

UV LED Screen Exposure System



FEATURES

- **Maximum screen frame size**
58 x 79 cm (23" x 31")
or 79 x 102 cm (31" x 40")
- **High-output UV LEDs produce fast, inexpensive screen exposures at cooler operating temperatures**
- **The high density of M&R's screen-exposure LEDs provides the finest detail, the most uniform coverage, and the quickest exposures available**

Starlight 3140 shown with optional CTS kit and floor stand

Starlight is NuArc's versatile and affordable tabletop or stand-mounted UV LED screen exposure unit. It's ideal for conventional exposures, and an optional CTS retrofit kit turns Starlight into a computer-to-screen (CTS) UV LED screen exposure system. Starlight's UV LEDs save energy costs, reduce screen exposure time, speed up production, and operate at far lower temperatures than metal-halide lamps. And, unlike expensive metal-halide bulbs that require replacement every year or two, Starlight's UV LED light source can last for decades. And the high density of M&R's screen-exposure LEDs (6840 on Starlight 3140 and 4320 on Starlight 2331) provides the finest detail, the most uniform coverage, and the quickest exposures available. M&R's Starlights have more than three times as many LEDs per square inch as some competing products.

Starlight's sophisticated digital touchscreen controller automates screen exposures. All the operator needs to do is select the appropriate exposure preset and press START. The entire process, including vacuum, exposure, and shutdown, takes place without further operator involvement. Starlight allows the operator to walk away after initiating the process because Starlight ensures that exposures will not begin until proper vacuum has been reached—and vacuum and exposure LEDs will shut off automatically upon completion of exposure. Vacuum and exposure times can be set between 0.1 and 999.9 seconds. And Starlight's Job Recall™ speeds processing and increases productivity by enabling operators to save and recall up to 24 vacuum and exposure profiles—and identify each with a unique name or description.

Starlights quickly expose direct, capillary, and indirect emulsions. They work particularly fast on photopolymer emulsions, which can be exposed in as little as three to five seconds (results will vary based on emulsion type and thickness). Starlight UV LED screen exposure units can be located in areas housing unexposed screens because the ultraviolet light source and vacuum frame are enclosed, and the screen exposure lamp can't be turned on while the blanket frame is open. Starlights also incorporate several strips of yellow, non-exposing LED inspection lights for convenient setup. Starlights are available in two sizes: Starlight 2331 is capable of exposing screen frames up to 58 x 79 cm (23" x 31") and Starlight 3140 is capable of exposing screen frames up to 79 x 102 cm (31" x 40"). Starlight 2331 is perfect for small and startup shops, while Starlight 3140 makes it easy for medium-size shops to quickly process larger screens and higher volume. And Starlight 3140 is compatible with most sizes of M&R's Tri-Loc Registration System. If you're looking for blazingly fast quality exposures at an unbelievably affordable price, you'll find it all in the Starlight.

STANDARD FEATURES

BLANKET & VACUUM

- Exceptionally flexible and resilient material ensures intimate contact
- Gas shocks simplify blanket frame opening and closing
- Oil-free pump is fast, quiet, and efficient
- Specially designed vacuum system features high-speed drawdown

CERTIFICATION

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

DESIGN & CONSTRUCTION

- Fully-enclosed, heavy-duty all steel cabinet
- Light-Loc™ automatically turns off the screen exposure light source if the blanket frame is opened
- Optically clear plate glass
- Self-contained design speeds production by allowing placement in light-safe screen-coating rooms
- Ships fully assembled and ready to deploy
- Starlight 3140 is compatible with most sizes of M&R's Tri-Loc® Rapid Registration System

EXPOSURE CONTROLS

- Computerized touchscreen controller allows the operator to set vacuum and exposure times
- Exposure time can be set between 0.1 and 999.9 seconds
- Job Recall™ allows operators to save and recall up to 24 vacuum & exposure profiles—and identify each with a unique name or description
- Vacuum sensor automatically initiates the exposure process as soon as the operator-defined vacuum setting is reached

LIGHT SOURCE FOR SCREEN EXPOSURES

- Dramatically reduces exposure time
- Multiple banks of high-output UV LEDs excel on all emulsions: direct, capillary, and indirect
- The high density of M&R's screen-exposure LEDs (over 2000 on the Starlight 3140 and more than 1200 on the Starlight 2331) provides the finest detail, the most uniform coverage, and the quickest exposures available
- UV LEDs use far less energy than metal halide lamps and are only on during the exposure process
- UV LEDs run cooler, reduce screen exposure time, and speed up production

VACUUM/EXPOSURE PROCESS

- Starlight's Controller automates the screen exposure process:
 1. The operator selects the appropriate exposure preset and presses **START**
 2. When the system reaches the preset vacuum level, the user-set vacuum countdown begins
 3. When vacuum countdown reaches zero, the LED exposure process begins
 4. When exposure countdown reaches zero, vacuum and exposure LEDs turn off automatically
 5. After the exposure is complete, the display shows **EXPOSURE COMPLETE** letting the operator know that the screen has been exposed
- Starlight's exposure process allows the operator to walk away after pushing the start button because the automated process ensures that exposures will not begin until proper vacuum has been reached—and vacuum and exposure LEDs will shut off automatically upon completion of exposure

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
- One-year limited warranty
- The screen-exposure LEDs used in this equipment carry a limited lifetime warranty against failure in normal use



STARLIGHT 2331 Tabletop Model

OPTIONS

CTS RETROFIT KIT

- Available at the time of purchase or as a field retrofit
- CTS Kit turns Starlight into a computer-to-screen UV LED screen exposure system
- Eliminates glass and the need for vacuum drawdown for faster exposure times
- Replaces the glass with an adjustable screen support framework, providing quick adjustment for different frame sizes

FLOOR STAND

- Turns Starlight models into freestanding UV LED screen exposure systems

SPECIFICATIONS

	Starlight 2331	Starlight 3140
Electrical Requirements ¹	110 V, 1 ph, 9.5 A, 50/60 Hz, 1.1 kW	110V, 1ph, 12.5A, 50/60Hz, 1.4 kW
Maximum Screen Frame Size	58 x 79 cm (23" x 31")	79 x 102 cm (31" x 40")
Overall Size with Stand (H x W x D)	104 x 109 x 91 cm (41" x 43" x 36")	104 x 130 x 109 cm (41" x 51" x 43")
Overall Size (H x W x D)	23 x 109 x 91 cm (9" x 43" x 36")	23 x 130 x 109 cm (9" x 51" x 43")
Shipping Weight	147 kg (325 lb)	193 kg (425 lb)

¹ 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.



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