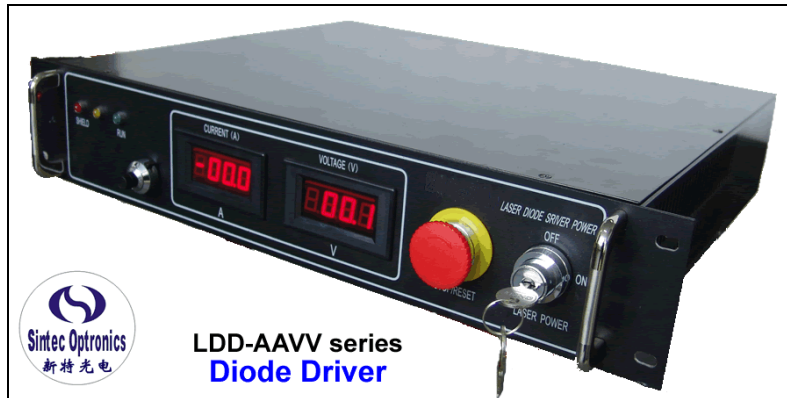


Diode Driver

# Operation Manual



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## Sintec Optronics Pte Ltd

We, Sintec Optronics Pte Ltd, are a Singapore-based supplier of a wide range of photonics products (lasers & parts, optical components, and relevant accessories). We provide various high-quality low-price lasers, parts & optics for OEM and end users. The company is managed by experienced professionals with engineering & servicing backgrounds. Our customers range over 32 countries around the world.

### 1. Lasers

- 1.1 Sealed CW CO2 lasers
- 1.2 CW Nd:YAG laser systems
- 1.3 Diode-pumped YAG lasers
- 1.4 Diode pumped green lasers
- 1.5 Pulse Nd:YAG lasers
- 1.6 High-power diode lasers
- 1.7 Red diode lasers
- 1.8 Diode-pumped green lasers
- 1.9 Fiber Lasers

### 2. Optical Components

- 2.1 Focusing lenses
- 2.2 Mirrors & output couplers
- 2.4 Beam expanders
- 2.5 Zoom beam expanders
- 2.6 Beam splitters
- 2.7 Scan mirrors
- 2.8 Scan lenses (f-theta lenses)

### 3. Accessories

- 3.1 Laser lamps (Kr and Xe lamps)
- 3.2 CW and pulse Nd:YAG laser power supply
- 3.3 Diode laser drivers
- 3.4 Laser chillers/heat exchangers
- 3.5 Laser crystals & optical crystals (YAG rods, KTP, BBO, ZnSe etc)
- 3.3 AO & EO Q-switches & drivers
- 3.4 AOMs
- 3.5 Laser power/energy meters
- 3.6 Laser safety goggles
- 3.7 Optical scanners/galvanometers
- 3.8 Motorized or manual adjustable XYZ stages & rotary stages
- 3.9 Vertical translation stages
- 3.10 Mirror mounts, holders, posts & holders
- 3.11 Optical tables
- 3.12 CNC control software
- 3.13 Laser marking heads and marking software
- 3.14 Laser pump chambers

We are a leading company in Singapore to provide quality laser systems & optical components and excellent services at attractive prices. We always try our best to make our products reliable, safe, easy to use, flexible and economical. We believe our continuing advances in technologies will make us the best choice to provide the solutions to make you remain competitive and be a leader in your own field.

## Main Specifications:

Dimension: 19", 2U box, 482×88x400mm

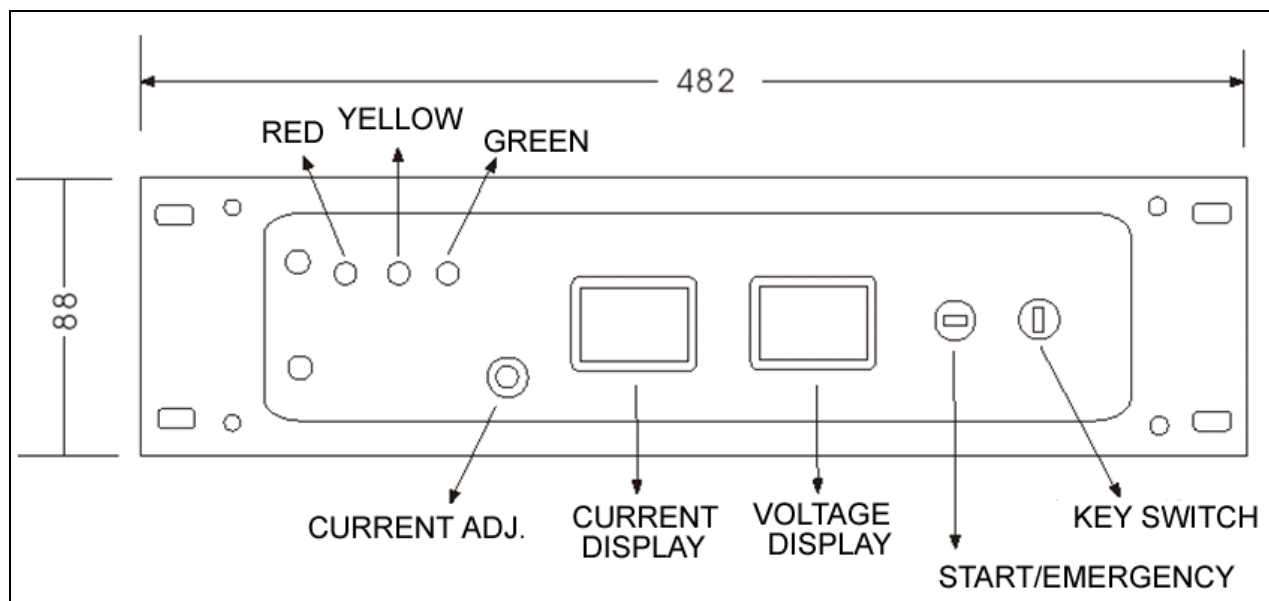
Input electricity, 220VAC, 1200W

Output: 18-36VDC, 1-28ADC adjustable

Ripple voltage: <60mV

Over current setting: 30.5ADC, over voltage setting: 36.5VDC

## Front Panel



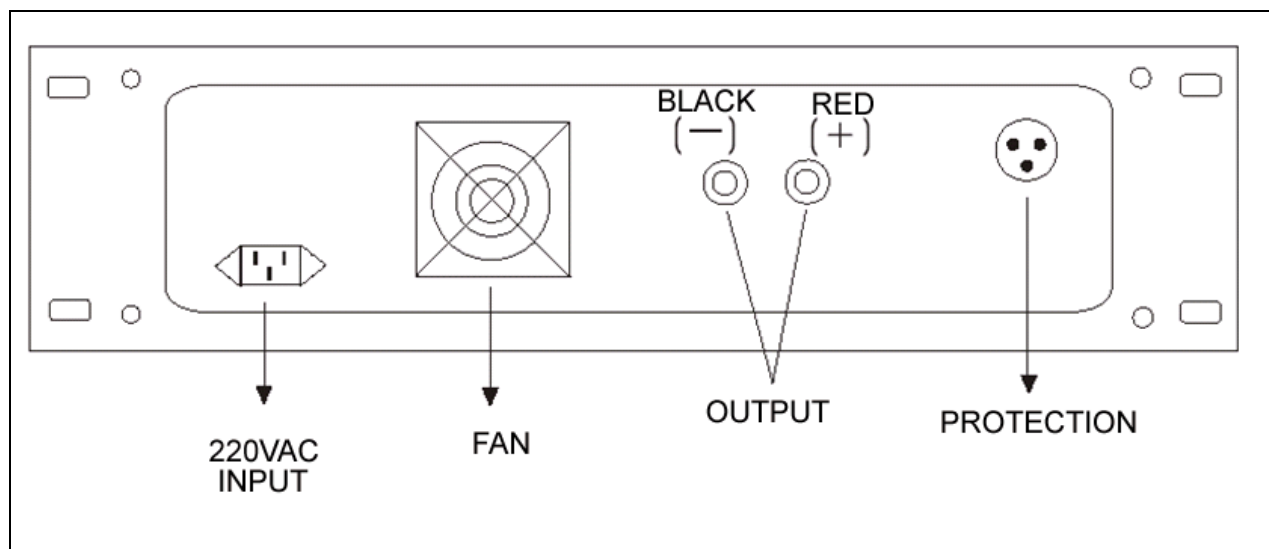
Indicator YELLOW: preparation status

Indicator GREEN: normal status

Indicator RED: protection status. Possible causes are PROTECTION activated, loading is open or shorted (that is that the diode laser is not well connected with the driver), over current, over voltage etc.

**WARNING: once the indicator RED is light on, you should anti-clockwise adjust CURRENT ADJ to the end.**

## Back Panel



PROTECTION: PIN 1 and PIN2: when shorted, the driver can output; when open, the driver can not output (protected). (or called INTERLOCK)

OUTPUT: connected to diode laser.

### **Operation Procedures:**

#### **Before starting operation**

1. Connect the diode laser with the driver (please note the polarity).
2. Connect the signal from the external machine/signal to PROTECTION. If you do not want PROTECTION from other equipment, just short PINS 1 & 2 of PROTECTION.
3. Connect 220VAC INPUT to the electricity supply.
4. Anti-clockwise adjust CURRENT ADJ to the end.

#### **Start operation**

1. Turn on KEY SWITCH.
2. Turn on START/EMERGENCY.
3. Clockwise adjust CURRENT ADJ to the current you want.

#### **Close the driver**

1. Anti-clockwise adjust CURRENT ADJ to the end.
2. Turn off START/EMERGENCY and KEY SWITCH.