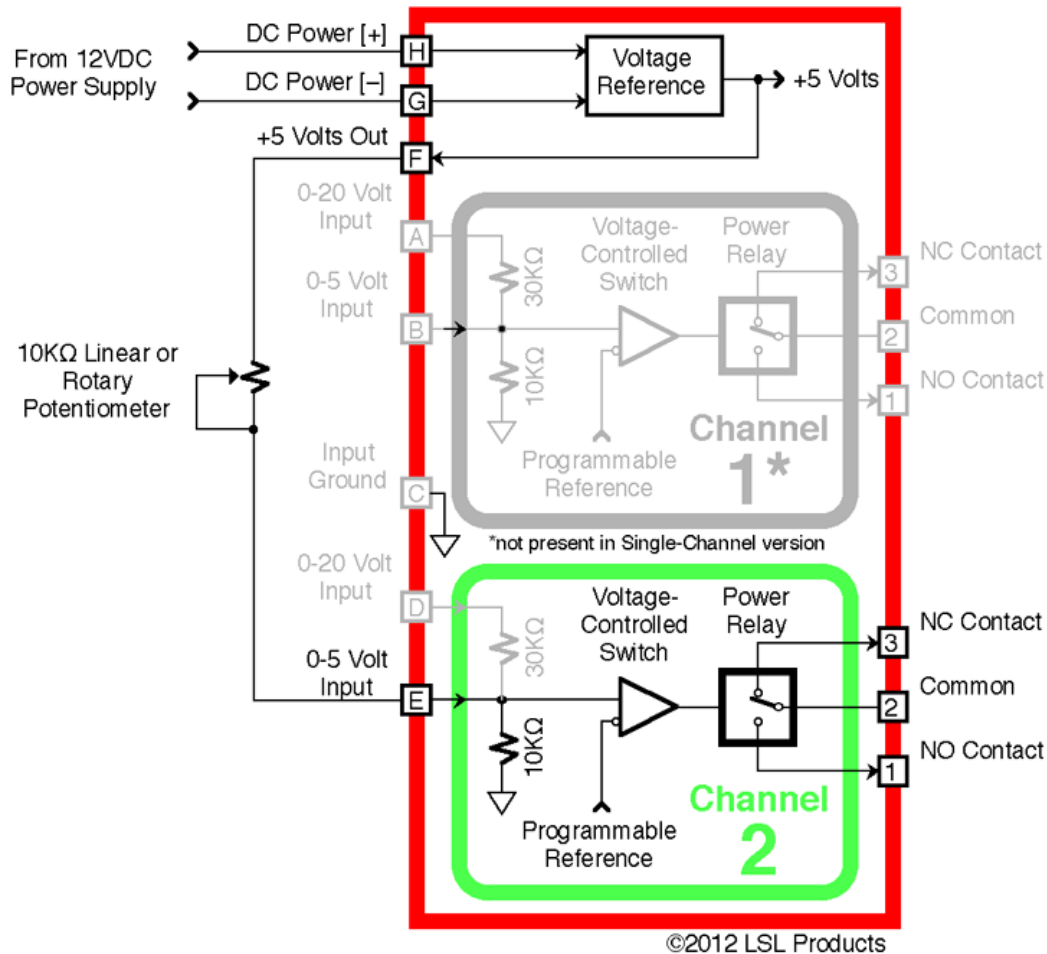


Pro-VCS™ Application Example:

Limit Switch



This configuration uses a potentiometer (or "pot") that is connected to produce a voltage which is proportional to its position. Essentially, the pot forms the upper part of a resistive divider circuit, and the 10K Ohm resistor which is built into the **Pro-VCS™** unit forms the lower part. As the shaft on the pot is moved to different positions, its resistance will change, causing the voltage at the center of the divider to also change. We can program the **Pro-VCS™** to turn on or off at these different voltages, thereby allowing the unit to function as a limit switch. Only one of **Pro-VCS's** two channels is required to build this circuit.

One of the key advantages this scheme has over mechanical limit switches is the fact that the limit setpoints can be changed instantly, at the press of a button - No need to adjust the mechanical link to the device being controlled.

The physical characteristics of the pot will depend on your intended application - A rotary pot might be used for preventing a shaft from rotating beyond a certain angle, or a linear pot might be used to prevent a lever from moving beyond a certain point. Multi-turn pots are also commonly available, making it possible to limit the rotation of a shaft to a certain number of revolutions.