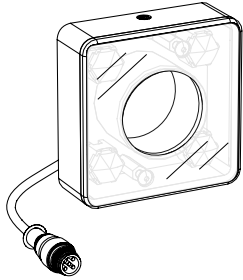


LED..R70XD4-..High-Intensity Ring Light



Datasheet

High-Intensity LED Ring Light for use with PresencePLUS® and other Vision Systems

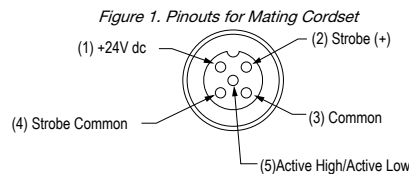


- Compact ring light for PresencePLUS® and other Vision Systems
- Four extremely bright LEDs for illumination of targets from 0.15 meters to beyond 2 meters (0.49 feet to 6.56 feet)
- Continuous or strobed operation
- Fixed or adjustable intensity, depending on model
- Maintenance-free, rugged construction
- Evenly and intensely illuminates a 610 millimeters (24 inches) diameter at 1 meter (3.28 feet)

Models

Model ¹	LED Color	Bracket	Cable
LEDRR70XD4-XQ	Red, 625 nm	Optional bracket available (see Brackets)	150 mm (6 in) cable with threaded 5-pin Euro-style connector ²
LEDWR70XD4-XQ	White, 5500 K		
LEDBR70XD4-XQ	Blue, 470 nm		
LEDGR70XD4-XQ	Green, 530 nm		
LEDIR70XD4-XQ	Infrared, 850 nm		
LEDRR70XD4-XM	Red, 625 nm	Built-in P4 bracket (see Dimensions)	300 mm (12 in) cable with threaded 3-pin Pico-style connector ³
LEDWR70XD4-XM	White, 5500 K		
LEDBR70XD4-XM	Blue, 470 nm		
LEDGR70XD4-XM	Green, 530 nm		
LEDIR70XD4-XM	Infrared, 850 nm		

Wiring



Pinouts of the original 4-pin connector is the same as above, but without the center pin (gray wire).

Wire Purpose	Cable Wire Color ⁴	Continuous On Mode	Strobed Mode	PresencePlus Pro Controller Terminal Block
Power Wires	Brown (1)	+24 V DC	+24 V DC	Pin 01
	Blue (3)	common	common	Pin 02
Strobe Polarity Control	Gray (5)	open	Active Low: open Active High: connect to common (Blue wire)	Pin 02
Strobe Voltage Wires	White (2)	open	0 V DC = ON (Active Low) +5 V DC to 24 V DC = OFF (Active Low)	Pin 04
	Black (4)	open	0 V DC = OFF (Active High) +5 V DC to 24 V DC = ON (Active High)	Pin 02
			Strobe common	



Note: To meet CE certification requirements, the light needs to be connected to earth ground.

¹ For models with controllable intensity, add "P" to the model number (for example, LEDRR70XD4-PQ).
² Requires Euro-style cordset.
³ Connects directly to the P4 sensor.
⁴ For Banner-supplied wire.



Light Intensity Adjustment

Turn the 270° intensity potentiometer with a small flat-blade screwdriver to adjust the light's intensity.

1. Apply power to the light and turn the potentiometer all the way clockwise for maximum intensity.
2. If the object to be sensed is too bright at maximum intensity, turn the potentiometer counterclockwise, a little at a time, testing with the target object, until the correct brightness is achieved.

Specifications

Light Source

Four high-intensity LEDs; see models table for wavelengths

Illumination

610 mm (24 in) diameter usable light pattern at 1 m (3.28 ft)

Strobe

Optically isolated

Supply Voltage and Current

Operating Voltage: 24 V DC $\pm 10\%$

Strobe Voltage: 5 V DC to 24 V DC at 15 mA maximum

Current Draw at Full Intensity: 350 mA maximum

Built-in constant current regulator for LEDs

Potentiometer controls variable intensity for "P" models

Construction

Enclosure rating: IP50

Housing: aluminum, black anodized

Window: acrylic, clear with frosted diffusing surface on the inside

Bracket: aluminum, black anodized. Attaches ring light directly to *PresencePLUS* P4 with two included M4x14 screws

Useful Life

50,000 hours (LED ON time). When operated within specifications, output will decrease less than 30% after 50,000 hours

Operating Conditions

Temperature: 0 °C to +50 °C (+32 °F to +122 °F)

Humidity: 90% maximum relative humidity (non-condensing)

Dimensions

All measurements are listed in millimeters [inches], unless noted otherwise.

Figure 2. Q Models

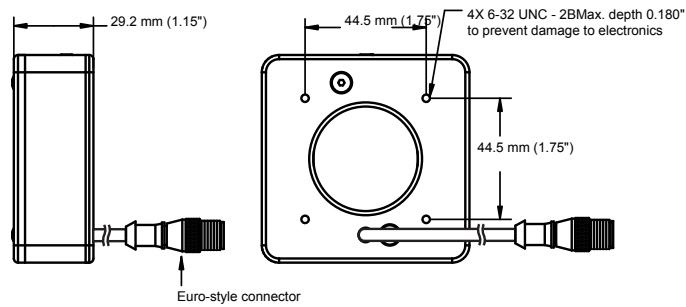
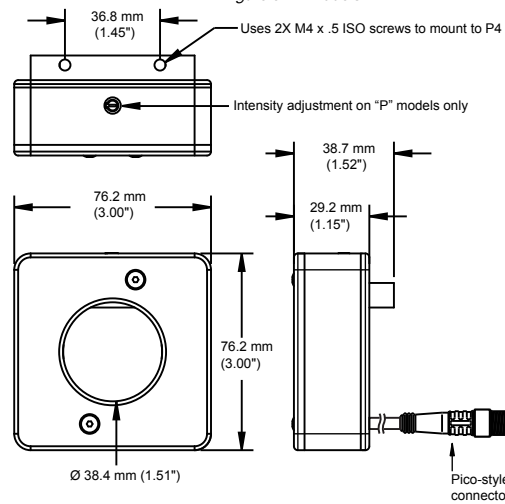


Figure 3. M Models



Accessories

Cordsets

5-Pin Threaded M12 Cordsets—Single Ended				
Model	Length	Style	Dimensions	Pinout (Female)
MQDC20-506	2 m (6.56 ft)	Straight		
MQDC20-515	5 m (16.4 ft)			
MQDC20-530	9 m (29.5 ft)			

1 = Brown
2 = White
3 = Blue
4 = Black
5 = Gray

Accessory Brackets

SMBPPRH1

- Black zinc plated cold rolled steel bracket
- Mounts directly to Presence*PLUS* Pro sensor
- Includes: 2 – 6-32 screws (socket drive, button head) 4 – M3 screws (socket drive, cap head)



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