

# Metaphase LED Pattern Projector

Model#: MB-LPP



- Use with C-Mount, 2/3" format imaging lenses
- Designed for Structured Light Applications
- Project Patterns with <math><1\mu\text{m}</math> Edge Sharpness
- Built in driver, no special control required, simply provide 24VDC
- 0-10V intensity control signal
- Optional manual dimmer available.
- Versions available: Strobe, DC (Continuous) and versions for use with external controller (ULC-2)
- Patterns include: Crosshair, Stripes, Grid, Edge & Line

**Dimensions**

Length:	4in	101.6mm
Width:	2in	50.8mm

**Contact Us:**

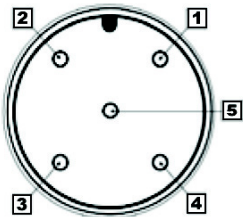
Contact your Metaphase Technologies Representative for options including: Filter Options, Power Options, & Wavelength.

**Specifications:**

Current Consumption	0.2A @ 24VDC
Finish	Black Anodized
Weight	0.5lbs / 0.226kg
Operating Temperature	120° F Max
Compliance	CE/RoHS
Lifetime Hours	60,000 Hours
Illuminance	350 lumens

**M12 Connector**

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



**Wiring Diagram**

Flying Leads	Function
RED	+24VDC
BLACK	Ground
WHITE	0 ~ 10 Volt
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

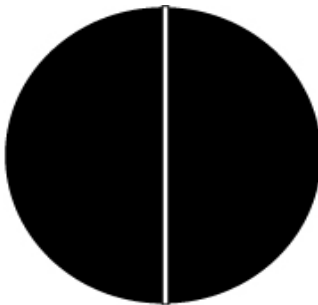
Focal Lens Selection:

A = Diameter of Area

	60mm	100mm	150mm	200mm	300mm	400mm	500mm	
W = Working Distance	100mm		8	6				
	150mm		12	8	6			
	200mm	25	16	12	8	6		
	300mm		25	16	12	8	6	
	400mm		35	25	16	12	8	
	500mm	50	35	25	16	12	8	
	600mm		50	35	25	16	12	8
	750mm		50	35	25	16	12	12
	1000mm			50	35	25	16	16
	1500mm			75	50	35	25	25
	2000mm				100	50	35	25

Shaded Cells represent the focal length of lens

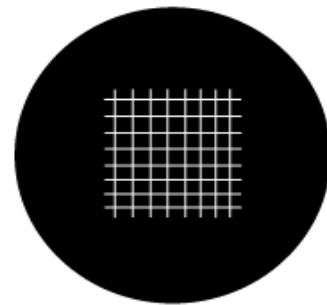
Standard Patterns: GD=Grid, L=Line, CH=Cross Hair, ST = Stripes, ED =Edge



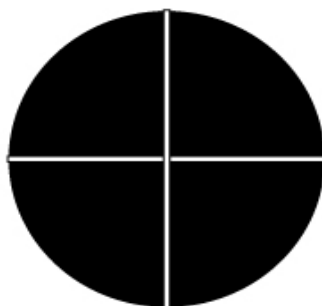
Line Pattern  
**LPP-LINE**



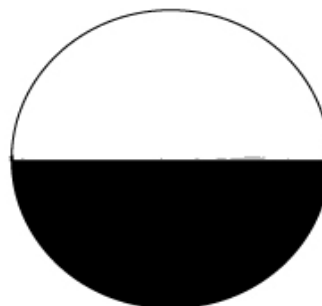
Stripe Pattern  
**LPP-STRIPES**



Grid Pattern  
**LPP-GRID**



Cross Pattern  
**LPP-Cross**



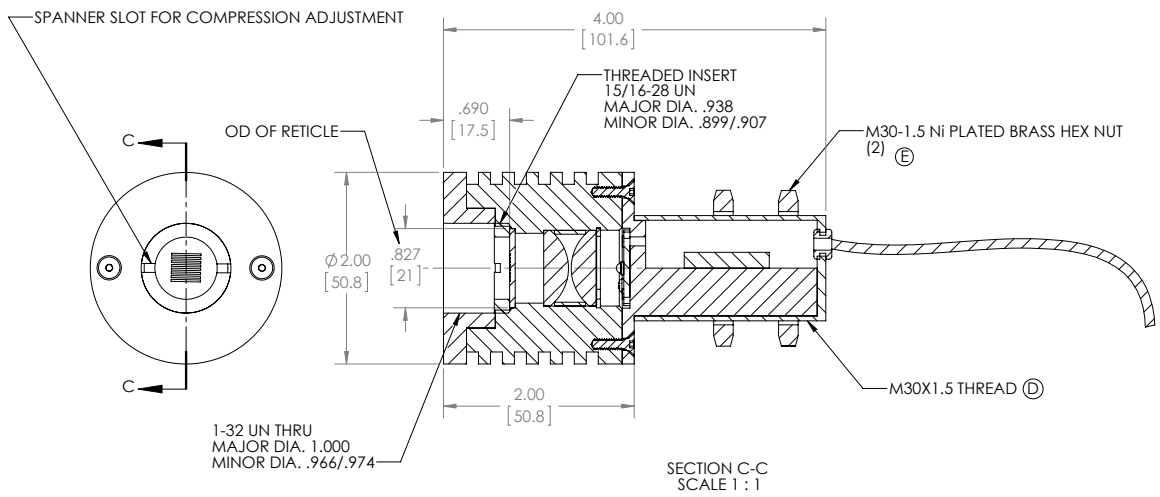
Edge Pattern  
**LPP-EDGE**

# Metaphase LED Pattern Projector

Model#: MB-LPP

Drawing/Diagram

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	C	REVISED AND REDRAWN, KW	3/22/2012	
	D	REMOVED HEX NUTS AND ADJUSTED METRIC THREAD PITCH, KW	3/22/2012	
	E	REPLACED HEX NUTS, KW	4/3/2012	



SECTION C-C  
SCALE 1 : 1

**PROPRIETARY AND CONFIDENTIAL**  
THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF [REDACTED]. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF [REDACTED] IS PROHIBITED.

UNLESS OTHERWISE SPECIFIED:	NAME	DATE	METAPHASE TECHNOLOGIES, INC.
DIMENSIONS ARE IN INCHES	DRAWN	KW	3/22/2012
TOLERANCES:	CHECKED		TITLE:
FRACTIONAL ± 1/64	ENG APPR.		LIGHT ENGINE, LASERLINE
ANGULAR: MACH ± 1/2° BEND ± 2°	MFG APPR.		Q.A.
TWO PLACE DECIMAL ± .01			COMMENTS:
THREE PLACE DECIMAL ± .005			MB-LPP
INTERPRET GEOMETRIC TOLERANCING PER:			SIZE DWG. NO.
MATERIAL			<b>B</b> LE250
FINISH			REV
NEXT ASSY USED ON			<b>E</b>
APPLICATION			SCALE: 1:2 WEIGHT:
			SHEET 1 OF 1