

# LOGIC MR16 Downlight S



## FEATURES

Illuminarc Logic MR16 Downlight luminaires are designed for the smallest of area lighting up to full room illumination. With their high quality 4-color RGBW color mixing system, Downlights provide soft, pleasing accent light and indirect illumination of bright, saturated colors and white calibrated CCT presets. Downlights utilize Power Over Ethernet (POE) technology, receiving power and control via an advanced driver. Powerful control options include Calendar Scheduling via onboard webserver, DMX, RDM, Art-Net, Art-RDM, sACN. Or you can use the included 8-button wall controller to trigger customizable looks. Go green with higher efficiency, lower cost without compromising quality or quantity.



Rear View

## SPECIFICATIONS

### OPTICAL

- Light Source: 1 LEDs (quad-color RGBW) 10 W, (4.375 A)
- Light Source Lifespan: 50,000 hours based on LED manufacturer's specifications
- White LED Native CCT: 3000 K
- Installed Optics: Medium filter
- Included Optics: Wide filter
- Standard Optics
  - Beam Angle: 30.9°
  - Field Angle: 59.7°
  - Cutoff angle: 82.8°
  - Lumens: 266
  - Base Illuminance @ 5 m: 29 lux
  - Efficacy: 32 lm / W
- Medium filter (installed)
  - Beam Angle: 40.4°
  - Field Angle: 81.7°
  - Cutoff angle: 148.9°
  - Lumens: 194
  - Base Illuminance @ 5 m: 11 lux
  - Efficacy: 23 lm / W
- Medium filter with honeycomb filter (installed)
  - Beam Angle: 33.6°
  - Field Angle: 63.9°
  - Cutoff angle: 84.7°
  - Lumens: 98.3
  - Base Illuminance @ 5 m: 9 lux
  - Efficacy: 12 lm / W
- Wide Filter (included)
  - Beam Angle: 41.8°
  - Field Angle: 105.5°
  - Cutoff angle: 154.3°
  - Lumens: 182
  - Base Illuminance @ 5 m: 8 lux
  - Efficacy: 22 lm / W
- Wide filter with honeycomb filter (included)
  - Beam Angle: 34.2°
  - Field Angle: 64.3°
  - Cutoff angle: 90°
  - Lumens: 83.1
  - Base Illuminance @ 5 m: 8 lux
  - Efficacy: 10 lm / W
- Color Temperature Presets: Built-in, 1,800 to 10,000 K

## CONSTRUCTION/PHYSICAL

- Dimensions: 1.96 x 1.96 x 3.86 in (50 x 50 x 98.10 mm)
- Weight: 0.39 lb (0.18 kg)
- Fixture Color: White
- Housing Material: Aluminum (ADC12)
- Lens Cover: Frosted polycarbonate
- Mounting Options: Logic MR16 Trim Ring, Logic MR16 Mounting Kit

## CONTROL SPECIFICATIONS

- Control Protocol: USITT DMX-512a, RDM, Art-Net, Art-RDM, sACN via Logic Drive 2X
- Operating Modes: Selectable personalities, via Logic Drive 2X and POEX
  - o Red (1-channel): Red
  - o Green (1-channel): Green
  - o Blue (1-channel): Blue
  - o White (1-channel): White
  - o TW (2-channel): Dimmer, White CCT Preset
  - o RGB (3-channel): Red, Green, Blue
  - o RGBW (4-channel): Red, Green, Blue, White
  - o RGBW+D (5-channel): Red, Green, Blue, White, Dimmer
  - o FULL (10-channel): Dimmer, Red, Green, Blue, White, White CCT Presets, Strobe, Auto Programs, Dimmer Speed Presets
- Standalone Control: Yes, Logic Wall Con via Logic Drive 2X and POEX
- Fixture setup: Logic Drive 2X and POEX (RDM, webserver or display), Art-RDM (DMX Workshop)

## ELECTRICAL

- Input Voltage: 52 VDC, DMX/RDM (via Logic POEX)
  - o Power and Current (fixture via POEX): 8.3 W
- Power Supply: Logic POEX (52 VDC)
- Dimmer: Electronic
- Power Linking: 8 units via Logic POEX
- Power/Data Connection: 2 Ethernet (RJ45)
- Required Cable Specifications
  - o Cable type: CAT6/A, Shielded
  - o Conductor Diameter:  $\geq 23$  AWG ( $\geq 0.5733$  mm)
  - o Conductor Material: Solid Bare Copper Wire (stranded not supported)
  - o Cable Terminator: RJ45, CAT6/A, Shielded
- Cable Length(s) Supported:
  - o Total Max Cable Length (Drive to POE.X):  $\leq 100$  m / 328 ft
  - o Total Max Cable Length (POE.X to first fixture):  $\leq 15.24$  m / 50 ft
  - o Total Max Cable Length (first fixture to last fixture):  $\leq 46$  m / 150 ft
  - o Total Max Cable Length

(Drive to last fixture):  $\leq 145$  m / 475 ft

- Recommended Cable (or equivalent): Belden 2413F, 2412F

## THERMAL SPECIFICATIONS

- Cooling: Convection
- Operating Temperature Range:  $-4$  °F to  $113$  °F ( $-20$  °C to  $45$  °C)
- Maximum Surface Temperature:  $158$  °F ( $70$  °C)
- Minimum Distance to Flammable Surface: 11.8 in (0.3 m)
- BTU/hr: 8.3

## REGULATORY & VOLUNTARY QUALIFICATION

- Certification Listings: CE, MET, FCC, ROHS
- US Safety: UL 2108, UL 1598A
- Canadian Safety : CSA-C22.2 No. 250.2
- City of Chicago Electric Code Safety : Chicago Plenum (CCEA), Section 18-27-300.22(c)(2)
- Environment: Dry location, IP20, All indoor permanent installations.
  - o Please refer to the User Manual for more detailed information on installation.
- Warranty: 36-month manufacturer's limited warranty (for covered regions only)
- Installation Orientation: Any

## ACCESSORIES

Required: Logic Drive 2X, Logic POEX

- Included:
  - o Wide filter
  - o Pendant hanging bracket
- Optional:
  - o Logic MR16 Honeycomb filter
  - o Logic MR16 Trim Ring (white)
  - o Logic MR16 Mounting Kit (for wall mount, ceiling mount, and hanging pendant)



Honey Comb Filter

Trim Ring