

hp
scanjet
5590
digital flatbed
scanner



user's manual



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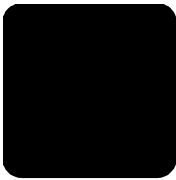
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1

how to use the scanner

This manual describes how to use the hp scanjet 5590 digital flatbed scanner and its accessories, resolve installation problems, and reach customer support.

For installation and setup procedures, see the setup poster. For scanning software procedures, see the HP Photo & Imaging software Help.

install the scanning software











Choose from the following three options when installing the scanner software.

Software options	Description
HP Photo & Imaging Software (most users choose this option)	<ul style="list-style-type: none">• Requires 160 megabytes (MB) of disk space• Offers a complete software solution for document and photo management and enhancement• Can scan slides and negatives• Enables front-panel scanner buttons• Includes TWAIN connectivity to the most popular imaging software programs
HP Commercial Scanjet 5590 TWAIN	<ul style="list-style-type: none">• Requires 20 MB of disk space• Can be used with document management or customized business software• Offers TWAIN contrast and brightness capabilities• Offers improved two-sided scanning performance• Does not offer front panel scanner button functionality• Cannot scan slides and negatives
HP Photo & Imaging Software and HP Commercial Scanjet 5590 TWAIN (both software programs can be installed)	<ul style="list-style-type: none">• Requires 180 MB of disk space• Can scan slides and negatives• Enables front-panel scanner buttons• Includes TWAIN connectivity to most popular imaging software programs• Includes commercial TWAIN for document management and customized business software

See the Readme file on your CD for more information about the TWAIN drivers. To learn more about TWAIN, you can also visit <http://www.twain.org>.

front panel and accessories overview

This section presents an overview of the scanner front panel, the transparent materials adapter (TMA), and the automatic document feeder (ADF).

Feature	Description
 SCAN DOCUMENT button	Scans an original document to a software program where it can be edited or reformatted.
 SCAN PICTURE button	Scans the picture to the HP Photo & Imaging Gallery.
 FILE DOCUMENTS button	Scans the original document to be saved on a disk or CD in a designated file format (for example, .PDF, .TIF, or .HTML).
 E-MAIL button	Scans the item by using settings that are optimized for e-mail, and sends the scan to your e-mail software (if the software is supported).
 COPY button	Scans the item and sends it to a printer to make copies.
 NUMBER OF COPIES button	Selects the number of copies to be printed with the COPY button.
 COLOR/BLACK & WHITE copy button	Determines whether items will be scanned in color or in black and white when you press the COPY button.
 POWER SAVE button	Turns off the scanner lamp, the LEDs, and the LCD.
 CANCEL button	Cancels a scan while the scanner is scanning, or cancels a series of scans from the automatic document feeder (ADF).
 2-digit LCD	Indicates the number of copies that will be printed when you press the COPY button. Also shows error codes that identify scanner problems.

automatic document feeder (ADF)

The hp scanjet 5590 digital flatbed scanner has an automatic document feeder (ADF) that you can use to scan multiple documents quickly and easily. For more information about the ADF, see **how to scan from the automatic document feeder** on page 7.

transparent materials adapter (TMA)

You can use the transparent materials adapter (TMA) to scan 35 mm slides or negatives. For more information about the TMA, see **how to scan slides and negatives** on page 9.

scanning overview

You can start scanning in one of three ways: from the front-panel buttons, from the HP Director, or from other software programs.

Macintosh users: See the HP Photo & Imaging software Help for information about scanning procedures.

scan from the scanner front-panel buttons

The front-panel buttons on the scanner provide shortcuts to frequently used scanning functions, such as scanning documents and pictures. Instructions for using the front-panel buttons are located in this manual.

Note: The HP Photo & Imaging software must be installed to use the front-panel buttons and the TMA.

scan from the HP Director

Scan from the HP Director when you want more control over your scan, such as when you want to preview the image before the final scan.

To start the HP Photo & Imaging software, double-click the HP Director icon on the desktop. The HP Director window appears. From this window you can scan, view, or print images; use online Help; and more.

If the HP Director icon is not on the desktop, on the **Start** menu, point to **Programs** or **All Programs**, point to **Hewlett-Packard**, point to the name of your scanner or to **Scanners**, and then click **Photo & Imaging Director**.

Note: The HP Director is available only when the HP Photo & Imaging software is installed.

scan from other software programs

You can scan an image directly from an open file in one of your software programs if the program is TWAIN-compliant. Generally, the program is compliant if it has an option such as **Acquire**, **Scan**, or **Import New Object**. If you are unsure whether the program is compliant or what the option is, see the documentation for that program.

select original types

You have two choices for original type: Document or Picture. The scanner optimizes settings based on your choice. Use the following guidelines to determine the best original type for your needs.


If your original consists of	Select this original type
Text, or both text and graphics	Document
A printed photograph or graphic	Picture

scan documents

Use the **SCAN DOCUMENT** button () to scan documents.

- 1 Place the originals face-down on the scanner glass, as indicated by the reference mark, or face-up in the ADF.





- 2 Press the **SCAN DOCUMENT** button (). The **What are you scanning?** dialog box appears.
- 3 Choose the appropriate settings, and then click **Scan**.
- 4 When you are finished scanning, click **Done**. The software sends the scanned file to the specified location.

Note: If you want to preview scans before they are sent to their destination, see **preview a scanned image**.

Note: To create a searchable PDF from your scan, select the **Scan for editable text (OCR)?** option in the **What are you scanning?** dialog box. When you are done scanning your document, save it as a PDF. For more information about OCR scanning, see **scan text for editing** on page 6.

scan pictures

Use the **SCAN PICTURE** button () to scan printed photos, graphics, slides, or negatives.

- 1 Place the original face-down on the scanner glass, as indicated by the reference marks, and close the lid.
- 2 Press the **SCAN PICTURE** button ().
- 3 When you are finished scanning, click **Done**. The image is scanned into the HP Photo & Imaging Gallery.

Note: If you want to preview scans before they are sent to their destination, see **preview a scanned image**.

Tip: The HP Scanning software can automatically correct your pictures or restore faded colors in old pictures. To turn picture correction on or off, select **Auto Correct Photos** from the **Basic** menu of the HP Director, and then choose the options you want.

preview a scanned image


By default, the software does not prompt you to preview the scan when you use any of the front-panel buttons on the scanner.


If you want to preview the scanned file, either begin the scan from the HP Director instead of using the buttons on the front of the scanner, or change the button settings in the HP Director to allow previews.

For more information about changing button settings to preview scans, see **preview a scanned image** in the online Help.

Note: There is no preview image for the copy function.


save a document to a disk or CD


Use the **FILE DOCUMENTS** button () to save scanned documents to a disk, such as a hard disk or a CD.

- 1 Place the original face-down on the scanner glass, as indicated by the reference marks, or face-up in the ADF.
- 2 Press the **FILE DOCUMENTS** button (). The **What are you scanning?** dialog box appears.
- 3 Choose the appropriate settings, and then click **Scan**.
- 4 When you are finished scanning, click **Done**. The **Save As** dialog box appears.
- 5 Select a folder in the **Save As** dialog box, type a file name, and then select a file type. Click **OK**. The software saves the document to the specified folder.

Note: If you want to preview scans before they are sent to their destination, see **preview a scanned image** on page 4.

e-mail a scanned document or picture


Use the **E-MAIL** button () to scan documents or pictures and insert them in an e-mail message as an attachment. You must have an Internet connection and a supported e-mail software program.





- 1 Place the original face-down on the scanner glass, as indicated by the reference marks, or face-up in the ADF.
- 2 Press the **E-MAIL** button (). The **What are you scanning?** dialog box appears.
- 3 Choose the appropriate settings, and then click **Scan**.
- 4 When you are finished scanning, click **Done**. Your e-mail program opens and the scanned file is attached to an e-mail message.
- 5 The **E-mail attachment** dialog box appears. Type a file name, and then select a file type. Click **Continue**. Follow the on-screen instructions.
- 6 Use your e-mail program to complete and send the e-mail.

Note: To view the scanned image before you e-mail it, double-click the attachment in your e-mail software.

To change the e-mail program, open the HP Director, and then select **E-mail Settings** in the **Settings** drop-down list. The **Email Settings** dialog box appears. Select the e-mail program that you want to use, and then click **OK**.

print copies


Use the **COPY** button () to scan an original and send it to a printer.

- 1 Place the original face-down on the scanner glass, as indicated by the reference marks, or face-up in the ADF.
- 2 Select the copy options:
 - Select the number of copies by pressing the **NUMBER OF COPIES** button (). The number of copies appears in the front-panel display.
 - Select how the original is scanned by pressing the **COLOR** button () or **BLACK & WHITE** button ().
- 3 Press the **COPY** button (). The copies are printed on the default printer.

Note: To change any copy settings, such as size, darkness, or the printer, click **Cancel** during processing. The **hp copying** dialog box appears and allows you to change settings.

Note: There is no preview image for the copy function.

cancel a scan

Press the **CANCEL** button () to cancel a scan in progress, or to cancel a series of scans when you are scanning from the ADF.

use the Power Save button

Use the **POWER SAVE** button () to turn off the lamp when you are not using the scanner. When you press the **POWER SAVE** button (), the scanner lamp, the small indicator lights, and the front-panel display turn off.

To use the scanner again, press any button on the front panel or start a scan from the HP Director. After a short warm-up cycle, the scan begins.

Your scanner automatically goes into Power Save mode after 15 minutes of non-use. To change this to one hour, open the HP Director, and click **Settings**. Click **Scan Preferences**, and then click the **Quality vs. Speed** tab. Select the **Extend lamp timeout** check box. The scanner stays on for one hour before going into Power Save mode.

change settings

You can change many scan settings from the HP Photo & Imaging software. These include button settings, preferences for automatic exposure, and file destination. Open the HP Director, make sure that the hp scanjet 5590 digital flatbed scanner is selected, and then click **Settings**.

scan text for editing

The scanner uses optical character recognition (OCR) to convert text on a page to text that you can edit on your computer. The OCR software is installed automatically when you install the HP Photo & Imaging software.

For information about using the OCR software, see **scan text for editing** in the online Help.

2

how to scan from the automatic document feeder

This section explains how to use the automatic document feeder (ADF) for the HP Scanjet 5590 scanner.

choose acceptable media for the ADF

The ADF works best when the originals meet the following specifications. If the originals do not meet these criteria, scan from the scanner glass.

- For one-sided scanning, you can use legal-size paper: 210 mm by 355.6 mm (8.5 by 14 inches).
- For two-sided scanning, use A4-size or letter-size media. The ADF cannot scan both sides of a document smaller than 127 mm by 127 mm (5 by 5 inches) or larger than 210 mm by 304.8 mm (8.5 by 12 inches).
- Custom-size media ranging from 88.9 mm by 127 mm (3.5 by 5 inches) to 216 mm by 356 mm (8.5 by 14 inches) can be scanned with the one-sided option.

Tip: To scan both sides of a legal-size document, 216 mm by 356 mm (8.5 by 14 inches), scan one side in the ADF, turn the document over, and then scan the other side in the ADF.

- Media weights from 60 to 90 grams per square meter (g/m^2) (16 to 24 lbs).
- Media that does not contain perforations or punch holes.
- Media that does not contain wet glue, correction fluid, or ink.

Note: Avoid putting multipart forms, transparencies, magazine pages, gum-backed pages, and lightweight paper in the ADF.

Before placing an original in the ADF, check for and remove curls, wrinkles, staples, paperclips, and any other attached material.

load originals in the ADF

- 1 Place a stack of similarly sized documents face-up in the document input tray, with the first page on top.



Load a document and center it in the ADF tray

- 2 Adjust the paper guides to center the stack.
- 3 Press a scanner button or use the HP Director to begin scanning. Follow the instructions on the computer screen to finish scanning.

scan two-sided documents from the ADF

When you scan documents from the ADF, the **What are you scanning?** dialog box appears. Select **Yes, scan both sides** for two-sided scanning.


The ADF is unable to scan both sides of documents longer than 12 inches. To scan longer two-sided documents, you must set the ADF to scan only one side at a time. To change this setting, clear the **Yes, scan both sides** option in the **What are you scanning?** dialog box.

One-sided scanning is the default method for the ADF. To change this default to two-sided scanning, open the HP Director, click **Settings** and then click **Scan Preferences**. Click the **Automatic** tab, and then select the setting that you want to assign as the default.

Note: Use A4- or letter-size media for two-sided scanning. The ADF cannot scan both sides of a document smaller than 127 mm by 127 mm (5 by 5 inches) or larger than 210 mm by 304.8 mm (8.5 by 12 inches).

If you are acquiring your scan from an imaging software program using TWAIN, the Commercial Scanjet 5590 TWAIN software offers additional capabilities for brightness and contrast, and improved performance and control for two-sided scanning. For more information about installing the Commercial Scanjet 5590 TWAIN software, see **install the scanning software** on page 1.

make copies from the ADF


You can use the **Copy** button () to scan multiple originals from the ADF and send them to a printer. The copy function defaults to the setting used the last time you made copies. For two-sided copies, open the HP Director, and then click **Make Copies**. Select the **Duplex** option in the **hp copying** dialog box. For more information, see **print copies** on page 5.

3

how to scan slides and negatives

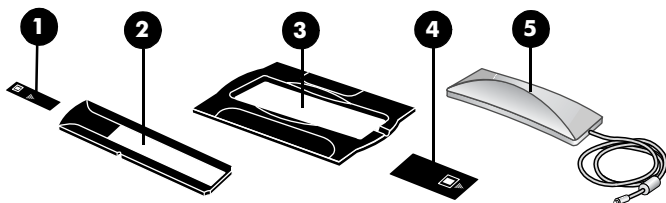
This section contains information about setting up and using the transparent materials adapter (TMA) to scan slides and negatives. You can use the TMA to scan 35 mm slides or negatives.

tips for scanning transparent items

- To scan items larger than those that the TMA accepts, place the transparency on the scanner glass, place a white sheet of paper on top of the transparency, and then scan as usual.
- When scanning a 35 mm slide or negative, the scanner software automatically enlarges the image to approximately 11 cm by 15 cm (4 by 6 inches). If you want the final image to be larger or smaller, use the Resize tool in the scanner software to set the scaling to the final size that you want. The scanner will scan the item at the proper resolution and enlargement for the size that you select.
- To scan 35 mm slides or negatives by using the TMA, press the **SCAN PICTURE** button () on the front of the scanner, or click **Scan Picture** in the HP Director.

set up the TMA

The TMA includes a light source, a positioning plate, and media holders that are placed directly on the top of the scanner glass. Make sure you have all the components of the TMA.



TMA components

- 1- Negative light shield
- 2- Negative holder
- 3- Positioning plate
- 4- Slide light shield
- 5- Light source and slide holder

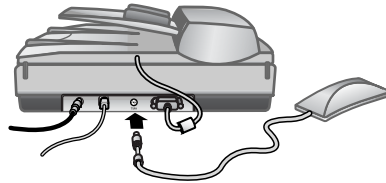
to connect the TMA cable to its port on the scanner

- 1 Disconnect the power cable from the scanner.
- 2 On the back of the scanner, find the round TMA port.
- 3 Holding the TMA cable by its free end, align the connector so that the arrow is on the top side.

- 4 Gently insert the connector into the TMA port.

Caution! Do not force the cable into the TMA port. Forcing the cable can bend or break internal pins.

- 5 Reconnect the power cable.



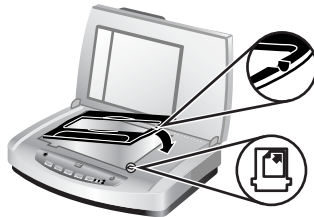
TMA cable and port

scan slides or negatives

To scan standard 35 mm slides or negatives, use the TMA light source and the positioning plate. For negatives, you need the negative holder. When scanning fewer than three slides, you will need the slide light shield; when scanning fewer than four negative frames, you will need the negative light shield.

to start the scanning process

- 1 Place the positioning plate on the scanner glass, and match the reference mark on the plate to the reference mark on the scanner.



Place the positioning plate on the scanner glass

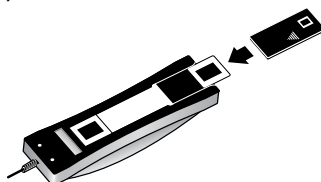
- 2 Insert slides or negatives into the TMA light source.

to load slides into the TMA light source

- 1 Insert up to three slides into the slide holder on the bottom side of the TMA light source.

Note: Make sure that the shiny side faces the scanner glass when the TMA light source is in the position on the scanner glass. (The emulsion side is dull.)

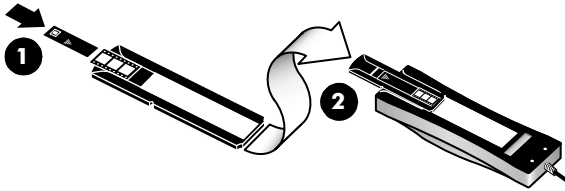
- 2 If you are scanning fewer than three slides, insert the slide light shield after you load the last slide.



Insert a slide into the slide holder with a slide light shield

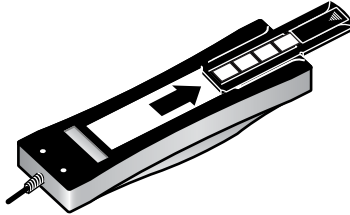
to load negatives into the TMA light source

- 1 Load a negative strip into the negative holder.
Note: Make sure that the shiny side faces the scanner glass when the TMA light source is in position on the scanner glass. (The emulsion side is dull.)
Caution! Negatives are easily damaged. Touch them only on their edges.
- 2 If you are scanning a negative strip with fewer than four frames, insert the negative light shield after you load the negative strip. Use the arrow icons on the negative light shield to position it correctly.
- 3 Slide the negative holder into the slide holder on the bottom side of the TMA light source.



- 1 - Load the negative strip into the negative holder with a negative light shield
- 2 - Slide the negative holder into the slide holder of the TMA light source

Note: The negative holder is stored in the TMA light source, within the slide holder.




to complete the scanning process

- 1 Place the TMA light source into the positioning plate with the slides or negatives facing down. The TMA cable should fit in the groove that is on the same end of the positioning plate as the reference marks.



Place the TMA light source on the positioning plate

- 2 Press the **SCAN PICTURE** button () on the front of the scanner.

- 3 In the scan preview, select the area of the slide or negative that you want to scan. Click and hold the selection handle that you want to move and adjust the area to frame the final scan area of the image.



Final scan area

Note: For information about rotating the image, adjusting color or size, or making other changes to the image, see **adjust an image during the preview** in the HP Photo & Imaging software Help.

- 4 Click **Accept** when the image adjustments are complete.

To keep the TMA light source on beyond the default period, select the **Extend lamp timeout** setting in the software. Open the HP Director, click the **Settings** menu, click **Scan Preferences**, and then click the **Quality vs. Speed** tab.

4

care and maintenance

This section presents information about how to care for and maintain the scanner.

Occasional cleaning of your scanner helps ensure optimal performance. The amount of care necessary depends upon several factors, including the amount of use, the type of media that is fed through the ADF, and the environment. You should perform routine cleaning as necessary.

Routine cleaning and maintenance should include cleaning the scanner glass, the TMA, and the ADF.

Caution! Avoid placing items that have sharp edges in the scanner. Doing so can damage the scanner. Before placing an item on the scanner glass, make sure that the item does not contain wet glue, correction fluid, or other substances that can be transferred to the glass.

clean the scanner glass

- 1 Disconnect the universal serial bus (USB) cable and power cable from the scanner.
- 2 Clean the glass by using a soft, lint-free cloth that has been sprayed with a mild glass cleaner, and dry the glass with a dry, soft, lint-free cloth.

Caution! Use only glass cleaner. Avoid 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.

Do not spray the glass cleaner directly on the glass. If too much glass cleaner is applied, the cleaner could run to the edges and damage the scanner.

- 3 When you have finished, reconnect the USB cable and power cable to the scanner.

Note: For instructions about how to clean the underside of the scanner glass, visit www.hp.com/support.

clean the TMA

Clean the TMA with a dry, soft cloth. If necessary, lightly spray the cloth with glass cleaner and wipe the TMA.

clean and maintain the ADF


The ADF requires periodic cleaning depending on the amount of use and the type of media that is fed through it. Use an HP ADF cleaning cloth to clean the ADF when vertical streaks appear in images scanned by using the ADF, when

media running through the ADF is dusty or dirty, or when the environment is dusty. If you use the ADF several times per week, monthly cleaning is recommended. Set up a cleaning routine that is appropriate for your scanner.

Use the following methods to clean the ADF:

- **run the cleaning cloth through the ADF**
- **clean the ADF window**
- **clean the feed-roller assembly manually**

run the cleaning cloth through the ADF

- 1 Open the sealed container, starting at the notch. Take care not to tear the cleaning cloth that is inside.
- 2 Remove the cleaning cloth and unfold it.
- 3 Place the unfolded cloth into the paper input tray.
- 4 Press the **SCAN DOCUMENT** button ().
The cleaning cloth runs through the ADF.

Caution! Wait two minutes to allow the components to dry before proceeding to the next step.

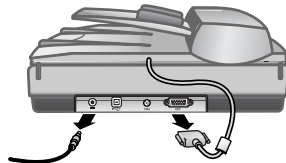
- 5 Place up to five pages of printed paper in the paper input tray. Scan and view the results.
- 6 If streaks still appear, repeat steps 3 through 5.
The cleaning cloth can be cycled through the ADF up to five times.

Note: If you still have streaks in your scanned image after running the cleaning cloth through the ADF, you might need to clean the ADF window.

clean the ADF window

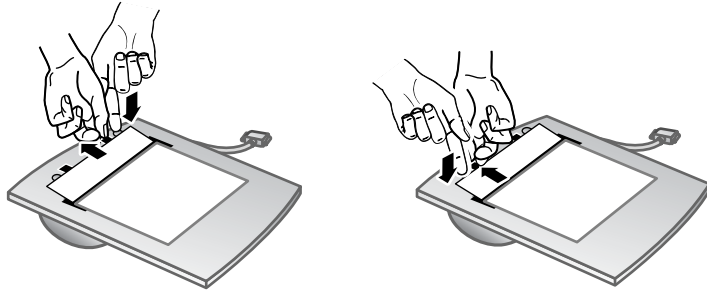
If streaks exist on your scanned images, cleaning the ADF window might solve the problem. Use the following steps to remove the clear ADF window, clean it, and replace it in the ADF.

- 1 Unplug the power cord and the connector from the scanner to the ADF.

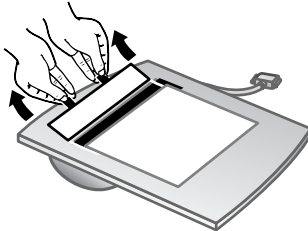


- 2 Remove the ADF from the scanner by opening the ADF and lifting it straight up.
- 3 Unlock the ADF window.
 - a. Locate the clear ADF window containing the blue-green rectangles on the underside of the ADF.
 - b. Press down one of the tabs next to the blue-green rectangle.
 - c. Pull the blue-green rectangle toward the closest end of the scanner.

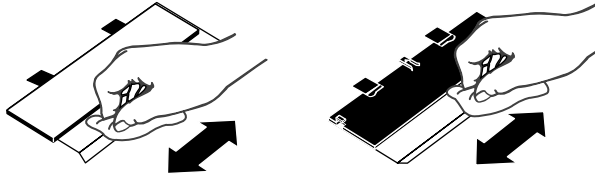
- d. Repeat these steps for the other tab and blue-green rectangle.



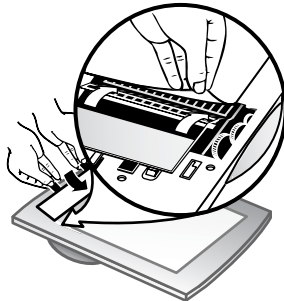
- 4 Remove the ADF window from the ADF.



- 5 Wipe the clear plastic area with an HP ADF cleaning cloth or a clean, dry lint-free cloth. Clean both sides before replacing. Make sure that each side is dry and free of spots.



- 6 Replace the ADF window.
- a. Gently lift the edge of the large gray plastic film attached to the bottom of the ADF.
 - b. Slide the clear side of the edge of the clear ADF window under the gray plastic film.
 - c. Slide the clear ADF window forward until it clicks into place.
 - d. Make sure that the small blue-green rectangle at the center of the optic latches underneath the gray tab and not above the tab.



- 7 Place the ADF on the scanner.

- 8 Connect the ADF connector to the scanner, and then connect the power cord to the scanner.
- 9 Use the ADF to scan up to five documents. View the results. If streaks still exist on the scanned images, call HP Customer Support. It may be necessary to order a new clear ADF window/optic assembly (C9915-60011).

clean the feed-roller assembly manually

- 1 Open the hatch, and then lift the green tab to the fully open position. The feed-roller assembly should be in a nearly vertical position.



Lift the green tab to expose the feed rollers

- 2 Use an HP ADF cleaning cloth (C9915-60056) to clean each of the feed rollers and the small rubber pad that is located below the rollers.
Note: If you do not have the HP ADF cleaning cloth, use a lint-free cloth that has been dampened with isopropyl alcohol.
- 3 Wipe the area around the small rubber pad to remove any paper dust.
- 4 Lower the green tab and feed-roller assembly.
- 5 Close the hatch

maintain the ADF

If misfeeds are occurring frequently follow these steps:

- 1 Clean the feed-roller assembly manually. See **clean and maintain the ADF**.
- 2 See the online Help for information about resolving ADF problems.
- 3 If the misfeeds continue, order and install the ADF Roller Replacement kit (C9937-68001). The ADF Roller Replacement kit contains a roller mechanism, a separation pad, new screws for the separation pad and replacement instructions (see **order maintenance supplies** for more information).

order maintenance supplies

You can purchase maintenance parts online at www.hp.com/support/scannersupplies. Items such as HP ADF cleaning cloths or the ADF Roller Replacement kit are available for worldwide delivery.

5

troubleshooting

This section contains solutions for common problems with the scanner, the automatic document feeder (ADF), and the transparent materials adapter (TMA).

scanner installation or setup problems

This section contains solutions for installation and setup problems.

check your computer

- Make sure that your computer meets the minimum system requirements, which are listed on the scanner box and in the **scanner installation or setup problems** section of the online Help file.
- If you do not have enough hard-disk space, remove unnecessary files or install the software on a different disk drive.

use administrative privileges

If you are installing the scanner on a Microsoft® Windows® 2000 or Windows XP computer, you must be logged on as an Administrator. See your operating system Help for how to log on as an Administrator.

use a valid folder

On a Microsoft Windows computer, if you receive a message such as “Destination Directory Is Invalid” or “Program Folder Is Invalid” during installation, you might not have read/write permissions to that folder.

check the cables

Cable type	Action
Power cable	<p>The power cable is connected between the scanner and an AC outlet.</p> <ul style="list-style-type: none">• Ensure that the power cable is securely connected between the scanner and a live electrical outlet or surge protector.• If the power cable is connected to a surge protector, ensure that the surge protector is plugged into an outlet and turned on.• Disconnect the power cable from the scanner and turn off the computer. After 60 seconds, reconnect the power cable to the scanner and then turn on the computer, in that order.

Cable type	Action
USB cable	<p>The USB cable is connected between the scanner and the computer.</p> <ul style="list-style-type: none"> • Use the cable that was included with the scanner. Another USB cable might not be compatible with the scanner. • Ensure that the USB cable is securely connected between the scanner and the computer. <p>For additional USB troubleshooting information, see www.hp.com/support, select your country/region, and then use the search tool to find USB troubleshooting topics.</p>

Macintosh users: Use the Apple System Profiler to make sure that the scanner is connected to the computer correctly.

scanner initialization or hardware problems

This section contains solutions for initialization and hardware problems.

reset the scanner

- If you receive an error message similar to “Scanner initialization failed” or “Scanner not found” when trying to use the scanner, use the following procedure:
 - a. Close the HP Scanning software if it is open.
 - b. Disconnect the cable that connects the scanner to the computer.
 - c. Turn the scanner off by disconnecting the power cable.
 - d. Turn the computer off, wait 60 seconds, and then turn the computer on again.
 - e. Turn the scanner on by reconnecting the power cable.
 - f. Reconnect the cable that connects the computer and the scanner (use a different USB port on the computer if possible).
- A “00” in the LCD on the front panel of the scanner indicates that a USB connection error has occurred. Check that the USB cable is securely connected between the scanner and the computer.
- Make sure that the USB cable is connected to the back of the scanner correctly. The USB symbol on the end of the cable (the connector) should be facing up. When connected correctly, the USB connector will feel slightly loose. When connected incorrectly, the USB plug will feel overly tight.
- Try connecting the USB cable to a different USB port on your computer.

If the scanner still fails to initialize, run the Repair utility (Windows computers only). For more information about the Repair utility, see **scanner has stopped working properly**.

scanner has stopped working properly

If the scanner stops scanning, complete the following steps, in order. After each step, start a scan to see if the scanner is working. If the problem continues, proceed with the next step.

- A cable might be loose. Ensure that both the USB cable and power cable are securely connected.
- Unplug the power cable from the power source, wait 60 seconds, and then plug it back in.
- Restart your computer.
- A software conflict might exist on your computer. You might need to reinstall the HP Photo & Imaging software. To do this, run the Repair utility (Windows computers only).
 - a. Click **Start**, click **Settings**, and then click **Control Panel** (in Windows XP, click **Start**, and then click **Control Panel**).
 - b. Click **Add/Remove Programs**, and then select the **HP Photo & Imaging** software.
 - c. Click **Add/Remove** (or **Change**, depending on your version of Windows).
 - d. Follow the instructions on the computer screen, and then click **Repair**.
- Install the scanner on another computer. This helps determine whether the problem is related to the computer or to the scanner.

If the scanner still does not work, visit www.hp.com/support or contact HP Customer Support. For more information about support, see **product support** on page 20.

additional troubleshooting information

To solve other problems with the scanner, use the Help system. To gain access to the Help, open the HP Director, click **Help**, and then click **HP Scanjet 5590 scanner help**. This Help system provides information about the HP Scanjet 5590 scanner as well as information about the HP Photo & Imaging software itself.



product support

This section contains support information, including phone numbers and website information.

accessibility website

Customers with disabilities can get help by visiting www.hp.com/hpinfo/community/accessibility/prodserv/.

hp scanjet website

Visit www.hp.com for a variety of information:

- learn tips for scanning more effectively and creatively
- gain access to HP Scanjet driver updates and software
- register your product
- subscribe to newsletters, driver and software updates, and support alerts
- purchase accessories

support process

The HP support process works most effectively if you perform the following steps in the order specified:

- 1 Review the electronic Help for the software and scanner, including the Troubleshooting section.
- 2 Go to the HP Consumer Support Website for support. If you have access to the Internet, you can obtain a wide range of information about your scanner. Visit the HP website for product help, drivers, and software updates at www.hp.com/support. The HP Consumer Support Website is available in the following languages: Dutch, English, French, German, Italian, Portuguese, Spanish, Swedish, Traditional Chinese, Simplified Chinese, Japanese, Korean. (Danish, Finnish, and Norwegian support information is available in English only.)
- 3 Use HP e-support. If you have access to the Internet, connect with HP via e-mail by going to www.hp.com/support. You will receive a personal reply from an HP Product Support technician. E-mail support is available in the languages listed at that website.
- 4 Contact your local HP dealer. If your scanner has a hardware failure, take it to your local HP dealer for a solution. Service is free during your scanner's limited warranty period. After the warranty period, the dealer will quote a service charge.

- 5 Contact the HP Product Support Center for support by phone. Please consult the following website to check the details and conditions of phone support in your country/region: www.hp.com/support. As a part of HP's continuing efforts to improve phone support information services, we advise you to check the HP website on a regular basis for new information regarding service features and delivery. If you cannot solve the problem by using the above options, call HP while you are in front of your computer and scanner. For faster service, please be prepared to provide the following information:

- the scanner's model number (located on the scanner)
- the scanner's serial number (located on the scanner)
- the computer's operating system
- the version of the scanner software (located on the scanner's CD label)
- messages displayed at the time the situation occurred

The applicable conditions for HP phone support are subject to change without notice.

Telephone support is free from the date of purchase for the period specified unless otherwise noted.

Locations	Phone-support period
Africa	30 days
Asia Pacific	1 year
Canada	1 year
Europe	1 year (See the following tables for details for each country.)
Latin America	1 year
Middle East	30 days
United States	1 year

phone support in the United States

Support is available both during and after the warranty period.

Within the period of your warranty, telephone support is provided free of charge. Call 800-HPINVENT (800-474-6836).

U.S. phone support is available in both English and Spanish 24 hours a day, 7 days a week (days and hours of support might change without notice).

After the warranty period, call 800-HPINVENT (800-474-6836). Charges are \$25.00 U.S. per issue, and are charged to your credit card. If you think your HP product needs service, call the HP Product Support Center, which can help determine if service is required.

phone support in Europe, Middle East, and Africa

HP Product Support Center phone numbers and polices can change. Visit the following website to check the details and conditions of phone support in your country/region: www.hp.com/support.

Algeria	+213 (0) 61 56 45 43
Austria	+43 (0) 820 87 4417
Bahrain	+973 800 728

Belgium	+32 070 300 005 (Dutch) +32 070 300 004 (French)
Czech Republic	+42 (0) 2 6130 7310
Denmark	+45 70202845
Egypt	+20 02 532 5222
Finland	+358 (0)203 66 767
France	+33 (0) 8 92 69 60 22 (Euro 0.34/min)
Germany	+49 (0) 180 5652 180 (Euro 0.12/min)
Greece	+30 10 60 73 603
Hungary	+36 (0) 1 382 1111
Ireland	+353 1890 923902
Israel	+972 (0) 9 830 4848
Italy	+39 848 800 871
Luxembourg	900 40 006 (French) 900 40 007 (German)
Morocco	+212 224 04747
Netherlands	0900 2020165 (Euro 0.10 per minute)
Norway	+47 815 62 070
Poland	+48 22 865 98 00
Portugal	+351 808 201 492
Romania	+40 1 315 44 42
Russian Federation	+ 7 095 797 3520 (Moscow) + 7 812 346 7997 (St. Petersburg)
Saudi Arabia	+966 800 897 1444
Slovakia	+421 2 6820 8080
South Africa	086 000 1030 (RSA) +27-11 258 9301 (Outside RSA)
Spain	+34 902 010 059
Sweden	+46 (0) 77-120 4765
Switzerland	+41 0848 672 672 (German, French, Italian – Peak time 0.08 CHF/Outside peak 0.04 CHF)
Tunisia	+216 1 891 222
Turkey	+90 216 579 71 71
Ukraine	+7 (380 44) 490-3520
United Arab Emirates	+971 4 883 845
United Kingdom	+44 (0)870 010 4320

other phone support worldwide

HP Product Support Center phone numbers and polices can change. Visit the following website to check the details and conditions of phone support in your country/region: www.hp.com/support.


Argentina	+54 11 4778 8380 0 810 555 5520
Australia	+63 (3) 8877 8000 (or local (03) 8877 8000)
Brazil	0800 157751 (11) 3747 7799
Canada	+1 800 hpinvent (or +1 800 474 6836) +1 905 206 4663 (Inside the Mississauga area)
Central America and the Caribbean	+1 800 711 2884
Chile	800 360 999
China	+86 (21) 3881 4518
Colombia	01 800 011 4726
Costa Rica	0 800 011 0524
Dominican Republic	1 800 7112884
Guatemala	1800 999 5105
Hong Kong SAR	+852 2802 4098
India	1 600 447737
Indonesia	+62 (21) 350 3408
Jamaica	0-800-7112884
Japan	0570 000 511 (Inside Japan) +81 3 3335 9800 (Outside Japan)
Korea, Republic of	+82 1588-3003 (Seoul) 0 80-999-0700 (Outside Seoul)
Malaysia	+60 1 800 805 405
Mexico	01-800-4726684 (55) 5258 9922
New Zealand	+64 (9) 356 6640
Nigeria	+234 1 3204 999
Panama	001 800 7112884
Peru	0 800 10111
Philippines	+ 63 (2) 867 3551
Puerto Rico	+1 877 2320 589
Singapore	+65 6272 5300
Taiwan	+886 0 800 010055
Thailand	+66 (0) 2 353 9000
Trinidad & Tobago	1 800 7112884
United States	1 800 474-6836 (800 HPINVENT)
Venezuela	01 800 4746 8368
Vietnam	+84 (0) 8 823 4530

7

regulatory information and product specifications

This section contains regulatory information and product specifications for the HP Scanjet 5590 scanner and accessories.

scanner specifications (with ADF where indicated)

Name	Description
Scanner type	Flatbed with automatic document feeder (ADF)
Weight with ADF	5.7 kg (12.6 lbs)
Size with ADF	488 mm by 340 mm by 162 mm (19.21 by 13.39 by 6.38 inches)
Scanning element	Charged-coupled device
Interface	USB 2.0 Hi-Speed
Optical resolution	2400 by 2400 dpi hardware
Selectable resolution	12 dpi to 999,999 enhanced dpi at 100 percent scaling
AC line voltage	100-120 V 60 Hz – North America 200-240 V 50 Hz – Continental Europe, United Kingdom, Australia 100-240 V 50 Hz/60 Hz – Rest of the world
Power consumption and regulatory information	For power consumption data, information on power supplies and regulatory information see the regulatory_supplement.htm file on the HP Photo & Imaging software CD.
	The HP Scanjet 5590 scanner is ENERGY STAR® compliant. As an ENERGY STAR® partner, Hewlett-Packard Company has determined that this product meets the ENERGY STAR® guidelines for energy efficiency.

transparent materials adapter (TMA) specifications

Name	Description
Media types	Three 35 mm slides or one 35 mm negative strip
Media capacity	Slide: 1.05 mm to 1.9 mm thick and 49.8 mm to 50.8 mm on any side
Size	287 mm by 84 mm by 50 mm (11.3 by 3.3 by 1.97 inches)
Weight	346 g (0.763 lbs)
Power requirements	12.0 V DC, 575 mA, 6.9 watts< (supplied by scanner)

automatic document feeder (ADF) specifications

Name	Description
Size	475 mm by 320 mm by 92 mm (18.7 by 12.6 by 3.6 inches)
Weight	2.46 kg (5.4 lbs)
Paper tray capacity	50 pieces of 75 g/m ² (20-lb bond)
Maximum paper size	One-sided scanning: 210 mm by 355.6 mm (8.5 by 14 inches) Two-sided scanning: 210 mm by 304.8 mm (8.5 by 12 inches)
Minimum paper size	One-sided scanning: 89 mm by 127 mm (3.5 by 5 inches) Two-sided scanning: 127 mm by 127 mm (5 by 5 inches)
Maximum paper weight	90g/m ² (24 lbs)
Power requirements	1.0 A, 32 V, 32 watts (supplied by scanner) 800 mA, 19 watts (peak) 625 mA, 15 watts (nominal)

environmental specifications for the scanner, ADF, and TMA

Name	Description
Temperature	Operating the scanner and TMA: 10° to 35° C (50° to 95° F)
	Operating the ADF: 10° to 30° C (50° to 85° F)
	Storage: -40° to 60° C (-40° to 140° F)
Relative humidity	Operating the scanner, ADF, and TMA: 15 percent to 80 percent noncondensing 10° to 35° C (50° to 95° F)
	Storage: up to 90 percent at 0° to 60° C or (32° to 140° F)

purchase accessories

You can purchase accessories at your local retailer or online at www.hpshopping.com (USA only). For other regions, use www.hp.com and select your language. Then select the shopping section.

www.hp.com

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