Scanner Parts



Optional Automatic Document Feeder

The Automatic Document Feeder (B12B813391) allows you to automatically load multiple-page documents into your scanner. See the on-screen *User's Guide* for instructions on installing and using the optional Automatic Document Feeder (ADF).

Automatic Document Feeder



Paper support

Holds up the paper that is loaded in the ADF.



Spare paper path guide

The paper path guide directs documents smoothly onto the scanner's document table. A spare paper path guide is included. If the surface of the paper path guide gets dirty, you can clean it or replace it with the spare guide.



ADF Document Mat

Place this mat over a document if you need to scan it from the document table when the ADF is installed.



Scanner Specifications

General

Scanner type	Flatbed color
Photoelectric device	Color CCD line sensor
Effective pixels	54,400 × 74,880 pixels at 6400 dpi* Scanning area may be restricted if resolution setting is large.
Document size	Documents or photos: 8.5 × 11.7 inches (216 × 297 mm) US letter size or A4
	Film or slides: 35 mm film strip: 12 frames at a time 35 mm slides: up to 4 slides at a time 6×12 cm medium format: 1 frame at a time
Scanning resolution	6400 dpi (main scan) 9600 dpi with Micro Step (sub scan)
Output resolution	50 to 6400, 9600, and 12800 dpi (50 to 6400 dpi in 1 dpi increments)
Image data	16 bits per pixel per color internal 16 bits per pixel per color external (maximum)
Interface	One USB 2.0 Hi-speed
Light source	White LED, IR LED

*Optical Resolution is the maximum scan resolution of the CCD elements, using the definition of ISO 14473. ISO 14473 defines optical resolution as the fundamental sampling rate of the scan sensor.

Mechanical

Dimensions	Width: 10.7 inches (272 mm)
	Depth: 18.7 inches (475 mm)
	Height: 4.4 inches (113 mm)
Weight	Approx. 8.8 lb (4.0 kg)

Electrical

Note:

Check the label on the AC adapter or on the back of the scanner for voltage information.

Scanner

Rated voltage	DC 24 V
Rated current	1.3 A
Power consumption	16.0 W (17.5 W with ADF) operating7.5 (6.5 W with ADF) ready mode4.0 W sleep mode

AC Adapter

100-120 V model	
AC adapter model	A411B
Rated input voltage	AC 100 to 120 $\rm V$
Rated input current	1.0 A
Rated input frequency	50 to 60 Hz
Rated output voltage	DC 24.0 V
Rated output current	1.3 A
220-240 V model	
220-240 V model AC adapter model	A411E
220-240 V model AC adapter model Rated input voltage	A411E AC 220 to 240 V
220-240 V model AC adapter model Rated input voltage Rated input current	A411E AC 220 to 240 V 0.5 A
220-240 V model AC adapter model Rated input voltage Rated input current Rated input frequency	A411E AC 220 to 240 V 0.5 A 50 to 60 Hz
220-240 V model AC adapter model Rated input voltage Rated input current Rated input frequency Rated output voltage	A411E AC 220 to 240 V 0.5 A 50 to 60 Hz DC 24.0 V

Environmental

Temperature	Operating	50 to 95 °F (10 to 35 °C)
	Storage	–13 to 140 °F (–25 to 60 °C)
Humidity	Operating	10 to 80%, without condensation
	Storage	10 to 85%, without condensation
Operating conditions		Ordinary office or home conditions. Avoid operating the scanner in direct sunlight, near a strong light source, or in extremely dusty conditions.

USB Interface

Interface type	Universal Serial Bus Specification Revision 2.0
Electrical standard	Full Speed mode (12 Mbits per second) and Hi-Speed mode (480 Mbits per second) of Universal Serial Bus Specification Revision 2.0
Connector type	One Type B port

Standards and Approvals

Scanner

EMC	FCC Part 15 Subpart B Class B
	CAN/CSA-CEI/IEC CISPR 22 Class B

AC Adapter

Safety	UL60950-1 CAN/CSA-C22.2 No. 60950-1
EMC	FCC Part 15 Subpart B Class B CAN/CSA-CEI/IEC CISPR22 Class B

Optional Automatic Document Feeder Specifications

General

Product code	B12B813391
Paper input	Face-up loading
Paper output	Face-down ejection
Paper capacity	Maximum 0.2 inch (6 mm) stack height
Paper types	Bond paper, fine-quality paper, check paper, and recycled paper

Electrical

Rated voltage	DC 24 V, DC 5 V
Input voltage	DC 24 V to DC 26.4 V DC 5 V ±5%
Input current	24 V: 0.8 A 5 V: 0.2 A

Environmental

Temperature	Operating	50 to 90 °F (10 to 32 °C)
	Storage	–4 to 140 °F (–20 to 60 °C)
Humidity	Operating	20 to 80%, without condensation
	Storage	10 to 85%, without condensation

Mechanical

Dimensions	Width: 12.6 inches (319 mm) Depth: 21.2 inches (539 mm) Height: 5.4 inches (137 mm)
Weight	Approx. 5.3 lb (2.4 kg)

Placing Originals

Placing a Document or Photo

Before scanning a document, remember to respect the rights of copyright owners. Do not scan published text or images without first checking their copyright status.

Caution:

Do not place heavy objects on the document table glass and do not press the glass with too much force.

1. Open the scanner cover.

Make sure the document mat is installed inside the cover. If it is not installed, see "Replacing the Document Mat" on page 8 for instructions.



2. Place your document or photo face-down on the document table. Make sure the upper left corner of the document or photo is against the rear right corner of the scanner, next to the arrow mark.



3. An area 0.12 inch (3 mm) from the horizontal and the vertical sides of the scanner glass cannot be scanned. If you place a document in the corner of the document table, move it down and in slightly to avoid cropping.



- 4. If you are scanning multiple photos at once, position each photo at least 0.8 inch (20 mm) apart from the others.
- 5. Close the scanner cover gently so that your original does not move.



Note:

Always keep the document table clean.

Do not leave photos on the document table for an extended period of time as they may stick to the glass.

To scan your document or photo, see "Scanning" on page 8.

Placing Large or Thick Documents

When you scan a large or thick document, you can remove the scanner cover.

- 1. Turn off the scanner using its power switch.
- 2. Disconnect the cover cable.



3. Open the scanner cover.



4. Pull the scanner cover straight up and off the scanner.



5. Turn on the scanner using its power switch.

Note:

When scanning without the scanner cover, gently press down on your document to flatten it.

6. When you are finished scanning, replace the scanner cover in the reverse order that you removed it.

Note:

Before connecting or disconnecting the cover cable, turn off the scanner using its power switch.

Placing Film or Slides

Removing the Document Mat

To scan film strips or slides, you need to remove the document mat from the scanner cover. This uncovers the transparency unit window so your scanner can use it to scan your film or slides.

1. Make sure the cover cable is connected to the scanner's OPTION port.



Note:

Before connecting or disconnecting the cover cable, turn off the scanner using its power switch.

2. Open the scanner cover and gently slide up the document mat to remove it. Also make sure the transparency unit transportation lock is unlocked.



3. Use a soft microfiber cloth to wipe the transparency unit window and the document table before placing your film or slides.



Placing 35mm Film Strips

1. Open the cover of the 35mm film strip holder.



2. Slide one or two film strips all the way into the film holder with the shiny base side facing down. Your images and any wording on the film strips should appear backwards on the side that faces up. You can scan up to 6 standard 35mm images per film strip.



Note:

Hold the edge of the film gently when touching the film; otherwise you may damage the film.

Make sure the white stickers on the back of the film holder and the areas around them are not scratched, dusty, or covered in any way. If the areas are obscured, the scanner may have trouble recognizing your film.

Do not cover any of the small holes in the film holder or the slots on the sides of the film holder.

3. Close the cover and press it down until you hear a click. Then press down on all the edges of the cover to secure it. Make sure the cover is properly seated and closed all the way.



4. Make sure the film strip is placed as shown.



5. Place the film holder on the document table so that it is aligned as shown. Make sure the tab labelled "A" on the film holder fits into the area labelled "A" on the scanner.



- 6. Make sure you removed the document mat. See "Removing the Document Mat" on page 5.
- 7. Close the scanner cover.

To scan your film, see "Scanning" on page 8.

When you are finished scanning film, be sure to replace the document mat before scanning documents or photos. See "Replacing the Document Mat" on page 8.

Placing Slides

You can scan up to four 35mm slides at a time using the slide portion of the film holder.

Note:

Make sure the white stickers on the back of the film holder and the areas around them are not scratched, dusty, or covered in any way. If the areas are obscured, the scanner may have trouble recognizing your slides.

Do not cover any of the small holes in the film holder or the slots on the sides of the film holder.

1. Place the film holder on the document table so that it is aligned as shown. Make sure the tab labelled "C" on the film holder fits into the area labelled "C" on the scanner.



2. Place up to four slides in the film holder with the shiny base side facing down. Your images should appear backwards on the side that faces up. Your images should be oriented as shown.



- 3. Make sure you removed the document mat. See "Removing the Document Mat" on page 5.
- 4. Close the scanner cover.

To scan your slides, see "Scanning" on page 8.

When you are finished scanning slides, be sure to replace the document mat before scanning documents or photos. See "Replacing the Document Mat" on page 8.

Placing Medium Format Film

- 1. Open the cover on the medium format film holder.
- 2. Slide one medium format film image into the film holder with the shiny base side facing down. Your image and any wording on the film should appear backwards on the side that faces up. Make sure the entire image frame is positioned in the film holder opening.



Note:

Hold the edge of the film gently when touching the film; otherwise you may damage the film.

Do not cover any of the small holes in the film holder or the slot on the side of the film holder; otherwise, the scanner may have trouble recognizing which film holder you are using.

3. Close the cover over the film and press it down until it clicks. Then press down on all the edges of the cover to secure it.



4. Make sure the film is placed as shown.



5. Place the film holder on the document table so that it is aligned as shown. Make sure the tab labelled "B" on the film holder fits into the area labelled "B" on the scanner.



- 6. Make sure you removed the document mat. See "Removing the Document Mat" on page 5.
- 7. Close the scanner cover.

Note:

You cannot use Full Auto Mode to scan medium format film.

To scan your film, see "Scanning" in the next column.

When you are finished scanning film, be sure to replace the document mat before scanning documents or photos. See "Replacing the Document Mat" below.

Replacing the Document Mat

Replace the document mat by sliding it into the notches in the scanner cover. Make sure the white surface faces outwards.



Scanning

You can use the scanner buttons, Epson Scan, or another scanning program to scan documents, photos, film, or slides. For detailed instructions, see the on-screen *User's Guide*. Also see the *User's Guide* for instructions on how to convert scanned documents into editable text and to scan and print color accurate images.

Using the Scanner Buttons

The scanner has four buttons for scanning operations. Before using the scanner buttons, make sure you have installed Epson Scan and the Epson Creativity Suite.



Button	Function	
♦ Start	Epson Scan starts.	
🖶 Сору	The Copy Utility starts.	
⊠≣ Scan to E-mail	Epson Scan automatically scans, then the Send File Via E-mail window appears.	
昂 Scan to PDF	The Scan to PDF window appears.	

Using Epson Scan

If you want to scan an image and save it directly to a file, you can start Epson Scan as a "standalone" program.

- Place your original on the scanner. See "Placing Originals" on page 3.
- 2. Do one of the following to start Epson Scan.

Windows:

 $\label{eq:constraint} Double-click the \ensuremath{\mathsf{EPSON}}\xspace{\ensuremath{\mathsf{Scan}}}\xspace{\ensuremath{\mathsf{icon}}}\xspace{\ensuremath{\mathsf{on}}}\xspace{\ensuremath{\mathsf{char}}}\xspace{\ensuremath{\mathsf{emstap}}}\xspace{\ensuremath{\mathsf{char}}\xspace{\ensuremath{\mathsf{emstap}}}\xspace{\ensuremath{\mathsf{char}}\xspace{\ensuremath{\mathsf{char}}\xspace{\ensuremath{\mathsf{emstap}}\xspace{\ensuremath{\mathsf{char}}\xspace{\ensuremath{\mathsf{emstap}}\xspace{\ensuremath{\mathsf{char}}\xspace{\ensuremath{\mathsf{char}}\xspace{\ensuremath{\mathsf{smar}}\xspace{\ensuremath{\mathsf{char}}\xspace{\ensuremath{\mathsf{char}}\xspace{\ensuremath{\mathsf{char}}\xspace{\ensuremath{\mathsf{char}}\xspace{\ensuremath{\mathsf{smar}}\xspace{\ensuremath{\mathsf{char}}\xspace{\ensuremath{\mathsf{char}}\xspace{\ensuremath{\mathsf{char}}\xspace{\ensuremath{\mathsf{char}}\xspace{\ensuremath{\mathsf{smar}}\xspace{\ensuremath{\mathsf{char}}\xspace{\ens$

Or select () or Start > All Programs or Programs > EPSON Scan > EPSON Scan.

Mac OS X:

Open the **Applications** folder and double-click the **EPSON Scan** icon.

Restoring Photos

Using the **Color Restoration** feature in Epson Scan, you can transform old, faded, or badly exposed photos into ones with true-to-life color and sharpness. You can restore printed photos, negative film, or slides automatically as you scan them. See the on-screen *User's Guide* for detailed instructions.

You can use **Color Restoration** in Epson Scan's Full Auto, Home, or Professional Mode.



Removing Dust and Scratch Marks From Film or Slides

Using the **Dust Removal** feature in Epson Scan, you can virtually "clean" the dust marks from your originals as you scan them. See the on-screen *User's Guide* for detailed instructions.



Your scanner and its Epson Scan software are equipped with the Digital ICE Technology ${}^{\rm M}$ and Digital ICE Lite

Technology[™] features that remove dust or scratch marks from color film or slides.



Digital ICE Technology is a hardware-based dust removal method that is more accurate than the Dust Removal feature. Digital ICE Technology can remove dust or scratch marks without affecting the image composition. However, it takes longer to scan using Digital ICE Technology and also uses more of your system resources. For faster (but less accurate) dust removal, try removing dust marks using the Dust Removal feature.

Fixing Backlit Photos

Using the **Backlight Correction** feature in Epson Scan, you can remove shadows from photos that have too much background light. You can fix printed photos, film, or slides automatically as you scan them. See the on-screen *User's Guide* for detailed instructions.

Note:

Backlight Correction is not available in Full Auto Mode.



Reading the Status Light

The status light is next to the & Start button.

Color	Indicator Status	Meaning
Green	On	Ready to scan images.
	Flashing	Initializing or scanning.
Orange	Flashing	An error has occurred. See the on-line <i>User's Guide</i> for more information.
(None)	Off	The scanner is off.

If an error occurs, the scanner stops operating and the status light flashes orange. This indicates one of the following problems:

- □ The scanner is not connected to your computer properly or your software is not fully installed. See the *Start Here* sheet that came with your scanner for instructions on installing the software and connecting the scanner to your computer.
- □ The scanner and/or the transparency unit transportation lock is locked. Slide the lock to the unlock position.
- □ The scanner cover cable or optional Automatic Document Feeder cable is not connected to the scanner's OPTION port. Connect the cable to the port.

Note:

Before connecting or disconnecting the scanner cover cable or the Automatic Document Feeder cable, turn off the scanner using its power switch.

After trying these solutions, turn off the scanner using its power switch, then turn it back on. If the status light is still flashing:

- **D** The scanner may be malfunctioning.
- □ The scanner light source may need to be replaced.
- **D** The connected optional equipment may be malfunctioning.

Contact Epson. See the on-screen User's Guide for details.

Transporting the Scanner

Before transporting the scanner for a long distance or storing it for an extended period of time, you need to lock the scanner's carriage and transparency unit to prevent damage.

 Plug in the scanner, connect it to your computer, turn on the scanner using its power switch, and wait until the carriage moves to the home position (near the cover hinge). While the status light is green, turn off the scanner using its power switch.

Note:

If the optional ADF is installed, make sure the scanner is turned off, then disconnect the ADF's cable and remove the ADF from the scanner. Place the scanner cover on the scanner, but do not connect the cover cable.

2. Open the scanner cover and slide the transparency unit transportation lock to the locked position. Then close the scanner cover.



3. If the cover cable is attached, disconnect it.



4. Disconnect the USB cable.

5. On the back of the scanner, slide the transportation lock to the locked position to secure the scanner carriage.



6. Attach the protective materials, then repack the scanner in its original box or a similar box that fits the scanner snugly.

Related Documentation

Note:

The availability of manuals varies by location.

CPD-23864	Epson Perfection V500 Photo Start Here sheet (English)
CPD-23869	Epson Perfection V500 Photo <i>Start Here</i> sheet (English/French/Spanish)
CPD-23866	Epson Perfection V500 Photo <i>Notices</i> booklet (English)
CPD-23867	Epson Perfection V500 Photo <i>Notices</i> booklet (English/French/Spanish)
CPD-23865	Epson Perfection V500 Photo Scanner Software CD-ROM (English, includes the on-screen <i>User's Guide</i>)
CPD-23868	Epson Perfection V500 Photo Scanner Software CD-ROM (English/French/ Spanish, includes the on-screen <i>User's Guide</i>)