

### Product Highlights

- The BL2 Series provides a highly uniform and high intensity, diffuse backlight source, primarily used for creating object silhouettes of high contrast or imaging through semi-translucent materials.
- BL2 Backlights are pre-engineered for scalability, allowing for size configurations in 1" increments up to 46" in length and width.
- This Backlight series is offered in 5 wavelength options and can be configured with either a polarization or collimation film.

**NEW**



### General Specifications

	Color	24V Current	All Other Controls
Electrical Specifications	WHI	0.015A per sq. inch	0.0157A per sq. inch
	470, 530	0.015A per sq. inch	0.0086A per sq. inch
	625	0.015A per sq. inch	0.0055A per sq. inch
	850	0.015A per sq. inch	0.0079A per sq. inch
Normal Operating Temperature	0 - 60°C		
Weight	12" x 12" Unit - 2204g (77.76oz) (4.86lbs)		
Standard Cable Information	2 m long -0/+150 mm (80" -0/+6") - 105°C rated PVC jacket, foil shield with drain.		
Photobiological Risk Factor	Exempt Applicable Wavelengths: 850 Group 1 (Low-Risk) Applicable Wavelengths: 470, 530, 625, WHI		
Compliance	CE, RoHS, IEC 62471		
IP Rating	Not Rated		
Lumen Maintenance	L70 = 50,000 Hours		

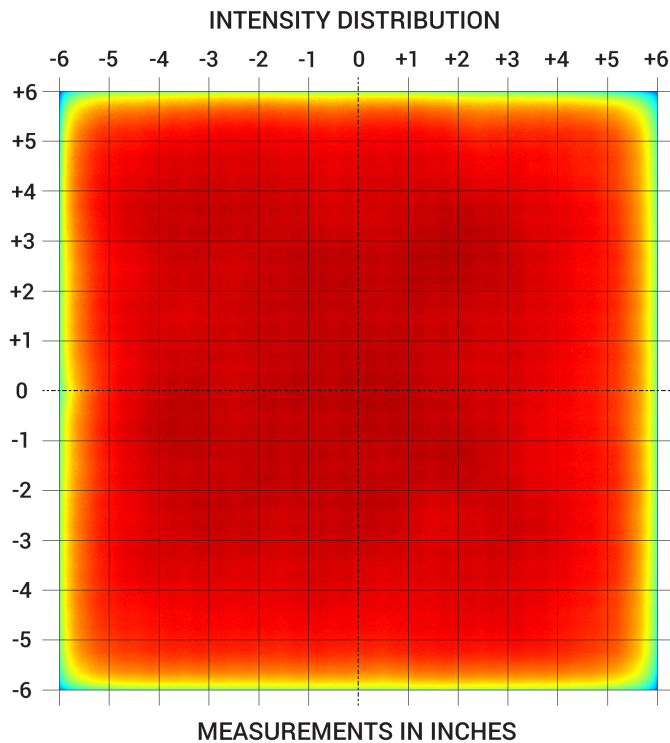
## Part Number Key

Model	-	Emitting Length (in)	Emitting Width (in)	Peak Wavelength	Connector/Control	Light Conditioning Options	-	Alternative Connector
BL2	-	XX	YY	XXX	XX	X	-	XXX
BL2		1" Increments from 1" to 46"	1" Increments from 1" to 46"	470 (blue)	C1	Polarizer <sup>2,3</sup>		M12 <sup>1</sup>
				530 (green)	C5	Collimator <sup>2</sup>		M8 <sup>1</sup>
				625 (red-orange)	IC			
				850 (IR)	I3			
				WHI (white)	I3S			
					I4			
					24			

**Example Part Numbers:**  
 BL2-1203635I3C-M12  
 BL2-0808WHI24

<sup>1</sup> Only available with IC, I3, I3S, I4 configurations  
<sup>2</sup> Only available up to 16" x 16"  
<sup>3</sup> 470nm will reduce the life of the polarizer if selected

## Optical Specs

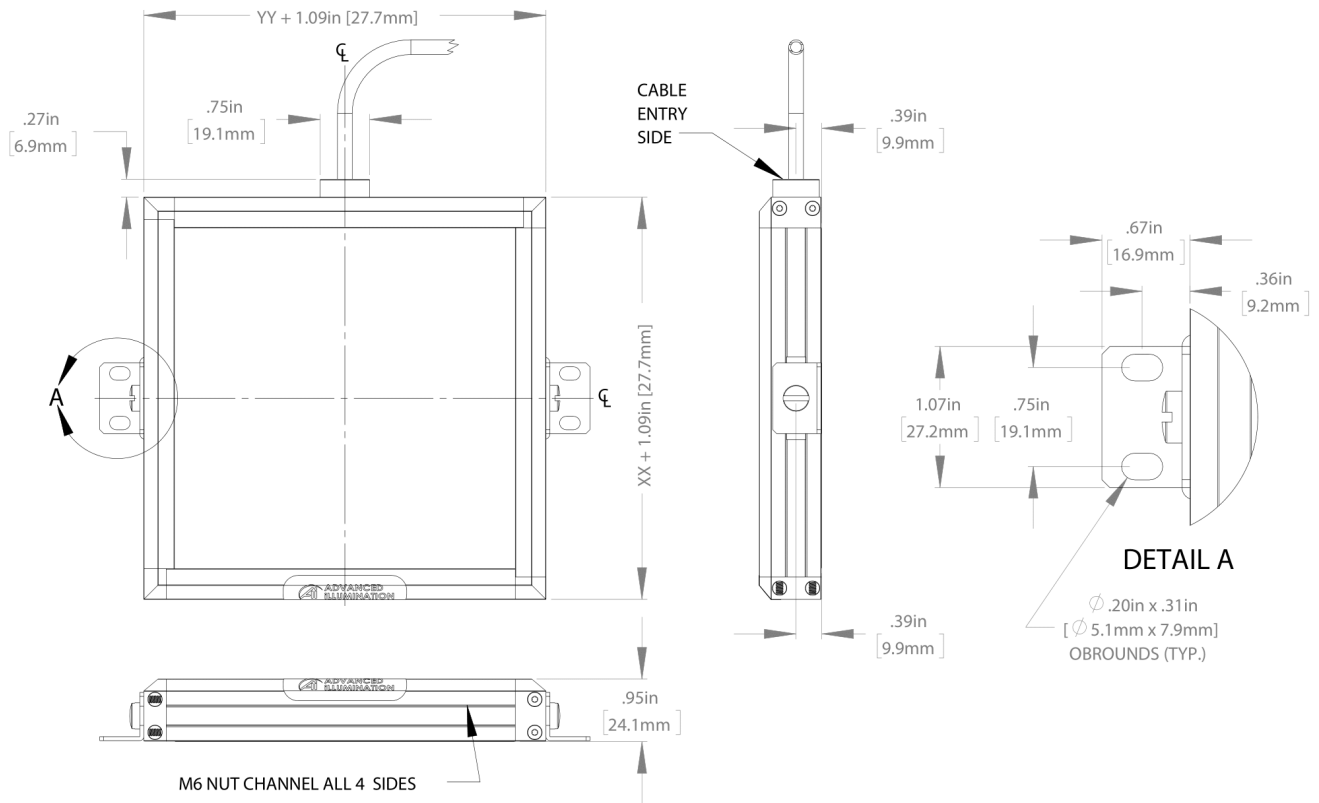


**INTENSITY LEVELS**

	100% - 80%	86.2 klx - 69.0 klx	249.2 W/m <sup>2</sup> - 199.7 W/m <sup>2</sup>
	80% - 60%	69.0 klx - 51.7 klx	199.7 W/m <sup>2</sup> - 149.5 W/m <sup>2</sup>
	60% - 40%	51.7 klx - 34.5 klx	149.5 W/m <sup>2</sup> - 99.7 W/m <sup>2</sup>
	40% - 20%	34.5 klx - 17.2 klx	99.7 W/m <sup>2</sup> - 49.8 W/m <sup>2</sup>
	20% - 0%	17.2 klx - 0.0 klx	49.8 W/m <sup>2</sup> - 0.0 W/m <sup>2</sup>

OPTICAL MEASUREMENTS TAKEN AT THE DIFFUSER SURFACE  
 USING A BL2-1212WHI24 CONFIGURATION

## Mechanical Specs

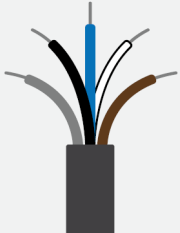


## Control Specs

<p><b>C1 CONNECTOR</b></p> <p>For use with: <b>DCS Series Controllers</b></p> <p>Strobe/Continuous Controllers</p>	<p><b>C5 CONNECTOR</b></p> <p>For use with: <b>Pulsar 320</b></p> <p>High Power Strobe only Controller</p>	<p><b>ICS 2 (IC)</b></p> <p>In-line Continuous Controller</p> <p>Powered with: <b>24V Power Supply</b></p>	<p><b>ICS 3</b></p> <p>In-line Strobe/ Continuous Controller</p> <p>Default On</p> <p>Powered with: <b>24V Power Supply</b></p>
<p><b>ICS 3S (I3S)</b></p> <p>In-line Strobe/ Continuous Controller</p> <p>Default Off</p> <p>Powered with: <b>24V Power Supply</b></p>	<p><b>I4</b></p> <p>In-line Strobe/ Continuous Controller</p> <p>Powered with: <b>24V Power Supply</b></p>	<p><b>24 VOLT</b></p> <p>Flying/Tinned Leads</p> <p>Powered with: <b>24V Power Supply</b></p>	

## Electrical Specs

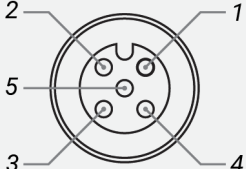
### Standard Flying Lead Functions for 24V, IC, I3, I3S, and I4 Control Options



COLOR	24V FUNCTIONS	IC FUNCTIONS	I3/I3S FUNCTIONS	I4 FUNCTIONS
BROWN	24 V DC	24 V DC	24 V DC	24 V DC
WHITE	N/A	0-10 V ANALOG DIMMING	RESERVED	NPN/ACTIVE LOW TRIGGER
BLUE	DC GND	DC GND	DC GND	DC GND
BLACK	N/A	PNP/ACTIVE LOW GATE	PNP/ACTIVE HIGH TRIGGER	PNP/ACTIVE HIGH TRIGGER
GRAY	N/A	N/A	0-10 V ANALOG DIMMING	0-10 V ANALOG DIMMING

The functions listed above are applicable when this product is configured with built-in 24V, IC, I3, I3S, or I4 control, without the optional A-coded 5-position Male M12 or A-coded 4-position Male M8 connector.

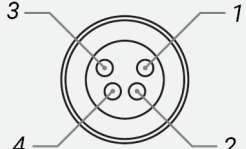
### M12 Connector Pinout Functions for 24V, IC, I3, I3S, and I4 Control Options



PIN	24V FUNCTIONS	IC FUNCTIONS	I3/I3S FUNCTIONS	I4 FUNCTIONS
1	24 V DC	24 V DC	24 V DC	24 V DC
2	N/A	0-10 V ANALOG DIMMING	RESERVED	NPN/ACTIVE LOW TRIGGER
3	DC GND	DC GND	DC GND	DC GND
4	N/A	PNP/ACTIVE LOW GATE	PNP/ACTIVE HIGH TRIGGER	PNP/ACTIVE HIGH TRIGGER
5	N/A	N/A	0-10 V ANALOG DIMMING	0-10 V ANALOG DIMMING

The functions listed above are only applicable when this product is configured with built-in 24V, IC, I3, I3S, or I4 control, with an A-coded 5-position Male M12 connector.

### M8 Connector Pinout Functions for 24V, IC, I3, I3S, and I4 Control Options



PIN	24V FUNCTIONS	IC FUNCTIONS	I3/I3S FUNCTIONS	I4 FUNCTIONS
1	24 V DC	24 V DC	24 V DC	24 V DC
2	N/A	0-10 V ANALOG DIMMING	0-10 V ANALOG DIMMING	0-10 V ANALOG DIMMING
3	DC GND	DC GND	DC GND	DC GND
4	N/A	PNP/ACTIVE LOW GATE	PNP/ACTIVE HIGH TRIGGER	PNP/ACTIVE HIGH TRIGGER

The functions listed above are only applicable when this product is configured with built-in 24V, IC, I3, I3S, or I4 control, with an A-coded 4-position Male M8 connector.

For details on operating configurations without built-in control (C1, C5, Q1, and Q4 control, when available), please refer to Advanced illumination's controller manuals.

## 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 FIVE YEARS from the original date of purchase. Should a defect develop during this period, customers may return the complete product, freight prepaid, to one of Ai's distributors or to the Ai factory. All product warranty returns require a Return Merchandise Authorization (RMA) number which is obtained from Customer Service. The RMA number must be clearly marked on the outside of the package. Ai will inspect the unit, and if a defect is found will, at our option, repair or replace the product without charge. Ai disclaims liability for any implied warranties, including implied warranties of "merchantability" and "fitness for a specific purpose." For products under warranty that have since been discontinued, Ai will make an effort to replace with equivalent parts; for circumstances that do not allow for equivalent replacement, Ai reserves the right to repair or replace these products with an updated version. Ai cannot be held responsible for the unauthorized or inappropriate use of its products. Any unauthorized repair or modifications will result in a voided warranty.

No Liability for Consequential Damages: In no event shall Ai be liable for any consequential, special, incidental, or indirect damages of any kind arising from the sale or use of the products.

## 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 ET or send an email to [orders@advancedillumination.com](mailto:orders@advancedillumination.com).

## Company Information

### **Advanced Illumination**

440 State Garage Road, Rochester, VT 05767

Phone: 802.767.3830

Fax: 802.767.2636

Email: [info@advancedillumination.com](mailto:info@advancedillumination.com)

Web: [advancedillumination.com](http://advancedillumination.com)

© 2021 Advanced illumination Inc. All rights reserved