

Exp.

## DISTANCE MEASUREMENT

### Aim

Design a system to measure the distance between objects.

### Hardware Required

Arduino Board

Ultrasonic distance measure. HC-SR04

### Code:

```
int trigPin = 4;  
int echoPin = 2;  
long duration, cm, inches;  
  
void setup() {  
    Serial.begin(9600);  
    pinMode(trigPin, OUTPUT);  
    pinMode(echoPin, INPUT);  
}  
  
void loop() {  
    digitalWrite(trigPin, LOW);  
    delayMicroseconds(5);  
    digitalWrite(trigPin, HIGH);  
    delayMicroseconds(10);  
    digitalWrite(trigPin, LOW);  
  
    duration = pulseIn(echoPin, HIGH);  
  
    cm = (duration/2) / 29.1;  
    inches = (duration/2) / 74;
```

Serial.print("Distance: ");  
Serial.print(endus);  
Serial.print(" in, ");  
Serial.print(cm);  
Serial.print(" cm");  
Serial.println();

delay(250);

}

