



1550 Series

Handheld Laser Diode Driver Controller

The model 1550 Laser Diode Driver Controller (LDDC) provides an easy to use method of controlling popular laser diode driver supplies. The LDDC provides all the features needed to fully monitor and control various diode drivers on the market. The LDDC comes in a compact hand-held package that can be powered by an external supply (wall mount) or in some cases can be powered directly from the diode driver supply itself. The unit comes standard with a USB interface for computer control, an easy to read LCD display, and a keypad with encoder for parameter adjustments. The interface to the diode driver is a standard density 15 pin d-sub connector.

Base Specifications

- 12 bit resolution on current setting
- Single shot, continuous, burst and CW modes
- Burst shots from 1- 65535
- Repetition rates from 0.1 Hz to 100 KHz
- Adjustable pulse widths from 100 ns to 90 % of period
- 10 bit measurement resolution for compliance voltage and current monitor



Quantum Composers, Inc.
P.O. Box 4248
Bozeman, MT 59772

Phone (406) 582-0227
Fax (406) 582-0237
Toll Free (800) 510-6530

www.quantumcomposers.com
sales@quantumcomposers.com

SPECIFICATIONS

1550 Series LDDC



Interface Connection:

- DB15 male standard density

Communication:

- USB 2.0 type B

Power Input:

- +15-24 VDC, 200 ma. from either external wall type or powered from driver

User Interface:

- 8 button keypad
- rotary encoder

Readout Display:

- 16X4 LCD backlit display
- 3 LED status indicators

Driver Compatibility:

- Standard diode drivers with digital and analog control interfaces

*Future options include: board level for OEM integration, ethernet communications, thermistor measurement, photodiode measurement and external trigger with adjustable synch.

#	Name	Type	Description	Range
1	Enable	Output	TTL output to enable diode driver output section	0 V = Off 5 V= On
2	Status Crowbar	Input	Indicates status of crowbar shorting clamp on output.	0 V= Crowbar Off 5 V= Crow On
3	Interlock Control	Output	Open collector output pulled to ground when activated	15 V max @100 mA sourcing.
4	GND	Ground	Signal Ground	
5	V Monitor	Input	Analog input corresponding to driver compliance voltage level	0-10 Vwith 0.01 V resolution.
6	I Monitor	Input	Analog input corresponding to driver current output	0-10 Vwith 0.01 V resolution.
7	I Program	Output	Current level adjustment	0-10 Vwith 0.0024 V resolution.
8	Pulse Control	Output	Pulsing control	0 V = On 5 V= Off
9	GND	Ground	Signal Ground	
10	N/C	Reserved – No connection		
11	Over Temperature	Input	Over temp input from driver.	0 V = Ok 5 V= High Temp
12	N/C	Reserved – No connection		
13	+15 VDC Input*	Power Input		+15 V @ 200 ma
14	+15 VDC Input*	Power Input		+15 V @ 200 ma
15	GND	Ground	Power Ground	