FOR DUAL VOLTAGES

When working with linear IC's you usually need a power supply that delivers equal positive and negative voltages. This circuit solves the dual-supply problem. It is a splitter that operates with inputs ranging from 10 to 40 volts dc. When balanced, the output ranges from + and -5 volts to + and -20 volts. One-percent resistors are indicated on the diagram. You may use the nearest 5% values shown in the table.

To calibrate the output, connect two equal resistors in series across the plus and minus output and then connect a tvm or similar meter between their junction and the common terminal. This forms a bridge nulling curcuit. Adjust the 2.5K pot for zero volts on the meter.

The splitter handles the difference current between the plus and minus loads so current through Q4 and Q5 is fairly low. When unbalanced operation is required, one of the output transistors carries more current than the other. Good heatsinking is required.

—Poly-Paks Engineering Department

