# Six Color LED static wash for indoor use (PAR)

## General

### The product shall be an Ovation P-56VW as manufactured by Chauvet & Sons, LLC or approved equal.

#### The product shall be a color-mixing high-intensity LED illuminator utilizing 6 Red, Green, Blue, Royal Blue, Orange and Lime LEDs using 3 to 4 W and have DMX control of intensity and color.

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

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

#### The product shall comply with the current PLASA ANSI E1.20-2010 remote device management (RDM) standard.

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

### Each LED optic shall be spaced for optimal photometric performance.

#### PHYSICAL

### The product shall be constructed of die-cast aluminum, free of defects or imperfections.

### The dimensions of the fixture shall be 17.6 x 14.88 x 10.63 in (447 x 378 x 270 mm) and weigh approximately 12 lbs (5.5 kg).

### The following shall be provided:

#### Ovation P-56VW fixture

#### Neutrik powerCON power cord

#### 7.5” Gel frame holder

#### Wide and medium lenses

### The housing shall have a black coat finish.

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

## Environmental and Agency Compliance

### 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, the product shall hold both MET and CE markings.

### The product shall conform to Part 15 of the FCC rules.

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

## Thermal

### Product heat management shall be achieved through forced cooling.

### The product shall utilize advanced thermal management systems to maintain LED life to an average of 70% intensity after 50,000 hours of use.

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

## Electrical

### The product shall be equipped with an auto ranging 100V to 240V 50/60 Hz internal power supply.

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

#### Power in shall be via Neutrik powerCON input connector.

#### Power thru shall be via Neutrik powerCON output connector.

#### Product power wiring and accessory power cables shall be rated to support linking of 11 products at 120V.

### The product requires power from a non-dim source.

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

### Product power input shall have current-limiting fuse protection.

### Power supply shall have power factor correction.

### OPTICAL DATA

### The product shall contain a 6 color LED color system to provide color characteristics as described in the Color section below.

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

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

### LED emitters should be rated for nominal 50,000-hour LED life to 70% intensity.

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

### LED system shall comply with all relevant patents.

## Color

### The product shall utilize a minimum of 48 3 W to 4 W LED emitters.

#### These emitters shall be composed of 6 red, 6 green, 10 blue, 4 R. blue, 6 orange, and 16 lime.

###### The color rendering index (CRI) shall be: 90.4 at 3204°K and 95 at 5601°K

1. The product shall be able to provide TM 30-18 scores with a Color Fidelity value of Rf 92.3 with a Gamut of Rg 105.4 at 3204° K and a Color Fidelity value of Rf 92.1 with a Gamut of Rg 101.7 at 5601° K
2. The color temperature shall be 2800° K to 8000° K.

## Dimming

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

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

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

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

### LED control shall be compatible with broadcast equipment in the following ways:

### PWM control of LED levels shall be imperceptible to video cameras and related equipment.

### PWM shall be capable of being set on the control via on board controls or via RDM from 600Hz, 1,200 Hz, 2,000 Hz, 4,000 Hz, 6,000 Hz, or 25,000 Hz.

## REQUIRED FEATURE SET

### The product shall offer interchangeable lens plates.

### The product shall offer +/- green shift adjustment via DMX or user interface.

### The product shall accept standard 7.5” beam shaping accessories.

### The product shall have a noise level maximum of 38.1 dB measured at 1 m.

### The product shall offer 35 Color Temperature presets selectable via DMX or user interface.

#### The product shall offer linear control of Color Temperature via DMX.

### The product shall offer Red Shift to mimic tungsten dimming characteristics.

### The product shall offer 4 selectable dimmer curves.

### The product shall offer 4 selectable fan modes.

### The product shall offer 7 DMX personalities.

### Products without the required feature set described above shall not be acceptable.

## Control and User interface

### The product shall be USITT DMX 512A-compatible via in and thru 3- and 5-Pin XLR DMX Connectors.

### The product shall offer control via DMX and RDM.

### The product shall be compatible with the ANSI RDM E1.20 standard.

#### All product functions shall be accessible via RDM protocol for modification from suitably equipped control console or RDM controller.

#### Temperature sensor within the luminaire shall be viewable in real time via RDM and on the control panel of the product.

#### Products not offering RDM compatibility, feature set access or temperature monitoring via RDM shall not be allowed.

### The product shall be equipped with an LED display with 5 lines of text.

### The product shall be equipped with a 4-button user-interface.

### The product shall offer direct and single channel control of each individual LED color.

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

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

#### Product can be linked together with standard DMX cables and controlled from designated master product.

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