

# MetaBright™ Collimated Tube Backlight

Model#: MB-CBL-41



- Collimated spot size of 1.5"
- Compact housing for application integration (5.2" min length, 1.9" max diameter)
- Optional mounting clip available
- Multiple wavelength options
- 24V power supply (no special controller required)
- DC & Strobe version available
- DC version have 0 ~ 10V intensity control
- Ideal for producing high contrast silhouette images for edge detection & high accuracy measurement

Part #	Color	Power Supply	Specifications:
MB-CBL-41-W-24	White 6000 K	24 volt power supply available upon request.	Current Consumption 0.18A @24VDC
MB-CBL-41-R-24	Red 630nm		Finish Powder Coated Black
MB-CBL-41-B-24	Blue 455nm		Intensity Uniformity +/-5%
MB-CBL-41-G-24	Green 530nm		Weight 0.2lbs / 0.09kg
MB-CBL-41-IRN-24	Infrared 850nm		Operating Temperature 120° F Max
MB-CBL-41-IRL-24	Infrared 880nm		Compliance CE/RoHS
MB-CBL-41-UVL-24	UV 395nm		Lifetime Hours 75,000 Hours
MB-CBL-41-UVS-24	UV 365nm		Illuminance 5,000 lux / 62 Lumens

10 ft. flying leads come standard on all products.  
Light features built-in constant current driver.  
No expensive controller required, simply provide 24VDC.  
0~10VDC intensity input.

Active Area	Dimensions
1.5in 38.1mm	5.18in x 1.90in 131.57mm x 48.26mm

### Contact Us:

Contact your Metaphase Technologies Representative for options including: Diffuser Choice, Polarizer & Light Control Film, Specific Intensity & Uniformity, & Wavelength.

### ORDERING INFORMATION:

• M B - C B L - 4 1 -  - 2 4 -

**W** White 5500k  
**R** Red 630nm  
**G** Green 530nm  
**B** Blue 455 nm  
**IRL** Infrared 880nm  
**UVL** (long) 395nm  
**UVS** (short) 365nm

**\*BLANK**  
**T**  
**ILD**  
**ILS**

10 ft. Flying Leads  
M12 Quick Disconnect  
In Line Dimmer  
In Line Strobe (customer provide trigger info)

**Pyramid Imaging**

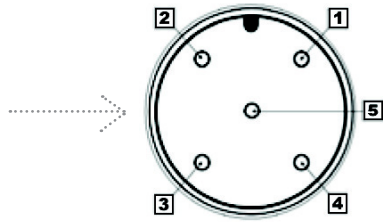
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## M12 Connector

PIN #	Function
1	+24VDC
2	0-10VDC Intensity Control
3	Ground
4	Signal Ground

24 AWG 4 WIRES CABLE X 1  
 When not using intensity control, connect 0-10V control line to +24 (Max Intensity Control = 25V) and intensity control ground to ground

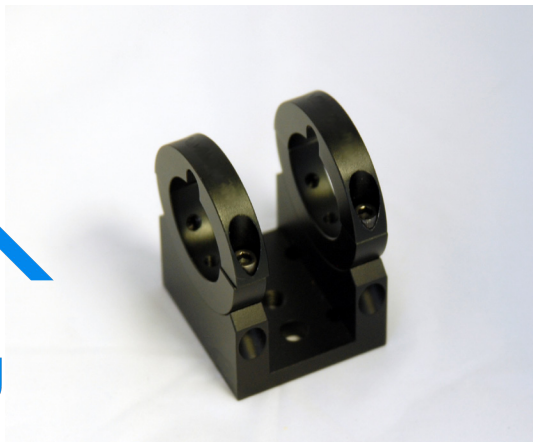
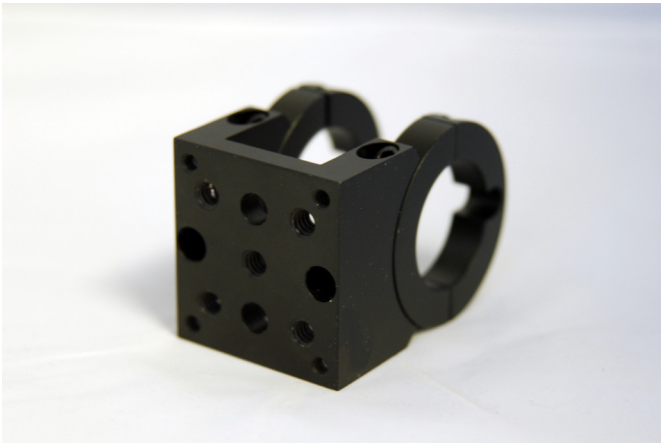


## Wiring Diagram

Flying Leads	Function
RED	+24VDC
BLACK	Ground
WHITE	+24VDC
GREEN	Ground

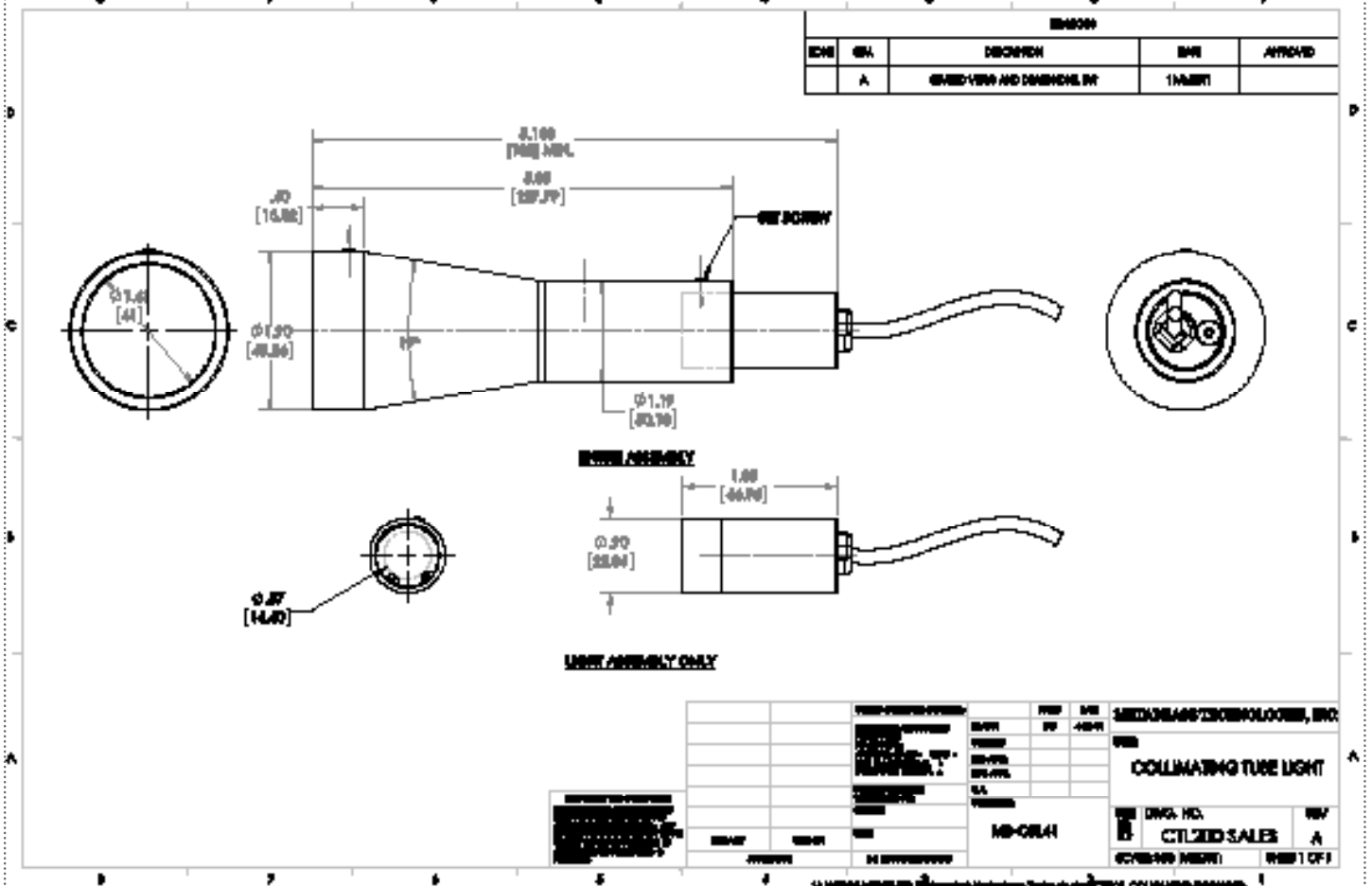
24 AWG 4 WIRES CABLE X 1  
 When not using intensity control, connect 0-10V control line to +24 (Max Intensity Control = 25V) and intensity control ground to ground

## Mounting Bracket (Optional): BRA-CBL-41



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Drawing/Diagram



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