



more sensors, more solutions

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

High-Intensity 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
- Continuous or strobed operation
- 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 |
|---------------|------------------|---|---|
| LEDRR70XD4-XQ | Red, 625 nm | Optional bracket available (see Mounting Bracket) | 150 mm (6") pigtail with threaded 5-pin Euro-style connector† |
| 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") pigtail with threaded 3-pin Pico-style connector†† |
| LEDWR70XD4-XM | White, 5500 K | | |
| LEDBR70XD4-XM | Blue, 470 nm | | |
| LEDGR70XD4-XM | Green, 530 nm | | |
| LEDIR70XD4-XM | Infrared, 850 nm | | |

* For models with controllable intensity, add "P" to the model number (e.g., LEDRR70XD4-PQ).

† Requires Euro-style cordset.

†† Connects directly to the P4 sensor.



Specifications

| Feature | Description |
|-----------------------------------|--|
| 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 | <p>Operating Voltage: 24V dc \pm10%</p> <p>Strobe Voltage: 5-24V dc @ 15 mA maximum</p> <p>Current Draw at Full Intensity: 350 mA max</p> <p>Built-in constant current regulator for LEDs</p> <p>Potentiometer controls variable intensity for "P" models</p> |
| Construction | <p>Enclosure rating: IP50</p> <p>Housing: aluminum, black anodized</p> <p>Window: acrylic, clear with frosted diffusing surface on inside</p> <p>Bracket: Aluminum, black anodized. Attaches ring light directly to Presence-PLUS P4 with 2 included M4x14 screws.</p> |
| Useful Life | 50,000 hours (LED ON time). When operated within specifications, output will decrease less than 30% after 50,000 hours. |
| Operating Conditions | <p>Temperature: 0° to +50° C (+32° to 122° F)</p> <p>Relative humidity: 90% (non-condensing)</p> |

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 Active High: connect to common (Blue wire) | Pin 02 |
| Strobe Voltage Wires | White (2) | open | 0V dc = ON (Active Low) 0V dc = OFF (Active High) +5 to 24V dc = OFF (Active Low) +5 to 24V dc = ON (Active High) | Pin 04 |
| | Black (4) | open | Strobe common | Pin 02 |

The diagram shows a circular 5-pin connector. Five pins are arranged in a circle. Pin (1) is at the top-left, (2) at the top-right, (3) at the bottom-right, (4) at the bottom-left, and (5) is the central pin.

Figure 1: Pinouts for Mating Cable

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

* For Banner-supplied wire.

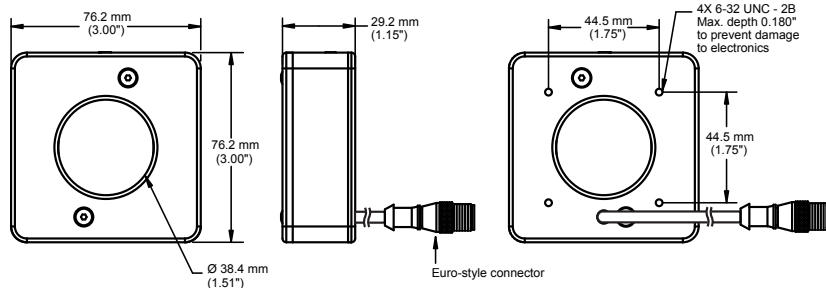
Note: To meet CE certification requirements, the light needs to be connected to earth ground.

Light Adjustment

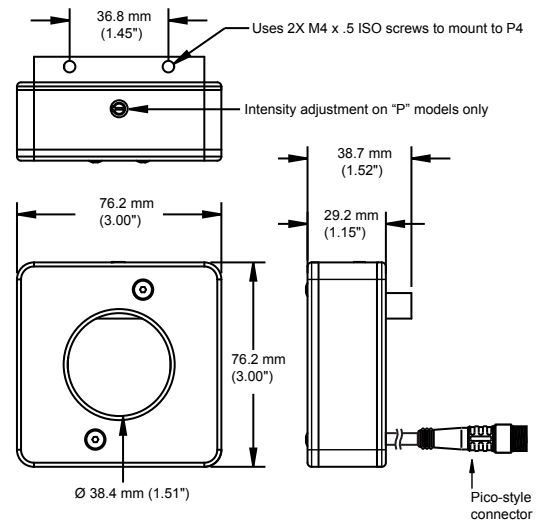
Intensity Adjustment

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.

"Q" Models



"M" Models




Quick-Disconnect (QD) Cordsets

| Style | Model | Length | Connector |
|-------------------------------------|-------------------|-----------|-----------|
| 5-Pin Threaded Euro-style, straight | MQDC20-506 | 2 m (6') | |
| | MQDC20-515 | 5 m (15') | |
| | MQDC20-530 | 9 m (30') | |

Note: These 5-wire cables can also be used on 4-pin connector lights

Accessory Brackets

| | | |
|-----------------|---|--|
| SMBPPRHI | <ul style="list-style-type: none">• Black anodized aluminum bracket• Mounts directly to PresencePLUS Pro sensor• Includes: 2 – 6-32 screws (socket drive, button head) 4 – M3 screws (socket drive, cap head) |  |
|-----------------|---|--|



Warranty: Banner Engineering Corp. will repair or replace, free of charge, any product of its manufacture found to be defective at the time it is returned to the factory during the warranty period. This warranty does not cover damage or liability for the improper application of Banner products. This warranty is in lieu of any other warranty either expressed or implied.