

COLOUR IMAGE SCANNER

EPSON EXPRESSION, 1680 Pro



The High-Resolution, High-Performance Scanner For Graphics Professionals



The ideal scanner for professionals, featuring true 48-bit 1600-dpi quality and film scanning capability

The EPSON Expression 1680 Pro is a scanning workhorse ideal for digital artists and graphics professionals. Featuring true, 48-bit, 1600 dpi-class imaging, it boasts a dynamic range of 3.6Dmax as well as an A4-sized scanning platen with USB, SCSI* and FireWire* ports, and includes a transparency unit for scanning positive and negative films of up to A4 size.

*Requires optional interface card for the host.

Impressive Imaging Quality

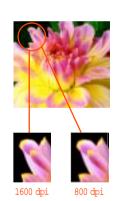
The EPSON Expression 1680 Pro is a flatbed and film scanner in one, offering ultra sharp 1,600 dpi imaging and 48-bit colour depth for both film and reflective scanning. By scanning 40,800 pixels per line and capturing more than 281 trillion colours in a single pass of the scanner's CCD array, it delivers breathtaking image precision.

To ensure perfect scans every time, the EPSON Expression 1680 Pro utilizes EPSON's world renowned key component technologies:

MatrixCCD™ enhances sensitivity while reducing image noise seen in many high-resolution scans. MicroStep™ Drive powers the carriage movements in minute steps to minimize jaggedness and colour anomalies. A new and improved high-definition Precision Optical Iens provides superior edge-to-edge sharpness and clarity when scanning full-width originals. Dynamic Range Control automatically shifts the dynamic range to enhance shadow details on dark-coloured transparency scans. Simultaneous RGB scanning doubles vertical resolution for greater detail and sharpness in the sub-scanning direction while eliminating any colour drift. The advanced Auto Focus System ensures accurate pinpoint focusing with zero ghosting and misalignment.

High Speed Scanning for Greater Productivity

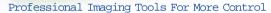
Speed is essential in professional scanning. While conventional scanners operate on a fully charged CCD even when scanning low-resolution files, the EPSON Expression 1680 Pro scanner charges the



High-resolution 1600 x 3200 dpi scanning assures superb image detail and edge definition.

CCD only on demand, and at the resolution required. This advanced technology, On-Demand Pixel Optimization, doubles or even triples signal throughput speed on low-resolution scans creating faster preview scans. A special high-speed processor also enhances processing speed while a high-intensity, zero-standby Xenon fluorescent lamp starts scanning the second the unit is switched on.

For ultra reliable performance, greater productivity and speed, the entire Auto Focus System of the EPSON Expression 1680 Pro is mounted on a sturdy die cast aluminium carriage that cuts vibration and noise during operation.





Versatile and easy-touse EPSON TWAIN Pro v2 driver software puts a wide array of pro-oriented features at your fingertips. The EPSON Expression 1680 Pro is bundled with highperformance software tools to fully exploit its capabilities. Applications include: Adobe® Photoshop® 5.0LE, Presto! PageManager, Xerox® TextBridge Classic, EPSON TWAIN Pro for Network, EPSON ScanServer and EPSON TWAIN Pro 2.0.

value of the image where the cursor is resting.

The readings indicate before-and-after



measurements for a detailed analysis of the impact of these changes.

Unsharp Mask - there are now three Unsharp Mask adjustments and On/Off operation. Improved Auto Exposure - a new algorithm refines scanned image quality, especially for film negatives.

Expanded Colour Space Support - the new TWAIN Pro 2.0 supports both the user-defined profile as well as EPSON's pre-defined standard profile as the colour management source. The result is a wider colour space beyond sRGB and a greater gamut of colours reproduced.

For seasoned graphics professionals, the bundled LaserSoft® SilverFast Ai 5 scanning software allows many image adjustments in the prescan mode. It can be installed as an Adobe Photoshop® plug-in or TWAIN module. With it, the user can use the slider-bar to apply gradation adjustments, global and selective corrections even to shadows and highlights.

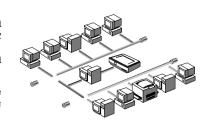


Excellent Versatility And Expandability

The EPSON Expression 1680 Pro scanners support USB, SCSI and FireWire interfaces as standard for Macintosh and Windows® PC environments. The unit is bundled with a transparency unit. An optional automatic document feeder is also available for more specialized scanning requirements.

Our powerful EPSON TWAIN Pro Network and Scan Server software are included as standard, with direct network scanning available by adding the optional EPSON Network Image Express scan server.

The EPSON Expression 1680 Pro is one truly efficient workhorse that delivers one perfect image after another!



Hardware and software networking solutions let your entire office benefit from enhanced scanning productivity.

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	SPEC	IFICAT	IONS
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SCANNER TYPE	Flatbed colour image scanner	
SUB-SCANNING METHOD	Movement of the Scanner-Head	
PHOTOELECTRIC DEVICE	Colour CCD line sensor	
DOCUMENT SIZE	8.5 X 11.7 inches (216 x 297mm)	
LIGHT SOURCE	Xenon Gas Fluorescent Lamp	
OPTICAL RESOLUTION	1,600 x 3,200 dpi with Micro Step™ Drive	
PIXELS / LINE	40,800 pixels	
OUTPUT RESOLUTION		

	50dpi to 6 400 dpi (in single steps) 13,600 (main) x 18,720 (sub) pixels (1,600 dpi)		
EFFECTIVE PIXEL-			
ZOOM	50% to 200% (in 1% steps)		
GRAYSCALE			

May 12 900 doi /at 2009/ 20

48-bit (281,474,900 million colours) internal

	49 bit /994 474 000 million colored external
COLOUR	
	16-bit (65,536 grayscale levels) internal
	10-bit (00,000 grayscale levels) external

SCANNING SPEED

MONOCHROME: (Draft mode)

A4 300 dpi 11sec.*1

COLOUR SEQUENCE: (Draft mode) A4 300 dpi

EMBEDDED IMAGE PROCESSING

Line art

Digital halftoning (Bi-Level, Quad-Level) Error diffusion 3 mode (A,B,C) Dither 4 mode (A,B,C,D) Dither (User specified A.B) AAS (Auto Area Segmentation) TET(Text Enhanced Technology) Tone correction

SUPPORTED PLATFORMS

<EPSON TWAIN Pro>

Windows®

SCSI Windows® 95/98/Me, 2000 Professional, NT4.0

Colour correction

USB Windows® 2000 Professional pre-installed PC (or Upgraded from Windows® 98 pre-installed PC),

Windows® 98 pre-installed PC

Windows® Me (or Upgraded from Windows® 98

pre-installed PC **IEEE1394**

Windows® 2000 Professional pre-installed PC, Windows® Me pre-installed PC

(Optional "IEEE1394 scanner I/F card" is necessary)

Macintosh®

SCSI Mac OS 8.0 or later USB Mac OS 8.5 or later

FireWire Mac OS 8.6 with FireWire 2.1 or later



INTERFACE

SCSI (50-contact high-density connector x 2, Standard) USB (Type-B receptacle connector, Standard)*3

IEEE 1394 Serial Bus Interface (optional)

ENVIRONMENTAL CONDITIONS

TEMPERATURE 5° to 35°C (operating) -25 to 60°C (storage)

10% to 80%, no condensation (operating)

HUMIDITY 10% to 85%, no condensation (storage)

ELECRTICIAL SPECIFICATIONS

VOLTAGE AC220~240V

FREQUENCY 50 to 60Hz

POWER CONSUMPTION Approx. 30W (operating without Option unit) Approx. 50W (operating with Option Unit)

Approx. 10W (standby without Option Unit) DIMENSIONS

WIDTH x DEPTH x HEIGHT 332 x 562 x 200mm

WEIGHT Approx. 12.5kg OPTIONS Automatic Document Feeder B813163

IEEE1394 Board B808343 Network Image Express B808365

*3 To use the USB port, your PC must conform to PC98 specifications, and have Windows® 98 pre-installed. Consult the documentation provided with your PC for further information about USB connectivity. Note also that printing errors may occur if non-standard cables or more than two

Scanning Speed Data Patterns

The thumbnail images below show the scanning patterns used to determine scanning speed specifications.



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Scanning Speed Test System Configuration CPU: PentiumII 450MHz RAM: 256MB SIZE: A4, Landscape MODE: Draft mode I/F: SCSI interface

Scanning speed test results vary according to system configuration, dpi setting, and scan mode setting. However, documents and photos other than those pictured above can be substituted without significantly affecting test results.



As an International ENERGY STAR partner, EPSON has determined that this product meets the International ENERGY STAR guidelines for energy efficiency.



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Dealer's stamp		