



### SCHMITT TRIGGER

A very useful schmitt trigger can be made by utilising a single 555 timer with its trigger and threshold inputs connected together. The schmitt has a very low input current (1.5uA) and can directly drive a relay taking up to 200mA of current.

The circuit shows a 555 schmitt being used to energise a relay when the

light level on a photoconductive cell falls below a preset value; the relay energises when the voltage on pins 2 and 6 is greater than  $2/3V_{cc}$  and de-energises when the voltage falls below  $1/3V_{cc}$ . This gives a hysteresis of  $1/3V_{cc}$ . The circuit can be used in many other similar applications where a high input impedance and low output impedance are required with the minimum component count.