

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

# iT12 Profile™

From Classic framed area lighting to complicated, sequenced, animated multi-gobo projections, the all-environments iT12 Profile<sup>™</sup> has all the tools, features, controls and light qualities to deliver outstanding static profile projector performance, whatever the environment can throw at it.



#### Light source

iSE-MSL-TE<sup>™</sup> 500W LED ENGINE



#### Light output

up to 13.600 lm, 35.740 lx @ 5m, Cpulse™ special flicker free management for HD and UHD cameras, ready for 8K and 16K



#### Zoom range

5.5°- 50°



#### Effects

Frost, Optional drop-in module with Framing Shutters and Iris, Optional drop-in module with Static gobo wheel, Rotating gobo wheel and Animation Wheel

Joining the Robe iSERIES, the IP65-protected iT12 Profile<sup>™</sup> will handle anything the elements can throw at it. Our revolutionary, self-managing, low-maintenance ingress protection technology ensures peace of mind, for theatres, television, and concerts, indoors or out.

Maintaining the renowned Multi-Spectral colour finesse of the T-series, the iT12 Profile<sup>™</sup> utilizes an iSE-MSL-TE<sup>™</sup> 500W LED IP65-rated Engine generating over 13.600 lm (integrating sphere) from the fixture. With all the advantages of cost, exchange or replacement in the field, this LED technology provides identical colour characteristics, responses, and control with T-series luminaires for absolute colour consistency throughout your Robe installation.

TRANSFERABLE ENGINE technology has all the advantages of cost, field exchange, or replacement, and the ability to keep up with LED development to ensure exceptionally long fixture life. With a typical lumen maintenance of L70/B50 40.000 hours, the 4-year 20.000-hour warranty gives peace of mind.

With a choice of RGB, CMY, or individual colour emitter control for advanced users, the luminaire contains factorycalibrated whites; a variable CCT from 2.700 - 8.000K; our DataSwatch pre-programmed colour library with 237 colours and tones; adjustable CRI from 80 to 95+ and lamp selectable Tungsten emulation.





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The 9:1 ratio 5.5°- 50° motorised SuperZoom with high-definition optics gives maximum task flexibility. To alter the beam from a perfectly flat field, we offer an optional 6:1 ratio Hot Spot lens.

For precise framing, the optional drop-in motorised Plano4<sup>™</sup> framing shutter module features four individually positionable blades in four separate planes with complete 120° module rotation. For image softening a 5° medium frost, using our MagFrost<sup>™</sup> quick change system, is fitted as standard.

Our patented BARS™ (Brake Attribute Retention System) locks the motorised Focus and Zoom firmly in place for consistent, accurate replayability of lighting cues even when power cycled.

Increasing gobo variation, an optional drop-in module features a static wheel with 9 gobos and a fully rotating, indexable wheel containing 7 gobos. The selection of theatrical style gobos are replaceable using our patented slot and lock system. The module also has an Animation wheel, which can be used alone or in combination with gobos, with full speed and directional controls.

At the heart of iT12s protection is RAINS<sup>™</sup> (Robe Automatic Ingress Protection System). This highly advanced patented technology not only prevents ingress. It actively manages the fixture's internal microclimate removing internal moisture build-up caused by constant heating and cooling to provide maximum protection for electronics. With simple maintenance procedures, Robe has revolutionised how outdoor fixtures are managed and protected.

Streamlined preparation saves time. The iT12 Profile<sup>™</sup> runs an ingenious Self Pressure Test to check internal pressure. Requiring no special tools and taking under 3 minutes, the test provides an error message if gaskets and covers were not replaced correctly or locking screws incorrectly tightened, ensuring maximum protection.

Their lightweight magnesium alloy covers, with aluminium alloy substructure, provide a dust-free environment for the optics. This eliminates the need for frequent cleaning, routine maintenance, and UV damage to plastic parts.

To maintain consistently high lumen output, even with the rigours of outdoor performance, water, dirt, dust, haze, and smoke are repelled from the front lens with our unique parCoat<sup>™</sup> hydrophobic, oleophobic-resistant coating. Furthermore, it allows easy removal of deposits without scratching or damage.

To operate in extreme cold, iT12 Profile<sup>™</sup> contains our innovative POLAR+<sup>™</sup> technology.

This special standby mode maintains the fixtures sensors and communication channels remain active while greatly reducing power consumption. When activated, POLAR+™ will automatically maintain an internal temperature level, allowing instant operability down to minus 50 degrees centigrade!

Ideally suited for remote outdoor installations, REAP<sup>™</sup>, the Robe Ethernet Access Portal communication software, viewed as a web browser, shows real-time fixture monitoring of all parameters, including complete RAINS<sup>™</sup> status information such as pressure and internal saturation levels.

By including NFC (Near-Field Communication) technology, you can access setup, diagnostic and performance features, even without power, directly from your mobile device using the Robe Com app.



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#### iT12 Profile<sup>™</sup> - Robe reliability in all weathers



# **Technical Specification**

#### Source

- Light source type: iSE-MSL-TE™ 500W LED Engine (Patented)
- LED life expectancy: min. 40.000 hours
- Colour rendition: CRI: 95, CRI R9: 96, TM30-18 Rf: 92, TM30-18 Rg: 106, TLCI: 91
- Typical lumen maintenance: L70/B50 @ 40.000 hours
- Light source warranty: 4 years or 20.000 hours

# **Optical system**

- Robe's proprietary optical design
- High-efficiency zoom optical system, ratio 9:1
- Zoom range: 5.5° 50°
- Fixture total lumen output:
  - 13.600 lm (integrating sphere)
  - 11.000 lm (goniophotometer)
- Illuminance: 35.740lx @ 5 m

• parCoat<sup>™</sup> (particle resistant coating) unique hydrophobic and oleophobic coating helps prevent water, dirt, dust, haze and smoke from adhering to the output lens



#### **Main features**

- Factory calibrated whites and colours via the new RCC<sup>™</sup> (Robe Colour Calibration) system, automatic or on-call selfre-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
- 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+
- Optional drop-in framing and iris module: Patented Plano4<sup>™</sup> framing shutters module with 4 individually positionable blades plus rotation of the complete frame system + 60°
- Optional drop-in gobo module: Static, rotating gobo wheel and animation wheel
- Static gobo wheel: 9 static, replaceable breakup gobos + open, all gobos specially selected for theatrical and TV productions, patented slot & lock system
- Rotating gobo wheel: 7 rotating, indexable and replaceable breakup and aerial gobos + open, patented slot & lock system
- Animation wheel: Aluminium animation wheel, used alone or in combination with gobos, rotating in both directions at variable speed
- Iris: Motorized, stepless, pulse effects up to 3 Hz (with optional drop-in framing and iris module)

• MagFrost<sup>™</sup> - magnetic paddle fast change system providing exchangeable frost containing as standard a medium 5° for even wash

- Hot-Spot: from flat field to 6:1 hot-spot (optional)
- Electronic strobe effect with variable speed up to 20 Hz, pre-programmed random strobe & pulse effects
- High resolution electronic dimming: 0 100%
- L3<sup>™</sup> (Low Light Linearity) Imperceptible 18 bit dimming for ultra smooth fade to black
- Dimmer profile selection: Linear, Square law
- Cpulse<sup>™</sup> special flicker-free management for HD and UHD cameras, ready for 8K and 16K
- Extremely quiet operation suitable for all types of production in Theatre and TV
- AirLOC<sup>™</sup> (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.
- BARS™ Brake Attribute Retention System (Patented) applied for Focus and Zoom stepper motors
- POLAR+<sup>™</sup> 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 3 editable programs (each up to 100 steps), built-in analyser for easy fault finding, NFC app controller

- Protocols:
  - USITT DMX-512, RDM
  - ArtNet, MA Net, MA Net2, sACN
- REAP<sup>™</sup> Robe Ethernet Access Portal
- Wireless CRMX™ technology from Lumen Radio
- Epass<sup>™</sup>: Ethernet pass through switch which sustains Ethernet integrity, when the fixture has no power, to automatically maintain network connectivity

• RAINS<sup>™</sup> (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: 8
- Control channels: 24, 28, 35, 39, 32, 36, 43, 47
- Variable CCT: 8 bit
- + Green correction: 8 bit
- Colour mixing: 8 or 16 bit (internal 18 bit)
- Framing shutters module movement & rotation: 8 bit
- Gobo indexing & rotation: 8 or 16 bit
- Animation wheel: 8 bit
- Animation wheel rotation: 8 bit
- Iris: 8 or 16 bit
- Frost: 8 bit
- Zoom: 8 or 16 bit
- Focus: 8 or 16 bit
- Dimmer: 8 or 16 bit (internal 18 bit)

#### **Rotating gobos**

- 7x rotating glass gobos: (with optional drop-in gobo and animation module)
- Outside diameter: 26.8 mm
- Image diameter: 23.5 mm
- Thickness: 1.1 mm
- High temperature borofloat or better glass
- Patented slot & lock system for easy replacement of gobo



#### Static gobos

- 9x static glass gobos: (with optional drop-in gobo and animation module)
- Outside diameter: 26.8 mm
- Image diameter: 23.5 mm
- Thickness: 1.1 mm
- High temperature borofloat or better glass

#### Effect wheel

- Single animation wheel: (with optional drop-in gobo and animation module)
- Material: Aluminium
- Can be used alone or in combination with rotating gobos
- Diameter: 109 mm
- Rotating in both directions at variable speed

#### Framing shutters system

- Patented Plano4<sup>™</sup> framing shutters module (with optional drop-in framing and iris module)
- Shutters: 4 Blades, each with separate movement and +- 25° rotation control
- Movement: Smooth with variable speed, ultrafast blade movements for creating mid-air effects
- Pre-programmed: Shape and blade sequences
- Rotation: +- 60° of the complete framing system

#### **Thermal specification**

- Maximum ambient temperature: 50 °C (122°F)
- Maximum surface temperature: 90 °C (176 °F)
- Minimum operating temperature: -50 °C (-58 °F)
- Total heat dissipation: max. 1125 BTU/h (calculated)

# **Electrical specification and connections**

- Power supply: Electronic auto-ranging
- Input voltage range: 100-240 V, 50/60 Hz
- Power consumption: Max. 600 W
- Power connector in/out: IP 65 Neutrik powerCON TRUE1 in/out
- DMX and RDM data in/out: IP65 Locking 5-pin XLR connectors
- Ethernet port in/out: IP65 RJ45 for Embedded Epass™ switch 10/100 Mbps



# Approvals

- CE Compliant
- cETLus Compliant

#### **Mechanical specification**

- Height: 534 mm (21.02") with yoke
- Width: 385 mm (15.51")
- Depth: 653 mm (26.18")
- Weight:
  - 27 kg (59.52 lbs) fully equipped
  - 24.7 kg (54.45 lbs) with optional drop-in gobo animation module
  - 25.3 kg (55.77 lbs) with optional framing shutters module
- Ingress protection rating: IP65

## Rigging

- Mounting horizontally or vertically via mounting yoke
- Mounting points: M12 bolt
- Safety cable attachment point

#### **Included** items

- User Manual
- Gel frame adaptor
- Power cord including powerCON TRUE1 In connector:
  - US:13052277-01
  - EU:13052276-01



#### **Optional accessories**

- iT12 iSE-MSL-TE<sup>™</sup> 500W LED Engine: 14080098
- Doughty Trigger Clamp
- Safety wire 36 kg: 99011963
- Floor stand: 10981014
- Frost 0.5° (exchange) assembled: 10980583
- Frost 3.5° (exchange) assembled: 10980668
- Frost 10° (exchange) assembled: 10980497
- Frost 20° (exchange) assembled: 10980574
- Frost 30° (exchange) assembled: 10980584
- iT12 Fresnel lens module: 10981029
- iT12 PC lens module: 10981028
- Drop-in gobo and animation wheel module: 10980968
- Drop-in framing and iris module: 10980969
- Drop-in module open gate: 10981008
- Hot-spot lens: 10980666
- Single Top Loader Case: 10120323
- Single Top Loader Trolley case: 10120324
- Dual Top Loader Case: 10120325
- Foam Shell: 20020468

# Legal

- iT12 Profile  $^{\text{m}}$  is a Trademark of Robe lighting s. r. o.
- iT12 Profile™ is patented by Robe lighting s. r. o. and is protected by one or more pending or issued patents