

INSTALLATION AND OPERATION

4-40 threaded holes are provided for mounting. Holes in the mounting surface must be in alignment with the power supply mounting holes and mounting screws should not be tightened excessively; otherwise the resultant stress may damage the case.

PC Board mounting models: May be mounted directly on a PC Board. An accessory Socket (model ELW-1) is also available.

Models with screw terminals: Threaded mounting holes permit mounting to a chassis, cabinet wall or bracket, or they may be used on a test bench or tabletop; or accessory Mounting Kits may be used:

For Wall Mounting: An accessory Mounting Kit (model EB4A) is available to enable mounting the power supply when the opposite side of the mounting surface is inaccessible. This kit consists of an aluminum plate and four screws for attaching it to the power supply, effectively adding mounting flanges to the power supply.

For DIN rail mounting: When DIN rail mounting is desired, use accessory Mounting Kit EB35DIN. This kit consists of an aluminum plate, with two clips attached to it, and four screws for attaching the plate to the power supply. The power supply can then be snapped onto a 35mm “top hat” type of DIN rail.

Even a relatively small amount of free air around a power supply will significantly reduce the rise in its temperature resulting from operation, and therefore the temperature of the critical components within it, improving both reliability and stability.

Input voltage: 85-130 VAC, 47-420 Hz, single phase, or 120-180 Vdc. DC input may be connected without regard to polarity.

Use the ground terminal for safety and lowest output noise.

Make all connections before applying input power.

Output voltage adjustment: output is factory set to within $\pm 2\%$ of the nominal output voltage rating on 5 to 9 volt models, and within $\pm 1\%$ of the nominal output voltage rating on 10 to 48 volt models. If necessary, the output voltage can be more precisely calibrated by using an external trim resistor connected between the T/C pin and the (+) output pin to decrease the voltage, or between the T/C pin and the (-) output pin to increase the voltage. Begin trimming with approximately 10 megohm resistance, and decrease resistance until calibration is attained. Trimming the output to a voltage other than the nominal rating may adversely affect performance and may result in damaging the supply.

If there is any possibility of voltage from another source (another power supply, a battery, transients, etc) being applied to the power supply's output terminals, protect the power supply by using a diode in series with one of the output leads.

Do not attempt to directly parallel the outputs of two power supplies. This would result in current flowing from the higher-set output into the lower-set output, and probable damage to both circuits. Outputs may be connected in series to obtain a higher voltage provided that a reverse-biased diode, having PIV and current ratings exceeding the combined output, is used across each output; however, keep in mind that the output current to be drawn cannot exceed the output current rating of the lowest rated supply used.

If the input power contains large voltage spikes ('noise') induced by the switching of high currents, inductive loads, electro-mechanical components, etc., the input power leads to the supply should include some means of transient suppression. Otherwise, a portion of the noise may be coupled through the supply to the load. Also, the supply could be damaged. The means of suppression that is easiest to install is a 1 mfd capacitor or a metal oxide surge suppressor (MOV) across the input terminals of the supply. In extremely severe cases, the use of RF chokes in series with each side of the line may also be required.

