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iESPRITE® Fresnel

Designed to complement our outdoor iESPRITE® Profile, the iESPRITE® Fresnel is engineered for uncompromising performance and hassle-free maintenance, delivering beautifully soft Fresnel style beams in any weather or atmospheric condition.

Light source

iSE-TE™ 650W White LED TRANSFERABLE ENGINE

Light output

24.400 lm (integrating sphere), 19.506 lm (goniophotometer)

Zoom range

6° - 62°

Effects

Internal barndoor system with +/- 90° rotation, Cpulse™ - Flicker Free Management, L3™ dimming system for ultra-smooth fade to black, RotaScrim

The IP65-rated iESPRITE® Fresnel integrates our latest protection technology with the highly sought-after ESPRITE® Fresnel, ensuring consistent output and feature-rich effects in a fully protected package. Unlike traditional IP-rated fixtures, our iESPRITE® Fresnel maintains identical performance to its indoor counterpart without the weight penalty, making it seamlessly suitable for both indoor and outdoor settings.

Powered by the innovative iSE-TE™ 650W HP White LED Engine or the iSE-TE™ 650W HCF White LED Engine, our fixture delivers exceptional output and colour fidelity, catering to diverse lighting needs without the complexity of separate luminaires. Engineered and manufactured in our own factory, these engines boast impressive longevity and performance, ensuring reliability for years to come.

Equipped with a comprehensive feature set, the iESPRITE® Fresnel includes flat field CMY mixing, variable CTO, selectable 80/90 CRI filters, ChromaTint™ linear +/- green control, fast colour wheels, two frosts.

Additional beam control is facilitated through the 4Door™ internal barndoor system, featuring 90° module rotation and edge correction, alongside the RotaScrim™ graduated filter with rotation control. With a wide 6°-62° zoom range, this system offers unparalleled flexibility and precision in lighting adjustment.

The exquisitely soft Fresnel beam, spanning a wide 6°-62° zoom range, harnesses the groundbreaking F2L™ lens technology. Internally adorned with characteristic annular rings, the lens flaunts a flat exposed surface, significantly minimizing the accumulation of deposits and debris. This resilience is further bolstered by parCoat™, our proprietary oleophobic and hydrophobic coating, which repels detritus such as mineral, dust, rain, or haze residue, ensuring sustained clarity and performance.

Enhanced by Cpulse™ for flicker-free operation with the latest cameras and ChromaTint™ for direct green/magenta content control. The iESPRITE® Fresnel also features EMS™ for motion stability and L3™ Low Light Linearity dimming to seamlessly integrate with traditional lighting rigs while meeting the demands of modern production environments.

Our ingenious ingress protection system, featuring the patented RAINS™ technology, ensures optimal performance by actively managing humidity, temperature, and pressure within the fixture. With NFC technology, you can access setup and diagnostic features directly from your mobile device via the Robe Com app, enhancing convenience and control.

Built to withstand extreme conditions, iESPRITE® features POLAR+™ technology, ensuring operability down to minus 50 degrees Celsius, making it ideal for outdoor applications in even the harshest environments.

With its lightweight magnesium alloy construction and NFC technology, iESPRITE® Fresnel redefines outdoor Fresnel style area lighting, offering unparalleled performance, durability, and ease of use.

iSeries – Robe reliability in all weathers

Technical Specification

Source

- Light source type: iSE-TE™ 650W HP White LED Engine (patented):
  - HP - High Performance Engine for maximum light output and optimal colour characteristics
  - LED Engine output: 55.000 lm
  - Fixture total lumen output:
    - 24.400 lm (integrating sphere)
    - 19.506 lm (goniophotometer)
  - Colour temperature output: 6.700 K
  - CRI: 70, remotely selectable filters for CRI 80 and CRI 90
  - Illuminance: 30.600 lx @ 5 m
- Light source type: iSE-TE™ 650W HCF White LED Engine (Patented):
  - HCF - High Colour Fidelity Engine for the best light quality and colour rendition
  - LED Engine output: 37.500 lm
  - Fixture total lumen output:
    - 16.580 lm (integrating sphere)
    - 13.264 lm (goniophotometer)
  - Colour temperature output: 6.000K
  - CRI: 96, TLCI: 97, TM-30-18 Rf: 92, TM-30-18 Rg: 99
  - Illuminance: 20.800 lx @ 5 m
- LED life expectancy: min. 50.000 hours
- Typical lumen maintenance: L70/B50 @ 50.000 hours
- Light source warranty: 4 years or 20.000 hours

Optical system

- Robe's proprietary optical design
- High-efficiency zoom optical system, ratio 10:1
- Zoom range: 6° - 62°
- Output lens diameter: 156 mm
- parCoat™ (particle resistant coating) unique hydrophobic and oleophobic coating helps prevent water, dirt, dust, haze and smoke from adhering to the output lens
- F2L™ Fresnel-lens system, comprising two lenses engineered with a smooth outer surface to eliminate the debris accumulation commonly found on outdoor Fresnel lenses

Dynamic Effects and Features

- Cyan: 0 - 100%
- Magenta: 0 - 100%
- Yellow: 0 - 100%
- Variable CTO: 3.000K - 6.700K
- ChromaTint™ - patented plus / minus green correction function
- Colour Wheel 1: 5 fixed dichroic colours + white
- Colour Wheel 2: 5 fixed dichroic colours + white
- 4Door™ - Internal Barndoors with individual control of the four leaves for added beam control of wash light, with +/- 90° module rotation. (Patented)
- MagFrost™ - Magnetic paddle fast change system providing exchangeable frosts containing as standard light 5° and medium 10° frost filters
- RotaScrim™ - Internal Scrim module with graduated filter position control for asymmetrical style lighting of drapes and unwanted hotspot removal from scenery. The entire module can be rotated +/- 180°. (Patented)
- Motorised zoom and focus
- Edge colour correction
- Electronic strobe effect with variable speed up to 20 Hz
- Pre-programmed random strobe & pulse effects
- High resolution electronic dimming: 0 - 100%
- L3™ - (Low Light Linearity) Imperceptible 18 bit dimming for ultra smooth fade to black
- Cpulse™ special flicker-free management for HD and UHD cameras, ready for 8K and 16K
- AirLOC™ (Less Optical Cleaning) technology greatly reduces the level of airborne particles drawn over the optical elements. This increases the overall performance, light quality and time between routine cleaning and maintenance.
- POLAR+™ for power saving and instant operation in extremely cold weather conditions

Control and programming

- Setting & Addressing: ROBE Navigation System 2 (RNS2)
- Display: QVGA Robe touch screen with battery backup, gravitation sensor for auto screen positioning, operation memory service log with RTC, stand-alone operation with 2 editable programs (each up to 80 steps), built-in analyser for easy fault finding
- Protocols: USITT DMX-512, RDM, ArtNet, MA Net, MA Net2, sACN
- Wireless CRMX™ technology from Lumen Radio
- Epass™: Ethernet pass through switch which sustains Ethernet integrity, when the fixture has no power, to automatically maintain network connectivity
- RAINS™ (Robe Automatic Ingress Neutralization System) manages humidity, temperature and pressure control using an active monitoring system to automatically remove any moisture detected within the fixture and provides constant monitoring to ensure peak performance
- DMX Protocol modes: 4
- Control channels: 34, 30, 35, 31
- Pan & Tilt resolution: 16 bit
- CMY & CTO: 8 bit
- + - Green correction: 8 bit
- Colour wheel positioning: 8 or 16 bit
- Internal barndoor module movement & rotation: 8 bit
- Internal scrim module movement & rotation: 8 bit
- Edge colour correction: 8 bit
- Frost: 8 bit
- Zoom: 8 or 16 bit
- Dimmer: 8 or 16 bit (internal 18 bit)

Movement

- Pan movement: 540°
- Tilt movement: 265°
- Movement control: Standard and Speed
- EMS™: Electronic Motion Stabilizer system for Pan & Tilt reducing beam deviation caused by truss movement or vibration (Patented)
- Automatic Pan & Tilt position correction
- MAPS™ - Motionless absolute positioning system for Pan and Tilt (Patented)

Internal barndoors

- Patented 4Door™ internal barndoors module:
  - Barndoors: 4 blades, each with separate movement control
  - Rotation: +/- 90° module rotation

Internal Scrim

- Patented RotaScrim™ internal Scrim module:
  - Graduated filter position control
  - Rotation: +/- 180° of the entire module

Thermal specification

- Maximum ambient temperature: 50°C (122°F)
- Maximum surface temperature: 80°C (176°F)
- Minimum operating temperature: -50°C (-58°F)

Noise Levels

- Sound pressure level:
  - 27 dB(A) at 1 m (quiet mode)
  - 42 dB(A) at 1 m (auto mode)
- Sound power level:
  - 35 dB(A) (quiet mode)
  - 50 dB(A) (auto mode)

Electrical specification and connections

- Power supply: Electronic auto-ranging
- Input voltage range: 100-240 V, 50/60 Hz
- Power consumption:
  - Standard mode max. 870 W at 230 V / 50 Hz
  - High-power mode max. 950 W at 230 V / 50 Hz
- Power connector in: IP65 Neutrik powerCON TRUE1
- DMX and RDM data in/out: IP65 Locking 5-pin XLR
- IP65 Ethernet port in/out: RJ45 for Embedded Epass™ switch 10/100 Mbps

Approvals

- CE Compliant
- cETLus Compliant

Mechanical specification

- Height: 758 mm (29.86") - head in vertical position
- Width: 458 mm (18.03")
- Depth: 289 mm (11.37") - head in vertical position
- Weight: 32.8 kg (72.31 lbs)
- Ingress protection rating: IP65

Rigging

- Mounting positions: vertically
- Universal operating position
- Mounting points: 5 pairs of 1/4-turn locking points
- 2x Omega adaptors with 1/4-turn quick locks
- Safety cable attachment point
- Pan & Tilt transport locks

Included items

- User Manual
- Omega Adaptor CL-regular 2 pcs: 10980033
- Gel frame adaptor
- Power cord including powerCON TRUE1 In connector:
  - US:13052277-01
  - EU:13052276-01

Optional accessories

- iEsprite iSE-TE™ 650W HP White LED Engine: 14080086
- iEsprite iSE-TE™ 650W HCF White LED Engine: 14080087
- Doughty Trigger Clamp: 17030386
- Omega Adaptor Tall CL - 2 pcs in box: 10980501
- Frost 20° (exchange) assembled: 10980574
- Frost 30° (exchange) assembled: 10980584
- Safety wire 36 kg: 99011963
- Single Top Loader Case: 10120312
- Dual Top Loader Case: 10120313
- Foam Shell: 20020464

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Legal

- iESPRITE® is Registered Trademark of Robe lighting s. r. o.
- iESPRITE® Fresnel is patented by Robe lighting s. r. o. and protected by one or more pending or issued patents