

RL-S052120 EuroBrite™ Ring Light

S Version Combination Strobe/Continuous

Product Highlights

- Cost-effective, feature-rich design
- Robust, sealed IP67 enclosure
- On-board smart driver - seamless strobe or continuous
- Adaptive Overdrive - optimized power under all strobe conditions
- Adaptive Power - factors in your light heat sink options and external temperature options to maximize performance and lifespan

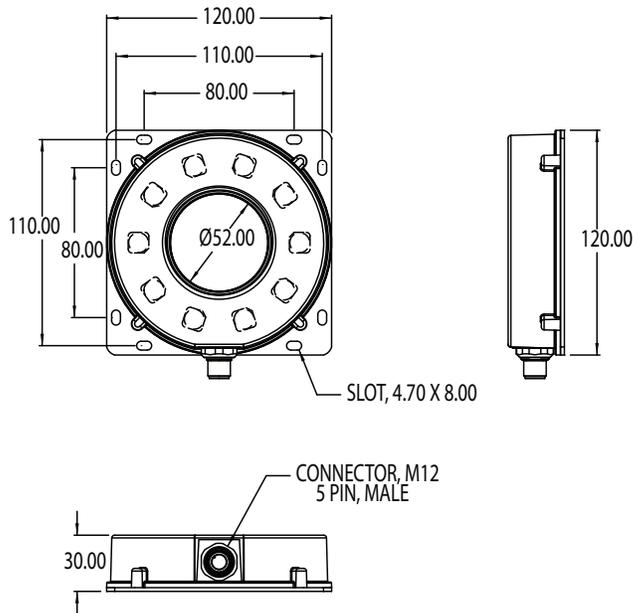


General Specifications

Electrical Specifications	Color	Current
Driver internal to light source inputs are tolerant to 30VDC	WHI 625 470	~0.54A <small>Current draw will depend on what the EuroBrite™ is trained to do. If it is attached to a heat sink, draw will be slightly higher. No heat sinking, draw will be slightly lower.</small>
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	No cable included; see part number LC.5-M12-5-FX or use standard coded 5-pin M12.	
Photobiological Risk Factor IEC 62471	Group 1 (Low-Risk): No photobiological hazard under normal behavioral limitations for 470, 625, and WHI.	
Compliance		
IP Rating	IP67	
Lumen Maintenance	L70 = 50,000 hours	

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Mechanical Specifications



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

Dimensions are in millimeters

Part Number Key

Model	—	Control	Model Indicator	Lens Option ⁴	—	Spectral Wavelength
RL	—	X	XXXXXX	X	—	XXX
RL		S (strobe)	052120	M (medium spread) W (wide spread)		470 (blue) 625 (red) WHI (white)
Ex: RL-S052120W-625 RL-S052120M-WHI					⁴ Beam angle (FWHM): M (standard) = 21° W = 32°	

Stock Product: *shipped next day*

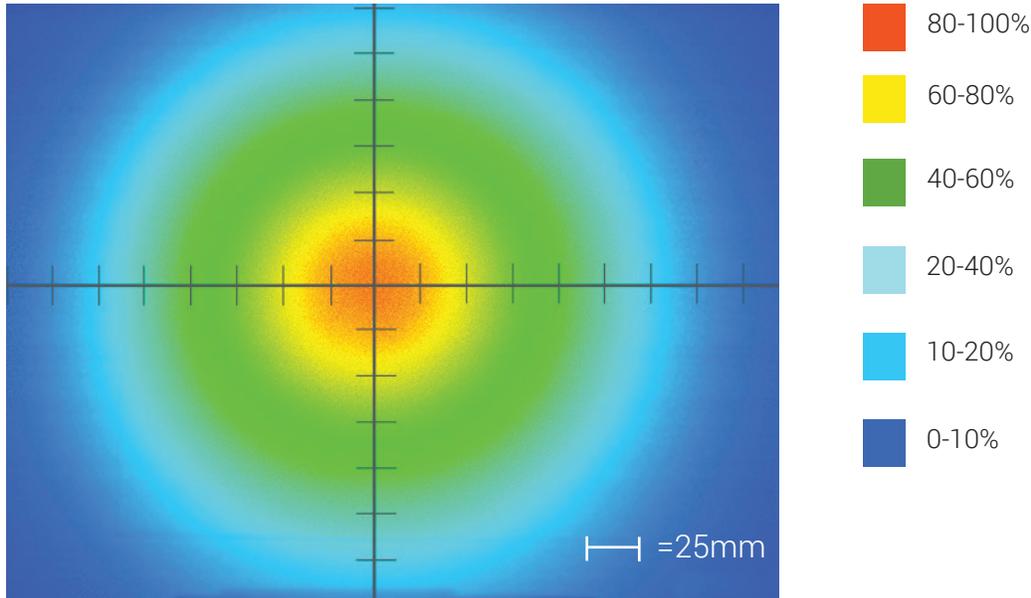
RL-S052120M-470
RL-S052120M-625
RL-S052120M-WHI

Build to Order: *shipped in two weeks*

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Optical Performance

Intensity Distribution



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

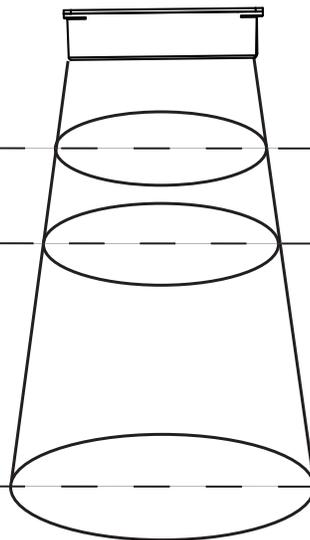
Area of Illuminance & Intensity

Working Area (FWHM)
@ Working Distance

137 DIA (mm)
@ **200** (mm)

147 DIA (mm)
@ **300** (mm)

213 DIA (mm)
@ **600** (mm)



Light Output

Irradiance (W/M²): Min 88.4 ; Typ 104
Illuminance (kLux): Min 28.3 ; Typ 33.3

Irradiance (W/M²): Min 64.3 ; Typ 75.6
Illuminance (kLux): Min 20.8 ; Typ 24.5

Irradiance (W/M²): Min 26.3 ; Typ 31.0
Illuminance (kLux): Min 8.50 ; Typ 10.0

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Operation & Wiring

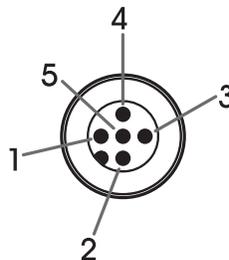
Modes of Operation

Continuous	Strobe	Thermal Foldback
<p>To enable output: Tie Trigger+ (black) HIGH to >0.5V.</p> <p>The light remains ON as long as Trigger+ is high</p> <p>Analog dimming is available: pin 5, gray</p>	<p>EuroBrite™ S-version uses Adaptive Overdrive™ to produce overdrive pulses while the trigger is HIGH.</p> <p>Overdrive period occurs from 0-5msec; light output can be increased by as much as 5X.</p> <p>Overdriving does not occur when pulses exceed 5msec.</p> <p>Analog dimming is available: pin 5, gray</p>	<p>To engage Thermal Foldback: Before turning the light on, tie pin 2 (white) to pin 3 (GND, blue).</p> <p>Onboard thermistor is sampled for 5 minutes. Light intensity will automatically adjust based on the Tcase during the training period.</p> <p>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</p>

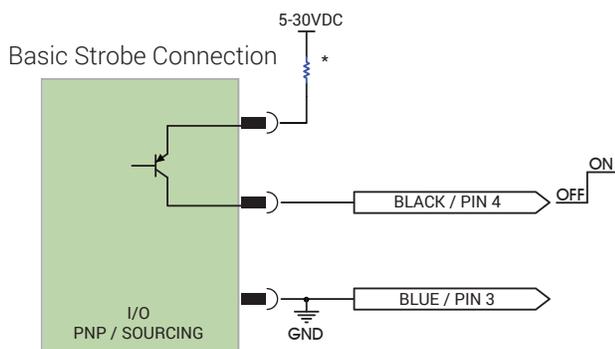
Standard Wiring Information

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

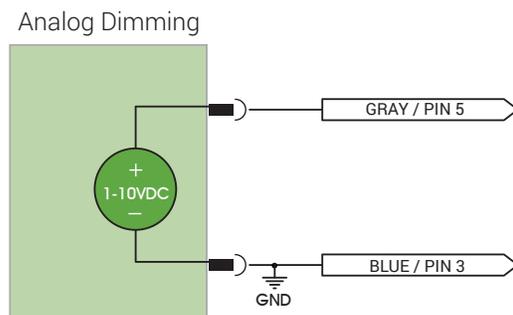
Male 5-Position



Wiring Diagrams



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



Analog dimming works in both strobe and continuous

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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

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