555 Timer Pinouts

Pin 8 = Hot
    Positive Voltage potential necessary to power the chip (<u>high</u> 4**.**5**-**15 Vdc)

Pin 1 = Ground
    Negative Voltage potential to necessary to power the chip (<u>low</u> 0 Vdc)

_____

Pin 2 = Input [start]
    Applying a <u>low</u> voltage (*at pin 1 potential*) starts a timing cycle. Once timing cycle begins, chip ignores all voltages applied to **pin 2** until the active timing cycle terminates.

Pin 5 = Input [duration]
    Voltages with potentials anywhere from <u>low</u> through <u>high</u> can be applied to **pin 5**. However, the duration of the timing cycle increases in direct proportion to the voltage potential applied. In other words, at <u>low</u> (*at pin 1 potential*) the timing cycle will be at its minimum duration, while at <u>high</u> (*at pin 8 potential*) the timing cycle will be at its maximum duration. Voltages in between these extremes will affect the cycle length proportionally.
    Caution: In critical timer applications where **pin 5** is not being used, **pin 5** should be tied to **pin 1** with a .01µf condenser to reject any potential spurious **pin 5** voltage input.

Pin 6 = Input [reset]
    Voltages (including sweeping voltages) with potentials anywhere from <u>low</u> through <u>high</u> can be applied to **pin 6**.   However, if a voltage potential within the range of 2/3rds of <u>high</u> on up to full <u>high</u> (*at pin 8 potential*) is applied, the active timing cycle terminates.

Pin 4 = Input [stop]
    Applying a <u>low</u> voltage (*at pin 1 potential*) terminates the active timing cycle, AND a new timing cycle can not begin as long as a <u>low</u> voltage is being applied to **pin 4** (regardless of any voltage potential being applied on **pin 2**).

_____

Pin 3 = Output
    Output is normally <u>low</u> (*at pin 1 potential*) until **pin 2** is triggered. Thereafter output switches to <u>high</u> (*at pin 8 potential*) for the duration of the timing cycle.

Pin 7 = Drain
    Voltage applied to **pin 7** flows through the chip directly into **pin 1** (*ground*), EXCEPT while an active timing cycle is in progress (be cautious not to exceed the chips ratings). The suggested function for this pin is to act as a charging regulator for an external capacitor.