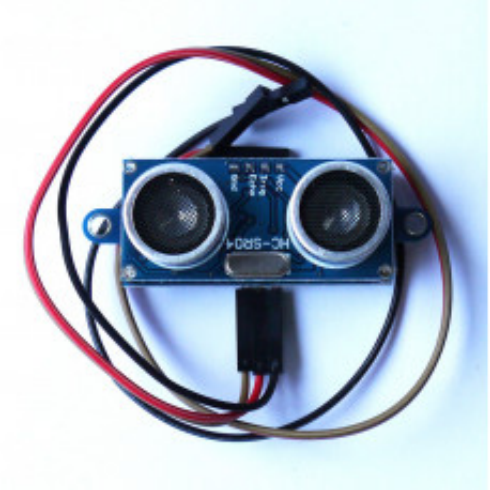
HC-SR04 Distance Sensor



Produktkode: 114aa
Tilgjengelighet: 7
Weight: 30.00g
Custom Field 5 (Location): A7

Pris: kr. 35,00

Kort beskrivelse
HC-SR04 Ultrasonic Wave Detector Ranging Module Distance Measuring PCB 4 Arduino

Beskrivelse
Overview

Ultrasonic ranging module HC - SR04 provides 2cm - 400cm non-contact measurement function, the ranging accuracy can reach to 3mm. The modules includes ultrasonic transmitters, receiver and control circuit. The basic principle of work:

- Using IO trigger for at least 10us high level signal,
- The Module automatically sends eight 40 kHz and detect whether there is a pulse signal back.

- IF the signal back, through high level , time of high output IO duration is the time from sending ultrasonic to returning. Test distance = (high level time×velocity of sound (340M/S) /2

Wire connecting direct as following:

- 5V Supply
- Trigger Pulse Input
- Echo Pulse Output
- 0V Ground

If you are sourcing a ultrasonic ranging module , the HC-SR04 is good choose . Its stable performance and high ranging accuracy make it a popular module in electronic market .

Compared to the Shap IR ranging module , HC-SR04 is more inexpensive than it . But it has the same ranging accuracy and longer ranging distance.

Specifications

- power supply :5V DC
- quiescent current : <2mA
- effectual angle: <15°
- ranging distance : 2cm – 500 cm
- resolution : 0.3 cm

There are 4 pins out of the module : VCC , Trig, Echo, GND . So it's a very easy interface for controller to use it ranging. The all process is : pull the Trig pin to high level for more than 10us impulse , the module start ranging ; finish ranging , If you find an object in front , Echo pin will be high level , and based on the different distance,it will take the different duration of high level. So we can calculated the distance easily :

Distance = ((Duration of high level)*(Sonic :340m/s))/2

Produktgalleri

