

Code to beep buzzer when object detected within 10cm of ultrasonic sensor

```
/*
This code should work to get warning cross the buzzer when something be closer than 0.1
meter
Circuit is ultrasonic sensor and buzzer +5v and Arduino uno is used
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*/
// Define pins for ultrasonic and buzzer
#include "SR04.h"
int const trigPin = 10;
int const echoPin = 9;
int const buzzPin = 2;
SR04 sr04 = SR04(echoPin, trigPin);
long a;

void setup() {
  Serial.begin(9600);
  delay(1000);
  pinMode(trigPin, OUTPUT); // trig pin will have pulses output
  pinMode(echoPin, INPUT); // echo pin should be input to get pulse width
  pinMode(buzzPin, OUTPUT); // buzz pin is output to control buzzing
}

void loop() {
  a=sr04.Distance();
  Serial.print(a);
  Serial.println("cm");
  delay(1000);
  // Duration will be the input pulse width and distance will be the distance to the obstacle in
  // centimeters
  int duration, distance;
  // Output pulse with 1ms width on trigPin
  digitalWrite(trigPin, HIGH);
  delay(1);
  digitalWrite(trigPin, LOW);
  // Measure the pulse input in echo pin
  duration = pulseIn(echoPin, HIGH);
  // Distance is half the duration divided by 29.1 (from datasheet)
  distance = (duration/2) / 29.1;
}
```

```
// if distance less than 0.5 meter and more than 0 (0 or less means over range)
if (distance <= 10 && distance >= 0) {
  // Buzz
  digitalWrite(buzzPin, HIGH);
} else {
  // Don't buzz
  digitalWrite(buzzPin, LOW);
}
// Waiting 60 ms won't hurt any one
delay(60);
}
```