media specifications................................................................135
  Understand supported sizes..................................................135
  Understand supported media types and weights.....................137
  Set minimum margins..........................................................138

Guidelines for two-sided (duplex) printing.............................139

Print resolution.................................................................139
Print specifications..............................................................139
Copy specifications..............................................................139
Fax specifications.................................................................140
Scan specifications...............................................................141
Operating environment..........................................................141
Electrical requirements..........................................................141
Acoustic emission specification...............................................141
C Additional fax setup

Set up faxing (parallel phone systems) ................................................................. 175
Choose the correct fax setup for your home or office .................................................. 176
Case A: Separate fax line (no voice calls received) ..................................................... 178
Case B: Set up the device with DSL ......................................................................... 179
Case C: Set up the device with a PBX phone system or an ISDN line ......................... 180
Case D: Fax with a distinctive ring service on the same line ........................................ 180
Case E: Shared voice/fax line .................................................................................... 181
Case F: Shared voice/fax line with voice mail ............................................................ 182
Case G: Fax line shared with computer modem (no voice calls received) ................. 183
  Set up the device with a computer dial-up modem ................................................... 184
  Set up the device with a computer DSL/ADSL modem .......................................... 185
Case H: Shared voice/fax line with computer modem ................................................. 186
  Shared voice/fax with computer dial-up modem ..................................................... 186
  Shared voice/fax with computer DSL/ADSL modem .............................................. 188
Case I: Shared voice/fax line with answering machine ............................................... 189
Case J: Shared voice/fax line with computer modem and answering machine .......... 190
  Shared voice/fax line with computer dial-up modem ............................................. 191
  Shared voice/fax line with computer DSL/ADSL modem ....................................... 193
Case K: Shared voice/fax line with computer dial-up modem and voice mail ........... 194
Serial-type fax setup ................................................................................................. 196
Test fax setup ............................................................................................................ 197

D Network setup (some models only)

Change basic network settings .................................................................................. 198
View and print network settings ................................................................................ 198
Turn the wireless radio on and off (some models only) .............................................. 198
Change advanced network settings .......................................................................... 198
Set link speed ............................................................................................................. 199
To View IP settings ................................................................................................... 199
To Change IP settings ............................................................................................... 199
Set up the device for wireless communication (some models only) ......................... 200
Understand 802.11 wireless network settings ......................................................... 200
To set up wireless communication using the device control panel with wireless setup
  wizard ....................................................................................................................... 201
To set up wireless communication using the installer (Windows) .............................. 202
To set up wireless communication using the installer (Mac OS X) ............................. 202
Connect the device using an ad hoc wireless network connection ............................. 202
To turn off wireless communication ....................................................................... 203
To print a wireless test page ..................................................................................... 203
Reset wireless settings ............................................................................................ 203
Change the connection method ............................................................................... 203
Guidelines for ensuring wireless network security .................................................... 204
  To add hardware addresses to a WAP .................................................................. 204
  Other guidelines .................................................................................................... 204
Guidelines for reducing interference on a wireless network .................................... 204
Uninstall and reinstall the software ......................................................................... 204

E Device management tools

Toolbox (Windows) .................................................................................................... 207
Use the HP Solution Center (Windows)..........................................................................................207
HP Utility (Mac OS X)..................................................................................................................207
Embedded Web server (some models only)..................................................................................208

F Errors (Windows)
Fax Memory Full..........................................................................................................................210
Device Disconnected..................................................................................................................210
Ink Alert.........................................................................................................................................210
Cartridge Problem.......................................................................................................................211
  Solution 1: Install the ink cartridges correctly.........................................................................211
  Solution 2: Turn the product off and on..................................................................................211
  Solution 3: Clean the electrical contacts..............................................................................213
  Solution 4: Replace the ink cartridge.....................................................................................213
Paper Mismatch............................................................................................................................213
The cartridge cradle cannot move...............................................................................................213
Paper Jam......................................................................................................................................213
The printer is out of paper............................................................................................................214
Printer Offline...............................................................................................................................214
Printer Paused..............................................................................................................................214
Document failed to print..............................................................................................................214
General printer error....................................................................................................................214
Align cartridge.............................................................................................................................215

Index..............................................................................................................................................216
1 Get started

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

- Accessibility
- Eco-Tips
- Understand the device parts
- Use the product control panel
- Finding the device model number
- Select print media
- Load an original on the scanner glass
- Load an original in the automatic document feeder (ADF)
- Load media
- Maintain the device
- Turn off the device

NOTE: If you are using the device with a computer running Windows XP Starter Edition, Windows Vista Starter Edition, or Windows 7 Starter Edition, some features might not be available. For more information, see Operating system compatibility.

Accessibility

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

Visual

The device software is accessible for users with visual impairments or low vision through the use of your operating system's accessibility options and features. It 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 software and on the device control panel have simple text or icon labels that convey the appropriate action.

Mobility

For users with mobility impairments, the device software functions can be executed through keyboard commands. The software also supports Windows accessibility options such as StickyKeys, ToggleKeys, FilterKeys, and MouseKeys. The device 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 product and HP's commitment to product accessibility, visit HP's Web site at www.hp.com/accessibility.

For accessibility information for Mac OS X, visit the Apple Web site at www.apple.com/accessibility.
Eco-Tips

HP is committed to helping customers reduce their environmental footprint. HP has provided the Eco-Tips below to help you focus on ways to assess and reduce the impact of your printing choices. In addition to specific features in this product, please visit the HP Eco Solutions Web site for more information on HP's environmental initiatives.

www.hp.com/hpinfo/globalcitizenship/environment/

- **Duplex printing**: Use **Paper-saving Printing** to print two-sided documents with multiple pages on same sheet to reduce paper usage. For more information, see Two-sided printing (duplexing).
- **Smart Web printing (Windows)**: The HP Smart Web Printing interface includes a **Clip Book** and **Edit Clips** window where you can store, organize, or print clips you have gathered from the Web. For more information, see Print a Web page.
- **Energy Savings Information**: To determine the ENERGY STAR® qualification status for this product, see Power consumption.
- **Recycled Materials**: For more information regarding recycling of HP products, please visit:
  www.hp.com/hpinfo/globalcitizenship/environment/recycle/

Understand the device parts

This section contains the following topics:

- **Front view**
- **Printing supplies area**
- **Back view**

Front view
<table>
<thead>
<tr>
<th></th>
<th>Control panel</th>
<th>Main tray</th>
<th>Cartridge access door</th>
<th>Scanner glass</th>
<th>Automatic document feeder</th>
<th>Scanner lid</th>
</tr>
</thead>
</table>

**Printing supplies area**

<table>
<thead>
<tr>
<th></th>
<th>HP Officejet 4500 / HP Officejet 4500 Wireless</th>
<th>HP Officejet 4500 Desktop</th>
</tr>
</thead>
</table>

1. Cartridge access door
2. Ink cartridges

**Back view**

<table>
<thead>
<tr>
<th></th>
<th>HP Officejet 4500 / HP Officejet 4500 Wireless</th>
<th>HP Officejet 4500 Desktop</th>
</tr>
</thead>
</table>

1. Universal serial bus (USB) port
2. Ethernet port (HP Officejet 4500 only)
3. Power input
Use the product control panel

This section contains the following topics:

- Overview of buttons and lights
- Change product settings
- Types of messages

Overview of buttons and lights

The following diagram and related table provide a quick reference to the device control panel features.

<table>
<thead>
<tr>
<th>Label</th>
<th>Name and Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Wireless button (HP Officejet 4500 Wireless): Turns the 802.11 wireless feature on or off. The button is lit when the wireless feature is on.</td>
</tr>
<tr>
<td>2</td>
<td>Keypad: Enters values.</td>
</tr>
<tr>
<td>3</td>
<td>Attention light: Indicates an error condition.</td>
</tr>
<tr>
<td>4</td>
<td>Back button: Reverts back to its previous setting or upper level menu.</td>
</tr>
<tr>
<td>5</td>
<td>Left arrow button: Navigates forward through settings in the menus.</td>
</tr>
<tr>
<td>6</td>
<td>OK button: Selects the current menu or setting.</td>
</tr>
<tr>
<td>7</td>
<td>Right arrow button: Navigates in reverse through settings in the menus.</td>
</tr>
<tr>
<td>8</td>
<td>Setup: Presents the Setup menu for generating reports and other maintenance settings, and for accessing the Help menu. The topic that you select from the Help menu opens a help window on your computer screen.</td>
</tr>
<tr>
<td>9</td>
<td>Start: Initiates a copy, fax, or scan job. Pressing Start processes the job according to the function selected.</td>
</tr>
<tr>
<td>10</td>
<td>Cancel: Stops a job, exits a menu, or exits settings.</td>
</tr>
<tr>
<td>Label</td>
<td>Name and Description</td>
</tr>
<tr>
<td>-------</td>
<td>----------------------</td>
</tr>
<tr>
<td>11</td>
<td>Scan function indicator</td>
</tr>
<tr>
<td>12</td>
<td>Copy Color function indicator</td>
</tr>
<tr>
<td>13</td>
<td>Copy B&amp;W function indicator</td>
</tr>
<tr>
<td>14</td>
<td>Fax Color function indicator</td>
</tr>
<tr>
<td>15</td>
<td>Fax B&amp;W function indicator</td>
</tr>
<tr>
<td>16</td>
<td><strong>Power</strong>: Turns the device on or off. The Power button is lit when the device is on. The light blinks while performing a job. When the device is turned off, a minimal amount of power is still supplied. To completely disconnect the power supply, turn the device off, and then unplug the power cord.</td>
</tr>
</tbody>
</table>

### Change product settings

You use the control panel to change the product’s mode and settings, print reports, or get help for the product.

**TIP:** If the product is connected to a computer, you can also change the product settings using software tools available on your computer, such as the Toolbox (Windows), the HP Utility (Mac OS X), or the embedded Web server (EWS). For more information about these tools, see [Device management tools](#).

This section contains the following topics:

- Select the mode
- Change product settings

### Select the mode

The mode indicator arrow on the control panel shows the mode currently selected for the product.

**NOTE:** After selecting a mode and changing settings, press (Start button) to start the job.

**To select a different mode**

Press left arrow ◀ or right arrow ▶ to select the desired mode, and then press OK.
To change settings for a mode
1. After selecting a mode, press the arrow buttons to scroll through the available settings available, and then press OK to select the setting you want to change.
2. Press the arrow buttons to change the settings, and then press OK.

**NOTE:** Use the left arrow button or button when you want to delete an incorrect entry on the display.

Change product settings
To change the product settings or print reports, use the options available in the Setup menu:
1. Press the (Setup) button
2. Press the arrow buttons to scroll through the menus.
3. Press OK to select menus or options.

**NOTE:** Use the left arrow button or button when you want to delete an incorrect entry on the display.

Types of messages
While using the product, messages will appear on the control panel display. These messages provide information about the product's activity. While some types of messages just provide information about the product's status, other types of messages might require that you take the appropriate action (often specified in the message itself) before the product can continue functioning.

**Status messages**
Status messages reflect the current state of the device. They inform you of normal operation and require no action to clear them. They change as the state of the device changes. Whenever the device is ready, not busy, and has no pending warning messages, the status message READY appears if the device is turned on.

**Warning messages**
Warning messages inform you of events that require your attention, but they do not prevent the device from operating. An example of a warning message is a low ink warning. These messages appear until you resolve the condition.

**Error messages**
Error messages communicate that some action must be performed, such as adding media or clearing a media jam. These messages are usually accompanied by a blinking red Attention light. Take the appropriate action to continue printing.

If the error message shows an error code, press the Power button to turn off the device, and then turn it on again. In most situations, this action solves the problem. If the message persists, your device might need service. For more information, see Solve a problem.
Critical error messages

Critical error messages inform you of a device failure. Some of these messages can be cleared by pressing the Power button to turn off the device, and then turning it on again. If a critical error persists, service is required. For more information, see Solve a problem.

Finding the device model number

In addition to the model name that appears on the front of the device, this device has a specific model number. You can use this number to help determine which supplies or accessories are available for your product, as well as when obtaining support.

The model number is printed on a label located inside the device, near the ink cartridges area.

Select print media

The device is designed to work well with most types of office media. It is best to test a variety of print media types before buying large quantities. Use HP media for optimum print quality. Visit the HP Web site at www.hp.com for more information about HP media.

Select print media 15

This section contains the following topics:

• Recommended papers for printing and copying
• Recommended papers for photo printing
• Tips for selecting and using media

Recommended papers for printing and copying

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.

<table>
<thead>
<tr>
<th>HP Brochure Paper</th>
<th>HP Superior Inkjet Paper</th>
</tr>
</thead>
<tbody>
<tr>
<td>These papers are glossy-coated or matte-coated on both sides for two-sided use. They are the perfect choice for near-photographic reproductions and business graphics for report covers, special presentations, brochures, mailers, and calendars.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HP Bright White Inkjet Paper</th>
</tr>
</thead>
<tbody>
<tr>
<td>HP Bright White Inkjet Paper delivers high-contrast colors and sharp text. It is opaque enough for two-sided color usage with no show-through, which makes it ideal for newsletters, reports, and flyers. It features ColorLok Technology for less smearing, bolder blacks and vivid colors.</td>
</tr>
</tbody>
</table>
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. It is acid-free for longer lasting documents.

| 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. It is acid-free for longer lasting documents |
| 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. It is acid-free for longer lasting documents |
| HP Premium Presentation Paper | These papers are heavy two-sided matte papers perfect for presentation, proposals, reports and newsletters. They are heavyweight for an impressive look and feel. |
| HP Professional Paper | HP Premium Inkjet Transparency Film makes your color presentations vivid and even more impressive. This film is easy to use and handle and dries quickly without smudging. |
| 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) 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 8.5x11 inch, A4, 4 x 6 inch and 10 x 15 cm. It is acid-free for longer lasting documents. |
| HP Iron-On Transfers | HP Iron-on Transfers (for color fabrics or for light or white fabrics) are the ideal solution for creating custom T-shirts from your digital photos. |

To order HP papers and other supplies, go to [www.hp.com/buy/supplies](http://www.hp.com/buy/supplies). If prompted, choose your country/region, follow the prompts to select your product, and then click one of the shopping links on the page.

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

**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 professional 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.

**Recommended papers for photo 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 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), 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 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 professional 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/buy/supplies](http://www.hp.com/buy/supplies). If prompted, choose your country/region, follow the prompts to select your product, and then click one of the shopping links on the page.

>Note: At this time, some portions of the HP Web site are available in English only.

**Tips for selecting and using media**
For the best results, observe the following guidelines.

- Always use media that conforms to the device specifications. For more information, see [Media specifications](#).
- Load only one type of media at a time into a tray or automatic document feeder (ADF) (some models only).
- When loading the trays and ADF (some models only), make sure the media is properly loaded. For more information, see [Load media](#) or [Load an original in the automatic document feeder (ADF)](#).
- Do not overload the tray or ADF (some models only). For more information, see [Media specifications](#).
- To prevent jams, poor print quality, and other printing problems, avoid loading the following media in the trays or ADF (some models only):
  - 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

**NOTE:** To scan, copy, or fax documents that contain pages that do not conform to these guidelines, use the scanner glass. For more information, see [Load an original on the scanner glass](#).

---

**Load an original on the scanner glass**

You can copy, scan, or fax up to letter- or A4-size originals by loading them on the glass.

**NOTE:** Many of the special features will not work correctly if the glass and lid backing are not clean. For more information, see [Maintain the device](#).

---

**To load an original on the scanner glass**

1. Lift the scanner lid.
2. Load your original print side down.

**TIP:** For more help on loading an original, refer to the engraved guides along the edge of the glass.

---

3. Close the lid.

---

**Load an original in the automatic document feeder (ADF)**

**NOTE:** The ADF is available for some models only.
You can copy, scan, or fax a one-sided, single- or multiple-page, A4- or letter-size document by placing it in the document feeder tray.

⚠️ **CAUTION:** Do not load photos in the ADF; this might cause damage to your photos.

📝 **NOTE:** Two-sided legal-size documents cannot be scanned, copied, or faxed using the ADF.

📝 **NOTE:** Some features, such as the **Fit to Page** copy feature, do not work when you load your originals in the ADF. You must load your originals on the glass.

The document feeder tray holds a maximum of 50 sheets of plain paper.

**To load an original in the document feeder tray**

1. Load your original, with the print side up, into the document feeder tray. Place the pages so that the top edge of the document goes in first. Slide the media into the automatic document feeder until you hear a beep or see a message on the display indicating that the loaded pages were detected.

💡 **TIP:** For more help on loading originals in the automatic document feeder, refer to the diagram engraved in the document feeder tray.

2. Slide the width guides inward until they stop at the left and right edges of the media.

📝 **NOTE:** Remove all originals from the document feeder tray before lifting the lid on the device.

**Load media**

This section provides instructions for loading media into the device.
To load media

1. Pull out the tray extender.

2. Insert the media print-side down along the right of the main tray. Make sure the stack of media 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 device is printing.

- **Envelopes:** Load envelopes with the flaps facing up to the right or the back of the tray. Depending on the type of envelope you are loading, the flap hinge should be on the left or towards the back of the tray.
- **Photo paper:** If the photo paper has a tab along one edge, make sure the tab is pointing towards the back of the product.
- **Transparencies:** Insert transparencies with the rough side down and the adhesive strip pointing towards the back of the product.
- **Custom-sized media:** Use only custom-sized media that is supported by the device. For more information, see Media specifications.

3. Slide the media guides in the tray to adjust them for the media size that you have loaded.
Maintain the device

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

- Clean the scanner glass
- Clean the exterior
- Clean the automatic document feeder (ADF) (Some models only)

Clean the scanner glass

NOTE: Dust or dirt on the scanner glass, scanner lid backing, or scanner frame can slow down performance, degrade the quality of scans, and affect the accuracy of special features such as fitting copies to a certain page size.

To clean the scanner glass

1. Turn off the device.
2. Lift the scanner lid.
3. Clean the glass by using a soft, lint-free cloth that has been sprayed with a mild glass cleaner. Dry the glass with a dry, soft, lint-free cloth.

CAUTION: Use only glass cleaner to clean the scanner glass. Avoid cleaners that contain abrasives, acetone, benzene, and carbon tetrachloride, all of which can damage the scanner glass. Avoid isopropyl alcohol because it can leave streaks on the glass.

CAUTION: Do not spray the glass cleaner directly on the glass. If too much glass cleaner is applied, the cleaner could leak under the glass and damage the scanner.

4. Close the scanner lid, and turn on the device.
Clean the exterior

⚠️ WARNING! Before cleaning the device, 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. The exterior of the device does not require cleaning. Keep fluids away from the interior of the device, as well as from the device control panel.

Clean the automatic document feeder (ADF) (Some models only)

💡 NOTE: The ADF is available for some models only.

If the automatic document feeder picks up multiple pages or if it does not pick up plain paper, you can clean the rollers and separator pad. Lift the automatic document feeder cover to access the pick assembly inside the automatic document feeder, clean the rollers or separator pad, and then close the cover.

If you have lines or dust appearing on scanned documents or faxes, clean the plastic strip in the ADF.

To clean the rollers or separator pad

1. Remove all originals from the document feeder tray.
2. Lift the automatic document feeder cover (1).
   This provides easy access to the rollers (2) and separator pad (3), as shown below.

![Diagram of automatic document feeder with labels 1, 2, and 3 pointing to the automatic document feeder cover, rollers, and separator pad.]

3. Lightly dampen a clean lint-free cloth with distilled water, then squeeze any excess liquid from the cloth.
4. Use the damp cloth to wipe any residue off the rollers or separator pad.

**NOTE:** If the residue does not come off using distilled water, try using isopropyl (rubbing) alcohol.

5. Close the cover of the automatic document feeder.

**To clean the plastic strip inside the automatic document feeder**

1. Turn off the device and unplug the power cord.

**NOTE:** Depending how long the device is unplugged, the date and time might be erased. You might need to reset the date and time later, when you plug the power cord back in.

2. Lift the cover of the automatic document feeder until it stops, and then gently pry the cover to release the catch.

3. Continue lifting the automatic document feeder cover to the vertical position.
4. Lift the automatic document feeder mechanism.

5. Clean the plastic strip with a soft cloth or sponge slightly moistened with a nonabrasive glass cleaner.

⚠️ CAUTION: Do not use abrasives, acetone, benzene, or carbon tetrachloride on the plastic strip, since they can damage it. Do not place or spray liquid directly on the plastic strip. The liquid might seep under the glass and damage the device.

6. Gently lower the automatic document feeder mechanism to avoid dislodging the plastic strip, and then close the cover of the automatic document feeder.

7. Plug in the power cord, and then turn on the device.

💡 NOTE: If you still see dust or lines on scans after cleaning the plastic strip, you may need to order a new plastic strip. For more information, see Solve a problem.

**Turn off the device**

Turn off the product by pressing the (power) button located on the product. Wait until the power light turns off before unplugging the power cord or turning off a power strip. If you improperly turn off the product, the print carriage might not return to the correct position causing problems with the ink cartridges and print quality issues.
Most print settings are automatically handled by the software application. You need to 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 about selecting the best print media for your documents, see Select print media.

This section contains the following topics:

- Print documents
- Print brochures
- Print on envelopes
- Print a Web page
- Print photos
- Print on special and custom-sized paper
- Print borderless documents

### Print documents

Note: With certain types of paper, you can print on both sides of a sheet of paper (called “two-sided printing” or “duplex printing”). For more information, see Two-sided printing (duplexing).

Follow the instructions for your operating system.

- Print documents (Windows)
- Print documents (Mac OS X)

#### Print documents (Windows)

1. Load paper in the tray. For more information, see Load media.
2. On the File menu in your software application, click Print.
3. Select the product you want to print to.
4. If you need 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 a type of print task in the Printing Shortcuts list. The preset default settings for the shortcuts are displayed.
6. If you change any settings on the Printing Shortcuts tab, you can save your custom settings as a new printing shortcut:
   a. Select the shortcut, and then click Save As.
   b. To delete a shortcut, select the shortcut, and then click Delete.

   **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.
8. Click Print or OK to begin printing.

Print 25
Print documents (Mac OS X)

1. Load paper in the tray. For more information, see Load media.
2. If you are using Mac OS X (v10.4), complete the following steps:
   a. From the File menu in your software application, choose Page Setup.
   b. Choose the desired printer in the Format for pop-up menu.
   c. Specify the page attributes, such as the paper size, orientation, and scaling.
   d. Click OK.
3. From the File menu in your software application, choose Print.
4. Make sure the product you want to use is selected.
5. Change the print settings for the option provided in the pop-up menus, as appropriate for your project.

NOTE: If your computer is using Mac OS X (v10.5), click the blue disclosure triangle next to the Printer selection to access these options.

6. Click Print to begin printing.

Print brochures

Follow the instructions for your operating system.

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

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

• Print brochures (Windows)
• Print brochures (Mac OS X)

Print brochures (Windows)

1. Load paper in the tray. For more information, see Load media.
2. On the File menu in your software application, click Print.
3. Select the product you want to print to.
4. If you need 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. Select Brochure Printing – Borderless in the Printing Shortcuts list. The default settings are displayed.
6. Change any other print settings.

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 Print to begin printing.
Print brochures (Mac OS X)

1. Load paper in the tray. For more information, see Load media.
2. If you are using Mac OS X (v10.4), complete the following steps:
   a. From the File menu in your software application, choose Page Setup.
   b. Choose the desired printer in the Format for pop-up menu.
   c. Specify the page attributes, such as the paper size, orientation, and scaling.
   d. Click OK.
3. From the File menu in your software application, choose Print.
4. Make sure the product you want to use is selected.
5. Choose Paper Type/Quality from the pop-up menu (located below the Orientation setting in Mac OS X v10.5), and then choose the following settings:
   • Paper Type: the appropriate brochure paper type
   • Quality: Normal or Best
   □ NOTE: If your computer is using Mac OS X (v10.5), click the blue disclosure triangle next to the Printer selection to access these options.
6. Select any other print settings that you want, and then click Print to begin printing.

Print on envelopes

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

Make sure the envelopes you load in the product are tightly constructed and that the folds 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 paper in the tray. For more information, see Load media.
2. On the File menu in your software application, click Print.
3. Select the product you want to print to.
4. If you need 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 Features tab, change the orientation to Landscape.
6. In the **Basic Options** area, from the **Size** drop-down list, select **More**. Then, select the appropriate envelope type.

**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 paper in the tray. For more information, see [Load media](#).
2. If you are using Mac OS X (v10.4), complete the following steps:
   a. From the **File** menu in your software application, choose **Page Setup**.
   b. Choose the desired printer in the **Page Setup** pop-up menu.
   c. Select one of the landscape, or horizontal, **Orientation** options.
   d. Click **OK**.
3. From the **File** menu in your software application, choose **Print**.
4. Make sure the product you want to use is selected.
5. If you are using Mac OS X (v10.5), complete the following steps:
   • Choose the appropriate envelope size in the **Paper Size** pop-up menu.
   • Select the landscape, or horizontal, **Orientation** option.

**NOTE:** If your computer is using Mac OS X (v10.5), click the blue disclosure triangle next to the **Printer** selection to access these options.

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

### Print a Web page

**TIP:** To print Web pages correctly, you might need to set your print orientation to Landscape.

If you are using a computer running Windows and Internet Explorer 6.0 or higher for Web browsing, you can use HP Smart Web Printing to ensure simple, predictable web printing with control over what you want and how you want it printed. You can access HP Smart Web Printing from the toolbar in Internet Explorer. For more information about HP Smart Web Printing, see the help file provided with it.

**NOTE:** With certain types of paper, you can print on both sides of a sheet of paper (called “two-sided printing” or “duplex printing”). For more information, see [Two-sided printing (duplexing)](#).

Follow the instructions for your operating system.

- [Print a Web page (Windows)](#)
- [Print a Web page (Mac OS X)](#)

#### Print a Web page (Windows)

1. Load paper in the tray. For more information, see [Load media](#).
2. On the **File** menu in your software application, click **Print**.
3. Select the product you want to print to.
4. If your Web browser supports it, select the items on the Web page that you want to include in the printout.
   For example, in Internet Explorer, click the Options tab to select options such as As laid out on screen, Only the selected frame, and Print all linked documents.
5. Click Print or OK to begin printing.

Print a Web page (Mac OS X)
1. Load paper in the tray. For more information, see Load media.
2. If you are using Mac OS X (v10.4), complete the following steps:
   a. From the File menu in your software application, choose Page Setup.
   b. Choose the desired printer in the Format for pop-up menu.
   c. Specify the page attributes, such as the paper size, orientation, and scaling.
   d. Click OK.
3. From the File menu in your software application, choose Print.
4. Make sure the product you want to use is selected.
5. Some Web browsers include special options for printing Web pages. If available, choose the option for your Web browser from the pop-up menu in the Print dialog (located below the Orientation setting in Mac OS X v10.5). For more information, see the documentation provided with your Web browser.

   NOTE: If your computer is using Mac OS X (v10.5), click the blue disclosure triangle next to the Printer selection to access these options.
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 reduce 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)

Print photos on photo paper (Windows)
1. Load paper in the tray. For more information, see Load media.
2. On the File menu in your software application, click Print.
3. Select the product you want to print to.
4. If you need 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 Photo Printing – Borderless or Photo Printing with white borders in the Printing Shortcuts list. The default settings are displayed.

**NOTE:** To achieve the highest dpi resolution, you can use the Maximum dpi setting with supported types of photo paper. If Maximum dpi is not listed in the Print quality drop-down list, you can enable it from the Advanced tab.

6. If you change any settings on the Printing Shortcuts tab, you can save your custom settings as a new printing shortcut:
   - Select the shortcut, and then click Save As.
   - To delete a shortcut, select the shortcut, and then click Delete.

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

7. If you want to print the photo in black and white, click the Advanced tab and, in the Color Options area, select the Print in grayscale check box.

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

Print photos on photo paper (Mac OS X)

1. Load paper in the tray. For more information, see Load media.
2. If you are using Mac OS X (v10.4), complete the following steps:
   a. From the File menu in your software application, choose Page Setup.
   b. Choose the desired printer in the Format for pop-up menu.
   c. Specify the page attributes, such as the paper size, orientation, and scaling.
   d. Click OK.
3. From the File menu in your software application, choose Print.
4. Make sure the product you want to use is selected.
5. If necessary, if you are using Mac OS X (v10.4), click Advanced.
6. Choose Paper Type/Quality from the pop-up menu (located below the Orientation setting in Mac OS X v10.5), and then choose the following settings:
   - Paper Type: The appropriate photo paper type
   - Quality: Best or Maximum dpi

**NOTE:** If your computer is using Mac OS X (v10.5), click the blue disclosure triangle next to the Printer selection to access these options.

7. If necessary, click the disclosure triangle next to Color Options. Select any other print settings that you want, and then click Print to begin printing.
8. Select the appropriate **Photo Fix** options:
   - **Off**: applies no HP Real Life Technologies to the image.
   - **Basic**: automatically focuses the image; moderately adjusts image sharpness.

9. If you want to print the photo in black and white, choose the **Grayscale** from the **Color** pop-up menu, and then choose 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.
   - **Black Print Cartridge Only**: uses black ink to print your photo in grayscale. The gray shading is created by varying patterns of black dots, which might result in a grainy image.

### 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 print 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 device. For more information, see Media specifications.

**NOTE**: With certain types of paper, you can print on both sides of a sheet of paper (called “two-sided printing” or “duplex printing”). For more information, see Two-sided printing (duplexing).

Follow the instructions for your operating system.

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

### Print on special or custom-sized paper (Windows)

1. Load paper in the tray. For more information, see Load media.
2. On the **File** menu in your software application, click **Print**.
3. Select the product you want to print to.
4. If you need 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. If necessary, set up the custom size in the printer driver:
   a. On the **Features** tab, click **Custom** in the **Size** drop-down list.
   b. Type a name for the new custom size.
   c. In the **Width** and **Height** boxes, type the dimensions, and then click **Save**.
   d. Click **OK**.

   **NOTE**: To achieve the highest dpi resolution, you can use the **Maximum dpi** setting with supported types of photo paper. If **Maximum dpi** is not listed in the **Print quality** drop-down list, you can enable it from the **Advanced** tab.

6. Make sure the custom size is selected in the **Size** drop-down list.
7. Select the paper type:
   a. Click More in the Paper type drop-down list.
   b. Click the desired paper type, and then click OK.
8. Click OK, and then click Print or OK to begin printing.

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 size in the printing software. For instructions, see Set up custom sizes (Mac OS X).

1. Load the appropriate paper in the tray. For more information, see Load media.
2. If you are using Mac OS X (v10.4), complete the following steps:
   a. From the File menu in your software application, choose Page Setup.
   b. Choose the desired printer in the Format for pop-up menu.
   c. Specify the page attributes, such as the paper size, orientation, and scaling.
   d. Click OK.
3. From the File menu in your software application, choose Print.
4. Make sure the product you want to use is selected.
5. If necessary, if you are using Mac OS X (v10.4), click Advanced.
6. Choose Paper Handling from the pop-up menu (located below the Orientation setting in Mac OS X v10.5).

NOTE: If your computer is using Mac OS X (v10.5), click the blue disclosure triangle next to the Printer selection to access these options.

7. Under Destination Paper Size, click Scale to fit paper size, and then select the custom size.
   Select any other print settings that you want, and then click Print to begin printing.
8. Change any other settings, and then click Print to begin printing.

Set up custom sizes (Mac OS X)

1. From the File menu in your software application, choose Page Setup (Mac OS X v10.4) or Print (Mac OS X v10.5).
2. Choose the desired printer in the Format for pop-up menu.
3. Choose Manage Custom Sizes in the Paper Size pop-up menu.
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 desired.
6. Choose Paper Handling from the pop-up menu (located below the Orientation setting in Mac OS X v10.5).
7. Click OK.

Print borderless documents

Borderless printing lets you print to the edges of certain photo media types and a range of standard media sizes.
NOTE: You cannot print a borderless document if the paper type is set to Plain paper.

NOTE: Before printing a borderless document, open the file in a software application and assign the image size. Make sure the size corresponds to the media size on which you are printing the image.

NOTE: Not all applications support borderless printing.

Follow the instructions for your operating system.

• Print borderless documents (Windows)
• Print borderless documents (Mac OS X)

Print borderless documents (Windows)
1. Load paper in the tray. For more information, see Load media.
2. On the File menu in your software application, click Print.
3. Select the product you want to print to.
4. If you need 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 Features tab.
6. In the Size list, click More, and then select the borderless size loaded in the tray. If a borderless image can be printed on the specified size, the Borderless check box is selected.
7. In the Paper type drop-down list, click More, and then select the appropriate paper type.
8. Select the Borderless check box if it is not already checked.
   If the borderless paper size and paper type are not compatible, the product software displays an alert and allows you to select a different type or size.
9. Click OK, and then click Print or OK to begin printing.

Print borderless documents (Mac OS X)
1. Load paper in the tray. For more information, see Load media.
2. If you are using Mac OS X (v10.4), complete the following steps:
   a. From the File menu in your software application, choose Page Setup.
   b. Choose the desired printer in the Format for pop-up menu.
   c. Specify the page attributes, such as the paper size, orientation, and scaling.
   d. Click OK.
3. From the File menu in your software application, choose Print.
4. Make sure the product you want to use is selected.
5. If necessary, if you are using Mac OS X (v10.4), click Advanced.
6. Choose **Paper Type/Quality** from the pop-up menu (located below the **Orientation** setting in Mac OS X v10.5), and then choose the following settings:
   - **Paper Type**: The appropriate paper type
   - **Quality**: Best or **Maximum dpi**

   **NOTE**: If your computer is using Mac OS X (v10.5), click the blue disclosure triangle next to the **Printer** selection to access these options.

7. If necessary, select the appropriate **Photo Fix** options:
   - **Off**: applies no HP Real Life Technologies 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.

### Two-sided printing (duplexing)

With certain types of paper, you can print on both sides of a sheet of paper (called “two-sided printing” or “duplex printing”).

- **Perform two-sided printing (Windows)**
- **Perform two-sided printing (Mac OS X)**

#### Perform two-sided printing (Windows)

1. Load paper in the tray. For more information, see [Load media](#) and [Guidelines for two-sided (duplex) printing](#).
2. On the **File** menu in your software application, click **Print**.
3. Select the **Two-sided (Duplex) Printing** option in the **Printing Shortcuts** list.
4. Click **OK**, and then click **Print** or **OK** to begin printing.
5. Follow any onscreen instructions.

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

1. Load paper in the tray. For more information, see [Load media](#) and [Guidelines for two-sided (duplex) printing](#).
2. From the **File** menu in your software application, choose **Print**.
3. Make sure the product you want to use is selected.
4. Choose **Paper Handling** from the pop-up menu (located below the **Orientation** setting in Mac OS X v10.5), and then choose **Odd numbered pages** or **Odd only**.
5. Change any other settings, and then click **Print**.
6. After the odd-numbered pages have printed, rotate the printed pages 180 degrees and reload them in the tray.

   **NOTE**: Make sure the freshly printed text is **face up**.

7. From the **File** menu, choose **Print**.
8. Choose **Paper Handling** from the pop-up menu, and then choose **Even numbered pages** or **Even only**.
9. Click **Print** to begin printing.
3 Scan

Using the product’s control panel, you can scan originals and send them to a variety of destinations, such as a folder or a program on a computer. You can also scan originals using the HP software provided with the product and TWAIN-compliant or WIA-compliant programs on a computer.

You can use the HP software to convert the text in scanned documents into a format that you can search, copy, paste, and edit.

NOTE: Scan functions are only available after you install the software.

This section contains the following topics:

• Scan an original
• Edit a scanned document using optical character recognition (OCR) software

Scan an original

You can start a scan from a computer or from the device control panel.

To use the scan features, your device and computer must be connected and turned on. The HP software must also be installed and running on your computer prior to scanning. To verify that the HP software is running on a computer running Windows, look for the device icon in the system tray at the lower-right side of the screen, near the clock.

NOTE: Closing the HP Digital Imaging Monitor icon in your Windows system tray can cause your device to lose some of its scan functionality and result in the No Connection error message. If this happens, you can restore full functionality by restarting your computer or by starting the HP Digital Imaging Monitor.

NOTE: If you are using a computer running Windows, you can also use the HP Solution Center to scan an image. Using this software, you can edit a scanned image and create special projects using a scanned image. For more information, see the onscreen help that came with your software.

This section contains the following topics:

• Scan an original from the product control panel

Scan an original from the product control panel

You can send a scan to a computer connected directly to the device. You can also send a scan to a program installed on a computer.

NOTE: If you are scanning a borderless original, load the original on the scanner glass, not the ADF.

To scan from the product control panel

1. Load the original. For more information, see Load an original on the scanner glass.
2. Press left arrow or right arrow to select the Scan function, and then press OK.
3. Press right arrow ➤ to select what to do with the scan, and then press **OK**.
4. Press **Start**.

**Edit a scanned document using optical character recognition (OCR) software**

You can use OCR software to import scanned text into your preferred word-processing program for editing. This allows you to edit letters, newspaper clippings, and many other documents.

You can specify the word-processing program that you want to use for editing. If the word-processing icon is not present or active, either you do not have word-processing software installed on your computer, or the scanner software did not recognize the program during the installation. See the onscreen Help for the HP Solution Center for information about how to create a link to the word-processing program.

The OCR software does not support scanning colored text. Colored text is always converted to black-and-white text before being sent to OCR. Thus, all text in the final document is in black and white, regardless of the original color.

Because of the complexity of some word-processing programs and their interaction with the device, it is sometimes preferable to scan to a text editor, such as Wordpad (Windows) or TextEdit (Mac OS X), and then cut and paste the text into the preferred word-processing program.
4 Copy

You can produce high-quality color and grayscale copies on a variety of paper types and sizes.

⚠️ NOTE: If you are copying a document when a fax arrives, the fax is stored in the device memory until the copying finishes. This can reduce the number of fax pages stored in memory.

This section contains the following topics:

- Copy documents
- Change copy settings

Copy documents

You can make quality copies from the device control panel.

⚠️ NOTE: If you are copying a borderless original, load the original on the scanner glass, not the ADF.

To copy documents

1. Make sure you have paper loaded in the main tray.
2. Place your original face down on the scanner glass. If you are copying a borderless original, load the original on the scanner glass, not the ADF. For more information, see Load an original on the scanner glass.
3. Use the left arrow or right arrow to select one of the following functions:
   - Copy B&W: To select a black-and-white copy job.
   - Copy Color: To select a color copy job.

   ⚠️ NOTE: If you have a color original, selecting the Copy B&W function produces a black-and-white copy of the color original, while selecting the Copy Color function produces a full-color copy of the color original.

4. Press OK.
5. Change any additional settings. For more information, see Change copy settings
6. Press Start.

Change copy settings

You can customize copy jobs using the various settings available from the product's control panel, including the following:

- Number of copies
- Copy paper size
- Copy paper type
- Copy speed or quality
• Lighter/Darker settings
• Resizing originals to fit on different paper sizes

You can use these settings for single copy jobs, or you can save settings to be used as defaults for future jobs.

To change copy settings for a single job
1. Press left arrow ⬅ or right arrow ► to navigate between different copy options.
2. Make any changes to the copy function settings, and then press OK to accept the changes.

To save the current settings as defaults for future jobs
1. Press left arrow ⬅ or right arrow ► to navigate between different copy options.
2. Make any changes to the copy function settings, and then press OK to accept the changes.
3. Press right arrow ► until Set As Default appears, and then press OK.
4. Press right arrow ► to select Yes, and then press OK.
5 Fax

You can use the device to send and receive faxes, including color faxes. You can schedule faxes to be sent at a later time and set up speed-dials to send faxes quickly and easily to frequently used numbers. From the device control panel, you can also set a number of fax options, such as resolution and the contrast between lightness and darkness on the faxes you send.

**NOTE:** Before you begin faxing, make sure you have set up the device properly for faxing. You might have already done this as part of the initial setup, by using either the control panel or the software that came with the device. You can verify the fax is set up correctly by running the fax setup test from the control panel. To run the fax test, press (Setup), select Tools, select Run fax test, and then press OK.

This section contains the following topics:

- Send a fax
- Receive a fax
- Change fax settings
- Fax over Internet Protocol (FoIP)
- Use reports

Send a fax

You can send a fax in a variety of ways. Using the device control panel, you can send a black-and-white or color fax. You can also send a fax manually from an attached phone. This allows you to speak with the recipient before sending the fax.

This section contains the following topics:

- Send a basic fax
- Send a fax manually from a phone
- Send a fax using monitor dialing
- Send a fax from memory
- Schedule a fax to send later
- Send a fax to multiple recipients
- Send a fax in Error Correction Mode

Send a basic fax

You can easily send a single- or multiple-page black-and-white or color fax by using the device control panel.

**NOTE:** If you need printed confirmation that your faxes were successfully sent, enable fax confirmation **before** sending any faxes.
**TIP:** You can also send a fax manually from a phone or by using monitor dialing. These features allow you to control the pace of your dialing. They are also useful when you want to use a calling card to charge the call and you have to respond to tone prompts while dialing.

**To send a basic fax from the device control panel**

1. Load your originals. If you are faxing a borderless original, load the original on the scanner glass, not the ADF. For additional information, see [Load an original on the scanner glass](#).
2. Press the left arrow or right arrow to select **Fax B&W** or **Fax Color**, and then press **OK**.
3. Enter the fax number by using the keypad.

   **TIP:** To add a pause in the fax number you are entering, press the * button repeatedly, until a dash (-) appears on the display.

4. Press **Start**.

   **If the device detects an original loaded in the automatic document feeder,** it sends the document to the number you entered.

   **TIP:** If the recipient reports issues with the quality of the fax you sent, you can try changing the resolution or contrast of your fax.

**Send a fax manually from a phone**

Sending a fax manually allows you to make a phone call and talk with the recipient before you send the fax. This is useful if you want to inform the recipient that you are going to send them a fax before sending it. When you send a fax manually, you can hear the dial tones, telephone prompts, or other sounds through the handset on your telephone. This makes it easy for you to use a calling card to send your fax.

Depending on how the recipient has their fax machine set up, the recipient might answer the phone, or the fax machine might take the call. If a person answers the phone, you can speak with the recipient before sending the fax. If a fax machine answers the call, you can send the fax directly to the fax machine when you hear the fax tones from the receiving fax machine.

**To send a fax manually from an extension phone**

1. Load your originals. If you are copying a borderless original, load the original on the scanner glass, not the ADF. For additional information, see [Load an original on the scanner glass](#).
2. Press the left arrow or right arrow to select **Fax B&W** or **Fax Color**, and then press **OK**.
3. Dial the number by using the keypad on the phone that is connected to the device.

   **NOTE:** Do not use the keypad on the control panel of the device when manually sending a fax. You must use the keypad on your phone to dial the recipient's number.

   **TIP:** To switch between **Fax B&W** or **Fax Color**, press the **Back** button.
4. If the recipient answers the telephone, you can engage in a conversation before sending your fax.

**NOTE:** If a fax machine answers the call, you will hear fax tones from the receiving fax machine. Proceed to the next step to transmit the fax.

5. When you are ready to send the fax, press **Start**.

**NOTE:** If prompted, select **Send Fax**.

If you were speaking with the recipient before sending the fax, inform the recipient that they should press **Start** on their fax machine after they hear fax tones.

The telephone line is silent while the fax is transmitting. At this point, you can hang up the telephone. If you want to continue speaking with the recipient, remain on the line until the fax transmission is complete.

### Send a fax using monitor dialing

Monitor dialing allows you to dial a number from the device control panel as you would dial a regular telephone. When you send a fax using monitor dialing, you can hear the dial tones, telephone prompts, or other sounds through the speakers on the device. This enables you to respond to prompts while dialing, as well as control the pace of your dialing.

**TIP:** If you do not enter your calling card PIN fast enough, the device might start sending fax tones too soon and cause your PIN not to be recognized by the calling card service. If this is the case, you can create a speed dial entry to store the PIN for your calling card.

**NOTE:** Make sure the volume is turned on, or you will not hear a dial tone.

### To send a fax using monitor dialing from the device control panel

1. Load your originals. For additional information, see **Load an original on the scanner glass** or **Load an original in the automatic document feeder (ADF)**.

**NOTE:** The ADF is available for some models only.

2. Press the left arrow or right arrow to select **Fax B&W** or **Fax Color**, and then press **Start**.

   If the device detects an original loaded in the automatic document feeder, you will hear a dial tone.

3. When you hear the dial tone, enter the number by using the keypad on the device control panel.

4. Follow any prompts that might occur.

   **TIP:** If you are using a calling card to send a fax and you have your calling card PIN stored as a speed dial, when prompted to enter your PIN, press **Speed Dial** to select the speed dial entry where you have your PIN stored.

Your fax is sent when the receiving fax machine answers.
Send a fax from memory

You can scan a black-and-white fax into memory and then send the fax from memory. This feature is useful if the fax number you are trying to reach is busy or temporarily unavailable. The device scans the originals into memory and sends them once it is able to connect to the receiving fax machine. After the device scans the pages into memory, you can immediately remove the originals from the document feeder tray.

**NOTE:** You can only send a black-and-white fax from memory.

To send a fax from memory

1. Load your originals. For additional information, see Load an original on the scanner glass or Load an original in the automatic document feeder (ADF).

   **NOTE:** The ADF is available for some models only.

2. Press the left arrow or right arrow to select Fax B&W or Fax Color, and then press OK.

3. Enter the fax number by using the keypad, press Speed Dial to select a speed dial, or press Redial/Pause to redial the last number dialed.

4. Press right arrow until Fax Method appears, and then press OK.

5. Press right arrow until Scan & Fax appears, and then press OK.

6. Press Start.

   The device scans the originals into memory and sends the fax when the receiving fax machine is available.

Schedule a fax to send later

You can schedule a black-and-white fax to be sent within the next 24 hours. This enables you to send a black-and-white fax late in the evening, when phone lines are not as busy or phone rates are lower, for example. The device automatically sends your fax at the specified time.

You can only schedule one fax to be sent at a time. You can continue to send faxes normally, however, while a fax is scheduled.

**NOTE:** You can only send faxes in black and white due to memory limitations.

To schedule a fax from the device control panel

1. Load your originals. For additional information, see Load an original on the scanner glass or Load an original in the automatic document feeder (ADF).

   **NOTE:** The ADF is available for some models only.

2. Press the left arrow or right arrow to select Fax B&W or Fax Color, and then press OK.

3. Press right arrow until Fax Method appears, and then press OK.

4. Press right arrow until Send Fax Later appears, and then press OK.

5. Enter the send time by using the numeric keypad, and then press OK. If prompted, press 1 for AM, or 2 for PM.
6. Enter the fax number by using the keypad, press **Speed Dial** to select a speed dial, or press **Redial/Pause** to redial the last number dialed.

7. Press **Start**.
   The device scans all pages and the scheduled time appears on the display. The fax is sent at the scheduled time.

**To cancel a scheduled fax**
1. Press the left arrow or right arrow to select **Fax B&W** or **Fax Color** , and then press **OK**.
2. Press right arrow until **Fax Method** appears, and then press **OK**.
3. Press right arrow until **Send Fax Later** appears, and then press **OK**.
   If there is a fax already scheduled, the **Cancel** prompt appears on the display.
4. Press 1 to select **Yes**.

**NOTE:** You can also cancel the scheduled fax by pressing **Cancel** on the device control panel when the scheduled time is visible on the display.

---

**Send a fax to multiple recipients**

You can send a fax to multiple recipients at once by grouping individual speed dial entries into group speed dial entries.

**To send a fax to multiple recipients using group speed dial**
1. Load your originals. For additional information, see **Load an original on the scanner glass** or **Load an original in the automatic document feeder (ADF)**.

**NOTE:** The ADF is available for some models only.

2. Press the left arrow or right arrow to select **Fax B&W**, and then press **OK**.
3. Press the left arrow or right arrow until the appropriate group speed dial entry appears.

**TIP:** You can also select a speed dial entry by entering its speed dial code using the keypad on the device control panel.

4. Press **Start**.
   If the device detects an original loaded in the automatic document feeder, it sends the document to each number in the group speed dial entry.

**NOTE:** You can only use group speed dial entries to send faxes in black and white, because of memory limitations. The device scans the fax into memory then dials the first number. When a connection is made, it sends the fax and dials the next number. If a number is busy or not answering, the device follows the settings for **Busy Redial** and **No Answer Redial**. If a connection cannot be made, the next number is dialed and an error report is generated.

---

**Send a fax in Error Correction Mode**

**Error Correction Mode** (ECM) prevents loss of data due to poor phone lines by detecting errors that occur during transmission and automatically requesting retransmission of the erroneous portion. Phone charges are unaffected, or might even be reduced, on good
phone lines. On poor phone lines, ECM increases sending time and phone charges, but sends the data much more reliably. The default setting is On. Turn ECM off only if it increases phone charges substantially, and you can accept poorer quality in exchange for reduced charges.

Before turning the ECM setting off, consider the following. If you turn ECM off

- The quality and transmission speed of faxes you send and receive are affected.
- The Fax Speed is automatically set to Medium.
- You will no longer be able to send or receive faxes in color.

To change the ECM setting from the control panel
1. Press Setup.
2. Press right arrow until Fax Settings appears, and then press OK.
3. Press right arrow until Error Correction Mode appears, and then press OK.
4. Press right arrow to select On or Off, and then press OK.

Receive a fax

You can receive faxes automatically or manually. If you turn off the Auto Answer option, you must receive faxes manually. If you turn on the Auto Answer option (the default setting), the device automatically answers incoming calls and receives faxes after the number of rings that are specified by the Rings to Answer setting. (The default Rings to Answer setting is five rings.)

If you receive a legal-size fax and the device is not currently set to use legal-size paper, the device reduces the fax so that it fits on the paper that is loaded. If you have disabled the Automatic Reduction feature, the device prints the fax on two pages.

NOTE: If you are copying a document when a fax arrives, the fax is stored in the device memory until the copying finishes. This can reduce the number of fax pages stored in memory.

- Receive a fax manually
- Set up backup fax
- Reprint received faxes from memory
- Poll to receive a fax
- Forward faxes to another number
- Set the paper size for received faxes
- Set automatic reduction for incoming faxes
- Block junk fax numbers
- Receive faxes to your computer (Fax to PC and Fax to Mac)

Receive a fax manually

When you are on the phone, the person you are speaking with can send you a fax while you are still connected. This is referred to as manual faxing. Use the instructions in this section to receive a manual fax.

NOTE: You can pick up the handset to talk or listen for fax tones.
You can receive faxes manually from a phone that is:

- Directly connected to the device (on the 2-EXT port)
- On the same phone line, but not directly connected to the device

**To receive a fax manually**

1. Make sure the device is turned on and you have paper loaded in the main tray.
2. Remove any originals from the document feeder tray.
3. Set the **Rings to Answer** setting to a high number to allow you to answer the incoming call before the device answers. Or, turn off the **Auto Answer** setting so that the device does not automatically answer incoming calls.
4. If you are currently on the phone with the sender, instruct the sender to press **Start** on their fax machine.
5. When you hear fax tones from a sending fax machine, do the following:
   a. Press left arrow or right arrow to select **Black-and-white fax** or **Color fax**.
   b. Press **Start**.
   c. After the device begins to receive the fax, you can hang up the phone or remain on the line. The phone line is silent during fax transmission.

**Set up backup fax**

Depending on your preference and security requirements, you can set up the device to store all the faxes it receives, only the faxes it receives while the device is in an error condition, or none of the faxes it receives.

The following **Backup fax** modes are available:

<table>
<thead>
<tr>
<th>Mode</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>On</strong></td>
<td>The default setting. When <strong>Backup fax</strong> is <strong>On</strong>, the device stores all received faxes in memory. This enables you to reprint up to eight of the most recently printed faxes if they are still saved in memory. <strong>NOTE:</strong> When device memory is low, it overwrites the oldest, printed faxes as it receives new faxes. If the memory becomes full of unprinted faxes, the device stops answering incoming fax calls. <strong>NOTE:</strong> If you receive a fax that is too large, such as a very detailed color photo, it might not be stored in memory due to memory limitations.</td>
</tr>
<tr>
<td><strong>On Error Only</strong></td>
<td>Causes the device to store faxes in memory only if an error condition exists that prevents the device from printing the faxes (for example, if the device runs out of paper). The device continues to store incoming faxes as long as there is memory available. (If the memory becomes full, the device stops answering incoming fax calls.) When the error condition is resolved, the faxes stored in memory print automatically, and then they are deleted from memory.</td>
</tr>
<tr>
<td><strong>Off</strong></td>
<td>Faxes are never stored in memory. For example, you might want to turn off <strong>Backup fax</strong> for security purposes. If an error condition occurs that prevents the device from printing (for example, the device runs out of paper), the device stops answering incoming fax calls.</td>
</tr>
</tbody>
</table>
NOTE: If Backup fax is enabled and you turn off the device, all faxes stored in memory are deleted, including any unprinted faxes that you might have received while the device was in an error condition. You must contact the senders to ask them to resend any unprinted faxes. For a list of the faxes you have received, print the Fax Log. The Fax Log is not deleted when the device is turned off.

To set backup fax from the device control panel
1. Press Setup.
2. Press right arrow ➤ until Tools appears, and then press OK.
3. Press right arrow ➤ until Backup fax appears, and then press OK.
4. Press right arrow ➤ to select On, On Error Only, or Off.
5. Press OK.

Reprint received faxes from memory
If you set the Backup fax mode to On, the received faxes are stored in memory, whether the device has an error condition or not.

NOTE: After the memory becomes full, the oldest, printed faxes are overwritten as new faxes are received. If all the stored faxes are unprinted, the device does not receive any fax calls until you print or delete the faxes from memory. You might also want to delete the faxes in memory for security or privacy purposes.

Depending on the sizes of the faxes in memory, you can reprint up to eight of the most recently printed faxes, if they are still in memory. For example, you might need to reprint your faxes if you lost the copy of your last printout.

To reprint faxes in memory from the device control panel
1. Make sure you have paper loaded in the main tray.
2. Press Setup.
3. Press right arrow ➤ until Print Report appears, and then press OK.
4. Press right arrow ➤ until Reprint Faxes appears, and then press OK.
The faxes are printed in the reverse order from which they were received with the most recently received fax printed first, and so on.
5. Press Start.
6. If you want to stop reprinting the faxes in memory, press Cancel.

To delete all the faxes in memory from the device control panel
▲ Turn off the device by pressing the Power button.
All faxes stored in memory are deleted from memory when you turn off the power.

Poll to receive a fax
Polling allows the HP All-in-One to ask another fax machine to send a fax that it has in its queue. When you use the Poll to Receive feature, the HP All-in-One calls the designated fax machine and requests the fax from it. The designated fax machine must be set for polling and have a fax ready to send.
NOTE: The HP All-in-One does not support polling pass codes. Polling pass codes are a security feature that require the receiving fax machine to provide a pass code to the device it is polling in order to receive the fax. Make sure the device you are polling does not have a pass code set up (or has not changed the default pass code) or the HP All-in-One will not be able to receive the fax.

To set up poll to receive a fax from the device control panel
1. Press left arrow or right arrow to select Black-and-white fax or Color fax, and then press OK.
2. Press right arrow until Fax Method appears, and then press OK.
3. Press right arrow until Poll to Receive appears, and then press OK.
4. Enter the fax number of the other fax machine.
5. Press Start.

NOTE: If you selected Color Fax but the sender sent the fax in black and white, the device prints the fax in black and white.

Forward faxes to another number
You can set up the device to forward your faxes to another fax number. A received color fax is forwarded in black and white.

HP recommends that you verify the number you are forwarding to is a working fax line. Send a test fax to make sure the fax machine is able to receive your forwarded faxes.

To forward faxes from the device control panel
1. Press Setup.
2. Press right arrow until Fax Settings appears, and then press OK.
3. Press right arrow until Fax Forwarding appears, and then press OK.
4. Press right arrow until On appears, and then press OK.

NOTE: If the device is not able to forward the fax to the designated fax machine (for example, if it is not turned on), the device prints the fax. If you set up the device to print error reports for received faxes, it will also print an error report.

5. At the prompt, enter the number of the fax machine that will receive the forwarded faxes, and then press OK.
Fax Forwarding appears on the device control panel display.
If the device loses power when Fax Forwarding is set up, it saves the Fax Forwarding setting and phone number. When the power is restored to the device, the Fax Forwarding setting is still On.

NOTE: You can cancel fax forwarding by pressing Cancel on the device control panel when the Fax Forwarding message is visible on the display, or you can select Off from the Fax Fwd, Black menu.

Set the paper size for received faxes
You can select the paper size for received faxes. The paper size you select should match what is loaded in your main tray. Faxes can be printed on letter, A4, or legal paper only.
NOTE: If an incorrect paper size is loaded in the main tray when you receive a fax, the fax does not print and an error message appears on the display. Load letter, A4, or legal paper, and then press OK to print the fax.

To set the paper size for received faxes from the device control panel
1. Press Setup.
2. Press right arrow until Fax Settings appears, and then press OK.
3. Press right arrow until Paper Options appears, and then press OK.
4. Press right arrow until Fax Paper Size appears, and then press OK.
5. Press right arrow to select an option, and then press OK.

Set automatic reduction for incoming faxes
The Automatic Reduction setting determines what the HP All-in-One does if it receives a fax that is too large for the default paper size. This setting is turned on by default, so the image of the incoming fax is reduced to fit on one page, if possible. If this feature is turned off, information that does not fit on the first page is printed on a second page. Automatic Reduction is useful when you receive a legal-size fax and letter-size paper is loaded in the main tray.

To set automatic reduction from the device control panel
1. Press Setup.
2. Press right arrow until Fax Settings appears, and then press OK.
3. Press right arrow until Paper Options appears, and then press OK.
4. Press right arrow until Auto Fax Resize appears, and then press OK.
5. Press right arrow to select Off or On.
6. Press OK.

Block junk fax numbers
If you subscribe to a caller ID service through your phone provider, you can block specific fax numbers so the device does not print faxes received from those numbers. When an incoming fax call is received, the device compares the number to the list of junk fax numbers to determine if the call should be blocked. If the number matches a number in the blocked fax numbers list, the fax is not printed. (The maximum number of fax numbers you can block varies by model.)

NOTE: This feature is not supported in all countries/regions. If it is not supported in your country/region, Junk Fax Blocker does not appear in the Fax Settings menu.

NOTE: If no phone numbers are added in the Caller ID list, it is assumed that the user has not signed up for the Caller ID service with the phone company.

• Add numbers to the junk fax list
• Remove numbers from the junk fax list
• Print a Junk Fax Report
Add numbers to the junk fax list
You can block specific numbers by adding them to the junk fax list.

To manually enter a number to block
1. Press Setup.
2. Press right arrow to select Fax Settings, and then press OK.
3. Press right arrow to select Junk Fax Blocker, and then press OK.
4. Press right arrow to select Add, and then press OK.
5. To select a fax number to block from the caller ID list, select Select no.
   - or -
   To manually enter a fax number to block, select Enter no.
6. After entering a fax number to block, press OK.
   Make sure you enter the fax number as it appears on the control-panel display, and
   not the fax number that appears on the fax header of the received fax, as these
   numbers can be different.
7. When the Enter Another? prompt appears, do one of the following:
   • If you want to add another number to the list of junk fax numbers, press Yes, and then repeat step 5 for each number you want to block.
   • If you are done, press No.

Remove numbers from the junk fax list
If you no longer want to block a fax number, you can remove a number from your junk fax list.

To remove numbers from the list of junk fax numbers
1. Press Setup.
2. Press Fax Settings, and then press OK.
3. Press Junk Fax Blocker, and then press OK.
4. Press Delete, and then press OK.
5. Press the right arrow button to scroll through the numbers you have blocked. When
   the number you want to remove appears, press OK to select it.
6. When the Delete Another? prompt appears, do one of the following:
   • If you want to remove another number from the list of junk fax numbers,
     press Yes, and then repeat step 5 for each number you no longer want to block.
   • If you are done, press No.

Print a Junk Fax Report
Use the following procedure to print a list of blocked junk fax numbers.

To print a Junk Fax Report
1. Press the (Setup) button.
2. Select Print Report, select Junk Fax Report, and then press OK.
Receive faxes to your computer (Fax to PC and Fax to Mac)

Use Fax to PC and Fax to Mac to automatically receive faxes and save faxes directly to your computer. With Fax to PC and Fax to Mac, you can store digital copies of your faxes easily and also eliminate the hassle of dealing with bulky paper files.

Received faxes are saved as TIFF (Tagged Image File Format). Once the fax is received, you get an on-screen notification with a link to the folder where the fax is saved.

The files are named in the following method: XXXX_YYYYYYYY_ZZZZZZ.tif, where X is the sender's information, Y is the date, and Z is the time that the fax was received.

NOTE: Fax to PC and Fax to Mac are available for receiving black-and-white faxes only. Color faxes are printed instead of being saved to the computer.

This section contains the following topics:

- Fax to PC and Fax to Mac requirements
- Activate Fax to PC and Fax to Mac
- Modify Fax to PC or Fax to Mac settings
- Turn off Fax to PC or Fax to Mac

Fax to PC and Fax to Mac requirements

- The administrator computer, the computer that activated the Fax to PC or Fax to Mac feature, must be on at all times. Only one computer can act as the Fax to PC or Fax to Mac administrator computer.
- The destination folder’s computer or server, must be on at all times. The destination computer must also be awake, faxes will not be saved if the computer is asleep or in hibernate mode.
- HP Digital Imaging monitor in Windows Taskbar must be on at all times.
- Paper must be loaded in the input tray.

Activate Fax to PC and Fax to Mac

Use the Fax to PC Setup Wizard to activate Fax to PC. The Fax to PC Setup Wizard can be started from the Solution Center or the Fax to PC Setup Wizard on the control panel. To set up Fax to Mac on Mac OS X, use the HP Setup Assistant (which can be launched from the HP Utility).

To set up the Fax to PC from the Solution Center (Windows)

1. Open the Solution Center. For more information, see Use the HP Solution Center (Windows).
2. Select Settings, and then select Fax to PC Setup Wizard.
3. Follow the onscreen instructions to set up Fax to PC.

To set up Fax to Mac (Mac OS X)

1. Launch the HP Utility. For instructions, see Open the HP Utility.
2. Click the Application icon on the toolbar.
3. Double-click HP Setup Assistant, and then follow the onscreen instructions.
Modify Fax to PC or Fax to Mac settings

You can update the Fax to PC settings from your computer at any time from the Fax Settings page in the Solution Center. You can update the Fax to Mac settings from the HP Setup Assistant. You can turn off Fax to PC or Fax to Mac and disable printing faxes from the device control panel.

To modify settings from the device control panel

1. Press the (Setup) button.
2. Select Basic Fax Setup, select Fax to PC, and then press OK.
3. Select the setting that you want to change. You can change the following settings:
   - **View PC hostname**: View the name of the computer that is set up to administer Fax to PC or Fax to Mac.
   - **Turn Off**: Turn off Fax to PC or Fax to Mac.

   **NOTE**: Use the Solution Center to turn on Fax to PC or Fax to Mac.
   - **Disable Fax Print**: Choose this option to print faxes as they are received. If you turn off printing, color faxes will still print.

To modify Fax to PC settings the HP Software

Follow the instructions for your operating system:

**Windows**

1. Open the Solution Center. For more information, see Use the HP Solution Center (Windows).
2. Select Settings, and then select Fax Settings.
3. Select the Fax to PC Settings tab, change the settings, and then click OK.

**Mac OS X**

1. Launch the HP Utility. For instructions, see Open the HP Utility.
2. Click the Application icon on the toolbar.
3. Double-click HP Setup Assistant, and then follow the onscreen instructions.

**Turn off Fax to PC or Fax to Mac**

1. Press the (Setup) button.
2. Select Basic Fax Setup, select Fax to PC, and then press OK.
3. Select Turn Off.

**Change fax settings**

After completing the steps in the getting started guide that came with the device, use the following steps to change the initial settings or to configure other options for faxing.

- Configure the fax header
- Set the answer mode (Auto answer)
- Set the number of rings before answering
- Change the answer ring pattern for distinctive ring
• Set the fax error correction mode
• Set the dial type
• Set the redial options
• Set the fax speed
• Set the fax sound volume

Configure the fax header

The fax header prints your name and fax number on the top of every fax you send. HP recommends that you set up the fax header by using the software that you installed with the device. You can also set up the fax header from the device control panel, as described here.

NOTE: In some countries/regions, the fax header information is a legal requirement.

To set or change the fax header
1. Press Setup.
2. Press right arrow to select Fax Settings, and then press OK.
3. Press right arrow to select Fax Header, and then press OK.
4. Enter your personal or company name using the numeric keypad, and then press OK.
5. Enter your fax number by using the numeric keypad, and then press OK.

Set the answer mode (Auto answer)

The answer mode determines whether the device answers incoming calls.

• Turn on the Auto Answer setting if you want the device to answer faxes automatically. The device answers all incoming calls and faxes.
• Turn off the Auto Answer setting if you want to receive faxes manually. You must be available to respond in person to the incoming fax call or the device does not receive faxes.

To set the answer mode to manual or automatic via the device control panel
1. Press Setup.
2. Press right arrow to select Fax Settings, and then press OK.
3. Press right arrow to select Answer Options, and then press OK.
4. Press right arrow to select Auto Answer, and then press OK.
5. Press right arrow to select On or Off as appropriate for your setup, and then press OK.

When Auto Answer is On, the device answers calls automatically. When Auto Answer is Off, it does not answer calls.

Set the number of rings before answering

If you turn on the Auto Answer setting, you can specify how many rings occur before incoming calls are automatically answered.

The Rings to Answer setting is important if you have an answering machine on the same phone line as the device, because you want the answering machine to answer the phone
before the device does. The number of rings to answer for the device should be greater than the number of rings to answer for the answering machine.

For example, set your answering machine to a low number of rings and the device to answer in the maximum number of rings. (The maximum number of rings varies by country/region.) In this setup, the answering machine answers the call and the device monitors the line. If the device detects fax tones, it receives the fax. If the call is a voice call, the answering machine records the incoming message.

To set the number of rings before answering via the device control panel
1. Press Setup.
2. Press right arrow to select Fax Settings, and then press OK.
3. Press right arrow to select Answer Options, and then press OK.
4. Press right arrow to select Rings to Answer, and then press OK.
5. Enter the appropriate number of rings by using the keypad, or press left arrow or right arrow to change the number of rings.
6. Press OK to accept the setting.

Change the answer ring pattern for distinctive ring

Many phone companies offer a distinctive ring feature that allows you to have several phone numbers on one phone line. When you subscribe to this service, each number is assigned a different ring pattern. You can set up the device to answer incoming calls that have a specific ring pattern.

If you connect the device to a line with distinctive ring, have your telephone company assign one ring pattern to voice calls and another ring pattern to fax calls. HP recommends that you request double or triple rings for a fax number. When the device detects the specified ring pattern, it answers the call and receives the fax.

If you do not have a distinctive ring service, use the default ring pattern, which is All Rings.

NOTE: The HP fax cannot receive faxes when the main phone number is off the hook.

To change the answer ring pattern for distinctive ring via the device control panel
1. Verify that the device is set to answer fax calls automatically.
2. Press Setup.
3. Press right arrow to select Basic Settings, and then press OK.
4. Press right arrow to select Ring Pattern, and then press OK.
   When the phone rings with the ring pattern assigned to your fax line, the device answers the call and receives the fax.

Set the fax error correction mode

Typically, the device monitors the signals on the phone line while it is sending or receiving a fax. If it detects an error signal during the transmission and the error-correction setting is on, the device can request that a portion of the fax be resent.

Turn off error correction only if you are having trouble sending or receiving a fax, and you want to accept the errors in the transmission. Turning off the setting might be useful when
you are trying to send a fax to another country/region or receive a fax from another country/region, or if you are using a satellite phone connection.

**To set the fax error-correction mode**

1. Press **Setup**.
2. Press right arrow ➤ to select **Fax Settings**, and then press **OK**.
3. Press right arrow ➤ to select **Error Correction**, and then press **OK**.
4. Press right arrow ➤ to select **On** or **Off**, and then press **OK**.

**Set the dial type**

Use this procedure to set tone-dialing or pulse-dialing mode. The factory-set default is **Tone**. Do not change the setting unless you know that your phone line cannot use tone dialing.

```
NOTE: The pulse-dialing option is not available in all countries/regions.
```

**To set the dial type**

1. Press **Setup**.
2. Press right arrow ➤ to select **Basic Settings**, and then press **OK**.
3. Press right arrow ➤ to select **Tone or Pulse**, and then press **OK**.
4. Press right arrow ➤ to select the appropriate option, and then press **OK**.

**Set the redial options**

If the device was unable to send a fax because the receiving fax machine did not answer or was busy, the device attempts to redial based on the settings for the busy-redial and no-answer-redial options. Use the following procedure to turn the options on or off.

- **Busy redial**: If this option is turned on, the device redials automatically if it receives a busy signal. The factory-set default for this option is **ON**.
- **No answer redial**: If this option is turned on, the device redials automatically if the receiving fax machine does not answer. The factory-set default for this option is **OFF**.

**To set the redial options**

1. Press **Setup**.
2. Press right arrow ➤ to select **Fax Settings**, and then press **OK**.
3. Press right arrow ➤ to select **Redial Options**, and then press **OK**.
4. Press right arrow ➤ to select the appropriate **Busy Redial** or **No Answer Redial** options, and then press **OK**.

**Set the fax speed**

You can set the fax speed used to communicate between your device and other fax machines when sending and receiving faxes.
If you use one of the following, setting the fax speed to a slower speed might be required:

- An Internet phone service
- A PBX system
- Fax over Internet Protocol (FoIP)
- An integrated services digital network (ISDN) service

If you experience problems sending and receiving faxes, try using a lower Fax Speed. The following table provides the available fax speed settings.

<table>
<thead>
<tr>
<th>Fax speed setting</th>
<th>Fax speed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fast</td>
<td>v.34 (33600 baud)</td>
</tr>
<tr>
<td>Medium</td>
<td>v.17 (14400 baud)</td>
</tr>
<tr>
<td>Slow</td>
<td>v.29 (9600 baud)</td>
</tr>
</tbody>
</table>

To set the fax speed from the device control panel

1. Press Setup.
2. Press right arrow ▶ to select Fax Settings, and then press OK.
3. Press right arrow ▶ to select Fax Speed, and then press OK.
4. Select an option using the arrow keys, and then press OK.

Set the fax sound volume

Use this procedure to increase or decrease the volume of the fax sounds.

To set the fax sound volume via the device control panel

Press Setup, select Fax Sound Volume, and then use the arrow keys to increase or decrease the volume. Press OK to select the volume.

Fax over Internet Protocol (FoIP)

You may subscribe to a low cost phone service that allows you to send and receive faxes with your device by using the Internet. This method is called Fax over Internet Protocol (FoIP). You probably use a FoIP service (provided by your telephone company) if you:

- Dial a special access code along with the fax number, or
- Have an IP converter box that connects to the Internet and provides analog phone ports for the fax connection.

**NOTE:** You can only send and receive faxes by connecting a phone cord to the port labeled "1-LINE" on the device. This means that your connection to the Internet must be done either through a converter box (which supplies regular analog phone jacks for fax connections) or your telephone company.

Some Internet faxing services do not work properly when the device is sending and receiving faxes at high speed (33600 bps) or when sending color faxes. If you experience problems sending and receiving faxes while using an Internet fax service, use a slower fax speed and only send black-and-white faxes. You can do this by using a lower Fax Speed setting. For information on changing this setting, see Set the fax speed.
NOTE: If you have questions about Internet faxing, contact your Internet faxing services support department or your local service provider for further assistance.

Use reports

You can set up the device to print error reports and confirmation reports automatically for each fax you send and receive. You can also manually print system reports as required; these reports provide useful system information about the device.

By default, the device is set to print a report only if there is a problem sending or receiving a fax. A confirmation message that indicates whether a fax was successfully sent appears briefly on the control-panel display after each transaction.

NOTE: If the reports are not legible, you can check the estimated ink levels from the control panel, HP Solution Center (Windows), or HP Utility (Mac OS X).

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.

NOTE: Ensure that the printhead and ink cartridges are in good conditions and installed properly.

This section contains the following topics:

- Print fax confirmation reports
- Print fax error reports
- Print and view the fax log
- Clear the fax log
- Print the details of the last fax transaction
- Print a Caller ID History Report

Print fax confirmation reports

If you require printed confirmation that your faxes were successfully sent, follow these instructions to enable fax confirmation before sending any faxes. Select either On Fax Send or Send & Receive.

The default fax confirmation setting is Off. This means that a confirmation report is not printed for each fax sent or received. A confirmation message indicating whether a fax was successfully sent appears briefly on the control-panel display after each transaction.

NOTE: You can include an image of the first page of the fax on the Fax Sent Confirmation report if you choose On Fax Send or Send & Receive, and if you scan the fax to send from memory.

To enable fax confirmation
1. Press the (Setup) button.
2. Press right arrow to select Print Report, and then press OK.
3. Press right arrow ▶ to select Fax Confirmation, and then press OK.

4. Press right arrow ▶ to select one of the following, and then press OK.

<table>
<thead>
<tr>
<th>Setting</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Off</td>
<td>Does not print a fax confirmation report when you send and receive faxes successfully. This is the default setting.</td>
</tr>
<tr>
<td>On Fax Send</td>
<td>Prints a fax confirmation report for every fax you send.</td>
</tr>
<tr>
<td>On Fax Receive</td>
<td>Prints a fax confirmation report for every fax you receive.</td>
</tr>
<tr>
<td>Send &amp; Receive</td>
<td>Prints a fax confirmation report for every fax you send and receive.</td>
</tr>
</tbody>
</table>

To include an image of the fax on the report

1. Press the (Setup) button.

2. Select Print Report, and then select Fax Confirmation.

3. Select either On Fax Send or Send & Receive, and then press OK.


5. Select On, and then press OK.

Print fax error reports

You can configure the device so that it automatically prints a report when there is an error during transmission or reception.

To set the device to print fax error reports automatically

1. Press Setup.

2. Press right arrow ▶ to select Print Report, and then press OK.

3. Press right arrow ▶ to select Fax Error, and then press OK.

4. Press right arrow ▶ to select one of the following, and then press OK.

<table>
<thead>
<tr>
<th>Setting</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Send &amp; Receive</td>
<td>Prints whenever a fax error occurs. This is the default setting.</td>
</tr>
<tr>
<td>Off</td>
<td>Does not print any fax error reports.</td>
</tr>
<tr>
<td>On Fax Send</td>
<td>Prints whenever a transmission error occurs.</td>
</tr>
<tr>
<td>On Fax Receive</td>
<td>Prints whenever a receiving error occurs.</td>
</tr>
</tbody>
</table>

Print and view the fax log

The logs list faxes that have been sent from the device control panel and all faxes that have been received.

You can print a log of faxes that have been received and sent by the device. Each entry in the log contains the following information:

- Transmission date and time
- Type (whether received or sent)
- Fax number
- Duration
To print the fax log from the device control panel

1. Press **Setup**.
2. Press right arrow ▶️ to select **Print Report**, and then press **OK**.
3. Press right arrow ▶️ to select **Fax Log**, and then press **OK**.
4. Press **OK** again to print the log.

To view the fax log from the HP software

Follow the instructions for your operating system.

**Windows**

1. Open the HP Solution Center software. For instructions, see *Use the HP Solution Center (Windows)*.
2. Click **Settings**.
3. In the **Fax Settings** area, click **More Fax Settings**, and then click **Fax Log**.

**Mac OS X**

1. Open the HP Utility. For instructions, see *Open the HP Utility*.
2. In the **Fax Settings** area, click **Fax Logs**.

Clear the fax log

Use the following steps to clear the fax log.

**To clear the fax log via the device control panel**

1. On the device control panel, press **Setup**.
2. Press the arrow key to move down to **Tools**, and then press **OK**.
3. Press the arrow key to move down to **Clear Fax Log**, and then press **OK**.

Print the details of the last fax transaction

The Last Fax Transaction report prints the details of the last fax transaction to occur. Details include the fax number, number of pages, and the fax status.

**To print the Last Fax Transaction report**

1. On the device control panel, press **Setup**.
2. Press the arrow key to move down to **Print Report**, and then press **OK**.
3. Press the arrow key to move down to **Last Transaction**, and then press **OK**.
Print a Caller ID History Report

Use the following procedure to print a list of Caller ID fax numbers.

To print a Caller ID History Report
1. Press Setup, select Printer Report, and then select Caller ID History Report.
2. Press OK.
6 Work with ink cartridges

To ensure the best print quality from the HP All-in-One, you will need to perform some simple maintenance procedures. This section provides guidelines for handling the ink cartridges, instructions for replacing the ink cartridges, and aligning and cleaning the printhead.

This section contains the following topics:

- Information about ink cartridges
- Check the estimated ink levels
- Handle the ink cartridges
- Replace the ink cartridges
- Store printing supplies
- Advanced ink cartridge maintainace

Information about ink cartridges

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

- If you need to replace an ink cartridge, wait until you have the new ink cartridge available to install before removing the old cartridge.

⚠️ CAUTION: Do not leave untaped ink cartridges outside of the product for an extended period of time. This can result in damage to the ink cartridge.

- Keep all ink cartridges in the original sealed packages until they are needed.
- Turn off the HP All-in-One by pressing the (Power) button located on the product. Wait until the power light turns off before unplugging the power cord or turning off a power strip. If you improperly turn off the HP All-in-One, the print carriage might not return to the correct position causing problems with the ink cartridges and print quality issues. For more information, see Turn off the device.
- Store ink cartridges at room temperature (15-35° C or 59-95° F).
- You do not need to replace the cartridges until print quality becomes unacceptable, but a significant decrease in print quality may be the result of one or more depleted cartridges. Possible solutions include checking the estimated ink levels remaining in the cartridges, and cleaning the ink cartridges. Cleaning the ink cartridges uses some ink. For more information, see Clean the ink cartridges.
- Do not clean ink cartridges 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 product, do the following to prevent ink leaking from the print carriage or other damage from occurring to the product:
  ◦ Make sure you turn off the product by pressing the (Power) button. The print carriage should be parked on the right side in the service station.
  ◦ Make sure you leave the ink cartridges installed.
  ◦ The product must be transported sitting flat; it should not be placed its side, back, front, or top.

Related topics
• Check the estimated ink levels
• Clean the ink cartridges

Check the estimated ink levels

You can check the estimated ink levels from the HP Solution Center, Toolbox (Windows), the HP Utility (Mac OS X), or the embedded Web server. For information about using these tools, see Device management tools. You can also print the Printer Status page to view this information (see Understand the Printer Status Report and Self-Test Report).

ckeck the estimated ink levels

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 the print quality is unacceptable.

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 product 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.
Handle the ink cartridges

Before you replace or clean an ink cartridge, you should know the part names and how to handle the ink cartridges.

1. Copper-colored contacts
2. Plastic tape with pink pull tab (must be removed before installing)
3. Ink nozzles under tape

Hold the ink cartridges by their black plastic sides, with the label on top. Do not touch the copper-colored contacts or the ink nozzles.

**NOTE:** Handle the ink cartridges carefully. Dropping or jarring cartridges can cause temporary printing problems, or even permanent damage.

Replace the ink cartridges

Follow these instructions when the ink level is low.

**NOTE:** When the ink level for an ink cartridge is low, a message appears on the display. You can also check the ink levels by using the printer Toolbox (Windows) or the HP Utility (Mac OS X).

**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 device 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).

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 the ink cartridges until print quality becomes unacceptable.

For more information about ordering ink cartridges for the device, see Order printing supplies online.

**To replace the ink cartridges**

1. Make sure the product is turned on.

   △ **CAUTION:** If the product is turned off when you open the front access door to access the ink cartridges, the product cannot release the cartridges for changing. You might damage the product if the ink cartridges are not docked safely when you try to remove them.

2. Open the front access door.
   The print carriage moves to the far right side of the product.

3. Wait until the print carriage is idle and silent, and then lightly press down on an ink cartridge to release it.
   If you are replacing the tri-color ink cartridge, remove the ink cartridge from the slot on the left.
If you are replacing the black ink cartridge, remove the ink cartridge from the slot on the right.

4. Pull the ink cartridge toward you, out of its slot.

**NOTE:** HP provides recycling options for used ink cartridges in many countries/regions. For more information, see [HP inkjet supplies recycling program](#).

5. Remove the new ink cartridge from its packaging and, being careful to touch only the black plastic, gently remove the plastic tape by using the pink pull tab.

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Copper-colored contacts</td>
</tr>
<tr>
<td>2</td>
<td>Plastic tape with pink pull tab (must be removed before installing)</td>
</tr>
<tr>
<td>3</td>
<td>Ink nozzles under tape</td>
</tr>
</tbody>
</table>

⚠️ **CAUTION:** Do not touch the copper-colored contacts or ink nozzles. Also, do not re-tape the ink cartridges. Doing so can result in clogs, ink failure, and bad electrical connections.
6. Hold the ink cartridge with the HP logo on top, and insert the new ink cartridge into the empty cartridge slot. Make sure you push the ink cartridge in firmly until it snaps into place.
   If you are installing the tri-color ink cartridge, slide it into the left slot.
   If you are installing a black ink cartridge, slide it into the right slot.

7. Close the front access door.

8. Make sure you have letter or A4, unused, plain white paper loaded in the input tray.
   For more information, see Load media.

   **NOTE:** If you have colored paper loaded in the input tray when you align the ink cartridges, the alignment will fail. Load unused plain white paper into the input tray, and then try the alignment again.

9. Press **OK**
   The HP All-in-One prints an ink cartridge alignment sheet.
10. Load the ink cartridge alignment sheet face down on the scanner glass in the front right corner with the top of the page to the right, and then press OK. For more information, see Load an original on the scanner glass. The HP All-in-One aligns the ink cartridges. Recycle or discard the ink cartridge alignment sheet.

Store printing supplies

Ink cartridges can be left in the device for extended periods of time. However, to assure optimal ink cartridge health, be sure to turn off the device properly. For more information, see Turn off the device.

Advanced ink cartridge maintenance

This section contains the following topics:

- Align the ink cartridges
- Clean the ink cartridges

Align the ink cartridges

The HP All-in-One prompts you to align cartridges every time you install or replace an ink cartridge. You can also align the ink cartridges at any time from the device control panel or by using the software you installed with the device. Aligning the ink cartridges ensures high-quality output.

NOTE: If you remove and reinstall the same ink cartridge, the device will not prompt you to align the ink cartridges. It remembers the alignment values for that ink cartridge, so you do not need to realign the ink cartridges.

To align the cartridges from the product control panel

1. Load letter or A4, unused, plain white paper in the input tray. For more information, see Load media.

   NOTE: If you have colored paper loaded in the input tray when you align the ink cartridges, the alignment will fail. Load unused plain white paper into the input tray, and then try the alignment again.

2. Press the (Setup) button on the product control panel.
3. Selects **Tools** and then select **Align Cartridge**. The product prints an ink cartridge alignment sheet.

4. Place the alignment sheet face down on the scanner glass. For more information, see **Load an original on the scanner glass**.

5. Press **OK** to scan the alignment sheet. After the alignment sheet is scanned, alignment is complete. Recycle or discard the alignment sheet.
To align the ink cartridges from the HP software

1. Load letter or A4, unused, plain white paper in the input tray. For more information, see [Load media].

   **NOTE:** If you have colored paper loaded in the input tray when you align the ink cartridges, the alignment will fail. Load unused plain white paper into the input tray, and then try the alignment again.

2. Follow the instructions for your operating system. The product prints an ink cartridge alignment sheet.

   **Windows**
   a. Open the Toolbox software. For instructions, see [Open the Toolbox].
   b. Click the **Device Services** tab.
   c. Click **Align the ink cartridges**.

   **Mac OS X**
   a. Open the HP Utility. For instructions, see [Open the HP Utility].
   b. Click **Align**, and then follow the onscreen instructions.

3. Place the alignment sheet face down on the scanner glass. For more information, see [Load an original on the scanner glass].

4. Press **OK** to scan the alignment sheet.

After the alignment sheet is scanned, alignment is complete. Recycle or discard the alignment sheet.

**Clean the ink cartridges**

Use this feature when there is streaking, white lines through any of the lines of color or when a color is muddy. Do not clean ink cartridges unnecessarily, as this wastes ink and shortens the life of the ink nozzles.
To clean the ink cartridges from the product control panel
1. Load letter, A4, or legal unused plain white paper into the input tray.
2. Press Setup.
3. Select Tools, and then select Clean Cartridge.
   The device prints a page that you can recycle or discard.
   If copy or print quality still seems poor after you clean the ink cartridges, try cleaning
   the ink cartridge contacts before replacing the affected ink cartridge.

To clean the ink cartridges from the HP software
1. Load letter, A4, or legal unused plain white paper into the input tray. For more
   information, see Load media.
2. Follow the instructions for your operating system.
   Windows
   a. Open the Toolbox software. For instructions, see Open the Toolbox.
   b. Click the Device Services tab.
   c. Click Align the ink cartridges.
   Mac OS X
   a. Open the HP Utility. For instructions, see Open the HP Utility.
   b. Click Clean Printheads, and then click Clean.
3. Follow the prompts until you are satisfied with the quality of the output, and then click
   Done or Finish.
   If copy or print quality still seems poor after you clean the ink cartridges, try cleaning
   the ink cartridge contacts before replacing the affected ink cartridge. For more
   information, see Clean the ink cartridge contacts.
Solve a problem

The information in Solve a problem suggests solutions to common problems. If your device is not operating correctly and those suggestions did not solve your problem, try using one of the following support services to obtain assistance.

This section contains the following topics:

- HP support
- General troubleshooting tips and resources
- Solve printing problems
- Poor print quality and unexpected printouts
- Clean the area around the ink nozzles
- Solve paper-feed problems
- Solve copy problems
- Solve scan problems
- Solve fax problems
- Solve wired (Ethernet) network problems (some models only)
- Solve wireless problems (some models only)
- Configure your firewall to work with HP devices
- Solve device management problems
- Troubleshoot installation issues
- Understand the Printer Status Report and Self-Test Report
- Understand the network configuration page (some models only)
- Clear jams

HP support

If you have a problem, follow these steps

1. Check the documentation that came with the product.
2. Visit the HP online support Web site at www.hp.com/support. HP online support is available to all HP customers. It is the fastest source for up-to-date device information and expert assistance and includes the following features:
   - Fast access to qualified online support specialists
   - Software and driver updates for the HP all-in-one
   - Valuable troubleshooting information for common problems
   - Proactive device updates, support alerts, and HP newsgrams that are available when you register the HP all-in-one
   
   For more information, see Obtain electronic support.

3. Call HP support. Support options and availability vary by device, country/region, and language. For more information, see HP support by phone.
Obtain electronic support

To find support and warranty information, go to the HP Web site at www.hp.com/support. If prompted, choose your country/region, and then click Contact HP for information on calling for technical support.

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

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

You can also obtain support from the Toolbox (Windows) or HP Utility (Mac OS X), which provide easy, step-by-step solutions to common printing problems. For more information, see Toolbox (Windows) or HP Utility (Mac OS X).

Support options and availability vary by product, 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.

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 web site: https://launchpad.net/hplip. Click the Ask a question button to begin the support process.

The HPLIP Web site does not provide support for Windows or Mac OS X. If you are using these operating systems, see www.hp.com/support.

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 HP All-in-One. Be prepared to provide the following information:

• Model number (located on the label on the front of the device)
• Serial number (located on the back or bottom of the device)
Chapter 7

- 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, HP All-in-One was moved, etc.)?

**Phone support period**

One year of phone support is available in North America, Asia Pacific, and Latin America (including Mexico).

**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).

<table>
<thead>
<tr>
<th>Country</th>
<th>Phone Number</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Africa (French)</td>
<td>+27 11 2345872</td>
<td></td>
</tr>
<tr>
<td>Algeria</td>
<td>20 672 280</td>
<td></td>
</tr>
<tr>
<td>Argentina (Buenos Aires)</td>
<td>54-11-4708-1600</td>
<td></td>
</tr>
<tr>
<td>Argentina</td>
<td>0-800-5555000</td>
<td></td>
</tr>
<tr>
<td>Australia</td>
<td>1300 721 147</td>
<td></td>
</tr>
<tr>
<td>Austria</td>
<td>0 32 78 600 019</td>
<td>Peak Hours: 0.05 €/p, Low Hours: 0.27 €/p</td>
</tr>
<tr>
<td>Belgium</td>
<td>0 32 78 600 020</td>
<td>Peak Hours: 0.005 €/min, Low Hours: 0.27 €/min</td>
</tr>
<tr>
<td>Belgium (Française)</td>
<td>+32 0820 87 4417</td>
<td>doppelster Ortsanr.</td>
</tr>
<tr>
<td>Brazil</td>
<td>55-11-4004-7751</td>
<td></td>
</tr>
<tr>
<td>Brasil</td>
<td>0-800-709-7751</td>
<td></td>
</tr>
<tr>
<td>Canada</td>
<td>1-800-474-6836 (1-800 hp invent)</td>
<td></td>
</tr>
<tr>
<td>Central America &amp; The Caribbean</td>
<td><a href="http://www.hp.com/la/isoporte">www.hp.com/la/isoporte</a></td>
<td></td>
</tr>
<tr>
<td>Chile</td>
<td>800-360-999</td>
<td></td>
</tr>
<tr>
<td>China</td>
<td>1066867980</td>
<td></td>
</tr>
<tr>
<td>Colombia</td>
<td>571-606-9191</td>
<td></td>
</tr>
<tr>
<td>Colombia</td>
<td>01-8000-51-474-8368</td>
<td></td>
</tr>
<tr>
<td>Costa Rica</td>
<td>0-800-011-1046</td>
<td></td>
</tr>
<tr>
<td>Czech Republic</td>
<td>810 122 222</td>
<td>1.53 CZK/min</td>
</tr>
<tr>
<td>Danmark</td>
<td>+45 70 202 845</td>
<td>4.80 kr. pr. Min</td>
</tr>
<tr>
<td>Ecuador (Andinatel)</td>
<td>1-999-111</td>
<td>800-711-2884</td>
</tr>
<tr>
<td>Ecuador (PacificTel)</td>
<td>1-800-225-528</td>
<td>800-711-2884</td>
</tr>
<tr>
<td>Egypt</td>
<td>880-6160</td>
<td></td>
</tr>
<tr>
<td>El Salvador</td>
<td>800-6160</td>
<td></td>
</tr>
<tr>
<td>España</td>
<td>+34 902 010 059</td>
<td>0.94 €/p</td>
</tr>
<tr>
<td>France</td>
<td>+33 0892 69 60 22</td>
<td></td>
</tr>
<tr>
<td>Deutschland</td>
<td>+49 18905 652 180</td>
<td>0.14 €/Min aus dem deutschen Festnetz, bei Anrufen aus Mobilfunknetzen können andere Preise gelten</td>
</tr>
<tr>
<td>Ελλάδα (Ιστοί του ελληνικού)</td>
<td>+30 210 8073603</td>
<td></td>
</tr>
<tr>
<td>Ελλάδα (Ιστοί του ελληνικού)</td>
<td>801 11 75400</td>
<td></td>
</tr>
<tr>
<td>Ελλάδα (Ιστοί του ελληνικού)</td>
<td>800 9 2654</td>
<td></td>
</tr>
<tr>
<td>Guinea</td>
<td>1-800-711-2884</td>
<td></td>
</tr>
<tr>
<td>Hong Kong Special Administrative Region</td>
<td>(852) 2802 4098</td>
<td></td>
</tr>
<tr>
<td>Magyarország</td>
<td>06 40 200 629</td>
<td>7.2 HUF/min</td>
</tr>
<tr>
<td>India</td>
<td>1-800-425-7737</td>
<td></td>
</tr>
<tr>
<td>India</td>
<td>91-80-28526900</td>
<td></td>
</tr>
<tr>
<td>Indonesia</td>
<td>+62 (21) 350 3408</td>
<td></td>
</tr>
<tr>
<td>Iran</td>
<td>+971 4 224 9189</td>
<td></td>
</tr>
<tr>
<td>Israel</td>
<td>02 270 503-048</td>
<td>0.95 NIS/min</td>
</tr>
<tr>
<td>Italia</td>
<td>+39 848 800 871</td>
<td>Chiamata a tariffa locale</td>
</tr>
<tr>
<td>Jamaica</td>
<td>1-800-711-2884</td>
<td></td>
</tr>
<tr>
<td>Japan</td>
<td>0570-000511</td>
<td></td>
</tr>
<tr>
<td>Japan</td>
<td>03-3335-9800</td>
<td></td>
</tr>
<tr>
<td>Jordan</td>
<td>0800 222 471</td>
<td></td>
</tr>
<tr>
<td>Korea</td>
<td>1588-3003</td>
<td></td>
</tr>
<tr>
<td>Luxembourg (Français)</td>
<td>+352 900 40 006</td>
<td>0.80 €/min</td>
</tr>
<tr>
<td>Luxembourg (Deutsch)</td>
<td>+352 900 40 007</td>
<td>0.80 €/Min</td>
</tr>
<tr>
<td>Malaysia</td>
<td>1800 88 8588</td>
<td></td>
</tr>
<tr>
<td>Mauritius</td>
<td>230 262 210 404</td>
<td></td>
</tr>
<tr>
<td>México (Ciudad de México)</td>
<td>55-5258-9922</td>
<td></td>
</tr>
<tr>
<td>México</td>
<td>01-800-472-6838</td>
<td></td>
</tr>
<tr>
<td>Maroc</td>
<td>081 005 010</td>
<td></td>
</tr>
<tr>
<td>Nederland</td>
<td>+31 0900 2020 165</td>
<td>0.80 €/p</td>
</tr>
<tr>
<td>New Zealand</td>
<td>0800 441 147</td>
<td></td>
</tr>
<tr>
<td>Nigeria</td>
<td>(01) 271 2320</td>
<td></td>
</tr>
<tr>
<td>Norge</td>
<td>+47 815 62 070</td>
<td>starter på 0.59 Kr per min., deretter 0.38 Kr per min.</td>
</tr>
<tr>
<td>Oman</td>
<td>24791773</td>
<td></td>
</tr>
<tr>
<td>Panamà</td>
<td>1-800-711-2884</td>
<td></td>
</tr>
<tr>
<td>Paraguay</td>
<td>009 800 54 1 0006</td>
<td></td>
</tr>
<tr>
<td>Perú</td>
<td>0-800-10111</td>
<td></td>
</tr>
<tr>
<td>Filipinas</td>
<td>2 867 3551</td>
<td></td>
</tr>
<tr>
<td>Polska</td>
<td>801 800 235</td>
<td>0.35 PLN/min</td>
</tr>
<tr>
<td>Portugal</td>
<td>+351 808 201 492</td>
<td>0.024 €/p</td>
</tr>
<tr>
<td>Puerto Rico</td>
<td>1-877-232-0589</td>
<td></td>
</tr>
<tr>
<td>República Dominicana</td>
<td>1-800-711-2884</td>
<td></td>
</tr>
<tr>
<td>Reunion</td>
<td>0820 890 323</td>
<td></td>
</tr>
<tr>
<td>România</td>
<td>0801 033 390</td>
<td></td>
</tr>
<tr>
<td>Rossija</td>
<td>095 777 3284</td>
<td></td>
</tr>
<tr>
<td>Rossija (Sankt-Peterburg)</td>
<td>812 332 4240</td>
<td></td>
</tr>
<tr>
<td>Sverige</td>
<td>+46 077 120 4765</td>
<td>8 kr/min.</td>
</tr>
<tr>
<td>Switzerland</td>
<td>+41 0848 672 672</td>
<td>0.08 CHF/min.</td>
</tr>
<tr>
<td>Тайван</td>
<td>02-8722-8000</td>
<td></td>
</tr>
<tr>
<td>Турция</td>
<td>+66 (2) 353 9000</td>
<td></td>
</tr>
<tr>
<td>Trinidåd &amp; Tobago</td>
<td>1-800-711-2884</td>
<td></td>
</tr>
<tr>
<td>Türkiye (İstanbul, Ankara, İzmir &amp; Bursa)</td>
<td>444 0307</td>
<td></td>
</tr>
<tr>
<td>Украина</td>
<td>(044) 230-51-06</td>
<td></td>
</tr>
<tr>
<td>United Arab Emirates</td>
<td>600 54 47 47</td>
<td></td>
</tr>
<tr>
<td>United Kingdom</td>
<td>+44 0870 010 4320</td>
<td>0.60 €/p</td>
</tr>
<tr>
<td>United States</td>
<td>1-(800)-474-6836</td>
<td></td>
</tr>
<tr>
<td>Uruguay</td>
<td>0044-054-177</td>
<td></td>
</tr>
<tr>
<td>Venezuela</td>
<td>58-212-278-8666</td>
<td></td>
</tr>
<tr>
<td>Venezuela</td>
<td>0-800-474-6838</td>
<td></td>
</tr>
<tr>
<td>Việt Nam</td>
<td>+84 88234530</td>
<td></td>
</tr>
</tbody>
</table>
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. 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 steps below require HP software. If you did not install the HP software, you can install it using the HP software CD included with the product, or you can download the software from the HP support Web site (www.hp.com/support).

Try these when you begin troubleshooting a printing problem.

- For a paper jam, see Clear paper jams.
- For paper-feed problems, such as the paper skew and paper pick, see Solve paper-feed problems.
- Power light is on and not blinking. When the device is turned on for the first time, it takes approximately 12 minutes to initialize it after the ink cartridges are installed.
- Power cord and other cables are working, and are firmly connected to the device. Make sure the device is connected firmly to a functioning alternating current (AC) power outlet, and is turned on. For voltage requirements, see Electrical requirements.
- Media is loaded correctly in the input tray and is not jammed in the device.
- All packing tapes and materials are removed.
- The device 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 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.

Troubleshooting topics

- Solve printing problems
- Poor print quality and unexpected printouts
- Solve paper-feed problems
- Solve copy problems
- Solve scan problems
- Solve fax problems
- Solve wired (Ethernet) network problems (some models only)
- Solve wireless problems (some models only)
- Solve device management problems
- Troubleshoot installation issues
Solve printing problems

This section contains the following topics:

• The device shuts down unexpectedly
• Error message appears on control-panel display
• Alignment fails
• The device is not responding (nothing prints)
• Device takes a long time to print
• Blank or partial page printed
• Something on the page is missing or incorrect
• Placement of the text or graphics is wrong
• The device prints half a page, then ejects the paper

The device shuts down unexpectedly

Check the power and power connections
Make sure the device is connected firmly to a functioning alternating current (AC) power outlet. For voltage requirements, see Electrical requirements.

Error message appears on control-panel display

A non-recoverable error has occurred
Disconnect all cables (such as power cord and USB cable), wait about 20 seconds, and reconnect the cables. If the problem persists, visit the HP Web site (www.hp.com/support) for the latest troubleshooting information, or product fixes and updates.

Alignment fails
If the alignment process fails, make sure you have loaded unused, plain white paper into the input tray. If you have colored paper loaded in the input tray when you align the ink cartridges, the alignment will fail.

If the alignment process fails repeatedly, you might have a defective sensor or ink cartridge. Contact HP support. Go to www.hp.com/support. If prompted, choose your country/region, and then click Contact HP for information on calling for technical support.

The device 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 device setup
For more information, see General troubleshooting tips and resources.
Check the device software installation
If the device is turned off when printing, an alert message should appear on your computer screen; otherwise, the device software might not be installed correctly. To resolve this, uninstall the software completely, and then reinstall the device software. For more information, see Uninstall and reinstall the software.

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

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 device. If there is a problem communicating with the device, try temporarily disabling the firewall. If the problem persists, the firewall is not the source of the communication problem. Re-enable the firewall.

Device takes a long time to print

Check the system configuration and resources
Make sure the computer meets the minimum system requirements for the device. For more information, see System requirements.

Check the device software settings
Print speed is slower when you select high print-quality settings. To increase the print speed, select different print settings in the device driver. For more information, see Print.

Blank or partial page printed

Clean the ink cartridge
Complete the ink cartridge cleaning procedure. For more information, see Clean the ink cartridges.

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

More than one page is being picked
For more information on paper-feed problems, see Solve paper-feed problems.
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 margin settings
Make sure the margin settings for the document do not exceed the printable area of the device. For more information, see Set minimum margins.

Check the color print settings
Make sure Print in Grayscale is not selected in the print driver.

Check the device 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 device 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 ink cartridges
Make sure the correct ink cartridges are installed and the ink cartridges are not low on ink. For more information, see Device management tools and Handle the ink cartridges.

Placement of the text or graphics is wrong

Check how the media is loaded
Make sure the media width and length guides fit snugly against the edges of the stack of media, and make sure the tray is not overloaded. For more information, see Load media.

Check the media size
• Content on a page might be cut off if the document size is larger than the media that you are using.
• Make sure the media size selected in the printer driver match the size of media 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 device. For more information, see Set minimum margins.

Check the page-orientation setting
Make sure the media size and page orientation selected in the application match the settings in the printer driver. For more information, see Print.

Check the device 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 device 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 properly. See the release notes for known software conflicts, refer to the application's documentation, or contact the software manufacturer for specific help.

The device prints half a page, then ejects the paper

Check the ink cartridges
Make sure the correct ink cartridges are installed and the ink cartridges are not low on ink. For more information, see Device management tools and Check the estimated ink levels. HP cannot guarantee the quality of non-HP ink cartridges.

Poor print quality and unexpected printouts

If the quality of the printout is not as expected, try the following solutions to resolve the problem. 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.

This section contains the following topics:

- Solution 1: Use genuine HP cartridges
- Solution 2: Check the paper
- Solution 3: Wait a short period of time (if possible)
- Solution 4: Check the print settings
- Solution 5: Check estimated ink levels and replace low or empty ink cartridges
- Solution 6: Print and evaluate a diagnostic report and troubleshoot defects
- Solution 7: Clean the ink cartridges
- Solution 8: Align the ink cartridges
- Solution 9: Replace the problem ink cartridge
- Solution 10: Service the product

Solution 1: Use genuine HP cartridges
HP recommends that you use genuine HP cartridges. Genuine HP cartridges are designed and tested with HP printers to help you easily produce great results, time after time. HP cannot guarantee the quality or reliability of non-HP supplies. Product service or repairs required as a result of using a non-HP ink supply will not be covered under warranty. HP recommends that you make sure that you are using genuine HP cartridges before continuing.

Solution 2: Check the paper
If you see vertical streaks on your printed documents, the paper or print media might not have been handled or stored properly. Do not replace cartridges to fix vertical streaks.
The images below show the difference between vertical and horizontal streaking.

<table>
<thead>
<tr>
<th>Horizontal Streaks</th>
<th>Vertical streaks</th>
</tr>
</thead>
</table>

NOTE: Streaks on a copied document commonly appear when the scanner glass or the plastic strip in the automatic document feeder (ADF) is dirty. For information about cleaning the scanner glass and plastic strip in the ADF, see Clean the scanner glass and To clean the plastic strip inside the automatic document feeder, respectively.

Use paper or other print media that is appropriate for the print job, and make sure that you handle and store it properly:
- Load the paper print-side down in the input tray. (Many papers have printing and nonprinting sides.)
- Make sure that the paper is not wrinkled or curled. Load only clean, wrinkle-free paper into the product.
- Plain paper is fine for text documents. For photos, HP Advanced Photo paper is the best choice.
- Try using a different paper. Paper that does not accept ink well is also prone to print defects. HP ink and paper are designed to work together.
- Store photo paper in its original packaging and inside a resealable plastic bag. Store the paper on a flat surface and in a cool, dry place. Load photo paper only when you are ready to print, and then put the unused paper back in the packaging.

For more information about selecting paper, see Select print media. For more information about loading paper, see Load media.

After trying the preceding guidelines, try printing again.

If the issue persists, continue to the next solution.

Solution 3: Wait a short period of time (if possible)

A short period of printer inactivity can clear up some problems. If possible, let the printer sit idle for 40 minutes, and then try printing again.

If the issue persists, continue to the next solution.

Solution 4: Check the print settings

Follow these steps to check the print settings to make sure that they are appropriate for your print job.
Step 1: Check the print quality settings

The print quality settings in the product software might not be optimized for the type of document you are printing. Follow these steps to check these settings.

If the issue persists, continue to the next solution Step 2: Check the Print in Grayscale setting.

Windows

1. In the software program from which you want to print, click the File menu, click Print, and then click Setup, Properties, or Preferences. (Specific options might vary depending on the application that you are using.)
2. On the Features tab, review the following options, and then make any necessary changes.
   • Print quality: If you are not satisfied with the quality of your printouts, increase the print quality. To print more quickly, decrease the print quality.
   • Paper type: If one of the options matches your paper type exactly, choose the matching option rather than Automatic.
   • Resizing Options: Make sure the selected option matches your paper size.

Mac OS X

1. From the File menu in your software application, choose Print.
2. Choose Paper Type/Quality from the pop-up menu (located below the Orientation setting in Mac OS X v10.5), review the following options, and then make any necessary changes.
   • Paper Type: If one of the options matches your paper type exactly, choose the matching option.
   • Quality: you are not satisfied with the quality of your printouts, increase the print quality. To print more quickly, decrease the print quality.
3. Choose Paper Handling from the pop-up menu, review the following options, and then make any necessary changes.
   Destination Paper Size: Make sure the selected option matches your paper size.

Step 2: Check the Print in Grayscale setting

The product software might be set to print in grayscale. Follow these steps to check this setting.

If the issue persists, continue to the next solution.

Windows

1. In the software program from which you want to print, click the File menu, click Print, and then click Setup, Properties, or Preferences. (Specific options might vary depending on the application that you are using.)
2. Click the Color tab.
3. Make sure Print in Grayscale is not selected.
Mac OS X
1. From the File menu in your software application, choose Print.
2. Choose Paper Type/Quality from the pop-up menu (located below the Orientation setting in Mac OS X v10.5).
3. In the Color Options area, make sure the Color setting is not set to Grayscale.

Solution 5: Check estimated ink levels and replace low or empty ink cartridges
Follow these steps to check the estimated ink levels on your product, and then replace low cartridges according to the results.
For more information about checking ink levels, see Check the estimated ink levels.
• If the ink-level graphic shows low cartridges, and you are not satisfied with the quality of your prints, replace the cartridges now. For more information about replacing cartridges, see Replace the ink cartridges.
• If the ink-level graphic shows cartridges that are not low, you do not need to replace the cartridges yet. Continue to the next solution.

Solution 6: Print and evaluate a diagnostic report and troubleshoot defects
1. To help diagnose the print quality problems, follow the instructions for your particular model to print a diagnostic report.
   • If your product does not support wireless communication, see Print Quality Diagnostic Report.
   • If your product supports wireless communication, see Self-Test Report.
2. After evaluating the report, if you see no defects on the diagnostic report, the print mechanism and ink supplies are working correctly. If prints are still unsatisfactory, check the following:
   • Make sure the image file has sufficient resolution. Images that have been enlarged too much might appear fuzzy or blurry.
   • If the problem seems confined to a band near the edge of a print, the problem might not appear on the other end of the print. Try using a program on your computer to rotate the document or image 180 degrees.
   • If the issue persists, visit the HP online support Web site at www.hp.com/support for further troubleshooting information.

   ![NOTE:](image)
   Stop troubleshooting here. Do not continue with the steps below if the page shows no defects.

3. If you see one or more defects on the diagnostic report, continue to the next solution.
Print Quality Diagnostic Report

1. Load regular, white, letter-size or A4 paper
2. On the product control panel, press (Setup), select Print Report, select Print Quality, and then press OK.
3. Evaluate the Print Quality Diagnostic Report:

   a. Ink level: Look at the ink level boxes to double-check cartridge ink levels. If a box is completely white, you might need to replace that ink cartridge.

   Example Ink Level - Black is low - replace. Tri-color is OK.
b. **Color bars:** Look at the color bars in the middle of the page. You should see seven color bars. These bars should have sharp edges, should be solid (not streaked with white or other colors), and should be uniform in color throughout.

Example of Good Color Bars: All bars are solid, sharp-edged, and extend with uniform color across the entire page. The printer is operating correctly.
- The top black bar is printed by the Black Ink Cartridge
- The colored bars are printed by the Tri-color Ink Cartridge

**Ragged or irregularly streaked or faded bars**

Example of Bad Color Bars: The top bar is irregularly streaked or fading.

Example of Bad Color Bars: The top bar is ragged on one end.
To prevent problems causing ragged bars on the PQ Diagnostic Report, try the following solutions:

- Avoid leaving un-taped ink cartridges outside of the printer for an extended period of time. For more information about handling ink cartridges, see **Handle the ink cartridges.**
- Always turn off the product using the (Power) button, which prevents air from getting into the cartridges. For more information about turning off the product, see **Turn off the device.**

### Regular white streaks in the bars

Example of bad color bars: The blue bar has **regular white streaks.**

### Bar colors are not uniform

Example of Bad Color Bars: The yellow bar is **streaked** with another color.

### Large-font text

- **Large-font text:** Look at the large-font text above the color blocks. The type should be sharp and clear.
- **Example of good large-font text**

```plaintext
I ABCDEFG abcdefg I
```

The letters are sharp and clear - the printer is operating correctly.
Examples of bad large-font text

The letters are **jagged**.

The letters are **smeared**.

The letters are **ragged on one end**.

d. **Alignment pattern:** If the color bars and large-font text look OK and the ink cartridges are not empty, look at the alignment pattern directly above the color bars.

Example of a good alignment pattern.

The lines are straight.

Example of a bad alignment pattern.
The lines are jagged.
Self-Test Report

Follow these steps to print, and then evaluate a Diagnostic report.

1. Load regular, white, letter-size or A4 paper.
2. On the product control panel, press (Setup), select Print Report, select Self-Test, and then press OK.

To evaluate the Diagnostic Page:

1. Look at the color bars in the middle of the page. There should be three color bars and a black bar. All the bars should have sharp edges. They should be solid (not streaked with white or other colors). They should be uniform in color throughout.
Example of Good Bars - all bars are solid, sharp-edged, and uniformly colored - the printer is operating correctly.

- The black bar is printed by the Black Ink Cartridge
- The colored bars are printed by the Tri-color Ink Cartridge

### Ragged or irregularly streaked or faded bars

![Example of bad black bar - The black bar is ragged at one end.](image)

**NOTE:** To prevent problems causing ragged bars on the Self-Test Report, try the following solutions:

- Avoid leaving un-taped ink cartridges outside of the printer for an extended period of time. For more information about handling ink cartridges, see [Handle the ink cartridges](#).
- Always turn off the product using the (Power) button, which prevents air from getting into the cartridges. For more information about turning off the product, see [Turn off the device](#).

### Regular white streaks in the bars

![Example of bad color bars - the blue bar has regular white streaks.](image)

### Bar colors are not uniform

![Example of Bad Color Bars - The yellow bar is streaked with another color.](image)
2. Look at the black text printed on the page. The type should be sharp and clear.

Example of good black text - the letters are sharp and clear - the printer is operating correctly

Example of bad black text - the letters are smeared.

**Solution 7: Clean the ink cartridges**

Clean the ink cartridges if you see the following in the diagnostic report:

- **Color bars**: Color bars are ragged or irregularly streaked or faded; have regular, white streaks; or are not a uniform color throughout the bar, clean the ink cartridges.
- **Large-font text**: Letters are smeared or ragged on one end.

For instructions, see [Clean the ink cartridges](#).

**NOTE**: Do not clean ink cartridges unnecessarily. Unnecessary cleaning wastes ink and shortens the life of the ink nozzles.

If the issue persists, continue to the next step.

**Solution 8: Align the ink cartridges**

Align the ink cartridges if you see the following in the diagnostic report:

- **Large-font text**: Letters are jagged.
- **Alignment pattern**: Lines are jagged.

For instructions, see [Align the ink cartridges](#).

If the issue persists, continue to the next step.
**Solution 9: Replace the problem ink cartridge**

If you saw defects on the Print Quality Diagnostic Report or Self-Test Report and cleaning and alignment did not help, replace the problem ink cartridge. For instructions, see [Replace the ink cartridges](#).

If the issue persists, continue to the next step.

**Solution 10: Service the product**

If you have completed all the steps listed above and are still experiencing a problem, the product might need servicing.

To contact HP support, visit [www.hp.com/support](http://www.hp.com/support). If prompted, choose your country/region, and then click Contact HP for information on calling for technical support.

**Clean the ink cartridge contacts**

Clean the ink cartridge contacts only if you get repeated messages on the display.

Before cleaning the ink cartridge contacts, remove the ink cartridge and verify that nothing is covering the ink cartridge contacts, then reinstall the ink cartridge. If you continue to get messages to check the ink cartridges, clean the ink cartridge contacts.

Make sure you have the following materials available:

- Dry foam rubber swabs, lint-free cloth, or any soft material that will not come apart or leave fibers.

  ✨ **TIP:** Coffee filters are lint-free and work well for cleaning ink cartridges.

- Distilled, filtered, or bottled water (tap water might contain contaminants that can damage the ink cartridges).

  △ **CAUTION:** Do not use platen cleaners or alcohol to clean the ink cartridge contacts. These can damage the ink cartridge or the HP All-in-One.

To clean the ink cartridge contacts

1. Turn on the device and open the ink cartridge door. The print carriage moves to the far right side of the device.

2. Wait until the print carriage is idle and silent, and then unplug the power cord from the back of the device.

  ✏ **NOTE:** Depending how long the HP All-in-One is unplugged, the date and time might be erased. You might need to reset the date and time later, when you plug the power cord back in.

3. Lightly press down on the ink cartridge to release it, and then pull it toward you, out of the slot.

4. Inspect the ink cartridge contacts for ink and debris buildup.

5. Dip a clean foam rubber swab or lint-free cloth into distilled water, and squeeze any excess water from it.

6. Hold the ink cartridge by its sides.
7. Clean only the copper-colored contacts. Allow the ink cartridges to dry for approximately ten minutes.

8. Slide the ink cartridge back into the slot. Push the ink cartridge forward until it clicks into place.

9. Repeat if necessary for the other ink cartridge.

10. Gently close the ink cartridge door and plug the power cord into the back of the device.

**Clean the area around the ink nozzles**

If the device is used in a dusty environment, a small amount of debris might accumulate inside the device. This debris can include dust, hair, carpet, or clothing fibers. When debris gets on the ink cartridges, it can cause ink streaks and smudges on printed pages. Ink streaking can be corrected by cleaning around the ink nozzles as described here.

**NOTE:** Clean the area around the ink nozzles only if you continue to see streaks and smudges on your printed pages after you have already cleaned the ink cartridges by using the device control panel or the software you installed with the HP All-in-One.

Make sure you have the following materials available:

- Dry foam rubber swabs, lint-free cloth, or any soft material that will not come apart or leave fibers.

  **TIP:** Coffee filters are lint-free and work well for cleaning ink cartridges.

- Distilled, filtered, or bottled water (tap water might contain contaminants that can damage the ink cartridges).

  **CAUTION:** Do not touch the copper-colored contacts or ink nozzles. Touching these parts can result in clogs, ink failure, and bad electrical connections.
To clean the area around the ink nozzles

1. Turn on the device and open the ink cartridge door. The print carriage moves to the far right side of the device.

2. Wait until the print carriage is idle and silent, and then unplug the power cord from the back of the device.

   NOTE: Depending how long the HP All-in-One is unplugged, the date and time might be erased. You might need to reset the date and time later, when you plug the power cord back in.

3. Lightly press down on the ink cartridge to release it, and then pull it toward you out of the slot.

   NOTE: Do not remove both ink cartridges at the same time. Remove and clean each ink cartridge one at a time. Do not leave an ink cartridge outside the device for more than 30 minutes.

4. Place the ink cartridge on a piece of paper with the ink nozzles facing up.

5. Lightly moisten a clean foam rubber swab with distilled water, and squeeze any excess water from it.

6. Clean the face and edges around the ink nozzle area with the swab, as shown below.

   ![Diagram](image)

   1. Nozzle plate (do not clean)
   2. Face and edges around the ink nozzle area

   CAUTION: Do not clean the nozzle plate.

7. Slide the ink cartridge back into the slot. Push the ink cartridge forward until it clicks into place.

8. Repeat if necessary for the other ink cartridge.

9. Gently close the ink cartridge door and plug the power cord into the back of the device.

Solve paper-feed problems

**Media is not supported for the printer or tray**

Use only media that is supported for the device and the tray being used. For more information, see [Media specifications](#).
Media is not picked up from a tray
• Make sure media is loaded in the tray. For more information, see Load media. Fan the media before loading.
• Make sure the paper guides are set to the correct markings in the tray for the media size you are loading. Also make sure the guides are snug, but not tight, against the stack.
• Make sure media in the tray is not curled. Uncurl paper by bending it in the opposite direction of the curl.
• When using thin special media, make sure that the tray is completely loaded. If you are using special media that is only available in small quantities, try placing the special media on top of other paper of the same size to help fill the tray. (Some media is picked up more easily if the tray is full.)
• If you are using thick special media (such as brochure paper), load media so that the tray is between 1/4 and 3/4 full. If necessary, place the media on top of other paper of the same size so that the stack height is within this range.

Media is not coming out correctly
• Make sure the output tray extension is extended; otherwise, printed pages may fall off the device.

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

Pages are skewing
• Make sure the media loaded in the trays is aligned to the paper guides. If needed, pull out the trays from the device and reload the media properly, making sure that the paper guides are properly aligned.
• Load media into the device only when it is not printing.

Multiple pages are being picked up
• Fan the media before loading.
• Make sure the paper guides are set to the correct markings in the tray for the media size you are loading. Also make sure the guides are snug, but not tight, against the stack.
• Make sure the tray is not overloaded with paper.
• When using thin special media, make sure that the tray is completely loaded. If you are using special media that is only available in small quantities, try placing the special media on top of other paper of the same size to help fill the tray. (Some media is picked up more easily if the tray is full.)
• If you are using thick special media (such as brochure paper), load media so that the tray is between 1/4 and 3/4 full. If necessary, place the media on top of other paper of the same size so that the stack height is within this range.
• Use HP media for optimum performance and efficiency.

Solve copy problems

If the following topics do not help, see HP support for information about HP support.

• No copy came out
• Copies are blank
• Documents are missing or faded
• Size is reduced
• Copy quality is poor
• Copy defects are apparent
• The device prints half a page, then ejects the paper
• Paper mismatch

No copy came out

• Check the power
  Make sure that the power cord is securely connected, and the device turned on.
• Check the status of the device
  ◦ The device might be busy with another job. Check the control-panel display for information about the status of jobs. Wait for any job that is processing to finish.
  ◦ The device might be jammed. Check for jams. See Clear paper jams.
• Check the trays
  Make sure that media is loaded. See Load media for more information.

Copies are blank

• Check the media
  The media might not meet Hewlett-Packard media specifications (for example, the media is too moist or too rough). See Media specifications for more information.
• Check the settings
  The contrast setting might be set too light. Use the Copy button on the device control panel to create darker copies.
• Check the trays
  If the product has an automatic document feeder (ADF) and you are copying from the ADF, make sure that the originals have been loaded correctly. For more information, see Load an original in the automatic document feeder (ADF).
Documents are missing or faded

- **Check the media**
  The media might not meet Hewlett-Packard media specifications (for example, the media is too moist or too rough). See [Media specifications](#) for more information.

- **Check the settings**
  The quality setting of **Fast** (which produces draft-quality copies) might be responsible for the missing or faded documents. Change to the **Normal** or **Best** setting.

- **Check the original**
  - The accuracy of the copy depends on the quality and size of the original. Use the **Copy** menu to adjust the brightness of the copy. If the original is too light, the copy might not be able to compensate, even if you adjust the contrast.
  - Colored backgrounds might cause images in the foreground to blend into the background, or the background might appear in a different shade.
  - If you are copying a borderless original, load the original on the scanner glass, not the ADF. For more information, see [Load an original on the scanner glass](#).

Size is reduced

- The reduce/enlarge or other copy feature might have been set from the device control panel to reduce the scanned image. Check the settings for the copy job to make sure that they are for normal size.

- The HP software settings might be set to reduce the scanned image. Change the settings, if needed. See the onscreen Help for the HP software for more information.

Copy quality is poor

- **Take steps to improve the copy quality**
  - Use quality originals.
  - Load the media correctly. If the media is loaded incorrectly, it might skew, causing unclear images. See [Media specifications](#) for more information.
  - Use or make a carrier sheet to protect your originals.

- **Check the device**
  - The scanner lid might not be closed properly.
  - The scanner glass or lid backing might need cleaning. See [Maintain the device](#) for more information.
  - If the product has an automatic document feeder (ADF), ADF might need cleaning. See [Maintain the device](#) for more information.

Copy defects are apparent

- **Vertical white or faded stripes**
  The media might not meet Hewlett-Packard media specifications (for example, the media is too moist or too rough). See [Media specifications](#) for more information.

- **Too light or dark**
  Try adjusting the contrast and copy-quality settings.

- **Unwanted lines**
  The scanner glass, lid backing, or frame might need cleaning. See [Maintain the device](#) for more information.
• **Black dots or streaks**
  Ink, glue, correction fluid, or an unwanted substance might be on the scanner glass or lid backing. Try cleaning the device. See [Maintain the device](#) for more information.

• **Copy is slanted or skewed**
  If the product has an automatic document feeder (ADF), check the following:
  - Make sure that the ADF input tray is not too full.
  - Make sure that the ADF width adjusters are snug against the sides of the media.

• **Unclear text**
  - Try adjusting the contrast and copy-quality settings.
  - The default enhancement setting might not be suitable for the job. Check the setting and change it to enhance text or photographs, if needed. For more information, see [Change copy settings](#).

• **Incompletely filled text or graphics**
  Try adjusting the contrast and copy-quality settings.

• **Large, black typefaces look splotchy (not smooth)**
  The default enhancement setting might not be suitable for the job. Check the setting and change it to enhance text or photographs, if needed. For more information, see [Change copy settings](#).

• **Horizontal grainy or white bands in light-gray to medium-gray areas**
  The default enhancement setting might not be suitable for the job. Check the setting and change it to enhance text or photographs, if needed. For more information, see [Change copy settings](#).

The device prints half a page, then ejects the paper

**Check the ink cartridges**
Make sure the correct ink cartridges are installed and the ink cartridges are not low on ink. For more information, see [Device management tools](#) and [Check the estimated ink levels](#).

HP cannot guarantee the quality of non-HP ink cartridges.

**Paper mismatch**

**Check the settings**
Verify that the loaded media size and type matches the control panel settings.

**Solve scan problems**

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

⚠️ **NOTE:** If you are starting the scan from a computer, see the software Help for troubleshooting information.

- **Scanner did nothing**
- **Scan takes too long**
- **Part of the document did not scan or text is missing**
Text cannot be edited
Error messages appear
Scanned image quality is poor
Scan defects are apparent

Scanner did nothing

- **Check the original**
  Make sure that the original is placed on the scanner glass correctly. For more information, see [Load an original on the scanner glass](#).

- **Check the device**
  The device might be coming out of PowerSave mode after a period of inactivity, which delays processing a short while. Wait until the device reaches the **READY** state.

- **Check the software**
  Make sure the software is properly installed.

Scan takes too long

- **Check the settings**
  - If you set the resolution too high, the scan job takes longer and results in larger files. To obtain good results when scanning or copying, do not use a resolution that is higher than needed. You can lower the resolution to scan more quickly.
  - If you acquire an image through TWAIN, you can change the settings so that the original scans in black and white. See the onscreen Help for the TWAIN program for information.

- **Check the status of the device**
  If you sent a print or copy job before you tried to scan, the scan starts if the scanner is not busy. However, the printing and scanning processes share memory, which means that the scan might be slower.
Part of the document did not scan or text is missing

- **Check the original**
  - Make sure that you loaded the original correctly. For more information, see [Load an original on the scanner glass](#).
  - If you are copying a borderless original, load the original on the scanner glass, not the ADF. For more information, see [Load an original on the scanner glass](#).
  - Colored backgrounds can cause images in the foreground to blend into the background. Try adjusting the settings before you scan the original, or try enhancing the image after you scan the original.

- **Check the settings**
  - Make sure that the input media size is large enough for the original that you are scanning.
  - If you are using the HP software, the default settings in the HP software might be set to automatically perform a specific task other than the one that you are attempting. See the onscreen Help for the HP software for instructions about changing the properties.
  - If you have selected a picture scanning option, the HP software automatically crops the image. However, if you want to scan the entire page, complete the following steps:
    - **Windows:** From the HP Solution Center software, click **Scan Picture**, click **Advanced Picture Settings**, and then select **Scan the entire glass**.
    - **Mac OS X:** From the HP Scan software, click **Scan**, select the **Pictures** scan profile, click **Profile Settings**, and then clear the **Crop** check box.

Text cannot be edited

- **Check the settings**
  - Make sure the HP software (or any additional OCR software) is properly installed.
  - When you scan the original, make sure that you select a document type or save the scan in a format that creates editable, searchable text. If text is classified as a graphic, it is not converted to text.
  - Your OCR program might be linked to a word-processing program that does not perform OCR tasks. See the product software Help for more information about linking programs.

- **Check the originals**
  - Make sure that you placed the original correctly on the scanner glass. For more information, see [Load an original on the scanner glass](#).
  - The OCR program might not recognize text that is tightly spaced. For example, if the text that the OCR program converts has missing or combined characters, "rn" might appear as "m."
  - The accuracy of the OCR program depends on the image quality, text size, and structure of the original and the quality of the scan itself. Make sure that your original has good image quality.
  - Colored backgrounds can cause images in the foreground to blend too much. Try adjusting the settings before you scan the original, or try enhancing the image after you scan the original. If you are performing an OCR operation on an original, any colored text on the original does not scan well, if at all.
Error messages appear

"Unable to activate TWAIN source" or "An error occurred while acquiring the image"

- If you are acquiring an image from another device, such as a digital camera or another scanner, make sure that the other device is TWAIN-compliant. Devices that are not TWAIN-compliant do not work with the device software.
- Make sure that you have connected the USB cable to the correct port on the back of your computer.
- Verify that the correct TWAIN source is selected. In the software, check the TWAIN source by selecting Select Scanner on the File menu.

Scanned image quality is poor

The original is a second-generation photo or picture
Reprinted photographs, such as those in newspapers or magazines, are printed by using tiny dots of ink that make an interpretation of the original photograph, which degrades the quality. Often, the ink dots form unwanted patterns that can be detected when the image is scanned or printed or when the image appears on a screen. If the following suggestions do not solve the problem, you might need to use a better-quality version of the original.
- To eliminate the patterns, try reducing the size of the image after scanning.
- Print the scanned image to see if the quality is better.
- Make sure that the resolution and color settings are correct for the type of scan job.

Text or images on the back of a two-sided original appear in the scan
Two-sided originals can "bleed" text or images from the back side to the scan if the originals are printed on media that is too thin or too transparent.

The scanned image is skewed (crooked)
The original might have been placed incorrectly. Be sure to use the media guides when you place the original on the scanner glass. For more information, see Load an original on the scanner glass.

The image quality is better when printed
The image that appears on the screen is not always an accurate representation of the quality of the scan.
- Try adjusting your computer monitor settings to use more colors (or levels of gray). On Windows computers, you typically make this adjustment by opening Display on the Windows control panel.
- Try adjusting the resolution and color settings.

The scanned image shows blots, lines, vertical white stripes, or other defects
- If the scanner glass is dirty, the image produced does not have optimum clarity. See Maintain the device for cleaning instructions.
- The defects might be on the original and not a result of the scanning process.

Graphics look different from the original
The graphics settings might not be suitable for the type of scan job that you are performing. Try changing the graphics settings.
Take steps to improve the scan quality

- Use high-quality originals.
- Place the media correctly. If the media is placed incorrectly on the scanner glass, it might skew, which causes unclear images. For more information, see Load an original on the scanner glass.
- Adjust the software settings according to how you plan to use the scanned page.
- Use or make a carrier sheet to protect your originals.
- Clean the scanner glass. See Clean the scanner glass for more information.

Scan defects are apparent

- **Blank pages**
  Make sure that the original document is placed correctly. Place the original document face down on the flatbed scanner with the top-left corner of the document located in the lower-right corner of the scanner glass.
- **Too light or dark**
  - Try adjusting the settings. Be sure to use the correct resolution and color settings.
  - The original image might be very light or dark or might be printed on colored paper.
- **Unwanted lines**
  Ink, glue, correction fluid, or an unwanted substance might be on the scanner glass. Try cleaning the scanner glass. See Maintain the device for more information.
- **Black dots or streaks**
  - Ink, glue, correction fluid, or an unwanted substance might be on the scanner glass, the scanner glass might be dirty or scratched, or the lid backing might be dirty. Try cleaning the scanner glass and lid backing. See Maintain the device for more information. If cleaning does not correct the problem, the scanner glass or lid backing might need to be replaced.
  - The defects might be on the original and not a result of the scanning process.
- **Unclear text**
  Try adjusting the settings. Make sure that the resolution and color settings are correct.
- **Size is reduced**
  The HP software settings might be set to reduce the scanned image. See the product software Help for more information about changing the settings.

Solve fax problems

This section contains fax setup troubleshooting information for the device. If the device is not set up properly for faxing, you might experience problems when sending faxes, receiving faxes, or both.

If you are having faxing problems, you can print a fax test report to check the status of the device. The test will fail if the device is not set up properly for faxing. Perform this test after you have completed setting up the device for faxing. For more information, see Test fax setup.
If the test fails, review the report for information on how to fix any problems found. For more information, see The fax test failed.

- The fax test failed
- The display always shows Phone Off Hook
- The device is having problems sending and receiving faxes
- The device is having problems sending a manual fax
- The device cannot receive faxes, but can send faxes
- The device cannot send faxes, but can receive faxes
- Fax tones are recorded on my answering machine
- The phone cord that came with my device is not long enough
- Color faxes do not print
- The computer cannot receive faxes (Fax to PC and Fax to Mac)

The fax test failed

If you ran a fax test and the test failed, review the report for basic information about the error. For more detailed information, check the report to see which part of the test failed, and then review the appropriate topic in this section for solutions to try.

This section contains the following topics:

- The "Fax Hardware Test" failed
- The "Fax Connected to Active Telephone Wall Jack" test failed
- The "Phone Cord Connected to Correct Port on Fax" test failed
- The "Using Correct Type of Phone Cord with Fax" test failed
- The "Dial Tone Detection" test failed
- The "Fax Line Condition" test failed

The "Fax Hardware Test" failed

Solution:

- Turn off the device by using the Power button located on the device control panel and then unplug the power cord from the back of the device. After a few seconds, plug the power cord in again, and then turn the power on. Run the test again. If the test fails again, continue reviewing the troubleshooting information in this section.
- Try to send or receive a test fax. If you can send or receive a fax successfully, there might not be a problem.
- If you are running the test from the Fax Setup Wizard (Windows) or HP Setup Assistant (Mac OS X), make sure the device is not busy completing another task, such as receiving a fax or making a copy. Check the display for a message indicating that the device is busy. If it is busy, wait until it is finished and in the idle state before running the test.
• Make sure you use the phone cord that came with the device. If you do not use the supplied phone cord to connect from the telephone wall jack to the device, you might not be able to send or receive faxes. After you plug in the phone cord that came with the device, run the fax test again.

• If you are using a phone splitter, this can cause faxing problems. (A splitter is a two-cord connector that plugs into a telephone wall jack.) Try removing the splitter and connecting the device directly to the telephone wall jack.

After you resolve any problems found, run the fax test again to make sure it passes and the device is ready for faxing. If the Fax Hardware Test continues to fail and you experience problems faxing, contact HP support. Go to www.hp.com/support. If prompted, choose your country/region, and then click Contact HP for information on calling for technical support.

The "Fax Connected to Active Telephone Wall Jack" test failed

Solution:
• Check the connection between the telephone wall jack and the device to make sure the phone cord is secure.

• Make sure you use the phone cord that came with the device. If you do not use the supplied phone cord to connect from the telephone wall jack to the device, you might not be able to send or receive faxes. After you plug in the phone cord that came with the device, run the fax test again.

• Make sure you have correctly connected the device to the telephone wall jack. Using the phone cord supplied in the box with the device, connect one end to your telephone wall jack, then connect the other end to the port labeled 1-LINE on the back of the device. For more information on setting up the device for faxing, see Additional fax setup.

• If you are using a phone splitter, this can cause faxing problems. (A splitter is a two-cord connector that plugs into a telephone wall jack.) Try removing the splitter and connecting the device directly to the telephone wall jack.

• Try connecting a working phone and phone cord to the telephone wall jack that you are using for the device and check for a dial tone. If you do not hear a dial tone, contact your telephone company and have them check the line.

• Try to send or receive a test fax. If you can send or receive a fax successfully, there might not be a problem.

After you resolve any problems found, run the fax test again to make sure it passes and the device is ready for faxing.
The "Phone Cord Connected to Correct Port on Fax" test failed

Solution: Plug the phone cord into the correct port.

1. Using the phone cord supplied in the box with the device, connect one end to your telephone wall jack, then connect the other end to the port labeled 1-LINE on the back of the device.

   NOTE: If you use the 2-EXT port to connect to the telephone wall jack, you will not be able to send or receive faxes. The 2-EXT port should only be used to connect other equipment, such as an answering machine.

<table>
<thead>
<tr>
<th>Figure 7-1 Back view of the device</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
</tr>
<tr>
<td>2</td>
</tr>
</tbody>
</table>

2. After you have connected the phone cord to the port labeled 1-LINE, run the fax test again to make sure it passes and the device is ready for faxing.

3. Try to send or receive a test fax.
   • Make sure you use the phone cord that came with the device. If you do not use the supplied phone cord to connect from the telephone wall jack to the device, you might not be able to send or receive faxes. After you plug in the phone cord that came with the device, run the fax test again.
   • If you are using a phone splitter, this can cause faxing problems. (A splitter is a two-cord connector that plugs into a telephone wall jack.) Try removing the splitter and connecting the device directly to the telephone wall jack.

The "Using Correct Type of Phone Cord with Fax" test failed

Solution:
• Make sure you used the phone cord supplied in the box with the device to connect to the telephone wall jack. One end of the phone cord should be connected to the
port labeled 1-LINE on the back of the device, and the other end to your telephone wall jack, as shown below.

![Diagram](image)

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Telephone wall jack</td>
</tr>
<tr>
<td>2</td>
<td>Use the phone cord supplied in the box with the device to connect to the &quot;1-LINE&quot; port</td>
</tr>
</tbody>
</table>

If the phone cord that came with the device is not long enough, you can use a coupler to extend the length. You can purchase a coupler at an electronics store that carries phone accessories. You will also need another phone cord, which can be a standard phone cord that you might already have in your home or office.

- Check the connection between the telephone wall jack and the device to make sure the phone cord is secure.
- Make sure you use the phone cord that came with the device. If you do not use the supplied phone cord to connect from the telephone wall jack to the device, you might not be able to send or receive faxes. After you plug in the phone cord that came with the device, run the fax test again.
- If you are using a phone splitter, this can cause faxing problems. (A splitter is a two-cord connector that plugs into a telephone wall jack.) Try removing the splitter and connecting the device directly to the telephone wall jack.

The "Dial Tone Detection" test failed

**Solution:**

- Other equipment, which uses the same phone line as the device, might be causing the test to fail. To find out if other equipment is causing a problem, disconnect everything from the phone line, and then run the test again. If the **Dial Tone Detection Test** passes without the other equipment, then one or more pieces of the equipment is causing problems; try adding them back one at a time and rerunning the test each time, until you identify which piece of equipment is causing the problem.
- Try connecting a working phone and phone cord to the telephone wall jack that you are using for the device and check for a dial tone. If you do not hear a dial tone, contact your telephone company and have them check the line.
• Make sure you have correctly connected the device to the telephone wall jack. Using the phone cord supplied in the box with the device, connect one end to your telephone wall jack, then connect the other end to the port labeled 1-LINE on the back of the device.

• If you are using a phone splitter, this can cause faxing problems. (A splitter is a two-cord connector that plugs into a telephone wall jack.) Try removing the splitter and connecting the device directly to the telephone wall jack.

• If your telephone system is not using a standard dial tone, such as some PBX systems, this might cause the test to fail. This will not cause a problem sending or receiving faxes. Try sending or receiving a test fax.

• Check to make sure the country/region setting is set appropriately for your country/region. If the country/region setting is not set or is set incorrectly, the test might fail and you might have problems sending and receiving faxes.

• Make sure you connect the device to an analog phone line or you will not be able to send or receive faxes. To check if your phone line is digital, connect a regular analog phone to the line and listen for a dial tone. If you do not hear a normal sounding dial tone, it might be a phone line set up for digital phones. Connect the device to an analog phone line and try sending or receiving a fax.

• Make sure you use the phone cord that came with the device. If you do not use the supplied phone cord to connect from the telephone wall jack to the device, you might not be able to send or receive faxes. After you plug in the phone cord that came with the device, run the fax test again.

After you resolve any problems found, run the fax test again to make sure it passes and the device is ready for faxing. If the Dial Tone Detection test continues to fail, contact your telephone company and have them check the phone line.

The "Fax Line Condition" test failed

Solution:

• Make sure you connect the device to an analog phone line or you will not be able to send or receive faxes. To check if your phone line is digital, connect a regular analog phone to the line and listen for a dial tone. If you do not hear a normal sounding dial tone, it might be a phone line set up for digital phones. Connect the device to an analog phone line and try sending or receiving a fax.

• Check the connection between the telephone wall jack and the device to make sure the phone cord is secure.

• Make sure you have correctly connected the device to the telephone wall jack. Using the phone cord supplied in the box with the device, connect one end to your telephone wall jack, then connect the other end to the port labeled 1-LINE on the back of the device.
• Other equipment, which uses the same phone line as the device, might be causing the test to fail. To find out if other equipment is causing a problem, disconnect everything from the phone line, and then run the test again.
  ◦ If the Fax Line Condition Test passes without the other equipment, then one or more pieces of the equipment is causing problems; try adding them back one at a time and rerunning the test each time, until you identify which piece of equipment is causing the problem.
  ◦ If the Fax Line Condition Test fails without the other equipment, connect the device to a working phone line and continue reviewing the troubleshooting information in this section.

• If you are using a phone splitter, this can cause faxing problems. (A splitter is a two-cord connector that plugs into a telephone wall jack.) Try removing the splitter and connecting the device directly to the telephone wall jack.

• Make sure you use the phone cord that came with the device. If you do not use the supplied phone cord to connect from the telephone wall jack to the device, you might not be able to send or receive faxes. After you plug in the phone cord that came with the device, run the fax test again.

After you resolve any problems found, run the fax test again to make sure it passes and the device is ready for faxing. If the Fax Line Condition test continues to fail and you experience problems faxing, contact your telephone company and have them check the phone line.

---

The display always shows Phone Off Hook

**Solution:** You are using the wrong type of phone cord. Make sure you are using the phone cord that came with the device to connect the device to your phone line. If the phone cord that came with the device is not long enough, you can use a coupler to extend the length. You can purchase a coupler at an electronics store that carries phone accessories. You will also need another phone cord, which can be a standard phone cord that you might already have in your home or office.

---

**Solution:** Other equipment that uses the same phone line as the device might be in use. Make sure extension phones (phones on the same phone line, but not connected to the device) or other equipment are not in use or off the hook. For example, you cannot use the device for faxing if an extension phone is off the hook, or if you are using a computer dial-up modem to send e-mail or access the Internet.

---

The device is having problems sending and receiving faxes

**Solution:** Make sure the device is turned on. Look at the display on the device. If the display is blank and the Power light is not lit, the device is turned off. Make sure the power cord is firmly connected to the device and plugged into a power outlet. Press the Power button to turn on the device.

After turning on the device, HP recommends you wait five minutes before sending or receiving a fax. The device cannot send or receive faxes while it is initializing after being turned on.
Solution: If Fax to PC or Fax to Mac has been enabled, you may not be able to send or receive faxes if the fax memory is full (limited by device memory).

Solution:

- Make sure you used the phone cord supplied in the box with the device to connect to the telephone wall jack. One end of the phone cord should be connected to the port labeled 1-LINE on the back of the device and the other end to your telephone wall jack, as shown below.

![Diagram](image)

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Telephone wall jack</td>
</tr>
<tr>
<td>2</td>
<td>Use the phone cord supplied in the box with the device to connect to the &quot;1-LINE&quot; port</td>
</tr>
</tbody>
</table>

If the phone cord that came with the device is not long enough, you can use a coupler to extend the length. You can purchase a coupler at an electronics store that carries phone accessories. You will also need another phone cord, which can be a standard phone cord that you might already have in your home or office.

- Try connecting a working phone and phone cord to the telephone wall jack that you are using for the device and check for a dial tone. If you do not hear a dial tone, call your local telephone company for service.

- Other equipment, which uses the same phone line as the device, might be in use. For example, you cannot use the device for faxing if an extension phone is off the hook, or if you are using a computer dial-up modem to send an e-mail or access the Internet.

- Check to see if another process has caused an error. Check the display or your computer for an error message providing information about the problem and how to solve it. If there is an error, the device will not send or receive a fax until the error condition is resolved.

- The phone line connection might be noisy. Phone lines with poor sound quality (noise) can cause faxing problems. Check the sound quality of the phone line by plugging a phone into the telephone wall jack and listening for static or other noise. If you hear noise, turn Error Correction Mode (ECM) off and try faxing again. For information about changing ECM, see the onscreen Help. If the problem persists, contact your telephone company.

- If you are using a digital subscriber line (DSL) service, make sure that you have a DSL filter connected or you will not be able to fax successfully. For more information, see Case B: Set up the device with DSL.
• Make sure the device is not connected to a telephone wall jack that is set up for digital phones. To check if your phone line is digital, connect a regular analog phone to the line and listen for a dial tone. If you do not hear a normal sounding dial tone, it might be a phone line set up for digital phones.

• If you are using either a private branch exchange (PBX) or an integrated services digital network (ISDN) converter/terminal adapter, make sure the device is connected to the correct port and the terminal adapter is set to the correct switch type for your country/region, if possible. For more information, see Case C: Set up the device with a PBX phone system or an ISDN line.

• If the device shares the same phone line with a DSL service, the DSL modem might not be properly grounded. If the DSL modem is not properly grounded, it can create noise on the phone line. Phone lines with poor sound quality (noise) can cause faxing problems. You can check the sound quality of the phone line by plugging a phone into the telephone wall jack and listening for static or other noise. If you hear noise, turn off your DSL modem and completely remove power for at least 15 minutes. Turn the DSL modem back on and listen to the dial tone again.

**NOTE:** You might notice static on the phone line again in the future. If the device stops sending and receiving faxes, repeat this process.

If the phone line is still noisy, contact your telephone company. For information on turning your DSL modem off, contact your DSL provider for support.

• If you are using a phone splitter, this can cause faxing problems. (A splitter is a two-cord connector that plugs into a telephone wall jack.) Try removing the splitter and connecting the device directly to the telephone wall jack.

### The device is having problems sending a manual fax

**Solution:**

**NOTE:** This possible solution applies only in the countries/regions that receive a 2-wire phone cord in the box with the device, including: Argentina, Australia, Brazil, Canada, Chile, China, Colombia, Greece, India, Indonesia, Ireland, Japan, Korea, Latin America, Malaysia, Mexico, Philippines, Poland, Portugal, Russia, Saudi Arabia, Singapore, Spain, Taiwan, Thailand, USA, Venezuela, and Vietnam.
• Make sure the telephone you use to initiate the fax call is connected directly to the device. To send a fax manually, the telephone must be connected directly to the port labeled 2-EXT on the device, as shown below.

1 Telephone wall jack
2 Use the phone cord supplied in the box with the device to connect to the "1-LINE" port
3 Telephone

• If you are sending a fax manually from your phone that is connected directly to the device, you must use the keypad on the telephone to send the fax. You cannot use the keypad on the device control panel of the device.

**NOTE:** If using a serial-type phone system, please connect your phone directly on top of the device cable which has a wall plug attached to it.

---

**The device cannot receive faxes, but can send faxes**

**Solution:**

• If you are not using a distinctive ring service, check to make sure that the Distinctive Ring feature on the device is set to All Rings. For more information, see [Change the answer ring pattern for distinctive ring](#).

• If Auto Answer is set to Off, you will need to receive faxes manually; otherwise, the device will not receive the fax. For information on receiving faxes manually, see [Receive a fax manually](#).

• If you have a voice mail service at the same phone number you use for fax calls, you must receive faxes manually, not automatically. This means that you must be available to respond in person to incoming fax calls. For information on setting up the device when you have a voice mail service, see [Case F: Shared voice/fax line with voice mail](#). For information on receiving faxes manually, see [Receive a fax manually](#).

• If you have a computer dial-up modem on the same phone line with the device, check to make sure that the software that came with your modem is not set to receive faxes automatically. Modems that are set up to receive faxes automatically take over the phone line to receive all incoming faxes, which prevents the device from receiving fax calls.
• If you have an answering machine on the same phone line with the device, you might have one of the following problems:
  ◦ Your answering machine might not be set up properly with the device.
  ◦ Your outgoing message might be too long or too loud to allow the device to detect fax tones, and the sending fax machine might disconnect.
  ◦ Your answering machine might not have enough quiet time after your outgoing message to allow the device to detect fax tones. This problem is most common with digital answering machines.

The following actions might help solve these problems:
  ◦ When you have an answering machine on the same phone line you use for fax calls, try connecting the answering machine directly to the device as described in Case I: Shared voice/fax line with answering machine.
  ◦ Make sure the device is set to receive faxes automatically. For information on setting up the device to receive faxes automatically, see Receive a fax.
  ◦ Make sure the Rings to Answer setting is set to a greater number of rings than the answering machine. For more information, see Set the number of rings before answering.
  ◦ Disconnect the answering machine and then try receiving a fax. If faxing is successful without the answering machine, the answering machine might be causing the problem.
  ◦ Reconnect the answering machine and record your outgoing message again. Record a message that is approximately 10 seconds in duration. Speak slowly and at a low volume when recording your message. Leave at least 5 seconds of silence at the end of the voice message. There should be no background noise when recording this silent time. Try to receive a fax again.

  **NOTE:** Some digital answering machines might not retain the recorded silence at the end of your outgoing message. Play back your outgoing message to check.

• If the device shares the same phone line with other types of phone equipment, such as an answering machine, a computer dial-up modem, or a multi-port switch box, the fax signal level might be reduced. The signal level can also be reduced if you use a splitter or connect extra cables to extend the length of your phone. A reduced fax signal can cause problems during fax reception.

To find out if other equipment is causing a problem, disconnect everything except the device from the phone line, and then try to receive a fax. If you can receive faxes successfully without the other equipment, one or more pieces of the other equipment is causing problems; try adding them back one at a time and receiving a fax each time, until you identify which equipment is causing the problem.

• If you have a special ring pattern for your fax phone number (using a distinctive ring service through your telephone company), make sure that the Distinctive Ring feature on the device is set to match. For more information, see Change the answer ring pattern for distinctive ring.
The device cannot send faxes, but can receive faxes

Solution:

- The device might be dialing too fast or too soon. You might need to insert some pauses in the number sequence. For example, if you need to access an outside line before dialing the phone number, insert a pause following the access number. If your number is 95555555, and 9 accesses an outside line, you might insert pauses as follows: 9-555-5555. To enter a pause in the fax number you are typing, press Redial/Pause, or press the Space (#) button repeatedly, until a dash (-) appears on the display.

You can also send the fax using monitor dialing. This enables you to listen to the phone line as you dial. You can set the pace of your dialing and respond to prompts as you dial. For more information, see Send a fax using monitor dialing.

- The number you entered when sending the fax is not in the proper format or the receiving fax machine is having problems. To check this, try calling the fax number from a telephone and listen for fax tones. If you cannot hear fax tones, the receiving fax machine might not be turned on or connected, or a voice mail service could be interfering with the recipient's phone line. You can also ask the recipient to check the receiving fax machine for any problems.

Fax tones are recorded on my answering machine

Solution:

- When you have an answering machine on the same phone line you use for fax calls, try connecting the answering machine directly to the device as described in Case I: Shared voice/fax line with answering machine. If you do not connect the answering machine as recommended, fax tones might be recorded on your answering machine.

- Make sure the device is set to receive faxes automatically and that the Rings to Answer setting is correct. The number of rings to answer for the device should be greater than the number of rings to answer for the answering machine. If the answering machine and the device are set to the same number of rings to answer, both devices answer the call and fax tones are recorded on the answering machine.

- Set your answering machine to a low number of rings and the device to answer in the maximum number of rings supported. (The maximum number of rings varies by country/region.) In this setup, the answering machine answers the call and the device monitors the line. If the device detects fax tones, the device receives the fax. If the call is a voice call, the answering machine records the incoming message. For more information, see Set the number of rings before answering.

The phone cord that came with my device is not long enough

Solution:  If the phone cord that came with the device is not long enough, you can use a coupler to extend the length. You can purchase a coupler at an electronics store that carries phone accessories. You will also need another phone cord, which can be a standard phone cord that you might already have in your home or office.
To extend your phone cord

1. Using the phone cord supplied in the box with the device, connect one end to the coupler, then connect the other end to the port labeled 1-LINE on the back of the device.

2. Connect another phone cord to the open port on the coupler and to the telephone wall jack.

Color faxes do not print

**Cause:** The Incoming Fax Printing option is turned off.

**Solution:** To print color faxes, make sure that the Incoming Fax Printing option in the device control panel is turned on.

The computer cannot receive faxes (Fax to PC and Fax to Mac)

**Cause:** The HP Digital Imaging monitor is turned off (Windows).

**Solution:** Check the taskbar and ensure that the HP Digital Imaging monitor is turned on at all times.

**Cause:** The computer selected to receive faxes is turned off.

**Solution:** Make sure the computer selected to receive faxes is switched on at all times.

**Cause:** Different computers are configured for setup and receiving faxes and one of them may be switched off.

**Solution:** If the computer receiving faxes is different from the one used for setup, both computers should be switched on at all times.

**Cause:** Fax to PC or Fax to Mac is not activated or the computer is not configured to receive faxes.

**Solution:** Activate Fax to PC or Fax to Mac and make sure the computer is configured to receive faxes.

**Cause:** HP Digital Imaging Monitor is not operating properly (Windows).

**Solution:** Restart the HP Digital Imaging Monitor or restart the computer.
Solve wired (Ethernet) network problems (some models only)

If you are unable to connect the product to your wired (Ethernet) network, perform one or more of the following tasks.

NOTE: After correcting any of the following, run the installation program again.

• General network troubleshooting
• Network port created does not match device IP address (Windows)

General network troubleshooting

If you are unable to install the device software, verify that:

• All cable connections to the computer and the device are secure.
• The network is operational and the network hub is turned on.
• All applications, including virus protection programs, spyware protection programs,
  and firewalls, are closed or disabled for computers running Windows
• The device is installed on the same subnet as the computers that will be using the
  device.

If the installation program cannot discover the device, print the network configuration
page, and enter the IP address manually in the installation program. For more information,
see Understand the network configuration page (some models only).

Though it is not recommended that you assign the device with a static IP address, you
might resolve some installation problems (such as a conflict with a personal firewall) by
doing so.

Network port created does not match device IP address (Windows)

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

1. Print the device’s network configuration page
2. Click Start, point to Settings, and then click Printers or Printers and Faxes.
   - or -
   Click Start, click Control Panel, and then double-click Printers.
3. Right-click the device icon, click Properties, and then click the Ports tab.
4. Select the TCP/IP port for the device, and then click Configure Port.
5. Compare the IP address listed in the dialog box and make sure it matches the IP
   address listed on the network configuration page. If the IP addresses are different,
   change the IP address in the dialog box to match the address on the network
   configuration page.
6. Click OK twice to save the settings and close the dialog boxes.
Solve wireless problems (some models only)

If the device is unable to communicate with the network after completing the wireless setup and software installation, perform one or more of the following tasks in the order shown below.

- Basic wireless troubleshooting
- Advanced wireless troubleshooting

Basic wireless troubleshooting

Perform the following steps in the order presented.

**NOTE:** If this is the first time you are setting up the wireless connection, and you are using the included software, make sure that the USB cable is connected to the device and the computer.

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

If the blue light near the HP device’s wireless button is not lit, the wireless capabilities might not have been turned on. To turn on wireless, press and hold the Wireless button for three seconds.

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

Step 2 - Restart components of the wireless network

Turn off the router and the HP device, and then turn them back on in this order: router first and then the HP device. If you still are unable to connect, turn off the router, HP device, and your computer. Sometimes, turning off the power and then turning it back on will recover a network communication issue.

Step 3 - Run the Wireless Network Test

For wireless networking issues, run the Wireless Network Test. To print a Wireless Network Test page, press the Wireless button. If a problem is detected, the printed test report will include recommendations that might help solve the problem.

Advanced wireless troubleshooting

If you have tried the suggestions provided in the Basic troubleshooting section and are still unable to connect to your HP device to the wireless network, try the following suggestions in the order presented:

- **Step 1:** Make sure your computer is connected to your network
- **Step 2:** Make sure that the HP device is connected to your network
- **Step 3:** Check to see if the firewall software is blocking communication
- **Step 4:** Make sure the HP device is online and ready
• **Step 5:** Make sure the wireless version of the HP device is set as the default printer driver (Windows only)

• **Step 6:** Make sure the HP Network Devices Support service is running (Windows only)

• Add hardware addresses to a wireless access point (WAP)

---

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

**To check a wired (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:** Macintosh 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. Click *Start*, click **Control Panel**, point to **Network Connections**, and then click **View Network Status** and **Tasks**.

or

Click *Start*, select **Settings**, click **Control Panel**, double-click **Network Connections**, click the **View** menu, and then select **Details**.

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.

If you are able to access the Internet and are using a computer running Windows, you can also access HP Network Assistant at www.hp.com/sbso/wireless/tools-setup.html?jumpid=reg_R1002_USEN for help in setting up a network. (This Web site is only available in English.)

Step 2: Make sure that the HP device is connected to your network
If your device is not connected to the same network as your computer, you will not be able to use the HP device over the network. Follow the steps described in this section to find out if your device is actively connected to the correct network.

NOTE: If your wireless router or Apple AirPort Base Station is using a hidden SSID, your HP device will not automatically detect the network.

A: Make sure the HP device is on the network
1. If the HP device supports Ethernet networking and is connected to an Ethernet network, make sure an Ethernet cable is not plugged into the back of the device. If an Ethernet cable is plugged into the back, then wireless connectivity is disabled.
2. If the HP device is connected to a wireless network, print the device's Wireless Configuration page. For more information, see Understand the network configuration page (some models only).
▲ After the page has been printed, check the Network Status and URL:

| Network Status                  | • If the Network Status is Ready, the HP device is actively connected to a network.  
                                | • If the Network Status is Offline, the HP device is not connected to a network. Run the Wireless Network Test (using the instructions at the beginning of this section) and follow any recommendations. |
|--------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| URL                            | The URL shown here is the network address assigned to the HP device by your router. You will need this to connect to the embedded Web server.                                                                 |

Chapter 7

116 Solve a problem
B: Check to see if you can access the embedded Web server (EWS)

After you establish that the computer and the HP device both have active connections to a network, you can verify if they are on the same network by accessing the device's embedded Web server (EWS). For more information, see Embedded Web server (some models only).

To access the EWS

a. On your computer, open the Web browser you normally use to access the Internet (for example, Internet Explorer or Safari). In the address box, type the URL of the HP device as it was shown on the Network Configuration Page (for example, http://192.168.1.101).

   **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 access the EWS, try using the HP device over the network (such as to print) to see if your network setup was successful.

c. If you cannot access the EWS or are still having problems using the HP device over the network, continue to the next section regarding firewalls.

Step 3: Check to see if the firewall software is blocking communication

If you cannot access the EWS and are sure both the computer and HP device have active connections to the same network, the firewall security software might be blocking communication. Temporarily turn off any firewall security software running on your computer and then try to access the EWS again. If you can access the EWS, try using the HP device (for printing).

If you are able to access the EWS and use your HP device with the firewall turned off, you will need to reconfigure your firewall settings to allow the computer and HP device to communicate with each other over the network. For more information, see Configure your firewall to work with HP devices.

If you are able to access the EWS, but are still unable to use the HP device even with the firewall turned off, try enabling the firewall software to recognize the HP device.

Step 4: Make sure the HP device is online and ready

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

To check the HP device’s status, complete the following steps:

Windows

1. Click **Start**, point to **Settings**, and then click **Printers** or **Printers and Faxes**.
   - Or -
   Click **Start**, click **Control Panel**, and then double-click **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 HP device is Offline, right-click the device, and click **Use Printer Online**.
   b. If the HP device is Paused, right-click the device, and click **Resume Printing**.
4. Try using the HP device over the network.

**Mac OS X**
1. Click **System Preferences** in the Dock, and then click **Print & Fax**.
2. Select the HP device, and click **Print Queue**.
3. If **Jobs Stopped** appears in the window that appears, click **Start Jobs**.

If you can use the HP device after performing the steps above but find that the symptoms persist as you continue to use the device, your firewall might be interfering. If you still cannot use the HP device over the network, continue to the next section for additional troubleshooting help.

**Step 5: Make sure the wireless version of the HP device is set as the default printer driver (Windows only)**

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

1. Click **Start**, point to **Settings**, and then click **Printers** or **Printers and Faxes**.
   - Or -
   Click **Start**, click **Control Panel**, and then double-click **Printers**.
2. Determine if the version of the printer driver in the **Printers** or **Printers and Faxes** folder is connected wirelessly:
   a. Right-click the printer icon, and then click **Properties, Document Defaults**, or **Printing Preferences**.
   b. On the **Ports** tab, look for a port in the list with a checkmark. The version of the printer driver that is connected wirelessly has **Standard TCP/IP Port** as the Port description, next to the checkmark.
3. 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 HP device, right-click the printer icon for the version of the printer driver that is connected wirelessly, and select **Set as Default Printer**.

**Step 6: Make sure the HP Network Devices Support service is running (Windows only)**

**To restart the HP Network Device Support service**
1. Delete any print jobs currently in the print queue.
2. On the desktop, right-click **My Computer** or **Computer**, and then click **Manage**.
3. Double-click **Services and Applications**, and then click **Services**.
4. Scroll down the list of services, right click **HP Network Devices Support**, and then click **Restart**.

5. After the service restarts, try using the HP device over the network again.

If you are able to use the HP device over the network, your network setup was successful.

If you still cannot use the HP device over the network or if you have to periodically perform this step in order to use your device over the network, your firewall might be interfering.

If this still does not work, there might be a problem with your network configuration or router. Contact the person who set up your network or the router manufacturer for help.

**Add hardware addresses to a wireless access point (WAP)**

MAC filtering is a security feature in which a wireless access point (WAP) is configured with a list of MAC addresses (also called “hardware addresses”) of devices that are allowed to gain access to the network through the WAP. If the WAP does not have the hardware address of a device attempting to access the network, the WAP denies the device access to the network. If the WAP filters MAC addresses, then the device’s MAC address must be added to the WAP’s list of accepted MAC addresses.

- Print the network configuration page. For more information, see [Understand the network configuration page (some models only)](#).
- Open the WAP’s configuration utility, and add the device’s hardware address to the list of accepted MAC addresses.

**Configure your firewall to work with HP devices**

A personal firewall, which is security software running on your computer, can block network communication between your HP device 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
- Scan communication errors or scanner busy messages
- Unable to see printer status on your computer

The firewall might be preventing your HP device from notifying computers on your network where it can be found. If the HP software cannot find the HP device during installation (and you know the HP device is on the network), or you have already successfully installed HP software and experience problems, try the following:

1. If you are using a computer running Windows, in the firewall configuration utility, look for an option to trust computers on the local subnet (sometimes called the “scope” or “zone”). By trusting all computers on the local subnet, computers and devices in your home or office can communicate with each other while still being protected from the internet. This is the easiest approach to use.

2. If you do not have the option to trust computers on the local subnet, add incoming UDP port 427 to your firewall’s list of allowed ports.

**NOTE:** Not all firewalls require you to differentiate between incoming and outgoing ports, but some do.
Another common problem is that HP software is not set as a trusted software by your firewall to access the network. This can happen if you answered “block” to any firewall dialog boxes that appeared when you installed the HP software.

If this occurs, and if you are using a computer running Windows, check that the following programs are in your firewall’s list of trusted applications; add any that are missing.

- **hpqkygrp.exe**, located in `C:\program files\HP\digital imaging\bin`
- **hpqscnvw.exe**, located in `C:\program files\HP\digital imaging\bin`
- or -
  - **hpiscnapp.exe**, located in `C:\program files\HP\digital imaging\bin`
- **hpqste08.exe**, located in `C:\program files\HP\digital imaging\bin`
- **hpqtra08.exe**, located in `C:\program files\HP\digital imaging\bin`
- **hpqthb08.exe**, located in `C:\program files\HP\digital imaging\bin`

**NOTE:** Refer to your firewall documentation on how to configure the firewall port settings and how to add HP files to the “trusted” list.

Some firewalls continue to cause interference even after you disable them. If you continue to have problems after configuring the firewall as described above and if you are using a computer running Windows, you might need to uninstall the firewall software in order to use the HP device over the network.

### Advanced firewall information

The following ports are also used by your HP device and might need to be opened on your firewall configuration. Incoming ports (UDP) are destination ports on the computer while outgoing ports (TCP) are destination ports on the HP device.

- **Incoming (UDP) ports:** 137, 138, 161, 427
- **Outgoing (TCP) ports:** 137, 139, 427, 9100, 9220, 9500

The ports are used for the following functions:

#### Printing

- **UDP ports:** 427, 137, 161
- **TCP port:** 9100

#### Photo card upload

- **UDP ports:** 137, 138, 427
- **TCP port:** 139

#### Scanning

- **UDP port:** 427
- **TCP ports:** 9220, 9500

#### HP device status

**UDP port:** 161
Faxing
• UDP port: 427
• TCP port: 9220

HP device installation
UDP port: 427

Solve device management problems

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

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

• Embedded Web server cannot be opened
• The EWS is only available in English

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 device to the network.
• Make sure the network cable is securely connected to the device.
• Make sure the network hub, switch, or router is turned on and working properly.

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

NOTE: To use the embedded Web server (EWS), the product must be connected to a network using either an Ethernet or a wireless connection. You cannot use the embedded Web server if the product 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 System requirements.
• If your Web browser uses any proxy settings to connect to the Internet, try turning off these settings. For more information, the documentation available with your Web browser.
Check the device IP address

• To check the IP address of the product, obtain the IP address by printing a network configuration page. Press the Setup button, select Network Setup, and then select Print Network Settings.
• Ping the device using the IP address from the command prompt. For example, if the IP address is 123.123.123.123, type the following at the MS-DOS prompt:
  C:\Ping 123.123.123.123
Or, in Mac OS X, open Terminal (available in the Applications > Utilities folder) and type the following: ping 123.123.123
If a reply appears, the IP address is correct. If a time-out response appears, the IP address is incorrect.

The EWS is only available in English

If your product only supports wireless network connections and not Ethernet network connections, the EWS is only available in English.

Troubleshoot installation issues

If the following topics do not help, see Solve a problem for information about HP support.

• Hardware installation suggestions
• Software installation suggestions

Hardware installation suggestions

Check the device

• Make sure that all packing tape and material have been removed from outside and inside the device.
• Make sure that the device is loaded with paper.
• Make sure that no lights are on or blinking except the Ready light, which should be on. If the Attention light is blinking, check for messages on the device control panel.

Check the hardware connections

• Make sure that any cords and cables that you are using (such as USB cable or Ethernet cable) are in good working order.
• Make sure that the power cord is connected securely to both the device and to a working power outlet.
• Make sure that the phone cord is connected to the 1-LINE port.
Check the ink cartridges
• The product prompts you to align ink cartridges every time you install or replace an ink cartridge. You can also align the ink cartridges at any time from the product’s control panel or by using the HP software installed with the product. Aligning the ink cartridges ensures high-quality output. For more information, see Align the ink cartridges. If the alignment fails, check to make sure the cartridges are installed correctly, and start the ink cartridge alignment. For more information, see Alignment fails.
• Make sure that all latches and covers are closed properly.

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.

Check the device to ensure the following
• Power light is on and not blinking. When the device is first turned on, it takes approximately 45 seconds to warm up.
• The device is in the Ready state, and no other lights on the device control panel are lit or blinking. If lights are lit or blinking, see the message on the device control panel.
• Ensure power cord and other cables are working, and are firmly connected to the device.
• All packing tapes and materials are removed from the device.
• Duplexer is locked into place.
• Paper is loaded correctly in the tray, and is not jammed in the device.
• All latches and covers are closed.

Software installation suggestions

Verify installation preliminaries
• Make sure to use the HP software CD that contains the correct installation software for your operating system.
• Before installing software, make sure that all other programs are closed.
• If the computer does not recognize the path to the CD drive that you type, make sure that you are specifying the correct drive letter.
• If the computer cannot recognize the HP software CD in the CD drive, inspect the HP software CD for damage. You can download the device driver from the HP Web site (www.hp.com/support).

Check or perform the following
• Make sure the computer meets the system requirements.
• Before installing software on a Windows computer, ensure all other programs are closed.
• If the computer does not recognize the path to the CD drive that you typed, ensure you are specifying the correct drive letter.
If the computer cannot recognize the HP software CD in the CD drive, inspect the CD for damage. You can download the device driver from the HP Web site (www.hp.com/support).

In the 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 device, run the uninstallation utility (util\ccc\uninstall.bat on the HP software CD) to perform a clean uninstallation of the device driver. Restart your computer, and reinstall the device driver.

**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.

**Understand the Printer Status Report and Self-Test Report**

Use the Printer Status Report or Self-Test Report to:

- View current device information and ink cartridge status
- Help troubleshoot problems

The Printer Status Report and the Self-Test Report also contain a log of recent events.

**NOTE:** If your product does not support wireless communication, the report is called the "Printer Status Report". If your product supports wireless communication, the report is called the "Self-Test Report".

If you need to call HP, it is often useful to print the Printer Status Report or Self-Test Report before calling.

**Printer Status Report**
1. **Product Information:** Shows product information (such as the product name, model number, serial number, and firmware version number), as well as usage information printed from the tray.

2. **Ink Delivery System Information:** Shows information about the ink cartridges, such as the estimated ink levels.

   **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.

3. **Additional Assistance:** Provides information about available methods for finding more information about the product, as well as information about diagnosing problems.

---

### Self-Test Report

1. **Printer Information:** Shows device information (such as the product name, model number, serial number, and firmware version number), and the number of pages printed from the tray.

2. **Nozzle test pattern:** Missing lines indicate problems with the ink cartridges. Try cleaning the cartridges, or replacing the cartridges.

3. **Color bars and boxes:** Uneven, faded, or faint color bars or boxes indicate low ink. Check the ink levels.

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

---

**To print the Printer Status Report or Self-Test Report**

- **Product control panel:** Press **Setup**, select **Print Report**, select **Printer Status or Self-Test**, and then press **OK**.
Understand the network configuration page (some models only)

If the device is connected to a network, you can print a network configuration page to view the network settings for the device. 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.

**Network Configuration Page**

1. **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.
2. **802.3 Wired**: Shows information about the active wired network connection, such as the IP address, subnet mask, default gateway, as well as the hardware address of the device.
3. **802.11 Wireless**: Shows information about the active wireless network connection, such as the IP address, the communication mode, the network name, authentication type, and signal strength.
4. **mDNS**: Shows information about the active Multicast Domain Name System (mDNS) connection. mDNS services are typically used on small networks for IP address and name resolution (through UDP port 5353) where a conventional DNS server is not used.
5. **SLP**: Shows information about the current Service Location Protocol (SLP) connection. SLP is used by network management applications for device management. The device supports SNMPv1 protocol on IP networks.

**To print the network configuration page from the device control panel**

Press the **Setup** button, select **Print Report**, select **Network Config**, and then press **OK**.
Clear jams

Occasionally, media becomes jammed during a job. Try the following remedies before you attempt to clear the jam.

- Make sure that you are printing with media that meets specifications. For more information, see Media specifications.
- Make sure that you are printing with media that is not wrinkled, folded, or damaged.
- Make sure that the device is clean. For more information, see Maintain the device.
- Make sure that the trays are loaded correctly and are not too full. For more information, see Load media.

This section contains the following topics:

- Clear paper jams
- Avoid paper jams

Clear paper jams

If the paper was loaded in the main tray, you might need to clear the paper jam from the rear door.

Paper can also jam in the automatic document feeder (ADF). If the product has an automatic document feeder (ADF), several common actions can cause paper to jam the ADF:

- Placing too much paper in the ADF tray. For information on the maximum number of sheets allowed in the ADF, see Load an original on the scanner glass.
- Using paper that is too thick or too thin for the device.
- Trying to add paper to the ADF tray while the device is feeding pages.

To clear a paper jam from the rear door

1. Press in the tab on the left side of the rear door to release the door. Remove the door by pulling it away from the device.

⚠️ CAUTION: Trying to clear a paper jam from the front of the device can damage the print mechanism. Always access and clear paper jams through the rear door.
2. 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 device. If you do not remove all the pieces of paper from the device, more paper jams are likely to occur.

3. Replace the rear door. Gently push the door forward until it snaps into place.

4. Press **OK** to continue the current job.

---

**To clear a paper jam in the automatic document feeder (ADF) (Some models only)**

1. Lift the cover of the ADF.

2. 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 device. If you do not remove all the pieces of paper from the device, more paper jams are likely to occur.

3. Close the cover of the ADF.

---

**Avoid paper jams**

To help avoid paper jams, follow these guidelines.

- Remove printed papers from the output tray frequently.
- Prevent curled or wrinkled paper by storing all unused paper flat in a resealable bag.
- Ensure that paper loaded in the input tray lays flat and the edges are not bent or torn.
- 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-width guide in the input tray to fit snugly against all paper. Make sure the paper-width guide does not bend the paper in the input tray.
- Do not force paper too far forward in the input tray.
- Use paper types that are recommended for the device. For more information, see **Media specifications**.
NOTE: Humidity may cause paper to curl and hence paper jam.
A Technical information

This section contains the following topics:

- Warranty information
- Device 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

<table>
<thead>
<tr>
<th>HP product</th>
<th>Duration of limited warranty</th>
</tr>
</thead>
<tbody>
<tr>
<td>Software Media</td>
<td>90 days</td>
</tr>
<tr>
<td>Printer</td>
<td>1 year</td>
</tr>
<tr>
<td>Print or ink cartridges</td>
<td>Until the HP ink is depleted or the &quot;end of warranty&quot; 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.</td>
</tr>
<tr>
<td>Printheads (only applies to products with customer replaceable printheads)</td>
<td>1 year</td>
</tr>
<tr>
<td>Accessories</td>
<td>1 year unless otherwise stated</td>
</tr>
</tbody>
</table>

A. Extent of limited warranty
1. Hewlett-Packard (HP) warrants to the end-user customer that the HP products specified above will be free from defects in materials and workmanship for the duration specified above, which duration begins on the date of purchase by the customer.
2. For software products, HP’s limited warranty applies only to a failure to execute programming instructions. HP does not warrant that the operation of any product will be uninterrupted or error free.
3. HP’s limited warranty covers only those defects that arise as a result of normal use of the product, and does not cover any other problems, including those that arise as a result of:
   a. Improper maintenance or modification;
   b. Software, media, parts, or supplies not provided or supported by HP;
   c. Operation outside the product’s specifications;
   d. Unauthorized modification or misuse.
4. 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.
5. If HP receives, during the applicable warranty period, notice of a defect in any product which is covered by HP’s warranty, HP shall either repair or replace the product, at HP’s option.
6. If HP is unable to repair or replace, as applicable, a defective product which is covered by HP’s warranty, HP shall, within a reasonable time after being notified of the defect, refund the purchase price for the product.
7. HP shall have no obligation to repair, replace, or refund until the customer returns the defective product to HP.
8. Any replacement product may be either new or like-new, provided that it has functionality at least equal to that of the product being replaced.
9. HP products may contain remanufactured parts, components, or materials equivalent to new in performance.
10. HP’s Limited Warranty Statement is valid in any country 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

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

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.

Dear Customer,

You will find below the name and address of the HP entity responsible for the performance of the HP Limited Warranty in your country.

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.

Ireland: Hewlett-Packard Ireland Limited, 63-74 Sir John Rogerson's Quay, Dublin 2
United Kingdom: Hewlett-Packard Ltd, Cain Road, Bracknell, GB-Berks RG12 1HN
Malta: Hewlett Packard International Trade BV, Branch 48, Sqaq Nru 2, Triq ix-Xatt, Pieta MSD08, Malta
South Africa: Hewlett-Packard South Africa Ltd, 12 Autumn Street, Rivonia, Sandton, 2128, Republic of South Africa

Warranty information 131
**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:

![Ink Cartridge](image)

For a copy of the HP Limited Warranty Statement, see the printed documentation that came with the product.
Device specifications

This section contains the following topics:

- Physical specifications
- Product features and capacities
- Processor and memory specifications
- System requirements
- Network protocol specifications (Some models only)
- Embedded Web server specifications (some models only)
- Media specifications
- Print resolution
- Print specifications
- Copy specifications
- Fax specifications
- Scan specifications
- Operating environment
- Electrical requirements
- Acoustic emission specification

Physical specifications

Size (width x depth x height)
433.5 x 401.5 x 216.7 mm (17.1 x 15.8 x 8.5 inches)

Device weight (does not include print supplies)
5.9 kg (13 lb)

Product features and capacities

<table>
<thead>
<tr>
<th>Feature</th>
<th>Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Connectivity</td>
<td>• USB 2.0-compliant high speed device</td>
</tr>
<tr>
<td></td>
<td>• Wired (Ethernet) network (some models only)</td>
</tr>
<tr>
<td></td>
<td>• Wireless 802.11b/g (some models only)</td>
</tr>
<tr>
<td>Ink cartridges</td>
<td>Black and tri-color ink cartridge</td>
</tr>
<tr>
<td>Device languages</td>
<td>HP PCL 3 GUI</td>
</tr>
<tr>
<td>Duty cycle</td>
<td>Up to 3000 pages per month</td>
</tr>
<tr>
<td>Device control panel language</td>
<td>Bulgarian, Croatian, Czech, Danish, Dutch, English, Finnish, French,</td>
</tr>
<tr>
<td>support</td>
<td>German, Greek, Hungarian, Italian, Japanese, Korean, Norwegian, Polish,</td>
</tr>
<tr>
<td></td>
<td>Portuguese, Romanian, Russian, Simplified Chinese, Slovak, Slovenian,</td>
</tr>
<tr>
<td></td>
<td>Spanish, Swedish, Traditional Chinese, Turkish.</td>
</tr>
</tbody>
</table>

Processor and memory specifications

Non-wireless models
Processor: 192 MHz ARM9 core
Memory: 64 MB DDR2

**Wireless models**
Processor: 180 MHz ARM9 core
Memory: 32 MB SDRAM

**System requirements**

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

**Operating system compatibility**
- Windows XP Service Pack 1, Windows Vista, Windows 7

To see system requirements and specifications for Windows 7, see the Readme file. This file is available on your computer after you install the HP software.

- Mac OS X (v10.4.11, v10.5, v10.6)
- Linux (For more information, see [www.hp.com/go/linuxprinting](http://www.hp.com/go/linuxprinting)).

**Minimum requirements**
- Microsoft Windows XP (32-bit) Service Pack 1: Intel Pentium II or Celeron processor, 512 MB RAM, 790 MB free hard disk space, Microsoft Internet Explorer 6.0
- Microsoft Windows Vista: 800 MHz 32-bit (x86) or 64-bit (x64) processor, 512 MB RAM, 1.15 GB free hard disk space, Microsoft Internet Explorer 7.0
- Mac OS X (v10.4.11, v10.5.6, v10.6): 256 MB memory, 500 MB free hard disk space
- Quick Time 5.0 or later (Mac OS X)
- Adobe Acrobat Reader 5.0 or later

**Recommended requirements**
- Microsoft Windows XP (32-bit) Service Pack 1: Intel Pentium III or higher processor, 512 MB RAM, 850 MB free hard disk space, Microsoft Internet Explorer 6.0 or later
- Microsoft Windows Vista: 1 GHz 32-bit (x86) or 64-bit (x64) processor, 1 GB RAM, 1.2 GB free hard disk space, Microsoft Internet Explorer 7.0 or later
- Mac OS X (v10.4.11, v10.5.6, v10.6): 512 MB memory, 500 MB free hard disk space

**Network protocol specifications (Some models only)**

**Network operating system compatibility**
- Mac OS X (10.4.11, 10.5.6, 10.6)
- Microsoft Windows 2000 Server Terminal Services with Citrix Metaframe XP with Feature Release 3
- Microsoft Windows 2000 Server Terminal Services with Citrix Presentation Server 4.0
- Microsoft Windows 2000 Server Terminal Services
- Microsoft Windows 2003 Server Terminal Services
- Microsoft Windows 2003 Server Terminal Services with Citrix Presentation Server 4.0
- Microsoft Windows 2003 Server Terminal Services with Citrix Presentation Server 4.5
• Microsoft Windows 2003 Server Terminal Services with Citrix Metaframe XP with Feature Release 3
• Microsoft Windows 2003 Small Business Server Terminal Services
• Microsoft Windows Server 2008 Terminal Services

Compatible network protocols
TCP/IP

Network management
• HP Web Jetadmin plug-ins
• Embedded Web server
Features
Ability to remotely configure and manage network devices

Embedded Web server specifications (some models only)

Requirements
• A TCP/IP-based network (IPX/SPX-based networks are not supported)
• A Web browser (either Microsoft Internet Explorer 6.0 or higher, Opera 8.0 or higher, Mozilla Firefox 1.0 or higher, or Safari 1.2, or higher)
• A network connection (you cannot use the embedded Web server connected directly to a computer with 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 will not be available.

• It must be on the same side of a firewall as the device.

Media specifications
Use the Understand supported sizes and Understand supported media types and weights tables to determine the correct media to use with your device, and determine what features will work with your media. See the Set minimum margins section for information about the printing margins used by the product, see the Guidelines for two-sided (duplex) printing section for guidelines that should be followed when printing on both side of a page.

Understand supported sizes

<table>
<thead>
<tr>
<th>Media size</th>
<th>Main tray</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Standard media sizes</strong></td>
<td></td>
</tr>
<tr>
<td>U.S. Legal (216 x 356 mm; 8.5 x 14 inches)</td>
<td>✔</td>
</tr>
<tr>
<td>A4 (210 x 297 mm; 8.3 x 11.7 inches)</td>
<td>✔</td>
</tr>
<tr>
<td>U.S. Executive (184 x 267 mm; 7.25 x 10.5 inches)</td>
<td>✔</td>
</tr>
<tr>
<td>B5 (176 x 250 mm; 6.9 x 9.8 inches)</td>
<td>✔</td>
</tr>
<tr>
<td>A5 (148 x 210 mm; 5.8 x 8.3 inches)</td>
<td>✔</td>
</tr>
<tr>
<td>Borderless A4 (210 x 297 mm; 8.3 x 11.7 inches)</td>
<td>✔</td>
</tr>
<tr>
<td>Borderless A5 (148 x 210 mm; 5.8 x 8.3 inches)</td>
<td>✔</td>
</tr>
</tbody>
</table>
### Media size

<table>
<thead>
<tr>
<th>Media size</th>
<th>Main tray</th>
</tr>
</thead>
<tbody>
<tr>
<td>Borderless B5 (176 x 250 mm; 6.9 x 9.8 inches)</td>
<td>✓</td>
</tr>
<tr>
<td>Borderless (10 x 15 cm, tab)</td>
<td>✓</td>
</tr>
<tr>
<td>Borderless (4 x 6 inches, tab)</td>
<td>✓</td>
</tr>
<tr>
<td>Borderless HV</td>
<td>✓</td>
</tr>
<tr>
<td>Borderless A6</td>
<td>✓</td>
</tr>
<tr>
<td>Borderless cabinet</td>
<td>✓</td>
</tr>
<tr>
<td>Borderless (13 x 18 cm), same dimension as 5 x 7 inches</td>
<td>✓</td>
</tr>
<tr>
<td>Borderless (8.5 x 11 inches)</td>
<td>✓</td>
</tr>
<tr>
<td>10 x 15 cm (tab)</td>
<td>✓</td>
</tr>
<tr>
<td>4 x 6 inches (tab)</td>
<td>✓</td>
</tr>
<tr>
<td>HV</td>
<td>✓</td>
</tr>
<tr>
<td>Cabinet</td>
<td>✓</td>
</tr>
<tr>
<td>13 x 18 cm (same dimension as 5 x 7 inches)</td>
<td>✓</td>
</tr>
</tbody>
</table>

### Envelopes

<table>
<thead>
<tr>
<th>Envelopes</th>
<th>Main tray</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S. #10 Envelope (105 x 241 mm; 4.12 x 9.5 inches)</td>
<td>✓</td>
</tr>
<tr>
<td>Monarch Envelope (98 x 191 mm; 3.88 x 7.5 inches)</td>
<td>✓</td>
</tr>
<tr>
<td>Card Envelope (111 x 152 mm; 4.4 x 6 inches)</td>
<td>✓</td>
</tr>
<tr>
<td>A2 Envelope (111 x 146 mm; 4.37 x 5.75 inches)</td>
<td>✓</td>
</tr>
<tr>
<td>DL Envelope (110 x 220 mm; 4.3 x 8.7 inches)</td>
<td>✓</td>
</tr>
<tr>
<td>C6 Envelope (114 x 162 mm; 4.5 x 6.4 inches)</td>
<td>✓</td>
</tr>
<tr>
<td>No. 6 3/4 Envelope (92.2 mm x 165.1 mm; 3.63 x 6.5 inches)</td>
<td>✓</td>
</tr>
<tr>
<td>Envelope C5</td>
<td>✓</td>
</tr>
</tbody>
</table>

### Cards

<table>
<thead>
<tr>
<th>Cards</th>
<th>Main tray</th>
</tr>
</thead>
<tbody>
<tr>
<td>Index card (76.2 x 127 mm; 3 x 5 inches)</td>
<td>✓</td>
</tr>
<tr>
<td>Index card (102 x 152 mm; 4 x 6 inches)</td>
<td>✓</td>
</tr>
<tr>
<td>Index card (127 x 203 mm; 5 x 8 inches)</td>
<td>✓</td>
</tr>
<tr>
<td>A6 card (105 x 148.5 mm; 4.13 x 5.83 inches)</td>
<td>✓</td>
</tr>
</tbody>
</table>

### Photo media
(continued)

<table>
<thead>
<tr>
<th>Media size</th>
<th>Main tray</th>
</tr>
</thead>
<tbody>
<tr>
<td>Photo media (89 x 127 mm; 3.5 x 5 inches)</td>
<td>✔️</td>
</tr>
<tr>
<td>Photo media (102 x 152 mm; 4 x 6 inches)</td>
<td>✔️</td>
</tr>
<tr>
<td>Photo media (5 x 7 inches)</td>
<td>✔️</td>
</tr>
<tr>
<td>Photo media (8 x 10 inches)</td>
<td>✔️</td>
</tr>
<tr>
<td>Photo media (10 x 15 cm)</td>
<td>✔️</td>
</tr>
<tr>
<td>Borderless photo media (89 x 127 mm; 3.5 x 5 inches)</td>
<td>✔️</td>
</tr>
<tr>
<td>Borderless photo media (102 x 152 mm; 4 x 6 inches)</td>
<td>✔️</td>
</tr>
<tr>
<td>Borderless photo media (5 x 7 inches)</td>
<td>✔️</td>
</tr>
<tr>
<td>Borderless photo media (8 x 10 inches)</td>
<td>✔️</td>
</tr>
<tr>
<td>Borderless photo media (8.5 x 11 inches)</td>
<td>✔️</td>
</tr>
<tr>
<td>Borderless photo media (10 x 15 cm)</td>
<td>✔️</td>
</tr>
</tbody>
</table>

**Other media**

Custom-sized media between between 76.20 to 210.06 mm wide and 101.60 to 762.00 mm long (3 to 8.5 inches wide and 4 to 30 inches long) ✔️

**Understand supported media types and weights**

<table>
<thead>
<tr>
<th>Tray</th>
<th>Type</th>
<th>Weight</th>
<th>Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main tray</td>
<td>Paper</td>
<td>60 to 105 g/m² (16 to 28 lb bond)</td>
<td>Up to 100 sheets of plain paper (25 mm or 1 inch stacked)</td>
</tr>
<tr>
<td></td>
<td>Transparencies</td>
<td></td>
<td>Up to 70 sheets (17 mm or 0.67 inch stacked)</td>
</tr>
<tr>
<td></td>
<td>Photo media</td>
<td>280 g/m² (75 lb bond)</td>
<td>Up to 100 sheets (17 mm or 0.67 inch stacked)</td>
</tr>
<tr>
<td></td>
<td>Labels</td>
<td></td>
<td>Up to 100 sheets (17 mm or 0.67 inch stacked)</td>
</tr>
<tr>
<td></td>
<td>Envelopes</td>
<td>75 to 90 g/m² (20 to 24 lb bond envelope)</td>
<td>Up to 30 sheets (17 mm or 0.67 inch stacked)</td>
</tr>
<tr>
<td></td>
<td>Cards</td>
<td>Up to 200 g/m² (110 lb index)</td>
<td>Up to 80 cards</td>
</tr>
</tbody>
</table>
### Set minimum margins

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

![Image of margin settings]

<table>
<thead>
<tr>
<th>Media</th>
<th>(1) Left margin</th>
<th>(2) Right margin</th>
<th>(3) Top margin</th>
<th>(4) Bottom margin*</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S. Letter</td>
<td>3.0 mm (0.125 inches)</td>
<td>3.0 mm (0.125 inches)</td>
<td>3.0 mm (0.125 inches)</td>
<td>3.0 mm (0.125 inches)</td>
</tr>
<tr>
<td>U.S. Legal</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>U.S. Executive</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>U.S. Statement</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cards</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Custom-sized media</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Photo media</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Envelopes</td>
<td>3.0 mm (0.125 inches)</td>
<td>3.0 mm (0.125 inches)</td>
<td>3.0 mm (0.125 inches)</td>
<td>14.3 mm (0.563 inches)</td>
</tr>
</tbody>
</table>

* To achieve this margin setting on a computer running Windows, click the **Advanced** tab in the print driver, and select **Minimize Margins**.
Guidelines for two-sided (duplex) printing

- Always use media that conforms to the device specifications. For more information, see Media specifications.
- Do not print on both sides of transparencies, envelopes, photo paper, glossy media, or paper lighter than 16 lb bond (60 g/m²) or heavier than 28 lb bond (105 g/m²). Jams might occur with these media types.
- Several kinds of media 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 device prints the first side of the media first. Load the media with the print side facing down.

Print resolution

**Black print resolution**
Up to 600 dpi rendered black (when printing from a computer)

**Color print resolution**
Up to 4800 x 1200 optimized dpi color on select HP photo papers with 1200 input dpi. Photo papers include the following:
- HP Premium Plus Photo
- HP Premium Photo
- HP Advanced Photo

Print specifications

**Black print resolution**
Up to 600 dpi rendered black (when printing from a computer)

**Color print resolution**
Up to 4800 x 1200 optimized dpi color on select HP photo papers with 1200 input dpi. Photo papers include the following:
- HP Premium Plus Photo
- HP Premium Photo
- HP Advanced Photo

Copy specifications

- Digital image processing
- Up to 100 copies from original (varies by model)
- Digital zoom: from 25 to 400% (varies by model)
- Fit to page, pre-scan
- Copy speeds vary according to the complexity of the document

Refer to the following table to determine which paper type setting to choose based on the paper loaded in the main tray.

<table>
<thead>
<tr>
<th>Paper type</th>
<th>Device control panel setting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plain paper</td>
<td>Plain Paper</td>
</tr>
<tr>
<td>HP Bright White Paper</td>
<td>Plain Paper</td>
</tr>
<tr>
<td>HP Premium Presentation Paper, Matte</td>
<td>Premium Inkjet</td>
</tr>
<tr>
<td>Other inkjet papers</td>
<td>Premium Inkjet</td>
</tr>
</tbody>
</table>


Appendix A (continued)

<table>
<thead>
<tr>
<th>Paper type</th>
<th>Device control panel setting</th>
</tr>
</thead>
<tbody>
<tr>
<td>HP Premium Plus Photo Papers</td>
<td>Photo Paper</td>
</tr>
<tr>
<td>HP Premium Photo Papers</td>
<td>Photo Paper</td>
</tr>
<tr>
<td>HP Advanced Photo Paper</td>
<td>Photo Paper</td>
</tr>
<tr>
<td>HP Everyday Photo Paper, Semi-gloss</td>
<td>Photo Paper</td>
</tr>
<tr>
<td>HP Everyday Photo Paper, Matte</td>
<td>Premium Inkjet</td>
</tr>
<tr>
<td>Other photo papers</td>
<td>Photo Paper</td>
</tr>
<tr>
<td>HP Premium Inkjet Transparency</td>
<td>Premium Inkjet</td>
</tr>
<tr>
<td>HP Iron-on Transfer</td>
<td>Premium Inkjet</td>
</tr>
<tr>
<td>HP Photo Cards</td>
<td>Photo Paper</td>
</tr>
<tr>
<td>Other specialty papers</td>
<td>Premium Inkjet</td>
</tr>
<tr>
<td>Glossy Greeting Card</td>
<td>Photo Paper</td>
</tr>
<tr>
<td>Matte Greeting Card</td>
<td>Premium Inkjet</td>
</tr>
<tr>
<td>HP Brochure &amp; Flyer Paper, Glossy</td>
<td>Photo Paper</td>
</tr>
<tr>
<td>HP Brochure &amp; Flyer Paper, Matte</td>
<td>Premium Inkjet</td>
</tr>
<tr>
<td>Other Glossy Brochure</td>
<td>Photo Paper</td>
</tr>
<tr>
<td>Other Matte Brochure</td>
<td>Premium Inkjet</td>
</tr>
</tbody>
</table>

Fax specifications

- Walk-up black-and-white and color fax capability.
- Up to 99 speed dials (varies by model).
- Up to 100-page memory (varies by model, based on ITU-T Test Image #1 at standard resolution). More complicated pages or higher resolution takes longer and uses more memory. Also, other product functions, such as copying, might affect the number of pages that can be stored in memory.
- Manual fax send and receive.
- Automatic busy redial up to five times (varies by model).
- Confirmation and activity reports.
- CCITT/ITU Group 3 fax with Error Correction Mode.
- 33.6 Kbps transmission.
- 3 seconds per page speed at 33.6 Kbps (based on ITU-T Test Image #1 at standard resolution). More complicated pages or higher resolution take longer and use more memory.
- Ring detect with automatic fax/answering machine switching.

<table>
<thead>
<tr>
<th>Photo (dpi)</th>
<th>Very Fine (dpi)</th>
<th>Fine (dpi)</th>
<th>Standard (dpi)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black 196 x 203 (8-bit grayscale)</td>
<td>300 x 300</td>
<td>196 x 203</td>
<td>196 x 98</td>
</tr>
<tr>
<td>Color 300 x 300</td>
<td>200 x 200</td>
<td>200 x 200</td>
<td>200 x 200</td>
</tr>
</tbody>
</table>
Scan specifications

- Image editor included
- Integrated OCR software automatically converts scanned text to editable text
- Scan speeds vary according to the complexity of the document
- Twain-compliant interface
- Resolution: 2400 x 4800 ppi optical, up to 19,200 ppi enhanced
- Color: 16-bit per RGB color, 48-bit total
- Maximum scan size from glass: 216 x 297 mm (8.5 x 11.7 inches)

Operating environment

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: 20 to 80% noncondensing

Storage environment
Storage temperature: -40° to 60° C (-40° to 140° F)
Storage relative humidity: Up to 90% noncondensing at a temperature of 65° C (150° F)

Electrical requirements

Power supply
Universal power adapter (external)

Power requirements
Input voltage: 100 to 240 VAC (± 10%), 50/60 Hz (± 3Hz)
Output voltage: 32 Vdc at 625 mA

Power consumption
28.4 watts printing (Fast Draft Mode); 32.5 watts copying (Fast Draft Mode)

Acoustic emission specification
Print in Draft mode, noise levels per ISO 7779

Sound pressure (bystander position)
LpAd 56 (dBA)

Sound power
LwAd 7.0 (BA)
Regulatory information

The device meets product requirements from regulatory agencies in your country/region. This section contains the following topics:

- 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
- LED indicator statement
- Notice to users of the U.S. telephone network: FCC requirements
- Notice to users of the Canadian telephone network
- Notice to users in the European Economic Area
- Notice to users of the German telephone network
- Australia wired fax statement
- Regulatory information for wireless products
- Regulatory model number
- Declaration of conformity
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 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

사용자 안내문(B급 기기)
이 기기는 비업무용으로 전자파 적합등록을 받은 기기로서, 주거지역에서는 물론 모든 지역에서 사용할 수 있습니다.

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
Appendix A

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

LED indicator statement

LED indicator statement
The display LEDs meet the requirements of EN 60825-1.
Notice to users of the U.S. telephone network: FCC requirements

This equipment complies with FCC rules, Part 68. On this equipment is a label that contains, among other information, the FCC Registration Number and Ringer Equivalent Number (REN) for this equipment. If requested, provide this information to your telephone company.

An FCC compliant telephone cord and modular plug is provided with this equipment. This equipment is designed to be connected to the telephone network or premises wiring using a compatible modular jack which is Part 68 compliant. This equipment connects to the telephone network through the following standard network interface jack: USOC RJ-11C.

The REN is useful to determine the quantity of devices you may connect to your telephone line and still have all of those devices ring when your number is called. Too many devices on one line might result in failure to ring in response to an incoming call. In most, but not all, areas the sum of the RENs of all devices should not exceed five (5). To be certain of the number of devices you may connect to your line, as determined by the REN, you should call your local telephone company to determine the maximum REN for your calling area.

If this equipment causes harm to the telephone network, your telephone company might discontinue your service temporarily. If possible, they will notify you in advance. If advance notice is not practical, you will be notified as soon as possible. You will also be advised of your right to file a complaint with the FCC. Your telephone company might make changes in its facilities, equipment, operations, or procedures that could affect the proper operation of your equipment. If they do, you will be given advance notice so you will have the opportunity to maintain uninterrupted service. If you experience trouble with this equipment, please contact the manufacturer, or look elsewhere in this manual, for warranty or repair information. Your telephone company might ask you to disconnect this equipment from the network until the problem has been corrected or until you are sure that the equipment is not malfunctioning.

This equipment may not be used on coin service provided by the telephone company.

Connection to party lines is subject to state tariffs. Contact your state public utility commission, public service commission, or corporation commission for more information.

This equipment includes automatic dialing capability. When programming and/or making test calls to emergency numbers:

- Remain on the line and explain to the dispatcher the reason for the call.
- Perform such activities in the off-peak hours, such as early morning or late evening.

Note The FCC hearing aid compatibility rules for telephones are not applicable to this equipment.

The Telephone Consumer Protection Act of 1991 makes it unlawful for any person to use a computer or other electronic device, including fax machines, to send any message unless such message clearly contains in a margin at the top or bottom of each transmitted page or on the first page of transmission, the date and time it is sent and an identification of the business, other entity, or other individual sending the message and the telephone number of the sending machine or such business, other entity, or individual. (The telephone number provided might not be a 900 number or any other number for which charges exceed local or long-distance transmission charges.) In order to program this information into your fax machine, you should complete the steps described in the software.

Regulatory information 145
Notice to users of the Canadian telephone network

Cet appareil est conforme aux spécifications techniques des équipements terminaux d’Industrie Canada. Le numéro d’enregistrement atteste de la conformité de l’appareil. L’abréviation IC qui précède le numéro d’enregistrement indique que l’enregistrement a été effectué dans le cadre d’une Déclaration de conformité stipulant que les spécifications techniques d’Industrie Canada ont été respectées. Néanmoins, cette abréviation ne signifie en aucun cas que l’appareil a été validé par Industrie Canada.

Pour leur propre sécurité, les utilisateurs doivent s’assurer que les prises électriques reliées à la terre de la source d’alimentation, des lignes téléphoniques et du circuit métallique d’alimentation en eau sont, le cas échéant, branchées les unes aux autres. Cette précaution est particulièrement importante dans les zones rurales.

Remarque  Le numéro REN (Ringer Equivalence Number) attribué à chaque appareil terminal fournit une indication sur le nombre maximal de terminaux qui peuvent être connectés à une interface téléphonique. La terminaison d’une interface peut se composer de n’importe quelle combinaison d’appareils, à condition que le total des numéros REN ne dépasse pas 5.

Basé sur les résultats de tests FCC Partie 68, le numéro REN de ce produit est 0.0B.

This equipment meets the applicable Industry Canada Terminal Equipment Technical Specifications. This is confirmed by the registration number. The abbreviation IC before the registration number signifies that registration was performed based on a Declaration of Conformity indicating that Industry Canada technical specifications were met. It does not imply that Industry Canada approved the equipment.

Users should ensure for their own protection that the electrical ground connections of the power utility, telephone lines and internal metallic water pipe system, if present, are connected together. This precaution might be particularly important in rural areas.

Note  The REN (Ringer Equivalence Number) assigned to each terminal device provides an indication of the maximum number of terminals allowed to be connected to a telephone interface. The termination on an interface might consist of any combination of devices subject only to the requirement that the sum of the Ringer Equivalence Numbers of all the devices does not exceed 5.

The REN for this product is 0.0B, based on FCC Part 68 test results.
Notice to users in the European Economic Area

This product is designed to be connected to the analog Switched Telecommunication Networks (PSTN) of the European Economic Area (EEA) countries/regions. Network compatibility depends on customer selected settings, which must be reset to use the equipment on a telephone network in a country/region other than where the product was purchased. Contact the vendor or Hewlett-Packard Company if additional product support is necessary.

This equipment has been certified by the manufacturer in accordance with Directive 1999/5/EC (annex II) for Pan-European single-terminal connection to the public switched telephone network (PSTN). However, due to differences between the individual PSTNs provided in different countries, the approval does not, of itself, give an unconditional assurance of successful operation on every PSTN network termination point.

In the event of problems, you should contact your equipment supplier in the first instance. This equipment is designed for DTMF tone dialing and loop disconnect dialing. In the unlikely event of problems with loop disconnect dialing, it is recommended to use this equipment only with the DTMF tone dial setting.

Notice to users of the German telephone network

Hinweis für Benutzer des deutschen Telefonnetzwerks


Australia wired fax statement

In Australia, the HP device must be connected to Telecommunication Network through a line cord which meets the requirements of the Technical Standard AS/ACIF S008.

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
- European Union regulatory notice
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

For Indoor Use. This digital apparatus does not exceed the Class B limits for radio noise emissions from the digital apparatus set out in the Radio Interference Regulations of the Canadian Department of Communications. The internal wireless radio complies with RSS 210 and RSS GEN of Industry Canada.

Utiliser à l'intérieur. Le présent appareil numérique n'émet pas de bruit radioélectrique dépassant les limites applicables aux appareils numériques de la classe B prescrites dans le Règlement sur le brouillage radioélectrique édicté par le ministère des Communications du Canada. Le composant RF interne est conforme a la norme RSS-210 and RSS GEN d'Industrie Canada.

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、科學及醫療用電波輻射性電機設備之干擾。
European Union regulatory notice

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

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

If this product has 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 harmonized European standards (European Norms) that are listed in the EU Declaration of Conformity issued by HP for this product or product family. This compliance is indicated by the following conformity marking placed on the product.

The wireless 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.

Products with 2.4-GHz wireless LAN devices

France

For 2.4 GHz Wireless LAN operation of this product certain restrictions apply: This product may be used indoor for the entire 2400-2483.5 MHz frequency band (channels 1-13). For outdoor use, only 2400-2454 MHz frequency band (channels 1-9) may be used. For the latest requirements, see http://www.art-telecom.fr.

Italy

License required for use. Verify with your dealer or directly with the General Direction for Frequency Planning and Management (Direzione Generale Pianificazione e Gestione Frequenze).

Regulatory model number

For regulatory identification purposes, your product is assigned a Regulatory Model Number. The Regulatory Model Number for your product is SNPRC-0902-01 or SDGOB-0833. This regulatory number should not be confused with the marketing name (HP Officejet 4500 (G510) All-in-One series) or product number.
Declaration of conformity

DECLARATION OF CONFORMITY
according to ISO/IEC 17050-1 and EN 17050-1

Supplier’s Name: Hewlett-Packard Company
Supplier’s Address: 138, Depot Road, #02-01
Singapore 109683

DoC#: SNPRC-0902-01-A

declares, that the product

Product Name and Model: HP Officejet 4500 series printer
Regulatory Model Number: SNPRC-0902-01

Product Options: All
Power adaptor: 0957-2269

conforms to the following Product Specifications and Regulations:

SAFETY:
EN 62311:2008

EMC:
EN 61000-3-2:2008
FCC CFR 47, Part 15 Class B / ICES-003, Issue 4 Class B

Telecom:
TBR 21: 1998
FCC Rules and Regulations 47CFR Part 68
CS-03, Part I, Issue 9, Feb 2005

Supplementary Information:

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

2. This product complies with the requirements of the Low Voltage Directive 2006/95/EC, the EMC Directive 2004/108/EC
& the R&TTE Directive 99/5/EC and carries the CE mark accordingly. In addition, it complies with the WEEE Directive
2002/96/EC and RoHS Directive 2002/95/EC.

3. This product complies with TBR21:1998, except clause 4.7.1 (DC characteristic), which complies with ES 203 021-3,
clause 4.7.1.

4. 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.

5. The product was tested in a typical configuration.

Yik Hou Meng
Product Regulations Manager
Customer Assurance, Business Printing Division

Singapore 25 June 2009

Local contact for regulatory topics only:
USA : Hewlett-Packard, 3000 Hanover St., Palo Alto 94304, U.S.A. 650-857-1501
DECLARATION OF CONFORMITY
according to ISO/IEC 17050-1 and EN 17050-1

Supplier’s Name: Hewlett-Packard Company
DoC#: SDGOB-0833-Rev.7.0
Supplier’s Address: 138, Depot Road, #02-01
Singapore 109683
declares, that the product
Product Name and Model: HP Officejet J4680 and J4624, HP Officejet 4500 Wireless series printer
Regulatory Model Number: SDGOB-0833
Product Options: All
Radio Module: RSVLD-0608
Power adaptor: 0957-2269

conforms to the following Product Specifications and Regulations:
EN 62311:2008
EN 61000-3-2:2006
FCC CFR 47, Part 15 Class B / ICES-003, Issue 4 Class B
EN301 489-1 V1.6.1, EN301 489-17 V1.2.1
c FCC Rules and Regulations 47CFR Part 68
CS-03, Part I, Issue 9, Feb 2005

Supplementary Information:
1. This product is assigned a Regulatory Model Number which stays with the regulatory aspects of the design. The Regulatory Model Number is the main product identifier in the regulatory documentation and test reports, this number should not be confused with the marketing name or the product numbers.
3. This product complies with TBR21:1998, except clause 4.7.1 (DC characteristic), which complies with ES 203 021-3, clause 4.7.1.
4. 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.
5. The product was tested in a typical configuration.

Yik Hou Meng
Product Regulations Manager
Customer Assurance, Business Printing Division
4 Aug 2009

Local contact for regulatory topics only:
USA: Hewlett-Packard, 3000 Hanover St., Palo Alto 94304, U.S.A. 650-857-1501
Environmental product stewardship program

Hewlett-Packard is committed to providing quality products in an environmentally sound 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 HP’s Commitment to the Environment Web site at:
www.hp.com/hpinfo/globalcitizenship/environment/index.html

This section contains the following topics:
- 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
- RoHS notices (China only)

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

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/

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

The product to which this symbol is attached indicates that you may not dispose of it as unsorted municipal waste. Instead, you are responsible for returning it to an authorized waste collection point for recycling or proper disposal. Contact your local authorities, waste disposal facilities, or the store where you purchased the product for more information. Disposal of waste equipment by users in private households in the European Union

Environmental product stewardship program 153
Power consumption

Hewlett-Packard printing and imaging equipment marked with the ENERGY STAR® logo is qualified to the U.S. Environmental Protection Agency’s ENERGY STAR specifications for imaging equipment. The following mark will appear on ENERGY STAR qualified imaging products:

ENERGY STAR is a U.S. registered service mark of the U.S. EPA. As an ENERGY STAR partner, HP has determined that this product meets ENERGY STAR guidelines for energy efficiency. Additional ENERGY STAR qualified imaging product model information is listed at: www.hp.com/go/energystar

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

RoHS notices (China only)

Toxic and hazardous substance table

<table>
<thead>
<tr>
<th>零件描述</th>
<th>有毒有害物质和元素</th>
<th>铅</th>
<th>汞</th>
<th>镉</th>
<th>铬</th>
<th>多溴联苯</th>
<th>多溴联苯醚</th>
</tr>
</thead>
<tbody>
<tr>
<td>外壳和托盘*</td>
<td></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>电路*</td>
<td></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>印刷电路板*</td>
<td></td>
<td>X</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>打印系统*</td>
<td></td>
<td>X</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>墨盒*</td>
<td></td>
<td>X</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>墨盒打印机墨盒*</td>
<td></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>驱动光盘*</td>
<td></td>
<td>X</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>打印机*</td>
<td></td>
<td>X</td>
<td>X</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>电路板*</td>
<td></td>
<td>X</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>自动双面打印系统*</td>
<td></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>外壳*</td>
<td></td>
<td>X</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

0: 指此部件的所有每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: 指此部件使用的同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
Third-party licenses

This section contains the following topics:

- HP Officejet 4500 Desktop
- HP Officejet 4500
- HP Officejet 4500 Wireless
AES

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>
@author Paulo Barreto <paulo.barreto@terra.com.br>

This code is hereby placed in the public domain.

THIS SOFTWARE IS PROVIDED BY THE AUTHORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE AUTHORS OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.
SHA2

FIPS 180-2 SHA-224/256/384/512 implementation
Last update: 02/02/2007
Issue date: 04/30/2005

Copyright (C) 2005, 2007 Olivier Gay <olivier.gay@a3.epfl.ch>
All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:
1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
3. Neither the name of the project nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE PROJECT AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE PROJECT OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.
ZLIB

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

Copyright (C) 1995-2005 Jean-loup Gailly and Mark Adler

This software is provided 'as-is', without any express or implied warranty. In no event will the authors be held liable for any damages arising from the use of this software.

Permission is granted to anyone to use this software for any purpose, including commercial applications, and to alter it and redistribute it freely, subject to the following restrictions:

1. The origin of this software must not be misrepresented; you must not claim that you wrote the original software. If you use this software in a product, an acknowledgment in the product documentation would be appreciated but is not required.
2. Altered source versions must be plainly marked as such, and must not be misrepresented as being the original software.
3. This notice may not be removed or altered from any source distribution.

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 (deflate format) and rfc1952.txt (gzip format).
Third-party licenses

AES

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>
@author Paulo Barreto <paulo.barreto@terra.com.br>

This code is hereby placed in the public domain.

THIS SOFTWARE IS PROVIDED BY THE AUTHORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE AUTHORS OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.
Appendix A

**Expat**

Copyright (c) 1998, 1999, 2000 Thai Open Source Software Center Ltd

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.
OpenSSL

Copyright (C) 1995-1998 Eric Young (eay@cryptsoft.com)
All rights reserved.

This package is an SSL implementation written by Eric Young
(eay@cryptsoft.com).
The implementation was written so as to conform with Netscapes SSL.

This library is free for commercial and non-commercial use as long as the
following conditions are aheared to. The following conditions apply to all code
found in this distribution, be it the RC4, RSA, lhash, DES, etc., code; not just the
SSL code. The SSL documentation included with this distribution is covered by the
same copyright terms except that the holder is Tim Hudson (tjh@cryptsoft.com).

Copyright remains Eric Young’s, and as such any Copyright notices in
the code are not to be removed.
If this package is used in a product, Eric Young should be given attribution
as the author of the parts of the library used.
This can be in the form of a textual message at program startup or
in documentation (online or textual) provided with the package.

Redistribution and use in source and binary forms, with or without modification,
are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the copyright notice, this list of
   conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this
   list of conditions and the following disclaimer in the documentation and/or
   other materials provided with the distribution.
3. All advertising materials mentioning features or use of this software must
   display the following acknowledgement:
   "This product includes cryptographic software written by Eric Young
   (eay@cryptsoft.com)"
   The word 'cryptographic' can be left out if the rouines from the library
   being used are not cryptographic related :-).
4. If you include any Windows specific code (or a derivative thereof) from
   the apps directory (application code) you must include an acknowledgement:
   "This product includes software written by Tim Hudson (tjh@cryptsoft.com)"
Appendix A

THIS SOFTWARE IS PROVIDED BY ERIC YOUNG ``AS IS'' AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE AUTHOR OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

The licence and distribution terms for any publically available version or derivative of this code cannot be changed. i.e. this code cannot simply be copied and put under another distribution licence [including the GNU Public Licence.]

=====================================================================
Copyright (c) 1998-2001 The OpenSSL Project. All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.

2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

3. All advertising materials mentioning features or use of this software must display the following acknowledgment:
   "This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit. (http://www.openssl.org/"

4. The names "OpenSSL Toolkit" and "OpenSSL Project" must not be used to endorse or promote products derived from this software without prior written permission. For written permission, please contact openssl-core@openssl.org.

5. Products derived from this software may not be called "OpenSSL" nor may "OpenSSL" appear in their names without prior written permission of the OpenSSL Project.

6. Redistributions of any form whatsoever must retain the following acknowledgment:
   "This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit (http://www.openssl.org/)"
THIS SOFTWARE IS PROVIDED BY THE OpenSSL PROJECT ``AS IS'' AND ANY
EXPRESSED OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO,
THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A
PARTicular PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE OpenSSL
PROJECT OR ITS CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT,
INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES
 INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS
 OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS
 INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY,
 WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLI-
 GENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS
 SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

========================================================
This product includes cryptographic software written by Eric Young
eay@cryptsoft.com). This product includes software written by Tim Hudson
tjh@cryptsoft.com).

========================================================

Copyright (c) 1998-2006 The OpenSSL Project. All rights reserved.

Redistribution and use in source and binary forms, with or without modification,
are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list
   of conditions and the following disclaimer.

2. Redistributions in binary form must reproduce the above copyright notice, this
   list of conditions and the following disclaimer in the documentation and/or
   other materials provided with the distribution.

3. All advertising materials mentioning features or use of this software must
display the following acknowledgment:
"This product includes software developed by the OpenSSL Project for use in
the OpenSSL Toolkit. (http://www.openssl.org/)"

4. The names "OpenSSL Toolkit" and "OpenSSL Project" must not be used to
endorse or promote products derived from this software without prior written
permission. For written permission, please contact openssl-core@openssl.org.

5. Products derived from this software may not be called "OpenSSL" nor may
"OpenSSL" appear in their names without prior written permission of the
OpenSSL Project.

6. Redistributions of any form whatsoever must retain the following
acknowledgment:
"This product includes software developed by the OpenSSL Project for use in
the OpenSSL Toolkit (http://www.openssl.org/)"
THIS SOFTWARE IS PROVIDED BY THE OpenSSL PROJECT ``AS IS'' AND ANY EXPRESSED OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE OpenSSL PROJECT OR ITS CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

This product includes cryptographic software written by Eric Young (eay@cryptsoft.com). This product includes software written by Tim Hudson (tjh@cryptsoft.com).

Copyright 2002 Sun Microsystems, Inc. ALL RIGHTS RESERVED.
ECC cipher suite support in OpenSSL originally developed by SUN MICROSYSTEMS, INC., and contributed to the OpenSSL project.

SHA2

FIPS 180-2 SHA-224/256/384/512 implementation
Last update: 02/02/2007
Issue date: 04/30/2005

Copyright (C) 2005, 2007 Olivier Gay <olivier.gay@a3.epfl.ch>
All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.

2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

3. Neither the name of the project nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.
THIS SOFTWARE IS PROVIDED BY THE PROJECT AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE PROJECT OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

ZLIB

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

Copyright (C) 1995-2005 Jean-loup Gailly and Mark Adler

This software is provided 'as-is', without any express or implied warranty. In no event will the authors be held liable for any damages arising from the use of this software.

Permission is granted to anyone to use this software for any purpose, including commercial applications, and to alter it and redistribute it freely, subject to the following restrictions:

1. The origin of this software must not be misrepresented; you must not claim that you wrote the original software. If you use this software in a product, an acknowledgment in the product documentation would be appreciated but is not required.
2. Altered source versions must be plainly marked as such, and must not be misrepresented as being the original software.
3. This notice may not be removed or altered from any source distribution.

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 (deflate format) and rfc1952.txt (gzip format).
Third-party licenses

AES

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>
@author Paulo Barreto <paulo.barreto@terra.com.br>

This code is hereby placed in the public domain.

THIS SOFTWARE IS PROVIDED BY THE AUTHORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE AUTHORS OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.
Expat

Copyright (c) 1998, 1999, 2000 Thai Open Source Software Center Ltd

Permission is hereby granted, free of charge, to any person obtaining a copy of
this software and associated documentation files (the "Software"), to deal in the
Software without restriction, including without limitation the rights to use, copy,
modify, merge, publish, distribute, sublicense, and/or sell copies of the
Software, and to permit persons to whom the Software is furnished to do so,
subject to the following conditions:

The above copyright notice and this permission notice shall be included in all
copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND,
EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES
OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONIN-
FRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLD-
ERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER
IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT
OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER
DEALINGS IN THE SOFTWARE.
**OpenSSL**

Copyright (C) 1995-1998 Eric Young (eay@cryptsoft.com)
All rights reserved.

This package is an SSL implementation written by Eric Young
(eay@cryptsoft.com). The implementation was written so as to conform with
Netscape's SSL.

This library is free for commercial and non-commercial use as long as the
following conditions are aheared to. The following conditions apply to all code
found in this distribution, be it the RC4, RSA, Ihash, DES, etc., code; not just the
SSL code. The SSL documentation included with this distribution is covered by
the same copyright terms except that the holder is Tim Hudson
(tjh@cryptsoft.com).

Copyright remains Eric Young's, and as such any Copyright notices in the code
are not to be removed. If this package is used in a product, Eric Young should
be given attribution as the author of the parts of the library used. This can be in
the form of a textual message at program startup or in documentation (online or
textual) provided with the package.

Redistribution and use in source and binary forms, with or without modification,
are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the copyright notice, this list of
   conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this
   list of conditions and the following disclaimer in the documentation and/or
   other materials provided with the distribution.
3. All advertising materials mentioning features or use of this software must
   display the following acknowledgement:
   "This product includes cryptographic software written by Eric Young
   (eay@cryptsoft.com)"
   The word 'cryptographic' can be left out if the rouines from the library being
   used are not cryptographic related :-).
4. If you include any Windows specific code (or a derivative thereof) from the
   apps directory (application code) you must include an acknowledgement:
   "This product includes software written by Tim Hudson (tjh@cryptsoft.com)"

---

Appendix A

168 Technical information
THIS SOFTWARE IS PROVIDED BY ERIC YOUNG ``AS IS'' AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE AUTHOR OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

The licence and distribution terms for any publically available version or derivative of this code cannot be changed. i.e. this code cannot simply be copied and put under another distribution licence [including the GNU Public Licence.]

========================================================

Copyright (c) 1998-2001 The OpenSSL Project. All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.

2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

3. All advertising materials mentioning features or use of this software must display the following acknowledgment:
"This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit. (http://www.openssl.org/)"

4. The names "OpenSSL Toolkit" and "OpenSSL Project" must not be used to endorse or promote products derived from this software without prior written permission. For written permission, please contact openssl-core@openssl.org.

5. Products derived from this software may not be called "OpenSSL" nor may "OpenSSL" appear in their names without prior written permission of the OpenSSL Project.

6. Redistributions of any form whatsoever must retain the following acknowledgment:
"This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit (http://www.openssl.org/)"
THIS SOFTWARE IS PROVIDED BY THE OpenSSL PROJECT `AS IS' AND ANY EXPRESSED OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE OpenSSL PROJECT OR ITS CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

This product includes cryptographic software written by Eric Young (eay@cryptsoft.com). This product includes software written by Tim Hudson (tjh@cryptsoft.com).

Copyright (c) 1998-2006 The OpenSSL Project. All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.

2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

3. All advertising materials mentioning features or use of this software must display the following acknowledgment:
"This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit. (http://www.openssl.org/"

4. The names "OpenSSL Toolkit" and "OpenSSL Project" must not be used to endorse or promote products derived from this software without prior written permission. For written permission, please contact openssl-core@openssl.org.

5. Products derived from this software may not be called "OpenSSL" nor may "OpenSSL" appear in their names without prior written permission of the OpenSSL Project.

6. Redistributions of any form whatsoever must retain the following acknowledgment:
"This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit (http://www.openssl.org/)"

Appendix A

Technical information
THIS SOFTWARE IS PROVIDED BY THE OpenSSL PROJECT "AS IS" AND ANY EXPRESSED OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE OpenSSL PROJECT OR ITS CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

========================================================
This product includes cryptographic software written by Eric Young (eay@cryptsoft.com). This product includes software written by Tim Hudson (tjh@cryptsoft.com).

========================================================

Copyright 2002 Sun Microsystems, Inc. ALL RIGHTS RESERVED. ECC cipher suite support in OpenSSL originally developed by SUN MICROSYSTEMS, INC., and contributed to the OpenSSL project.

**SHA2**

FIPS 180-2 SHA-224/256/384/512 implementation
Last update: 02/02/2007
Issue date: 04/30/2005

Copyright (C) 2005, 2007 Olivier Gay <olivier.gay@a3.epfl.ch>
All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
3. Neither the name of the project nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.
THIS SOFTWARE IS PROVIDED BY THE PROJECT AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE PROJECT OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

=================================================================

ZLIB

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

Copyright (C) 1995-2005 Jean-loup Gailly and Mark Adler

This software is provided 'as-is', without any express or implied warranty. In no event will the authors be held liable for any damages arising from the use of this software.

Permission is granted to anyone to use this software for any purpose, including commercial applications, and to alter it and redistribute it freely, subject to the following restrictions:

1. The origin of this software must not be misrepresented; you must not claim that you wrote the original software. If you use this software in a product, an acknowledgment in the product documentation would be appreciated but is not required.
2. Altered source versions must be plainly marked as such, and must not be misrepresented as being the original software.
3. This notice may not be removed or altered from any source distribution.

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 (deflate format) and rfc1952.txt (gzip format).
This section provides information on HP supplies and accessories for the device. The information is subject to changes, visit the HP Web site (www.hpshopping.com) for the latest updates. You may also make purchases through the Web site.

This section contains the following topics:

- Order printing supplies online
- Supplies

Order printing supplies online

For a list of HP cartridge numbers that work with your printer, see Supported ink cartridges. Cartridge information and links to online shopping also appear on ink alert messages.

You can order printing supplies online using the following tools:

- **NOTE:** For more information about opening and using these HP software tools, see Device management tools

- **HP Solution Center (Windows):** From HP Solution Center, click the Shopping icon, and then select Shop Online to order supplies or Print My Shopping List to create a printable shopping list. HP Solution Center 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).

- **HP Toolbox (Windows):** On the Estimated Ink Level tab, click Shop Online.

- **HP Utility (Mac OS X):** On the toolbar, click the Supplies icon.

- **HP SureSupply Web site:** In a standard Web browser, go to www.hp.com/buy/supplies. If prompted, choose your country/region, follow the prompts to select your product, and then the supplies you need.

- **Embedded Web server (EWS):** From the EWS, click Order Supplies. Click Send to send printer information (such as model number, serial number, and estimated ink levels) to HP, and you will be re-directed to the HP SureSupply Web site.

- **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 page to obtain information about purchasing HP products in your country.

Supplies

This section contains the following topics:

- Supported ink cartridges
- HP media

Supported ink cartridges

You can check the following places to find which cartridges are supported by the device:

- The ink supplies label (located inside the printer, near the ink cartridges).
- The HP SureSupply Web site (www.hp.com/buy/supplies). For more information, see Order printing supplies online.
- The label of the ink cartridge you are replacing.
• The HP software on your computer:

![NOTE:](#) For more information about opening and using these HP software tools, see Device management tools.

- **Solution Center (Windows):** Click **Status**, and then click **Estimated Ink Levels**. The **My Cartridges** tab lists the currently installed cartridges. The **All Cartridges** tab lists all supported cartridges for the device.
- **Toolbox (Windows):** Click the **Estimated Ink Levels** tab, and then click the **Cartridge Details** button to view information about replacement ink cartridges.
- **HP Utility (Mac OS X):** Click the **Supplies Info** icon in the **Information and Support** pane.
- **Embedded Web server:** Click the **Information** tab, and then click **Device Information** in the left pane.

• The self-test diagnostic page. For more information, see Understand the Printer Status Report and Self-Test Report.

![NOTE:](#) When replacing ink cartridges, make sure to use only replacement cartridges that have the same cartridge number as the ink cartridge you are replacing.

**HP media**

To order media such as HP Advanced Photo Paper, go to [www.hp.com](http://www.hp.com).
C  Additional fax setup

After completing all the steps in the getting started guide, use the instructions in this section to complete your fax setup. Keep your getting started guide for later use.

In this section, you will learn how to set up the device so that faxing works successfully with equipment and services you might already have on the same phone line.

💡 TIP: You can also use the Fax Setup Wizard (Windows) or HP Setup Assistant (Mac OS X) to help you quickly set up some important fax settings such as the answer mode and fax header information. You can access these tools through the software you installed with the device. After you run these tools, follow the procedures in this section to complete your fax setup.

This section contains the following topics:
- Set up faxing (parallel phone systems)
- Serial-type fax setup
- Test fax setup

Set up faxing (parallel phone systems)

Before you begin setting up the device for faxing, determine which kind of phone system your country/region uses. The instructions for fax setup differ depending on whether you have a serial- or parallel-type phone system.

- If you do not see your country/region listed in the table below, you probably have a serial-type phone system. In a serial-type phone system, the connector type on your shared telephone equipment (modems, phones, and answering machines) does not allow a physical connection to the "2-EXT" port on the device. Instead, all equipment must be connected at the telephone wall jack.

⚠️ NOTE: In some countries/regions that use serial-type phone systems, the phone cord that came with the device might have an additional wall plug attached to it. This enables you to connect other telecom devices to the wall jack where you plug in the device. You might need to connect the supplied phone cord to the adapter provided for your country/region.

- If your country/region is listed in the table below, you probably have a parallel-type telephone system. In a parallel-type phone system, you are able to connect shared telephone equipment to the phone line by using the "2-EXT" port on the back of the device.

⚠️ NOTE: If you have a parallel-type phone system, HP recommends you use the 2-wire phone cord supplied with the device to connect it to the telephone wall jack.

<table>
<thead>
<tr>
<th>Countries/regions with a parallel-type phone system</th>
</tr>
</thead>
<tbody>
<tr>
<td>Argentina</td>
</tr>
<tr>
<td>Canada</td>
</tr>
<tr>
<td>Colombia</td>
</tr>
<tr>
<td>Indonesia</td>
</tr>
<tr>
<td>Korea</td>
</tr>
<tr>
<td>Mexico</td>
</tr>
</tbody>
</table>

Additional fax setup  175
If you are unsure which kind of telephone system you have (serial or parallel), check with your telephone company.

This section contains the following topics:

- Choose the correct fax setup for your home or office
- Case A: Separate fax line (no voice calls received)
- Case B: Set up the device with DSL
- Case C: Set up the device with a PBX phone system or an ISDN line
- Case D: Fax with a distinctive ring service on the same line
- Case E: Shared voice/fax line
- Case F: Shared voice/fax line with voice mail
- Case G: Fax line shared with computer modem (no voice calls received)
- Case H: Shared voice/fax line with computer modem
- Case I: Shared voice/fax line with answering machine
- Case J: Shared voice/fax line with computer modem and answering machine
- Case K: Shared voice/fax line with computer dial-up modem and voice mail

**Choose the correct fax setup for your home or office**

To fax successfully, you need to know what types of equipment and services (if any) share the same phone line with the device. This is important because you might need to connect some of your existing office equipment directly to the device, and you might also need to change some fax settings before you can fax successfully.

1. Determine if your telephone system is serial or parallel (see Set up faxing (parallel phone systems)).
   
   a. Serial-type telephone system — See Serial-type fax setup.
   b. Parallel-type telephone system — Go to step 2.

2. Select the combination of equipment and services sharing your fax line.
   
   - DSL: A Digital subscriber line (DSL) service through your telephone company. (DSL might be called ADSL in your country/region.)
   - PBX: A private branch exchange (PBX) phone system or an integrated services digital network (ISDN) system.
   - Distinctive ring service: A distinctive ring service through your telephone company provides multiple telephone numbers with different ring patterns.
   - Voice calls: Voice calls are received at the same phone number you use for fax calls on the device.
   - Computer dial-up modem: A computer dial-up modem is on the same phone line as the device. If you answer Yes to any of the following questions, you are using a computer dial-up modem:
     - Do you send and receive faxes directly to and from your computer software applications through a dial-up connection?
     - Do you send and receive e-mail messages on your computer through a dial-up connection?
     - Do you access the Internet from your computer through a dial-up connection?
3. From the following table, choose the combination of equipment and services applicable to your home or office setting. Then look up the recommended fax setup. Step-by-step instructions are included for each case in the sections that follow.

---

**NOTE:** If your home or office setup is not described in this section, set up the device as you would a regular analog phone. Make sure you use the phone cord supplied in the box to connect one end to your telephone wall jack and the other end to the port labeled 1-LINE on the back of the device. If you use another phone cord, you might experience problems sending and receiving faxes.

You might need to connect the supplied phone cord to the adapter provided for your country/region.

<table>
<thead>
<tr>
<th>Other equipment or services sharing your fax line</th>
<th>Recommended fax setup</th>
</tr>
</thead>
<tbody>
<tr>
<td>DSL</td>
<td>PBX</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Case A: Separate fax line (no voice calls received)</td>
<td></td>
</tr>
<tr>
<td>Case B: Set up the device with DSL</td>
<td></td>
</tr>
<tr>
<td>Case C: Set up the device with a PBX phone system or an ISDN line</td>
<td></td>
</tr>
<tr>
<td>Case D: Fax with a distinctive ring service on the same line</td>
<td></td>
</tr>
<tr>
<td>Case E: Shared voice/fax line</td>
<td></td>
</tr>
<tr>
<td>Case F: Shared voice/fax line with voice mail</td>
<td></td>
</tr>
<tr>
<td>Case G: Fax line shared with computer modem (no voice calls received)</td>
<td></td>
</tr>
<tr>
<td>Case H: Shared voice/fax line with computer modem</td>
<td></td>
</tr>
<tr>
<td>Case I: Shared voice/fax line with answering machine</td>
<td></td>
</tr>
</tbody>
</table>
**Case A: Separate fax line (no voice calls received)**

If you have a separate phone line on which you receive no voice calls, and you have no other equipment connected on this phone line, set up the device as described in this section.

### Back view of the device

1. Telephone wall jack

2. Use the phone cord supplied in the box with the device to connect to the 1-LINE port
   You might need to connect the supplied phone cord to the adapter provided for your country/region.

### To set up the device with a separate fax line

1. Using the phone cord supplied in the box with the device, connect one end to your telephone wall jack, then connect the other end to the port labeled 1-LINE on the back of the device.

   **NOTE:** You might need to connect the supplied phone cord to the adapter provided for your country/region.
   If you do not use the supplied cord to connect from the telephone wall jack to the device, you might not be able to fax successfully. This special phone cord is different from the phone cords you might already have in your home or office.

2. Turn on the **Auto Answer** setting.
3. (Optional) Change the **Rings to Answer** setting to the lowest setting (two rings).
4. Run a fax test.

When the phone rings, the device answers automatically after the number of rings you set in the **Rings to Answer** setting. The device begins emitting fax reception tones to the sending fax machine and receives the fax.

**Case B: Set up the device with DSL**

If you have a DSL service through your telephone company, and do not connect any equipment to the device, use the instructions in this section to connect a DSL filter between the telephone wall jack and the device. The DSL filter removes the digital signal that can interfere with the device, so the device can communicate properly with the phone line. (DSL might be called ADSL in your country/region.)

**NOTE:** If you have a DSL line and you do not connect the DSL filter, you will not be able to send and receive faxes with the device.

**Back view of the device**

1. Telephone wall jack
2. DSL (or ADSL) filter and cord supplied by your DSL provider
3. Use the phone cord supplied in the box with the device to connect to the 1-LINE port

You might need to connect the supplied phone cord to the adapter provided for your country/region.

**To set up the device with DSL**

1. Obtain a DSL filter from your DSL provider.
2. Using the phone cord supplied in the box with the device, connect one end to the open port on the DSL filter, and then connect the other end to the port labeled 1-LINE on the back of the device.

**NOTE:** You might need to connect the supplied phone cord to the adapter provided for your country/region.

If you do not use the supplied cord to connect from the DSL filter to the device, you might not be able to fax successfully. This special phone cord is different from the phone cords you might already have in your home or office.

As only one phone cord is supplied, you might need to obtain additional phone cords for this setup.
3. Connect an additional phone cord from the DSL filter to the telephone wall jack.
4. Run a fax test.

If you encounter problems setting up the device with optional equipment, contact your local service provider or vendor for further assistance.

**Case C: Set up the device with a PBX phone system or an ISDN line**

If you are using either a PBX phone system or an ISDN converter/terminal adapter, make sure you do the following:

- If you are using either a PBX or an ISDN converter/terminal adaptor, connect the device to the port that is designated for fax and phone use. Also, make sure that the terminal adapter is set to the correct switch type for your country/region, if possible.

  **NOTE:** Some ISDN systems allow you to configure the ports for specific phone equipment. For example, you might have assigned one port for telephone and Group 3 fax and another port for multiple purposes. If you have problems when connected to the fax/phone port of your ISDN converter, try using the port designated for multiple purposes; it might be labeled “multi-combi” or something similar.

- If you are using a PBX phone system, set the call waiting tone to "off."

  **NOTE:** Many digital PBX systems include a call-waiting tone that is set to "on" by default. The call waiting tone will interfere with any fax transmission, and you will not be able to send or receive faxes with the device. Refer to the documentation that came with your PBX phone system for instructions on how to turn off the call-waiting tone.

- If you are using a PBX phone system, dial the number for an outside line before dialing the fax number.

- Make sure you use the supplied cord to connect from the telephone wall jack to the device. If you do not, you might not be able to fax successfully. This special phone cord is different from the phone cords you might already have in your home or office. If the supplied phone cord is too short, you can purchase a coupler from your local electronics store and extend it. You might need to connect the supplied phone cord to the adapter provided for your country/region.

If you encounter problems setting up the device with optional equipment, contact your local service provider or vendor for further assistance.

**Case D: Fax with a distinctive ring service on the same line**

If you subscribe to a distinctive ring service (through your telephone company) that allows you to have multiple phone numbers on one phone line, each with a different ring pattern, set up the device as described in this section.
To set up the device with a distinctive ring service

1. Using the phone cord supplied in the box with the device, connect one end to your telephone wall jack, then connect the other end to the port labeled 1-LINE on the back of the device.

   **NOTE:** You might need to connect the supplied phone cord to the adapter provided for your country/region. If you do not use the supplied cord to connect from the telephone wall jack to the device, you might not be able to fax successfully. This special phone cord is different from the phone cords you might already have in your home or office.

2. Turn on the Auto Answer setting.
3. Change the Distinctive Ring setting to match the pattern that the telephone company assigned to your fax number.

   **NOTE:** By default, the device is set to answer all ring patterns. If you do not set the Distinctive Ring to match the ring pattern assigned to your fax number, the device might answer both voice calls and fax calls or it might not answer at all.

4. (Optional) Change the Rings to Answer setting to the lowest setting (two rings).
5. Run a fax test.

   The device automatically answers incoming calls that have the ring pattern you selected (Distinctive Ring setting) after the number of rings you selected (Rings to Answer setting). The device begins emitting fax reception tones to the sending fax machine and receives the fax.

   If you encounter problems setting up the device with optional equipment, contact your local service provider or vendor for further assistance.

Case E: Shared voice/fax line

If you receive both voice calls and fax calls at the same phone number, and you have no other office equipment (or voice mail) on this phone line, set up the device as described in this section.
<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Telephone wall jack</td>
</tr>
<tr>
<td>2</td>
<td>Use the phone cord supplied in the box with the device to connect to the 1-LINE port. You might need to connect the supplied phone cord to the adapter provided for your country/region.</td>
</tr>
<tr>
<td>3</td>
<td>Telephone (optional)</td>
</tr>
</tbody>
</table>

**To set up the device with a shared voice/fax line**

1. Using the phone cord supplied in the box with the device, connect one end to your telephone wall jack, then connect the other end to the port labeled 1-LINE on the back of the device. 

   **NOTE:** You might need to connect the supplied phone cord to the adapter provided for your country/region.
   If you do not use the supplied cord to connect from the telephone wall jack to the device, you might not be able to fax successfully. This special phone cord is different from the phone cords you might already have in your home or office.

2. Do one of the following:
   - If you have a parallel-type phone system, remove the white plug from the port labeled 2-EXT on the back of the device, and then connect a phone to this port.
   - If you have a serial-type phone system, you might plug your phone directly on top of the device cable which has a wall plug attached to it.

3. Now you need to decide how you want the device to answer calls, automatically or manually:
   - If you set up the device to answer calls automatically, it answers all incoming calls and receives faxes. The device will not be able to distinguish between fax and voice calls in this case; if you suspect the call is a voice call, you will need to answer it before the device answers the call. To set up the device to answer calls automatically, turn on the Auto Answer setting.
   - If you set up the device to answer faxes manually, you must be available to respond in person to incoming fax calls or the device cannot receive faxes. To set up the device to answer calls manually, turn off the Auto Answer setting.

4. Run a fax test.
   If you pick up the phone before the device answers the call and hear fax tones from a sending fax machine, you will need to answer the fax call manually.
   If you encounter problems setting up the device with optional equipment, contact your local service provider or vendor for further assistance.

**Case F: Shared voice/fax line with voice mail**

If you receive both voice calls and fax calls at the same phone number, and you also subscribe to a voice mail service through your telephone company, set up the device as described in this section.

**NOTE:** You cannot receive faxes automatically if you have a voice mail service at the same phone number you use for fax calls. You must receive faxes manually; this means you must be available to respond in person to incoming fax calls. If you want to receive faxes automatically instead, contact your telephone company to subscribe to a distinctive ring service, or to obtain a separate phone line for faxing.
To set up the device with voice mail

1. Using the phone cord supplied in the box with the device, connect one end to your telephone wall jack, then connect the other end to the port labeled 1-LINE on the back of the device. You might need to connect the supplied phone cord to the adapter provided for your country/region.

   NOTE: You might need to connect the supplied phone cord to the adapter provided for your country/region.

   If you do not use the supplied cord to connect from the telephone wall jack to the device, you might not be able to fax successfully. This special phone cord is different from the phone cords you might already have in your home or office.

2. Turn off the Auto Answer setting.

3. Run a fax test.

   You must be available to respond in person to incoming fax calls, or the device cannot receive faxes. You must initiate the manual fax before voicemail picks up the line.

   If you encounter problems setting up the device with optional equipment, contact your local service provider or vendor for further assistance.

Case G: Fax line shared with computer modem (no voice calls received)

If you have a fax line on which you receive no voice calls, and you also have a computer modem connected on this line, set up the device as described in this section.

   NOTE: If you have a computer dial-up modem, your computer dial-up modem shares the phone line with the device. You will not be able to use both your modem and the device simultaneously. For example, you cannot use the device for faxing while you are using your computer dial-up modem to send an e-mail or access the Internet.

   • Set up the device with a computer dial-up modem
   • Set up the device with a computer DSL/ADSL modem
Set up the device with a computer dial-up modem

If you are using the same phone line for sending faxes and for a computer dial-up modem, follow these directions for setting up the device.

Back view of the device

1  Telephone wall jack
2  Use the phone cord supplied in the box with the device to connect to the “1-LINE” port
   You might need to connect the supplied phone cord to the adapter provided for your country/region.
3  Computer with modem

To set up the device with a computer dial-up modem

1. Remove the white plug from the port labeled 2-EXT on the back of the device.
2. Find the phone cord that connects from the back of your computer (your computer dial-up modem) to a telephone wall jack. Disconnect the cord from the telephone wall jack and plug it into the port labeled 2-EXT on the back of the device.
3. Using the phone cord supplied in the box with the device, connect one end to your telephone wall jack, then connect the other end to the port labeled 1-LINE on the back of the device.

   NOTE: You might need to connect the supplied phone cord to the adapter provided for your country/region.

   If you do not use the supplied cord to connect from the telephone wall jack to the device, you might not be able to fax successfully. This special phone cord is different from the phone cords you might already have in your home or office.

4. If your modem software is set to receive faxes to your computer automatically, turn off that setting.

   NOTE: If you do not turn off the automatic fax reception setting in your modem software, the device will not be able to receive faxes.

5. Turn on the Auto Answer setting.
6. (Optional) Change the Rings to Answer setting to the lowest setting (two rings).
7. Run a fax test.

When the phone rings, the device automatically answers after the number of rings you set in the Rings to Answer setting. The device begins emitting fax reception tones to the sending fax machine and receives the fax.

If you encounter problems setting up the device with optional equipment, contact your local service provider or vendor for further assistance.
### Set up the device with a computer DSL/ADSL modem

If you have a DSL line and use that phone line to send faxes, follow these instructions to set up your fax.

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Telephone wall jack</td>
</tr>
<tr>
<td>2</td>
<td>Parallel splitter</td>
</tr>
<tr>
<td>3</td>
<td>DSL/ADSL filter</td>
</tr>
<tr>
<td></td>
<td>Connect one end of the phone jack that was supplied with the device to connect to the 1-LINE port on the back of the device. Connect the other end of the cord to the DSL/ADSL filter.</td>
</tr>
<tr>
<td></td>
<td>You might need to connect the supplied phone cord to the adapter provided for your country/region.</td>
</tr>
<tr>
<td>4</td>
<td>Computer</td>
</tr>
<tr>
<td>5</td>
<td>Computer DSL/ADSL modem</td>
</tr>
</tbody>
</table>

**NOTE:** You will need to purchase a parallel splitter. A parallel splitter has one RJ-11 port on the front and two RJ-11 ports on the back. Do not use a 2-line phone splitter, a serial splitter, or a parallel splitter which has two RJ-11 ports on the front and a plug on the back.

---

### To set up the device with a computer DSL/ADSL modem

1. Obtain a DSL filter from your DSL provider.
2. Using the phone cord provided in the box with the device, connect one end to the DSL filter, and then connect the other end to the port labeled 1-LINE on the back of the device.

**NOTE:** You might need to connect the supplied phone cord to the adapter provided for your country/region.

If you do not use the supplied cord to connect from the DSL filter to the back of the device, you might not be able to fax successfully. This special phone cord is different from the phone cords you might already have in your home or office.

3. Connect the DSL filter to the parallel splitter.
4. Connect the DSL modem to the parallel splitter.
5. Connect the parallel splitter to the wall jack.
6. Run a fax test.

When the phone rings, the device automatically answers after the number of rings you set in the **Rings to Answer** setting. The device begins emitting fax reception tones to the sending fax machine and receives the fax.

If you encounter problems setting up the device with optional equipment, contact your local service provider or vendor for further assistance.

**Case H: Shared voice/fax line with computer modem**

There are two different ways to set up the device with your computer based on the number of phone ports on your computer. Before you begin, check your computer to see if it has one or two phone ports.

**NOTE:** If your computer has only one phone port, you will need to purchase a parallel splitter (also called a coupler), as shown below. (A parallel splitter has one RJ-11 port on the front and two RJ-11 ports on the back. Do not use a two-line phone splitter, a serial splitter, or a parallel splitter which has two RJ-11 ports on the front and a plug on the back.)

- Shared voice/fax with computer dial-up modem
- Shared voice/fax with computer DSL/ADSL modem

**Shared voice/fax with computer dial-up modem**

If you use your phone line for both fax and telephone calls, use these instructions to set up your fax. There are two different ways to set up the device with your computer based on the number of phone ports on your computer. Before you begin, check your computer to see if it has one or two phone ports.

**NOTE:** If your computer has only one phone port, you will need to purchase a parallel splitter (also called a coupler), as shown below. (A parallel splitter has one RJ-11 port on the front and two RJ-11 ports on the back. Do not use a two-line phone splitter, a serial splitter, or a parallel splitter which has two RJ-11 ports on the front and a plug on the back.)

**Example of a parallel splitter**

To set up the product on the same phone line as a computer with two phone ports

**Back view of the product**
1. Remove the white plug from the port labeled 2-EXT on the back of the product.
2. Find the phone cord that connects from the back of your computer (your computer dial-up modem) to a telephone wall jack. Disconnect the cord from the telephone wall jack and plug it into the port labeled 2-EXT on the back of the product.
3. Connect a phone to the "OUT" port on the back of your computer dial-up modem.
4. Using the phone cord supplied in the box with the product, connect one end to your telephone wall jack, then connect the other end to the port labeled 1-LINE on the back of the product.

**NOTE:** You might need to connect the supplied phone cord to the adapter provided for your country/region.

If you do not use the supplied cord to connect from the telephone wall jack to the device, you might not be able to fax successfully. This special phone cord is different from the phone cords you might already have in your home or office.

5. If your modem software is set to receive faxes to your computer automatically, turn off that setting.

**NOTE:** If you do not turn off the automatic fax reception setting in your modem software, the HP product will not be able to receive faxes.

6. Now you need to decide how you want the product to answer calls, automatically or manually:
   - If you set up the product to answer calls **automatically**, it answers all incoming calls and receives faxes. The HP All-in-One will not be able to distinguish between fax and voice calls in this case; if you suspect the call is a voice call, you will need to answer it before the product answers the call. To set up the product to answer calls automatically, turn on the **Auto Answer** setting.
   - If you set up the product to answer faxes **manually**, you must be available to respond in person to incoming fax calls or the product cannot receive faxes. To set up the product to answer calls manually, turn off the **Auto Answer** setting.

7. Run a fax test.
   - If you pick up the phone before the device answers the call and hear fax tones from a sending fax machine, you will need to answer the fax call manually.
   - If you use your phone line for voice, fax, and your computer dial-up modem, follow these directions to set up your fax.
   - If you encounter problems setting up the device with optional equipment, contact your local service provider or vendor for further assistance.
Shared voice/fax with computer DSL/ADSL modem
Use these instructions if your computer has a DSL/ADSL modem

1. Telephone wall jack
2. Parallel splitter
3. DSL/ADSL filter
4. Phone cord supplied with the device
   You might need to connect the supplied phone cord to the adapter provided for your country/region.
5. DSL/ADSL modem
6. Computer
7. Telephone

**NOTE:** You will need to purchase a parallel splitter. A parallel splitter has one RJ-11 port on the front and two RJ-11 ports on the back. Do not use a 2-line phone splitter, a serial splitter, or a parallel splitter which has two RJ-11 ports on the front and a plug on the back.
To set up the device with a computer DSL/ADSL modem
1. Obtain a DSL filter from your DSL provider.

   **NOTE:** Phones in other parts of the home/office sharing the same phone number with DSL service will need to be connected to additional DSL filters, otherwise you will experience noise when making voice calls.

2. Using the phone cord supplied in the box with the devices, connect one end to the DSL filter, then connect the other end to the port labeled 1-LINE on the back of the device.

   **NOTE:** You might need to connect the supplied phone cord to the adapter provided for your country/region.
   
   If you do not use the supplied cord to connect from the DSL filter to the device, you might not be able to fax successfully. This special phone cord is different from phone cords you might already have in your home or office.

3. If you have a parallel-type phone system, remove the white plug from the port labeled 2-EXT on the back of the device, and then connect a phone to this port.
4. Connect the DSL filter to the parallel splitter.
5. Connect the DSL modem to the parallel splitter.
6. Connect the parallel splitter to the wall jack.
7. Run a fax test.

   When the phone rings, the device automatically answers after the number of rings you set in the **Rings to Answer** setting. The device begins emitting fax reception tones to the sending fax machine and receives the fax.

   If you encounter problems setting up the device with optional equipment, contact your local service provider or vendor for further assistance.

**Case I: Shared voice/fax line with answering machine**

If you receive both voice calls and fax calls at the same phone number, and you also have an answering machine that answers voice calls at this phone number, set up the device as described in this section.

**Back view of the device**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Telephone wall jack</td>
</tr>
<tr>
<td>2</td>
<td>Use the phone cord provided to connect to the 1-LINE port on the back of the device</td>
</tr>
<tr>
<td></td>
<td>You might need to connect the supplied phone cord to the adapter provided for your country/region.</td>
</tr>
</tbody>
</table>
To set up the device with a shared voice/fax line with answering machine

1. Remove the white plug from the port labeled 2-EXT on the back of the device.
2. Unplug your answering machine from the telephone wall jack, and connect it to the port labeled 2-EXT on the back of the device.

   **NOTE:** If you do not connect your answering machine directly to the device, fax tones from a sending fax machine might be recorded on your answering machine, and you probably will not be able to receive faxes with the device.

3. Using the phone cord supplied in the box with the device, connect one end to your telephone wall jack, then connect the other end to the port labeled 1-LINE on the back of the device.

   **NOTE:** You might need to connect the supplied phone cord to the adapter provided for your country/region.
   If you do not use the supplied cord to connect from the telephone wall jack to the device, you might not be able to fax successfully. This special phone cord is different from the phone cords you might already have in your home or office.

4. (Optional) If your answering machine does not have a built-in phone, for convenience you might want to connect a phone to the back of your answering machine at the "OUT" port.

   **NOTE:** If your answering machine does not let you connect an external phone, you can purchase and use a parallel splitter (also known as a coupler) to connect both the answering machine and telephone to the device. You can use standard phone cords for these connections.

5. Turn on the **Auto Answer** setting.
6. Set your answering machine to answer after a low number of rings.
7. Change the **Rings to Answer** setting on the device to the maximum number of rings supported by your device. (The maximum number of rings varies by country/region.)
8. Run a fax test.
   When the phone rings, your answering machine answers after the number of rings you have set, and then plays your recorded greeting. The device monitors the call during this time, "listening" for fax tones. If incoming fax tones are detected, the device emits fax reception tones and receives the fax; if there are no fax tones, the device stops monitoring the line and your answering machine can record a voice message.
   If you encounter problems setting up the device with optional equipment, contact your local service provider or vendor for further assistance.

**Case J: Shared voice/fax line with computer modem and answering machine**

If you receive both voice calls and fax calls at the same phone number, and you also have a computer modem and answering machine connected on this phone line, set up the HP device as described in this section.

**NOTE:** Since your computer dial-up modem shares the phone line with the HP device, you cannot use both your modem and the device simultaneously. For example, you cannot use the HP device for faxing while you are using your computer dial-up modem to send an e-mail or access the Internet.

- **Shared voice/fax line with computer dial-up modem and answering machine**
- **Shared voice/fax line with computer DSL/ADSL modem and answering machine**
Shared voice/fax line with computer dial-up modem and answering machine

There are two different ways to set up the product with your computer based on the number of phone ports on your computer. Before you begin, check your computer to see if it has one or two phone ports.

**NOTE:** If your computer has only one phone port, you will need to purchase a parallel splitter (also called a coupler), as shown below. (A parallel splitter has one RJ-11 port on the front and two RJ-11 ports on the back. Do not use a two-line phone splitter, a serial splitter, or a parallel splitter which has two RJ-11 ports on the front and a plug on the back.)

Example of a parallel splitter

To set up the product on the same phone line as a computer with two phone ports

Back view of the product

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Telephone wall jack</td>
</tr>
<tr>
<td>2</td>
<td>&quot;IN&quot; phone port on your computer</td>
</tr>
<tr>
<td>3</td>
<td>&quot;OUT&quot; phone port on your computer</td>
</tr>
<tr>
<td>4</td>
<td>Telephone (optional)</td>
</tr>
<tr>
<td>5</td>
<td>Answering machine</td>
</tr>
<tr>
<td>6</td>
<td>Computer with modem</td>
</tr>
<tr>
<td>7</td>
<td>Use the phone cord supplied in the box with the device to connect to the 1-LINE port. You might need to connect the supplied phone cord to the adapter provided for your country/region.</td>
</tr>
</tbody>
</table>
1. Remove the white plug from the port labeled 2-EXT on the back of the product.

2. Find the phone cord that connects from the back of your computer (your computer dial-up modem) to a telephone wall jack. Disconnect the cord from the telephone wall jack and plug it into the port labeled 2-EXT on the back of the product.

3. Unplug your answering machine from the telephone wall jack, and connect it to the port labeled "OUT" on the back of the computer (the computer dial-up modem).

4. Using the phone cord supplied in the box with the product, connect one end to your telephone wall jack, then connect the other end to the port labeled 1-LINE on the back of the product.

   **NOTE:** You might need to connect the supplied phone cord to the adapter provided for your country/region.

   If you do not use the supplied cord to connect from the telephone wall jack to the device, you might not be able to fax successfully. This special phone cord is different from the phone cords you might already have in your home or office.

5. (Optional) If your answering machine does not have a built-in phone, for convenience you might want to connect a phone to the back of your answering machine at the "OUT" port.

   **NOTE:** If your answering machine does not let you connect an external phone, you can purchase and use a parallel splitter (also known as a coupler) to connect both the answering machine and telephone to the product. You can use standard phone cords for these connections.

6. If your modem software is set to receive faxes to your computer automatically, turn off that setting.

   **NOTE:** If you do not turn off the automatic fax reception setting in your modem software, the HP product will not be able to receive faxes.

7. Turn on the **Auto Answer** setting.

8. Set your answering machine to answer after a low number of rings.

9. Change the **Rings to Answer** setting on the product to the maximum number of rings supported by the product. (The maximum number of rings varies by country/region.)

10. Run a fax test.

When the phone rings, your answering machine will answer after the number of rings you have set, and then play your recorded greeting. The product monitors the call during this time, "listening" for fax tones. If incoming fax tones are detected, the product will emit fax reception tones and receive the fax; if there are no fax tones, the product stops monitoring the line and your answering machine can record a voice message.

If you encounter problems setting up the device with optional equipment, contact your local service provider or vendor for further assistance.
Shared voice/fax line with computer DSL/ADSL modem and answering machine

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Telephone wall jack</td>
</tr>
<tr>
<td>2</td>
<td>Parallel splitter</td>
</tr>
<tr>
<td>3</td>
<td>DSL/ADSL filter</td>
</tr>
<tr>
<td>4</td>
<td>Phone cord provided with the device connected to the 1-LINE port on the back of the device. You might need to connect the supplied phone cord to the adapter provided for your country/region.</td>
</tr>
<tr>
<td>5</td>
<td>DSL/ADSL modem</td>
</tr>
<tr>
<td>6</td>
<td>Computer</td>
</tr>
<tr>
<td>7</td>
<td>Answering machine</td>
</tr>
<tr>
<td>8</td>
<td>Telephone (optional)</td>
</tr>
</tbody>
</table>

**NOTE:** You will need to purchase a parallel splitter. A parallel splitter has one RJ-11 port on the front and two RJ-11 ports on the back. Do not use a 2-line phone splitter, a serial splitter, or a parallel splitter which has two RJ-11 ports on the front and a plug on the back.
To set up the device with a computer DSL/ADSL modem

1. Obtain a DSL/ADSL filter from your DSL/ADSL provider.

   **NOTE:** Phones in other parts of the home/office sharing the same phone number with DSL/ADSL service will need to be connected to additional DSL/ADSL filters, otherwise you will experience noise when making voice calls.

2. Using the phone cord supplied in the box with the device, connect one end to the DSL/ADSL filter, then connect the other end to the port labeled 1-LINE on the back of the device.

   **NOTE:** You might need to connect the supplied phone cord to the adapter provided for your country/region.
   - If you do not use the supplied cord to connect from the DSL/ADSL filter to the device, you might not be able to fax successfully. This special phone cord is different from the phone cords you might already have in your home or office.

3. Connect the DSL/ADSL filter to the splitter.

4. Unplug the answering machine from the telephone wall jack, and connect it to the port labeled 2-EXT on the back of the device.

   **NOTE:** If you do not connect your answering machine directly to the device, fax tones from a sending fax machine might be recorded on your answering machine, and you probably will not be able to receive faxes with the device.

5. Connect the DSL modem to the parallel splitter.

6. Connect the parallel splitter to the wall jack.

7. Set your answering machine to answer after a low number of rings.

8. Change your **Rings to Answer** setting on the device to the maximum number of rings supported by the device.

   **NOTE:** The maximum number of rings varies by country/region.

9. Run a fax test.

   When the phone rings, your answering machine will answer after the number of rings you have set, and then play your recorded greeting. The device monitors the call during this time, “listening” for fax tones. If incoming fax tones are detected, the device will emit fax reception tones and receive the fax; if there are no fax tones, the device stops monitoring the line and your answering machine can record a voice message.

   If you use the same phone line for telephone, fax, and have a computer DSL modem, follow these instructions to set up your fax.

   If you encounter problems setting up the device with optional equipment, contact your local service provider or vendor for further assistance.

**Case K: Shared voice/fax line with computer dial-up modem and voice mail**

If you receive both voice calls and fax calls at the same phone number, use a computer dial-up modem on the same phone line, and subscribe to a voice mail service through your telephone company, set up the device as described in this section.

**NOTE:** You cannot receive faxes automatically if you have a voice mail service at the same phone number you use for fax calls. You must receive faxes manually; this means you must be available to respond in person to incoming fax calls. If you want to receive faxes automatically instead, contact your telephone company to subscribe to a distinctive ring service, or to obtain a separate phone line for faxing.
Since your computer dial-up modem shares the phone line with the device, you cannot use both your modem and the device simultaneously. For example, you cannot use the device for faxing if you are using your computer dial-up modem to send an e-mail or access the Internet.

There are two different ways to set up the device with your computer based on the number of phone ports on your computer. Before you begin, check your computer to see if it has one or two phone ports.

- If your computer has only one phone port, you will need to purchase a parallel splitter (also called a coupler), as shown below. (A parallel splitter has one RJ-11 port on the front and two RJ-11 ports on the back. Do not use a two-line phone splitter, a serial splitter, or a parallel splitter which has two RJ-11 ports on the front and a plug on the back.)

Example of a parallel splitter

- If your computer has two phone ports, set up the device as described below.

Back view of the device

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Telephone wall jack</td>
</tr>
<tr>
<td>2</td>
<td>Use the phone cord supplied in the box with the device to connect to the 1-LINE port</td>
</tr>
<tr>
<td></td>
<td>You might need to connect the supplied phone cord to the adapter provided for your country/region.</td>
</tr>
<tr>
<td>3</td>
<td>Parallel splitter</td>
</tr>
<tr>
<td>4</td>
<td>Computer with modem</td>
</tr>
<tr>
<td>5</td>
<td>Telephone</td>
</tr>
</tbody>
</table>

To set up the device on the same phone line as a computer with two phone ports
1. Remove the white plug from the port labeled 2-EXT on the back of the device.
2. Find the phone cord that connects from the back of your computer (your computer dial-up modem) to a telephone wall jack. Disconnect the cord from the telephone wall jack and plug it into the port labeled 2-EXT on the back of the device.
3. Connect a phone to the “OUT” port on the back of your computer dial-up modem.
4. Using the phone cord supplied in the box with the device, connect one end to your telephone wall jack, then connect the other end to the port labeled 1-LINE on the back of the device.

**NOTE:** You might need to connect the supplied phone cord to the adapter provided for your country/region.
If you do not use the supplied cord to connect from the telephone wall jack to the device, you might not be able to fax successfully. This special phone cord is different from the phone cords you might already have in your home or office.

5. If your modem software is set to receive faxes to your computer automatically, turn off that setting.

**NOTE:** If you do not turn off the automatic fax reception setting in your modem software, the device will not be able to receive faxes.

6. Turn off the **Auto Answer** setting.

7. Run a fax test.
You must be available to respond in person to incoming fax calls, or the device cannot receive faxes.
If you encounter problems setting up the device with optional equipment, contact your local service provider or vendor for further assistance.

### Serial-type fax setup

For information on setting up the device for faxing using a serial-type phone system, see the Fax Configuration Web site for your country/region.

<table>
<thead>
<tr>
<th>Country</th>
<th>Fax Configuration Web Site</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria</td>
<td><a href="http://www.hp.com/at/faxconfig">www.hp.com/at/faxconfig</a></td>
</tr>
<tr>
<td>Germany</td>
<td><a href="http://www.hp.com/de/faxconfig">www.hp.com/de/faxconfig</a></td>
</tr>
<tr>
<td>Switzerland (French)</td>
<td><a href="http://www.hp.com/ch/fr/faxconfig">www.hp.com/ch/fr/faxconfig</a></td>
</tr>
<tr>
<td>Switzerland (German)</td>
<td><a href="http://www.hp.com/ch/de/faxconfig">www.hp.com/ch/de/faxconfig</a></td>
</tr>
<tr>
<td>United Kingdom</td>
<td><a href="http://www.hp.com/uk/faxconfig">www.hp.com/uk/faxconfig</a></td>
</tr>
<tr>
<td>Finland</td>
<td><a href="http://www.hp.fi/faxconfig">www.hp.fi/faxconfig</a></td>
</tr>
<tr>
<td>Denmark</td>
<td><a href="http://www.hp.dk/faxconfig">www.hp.dk/faxconfig</a></td>
</tr>
<tr>
<td>Sweden</td>
<td><a href="http://www.hp.se/faxconfig">www.hp.se/faxconfig</a></td>
</tr>
<tr>
<td>Norway</td>
<td><a href="http://www.hp.no/faxconfig">www.hp.no/faxconfig</a></td>
</tr>
<tr>
<td>Netherlands</td>
<td><a href="http://www.hp.nl/faxconfig">www.hp.nl/faxconfig</a></td>
</tr>
<tr>
<td>Belgium (Dutch)</td>
<td><a href="http://www.hp.be/nl/faxconfig">www.hp.be/nl/faxconfig</a></td>
</tr>
<tr>
<td>Belgium (French)</td>
<td><a href="http://www.hp.be/fr/faxconfig">www.hp.be/fr/faxconfig</a></td>
</tr>
<tr>
<td>Portugal</td>
<td><a href="http://www.hp.pt/faxconfig">www.hp.pt/faxconfig</a></td>
</tr>
<tr>
<td>Spain</td>
<td><a href="http://www.hp.es/faxconfig">www.hp.es/faxconfig</a></td>
</tr>
<tr>
<td>France</td>
<td><a href="http://www.hp.com/fr/faxconfig">www.hp.com/fr/faxconfig</a></td>
</tr>
<tr>
<td>Ireland</td>
<td><a href="http://www.hp.com/ie/faxconfig">www.hp.com/ie/faxconfig</a></td>
</tr>
<tr>
<td>Italy</td>
<td><a href="http://www.hp.com/it/faxconfig">www.hp.com/it/faxconfig</a></td>
</tr>
</tbody>
</table>
Test fax setup

You can test your fax setup to check the status of the device and to make sure it is set up properly for faxing. Perform this test after you have completed setting up the device for faxing. The test does the following:

- Tests the fax hardware
- Verifies the correct type of phone cord is connected to the device
- Checks that the phone cord is plugged into the correct port
- Checks for a dial tone
- Checks for an active phone line
- Tests the status of your phone line connection

The device prints a report with the results of the test. If the test fails, review the report for information on how to fix the problem and rerun the test.

To test fax setup via the device control panel

1. Set up the device for faxing according to your particular home or office setup instructions.
2. Make sure the ink cartridges are installed, and that full-size paper is loaded in the input tray before starting the test.
3. From the device control panel, press Setup.
4. Select Tools, and then select Run Fax Test.
   The device displays the status of the test on the display and prints a report.
5. Review the report.
   - If the test passes and you are still having problems faxing, check the fax settings listed in the report to verify the settings are correct. A blank or incorrect fax setting can cause problems faxing.
   - If the test fails, review the report for more information on how to fix any problems found.
D Network setup (some models only)

You can manage network settings for the device through the device 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 device. For more information, see Embedded Web server (some models only).
This section contains the following topics:

- Change basic network settings
- Change advanced network settings
- Set up the device for wireless communication (some models only)
- Uninstall and reinstall the software

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 (some models only)

View and print network settings

You can display a summary of the network settings on the device control panel or the Network
Toolbox. You can print a more detailed network configuration page. The network configuration page
lists all of the important network settings such as the IP address, link speed, DNS, and mDNS. For
information on the network settings, see Understand the network configuration page (some models
only).

1. Press the Setup button.
2. Press the arrow keys until Print Report is highlighted, and then press OK.
3. Press the arrow keys until Network Settings is highlighted, and then press OK.

Turn the wireless radio on and off (some models only)

The wireless radio is on by default, as indicated by the blue light on the front of the device. In order
to stay connected to a wireless network, the radio must stay on. However, if your device is connected
to a wired network or you have a USB connection, the radio is not used. In this case you might want
to turn the radio off.

1. Press the Setup button.
2. Press the arrow keys until Network is highlighted, and then press OK.
3. Select Wireless Radio, and then select Yes to turn the radio on, or No to turn the radio off.

Change advanced network settings

The advanced network settings are provided for your convenience. However, unless you are an
advanced user, you should not change any of these settings. The advanced settings include Link
Speed, IP Settings, and Default Gateway.
This section contains the following topics:

• Set link speed
• To View IP settings
• To Change IP settings

Set link speed
You can change the speed at which data is transmitted over the network. The default is Automatic.
1. Press the Setup button.
2. Press the arrow keys until Network is highlighted, then press OK.
3. Select Advanced Setup, then select Link Speed.
4. Press the number next to the link speed that matches your network hardware:
   • 1. Automatic
   • 2. 10-Full
   • 3. 10-Half
   • 4. 100-Full
   • 5. 100-Half

To View IP settings
To view the IP address of the device:
• Print the network configuration page. For more information, see Understand the network configuration page (some models only).
• Or, open the Network Toolbox (Windows), click the Network Settings tab, click the Wired or Wireless tab (depending on the current connection), and then click IP Settings.

To Change IP settings
The default IP setting for the IP settings is Automatic, which sets the IP settings automatically. However, if you are an advanced user, you might want to manually change, 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 will not be able to connect with the device.

1. Press the Setup button.
2. Press the arrow keys until Network is highlighted, and then press OK.
4. Press the number next to the IP setting:
   • 1. IP Address
   • 2. Subnet Mask
   • 3. Default Gateway
5. Enter your changes, and then press OK.
Set up the device for wireless communication (some models only)

You may set up the device for wireless communication using one of the following ways:

<table>
<thead>
<tr>
<th>Setup method</th>
<th>Infrastructure wireless communication</th>
<th>Ad hoc wireless communication*</th>
</tr>
</thead>
<tbody>
<tr>
<td>USB cable</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>For more information, see To set up wireless communication using the installer (Mac OS X) or To set up wireless communication using the installer (Windows).</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Device control panel</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

* An ad hoc network can be set up using the Wireless Connection Utility on the HP software CD.

**NOTE:** If you encounter problems, see Solve wireless problems (some models only).

To use the device with any wireless connection, you must run the installation program at least once from the HP software CD and create a wireless connection.

Make sure the device is not connected to the network using a network cable.

The sending device must have built-in 802.11 capabilities or an 802.11 wireless card installed.

The device and the computers that use it must be on the same subnet.

Before installing the device software, you may wish to find out the settings of your network. Obtain the information from your system administrators, or complete the following tasks:

- Obtain your network's network name or Service Set Identifier (SSID) and communication mode (infrastructure or ad hoc) from the configuration utility for the network's wireless access point (WAP) or the computer's network card.
- Find out the type of encryption your network uses, such as Wired Equivalent Privacy (WEP).
- Find out the security password or encryption key of the wireless device.

This section contains the following topics:

- Understand 802.11 wireless network settings
- To set up wireless communication using the device control panel with wireless setup wizard
- To set up wireless communication using the installer (Windows)
- To set up wireless communication using the installer (Mac OS X)
- Connect the device using an ad hoc wireless network connection
- To turn off wireless communication
- To print a wireless test page
- Reset wireless settings
- Change the connection method
- Guidelines for ensuring wireless network security
- Guidelines for reducing interference on a wireless network

Understand 802.11 wireless network settings

**Network name (SSID)**

By default, the device looks for the wireless network name or SSID named "hpsetup." Your network may have a different SSID.

**Communication mode**
There are two communication mode options:

- **Ad hoc**: On an ad hoc network, the device is set to ad hoc communication mode and communicates directly with other wireless devices without the use of a WAP. All devices on the ad hoc network must:
  - Be 802.11 compatible
  - Have ad hoc as the communication mode
  - Have the same network name (SSID)
  - Be on the same subnet and same channel
  - Have the same 802.11 security settings

- **Infrastructure (recommended)**: On an infrastructure network, the device is set to infrastructure communication mode and communicates with other devices on the network, whether the devices are wired or wireless, through a WAP. WAPs commonly act as routers or gateways on small networks.

### Security settings

**NOTE**: For more information on wireless security, visit [www.weca.net/opensection/pdf/whitpaper_wi-fi_security4-29-03.pdf](http://www.weca.net/opensection/pdf/whitpaper_wi-fi_security4-29-03.pdf).

- **Network authentication**: The device’s factory default setting is 'Open,' which does not require security for authorization or encryption. The other possible values are 'OpenThenShared,' 'Shared,' and 'WPA-PSK' (Wi-Fi® Protected Access Pre-Shared Key).
  
  WPA increases the level of over-the-air data protection and access control on existing and future Wi-Fi networks. It addresses all known weaknesses of WEP, the original native security mechanism in the 802.11 standard.
  
  WPA2 is the second generation of WPA security; it provides enterprise and consumer Wi-Fi users with a high level of assurance that only authorized users can access their wireless networks.

- **Data encryption**:
  - Wired Equivalent Privacy (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 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 a new encryption scheme, 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 in ad hoc mode.

### To set up wireless communication using the device control panel with wireless setup wizard

The Wireless Setup Wizard provides an easy way to set up and manage a wireless connection to your device.

**NOTE**: To use this method, you must have a wireless network set up and running.

1. Set up the device hardware (see the getting started guide or the setup poster that came with your device).
2. On the device control panel, press the **Setup** button.
3. Press an arrow button to move to **Wireless Menu**, and then press **OK**.
4. Press an arrow button to move to **Setup Wizard**, and then press **OK**.
5. Follow the display instructions to complete the setup.
To set up wireless communication using the installer (Windows)

1. Insert the HP software CD into the CD drive. The CD menu runs automatically. If the CD menu does not start automatically, double-click the setup icon on the HP Software CD.

2. On the CD menu, click **Install Network/Wireless Device**, and then follow the onscreen instructions.

3. When prompted, temporarily connect the USB wireless setup cable.

4. Follow the onscreen instructions to complete the installation.

To set up wireless communication using the installer (Mac OS X)

1. Connect a USB wireless setup cable to the port on the back of the HP device and then to any USB port on the computer.

2. Place the HP software CD into the computer.

3. Double-click the HP Installer icon on the HP Software CD, and then follow the onscreen instructions.

Connect the device using an ad hoc wireless network connection

**Method 1**

1. Turn on wireless in your computer and in the device.

2. On your computer, connect to the network name (SSID) "hpsetup". (This network name is the default, ad hoc network created by the HP device.)

**NOTE:** If your HP device was previously configured for a different network, you can restore the network defaults to enable the device to use "hpsetup". To restore the network defaults complete the following steps:

- **Reset the administrator password and network settings**: Select **Setup**, select **Network**, and then select **Restore Network Defaults**. For more information, see **General troubleshooting tips and resources**.
To turn off wireless communication

- **Device control panel:** Press Setup, then select **Wireless**, then select **Wireless ON/OFF**, and then select either **On** or **Off**.
- Press the wireless button on the front of the device.

To print a wireless test page

Print the wireless test page for information about the device’s wireless connection. The wireless test page provides information about the device’s status, MAC address, and IP address. If the device is connected to a network, the test page displays details about the network settings.

▲ **Device control panel:** Press **Setup**, select **Print Report**, select **Wireless Test**, and then press **OK**.

Reset wireless settings

**Reset network configuration settings**

If the device is still unable to communicate with the network, reset the device’s network settings.

- Press **Setup**. Press an arrow button to move to **Network**, and then press **OK**.
- Press an arrow button to move to **Reset Wireless**, and then press **OK**.
- Print the wireless configuration page and verify that the network settings have been reset. For more information, see *Understand the network configuration page (some models only)*. By default, the network name (SSID) is “hpsetup” and the communication mode is “ad hoc.”

Change the connection method

If you have installed the software and connected your HP device using a USB or Ethernet cable, you can change to a wireless connection any time you want.

**Change from a USB connection to a wireless connection (Windows)**

1. Select **Start**, **Programs**, **HP**, select your device, and then select **Change Connection Method**.
2. Press **Add a Device**.
3. Follow the onscreen instructions and remove the USB cable when prompted.

**Change from a USB connection to a wireless connection (Mac OS X)**

1. Click the **HP Device Manager** icon on the Dock or in the Hewlett Packard folder in the Applications folder.
2. From the **Information and Settings** list, select **Network Printer Setup Utility**.
3. Follow the onscreen instructions to configure the network settings.

**Change from an Ethernet connection to a wireless connection**

**NOTE:** For Ethernet-enabled HP devices only.

1. Open the embedded Web server (EWS). For more information, see *Embedded Web server (some models only)*.
2. Click the **Networking** tab, and then click **Wireless (802.11)** in the left pane.
3. On the **Wireless Setup** tab, press **Start Wizard**.
4. Follow the onscreen instructions to change from an Ethernet connection to a wireless connection.
5. After you finish changing the settings, disconnect the Ethernet cable.
Guidelines for ensuring wireless network security

This section contains the following topics:

• To add hardware addresses to a WAP
• Other guidelines

To add hardware addresses to a WAP

MAC filtering is a security feature in which a WAP is configured with a list of MAC addresses (also called "hardware addresses") of devices that are allowed to gain access to the network through the WAP.

If the WAP does not have the hardware address of a device attempting to access the network, the WAP denies the device access to the network.

If the WAP filters MAC addresses, then the device's MAC address must be added to the WAP's list of accepted MAC addresses.

1. Print the network configuration page. For information on the network configuration page, see Understand the network configuration page (some models only).
2. Open the WAP's configuration utility, and add the device's hardware address to the list of accepted MAC addresses.

Other guidelines

To keep the wireless network secure, follow these guidelines:

• Use a password with at least 20 random characters. You can use up to 63 characters in a WPA password.
• Avoid any common words or phrases, easy sequences of characters (such as all 1s), and personally-identifiable information for passwords. Always use random strings composed of uppercase and lowercase letters, numbers, and if allowed, special characters such as punctuation.
• Change the password periodically.
• Change the default 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 a wired 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.
• For an infrastructure network, position the WAP 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.

Uninstall and reinstall the software

If your installation is incomplete, or if you connected the USB cable to the computer before prompted by the software installation screen, you might need to uninstall and then reinstall the software. Do
not simply delete the device application files from your computer. Make sure to remove them properly using the uninstall utility provided when you installed the software that came with the device. There are three methods to uninstall the software on a Windows computer, and one method to uninstall on a Macintosh computer.

To uninstall from a Windows computer, method 1
1. Disconnect the device from your computer. Do not connect it to your computer until after you have reinstalled the software.
2. On the Windows taskbar, click Start, select Programs or All Programs, select the product name, and then click Uninstall.
3. Follow the onscreen 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 properly if the files are deleted.
5. Restart your computer.
6. To reinstall the software, insert the HP Software CD into your computer's CD drive, follow the onscreen instructions.
7. Connect the device when the software prompts you to connect it to the computer.
8. Press the Power button to turn the device on. After connecting and turning on the device, you might have to wait several minutes for all of the Plug and Play events to complete.
9. Follow the onscreen instructions.
When the software installation is complete, the HP Digital Imaging Monitor icon appears in the Windows system tray.

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 Windows taskbar, click Start, select Settings, select Control Panel, and then click Add/Remove Programs.
   - Or -
   Click Start, click Control Panel, and then double-click Programs and Features.
2. Select the product name, and then click Change/Remove or Uninstall/Change.
   Follow the onscreen instructions.
3. Disconnect the device from your computer.
4. Restart your computer.

NOTE: It is important that you disconnect the device before restarting your computer. Do not connect the device to your computer until after you have reinstalled the software.
5. Insert the HP Software CD into your computer's CD drive and then start the Setup program.
6. Follow the onscreen instructions.

To uninstall from a Windows computer, method 3

NOTE: Use this method if Uninstall is not available in the Windows Start menu.
1. Insert the HP Software CD into your computer's CD drive, and then start the Setup program.
2. Disconnect the device from your computer.
3. Select Uninstall and follow the onscreen directions.
4. Restart your computer.

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

5. Start the Setup program for the device again.
6. Select **Install**.
7. Follow the onscreen instructions.

**To uninstall from a Macintosh computer, method 1**
1. Launch the HP Utility. For instructions, see Open the HP Utility.
2. Click the Application icon on the toolbar.
3. Double click **HP Uninstaller**.
   - Follow the onscreen instructions.
4. After the software is uninstalled, restart your computer.
5. To reinstall the software, insert the HP Software CD into your computer's CD drive.
6. On the desktop, open the CD, and then double-click **HP Installer**.
7. Follow the onscreen instructions.

**To uninstall from a Macintosh computer, method 2**
1. Open the Finder.
2. Double-click **Applications**.
3. Double-click **HP Uninstaller**.
4. Select your device, and then double-click **Uninstall**.
E Device management tools

This section contains the following topics:

• Toolbox (Windows)
• Use the HP Solution Center (Windows)
• HP Utility (Mac OS X)
• Embedded Web server (some models only)

Toolbox (Windows)
The Toolbox provides maintenance information about the device.

NOTE: The Toolbox can be installed from the HP Software CD by selecting the full installation option if the computer meets the system requirements.

Open the Toolbox
• From the HP Solution Center, click the Settings menu, point to Print Settings, and then click Printer Toolbox.
• Right-click the HP Digital Imaging Monitor in the taskbar, point to Printer Model Name and then click Display Printer Toolbox.
• From the printer preferences, click the Features tab, and then click Printer Services.

Network Toolbox (some models only)
The Network Toolbox allows you to view and change some network settings. You can change the IP address, perform tests, and print reports.

NOTE: The Network Toolbox is only available if you have connected the product using a wired (Ethernet) network.

To open the Network Toolbox
1. Open the Toolbox
2. Click the Network Settings tab.
3. Click the Change Settings... button.

Use the HP Solution Center (Windows)
On a Windows computer, the HP Solution Center is the entry point for the HP software. Use the HP Solution Center to change print settings, order supplies, and access the onscreen Help.
The features available in the HP Solution Center vary depending on the devices you have installed. The HP Solution Center is customized to show icons that are associated with the selected device. If the selected device is not equipped with a particular feature, then the icon for that feature does not appear in the HP Solution Center.

Open the Solution Center using one of these methods:
Double-click the Solution Center icon in the desktop.
- Or -
Double-click the Digital Imaging Monitor icon in the taskbar.

HP Utility (Mac OS X)
The HP Utility contains tools to configure print settings, calibrate the device, order supplies online, and find Web site support information.
NOTE: On a Macintosh computer, the features available in the HP Utility vary depending on the selected device.

Ink level warnings and indicators provide estimates for planning purposes only. When you receive an ink alert message, consider having a replacement cartridge available to avoid possible printing delays. You do not need to replace cartridges until print quality becomes unacceptable.

TIP: When the HP Utility is opened, you can gain access to the Dock menu shortcuts by selecting and holding the mouse button over the appropriate icon for the HP Utility in the Dock.

Open the HP Utility

To open the HP Utility

▲ Click the HP Utility icon in the Dock.

NOTE: If the icon does not appear in the Dock, click the Spotlight icon on the right side of the menu bar, type HP Utility in the box, and then click the HP Utility entry.

Embedded Web server (some models only)

When the device is connected to a network, you can use the embedded Web server 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 (some models only).

Some settings might be restricted by the requirement for a password.

You can open and use the embedded Web server without being connected to the Internet; however, some features will not be available.

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.

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 device, if you chose to disable cookies, you will disable one or more of the following features:

- Automatically refreshing the existing page
- Starting where you left the application (especially useful when using setup wizards)
- Preventing other users from modifying the same settings while you are making changes
- Remembering the EWS browser language setting

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 device must be on a network and must have an IP address.
You can open the embedded Web server by using these methods:

- **Web browser**: In a supported Web browser on your computer, type the IP address or hostname that has been assigned to the device.
  
  For example, if the IP address is 123.123.123.123, type the following address into the Web browser: `http://123.123.123.123`.
  
  The IP address and hostname for the device are listed on the status report. For more information, see [Understand the network configuration page (some models only)](#).
  
  After opening the embedded Web server, you can bookmark it so that you can return to it quickly.

- **Windows taskbar**: Right-click the HP Digital Imaging Monitor icon, point to the device you wish to view, and then click [Network Settings (EWS)].

- **Windows Vista**: In the Network list of devices, right-click the device icon and then select [View device webpage].
F Errors (Windows)

This list represents some of the errors you might see on your computer screen (Windows) and how to fix the errors.

- Fax Memory Full
- Device Disconnected
- Ink Alert
- Cartridge Problem
- Paper Mismatch
- The cartridge cradle cannot move
- Paper Jam
- The printer is out of paper
- Printer Offline
- Printer Paused
- Document failed to print
- General printer error
- Align cartridge

Fax Memory Full

If Backup Fax Reception or HP Digital Fax (Fax to PC or Fax to Mac) is enabled and the product has a problem (such as a paper jam), the product saves incoming faxes to memory until the problem is resolved. However, the product’s memory might fill up with faxes that have not been printed yet or transferred to the computer.

To solve this problem, resolve any problems with the product.

For more information, see Solve fax problems.

Device Disconnected

The computer cannot communicate with the product because one of the following events has occurred:

- The product has been turned off.
- The cable connecting the product - such as a USB cable or a network (Ethernet) cable - has been disconnected.
- If the product is connected to a wireless network, the wireless connection has been broken.

To solve this problem, try the following solutions:

- Make sure the product is turned on and that the (Power) light is on.
- Make sure the power cord and other cables are working and are firmly connected to the product.
- Make sure the power cord is connected firmly to a functioning, alternating current (AC) power outlet.
- If the product is connected to a network, make sure the network is functioning properly. For more information, see Solve wired (Ethernet) network problems (some models only).
- If the product is connected to a wireless network, make sure the wireless network is functioning properly. For more information, see Solve wireless problems (some models only).

Ink Alert

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 the ink cartridges until print quality becomes unacceptable.

For information about replacing ink cartridges, see Replace the ink cartridges.
For information about ordering ink cartridges, see HP supplies and accessories.
For information about recycling used ink supplies, see HP inkjet supplies recycling program.

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 device 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.

Cartridge Problem

The ink cartridge identified in the message is missing, damaged, or inserted into the wrong slot in the product.

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.

Choose your error

• Solution 1: Install the ink cartridges correctly
• Solution 2: Turn the product off and on
• Solution 3: Clean the electrical contacts
• Solution 4: Replace the ink cartridge

Solution 1: Install the ink cartridges correctly

Make sure all of the ink cartridges are properly installed:

1. Make sure the product is turned on.

   △ CAUTION: If the product is turned off when you open the front access door to access the ink cartridges, the product cannot release the cartridges for changing. You might damage the product if the ink cartridges are not docked safely when you try to remove them.

2. Open the front access door.
   The print carriage moves to the far right side of the product.
3. Wait until the print carriage is idle and silent, and then lightly press down on the ink cartridge to release it.

4. Pull the ink cartridge toward you, out of its slot.

⚠️ **CAUTION:** Do not touch the copper-colored contacts or ink nozzles. Doing so can result in clogs, ink failure, and bad electrical connections.

5. Hold the ink cartridge with the HP logo on top, and reinsert the ink cartridge. Make sure you push the ink cartridge in firmly until it snaps into place.

6. Close the front access door and check if the error message has gone away. If the problem persists, try the next solution.
Solution 2: Turn the product off and on
Turn off the product, and then turn it on again.
If the problem persists, try the next solution.

Solution 3: Clean the electrical contacts
Clean the electrical contacts on the ink cartridge. For more information, see Clean the ink cartridge contacts.
If the problem persists, try the next solution.

Solution 4: Replace the ink cartridge
Replace the indicated ink cartridge. For more information, see HP supplies and accessories.

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.

Paper Mismatch
The paper size or type selected in the printer driver does not match the paper loaded in the product.
To solve this problem, try one of the following:
• Load the correct paper in the product, and then press OK. For more information, see Load media
• Press the $(Cancel) button on the product’s control panel, select a different 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 product that holds the ink cartridges).
To clear the obstruction, press the $(Power) button to turn off the product, and then check the product for jams.
For more information, see Clear jams.

Paper Jam
Paper has become jammed in the product.
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. For more information, see Media specifications.
• Make sure that the product is clean. For more information, see Maintain the device.
• Make sure that the trays are loaded correctly and are not too full. For more information, see Load media.
For instructions on clearing jams, as well as more information about how to avoid jams, see Clear jams.

Paper Jam
Paper has become jammed in the automatic document feeder (ADF).
Before you try to clear the jam, check the following:

- Make sure that you have loaded paper that meets specifications and that is not wrinkled, folded, or damaged. For more information, see Media specifications.
- Make sure that the product is clean. For more information, see Maintain the device.
- Make sure that the ADF is loaded correctly and is not too full. For more information, see Load an original in the automatic document feeder (ADF).

**NOTE:** Do not load photos in the ADF; this might cause damage to your photos.

For instructions on clearing jams, as well as more information about how to avoid jams, see Clear jams.

### The printer is out of paper

The default tray is empty. Load more paper, and then press **OK**.

For more information, see Load media.

### Printer Offline

The product is currently offline. While offline, the product cannot be used.

To change the product's status, complete the following steps.

1. Click **Start**, point to **Settings**, and then click **Printers** or **Printers and Faxes**.
   - Or -
   Click **Start**, click **Control Panel**, and then double-click **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 product is **Offline**, right-click the product, and click **Use Printer Online**.
4. Try using the product again.

### Printer Paused

The product is currently paused. While paused, new jobs are added to the queue but are not printed.

To change the product's status, complete the following steps.

1. Click **Start**, point to **Settings**, and then click **Printers** or **Printers and Faxes**.
   - Or -
   Click **Start**, click **Control Panel**, and then double-click **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 product is **Paused**, right-click the product, and click **Resume Printing**.
4. Try using the product again.

### Document failed to print

The product could not print the document because a problem occurred in the printing system.

For information about solving printing problems, see Solve printing problems.

### General printer error

There was a problem with the product.
Usually, you can resolve such problems by completing the following steps:

1. Press the (Power) button to turn off the product.
2. Unplug the power cord, and then plug in the power cord again.
3. Press the (Power) button to turn on the product.

If this problem persists, write down the error code provided in the message, and then contact HP support. For more information about contacting HP support, see HP support.

**Align cartridge**

The product prompts you to align ink cartridges every time you install or replace an ink cartridge. You can also align the ink cartridges at any time from the product’s control panel or by using the HP software installed with the product. Aligning the ink cartridges ensures high-quality output.

---

**NOTE:** When you remove and reinstall the same ink cartridge, the product remembers the alignment values for that ink cartridge and does not prompt you to align the ink cartridge.

If the alignment process fails, make sure you have loaded unused, plain white paper into the input tray. If you have colored paper loaded in the input tray when you align the ink cartridges, the alignment will fail.

If the alignment process fails repeatedly, you might have a defective sensor or ink cartridge. Contact HP support. Go to [www.hp.com/support](http://www.hp.com/support). If prompted, choose your country/region, and then click Contact HP for information on calling for technical support.

For more information, see Align the ink cartridges.
Symbols/Numerics
(ADF) automatic document feeder
clean 22
feeding problems, troubleshoot 22

A
accessibility 3, 9
accessories
Printer Status Report 125
Self-Test Report 125
warranty 131
acoustic emissions 141
ADF (automatic document feeder)
capacity 19
load originals 18
ADSL, fax setup with parallel phone systems 179
after the support period 74
align ink cartridges 66
answer ring pattern change 53
parallel phone systems 180
answering machine
tax tones recorded 111
set up with fax (parallel phone systems) 189
set up with fax and modem 190
automatic document feeder (ADF)
capacity 19
load originals 18
automatic fax reduction 48
available 122

B
Back button 12
backup fax 45
baud rate 54
black and white pages
copy 37
fax 39
black dots or streaks, troubleshoot copies 96
scan 100
blank pages, troubleshoot copy 94
print 76
scan 100
blocked fax numbers set up 48
broadcast faxing send 43
buttons, control panel 12

C
cancel
scheduled fax 43
Cancel button 12
capacity
ADF 19
tray 137
cards
sizes supported 136
tray supporting 137
clean
automatic document feeder 22
exterior 22
ink cartridge contacts 90
ink cartridge ink nozzle area 91
ink cartridges 68
scanner glass 21
clear
fax logs 58
color copy 37
colored text, and OCR 36
custom-sized media
sizes supported 137
custom-sized paper
Mac OS 32
print on 31
customer support
electronic 71
cut-off pages, troubleshoot 77

D
dark images, troubleshoot copies 95
scans 100
Declaration of Conformity (DOC) 150
default settings  
copy 38  
deleting faxes from memory 46  
device control panel  
locating 10  
network settings 198  
scan from 35  
send faxes 40  
dial tone test, failure 104  
dial type, setting 54  
dial-up modem  
shared with fax (parallel phone systems) 183  
shared with fax and answering machine (parallel phone systems) 190  
shared with fax and voice line (parallel phone systems) 186  
shared with fax and voice mail (parallel phone systems) 194  
distinctive ringing  
change 53  
parallel phone systems 180  
DOC 150  
dots or streaks, troubleshoot copies 96  
dots, troubleshoot scan 100  
driver  
warranty 131  
DSL, fax setup with parallel phone systems 179  
duty cycle 133

**E**

ECM. See error correction mode  
edit  
text in OCR program 36  
electrical specifications 141  
embedded Web server  
about 208  
opening 208  
system requirements 135  
troubleshoot, cannot be opened 121  
envelopes  
sizes supported 136  
tray supporting 137  
environmental specifications 141

environmental sustainability  
program 152  
error correction mode 43  
error messages  
device control panel 14  
unable to activate TWAIN source 99  
error reports, fax 57  
error-correction mode, fax 53  
event log 125  
EWS. See embedded Web server

**F**

faded copies 95  
faded stripes on copies, troubleshoot 95  
fax  
answer mode 52  
answering machine and modem, shared with (parallel phone systems) 190  
answering machine troubleshoot 111  
answering machine, set up (parallel phone systems) 189  
auto answer 52  
backup fax 45  
blocking numbers 48  
confirmation reports 56  
deleting from memory 46  
dial tone test, failed 104  
dial type, setting 54  
distinctive ringing setup (parallel phone systems) 180  
distinctive ringing, change pattern 53  
DSL, set up (parallel phone systems) 179  
error correction mode 43  
error reports 57  
error-correction mode 53  
Fax to Mac 50  
Fax to PC 50  
forwarding 47  
header 52  
Internet Protocol, over 55  
ISDN line, set up (parallel phone systems) 180  
l ine condition test, failed 105  
log, clear 58  
log, print 57  
manual receive 44  
modem and answering machine, shared with (parallel phone systems) 190  
modem and voice line, shared with (parallel phone systems) 186  
modem and voice mail, shared with (parallel phone systems) 194  
modem, shared with (parallel phone systems) 183  
monitor dialing 41, 43  
paper size 47  
parallel phone systems 175  
PBX system, set up (parallel phone systems) 180  
phone cord connection test, failed 103  
phone cord too short 111  
phone cord type test, failed 103  
poll to receive 46  
print last transaction details 58  
receive 44  
receive, troubleshoot 106, 109  
redial options 54  
reduction 48  
reports 56  
reprint 46  
rings to answer 52  
schedule 42  
send 39  
send, troubleshoot 106, 108, 111  
separate line setup (parallel phone systems) 178  
settings, change 51  
setup types 176  
shared phone line setup (parallel phone systems) 181  
sound volume 55  
specifications 140  
speed 54  
test failed 101
test setup 197
troubleshoot 100
voice mail, set up (parallel phone systems) 182
wall jack test, failed 102
Fax B&W function indicator 13
Fax Color function indicator 13
Fax to Mac
activate 50
modify 50
Fax to PC
activate 50
modify 50
Firewall
configure 119
firewalls, troubleshoot 76
FoIP 55
forwarding faxes 47
G
glass, scanner
clean 21
load originals 18
locating 10
grainy or white bands on copies, troubleshoot 96
graphics
incompletely filled on copies 96
look different from original scan 99
H
hardware, fax setup test 101
header, fax 52
Help button 12
Hewlett-Packard Company
notices 3
HP Solution Center 207
HP Utility (Mac OS X)
opening 207
humidity specifications 141
I
ink cartridge door, locating 11
ink cartridge latch, locating 11
ink cartridges
align 66
check ink levels 61
clean 68
clean contacts 90
clean ink nozzle area 91
handle 62
locating 11
order online 173
part names 62
replace 62
supported 133, 173
test 125
tips 60
warranty 131
yields 133
ink levels, check 61
installation
troubleshoot 122
Internet Protocol
fax, using 55
IP address
checking for device 122
IP settings 199
ISDN line, set up with fax
parallel phone systems 180
J
jams
clear 127
media to avoid 17
paper 127, 128
junk fax mode 48
K
kepad, device control panel
locating 12
L
language, printer 133
left navigation button 12
light images, troubleshoot copies 95
scans 100
lights, control panel 12
line condition test, fax 105
lines
copies, troubleshoot 95
scans, troubleshoot 99, 100
link speed, setting 199
load
tray 20
load media 20
log, fax
print 57
M
Mac OS
custom-sized paper 32
Print borderless 33
Print photos 30
print settings 26
two-sided 34
Mac OS X
HP Utility 207
uninstall software 206
wireless communication setup 202
main tray
media supported 138
maintenance
align ink cartridges 66
check ink levels 61
clean ink cartridges 68
replace ink cartridges 62
manual faxing
receive 44
send 40, 41
margins
setting, specifications 138
media
ADF capacity 19
clear jams 127
HP, order 174
load tray 19
print on custom-sized 31
selecting 17
skewed pages 93
specifications 135
supported sizes 135
troubleshoot feeding 93
types and weights supported 137
memory
deleting faxes 46
reprint faxes 46
save faxes 45
missing or incorrect information, troubleshoot 77
model number 125
modem
shared with fax (parallel phone systems) 183
shared with fax and answering machine (parallel phone systems) 190
shared with fax and voice line (parallel phone systems) 186
shared with fax and voice mail (parallel phone systems) 194
monitor dialing 41, 43
multi-feeds, troubleshoot 93

N
network port
address 113
networks
advanced settings 198
connector illustration 11
firewalls, troubleshoot 76
IP settings 199
link speed 199
operating systems
supported 134
protocols supported 135
system requirements 135
view and print settings 198
wireless communication
setup 200
wireless settings 126, 200
noise information 141

O
OCR
edit scanned documents 36
troubleshoot 98
OK button 12
On button 13
operating environment
specifications 141
operating systems
supported 134
originals
scan 35
output tray
locating 10

P
pages per month (duty cycle) 133
paper
jams 127, 128
size, set for fax 47
paper-feed problems,
troubleshoot 92
parallel phone systems
answering machine
setup 189
countries/regions with 175
distinctive ringing setup 180
DSL setup 179
ISDN setup 180
modem and answering
machine setup 190
modem and voice mail
setup 194
modem setup 183
modem shared with voice line setup 186
PBX setup 180
separate line setup 178
setup types 176
shared line setup 181
PBX system, set up with fax
parallel phone systems 180
PCL 3 support 133
phone cord
connected to correct port
test failed 103
correct type test failed 103
extend 111
phone line, answer ring
pattern 53
phone support 71
phone support period
period for support 72
phone, fax from
receive 44
send, 40
photo media
sizes supported 136
poll to receive fax 46
ports, specifications 133
power
specifications 141
troubleshoot 75
power input, locating 11
power on button 13
print
fax logs 57
fax reports 56
faxes 46
last fax details 58
Printer Status Report 125
slow 76
troubleshoot 75
Print borderless
Mac OS 33
Windows 33
Print brochures
print 27
print driver
warranty 131
Print envelope
Print envelopes
Mac OS 28
Print photos
Mac OS 30
Windows 29, 31
print quality
troubleshoot 78
print-carriage access door,
locating 11
printer driver
warranty 131
Printer Status Report
information on 124
print 125
processor specifications 133
product control panel
scan 35
pulse dialing 54

Q
quality, troubleshoot
copy 95
print 78
scan 99

R
radio interference
reducing 204
regulatory information 147
radio, turn off 198
rear access panel
clear jams 127
illustration 11
receive faxes
auto answer mode 52
automatically 44
blocking numbers 48
forwarding 47
manually 44
polling 46
rings to answer 52
troubleshoot 106, 109
recycle
print cartridges 152
Index

T
technical information
copy specifications 139
fax specifications 140
scan specifications 141
telephone line, answer ring pattern 53
telephone wall jack, fax 102
telephone, fax from receive 44
send 40
temperature specifications 141
tests, fax
dial tone, failed 104
failed 101
fax line condition 105
fax phone cord type test failed 103
hardware, failed 101
port connection, failed 103
setup 197
telephone wall jack 102
text
cannot be edited after scan, troubleshoot 98
incompletely filled on copies 96
missing from scan, troubleshoot 98
splotchy on copies 96
troubleshoot 98
unclear on copies, troubleshoot 96
unclear scans 100
tone dialing 54
Toolbox (Windows)
about 207
opening 207
tray
capacity 137
media sizes supported 135
media types and weights supported 137
trays
capacities 137
clear jams 127
load media 19
locating 10
media sizes supported 135
paper guides illustration 10
troubleshoot feeding 93
troubleshoot
answering machines 111

U
uninstall software
Mac OS X 206
Windows 205
USB connection
port, locating 10, 11
specifications 133

V
vertical stripes on copies, troubleshoot 95
view
network settings 198
voice mail
set up with fax (parallel phone systems) 182
set up with fax and computer modem (parallel phone systems) 194
voltage specifications 141
volume
fax sounds 55

W
wall jack test, fax 102
warning messages 14
warranty 131
Web page
print 28
Web sites
accessibility information 3, 9
customer support 71
environmental programs 152
order supplies and accessories 173
supply yield data sheet 133
wireless security 201
white bands or stripes, troubleshoot
copies 95, 96
scans 99
Windows
borderless 33
HP Solution Center 207
print brochures 26
Print photos 29, 31
print settings 25
set up wireless communication 202
system requirements 134