

# SPECIFICATIONS

COLOR IMAGE SCANNER

EPSON

# EPSON PERFECTION™ 4870 PHOTO

COLOR IMAGE SCANNER  
**EPSON PERFECTION™ 4870 PHOTO**

**BASIC**

SCANNER TYPE  
 OPTICAL RESOLUTION  
 DOCUMENT SIZE

Flatbed colour image scanner  
 Main 4800 dpi x Sub 9600 dpi  
 216 x 297mm (A4, US Letter)  
 144 x 231mm  
 135mm Strip film 6 frames x 4  
 35mm Mounted film 8 frames  
 120/220 film 3 frames  
 (Max. 6 x 12cm)  
 4" x 5" 2 frames  
 USB2.0 (Type B receptacle connector x 1)  
 IEEE1394 (6 pin connector x 1)

**INTERFACE**

**CONFIGURATION**

PHOTOELECTRIC DEVICE

Alternate 6 lines colour CCD with Micro Lens  
 122,400 pixels (20400 x 2 Line x 3 colours)  
 White cold cathode fluorescent lamp  
 Fixed document and moving carriage

**LIGHT SOURCE**

SUB-SCANNING METHOD

**PERFORMANCE**

OUTPUT RESOLUTION

COLOURS

Internal  
 Output

50 – 6400, 9600, 12800 dpi  
 48 bit (281.5 trillion colours)  
 48 bit (281.5 trillion colours)  
 24 bit (16.7 million colours)  
 16 bit (65,536 grayscale levels)  
 8 bit (256 grayscale levels)  
 1 bit Monochrome

**SCANNING SPEED**

REFLECTIVE SCANNING

MONOCHROME\*

24bit COLOUR\*

A4 300dpi 14sec  
 A4 300dpi 20sec  
 A4 600dpi 34sec

**FILM SCANNING**

35mm Positive film

35mm Negative film

2400dpi 66sec  
 2400dpi 179sec

**FUNCTIONS**

IMAGE QUALITY ENHANCER

Digital ICE  
 Grain Reduction  
 Color Restoration  
 Dust Removal  
 PRINT Image Matching II  
 Optimised Auto Exposure  
 Unsharp Mask with Noise Reduction  
 De-Screening with Document Type Optimiser  
 Tone Curve Adjustment with Histogram  
 1 Push Button  
 Stand-Alone Application and Scan to File Feature  
 Multi Purpose User Interface  
 Multi Document Auto Detection  
 Multi Document Auto Cropping  
 Auto Skew Correction  
 Multi Marquee  
 Film Scanning Thumbnail Preview

**EASY SCANNING**

**SUPPORTED PLATFORMS**

USB1.1:

Microsoft® Windows® 98/Me/2000 Professional/XP Home Edition/XP Professional  
 (Pre-installed model or upgrade of Windows® 98/Me/2000 Professional pre-installed model)  
 Mac OS® 8.6 to 9.x, Mac OS® X 10.2 or later (SilverFast®: Mac OS® 9.2 or later)

USB2.0:

Microsoft® Windows® XP Home Edition/XP Professional/2000 Professional  
 (Pre-installed model or upgrade of Windows® 98/Me/2000 Professional pre-installed model)  
 \*USB2.0 Host Driver by Microsoft is required.

IEEE1394 (FireWire):

Microsoft® Windows® Me/2000 Professional/XP Home Edition/XP Professional  
 Mac OS® 8.6 to 9.x, Mac OS® X 10.2 or later (SilverFast®: Mac OS® 9.2 or later)

**ENVIRONMENTAL CONDITIONS**

TEMPERATURE

HUMIDITY

5°C to 35°C (Operating)  
 10% to 80% without condensation (Operating)

**ELECTRICAL SPECIFICATIONS**

VOLTAGE

POWER CONSUMPTION

AC220-240V 50-60Hz  
 24W (Operation)  
 16W (Standby Mode)  
 4.5 W (Sleep Mode)



EPSON Perfection™ 4870 Photo  
 Weight=Approx. 6.7 kg

\*To use the USB port, consult the documentation provided with your PC for further information about USB connectivity. Please note that errors may occur if non-standard cables or multiple hub connections are used.

**Scanning Speed Data Patterns**

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

**System Configuration of Scanning Speed**

CPU: Pentium 4, 2.4GHz

RAM: 512MB

I/F: USB2.0 Hi-Speed

OS: Windows XP Home Edition

Soft: Adobe Photoshop 7.01E



\*1  
 Line Art  
 (MEMO)



\*2  
 Photo  
 (Photo courtesy of ISO/JIS-SCID. Reprinted by permission.)

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 program for energy efficiency.

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**Pinnacle of Perfection  
 – with Digital ICE™**

Dealer's Stamp



Dec 03

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For enquiries, contact your nearest EPSON sales representatives:

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 www.epsonphoto.com.sg



# Pinnacle of Perfection

— with Digital ICE™



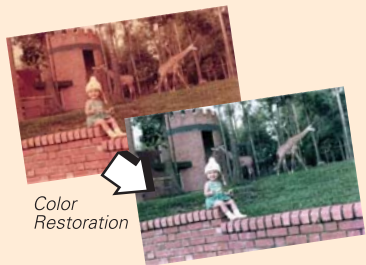
**EPSON Perfection™ 4870 Photo** is the breakthrough in consumer class scanners with its revolutionary hardware design and software support that achieves unprecedented imaging functionalities.

A first for consumer class scanners, EPSON Perfection™ 4870 Photo is designed with a Moving Carriage-Type Transparency Unit (TPU) for supreme performance. Redefine your scanning expectations, with a premium resolution of 4800 dpi, maximum optical density of 3.8, and dazzling speed. Capable of scanning a wide range of film formats, choose freely between 35mm strip film, 35 mm positive slide, 120/220 (6x12cm) medium format film and 4x5" format film. Innovative technology Digital ICE™ is newly incorporated, for professional detection and correction of defects in photos and films. With its exciting features, this is the scanner for serious photo enthusiasts and professionals.

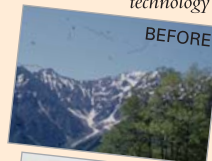
## Image Correction and Enhancement – With Digital ICE™

EPSON Perfection™ 4870 Photo provides an array of tools through the improved driver software EPSON Scan ver 2.0 to correct defects on film and photo. Digital ICE™ is a technology that combines hardware detection and software processing to automatically correct and enhance images from film (Film ICE) and photo prints (Print ICE). For film, Film ICE uses infrared to scan for defect information from scratches, dust particles, dirt particles, marks and fingerprints, and removes them. Print ICE employs differential shadowing technology and software algorithm to identify the precise location of physical defects on the photo being scanned. Surface defects such as scratches, dust particles, dirt particles, folds, creases and tears are then detected and corrected.

In addition, EPSON Scan ver 2.0 provides software-based editing functions like Color Restoration, Dust Removal and the new Grain Reduction function for added versatility. Grain Reduction reduces the 'sandy' and rough appearance of enlarged images from film by applying a filter that smoothens the image.



Color Restoration



## Professional Quality

EPSON Perfection™ 4870 Photo is engineered with a Moving Carriage-Type TPU that creates brighter lamp intensity to produce improved image quality. Complemented with MatrixCCD technology and the revolutionary On-chip Microlens, the scanner uses Micro Step Drive and high 16-bit gradation to generate clearer images with brilliant colours. Enjoy the premium resolution of 4800 dpi and a maximum optical density of 3.8 for more detailed film scan.

## Breakthrough in Speed

Scan photographs or films with dazzling speed. The Moving Carriage-Type TPU enhances the scanning time of negative film by achieving a brighter luminance and using a bluish lamp to expedite exposure time. Equipped with a high speed Application Specific Integrated Circuit (ASIC) hyper processor, image-processing time is shortened. Together with the bundled large film holders that can load more films in a variety of sizes for simultaneous scanning, and high speed interface ports USB 2.0 Hi-Speed; IEEE1394; negative and positive films are scanned faster.



## Convenient and Versatile

Choose scan applications easily from the improved user interface of EPSON Smart Panel ver 3.1 that features merged application applets and larger thumbnails for image preview.

Other bundled software includes ABBYY FineReader SPRINT 5.0 PLUS, an optical character recognition (OCR) software; Adobe Photoshop Elements 2.0, for photo re-touching; and LaserSoft SilverFast SE 6, a scan and imaging software.

EPSON Perfection™ 4870 Photo is easily connectable to your PCs or Macintosh® with Hi-Speed USB 2.0 or IEEE1394 Interfaces.

