

CW Series AC Power Sources

Remote/Local Sense Operation

The CW Series AC Power Source can be used with or without remote sense leads connected to the load. Where the sense leads (line and neutral sense) are connected determines the point at which the CW output voltage will be precisely regulated.

As shipped, the units are configured for local sense operation. This is achieved by connecting shorting jumpers between the sense and AC output terminals of the rear panel output terminal block, as shown in Figure 1.

When using remote sensing, the shorting jumpers must be removed, and the remote sense leads connected from the CW sense terminals to the load. The point of voltage regulation will now be at the load, and any reasonable voltage drop across the interconnecting output cable will be compensated.

In the event that the external remote sense circuit opens, the CW maintains control of the output voltage by utilizing a redundant sense circuit. This redundant circuit is comprised of 10k Ω resistors internally connected from the AC output terminals to the voltage control circuitry. However, since the unit is calibrated with the sense leads connected, the presence of the 10k Ω resistors reduces accuracy in the AC output voltage in this mode of operation.

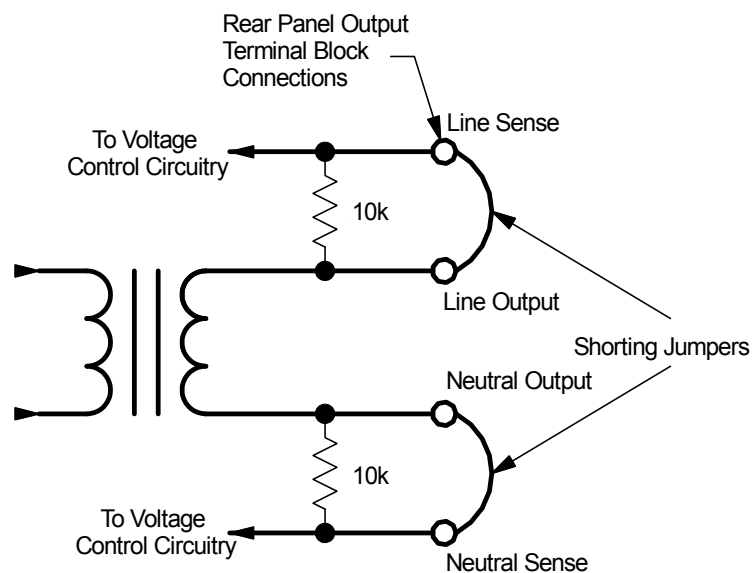


Figure 1 Output Voltage Sensing Configuration