# EuroBrite™ Ring
## RL-S052120
S Version Combination Strobe/Continuous

## Product Highlights

- Cost-effective, feature-rich design
- Robust, sealed IP67 enclosure available
- On-board smart driver - seamless strobe or continuous
- Adaptive OverDrive - optimized power under all strobe conditions
- Thermal Foldback - optimal heat damage protection

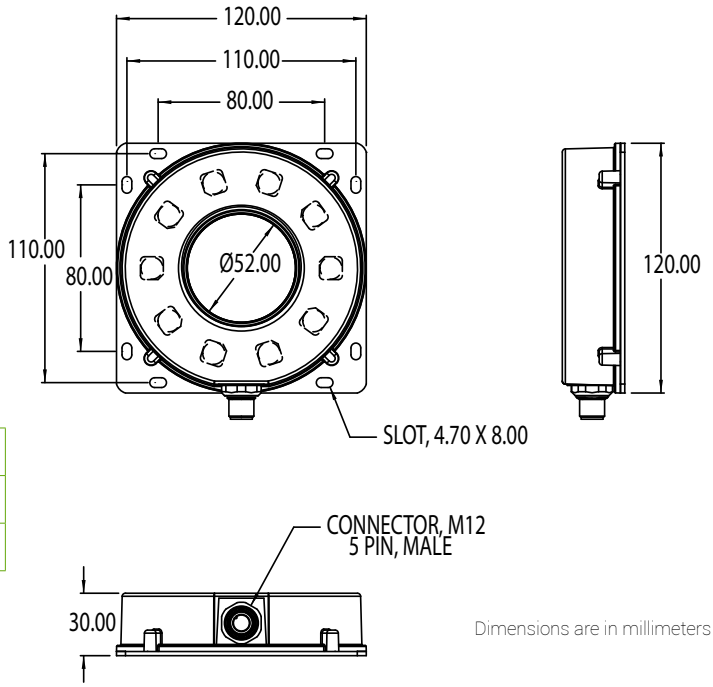
## General Specifications

| | | | |
|---|---|---|---|
| Electrical Specifications<br>Driver internal to light source inputs are tolerant to 30VDC | Color | Current | |
| | 470, WHI | 650 mA Max | |
| | 625 | 400 mA Max | |
| Input Voltage Range | 24V nom. (min 22/max 28) | | |
| Maximum Input Current | 0.42-0.49A | | |
| Strobe/On-Off Control | up to 5X overdrive, active high | | |
| Analog Intensity Control | Analog 0.7-10V; 0.7V=10% 10V=100% | | |
| Trigger-to-Pulse Latency | 10µsec | | |
| Normal Operating Temperature | 0 - 60°C | | |
| Weight (g) | 173g | | |
| Standard Cable Information | 80" (2 meters) long - jacket is 105°C rated PUC jacket, foil shield with drain. | | |
| Photobiological Risk Factor IEC 62471 | **Group 1 (Low-Risk):** No photobiological hazard under normal behavioral limitations for blue, green, red (625), and white. | | |
| Compliance | CE RoHS IEC 62471 | | |
| IP Rating | | | |
| Maximum Case Temperature | 55°C | | |
| Lumen Maintenance | L70 = 50,000 hours | | |

Released 6/5/2015
Updated 6/5/2015

# EuroBrite™ Ring
## RL-S052120

## Mechanical Specifications




| | |
|---|---|
| Length (mm) | 120 |
| Width (mm) | 120 |
| Height (mm) | 30 |

Dimensions are in millimeters

## Part Number Key

| Model | — | Control | Model Indicator | Lens Type | — | Spectral Wavelength |
|---|---|---|---|---|---|---|
| RL | — | X | XXXXXX | X | — | XXX |
| RL | | S (strobe) | 052120 | M (medium spread)<br>W (wide spread) | | 470 (blue)<br>625 (red)<br>WHI (white) |

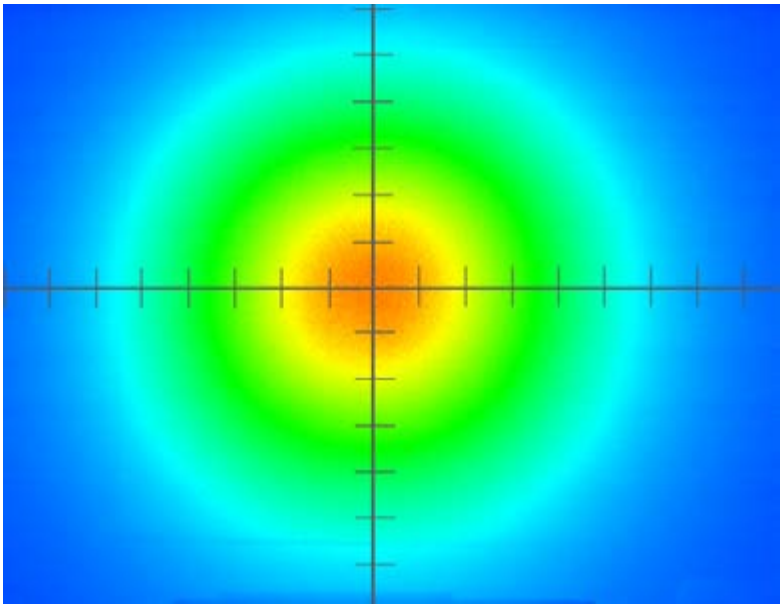
Ex: RL-S052120W-652
RL-S052120M-WHI

**Stock Product:** *shipped next day*

- RL-S052120M-470
- RL-S052120M-625
- RL-S052120M-WHI

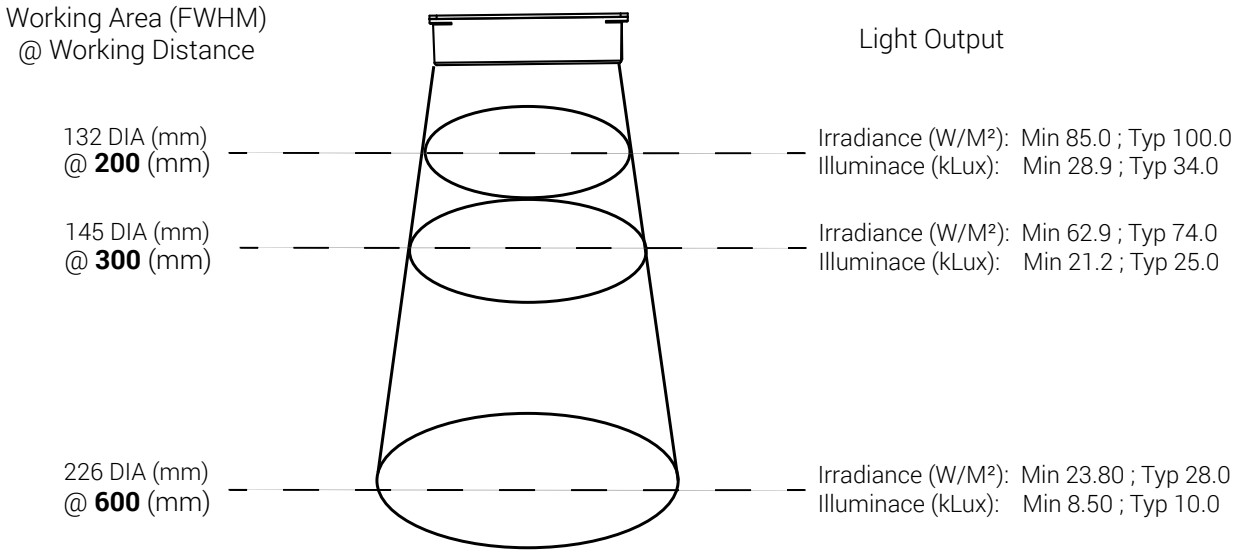
## Optical Performance

### Intensity Distribution




Optical measurement taken using RL-S052120M-WHI @ 300 mm

### Area of Illuminance & Intensity



## Operation & Wiring

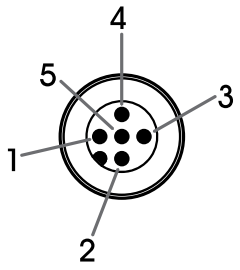
### Modes of Operation

| Continuous | Strobe | Thermal Foldback |
|---|---|---|
| To enable output:<br>Tie Trigger+ (black) HIGH to >0.5V.<br><br>The light remains ON as long as Trigger+ is HIGH.<br><br>Analog dimming is available: pin 5, gray | EuroBrite™ S-version uses Adaptive Overdrive™ to produce overdrive pulses while the trigger is HIGH.<br><br>Overdrive period occurs from 0-5msec; light output can be increased by as much as 5X.<br><br>Overdriving does not occur when pulses exceed 5msec.<br><br>Analog dimming is available: pin 5, gray | To engage Thermal Foldback:<br><br>Before turning the light on, tie pin 2 (white) to pin 3 (GND, blue).<br><br>Onboard thermistor is sampled for 5 minutes. Light intensity will automatically adjust based on the Tcase<br>during the training period.<br><br>The beginning of training is signified by a series of rapid flashes. While training, the light will blink every two seconds. A few slower blinks signal the end of the training period. |

### Standard Wiring Information

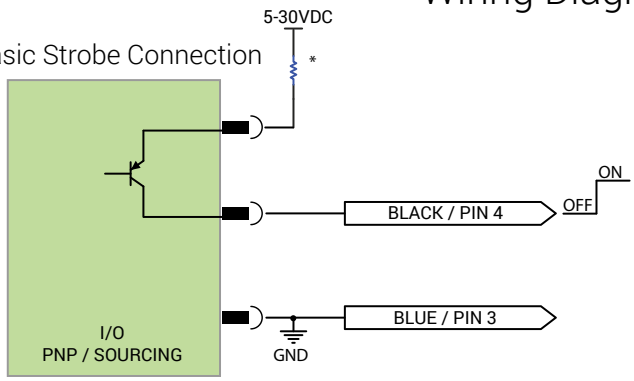
| Pin | Function | Wire Color | Type |
|---|---|---|---|
| 1 | 24VDC | Brown | Power |
| 2 | Thermal Foldback | White | Input |
| 3 | GND | Blue | Power |
| 4 | Trigger + | Black | Input |
| 5 | Analog | Gray | Input |

### Male 5-Position



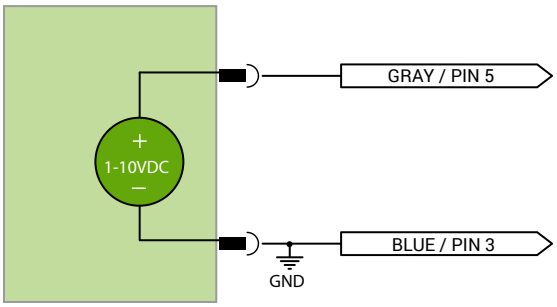

### Wiring Diagrams

Basic Strobe Connection




*External resistors may not be needed
Check documentation on I/O for recommendations and voltage limits

Analog Dimming




Analog dimming works in both strobe and continuous

## Warranty Information

Every Advanced illumination, Inc. (Ai) product is thoroughly inspected and tested before leaving the factory. Products are warranted to be free of defects in workmanship and materials for a period of two years from the original date of purchase. Should a defect develop during this period, please contact Ai Customer Service or your Ai distributor for a Return Merchandise Authorization (RMA), and return the complete product, freight prepaid, to Ai. If a defect is found, Ai will - at our discretion - repair or replace the product without charge. Ai claims no liability for any implied warranties, including "merchantability" and "fitness for a specific purpose."

## Electromagnetic Compatibility

This product was tested and complies with the regulatory requirements and limits for electromagnetic compatibility (EMC) as stated in the product specifications. These requirements and limits are designed to provide reasonable protection against harmful interference only when the product is operated in its intended industrial electromagnetic environment. To minimize the potential for electromagnetic interference or unacceptable performance degradation, install and use this product in strict accordance with the instructions in the product documentation.

## Customer Service

For information on existing orders, or to make an order adjustment, contact us Monday through Friday 8:00 am to 5:00 pm, EST or send an email to orders@advill.com.

## Company Information

**Advanced Illumination**
440 State Garage Road, Rochester VT. 05767
Phone: 802.767.3830
Fax: 802.767.3831
Email: info@advancedillumination.com
Web: advancedillumination.com