

Operating Instructions for PSU-III-FDA Power Supply

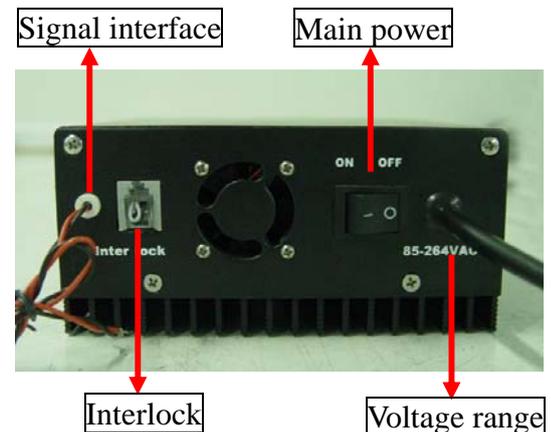
Note: Only operate the laser after it reaches room temperature, to avoid damage from large temperature fluctuations.

1. Product features

- 1.1. Place the laser and power supply on a heat-conducting surface, such as metal plate.
- 1.2. Make sure the back panel main power switch is “OFF”
- 1.3. Check the key switch and make sure it is off (Vertical)
- 1.4. Make sure your local voltage is in the range shown on the back panel.
- 1.5. Interlock: pulling it out shuts down the laser system. This allows a remote cutoff switch. Reinstall the interlock, and on the front panel reset the main power and key switch to restart the laser.
- 1.6. TTL or Analog external control signal interface (back panel).



Key switch



Signal interface

Main power

Interlock

Voltage range

2. Operation

- 2.1. Attach the cord from the laser body to the power supply, and fasten the locking ring on the connector.
- 2.2. Uncover the aperture.
- 2.3. Switch on the main power of the power supply. The red LED (“Power”) should be lit.
- 2.4. Turn on the key switch to “ON”. The laser starts to work after about 5 seconds delay. The green LED (“Laser”) should be lit. The warm up time is about 15 minutes.
- 2.5. Only for unexpected accidents, the yellow LED (“Alarm”) will be lit. That means the laser system is working in an abnormal state. Please turn the key switch to OFF and then switch off the main power. Wait a few minutes, then to restart the laser system again.
- 2.6. TTL and analogue modulation are optional. As for the TTL or analogue instruction, 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. Closing the laser system: Turn off the key switch first, and then switch off the main power.
- 2.8. Cover the aperture to keep dust from 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.