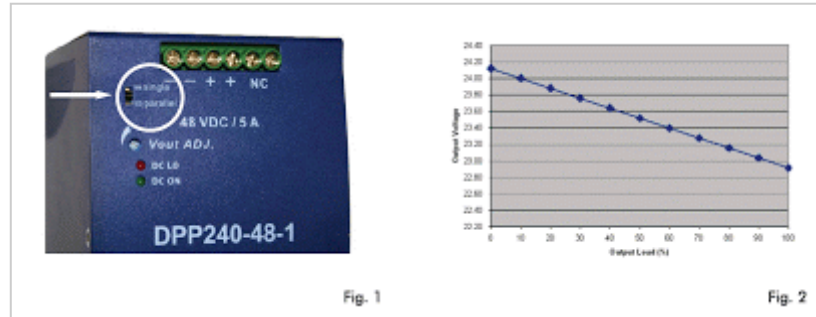


Wednesday, March 5, 2008

## Droop Mode Current Share

If two power supplies are to be connected together to produce more power or share the load, then a parallel capable model should be selected. Lambda's DPP100, 120, 240 and 480 models are all parallel capable. On the front of each power supply is a small black switch. For parallel operation this switch should be set to "parallel" (Fig. 1).



In single mode the load regulation (the amount the output voltages changes with load) is minimal, the difference being less than 0.24V from zero load to full load for a 24V output power supply.

In parallel mode that load regulation is artificially increased to 1.2V using internal circuitry (Fig. 2).

The extra voltage drop or "droop" is proportional to the load drawn, so that when two or more power supplies are connected in parallel the output load is shared between the power supplies. If one of the paralleled power supplies tries to provide more current, its output will droop slightly and the other supplies will balance.

For optimal performance, all power supplies should have their outputs set to the same voltage.

Posted by [Power Guy](#)