

NE555 Pulse Frequency Module



The NE555 Pulse Frequency Module is used to drive a stepper motor for generating a square wave drive signal. As a square wave signal generator, it generates a square wave signal used for experimental development. Generate adjustable pulse for MCU and to control circuitry.

Specifications:

Input Voltage: 5V to 15VDC

Current output: 15mA to 35mA

Input Current: $\geq 100\text{mA}$

Output Amplitude: 4.2V V-pp to 11.4 V-pp
(Different input voltage, the output amplitude will be different)

Output with LED indication: Low level, LED will ON; High Level, LED will off, low frequency, the LED flashes

PCB Dimensions: 22 mm x 31 mm

The **output frequency range** is selectable:

LF file: 1Hz ~ 50Hz

IF file: 50Hz ~ 1kHz

High-frequency file: 1KHz ~ 10kHz

HF file: 10kHz ~ 200kHz

The **output duty cycle** can fine-tune; duty cycle and frequency is not separately adjustable; adjusting the duty cycle will change the frequency;

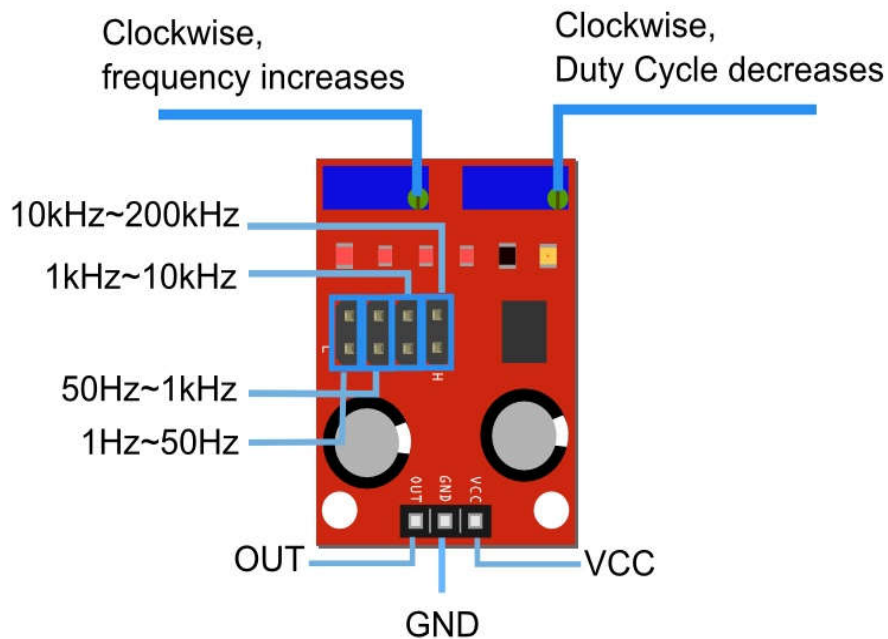


Figure 1. Pinouts of Pulse Frequency module.

The **output frequency** is adjustable:

Period $T = 0.7 (RA + 2 RB) C$

RA, RB is 0-10K adjustable;

Low profile when $C = 0.001\mu F$;

IF stalls $C = 0.1\mu F$;

High-frequency file $C = 1\mu F$;

HF stalls $C = 100\mu F$;

so buyers can calculate the frequency of the waveform.