



High Intensity Back-lit Backlights

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 0.00		0.0055A per sq. inch			
	850	0.015A per sq. inch	0.0079A per sq. inch			
Normal Operating Tempurature	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					

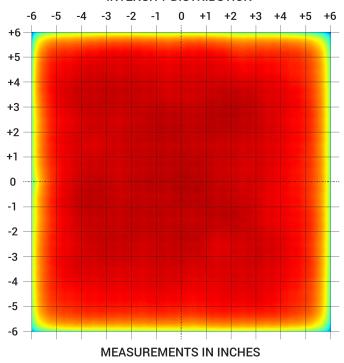
Part Number Key

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 ^{2,3}		M12 ¹
				530 (green)	C5	Collimater ²		M8 ¹
				625 (red-orange)	IC			
				850 (IR)	13			
				WHI (white)	I3S			
					14			
					24			

Example Part Numbers: BL2-120363513C-M12 BL2-0808WHI24 1 Only available with IC, I3, I3S, I4 configurations 2 Only available up to 16" x 16" 3 470nm will reduce the life of the polarizer if selected

Optical Specs

INTENSITY DISTRIBUTION

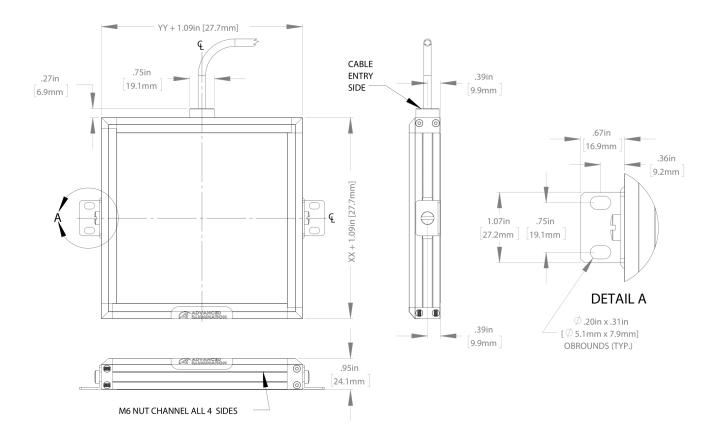


INTENSITY LEVELS

100% - 80%	86.2 klx - 69.0 klx	249.2 W/m² - 199.7 W/m²
80% - 60%	69.0 klx - 51.7 klx	199.7 W/m² - 149.5 W/m²
60% - 40%	51.7 klx - 34.5 klx	149.5 W/m² - 99.7 W/m²
40% - 20%	34.5 klx - 17.2 klx	99.7 W/m² - 49.8 W/m²
20% - 0%	17.2 klx - 0.0 klx	49.8 W/m² - 0.0 W/m²

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

Mechanical Specs



Control Specs

C1 CONNECTOR

For use with: DCS Series Controllers

Strobe/Continuous Controllers

C5 CONNECTOR

For use with: Pulsar 320

High Power Strobe only Controller

ICS 2 (IC)

In-line Continuous Controller

Powered with: **24V Power Supply**

ICS₃

In-line Strobe/ Continuous Controller

Default On

Powered with: **24V Power Supply**

ICS 3S (I3S)

In-line Strobe/ Continuous Controller

Default Off

Powered with: **24V Power Supply**

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In-line Strobe/ Continuous Controller

Powered with: **24V Power Supply**

24 VOLT

Flying/Tinned Leads

Powered with: **24V Power Supply**

COLOR **24V FUNCTIONS** IC FUNCTIONS 13/13S FUNCTIONS **14 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 N/A N/A 0-10 V ANALOG DIMMING 0-10 V ANALOG DIMMING

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

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	13/13S FUNCTIONS	14 FUNCTIONS
5 0 0 0	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

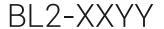
The functions listed above are only applicable when this product is configured with built-in 24V, IC, I3, I3S, or I4 control, with an A-coded 5-position Male M12 connector.

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

3 - 1	PIN	24V FUNCTIONS	IC FUNCTIONS	13/13S FUNCTIONS	14 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.

Company Information

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