The new Konica Minolta DiMAGE Scan Dual IV film scanner

Osaka, Japan, January 7th, 2004: Konica Minolta Camera, Inc. introduces the DiMAGE Scan Dual IV film scanner as a successor model of their already worldwide-popular DiMAGE Scan Dual III. The new DiMAGE Scan Dual IV incorporates a number of features found only on high-end scanners, which make operation easy and faithfully reproduce film images into digital in less work time. Moreover, it uses a new 3200 dpi CCD to deliver higher image quality and yet it is still affordably priced for a 35 mm/Advanced Photo System film scanner.

The DiMAGE Scan Dual IV delivers high image quality that will satisfy photo enthusiasts by not only adopting a new high performance 3-line color 3200 dpi CCD, but also by incorporating an advanced optical system specifically designed for film scanning consisting of a film scanner lens that condenses the technology of Konica Minolta, and an auto focusing system that is not available in flatbed scanners.

With a 16-bit A/D conversion and a wide dynamic range of 4.8, the DiMAGE Scan Dual IV faithfully reproduces the rich variations in tone from light to dark of the original film image. Moreover, Multi-sample Scanning improves the scan data by reducing random noise.

The DiMAGE Scan Dual IV features advanced image correction technology.

・ Auto Dust Brush

Auto Dust Brush automatically detects dust on the film surface that blowers cannot remove, and corrects the image. Moreover, a Photoshop Plug-in has been added so that images can be corrected in real-time using the bundled software Photoshop Elements 2.0. Users can also select areas for correction, and adjust the processing level.

・ Pixel Polish

Pixel Polish brings various corrective features for matching the overall image to specific elements in the picture such as person, night scene, trees and sky, in addition to allowing the user to restore faded colors, or correcting backlit and under/over exposure.

・ Digital Grain Dissolver

Digital Grain Dissolver reduces the affect of grain in color film without sacrificing original image detail.

Thanks to improved sequences in the scanning process and the USB2.0 interface, high speed operation including image transfer and display is possible only 21 seconds per image even at the highest resolution of 3200 dpi.

The DiMAGE Scan Dual IV's high-speed auto focus with an upgraded algorithm and improved motor drive control allows the scanner to be focused quickly onto the center or a selected point within the image.

The DiMAGE Scan Dual IV makes operation easier and shortens work time by incorporating the Batch Scan and the Quick Scan function. Batch Scan Utility enables continuous scanning under user-set optical input resolution, exposure and Image correction, so scan work is more efficient. And, because pressing the Quick Scan button allows the user to scan 6 continuous frames, users can shorten the amount time needed to complete scan work.

DiMAGE Scan Dual IV Major Features

- High image quality by an optical system designed specifically for film scanning
- New high performance 3200 dpi, 3-line color CCD
- High speed scanning only 21 seconds per frame even at maximum 3200 dpi resolution
- 16-bit A/D conversion (dynamic range of 4.8)
- Multi-sample scanning for reducing random noise
- Auto Dust Brush for dust removal, Photoshop Plug-in enables to be processed within selected area in the image after the scan.
- Pixel Polish for various automatic image correction
- Digital Grain Dissolver reduces the affect of film grain.
- Quick Scan function allows users to scan 6 frames continuously by simply pressing the Quick Scan button.
- Simple operation that completes scanning in 4 easy steps by using Easy Scan Utility
- High performance, high speed auto focus
- Can scan film images from corner to corner thanks to a new film holder that enables a 100% field of view.
- Supports 35 mm/APS film.

DiMAGE Scan Dual IV

Technical Specifications

Film formats:	35mm, Advanced Photo System
Film types:	Negative and positive, color and black and white
Optical input resolution:	3200dpi

Scan sizes:

35mm film:	24.76 x 37.14 mm
Advanced Photo System film:*	17.33 x 30.09 mm

Input pixels:

35mm film:	3,120 x 4,680
Advanced Photo System film:*	2,184 x 3,792

Scan method:	Moving-film, fixed-sensor, single-pass scan
Sensor type:	3-line color CCD (5,340 pixels / line)
Filter:	RGB filter
Multi-sample scanning:	2x, 4x, 8x, 16x, Off
Continuous scan:	35mm-film holder: 6 frames (max.)
	Slide mount holder: 4 frames (max.)
A/D conversion:	16 bits
Output data:	8 bits, 16 bits (per color channel)
Dynamic range:	4.8
Scan times:	Approximate time with color positive film, 3200 dpi input resolution, 8-bit color depth, No cropping, No autoexposure, No color matching, No Auto Dust Brush, No image corrections:

Windows:

		Pre-scan	Final scan
35mm film:	5 s		21 s

System test environment:
Windows XP Professional
Pentium 4 3.2 GHz
1GB of RAM
86 GB of hard-disk space
Application: Adobe Photoshop 7.0.1
Memory allocated to application: 80%

Interface:	USB 2.0

Macintosh:

		Pre-scan	Final scan
35mm film:	8 s		21 s

System test environment:

Mac OS 10.3.1
PowerPC G5 1.8GHz
512 MB of RAM
16 GB of hard-disk space
Application: Adobe Photoshop 7.0
Memory allocated to application: 80%
Interface: USB 2.0

PC interface:	USB 2.0 (1.1 compatible)
Focusing:	Autofocus (Point AF available), Manual focus
Light source:	3-wave cold-cathode fluorescent tube
Power requirements:	24V DC with specified AC adapter
	100-120V AC for North America, Taiwan, and Japan
	220-240V AC for Europe, Asia (except Taiwan
	and Japan), and Oceania
Power consumption:	30W (max.)
	* As an ENERGY STAR Partner, Konica Minolta
	has determined that this product meets the
	ENERGY STAR guidelines for energy efficiency.
Dimensions:	145(W) x 100(H) x 325(D) mm /
	5.7 (W) x 3.9 (H) x 12.8 (D) in.
Weight (Scanning unit only):	1.5 kg / 3.3 lb. (approx.)
Standard accessories:	35mm-film Holder FH-U2
	Slide Mount Holder SH-U1
	USB Cable UC-2
	AC Adapter AC-U22, U23, U24, or U25
	CD-ROM for DiMAGE Scan Dual IV
	Photoshop Elements 2.0
Optional accessories:	APS Adapter AD-10

Specifications and accessories are based on the latest information available at the time of printing and are subject to change without notice.

Specification figures are based on Konica Minolta's standard test method.

System Requirements

<Macintosh>

Computer:	Apple Macintosh computers
CPU: [1]	PowerPC G3 or later [3]
Operating system:	Mac OS 8.6 – 9.2.2 , Mac OS X v10.1.3-10.1.5, Mac OS X v10.2.1-10.2.8, 10.3-10.3.1
RAM: [1]	64MB or larger excluding memory used for application software and operating sytem [3]
HD free space:	300MB or larger [3]
Recommended interface boards: [2]	USB port as standard interface
Monitor:	800 x 600 pixels 1024 x 768 pixels or larger is recommended.
Number of colors:	32,000 or more
Others:	CD-ROM drive Photoshop plug-in driver software has been fully tested for use with Adobe Photoshop ver. 6.0.1, 7.0.1, and Adobe Photoshop Elements 2.0. [2] ColorSync profile is included on the CD-ROM for the DiMAGE Scan Dual IV.

[1] Necessary to meet the requirements recommended for use with the operating system.
[2] Operation must be guaranteed by the manufacturers when used with the operating system. Users are asked to contact the manufacturer for details.
[3] CPU, Memory, and hard-disc space requirements with 16-bit color depth and Auto Dust Brush are as follows:

CPU:	PowerPC G3 or later (Power PC G4 or later is recommended.)
RAM:	128 MB free memory or larger. (256 MB or larger is recommended.)
HD free space:	1.2GB or larger (2GB or larger is recommended.)

<Windows>

Computer:	IBM PC/AT compatible computers
CPU: [1]	Pentium 166 MHz or later [3]
Operating system:	Windows 98, Windows 98 Second Edition, Windows 2000 Professional, Windows Me, Windows XP Professional, or Windows XP Home Edition
RAM: [1]	64MB or larger actual memory capacity [3]
HD free space:	300MB or larger [3]

Recommended   interface   boards:[2]

USB port as standard interface

USB 2.0 cards:

    Adaptec: USB2connect 3100, USB2connect 5100, DuoConnect

    Belkin: Hi-speed USB 2.0 5-Port PCI Card,

                      USB 2.0 Hi-Speed 2-Port PCI Card

Monitor: 800 x 600 pixels

                1024 x 768 pixels or larger is recommended.

Number of colors: A 16-bit or greater color monitor: High Color or medium color quality (Windows XP)

Others: CD-ROM drive

The TWAIN driver software has been fully tested for use with Adobe Photoshop ver. 6.0.1, 7.0.1, Adobe Photoshop Elements 2.0, Paint Shop Pro 8.0, and Corel PHOTO-PAINT 11.0. [2]

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[1]   Necessary to meet the requirements recommended for use with the operating system.

[2]   Operation must be guaranteed by the manufacturers when used with the operating system. Users are asked to contact the manufacturer for details.

[3]   CPU, Memory, and hard-disc space requirements with 16-bit color depth and Auto Dust Brush are as follows:

CPU: Pentium 166 MHz or later (Pentium III or later is recommended.)

RAM: 128 MB actual memory or larger. (256 MB or more is recommended.)

HD free space: 1.2GB or larger (2GB or larger is recommended.)

Error-free operation is not guaranteed for any of the systems recommended.

System requirements are based on the latest information available at the time of printing and are subject to change without notice.

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