

Product Highlights

- The fourth generation of Ai's popular Inline Control System.
- High Output Power: Capable of delivering 2.1 amps of continuous output and up to 8 amps in overdrive strobe at 24V, outperforming all other inline controllers on the market.
- Compact & Rugged: Sleek enough to fit through wiring conduit with its compact anodized aluminum housing and sealed to IP68 standards for prolonged liquid immersion and complete dust protection.
- Plug-and-Play Functionality: Enabled with SignaTech™, allowing for simplicity when overdriving, without risk of damage to the lighthouse.



General Specifications

Controller Style	Inline Control System (Cable Inline, Permanently Affixed)
Operating Modes	Pulse (Overdrive Strobe), Gated Continuous, Continuous
Input Connection	Flying Tinned Leads or Optional A-coded 5-pin Male M12 Connector
Input Supply Requirements	24V DC Nominal, 2.1A Recommended 21V Min - 30V Max; Power Inputs Reverse-Polarity Protected
Output Channels	1 Inline Channel
Output Power	Continuous: 50W Max* Pulsed: 150W Peak Max*
Output Current	Continuous: 2.1A Max* Pulsed: 8A Max* (Load Dependent)
Output Voltage	Vin - 1V

Trigger Signal	NPN, Active Low, TTL Compatible PNP, Active High, TTL Compatible 2.5V Min - 30V Max, <=5mA
Trigger Protection	Protected up to 30V;
Trigger Delay	20 $\mu$ s + 10us LED rise-time
Trigger Frequency Limit	2KHz *Requires Duty Cycle <= 1% beyond 1KHz
Trigger Interaction	Default OFF - PNP pull HIGH to enable, NPN pull LOW to enable
Pulse Width Range	30 $\mu$ s - ?
Duty Cycle Range	<5% up to 5ms <10% up to 10ms >= 10% past 10ms
Analog Dimming	0V - 10V (0% - 100%); <=5mA
Operating Temperature Range	0°C to +60 °C
Storage Temperature Range	-25°C to +85 °C
IP Rating	IP68
Dimensions	3.9" x 0.65 DIA (99.06mm x 20.6mm DIA)
Weight	Approx. 0.106lb (48g)
Mounting	N/A (Inline)
Case Material	Aluminum
Warranty	5 Years
Compliance	CE, RoHS
	*Values shown are based on controller component limitations. Actual limitations will vary depending on the limits set for the connected light head. These limits are hardcoded into each in-line controller to prevent LED failure from occurring when driven beyond the light's acceptable range.

Please refer to the User Manual for complete specifications.

Mechanical Specs



Control Specs

Standard Flying Lead Functions

COLOR	I4 FUNCTIONS
BROWN	24 V DC
WHITE	NPN/ACTIVE LOW TRIGGER
BLUE	DC GND
BLACK	PNP/ACTIVE HIGH TRIGGER
GRAY	0-10 V ANALOG DIMMING

M12 Connector Pinout Functions

PIN	I4 FUNCTIONS
1	24 V DC
2	NPN/ACTIVE LOW TRIGGER
3	DC GND
4	PNP/ACTIVE HIGH TRIGGER
5	0-10 V ANALOG DIMMING

M8 Connector Pinout Functions

PIN	I4 FUNCTIONS
1	24 V DC
2	0-10 V ANALOG DIMMING
3	DC GND
4	PNP/ACTIVE HIGH TRIGGER

For complete specifications, please refer to the I4 User Manual.

## 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