ROBE lighting s .r. o., Hazovice 2090
75661 Roznov pod Radhostem
Czech Republic

Tel: +420-571-751500
Fax: +420-571-751515
Email: info@robe.cz

ESPRITE® Fresnel

ESPRITE® Fresnel is for those demanding a classic Fresnel beam whilst enjoying the many advantages of our TE™ Transferable Engines.

Light source

TE™ 650W White LED TRANSFERABLE ENGINE

Light output

up to 24.400 lm, 30.600 lx @ 5m, Cpulse™ special flicker free management for HD and UHD cameras, ready for 8K and 16K

Zoom range

6° - 61°

Effects

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

With this unique, ground-breaking technology, you have a choice of engines.

The TE™ 650W HP White LED Engine (HP – High Performance), producing the highest output possible, or the TE™ 650W HCF White LED Engine (HCF – High Colour Fidelity) for those requiring exceptional colour quality. Now you can fit either engine within the same fixture, without alignment or warranty issues, within five minutes! Without the expense, and complication of needing to have separate luminaires with differing sources, TRANSFERABLE ENGINES give you the right engine, in the right fixture, at the right time!

The revolutionary self-referencing, data capturing engines are all designed, developed and manufactured within our own factory (Patents pending). Performance has not been compromised, with the TE™ 650W HP White 6.700 K LED Engine producing a piercing 24.400 lm and the TE™ 650W HCF White 6.000 K LED Engine 16.680 lm with its exceptionally high inherent CRI of 96. The L70/B50 ratings of 50.000 hours, means longevity is assured.

The comprehensive feature set includes: Flat field CMY mixing; variable CTO; remotely selectable CRI 70/80/90 (HP Engine); two fast colour wheels; medium and light frosts; Scrim with graduated filter position control with +/- 180° rotation and edge colour correction for added finesse.

A quick, accurate internal barndoor provides individual blade control and +/- 90° module rotation, whilst a wide zoom range of 6 - 61° ensures maximum flexibility.

Furthermore, these fixtures are enhanced by Cpulse™, the flicker-free management system for the latest cameras; EMS™ for enhanced motion stability and L3™ Low Light Linearity dimming, for ultra-smooth fade to black allowing seamless integration with traditional lighting rigs.

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Technical Specification

Source

- Light source type: 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: 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:
    - 16.680 lm (integrating sphere)
    - 13.264 lm (goniophotometer)
  - Colour temperature output: 6.000 K
  - CRI: 96, TLCI: 97, TM-30-18 Rf: 92, TM-30-18 Rg: 99
  - Illuminance: 20.800 lx @ 5 m
- Light source type: TE™ 650W TGW White LED Engine (Patented):
  - TGW - Simulates the comforting warmth of tungsten lighting
  - LED Engine output: 30.250 lm
  - Fixture total lumen output:
    - 14.300 lm (integrating sphere)
    - 11.300 lm (goniophotometer)
  - Colour temperature output: 3.200 K
  - CRI: 97, TLCI: 97, TM-30-18 Rf: 93, TM-30-18 Rg: 102
  - Illuminance: 17.800 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° - 61°
- Output lens diameter: 156 mm

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)
- Motorized 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.

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 3 editable programs (each up to 100 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 - on request
- Epass™: Ethernet pass through switch which sustains Ethernet integrity, when the fixture has no power, to automatically maintain network connectivity - on request
- 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
- Frost: 8 bit
- Zoom: 8 or 16 bit
- Edge colour correction: 8 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

Internal barndoors

- Patented 4Door™ internal barndoors module:
  - Blades: 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: 45°C (113°F)
- Maximum surface temperature: 80°C (176°F)
- Minimum operating temperature: -5°C (23°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 in connector: Neutrik powerCON TRUE1
- DMX and RDM data in/out: Locking 3-pin & 5-pin XLR
- Ethernet port in: RJ45
- Ethernet port in/out: RJ45 (instead of 3-pin XLR) for Embedded Epass™ switch 10/100 Mbps - on request
- USB connector (series A) for lightmaster purposes

Approvals

- CE Compliant
- cETLus Compliant

Mechanical specification

- Height: 719 mm (28.31") - head in vertical position
- Width: 443 mm (17.4")
- Depth: 264 mm (10.4") - head in vertical position
- Weight: 26 kg (57.3 lbs)
- Ingress protection rating: IP20

Rigging

- Mounting positions: Horizontally or 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
- Power cord including powerCON TRUE1 In connector
- Gel frame adaptor: 99016002
- Top hat: 10980535

Optional accessories

- ESPRITE TE™ 650W HP White LED Engine: 14080066
- ESPRITE TE™ 650W HCF White LED Engine: 14080071
- ESPRITE TE™ 650W TGW White LED Engine: 14080079
- Gel frame: 10980452
- Module of PC lens for Esprite Fresnel: 10980531
- Doughty Trigger Clamp: 17030386
- Omega Adaptor Tall CL-regular 2 pcs in box: 10980501
- Safety wire 36 kg: 99011963
- Single Top Loader Case: 10120254
- Dual Top Loader Case: 10120255
- Foam Shell: 20020357

Legal

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

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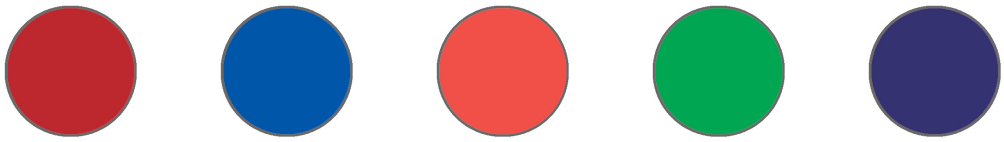
Gobos&Colours

Colour Wheel 1



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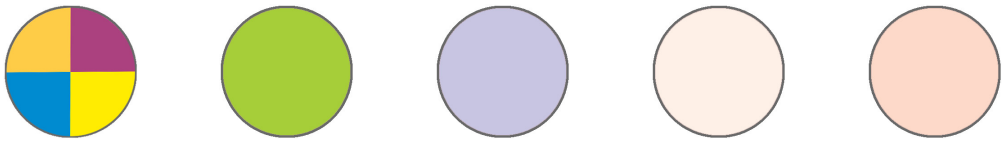
Colour Wheel 2



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