

# T1 Fresnel™

T1 Fresnel. The new ONE and only wash fixture you need for theatre, television and touring.

**Light source**

MSL™ 550 W Multi-Spectral LED engine

**Light output**

up to 10.500 lm, CRI 95+, + - Green Correction Function, Cpulse™ special flicker free management for HD and UHD cameras

**Zoom range**

8° - 60°

**Effects**

Beam Shaper (internal barndoors), Scrim Module



Specifically designed to fulfil the challenging requirements of these diverse applications within one wash fixture. The new revolutionary MSL™ (Multi-Spectral Light) LED engine provides an output reaching 10.500 lumens. It's impressively bright.

Using either the Fresnel or PC lens supplied, T1 Fresnel is full of theatrical subtlety. With CMY colour control, DataSwatch™ filters containing a selection of pre programmed colours via the new generation RCC™ (Robe Colour Calibration) algorithm and a wide ranging 2700K to 8000K CCT control - all variations of colour are possible for even the most demanding designers. The precise needs of theatrical dimming are catered to with our new L3™ Low Light Linearity dimming system. In addition, the high CRI of 95+ provides natural skin tones.

For television work, we have included a plus and minus green channel and Cpulse™ flicker-free source management for all vision systems such as HD and UHD cameras.

All this combined with our precise +/- 90° rotatable individually controlled internal barndoor system, a zoom range of 8° to 60°, beam shaper, graduated scrim with 180° rotation and light and medium frosts, the result is total control of your designs in theatre, television and touring.

You need only ONE. T1.

# Technical Specification

## Source

- Light source type: MSL™ 550 W Multi-Spectral LED engine (Patented)
- LED life expectancy: min. 40.000 hours
- Colour rendition:
  - CRI: 95, CRI R9: 91, TM30-18 Rf: 93, TM30-18 Rg: 103, TLCI: 94
- 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 7:1
- Zoom range: 8° - 60°
- Fixture total lumen output:
  - 10.500 lm (integrating sphere)
  - 8.500 lm (goniophotometer)
- Output lens diameter: 156 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)
- 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
- 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 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
- 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 - on request
- 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:
  - 24 dB(A) at 1 m (quiet mode)
  - 30 dB(A) at 1 m (auto mode)
- Sound power level:
  - 32 dB(A) (quiet mode)
  - 38 dB(A) (auto mode)

## Electrical specification and connections

- Power supply: Electronic auto-ranging
- Input voltage range: 100-240 V, 50/60 Hz
- Power consumption: maximum 750 W at 230 V / 50 Hz (all LEDs On)
- Typical power consumption: 160 - 215 W (one colour = full)
- 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: 712 mm (28") - head in vertical position
- Width: 400 mm (15.7")
- Depth: 258 mm (10.2") - head in vertical position
- Weight: 22.6 kg (49.8 lbs)
- Ingress protection rating: IP20

## Rigging

- Mounting positions: Horizontally or vertically
- 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
- Top hat: 10980535

## Optional accessories

- Gel frame: 10980452
- Module of PC lens for T1 Fresnel: 10980449
- Doughty Trigger Clamp: 17030386
- Safety wire 36 kg: 99011963
- Single Top Loader Case: 10120244-03
- Dual Top Loader Case: 10120245-03
- Foam Shell: 20020340-01

## Legal

- T1 Fresnel™ is a Trademark of Robe lighting s. r. o.
- T1 Fresnel™ is patented by Robe lighting s. r. o. and is protected by one or more pending or issued patents