

CONNECTIONS IN WOKWI FOR ULTRASONIC SENSOR

CODE

Ultrasonic Simple

Prints the distance read by an ultrasonic sensor in centimeters. They are supported to four pins ultrasound sensors (like HC-SC04) and three pins (like PING))) and Seeed Studio sensors).

The circuit:

* * Module HC-SC04 (four pins) or PING))) (and other with three pins), attached to digital pins as follows:

```
-----
| HC-SC04 | Arduino |   | 3 pins | Arduino |
-----
| Vcc  | 5V  |   | Vcc  | 5V  |
| Trig | 12  | OR | SIG  | 13  |
| Echo | 13  |   | Gnd  | GND  |
| Gnd  | GND  |   | -----
```

*/

```
#include "Ultrasonic.h"
```

```
/*
```

Pass as a parameter the trigger and echo pin, respectively, or only the signal pin (for sensors 3 pins), like:

```
Ultrasonic ultrasonic(13);
```

```
*/
```

```
Ultrasonic ultrasonic(12, 13);
```

```
int distance;
```

```
void setup() {
```

```
  Serial.begin(9600);
```

```
}
```

```
void loop() {  
  // Pass INC as a parameter to get the distance in inches  
  
  distance = ultrasonic.read(CM);  
  
  Serial.print("Distance in CM: ");  
  Serial.println(distance);  
  
  distance = ultrasonic.read(INC);  
  
  Serial.print("Distance in Inches: ");  
  Serial.println(distance);  
  
  delay(1000);  
}
```

Diagram.json:

```
{  
  "version": 1,  
  "author": "PAVITHRA K",  
  "editor": "wokwi",  
  "parts": [  
    { "type": "wokwi-arduino-uno", "id": "uno", "top": 88.67, "left": -30, "attrs": { } },  
    { "type": "wokwi-hc-sr04", "id": "ultrasonic1", "top": -88.09, "left": -64.33, "attrs": { } }  
  ],  
  "connections": [  
    [ "ultrasonic1:VCC", "uno:5V", "red", [ "v33.74", "h-107.21", "v292.8", "h230" ] ],  
    [ "ultrasonic1:TRIG", "uno:12", "green", [ "v59.84", "h90.43", "v1.63" ] ],  
    [ "ultrasonic1:ECHO", "uno:13", "magenta", [ "v69.63", "h4.25" ] ],  
    [ "ultrasonic1:GND", "uno:GND.1", "black", [ "v42.72", "h51.82", "v-0.82" ] ]  
  ]  
}
```

hc-sr04-Ultrasonic-Simulation.ino diagram.json Ultrasonic.h Ultrasonic.cpp

Library Manager

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32 modified 11 Jun 2018

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34

35 This example code is released into the MIT License.

36 */

37

38 #include "Ultrasonic.h"

39

40 /*

41 | Pass as a parameter the trigger and echo pin, respectively,

42 | or only the signal pin (for sensors 3 pins), like:

43 | Ultrasonic ultrasonic(13);

44 */

45 Ultrasonic ultrasonic(12, 13);

46 int distance;

47

48 void setup() {

49 | Serial.begin(9600);

50 }

51

52 void loop() {

53 | // Pass INC as a parameter to get the distance in inches

54

55 | distance = ultrasonic.read(CM);

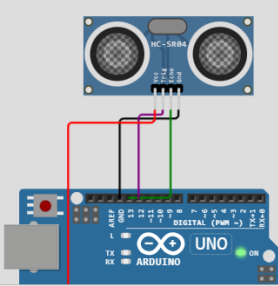
56

57 | Serial.print("Distance in CM: ");

58 | Serial.println(distance);

Simulation

01:03.220 91%



Distance in Inches: 41
Distance in CM: 105
Distance in Inches: 41
Distance in CM: 105
Distance in Inches: 41
Distance in CM: 104
Distance in Inches: 41