2024/06/03 06:24 1/4 Power Supply

Power Supply

Model No. D2-005

Document Revision: 1

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Please read Limited Warranty and General Warnings and Cautions prior to operating the D2-005.

Link to D2-005 Power Supply web page

Description

The Power Supply is a quiet, linear power supply providing +/-15V and 5V. It is in a separate box to isolate 60 Hz and EM interference. One power supply can power two complete laser systems, or four electronics modules.



D2-005 Power Supply

Purchase Includes

- D2-005 Power Supply
- VPN00464 Power Cord

Absolute Maximum Ratings

Note: All modules designed to be operated in laboratory environment

| Parameter | Rating |
|---------------------------|-----------------|
| Environmental Temperature | >15°C and <30°C |
| Environmental Humidity | <60% |
| Environmental Dew Points | <15°C |

Specifications

| | Units | |
|---------------|-------|---|
| Current Limit | | |
| +15V | 1.5 | А |
| -15V | 1.5 | А |

| | | Units |
|-------------------|------|-------|
| +5V | 6 | Α |
| Output Regulation | 0.05 | % |

Inputs, Outputs, and Controls

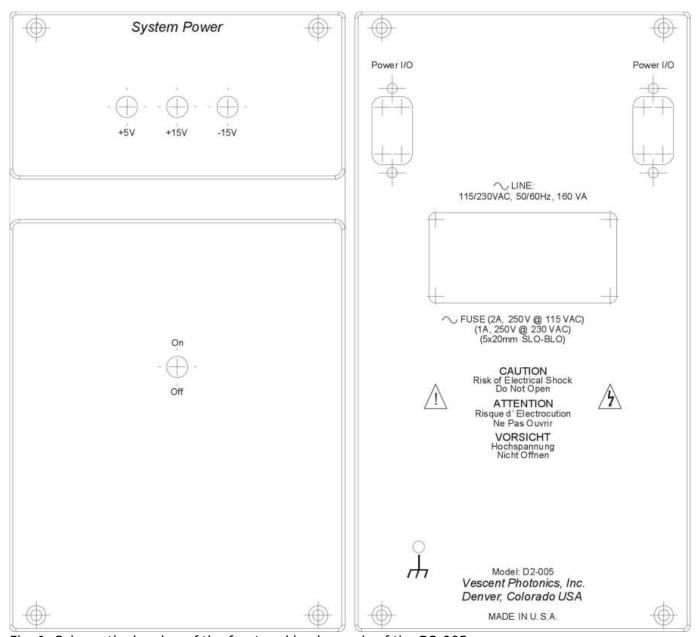


Fig. 1: Schematic drawing of the front and back panels of the D2-005

Monitor Section

The monitor section contains three blue status LEDs indicating proper voltage on the +15,-15, and 5V power lines. If there is a voltage sag on any of the power lines, the blue status LED will turn off.

Back panel I/O

Power I/O (9-pin D-sub)

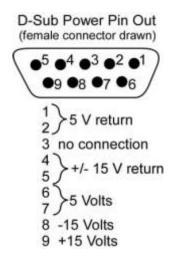


Always turn off the D2-005, make connections to the device, and then re-energize the D2-005. Never connect this D2-005 Power Supply to a device when it is switched on and supplying power.



If you are considering using an Uninterruptible Power Supply (UPS) to guarantee operation of your Vescent products through a brown out or black out, great care should be taken in choosing the model. Lower cost models tend to produce modified square wave voltage profiles. The high-frequency components of such a voltage profile may interact poorly with the D2-005 (and down-stream active Vescent modules). If you do choose to use a UPS, select a model that will provide a sine wave voltage profile without higher harmonic components to avoid potential damage to your high-value equipment.

The power to each electronics module is through a 9-pin D-sub connector through a power bridge unit. The unit can also be powered through any serial cable with 9-pin D-sub connectors, which is convenient when the unit must be taken out of line for access to the side panels. The pin outs are shown in the following figure:



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