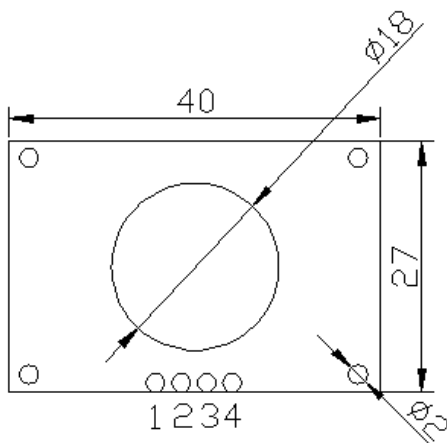This module provides ultrasonic 30cm-3m of non-contact distance measurement function, range sensor in the sensor output corresponding to the objects in the high pulse width signal.

Features

- Detecting range: 30cm-3m
- Best in 30 degree angle
- Electronic brick compatible   interface
- 5VDC power supply
- Breadboard friendly
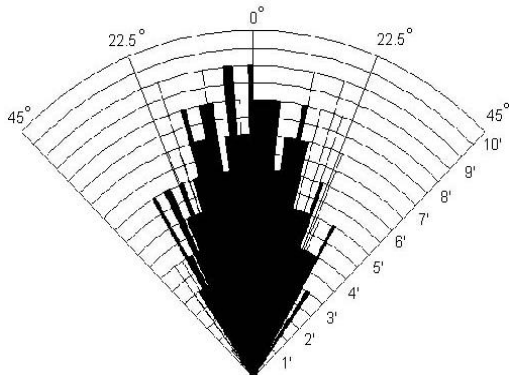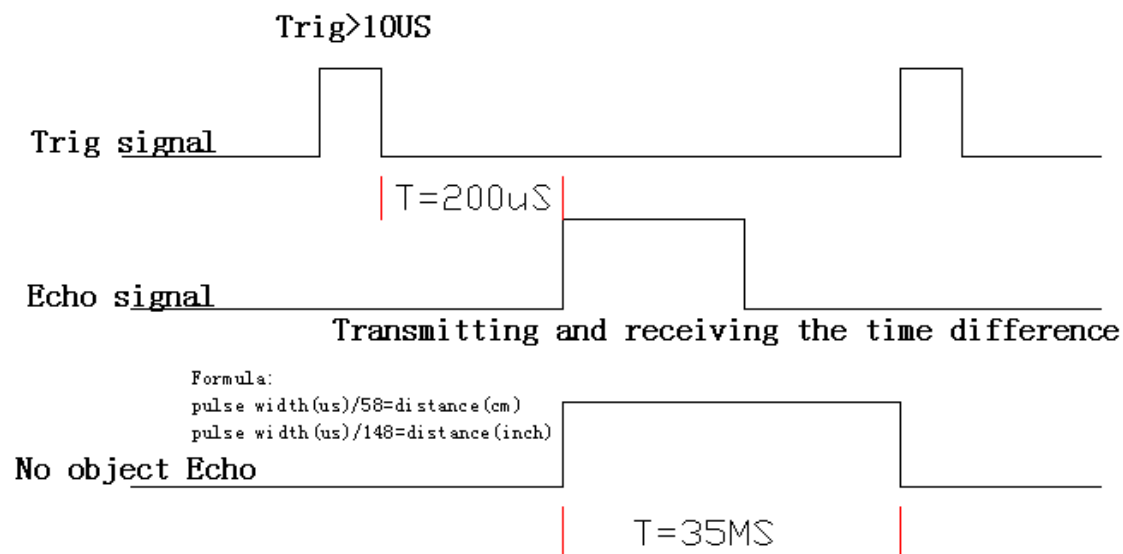- Dual transducer

Pin Definition

Pin	Value
1	GND
2	ECHO
3	TRIG
4	VCC

Specifications

Parameter	Value
Supply voltage	5V
Global Current Consumption	15 mA
Ultrasonic Frequency	40k Hz
Maximal Range	350 cm
Minimal Range	30 cm
Resolution	1 cm
Trigger Pulse W idth	10 µs

Practical test of performance, best in 30 degree

Sequence Chart

After power on, the module is waiting for the trigger signal. Triggered automatically issued within 8 40kHz cycle level, and to detect the long echo time, and through the corresponding timer output level TTL level PWM pulse width. According to the object at different distances, a corresponding proportion of the output pulse width. MCU can be used to determine the timing of pulses calculated distance. Formula: uS/5.8 = mm, or uS/148 = inches. If the object is not detected, the module output pin will output a constant pulse width of about 35MS.

Note: The module detects a minimum distance of 30cm inside the object, the signal will be inaccurate.

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