

NI 6704 Current Output

You can connect a floating or grounded load to your NI 6704 device at the current output channel. You do not need an external floating power supply to complete the controlled current loop. You can control the current loop from 0.1 to 20.2 mA. The compliance for the current loop is 0 V to 10 VDC.



Note The voltage is not clamped at 10 V. If the current supplied to the load generates a voltage greater than 10 V, the device will generate a voltage greater than 10 V.



Caution Because the NI 6704 is not electrically isolated from high voltages, a load with high common-mode voltages can damage the NI 6704. National Instruments is *not* liable for any damages resulting from any such signal connections.

Figure 2-3 shows how to connect a current channel as a current output.

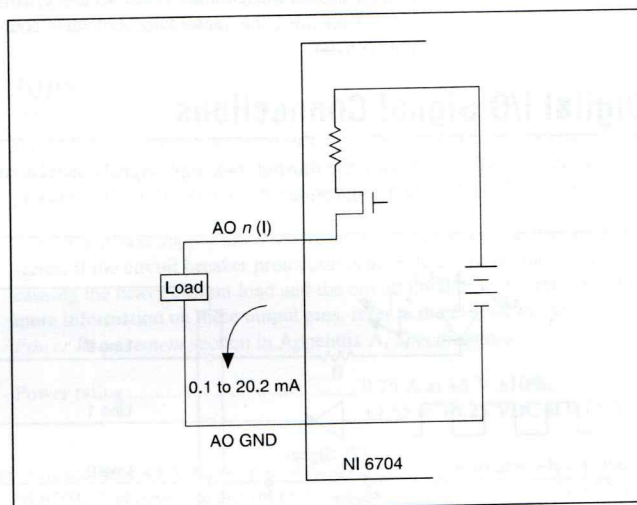


Figure 2-3. Current Output Connections

Because each current channel shares a ground line with a voltage channel, try to minimize the effect of the return current from your current channel on the voltage that you are outputting on your voltage channel. For example, if you output 20 mA on a current channel and return that current to the NI 6704 device along the shared ground line in a cable with an