

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

# FORTE<sup>®</sup> FS

Forte means Excellence, Speciality, Strength. Our FORTE® certainly lives up to its name! With a choice of premium performance engines from our revolutionary TRANSFERABLE ENGINE technology, giving you the ability to maintain light quality, combined with a fixture packed full of specialist innovation, you have the luminaire ready to lead you into the future.



#### Light source

TE<sup>™</sup> 1.000W White LED TRANSFERABLE ENGINE



#### Light output

up to 50.000 lm, 113.000 lx @5m, Cpulse™ special flicker free management for HD and UHD cameras, ready for 8K and 16K



#### Zoom range

5° - 55°



#### Effects

2 rotating gobo wheels, 2 color wheels, animation wheel, frost, iris, 6-facet circular and linear prisms, framing shutters

You can now choose between the TE<sup>™</sup> 1.000W HP White LED Engine (HP - High Performance), producing the highest output possible, or the TE<sup>™</sup> 1.000W HCF White LED Engine (HCF - High Colour Fidelity) for those requiring exception 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 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 (Robe patented technology). Performance has not been compromised, with the TE<sup>™</sup> 1.000W HP White 6.700 K LED Engine producing a piercing 50.000 lm and the TE<sup>™</sup> 1.000W HCF White 6.000 K LED Engine 35.000 lm with its exceptionally high inherent CRI of 96. The L70/B50 ratings of 50.000 hours, means longevity is assured.





Harnessing the strength of the self-referencing, data capturing TRANSFERABLE ENGINES, FORTE® has wide ranging 5 - 55 degree zoom capability to fulfil all your spot, wash and beam applications, contained within its class-leading 41 kg frame. Usual output loss at the narrow zoom setting is taken care of via our ingenious Robe Patent pending narrow zoom output boost, improving performance by over 15 %, giving you a dramatically increased output, perfect for sabre like beams.

Robe's new, cutting-edge, CMY colour mixing system provides beautifully smooth colour transitions. Combined with two colour wheels, CRI 80 and 90 filters (HP Engine), and a variable CTO from 3.000 - 6.700 K gives FORTE® total colour finesse.

The comprehensive, dynamic effects package includes; two fully indexable, rotatable gobo wheels each with 6 gobos using the fast change Robe slot and lock system; two stackable 6-facet prisms, one linear, one round; animation wheel and an ultra-fast motorized iris. The two rapid insert interchangeable frosts, a soft 1° and a medium 5° for silky smooth washes cover the entire zoom range of 5-55 degrees with no restricted range cut off.

FORTE® gives you total control via our ultra-precise patented framing shutter system, with separate blade control and the entire assembly capable of +- 60° rotation; Cpulse™ PWM control and direct Plus/Minus Green control for broadcast precision; EMS™ (Electronic Motion Stabiliser) technology, for instant stop and hysteresis elimination, making FORTE® the ideal fixture for RoboSpot™; L3™ (Low Light Linearity) dimming producing imperceptible fades to black.

FORTE® possesses a comprehensive protocol suite; USITT DMX 512, RDM, ArtNet, MA Net, MA Net 2, and sACN. REAP™ (Robe Ethernet Access Portal) is included for direct communication over Ethernet networks. DMX Wireless control is available on request. All this allows seamless integration into all control networks.

The FORTE® FollowSpot is equipped with the digital camera on the head and can be connected with the RoboSpot™ BaseStation for off-stage follow spot operation.



# **Technical Specification**

#### Source

- Light source type: TE<sup>™</sup> 1.000W HP White LED Engine (Patented)
  - HP High Performance Engine for maximum light output and optimal colour characteristics
  - LED Engine output: 82.000 lm
  - Fixture total lumen output:
    - 50.000 lm (integrating sphere)
    - 40.000 lm (goniophotometer)
  - Colour temperature output: 6.700 K
  - CRI: 70, remotely selectable filters for CRI 80 and CRI 90
  - Illuminance: 113.000 lx @ 5 m
- Light source type: TE™ 1.000W HCF White LED Engine (Patented)
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  - HP High Performance Engine for maximum light output and optimal colour characteristics
  - LED Engine output: 82.000 lm
  - Fixture total lumen output:
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    - 40.000 lm (goniophotometer)
  - Colour temperature output: 6.700 K
  - CRI: 70, remotely selectable filters for CRI 80 and CRI 90
  - Illuminance: 113.000 lx @ 5 m
- Light source type: TE<sup>™</sup> 1.000W HCF White LED Engine (Patented)

#### **Optical system**

- Robe's proprietary optical design
- High-efficiency 13-lens zoom optical system, ratio: 11:1
- Zoom range: 5° 55°
- Robe's proprietary optical design
- High-efficiency 13-lens zoom optical system, ratio: 11:1
- Zoom range: 5° 55°



#### **Dynamic Effects and Features**

- Cyan: 0 100%
- Magenta: 0 100%
- Yellow: 0 100%
- Cyan: 0 100%
- Magenta: 0 100%
- Yellow: 0 100%

#### **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
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#### Movement

- Pan movement: 540°
- Tilt movement: 270°
- Movement control: Standard and Speed
- Pan movement: 540°
- Tilt movement: 270°
- Movement control: Standard and Speed

#### **Rotating gobos**

- 12x fully rotating, indexable glass gobos on two wheels
- Outside diameter: 30.8 mm
- Image diameter: 25.0 mm
- 12x fully rotating, indexable glass gobos on two wheels
- Outside diameter: 30.8 mm
- Image diameter: 25.0 mm



#### Effect wheel

- Single animation wheel
- Material: Aluminium
- Diameter: 112 mm
- Single animation wheel
- Material: Aluminium
- Diameter: 112 mm

#### Camera

- Type: XNZ-L6320A
- Resolution: 1920 x 1080, 16:9 Full HD (1080p) resolution support
- Zoom:
- Type: XNZ-L6320A
- Resolution: 1920 x 1080, 16:9 Full HD (1080p) resolution support
- Zoom:

#### Framing shutters system

- Patented Plano4<sup>™</sup> framing shutters module
- Shutters: 4 Blades, each with separate movement and +- 25° rotation control
- Movement: Smooth with variable speed, ultra-fast for creating mid-air effects
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- Shutters: 4 Blades, each with separate movement and +- 25° rotation control
- Movement: Smooth with variable speed, ultra-fast for creating mid-air effects

#### **Thermal specification**

- Maximum ambient temperature: 45°C (113°F)
- Maximum surface temperature: 100°C (212°F)
- Minimum operating temperature: -5°C (23°F)
- Maximum ambient temperature: 45°C (113°F)
- Maximum surface temperature: 100°C (212°F)
- Minimum operating temperature: -5°C (23°F)



#### Noise Levels

- Sound pressure level:
  - 33 dB(A) at 1 m (quiet mode)
  - 44 dB(A) at 1 m (auto mode)
- Sound power level:
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  - 33 dB(A) at 1 m (quiet mode)
  - 44 dB(A) at 1 m (auto mode)
- Sound power level:

#### **Electrical specification and connections**

- Power supply: Electronic auto-ranging
- Input voltage range: 100-240 V, 50/60 Hz
- Power consumption: max. 1250 W
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- Input voltage range: 100-240 V, 50/60 Hz
- Power consumption: max. 1250 W

## Approvals

- CE Compliant
- cETLus Compliant
- CE Compliant
- cETLus Compliant

#### **Mechanical specification**

- Height: 843 mm (33.2") head in vertical position
- Width: 483.5 mm (19")
- Depth: 335 mm (13.1") head in vertical position
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- Width: 483.5 mm (19")
- Depth: 335 mm (13.1") head in vertical position

## Rigging

- Mounting positions: 0°, 32°, 90°
- Universal operating position
- Mounting points: 5 pairs of 1/4-turn locking points



- Mounting positions: 0°, 32°, 90°
- Universal operating position
- Mounting points: 5 pairs of 1/4-turn locking points

#### **Included** items

- User Manual
- Omega Adaptor CL-regular 2 pcs: 10980033
- Power cord including powerCON TRUE1 In connector
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- Power cord including powerCON TRUE1 In connector

#### **Optional accessories**

- FORTE TE<sup>™</sup> 1.000W HP White LED Engine: 14080067
- FORTE TE<sup>™</sup> 1.000W HCF White LED Engine: 14080072
- Frost 0.5° (exchange) assembled: 10980581
- FORTE TE<sup>™</sup> 1.000W HP White LED Engine: 14080067
- FORTE TE<sup>™</sup> 1.000W HCF White LED Engine: 14080072
- Frost 0.5° (exchange) assembled: 10980581

#### Legal

- FORTE<sup>®</sup> is a Trademark of Robe lighting s. r. o.
- FORTE<sup>®</sup> FS is patented by Robe lighting s. r. o. and is protected by one or more pending or issued patents
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# Gobos&Colours

# **Rotating Gobo Wheel 1**















15020396

15020397

15020398

15020399

15020400

15040025

## **Rotating Gobo Wheel 2**







15020403



15020404

15020405



15020406

# Colour Wheel 1



14070484

14070489



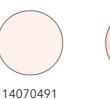
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**Colour Wheel 2** 









# **Animation Wheel**



11020262