

Real-Time Object Detection System

Wiring and Setup

Wiring Details

The system connects an Arduino Uno, a servo motor, and an ultrasonic sensor to detect objects in its environment. Key connections include:

- **Servo Motor (SG90):**
 - Brown wire → GND on Arduino
 - Red wire → 5V on Arduino
 - Orange wire → Digital Pin 9 on Arduino
- **Ultrasonic Sensor (HC-SR04):**
 - Trig Pin → Digital Pin 12 on Arduino
 - Echo Pin → Digital Pin 11 on Arduino
 - VCC → 5V on Arduino
 - GND → GND on Arduino

