

# T2 Fresnel™

T2. Multispectral perfection, only further!  
While simultaneously maintaining the absolute colour finesse of Robe's phenomenally successful T1 series, featuring the MSL™ (Multi-Spectral) LED engine, our T2 Fresnel™ provides an enhanced output of more than 15.000 lumens from its 850W MSL™ source.

**Light source**

MSL™ 850 W Multi-Spectral LED engine

**Light output**

15.500 lm, CRI 95+, + - Green Correction Function, Cpulse™ special flicker free management for HD and UHD cameras

**Zoom range**

7° - 62°

**Effects**

Beam Shaper (internal barndoors), Scrim Module



With their zoom range of 7-62°, and classically soft beam, T2 Fresnels are ideally suited to their long-throw role in theatre, television, and touring.

T2 Fresnels are full of theatrical subtlety. With CMY colour control, DataSwatch™ filters containing a selection of pre-programmed colours via our renowned RCC™ (Robe Colour Calibration) algorithm and a wide-ranging 2.700K to 8.000K CCT control, all variations of colour are possible. With absolutely no variation in colour produced by T1 and T2 platforms, you can use them together with confidence to provide consistent colour across your lighting rig, perfect for even the most demanding designers.

The precise needs of theatrical dimming are catered to with our super-smooth L3™ dimming system producing imperceptible fades to black. The exceptionally high CRI of 95+ assures natural rendition of all skin tones.

Specifically, for television work, we have included a plus and minus green channel and the Cpulse™ flicker-free management system for all vision systems including HD and UHD cameras, all controllable directly from your console.

Designed to operate in noise-sensitive environments such as television studios, theatres, and houses of worship, T2 Fresnels utilise our innovative AirLOC™ system. Meaning "Less Optical Cleaning," this technology not only aids noise reduction but also dramatically reduces the level of airborne particles drawn over the optics, keeping them in pristine condition for far longer.

All this combined with our highly acclaimed internal four individually controlled leaf barndoor system, rotational scrim control, two interchangeable frosts and ground-breaking edge control technology, gives you total control over your designs in theatre, television, and touring.

# Technical Specification

## Source

- Light source type: MSL™ 850 W Multi-Spectral LED engine
- Colour rendition:
  - CRI: 95, CRI R9: 91, TM30-18 Rf: 93, TM30-18 Rg: 103, TLCI: 94
- LED life expectancy: min. 40.000 hours
- Typical lumen maintenance: L70/B50 @ 40.000 hours
- Light source warranty: 3 years or 20.000 hours

## Optical system

- Robe's proprietary optical design
- High-efficiency zoom optical system, ratio 9:1
- Zoom range: 7° - 62°
- Fixture total lumen output:
  - 15.500 lm (integrating sphere)
  - 12.500 lm (goniophotometer)
- Output lens diameter: 200 mm

## Dynamic Effects and Features

- Factory calibrated whites and colours via the new RCC™ (Robe Colour Calibration) system, automatic or on-call self-re-calibration of the LED engine without the use of any external tool (Patent pending)
- Colour mixing: CMY/RGB or RGBAL
- White light: Variable CCT 2.700K - 8.000K
- DataSwatch™ filters: pre-programmed 237 colours and tones including most used whites 2.700K, 3.200K, 4.200K, 5.600K and 8.000K
- Tungsten lamp effect: 750W, 1.000W, 1.200W, 2.000W, 2.500W lamp emulation for whites from 2.700K to 4200K (red shift and thermal delay)
- +- Green correction function
- Adjustable CRI from 80 to 95+
- 4Door™ - Internal Barndoors with individual control of the four leaves for added beam control of wash light, with +/- 90° module rotation (Patented)
- 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)
- Frosts: MagFrost™ - magnetic paddle fast change system providing exchangeable frosts containing as standard a light 5° for instant softening of the projected gobo or framing shutters, and a medium 10° for even wash, both specifically selected for theatre and TV use
- Motorized zoom
- Edge colour correction
- Electronic strobe effect with variable speed up to 20 Hz
- Pre-programmed random strobe & pulse effects
- L3™ - (Low Light Linearity) Imperceptible 18 bit dimming for ultra smooth fade to black
- Extremely quiet operation suitable for all types of production in Theatre and TV
- 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 screen with battery backup, gravitation sensor for auto screen positioning, operation memory service log with RTC, built-in analyser for easy fault finding, NFC app controller
- Protocols: USITT DMX-512, RDM, ArtNet, MA Net, MA Net2, sACN
- REAP™ - Robe Ethernet Access Portal
- 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
- DMX Protocol modes: 3
- Control channels: 35, 24, 39
- Pan & Tilt resolution: 16 bit
- Colour mixing: 8 or 16 bit (internal 18 bit)
- Variable CCT: 8 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
- Controllable speed of Pan & Tilt movement
- Automatic Pan & Tilt position correction
- EMS™: Electronic Motion Stabilizer system for Pan & Tilt reducing beam deviation caused by truss movement or vibration (Patented)
- MAPS™ - Motionless absolute positioning system for Pan & Tilt (Patented) - on request

## 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: 70°C (158°F)
- Minimum operating temperature: -5°C (23°F)

## Noise Levels

- Sound pressure level:
  - 23 dB(A) at 1 m (quiet mode)
  - 29 dB(A) at 1 m (auto mode)
- Sound power level:
  - 31 dB(A) (quiet mode)
  - 37 dB(A) (auto mode)

## Electrical specification and connections

- Power supply: Electronic auto-ranging
- Input voltage range: 100-240 V, 50/60 Hz
- Power consumption: max. 1150 W
- Power connector in: Neutrik powerCON TRUE1
- DMX and RDM data in/out: Locking 3-pin & 5-pin XLR
- Ethernet port in/out: RJ45 for Embedded Epass™ switch 10/100 Mbps
- USB connector (series A) for lightmaster purposes

## Approvals

- CE Compliant
- cETLus Compliant

## Mechanical specification

- Height: 802 mm (31.6") - head in vertical position
- Width: 483 mm (19")
- Depth: 335 mm (13.2") - head in vertical position
- Ingress protection rating: IP20
- Weight: 33.5 kg (73.85 lbs)

## Rigging

- Mounting positions: 0°, 32°, 90°
- Universal operating position
- Mounting points: 2 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: 99016721
- Top hat: 10980591

## Optional accessories

- Gel frame: 10980561
- Module of PC lens: 10980611
- Doughty Trigger Clamp: 17030386
- Safety wire 50 kg: 99011957
- Single Top Loader Case: 10120271
- Dual Top Loader Case: 10120272
- Foam Shell: 20020396

## Legal

- T2 Fresnel™ is a Trademark of Robe lighting s. r. o.
- T2 Fresnel™ is patented by Robe lighting s. r. o. and is protected by one or more pending or issued patents