



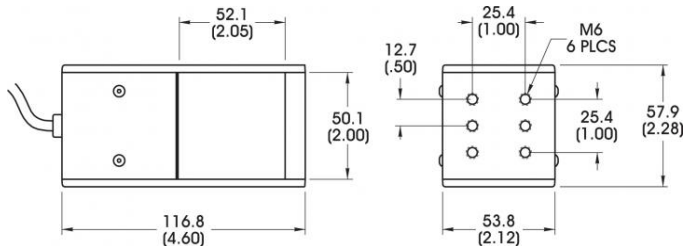
LT-410 COAXIAL LIGHTING SYSTEM FOR MATRIX FAMILY READERS



DESCRIPTION

The LT-410 Coaxial Lighting System is an axial diffuse illuminator designed for reading codes produced by Dot Peening or Laser Etching on flat parts having a matte, specular or mixed surface reflectivity.

MECHANICAL DIMENSIONS



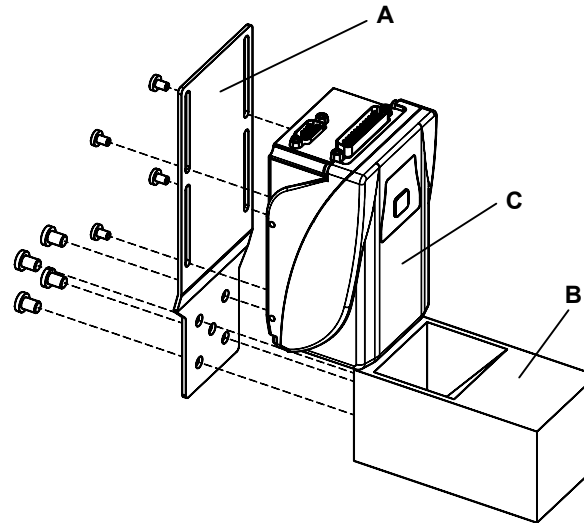
Cable Length: 1.5 Meter (59")

mm
[inch]

MOUNTING Matrix-1000/2000™

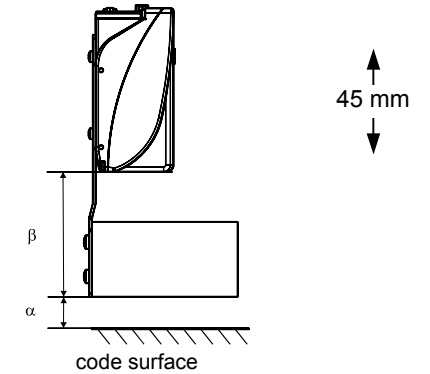
The following parts are required for mounting:

- LT-410 Coaxial Lighting System
- BK-410 Coaxial Lighting System Bracket



1. Mount the bracket **A** onto the LT-410 illuminator **B** using the 4 M6x8 screws in the bracket package.
2. Mount the reader **C** onto the illuminator assembly through the positioning slots on the bracket. Use either the M4x6 or M4x8 screws in the bracket package. The longer screws are used when mounting the assembly to the Matrix mounting bracket.
3. Wire the LT-410 to the CBX according to the wiring table on the opposite page.
4. Position the Matrix assembly over the code reading area at the correct Focus Distance for your model, (described in the Matrix Reference Manual under "Reading Features").

POSITIONING Matrix-1000/2000™



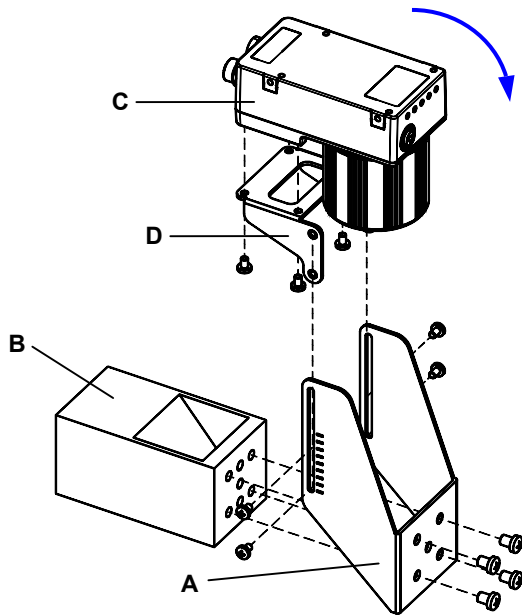
$$\text{Focus distance} = \alpha + \beta$$

The best results for this illuminator are obtained when α is approximately 25 mm (1"). The positioning slots on the brackets allow adjustment to obtain the best results between the reader optimal focus distance and the illuminator optimal working distance. You can maximize the reading performance through VisiSet™.

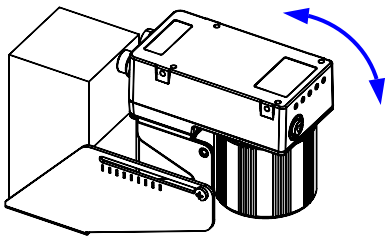
MOUNTING Matrix 400™

The following parts are required for mounting:

- LT-410 Coaxial Lighting System
- BK-4410 Matrix 400™ Coaxial Lighting System Bracket



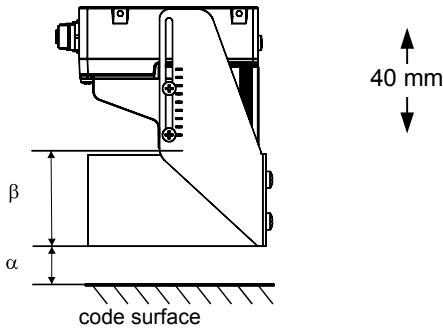
1. The BK-4410 bracket comes already partially mounted (D+A) with 2 M4 screws.
2. Mount the bracket A onto the LT-410 illuminator B using the 4 M6x8 screws.
3. Swing the bracket D 90° and mount the reader C onto it through the mounting holes on the bracket. Use 4 of the M4 screws.



4. Wire the LT-410 to the CBX according to the Wiring table.
5. Remove the Lens Cover and loosen the Locking Knobs as described in the Reference Manual. Swing the bracket D 90° returning to the reading position.

6. Position and mount the Matrix assembly over the code reading area at the correct Focus Distance (or range) for your model, (described in the Matrix Reference Manual).
7. Perform the Focusing procedure described in the Reference Manual.
8. After Focusing, tighten the Focus and Diaphragm Locking Knobs. Swing the bracket D 90° as previously shown to replace the Lens Cover. Swing the bracket D 90° returning to the reading position and fix the reader assembly (C+D) to the illuminator assembly (A+B) with the remaining 2 M4 screws.

POSITIONING Matrix 400™



Focus distance = $\alpha + \beta$

The best results for this illuminator are obtained when α is approximately 25 mm (1"). The positioning slots on the brackets allow adjustment to obtain the best results between the reader optimal focus distance and the illuminator optimal working distance. You can maximize the reading performance through VisiSet™.

TECHNICAL FEATURES

Supply Voltage	24 Vdc
Power Consumption	113 mA; 2.7 W max.
Optimal Working Distance	25.4 mm (1")
Effective Working Range	12.7 - 50 mm (0.5" – 2")
Illumination Area	(50 x 50) mm² @ 25 mm ((2" x 2") sq" @ 1")
Wavelength	660 nm
Typical Irradiance	10 W/m² @ 25.4 mm
Operating Temperature	0 – 60 °C
Dimensions (L x W x H)	116.8 x 57.9 x 53.8 mm (4.6" x 2.3" x 2.1") (without bracket)
Weight	321 g. (without bracket)

WIRING

Wire Color	CBX/Matrix Signal	Meaning
White	Vdc	24 Vdc
Black	GND	Ground
Shield	Earth	Earth Ground

COMPLIANCE

LED Class

LED RADIATION
DO NOT VIEW DIRECTLY WITH OPTICAL INSTRUMENTS
CLASS 1M LED PRODUCT TO EN 60825-1:(2001)

CE Compliance

Warning: This is a Class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.