

**SCREEN**

# DT-S1045AI

Digital Color Drum Scanner



I  
N  
P  
U  
T

**From Vision  
To Impression**

# High quality and ease

In today's printing world, only the best will do. Clients demand high-quality work at high-speed, and expect you to get it all done at low cost. So how can you increase productivity and efficiency without sacrificing quality?

The answer is Dainippon Screen's DT-S1045AI digital color scanner. This advanced unit offers high-quality, high-resolution scanning of originals of up to 12 by 17 inches, combined with a variety of features which improve productivity and efficiency.

## High-quality

Single pass scanning using photomultipliers, customizable sharpness, and a top resolution setting of 8,000 dpi assure the DT-S1045AI's superior quality even at high-magnification. Manual and AI setup offer a variety of options for fine-tuning scans.

## Easy operation

An advanced, intuitive GUI offers multi-window capabilities and ease of use even for the novice, all right from a Macintosh computer. ColorSync 2.0 support for the Macintosh's Color Matching Method helps makes reliable previewing a reality, so operators can check settings before the actual scan. Furthermore, Screen's advanced AI setup channels make great results a snap even for inexperienced operators.

## Productivity

Advanced automation and batch scanning increase productivity dramatically. The unit's multiple 64 MHz DSPs (Digital Signal Processors) allow high-speed scanning. A special high-speed scan mode increases scan speed, with no virtually no noticeable reduction in quality.

## Flexibility

The DT-S1045AI has a maximum imaging area of 12" by 17", and can scan multiple smaller originals at once. Negatives, positives, reflection originals, transparencies; there's almost nothing this unit can't handle. Furthermore, a variety of output formats, including Scitex CT, are supported.





Original: 6 x 7 cm color transparency  
Resolution: 400 dpi  
Magnification: 400%  
AI setup: Standard; highlight and shadow densities altered to increase contrast  
Sharpness: Between "Hard" and "Very Hard"  
Graininess: 3



Original: 6 x 7 cm color transparency  
Resolution: 400 dpi  
Magnification: 175%  
AI setup: Standard  
Sharpness: "Hard"  
Graininess: 0



Original: 6 x 7 cm color transparency  
Resolution: 400 dpi  
Magnification: 175%  
AI setup: Standard  
Sharpness: Normal  
Graininess: 0

# of operation in a flexib

## High Quality

### Single-pass scanning

The DT-S1045AI scans originals in a single pass, using 3 high-quality photomultipliers. This both ensures perfect registration and enables very high scanning speeds. The unit also features a dynamic range of up to 3.9D, so you can get the best scans possible for your important images.

### High resolution and color depth

The DT-S1045AI features a top resolution setting of 8,000 dpi. This, paired with the unit's magnification range of 33 to 2,660% at 150 lpi, allows the DT-S1045AI to offer high quality scanning of virtually any image for virtually any use. Moreover, with the unit's 16-bit color depth, it's easy to take full advantage of the quality of the scans when it comes time to reproduce them.

### Digital USM

The DT-S1045AI offers digital unsharp masking (USM) for greater flexibility. Five standard USM levels are available for each aperture setting. The user can customize these sharpness settings as desired, and even set separate sharpness levels for C, M, Y, K, Violet, Orange, and Blue.

### AI and manual setup

The DT-S1045AI offers AI setup, assuring great results for any operator. Furthermore, for operators who want to give an image that extra bit of individualized polish, the DT-S1045AI offers manual control of tone curve, color correction, and sharpness using a set of graphical interfaces.

## Easy Operation

### Intuitive GUI

The DT-S1045AI's advanced GUI (Graphical User Interface), running on a Power Macintosh computer, offers multi-window capabilities and is extremely easy to use. The GUI supports simultaneous window operations, so the user can preview the potential results of a scan while tweaking the color correction or tone curve, making setup easy and intuitive.



### Soft proofing with ColorSync 2.0

Operators can get scans right the first time with the aid of the DT-S1045AI's ColorSync 2.0 supported previewing function. This function allows the

operator to check a simulation of the scan, color matched to the potential CMYK press output, before actually scanning. Screen's unique printer and monitor profiles, which conform to ICC standards, make it possible to compensate for inherent deficiencies such as the relatively small color range of ink output on paper from presses as compared to RGB output on monitors, giving the user a realistic color reproduction of the printed product on screen. And to assure that what you see is what you get at all times, the "Fit" application can be used to periodically recalibrate monitors, whose display characteristics may alter over time.

### AI setup

The DT-S1045AI offers Dainippon Screen's exclusive AI setup channels. All the operator has to do is choose the appropriate channel for the given image, and the AI program does the rest. This makes it possible for even relatively inexperienced operators to get superior results right away.

## Productivity

### Advanced Automation

The DT-S1045AI features a variety of automated features which make the operator's task easier. These include auto-focus, automatic light source selection, and automatic aperture selection. This means the unit can automatically select the appropriate settings for each original mounted, whether magnified, full size, reflective, or transparent, so the operator doesn't have to.

### Batch scanning and optional offline setup

The DT-S1045AI offers batch scanning and offline setup to improve productivity. Batch scanning allows the operator to set up all the images mounted on the drum right from the Macintosh, and then let the unit do the rest. Thanks to the advanced automation, there's no need for the operator to indicate focus, light source, or aperture for the originals. Furthermore, prescan data can be sent from the scanner Macintosh

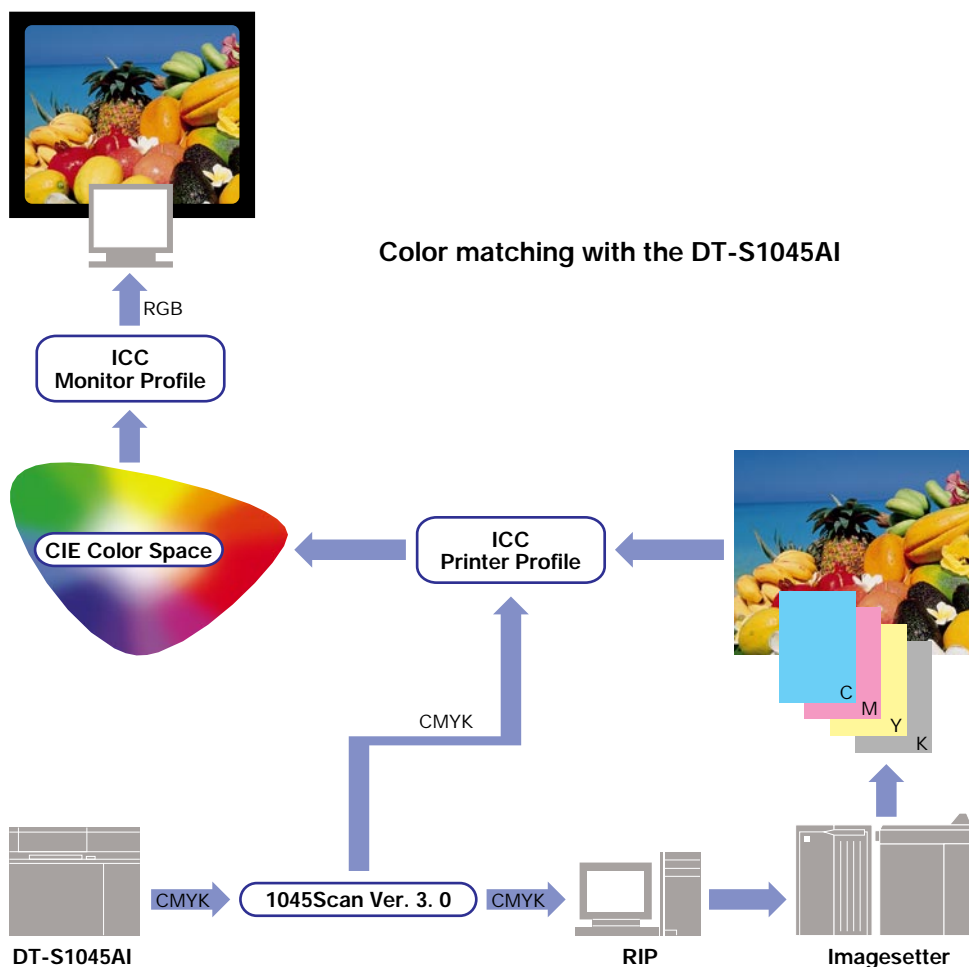
# le, productive unit

## Intuitive GUI

The DT-S1045AI's advanced GUI (Graphical User Interface), running on a Power Macintosh computer, offers multi-window capabilities and is extremely easy to use. The GUI supports simultaneous window operations, so the user can preview the potential results of a scan while tweaking the color correction or tone curve, making setup easy and intuitive.

## Soft proofing with ColorSync 2.0

Operators can get scans right the first time with the aid of the DT-S1045AI's ColorSync 2.0 supported previewing function. This function allows the operator to check a simulation of the scan, color matched to the potential CMYK press output, before actually scanning. Screen's unique printer and monitor profiles, which conform to ICC standards, make it possible to compensate for inherent deficiencies such as the relatively small color range of ink output on paper from presses as



## Advanced Automation

The DT-S1045AI features a variety of automated features which make the operator's task easier. These include auto-focus, automatic light source selection, and automatic aperture selection. This means the unit can automatically select the appropriate settings for each original mounted, whether magnified, full size, reflective, or transparent, so the operator doesn't have to.

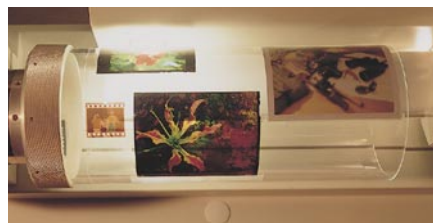
## Batch scanning and optional offline setup

The DT-S1045AI offers batch scanning and offline setup to improve productivity.

## Flexibility

### Flexible Input

The DT-S1045AI has a maximum imaging area of 12" by 17", which can be used to scan a single large original or multiple smaller originals. It can handle

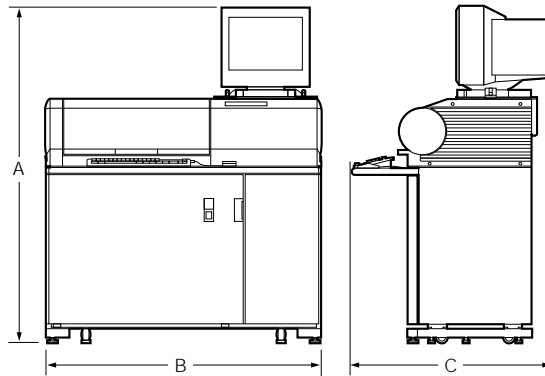


negatives, positives, reflection originals, and transparencies, so you don't have to limit your input sources.

### Flexible Output

The DT-S1045AI also allows you to output in a variety of different ways. Output formats available include Scitex CT, RGB, and CMYK, so you don't have to waste time converting your output. A SCSI 2 connection lets you send output where it's needed fast, too.

## Space Requirements



Note: The above diagram shows DT-S1045AI with monitor.\*

### Dimensions

	A	B	C
mm	1531.5	1240	889.5
inch	60.3	48.9	35.1

## Specifications

Original types	Reflection copy and positive or negative transparencies
Original size	305 x 432 mm (12" x 17")
Light source	Halogen lamp
Aperture	11 settings for transparencies, 8 for reflection copy; automatic setting and changeover
Light sensor	Photomultiplier (3 channels)
Drum speed	150, 300, 600, 900, or 1,200 rpm, depending on magnification
Secondary scan	Spiral with start/stop
Resolution	50 to 8,000 dpi
Unsharp masking	Digital
Color computation	Highlight/shadow densities
	Gradation
	24 channel color correction
Interface	SCSI-2 to Macintosh
Output data	Gray 8 bits; RGB 8 or 16 bits per color modes; CMYK 8 bits per color
Weight	160 kg (352 lbs.) approx.
Power requirements	Single phase 95-125V 0.20 kW 3.1A (14A as starting current)
	Single phase 180-225V 0.19 kW 1.8A (8.3A as starting current)
Environment	23 ±3°C (73.4 ±5°F), 50-70% RH
Recommended system	Power Macintosh™ with at least 32 MB RAM

\* Monitor not included.

## Monitor Profiles

Profile name	Video card	Monitor (Manufacturer)
GDM2000TC (PCI)	ThunderColor 30/1600	GDM2000TC (Sony)
PressView21 (PCI)	PCI Radius	PressView21SR (Radius)
BARCO (PCI)	PCI Radius	121CH (BARCO)
GDM2000TC (NuBus)	LeMansGT	GDM2000TC (Sony)
PressView21 (NuBus)	NuBus Radius	PressView21SR (Radius)
BARCO (NuBus)	NuBus Radius	121CH (BARCO)
GDM2000TC (VRAM)	None	GDM2000TC (Sony)
PressView21 (VRAM)	Macintosh direct output	PressView21SR (Radius)
BARCO (VRAM)	Macintosh direct output	121CH (BARCO)

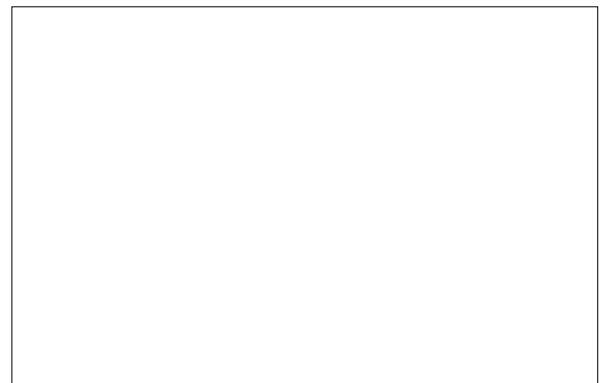
## Printer Profiles

Japan Color-DS/coated paper  
SWOP-DS/coated paper  
EURO-DS/coated paper

- Macintosh is a registered trademark and Power Macintosh is a trademark of Apple Computer, Inc.
- Adobe Photoshop is a trademark of Adobe Systems Incorporated which may be registered in certain jurisdictions.

## DAINIPPON SCREEN MFG. CO., LTD.

**OVERSEAS DIVISION**  
 • Teranouchi-agaru 4-chome, Horikawa-dori, Kamigyo-ku, Kyoto, 602 Japan/Phone 075-417-2610/Fax 075-414-7606/Telex 5422-209 DSKYO J  
**SCREEN (USA)**  
 • 5110 Tolliver Dr., Rolling Meadows, IL 60008, U.S.A./Phone 800-372-7737/Fax 847-870-0149  
**EUROPEAN HEADQUARTERS**  
 • Mündelheimer Weg 39, 40472 Düsseldorf, Germany/Phone 0211-472702/Fax 0211-4727299  
**DAINIPPON SCREEN (DEUTSCHLAND) GmbH**  
 • Mündelheimer Weg 39, 40472 Düsseldorf, Germany/Phone 0211-472701/Fax 0211-4727199/Telex 858-4438 DSDD D  
**DAINIPPON SCREEN (U.K.) LTD.**  
 • Colindale Lane, London NW9 6HZ, United Kingdom/Phone 0181-205-1213/Fax 0181-200-5477/Telex 27122 DSLON G  
**DAINIPPON SCREEN (FRANCE) S.A.**  
 • 69, rue de la Belle Étoile, F-95700 Roissy, France/Phone 1-48-17-86-00/Fax 1-48-17-86-01/Telex 231-401 DSF F  
**DAINIPPON SCREEN (NETHERLAND) BV**  
 • Bouwerij 46, 1185XX Amstelveen, Holland/Phone 020-6433626/Fax 020-6432824/Telex 15166 DSBEN NL  
**DAINIPPON SCREEN (BELGIUM)**  
 • Buro & Design Center, Heizel Esplanade Bus Nr. 54, 1020 Brussels, Belgium/Phone 02-476-1414/Fax 02-476-1313  
**BANCOLINI s.r.l.**  
 • Via Mazzini, 152 - 40138 Bologna, Italy/Phone 051-39 29 43/Fax 051-657 30 95  
**DAINIPPON SCREEN SINGAPORE PTE. LTD.**  
 • 39, Kim Keat Road, Singapore 1232/Phone 2553377/Fax 2504888  
**DAINIPPON SCREEN (HONG KONG) LTD.**  
 • 9th Floor, New Bright Bldg., 11 Sheung Yue Road, Kowloon Bay, Kowloon, Hong Kong/Phone 2953-0038/Fax 2755-8683  
**DAINIPPON SCREEN (TAIWAN) CO., LTD.**  
 • 4F No. 126-1, Ming Tsu West Rd., Taipei, Taiwan/Phone 02-5862711/Fax 02-5914367  
**DAINIPPON SCREEN (AUSTRALIA) PTY. LTD.**  
 • Unit 2, 207-209 Young Street, Waterloo, NSW 2017, Australia/Phone 02-310-1314/Fax 02-310-3566  
**REPRESENTATIVE OFFICES: BEIJING, SHANGHAI, China**



We reserve the right to alter product design and specifications without prior notice.