



Interface:	SCSI II
Data input:	30 bits internal 24 bits external
Light source:	Cold cathode fluorescent lamp
Reliability:	Main unit and transparency unit MTBF: 10,000 scan hours
Lamp:	Warm up time: 30 seconds at 77° F Auto switch off: 30 minutes
Dimensions:	Width: 12.8 inches (322 mm) Depth: 21.7 inches (550 mm) Height: 5.1 inches (129 mm)
Weight:	About 11.4 lb (5.2 kg)
Brightness:*	-100 to 100
Contrast:*	-100 to 100

**Processed by driver software*

Scanner Specifications

Scanner type:	Flatbed, color/monochrome
Photoelectric device:	Color CCD (Charged Coupled Device) line sensor
Maximum document size:	8.5 inches × 14 inches (216 mm × 356 mm) up to US legal size
Optical scanning resolution:	600 dpi (main scan); 1200 dpi (subscan)
Output resolution:	25 dpi to 2400 dpi interpolated (Win 95, Win NT, and Macintosh) 1 dpi to 4800 dpi interpolated (Win 3.1 only)
Scanning speed:	Color: 10 ms/line Grayscale: 5 ms/line Line Art: 5 ms/line
Color separation:	Trilinear color CCD element

Electrical Specifications

Power supply	Main unit: internal universal power supply (switching type) Transparency unit: universal AC adapter power supply
Rated voltage	AC 100 V AC 240 V
Input voltage range:	AC 90 to 132 V (at 100 V) AC 198 to 264 V (at 240 V)
Rated current:	Main unit: 0.5 A at AC connector Transparency unit: 0.33 A at AC connector
Rated frequency:	50 to 60 Hz
Rated frequency range:	48 to 52 Hz (at 100 V) 58 to 62 Hz (at 240 V)
Power consumption:	Operation: maximum 12 W (main unit); maximum 8.8 W (transparency unit) Standby: maximum 7.5 W (main unit); maximum 6.4 W (transparency unit)

Environmental Conditions

Temperature:	Operation: 41° F to 95° F (5° C to 35° C) Storage: -13° F to 140° F (-25° C to 60° C)
Humidity:	Operation: 10% to 80%, without condensation Storage: 10% to 85%, without condensation
Operating conditions:	Ordinary office or home conditions. Avoid extremely dusty conditions, direct sunlight, and strong light conditions

Note:
Specifications are subject to change without notice.

Interface Specifications

Interface type:	ANSI X3T9.2/375D revision 10L standard
Function:	BUS FREE phase ARBITRATION phase SELECTION/RESELECTION phase COMMAND phase DATA phase Data in phase Data out phase STATUS phase MESSAGE phase MESSAGE IN phase MESSAGE OUT phase
Electrical standard:	As per ANSI X3T9.2/375D revision 10L
SCSI ID setting:	Selectable from 0 to 7 with the rotary switch (Do not select 8 or 9.) Default setting is 5.
Connector type:	Two 25-pin D-SUB connectors
Terminator type:	External 25-pin D-SUB passive terminator

SCSI connector pin assignments:

Signal	I/O	Pin no.	Description
REQ	O	1	Request
MSG	O	2	Message
I/O	O	3	Input/Output
RST	I	4	Reset
ACK	I	5	Acknowledge
BSY	I/O	6	Busy
GND	—	7	Ground
DB0	I/O	8	Data Bus 0
GND	—	9	Ground
DB3	I/O	10	Data Bus 3
DB5	I/O	11	Data Bus 5
DB6	I/O	12	Data Bus 6
DB7	I/O	13	Data Bus 7
GND	—	14	Ground
C/D	O	15	Command/Data
GND	—	16	Ground
ATN	I	17	Attention
GND	—	18	Ground
SEL	I/O	19	Select
DBP	I/O	20	Data Bus P
DB1	I/O	21	Data Bus 1
DB2	I/O	22	Data Bus 2
DB4	I/O	23	Data Bus 4
GND	—	24	Ground
TERMPWR	—	25	Terminator Power

Changing the Default Settings

You can change default scanning settings before or after you prescan the image. (This is also true for all advanced scanning tools and procedures.)

Note:
You can restore the default scan settings at any time by clicking the Reset button.

You can also change the following settings:

Document Source

To get the best results from your EPSON scanner, you must specify the type of media you're scanning.

From the EPSON Perfection 600 main window, select one of the following document source options:

- Reflective—The image is captured when light reflects off the original on the scanner flatbed. Most originals require reflective scanning. In the Windows 3.1 scanner driver, this option is called Flatbed/Reflective.

- ❑ Transparency—The image is captured when light shines through the original instead of reflecting off it. This option is called Transparentive in the Windows 3.1 scanner driver. (An optional transparency unit must be installed.)

Document Output

From the EPSON Perfection 600 main window, select the output option that best matches your source.

Scan Type (Windows 95/NT and Macintosh)

If you've installed the scanner driver for Windows 95, Windows NT, or Macintosh, choose one of the following options under Scan Type to save your scanned image:

- ❑ 30 bit Color—Saves the scanned original as a color image.
- ❑ 10 bit Grayscale—Saves the scanned original as a black and white image with shades of gray.
- ❑ 1 bit Line Art (OCR)—Saves the scanned original as a black and white line art image, with no gray tones. Use this option when you're scanning line art or text.

Image Type (Windows 3.1)

If you're running Windows 3.1, select one of the following options under Image Type to save your scanned image:

- ❑ Color Photo—Saves the scanned original as a 24-bit color image.
- ❑ 256 Colors—Saves the scanned original as an 8-bit color image. Use this option when you're scanning color images with fewer tones than color photographs, such as drawings.
- ❑ Black & White Photo—Saves the scanned original as an 8-bit grayscale image (256 shades).
- ❑ Black & White Halftone—Saves the scanned original as a 1-bit halftone image.
- ❑ Line Art—Saves the scanned original as a black and white image. Choose this option if you're scanning a black and white illustration.
- ❑ OCR—Use this option when you're scanning text to be used with an Optical Character Recognition (OCR) program.
- ❑ Copy/FAX—Use this option to scan an image that has been faxed or photocopied.

Resolution

The following table shows the best scanning resolutions for most output devices:

Output device	Recommended resolution
Inkjet printer	240 dpi
Monochrome laser printer	150 dpi
Computer screen	72 dpi
Four-color printing press with 150 lpi	250 dpi
Four-color printing press with 175 lpi	300 dpi
B&W printing press with 85 lpi	150 dpi
B&W printing press with 100 lpi	170 dpi
B&W printing press with 133 lpi	225 dpi
Line art logo	600 dpi
OCR	300 dpi

Problems and Solutions

The ready light doesn't come on...

Check the scanner power cord.

Make sure the power cord is securely plugged into the scanner and the power outlet, and that the scanner is turned on. Also, check that the power outlet is working. If you're using the optional transparency unit, make sure the power adapter is installed correctly.

If the scanner test fails (PC only)...

Check the cable connecting the scanner to the computer.

Make sure the scanner is correctly connected to the computer. Also, make sure the scanner's ready light is on.

Check the terminator and SCSI ID.

Make sure you've attached the terminator and set the correct SCSI ID.

Check your SCSI board installation.

Make sure that the SCSI interface board is installed correctly.

Check that your system recognizes your scanner and SCSI interface board.

Check System Device Manager in the Windows 95 Control Panel, or the Adaptec SCSI Interrogator if you're running Windows 3.1. For Windows NT, check the SCSI Adapter dialog in the Control Panel. If your system isn't recognizing either the SCSI board or the scanner, go to the next section.

Check for conflicts in the interrupt setting for your SCSI board, I/O address, or other settings.

See your computer manual for detailed information about selecting settings.

If your system doesn't recognize the scanner or the SCSI board (PC only)...

Check the plug-and-play option.

If you're running Windows 95, plug-and-play should be active.

If you're running Windows NT, plug-and-play should be disabled. (You can disable ISA plug-and-play from the Advanced Configuration Options menu in SCSISelect.)

If you're running Windows 3.1, run SCSISelect to disable plug-and-play.

Did you install another SCSI device, such as a ZIP drive, after you installed your SCSI board? (Windows 95 only)

If so, your device installation may have overwritten the SCSI driver (sparrow.mpd) with an older version of the driver. Copy sparrow.mpd from the Sparrow directory on your EPSON CD-ROM to the \windows\system\iosubsys subdirectory on your hard drive.

Run the Add New Hardware wizard. (Windows 95 and NT only)

Follow the instructions on the screen. (It's best to accept the default settings.) When you're done, restart your computer.

Run SCSISelect.

Your scanner comes with the 1505 SCSISelect diskette, which contains SCSISelect, a special SCSI troubleshooting and configuration utility for Windows 3.1, Windows 95, and Windows NT. Insert this diskette in your diskette drive and restart your computer, then follow the instructions on your screen.

If SCSISelect hangs or you get an error message, you have a hardware problem. Make sure your SCSI board is installed correctly. If the SCSI card is found, but not the scanner, you need to install a SCSI terminator. Also, check the SCSI cable connection and make sure the scanner is turned on. After checking your hardware, run SCSISelect again.

If you continue to have problems, your SCSI board may be defective.

If the scanner doesn't scan your image.

Check your image source setting.

Make sure you selected the Perfection 600 as your source.

Run the scanner test (PC only).

Run the scanner test to make sure the scanner is communicating with your computer. If the test fails, check the items above. (The scanner test is not available for the Macintosh.)

Check the cable connecting the scanner to the computer.

Make sure the scanner is correctly connected to the computer. Also, make sure the scanner's ready light is on.

Check the terminator and SCSI ID.

Make sure you've attached the terminator and set the correct SCSI ID.

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

Check your system requirements.

Check that the system requirements, such as the operating system version, are correct for your software.

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.)

Check your software installation.

Make sure that your software is correctly installed or set up. If all else fails, uninstall your software, then reinstall it.

If the file size is too big...

Adjust your scan settings.

Try setting a lower resolution, or scan only part of the image.

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 (the glass area). If only part of the image is blurred, part of your document may be wrinkled or warped.

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

Check the brightness.

Decrease the scanner driver's brightness setting.

Check the condition of your original.

If the document is damaged, dirty, or wrinkled, these imperfections will show up in your scan.

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.

Options

Transparency Unit (B813121)

The transparency unit allows you to scan slides, negatives, and transparencies up to 8.5 × 14 inches. The transparency unit replaces the scanner cover but still allows scanning of individual items.

Scanner Bundled Kits

The scanner is available in a bundled kit that includes software for operating the scanner in a PC or Macintosh environment. The kit includes the following:

Perfection 600 scanner

EPSON Installer CD Pak

Adobe® PhotoDeluxe™

Visioneer® PaperPort™ LE with Xerox® Textbridge™

Adobe PageMill™ (not available for Windows 3.1)

EarthLink® Network TotalAccess™ with

Netscape® Navigator™ (not available for Windows NT)

Adobe Acrobat™ Reader

Adaptec SCSI board (AVA-1505 AE)

SCSI cable

SCSI terminator

1505SELECT (configuration utility for the AVA-1505 AE)

Information Reference List

Related Documentation

CPD 5595	EPSON Perfection 600 Welcome Placemat
CPD 5594	EPSON Perfection 600 Quick Start Guide
TM-PERF600	EPSON Perfection 600 Service Manual
PL-PERF600	EPSON Perfection 600 Parts List

Engineering Change Notices

None

Product Support Bulletins

None

Technical Support Bulletins

None