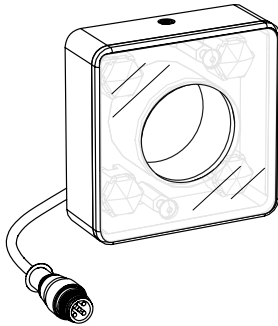


# LED High-Intensity Ring Light



High-Intensity LED Ring Light For Use With PresencePLUS and other Vision Systems

For the latest technical information about this product, including specifications, dimensions, and wiring, see [www.BannerEngineering.com](http://www.BannerEngineering.com)



- 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
- Continuous or strobed operation
- Optically isolated strobe signal
- Fixed or adjustable intensity, depending on model
- Maintenance-free, rugged construction
- Evenly and intensely illuminates a 610 mm (24") diameter at 1 m

## Models

Model*	LED Color	Bracket	Cable
LEDRR70XD5-XQ	Red, 620-630 nm	Optional bracket available (see Mounting Bracket)	150 mm (6") pigtail with threaded 5-pin Euro-style connector†
LEDWR70XD5-XQ	White, 5000 - 8300 K		
LEDBR70XD5-XQ	Blue, 465 - 485 nm		
LEDGR70XD5-XQ	Green, 520 - 535 nm		
LEDIR70XD5-XQ	Infrared, 850 nm		
LEDUV395R70XD5-XQ‡	UV, 395 nm		
LEDRR70XD5-XM	Red, 620 - 630 nm	Built-in P4 bracket (see dimensions)	300 mm (12") pigtail with threaded 3-pin Pico-style connector††
LEDWR70XD5-XM	White, 5000 - 8300 K		
LEDBR70XD5-XM	Blue, 465 - 485 nm		
LEDGR70XD5-XM	Green, 520 - 535 nm		
LEDIR70XD5-XM	Infrared, 850 nm		
LEDUV395R70XD5-XM‡	UV, 395 nm		

\* For models with controllable intensity, add "P" to the model number (e.g., LEDRR70XD5-PQ).

† Requires Euro-style cordset.

†† Connects directly to the P4 sensor.

### ‡ Risk Group 2:

#### CAUTION: UV Emitted from this product.

Eye or skin irritation may result from exposure. Use appropriate shielding and eye protection. Risk Group 2 (RG 2) products generally do not pose a realistic optical hazard if aversion responses limit the exposure duration or where lengthy exposures are unrealistic.

- IEC 62471



## Specifications

### Light Source

Four high-intensity LEDs; see models table for wavelengths

### Illumination

610 mm (24") diameter usable light pattern at 1 m

### Strobe

Optically isolated

### Supply Voltage and Current

**Operating Voltage:** 24V dc  $\pm$ 10%

**Strobe Voltage:** 5-24V dc @ 15 mA maximum

**Current Draw at Full Intensity:** 350 mA max

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 inside

**Bracket:** Aluminum, black anodized. Attaches ring light directly to PresencePLUS P4 with 2 included M4x14 screws.

### Useful Life

When operated within specifications, output will decrease less than 30% after 50,000 hours for visible and IR models, 20,000 hours for UV models.

### Operating Conditions

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

**Relative humidity:** 90% (non-condensing)

### Certifications



## Wiring Table

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

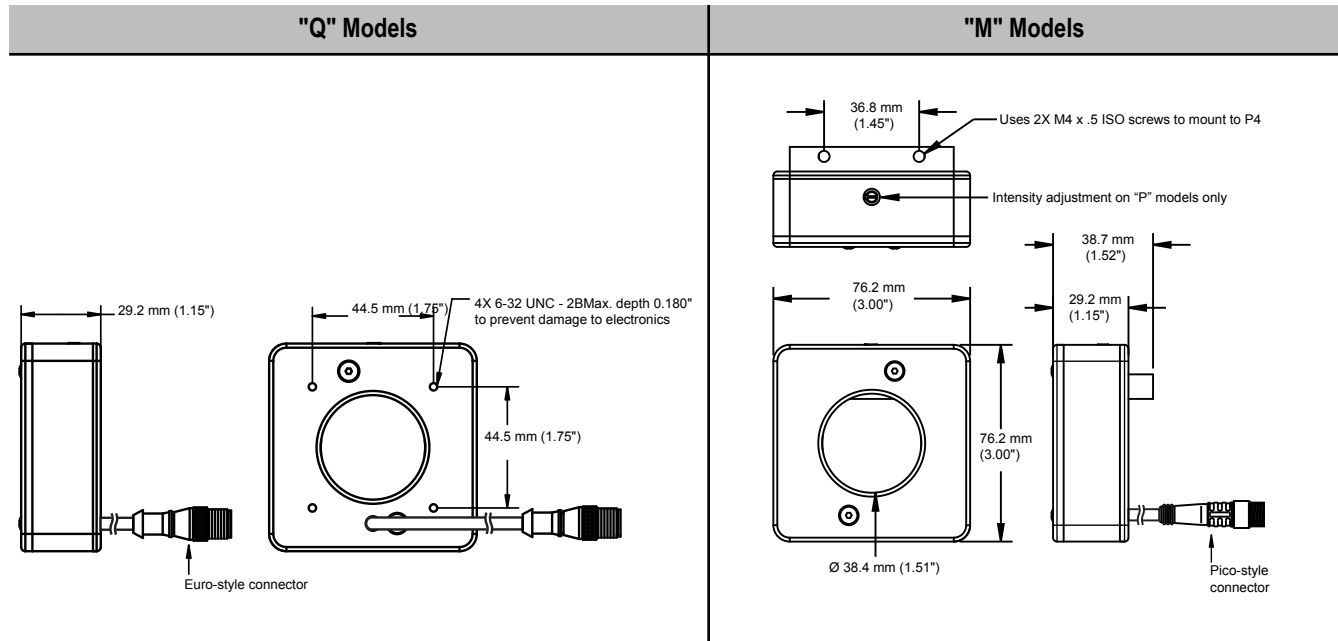
**Figure 1. Pinouts for Mating Cordset**

\* For Banner-supplied wire.

\*\* When connecting the light to a PresencePLUS Pro controller terminal block, the controller supply must be 24V dc  $\pm$  10%.

## Light Intensity Adjustment

Adjust the light's intensity by turning the 270° Intensity potentiometer with a small flat-blade screwdriver. Apply power to the light and turn the potentiometer all the way clockwise for max. intensity. If the object to be sensed is too bright at max. intensity, turn the potentiometer down a little at a time, testing with the object, until the correct brightness is achieved.



## 5-Pin Euro-Style Cordsets

5-Pin M12/Euro-Style Cordsets (straight connector)	5-Pin M12/Euro-Style Cordsets (right-angle connector)
MQDC1-506, 2 m (6')	MQDC1-506RA, 2 m (6')
MQDC1-515, 5 m (15')	MQDC1-515RA, 5 m (15')
MQDC1-530, 9 m (30')	MQDC1-530RA, 9 m (30')

## Accessory Brackets

<p><b>SMBPPRHI</b></p>	<ul style="list-style-type: none"> <li>• Black zinc plated cold rolled steel bracket</li> <li>• Mounts directly to PresencePLUS Pro sensor</li> <li>• Includes: 2 – 6-32 screws (socket drive, button head) 4 – M3 screws (socket drive, cap head)</li> </ul>	
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