

Computer-to-Screen Imaging System

FEATURES

than a minute

51 x 76 cm (20" x 30")



M&R's i-Image ST Computer-to-Screen (CTS) Imaging System uses speciallyformulated water-based UV-blocking ink and advanced high-resolution computerto-screen inkjet printer technology to quickly generate opaque images on emulsion-coated screens. CTS images are superior to traditional film positives, delivering greater detail and smoother halftone transitions. And since i-Image ST generates the image directly on the screen, there's no need for vacuum hold-down during the screen exposure process. This, coupled with the fact that light doesn't have to penetrate layers of film and glass, can reduce exposure time up to half. *i*-Image ST also benefits screen printers by eliminating the need for costly film positives, as well as the space and labor required to store and retrieve them. Because the image information is digital, it's easy to store and quick to retrieve. And i-Image ST CTS imaging machines are electrically operated so there is no need to locate them near pneumatic lines.

The i-Image ST Computer-to-Screen Imaging System includes computer, monitor, and M&R's proprietary RIP software. By providing complete control of print parameters, the RIP software ensures high-quality screen images at productionlevel speed. It provides full image scaling and positioning, has presets for common applications, and can be user-customized for specific art types and various mesh counts. Three i-Image ST models are available: i-Image ST 1, with one industrial printhead capable of processing up to 150 screens per 8-hour shift; i-Image ST 2, with two industrial printheads for processing up to 300 screens per shift; and *i*-Image ST 3, with three industrial printheads for processing up to 400 screens per shift. In fact, i-Image ST 3 can create a full-size image in less than a minute. i-Image ST 36 units process image areas up to 51 x 58 cm (20" x 23") and accept

most screen frames up to 66 x 91 cm (26" x 36"). i-Image ST 43 units process image areas up to 51 x 76 cm (20" x 30") and accept most screen frames in sizes up to 66 x 109 cm (26" x 43"). All i-Image ST units are designed to fit through an 81 cm (32") doorway.

Because they reduce screen-processing steps, minimize screen handling, and produce greater image accuracy, i-Image ST models are able to deliver fast, accurate, and cost-effective screen imaging. Screens for multicolor jobs are quickly generated in perfect registration. Ruggedly designed, affordably priced, and backed by the world's largest network of service and support, the i-Image ST Computer-to-Screen Imaging System is the ideal addition to any screen-printing operation.

Tri-Loc for CTS (Computer-to-Screen) Imaging Systems

Since every CTS-generated screen is automatically pre-registered for M&R's Tri-Loc registration system, on-press registration is blazingly fast. The entire process—from screen imaging to the first finished print—is dramatically shortened, with registration time reduced up to 95%. In fact, the combination of i-Image ST and Tri-Loc results in the fastest, most accurate way to generate and register screens. Users simply mount the Tri-Loc pallet to the press and move it to each printhead, pulling the screen frames into contact with the pallet at the three registration points. It's an amazingly easy process.

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STANDARD FEATURES

CERTIFICATION

- CE Certified: Built to specifications established by the European Committee for Standardization® (CE)
- UL Listed: Built to specifications established by Underwriters Laboratories® (UL)

COMPUTER-TO-SCREEN IMAGING

- · Can be user-customized for specific art types, various mesh counts, and types of emulsion
- · Digital workflow simplifies the imaging process
- · Eliminates the need for costly film
- Improves image quality
- · Produces exceptional screen-to-screen registration
- Promotes faster on-press setup and registration
- Provides complete control of print parameters

- Provides full image scaling and positioning
- Reduces processing steps
- · Three-printhead models can generate full-size images in less than a minute
- · Virtually eliminates pinhole touchup
- · Workflow can be customized for specific customer needs

DESIGN & CONSTRUCTION

- Designed to fit through an 81 cm (32") doorway
- Includes computer, monitor, and M&R's proprietary software
- Self-contained design speeds production by allowing placement in light-safe screen-coating rooms
- · Ships fully assembled and ready to deploy
- Touchscreen panel with alphanumeric display

WARRANTY, SERVICE AND SUPPORT

- 24-hour hotline is staffed 365 days a year
- Access to M&R's Training Center
- M&R OEM parts—including genuine M&R pallets & platens—and screen printing supplies are available online at store.mrprint.com
- One-year limited warranty

SPECIFICATIONS

	i-Image ST 36-1	i-Image ST 36-2	i-Image ST 36-3	i-Image ST 43-1	i-Image ST 43-2	i-Image ST 43-3
Electrical Requirements 1, 2, 3	208/230 V, 1 ph, 5 A, 50/60 Hz, 1.15 kW	208/230 V, 1 ph, 5 A, 50/60 Hz, 1.15 kW	208/230 V, 1 ph, 5 A, 50/60 Hz, 1.15 kW	208/230 V, 1 ph, 5 A, 50/60 Hz, 1.15 kW	208/230 V, 1 ph, 5 A, 50/60 Hz, 1.15 kW	208/230 V, 1 ph, 5 A, 50/60 Hz, 1.15 kW
Industrial Printheads	1	2	3	1	2	3
Maximum Image Area ⁴	51 x 58 cm (20" x 23")	51 x 58 cm (20" x 23")	51 x 58 cm (20" x 23")	51 x 76 cm (20" x 30")	51 x 76 cm (20" x 30")	51 x 76 cm (20" x 30")
Maximum Screen Frame Profile	4.1 x 4.1 cm (1.63" x 1.63")					
Maximum Screen Frame Size	66 x 91 cm (26" x 36")	66 x 91 cm (26" x 36")	66 x 91 cm (26" x 36")	66 x 109 cm (26" x 43")	66 x 109 cm (26" x 43")	66 x 109 cm (26" x 43")
Minimum Screen Frame Size	30 x 46 cm (12" x 18")					
Overall Size (H x W x D)	125 x 142 x 213 cm (49" x 56" x 84")	125 x 142 x 213 cm (49" x 56" x 84")	125 x 142 x 213 cm (49" x 56" x 84")	125 x 142 x 254 cm (49" x 56" x 100")	125 x 142 x 254 cm (49" x 56" x 100")	125 x 142 x 254 cm (49" x 56" x 100")
Screens per Shift 5	150	250	350	150	250	350
Shipping Weight	612 kg (1350 lb)	612 kg (1350 lb)	612 kg (1350 lb)	635 kg (1400 lb)	635 kg (1400 lb)	635 kg (1400 lb)

¹If incoming voltage differs from the voltage(s) listed in this brochure, calculate amperage accordingly. Other electrical configurations are available: Contact The M&R Companies for details.

THE DIGITAL SCREEN ROOM

Fast, high-quality screen printing starts with high-quality screens, and M&R's Digital Screen Room concept is dedicated to dramatically reducing screen-production time while making substantial improvements to image quality and consistency.

Coat Screens with Uni-Kote **Automatic Screen Coating Machine**

Uni-Kote provides a reliable, low-cost option for automating screen coating. The computerized control center, conveniently mounted at the side of the screen coating machine, makes programming simple. Uni-Kote's front and rear screen coaters can apply emulsion in tandem or independently



Image Screens with *i*-Image ST

i-Image ST computer-to-screen imaging system uses computer-to-screen inkjet printer technology to generate opaque images on emulsion-coated screens. With fewer layers of glass and no vacuum required, those images can be processed in as little as half the time on screen exposure

equipment like Tri-Light CTS computer-to-screen exposure system and MSP 3140 CTS computer-to-screen exposure unit.



Expose Screens with D-Scan or with MSP 3140 CTS or Tri-Light CTS Exposure System

D-Scan's UV LED scanning strip exposes digitally-created screens. Ultra-fast curing and minimal energy usage make it ideal for shops transitioning to digital screen creation. Tri-Light CTS and MSP 3140 CTS expose conventional screens as well as CTS-generated screens, adding flexibility for shops using both screen types

Select Your Exposure System

> M&R's Eco-Rinse automates the tedious process of rinsing exposed screens while ensuring consistency and reducing the chance of unintentionally blowing out exposed images. Manually-processed screens often require follow-up rinsing because of incomplete or inadequate processing due to operator fatigue, boredom, or inadequate training, Processing can also vary from one operator to the next. Those problems are eliminated with the consistent screen rinsing available with the Eco-Rinse automatic screen rinsing system.



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²An uninterruptable power supply (UPS) should be used to protect electrical components

³ 110 V electrical configuration is optionally available

 $^{^4}$ When printed on a $66\,x$ 91 cm (26" x 36") screen frame on i-Image ST 36 models or when printed on a $66\,x$ 109 cm (26" x 43") screen frame on i-Image ST 43 models

⁵Approximate number of screens the model is capable of printing in an 8-hour shift. Your results may vary