

# **Tender Specifications**



# EclPanel IPSoft2x1

2x1 Soft Source LED Panel, IP65 with 550W power and 6 colors source



#### 1. General

- 1. The luminaire shall be a colour-mixing LED Soft Light with DMX control of intensity and colour, and the ability to change the diffusion panel as needed.
- 2. The luminaire shall be CE, RCM, FCC, cTUVus compliant.
- 3. The luminaire shall comply with the USITT DMX-512 A and ANSI RDM E 1.20, CRMX protocol standards.
- 4. The luminaire shall be capable of delivering a variable white output from 1'850 K to 20'000 K, featuring an average CRI, in excess of 95 Ra when measured across the full colour temperature range.
- 5. The luminaire shall be capable of delivering an extensive range of saturated and pastel colours.
- 6. The luminaire shall feature an LED source with a power of 550 W.
- 7. The luminaire shall features an LED source containing 6 different colours of LED, controllable in 8 section, maximizing the light flux and delivering a beautiful soft projection with outstanding quality and rich color spectrum.
- 8. The luminaire shall be capable of making adjustment to the green and magenta value any point on the CCT range.
- 9. The luminaire shall feature a selectable HSI colour mode, and colour gels matching and RGB.
- 10. The luminaire shall feature several colour control systems: XY, CCT, RGB, Gel with Source Emulation and Real Shift, HSI, Source Emulation, Colour preset, Base CCT Temperature, colour macros and CTO on colours.
- 11. The luminaire shall be available to mount an accessory pole operated yoke to be sold as accessory and mounted on demand.
- 12. The luminaire shall not infringe any Intellectual Property unless licenced by the owner.

## 2. Physical

- 1. The luminaire shall be weatherproof (IP65) and constructed from durable die cast magnesium alloy, finished in black.
- 2. The luminaire shall feature an integral frame holder including safety locks and a top latch.



- 3. The luminaire shall feature an adjustable yoke constructed from die-cast aluminium and finished in black that allows a minimum of 180° tilt rotation and 360° pan rotation.
- 4. The luminaire shall feature a secure locking mechanism for the tilt axis.
- 5. The luminaire shall feature integral power and electronics on board of the fixture.
- 6. The luminaire shall feature an option for pole operated control of both the pan and tilt axes.
- 7. The luminaire shall feature an option for barn door.
- 8. The luminaire shall be supplied with a 28 mm extruded aluminium spigot suitable for attachment to industry standard accessories.
- 9. The luminaire shall feature integral power and electronics on board of the fixture.
- 10. The soft light luminaire shall have the dimensions not exceeding 819 mm (32.24") in length, 433 mm (17.05") in height without spigot, and 142 mm (5.59") in width.
- 11. The luminaire shall weigh no more than 18,6 kg (41.01lbs).
- 12. The luminaire shall feature an active cooling system and low noise fan for quiet operation with multiple fan modes.

#### 3. LED Emitters

- 1. The luminaire shall feature an LED source consisting of 432 LED emitters customised for PROLIGHTS and driven at a power output of 550 watts.
- 2. The luminaire shall feature an LED source comprising of 432 pcs RGB LEDs, 432 pcs Mint LEDs, 432 pcs Cyan LEDs, 432 pcs Warm White LEDs.
- 3. The luminaire shall feature a section control of the LED panel being 8 section, 4 horizontal and two verticals, which can be both controlled by user, or enabled to perform the on-board section macros to reproduce the effects.
- 4. The luminaire shall feature an LED source consisting only of LED emitters from a known production batch and bin.
- 5. The luminaires shall feature only LED emitters rated for nominal 50'000-hours LED life to L70.
- 6. The luminaire shall feature a minimum of three hours burn-In test during its manufacturing process.
- 7. The luminaire shall feature a flicker free adjustable PWM frequency selectable from 600Hz to 40'000 Hz.



#### 4. Photometric documentation

- 1. The luminaire shall be supplied with a full and detailed photometric report measured by a calibrated two axis photogoniometer in a constant temperature environment and with the luminaire in a stabilised condition with not more than 0.5% variation in output over a 15 minute period.
- 2. The photometric report supplied with the luminaire shall detail CRI, CQS, TM-30 and spectral distribution at full output.
- 3. The photometric report supplied with the luminaire shall detail the spectral distribution of each constituent LED colour of LED source.
- 4. The photometric report supplied with the luminaire shall detail light level measured in lux and foot candles and beam diameter measured in meters and feet at 1 m, 2 m, 3 m 4 m, 5 m, 6 m, 7.5 m, 10 m, 15 m, 20 m, 25 m 30 m, 40 m distance with the luminaire at its smallest, middle and largest beam angle.
- 5. The photometric report supplied with the fixture shall include ISO LUX and candela diagrams, showing light distribution in both X and Y planes measured with the luminaire mounted at height of 10 meters.

### 5. Photometric performance

- 1. The luminaire shall meet the following minimum photometric performance requirements which shall be supported by the photometric documentation:
  - The luminaire shall have a colour temperature within 100 K of the target colour temperature when set to a preset of 3'200 K or 5'600 K.
  - The luminaire shall have a CRI greater than 96,4 when set to a preset of 3'200 K.
  - The luminaire shall have a luminous flux exceeding 59'168 lm when set to a preset value of 3'200 K in HQ mode.
  - The luminaire shall have a luminous flux exceeding 63'650 lm when set to a preset value of 3'200 K in HB mode.
  - The luminaire shall have a CRI greater than 96,8 when set to a preset of 5'600 K.
  - The luminaire shall have a luminous flux greater than 57'200 lm at a preset of 5'600 K in HQ mode.
  - The luminaire shall have a luminous flux greater than 64'132 lm at a preset of 5'600 K in HB mode.



#### 10. Calibration

- 1. The luminaire shall be factory Spectra Calibration during its production process.
- 2. The luminaire shall permanently store calibration data on internal PCB.
- 3. The luminaire shall feature replacement LED source calibrated using the same method as the standard.
- 4. Fixtures not offering LED calibration shall not be acceptable.

#### 11. Electrical

- 1. The luminaire shall feature an internal auto sensing power supply with an input range from 100 V to 240 V AC 50/60 Hz protect by on board fuse.
- 2. The luminaire shall feature a Low Voltage power input: 24-36V via batteries and a 48V DC input.
- 3. The luminaire shall feature a nominal power consumption of 550 W.
- 4. The luminaire shall feature a Seetronik® IP65 PowerCON TRUE1 IN/OUT connectors.
- 5. The luminaire shall feature an IP65 Seetronik® XLR 5p IN/OUT connectors.
- 6. The luminaire shall feature a Weipu SF12 4P-F data connector.
- 7. The luminaire shall feature an Seetronik® XLR 3p for 48V DC IN.
- 8. The luminaire shall feature an Seetronik® XLR 4p for 24V-36V DC IN.
- 9. The luminaire shall feature an IP65 RJ45 IN/OUT data connection with Ethernet pass through in the event of PSU or Master PCB failure.
- 10. The luminaire shall feature an on board 3,5" OLED graphic display.
- 11. The luminaire shall be compatible with the USITT DMX-512A RDM protocol.
- 12. The luminaire shall support firmware upgrades using a dedicated UP-LOADER device using a 5 pin XLR connector.
- 13. The luminaire shall meet all requirements of the LVD (Low Voltage Directive) 2014/35EC and with the EMC (Electromagnetic Compatibility Directive) 2014/30/EU, RoHS (Restriction of the use of certain hazardous substances) 2014/53/EU and with the RED (Radio Equipment Directive) 2014/53/EU.



#### 12. Environmental

- 1. The luminaire shall feature IP 65 rating for temporary outdoor application, not for fixed installations.
- 2. The luminaire shall be capable of operating in ambient temperature range of -20 $^{\circ}$ C (4 $^{\circ}$ F) to +45 $^{\circ}$ C (113 $^{\circ}$ F).
- 3. The luminaire shall be equipped with a cooling fan.
- 4. Fan speed control via DMX channel shall be possible.
- 5. Fan speed software shall permit the fixture to override DMX fan speed setting to prevent heat damage.
- 6. Thermal management shall include LED array circuit board temperature sensor.
- 7. Users shall permit monitoring of temperature sensor via legible black OLED multi-line display.
- 8. Fixtures that do not provide the active thermal monitoring of LED board, shall not be acceptable.

#### 13. Control And User Interface

- 1. The luminaire shall feature a temperature sensor which shall be accessible in real time via RDM.
- 2. The luminaire reports its internal temperature on its graphical display.
- 3. The luminaire shall feature local control using four RGB backlight push-encoders.
- 4. The luminaire shall feature a range of control modes including:
  - Control of colour: XY, CCT, RGBW, Gel, HSI, Source Emulation, colour macros, CTO on colours.
  - Colour mixing with 6 colour custom LEDs source (red, green, blue, cyan, mint, white).
  - CCT control, + / green correction, tungsten emulation.
  - White presets range 1,850K 20,000K.
  - Colour gels matching and RGB / HSI selectable colour mode.
  - Several pre-built macros with adjustable speed.
- 5. The luminaire shall feature a manual adjustment of intensity, CCT, colour correction from knob.
- 6. The luminaire shall feature Silent operation with multiple fan modes.
- 7. The luminaire shall feature color space and camera profile LUTs selection.



- 8. The luminaire shall feature 8 section pixel control and built-in lighting effects for film applications.
- 9. The luminaire shall feature output management, linear crossfade from any white to any colour and virtual CTO on colours.
- 10. The luminaire shall feature with DMX512, RDM, ArtNet, sACN, CRMX protocols.
- 11. The luminaire shall feature with LumenRadio TimoTwo DMX/RDM compatible with both CRMX, CRMX2 (Lumen Radio) and W-DMX (Wireless DMX), Bluetooth capable.
- 12. The luminaire shall feature with a 3,5" display graphic user interface.
- 13. The luminaire shall feature to upgrade the firmware via DMX interface (UPBOXPRO/UPBOX1).

#### 14. Dimming

- 1. The luminaire shall feature continuous smooth and linear dimming of intensity from 0% to 100%.
- 2. The luminaire shall feature control of intensity in 16 bit mode.
- 3. The luminaire shall feature a minimum of 4 options for dimming curves, selectable from the on board menu.
- 4. 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 rates shall be adjustable by the user at the fixture if necessary to avoid any visible interference on video camera and related equipment.
- 5. Dimming curves shall be optimized for smooth dimming over longer time fades.
- 6. The LED system shall be digitally driven using high-speed pulse width PWM modulation

#### 15. Accessories

The following accessories shall be included in fixture supplied:

- 1. 28 mm conical connector adapter for stands or pantographs.
- 2. Medium Density Diffusion Filter.
- 3. 16 A 3G 2.5 mm Power cable with Neutrik PowerCON TRUE bare end.



The following accessories shall be available as an optional:

- 1. Flight case for 2 units.
- 2. Flight case for 3 units.
- 3. Trolley bag for 1 unit.
- 4. Pole operated aluminium yoke bracket.
- 5. Modular yoke for installation of up to 3 units on a single yoke.
- 6. Center mount bracket.
- 7. Ball head joint for center mount bracket.
- 8. Rigging metal plate for ECLPANELIP series to mount the products in arrays, 2U.
- 9. Rigging metal plate for ECLPANELIP series to mount the products in arrays, 4U.
- 10. Front high diffusion filter.
- 11. Front low diffusion filter.
- 12. Front Intensified diffusion filter.
- 13. 30 degrees egg.
- 14. 60 degrees egg.
- 15. 8 chamber egg.
- 16. Barn Door with 4 directional flaps to adjust the light beam.
- 17. UPBOXPRO Firmware uploader kit.
- 18. All DoPchoice accessories shall be available as an optional.
- 19. Up-loader Tool (UPBOXPRO) and it's PC Software.

Approved device shall be the PROLIGHTS ECLPANELIPSOFT2X1; no alternates or equals.