# LED..R..W Series Ring Lights





• Low-cost ring lights for *Presence*PLUS<sup>®</sup> Pro, ProII, and Mini Pro sensors. See Banner's Web site (*www.bannerengineering.com/iknowlighting*) for a complete lighting tutorial.

- Solid-state LED matrix; select continuous or strobed operation via sensor software.
- Direct connection to *Presence*PLUS Pro, ProII, Mini Pro, or to external power supply using 3 discrete wires
- Mounts directly to *Presence*PLUS Pro, ProII, Mini Pro sensors using included hardware

# Models

PresencePLUS Pro and Proll Sensor Models								
Model*		Color	Ambient Light Fil-	Polarizing Filter Kit				
62 x 62 mm	80 x 80 mm		ter Kit	62 x 62 mm	80 x 80 mm			
LEDIR62X62W	LEDIR80X80W	Infrared, 940 nm	FLTI	_	_			
LEDRR62X62W	LEDRR80X80W	Visible Red, 630 nm	FLTR (included with LEDRRPFK)	LEDRRPFKS	LEDRRPFK			
LEDWR62X62W	LEDWR80X80W	White, All Visible	FLTB or FLTG					
LEDBR62X62W	LEDBR80X80W	Blue, 464 to 475 nm	FLTB					
LEDGR62X62W	LEDGR80X80W	Green, 520 to 540 nm	FLTG					

\*For 9 m (30') integral cable, add suffix "W/30" to the model number (e.g., LEDIR80X80W W/30).

PresencePLUS Mini Pro Sensor Models							
Models	Color	Ambient Light Filter Kit	Polarizing Filter Kit				
62 x 62 mm			62 x 62 mm	80 x 80 mm			
LEDIRM62X62W	Infrared, 940 nm	FLTI	_	—			
LEDRRM62X62W	Visible Red, 630 nm	FLTR (included with LEDRRPFK)					
LEDWRM62X62W	White, All Visible	FLTB or FLTG	LEDRRPFKS	LEDRRPFK			
LEDBRM62X62W	Blue, 464 to 475 nm	FLTB					
LEDGRM62X62W	Green, 520 to 540 nm	FLTG					

\*For 9 m (30') integral cable, add suffix "W/30" to the model number (e.g., LEDIR80X80W W/30).



# **Specifications**

#### Supply Voltage and Current

62 x 62 Models: Infrared — 24V dc @ 100 mA max.

80 x 80 Models: 24V dc @ 250 mA max.

All other colors — 24V dc @ 130 mA max.

## Connections

PVC-jacketed 3-conductor 2 m (6.5') or 9 m (30') attached cable

## Construction

Low-carbon steel with black zinc plating, acrylic window

#### Light Source

LED, see Models table above for wave lengths

## Illumination

High-intensity ring light

## Useful Life

10,000 hours (LED ON time). When operated within specifications, output will decrease less than 30% after 10,000 hours and less than 50% (less than 40% for red and IR models) after 20,000 hours.

## **Operating Conditions**

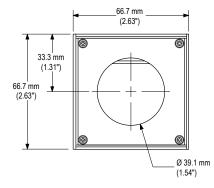
Temperature: 0° to +50° C (+32° to 122° F) Relative humidity: 90% at 50° C (non-condensing) max.

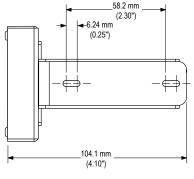
Cleaning Instructions. Regularly remove any dust, dirt, or fingerprints from the light source.

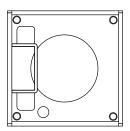
- 1. Blow off dust using anti-static compressed air.
- 2. If necessary, use a lens cloth and lens cleaner or window cleaner to wipe off remaining debris. Do not use any other chemicals for cleaning.

## Dimensions

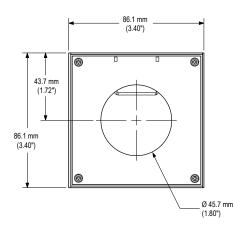
## 62 x 62 mm Models

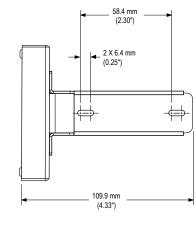


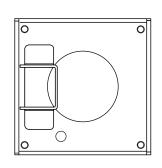




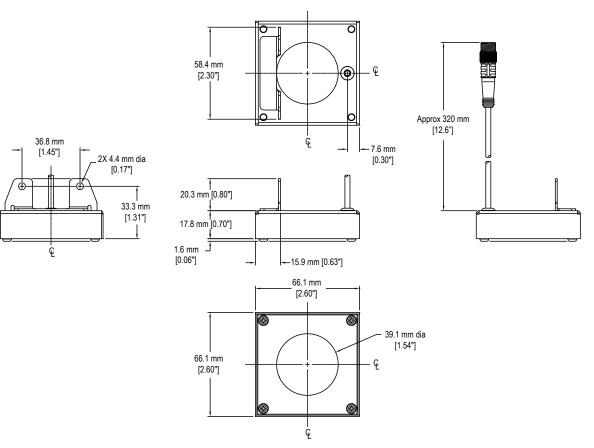
#### 80 x 80 mm Models







## Dimensions Model LEDIRM62X62W 62 x 62



# Wiring Table

Light Wire	PresencePLUS Pro Controller Ter- minal Block	External Power Supply (Stro- bed)	External Power Supply (Con- tinuous)
Brown	Pin 1 (+V*)	+V	+V
Blue	Pin 2 (–V*)	-V	-V
White	Pin 4 (strobe)	+5V dc to +24V dc OFF	_V
		–V ON	-v

\* +V = 24V dc  $\pm$  10%; -V = dc common

# Installing the Ring Light

The ring light bracket attaches to the top of the PresencePLUS Pro, Proll or Mini Pro lens block, using the hardware kit provided.



**NOTE:** Before installing this light it is recommended that an ambient light filter be installed behind the lens. The filter improves image quality by reducing unwanted ambient light.

## **Sensing Shiny Surfaces**

To eliminate direct reflections without using polarizing filters, angle the sensor approximately 15° (or more) from perpendicular to a shiny surface.

#### **Polarizing Kit**

If it is necessary to mount the camera at a 90° angle to a shiny surface, the polarizing filter kit provides filters for both the LED ring light and sensor to reduce the negative effects of strong, direct light reflections. The red filter kit (FLTR) is included with the polarizing kit. When light colors other than red are used, discard the red filter in the polarizing kit and use the proper filter (see Models tables). The polarizing filters reduce the amount of light returned to the sensor.

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