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HC-SR04 Ping distance sensor]

VCC to arduino 5v GND to arduino GND

Echo to Arduino pin 13 Trig to Arduino pin 12

Red POS to Arduino pin 11

Green POS to Arduino pin 10

220 ohm resistor to both LED NEG and GRD power rail

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#define trigPin 13

#define echoPin 12

#define led 11

#define led2 10

void setup() {

 Serial.begin (9600);

 pinMode(trigPin, OUTPUT);

 pinMode(echoPin, INPUT);

 pinMode(led, OUTPUT);

 pinMode(led2, OUTPUT);

}

void loop() {

 long duration, distance;

 digitalWrite(trigPin, LOW);

 delayMicroseconds(2);

 digitalWrite(trigPin, HIGH);

 delayMicroseconds(10);

 digitalWrite(trigPin, LOW);

 duration = pulseIn(echoPin, HIGH);

 distance = (duration/2) / 29.1;

 if (distance >= 200 || distance <= 0){

 Serial.println("Out of range");

 digitalWrite(led,HIGH);

 digitalWrite(led2,LOW);

 }

 else {

 Serial.print(distance);

 Serial.println(" cm");

 digitalWrite(led,LOW);

 digitalWrite(led2,HIGH);

 }

 delay(500);

}