English

DYP-ME007Y-PWM Ultrasonic sensor

DYP-ME007Y-PWM module provides ultrasonic 30cm-3m of noncontact distance measurement, the sensor senses an object is within the range corresponding to the high output pulse signal.

Features

- Small, easy to use
- · low voltage, low power consumption
- Wide measurement range
- high accuracy
- the small blind
- waterproof

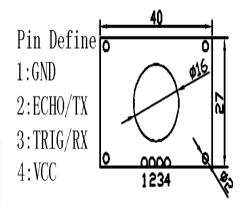
Application

- Apply waterproof ranging occasions;
- measuring the distance between objects:
- Programmable car obstacle avoidance:
- robot obstacle avoidance:
- teaching apparatus;
- security, industrial contro

Product physical map:



Product structure:

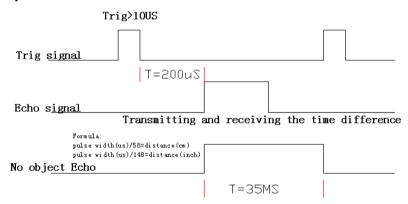


Electrical parameters

TYPE	DYP-ME007Y-PWM
Operating voltage	DC 5V
Operating current	Less than 15mA
frequency	40KHz
Max distance	3.5m
Min distance	30cm
Output pin	2. ECHO/TX

Output signal	5V TTL level
Response time	100MS
accurcy	1cm
drectivity	Less than 50
Operating Temperature	-10-60°C
Storage Temperature	-20-80°C
size	40mm*27mm

Sequence chart



Description:

After power on, the module 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 pin will output a constant pulse width of about 35MS.

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