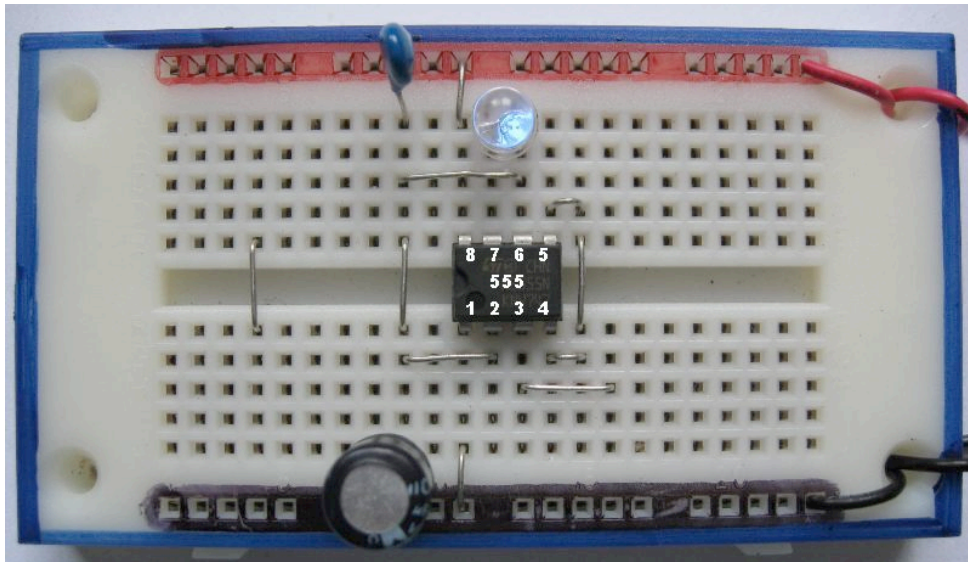
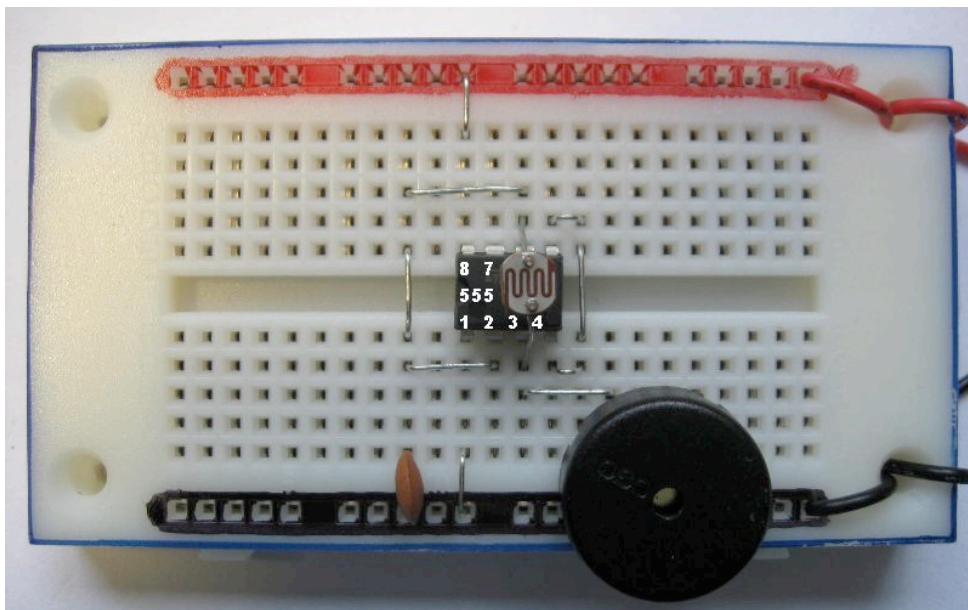


555 LED Strobe



- Pin 2 < $\frac{1}{3} V_{cc}$ pin 7 goes Open Circuit, capacitor charges up, pin 3 OP goes HIGH
- Pin 6 > $\frac{2}{3} V_{cc}$ pin 7 goes LOW, capacitor dumps into pin 7 via LED, OP pin 3 goes LOW
- Pin 4 must be high to allow the 555 to run but may be strapped directly to pin 5
- Build the above circuit. Compare the flash rate with the temperature
- To “Night Switch” this strobe circuit place the thermistor between pin 2 and pin 3 and place an LDR between pin 4 and -ve which will shut down the 555 during daylight

555 Wobulator ~ Theremin



- In this simplified astable circuit the 555 “chases it’s own tail” Pin 3 OP charges and discharges the timing capacitor via an LDR. Any resistance may be used in place of the LDR. The OP signal is an almost perfect square wave.
- A constant frequency 0 to 100 % PWM wave generator can be made by replacing the timing resistor with a the two end tabs of a potentiometer. Connect two diodes to the centre wiper of the potentiometer from each end. Take the OP from pin 7 with a pull-up resistor
- This simple oscillator is the basis of some great sound effects ! Wobulate the sound by connecting the digital square wave OP from pin 3 of another 555 or the triangular sweep wave from another slowly oscillating 555 circuit. Great for siren, car alarm sound effects !