

# CONNECTIONS IN WOKWI FOR ULTRASONIC SENSOR

## CODE:

### Sketch.ino:

```
/*
```

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 HR-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": "KEERTHANA P",
  "editor": "wokwi",
  "parts": [
    { "type": "wokwi-arduino-uno", "id": "uno", "top": 64.67, "left": 53.33, "attrs": {} },
    { "type": "wokwi-hc-sr04", "id": "ultrasonic1", "top": -63.04, "left": 30, "attrs": {} }
  ],
  "connections": [
    [ "ultrasonic1:VCC", "uno:5V", "red", [ "v20.58", "h-83.56", "v221.33", "h194.67" ] ],
    [ "ultrasonic1:GND", "uno:GND.1", "black", [ "v15.24", "h42.11" ] ],
    [ "ultrasonic1:ECHO", "uno:13", "green", [ "v17.24", "h-1.34", "v3.33", "h63.33" ] ],
    [ "ultrasonic1:TRIG", "uno:12", "green", [ "v23.91", "h77.89", "v2.67" ] ]
  ]
}

```

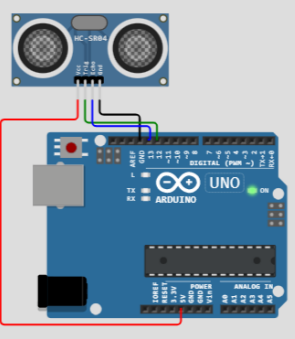
# OUTPUT:

WOKWI SAVE SHARE sketch.ino Docs

sketch.ino diagram.json libraries.txt Library Manager

```
1 /*
2  * Ultrasonic Simple
3  * Prints the distance read by an ultrasonic sensor in
4  * centimeters. They are supported to four pins ultrasound
5  * sensors (like HC-SC04) and three pins (like PING)))
6  * and Sreed Studio sensors).
7  *
8  * The circuit:
9  * * Module HC-SC04 (four pins) or PING))) (and other with
10  * three pins), attached to digital pins as follows:
11  *
12  * | HC-SC04 | Arduino | | 3 pins | Arduino |
13  * |-----|
14  * | Vcc      | 5V      | | Vcc    | 5V      |
15  * | Trig     | 12      | | SIG   | 13      |
16  * | Echo     | 13      | | Gnd   | GND      |
17  * | Gnd      | GND      | |-----|
18  *
19  */
20
21
22 #include "Ultrasonic.h"
23
24 /*
25  * Pass as a parameter the trigger and echo pin, respectively,
26  * or only the signal pin (for sensors 3 pins), like:
27  * Ultrasonic ultrasonic(13);
28  */
```

Simulation



00:51.147 100%

Distance in CM: 276  
Distance in Inches: 108  
Distance in CM: 242  
Distance in Inches: 95

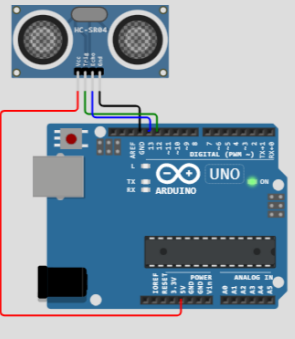
Activate Windows  
Go to Settings to activate Windows.

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sketch.ino diagram.json libraries.txt Library Manager

```
28 /*
29  * Ultrasonic ultrasonic(12, 13);
30  * int distance;
31  *
32  * void setup() {
33  *   Serial.begin(9600);
34  * }
35  *
36  * void loop() {
37  *   // Pass INC as a parameter to get the distance in inches
38  *
39  *   distance = ultrasonic.read(CM);
40  *
41  *   Serial.print("Distance in CM: ");
42  *   Serial.println(distance);
43  *
44  *   distance = ultrasonic.read(INCH);
45  *
46  *   Serial.print("Distance in Inches: ");
47  *   Serial.println(distance);
48  *
49  *   delay(1000);
50  * }
51  */
```

Simulation



00:51.147 100%

Distance in CM: 276  
Distance in Inches: 108  
Distance in CM: 242  
Distance in Inches: 95

Activate Windows  
Go to Settings to activate Windows.

LINK:<https://wokwi.com/projects/346962674371789396>