

FPAS Power Supply Diode Retrofit

Scope:

This procedure defines the method of adding power diodes to the FPAS power supplies. This will prevent the supplies from powering on independently and cycling

PLEASE NOTE POLARITY OF POWER SUPPLY WIRES AND POLARITY OF DIODES!

Tools Required:

- Philips Head screwdriver and 3mm Hex key or T25 Torx.
- Wire Cutters/Strippers.
- Soldering iron and solder (recommended)

Procedure:

- 1.0 Turn off power switch, disconnect all cables from FPAS integrator box.
- 2.0 Remove chassis bottom panel (fan side)
 - 2.1 The earlier chassis will require removal of 2x 3mm Hex screws on the rear panel. Once the screws are removed, the cover will slide towards the rear and pop off. Disconnect fan power connector, so that the entire bottom cover can be separated from the rest of the unit.
 - 2.2 The later chassis will require removal of the 2x side panels to expose the screws. The side panels will pop off. They are held in by clips and Velcro. Once the panels are removed the T25 Torx screws will be visible. There are 2x screws on each side of the bottom cover. Remove all 4x screws and the panel will pop off. It is held in by clips. Disconnect the fan power connector, so that the entire bottom cover can be separated from the rest of the unit.
- 3.0 Remove +15 (yellow) and -15 (gray) wires from the respective power supplies
- 4.0 Proceed to Add diode assemblies to the power wires and reconnect to the power supplies. (notice stripe on diode for orientation)
- 5.0 Reassemble chassis.

Please contact Infrared Systems Development Corporation for any questions or comments regarding this procedure. (407) 679-5101



Fig 1. Pair of Diodes. Notice the orientation (polarity) of the stripe. (both are different)



Fig 2. Shows + and - 15 V power terminals disconnected from power supply (+15 YELLOW and -15 GRAY)



Fig 3. Terminals cut off and wires stripped.

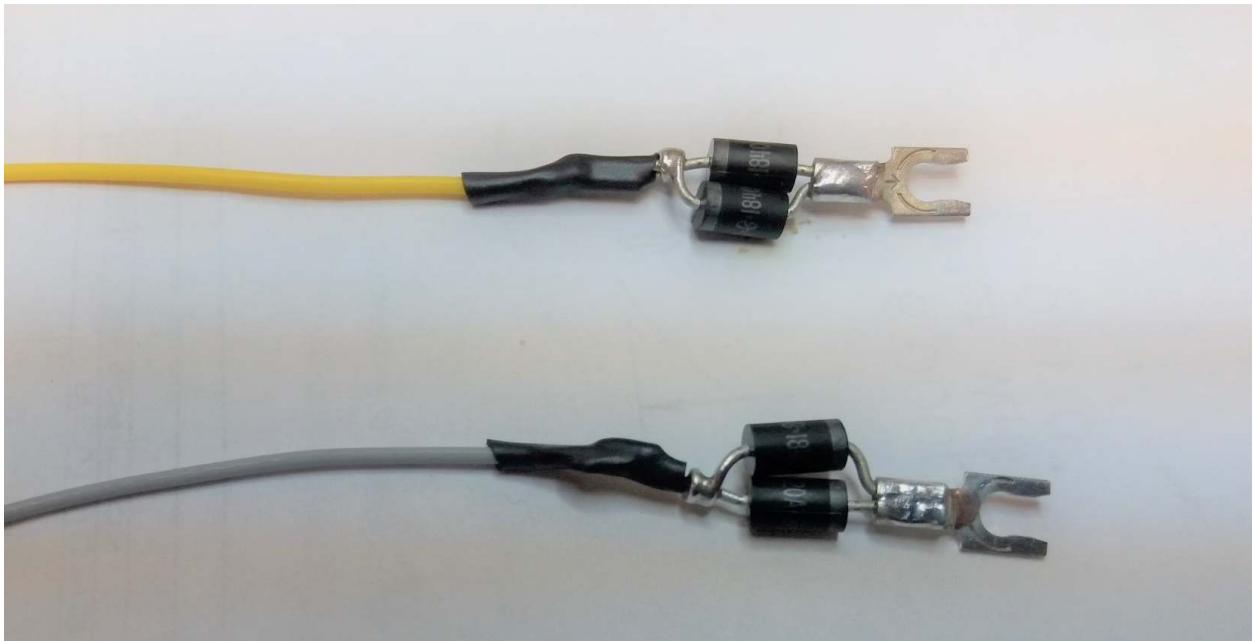


Fig 4. Wires soldered to diodes and covered with heat shrink tubing.

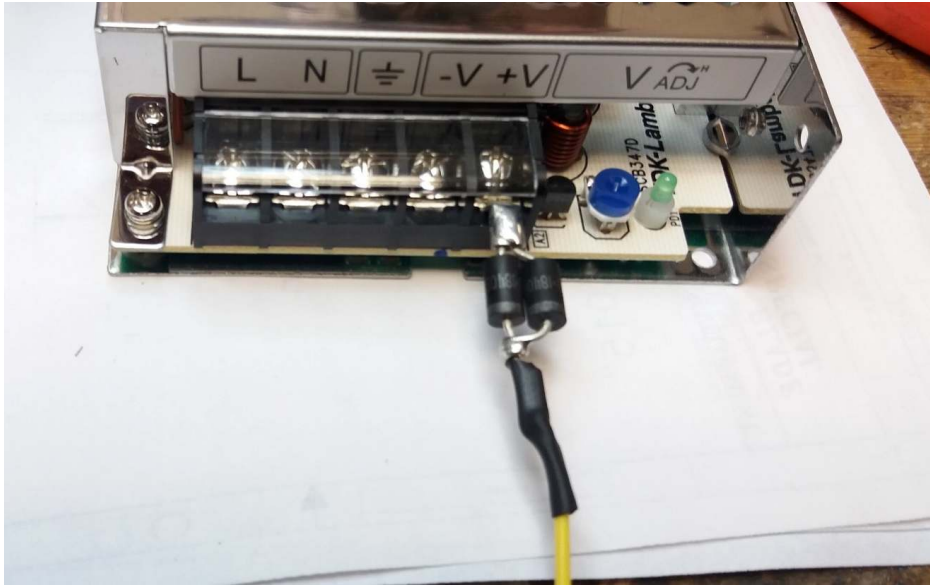


Fig 5. +15 wire reconnected (does NOT show all wires)

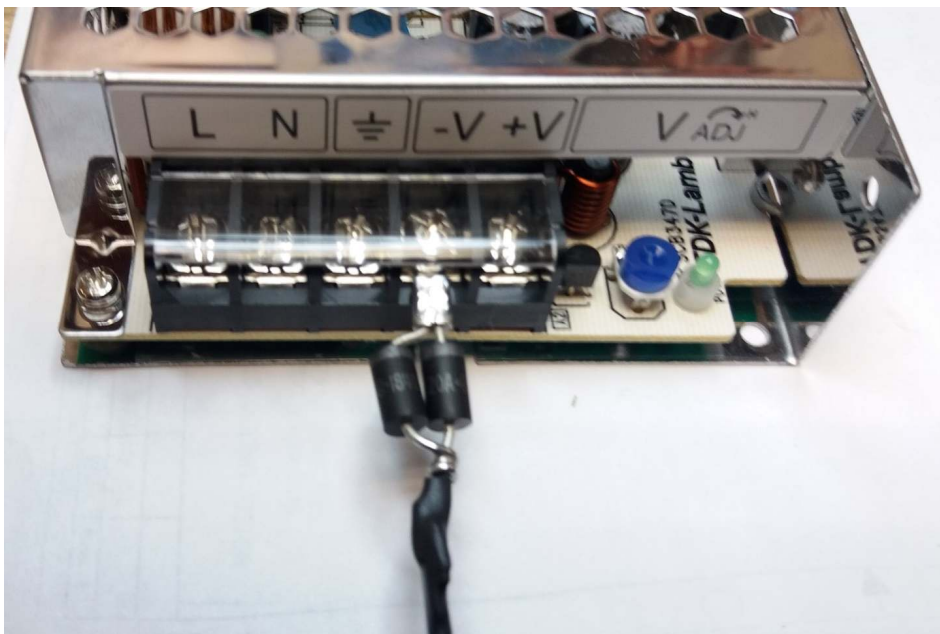


Fig 6. - 15V wire reconnected. (does NOT show all wires)