

Five scalable power supplies(ssp-8080) in parallel

The sustainable and modular design concept of SSP-7080 allows of up to 5 units to be connected in parallel to give 5 times max. current. Before connecting, set all the units to the same UVL (Upper Voltage Limit) and same VI range. Then set the voltage and current limit of all the Slave units to maximum values. (See Figure 1)



Figure 1 Front panel of Multi-VI range, scalable power supply SSP-7080 in action. All units have been set with the same VI range (16V, 5A)as shown on the indicators.

Master and Slave connection setting

First, one of the units has to be set as Master, while the rest of the units would be set as Slave. In the following example, the unit marked ED is the Master, such that OUT from Master is connected to the IN of the first Slave unit. The OUT of first Slave unit to IN of second Slave and so on .

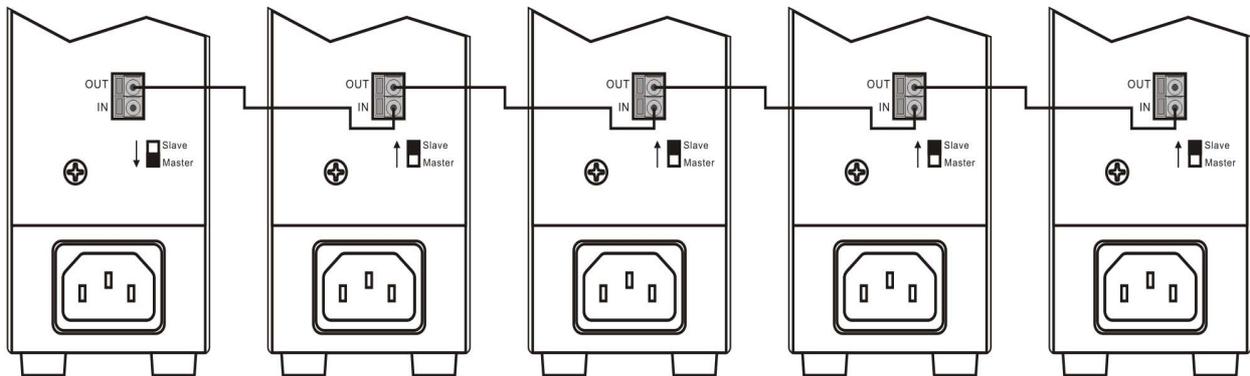


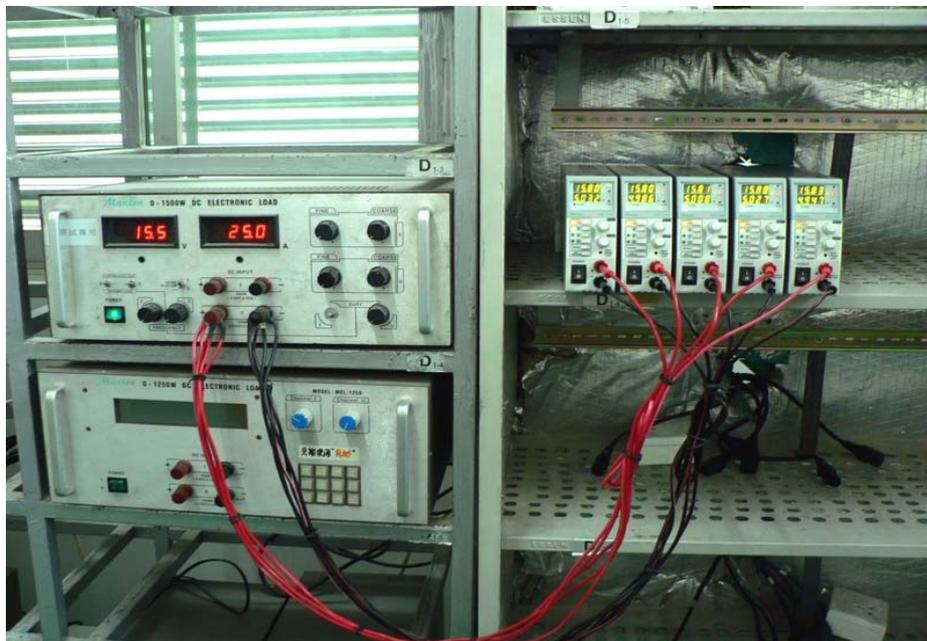
Figure 2 Connection of Master and Slave units with IN and OUT connection



Figure 3 Setting of Master and Slave connections at the rear panels of 5 units of SSP-7080 modular power supplies

Remarks : When the output current in the Master & Slave connection drops to zero ampere, the output voltage will no longer be controlled by the Master unit.

Make sure to keep a minimum current flowing that is at least several percent of the rated current at all times. This can be done by supplying a small removable load.



Now, all the output should be connected to the load, which the electronic load shows the current is 25A, ($5 \times 5A = 25A$), which captures the idea of the modular and scalable concept.

Figure 4 Five units of SSP-7080 connected to the electronic load, showing the total sum of output current equals to the sum of the current delivered from the power supplies.