

SUPPORT

EXTERNAL PROGRAMMING

D series supplies allow voltage, current, voltage trip, and current trip to be programmed from a remote location. Programming can be accomplished either by resistive, voltage, or current programming circuits.

Figure 1 illustrates the three alternatives for programming the voltage set point. The method applies equally to programming set point current, over voltage trip, and over current trip.

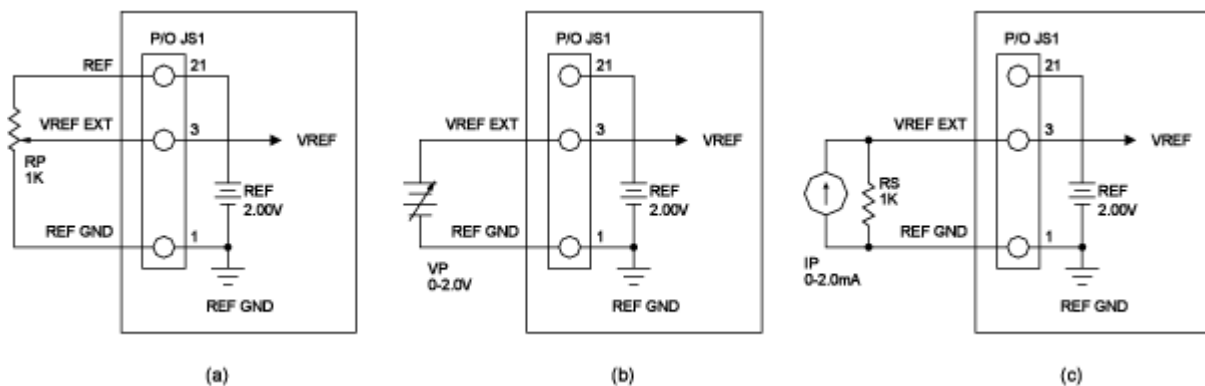


Figure 1. (a) Resistive programming, (b) voltage programming, and (c) current programming

RESISTIVE PROGRAMMING

Resistive programming requires connection of an external potentiometer or resistors between terminals 21, 3, and 1 of JS1. Terminal 21 is a 2.0 V precision reference, terminal 1 is the reference ground, and terminal 3 is the voltage set point input. Like front panel rotary control, the 2.0 V precision reference produces a voltage across the potentiometer or resistors which is then used to produce the voltage set point. Metal film resistors or a wire wound potentiometer will result in the lowest temperature coefficient.

The current set point, over voltage trip, and over current trip can be programmed in the same manner. Referring to the manual for terminal identification, use terminal 22 to program the current set point, terminal 4 to program over voltage trip, and terminal 23 to program over current trip. The power supply has been calibrated to produce full scale output voltage, output current, over voltage trip, and over current trip with a 2.0 V input at the external reference input terminals.

Over voltage trip and over current trip may be set to a value greater than full scale voltage and current by using terminal 26 as the reference voltage. The reference output at this terminal is 5.0. If the applied voltage at any input is greater than 2.50 V, the pgl (program line) LED will light and the power supply will turn off.

VOLTAGE PROGRAMMING

Voltage programming is very similar to resistive programming. In this case, the voltage reference, terminal 21 of JS1, is not used and an external voltage reference is applied to the programming inputs directly. A 2.0 V voltage source placed between terminals 3 and 1 of JS1 will produce full scale output voltage.

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