

## SHOWLINE SL e130 LED STROBE LUMINAIRE SPECIFICATIONS.

### GENERAL.

#### A.) Overview.

- 1.) The luminaire shall be a LED strobe luminaire employing five hundred and seventy-six (576) white LED engines. The engine shall be capable of providing strobing and continuous on functions.
- 2.) The luminaire shall have CE markings.
- 3.) The luminaire shall conform to USITT DMX-512A(RDM) protocol standards.
- 4.) The luminaire shall employ five hundred and seventy-six (576) 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). Luminaires 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, stored custom presets and chases, and status reporting.
- 6.) The luminaire shall be an LED strobe with a one-hundred and twenty (120) degree homogenized output.
- 7.) The luminaire shall have an output of up to 28000 lumens.
- 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.
- 10.) All LED luminaires shall be provided by a single manufacturer to ensure over all compatibility.

#### B.) Physical

- 1.) The construction of the luminaire shall be aluminium die casting in a matt black finish.
- 2.) The luminaire shall be of compact dimensions, not exceeding 9 1/4 inches [235 mm] in length, 12 1/4 inches [311 mm] in height and 12 inches [302 mm] in width.
- 3.) The luminaire shall weigh no more than 12.13 lbs. [5.5 kg].
- 4.) The luminaire shall provide mounting capabilities from an included split yoke to which approved mounting devices can be attached. The yoke shall also operate as a floor stand.

5.) A locking accessory frame slot shall include dual channels for accessories.

- a. A spring-loaded locking mechanism shall prevent accessories from falling from the luminaire.

E.) Mechanical Data.

- 1.) Variable fans shall be used to provide forced-air cooling for internal components. In addition, the fans shall be capable of being disabled where the unit shall regulate intensity without utilizing the fans.
- 2.) A LCD menu system shall provide essential system information and operational controls.
- 3.) The finish shall be high temperature stoved black paint on the metal components.
- 4.) The luminaire shall be supplied with a limited two-year warranty when used in normal applications.

C.) Electrical.

- 1.) Supply Voltage shall be 100 to 240V, 50/60Hz. (+/- 10% auto-ranging)
- 2.) The luminaire current draw shall not exceed 150 watts with all LED engines at full output; luminaires that do not meet these criteria shall not be accepted.
- 3.) The light engine source shall consist of five hundred and seventy-six (576) white LED engines.
- 4.) The luminaire shall be CE and C-Tick marked.

D.) Environmental.

- 1.) Maximum operating ambient temperature shall not exceed 104 degrees Fahrenheit (40 degrees Celsius)
- 2.) A variable speed 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 1 channel, 3 channel, 4 channel, 16-Bit or Zone Mapping mode. Control parameters for each DMX512 mode shall be as follows:

- a. Single Channel Mode (1 Channel)
  - a. Strobe Rate
  
- b. Three Channel Mode (3 Channel)
  - a. Intensity
  - b. Duration
  - c. Rate
  
- c. Four Channel Mode (4 Channel)
  - a. Intensity
  - b. Duration
  - c. Rate
  - d. Effects
  
- d. 16-Bit Mode (6 Channel)
  - a. Intensity – High
  - b. Intensity – Low
  - c. Effects
  - d. Control
  - e. Duration
  - f. Strobe
  
- e. Zone Mapping Mode (16 Channel)
  - a. Intensity – High
  - b. Intensity – Low
  - c. Effects
  - d. Control
  - e. Zone 1 Intensity
  - f. Zone 1 Duration
  - g. Zone 1 Strobe
  - h. Zone 2 Intensity
  - i. Zone 2 Duration
  - j. Zone 2 Strobe
  - k. Zone 3 Intensity
  - l. Zone 3 Duration
  - m. Zone 3 Strobe
  - n. Zone 4 Intensity
  - o. Zone 4 Duration
  - p. Zone 4 Strobe
  
- f. 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 zones, and address.
  - ii. RDM – using any RDM controller, the DMX address shall be assignable via standard RDM commands.

- 3.) The luminaire shall operate with all LEDs or in any combination of four (4) discrete zones.
  - a. Zones shall be individually controllable when using the Zone Control DMX mode.
  - b. An Effects DMX channel shall allow only certain zones to be used in response to the master strobe and duration channels. Additional zone chases shall also be available.
- 4.) The luminaire shall be capable of unlimited extended operation with any strobe setting.
- 5.) The luminaire shall include a constant on mode that enables LEDs to be on without strobing for up to two minutes.
- 6.) The luminaire shall include an onboard LCD display and controls of the following:
  - a. Menu settings:
    - i. Presets (standard and user defined)
    - ii. Effects (Chases – preloaded and user defined)
    - iii. Settings (configuration options)
    - iv. Current Fixture Operational Status
- 7.) Access to on board presets shall be from the control panel of the luminaire and DMX. Each user definable preset shall store Zones, Rate and Duration as well as master intensity settings for each of the thirty-one (31) presets. All or discrete LED zones shall be selectable for editing. Presets shall be storable in the fixture firmware.
- 8.) Access to eighteen (18) on board chases shall be from the control panel of the luminaire and DMX. Each chase shall playback Zones, Rate and Duration settings for each step of the eighteen (18) presets. All or discrete LED zones shall be selectable for editing. Ten (10) built-in and eight (8) user adjustable presets shall be storable in the fixture firmware.
- 9.) The luminaire shall provide temperature monitoring technology. This technology employs provides the operating temperature for the luminaire as well as high and low records.
  - a. The current and past temperatures shall be readable in the menu system under Status.
  - b. The luminaire shall be capable of having its fans disabled via the menu system or DMX where the luminaire shall regulate luminaire intensity in relation to temperature without utilizing the fans.

Luminaires not utilizing temperature monitoring technology and luminaire status will not be accepted.

- 10.) The luminaire shall include five hundred and seventy-six (576) white LED engines capable of multiple strobe rates and continuous on and delivering full field dimming - allowing for both smooth timed fades and fast blackouts. The LED engines shall operate in various zones allowing up to four (4) individually controlled LED zones. Built in zone effects shall enable only particular combinations of zones to be active.
  - a. The LEDs used in the luminaire shall be high brightness and proven quality from established and reputable LED manufacturers.
  - b. The Philips Lumileds LED emitters used in the luminaire shall be rated for nominal 50,000-hour LED life to 70% intensity.
  - c. All LED fixtures (100% of each lot) shall undergo a minimum seventy-two (72) 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, DMX 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 dimming curve from 100 to 0 % and shall be imperceptible to video cameras and video related devices.

**END OF SPECIFICATION.**