CHAUVET PROFESSIONAL SPECIFICATIONS SHEET

OVATION ED-190WW

Warm White LED (Light Emitting Diode) ERS-style product

GENERAL

A. The product shall be an Ovation ED-190WW as manufactured by Chauvet & Sons, LLC or approved equal.

1. The product shall be high-intensity LED illuminator utilizing warm white (WW) LED's and DMX control of intensity.

2. Product must work on conventional dimmers or constant power with DMX.

3. The products shall conform to CSA C22.2 No. 166-15 and UL 1573 stage and studio use as well as UL 8750 LED standards, tested via MET to conform to the aforementioned UL specifications, product shall hold MET and CE markings.

4. The product shall comply with the USITT DMX-512A standard.

5. All LED products shall be provided by a single manufacturer to ensure color consistency.

PHYSICAL

A. The product shall be constructed of rugged, die cast aluminum, free of defects or imperfections.

B. The following shall be provided:

1. Lenses attached with silicone shock mounts.

2. Shutter assembly shall allow for +/-25° rotation in either direction from the center position. Barrel rotation shall be secured by two thumb screws for tool free operation.

3. Lens tubes shall be interchangeable for various beam/field angles utilizing polycarbonate guides for ease of focus. Lenses shall be secured with two thumb screws for tool free operation.

4. Sturdy integral die cast gel frame holders with two accessory slots, and a top-mounted, quick release gel frame retainer.

5. Rugged aluminum yoke with two mounting positions allowing 300°+ rotation of the product within the yoke.

6. Product shall have a double clutch yoke lock on the side of the product with ratcheting handles.

7. Accessories slot with thumb screws for tool free access for optional accessories.

8. Product shall contain a safety mounting point as an integral part of the casing.

C. The housing shall have a rugged black powder coat finish.

D. Power supply, cooling and electronics shall be integral to each product.

E. The product shall ship with:

1. Theatrical-style hanging yoke as standard

2. 5’ cable with Neutrik powerCON™ to Edison connector as standard

OPTICAL

A. The product shall provide, but not be limited to:

1. Low gate temperature.

2. Sharp imaging through a three-plane shutter design.

B. The product shall have the following lens options available:

1. 14, 19, 26, 36, and 50 degree HD lenses with fixed field angles as standard options.

2. 15-30 and 25-50 degree HD lenses with variable field angles as standard options.

C. Product optics shall provide:

1. Sharp shutter cuts without halation.

2. Shutter warping and burnout in normal use shall be unacceptable.

3. Adjustable hard and soft beam edges.

4. High Definition lenses that provide high definition imaging shall be standard. Approved alternate products must provide lensing with comparable definition.

ENVIRONMENTAL AND AGENCY COMPLIANCE

A. The product shall conform to UL 1573, CSA C22.2 No. 166, and UL 8750 LED standards, tested via MET to conform to the aforementioned UL specifications, product shall hold MET and CE markings.

B. The product shall be rated for IP-20 dry location use.

THERMAL

A. Product heat management shall be achieved though active cooling via a low noise fan. Fan db rating shall not exceed 51 db at a distance of 12 inches.

1. Products exceeding 51 db @ 12 in. shall not be allowed.

2. Fan mode shall be selectable via on board menu.

B. The product shall utilize advanced thermal management systems to maintain LED life to an average of 70% intensity after 100,000 hours of use.

    1. Thermal management shall include temperature sensors within the housing to include:
        a. LED array circuit board temperatures.
        b. Product temperature shall be accessible with on board display.

C. The product shall operate in an ambient temperature range of -20°C (-4°F) minimum, to 45° C (113°F) maximum ambient temperature.

ELECTRICAL

A. The product shall be equipped with a 120/230 VAC, 50/60 Hz (switchable) internal power supply.

B. The product shall support power in and thru operation.

    1. Power in shall be via Neutrik powerCON™ input connector.

    2. Power through shall be via Neutrik powerCON™ output connector.

    3. Product power wiring and accessory power cables shall be rated to support linking of multiple products up to the capacity of a 15 A breaker.

C. The product requires power from either a non-dim or dimmable source.

D. Product shall automatically sense whether it is receiving power from a dimmable source or a conventional power source and respond appropriately.

E. Products shall have thermal output compensation to prevent thermal shift of color or intensity.

F. Product power input shall have current limiting fuse protection.

G. Power supply shall have power factor correction.

LED EMITTERS

A. The product shall contain a warm white LED color system to provide color characteristics as described in the Color section below.

B. All LEDs used in the product shall be high brightness and proven quality from established and reputable LED manufacturers.

    1. Product shall utilize CREE LED emitters.

C. Manufacturer of LED emitters shall utilize an advanced production LED binning process to maintain color consistency.

D. LED emitters shall be rated for nominal 100,000-hour LED life at 70% intensity.

E. All LED products (100% of each lot) shall undergo a minimum three-hour burn-in test during manufacturing.

F. LED system shall comply with all relevant patents.

COLOR

A. The product shall utilize a minimum of 19 LED emitters.

    1. These emitters shall be composed of nineteen 10 Watt, warm white LEDs.

DIMMING

A. The LED system shall use 16-bit nonlinear scaling techniques for high-resolution dimming.

B. The product shall have a selectable dimming curve to simulate incandescent dimming curves.

C. Dimming curve shall be optimized for smooth dimming over longer timed fades.

D. The LED system shall be digitally driven using high-speed pulse width modulation (PWM).

CONTROL AND USER INTERFACE

A. The product shall be USITT DMX 512A-compatible via in and through 5-pin XLR connectors and 3-pin XLR connectors.

B. The product shall be equipped with an LED segment display.

C. The product shall be equipped with a four-button user-interface.

D. A variable-rate strobe channel shall be provided.

E. The product shall offer stand-alone functionality, eliminating the need for a console.

    1. Product can be linked together with standard DMX cables and controlled from designated master product.
        a. Up to 32 products may be linked.

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