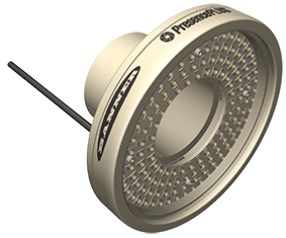
Features

LED Ring Lights for Use with PresencePLUS® Pro Sealed Sensors



Shown with cable installed; see Cordsets for options

- Rugged, waterproof housing, rated IP68
- 90 mm light diameter
- Solid-state LED matrix; continuous or strobed operation is selectable via sensor software
- Available with 316 stainless steel or nickel-plated aluminum housing and a choice of either acrylic or tempered optical glass windows
- Mounts directly to PresencePLUS® Pro washdown sensors
- LEDs directly illuminate target

IMPORTANT: Read the following instructions before operating the light. Please download the complete LEDxR90S Sealed Ring Light technical documentation, available in multiple languages, from www.bannerengineering.com for details on the proper use, applications, Warnings, and installation instructions of this device.

IMPORTANT: Lea el siguiente instructivo antes de operar el luminario. Por favor descargue desde www.bannerengineering.com toda la documentación técnica de los LEDxR90S Sealed Ring Light, disponibles en múltiples idiomas, para detalles del uso adecuado, aplicaciones, advertencias, y las instrucciones de instalación de estos dispositivos.

IMPORTANT: Lisez les instructions suivantes avant d'utiliser le luminaire. Veuillez télécharger la documentation technique complète des LEDxR90S Sealed Ring Light sur notre site www.bannerengineering.com pour les détails sur leur utilisation correcte, les applications, les notes de sécurité et les instructions de montage.

Models

Models	Window Material	LED Color	Housing	Optional Ambient Light Filter Kit	Optional Polarizing Filter Kit
LEDIR90S-P	Acrylic	Infrared, 940 nm	Nickel-plated aluminum	FLTI, included with IR lights	LEDRPFK90
LEDBR90S-P		Blue, 464 nm to 475 nm		FLTB	

For a list of discontinued models, see Discontinued Models.

Installing the Ring Light

NOTE: Before installing this product, Banner Engineering Corp. recommends installing a light filter behind the lens. The filter improves image quality by reducing unwanted ambient light. See Models table for further information.

1. Install and focus lens while holding ring light beside the sensor, illuminating the target.
2. Thread on ring light assembly until it is seated against the sensor.
3. Loosen the set screw and rotate the cable outlet to the desired position. Tighten set screw. Do not overtighten.
4. Install cable (not included, see page 3) to cable outlet.
5. Connect cable to power source.
6. Connect strobe signal output from Pro controller to strobe input wire (black) of light (optional).

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 sensor 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 polarizing filters reduce the amount of light returned to the sensor.

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128842
p/n: 128842 Rev. G

Wiring

Cable Wire	PresencePLUS Pro Controller Terminal Block	External Power Supply (Strobed)	External Power Supply (Continuous)
Brown	Pin 1 (+V[1])	+V	+V
Blue	Pin 2 (-V[1])	-V	-V
Black	Pin 4 (strobe)	+5 V DC OFF -V ON	-V

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.

Specifications

Supply Voltage and Current

Infrared: 24 V DC at 180 mA maximum

All other colors: 24 V DC at 250 mA maximum

See the electrical characteristics on the product label.

Connections

8 mm male M8 connector; accessory cable required for operation, see "Cordsets" on page 2 for options

Construction

Housing: Nickel-plated aluminum or 100% 316 stainless steel, depending on model

Window: Acrylic or tempered optical glass window, depending on model

Environmental Rating

Nickel-plated models: IP68

Stainless steel models: NEMA 4X; IP68

Operating Conditions

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

Light Source

LED, see Models table for wavelengths

Illumination

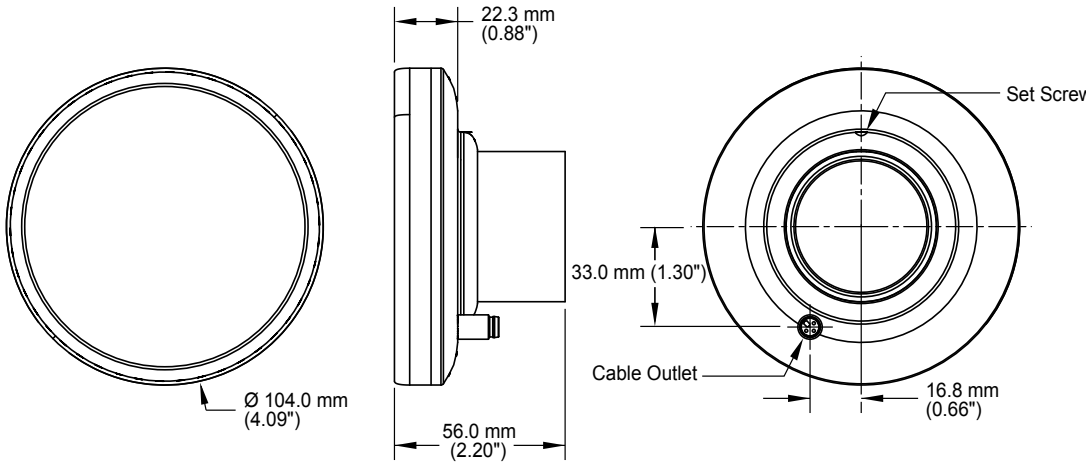
High-intensity ring light

Useful Life

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

Dimensions

All measurements are listed in millimeters [inches], unless noted otherwise. The measurements provided are subject to change.



Cordsets

Model	Length	Description	Use With
PKG3M-4	4 m (13 ft)	Female M8 (8 mm) connector at one end; flying leads at opposite end	Nickel-plated aluminum models

Continued on page 3

[1] For Banner-supplied wire.

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Continued from page 2

Model	Length	Description	Use With
PKG3M-7	7 m (23 ft)		
PKG3M-10	10 m (33 ft)		
PKGV3M-4	4 m (13 ft)	Female M8 (8 mm) 316 stainless steel connector at one end; flying leads at opposite end	Stainless steel models
PKGV3M-7	7 m (23 ft)		
PKGV3M-10	10 m (33 ft)		

Product Support and Maintenance

Discontinued Models

The following models are no longer available for order but are still covered by the information in this document.

Models		LED Color	Housing	Optional Ambient Light Filter Kit	Optional Polarizing Filter Kit
Acrylic Window	Glass Window				
—	**LEDIR90S-G**	Infrared, 940 nm	Nickel-plated aluminum	FLTI, included with IR lights	LEDRPFK90
LEDRR90S-P	**LEDRR90S-G**	Visible red, 630 nm		FLTR, included with LEDRPFK90	
LEDWR90S-P	**LEDWR90S-G**	White, all visible		FLTB or FLTG	
—	**LEDBR90S-G**	Blue, 464 nm to 475 nm		FLTB	
LEDGR90S-P	**LEDGR90S-G**	Green, 520 nm to 540 nm		FLTG	
LEDIR90SS-P	**LEDIR90SS-G**	Infrared, 940 nm	316 Stainless steel	FLTI, included with IR lights	
LEDRR90SS-P	**LEDRR90SS-G**	Visible red, 630 nm		FLTR, included with LEDRPFK90	
LEDWR90SS-P	**LEDWR90SS-G**	White, all visible		FLTB or FLTG	
LEDBR90SS-P	**LEDBR90SS-G**	Blue, 464 nm to 475 nm		FLTB	
LEDGR90SS-P	**LEDGR90SS-G**	Green, 520 nm to 540 nm		FLTG	

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For patent information, see www.bannerengineering.com/patents.

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