

PARALLELABLE REDUNDANT POWER SUPPLIES with audible alarms



SET-UP

- 1. Be certain AC input switches are off.
- 2. Wire the Redundant output connectors as shown above, but temporarily without the load. (The sensing lines must be connected at the redundant output as shown above (remote sensing) or in the connector (local sensing). Failure to do so may result in permanent damage.)
 - Two connector pins are used for each output connection, because of the high currents. Each output lead may be one heavy gauge wire connected to both pins, or two wires (as shown).
 - The sense currents are less than 10 ma, so light gauge wire is adequate for the sense lines.
 - If voltage drops in the output voltage leads (which degrade regulation) are not objectionable, local sensing can be used. To use local sensing, do not wire the sense lines as shown above. Instead, on each connector, jumper pin 5 to pin 3 and jumper pin 6 to pin 4.
- 3. Turn on primary power supply (PS1) and set its output to the nominal output voltage. For greatest accuracy, using a digital voltmeter connected to the redundant output is recommended. (The built-in voltmeters monitor the voltages before the isolation diodes, and so their readings are slightly higher than the voltages going to the load.) Then switch off this supply.
- 4. Turn on backup power supply (PS2) and set its output to 0.2 volts below the nominal output voltage. Then switch off this supply.
- 5. Connect the load, then switch on both power supplies. The redundant output is now operational.
- 6. If the audible alarm (optional) sounds due to a failure, it can be silenced by turning off the failed supply's input switch.





