MODULE CONVERTISSEUR PWM - TENSION ANALOGIQUE 0-10V / 0-100 %

Description:

1. The PWM transfer voltage module LC-LM358-PWM2V converts the PWM digital signals into 0 to 10V analog signals.
2. It can be used as signal interface switching for PLC or other industrial control boards. The output voltage is regulated by adjusting the duty ratio of the PWM.
   The modules are small in size and easy to use in different places.

Features:

1>. MCU embedded technology
2>. Easy to operate, fine tuned by potentiometer
3>. Select the PWM signal input level range through short-circuit
4>. The module is smaller, easy to carry and use

Parameter:

1>. Work Voltage:DC 12V-30V; (> 100MA)
2>. PWM Receiver Frequency:1KHZ-3KHZ
3>. PWM signal input level range:
   The peak of 4.5V to 10V level. The short cap install in '5V'. This level is used for normal controller or 5V MCU
   The peak of 12V to 24V level, so inserted in 24V. The short cap install in '24V'. This level is used for normal PLC controller
4>. Conversion range:0%-100% PWM to 0-10V
5>. Allowable error:5%

Hardware Interface:

VCC	DC 12V-30V
GND	Ground
PWM	Positive of PWM input signal
GND	Negative of input signal
VOUT	Output Voltage 0-10V

GND	Output Voltage Ground

Operation instructions:

After power on, without input signal, the output is 0V, so only input can output.

The first time when the power is on, it is best to do a calibration debugging: Input a 50% duty ratio signal to PWM/GND and adjust the relative amplitude short cap.

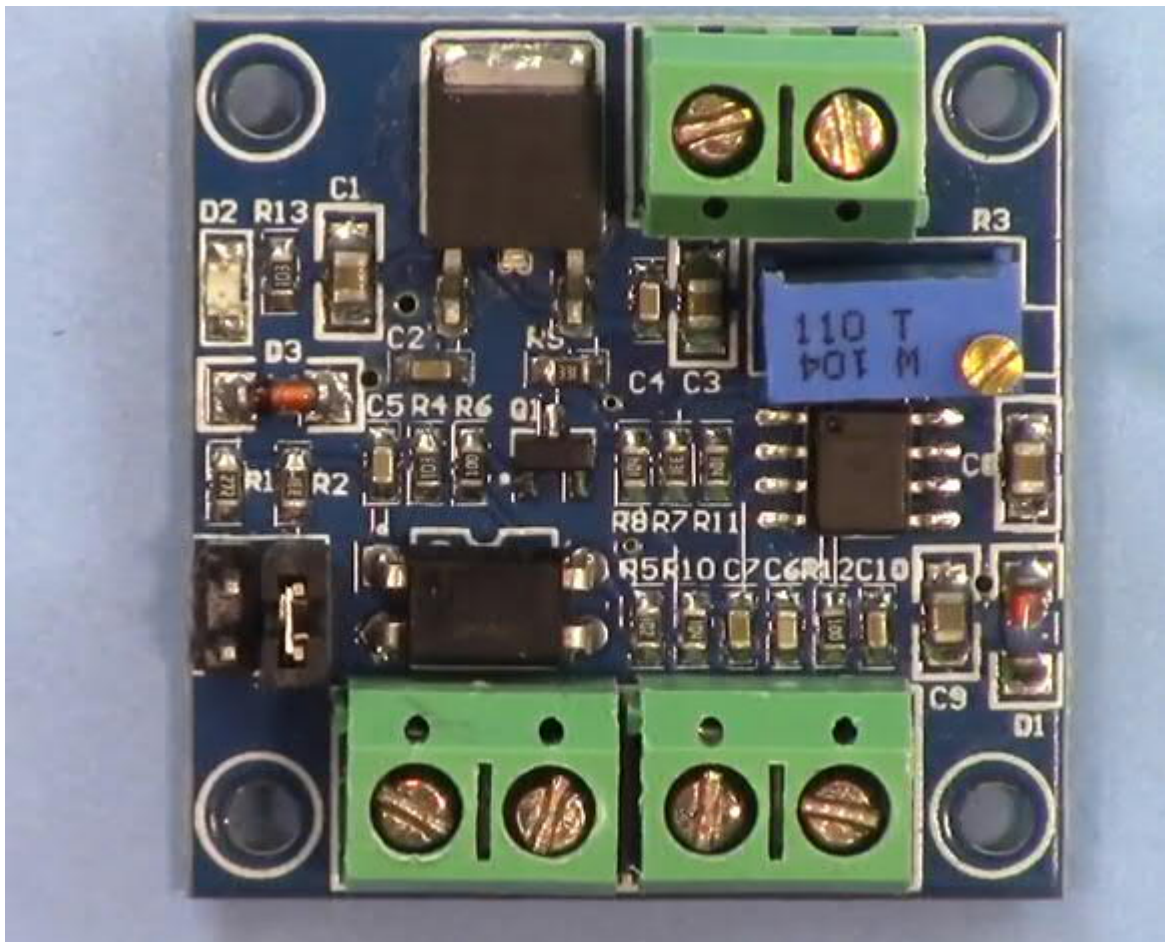The frequency is 1KHZ-3KHZ, Measured VOUT and GND with a multimeter and it will display 5V.

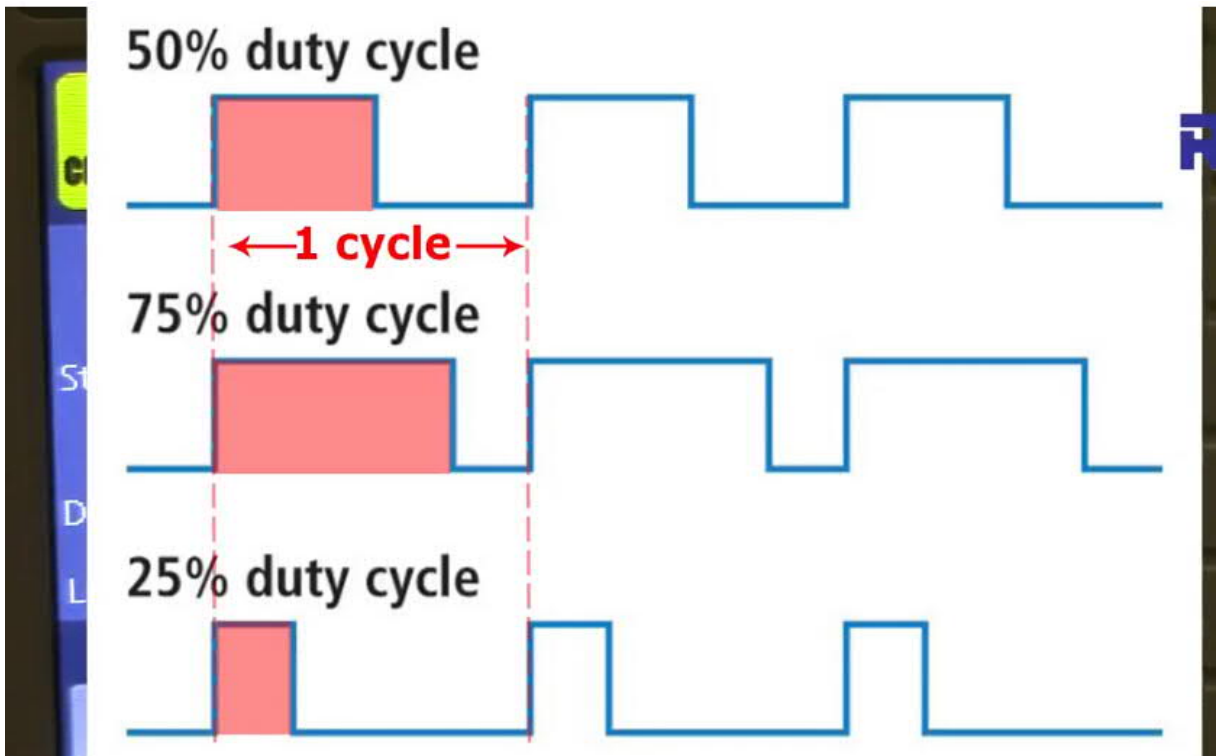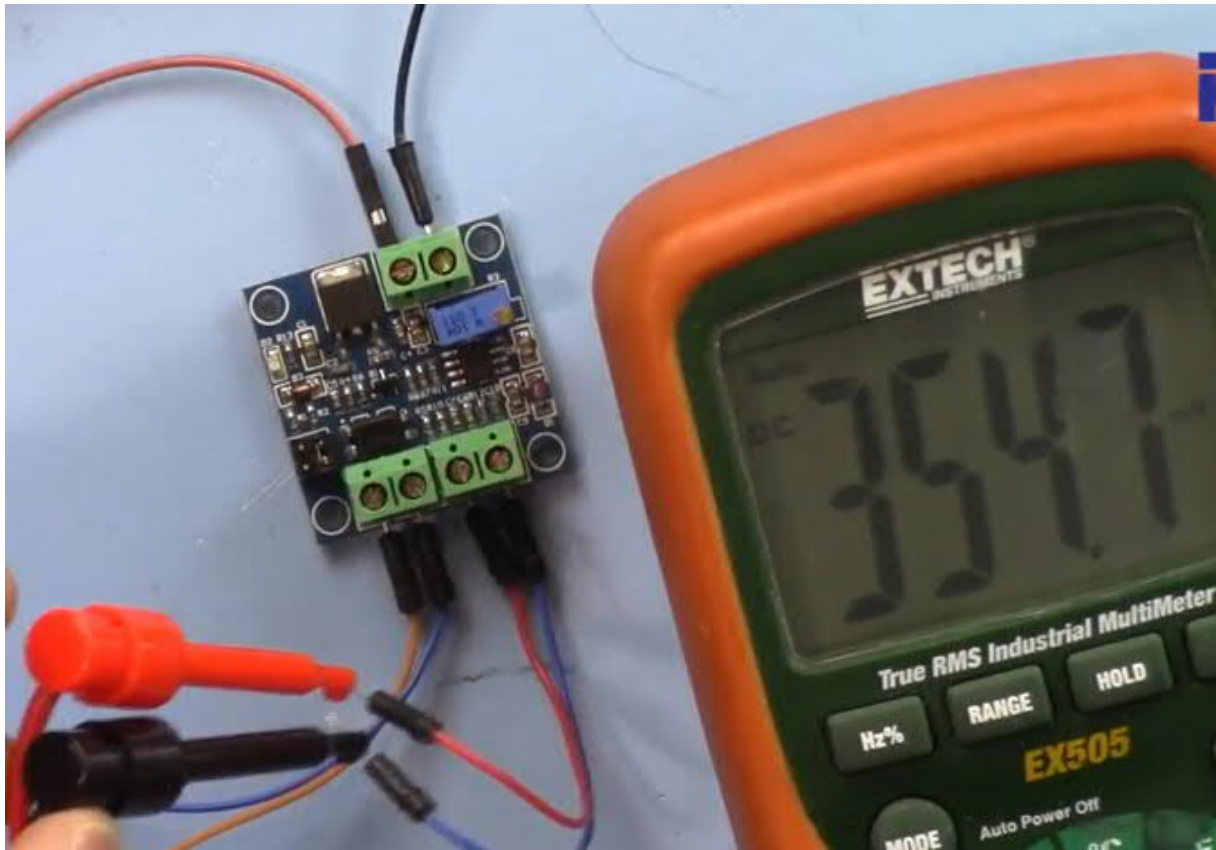Adjust potentiometer to make sure display 5.00V on multimeter. This will calibrate your pulse signal to this module.

When the frequency changes, the correspondences may be offset and need to be re calibrated.
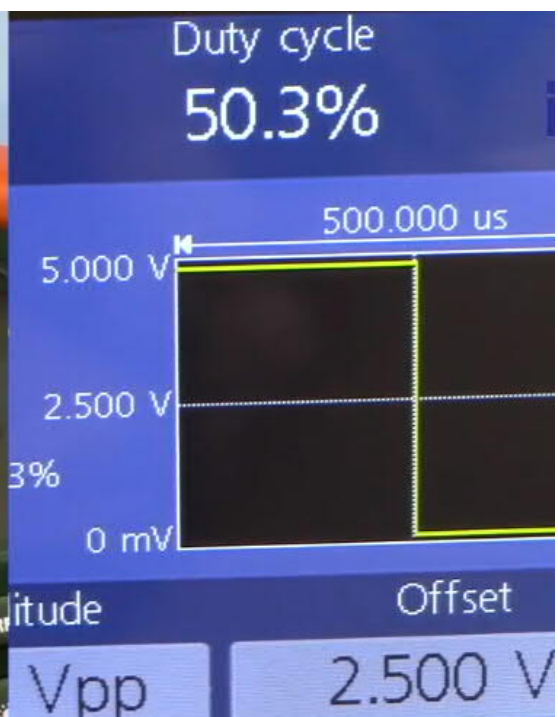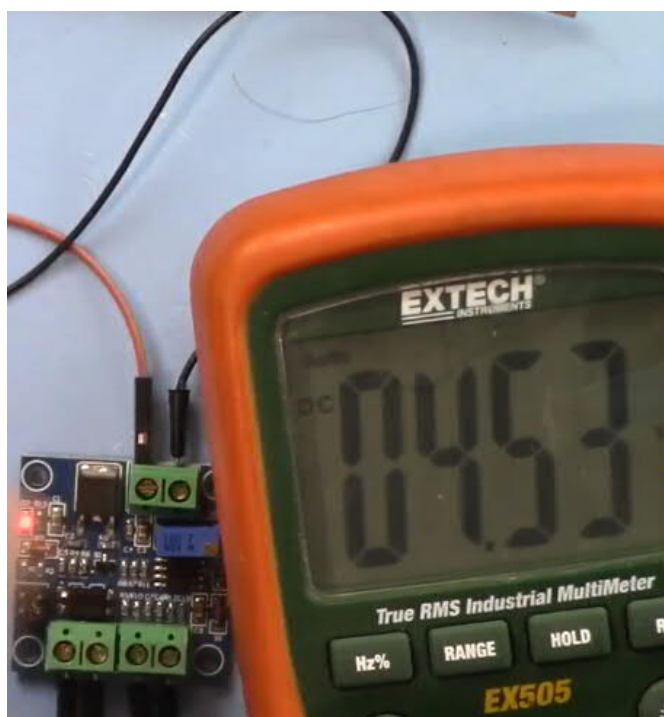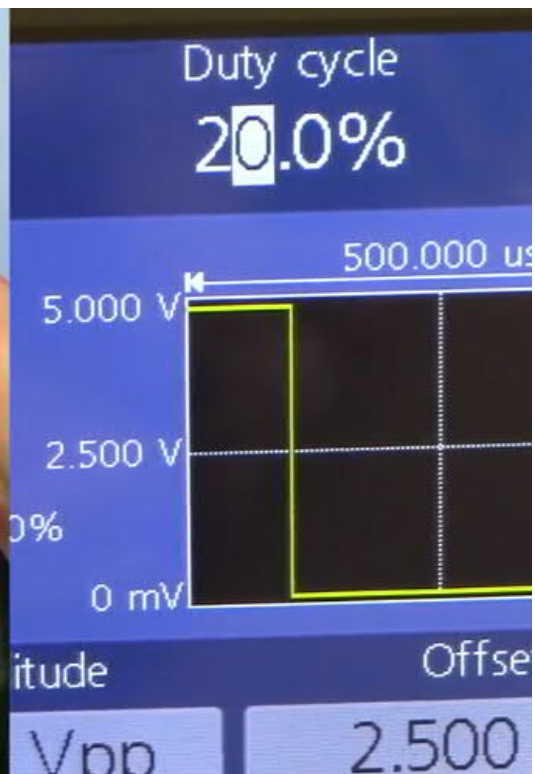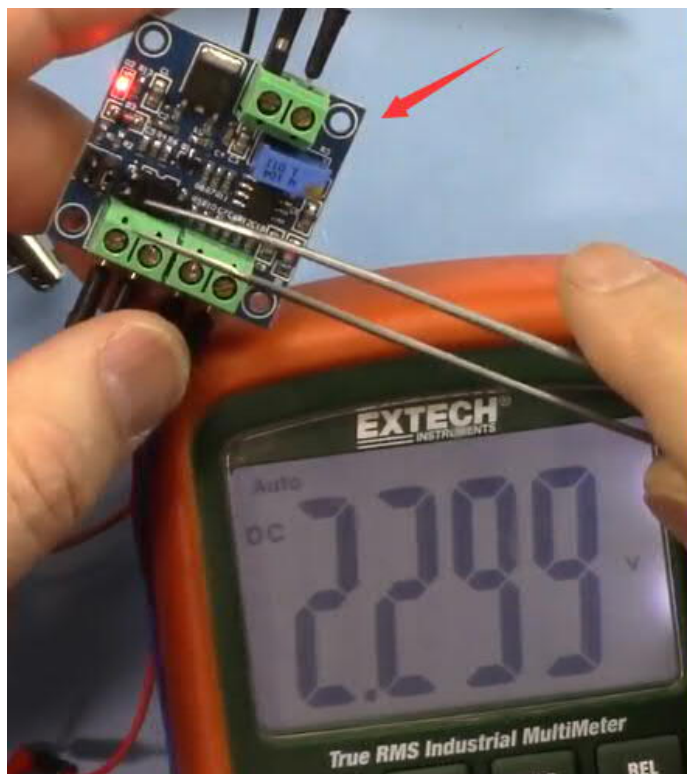The output voltage can be adjusted by adjusting the duty ratio.
The accuracy can be controlled by adjusting the potentiometer.

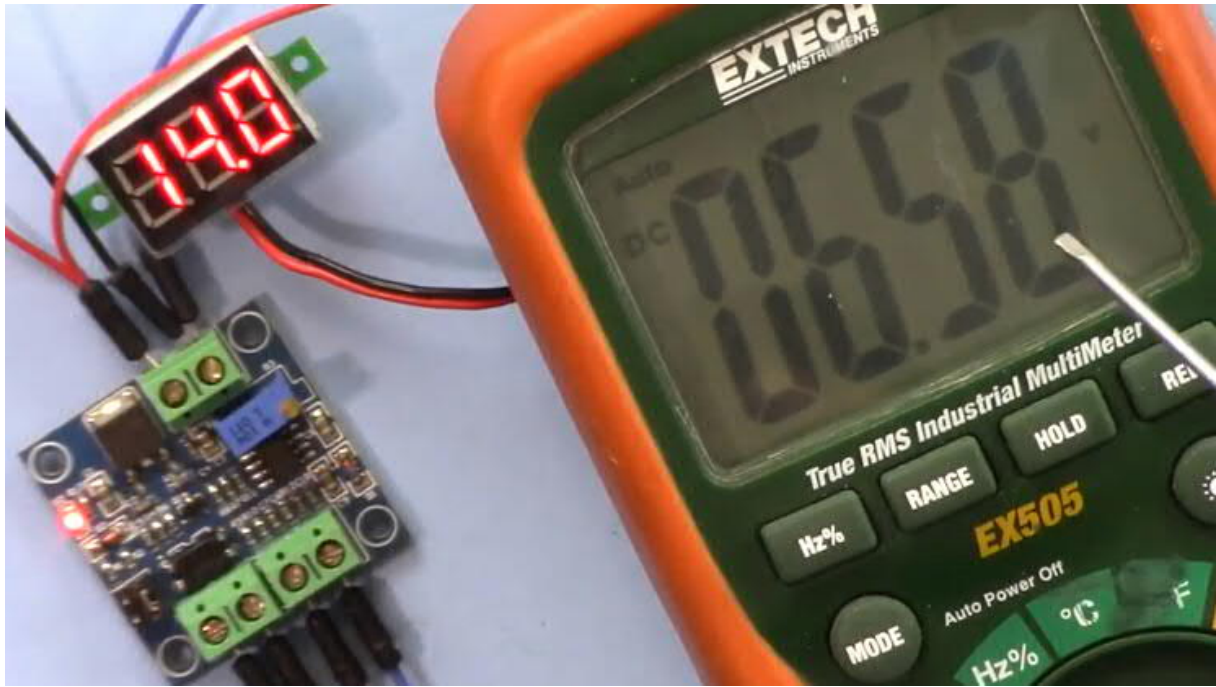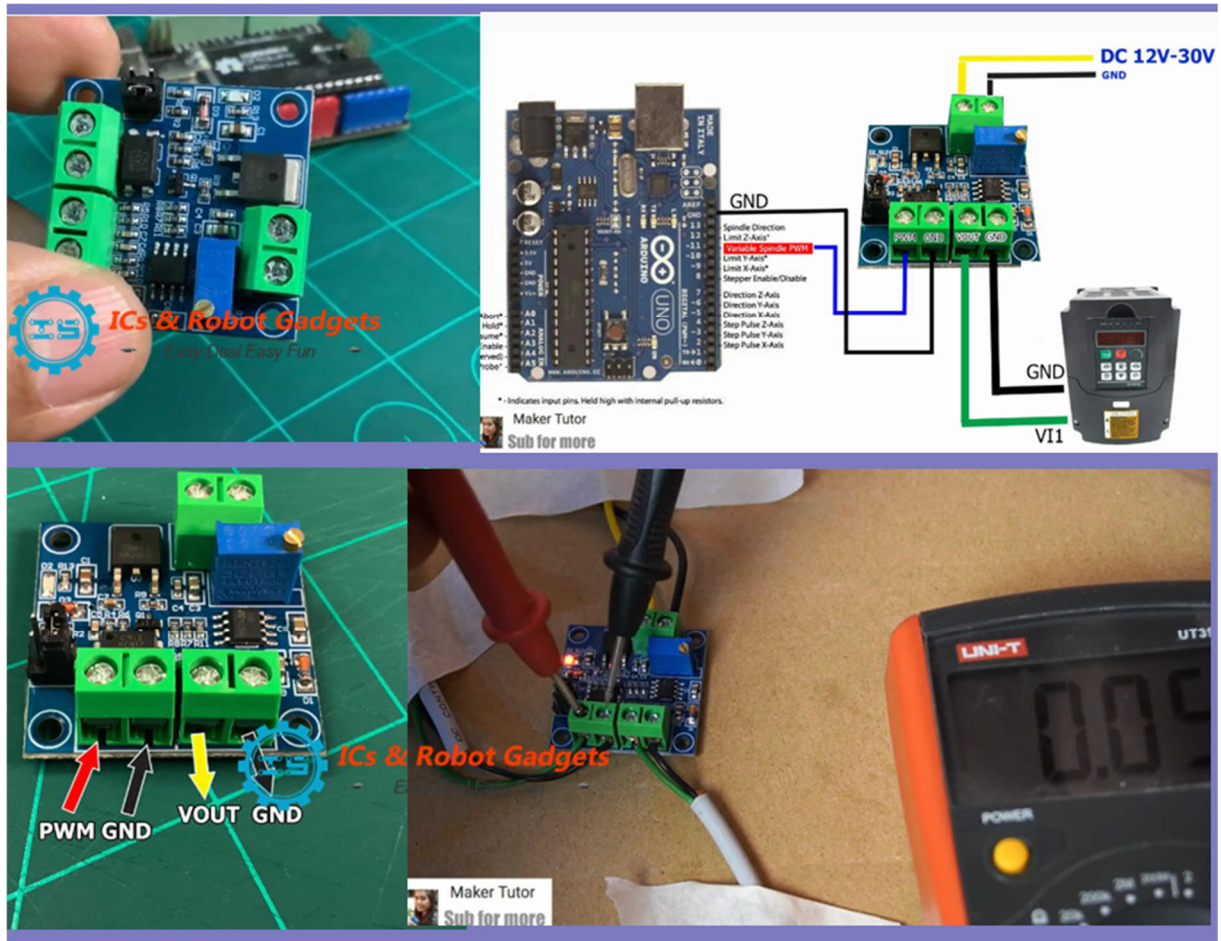## 1. Tested by ICStation's Outstanding Partner Robojax:

50% duty cycle

←—1 cycle—→

75% duty cycle

25% duty cycle

Duty cycle
20.0%

500.000 us

5.000 V
2.500 V
0 mV

itude   Offse
Vpp   2.500

Duty cycle
50.3%

500.000 us

5.000 V
2.500 V
0 mV

itude   Offset
Vpp   2.500 V

Learn More Details in the Video:
(The language in the video is **English**)

2. Tested by ICStation's Outstanding Partner Maker Tutor:

VIDEO DEMO

https://youtu.be/hhISpaA8an4