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



Datasheet

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

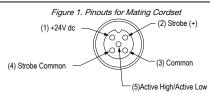


- Compact ring light for *Presence*PLUS® and other Vision Systems
 Four extremely bright LEDs for illumination of targets from 0.15 meters to beyond 2 meters (0.49 feet to 6.56 feet)
- Continuous or strobed operation
- Fixed or adjustable intensity, depending on model
- Maintenance-free, rugged construction
- 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			
LEDWR70XD4-XQ	White, 5500 K		150 mm (6 in) cable with threaded 5-pin Euro-style connector ²	
LEDBR70XD4-XQ	Blue, 470 nm	Optional bracket available (see Brackets)		
LEDGR70XD4-XQ	Green, 530 nm			
LEDIR70XD4-XQ	Infrared, 850 nm			
LEDRR70XD4-XM	Red, 625 nm			
LEDWR70XD4-XM	White, 5500 K		300 mm (12 in) cable with threaded 3-pin Pico- style connector 3	
LEDBR70XD4-XM	Blue, 470 nm	Built-in P4 bracket (see Dimensions)		
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	Power Wires Brown (1)		+24 V DC	Pin 01
	Blue (3)	common	common	Pin 02
Strobe Polarity Control Gray (8	Cross (5)	open	Active Low: open	Pin 02
	Gray (5)		Active High: connect to common (Blue wire)	
Strobe Voltage Wires	White (2)	open	0 V DC = ON (Active Low) +5 V DC to 24 V DC = OFF (Active Low)	Pin 04
			0 V DC = OFF (Active High) +5 V DC to 24 V DC = ON (Active High)	FIII 04
	Black (4)	open	Strobe common	Pin 02



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





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For models with controllable intensity, add " \mathbf{P} " to the model number (for example, **LEDRR70XD4-PQ**).

Requires Euro-style cordset.
Connects directly to the P4 sensor.

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 ±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

onstruction

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 M4×14 screws

Useful Life

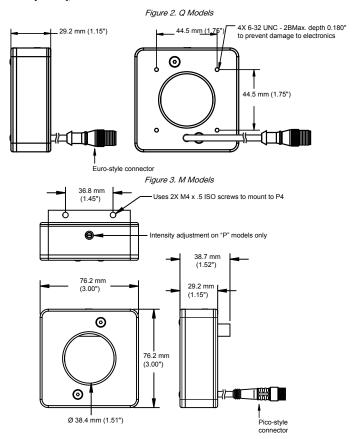
50,000 hours (LED ON time). When operated within specifications, output will decrease less than 30% after 50,000 hours

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.



Accessories

Cordsets

0010000							
5-Pin Threaded M12 Cordsets—Single Ended							
Model	Length	Style	Dimensions	Pinout (Female)			
MQDC20-506	2 m (6.56 ft)						
MQDC20-515	5 m (16.4 ft)		10 T	1 000			
MQDC20-530	9 m (29.5 ft)	Straight	42 Typ. [1.65*] M12 x 1 ø 15 [0.59*]	1 = Brown 2 = White 3 = Blue 4 = Black 5 = Gray			

Accessory Brackets

SMBPPRHI

- Black zinc plated cold rolled steel
- Black zinc plated cold folled 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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