

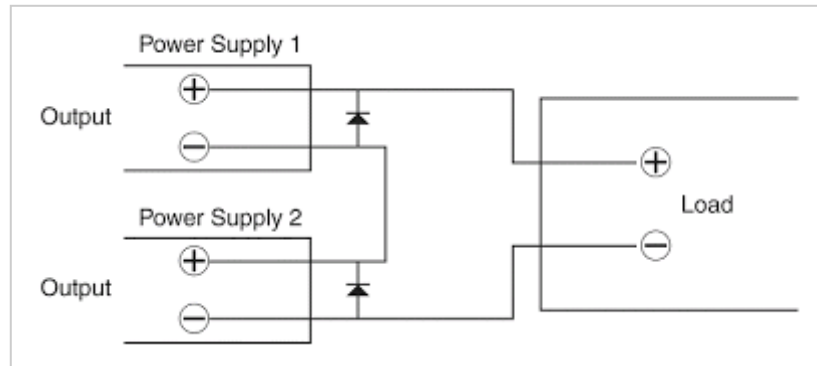
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Operating Power Supplies in Series

Although some users are nervous about operating power supplies in series, it is common practice in the industry. The benefit is that voltages greater than 60V can be obtained using off-the-shelf products.

It is possible to connect several power supplies in series, but please read the precautionary notes below:

- Connect back-biased diodes across the power supply terminals as shown below.



Rate these diodes at the same output current as the power supplies.

In the event both power supplies do not turn on at the same time, or if the load becomes a short circuit, then the diodes will protect the power supplies from any applied reverse voltage.

- Do not exceed the output to ground/chassis voltage rating. Inside most power supplies are noise filter capacitors connected from the output to ground. It is possible to exceed the operating voltage of those capacitors, particularly when configuring several units in series.
- Avoid using "fold-back style" current limited power supplies as these may lock up the power supply during initial switch on.

Posted by [Power Guy](#)