
OPERATIONS MANUAL for 532nm / 1W laser

Note: The laser unit can only be operated after the case temperature equals or below room temperature, this is to avoid damages to the unit and prevent the unit from overheating.

1. Product Features

- 1.1. Place the laser head which has the same serial number with the power supply on a stable and heat-conducting plate, such as metal plate.

Note: The heat-sink at the top of laser-head is air vent .

- A. The air vent should not be blocked and make sure there is nothing placed within 0.05m-0.1m.
- B. If the laser system needs to be installed into equipment please make sure the airflow is not blocked all the time.
- C. If a cooling fan is needed in the equipment, please make sure the wind direction is the same as right figure.

Front Panel

1. Current/Temperature Meter

2. GREEN LED for normal operations

Green LED indicator On - Unit and Driver is working fine.

3. RED LED for overheating and others

Red LED indicator On - Indicates power driver auto-shutdown because of overheating or some other reasons.

4. Current regulator

When rotating the Current Regulator clockwise it will revved up to Maximum allowable power

5. Power On-Off button.



Rear Panel

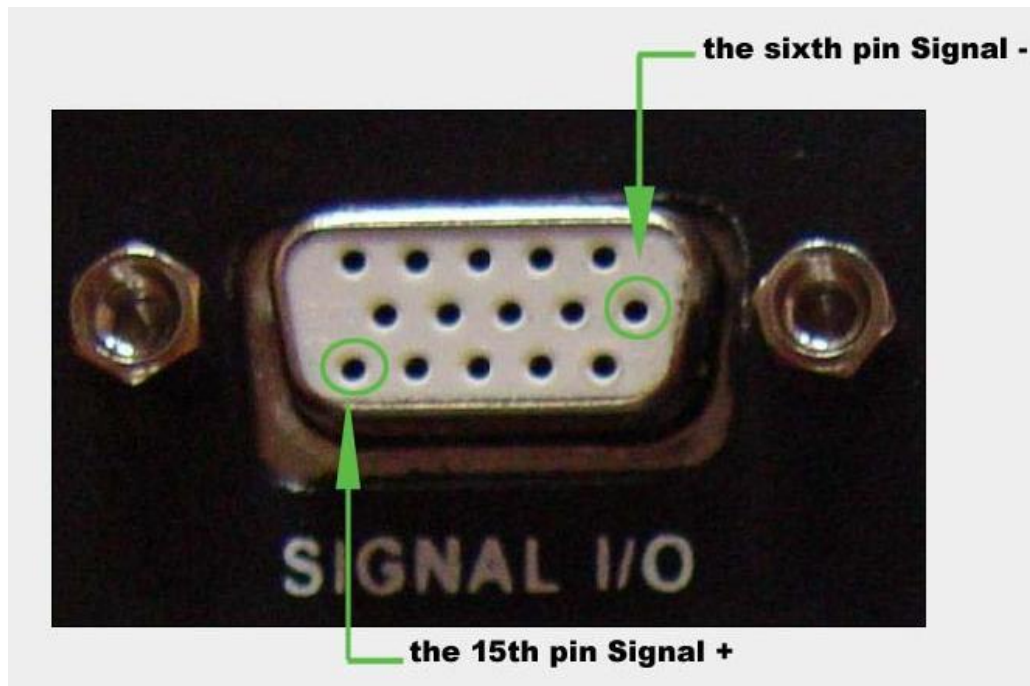
1. Output pin port

Port to connect power driver with laser head by 15-pin cord.

2. Signal input connector

To connect power driver with 0~5V TTL or Analog modulation

15--S+,6--S- (As bellow)



3. Power port

To connect power driver with 220V or 110V source

4. Modulating mode switch

TTL+: for 5V 0~30KHz TTL modulation, 5V on, 0V off

TTL-: for 5V 0~30KHz TTL modulation, 0V on, 5V off (when using the
laser without modulation, RECOMMENDED)

Analog: for 5V 0~10KHz analog modulation

5. Current/Temperature Meter display switch

6. Fan



2. Normal Operation Instruction

- 2.1. Attach the laser head to the connector of power supply firmly. Please make sure to fasten the locking ring into the connector.
 - 2.2. Remove the label at aperture.
 - 2.3. Switch on the main power of the power supply. The red LED indicator indicates - "Power" is on.
 - 2.4. The laser start to work after 5 seconds, the green LED indicator indicates - "Laser" is on. The warming up time is about 15 minutes
 - 2.5. Only for unexpected accident occurs, the red LED-"Error" will be on. That means the laser system works in abnormal state. Please switch off the main power. Please reset the main power and key switch after a few minutes, then try restart the laser system again if for any reason the laser unit failed to operate please contact us by phone at 877-225-4961 or email us at master@warnlaser.com
 - 2.6. TTL modulation is optional. As for the TTL instruction, please refer to the "Notes for
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TTL Modulation” .

Note: For TTL function, you need to input 5 VDC input voltage.

- 2.7. Closing the laser system: switch off the main power of the power supply.
- 2.8. To prevent optic path from dust it is advisable to replace aperture label.

3. Manufacturers' Warranty

- 3.1. The warranty is one year from the shipping date.
 - 3.2. This warranty will not apply to those products which have been:
 - 3.2.1. Repaired or altered other than in accordance with the terms of this warranty.
 - 3.2.2. Abused, misused, improper handling or storage, or used in an Un-authorized or improper manner or without following the written procedures supplied by manufacturer.
 - 3.2.3. Original identification markings or labels have been removed, defaced or altered.
 - 3.2.4. Any other claims not arising directly from material defects in material or workmanship.
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4. Lasers Safety

4.1. All lasers and laser light show systems have intrinsic dangers - even laser pointers!

Observation of basic laser safety rules and the specific safety regulations of the jurisdiction in which you operate are essential.

4.2. Safety with high powered lasers is a critical issue that cannot be overlooked.

Despite their brilliant beams and ability to burn, high power laser pointers and portable lasers are dangerous to eyes. The danger that lasers represent to your eyes is very serious. The visual receptors in our eyes are part of our central nervous system which means if our eyes are damaged, they do not heal or recover.

4.3. As far as power output, laser pointers and portable lasers do not release that much power. Especially not when compared to a normal 75W or 100W light globe. What makes the light from lasers so dangerous is that it has two unique properties.

4.3.1. Coherent and focused. The energy is focused on a very small area similar to the way a magnifying glass focuses the sun.

4.3.2. Collimated. The light does not spread out from a laser; it stays in a focused narrow beam that makes lasers almost as dangerous at a distance as close up.

This not to say you should be afraid of lasers or avoid using them. What you should do however is to treat lasers with respect be aware of their dangers and follow some basic guidelines to ensure your safety.
