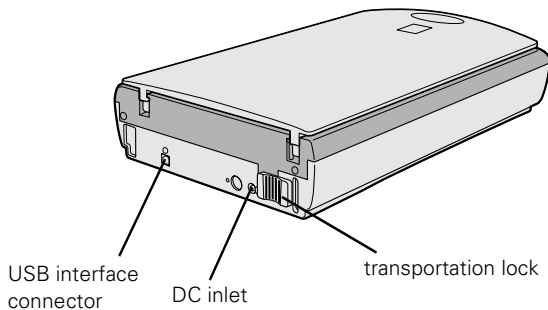
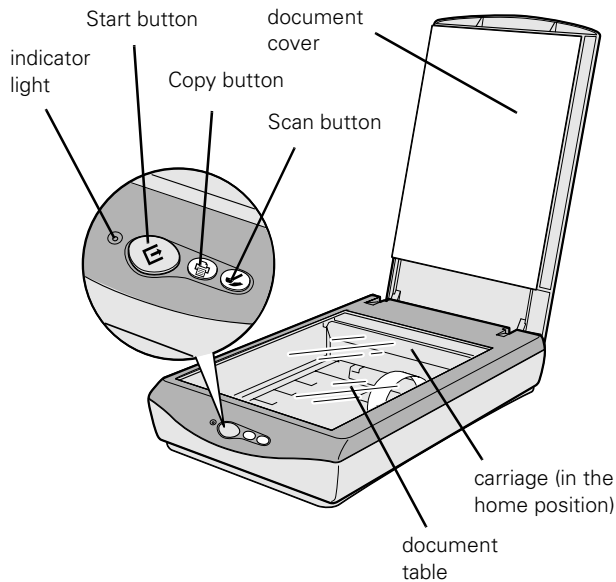


Scanner Parts



Scanner Specifications

Basic Specifications

Scanner type	Flatbed, color
Photoelectric	Color CCD line sensor device
Effective pixels	10200 × 14040 pixels at 1200 dpi, 100% scaling
Maximum document size	US letter or A4 size (8.5 × 11.7 inches [216 × 297 mm])
Optical resolution	1200 dpi
Maximum hardware resolution*	1200 dpi (main scan) × 2400 dpi (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: 7 msec/line Greyscale: 6.5 msec/line
Output resolution	50 to 9600 dpi (50 to 4800 dpi in 1 dpi increments, 7200 dpi, and 9600 dpi performed with zoom function)
Command level	ESC/I-B8
Zoom	50 to 200% in 1% increments
Pixel depth	14 bits per pixel
Brightness	7 levels
Line art settings	Fixed threshold 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 dither patterns
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 1 type for user-defined (only user-defined color correction is available in EPSON TWAIN)
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: 10.6 inches (26.9 cm) Depth: 17.1 inches (43.5 cm) Height: 3.7 inches (9.3 cm)
Weight	Approx. 6.2 lb (2.8 kg)

Electrical

Input voltage range DC 24 V

Rated input current 0.8 A

Power consumption Approx. 20 W, operating approx. 10 W, standby

Note: 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 Standards

120 V model UL 1950
 CSA C22.2 No. 950
 EMC FCC part 15 subpart B class B
 CSA C108.8 class B

230 V model EN 60950
 EMC EN 55022 (CISPR Pub 22) class B
 AS/NZS 3548 class B

CE marking

230 V model EMC Directive 89/336/EEC
 EN 55022 Class B
 EN 50082-1
 IEC 60801-2
 IEC 60801-3
 IEC 60801-4

USB Interface

Interface type Universal Serial Bus Specification Revision 1.1

Configuration

Element	Description
Configuration	Characteristics: Self-powered Remote wake up feature: Not supported Maximum power consumption from VBUS: 2mA (5V)
Interface	No alternate setting Number of endpoints used by this interface (excluding endpoint 0): 2 Class: Vendor specific
Endpoint 1	Bulk IN transfer Maximum data transfer size: 64 bytes
Endpoint 2	Bulk OUT transfer Maximum data transfer size: 64 bytes
String Descriptor	Language ID: US English 1: Manufacturer: "EPSON" 2: Product: "Perfection 1240U"

Electrical standard Full Speed mode (12Mbit/s) of Universal Serial Bus Specification Revision 1.1

Connector type One receptacle (Type 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 plugged in. * 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.

AC Adapter Specifications

Basic Specifications (Model A110B)

Temperature 41 to 95° F (5 to 35° C)

Dimensions 2.3 × 4.3 × 3.4 inches
 (5.8 × 10.8 × 3.4 cm)

Weight Approx. 0.55 lb (0.25 kg, without AC plug)

Electrical

Rated input voltage	100 to 120 V
Rated input current	0.7 A (input AC 100 V)
Rated output voltage	DC 24 V
Rated output current	0.8 A
Rated frequency	50 to 60 Hz
Input frequency range	49.5 to 60.5 Hz

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.
Document specifications	Transparencies up to 4 × 5 inches (negative film, positive film) 35 mm strip film (negative, positive) 35 mm slides (negative, positive) Brownie size strip film (120/220 size, 6 cm x 9 cm)

Safety Approvals

CE marking

230 V model	Low Voltage Directive 73/23/EEC EN 60950
	EMC Directive 89/336/EEC EN 55022 Class B EN 50082-1 IEC 60801-2 IEC 60801-3 IEC 60801-4

Optional Transparency Unit Specifications

The transparency unit (B813172), also called a film adapter, allows you to scan positive and negative transparent materials—35 mm slides, filmstrips, and film up to 4 × 5 inches in size.





The transparency unit comes bundled with the EPSON Perfection 1240U PHOTO.



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 24 V ±10% V Rated current: 0.5 A
Reliability	10,000 hours for light source

Using EPSON Smart Panel

Follow these steps to use EPSON Smart Panel™ to scan your document or photo:

1. Place your original document(s) face down on the document table.
2. Do one of the following to open the Smart Panel:
 - Press the  Start button on your scanner.
 - Click the  Smart Panel icon on the Windows taskbar.
 - Open the Apple menu and select EPSON SMART PANEL.



The  Start button is set to open the Smart Panel by default. However, you can assign the  Start button to automatically open any of the Smart Panel operations.

3. Click the icon for your desired scanning application. The window for that option appears and lets you adjust settings for your scan. Follow the on-screen steps for each option.



If you select Copy or Photo Print, make sure your printer is turned on and the correct paper type and size is loaded in your printer. You can use Photo Print only with an EPSON Stylus® Color or EPSON Stylus Photo printer.

For detailed instructions on using each of the Smart Panel applications, read your electronic manual for EPSON Smart Panel.

send photos or documents by e-mail (requires a modem and e-mail service)

Optical character recognition (OCR) converts a scanned text image into text that you can edit in a word processing program

make copies of printed pages and photos

To launch each application, click on the icon.

gives you an easy way to reprint your photos in any size you want

scans your image automatically and then opens it in Adobe® PhotoDeluxe®

automatically scans your image and then opens it in any supported application program on your computer

select EPSON Smart Panel or a Smart Panel application to use with the Start button

Selecting TWAIN Settings

The illustration below shows the different settings you can adjust in the EPSON TWAIN window, and the preferred order you should adjust them in. Detailed descriptions are given in the electronic *Reference Guide*. Manually adjust settings in the EPSON TWAIN window in the following order:

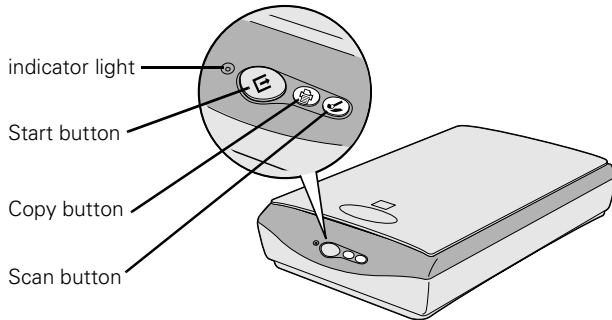
- Select the basic settings:
Document Source
Image Type
Destination
- Preview your image
- Automatically set the scan area for your image using Auto Locate
- Size or scale the image (be sure to increase the Resolution if you increase the size or scale)
- Customize your settings and configuration, and use color management
- Scan the image into your application
- Close the EPSON TWAIN window



The most important thing to remember when scanning is to select the correct image type and best resolution for your scan. For more detailed information on making settings in EPSON TWAIN driver, see the electronic *Reference Guide*.

Light and Buttons




The scanner has one indicator light and three buttons. Light status and button functions are described in the tables below.



Scanner indicator light

Light	Color	Status
Flashing	Green	The scanner is initializing or busy scanning.
On	Green	The scanner is ready to scan images.
On	Red	The scanner has received incorrect commands from your scanning software. When this error occurs, try to rescan the document. The scanner returns to normal when it receives correct commands. Normally you do not need to reset the scanner when this type of error occurs.
Flashing	Red	The scanner may not be properly connected to the computer. Unplug the scanner and USB connector, and then plug them back in. If this doesn't eliminate the error, one of the following may be the problem: <ul style="list-style-type: none"> <input type="checkbox"/> The fluorescent lamp needs to be replaced. <input type="checkbox"/> The scanner is malfunctioning. Consult your dealer or EPSON.
Off	—	The scanner or AC adapter is unplugged.

Scanner buttons

Button	Function
 Start	Lets you scan directly to EPSON Smart Panel or a Smart Panel application.
 Copy	Scan directly to the Copy utility in EPSON Smart Panel and print on an EPSON ink jet printer.
 Scan	Scan directly to Adobe PhotoDeluxe.

Scanner Models

The scanner is available in two models.

EPSON Perfection 1240U includes:

EPSON Perfection 1240U scanner
USB cable
AC adapter and power cable
Scanner Software CD-ROM that includes: <ul style="list-style-type: none"> <input type="checkbox"/> EPSON TWAIN driver for Windows® and Macintosh® <input type="checkbox"/> ScanSoft® TextBridge® Pro <input type="checkbox"/> EPSON Software™ Film Factory™ Lite <input type="checkbox"/> EPSON Smart Panel <input type="checkbox"/> ArcSoft™ PhotoPrinter™ 2000 Pro <input type="checkbox"/> ArcSoft Panorama Maker™ 2000 <input type="checkbox"/> Monaco Systems™ MonacoEZcolor™ (software offer) <input type="checkbox"/> Electronic manuals (EPSON Perfection 1240U <i>Reference Guide</i> [HTML], EPSON Smart Panel <i>User's Guide</i> [PDF])
Adobe PhotoDeluxe CD-ROM (Home Edition, Windows version 4.0, Macintosh version 2.0)
<i>Scanner Basics</i> guide

EPSON Perfection 1240U PHOTO includes:

EPSON Perfection 1240U scanner
Transparency unit
USB cable
AC adapter and power cable
Scanner Software CD-ROM that includes: <ul style="list-style-type: none"> <input type="checkbox"/> EPSON TWAIN driver for Windows and Macintosh <input type="checkbox"/> ScanSoft TextBridge Pro <input type="checkbox"/> EPSON Software Film Factory Lite <input type="checkbox"/> EPSON Smart Panel <input type="checkbox"/> ArcSoft PhotoPrinter 2000 Pro <input type="checkbox"/> ArcSoft Panorama Maker 2000 <input type="checkbox"/> Monaco Systems MonacoEZcolor (software offer) <input type="checkbox"/> Electronic manuals (EPSON Perfection 1240U <i>Reference Guide</i> [HTML], EPSON Smart Panel <i>User's Guide</i> [PDF])
Adobe PhotoDeluxe CD-ROM (Home Edition, Windows version 4.0, Macintosh version 2.0)
Adobe Photoshop® LE CD-ROM
<i>Scanner Basics</i> guide

Related Documentation

CPD-10861	EPSON Perfection 1240U <i>Scanner Basics</i>
—	<i>Reference Guide</i> (HTML)
—	EPSON Smart Panel <i>User's Manual</i> (PDF)
TM-640/1240	EPSON Perfection 640U/1240U Service Manual
PL-PERF1240	EPSON Perfection 1240U Parts List
PL-PER1240PH	EPSON Perfection 1240U PHOTO Parts List
PL-B813172	Transparency Unit Parts List