

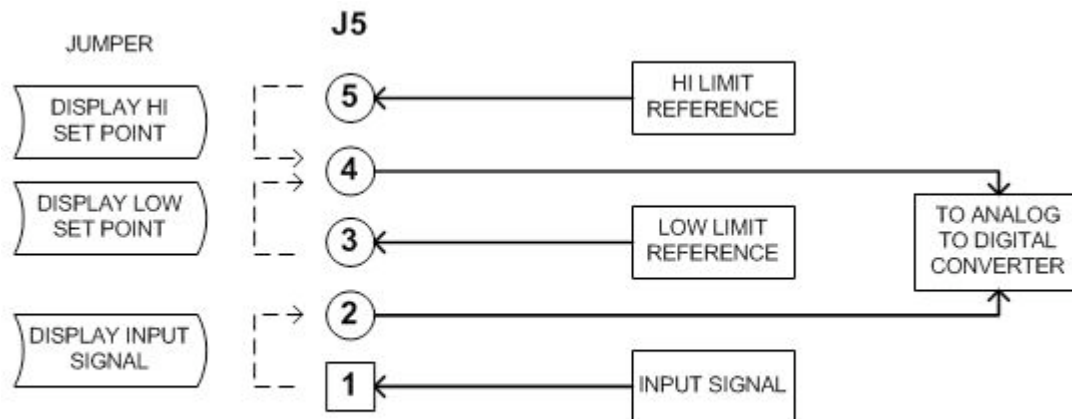
Setting Limits on a HI-Q101 Series Meter

Introduction:

The HI-Q101 series of meters has 2 analog comparators used to trigger 2 separate relays at the desired set point. One comparator acts as a **low limit** in that the relay is energized when the monitored signal is below the set point value. The other comparator acts as a **hi limit** in that the relay is energized when the monitored signal goes above the set point value.

Adjusting Set Points:

Units ordered with set points will have J5 populated on the back of the unit. This 5 position 0.1 inch center to center header aids in the adjustment of the set points. Normally the jumper will be on pins 1 & 2, this connects the input signal to the +IN on our analog to digital converter. The following diagram shows the jumper position and its function.



ONLY ONE JUMPER POSITION CAN BE POPULATED AT A TIME

To calibrate the “Hi Set Point” the following procedure would be followed.

- 1) Remove jumper from pins 1 & 2.
- 2) Place jumper on pins 4 & 5.
- 3) Observe bargraph and/or digital display and adjust Hi Set Point Potentiometer to desired limit level.
- 4) Remove the jumper from 4 & 5 and place on 1 & 2.
- 5) Apply an input signal and verify limit is triggering at the desired input signal level.

Note:

The limits have a small hysteresis to avoid the limit relay from chattering. This hysteresis may induce a small error (a dead zone around) where the relay energizes and de-energizes.

The same calibration procedure would be used for adjusting the “Low Set Point” but the jumper would be on pins 3 & 4.

Note:

Don't forget to replace jumper on 1&2 before applying input signal.