EPSON®

Epson Expression® 1680
Color Flatbed Scanner

The remarkable 1600 dpi, 48-bit scanner for graphic arts professionals.

A remarkable breakthrough in high quality imaging, the Epson Expression 1680 is Epson's first 1600 x 3200 dpi flatbed scanner to feature, 48-bit color and a 3.6 Dmax. Optimized to consistently deliver enhanced colors, subtle highlights, and sharp shadow detail, this affordable scanner sets a new standard in image quality.

The Epson Expression 1680 blazes through each scan with reliable performance and minimum noise. Our exclusive ColorTrue® II Imaging System and MatrixCCD™ technology combine custom optics, a Xenon lamp, Dynamic Range Control, and superior image processing for phenomenal results every time.

With the highest price/performance ratio in its category, this durable unit is perfect for your demanding workload as a graphics arts professional or photographer. Quickly and accurately, it delivers extraordinary results with virtually any original, from reflective media up to 8.5" x 11.7" and 35mm to 8" x 10" transparencies.* Its Dual-Focus Mechanism, in combination with its custom film holders, eliminates the "Newton Ring" problems often associated with less sophisticated scanners.

The scanner supports both USB and SCSI connectivity. With an optional high-speed FireWire® interface it's compatible with both the Power Mac™ G4 and the latest PCs. It's available in three configurations: Special Edition, Professional and Professional FireWire. The Professional and Professional FireWire models include powerful graphics software such as LaserSoft® SilverFast™ Ai 6 and a transparency unit.

Use the LaserSoft SilverFast scanner software to sharpen and descreen images, control color balance, tonal curves, highlights and shadows. Or, take advantage of its unattended batch scanning capabilities. Simply set all the settings at once and watch it scan all the images in one operation. An optional transparency unit and automatic document feeder are also available.

When teamed with an Epson Stylus® Pro Series printer, the Epson Expression 1680 is the perfect input/output solution.

* Optional transparency unit required.

Key Features

1600 x 3200 dpi optical resolution

Delivers remarkable resolution and extraordinary image quality

ColorTrue II Imaging and true 48-bit color depth

Produces smooth gradations and outstanding color reproduction; captures over 281 trillion colors (48-bit) and 65,536 shades of gray (16-bit)

Exceptional dynamic range (up to 3.6 Dmax for transparency scanning*)

Accurately scans each image; provides enhanced highlights and subtle shadow detail from transparencies; provides intelligent negative scanning for 35mm film strips

Dual-Focus Mechanism

Works with custom film holders to eliminate "Newton Rings" for clear, sharp results every time

High-speed scans and previews

Offers high speed image processing for increased productivity; creates full color preview in as little as 10 seconds; scans a 35mm slide at 1600 dpi in approximately 65 seconds; scans an 8.5" x 11" color photo at 300 dpi in approximately 23 seconds

USB and SCSI connectivity with optional FireWire interface

Provides trouble-free setup and installation for Windows and Macintosh systems

Premium software bundle**

LaserSoft SilverFast Ai 6
MonacoEZcolor™
Adobe® Photoshop® Elements 2.0
ArcSoft® PhotoBase™
ArcSoft PhotoStudio®
ArcSoft Panorama Maker™
Epson Scan

** Included on the Professional, and Professional FireWire models.
Special Edition model includes Epson Scan software only.

EPSON Expression 1680
Shown here with optional transparency unit
(included on Professional and Professional FireWire models)

Epson Expression 1680

Scanner Type	Flatbed color image scanner
Scanning Method	Movement of reading mirror
Photoelectric Device	Epson MatrixCCD Line Sensor
Maximum Read Area	8.5" x 11.7" (216mm x 297mm)
Light Source	Xenon gas cold cathode fluorescent lamp
CCD Resolution	1600 dpi
Hardware Resolution	1600 x 3200 dpi with Micro Step Drive™ technology
Maximum Resolution	12,800 x 12,800 dpi with interpolation
Effective Pixels	13,600 x 18,720 pixels (1600 dpi)

Image Data

Color Depth	48 bits per pixel internal/external
Grayscale Depth	16 bits per pixel internal/external
Line Art	1 bit per pixel

Scaling (Zoom)	50% to 200% (1% step)
Optical Density	3.6 Dmax
Brightness	7 levels
Reading Sequence	One-pass scanning

Scanning Speed (1600 dpi, draft mode)

Color	9.2 msec/line (approx.)
Grayscale/Monochrome	3.1 msec/line (approx.)

Operating Systems Supported

Macintosh	Macintosh OS 8.0 or later
PC	Windows 95, 98, 2000, Me or NT 4.0

Windows Minimum System Requirements

PC with Pentium® equivalent or higher processor
128MB RAM recommended
CD-ROM drive (4x or faster)

SCSI – Requires ASPI-compliant compatible Fast SCSI, Ultra or Ultra 2 SCSI PCI Card

USB – USB port equipped systems with Windows 98 Second Edition (factory installed), Windows 2000, Windows Me or Windows XP

IEEE 1394 – IEEE 1394 port equipped PC systems (OHCI compliant) with Windows 2000 or Windows Me

Macintosh Minimum System Requirements

PowerPC™ processor or higher
128MB RAM recommended
CD-ROM drive (4x or faster)

SCSI – Requires Power Macintosh system with built-in SCSI port or a Mac-compatible PCI SCSI/SCSI-2 card with Mac OS 8.0 to 9.x

USB – iMac®, G3, G4 or USB port equipped Power Macintosh system with Mac OS 8.6 to 9.x, OS X 10.1.4 or later

IEEE 1394 (FireWire) – iMac, G3, G4 and IEEE 1394 (FireWire) port equipped Power Macintosh systems with Mac OS 8.6 to 9.x (FireWire updater 2.1 or later required), OS X 10.1.4 or later

Interface	SCSI-2 and USB standard, IEEE 1394 FireWire optional

Configurations

Special Edition Model (MAC & PC) E1680-SE
    Epson Scan
    USB cable

Configurations (cont.)

Professional Model (MAC & PC) E1680-PRO
    Transparency Unit
    Epson Scan
    LaserSoft SilverFast Ai 6
    MonacoEZcolor
    Adobe Photoshop Elements 2.0
    ArcSoft PhotoBase
    ArcSoft PhotoStudio
    ArcSoft Panorama Maker
    USB cable

Professional FireWire Model (MAC & PC) E1680-PROFWR
    Transparency Unit
    Epson Scan
    LaserSoft SilverFast Ai 6
    MonacoEZcolor
    Adobe Photoshop Elements 2.0
    ArcSoft PhotoBase
    ArcSoft PhotoStudio
    ArcSoft Panorama Maker
    FireWire cable

Reliability

MCBF	100,000 cycles

Environmental Conditions

Temperature	Operating 41°F to 95°F (5°C to 35°C)
Humidity	Operating 10% to 80% (no condensation)
	Storage 10% to 85% (no condensation)

Power Requirements

Voltage	AC 100V-120V, 220V-240V
Frequency	50-60Hz
Power consumption	30W operating w/o optional unit
	50W operating w/optional unit
	10W standby w/o optional unit

Physical Dimensions (scanner only)

Width	13.1" (332mm)
Depth	22.1" (562mm)
Height	5.2" (133mm)
Weight	18.7 lb (8.5 kg approx.)

Optional Accessories

Transparency Unit
Automatic Document Feeder
IEEE 1394 FireWire Scanner Interface Card

Product/Accessory Part Numbers

Epson Expression 1680 Special Edition Scanner	E1680-SE
Epson Expression 1680 Professional Scanner	E1680-PRO
Epson Expression 1680 Professional FireWire Scanner	E1680-PROFWR
Transparency Unit	B813182
Automatic Document Feeder	B813162
IEEE 1394 FireWire Scanner Interface Card	B808342

Warranty

One year limited warranty in the U.S. and Canada
Optional extended service plans for Depot Repair and Express Exchange available

Support–The Epson Connection℠

Pre-sales support U.S. and Canada	800-463-7766
Automated Technical Support	800-922-8911
Internet Website	www.epson.com

EPSON®

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specifications