

- (6) Set the output voltage to the desired value, using the front panel dials. Set the VERNIER control to zero if interpolation between 1 millivolt steps is not desired.
- (7) Connect the DC+ and DC- terminals (on the front or rear panel) across the load. If desired, connect the positive or negative output terminal to ground.

b. Sensing . The regulator circuit maintains the potential between the sense leads (S+ and S-) at the set output voltage. When these leads are connected to the positive and negative output terminals, the power source is connected for local sensing. When the sense leads are connected to the load, the source is connected for remote sensing. Remote sensing is used when an appreciable voltage drop is anticipated in the leads connecting the positive and negative output terminals to the load. The Model 2005 is connected for local sensing when shipped from the factory. For remote sensing, proceed as follows:

- (1) Remove the shorting links from between the rear panel DC+ and S+ terminals and from between the DC- and S- terminals.
- (2) Connect the DC+ and DC- leads across the load.
- (3) Connect the S+ and S- leads to the positive and negative sides of the load, respectively. Run the sense leads as a tightly twisted, shielded pair. Connect the shield to the G (chassis ground) terminal to minimize output ripple
- (4) Turn on the Model 2005.

c. Series Operation . As many as four Model 2005 units may be connected in series to provide up to 80 volts. Connect the positive DC output terminal of one supply to the negative output terminal of the next, in the same manner as connecting batteries in series. The ground terminals on all units may be left floating or they may be tied together and connected to either the most positive or most negative output terminal.

To insure optimum voltage regulation, disconnect the shorting links between all S+ and DC+ output terminals except those at the most positive potential. Then connect jumper wires between each S+ terminal and the S- terminal on the next more positive power source. In this way the voltage drops in the leads connecting the power sources will be compensated for by the regulator circuits of the individual units. For remote sensing, proceed as directed above, except connect the most positive and most negative S+ and S- leads across the load.

d. Remote Voltage Programming . The output voltage can be programmed remotely by an external fixed or variable resistance. Proceed as follows:

- (1) Turn off the power source, set all output voltage controls to zero and set the RANGE switch to 0 -10V.
- (2) Remove the shorting link from between the rear panel RV and S+ terminals.