Operating Instructions for PSU-H-FDA Power Supply

Note: Only operate the laser after it reaches room temperature, to avoid damage from large temperature fluctuations.

1. Product features

1.1. Place the laser and power supply on a heat-conducting surface, such as a metal plate.

Note: The heat-sink at the bottom of the laser head is an air duct.

A. The air duct should not be blocked: make sure there is nothing placed within 2 inches.

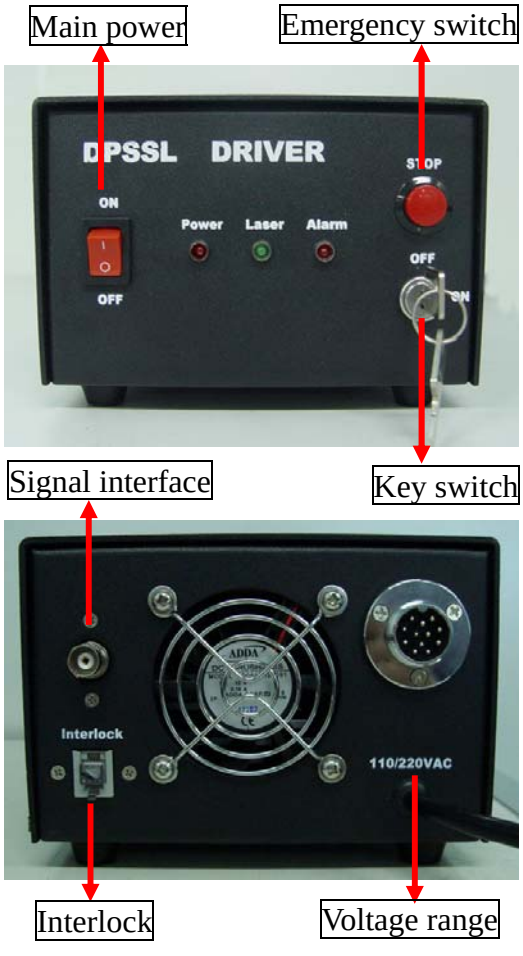
B. If the laser system needs to be installed into equipment, please make sure the airflow is clear.

C. If a cooling fan is needed in the equipment, please make sure the air flows front-to-back, as shown in the figure.

1.2. Check the main power and make sure it is “OFF”.

1.3. Check the key switch and make sure it is “OFF”.

1.4. Emergency switch: press to immediately switch off the laser. Reset the main power and key switch to restart the laser.



1.5. Check to make sure your local voltage is in the range shown on the back panel.

1.6. Interlock: pulling this out will shut down the laser system. Reinstall the interlock, and on the front panel reset the main power and key switch to restart the laser.

1.7. Signal interface: for TTL or Analog external voltage control.

2. Operation

2.1. Attach the cable from the laser to the multi-pin power supply connector, making sure to fasten the locking ring on the connector.

2.2. Uncover the laser aperture.

2.3. Switch on the main power. The red LED (“Power”) should be lit.

2.4. Turn the key switch to the “ON” position. The laser starts to work after about 5 seconds delay. The green LED (“Laser”) should be lit. The warmup time is about 15 minutes.

2.5. For unexpected accidents, the red LED (“Alarm”) will be on. This means the laser system is working in an abnormal state. Please switch off the main power. After a few minutes, reset the main power and key switch to restart the laser system again.

2.6. TTL and analog modulation are optional. As for the TTL or analog instructions, please refer to the “Notes for TTL Modulation” or “Notes for Analog Modulation.”

Note: For analog function, you need to provide 0-5 VDC input voltage.

2.7. To turn off the laser system: switch off the main power, turn off the key switch.

2.8. Cover the aperture to prevent dust from getting into the optic path.

3. 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 Agreement**.**

3.2.2. Abused, misused, improperly handled in use or storage, or used in an unauthorized or improper manner or without following 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.

4. Laser safety

4.1. All lasers and laser light show systems have intrinsic dangers - even laser pointers! Following basic laser safety rules and the specific safety regulations of the jurisdiction in which you operate is 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 only a danger to your eyes. But the danger that lasers represent to your eyes is very serious. If the visual receptors in your eyes are damaged by a burning laser (or by longer exposures from non-burning lasers), 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 sunlight.

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 treat lasers with respect, be aware of their dangers and follow some basic guidelines to ensure your safety.