NE555 Pulse Frequency Square Wave Signal Generator Module Stepper Motor Driver

Description:

1. Size : 3.1cm * 2.2cm 2. Main chip : NE555;

- 3. Input voltage: 5V-15VDC. When 5V supply, the output current can be at around 15mA; when the 12V supply, the output current can be about 35mA;
- 4. input current: 100mA
- 5. The output amplitude : 4.2V V-PP to 11.4V V-PP (different depending on the input voltage , the output amplitude will be different)
- 6. The maximum output current : 15mA (5V power supply , V-PP greater than 50%), 35mA (12V power supply , V-PP greater than 50%)

Advantages:

- 1. The output with LED indication, there is no output straightforward (low level LED volume, high LED off frequency is relatively low LED flashes);
- 2. The output frequency range of grades available, the output frequency more continuously adjustable; Low Frequency: $1Hz \sim 50Hz$

Medium Frequency: 50Hz ~ 1kHz

Medium and High frequency: 1KHz ~ 10kHz

High frequency: 10kHz ~ 200kHz

3. The output duty cycle can be fine-tuning, duty cycle and frequency are not adjustable, adjust the duty cycle will change the frequency;

The output frequency is adjustable;

Cycle T = 0.7 (RA + 2 RB) C

RA, RB is 0-10K adjustable;

Low frequencies C = 0.001 uF;

Medium Frequency C = 0.1 uF;

Medium & High frequency file C = 1uF;

High-frequency gear C = 100 uF,

Application:

- 1. Be used as a square wave signal generator generates a square wave signal for experimental development use.
- 2. Drives the stepping motor for generating a square wave drive signal.
- 3. Adjustable pulse generated for MCU to use.
- 4. Adjustable pulse generating control-related circuit.