Interface an Ultrasonic Sensor

How HC-SR04 Works

The HC-SR04 uses ultrasonic sound waves to measure distance:

- 1. **Trig pin** sends a short pulse (ultrasound).
- 2. The sound bounces back after hitting an object.
- 3. **Echo pin** receives the returning sound.
- 4. The time taken between sending and receiving is used to calculate distance.