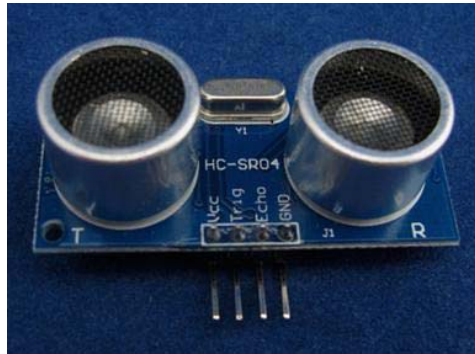


Arduino Ultrasonic Module Range Detection Sensor

Model: HC-SR04



Technical Parameters:

1. Working Voltage : 5V(DC)
2. Static current: Less than 2mA.
3. Output signal: Electric frequency signal, high level 5V, low level 0V.
4. Sensor angle: Not more than 15 degrees.
5. Detection distance: 2cm-500cm.
6. High precision: Up to 0.3cm
7. Input trigger signal: 10us TTL impulse
8. Echo signal : output TTL PWL signal

Mode of connection:

1. VCC
2. trig(T)
3. echo(R)
4. GND

Use Method:

Supply module with 5V, the output will be 5V while obstacle in range, or 0V if not. The out pin of this module is used as a switching output when anti-theft module, and without the feet when ranging modules.

Note : the module should be inserted in the circuit before been power, which avoid producing high level of misoperation; if not, then power again.

Module Working Principle:

1. Adopt IO trigger through supplying at least 10us sequence of high level signal.
2. The module automatically send eight 40khz square wave and automatically detect whether receive the returning pulse signal.
3. If there is signals returning, through outputting high level and the time of high level continuing is the time of that from the ultrasonic transmitting to receiving. Test distance = (high level time * sound velocity (340M/S) / 2.

Note : This module is not suitable to connect with electric power, if you need to connect this module with electronic power, then let the GND terminal of this module to be connected first, otherwise, it will affect the normal work of the module.