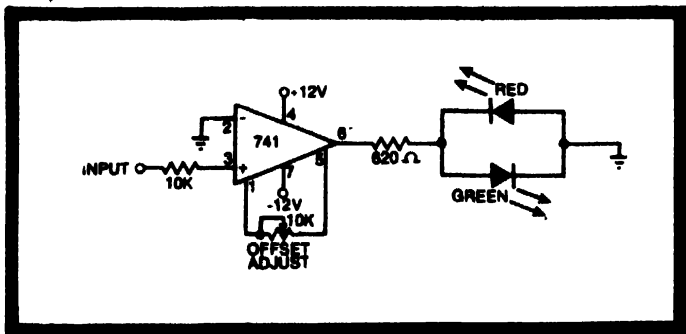


# Polarity or Null Indicator

Input is applied to non-inverting input (+) terminal of the operational amplifier. Output is positive when the input is positive and thus the green LED lights up. When the input is negative, the output of the operational amplifier is also negative and the red LED lights up.



The operational amplifier has been used to increase the sensitivity and to achieve a very low input voltage threshold, which is  $\pm 6\text{mV}$  or less for a 741 operational amplifier. No loading was observed and the input current was very small.

The circuit can be used as a sensitive polarity indicator or a null indicator.