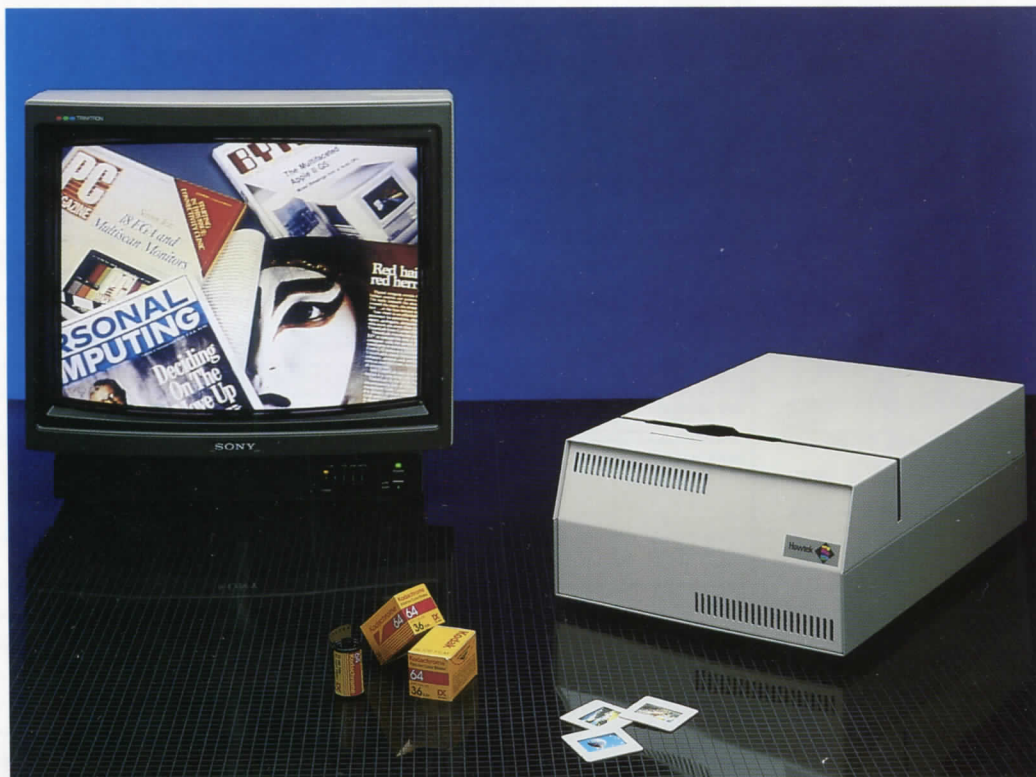




Scanmaster/35



The Scanmaster/35™ family adds a new dimension to desk top scanning.

Both Macintosh™ and IBM® PC compatible, the Scanmaster/35 converts film images into data which can be displayed and stored on an image capturing computer. Input can be in the form of 35mm positive or negative, color or black and white film, either mounted or in strip form.

The Scanmaster/35 family currently consists of two products. The Scanmaster/35 has a scanning resolution of 2000 x 2000 dpi, yielding an effective resolution of 1333 x 2000 dpi, and full 180-degree image rotation capability. Scanmaster/35 is recommended for publishing and other applications where it is essential that the image be presented in the appropriate orientation.

Scanmaster/35 II, with a scanning resolution of 2000 x 3000 dpi, is particularly suited for applications such as medical imaging and high quality re-touching, where high resolution is essential but orientation is not.

◆ Features

PRECISION COLOR SCANNING — Scanning is accomplished using a 2048 element CCD array, a fluorescent lamp and color filter wheel. To digitize an area, a 6000 step stepper motor moves the film horizontally between the lamp and the CCD, making the motion extremely accurate over the entire scan. The result is an overall image resolution of 3 million pixels per film, with accuracy to 1/2 pixel.

Both Scanmaster/35's scan at 12 bits per color, with a total accuracy of 24 bits per pixel (4096 grey levels). The user can choose to read the raw 12-bit CCD data, or 12 or 8 bit values that have been color corrected.

SELECTABLE DATA PACKING — Scanning is line oriented and sent over a standard 8-bit GPIB interface. Under control of the host computer, output data can be packed in one of four ways: RGB pixel packed, RGB line packed, RGB field packed, or black and white.

◆ Scan-It/35 Applications Program

The Scan-It/35 applications program is a menu driven package providing the user with immediate access to all of the Scanmaster/35's functions. Available for both the IBM PC and Mac II, Scan-It/35 allows the user to display scanned images, generate display files for processing with other graphics editing software, and send images directly to Howtek's Pixelmaster color printer.

◆ Scan-It/35 Features

CONTRAST AND COLOR CORRECTION — With the color and contrast menu, Scan-It/35 allows the operator to color and contrast correct an image by adjusting the gamma (contrast) in the scanner to match a specific output or display device, and by modifying the scanner's internal color look-up tables (LUT's). The red, green, blue and black 12-bit downloadable LUT's provide 4096 grey levels per color, as opposed to 256 levels which is standard in competitive products.

PREVIEW — A preview function allows the user to quickly scan an image in black and white to the monitor. Using a pointing device (keyboard, mouse or tablet), the user can select a subsection of the original image, zoom, crop and size it. This new, sized image is then re-scanned and displayed in color so that color adjustments can be made before printing or storing the image for subsequent use with other graphics software packages.

The Scanmaster/35 family is a natural progression of Howtek's expertise in color input and output peripherals. The Scanmaster/35, combined with the Scanmaster™ flat bed scanner, the Pixelmaster™ color printer and a microcomputer, make the production of color documents a cost effective reality in today's office.

Scanmaster/35 Specifications*

	Scanmaster/35	Scanmaster/35 II
Image Size	24mm x 36mm	same
Image Type	Positives or negatives, mounted, unmounted or film strips	same
Image Samples	2K x 2K (effective 1333 x 2000)	2K x 3K
Color Separation	CCD array, RGB filter wheel and fluorescent lamp	same
Output Data Packing	RGB line packed RGB pixel packed RGB field packed Black and white	same
Data Transfer Rate	Approximately 100 Kbytes per second sustained rate over GPIB for RGB pixel packed data	same
Scanning Time	(See chart below)	
Output Data Size	8 bit or 12 bit	same
Downloadable Lookup Tables	12 bit	same
Variable Area Selection	yes	yes
Window and Zoom Functionality	yes	yes
Image Rotation	yes (0 to 90 degrees, effective 360 degrees)	no
Interface	GPIB 8-bit parallel	same
Command Set	Extension of Howtek Scanmaster reflective copy scanner	same
Application Software	Scan-It/35 (Available for MS-DOS and MAC II environments)	same
Voltage	115/230 volts; 50/60Hz	same
Dimensions	11.75"(W) x 18.55"(D) x 6.3"(H)	same
Operating Temperature	10 to 32.5 degrees C	same
Storage Temperature	-20 to 65 degrees C	same
Safety Emissions	UL 478, CSA 22.2, IEC 380 VDE 0871, FCC Class A	same

Chart of Scanmaster 35 Scan Times

Color - RGB Line Packed		
Resolution:	400 x 600 (35 & 35 II)	3.3 minutes
	1333 x 2000 (35 only)	7.4 minutes
	2000 x 3000 (35 II only)	16.67 minutes
Single Plane Color Scan		
Resolution:	400 x 600 (35 & 35 II)	30 seconds
	1333 x 2000 (35 only)	1.11 minutes
	2000 x 3000 (35 II only)	2.5 minutes

* Specifications subject to change without notice.

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Howtek Inc.

21 Park Ave.

Hudson, NH 03051

(603) 882-5200

FAX (603) 880-3843