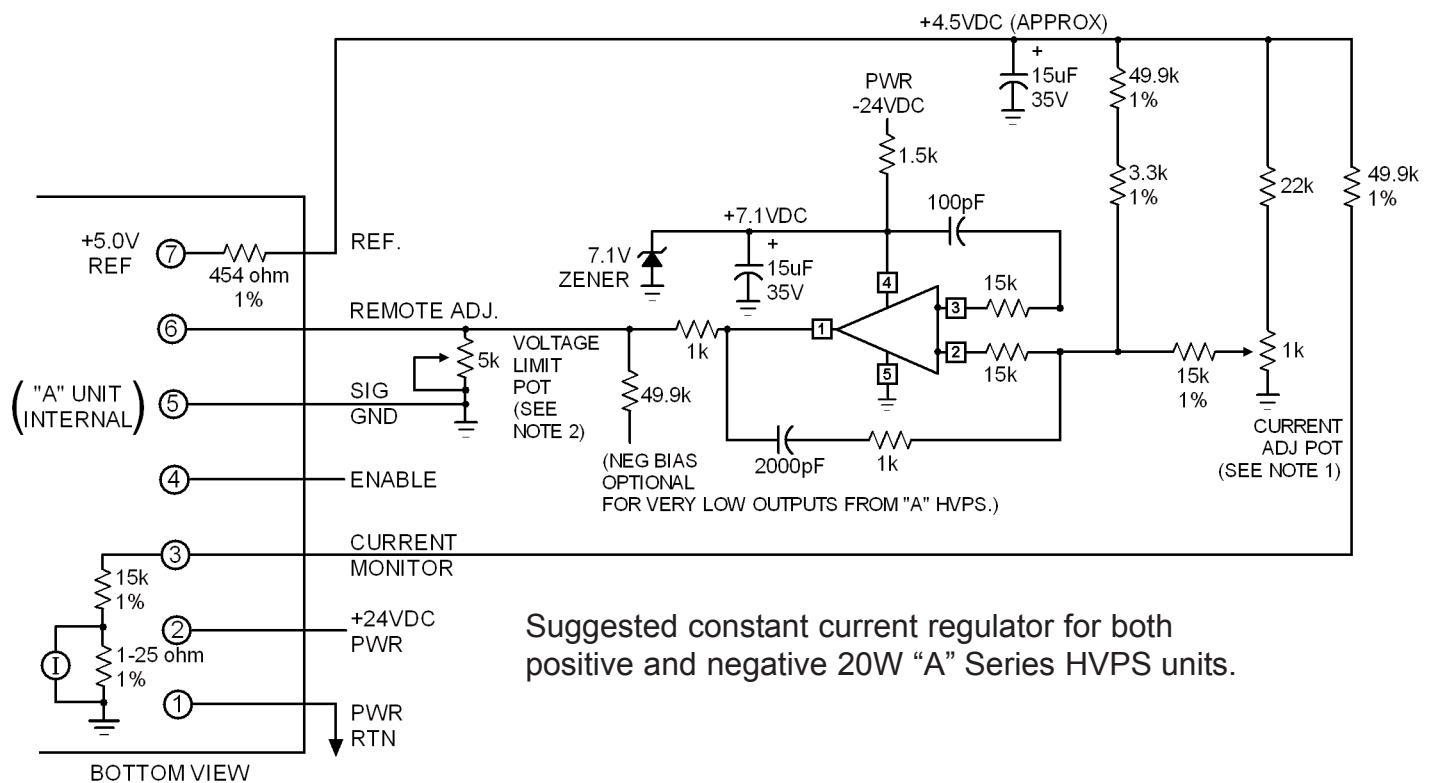


Each “A” Series high-voltage power supply (HVPS) is a remotely programmable constant-voltage HVPS offering output voltage from 0VDC up to the maximum rating of each particular unit in the series. All power supplies respond to a remote-adjustable voltage range of 0 to +5VDC. (An internal clamp limits remote voltages in excess of +5VDC, so positive units cannot exceed 20% of their maximum nominal output.)

For an application that requires a constant-current output, it is possible to use the current monitor feature to permit the HVPS to operate in a regulated-current mode. A circuit may be added externally to the “A” Series unit to convert the HVPS from voltage regulation to current regulation as shown in the suggested schematic below.



Note 1:

There is a current-adjust pot, which can be used to set the desired current-limit point. This circuit arrangement works for either a -P (positive) or -N (negative) HVPS. The suggested circuit shown assumes a +24V input power source. Downward adjustment of the 49.9k Ω and 22k Ω resistors will enable the circuit to operate off a +12V buss.

Note 2:

When it is desired to limit the output of the HVPS, a 5k Ω rheostat-connected pot can be connected from the *Remote Adjust Input* (pin 6) to either *Signal Ground Return* (pin 5), for -P units, or to the +7.1V zener voltage, for -N units.

Below is an example of a negative HVPS constant current regulator.

