



Scanner Basics

EPSON Perfection 1200U and 1200U PHOTO

PLAN YOUR SCAN

SELECT AN IMAGE TO SCAN

The type of image you're scanning determines what input setting you select in your software.



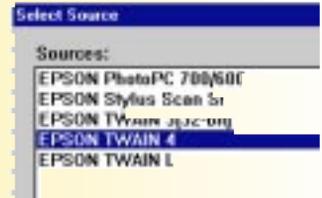
OPEN YOUR HOST APPLICATION

This is the software application where you'll import your scanned image. You'll start the scanner's software from within these or other applications.



SELECT YOUR SCANNER SOURCE

This is the scanner driver you're using. Your scanner comes with EPSON TWAIN. You start EPSON TWAIN from within your application.



DETERMINE WHAT THE FINAL OUTPUT WILL BE

How you're going to use your scanned image determines some of the settings you select.



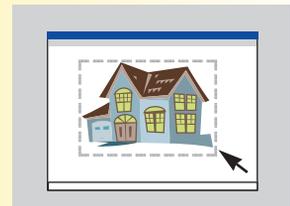
SELECT THE CORRECT SETTINGS FOR YOUR SCAN

You can scan part of your image, adjust colors, and scale your image.



SCAN YOUR IMAGE

Once you scan, your image appears in your application window. Now you can crop or edit your image as needed, and use it in your documents.



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A Complete Scanning Solution

Your EPSON® Perfection™ 1200U scanner is a professional-quality 36-bit scanner packed with easy-to-use features for practically any type of scanning—for business, home, or school. The “plug & play” USB connection is fast and easy with no extra hardware to install. Using EPSON’s ColorTrue® II Imaging System, the scanner captures your images with amazing detail and accurate colors. Your scanner can achieve up to 1200 × 2400 dpi hardware resolution with EPSON’s proprietary Micro Step Drive™ technology, delivering the kind of crisp, precise images you’d normally expect from a professional graphics scanner, and faster than any other scanner in its class.

The EPSON Perfection 1200U PHOTO adds to this a transparency unit and special software to make scanning and printing slides, negatives, and photographs simple.



About Your Scanner

Your EPSON Perfection 1200U scanner includes the following features:

- Superior image quality:
 - True optical resolution of 1200 dots per inch (dpi)
 - Hardware resolution of 1200 × 2400 dpi
 - Maximum resolution of 9600 × 9600 dpi with interpolation
- 36-bit color depth for capturing images with over 68 billion colors
- EPSON TWAIN for high speed scanning and accurate optical character recognition (OCR)
- Start button for one-touch scanning
- Letter/A4 size scanning area (legal size documents can be scanned with the optional auto document feeder)
- Optional transparency unit and auto document feeder

About Your Software

The EPSON Perfection 1200U scanner includes these leading-edge applications for professional-quality scans:



EPSON TWAIN Driver

The scanning utility for producing professional quality images. Ideal for scanning text into OCR programs—includes Text Enhancement Technology (TET) for more accurate OCR scanning and Auto Area Segmentation (AAS) to separate text from background colors.



Adobe® PhotoDeluxe® Business Edition 1.0 (Windows®) or Adobe PhotoDeluxe version 2.0 (Macintosh®)

Edit your photos with professional results. Add special effects, overlay titles and captions, restore old photos, and add many other creative enhancements to your photographs. Create invitations, flyers, and promotional items for business or fun.



Broderbund® The Print Shop® PressWriter™

Use the built-in templates to easily and quickly create professional newsletters, brochures, resumes, and flyers.



NewSoft™ Presto!™ PageManager™ for EPSON

Use with the scanner's Start button feature to quickly scan single- or multi-page documents (with the optional auto document feeder) and save time. Then drag and drop your scanned images into almost any application. Or convert scanned text into editable documents using the built-in OCR software.



ArcSoft™ Photo Printer,™

A photo layout program that lets you print your images in creative formats, such as multiple photo montages, framed or bordered pictures, and calendars.

You also get your choice of two free software titles (for a small shipping and handling fee) and a chance to purchase three additional titles. You can print out the order form, order online (if you are connected to the Internet), or use the handy preprinted form included in your scanner box. Click the EPSON Bonus Software button on your CD for details.

About Your Documentation

This guide includes setup instructions for your scanner, scanning tips, and troubleshooting advice. It also includes instructions for viewing your electronic manuals and installing the optional equipment.

For details on using the scanner software (TWAIN), see your electronic *EPSON TWAIN User's Guide*.

Cautions, Notes, and Tips

Please follow these guidelines as you read your documentation:



Cautions must be observed to avoid damage to your equipment.



Notes contain important information about your scanner.



Tips contain hints for great scanning.

Year 2000 Ready

Your EPSON scanner is *Year 2000 Ready*. However, be sure the other parts of your computer system are also ready for the year 2000.

System Requirements

The minimum system requirements for Windows® and Macintosh® are listed below. For optimum performance, a faster processor and more memory are recommended. If you are scanning high resolution images, you need more than the minimum available hard disk space listed.



Color and tone reproduction are subject to the display capability of your computer system, including the video card, monitor, and software. See the documentation for these products for details.

Windows 98

- An IBM® compatible PC with a 486/66 MHz or faster processor
- Microsoft® Windows 98 preinstalled
- 16MB RAM (32MB recommended)
- 50MB available hard disk space
- Available built-in USB port or hub connection
- Shielded USB “AB” interface cable, from Series A (computer) to Series B (scanner), up to 6.5 feet (2 m) long (one is included with your scanner).



Using an improperly shielded USB cable—especially a cable more than 6.5 feet (2 m) long—may cause the scanner to malfunction.

- CD-ROM drive
- Mouse or pointing device
- VGA or higher resolution monitor with 640 × 480 resolution (800 × 600 or higher recommended) and 256 colors (65,000 colors or more recommended)

Macintosh

- iMac™ or Power Macintosh® G3 with built-in USB port
- System 8.1 or later (iMac), System 8.5.1 or later (Power Macintosh G3)



If your system is running OS 8.1, you must download and install the iMac Update 1.0 from Apple® at <http://swupdates.info.apple.com> before you install the EPSON USB software. Contact Apple Computer if you have problems installing this update. If your system is running OS 8.5 or later, you do not need to download and install the update. Your operating system already includes full support for the EPSON USB software.

- Shielded USB “AB” interface cable, from Series A (computer) to Series B (scanner), up to 6.5 feet (2 m) long (one is included with your scanner).



Using an improperly shielded USB cable—especially a cable more than 6.5 feet (2 m) long—may cause the scanner to malfunction.

- Available USB port or hub connection
- 32MB RAM (64MB recommended)
- At least 50MB available hard disk space
- CD-ROM drive
- Mouse or pointing device
- VGA color monitor with 640 × 480 screen resolution (or higher recommended) and 256 colors (32,000 colors or more recommended)

EPSON TWAIN supports the Apple ColorSync™ 2.x color management system and QuickTime.™ These extensions are automatically installed during EPSON TWAIN installation.

ENERGY STAR Compliance

As an ENERGY STAR Partner, EPSON has determined that this product meets the ENERGY STAR guidelines for energy efficiency. The EPA ENERGY STAR Office Equipment program is a voluntary partnership with the computer and office equipment industry to promote the introduction of energy-efficient personal computers, monitors, printers, fax machines, scanners, and copiers in an effort to reduce air pollution caused by power generation.



Important Safety Instructions

Read all of these instructions and save them for later reference. Follow all warnings and instructions marked on the scanner.

- Unplug the scanner before cleaning. Clean with a damp cloth only. Do not spill liquid on the scanner.
- Do not place the scanner on an unstable surface or near a radiator or heat source.
- Do not block or cover the openings in the scanner's cabinet. Do not insert objects through the slots.
- Use only the type of power source indicated on the scanner's label.
- Connect all equipment to properly grounded power outlets. Avoid using outlets on the same circuit as photocopiers or air control systems that regularly switch on and off.
- Do not let the power cord become damaged or frayed.
- If you use an extension cord with the scanner, make sure the total ampere rating of the devices plugged into the extension cord does not exceed the cord's ampere rating. Also, make sure the total ampere rating of all devices plugged into the wall outlet does not exceed the wall outlet's ampere rating.
- Do not attempt to service the scanner yourself.

- Unplug the scanner and refer servicing to qualified service personnel under the following conditions:

If the power cord or plug is damaged; if liquid has entered the scanner; if the scanner has been dropped or the cabinet damaged; if the scanner does not operate normally or exhibits a distinct change in performance. Do not adjust controls that are not covered by the operating instructions.

Setting Up Your Scanner

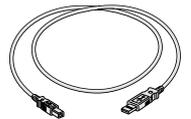
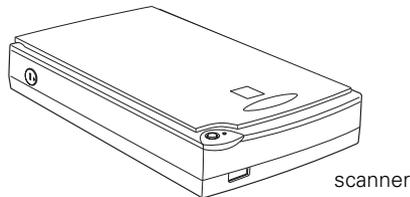
Setting up your scanner is easy—just follow the simple steps in this book in the order listed below.

1. Unpack and choose a place for your scanner.
2. Unlock the scanner.
3. Connect the scanner to your computer.
4. Power on your system.
5. Install the scanner software.
6. Install the creative software and view your electronic manuals.

If you purchased the optional transparency unit or auto document feeder, see “Using the Optional Equipment” on page 59 for installation instructions.

Unpack Your Scanner

Remove the scanner from the box, then remove the packing material from your scanner. Save the packaging in case you need it later. Your EPSON Perfection 1200U comes with the items shown here.



CD-ROM with driver, electronic manuals, and creative software for Windows 98

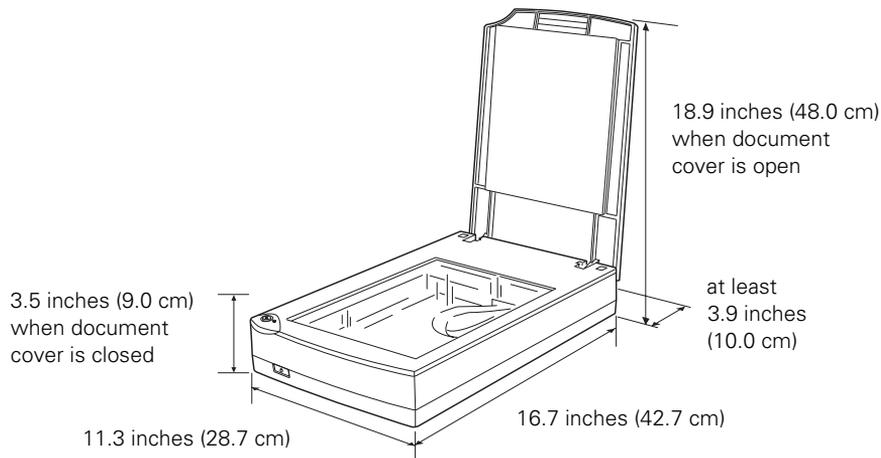


CD-ROM with driver, electronic manuals, and creative software for Macintosh

Choose a Good Place for Your Scanner

Here are some points to consider:

- Place the scanner on a flat, stable surface. If the scanner is tilted, it can't operate properly.
- Make sure to place the scanner where you can easily unplug the power cord, and where the USB cable can reach your computer.
- Keep the scanner away from direct sunlight and strong light sources.
- Avoid places subject to shocks and vibrations, or high or rapidly changing temperatures and humidity.
- Be sure there's enough room behind the scanner for the cables, and above the scanner so you can fully raise the document cover.

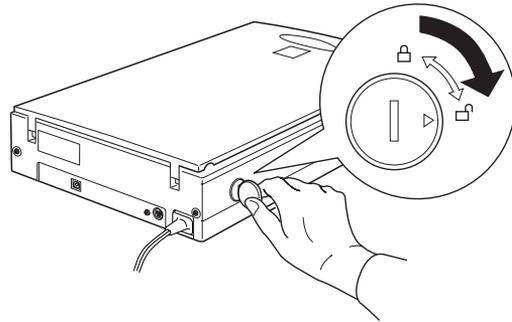


Unlock the Scanner

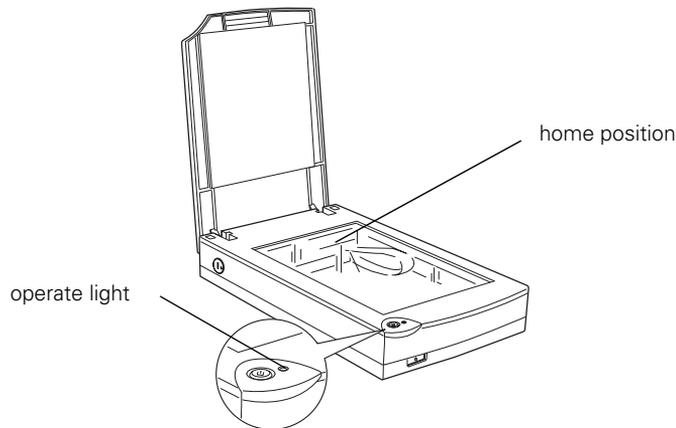
Before connecting the scanner to a power source, you must release the transportation lock, located on the side of the scanner.

Turn the transportation lock down to the unlocked position using a coin or similar object, as shown.

If you can't turn the transportation lock easily, turn the scanner on (see page 12 for instructions); then, after the operate light starts flashing red, turn the scanner off and try again.



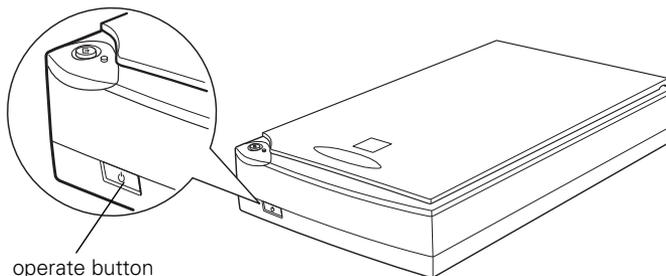
Always lock the scanner carriage before transporting it; otherwise, the scanner may be damaged. Be sure the scanner lamp is in the home position (toward the back of the scanner). To ensure this, always turn off the scanner before locking the carriage.



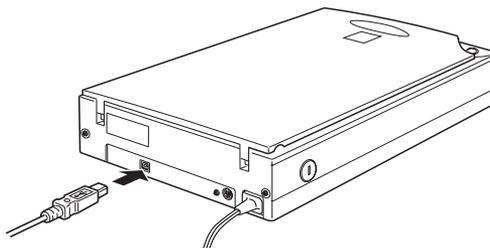
Connect the Scanner to Your Computer

If you are connecting to a PC, Windows 98 must be factory preinstalled on your system.

1. Make sure the scanner, computer, and any USB devices connected to your computer are turned off. The scanner is off when the  operate button is out (not pushed down below the surface of the front panel).



2. Locate the USB cable that came with your scanner.
3. Plug the square connector  on the USB cable into the USB connector on the back of the scanner. Then plug the flat connector  into the USB port on your computer or USB hub.



Your system may not work correctly if you use a USB cable other than the one supplied by EPSON or if you connect your scanner through more than one hub.

4. Plug in the power cables for your computer, scanner, and other USB devices.

Power On Your System

Always turn your scanner on before you turn on the computer. Otherwise, the computer may not recognize your EPSON scanner when you install your software.

The operate light on the top of the scanner blinks as the scanner initializes.



Whenever you turn off the scanner, wait at least 10 seconds before turning it back on. Rapidly turning the scanner on and off can damage the scanner.

Install the Scanner Software

The scanner software comes on two CD-ROMs: one for Windows 98 and one for the Macintosh. Check the CD-ROM label to make sure you have the correct CD-ROM for your operating system.

If You're Running Windows 98 . . .

You may be asked to insert your Windows 98 operating system CD-ROM during the scanner installation. Please have your Windows CD-ROM handy in case it is needed.

1. Turn on your scanner first; then turn on your computer. A screen appears saying that your system has detected new hardware. Then the Add New Hardware Wizard screen appears.
2. Insert the scanner software CD-ROM in the CD-ROM drive, then click Next.



3. Select the Search for the best driver for your device for your device option, then click Next.



4. Uncheck the Floppy disk drives and CD-ROM drive options and check Specify a location. Then use the Browse button to locate your CD-ROM drive and the /Win98 folder on the CD-ROM (the example uses D as the CD-ROM drive letter). Then click Next.



5. Click Next to continue with the driver installation.



6. Depending on your system, you may be asked to insert the Windows 98 CD-ROM. After inserting the CD-ROM, click OK. (If necessary, use the Browse button to locate your the /Win98 folder on the CD-ROM then click OK.)

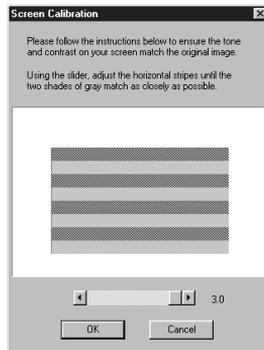


7. After the scanner software installation is complete, the EPSON Screen Calibration utility automatically starts. You must calibrate your screen and scanner to reproduce images closely matching the originals.

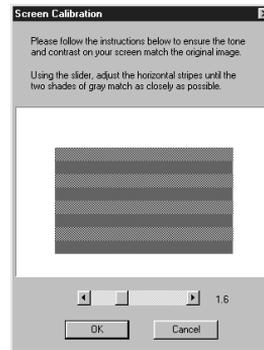


You don't need to change the screen calibration again so long as you continue to use the same monitor. If you don't see the utility or if you need to recalibrate your screen at a later time, click **Scanners and Cameras** in the Control Panel (click **Start > Settings > Control Panel > Scanners and Cameras** from the Windows Desktop to access it). On the Devices tab, select **Scanner**. Click **Properties**, then click the **Calibration** button.

In the following window, move the slider to the right or left until the shades of the horizontal gray stripes appear similar. View the screen from a short distance. The gray stripes will not perfectly blend together; however, try to make the two tones match as closely as possible.



before calibration



after calibration

8. Click OK to register the calibration setting.

9. Click Finish to exit the Add New Hardware Wizard.



You will find the Scanners and Cameras icon in the Windows Control Panel after EPSON TWAIN is installed.



10. Now you can install your creative software and view your electronic manuals as described on page 19.

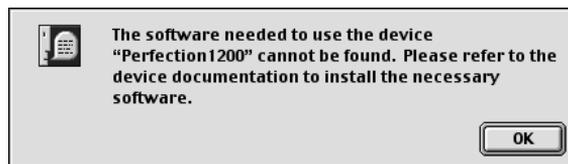
If You're Using a Macintosh . . .



If you are using Mac OS 8.1, you need to install the Macintosh Update before installing the scanner software. This is available online from the Apple web site. If you are using Mac OS 8.5 or later, check the Apple web site for any updates.

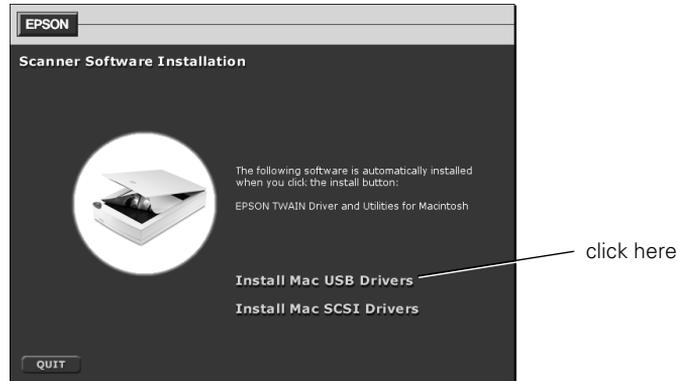
1. Turn on your scanner first. Then turn on your Macintosh and turn off any virus protection programs.

If you see the following message, click OK and continue with step 2.

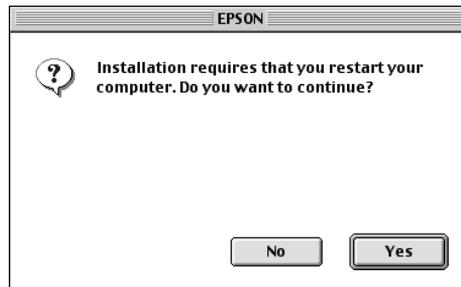


2. Insert the scanner software CD-ROM in the CD-ROM drive. (If necessary, double-click the EPSON CD-ROM icon to open it.)

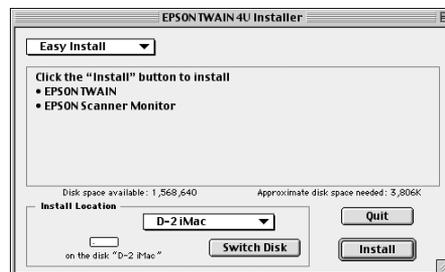
3. Double-click the  EPSON icon.
4. The EPSON screen and software License Agreement screen appear. After reading the license agreement, click AGREE to continue with the installation.
5. When the Scanner Software Installation screen appears, click Install Mac USB Drivers.



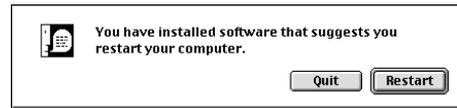
6. Click Yes when asked if you want to restart your computer when the installation is finished.



7. When the EPSON TWAIN 4U Installer screen appears, click Install for the default installation.

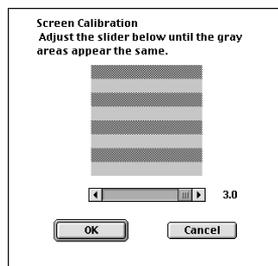


8. When the scanner software installation is complete, you see this screen:

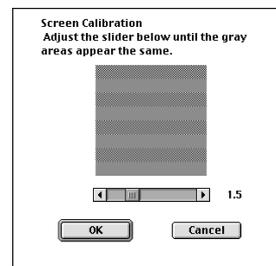


Click Restart. The Screen Calibration utility starts. (Your Macintosh will not restart until after you calibrate your screen.) You must calibrate your screen and scanner to reproduce images closely matching the originals.

9. In the following window, move the slider to the right or left until the shades of the horizontal gray stripes appear similar. View the screen from a short distance. The gray stripes will not perfectly blend together; however, try to make the two tones match as closely as possible.



before calibration



after calibration

10. Click OK to register the calibration setting. Then your Macintosh automatically restarts.



You will not need to change the screen calibration again as long as you continue to use the same monitor. If you need to recalibrate your screen at a later time, select **Screen Calibration** in the EPSON Scanner folder.

11. Now you can install your creative software and view your electronic manuals as described on page 19.

Install the Creative Software and Electronic Manuals

Before you begin:

- Check the CD-ROM label to make sure you have the correct CD-ROM for your operating system.

- Be sure any virus protection programs are turned off.

1. Insert the scanner software CD-ROM in your CD-ROM drive.

2. **Windows:** Double-click the My Computer icon on the desktop, then double-click your CD-ROM drive icon. When the EPSON window appears, double-click the EPSON icon.

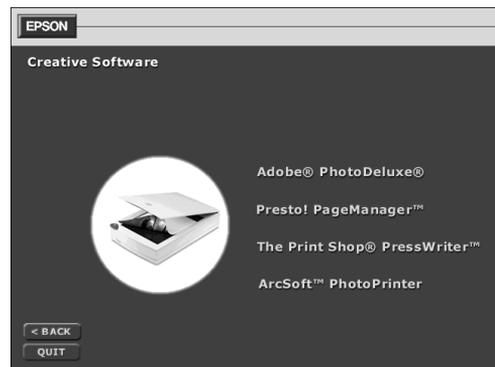
Macintosh: Double-click the EPSON CD-ROM icon to open it, if necessary, then double-click the  EPSON icon.

The Main Menu appears on your screen.



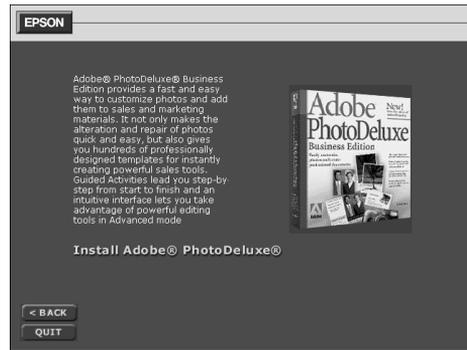
3. Click Creative Software. The Creative Software screen appears.

4. Click the application name or button for the program you want to install.



5. The install screen appears for the application you selected (the example shown is for Adobe PhotoDeluxe Business Edition for Windows).

Click the Install (*application name*) button to install the selected software. (You can skip the installation by clicking the <BACK button at the bottom of the window.)



6. Some applications include the option to install Adobe Acrobat Reader®. If you do not have Acrobat Reader on your system, go ahead and install it so you can read your electronic manuals.
7. If the application requires a restart, go back to step 2 after restarting to install another application. If the application did not require a restart, you automatically return to the Creative Software screen. Select another application to install or click <BACK to return to the Main Menu.
8. After you install your applications you can view and install your electronic manuals. At the Main Menu, click Electronic Documentation.
9. On the Electronic Documentation screen, click the name or button of the manual you want to view. If you don't have Adobe Acrobat Reader 3.0 installed, you have the option to install it from the CD-ROM. For more information, see "Viewing Your Electronic Manuals" on page 51.

If you install Acrobat Reader on your Macintosh, you need to restart the computer. To get back to the Main Menu, double-click the  EPSON icon.

10. After viewing an electronic manual, close Acrobat Reader and click the Electronic Documentation window to highlight it. You can select another manual to view, click <BACK to return to the Main Menu, or click QUIT to quit the installer.



If any of the software you installed requires a restart and you did not restart when you installed the software, you should restart your computer now.

Scanning from Start to Finish

To give you an idea of what the EPSON Perfection 1200U can do and how easy it is to use the bundled software, try using this practice “scan project” to create a scanned document from start to finish. Once you read this chapter, you’ll know how to:

- Use the Start button for quick scanning
- Drag-and-drop a scanned document in Presto! PageManager into a word processing application using the OCR (optical character recognition) feature
- Scan and retouch an image with imaging software, such as Adobe PhotoDeluxe; then drag-and-drop (Windows) or copy and paste it (Macintosh and Windows) into the same document



Using the Start Button

The scanner’s Start button lets you perform one-touch scanning with Presto! PageManager and a scanner monitoring utility (included with EPSON TWAIN). With one-touch scanning, you can load a document in the scanner, press the Start button, and watch while PageManager starts and then opens EPSON TWAIN automatically. You can then scan the item, send it to the PageManager desktop, and then direct the scan to other applications on your system.

To use the Start button, you must have installed PageManager (see page 19). If you want to configure specific settings for Start button scanning, see your electronic *EPSON TWAIN User’s Guide*.

When you’re ready to use the Start button, follow the instructions in “Creating an Illustrated Document,” below.



This chapter uses screen shots from the Windows versions of the bundled programs, but the Macintosh versions work the same way unless otherwise noted.

Creating an Illustrated Document

This section gives an example of how to use the Start button to:

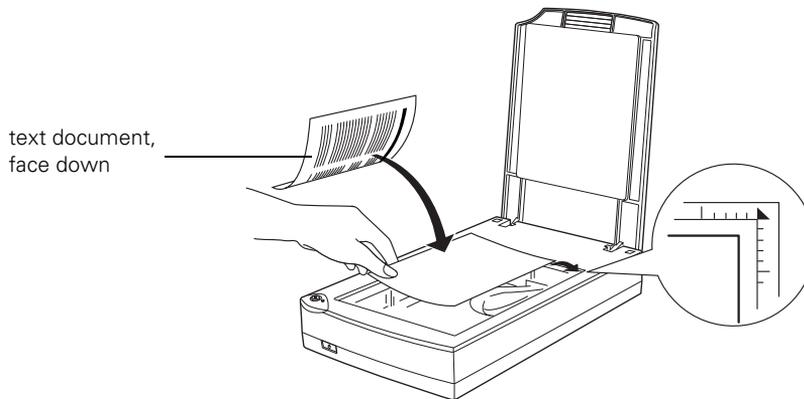
- Scan a text document
- Use PageManager's OCR (optical character recognition) feature to convert it to an editable document in your word processing program
- Drag and drop (Windows) or copy and paste (Macintosh and Windows) a scanned and retouched image into your document from Adobe PhotoDeluxe

To install Adobe PhotoDeluxe, see page 19 for instructions.

Scanning and Converting a Text Document

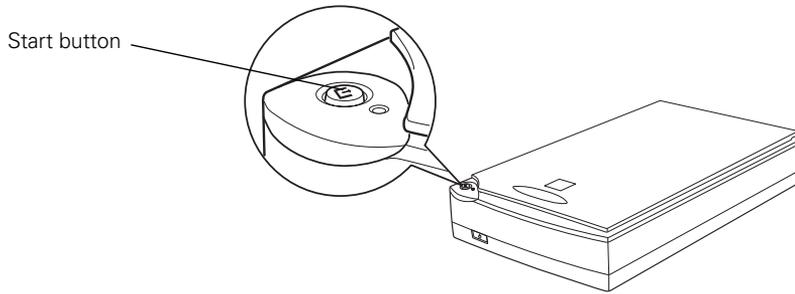
The project begins by scanning a printed page of text into Presto! PageManager. The Start button makes this process simple. Follow these steps:

1. Place the document face down and align its horizontal and vertical edges with the scales on the top and right side of the document table.

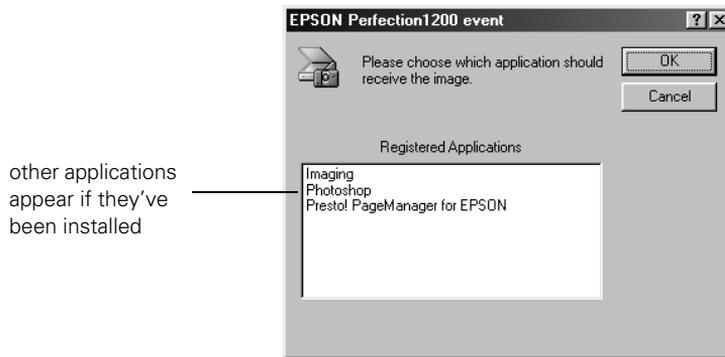


2. Close the scanner cover.

3. Press the scanner's  Start button.



4. In Windows 98, if you've installed other scanner applications, you see this dialog box (otherwise, skip ahead to step 5):

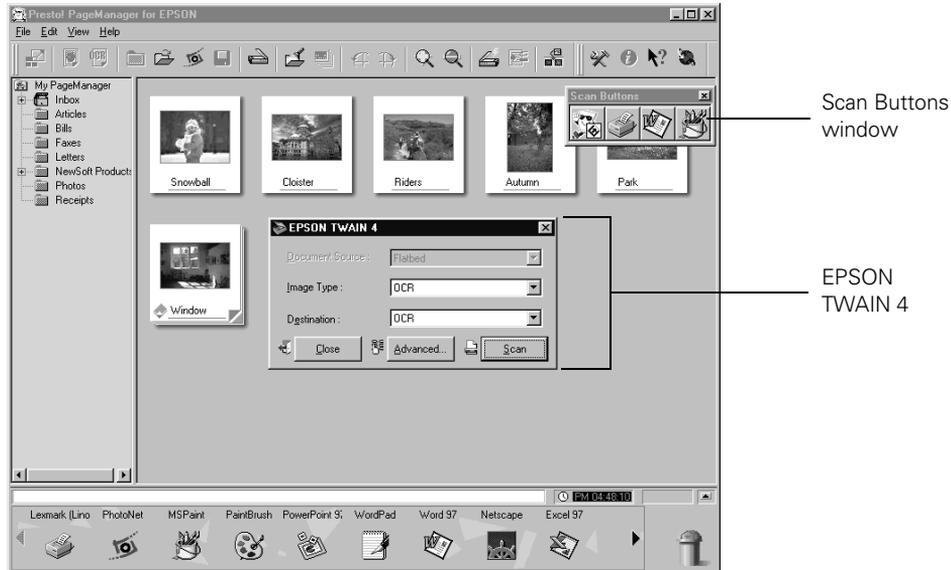


Click Presto! PageManager for EPSON and click OK. (If the dialog box disappears before you select an application, press the scanner's Start button again.) If PageManager wasn't running when you pressed the Start button, it starts now.



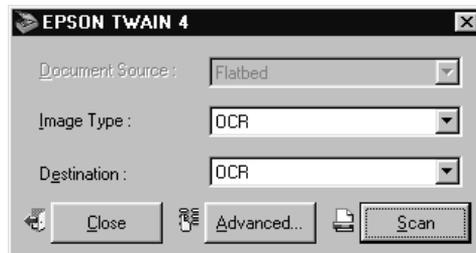
For instructions on changing the applications available for use with the Start button, see your electronic *EPSON TWAIN User's Guide*.

5. The EPSON TWAIN 4 window opens in PageManager, along with the Scan Buttons window.



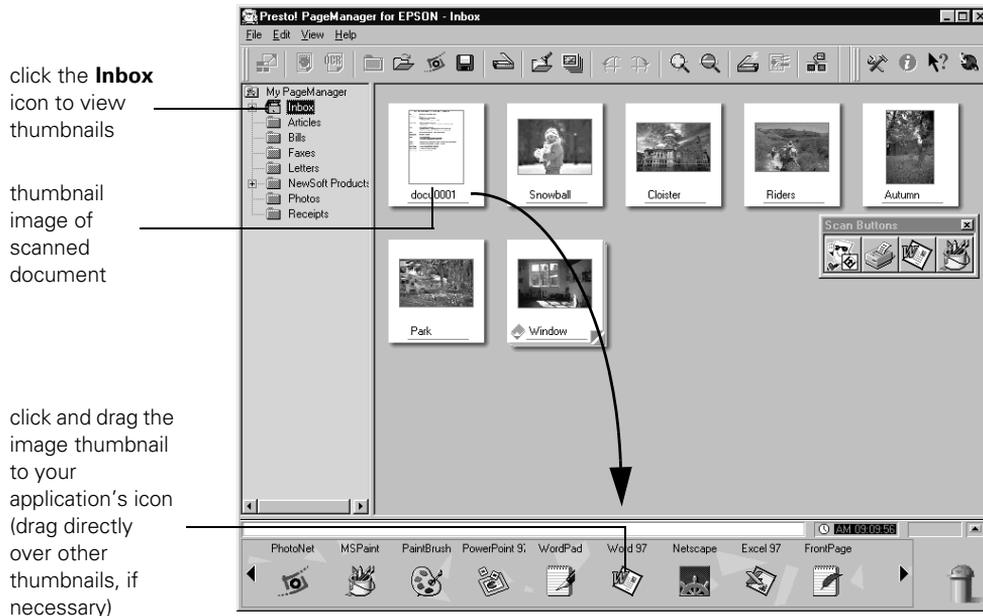
By default, the TWAIN window appears in Easy mode. If you are using Advanced mode, it will appear with many additional options. For now, if the Advanced TWAIN interface appears, click the Easy button to switch to the Easy interface.

6. To scan a document with the best settings for Optical Character Recognition (OCR), select OCR from the Image Type and Destination menus.



7. Click the Scan button to scan your document. When scanning is finished, click the Close button to close the EPSON TWAIN 4 window.

- By default, EPSON TWAIN 4 places all new scans in the PageManager Inbox folder, and represents each scan as a “thumbnail.” If necessary, click the Inbox icon to view the thumbnail of your scan in PageManager.



- Drag the thumbnail of the scanned text from the main window to your word processor's icon, such as Microsoft Word 97, at the bottom of the PageManager window.

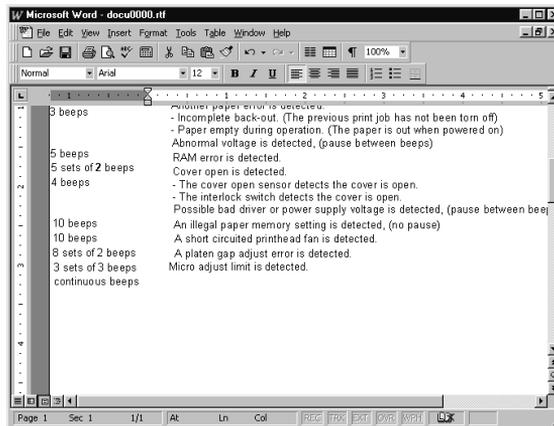


Icons of installed applications appear on the bottom of the PageManager window automatically. To manually add more, see the PageManager electronic documentation for details.

The OCR text-conversion window opens, showing the progress of the conversion to editable text.



10. Once the text is converted, the application automatically opens your new file. (If the scanned document contained columns of text, you may need to switch to Page Layout view.)



11. Save this new file in your application and close PageManager.

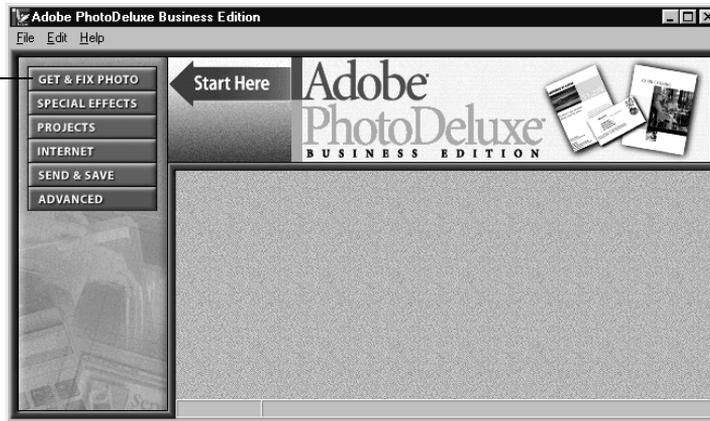
Scanning and Retouching a Photo

Next, we'll scan a photo, using Adobe PhotoDeluxe to capture the scanned image and retouch it as necessary before adding it to the document. If you haven't already installed PhotoDeluxe, see page 19 for instructions.

1. To begin, place the photo you want to scan face down on the scanner. Align the photo's horizontal and vertical edges with the scales on the top and right side of the document table. (See the illustration on page 22.)
2. Close the scanner cover.
3. Start Adobe PhotoDeluxe by double-clicking its icon on your desktop (Windows) or in the Adobe PhotoDeluxe folder on your hard drive (Macintosh).

4. When the Adobe PhotoDeluxe window appears, click **GET & FIX PHOTO** (Windows) or **Get Photo** (Macintosh).

click **GET & FIX PHOTO** (Windows) or **Get Photo** (Macintosh) to start scanning



5. When the Intro page appears, click the **Get Photo** tab.

click the **Get Photo** tab



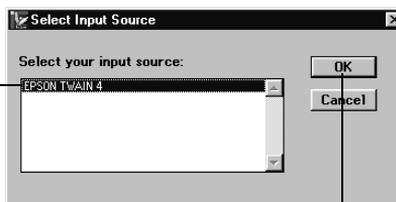
6. The **Get Photo** page appears.

If this is the first time you have scanned with PhotoDeluxe, click the triangle under the **Scanners** button. Then select **EPSON TWAIN 4** and click **OK**. If you have already scanned images with PhotoDeluxe, skip to step 7.

click the **triangle** under the **Scanners** button...



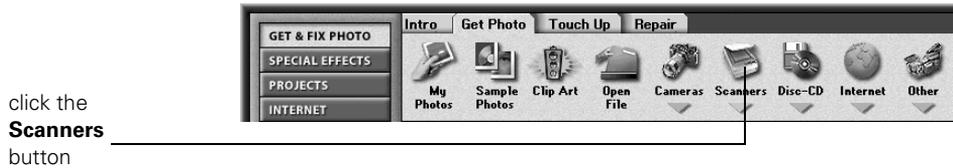
then select **EPSON TWAIN 4...**



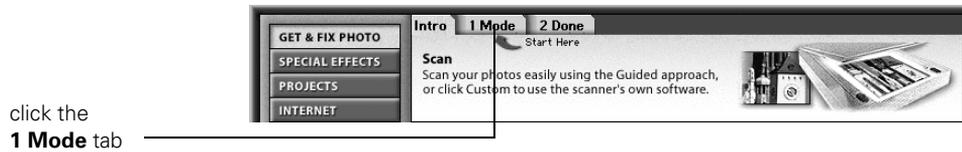
then click **OK**

- Once you have selected EPSON TWAIN 4, click the Scanners button above the triangle.

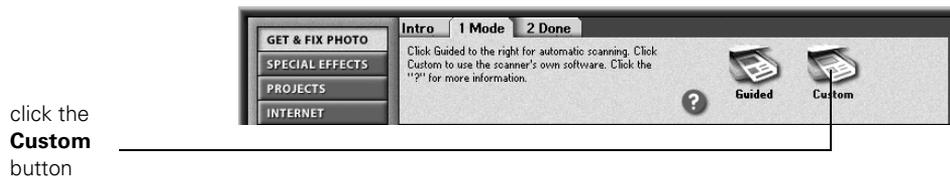
If you are using a Macintosh, skip to step 10 after clicking the Scanners button.



- The Scan page appears. Click the 1 Mode tab (Windows).



- The 1 Mode page appears. Click the Custom button (Windows).

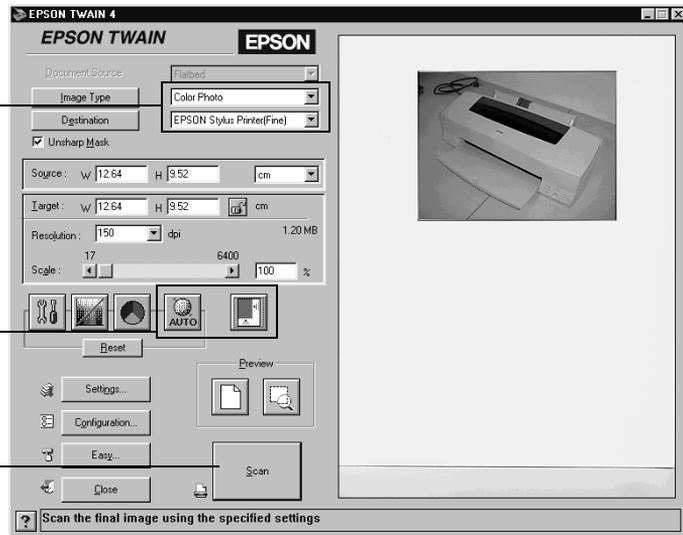


10. The EPSON TWAIN 4 window appears. (If the Easy TWAIN interface appears, click the Advanced button so you can access the scanner's advanced features.)

select Color Photo and your printer type from the **Image Type** and **Destination** menus...

click the **Auto Exposure** and **Auto Locate** buttons...

click **Scan** to scan the image



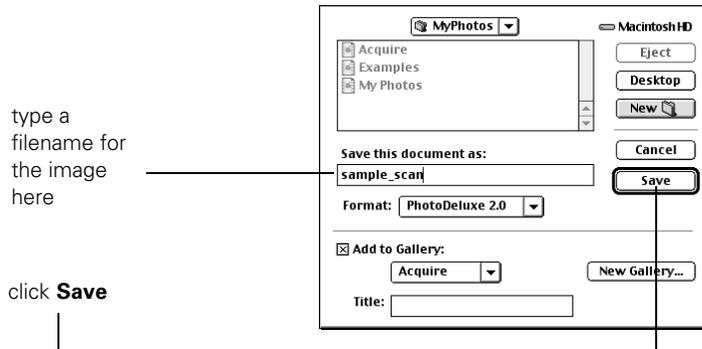
11. When the Advanced EPSON TWAIN window appears, the scanner pre-scans the picture automatically. When it finishes, select these settings:

- Set the Image Type to Color Photo, which sets the scanner to capture colors.
- Set the Destination to EPSON Stylus Printer(Fine) or EPSON Stylus Printer(Photo) (or another setting for your printer if you are not using an EPSON printer), which sets the scanner to capture a level of detail that looks good in printouts.
- Click the Auto Exposure and Auto Locate buttons, which automatically balances the colors and crops the photo.
- When you're finished selecting settings, click the Scan button.

For more details on the Advanced window, see the *EPSON TWAIN User's Guide* on your scanner software CD-ROM.

12. In Windows, once EPSON TWAIN 4 scans the image, click the Close button. Your scan appears in a new Adobe PhotoDeluxe window. Windows users can skip ahead to step 14.

On the Macintosh, you must save the scanned image before retouching it. Once EPSON TWAIN 4 scans the image, click the Close button. When the Save As dialog box appears, type a filename for the image in the Save this document as text box, and click Save.

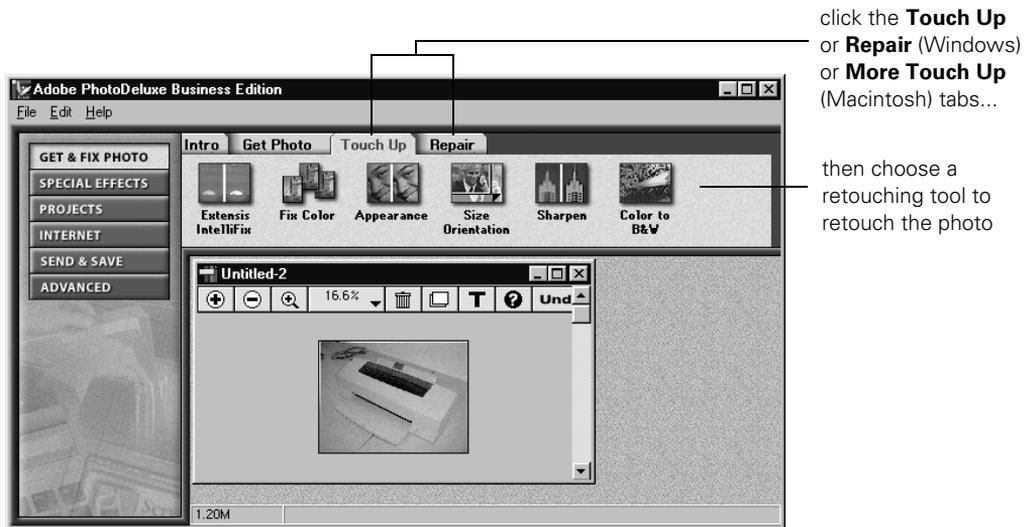


13. On the Macintosh, scanning the image places it in a “photo gallery window” where you can collect groups of related images. To start retouching the image, double-click it in the My Photos window. The image then opens within its own Adobe PhotoDeluxe editing window.



14. Once the image is in its own editing window, you can easily touch it up. To touch-up a photo, click the Touch Up or Repair (Windows) or More Touch Up (Macintosh) tabs, then choose a retouching tool.

To use a specific tool (such as Fix Color or Remove Red Eye), click its icon and follow the on-screen prompts.



15. When you are finished, save the photo by choosing Save from the File menu.

Adding a Scanned Photo to a Document

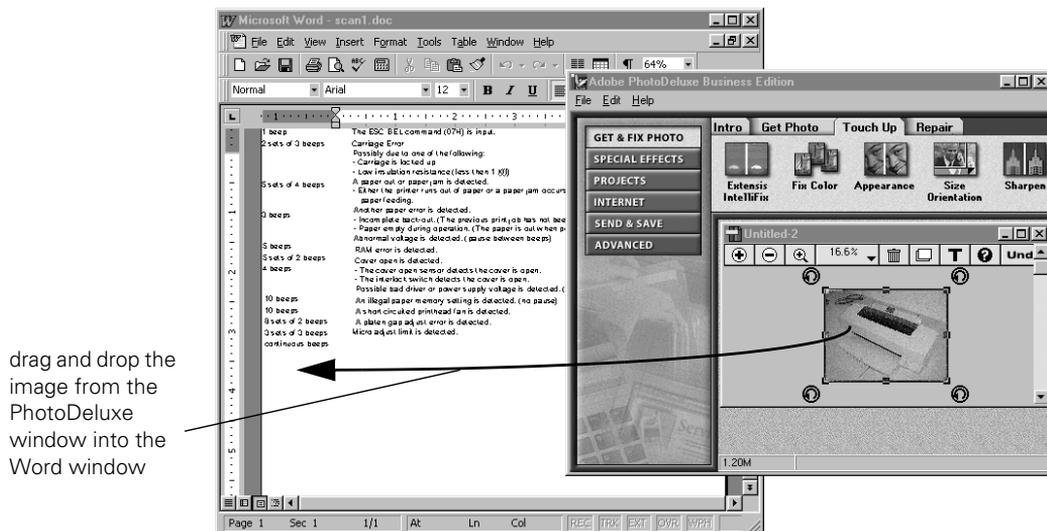
Once you have touched-up a scanned photo to your liking, you can add it to your document directly from PhotoDeluxe. There are two ways to do this:

- Drag and drop (Windows only)
- Copy and paste (Macintosh and Windows)

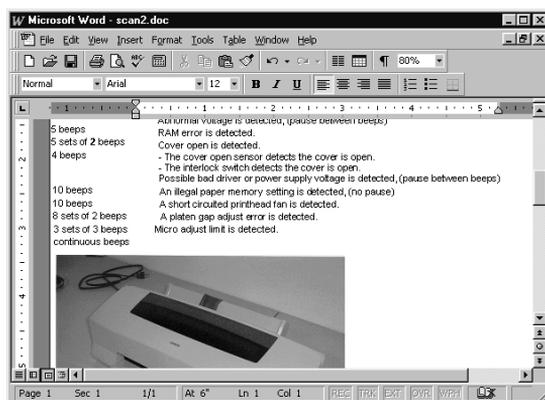
Both methods yield the same results: a document with both scanned editable text and a copy of the scanned image on the same page.

Using Drag and Drop

1. Open the word processor window (this example uses Microsoft Word) containing your document and position it next to the PhotoDeluxe window.
2. Click the image once in PhotoDeluxe. Its “handles” become visible.



3. While holding down the mouse button, drag the image to the location where you want it in your document.
4. Release the mouse button. The picture appears in your document in Word.



5. Once the image is in Word, you can resize the image by “stretching” the “handles” that appear when the image is clicked.

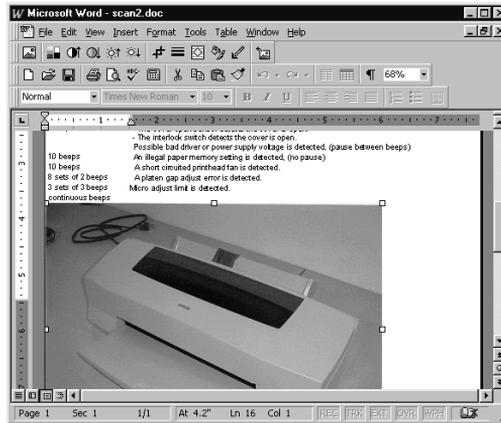
Using Copy and Paste

1. Open the PhotoDeluxe window with your scanned photo visible in its own window.
2. Click the scanned image once. Its “handles” become visible.



3. Choose Copy from the Edit menu.
4. Open the Microsoft Word window containing your document.
5. Click the cursor where you want the image in your document. The text-insertion cursor appears.
6. Choose Paste from the Edit menu of Word.

7. Once the image is in Word, you can resize the image by “stretching” the “handles” that appear when the image is clicked.



Now that you've successfully scanned in text and photographs, you can use the bundled software to create your own projects. The instructions for each bundled application are in electronic format on the CD-ROM.

Advanced Scanning

Though your EPSON Perfection 1200U scanner is pre-configured to easily capture quality images with its bundled applications, you can also use the scanner with nearly every high-end graphics application. In addition, you can adjust the way EPSON TWAIN captures images, and change how the Start button operates. This chapter gives you an overview of these advanced topics, and includes scanning and printing tips for getting the best results.

Scanning with EPSON TWAIN

Scans are always performed from within a host application — the application into which you plan to import the scanned image or document, such as Presto! PageManager, Adobe PhotoDeluxe, or nearly any other graphics program. You have to start this application before you can access EPSON TWAIN, your scanner software.

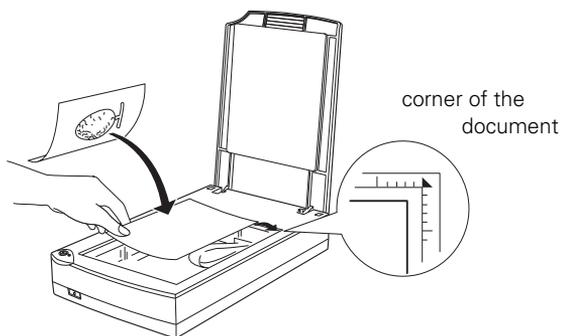
Once you've started your application, you need to select the scanner "source" you want to scan with. Your EPSON Perfection 1200U scanner comes with the EPSON TWAIN 4 driver. You need to select this driver as the source in your application.

This section contains step-by-step instructions for doing exactly this. Since Presto! PageManager comes with your scanner, this section uses it as an example, but you can perform the same steps with virtually any graphics program, such as Adobe Photoshop® or CorelDRAW®. For a comprehensive description of the scanner software, see the *EPSON TWAIN User's Guide* on your CD-ROM. For instructions on using the creative software, see your application's electronic manual or online help.

Placing Your Original Document

Placing the original document on the scanner correctly is very important. Follow these steps:

1. Raise the scanner cover and place your document face down on the document table glass. If you're scanning a transparency, the optional transparency unit should be installed and turned on.
2. Position the document so the horizontal and vertical edges are carefully aligned with the scales on the top and right side of the document table.



3. Close the scanner cover slowly. Be careful not to move the document.



The self-adjusting scanner cover allows you to place thick documents on the document table glass without removing the cover. But if your document is too thick to fit under the cover, you can remove the cover as described on page 54.

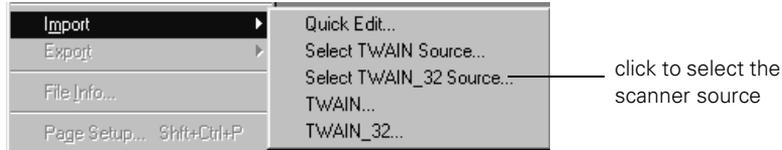
Selecting TWAIN from Your Application

Once the document is placed on the scanner and the scanner is turned on, you can start EPSON TWAIN to capture the image into your graphics application.

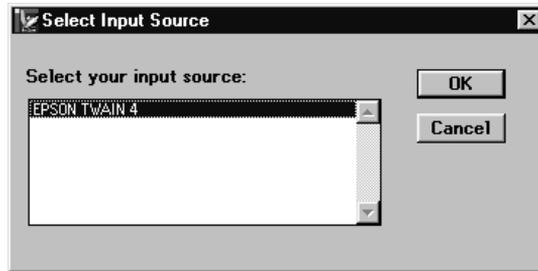
Follow these steps to start EPSON TWAIN from your application software (the steps may vary, depending on your application):

1. Start your application software by selecting the program icon in its program folder.

2. Select the scanner source. Open the File menu and choose Select Source, Import, or Acquire, and then select either Select TWAIN_32 Source (Windows) or TWAIN Select (Macintosh).



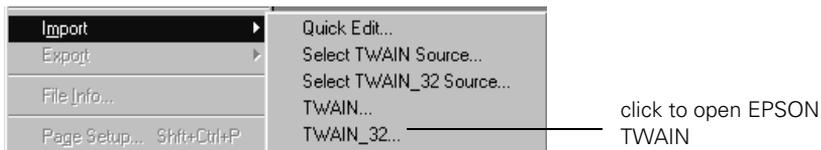
3. Select either EPSON TWAIN 4(32-bit) (Windows) or EPSON TWAIN 4 and click OK or Select.



Using EPSON TWAIN

Once EPSON TWAIN 4 is selected, you can start scanning with it. Follow these steps to capture the image:

1. Start EPSON TWAIN for scanning. Open the File menu and choose Import or Acquire and if necessary, select either TWAIN_32 or TWAIN (Windows) or TWAIN Acquire (Macintosh).

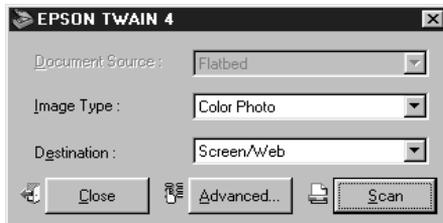




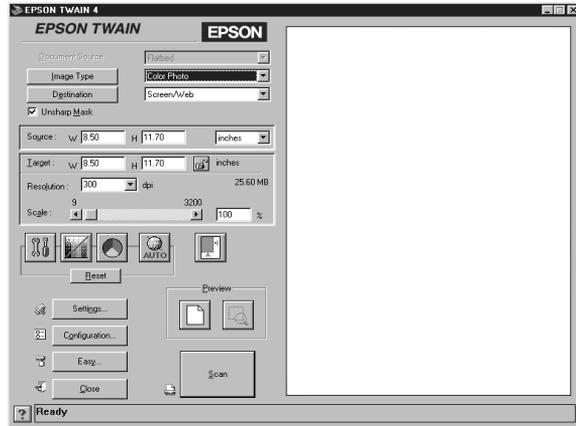
If your computer fails to recognize the scanner, you won't see the EPSON TWAIN driver when you try to select a scanner source from your host application. In addition, an error message may appear. If this happens, turn off your computer and scanner, and then turn the scanner back on. Then restart the computer.

Do not connect or disconnect the USB cable while you are using EPSON TWAIN.

2. One of the EPSON TWAIN windows appears on top of your graphics application.



Easy window



Advanced window

The first time you start EPSON TWAIN, you see the Easy window. After that, you'll see the window that was open the last time you closed EPSON TWAIN. To switch between the windows, click the Easy or Advanced button.

Both the Easy and Advanced windows contain the basic settings you need to scan an image. The Advanced window, however, lets you preview your image and select many advanced settings. See “Selecting Advanced TWAIN Settings” on page 44 for a summary of these settings, or your *EPSON TWAIN User's Guide* for a complete description.

3. Select the type of image (such as Color Photo or Line Art) and final output destination (such as Screen/Web or Laser Printer) from the Image Type and Destination menus. If you're scanning with the Easy window, skip to step 5.

4. If you're scanning with the Advanced window, click the  Preview icon to preview your scan. You see a preview of your scan in the preview area on the right side of your screen.

Make any other changes you want to adjust for the image (for details, see "Selecting Advanced TWAIN Settings" on page 44).

5. Click the Scan button to scan your image.

The operate light on the top of the scanner blinks for several seconds while it's scanning. In a few moments, the scanned image is imported into your graphics application. You must close EPSON TWAIN to view the application window and start editing the image using your graphics application's tools.

If the operate light continues to blink, it may indicate an error condition. See "Scanner operate light" on page 80 for more information.



Don't leave documents, especially photographs, on the document table for long periods of time. They may stick to the glass or deteriorate from the warmth of the scanner.

Setting Up PageManager for Start Button Scanning



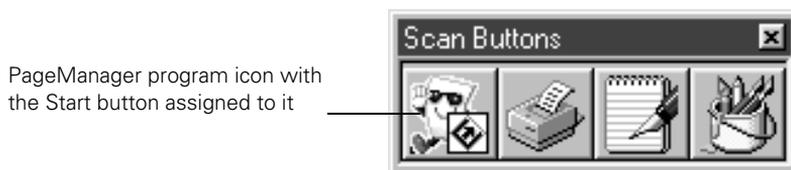
To set up applications other than Presto! PageManager in Windows 98, see the *EPSON TWAIN User's Guide* for instructions.

The PageManager program icon on the Macintosh is different from Windows; it is shaped like a desktop inbox. See PageManager online help for details.

By default, the Start button automatically launches Presto! PageManager. Presto! PageManager, in turn, automatically starts EPSON TWAIN, and optionally scans the image and sends it to the PageManager desktop. To have PageManager perform different actions when you press the Start button, you must set up PageManager's Scan Buttons palette and assign a destination program or device. For example, if you

want the images you scan with the Start Button to be sent directly to your image editing program, you can assign the Start button to Windows Imaging (or another image editing program).

The Scan Buttons palette appears on the screen whenever PageManager is running so you can select the destination program or device for your scanned images. (If it doesn't appear, open the PageManager View menu and click the Scan Buttons option.)



The icon that contains the  Start button icon indicates where images scanned using the Start button will be sent. (You can select PageManager as the destination program for your scanned images if you don't want them to load into a different program.)

Follow the instructions in these sections to set up the Scan Buttons:

- “Assigning a Destination to the Start Button” below
- “Adding a Destination to the Scan Buttons Palette” on page 41
- “Selecting Scan Button Settings” on page 43

Once you've assigned applications to the Scan Buttons palette, you can also access them directly for scanning by clicking them with the mouse. See “Launching Scanning Jobs with Scan Buttons” on page 43.

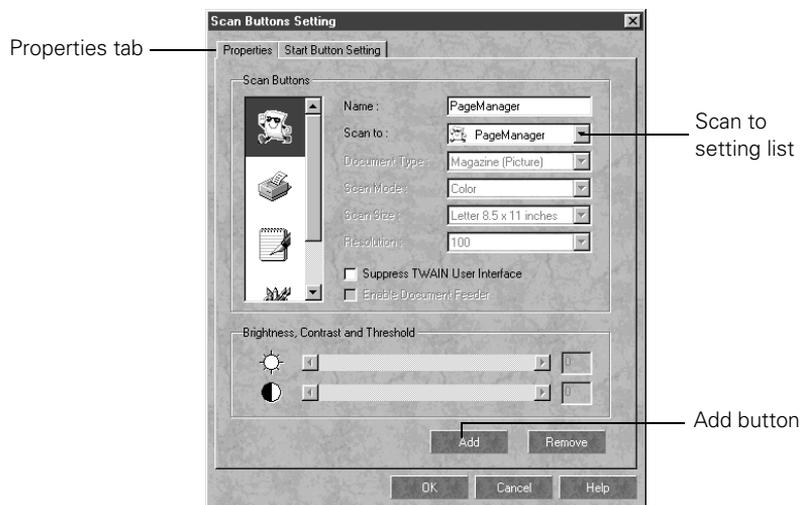
Assigning a Destination to the Start Button

PageManager is the default destination program for the Start button. To have another application start when the Start button is pressed, see your electronic *EPSON TWAIN User's Guide* for instructions.

Adding a Destination to the Scan Buttons Palette

If you want to add program or device icons to the Scan Buttons palette, follow these steps:

1. Open the File menu and select Scan Buttons Setting. You see the Scan Buttons Setting dialog box. Click the Properties tab, if necessary.



2. Click the Add button. On the Macintosh, you see the Add scan button dialog box.
3. Click the arrow in the Scan to (Windows) or Scan to App (Macintosh) setting box. The Scan to setting lists the programs and devices on your system that PageManager can send your scanned file to. Select the program or device you want to add. An icon for it appears in the scroll bar on the left (Windows only).
4. Type a name for the icon in the Name field. On a Macintosh, click OK to close the Add scan button dialog box.



For the best results, don't suppress the EPSON TWAIN interface when scanning with the Start button. This lets you preview and adjust your image settings the way you want them before you scan. You'll also get a wider variety of setting choices than if you suppress TWAIN and use the PageManager scan settings.

5. If the Suppress TWAIN User Interface checkbox is active, you can select whether you want PageManager to open the EPSON TWAIN dialog box when you press the Start button.

If you don't check the checkbox, the EPSON TWAIN dialog box appears after you press the Start button and PageManager opens. Then you can preview, select settings, and click Scan when you're ready.

If you check the checkbox, PageManager suppresses the EPSON TWAIN dialog box and uses the settings described in step 6.

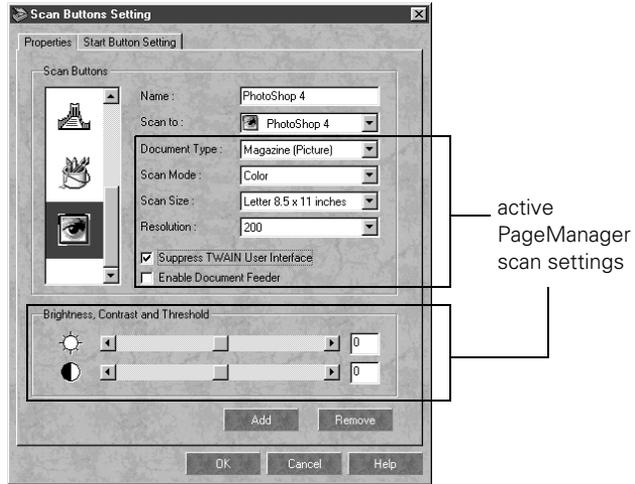
6. If you checked the Suppress TWAIN User Interface checkbox in step 5, the PageManager scan settings become active.

If these settings are active, select the scan settings you want to use whenever you press the program or device icon.

7. If you want to assign a new destination program or device to the Start button, see your electronic *EPSON TWAIN User's Guide* for instructions.

8. When you're finished adding programs or devices, click OK.

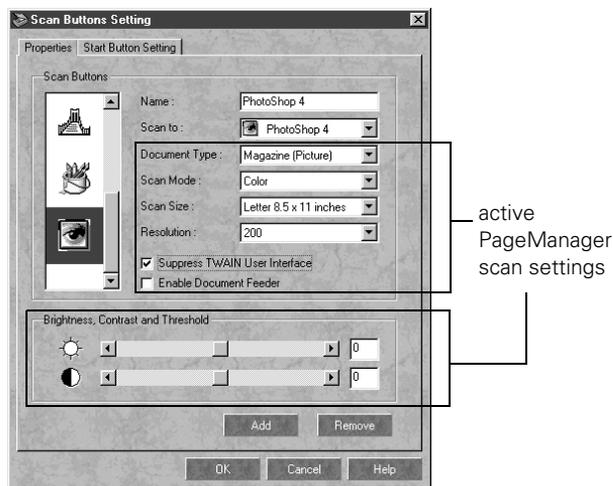
If you need to reassign a destination for the start button, see your electronic *EPSON TWAIN User's Guide* for instructions.



Selecting Scan Button Settings

If you select a device or program for which you've checked the Suppress TWAIN User Interface checkbox, the PageManager scan settings become active. If they're active, select the options you want to use whenever you press the destination icon in the Scan Buttons palette or assign the Start button to the icon.

For a complete description of the settings and their options, see the electronic *EPSON TWAIN User's Guide*.



Launching Scanning Jobs with Scan Buttons

The Scan Buttons palette can remain on your desktop even when the main PageManager window is minimized or hidden. This allows you to easily launch scanning jobs by simply clicking the Scan Button you've associated with a set of scanning options and an application.

For example, you could click the PhotoShop scan button that was created by the previous sections, and the Scan Button would automatically scan the image, launch PhotoShop, and open the scanned image. Similarly, you could click the Microsoft Word icon, and the scan button would scan the image, start the OCR feature, convert the printed material into text, launch Microsoft Word, and open the document.

For a complete description of the different tasks a Scan Button can perform, see the electronic *EPSON TWAIN User's Guide*.

Selecting Advanced TWAIN Settings

EPSON TWAIN 4 has two operating modes: Easy and Advanced. Easy mode automatically selects what are usually the best scanning settings based on the type of image you specify in the Image Type and Destination menus. Advanced mode also selects the best settings based on the Image Type and Destination selections, but allows you to manually adjust these settings. This section briefly describes the different settings you can adjust, and the preferred order you should adjust them in. Detailed descriptions are given in your electronic *EPSON TWAIN User's Guide*.

To manually adjust settings in the Advanced window, make adjustments in the following order:

The screenshot shows the EPSON TWAIN 4 Advanced window with the following settings and callouts:

- 1** Select the basic settings: Document Source, Image Type, Destination
- 2** Preview your image
- 3** Automatically set the scan area for your image using Auto Locate
- 4** Size or scale the image (be sure to increase the Resolution if you increase the size or scale)
- 5** Customize your Settings, select your preview Configuration, and use color management
- 6** Scan the image into your application
- 7** Close the driver

Special scanning features:

- Batch scanning: select Settings, save several setting groups, and click Batch Scan
- Color management: select Configuration and click ICM/sRGB (Windows 98) or ColorSync (Macintosh)
- Image corrections: use the  Image Controls,  Color Adjustment,  Tone Correction, and  Auto Exposure tools. Availability of these tools depends on the Image Type selected. If ICM/sRGB is selected on the Configuration screen, these tools are not available.

For more information, see your electronic *EPSON TWAIN User's Guide*.

Recommended Settings

If you are manually adjusting the settings in the Advanced window, you should consider using the following settings for optimal scans (a more detailed listing is available in your electronic *EPSON TWAIN User's Guide*):

Image type	Recommended application	Recommended Image Type	Scanning resolution for printing ^{1,2}
Photograph	PhotoDeluxe	Color Photo	300 dpi
Small photograph to be enlarged	PhotoDeluxe	Color Photo	300 dpi to 2400 dpi
Magazine	PhotoDeluxe	Color Photo	300 dpi
Newspaper (text only)	PageManager	OCR	400 dpi
Text for OCR	PageManager	OCR	400 dpi
Text with images	PageManager	Copy & Fax (automatically selects Auto Area Segmentation [AAS])	400 dpi
Line art	PhotoDeluxe	Line Art	300 to 2400 dpi
35 mm film (negative)	PhotoDeluxe	TPU for neg.Film	300 to 2400 dpi
4 x 5 or Brownie film (negative)	PhotoDeluxe	TPU for neg.Film	300 to 2400 dpi
35 mm slide or 4 x 5 transparency	PhotoDeluxe	TPU for pos.Film	300 to 2400 dpi

- ¹ If your final output is for on-screen viewing (for example, on a web page), select 72 dpi for your resolution.
- ² If you are enlarging your image, you must manually increase the resolution (dpi) proportionally to maintain the resolution of your original.



PressWriter for Macintosh does not have a TWAIN scan function, but you can import a scanned image from another application using the Object, Import Image function.

The EPSON Perfection 1200U's maximum hardware resolution of 1200 × 2400 dpi is achieved through EPSON's advanced Micro Step Drive technology. This technology enables the EPSON Perfection 1200U to achieve a maximum *sub-scan* or vertical resolution of 1200 dpi or 2400 dpi using "half-stepping" of the scanning carriage to double the optical resolution.

Scaling (Resizing) Images

If you plan to enlarge your image, it is better to enlarge it when you're scanning rather than in your application. Each time you modify an image, you lose some quality.

Keep in mind when you enlarge a small photo, such as a 35 mm slide or wallet-size photo, you'll need to scan at a high enough resolution to retain your image quality, but not so high that your file size is too large to be efficient.

You must manually adjust the resolution (dpi) to maintain the same image quality when you resize your image. For example, if you have a 300 dpi 2 × 2-inch image that you want to enlarge to 4 × 4 (a factor of 200%), increase the Scale setting to 200% and change the resolution to 600 dpi.

One-Touch Scanning

Your EPSON Perfection 1200U features a one-touch scanning button. With one-touch scanning, you can just load a document in the scanner, press the scanner's ⇨ Start button, and then PageManager opens EPSON TWAIN automatically. To use this option, you must first install Presto! PageManager (or another application that supports linking to scanner events with the Start button on Windows 98) and enable the scanner monitor utility. For details on how to set up one-touch scanning, see "Using the Start Button" on page 21.

Batch Scanning

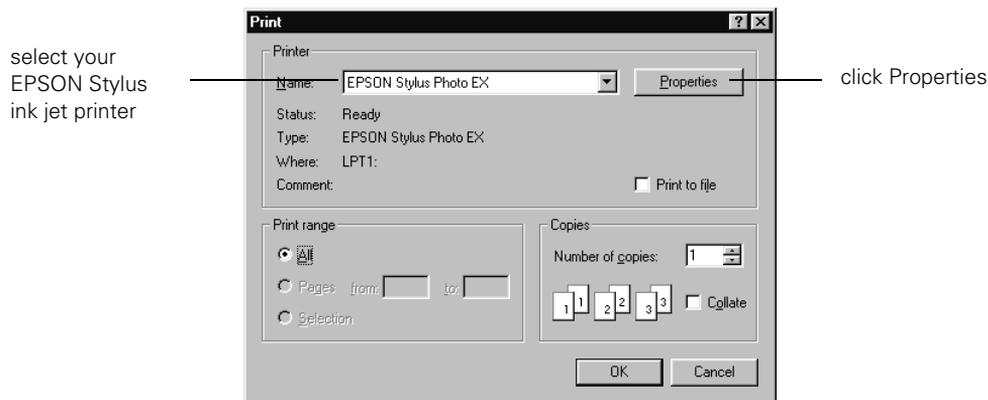
You can use batch scanning to save time. Batch scanning lets you scan the same image with several different settings. See “Batch Scanning” in your *EPSON TWAIN User’s Guide* for details.

Printing Scanned Images with Optimal Color in Windows

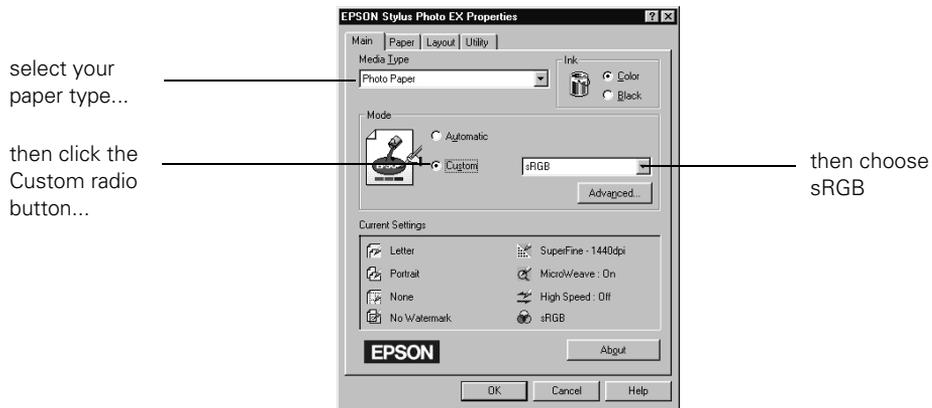
If you have an EPSON Stylus printer, you can select settings in your printer driver for optimal printouts of your scanned documents. Because you scan using the RGB (red, green, blue) color model, but print using the CMYK (cyan, magenta, yellow, black) color model, you can expect some differences in your printed document’s colors. However, when you select the printer driver’s sRGB setting, you can more closely match your printed colors to your scanned document colors.

Follow these steps to select the best color printing settings:

1. Choose Print from your application’s File menu. Macintosh users skip ahead to step 3.
2. From your application’s Print dialog box, select your EPSON printer and click the Properties button.



3. The printer Properties window appears. Choose your paper type from the Media Type menu, and click the Custom radio button. Then chose sRGB from the Custom Settings (Windows) menu.



4. Click OK on the Properties window. Then click OK from the Print dialog box to print your document.

Viewing Your Electronic Manuals

You always have easy access to your electronic manuals—just go to the Main Menu screen on your scanner software CD-ROM and click the Electronic Documentation button. If you already have Adobe Acrobat Reader 3.0 on your system, the manual opens in Acrobat Reader automatically. If you don't have Acrobat Reader, you can install it from the CD-ROM by clicking the Get Acrobat Reader button on the Electronic Documentation screen.

Your scanner software CD-ROM includes the following manuals:

- *EPSON TWAIN User's Guide* (TWAIN.pdf)
- *Adobe PhotoDeluxe Home Edition User's Guide* (Windows, PhotoDeluxe.pdf) or *Adobe PhotoDeluxe 2.0 User's Guide* (Macintosh, PhotoDeluxe.pdf)
- *NewSoft Presto! PageManager User's Guide* (PageManager.pdf)
- *Broderbund The Print Shop PressWriter User's Guide* (PressWriter.pdf)
- *ArcSoft PhotoPrinter User's Guide* (Windows: photoprint.pdf, Macintosh: PhotoPrinter.pdf)

For guidelines on viewing your electronic manuals using Acrobat Reader, see “Navigating a Manual” on the next page.

Copying a Manual to Your Hard Drive

If you prefer to view the electronic manuals from your hard drive instead of the CD-ROM, you can copy them from the Manuals folder in the Browser folder on the CD-ROM. The file names are listed above.



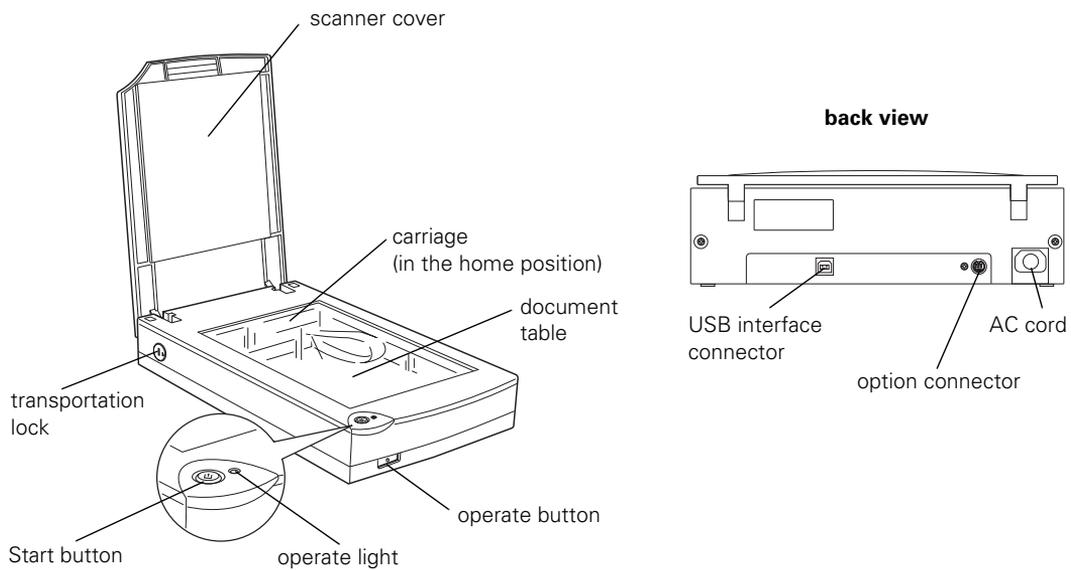
The manuals for some software applications are automatically copied to your hard drive when you install the software. You can access these manuals by clicking **Start**, **Programs**, the program name, then the manual name.

Scanner Maintenance

This section gives you basic maintenance instructions and tells you how to transport your scanner safely.

Identifying Scanner Parts

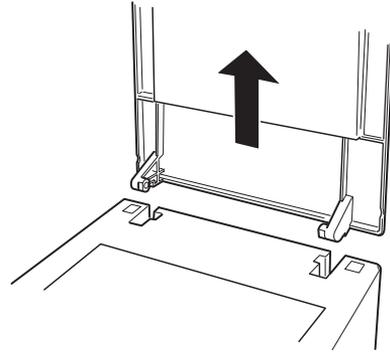
Here are the parts of your scanner:



Removing the Scanner Cover

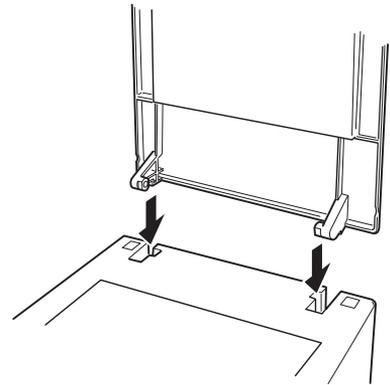
If you're scanning something that doesn't fit under the scanner cover, you can remove it. To do this, simply open the scanner cover all the way, and lift it straight up.

When scanning with the cover removed, make sure you cover any exposed areas of the document table glass to prevent interference from external light.



Reattaching the Scanner Cover

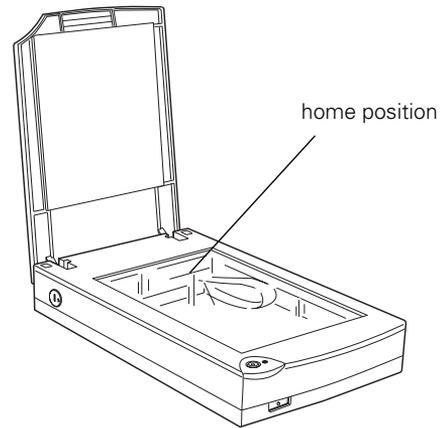
When reattaching the document cover, be sure to hold the cover upright, so the pivot “grooves” are aligned vertically with the hinge notches on the scanner. Then ease the cover into the notches.



Transporting the Scanner

When you transport the scanner a long distance or store it for an extended time, follow the steps below to secure the carriage.

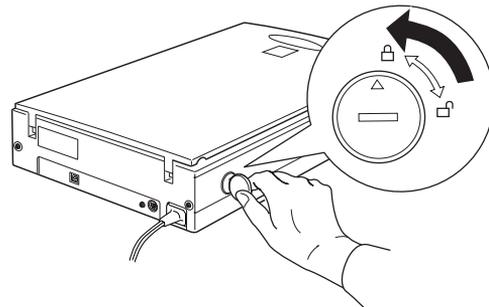
1. Remove any optional equipment and replace the document cover.
2. Turn on the scanner and wait until the carriage moves to the home position (toward the back of the scanner). Then turn off the scanner.



If the carriage does not automatically return to the home position, slowly raise the front of the scanner and hold it up until the carriage comes to rest in the home position. Then turn the transportation lock to the locked position.

If you are using the transparency unit and it is switched on, the carriage will not move to the home position. Remove the transparency unit first, then perform the steps above.

3. Use a coin or screwdriver to turn the transportation lock to the locked position (toward the top of the scanner).



Cleaning the Scanner

To keep your scanner operating at its best, you should clean it periodically. Before cleaning, unplug the power cord.

Use a soft cloth to clean the outer case with mild detergent dissolved in water.

If the document table glass gets dirty, clean it with a soft, dry cloth. If the glass is stained with grease or other hard-to-remove material, use a small amount of glass cleaner on a soft cloth to remove it. Wipe off any remaining liquid with a dry cloth.

Be sure there's no dust on your document table. Dust can cause white spots to appear in your scanned image.



Never use a harsh or abrasive brush or cleaning product to clean the document table. A damaged glass surface can decrease the scanning quality.

Never use alcohol, thinner, or corrosive solvent to clean the scanner. These chemicals can damage the scanner components as well as the case.

Be careful not to spill liquid into the scanner mechanism or electronic components. This could permanently damage them.

Never open the scanner case. Don't spray lubricants inside the scanner. If you think repairs or adjustments are necessary, consult your dealer or contact EPSON.

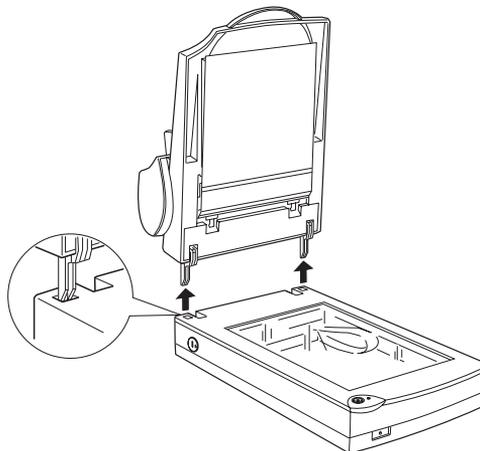
Cleaning the Paper Path Guide

If you are using the optional auto document feeder (ADF) and you notice the quality of your scans have declined, or you simply want to keep the quality of your scans at their best, clean the paper path guide.

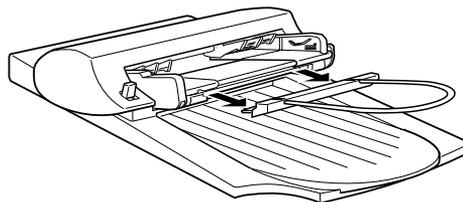
Follow the instructions below to remove, clean, and reattach the paper path guide.

Removing the Paper Path Guide

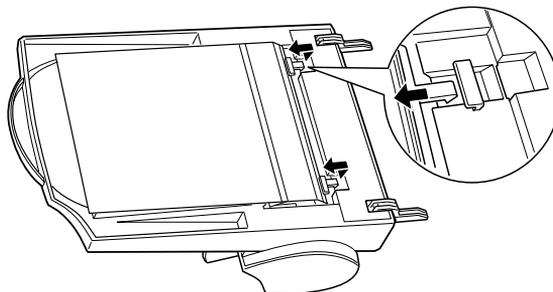
1. Turn off the scanner.
2. Disconnect the cable and remove the ADF.



3. Gently pull out the paper support.

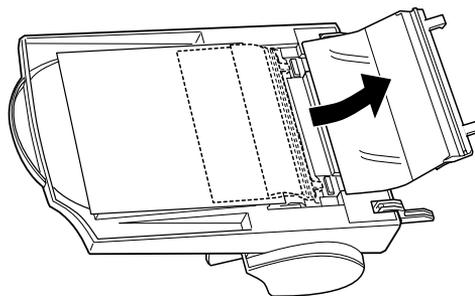


4. Place the ADF on the document table upside down, with the front of the ADF towards you.



5. Gently pull the two white hooks up, and then push them back down out of the rectangular holes.

6. Pull the paper path guide upwards and out to remove it.



To clean the paper path guide, see “Cleaning the Paper Path Guide” below. To reattach the paper path guide, see “Attaching the Paper Path Guide” below.

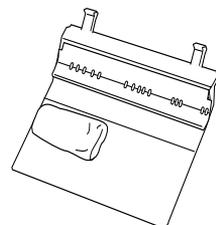
Cleaning the Paper Path Guide



Be careful not to scratch or damage the paper path guide.

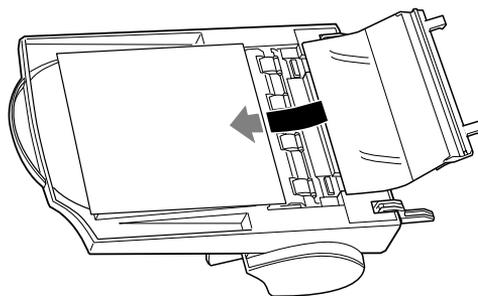
To avoid damaging the auto document feeder, be careful not to touch the rollers or metal parts.

Use a soft dry cloth to gently wipe the transparent plastic sheet of the paper path guide.

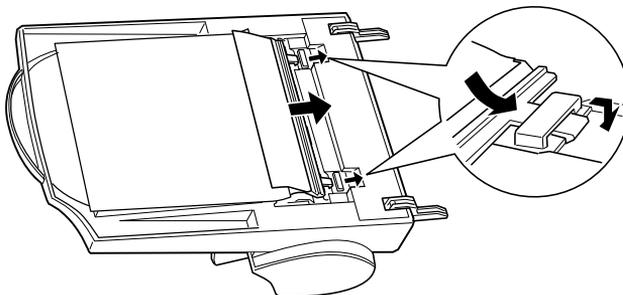


Attaching the Paper Path Guide

1. Insert the transparent plastic sheet of the paper path guide into the paper path of the auto document feeder.



2. Insert the hooks into the rectangular holes in the bottom of the auto document feeder. Make sure the hooks click into place.



Using the Optional Equipment

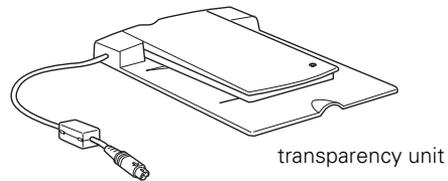
This section includes basic information on unpacking, installing, and using the options for the EPSON Perfection 1200U: a transparency unit (B813172) and an auto document feeder (B813142).

You can purchase these options from EPSON Accessories at (800) 873-7766 or visit our web site at www.epsonsupplies.com (U.S. sales only). In Canada, please call (800) 873-7766 for dealer referral.

Transparency Unit

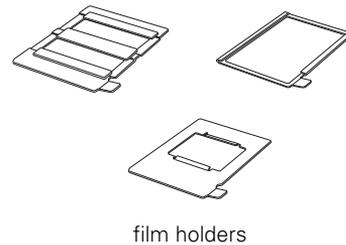
The transparency unit lets you scan negative or positive film strips and slides on your scanner.

It comes with the EPSON Perfection 1200U PHOTO scanner package.



Unpacking the Transparency Unit

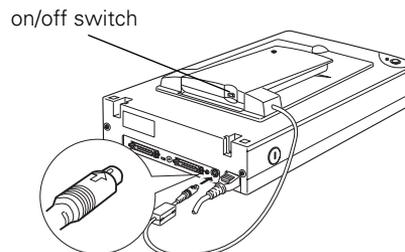
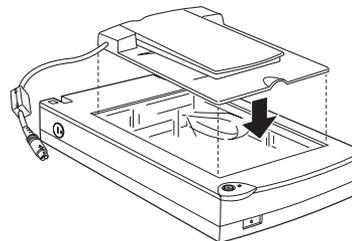
Make sure that all the items to the right are included in the transparency unit box. If any items are missing or damaged, contact your EPSON dealer immediately. Keep all the packing materials so you can use them for storage when you are not scanning transparencies.



Installing the Transparency Unit

Follow the steps below to install the transparency unit on the scanner.

1. Make sure the scanner is turned off.
2. Remove the document cover from the scanner by opening it to an upright position and lifting it straight up.
3. Make sure the document table glass is clean and dust free.
4. Place the transparency unit on the document table glass so that the hinges face the rear of the scanner and it fits on the document table glass.
5. Connect the transparency unit connector (arrow faces up) to the scanner's option interface.
6. Turn on the transparency unit.
7. Turn on the scanner.



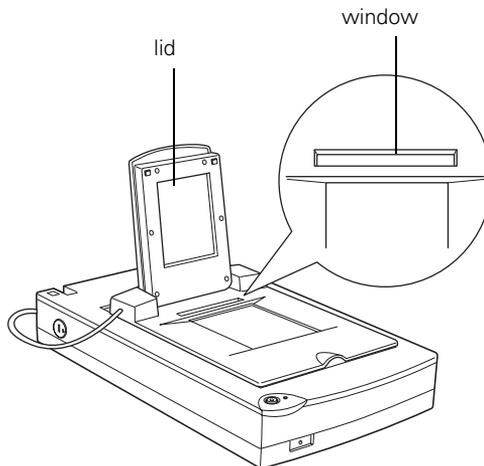
For information on loading transparencies and selecting driver settings, see the next section, "Loading Transparencies."

Using the Transparency Unit

Loading Transparencies

Before scanning transparencies, wipe the lid of the transparency unit, the scanner's document table glass, and the narrow window near the hinges. Be sure to keep the window uncovered when loading your transparencies. If your transparency obstructs the window, the colors in your scans will be affected.

You can load transparencies in the film holders or you can place them directly on the document table, as described in the following sections.



Using Film Holders

Three film holders are included with the transparency unit. To place film in the holders, see the instructions for the type of film you're scanning. To remove a film holder from the document table, lift it out by its tab.



Hold the film by the edges or use gloves. Touching the film surface with bare hands can leave fingerprints or other marks on the film.

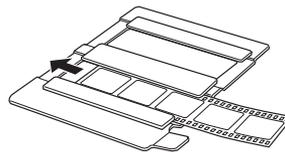
Placing the Film

Film has two sides, a base side that is shiny and a dull side with the emulsion. The base side of the film has the film maker's name and film ID numbers printed on it.

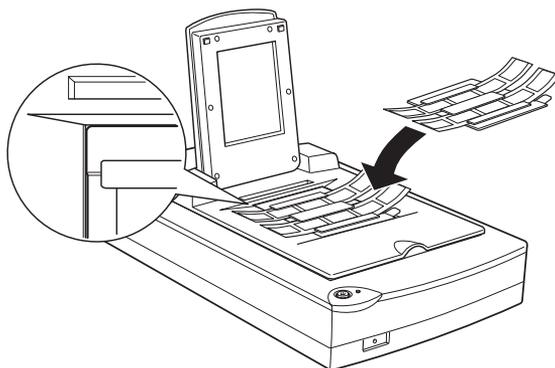
Film should always be loaded in the film holders or placed on the document table with the base side down.

Loading 35 mm Negative or Positive Film

Insert a strip of film in the 35 mm film holder, base side facing down.

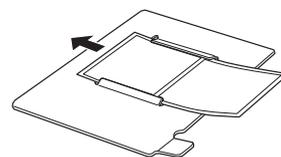


Then place the film holder on the document table. Be sure to align the upper left corner of the film holder with the upper left corner of the transparency unit. You can adjust the position of 35 mm film by sliding the strips in the film holder so the frames you want to scan are positioned in the window.

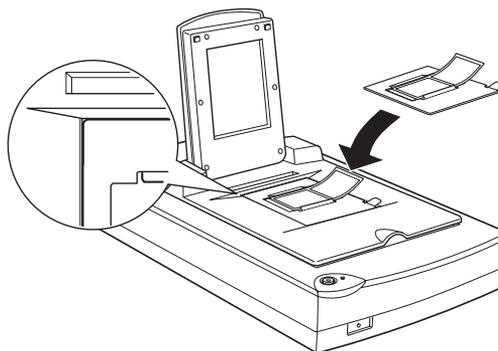


Loading Brownie Size Film

Brownie size film is 2.4 × 3.5 inches (6 × 9 cm). Insert the film in the Brownie size film holder, base side facing down.



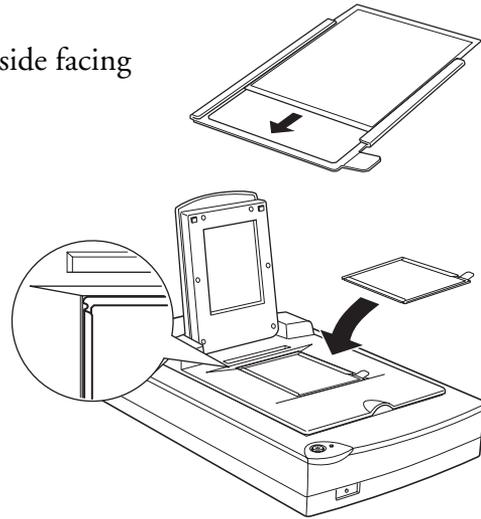
Then place the film holder on the document table. Be sure to align the upper left corner of the film holder with the upper left corner of the transparency unit.



Loading 4 x 5 inch Film

Insert film in the 4 × 5 inch film holder, base side facing down.

Then place the film holder on the document table. Be sure to align the upper left corner of the film holder with the upper left corner of the transparency unit.



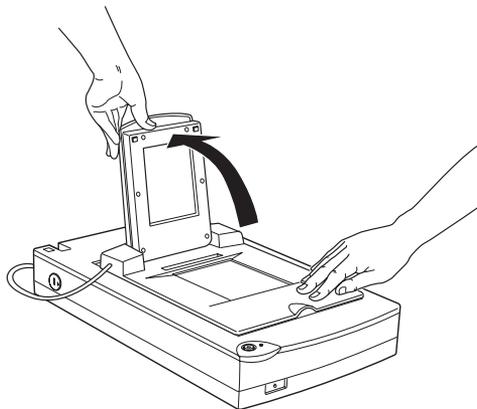
Loading Slides and Film Directly on the Document Table



Hold the film by the edges or use gloves. Touching the film surface with bare hands can leave fingerprints or other marks on the film.

You can scan slides and film strips in the 4 × 5-inch (101.6 × 127 mm) scanning area of the transparency unit. You can use film holders (as described in the previous sections) or place them directly on the document table. Follow the steps below.

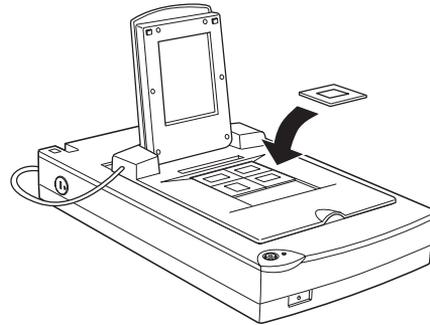
1. Open the top of the transparency unit while holding the base down.





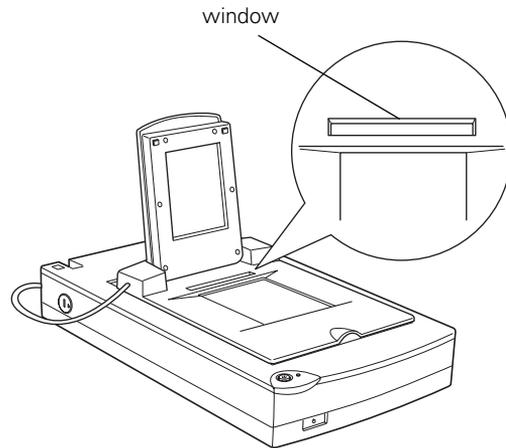
If the film size is 4 × 5 inches, it may be easier to use the film holder. If you place the film directly on the document table, it may be difficult to pick up.

2. Load the slide or film with the base side down on the scanner's document table in the transparency unit window, as shown to the right.
3. Close the transparency unit.



Leave the narrow window uncovered, otherwise the colors in your scans will be affected.

Make sure the unit is completely closed, otherwise an option error results and you will not be able to scan the document or get correctly colored images.



Selecting Settings

In EPSON TWAIN, select TPU - neg. Film or TPU - pos. Film as the Document Source setting, depending on the type of film (35 mm film strips or slides) you are scanning. When previewing images of negatives scanned using a film holder, the color may appear odd as the frame of the film holder is perceived as white, causing your scans to appear darker. To see the correct color, click and drag the mouse over the image area, then click the  Zoom Preview button. For details on scanner software settings, see the electronic *EPSON TWAIN User's Guide*.

Scanning Reflective Documents or Photographs

When you return to scanning normal reflective documents (such as memos or photographs), you can turn off the transparency unit, then place documents between it and the document table. Remember to change the Document Source setting to Flatbed in EPSON TWAIN. Be aware that the entire document table will be scanned so you will scan not only your document, but also the underside of the transparency unit. To prevent scanning the underside of the transparency unit, you can place a white piece of paper between your document and the transparency unit.

When scanning thin documents, you may see an impression of the underside of the transparency unit in your scans. If so, remove the transparency unit and re-install the document cover as described in the next section.

If you don't plan to scan transparencies for a while, you can remove the transparency unit and re-install the document cover as described in the next section.

Removing the Transparency Unit

Follow these steps to remove the transparency unit:

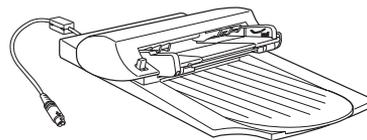
1. Turn off the transparency unit and the scanner.
2. Remove any film holders or film from the document table.
3. Unplug the transparency unit connector from the scanner's option interface.
4. Store the transparency unit and film holders in their original packaging.
5. Reattach the document cover as described on page 54.

Auto Document Feeder

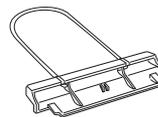
The auto document feeder allows you to automatically load single-sided, multi-page documents into your scanner. The document feeder is particularly useful for OCR (optical character recognition) scanning or for creating an image database.

Unpacking the Auto Document Feeder

When you unpack your auto document feeder (ADF), make sure you have all the parts shown to the right. Remove the protective materials from the ADF. Keep all the packing materials so you can use them for storage when you are using the auto document feeder. If any items are missing or damaged, contact your EPSON dealer.



auto document feeder



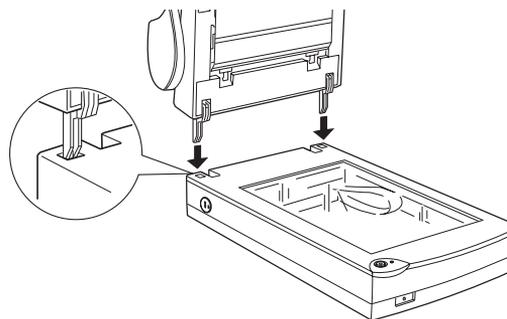
paper support



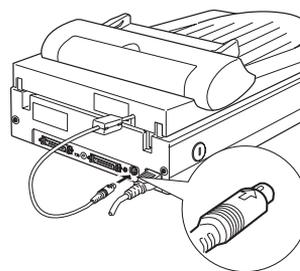
spare paper path guide

Installing the Auto Document Feeder

1. Make sure your scanner is turned off.
2. Remove the document cover from the scanner by opening it to an upright position, and lifting it straight up.
3. Make sure the document table is clean and dust free.
4. Insert the hinges on the ADF into the outer square holes at the back of the scanner and close the ADF.



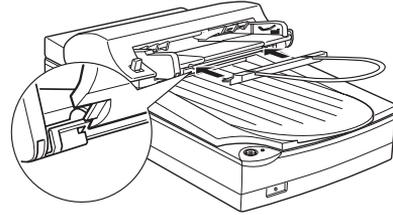
5. Attach the ADF's connector (arrow faces up) to the scanner's option interface.



6. Attach the paper support to the ADF.

7. Turn on the scanner.

For information on loading paper in the ADF and selecting driver settings, see “Selecting Settings” on page 69.



Using the Auto Document Feeder

Loading Paper into the Auto Document Feeder

Your ADF can automatically load up to 20 sheets of the following paper sizes (based on a paper weight of 17 lbs and a stack thickness of 0.16 inch [4.0 mm] or less):

- Letter: 8.5 × 11 inches (215.9 × 279.4 mm)
- Legal: 8.5 × 14 inches (215.9 × 355.6 mm)
- Checks: 3.3 × 5 inches (83 × 127 mm)
- B5: 7.17 × 10.1 inches (182 × 257 mm)
- A4: 8.27 × 11.69 inches (210 × 297 mm)

The width can range from 3.3 to 8.5 inches (85 to 216 mm) and the length can range from 5 to 14 inches (127 to 356 mm)



Do not feed photographic sheets or valuable original artwork into the auto document feeder as a misfeed may result in accidental wrinkling or damage.

If you are scanning high-quality color or halftone documents, place the documents directly on the document table.

Check the following before feeding a document into the feeder:

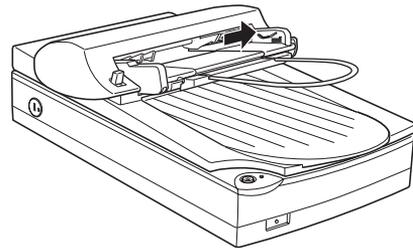
- Ink on the document is dry.
- The document has no holes and is not ripped or wrinkled.
- The document has no staples, paper clips, or other objects attached that might damage the feeder mechanism.
- The document has no folds closer than 0.2 inch (5 mm) from its edge.
- The document is not a multi-part form or bound.
- The document has no rear carbon coating.
- The document has no cut-out areas.



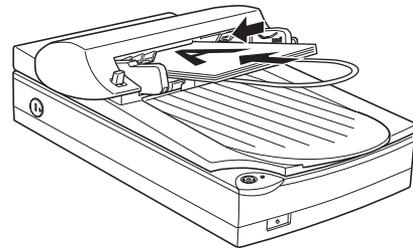
Make sure no documents or dust are on the document table glass when using the auto document feeder. Dust on the document table glass near the carriage home position may result in vertical lines on the scanned images.

Follow the steps below to load paper into the auto document feeder (ADF):

1. Slide the right edge guide all the way to the right.



2. Insert the paper stack into the ADF until it meets resistance. Make sure that the side you want to scan is facing up, with the top edge facing into the feeder; the first page you want to scan should be on top. Then move the right edge guide so it is flush with the right edge of your paper.



Documents are output into the lower tray after scanning is finished.

Selecting Settings

Be sure to select Auto Document Feeder (ADF) in the Document Source setting in EPSON TWAIN. For more information on selecting driver settings, see the *EPSON TWAIN User's Guide*.

Loading Documents Manually

You can load documents manually even when the ADF is installed.

Lift the ADF and place the document on the document table. Then lower the ADF and scan the document.

Always close the ADF and its cover before scanning. If you are scanning thick material or documents more than 1.6 inches (4 cm) thick, leave the ADF in the upright position. Be sure to cover any exposed areas of the document table glass.

Be sure to select Flatbed in the Document Source settings in EPSON TWAIN.



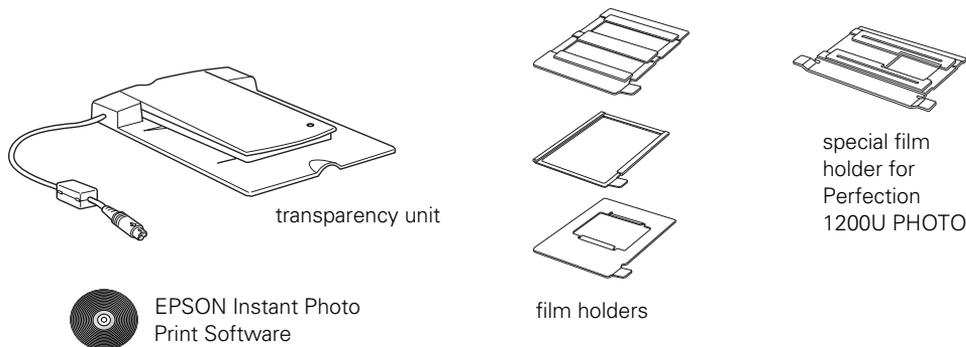
Opening the auto document feeder or its cover while it is operating results in an option error and stops paper feeding.

When scanning thin documents, you may see an impression of the underside of the auto document feeder in your scans. If so, remove the auto document feeder and re-install the document cover as described on page 54.

Using the Perfection 1200U PHOTO

The EPSON Perfection 1200U PHOTO scanner includes both hardware and software that simplifies the scanning and printing of photos, photo negatives, and transparencies. In addition to all the materials included with the Perfection 1200U scanner, the Perfection 1200U PHOTO adds the following:

- A transparency unit
- Four film holders (one unique to the Perfection 1200U PHOTO)
- EPSON Instant Photo Print utility software



EPSON Instant Photo Print simplifies scanning and printing photos on your EPSON color ink jet printer with only a few mouse clicks. It is compatible with both Windows and Macintosh computers.



EPSON Instant Photo Print is compatible with the following ink jet printers: the EPSON Stylus COLOR 740, 740i, 850, 850N, 900, 900N, and the EPSON Stylus PHOTO series.

The following sections describe how to install and use EPSON Instant Photo Print software. To install the transparency unit, see “Installing the Transparency Unit” on page 60.

Installing EPSON Instant Photo Print

EPSON Instant Photo Print is included on its own CD-ROM that is Macintosh and Windows compatible. To install EPSON Instant Photo Print, follow these steps:

1. Turn on your computer. Disable any anti-virus programs.
2. Insert the EPSON Instant Photo Print CD-ROM in your drive.
3. If the EPSON window does not automatically open on your Windows computer, double-click the My Computer icon on your Desktop, then double-click the EPSON CD-ROM icon.

If the EPSON window does not automatically open on your Macintosh computer, double-click the EPSON CD-ROM icon on your desktop.

4. Double-click the EPSON Installer icon in the EPSON CD-ROM window.
5. Follow the on-screen prompts to install the software.
6. Restart your system, if prompted.

Using EPSON Instant Photo Print

Before you start EPSON Instant Photo Print, make sure:

- Your EPSON scanner and printer are turned on and ready to scan and print. (If you start EPSON Instant Photo Print before turning on your scanner or printer, you may not be able to scan and print properly.)
- The transparency unit is turned on if you are scanning film or slides (see page 59 for installation instructions).
- Your EPSON ink jet printer is your default printer (Windows) or is your current printer in the Chooser (Macintosh).



Do not connect or disconnect the USB cable while EPSON Instant Photo Print is open, otherwise it may not work properly.



Most of the screens shown in this section are for Windows, though the Macintosh version looks nearly identical. The instructions are the same.

In Windows, click Start, Programs, EPSON Scanner, then choose Instant Photo Print.

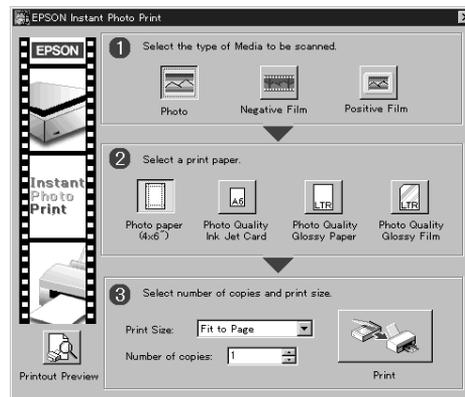


For the Macintosh, open the Instant Photo Print folder, then double-click the Instant Photo Print icon.



Instant Photo Print

The EPSON Instant Photo Print window appears.



Now follow the steps in the next section to place your film and photos on the scanner, load paper in the EPSON printer, and scan and print your photo.

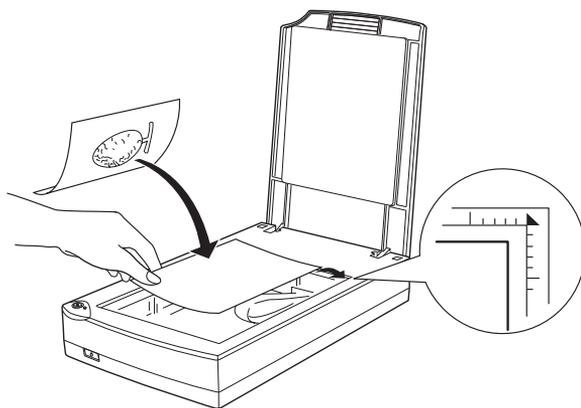
Placing Film and Photos

Once the software is running, place the film or photos you want to scan and print on the scanner's document table, one at a time. You can scan photos and documents up to A4 size. With transparent originals, you can only scan 35 mm strip negative films ("negatives") or mounted positive films (slides).

Follow the instructions below to place your film or photos on the scanner. If you need more details, refer to page 59.

■ Photos (reflective material)

Place the photo on the document table, with the side to be scanned facing down and aligned with the upper right corner.



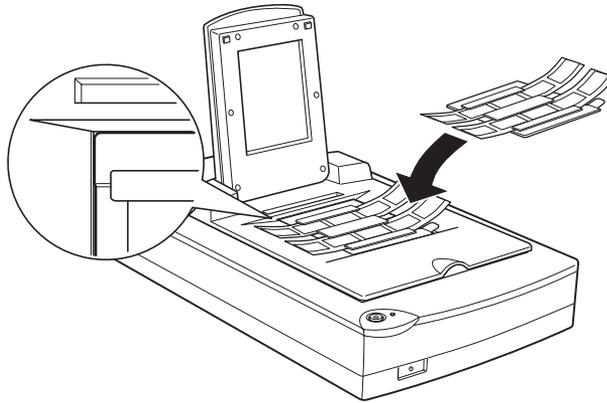
■ 35 mm Film

Set the film in the film holder facing down.



The front side of film is the side on which the film maker's name and film ID numbers are readable. Place this side down on the document table.

Place the film holder on the document table, aligned with the upper right corner of the film adapter.



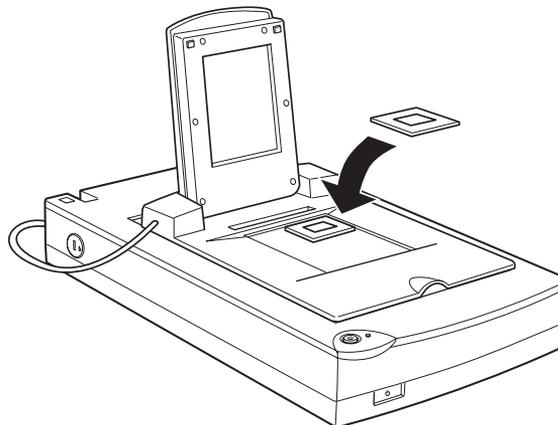
■ 35 mm Slides

Place the 35 mm slide on the document table, facing down in the window of the transparency unit.



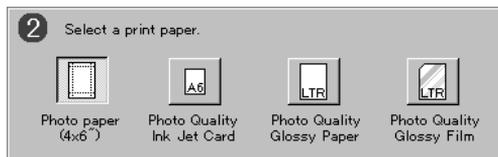
The front side of the slide is the side on which the film maker's name and film ID numbers are readable. Place this side down on the document table.

Then place the slide on the document table aligned with the upper right corner of the film adapter.



Loading Paper in Your EPSON Printer

You can load any of the media types and sizes shown in the EPSON Instant Photo Print window in your printer. Follow the paper loading instructions in your printer documentation.



The types and sizes of paper that can be used with EPSON Instant Photo Print may vary depending on the version of the software you're using.

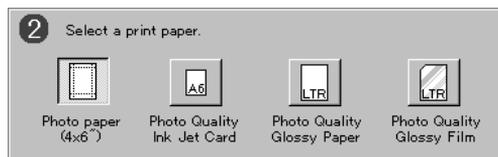
Scanning and Printing

Follow the steps below to scan and print.

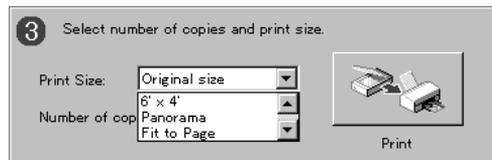
1. Click the button for the type of original you have placed on the scanner.



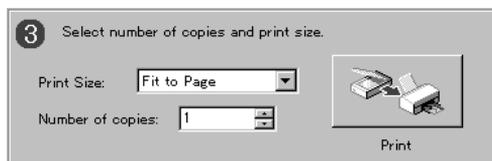
2. Click the button for the type of paper you loaded in the printer.



3. Select the size of your original and the layout you want to use from the Print Size list.



4. Specify the number of copies you want to print in the Number of copies box.



5. If you want to view a preview of how your image will print, click the Printout Preview icon.



6. Click the Print icon to start scanning and printing.



To close EPSON Instant Photo Print, click the Close button.

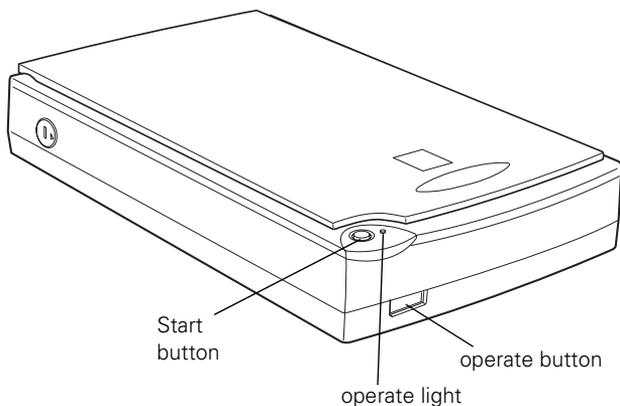
Problems? Need Help?

This chapter identifies the scanner parts including its light and buttons, and gives you the basics for diagnosing and solving scanner problems. For solutions to common setup and software problems, see “Problems and Solutions” on page 81.

For more troubleshooting tips, see the “Troubleshooting” section of your electronic *EPSON TWAIN User’s Guide*.

Light and Buttons

The scanner has one light and two buttons. The tables on the next page provide details about the light status and button functions.



Scanner Light

The operate light indicates the status of the scanner. If an error occurs, the scanner stops operating and the operate light shows the type of error.

Scanner operate light

Light status	Color	Scanner status
◐ (slowly flashing)	Green	Initializing or busy scanning
○	Green	Ready to scan images
◑ (rapidly flashing)	Red	The scanner is not properly connected to the computer. Check the cable connection. Then turn the scanner off and back on to reset it.
		The scanner is locked. Turn off the scanner, unlock the transportation lock, then turn the scanner on.
●	—	The scanner is turned off

○ = on, ● = off, ◐ = flashing

Scanner buttons

Button	Function
 Operate	Turns the scanner on and off.
 Start	Lets you scan directly to an application with one touch. You must set up the scanner monitor and a compatible application to use this button. See your <i>EPSON TWAIN User's Guide</i> for more information.

Problems and Solutions

If you're having problems, this section answers some of the most common questions.

Setup Problems

If your system doesn't recognize the scanner . . .

- Make sure your scanner is turned on. If you opened your host application before you turned on your scanner, close your application and reopen it.
- Check the USB cable connection or try using another USB cable.
- If you get the message, "No push button scanner found," turn off your scanner, shut down your computer, turn on your scanner, and then turn on your computer.

Scanner Problems

If the operate light doesn't come on or blinks slowly . . .

Check the scanner power cord. Make sure the power cord is securely plugged into the power outlet, and that the scanner is turned on. Also, check that the power outlet is working and provides sufficient power for the scanner.

If the scanner doesn't scan your image . . .

Check your scanner source setting. Make sure you selected EPSON TWAIN 4(32-bit) (Windows 98) or EPSON TWAIN 4 (Macintosh).

If you see the message "Scanner Not Ready" (Windows 98) or "Cannot find the scanner on the bus" (Macintosh) . . .

- Make sure the scanner is turned on. You may need to restart your computer after turning on your scanner.
- Make sure your scanner cable is securely connected. Then open and close the scanner monitoring utility to manually check for the scanner (see "Enabling Scanner Monitoring" in your *EPSON TWAIN User's Guide*). If you still see the message, turn off your scanner, then turn it on again, and restart your system.
- To turn off scanner monitoring, see "Enabling Scanner Monitoring" in your *EPSON TWAIN User's Guide*.

If the scanner lid seems “loose” . . .

This is normal. Your scanner has a self-adjusting cover that allows you to place thick documents on the document table glass without removing the cover.

If you’re having trouble scanning while using the optional equipment . . .

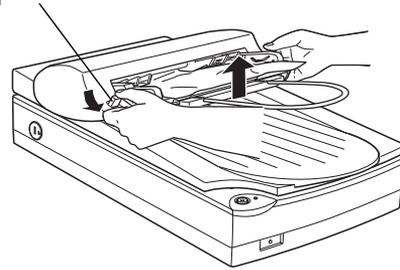
- Make sure the option is correctly installed and connected to the scanner’s option interface.
- Make sure you select the correct Document Source setting for the option and your image: Auto Document Feeder (ADF), TPU for neg.Film, or TPU for pos.Film.
- Make sure the unit is completely closed.
- If you’re using the transparency unit, make sure it is turned on.

If you need to remove jammed paper from the auto document feeder . . .

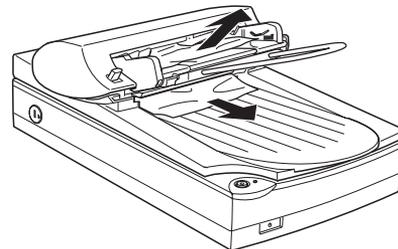
To clear jammed paper in the optional auto document feeder, follow the steps below:

1. Turn off the scanner.
2. Push down the release lever to slightly raise the feeder mechanism and release the paper.

release
lever

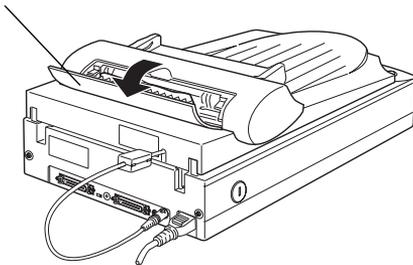


3. Slowly pull the jammed paper out of the feeder mechanism. (Be careful not to pull too hard; the paper may tear, making it more difficult to remove.)



4. If paper is still jammed inside the mechanism, open the cover to remove it.

ADF cover



5. After removing jammed paper, make sure that the cover is closed, and push the feeder mechanism down until it clicks into place.

Software Problems

If you can't open the EPSON TWAIN driver . . .

- Check the USB cable connection. Also, make sure the scanner's operate light is on. The scanner must be turned on before you start your computer. If necessary, turn on the scanner and restart your computer.
- Check that your system recognizes your scanner. Check System Device Manager in the Windows Control Panel.

- Check your scanner source setting. Make sure you selected EPSON TWAIN 4(32-bit) (Windows) or EPSON TWAIN 4 (Macintosh).

If the scanner software doesn't work properly . . .

- Make sure your computer meets the system requirements listed on pages 4 and 5, and supports any software applications you are using.
- Check your computer's memory. See if the computer has enough memory for your software. If you're running other software at the same time, using RAM resident programs, or have many device drivers, the computer may not have enough memory. (See your software and computer manuals.) If you are scanning a large image or scanning at a high resolution, your computer may not have enough memory to process the image.
- Check your software installation. Make sure that your software is correctly installed and set up. If all else fails, uninstall your software, then reinstall it, as described on the next page.

If you need to reinstall your scanner software in Windows . . .

Note: You must uninstall the EPSON scanner software before reinstalling it; the steps are included below.

1. Open the Windows Control Panel.
2. Double-click Scanners and Cameras.
3. Highlight the Perfection 1200 entry.
4. Click Remove to remove your scanner software.
5. Insert your scanner CD-ROM in your CD-ROM drive.
6. Double-click the My Computer icon on your desktop, then double-click the CD-ROM icon. From the EPSON window that appears, double-click the EPSON icon.
7. On the Main Menu, select Re-install Scanner Software.
8. On the Re-install screen, click the Re-install EPSON Scanner Software button.
9. At the restart message, click OK.

10. After your computer restarts, you see the Add New Hardware Wizard screen.

Follow steps 3 through 9, starting on page 14 to reinstall your scanner software.

If you need to reinstall your scanner software on a Macintosh . . .

1. Insert your scanner CD-ROM in your CD-ROM drive.
2. Double-click the EPSON icon.
3. On the Main Menu, select Re-install Scanner Software.
4. On the Re-install screen, click the Re-install button.
5. Follow the steps on screen to reinstall your scanner software.

Scanning Problems



If the file size is too big . . .

Adjust your scan settings. Try selecting a lower resolution (dpi), or scan only part of the image.



If your scanned image is faint or has gaps . . .

- Check the brightness. Decrease the software or driver's brightness setting.
- Try adjusting the Gamma setting.
- Check the condition of your original. If the document is damaged, dirty, or wrinkled, these imperfections will show up in your scan.
- Check that the document is placed flush against the document table.



If your scanned image is blurred or distorted . . .

- Check the position and condition of your document. Make sure the document is placed flat against the scanner's document table glass. If only part of the image is blurred, part of your document may be wrinkled or warped.
- Make sure the document table glass is clean.
- Make sure the scanner is not tilted or placed on an unstable or uneven surface.



If your image scans at an angle . . .

Check the position of your source document. It may be placed at an angle on the document table. Align it so the horizontal and vertical edges are carefully aligned with the scales on the top and side of the document table.



If the edges of the document are not scanned . . .

- Check the position of your source document. Adjust your document's position so that the image is within the glass area.
- The document table has non-readable areas around the edges. If part of your document extends beyond the maximum limits marked on the document table edge guides, you may have to reposition your document so that the image you want to scan is within the readable area.

If the color is patchy or distorted at the edges of the image. . .

- Make sure your document is flat. If the document is very thick or warped at the edges, the edges of the image may be discolored. Cover the edges of the document with opaque paper to block outside light.
- If your document is too large, part of the document extends beyond the document table, and that edge may not be in contact with the document table. Change the position of the document.

If the colors in the image look too dark or odd. . .

- Make sure your software settings are correct for your document type.
- Try adjusting the brightness with your application software. Also check the brightness and contrast values of your display screen.
- If you are using the transparency unit, make sure the rectangular window near the hinges on the base is uncovered, or make sure the top of the transparency unit is closed when scanning.

If straight lines in the image are jagged . . .

The document may have been placed at an angle on the document table. Align it so that the horizontal and vertical lines are carefully aligned with the scales on the top and side of the document table.

The image does not look the same as the original.

- Your software settings are not correct for your document type. Try different combinations of image settings using your scanner software.
- The colors displayed on your monitor don't match the original or printed colors. Try increasing your monitor's color palette to 16 bit or 24 bit.

Because your monitor and printer use different technologies to represent colors, your printed colors cannot exactly match the colors you see on your monitor screen.

Your software may not have sufficient color matching and color management features, or these components of your software may not be correctly installed. (See your software, monitor, and computer manuals for information on color matching and calibration.)

- If you are importing an image file into your application software, make sure the file format is one your software can read. Also check that the image settings in your application are appropriate for the type of image you want to scan. (See your software manual.)

A line of dots is always missing in the scanned image . . .

- If this happens in your printed image only, your printer is low on ink or toner. Replace your ink or toner cartridge. If this does not solve the problem, your printer may be malfunctioning. (See your printer manual.)
- If this happens on both your screen and printout, the scanner's sensor may be malfunctioning. Consult your dealer.

A line of dots always appears in the scanned image . . .

- If this happens on both your screen and printout, the document table glass may be dusty or scratched. Clean the document table glass.
- If you are using the auto document feeder, the paper path guide of the auto document feeder may be dusty. Clean the paper path guide. If the problem still exists, the guide may be scratched and must be replaced.

Textured patterns of dots appear on areas of an image . . .

You are using halftoning, which causes normal moiré patterns. Your scanner automatically minimizes the problem if you turn on De-screening in the Image Type dialog box.

Colors on your monitor or printed page are different from those in the original image . . .

- Because your monitor and printer use different technologies to represent colors, your printed colors cannot exactly match the colors you see on your monitor screen.
- Check the image settings in your scanner software, especially data format (bits/pixel/color), gamma correction, and color correction. Try a different combination of these settings.
- Your software may not have sufficient color matching and color management features, or these components of your software may not be correctly installed. (See your software, monitor, and computer manuals for information on color matching and calibration.)

If the printed image is larger or smaller than the original size . . .

You have changed the resolution or scaled your image. The image size settings in your software determine the size of the printed image. Do not use the size of the image on your monitor to judge the printed size.

Your image cannot be printed or the printout is garbled . . .

- Your image file size may be too large. Confirm that the computer has enough memory for your software. If your computer has many device drivers, or if you are running other software at the same time, or using RAM-resident programs, the computer may not have enough memory available. (See your software and computer documentation.)
- Check that the printer is properly connected to the computer and is correctly set up. (See your printer manual.)
- Check that your software is properly installed and set up for your printer. (See your software manual.)

Color of negative film preview images looks odd . . .

- Check that your scanner software settings are correct. See your electronic *EPSON TWAIN User's Guide* for details.
- Make sure the narrow window at the top of the transparency unit is not covered.
- Remember that the dark area around the film, such as the frame of the film holder, is perceived as white—altering the exposure of the scanning area and causing your scans to appear darker. Set the correct color by adjusting the marquee or frame border and then adjusting the exposure. See your electronic *EPSON TWAIN User's Guide* for details.

Where To Get Help

EPSON Technical Support

EPSON provides technical assistance through electronic support services and automated telephone services 24 hours a day. The following tables list the contact information:

Electronic support services

Service	Access
World Wide Web	From the Internet, you can reach EPSON's Home Page at http://www.epson.com .
EPSON Internet FTP Site	If you have Internet FTP capability, use your Web browser (or other software for FTP downloading) to log onto ftp.epson.com with the user name anonymous and your e-mail address as the password.
EPSON Forum on CompuServe®	Members of CompuServe can type GO EPSON at the menu prompt to reach the Epson America Forum. For a free introductory CompuServe membership, call (800) 848-8199 and ask for representative #529.

Automated telephone services

Service	Access
EPSON SoundAdvice SM	For pre-recorded answers to commonly asked questions about EPSON products 24 hours a day, seven days a week, call (800) 922-8911 .
EPSON FaxAdvice TM	Access EPSON's technical information library by calling (800) 922-8911 . You must provide a return fax number to use this service.
EPSON Referral Service	For the location of your nearest Authorized EPSON Reseller or Customer Care Center, call (800) 922-8911 .

To speak to a technical support representative, dial (310) 974-1970 (U.S.) or (905) 709-3839 (Canada), 6 AM to 6 PM, Pacific Time, Monday through Friday. Toll or long distance charges may apply.

Before you call, please have the following information ready:

- Product name (EPSON Perfection 1200U)
- Product serial number (located on the back of the scanner)
- Computer configuration
- Description of the problem

You can purchase genuine EPSON supplies and accessories from EPSON Accessories at (800) 873-7766 or visit our web site at www.epsonsupplies.com (U.S. sales only). In Canada, please call (800) 873-7766 for dealer referral.



If you need help using another manufacturer's software with an EPSON product, see the documentation for that software for technical support information.

Software Technical Support

Software	Telephone	Fax	Online and E-mail
EPSON TWAIN driver EPSON Instant Photo Print	US: (310) 974-1970 Canada: (905) 709-3839	(800) 922-8911 fax-on-demand system	www.epson.com
Adobe PhotoDeluxe	(206) 675-6371	(206) 675-6137 fax-on-demand system	www.adobe.com/prodindex/photodeluxe.gethelp.html techdocs@adobe.com
NewSoft Presto! PageManager	(510) 445-8616	(510) 445-8601	www.newsoftinc.com
Brøderbund The Print Shop PressWriter	(423) 670-2032	(423) 670-2021	www.broderbund.com/support

Specifications



Specifications are subject to change without notice.

Scanner Specifications

Basic Specifications

Scanner type

Flatbed, color

Photoelectric device

Color CCD line sensor

Effective pixels

10200 × 14040 pixels at 1200 dpi,
100% scaling

Maximum document size

US letter or A4 size (8.5 inches × 11.7 inches [216 mm × 297 mm])

Up to legal size if using the optional auto document feeder
(The reading area can be specified from software.)

Optical resolution

1200 dpi

Maximum hardware resolution*

1200 dpi (main scan)
2400 (sub scan)

* The maximum hardware resolution of 1200 × 2400 dpi is achieved using EPSON's Micro Step Drive technology.

Maximum interpolated resolution

9600 dpi

Speed (1200 dpi, draft mode)

Color: 6.5 msec/line

Monochrome (bi-level): 2.2 msec/line

Output resolution

50 to 9600 dpi (50 to 4800 dpi in 1 dpi increments)

Color separation

RGB color filters on CCD

Command level

ESC/I-B7

Reading sequence

Monochrome: One-pass scanning

Color byte sequence: One-pass scanning
(R, G, B)

Color line sequence: One-pass scanning
(R, G, B)

Pixel depth

12 bits per pixel (12 bits per pixel input,
1-8 bits per pixel output)

Brightness

7 levels

Line art settings

Fixed threshold

TET (Text Enhancement Technology,
enable/disable selectable)

Digital halftoning

AAS (Auto Area Segmentation,
enable/disable selectable)

3 halftoning modes (A, B, and C) and 4
dither patterns (A, B, C, and D) for
bi-level and quad-level data

2 user defined (A, B)

Gamma correction

- 2 types for CRT display
- 3 types for printer
- 1 type for user-defined

Color correction

- 1 type for CRT display
- 3 types for printer output (available in color byte sequence mode and color line sequence mode)
- 1 type for user-defined

Interface

USB (Type B receptacle connector)

Light source

White cold cathode fluorescent lamp

Reliability

30,000 cycles of carriage movements (main unit MCBF)

Dimensions

Width: 11.3 inches (287 mm)
Depth: 16.7 inches (427 mm)
Height: 3.4 inches (90 mm)

Weight

Approx. 9.9 lb (4.5 kg)

Electrical

Specification	100–120 V model	220–240 V model
Input voltage range	AC 90 to 132 V	AC 198 to 264 V
Rated frequency	50 to 60 Hz	
Input frequency	49.5 to 60.5 Hz	
Rated current	0.5 A	0.3 A
Power consumption	Approx. 25W operating approx. 12W stand by	

Note: Check the label on the back of the scanner for voltage information.

Environmental

Temperature

Operation: 41 to 95 °F (5 to 35 °C)
50 to 89 °F (10 to 32 °C)
when using the auto document feeder

Storage: –13 °F to 140 °F (–25 °C to 60 °C)

Humidity (without condensation)

Operation: 10% to 80%
20% to 80%, when using the auto document feeder

Storage: 10% to 85%

Operating conditions

Ordinary office or home conditions; avoid extreme dust, operation under direct sunlight, and strong light sources.

Safety Approvals

120V model

Safety standards: UL 1950 with D3
CSA C22.2 No. 950

EMC FCC part 15 subpart B class B
CSA C108.8 class B

230V model

Safety standards: EN 60950

EMCEN 55022 (CISPR Pub 22) class B
AS/NZS 3548 class B

CE marking

230 V model

Low Voltage Directive 73/23/EEC EN 60950

EMC Directive 89/336/EEC EN 55022
Class B

EN 61000-3-2

EN 61000-3-3

EN 50082-1

IEC 801-2

IEC 801-3

IEC 801-4

USB Interface

Interface type

Universal Serial Bus Specification
Revision 1.0

Configuration

Element	Description
Device	Full Speed mode (12Mbit/s)
Configuration	Characteristics: Self-powered Remote wake up feature: Not supported Maximum power consumption from VBUS: 2mA at 5V
Interface	No alternate setting Number of endpoints used by this interface (excluding endpoint 0): 2
Endpoint 1	Bulk IN transfer Maximum data transfer size: 64 byte
Endpoint 2	Bulk OUT transfer Maximum data transfer size: 64 byte
String Descriptor	Language ID: US English 1: iManufacturer: "EPSON" 2: iProduct: "Perfection1200"

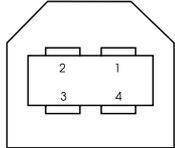
Electrical standard

Full Speed mode (12Mbit/s) of
Universal Serial Bus Specification
Revision 1.0.

Connector type

One receptacle (series B)

Connector pin arrangement

Pin number	Signal	Connector
1	VCC	
2	-DATA	
3	+DATA	
4	GND	

Initialization Methods

The scanner can be initialized (returned to a fixed set of conditions) in the following ways:

Hardware initialization	* The scanner is turned on. * The USB cable is unplugged from the USB port on the scanner.
Software initialization	* Software sends the ESC @ (initialize the scanner) command. * The scanner receives a Bus Reset from the USB interface.

Transparency Unit Specifications

Basic Specifications

Dimensions

Width: 8.7 inches (222 mm)
Depth: 12.0 inches (305 mm)
Height: 1.4 inches (36 mm)

Weight

1.5 lb (0.7 kg)

Maximum readable area

3.6 × 4.6 inches ([93 × 118 mm] size of
4 × 5 inch film holder opening)

Electrical

Supply voltage: DC 24V ±10%V
Rated current: 0.5A

Reliability

10,000 hours for light source

Environmental

Operation: 41 to 95 °F (5 to 35 °C)
Storage: -13 to 140 °F
(-25 to 60 °C)

Humidity (without condensation)

Operation: 10% to 80%
Storage: 10% to 85%

Operating conditions

Ordinary office or home conditions;
avoid extreme dust, operation under
direct sunlight, and strong light sources.

Document specifications

Transparencies up to 4 × 5-inch film
(negative film, positive film)
35 mm strip film
35 mm slides
Brownie size strip film

Safety approvals

UL 1950
CSA C22.2 No. 950
EN 60950
IEC 950

EMC

FCC Part 15 subpart B class B
CSA C108.8 class B
AS/NZS3548 Class B
CE Marking

Low voltage directive 73/23/EEC

EN60950

EMC Directive 89/336/EEC EN55022

Class B

EN50082-1

IEC 801-2/801-3/801-4

Resistance to electrical noise (static electricity)

Panel: 10kV

Metal: 7kV/150pF, 150 ohm

Auto Document Feeder Specifications**Basic Specifications****Dimensions**

Width: 12.6 inches (319 mm)

Depth: 17.8 (451 mm)

Height: 5.4 inches (137 mm)

Weight

4.9 lb (2.2 kg)

Feeder type

Sheet through, face up loading, face
down ejecting, roller friction

Loading position

Left side of document against left side of
feeder, opposite scanner's original point

Connector

8-pin DIN male

Environmental temperatures

Operation: 50 to 90 °F (10 to 32 °C)

Storage: -4 to 140 °F
(-20 to 60 °C)

Humidity (without condensation)

Operation: 20% to 80%

Storage: 10% to 85%

Operating conditions

Ordinary office or home conditions;
avoid extreme dust, operation under
direct sunlight, and strong light sources.

Reliability

Load/eject: MCBF 20,000 sheets

Hinge: MCBF 12,000 cycles

Electrical

Input voltage: DC 24V \pm 10%
DC 5V \pm 5%

Input current: 24V: 0.8 A
5V: 0.2 A

Safety approvals

UL 1950

CSA C22.2 No. 950

EN60950 (VDE)

IEC950 (ROSTEST, PSB)

EMC

FCC Part 15 Subpart B Class B

CSA C108.8 Class B

AS/NZS3548 Class B

CISPR Pub 22 Class B

CNS13438 Class B

CE Marking

Low voltage directive 73/23/EEC

EN60950

EMC Directive 89/336/EECEN55022

Class B

EN50082-1

IEC 801-2/801-3/801-4

Resistance to electrical noise (static electricity)

Casing: 10kV

Metal: 7kV/150pF, 150 ohm

ADF Document Specifications

Feeder capacity

Total stack: 20 sheets of maximum
weight 55 gm paper, thickness less
than 4 mm

Size

Width: 3.3 to 8.5 inches
(85 to 216 mm)

Length: 5 to 14 inches
(127 to 356 mm)

Thickness

0.0028 to 0.0063 inch (0.07 to
0.16 mm)

Weight

58 to 122 g/m²

Paper quality

High-quality paper, bond paper, check
paper, recycled paper

Applied color

Color and monochrome

Document type

Documents printed with impact
printers, laser printers, or fax machines



Don't use the
following paper types:
transparencies, film,
coated paper, labels,
carbon paper, or paper
with staples, holes,
rips, curls, or folds.

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FCC Compliance Statement

For United States Users

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 or television reception. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause interference to radio and television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures.

- ▶ Reorient or relocate the receiving antenna.
- ▶ Increase the separation between the equipment and 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.

Warning

The connection of a non-shielded equipment interface cable to this equipment will invalidate the FCC Certification of this device and may cause interference levels which exceed the limits established by the FCC for this equipment. It is the responsibility of the user to obtain and use a shielded equipment interface cable with this device. If this equipment has more than one interface connector, do not leave cables connected to unused interfaces. Changes or modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment.

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According to 47CFR, Part 2 and 15 for Class B Personal Computers and Peripherals;
and/or CPU Boards and Power Supplies used with Class B Personal Computers:

We: EPSON AMERICA, INC.
Located at: 20770 Madrona Avenue
MS: B2-11
Torrance, CA 90503
Telephone: (310)782-5254

Declare under sole responsibility that the product identified herein, complies with 47CFR Part 2 and 15 of the FCC rules as a Class B digital device. Each product marketed, is identical to the representative unit tested and found to be compliant with the standards. Records maintained continue to reflect the equipment being produced can be expected to be within the variation accepted, due to quantity production and testing on a statistical basis as required by 47CFR §2.909. 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.

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Type of Product: Scanner
Model: G752A

Declaration of Conformity

Manufacturer: SEIKO EPSON CORPORATION
Address: 3-5, Owa 3-chome, Suwa-shi,
Nagano-ken 392-8502 Japan

Representative: EPSON EUROPE B.V.
Address: Prof. J. H. Bavincklaan 5 1183
AT Amstelveen
The Netherlands

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Product Name: Image Scanner
Model: G752A/G752B

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EN 55022 Class B
EN 61000-3-2
EN 61000-3-3
EN 50082-1
IEC 801-2
IEC 801-3
IEC 801-4

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June, 1999

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