

Monostable Mode (One Shot Triggered Output Pulse)			
Jumper:	J2	J5	J7
Position:	Removed	Installed on pin 3-4 (DIS-THR)	Installed on pin 1-2 (R1-DIS)

Pot R1 and Capacitors C2/C3 or external control timing.

Single shot output pulse is generated when Trigger (J9 pin 2) goes from high to low. Needs external pull up and switch to GND, or high/low driven signal

Trigger pin needs external pull up and switch to GND, or high/low driven signal to trigger output pulse.

Trigger pulse should be shorter duration than output pulse width

Info on 555 Monostable mode: [https://www.electronics-tutorials.ws/waveforms/555\\_timer.html](https://www.electronics-tutorials.ws/waveforms/555_timer.html)

Astable Mode (Oscillator)			
Jumper:	J2	J5	J7
Position:	Installed	Installed on pin 2-3 (R2-DIS)	Installed on pin 1-2 (R1-DIS)

Pots R1 and R2, and Capacitors C2/C3 or external control frequency.

Info on 555 Astable mode: [https://www.electronics-tutorials.ws/waveforms/555\\_oscillator.html](https://www.electronics-tutorials.ws/waveforms/555_oscillator.html)

Variable Duty Cycle Mode (Oscillator)			
Jumper:	J2	J5	J7
Position:	Installed	Installed on pin 1-2 (D%-R2)	Installed on pin 2-3 (DIS-D%)

Pot R2, and Capacitors C2/C3 or external control frequency.

Pot R3 controls duty cycle

Misc Jumpers			
Jumper:	J1	J3/J4	J10
Function:	555 Reset	Timing capacitor add/remove	Power
Position:	Installed = normal run mode Removed = manual reset via header pin (J9 Pin 4)	Installed = bring C2/C3 into circuit for timing cap Removed = C2/C3 not in circuit, use external timing cap on header pin (J9 pin 6 and ground)	Installed = power on Removed = power disconnected

Header J9 provides 1:1 connections to all 555 pins.

The PCB is powered with VCC on J9 Pin 8, Ground on J9 Pin 1.

VCC should be kept between 4.5v and 12v for compatibility with on board part ratings and different types of 555 chip specs