Practical scenes:

PWM signal generator, square wave rectangular wave signal generator.

Used to generate a square wave rectangular wave signal to control the DC motor or a stepper motor driver; Stepper motor, servo motor, electric gripper, robot arm.

Combine the driver to realize dimming, speed regulation, control solenoid valve, etc. It is unable to directly drive loads, such as electric lights, motors, and solenoid valves.

Product Features:

Two modes can be selected:

PWM mode - frequency (continuous), duty cycle, pulse number is not adjustable, continued to send pulse.
PULSE mode - positive pulse width time, negative pulse width time, delayed start time, and adjustable number of pulses.

Start-stop button:

External switch can also be used to control output signal ON/OFF.

Wide voltage input 3.3-30V, with anti-reverse protection, 5.08mm terminal wiring.

Technical Parameters:

Working voltage: 3.3V~30V, with anti-reverse protection.

Frequency range: 1Hz~150KHz, accuracy about 1%.

Duty cycle range: 0-100%, 1% stepping.

Number of pulses: 1-9999, or infinite (display ‘-----’stands for infinity).

Delay output time: 0.000s-9999s, the minimum can be set 1ms.

Positive and negative pulse width length: 0.000s-9999s, the minimum can be set 1ms.

Signal loading capacity: less than 30mA.

Output signal amplitude: amplitude is equal to the supply voltage.

Output signal waveform: amplitude is equal to the supply voltage, waveform. OUT disappears, indicate there is no output pulse.

PWM mode interface

Pulse mode setting interface

Operation Overview:

There is an output waveform when power is turned on;

Waveform amplitude/power supply voltage;

The number of output pulses reaches the set value, the output automatically is stopped, and “OUT” disappears;

Press the ON button to control the presence or absence of the waveform. OUT disappears, indicate there is no output waveform, and output is 0;

Through Power-on restart or ON button to turn on the output, recalculate the number of pulses.

Mode Overview:

PWM mode (The screen display “%”):

The factory default mode is PWM mode; the default factory frequency is 1KHz and the duty cycle is 50%.

FREQ+ and FREQ- button: Set frequency;

DUTY+ and DUTY- button: Set duty cycle;

Press ON button to control signal output or stop, when it stops, the output is 0. When the screen displays “OUT”, it indicate there is output; otherwise it stops output.

Long press the SET button (more than 6 seconds), do not release. When you see the screen changes and “%” disappears, it is PULSE mode.

PULSE mode (The right side of the screen do not display “%”):

+P+ and –P- button: Set positive pulse width time, display above the LCD screen;

+N+ and N- button: Set negative pulse width time, display below the LCD screen;

Press ON button to control signal output or stop, when it stops, the output is 0. When the screen displays “OUT”, it indicate there is output; otherwise it stops output.

The default factory positive pulse width is 0.5 seconds and the negative pulse width is 0.5 seconds.

Pulse number and delay time setting -- In PULSE mode, press and hold the SET button for 2 seconds and then release, enter the interface of setting pulse number and delay time, the screen displays SET, then it will be turned off and cleared the output pulse.

P+ and P- button: Set delay time;

N+ and N- button: Set pulse number;

The default delay time is 0 second, pulse number is infinite (display ‘-----’);

Press SET button for 2 seconds again, it will automatically return to the pulse interface.

Press ON button, set the delay time, it will start to issue the set number of pulses. When the pulse number is sent finished, it will automatically output 0. If press the ON button when the pulse number is not finished, it will turned off and cleared the output pulse.

The pulses number set will be sent every time it is started. After the pulses number is sent, OUT on the screen will disappears automatically.

Application Example:

PWM output 20KHz, 60% duty cycle: Select PWM mode, the frequency is set to 20.00, and the duty ratio is set to 60%.

The output is turned on for 0.6 seconds and turned off for 0.2 seconds. Infinite loop: Select PULSE mode, the positive pulse width is set to 0.600, the negative pulse width is set to 0.200, the delay time is set to 0.000, and the number of pulses is set to 1000.

Power on or press the start button, delay 5 seconds, then the output is turned on for 0.6 seconds, off 0.2 seconds, infinite loop: Select PULSE mode, positive pulse width is set to 0.600, negative pulse width is set to 0.200, delay The time is set to 5.000 and the number of pulses is set to 1000.

Power on or press the start button, delay 5 seconds, then output 100 pulses of high level 10ms low level 10ms: Select PULSE mode, positive pulse width is set to 0.010, negative pulse width is set to 0.010, delay time is set to 5.000 and the number of pulses is set to 1010.

Power-on delay for 10 seconds, permanently output signal: Select PULSE mode, the positive pulse width is set to a number higher than 0, the negative pulse width is set to 0, the delay time is set to 10.00 seconds, and the pulse number is infinite (-----).

Note:

Power supply voltage shall use 3.3V~30V DC power supply, do not use AC power. If the voltage is over, the module will be burnt out after power on.

Please ensure that the input and output wiring is correct before power on, otherwise the circuit may be burnt out.

Don’t make the module is affected by moisture, don’t make the components of the circuit board short-circuit, don’t touch the pins and pads of the board components by hand.

Don’t use this product in medical, life-saving, flammable, explosive and other fields and occasions.

Recommended product on Amazon: DROK PWM & Pulse Signal Generator

Any questions please contact us through Amazon: https://www.droking.com