LL137 Expandable Series

High Power Line Lights

Expandable

Product Highlights

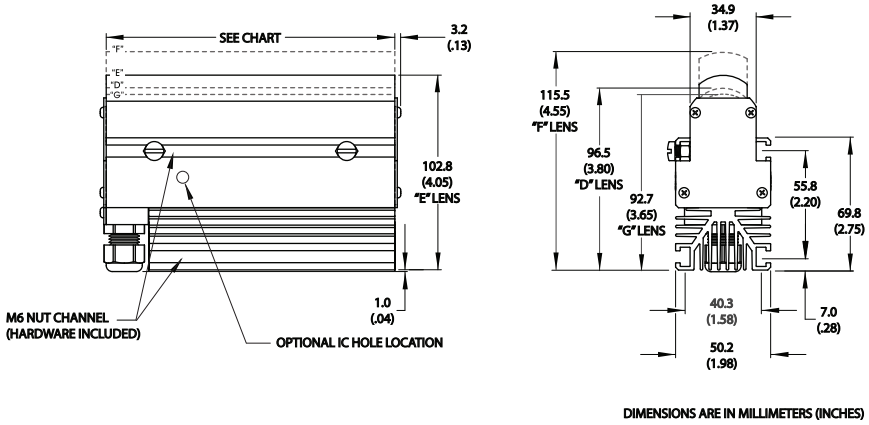
- 3″ (72mm) model available
- Passively cooled design in 6″ increments; Lengths from 6″ to 96″
- Perfect for line scanning applications. 200,000 Lux @ 3″; 50,000 hours life
- Intensity control of entire light via 0 - 10v input

General Specifications

Electrical Specifications	Color	24v Current	All Other Controls
	880	0.25 A per 3 inches	0.25 A Max per 3 inches
	625	0.32 A per 3 inches	0.32 A Max per 3 inches
	455, 520, WHI	0.375 A per 3 inches	0.375 A Max per 3 inches
Normal Operating Temperature	0 - 60°C		
Weight (g)	Varies by size		
Standard Cable Information	Up to 2 meters (80″) long - 105°C rated PVC jacket, foil shield with drain.		
Photobiological Risk Factor IEC 62471	**Exempt Applicable Wavelengths:** 880 **Group 1 (Low-Risk) Applicable Wavelengths:** 470, 520, 625, WHI, RGB		
Compliance	CE RoHS IEC 62471		
IP Rating	IP65 Sealed, IP50 Unsealed		
Lumen Maintenance	L70 = 50,000 hours		

Released 7/15/2015
Updated 6/8/2016

Mechanical Specifications



DIMENSIONS ARE IN MILLIMETERS (INCHES)

Part #	Length in mm (inches)	
LL137X03	76	(3)
LL137X06	152	(6)
LL137X12	305	(12)
LL137X18	457	(18)
LL137X24	610	(24)
LL137X30	762	(30)
LL137X36	914	(36)
LL137X42	1067	(42)

6" Increments up to a max of 96" with the exception of a 3" length model

"X" refers to the lens type: D,E,F,G

Part Number Key

Model	Lens Type	Lighted Length	—	Spectral Wavelength	Connector/ Control
LL137	X	XX	—	XXX	XX
LL137	D E F G	3" model available as well as 6" increments up to 96"		(blue) 455 (green) 530 (red) 625 (infra-red) 850 (all colors) RGB [2] (white) WHI	C1 IC [1] 24v

Ex: LL137E12-455C1
LL137G24-625IC

[1] IC option (see page 4 for detail) not available with 3" model

Lens	Working Distance	Beam Width
D	50mm (2")	3mm (.13")
E	75mm (3")	5mm (.18")
F	150mm (6")	8mm (.3")
G	300mm (12")	20mm (.8")
	600mm (24")	38mm (1.5")
	900mm (36")	56mm (2.2")
	1200mm (48")	74mm (2.9")

Stock Product: *shipped next day*
LL137E12-WHI24

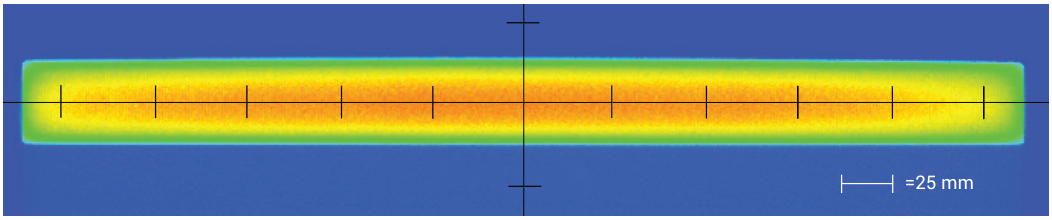
Build to Order: *shipped within two weeks*

Connector | Control Options

C1 Connector	IC	24
For use with: DCS Series Controllers	Please see page 4 for IC information	Flying/tinned leads *Powered with:* 24V power supply

Optical Performance

Intensity Distribution



Optical measurement taken using LL137E12-WHI24

80-100% 60-80% 40-60% 20-40% 10-20% 0-10%

Area of Illuminance & Intensity

Working Area (FWHM)
@ Working Distance

297 X 17.8 (mm)
@**surface**

Light Output

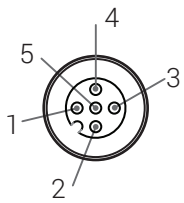
Irradiance (W/M²): Min 117.3; Typ 1380
Illuminance (kLux): Min 433.5 ; Typ 510

Operation and Wiring

24 Volt

Pin (M12)	Function	Wire Color
1	+24 VDC	Brown
2	N/A	White
3	GND	Blue
4	N/A	Black

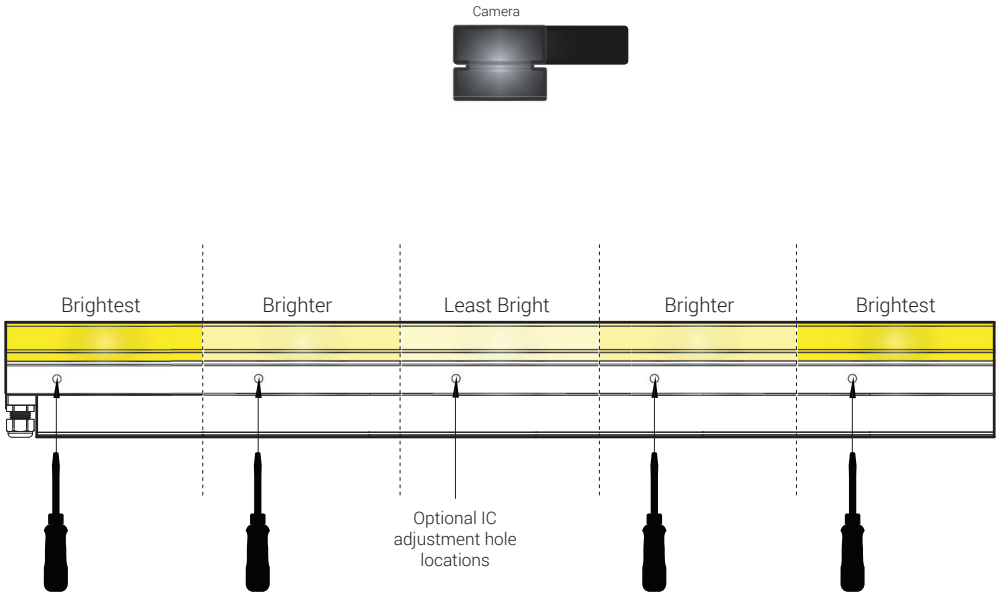
Optional M12 Pinout



male
5-position

IC Control

The IC option allows for control of intensity on each 6" (152mm) section of BL138, BL168, LL137 and LL167 **only**. Fig. 1 shows 5 segments of 6" (152mm) BL138 with IC adjustment holes.



(fig. 1)

Controlling each 6" (152mm) section independently and making the center of the line less bright and the outside of the immediate camera viewing radius brighter ultimately results in better imaging.

Better imaging occurs because the camera can see very well in it's area of focus, but outside that area the camera doesn't focus as well without brighter illumination.

Ai recommends using IC adjustment holes for aforementioned lights over 24" (610mm) long.

All other lighting products that have an IC option have the IC control located on the cable. (see fig. 2)

Standard IC control on all other lighting products (built into cable)

(fig. 2)

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, EST or send an email to 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

Web: advancedillumination.com