

Tender Specifications



Muse Fresnel70 CT+

1000 W 6 Color Moving LED Fresnel, 10° - 60°
zoom with 200mm/8" lens

1. General

1. The luminaire shall be a moving LED Fresnel using a 1.000 W six-colour additive LED source designed for theatre, television, film and studio key-light applications.
2. The fixture shall be IP20, with aluminium structure and high-resistance polycarbonate cover, finished black.
3. The fixture shall employ a dedicated Fresnel optical architecture and shall not be derived from a profile-type optical platform, this ensure authentic Fresnel behaviour, beam with a single clean shadow and a natural soft-light fall-off.
4. The fixture shall provide pan 540° and tilt 270° with 16-bit resolution and automatic repositioning after accidental movement.

2. Light Source

1. The fixture shall employ a 1.000 W six-colour LED source with adjustable high-colour-rendering operation.
2. The LED engine shall be rated at 1.500 W and operated at 1.000 W, to ensure consistent output and calibration over time and boosted colors.
3. The source life expectancy shall be greater than 50.000 hours, L70B10 at Ta 25 °C.

3. Optical System

1. The optical system shall provide a motorised linear zoom from 10° to 60°.
2. The fixture shall be equipped with a 200 mm / 8 in AR-coated glass Fresnel lens, that provide a classic soft-light fall-off.

4. Photometric Performance

1. At Full On, HQ mode and Min zoom ($\approx 10^\circ$), the fixture shall deliver a total luminous flux of at least 27.750 lm total luminous flux and 33.700 lx @ 5 m, with beam geometry 10° (50%) / 15,4° (10%) / 20,6° (2,5%).

2. At Full On, HQ mode and Max zoom ($\approx 51.7^\circ$), the fixture shall deliver a total luminous flux of at least 28.600 lm and 1.750 lx @ 5 m; beam geometry shall be $51,7^\circ / 60,3^\circ / 66,2^\circ$.
3. The system shall support high colour rendering; typical values shall include CRI 98.2 @ 3200 K, CRI 97.2 @ 5600 K, with R9 97.1 / 96.4, TLCI 93 / 97, TM-30 Rf 95/94, Rg 100/101.
4. The datasheet and photometric report shall provide centre-beam lux tables and beam-width diagrams for design verification at multiple distances and CCT.

5. Colour System & Effects

1. The colour system shall implement Spektra OS colour engine with control via XY, CCT, RGB, CMY and Gel filters; the CCT range shall be 2.200–15.000 K with $\pm$ green correction and tungsten emulation.
2. The unit shall include a colour wheel with 5 dichroic filters.
3. The framing system shall provide four shutter blades with position and $\pm 25^\circ$ angle adjustment and $\pm 60^\circ$ rotation of the complete framing module.
4. The effects package shall include ovalizer filter motorized with indexing and rotation; linear frost 0–100% (soft to heavy); and a motorised iris 5–100%.

6. Control & Interface

1. Control protocols shall include DMX512, RDM, Art-Net, sACN with IGMP v2 and CRMX; wireless control shall be included via LumenRadio Timo Fx DMX/RDM receiver (compatible with CRMX and W-DMX).
2. Ethernet connections shall provide Ethernet pass-through even when unpowered.
3. The fixture shall provide 35, 40, 41 and 46 DMX channels and a 2.4" Graphic User Interface (display), with RDM for remote monitoring and settings.
4. Firmware upgrades shall be performed via DMX using UPBOXPRO (USB-DMX not included), or via Ethernet using Art-Net with DMX-Workshop.

7. Electronics

1. The dimmer shall be 0–100% electronic with 5 selectable dimming curves and electronic strobe 1–30 Hz.
2. The LED control shall be flicker-free with selectable PWM 1.200–50.000 Hz; the operating temperature shall be $-10 \sim +45^{\circ}\text{C}$ (T_a).

8. Electrical

1. The mains shall be 100–240 V AC, 50/60 Hz; maximum power consumption 1.450 W at 230 V; standby power 116 W; power factor > 0.94 .

9. Mechanical & Connections

1. The product shall be rated IP20 and shall use a heat-pipe cooling system with low-noise fan with Silent and Fan-Off modes.
2. The suspension system shall accept quick-lock Omega brackets and shall provide pan/tilt locks for transport and maintenance.
3. Connections shall include Amphenol XLR 5-pin IN/OUT and Amphenol RJ45 IN/OUT; power connection shall be Neutrik powerCON TRUE1 IN.
4. Physical dimensions (W×H×D) shall be 436 × 703 × 331 mm; weight 29,3 kg.

10. Compliance

1. The luminaire shall hold CE and RCM approvals.

11. Accessories

The following accessories shall be included in the fixture supplied:

1. 16 A 3G 2.5 mm Power cable with Neutrik PowerCON TRUE1 – Bare End.
2. 2 x Quick-Lock omega brackets.

The following accessories shall be available as an optional:

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|--------------------------------|-----------------------------------|
| 1. Flight Case for 2 pcs. | 5. AetherBox. |
| 2. Holder and Filter Frame. | 6. IP Test box. |
| 3. Heavy-load aluminium clamp. | 7. Firmware uploader UPBOX2P5 and |
| 4. Security cables | UPBOXPRO |

Approved device shall be the PROLIGHTS MUSEF70CT, no alternates or equals.