# Arduino/ESP8266/ESP32 library for HC-SR04 ultrasonic distance sensor.

This library is used for measuring distance with the HC-SR04, which is an ultrasonic sensor that measures distances from 2 to 400cm. My library features a temperature correction and can utilize one trigger pin with multiple echo pins in parallel. I based this library on two other libraries.

1. <https://github.com/Martinsos/arduino-lib-hc-sr04> --> I basically used the temperature calculation
2. <https://github.com/gamegine/HCSR04-ultrasonic-sensor-lib> --> I basically used the idea of using one trigger and multiple echos. But instead of measuring them in series, I tried to do that in parallel.

HC-SR04

## Usage

## Example

#include <HCSR04.h>

byte triggerPin = 21;

byte echoCount = 2;

byte\* echoPins = new byte[echoCount] { 12, 13 };

void setup () {

Serial.begin(115200);

HCSR04.begin(triggerPin, echoPins, echoCount);

}

void loop () {

double\* distances = HCSR04.measureDistanceCm();

for (int i = 0; i < echoCount; i++) {

if (i > 0) Serial.print(" | ");

Serial.print(i + 1);

Serial.print(": ");

Serial.print(distances[i]);

Serial.print(" cm");

}

Serial.println("");

delay(500);

}