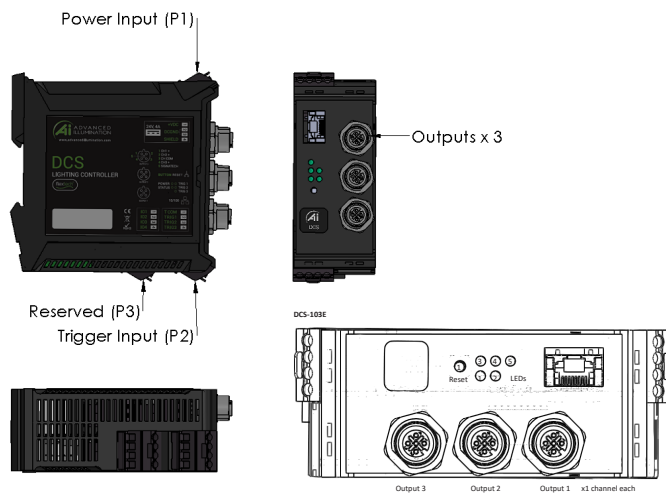


### Product Highlights

- High power in a compact package; a slim design at 115 x 121mm and only 45mm wide
- Three Independent Outputs
- 1-Independent Channel within each output
- Up to 90W output power, 30W per output
- GUI, WebServer & Command Line Tools
- Software SDKs including: LabView, C++, C# and more
- **For pulse widths greater than 100  $\mu$ sec (10  $\mu$ sec resolution)**
- **Overdrive currents in strobe mode limited to 5-10x**



### Mechanical Specifications



Length mm (in)	121.76 (4.79)
Width mm (in)	45.36 (1.79)
Height mm (in)	115.10 (4.53)
Weight	294.83g
Operating Temp.	-25 to 57°C
Compliance	CE, RoHS

### Electrical Specifications

Input Voltage Range	24V nom.
Maximum Input Current	4.5A
Output Power	30W per output
Modes	Pulsed, Continuous, Gated Continuous
Trigger-to-Pulse Latency	10 $\mu$ sec
Trigger	5-30VDC, 2KHz, Opto-Isolated inputs
Pulse-Width Range (Pulsed)	10 $\mu$ sec – 65msec
Programmable Pulse-Delay	1 $\mu$ sec-10msec
Duty Cycle	10% pulsed / >10% gated-continuous

<sup>1</sup> SignaTech® limited, duty cycle dependent

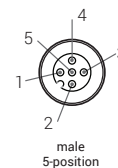
## Cable Description

The DCS-103E controller is only compatible with lights employing a "C1" connector.

### Cable Specifications:

B-Coded  
 PVC Jacket  
 Foil Shield + Drain Wire  
 5.7mm (0.225") outer diameter

Optional M12 Pinout



## Wiring Information

### Standard Wiring Information

Pin	Channel	Wire Color	Type
1	Channel 1 (+)	Brown	Power
2	Channel 2 (+)	White	Input
3	Channel (-)	Blue	Power
4	Channel 3 (+)	Black	Input
5 <sup>1</sup>	SignaTech <sup>®</sup>	Gray	Input

<sup>1</sup> Do NOT connect anything to pin 5 – damage to internal electronics may occur if pin 5 is used for anything other than SignaTech<sup>®</sup> protection.

- Trigger Inputs are bi-directional opto-isolated.
- Common may be tied to +V or GROUND depending on whether sinking or sourcing is to be used.
- All inputs are TTL-compliant, and are rated to +30VDC.
- Inputs are clamped and protected against overvoltage.

### Power Input

Pin	Function	Notes
1	24V DC	4.5A recommended minimum for best performance
2	DC GND	
3	DC GND	
4	SHIELD	Optional: Tied to chassis copper for ESD/EMI protection. Tie to earth ground if needed.

### External Trigger Input (top connector)

Pin	Function	Notes
1	COMMON	Connect to common ground of supply voltage based on sinking/sourcing requirements. All triggers share common.
2	TRIGGER 1	5-30VDC tolerant
3	TRIGGER 2	--
4	TRIGGER 3	--

## Part Number Key

Model	—	Controller	Connection Type
DCS	—	XXX	X
DCS	—	103	E
Example light part number for DCS lighting controller: <b>AL295-150WHIC1</b>			



DCS-100E and DCS-103E Shown

## Additional Information

This is **flextech™** enabled with the following software:

### SignaTech®

The proprietary SignaTech® (**Signature Technology**) control system allows an LED illuminator to operate at maximum output without risk of damage.

A microprocessor-based controller reads a SignaTech® memory chip, specifically programmed for each illuminator, in order to establish maximum operating parameters. The memory chip, located in the light-head cable, is preprogrammed with details about the illuminator's circuit design as well as specific LED characteristics.

## 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](mailto:orders@advill.com).

## Company Information

### **Advanced Illumination**

440 State Garage Road, Rochester VT. 05767

Phone: 802.767.3830

Fax: 802.767.3831

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

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

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