

# BL MetaBright™ Back Light

## Model:MB-BL10x12



Backlighting is one of the most popular forms of vision inspection illumination, providing maximum contrast between object and scene and producing a high contrast image with consistent edge definition. *Metaphase Backlights* combine the latest high brightness LEDs with exclusive optical lensing to create high intensity and uniform (+/- 5%), shadow-free illumination.

Connectorized and convenient 24VDC power supply features an onboard and integrated driver. Commonly applied to measuring, defect and hole detection, and determining the orientation of parts. *Metaphase* offers variety of backlights to suit the needs of various applications: area, linear, narrow, and our highly compact thin backlights. Backlights can be configured for wavelength and other specifications.

### BENEFITS:

- Up to 50 SMD LED's per inch array
- Exclusive optical lens provides high uniformity (+/- 5%), shadow-free backlight illumination
- High Density Precision Chip Technology (HDPCT)
- Patent-pending thermal management design draws heat directly from the die ensuring long life
- Metaphase Technologies has the largest selection of Backlights in the vision industry.
- Backlights with in-line and built-in strobe circuit available
- Backlight shapes/sizes include low profile, narrow and large area backlights
- Options include built-in line remote & potentiometer intensity control

### APPLICATIONS:

- Absence/Presence of Objects
- Defect Detection
- Object tracking
- PCB (Printed Circuit Board)
- Web Inspection
- Bottle/Bolt
- Glass Sheet
- Sub-pixel

### RATINGS:



### DOMINANT WAVELENGTH:

| Part #            | Color   | Power Supply                                 |
|-------------------|---|--|
| MB-BL10x12-W-24   | White 5500K   |  |
| MB-BL10x12-R-24   | Red 630nm   |  |
| MB-BL10x12-B-24   | Blue 470nm (Optional 455nm)                           |  |
| MB-BL10x12-G-24   | Green 530nm   | 24 volt power supply available upon request. |
| MB-BL10x12-IRN-24 | Infrared 850nm  |  |
| MB-BL10x12-IRL-24 | Infrared 880nm  |  |
| MB-BL10x12-UVL-24 | UV 395nm  |  |
| MB-BL10x12-UVS-24 | UV 365nm  |  |
| MB-BL10x12-RGB-24 | 625nm / 530nm / 470nm<br>(3 die packaging technology) |  |

10 ft. flying leads come standard on all products.  
Light features built-in constant current driver.

#### Vision Light Tech B.V.

Protonenlaan 22, 5405 NE UDEN, P.O. Box 345, 5400 AH UDEN, The Netherlands

Phone: +31 (0)413 26 00 67, Fax +31 (0)413 26 09 38, E-mail: inquiry@vlt.nl, Website: www.vlt.nl

Trade register No. 17150044, VAT No. NL8112.30.946.B01

# BL MetaBright™ Back Light

## Model:MB-BL10x12

### ELECTRICAL & CONTROLS:

|                       |                              |
|-----------------------|------------------------------|
| Current Consumption   | 2.2 ~3A                      |
| Light Intensity       | +/-5%                        |
| Illuminance           | 60,000 Lux                   |
| Operating Temperature | -22°F(-30°C) to 120°F (60°C) |
| Lifetime Hours        | 75,000 Hours                 |

### HOUSING:

|            |  |
|------------|--|
| Dimensions | Length: 15in/381mm<br>Width: 13.18in/334.65mm<br>Height: .81in/20.65mm |
| Weight     | 4lb/ 1814.37g  |
| Housing    | Aluminum   |
| Finish     | Powder Coated- Black   |

### WIRING DIAGRAM:

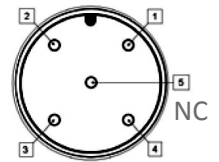
|       |        |
|-------|--------|
| RED   | +24VDC |
| WHITE | +24VDC |
| GREEN | Ground |
| BLACK | Ground |

24 AWG 2 WIRE CABLE X 1

When not using intensity control, connect 0-10V control line to +24 and intensity control ground to ground

### WIRING DIAGRAM:

| PIN # | Function           |
|-------|--------------------|
| 1     | +24VDC             |
| 2     | Falling E. Trigger |
| 3     | Ground             |
| 4     | Trigger Ground     |
| 5     | Rising E. Trigger  |



### ORDERING INFORMATION:

• M B - B L 1 0 x 1 2 - □ - 2 4 - □

**W**- White 6000k

**R**- Red 630nm

**G**- Green 530nm

**B**- Blue 470 nm

**IRN**- Infrared 850nm

**IRL**- Infrared 880nm

**UVL**- (long) 395nm

**UVS**- (short) 365nm

**RGB**- 625nm / 530nm / 470nm

(3 die packaging technology)

\***BLANK**- 10 ft. Flying Leads

**T**- M12 Quick Disconnect

**ILD**- In Line Dimmer

**ILS**- In Line Strobe (customer provide trigger info)

# BL MetaBright™ Back Light

## Model:MB-BL10x12

### DRAWING & DETAILS:

