

Part 9 of 15



Distance sensor HC-SR04

Measures distance with sound, just like a bat

In your kit: 1x

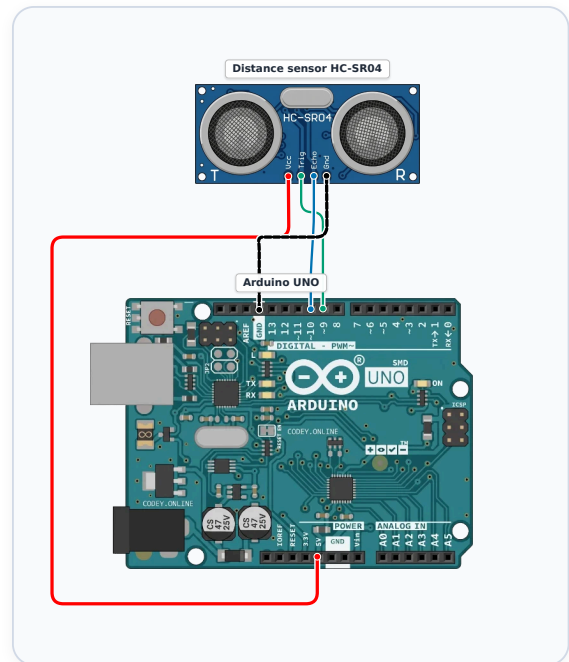
What is it?

This sensor sends out a little sound that you cannot hear. The sound bumps into something and comes back. The sensor measures how long that takes. This way your Arduino knows how far away something is: from 2 cm to about 4 meters.

This is how you connect it

- **Trig** (send) to D9
- **Echo** (receive) to D10
- **Vcc** to 5V
- **Gnd** to GND

Wiring diagram



- Arduino UNO · 5V → Distance sensor HC-SR04 · Vcc
- Arduino UNO · GND → Distance sensor HC-SR04 · Gnd
- Arduino UNO · D9 → Distance sensor HC-SR04 · Trig
- Arduino UNO · D10 → Distance sensor HC-SR04 · Echo

What can you do with it?

- A parking sensor
- A distance meter
- A barrier gate that opens by itself

Tip

The two "eyes" are the speaker and the microphone. Point them straight at what you want to measure.

Projects with this part

★★★ Parking sensor

★★★★ Deluxe parking sensor

★★★★ Distance meter with light bar

★★★★ Automatic barrier