



INTRODUCTION

This Technical Note is intended to allow the easy integration of the controls, programming, and monitoring features of the SPL Series power supply. The controls and monitors are available via a standard XXXX female connector.

Input Power Connector (Molex 0039012045) –AC Models

Pin 1 – Line In: The input power to all SPL Series “-AC” units is +90VAC to +264VAC

Pin 2 – Earth Ground: Connect to ground pin on AC cord

Pin 3 – Neutral: Use this pin for the input power return.

Pin 4 –No Connection

Input Power Connector (Molex 0039012045) –DC Models

Pin 1 – Input Voltage - The input voltage to all SPL Series “-DC” units is +15VDC to +28VDC, +24VDC nominal.

Pin 3 – Power Ground - Use this pin for the input power return.

Pins 2, 4 –No Connection

Controls Interface

Pin 1 – Red LED Cathode connection- See Figure 1 for a typical circuit configuration.

Pin 2 – Voltage Control: The SPL Series Voltage Control input allows the user to control the output of the unit from 50% to 100% using a 0 to +5 Vdc for the all versions. If the programming is left unconnected, the output voltage will be set to 0. See Figure 2 for a typical circuit configuration.

Pin 3 – Green LED Cathode connection - See Figure 1 for a typical circuit configuration.

Pin 4 – Blue LED Cathode connection- See Figure 1 for a typical circuit configuration.

Pin 5– Ground: This connection should not be used for the return from the High Voltage Load and must be used as the ground reference for pin 2 (voltage control).

Pin 6 – Digital I/O – Multi function Input output connection for custom configurations.

Pin 7 – No Connection

Pin 8 – +5VDC: Used for the anode connection to the led(s), can be used to generate the Voltage Control (Pin 2). Max output current is 15mA.



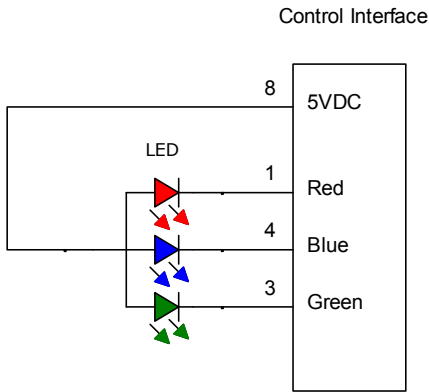


Fig. 1

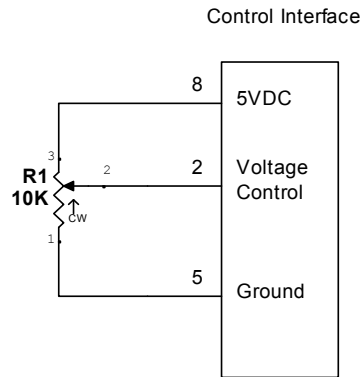


Fig. 2

Ground Stud: The stud, located on the control side of the PSU should be used as the load return.

CASE LED

There is a Multi-Color LED located above the programming port. The LED will illuminate green when all conditions are good and the unit is powered on. The LED will change colors to indicate abnormal conditions as follows:

Characteristic	Condition	LED Color
Voltage	>15% over set voltage	Purple
Voltage	>10% under set voltage	Blue
Current	>10% over max current	Red
Temperature	>85°C internal temp.	Yellow

HIGH VOLTAGE CONNECTIONS

Connect the high voltage load to the Output connector to a 18291-002 type connector and the High Voltage Return stud. Do NOT connect the High Voltage Return stud to the ground at pin 5 on the control interface. The High Voltage Return stud and the Pin 4 Ground are connected internally.

EXAMPLES OF FACTORY PROGRAMABLE OPTIONS

Fault Recovery

- Adjustable reset timer on fault
- Fault counter with latched shutdown requiring Restart
- Drop voltage XX volts on fault and restart per Reset time
- Fault counter with latched shutdown requiring Restart (time based)
- High average current over time turns on "Clean Me" indicator

Data Logging

- Run Time
- Number of On/Offs
- Max Temperature, Time stamp referencing run time

Other options available upon request, contact the factory for more information!