

Module Instruction:

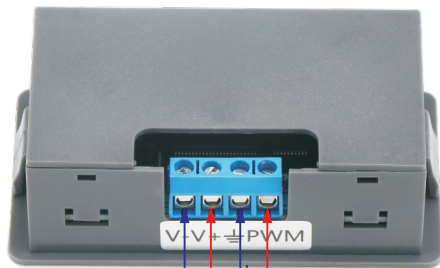
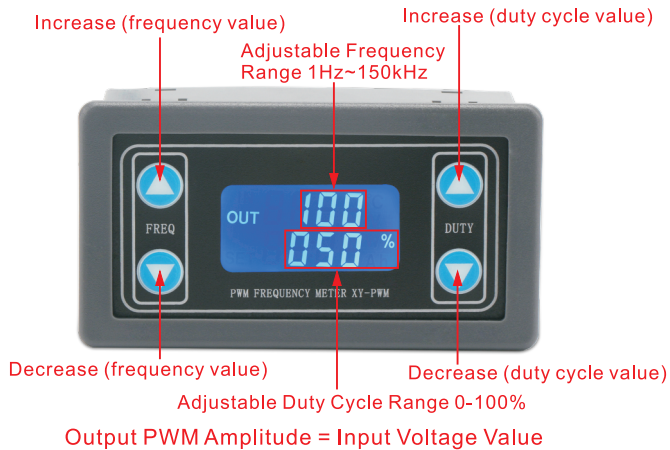
PWM output can be set the frequency and duty cycle value separately.

The frequency is divided into 4 ranges and can be switched automatically.

1. XXX (without decimal point): the minimum unit is 1Hz, and the value range is 1Hz~999Hz.
2. X.XX (the decimal point is in the hundreds) the minimum unit is 0.01kHz, and the value range is 1.00kHz~9.99kHz.
3. XX.X (the decimal point is in the ten digits): the minimum unit is 0.1kHz; and the value range is 10.0kHz~99.9kHz.
4. X.X.X (full decimal point): the minimum unit is 1kHz; the value range is 1kHz~150kHz

e.g. Frequency display: 100 represents 100Hz;
 1.01 represents 1.01kHz;
 54.1 represents 54.1kHz;
 1.2.4 represents 124kHz

Duty cycle range: 0-100%



Input voltage - 3.3V~30V
 Input voltage + 3.3V~30V
 GND
 PWM

Setting Parameters:

There are 4 independent keys on the module for setting the frequency value and the duty cycle value. It supports short press (increase or decrease one unit) and long press (fast increase or decrease).

All setting parameters will be saved if power down.

Module Parameters:

Operating voltage range: DC 3.3~30V

Frequency range: 1Hz~150kHz

Frequency accuracy: the accuracy in each range is about 2%

Signal load capacity: the output current is about 5-30mA

Output amplitude: the PWM amplitude is equal to the input voltage value

Environment temperature range: -20~+70°C

It will display OUT when it is working



It will display SET when setting parameters



Serial Port Control (microcontroller TTL level communication)

Communication standard: 9600 bps

Data bits: 8

Stop bit: 1

Check digit: none

Flow control: none

1. Set the PWM frequency

"F101": Set the frequency to 101 Hz (001~999)

"F1.05": Set the frequency to 1.05 kHz (1.00~9.99)

"F10.5": Set the frequency to 10.5kHz (10.0~99.9)

"F1.0.5": Set the frequency to 105kHz (1.0.0~1.5.0)

2. Set the PWM duty cycle

"DXXX": Set the PWM duty cycle to XXX; (001~100)

For example, D050, set the PWM duty cycle to be 50%.

3. Read the setting parameters

Send a "read" string and read the set parameters.

Setting is successful and return: DOWN;

Setting is failed and return: FALL.

Application:

Used as a square wave signal generator to generate a square wave signal for experimental development;

Used to generate a square wave signal that controls the motor driver;

Generate adjustable pulses used by the MCU;

Generate adjustable pulses, control related circuits (PWM dimming speed adjustment applications, etc.)