

Product Features

Simple and easy socket mounting for HHL, TO-3 and other high power laser diode packages

Unobstructed access to the front of the laser diode package

Conveniently mounts to an optical table

Water-cooled riser for optimum heat dissipation

Compatible with ILX Lightwave current sources and temperature controllers

The LDM-4442 solves the fixturing and heat dissipation problems associated with operating higher power laser diodes.

This laboratory-quality laser diode mount has the ability to dissipate up to 18 W of heat generated by a laser diode and its internal thermoelectric modules.

The laser mounting plates, which attach quickly and easily to the riser, are equipped to handle the most popular laser diode packages. The front of the laser diode is easily accessible to provide operational flexibility in a host of applications.

LDM 4442

Temperature Controlled Laser Diode Mount



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Interchangeable Laser Mounting Plates

The LDM-4442 consists of an extruded heat sink, detachable base and water-cooled riser. Interchangeable mounting plates, each designed to accept a high-power laser package, are offered for versatile operation. A small circuit board, containing the appropriate electrical socket, is attached to the reverse side of each laser mounting plate, allowing for quick attachment of the laser diode.

Interface with Any ILX Source or Controller

Each mounting plate kit comes with the cables needed to interface to any ILX Lightwave current source or temperature controller. The cables are fixed

on one end with standard D-subminiature connectors. The other ends are prepared for easy termination into the provided female connector. This allows easy interface with the male connector affixed to the laser mounting plate circuit board.

Conveniently Mounts to Standard Optical Tables

The LDM-4442 can be attached directly to a standard (1/4 - 20 on 1" centers) optical table and conveniently aligns the laser diode at a 4" optical line height. The laser package is electrically isolated from the table to prevent damaging the laser diode.

Specifications

Beam Height ¹	
With base stand:	101.6mm (4.0") nominal
Without base stand:	88.9mm (3.5") nominal
Maximum Heat Dissipation:	50W
Maximum Laser Current	7A
Thermal Resistance	
Natural Convection:	1.4 °C/W
Water Cooling ² :	0.7 °C/W
Mounting Plate Delta T ³	
Natural Convection:	28 °C
Water Cooling ² :	15 °C
Laser Diode Connection ⁴ :	10 pin ribbon connector
Laser Package Styles:	TO-3, HHL

GENERAL

Size (HxWxD):	152 mm x 102 mm x 119mm 6" x 4" x 4.7"
Weight:	1.8 kg (4 lbs)

NOTES

1. Laser output centered in the package.
2. 500 CC/min water flow, water temperature of 8 °C.
3. With 18W heat load.
4. Connections from current sources and temperature controllers user configurable.

ORDERING INFORMATION

LDM-4442	Laser Diode Mount (includes water fittings, cable strain relief clamp and ground lug)
LDM-444201	TO-3 Laser Mounting Plate Kit (includes an 8-pin socket, a circuit board with a 10-pin in-line connector, and 501 and 301 interface cables)
LDM-444202	HHL Package Laser Mounting Plate Kit (includes a 10-pin socket, a circuit board with a 10-pin, in-line connector, and 501 and 301 interface cables)
LDM-444204	Blank Laser Mounting Plate (includes 501 and 301 interface cables)

In keeping with our commitment to continuous improvement, ILX Lightwave reserves the right to change specifications without notification and without liability for such changes.



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