

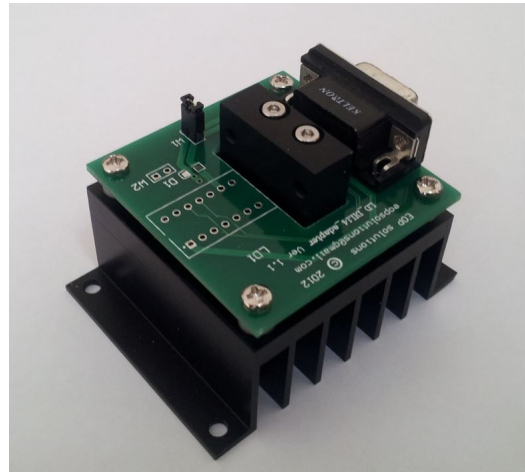
# DIL Laser Diode Mount

[www.eloptech.com](http://www.eloptech.com)

## Features

The LDM DIL-T1-D9 laser diode mount is designed for use with DIL 14-pin laser diode package. The DIL-T1-D9 features a small footprint heat sink that do not require forced convection for most Laser diode.

The mount features a single 9-pin D-sub female connector to allow quick and simple connectivity.



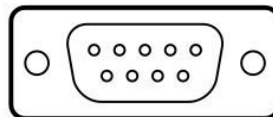
## Specifications

Polarity of LD	AG/CG
Polarity of PD	Floating
Maximum TEC current	3A
Dimensions (LxWxH) mm	66 x 50 x 43
Mounting Holes 4 x 3.4mm	56 x 42

## 9-pin D-sub connector Pinout

Female D-sub 9-pin connector  
front

5 4 3 2 1



9 8 7 6

1	LD Anode (+)
2	LD Cathode (-)
3	Case Ground
4	TEC (-)
5	TEC (+)
6	PD Anode (+)
7	PD Cathode(-)
8	Thermistor
9	Thermistor

# DIL Laser Diode Pin Assignment

1	TEC (+)
2	NC
3	NC
4	NC
5	LD Anode (+)
6	NC
7	PD Cathode (-)
8	PD Anode (+)
9	LD Cathode (-)
10	NC (W2 GND)
11	Thermistor
12	Thermistor
13	GND PCB
14	TEC (-)

## Installation

laser diode produce heat. In order to maintain constant temperature a TEC is integrated into the Laser Diode package. To utilize the TEC make sure to have good thermal contact between the Laser Diode package and the Mount heat sink. The use of thermal interface material between the Laser Diode package and the heat sink is strongly recommended. A good quality thermal grease or thermal interface pad can be used for this purpose.

### DIL package soldering to the Mount PCB

1. Remove the PCB from the heat sink by unscrewing the 4 M3 screws that holding the PCB on the heat sink.Keep the 4 round plastic spacers holding the PCB on the heat sink.

Important! Laser diode may be damaged by ESD, make sure to take precautions and work in ESD safe environment.

2. Insert the DIL Laser Diode into the PCB .Solder the DIL Laser Diode pins to the PCB.Then cut the excess length of the pins.

### Installation of the PCB and DIL package on the heat sink

3. Apply a small amount of thermal grease on the DIL Laser flange where it should connect to the heat sink stub.

4. Install the PCB with the Laser Diode assembled back on the Mount heat sink ,with the 4 M3 screws and the 4 round plastic spacers.
5. Install the 2 M3 screws on the heat sink stub securing the Laser Diode to the stub, but do not tighten yet.
6. Unscrew the 2 HEX screws on the heat sink stub top about ½ turn,just to let the stub move a bit on the heat sink.
7. Secure the Laser Diode by tightening the 2 M3 screws evenly.
8. Secure the stub to the heat sink by tightening the 2 HEX screws on the top.

Congratulations ! Your diode is Ready!

Notes:

W1 jumper is installed by default and is protecting the Laser Diode from esd damage by shortening it.Install W1 jumper when Laser Diode not in use or disconnected from the current source to protect from damage.

Make sure to remove W1 jumper after connecting the mount to the laser source.

The screws should be tightened evenly in two stage. The package can be distorted and/or damaged if the screws are tightened unevenly or over tightened.

#### Heat sink dimensions and mounting holes

The Mount have 4 holes of 3.4mm on its base to secure it to a working surface.

The length between the holes is 42mm on the 50mm side and 58mm on the 66mm side.

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