

# TRI-LIGHT™ ST



## Metal-Halide UV Screen Exposure System

### FEATURES

- **Maximum screen frame size**  
132 x 152 cm (52" x 60")
- **Instant-start multi-spectrum metal-halide UV**  
screen exposure lamp
- **Designed for high-production screen exposure applications**



Tri-Light ST is a larger, shuttered-light version of NuArc's popular Tri-Light Screen Exposure System. With its 132 x 152 cm (52" x 60") maximum screen frame size; fast, powerful multi-spectrum metal-halide UV screen exposure light source; and exceptional repeatability, Tri-Light ST is perfect for high-volume operations. NuArc's computerized and programmable integrator/controller ensures precise vacuum duration and screen exposure lamp output compensation. Tri-Light ST is also simple to operate. The entire screen exposure process—from vacuum drawdown through screen exposure and vacuum release—is accomplished with a single keystroke.

NuArc's unique manifold system ensures intimate contact by drawing vacuum evenly around the perimeter of the blanket frame. Screen exposures are powered by NuArc's multi-spectrum metal-halide System 631™ screen exposure lamp, which idles at 1 kW and operates at user-selected settings of 6 kW, 3 kW and 1 kW. The 3 kW and 1 kW settings allow operators to slow down screen exposures when necessary. They also extend Tri-Light's ability

to adapt to future emulsion formulas. Tri-Light ST also features NuArc's exclusive Proportional Temperature Control (PTC). PTC continuously monitors lamp temperature, turning the cooling fans on and off to keep the screen exposure lamp at the optimum operating temperature. Tri-Light ST can be located in areas housing unexposed screens because the light source and vacuum frame are enclosed, and the exposure screen exposure lamp can't be turned on while the blanket frame is open.

M&R is the world's largest manufacturer of screen printing equipment, and the online M&R Store features a wide variety of genuine M&R OEM parts and screen printing supplies. The NuArc line includes CTS computer-to-screen exposure systems, UV screen exposure units, lithographic imaging systems and free standing vacuum frames. All equipment from The M&R Companies is built with M&R's unsurpassed attention to detail and commitment to quality, durability, innovation, and design excellence, and is backed by M&R's unparalleled 24-hour access to service, support, and premium parts.

[www.mrprint.com](http://www.mrprint.com)  
[store.mrprint.com](http://store.mrprint.com)

# TRI-LIGHT™ ST

## STANDARD FEATURES

### BLANKET & VACUUM

- Advanced design eliminates the need for a vacuum hose connection to the blanket
- Exceptionally flexible and resilient material ensures intimate contact and blanket longevity
- Gas shocks simplify blanket frame opening and closing
- Oil-free pump is fast, quiet, and efficient
- Unique manifold system ensures intimate contact by drawing vacuum evenly around the perimeter of the blanket frame
- Vacuum release system instantly releases vacuum

### CERTIFICATION

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

### CONTROLLER/INTEGRATOR FOR SCREEN EXPOSURES

- Computer controlled and fully programmable
- Job Recall™ allows storage and recall of numerous vacuum and screen exposure values
- Light integrator ensures precise screen exposure times
- Touch-screen panel with alphanumeric display

### DESIGN & CONSTRUCTION

- 104 cm (41") working height for no-step access
- 9.5 mm (3/8") thick optically-clear plate glass
- Can be disassembled to fit through a 76 cm (30") wide opening
- Frame latches are made with state-of-the-art materials for durability, longevity, and operator comfort
- Fully-enclosed, heavy-duty all steel cabinet
- Light-Loc™ automatically turns off the screen exposure light source if the blanket frame is opened
- Removable covers provide easy access to components to clean or replace serviceable items like screen printing lamps
- Self-contained design speeds production by allowing placement in light-safe screen-coating rooms
- Ships fully assembled and ready to deploy
- Square tubular steel welded frame

### LIGHT SOURCE FOR SCREEN EXPOSURES

- Lamp drawer makes screen exposure lamp easy to access and change
- Multi-point metal-halide UV screen exposure lamps excel on all emulsions: direct, capillary, and indirect
- Point-light source provides maximum collimation and optimum coverage to hold fine lines and dots during screen exposure

- Proportional Temperature Control (PTC) turns cooling fans on and off to keep the screen exposure lamp at optimum operating temperature
- Screen exposure lamp idles at 1 kW when not exposing screens
- System 631 shuttered multi-spectrum metal-halide screen exposure lamp produces fast, efficient user-selected exposures of 6 kW, 3 kW or 1 kW

### SCREEN EXPOSURE AREA

- 132 x 152 cm (52" x 60") maximum screen frame size
- Compatible with the Tri-Loc® & Double Tri-Loc® Rapid Registration Systems from M&R

### WARRANTY, SERVICE & 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](http://store.mrprint.com)
- One-year limited warranty excluding blanket, glass, and screen exposure lamps

## OPTIONS

### INSPECTION LIGHT

- Allows the operator to check for alignment, dust, and pinholes before exposing screens
- Yellow safelight turns off automatically when the blanket frame is closed

### REPLACEMENT SCREEN EXPOSURE LAMPS

- 6 kW multi-spectrum metal-halide UV screen exposure lamp: Part Number MH153

## SPECIFICATIONS

	Tri-Light ST
Electrical Requirements <sup>1</sup>	208/230 V, 1 ph, 32/29 A, 50 Hz, 7 kW 208/230 V, 1 ph, 30/28 A, 60 Hz, 6 kW
Maximum Screen Frame Size	132 x 152 cm (52" x 60")
Overall Size (H x W x D)	109 x 188 x 180 cm (43" x 75" x 71")
Shipping Weight	619 kg (1365 lb)
Vacuum Frame Size	152 x 174 cm (60" x 68.5")
Wattage	6 kW

<sup>1</sup> If 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 M&R Companies**  
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