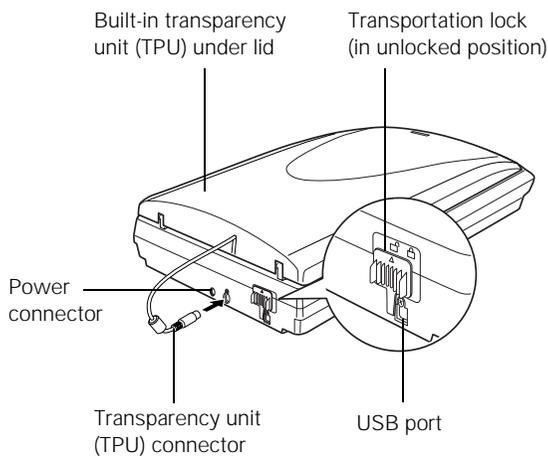
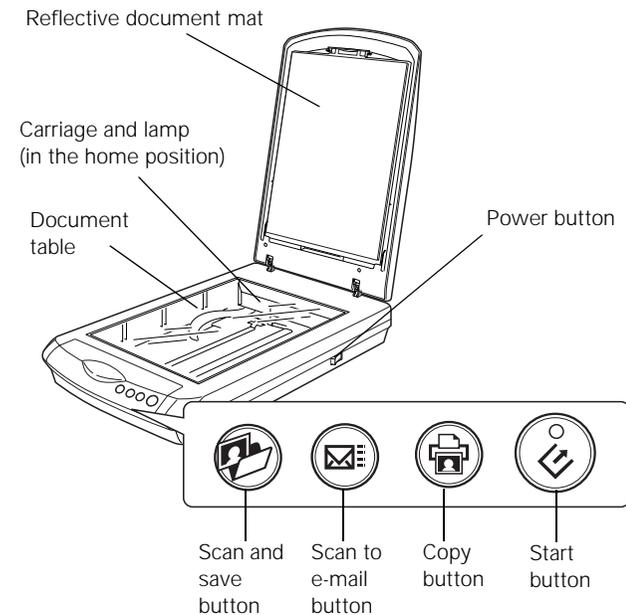
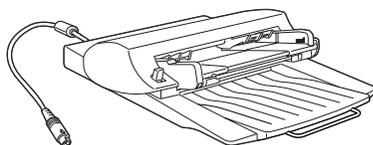


Scanner Parts



Note: 3 film holders are included (not shown)



Automatic Document Feeder (ADF) (optional)

Scanner Specifications

Basic Specifications

Scanner type	Flatbed, color
Photoelectric device	Color Epson Matrix CCD™ line sensor device
Effective pixels	40,800 × 56,160 pixels (4800 dpi) 100% scaling
Maximum document size	US letter or A4 size (8.5 × 11.7 inches [216 × 297 mm])
Optical resolution	4800 dpi
Maximum resolution*	4800 dpi (main scan) × 9600 dpi hardware (sub scan)
* The maximum hardware resolution of 4800 × 9600 dpi is achieved using Epson's Micro Step Drive™ technology.	
Maximum interpolated resolution	12,800 dpi
Speed (color)	16.9 msec/line at 4800 dpi 4.1 msec/line at 600 dpi (draft mode)
Pixel depth	16 bits per pixel (input/output)
Line art settings	Fixed threshold
Gamma correction	1 type for user-defined
Interface	USB 2.0 (Type B receptacle connector)
Light source	White cold cathode fluorescent lamp
Dimensions	Width: 10.9 inches (276 mm) Depth: 18.0 inches (458 mm) Height: 4.6 inches (117 mm)
Weight	Approx. 8.5 lb (3.9 kg)

Electrical

Input voltage range	100-120 VAC
Rated frequency	50 to 60 Hz
Rated current	1.4 A
Power consumption	Approx. 25 W operating approx. 19.5 W in stand-by mode approx. 4.5 W in power saving mode

Note: Scanners sold outside the US market may operate at a different voltage. Check the label on the back of the scanner for voltage information.

Environmental

Temperature	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, direct sunlight, and strong light sources.

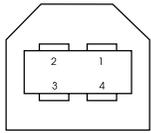
Safety Approvals

Safety	UL 60950 CSA C22.2 No. 60950
EMC	FCC part 15 subpart B class B CSA C108.8 class B

USB Interface

Interface type	Universal Serial Bus Specification Revision 2.0
Connector type	One receptacle (Type B)
Electrical standard	Full Speed mode (12 Mbps) and High Speed mode (480 Mbps), Universal Serial Bus Specification Revision 2.0

Connector pin arrangement

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

AC Adapter

Input	100-120 VAC, 50 to 60 Hz
Output	24.0-26.4 VDC, 1.4 A

Transparency Unit

The transparency unit (film adapter) is built into the scanner lid.

Electrical	Supply voltage: DC 24.0 to 26.4 V Rated current: 0.5 A
Document specifications	Positive or negative film in these sizes: 35 mm strips 35 mm slides 120/220 (up to 6 × 12-cm) film
Readable area	2.6 × 9.1 inches (66 × 231 mm)

Optional Automatic Document Feeder (B12B813341) Specifications

Basic Specifications

Paper supply	Face up load
Paper out	Face down eject
Paper setting quantity	30 sheets (55 g/m ² paper, maximum total thickness under 6 mm)
Reliability (mean cycles between failure)	load/eject: plain paper sheets - 20,000 transparency film - 10,000 hinge: 12,000 cycles

Electrical

Input voltage	24 VDC ± 10% 5 VDC ± 15%
Input current	24 V: 0.8 A 5 V: 0.2 A

Note: Optional ADFs sold outside the US market may operate at a different voltage. Check the label on the back of the scanner for voltage information.

Environmental

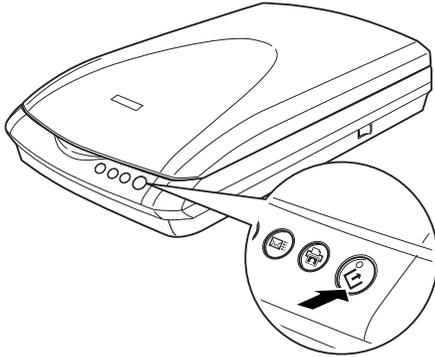
Temperature	Operation: 50 to 90 °F (10 to 32 °C) Storage: -4 to 140 °F (-20 to 60 °C)
Humidity (without condensation)	Operation: 20 to 80% Storage: 10% to 85%

How to Scan

The  Start button on your scanner automatically opens the EPSON Smart Panel, making it easy for you to scan your images for many different uses. Here's how you can use the  Start button and Smart Panel to scan photos and save them as files.

1. Raise the scanner cover and place your photo face down on the glass. Make sure the top right corner of the photo is aligned with the top right corner of the scanner.
2. Close the cover.

3. Press the  Start button on your scanner.

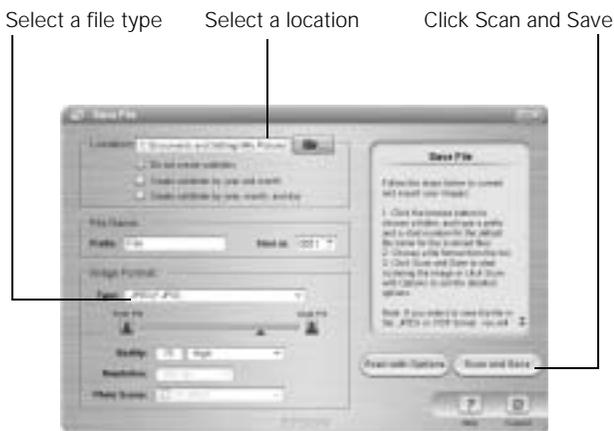


Note: In Windows XP, you will see a message the first time you press the  Start button. Select **EPSON Smart Panel**, click **Always use this program** for this action, then click **OK**.

EPSON Smart Panel opens on your computer.



4. Click the  Scan and Save icon.
5. When you see the following screen, select a location and file type for your scanned image, then click Scan and Save.

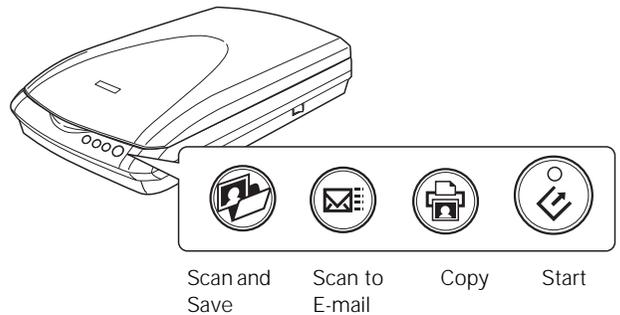


Starting a Scan

You can start a scan in several different ways:

- You can use the scanner buttons. Press the button for the type of scan you want. Smart Panel automatically opens and scans your documents. Then follow the easy on-screen instructions to finish your task.

Note: If you are using Windows XP, you will have to select **EPSON Smart Panel** and **Always use this program for this action** the first time you press each of the buttons.



- You can start Smart Panel by clicking the  icon on your desktop, and use it to perform various types of scans.
- You can start EPSON Scan from Adobe Photoshop Elements or any other TWAIN-compliant program. You can also start the EPSON Scan program directly from your computer.

Selecting the Scanning Mode

EPSON Scan has four scanning modes:



Choose your scanning mode

- ❑ **Full Auto Mode** for automatic control of scan settings.
- ❑ **Home Mode** for scanning film and more control over scan settings, including Color Restoration.
- ❑ **Office Mode** for scanning text and multiple pages (available only if the optional automatic document feeder [B12B813341] is installed).
- ❑ **Professional Mode** for full control over all scan settings.

To change the scanning mode, choose the mode you want to use from the list box at the top right of the window.

To change settings in Full Auto Mode, click the Pause button, then click Options. If you're using Home, Professional, or Office Mode, the options window automatically appears. Then select the settings you want to use for your scan.

Note: The selected mode and settings remain in effect until they are changed.

Restoring Color in Photos

If you have faded photos or negatives, you can use the Color Restoration setting in your software to improve the color of your scan. You can select this setting in Smart Panel or in EPSON Scan.



Smart Panel

To select the Color Restoration setting, follow these steps:

1. Press the  Copy button on the scanner. The Copy Center opens.

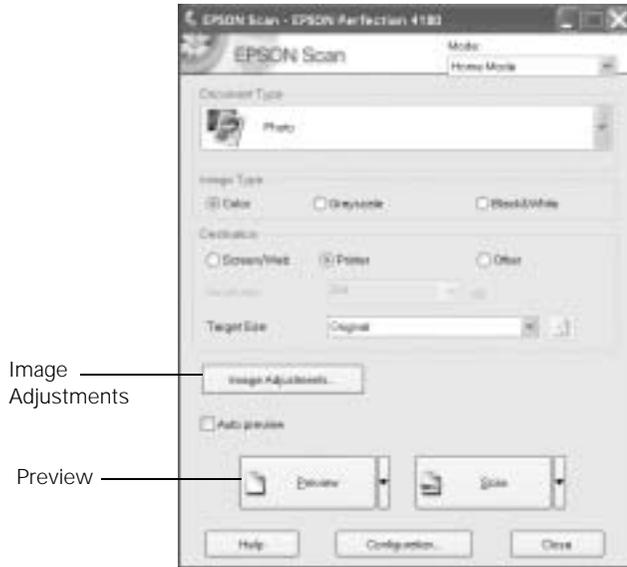


2. Select your printer. Then select Photo for the Source Type.
3. Select the Type and Size of paper loaded in your printer and the Copy Size you want.
4. Select Color Restoration, then click the Copy button on the screen. Your photo is copied, restored, and printed. (If you need more information, click Help button.)

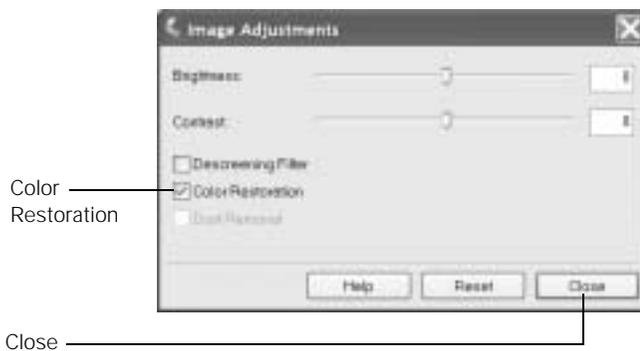
EPSON Scan

Color Restoration is available in Home and Professional Modes.

1. To select Color Restoration, start EPSON Scan. You see a screen similar to this (the example shows Home Mode).



2. Click the Preview button at the bottom of the screen to see your image.
3. Click Image Adjustments.
4. When the Image Adjustments screen appears, select Color Restoration. Then click Close.



5. Click the Scan button on the screen to scan your image.

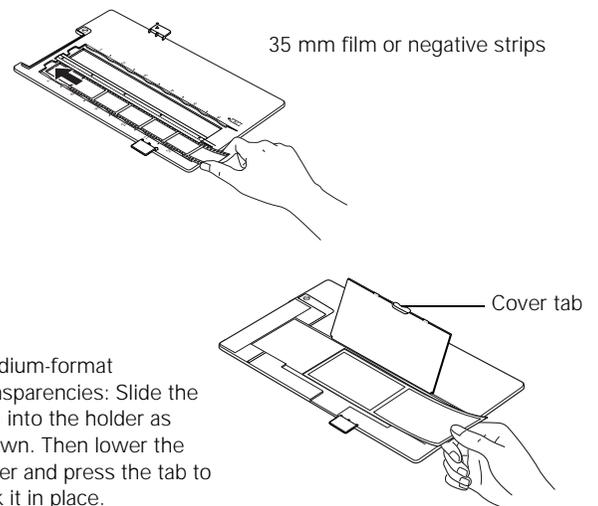
Scanning Film and Transparencies

The scanner cover has a built-in transparency unit (film adapter). To scan film or negative strips, slides, or transparencies, you need to remove the document mat from the scanner cover and insert the film in a holder.

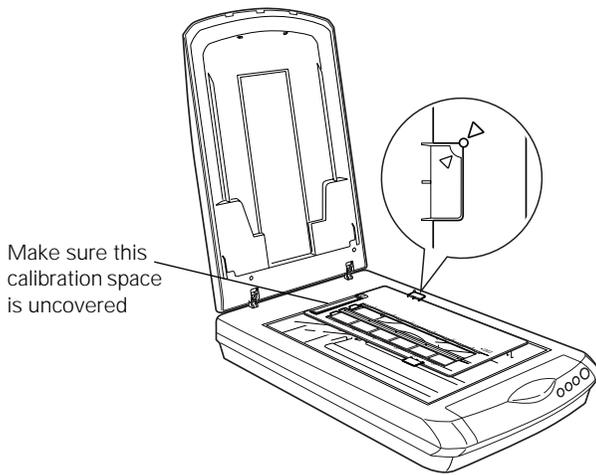
The scanner comes with 3 different film holders: one for 35 mm film or negative strips, one for 35 mm slides, and one for medium-format (120/220) transparencies.

1. Make sure the film adapter cable is connected to the scanner (see the *Start Here* sheet for instructions). If you need to connect the cable, first turn the scanner off. Then turn it back on again after you connect the cable.
2. Lift the scanner cover all the way up and slide the reflective document mat up and off of the scanner cover.
3. Follow the instructions for the type of film you are scanning:

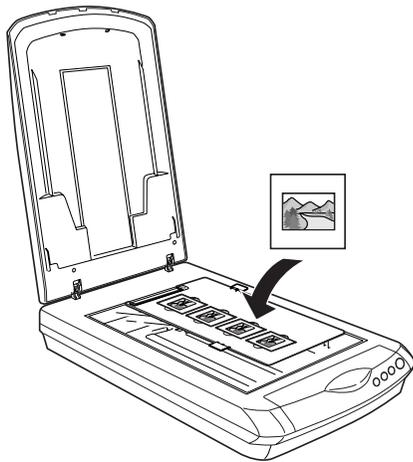
If you are scanning 35 mm film or negative strips or medium-format (120/220) transparencies, slide the film into the corresponding holder, with the film's shiny side facing down.



Place the film holder on the scanner as shown. Make sure the small circle on the holder tab fits into the hole on the scanner.



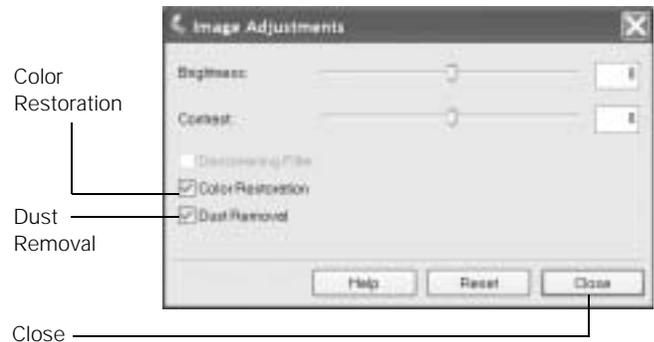
If you are scanning slides, place the holder on the scanner. Then place the slides in the holder. (Place the slides so the "this side to lamp" indication is facing down.)



4. Close the scanner cover.
5. Start EPSON Scan and make sure the correct Document Type is selected: either Color Negative Film, B&W Negative Film, or Positive Film (for slides and transparencies).
6. Click the Preview button to see your images.
7. Click Image Adjustments.



The Image Adjustments window opens.



8. Make any of the following adjustments:
 - If your images are faded, click Color Restoration.
 - If you see specks of dust on the preview, click Dust Removal.
 - In Professional Mode, you can also select Grain Reduction.
9. Click Close when you're done.
10. Click the Scan button on the screen to scan your images.

Indicator Light

The indicator light (on the  Start button) indicates the status of the scanner, as described below.

Light	Color	Status
On	Green	The scanner is ready to scan images.
Flashing	Green	The scanner is initializing (warming up) or is busy scanning.
Flashing	Red	<p>Check the following, then turn your scanner off and back on to reset it:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Make sure the transportation lock is in the unlocked position, as shown on page 1. <input type="checkbox"/> Try restarting your computer and turning the scanner off and then on again. <p>If this does not clear the error, the fluorescent lamp may need to be replaced or the scanner may have another problem. Consult your dealer or Epson.</p>
Off	—	The scanner is unplugged or turned off.

Related Documentation

- CPD-18186 Epson Perfection 4180 Photo *Start Here* poster
- CPD-18187 Epson Perfection 4180 Scanner Software CD-ROM, including online *Reference Guide*
- CPD-18188 Epson Perfection 4180 *Notices* booklet