

SHOWLINE SL STRIP 10 IP LINEAR WASH LUMINAIRE SPECIFICATIONS.

GENERAL.

A.) Overview.

- 1.) The luminaire shall be a color mixing luminaire employing ten (10) red, green, blue, and white LED engines. The engine shall be capable of providing color matched presets as well as millions of permutations of color.
- 2.) The luminaire shall conform to UL 1573 stage and studio use as well as UL 8750 LED standards and tested via ETL to conform to the aforementioned UL specifications, luminaire shall hold ETL, cETL, and CE markings. .
- 3.) The luminaire shall conform to USITT DMX-512A protocol standards.
- 4.) The luminaire shall employ 10 (10) LED light source engines that will not emit light in the ultra-violet (wavelengths less than 400nm for UV-A,B, or C) or the Infrared spectrum (wavelengths of more than 775 nm). Units that emit light within this spectrum shall not be accepted.
- 5.) The luminaire shall have an integrated control system that provides local controls offering access to set up parameters, preset colors, stored custom presets and chases, and status reporting.
- 6.) The luminaire shall be a linear wash luminaire with a six (6) degree homogenized output.
- 7.) The luminaire shall have an output of up to 2240 lumens (RGBW)
- 8.) The luminaire shall have control inputs for:
 - a. DMX512 with input/output connectivity via a 5 Pin DMX connector
 - b. RDM with input/output connectivity via a 5 Pin DMX connector
- 9.) All control and Power input and output shall be located on opposite side of the luminaire lenses with inputs and outputs located at opposite ends to aid in cable management.
- 10.) All LED luminaires shall be provided by a single manufacturer to ensure over all compatibility.

B.) Physical

- 1.) The construction of the unit shall be extruded aluminium in a matt black finish.
- 2.) The linear wash luminaire shall be of compact dimensions, not exceeding 42.4 inches [1077mm] in length, 7.9 inches [201 mm] in height and 4.7 inches [120 mm] in width.
- 3.) The luminaire shall weight no more than 16.5 lbs. [7.5 kg].

- 4.) The luminaire shall provide mounting capabilities from a pair of trunnions to which approved mounting devices can be attached. The trunnions shall also operate as floor stands and locking hardware shall permit units to be placed side by side without affecting the pixel pitch.
- 5.) Safety cable attachment points shall be located on both ends of the luminaire.

E.) Mechanical Data.

- 1.) A heat sink integrated into the luminaire design shall be used for silent passive cooling. Luminaires utilizing fans for active cooling shall not be accepted.
- 2.) The luminaire shall include an accessory slot above the lens to allow for holographic diffuser lenses to be fitted. This shall be accessed via a sealed channel.
- 3.) A LCD menu system shall provide essential system information and operational controls. The LCD display shall automatically orient the display according to the orientation of the unit, thus ensuring the menu is readable in various configurations.
- 4.) The finish shall be matt black.
- 4.) The luminaire shall be supplied with a limited two-year warranty when used in normal applications.
- 5.) The luminaire shall be supplied complete with a kit of three holographic diffuser lens for easy beam adjustment. The beam angles shall be fifteen (15) degree, twenty-five (25) degree, and eleven (11) x thirty (30) degree. Luminaires without a holographic diffuser lens kit shall not be accepted.
- 6.) The luminaire shall be rated for outdoor use to IP65.

C.) Electrical.

- 1.) Supply Voltage shall be 120 to 240V, 50/60Hz. (+/- 10% auto-ranging)
- 2.) The luminaires current draw shall not exceed 150 watts with all RGBW engines at full output and shall not exceed 150 watts in any of the preset color settings; luminaires that do not meet these criteria shall not be accepted.
- 3.) The luminaire shall be ETL and cETL Listed and CE marked.

D.) Environmental.

- 1.) Maximum operating ambient temperature shall not exceed 104 degrees Fahrenheit (40 degrees Celsius)
- 2.) A silent passive cooling system shall be employed to maintain the optimal operating temperature of the luminaire.
- 3.) Luminaires shall be low maintenance and environmentally friendly, all units shall be mercury free.

E.) Operation.

1.) The luminaire shall have control inputs for:

- a. DMX512 with input/output via a DMX 5 Pin Male and Female connector
- b. RDM with input/output via a DMX 5 Pin Male and Female connector
- c. Luminaires utilizing proprietary only controls shall not be accepted.

2.) DMX512 control will be via, RGBW 8-Bit or RGBW 16-Bit mode. Each control type can be further broken into LED groupings of 1, 2, 5, or 10 LED engines. Control parameters for each DMX512 mode shall be as follows (1 group mode):

a. RGBW 8-Bit Mode (4 Channel)

- a. Red
- b. Green
- c. Blue
- d. White

b. RGBW 16-Bit Mode (8 Channel)

- a. Red – High
- b. Red – Low
- c. Green – High
- d. Green – Low
- e. Blue – High
- f. Blue – Low
- g. White-High
- h. White-Low

c. Luminaire addressing shall be setup via two different methods:

- i. From the control menu – under Settings/DMX– set up the DMX address using the navigation arrows to set DMX 512 mode, LED grouping, and address.
- ii. RDM – using any RDM controller, the DMX address shall be assignable via standard RDM commands.

3.) The luminaire shall include an onboard LCD display and controls of the following:

a. Menu settings:

- i. Manual settings
- ii. Effects (Chases – preloaded and user defined)
- iii. Settings (configuration options)

4.) Access to on board chases shall be from the control panel of the luminaire.

- 5.) Each chase shall playback RGBW and intensity settings. All or discrete LED pixels shall be selectable for editing.
- 6.) The unit shall include a color calibration system, ensuring that each pixel can replicate colors within a pre-defined color space.
 - a. This color space shall match all Showline products and shall also include pre-defined preset colors.
 - b. The color calibration shall be set at the factory and shall be capable of being enabled or disabled via the menu, and RDM.

Luminaires not utilizing color calibration technology will not be accepted.

- 7.) The luminaire shall include ten (10) RGBW LED engines for full-range color mixing and providing full field dimming - allowing for both smooth timed fades and fast blackouts. The LED engines shall operate in various groupings allowing up to ten (10) individually LED engines.
 - a. Prolight LEDs used in the luminaire shall be high brightness and proven quality from established and reputable LED manufacturers.
 - b. Prolight emitters should be rated for nominal 50,000-hour LED life to 70% intensity.
 - c. All LED fixtures (100% of each lot) shall undergo a minimum eight-hour burn-in test during manufacturing.

F). DIMMING.

- 1.) The luminaire, in 16-bit mode, shall use 16-bit nonlinear scaling techniques for high-resolution dimming.
 - a. Dimming curves shall be selectable via the luminaire menu and RDM for various methods of smooth dimming over long timed fades.
 - b. The luminaire shall be digitally driven using high-speed pulse width modulations (PWM) in concert with power factor control (PFC) to ensure a smooth flicker free dim curve from 100 to 0 % and shall be imperceptible to video cameras and video related devices.

END OF SPECIFICATION.