

HP PhotoSmart S20 Photo Scanner Basics



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Chapter 1 - Introduction

Welcome to the HP PhotoSmart S20 Photo Scanner Basics guide. The S20 photo scanner is a compact scanner designed specifically for scanning photographs. It can scan these photographic formats:

- Mounted film — 35 mm mounted slides and mounted negatives
- Film strips — 35 mm negative strips and slide strips, up to 5 frames scanned at a time
- Prints — up to a maximum size of 5 inches x 7 inches (or 127 mm x 178 mm)

The S20 photo scanner also comes with the HP PhotoSmart scanning software for adjusting and storing scanned images with your PC.

This Basics guide helps you quickly set up the HP PhotoSmart scanning software and S20 photo scanner with your PC. This guide then explains how to scan mounted film, film strips, and prints with your photo scanner.

Note: For information on using the scanning software, please see the HP PhotoSmart Scanning Software Quick Reference and the online Help.

Checking the System Requirements

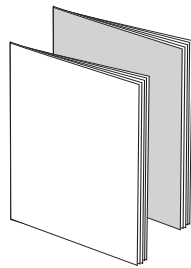
Both the HP PhotoSmart S20 photo scanner and the HP PhotoSmart scanning software work with PCs running either Microsoft® Windows® 95 or Windows 98. The specific system requirements for the photo scanner and scanning software are as follows:

<u>Component</u>	<u>Minimum Required</u>	<u>Recommended</u>
Processor	Pentium® 90 or equivalent	Pentium MMX® or equivalent
RAM	16 MB	32 MB or more
Free hard disk space	100 MB	120 MB
Monitor/video	640 x 480, 256 colors	800 x 600 or more, 16-bit color
CD-ROM drive	Double-speed (2X)	Quad-speed (4X) or better
Sound card/speakers	Not required	16-bit or better
Pointing device	Mouse or compatible Windows pointing device	Mouse or compatible Windows pointing device
USB interface	Available USB port	Available USB port

Unpacking Your Photo Scanner

To unpack your S20 photo scanner, do the following:

1. Remove all the contents from the HP PhotoSmart S20 photo scanner box. You should find the following items in the box along with the photo scanner.



This Basics guide for the S20 photo scanner and the Quick Reference for the HP PhotoSmart scanning software



calibration card *



photo sleeve *



HP PhotoSmart CD-ROM with the scanning software and multimedia tutorials



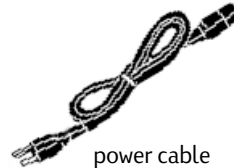
air bulb



cleaning brush



USB interface cable



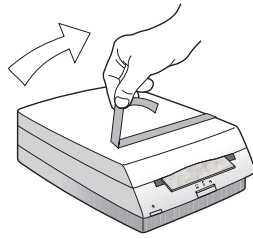
power cable

* Note that both the calibration card and the photo sleeve are packaged in the special pocket inside the back cover of this Basics guide.

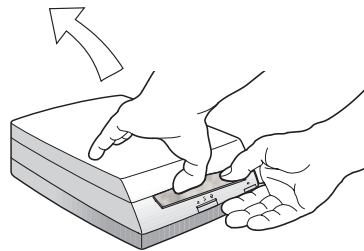
If you notice any damage while unpacking the contents, please notify the retailer where you purchased your photo scanner.

2. Remove the plastic wrapper from around the photo scanner.

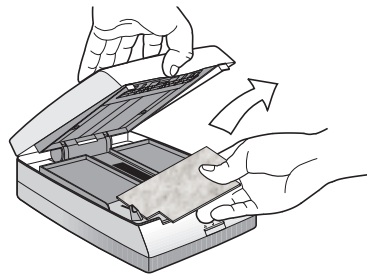
3. Remove the tape from the photo scanner lid.



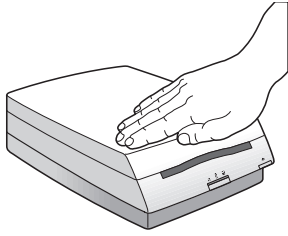
4. Hold the bottom of the photo scanner with one hand and pull up on the photo scanner lid with your other hand.



5. Open the photo scanner lid carefully and remove the foam insert.



6. Close the photo scanner lid by pressing down firmly until it snaps into place.



Note: Do not connect the S20 photo scanner to your PC. You must install the HP PhotoSmart scanning software on your PC (as explained in the next chapter) before you connect the photo scanner to your PC.

What's Next?

You are now ready to set up the HP PhotoSmart scanning software and S20 photo scanner with your PC. To do this, go on to the next chapter, "Quick Setup."

Note: If you ever need help while using the photo scanner, see Chapter 4 starting on page 27 in this guide. Chapter 4 explains how to access the HP PhotoSmart website, view the online Help, and get technical support from Hewlett-Packard Company for your photo scanner.

In addition, if you come across a particular term in this guide that you don't understand, please refer to the Glossary of definitions starting on page 37.

Chapter 2 - Quick Setup

Note: You must install the HP PhotoSmart scanning software on your PC before you connect the S20 photo scanner to your PC.

This chapter helps you quickly set up the HP PhotoSmart scanning software and S20 photo scanner with your PC. By following these simple steps, you'll be ready to scan photographs right away with your photo scanner.

Installing the Software

First, install the HP PhotoSmart scanning software on your PC, as follows:

1. Put the HP PhotoSmart CD into the CD-ROM drive of your PC. Within a minute or so, you will see the HP PhotoSmart setup screen displayed.

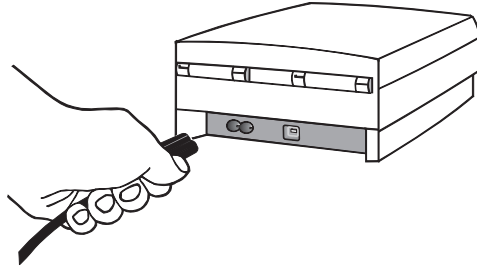
Note: If the HP PhotoSmart setup screen does not display: Click the **Start** button in the Windows taskbar and choose **Run**. Type the drive letter for your CD-ROM drive and the file name `setup.exe` (for example, `D:\setup.exe`). Then click **OK**.

2. Click **Install Software**.
3. Follow the directions on the screen to have the setup program copy the scanning software onto your PC's hard disk.
4. Once the software copying process is complete, the setup program prompts you to restart your computer. If you choose to restart your computer now, it will take a minute or two to do so.
5. The HP PhotoSmart Setup Wizard next prompts you to connect the photo scanner to a power outlet and to your PC. Go on to the next page for specific instructions on how to do this.

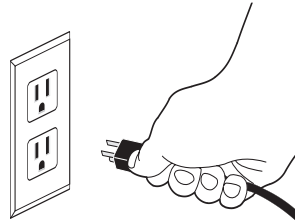
Connecting Your Photo Scanner

When the HP PhotoSmart Setup Wizard prompts you to do so, connect your photo scanner to a power outlet and to your PC, as follows:

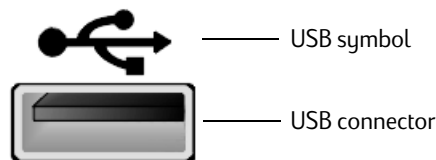
1. Connect the small end plug of the power cable to the power connector on the back of your photo scanner. (The power connector is to the left of the USB connector on the back of the photo scanner.)



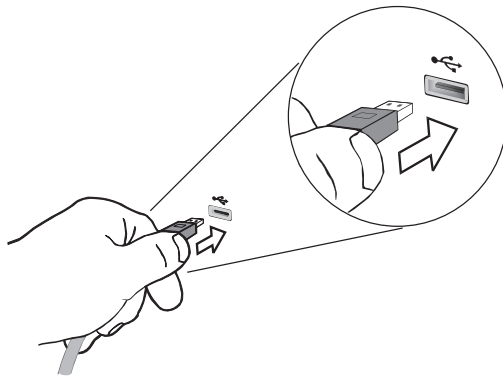
2. Plug the other end of the power cable into a power outlet.



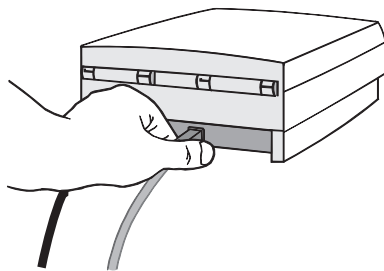
3. Locate the USB connector (or port) on the front or back exterior of your PC. The USB connector looks like this, and should have the distinctive USB symbol printed by it (usually above the connector), as shown here:



4. Connect the rectangular end of the USB interface cable to the USB connector on the front or back exterior of your PC.



5. Connect the square end of the USB interface cable to the USB connector on the back of your photo scanner. (The USB connector is to the right of the power connector on the back of the photo scanner.)



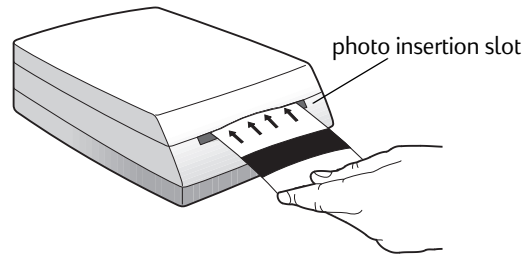
Note: The S20 photo scanner does not have a power switch. Thus, the photo scanner is always on while it is plugged into a power source. The photo scanner does, however, have a “sleep” mode for low power consumption when it is not in use.

6. Click the **Connected** button in the HP PhotoSmart Setup Wizard dialog box, and then go on to the next page.

Calibrating Your Photo Scanner

The Scanner Calibration Utility now prompts you to calibrate your S20 photo scanner.

Get the calibration card from the special pocket inside the back cover of this Basics guide. Then, with the calibration card face up and with the arrows pointing toward the photo scanner, insert the calibration card into the photo insertion slot of the photo scanner.



When the calibration is complete, be sure to put the calibration card back into the pocket of this Basics guide so you will have it for future use.

Registering Your Photo Scanner

The setup program now prompts you to register your S20 photo scanner online, if you wish. If you choose to register it now, simply follow the directions on the screen to complete the registration. If you do not wish to register now, click [Cancel](#), and you will be reminded to register in 2 weeks.

Installing Adobe Acrobat Reader

The setup program now prompts if you want the Adobe® Acrobat® Reader software installed on your PC. Acrobat Reader will allow you to read the HP PhotoSmart hardcopy documentation online, if you wish. If you choose to have Adobe Acrobat Reader installed, it will take a few seconds to do so.

What's Next?

You have now successfully set up the HP PhotoSmart scanning software and S20 photo scanner with your PC. Go on to the next chapter, "Scanning Photographs," to learn how to use your photo scanner.

Chapter 3 - Scanning Photographs

This chapter explains how to scan your photographs — mounted film, film strips, and prints — with the HP PhotoSmart S20 photo scanner.

Scanning photographs consists of these simple steps:

- Running the HP PhotoSmart scanning software on your PC
- Setting the photo scanner for the format of the photograph you want to scan
- Orienting the photograph for insertion into the photo scanner
- Inserting and scanning the photograph

Each of these steps is explained in this chapter. By following these simple steps, you will quickly gain professional-quality scanned images of your photographs from your S20 photo scanner.

Caution: Do not attempt to scan either small prints (less than 2 inches x 2 inches, or 50 mm x 50 mm) or paper clippings (such as magazine or newspaper clippings) without inserting them in the photo sleeve that came with your photo scanner. They may jam the photo scanner or may be destroyed by it. See “Inserting and Scanning Small Prints and Paper Clippings” starting on page 22 for more information.

Note: If you ever need to eject a photograph from the photo scanner during the scanning process, see “Manually Ejecting Photographs” starting on page 24.

Running the Scanning Software

You must first run the HP PhotoSmart scanning software on your PC so that your S20 photo scanner will recognize and then scan the photograph you insert into it. To run the scanning software, either:

- Double-click the HP PhotoSmart scanning software icon on your Windows desktop (if you had the setup program place such an icon, or shortcut, on your Windows desktop during software installation).

OR:

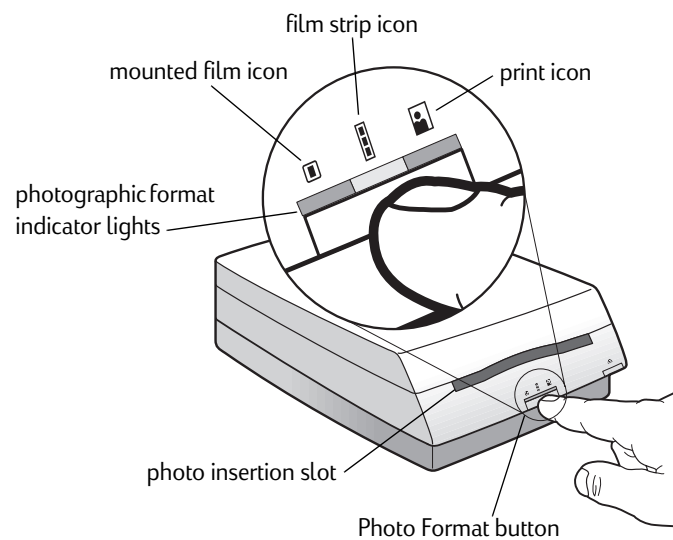
- Click the [Start](#) button in the Windows taskbar, and then choose [Programs > HP PhotoSmart > S20 Photo Scanner > Scanning Software](#).

Note: You can also start the HP PhotoSmart scanning software from inside another software program that supports TWAIN. This allows you to be in the other program and use TWAIN to bring the images you scan with the S20 photo scanner into that other program. For more information, see the online Help.

Setting the Photo Scanner for the Photographic Format

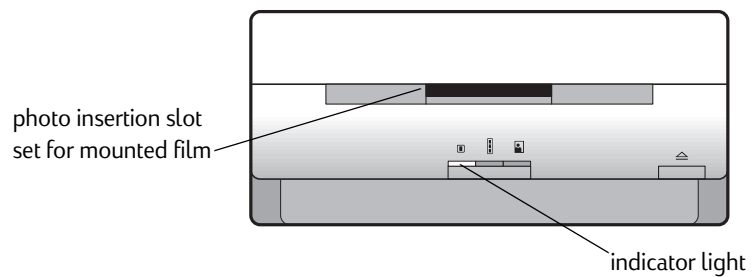
The next step in scanning photographs is to set the S20 photo scanner for the format of the photograph you will scan. To do this, you will use the Photo Format button on the photo scanner's front panel. The Photo Format button sets the photo insertion slot so it will accept the photographic format — mounted film, film strip, or print — that you will scan.

The photo scanner has three icons on its front panel which correspond to the three photographic formats: the mounted film icon, the film strip icon, and the print icon. Below the icons is a row of three indicator lights.

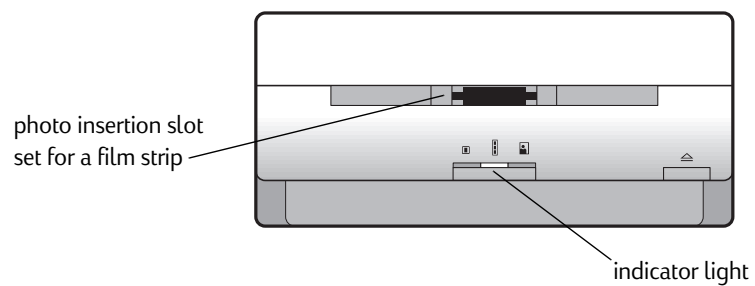


To set the photo scanner for the correct photographic format, press the Photo Format button until the indicator light is blinking under the icon for your photographic format. As shown on the next page, the size of the photo insertion slot changes accordingly to accommodate the photographic format you choose.

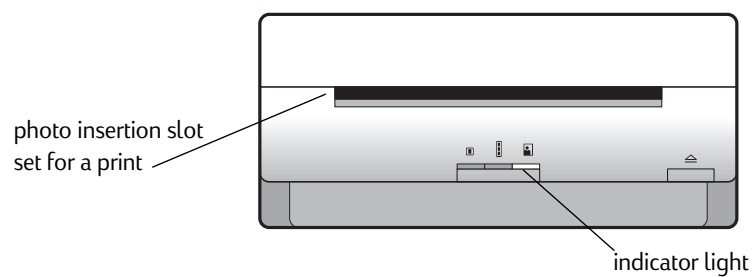
Setting the Photo Scanner for Mounted Film



Setting the Photo Scanner for a Film Strip



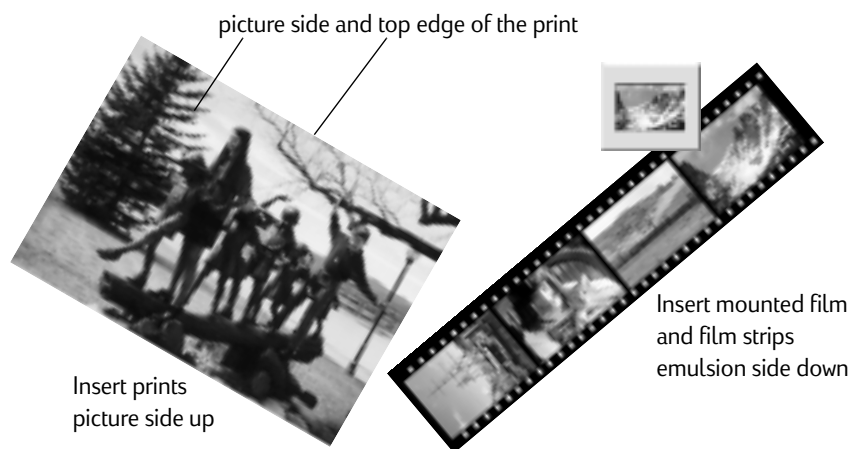
Setting the Photo Scanner for a Print



Orienting Photographs for Insertion

When orienting a photograph for insertion into the S20 photo scanner, you must first determine:

- Which is the emulsion side or picture side (face), and which is the back side of the mounted film, film strip, or print
- Which edge is the top of a print



To orient your photographs properly for scanning, remember to:

- Center the mounted film, film strip, or print in the photo insertion slot.
- Insert prints with the picture side up.
- Insert mounted film and film strips with the emulsion side down. (The emulsion side is dull compared to the shiny base side.)

Tip: For more information on determining the emulsion side of mounted film and film strips, see the online Help.

Inserting and Scanning Photographs

You insert and scan mounted film, film strips, prints, and small prints and paper clippings in different ways with the S20 photo scanner. Please refer to the appropriate subsection for the photographic format you wish to scan.

Inserting and Scanning Mounted Film



Notice that mounted film has short sides and long sides.

To scan mounted film with the S20 photo scanner, your mounted film must be:

- A 35 mm, single-frame slide or negative mounted in a paper or plastic mount. The mount must not be more than 1.8 mm thick.
- Clean and dust-free. (See the online help for information on cleaning mounted film.)
- Inserted with a short side pointing into the photo insertion slot and with the emulsion side down. (The emulsion side is dull compared to the shiny base side.)

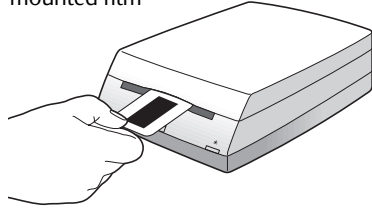
Note: You cannot scan an unmounted or a glass-mounted, single-frame slide or negative in the photo scanner. (You can scan multiple-frame film strips, however. See the next subsection.)

To insert and scan your mounted film, follow these steps:

1. Press the Photo Format button on the photo scanner until the photo insertion slot is set properly for mounted film, as shown in “Setting the Photo Scanner for the Photographic Format” on page 13.
2. Hold the mounted film by its mounting with the emulsion side down. (The emulsion side is dull compared to the shiny base side.)

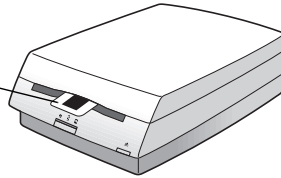
3. **Insert a short side of the mounted film into the photo insertion slot.**

Insert a short side of the mounted film



4. **Gently push the mounted film into the slot until the scanner light comes on and the photo scanner pulls in the mounted film.**

The photo scanner pulls in the mounted film



5. **Begin using the HP PhotoSmart scanning software to adjust or store your scanned image, as explained in the HP PhotoSmart Scanning Software Quick Reference and the online Help.**

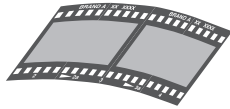
Inserting and Scanning Film Strips



You can scan only 35 mm film strips with the S20 photo scanner — it will not properly scan film strips from either 110 or APS sources.

To scan a film strip with the S20 photo scanner, your film strip must be:

- A 35 mm negative strip or slide strip.
- Clean and dust-free. (See the online Help for information on cleaning film strips.)
- Free of any paper labels.
- Flat — that is, not curled more than shown here:



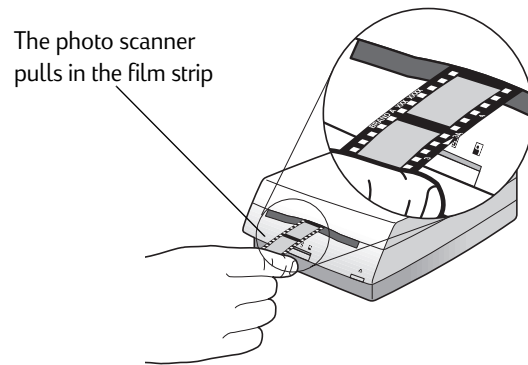
- Inserted with the emulsion side down. (The emulsion side is dull compared to the shiny base side.)

Note: The S20 photo scanner can only scan up to 5 frames of a particular film strip at a time. If your film strip has more than 5 frames, once you scan the first 5 frames, you will need to turn the film strip around and insert it into the photo scanner again to scan the remaining frames.

To insert and scan your film strip, follow these steps:

1. Press the Photo Format button on the photo scanner until the photo insertion slot is set properly for film strips, as shown in “Setting the Photo Scanner for the Photographic Format” on page 13.
2. Hold the film strip by its edges with the emulsion side down. (The emulsion side is dull compared to the shiny base side.)

3. Gently push the film strip into the slot until the scanner light comes on and the photo scanner pulls in the film strip.



4. Begin using the HP PhotoSmart scanning software to adjust or store your scanned images, as explained in the HP PhotoSmart Scanning Software Quick Reference and the online Help.

Inserting and Scanning Prints



Notice that a print has either a landscape orientation (wider than it is tall), or a portrait orientation (taller than it is wide).

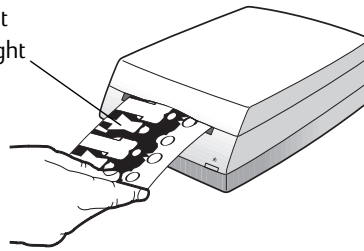
To scan a print with the S20 photo scanner, your print must be:

- No larger than 5 inches x 7 inches (or 127 mm x 178 mm), and no smaller than 2 inches x 2 inches (or 50 mm x 50 mm). (If you have a smaller print you wish to scan, use the photo sleeve as explained in the next subsection.)
- Clean and dust-free. (See the online Help for information on cleaning prints.)
- Inserted picture side up, with the top edge pointing to the right for landscape prints, or with the top edge pointing in for portrait prints.

To insert and scan your print, follow these steps:

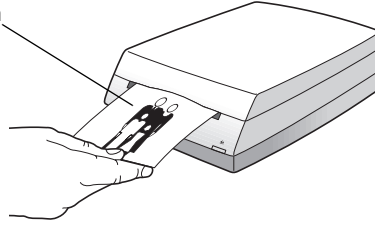
1. Press the Photo Format button on the photo scanner until the photo insertion slot is set properly for prints, as shown in “Setting the Photo Scanner for the Photographic Format” on page 13.
2. Hold the print by its edges with the picture side up.
 - For a landscape print, orient the top edge of the print to the right side of the photo insertion slot, as shown here.

Orient a landscape print
face up, top pointing right



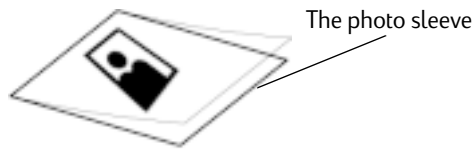
- For a portrait print, orient the top edge of the print directly into the photo insertion slot, as shown here.

Orient a portrait print
face up, top pointing in



3. Gently push the print into the slot until the scanner light comes on and the photo scanner pulls in the print.
4. Begin using the HP PhotoSmart scanning software to adjust or store your scanned image, as explained in the HP PhotoSmart Scanning Software Quick Reference and the online Help.

Inserting and Scanning Small Prints and Paper Clippings



The photo sleeve, which is included in the special pocket inside the back cover of this guide, allows you to scan small prints (less than 2 inches x 2 inches, or 50 mm x 50 mm) or paper clippings (such as magazine or newspaper clippings).

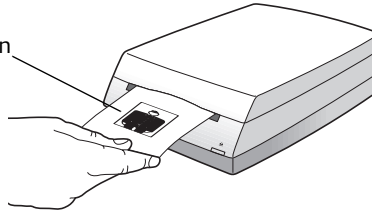
Caution: Never scan small prints or paper clippings without inserting them in the photo sleeve. They may jam the photo scanner or may be destroyed by it.

To insert and scan a small print or paper clipping, follow these steps:

1. Lift the clear cover of the photo sleeve.
2. Insert the print or paper clipping inside the photo sleeve, picture or face side up, as squarely aligned as possible.
 - Insert a landscape print or paper clipping with its left edge toward the photo sleeve's seam.
 - Insert a portrait print or paper clipping with its top edge toward the photo sleeve's seam.
3. Close the clear cover over the print or paper clipping.
4. Press the Photo Format button on the photo scanner until the photo insertion slot is set properly for prints, as shown in "Setting the Photo Scanner for the Photographic Format" on page 13.

5. Insert the photo sleeve into the photo insertion slot face up, with the seam end pointing into the slot, as shown here:

Insert the photo sleeve
face up, seam pointing in



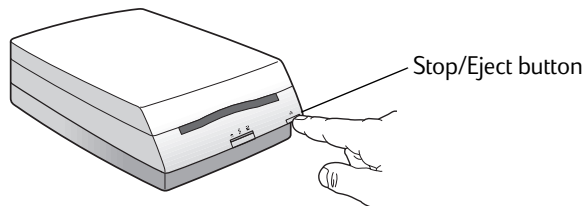
6. Gently push the photo sleeve into the slot until the scanner light comes on and the photo scanner pulls in the photo sleeve.
7. Begin using the HP PhotoSmart scanning software to adjust or store your scanned image, as explained in the HP PhotoSmart Scanning Software Quick Reference and the online Help.

Note: HP recommends against scanning prints smaller than 2 inches x 2 inches (or 50 mm x 50 mm) without using the photo sleeve. If you must scan a smaller print without the photo sleeve:

1. Set the photo insertion slot for prints.
2. Insert the print into the center of the slot. (The sensor that detects prints is located in the middle of the slot.)

Manually Ejecting Photographs

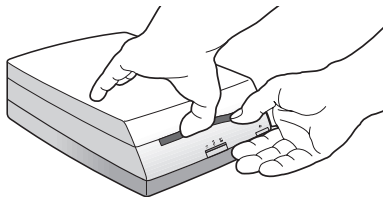
You can manually eject a photograph from the S20 photo scanner at any time during the scanning process. To do so, simply press the Stop/Eject button, as shown:



- If you press the Stop/Eject button while a photograph is moving into the photo scanner, the photograph will stop moving. You must press the button again to eject the photograph.
- If you press the Stop/Eject button while a photograph is being scanned, the scanning will stop and the photograph will be ejected.

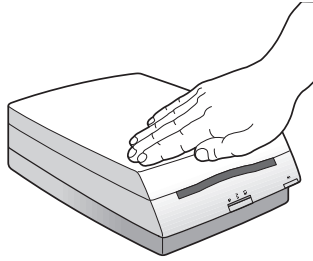
If your photograph does not eject from the photo scanner after you press the Stop/Eject button several times, you will need to open the photo scanner lid and remove the photograph, as follows:

1. Hold the bottom of the photo scanner with one hand and pull up on the photo scanner lid with your other hand.



2. Open the photo scanner lid carefully about 2 inches and then remove your photograph. Be sure you do not touch any of the glass windows inside the photo scanner.

3. Close the photo scanner lid by pressing down firmly until it snaps into place:



Learning More About Your Photo Scanner

You've now learned all the basics for using the HP PhotoSmart S20 photo scanner to scan your photographs. For more information on using your S20 photo scanner:

- Go through the Imaging Essentials Multimedia tutorials that are provided on the HP PhotoSmart CD. To run the tutorials, from the Windows Start menu choose [Programs > HP PhotoSmart > S20 Photo Scanner > Imaging Essentials Multimedia](#). You will be prompted to insert the HP PhotoSmart CD into a CD-ROM drive of your PC.
- Look in the online Help. The online Help contains “how to,” reference, and troubleshooting information for your photo scanner, including some multimedia video clips on particular topics. To learn how to view the online Help, see “Viewing Online Help” starting on page 27 in this guide.

To learn how to use the HP PhotoSmart scanning software, see the HP PhotoSmart Scanning Software Quick Reference and the online Help. Multimedia tutorials for the scanning software are also included on the HP PhotoSmart CD.

Finally, if you ever need help with your S20 photo scanner, see the next chapter. Chapter 4 explains how to access the HP PhotoSmart website and how to get technical support from Hewlett-Packard Company for your S20 photo scanner.

Chapter 4 - Getting Help for Your Photo Scanner

The HP PhotoSmart S20 photo scanner is designed to be easy to use. When there is a problem, you have several resources for finding a solution.

This chapter explains how you can get help for your S20 photo scanner, including:

- Accessing the HP PhotoSmart website for project ideas, troubleshooting assistance, and updated software
- Viewing the online Help for “how to,” reference, and troubleshooting information for your photo scanner
- Getting technical support from Hewlett-Packard Company for your photo scanner

Accessing the HP PhotoSmart Website

You can get project ideas, troubleshooting assistance, and updated software from the HP PhotoSmart website. For up-to-date information, check here first whenever you have a question about your photo scanner. The address for the website is:

<http://www.photosmart.com>

Viewing Online Help

The HP PhotoSmart S20 photo scanner and scanning software come with a complete online Help system. The online Help is context-sensitive and provides “how-to,” reference, and troubleshooting information for your photo scanner and scanning software.

To view the online Help while the scanning software is running, do any of the following:

- Click the **Help** button in a dialog box to get Help about that dialog box.
- Click the **?** button in a tool to get Help about that tool.
- Right-click a control (such as a button) to get “pop-up” Help about that control.

Some online Help topics also have multimedia video clips that you can watch. To view any of these video clips, simply click the **Movie** button for that online Help topic:

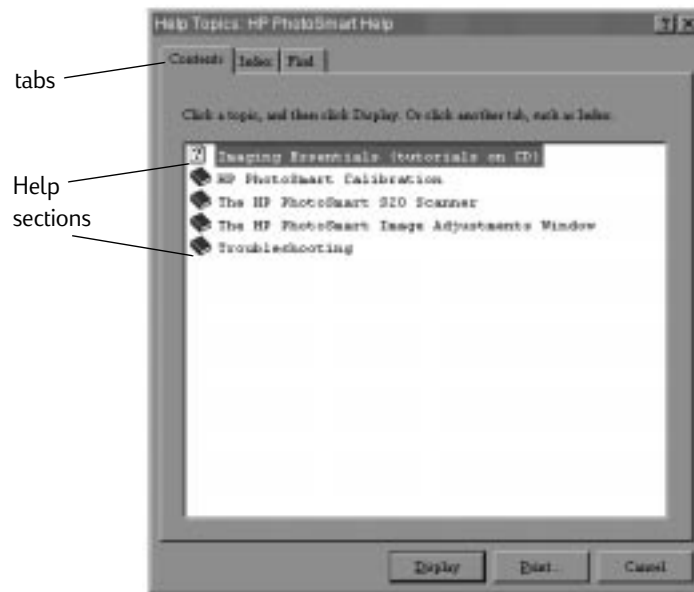


Note: Some multimedia video clips require the HP PhotoSmart CD. You will be prompted for the CD if it is needed and is not already in a CD-ROM drive on your PC.

You can also access the Help Topics dialog box, which lists all the topics in the online Help system. To display the Help Topics dialog box, either:

- Click the [Help Topics](#) button at the top of any Help window (except “pop-up” Help windows).
- From the Windows Start menu, choose [Programs > HP PhotoSmart > S20 Photo Scanner > Help Topics](#).

The Help Topics dialog box opens, as shown:



The information on the Contents tab of the Help Topics dialog box is organized into numerous sections, which are designated as books. Simply double-click a book to open that section, and then double-click the Help topic you want.

You can also click on the other tabs to go to the online Help's Index and Find utilities. Then follow the instructions displayed at the top of each tab to access the online Help information you want.

Note: The reference information provided in the online Help includes the limited warranty, as well as all specifications and regulatory notices for your S20 photo scanner.

Getting Technical Support

No matter where you are or when you need it, Hewlett-Packard Company's technical support is there to help you get the most from your HP products. Whether it's making products easier to use or providing you with innovative new ways to tackle your important projects, HP's technical support helps you be a confident and creative user. If you do encounter a problem with your HP product, don't worry. HP's technical support will deliver fast, accurate solutions to you.

HP has Customer Support Centers worldwide, some of which are listed below.

For a complete listing of HP's technical support services, please see the online Help.

[HP's Customer Support Centers](#)

Note: Replace a + with your international telephone access code.

United States	(208) 376-FOTO (3686)
Canada	English language support: (208) 376-FOTO (3686) French language support: (800) 387-3867
Europe	United Kingdom: 0171 512 5202 France: 04 50 43 9853 Germany: 0180 5 25 81 43 English language support from other European countries: +44 171 512 5202
Australia	(+61 3) 9272 8000
Singapore	(65) 272-5300

Appendix A - Cleaning Your Photo Scanner

If you get streaks in a scanned image that are not in the original photograph you scanned, you may need to clean your HP PhotoSmart S20 photo scanner. This appendix explains how to clean your photo scanner by removing accumulated dust from the glass windows inside it.

Tip: Before performing the cleaning procedure in this appendix, try calibrating the photo scanner to see if that clears up the problem. For information on photo scanner calibration, see the online Help.

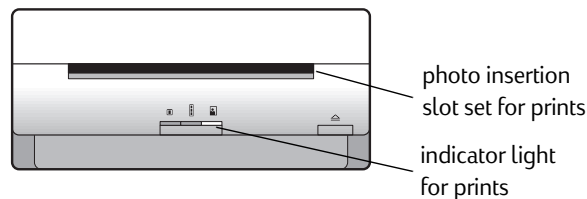
Caution: Be aware of the following so that you do not damage your photo scanner while cleaning it:

- Do **not** use any liquids to clean the inside of the photo scanner.
- Do **not** touch the glass windows inside the photo scanner. You may leave fingerprints that will appear in your scanned images.
- Do **not** use a cloth or brush to clean the glass windows inside the photo scanner. You may scratch the glass, and the scratches will appear in your scanned images.

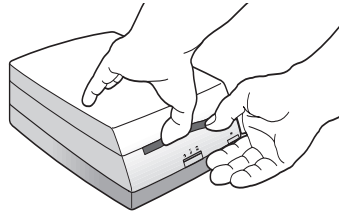
Note: You will need the air bulb that came with your S20 photo scanner for the following cleaning procedure.

To clean your S20 photo scanner, do the following:

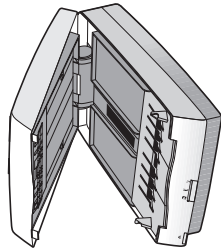
1. Press the Photo Format button on the photo scanner's front panel until the photo insertion slot is set properly for prints, as shown:



2. Hold the bottom of the photo scanner with one hand and pull up on the photo scanner lid with your other hand.

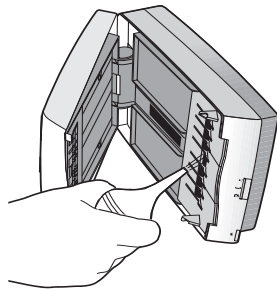


3. Open the photo scanner lid carefully about 3 inches and then lay the photo scanner on its side on a flat surface.

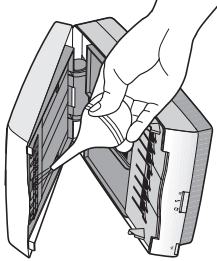


Caution: Do not touch the glass windows inside the photo scanner with the air bulb.

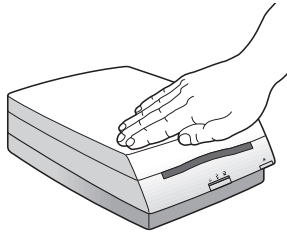
4. Use the air bulb that came with your photo scanner to blow the dust off the small glass window in the front bottom of the photo scanner between the rollers.



5. Use the air bulb to blow the dust off the long glass window in the front top of the photo scanner.



6. Turn the photo scanner back onto its base, and close the photo scanner lid by pressing down firmly until it snaps into place.



Appendix B - Uninstalling Your Photo Scanner

This appendix explains how to uninstall your HP PhotoSmart S20 photo scanner. This process includes uninstalling the HP PhotoSmart scanning software from your PC, as well as disconnecting the S20 photo scanner from the power outlet and from your PC.

Uninstalling the Software

To uninstall the HP PhotoSmart scanning software from your PC, do the following:

1. From the Windows Start menu, choose [Settings > Control Panel](#).
2. In the Control Panel, double-click the [Add/Remove Programs](#) icon.
3. In the Install/Uninstall tab of the Add/Remove Programs Properties dialog box, scroll down in the list of programs until you see [HP PhotoSmart S20 Scanner Software](#).
4. Click on [HP PhotoSmart S20 Scanner Software](#), and then click the [Add/Remove](#) button.
5. In the Confirm File Deletion dialog box, click the [Yes](#) button to remove the scanning software.

The HP PhotoSmart scanning software is uninstalled from your PC's hard disk.

Disconnecting the Photo Scanner

To uninstall the S20 photo scanner, disconnect its power cable from the power outlet and disconnect its USB cable from the USB connector on your PC.

You have now uninstalled the HP PhotoSmart scanning software and S20 photo scanner from your PC.

Glossary

calibration card

A card used to calibrate the HP PhotoSmart S20 photo scanner for scanning prints. (The calibration card is packaged in the special pocket inside the back cover of this Basics guide.) The calibration card contains both black and white reference sections so that the photo scanner can be properly calibrated. See also [photo scanner calibration](#).

CD-ROM

Compact disk read-only memory. A round disk containing data that can be read by a computer, but cannot be modified.

CD-ROM drive

The drive in a computer which can read the data on a CD-ROM.

click

To press and release a mouse button once. (If not specified, this means the left mouse button.)

connector

See [USB connector](#).

double-click

To click the left mouse button twice in rapid succession.

emulsion

The light-sensitive silver that is coated on the clear acetate film base, and which forms the photograph when you take a picture and then have the film developed.

film strip

Negatives or slides produced on multiple frames (a strip) of 35 mm print film or slide film, respectively. You can use a negative strip or a slide strip (up to 5 frames at a time) to create scanned images via the HP PhotoSmart S20 photo scanner. See also [negative strip](#) and [slide strip](#).

hard disk

The disk drive in a computer, which usually contains all the installed software programs as well as data files produced by the computer's user(s).

image

An electronic version of a photograph that can be displayed on a computer screen and saved to a computer disk. The HP PhotoSmart S20 photo scanner can translate an original photograph (mounted film, film strip, or print) into an image that a computer will recognize.

landscape



The orientation of a photograph or image that is wider than it is tall. (If it is taller than it is wide, then it has a portrait orientation.)

mounted film

A negative or slide produced on a single frame of 35 mm print film or slide film, respectively, and mounted in a standard 35 mm slide mount. You can use mounted film to create a scanned image via the HP PhotoSmart S20 photo scanner. See also [mounted negative](#) and [mounted slide](#).

mounted negative

A reversed photograph produced on a single frame of 35 mm print film and mounted in a standard 35 mm slide mount. You can use a mounted negative to create a scanned image via the HP PhotoSmart S20 photo scanner. See also [mounted film](#) and [mounted slide](#).

mounted slide

A transparent photograph produced on a single frame of 35 mm slide film and mounted in a standard 35 mm slide mount. You can use a mounted slide to create a scanned image via the HP PhotoSmart S20 photo scanner. See also [mounted film](#) and [mounted negative](#).

negative

A reversed photograph produced on a frame of 35 mm print film. You can use either a mounted, single-frame negative or a multiple-frame, negative film strip (up to 5 frames at a time) to create either one scanned image or several scanned images, respectively, via the HP PhotoSmart S20 photo scanner. See also [film strip](#), [mounted film](#), [mounted negative](#), and [negative strip](#).

negative strip

Reversed photographs produced on frames (a strip) of 35 mm print film. You can use a negative strip (up to 5 frames at a time) to create scanned images via the HP PhotoSmart S20 photo scanner. See also [film strip](#), [negative](#), and [slide strip](#).

peripheral

An electronic device that is connected to a PC and performs a particular task or set of tasks, such as printing, scanning, telephony, faxing, and so forth. The HP PhotoSmart S20 photo scanner is one such peripheral.

photograph

The original mounted film, film strip, or print. (The electronic version of a photograph is called an image.)

photographic format

The physical characteristics of a particular photograph. The HP PhotoSmart S20 photo scanner can scan photographs of the following photographic formats: mounted film (35 mm mounted slides or mounted negatives), film strips (35 mm negative strips or slide strips), and prints.

photo scanner

A computer peripheral capable of converting photographs into electronic images which can then be displayed, adjusted, and stored by a computer, as well as printed from a computer.

photo scanner calibration

The process that adjusts the color or black and white values in a scanned image to compensate for the effects a photo scanner has on the image. The HP PhotoSmart S20 photo scanner is automatically calibrated each time either mounted film or a film strip is scanned, but must be periodically calibrated for prints using the photo scanner's calibration card. See also [calibration card](#).

photo sleeve

The white card with a clear cover attached which is used for inserting small prints (smaller than 2 inches x 2 inches, or 50 mm x 50 mm) or paper clippings (such as magazine or newspaper clippings) into the HP PhotoSmart S20 photo scanner for scanning. (The photo sleeve is packaged in the special pocket inside the back cover of this Basics guide.)

port

See [USB connector](#).

portrait



The orientation of a photograph or image that is taller than it is wide. (If it is wider than it is tall, then it has a landscape orientation.)

print

A photograph produced from print film. You can use a print no larger than 5 inches x 7 inches, or 127 mm x 178 mm, to create a scanned image via the HP PhotoSmart S20 photo scanner. Prints that are smaller than 2 inches x 2 inches, or 50 mm x 50 mm, may be scanned by the S20 photo scanner if they are inserted in the photo sleeve. See also [photo sleeve](#).

processor

The main computing unit of a computer. The HP PhotoSmart S20 photo scanner requires a PC with a Pentium or equivalent processor.

slide

A transparent photograph produced on a frame of 35 mm slide film. You can use either a mounted, single-frame slide or a multiple-frame, slide film strip (up to 5 frames at a time) to create one scanned image or several scanned images, respectively, via the HP PhotoSmart S20 photo scanner. See also [film strip](#), [mounted film](#), [mounted slide](#), and [slide strip](#).

slide strip

Transparent photographs produced on frames (a strip) of 35 mm slide film. You can use a slide strip (up to 5 frames at a time) to create scanned images via the HP PhotoSmart S20 photo scanner. See also [film strip](#), [negative strip](#), and [slide](#).

taskbar

The Windows toolbar that docks on the edge of the desktop. The taskbar includes the Start button, buttons for each open computer program, and a status area.

TWAIN

A standard protocol (method of communication) that programs can use to send instructions to other programs or hardware, and receive data back from them (such as images). If you are using a program that supports TWAIN, you can start the HP PhotoSmart scanning software directly from that program.

USB connector

The connector (or port) on the USB interface installed in a PC to which the HP PhotoSmart S20 photo scanner can be connected. The USB connector is on either the front or back exterior of the PC.

USB interface

The Universal Serial Bus hardware and its associated software drivers. A USB interface installed in a PC and connected to the HP PhotoSmart S20 photo scanner enables the photo scanner to talk to the PC.

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