# **MAGICDOT-R**

RADICAL BEAM





# MAGICDOT-R CREATIVE SOLUTIONS

A new member of the RADICAL product line, MAGICDOT-R is the first professional moving head LED luminaire with a single optical collimator. The new high-efficiency optical system measuring 94 mm in diameter and weighing over 200 grammes required more than two years of development and perfection. The result is an intense beam of less than 5° using a multi-chip RGBW LED with a light-emitting surface of 8 mm2. With its minimalist cylindrical design, the innovative MAGICDOT-R (patent pending), capable of continuous double rotation on the pan & tilt axes, allows the user to create groups of luminaires and control each light emitter individually in all directions. Leaving a minimum amount of space between multiple luminaires will make it possible to create configurations never before dreamt of.



Highly compact, light, ultra-fast and powerful, the MAGICDOT-R is equipped with a new 60 W RGBW multichip LED emitter paired with a 94 mm high-efficiency collimator. The fixture offers an overall luminous flux of 1,600 lumens and a luminous intensity of 180,000 candela for an overall consumption of only 130 W. This new high-power LED source has required implementing a special phase-change liquid cooling system using a heat pipe. The MAGICDOT-R is the ideal tool for creating moveable virtual sets and complex light compositions with multiple beams.











# **OPTICS**

- · 94mm PMMA collimator optic
- · Beam aperture: 4.5°
- · 85% optic efficiency

#### LIGHT SOURCE

- 2,000 lumens RGBW High-Power LED source
- Total luminaire output: up to 1,600 lumens
- Luminous intensity: 180,000 cd (narrow beam)
- Rated life (L70): up to 40,000 hours
- Flicker free sources management, suitable for TV applications and all video recorded events

#### **MOVEMENT**

- · Extremely accurate positioning
- Moving-head operated via either 8- or 16-bit resolution
- High-resolution stepper motors operated via microprocessors ensure extreme accuracy and smooth movements.
- · Pan and tilt automatic repositioning
- · Moving-head range: infinite pan and tilt rotation

#### **COLOURS**

- Sophisticated 4 colours RGBW mixed, reaching high Colour Rendering Index
- Light beam with no colour shadows, and rich saturated and pastel colour-hues
- 4.29 billion colours (8 bit resolution)
- Virtual colour wheel, including most usuals white colour temperature presets
- Dynamic colour macro effect with variable speed

# DIMMER / STROBE

- Electronic dimmer, allowing perfect light adjustment from 0 to 100% without colour variation
- White or colour strobe effect, with speed adjustment from 1 to 25 flashes per second

# SOFTWARE FEATURES

- Local DMX addressing of luminaire and optional parameters through its built-in LCD control panel
- Remote DMX addressing of luminaire and optional parameters through a standard RDM DMX controller
- Information menu including hour counter, temperature, software version

# HARDWARE FEATURES

- Graphic LCD display for addressing and special functions settings, with flip function
- 6 menu buttons to set the functions
- · Excess temperature protection
- XLR 5 pin male and female connectors for DMX connection
- powerCON TRUE1 male and female connectors for power connection

# CONTROL

- DMX 512 protocol, through DMX cable
- DMX-RDM compatible
- · Stand-alone mode and Master/Slave modes
- · Local control panel, with LCD display
- Choice of 2 DMX modes (from 15 to 17 DMX channels)

# **POWER SUPPLY**

- · Electronic supply with active PFC
- 100 to 240 Volts 50/60 Hz
- Power 130 W maximum

#### **COOLING SYSTEM**

- Advanced cooling system based on heatpipe technology
- Self adjusting variable speed fans for quiet operation (Auto mode)
- · Selectable auto, stage & studio ventilation modes
- · Safety protection against temperatures excesses

# HOUSING

- Moving-head skeleton made of aluminium and steel metal plates
- · Heatsinks in aluminium and copper, satin finish
- Moulded covers in self-extinguishing fire retardant ABS PC (VO class)
- Two sides handles for transportation
- · Four heavy-duty feet for better stability
- · IP20 protection rating
- Exterior finish: black (Carbon)

#### INSTALLATION

- Fastening brackets system: one Omega 1/4 turn brackets designed for use with standard clamps
- Mounting points: two 1/4 turn locking fittings
- allowing installation of Omega brackets on luminaire

  Safety cable attachment point

# **OPERATING PARAMETERS**

- Operating positions: all (device on floor or fixed to a support)
- Maximum permitted ambient temperature (Ta max): 45°C (113°F)
- Minimum permitted ambient temperature (Ta min): -10°C (14°F)
- Minimum usage distance: 1.0 m (3.28 ft)

# **COMPLIANCE**

# EU (EMC)

• EMC Directive 2014/30/EU

# EU (LVD)

LVD Directive 2014/35/EU
 US Safety

# • UL 1573

- Product: 210 x 318 x 210 mm (l x h x d)
- Flight-case foam: 251 x 330 x 251 mm (I x h x d)

# WEIGHT

• Product: 5.3 KG

# PRODUCT CODES

015150: MAGIDOT-R CREATIVE SOLUTION









