ICS 2 Inline Controller

Continuous Only Operation

Product Highlights

- Fast response time - 30µS gating time
- Wash down version available
- 0 - 100% Intensity Control with optional DCS-MP, purchased separately, will provide manual intensity control via an external potentiometer
- ICS provides optimum current drive to a light head assembly, replacing external current driver units
- Intensity control is is also achieved via a 0-10 volts input. This adjusts the controller between 0%-100%
- DC gate control input is available to enable/disable the ICS output, thereby turning the light on and off
- The ICS unit employs reverse input polarity protection.

Shown with the SL191

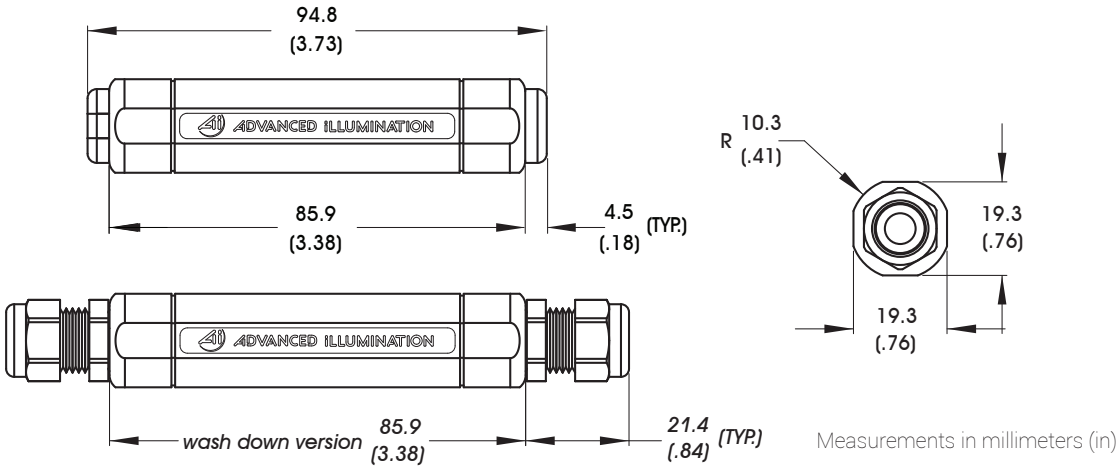
Electrical Specifications

Input Voltage Range	+21 to 30 volts dc (24V nom)
Maximum Input Current	2.0 A
Gating Control Active High (GHI) and Active Low	GHI Turn On Voltage = 4.2v / Input Tolerant to -10 to +24 vdc Analog 0-10V: White 0V =0%, 10V=100%. Note: Can also be used as an active LOW gate input
Gating Time	30µs +/- 10µs
Weight	Approx 1.7 oz (cable not included)
Housing Material	High Impact Polycarbonate
Maximum Ambient Operating Temperature	0 to +70C
Storage Temperature	-40 to +125C

Released 7/15/2015
Updated 5/22/2017

ICS 2 Inline Controller

Mechanical Specifications



Measurements in millimeters (in)

The ICS is not detachable. Standard location is 254mm (10") from the light head. Standard cable length (include the ICS) is 1.5m (59")

Connection and Wiring Information

3-in-1 Dimming Modes

Reference resistance value for output current adjustment (typical)
Example Shown

Resistance Value	<100KΩ	100KΩ	200KΩ	300KΩ	400KΩ	500KΩ	600KΩ	700KΩ	800KΩ	900KΩ	1MΩ
Percentage of Rated Current	0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%

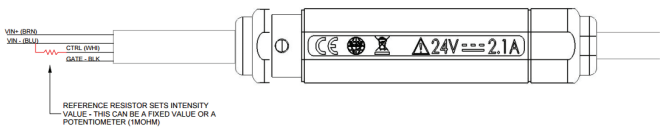
1 ~ 10V dimming function for output current adjustment (typical)
1-10V Fed Directly to CTRL wire

Dimming Value	0V	1V	2V	3V	4V	5V	6V	7V	8V	9V	10V
Percentage of Rated Current	0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%

10V PWM signmar for output current adjustment (typical): Frequency range 100Hz ~3KHz
PWM Fed Directly to CTRL wire

DutyValue	0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
Percentage of Rated Current	0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%

NOTE: When using the PWM dimming method, the device does not provide any filtering of the PWM signal. This means the PWM frequency could potentially be seen by high speed cameras and/or cameras with short exposure periods.



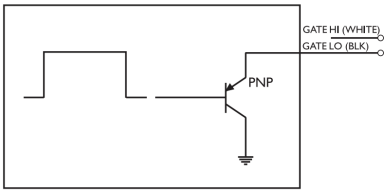
Using the built-in dimming function, a fixed (or variable resistor/potentiometer) can be used to dim the unit at various leves of intensity.

Connection and Wiring Information

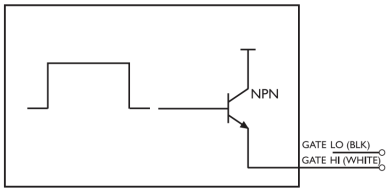
ICS 2 (IC)

Pin (M12)	Function	Wire Color
1	+24 VDC	Brown
2	0-10 VDC Analog Control	White
3	DCGND	Blue
4	GLO	Black

ICS Connection and Wiring Diagrams

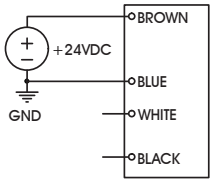


PNP -- Sinking Output

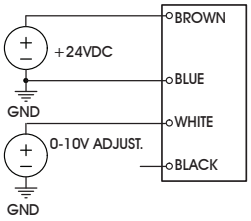


NPN -- Sourcing Output

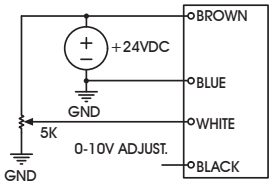
STANDARD OPERATION
LIGHT IS ALWAYS ON



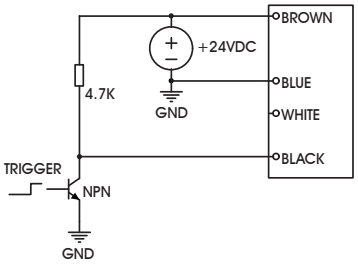
0-10V ANALOG CONTROL
LINEAR OUTPUT ADJUST



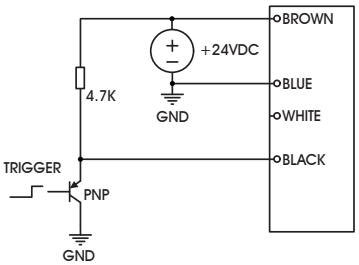
0-10V ANALOG CONTROL
LINEAR OUTPUT ADJUST WITH EXTERNAL POTENTIOMETER



ACTIVE LOW GATE
LOW TRIGGER SHUTS LIGHT OFF



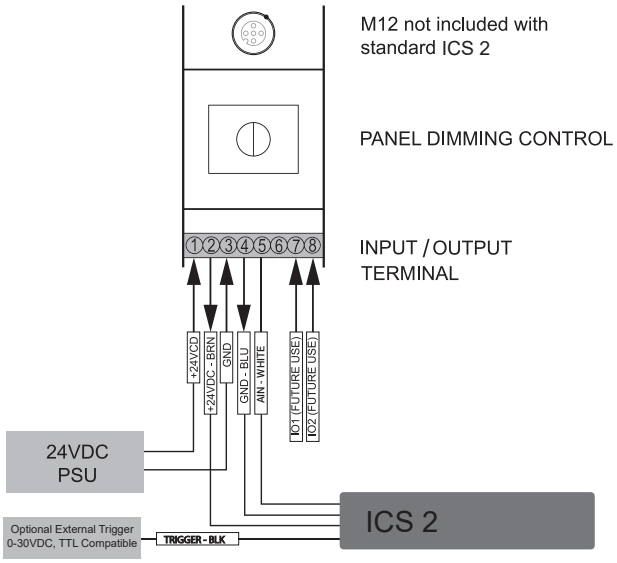
ACTIVE HIGH GATE
HIGH TRIGGER SHUTS LIGHT OFF



Wiring Diagrams for Optional Manual Intensity Control

DCS-MP Manual Dimming Control Wiring Diagram for ICS 2

- All ICS 2 connections must only be made at the input/output terminal via flying leads.
- The DCS-MP is compatible only with lights built with the ICS 2 or ICS 3 wiring option after 3/1/2012. It cannot be used with 24v voltage drive lights, or the ICS 1.0.



IC-M12

Please note that IC-M12 ordering option is not directly compatible with DCS-MP control due to the different pin assignments between ICS 2 and ICS 3. In order to use an IC-M12 with the DCS-MP, you must remove the M12 connector and wire the flying leads to the input/output terminal as shown. It is also possible, however to replace the molded IC-M12 with a field-wireable 5-pin male M12 – please contact Ai for more detail and proper pin assignments.

Part Number Key

Model	—	Controller	Connector/ Control	—	Optional Connector
SL185	—	XXX	XX	—	XXX
SL185		WHI	IC		M12

Example light part number for IC lighting controller: SL185-WHIIC

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 ET or send an email to orders@advill.com.

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