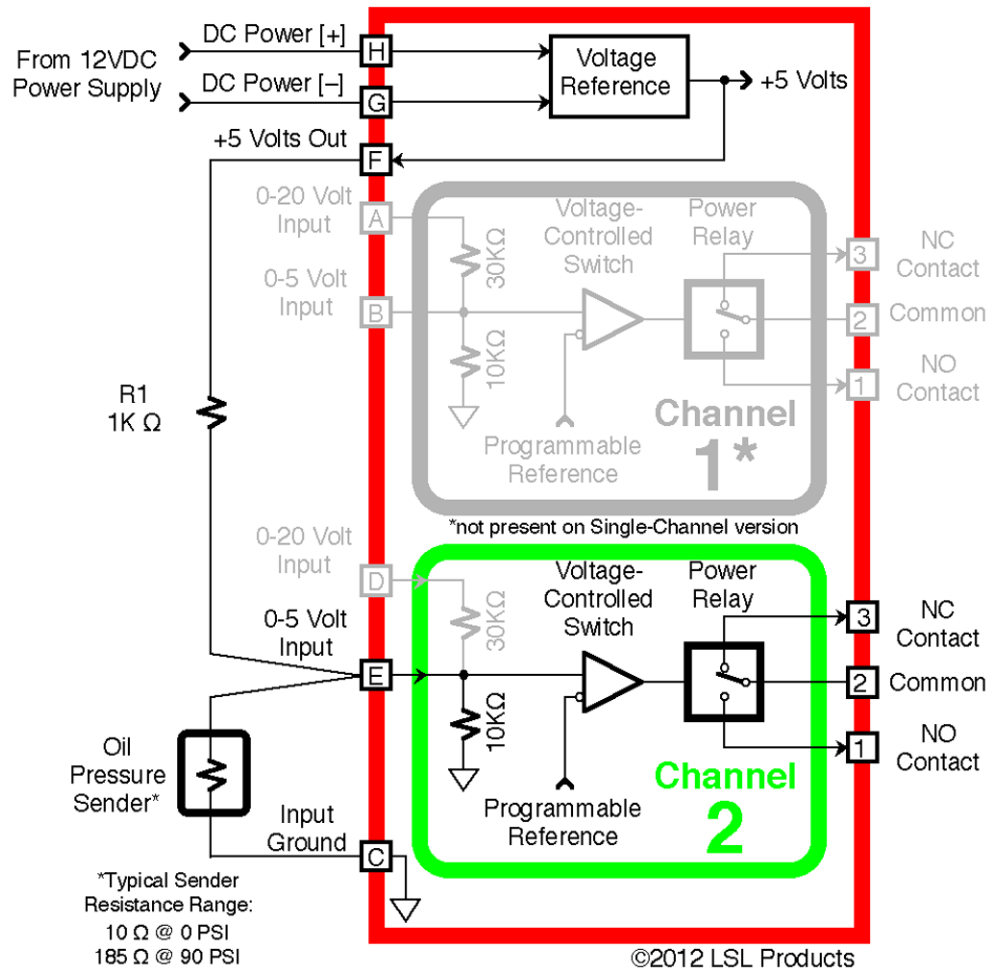


Oil Under/Overpressure Switch



This configuration uses a standard automotive oil pressure sender that is connected to produce a voltage which is proportional to the oil pressure it is measuring. Essentially, the sender forms the lower part of a resistive divider circuit, and resistor R1 forms the upper part. As the sender is exposed to different amounts of oil pressure, 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 an oil pressure switch. Only one of **Pro-VCS**'s two channels is required to build this circuit.

The resistance of most senders increases when exposed to more oil pressure. Thus, the configuration shown will produce a low voltage at low pressure (closing the **NO** relay contacts), or a higher voltage at high pressure (closing the **NC** relay contacts instead).

A typical application would to shut off an engine when its oil pressure drops below a pre-set value (by connecting the engine's ignition circuit in series with the **Common** and **NO** relay contacts).

Note that a relatively low resistance value was chosen for R1, in order to increase the range of voltages produced by the sender at various oil pressures.