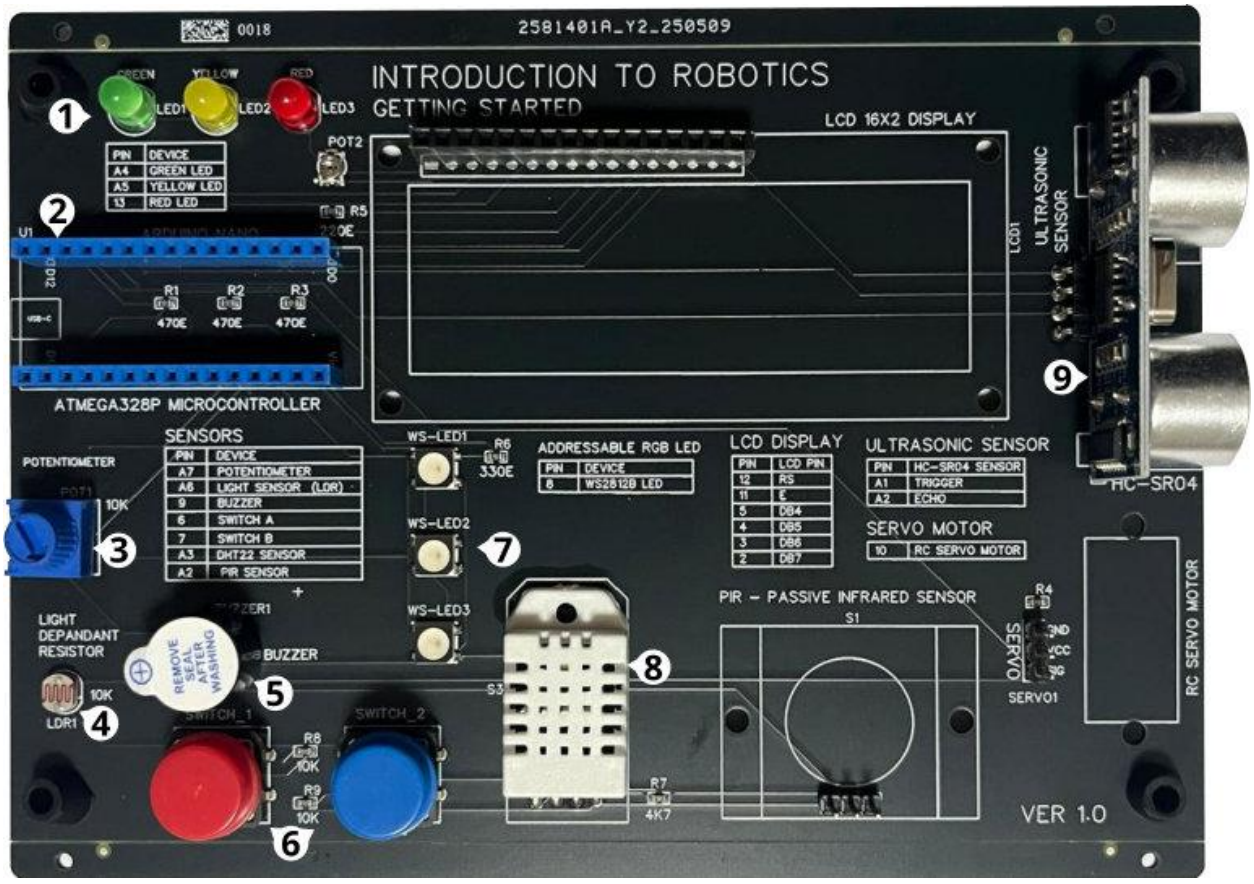
Assembly Instructions

Main Board (Partially Assembled)

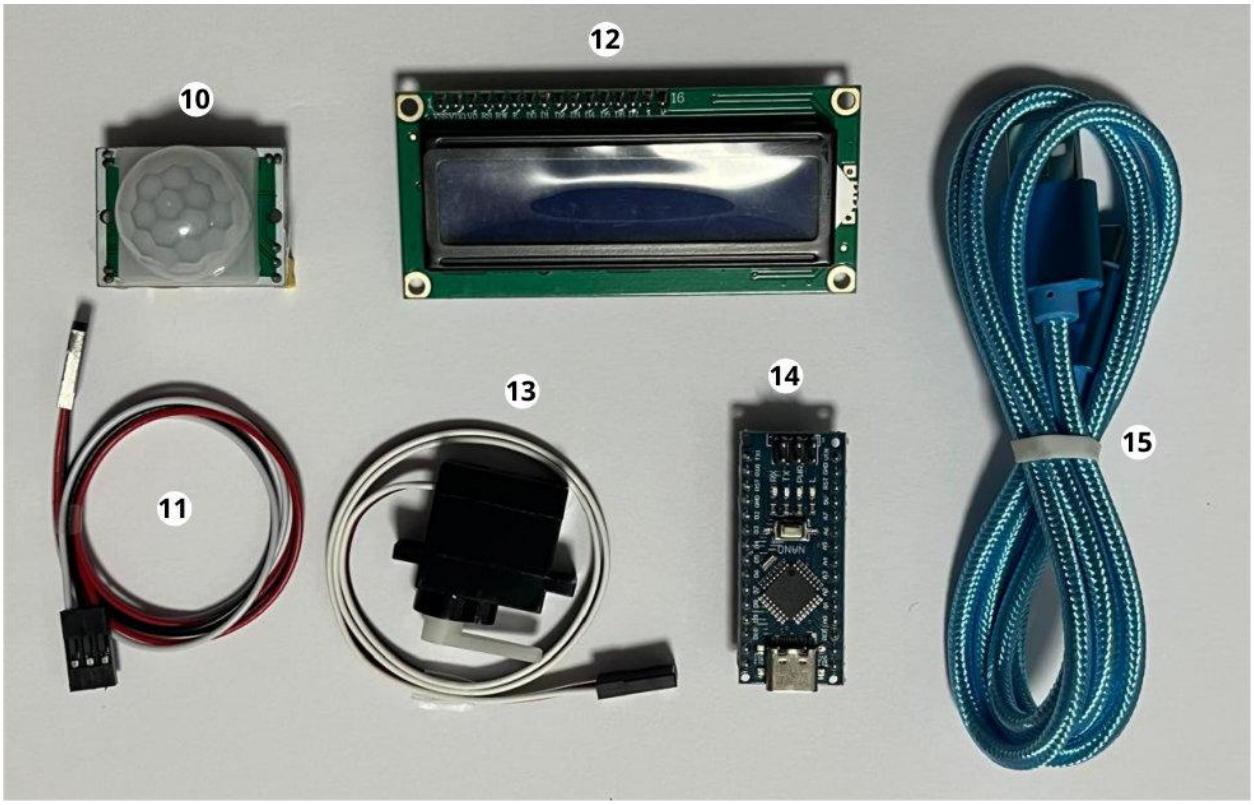
Upon receiving the *Getting Started with Robotics* kit, the board is only partially assembled. This guide will provide clear, step-by-step instructions to help the student complete the assembly quickly and correctly.



1. Three LEDs
2. Arduino Nano sockets
3. Potentiometer (POT)
4. Light Dependent Resistor (LDR)
5. Buzzer
6. Two switches (A and B)
7. Three WS2812 intelligent LEDs
8. DHT22 temperature and humidity sensor
9. HC-SR04 ultrasonic distance sensor

Additional Components

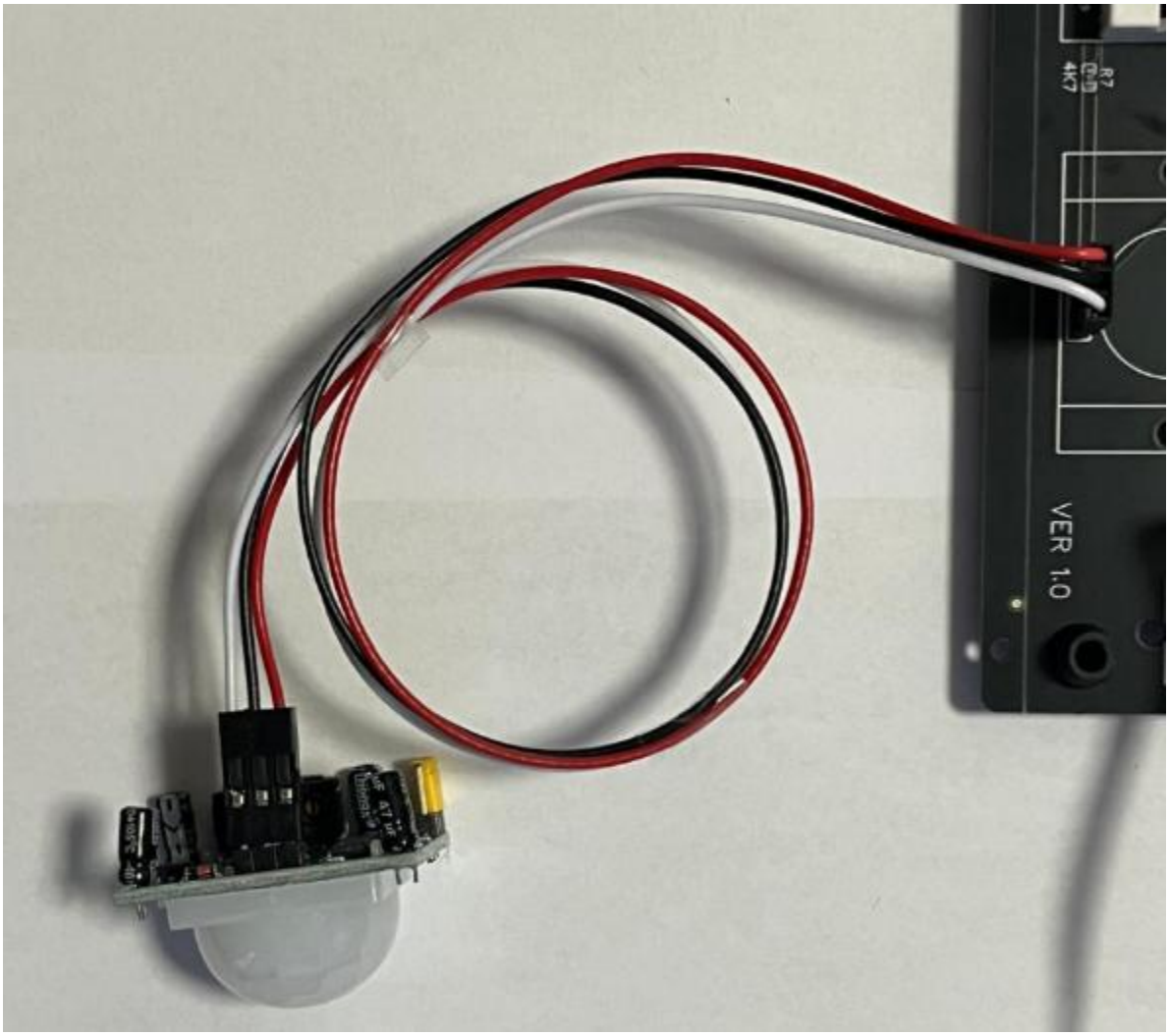
10. Passive Infrared (PIR) sensor (Motion Sensor)
11. PIR connection cable (for linking PIR sensor to mainboard)
12. 16x2 LCD (Liquid Crystal Display)
13. Servo motor
14. Arduino Nano microcontroller board
15. USB-C cable



Component Installation Instructions:

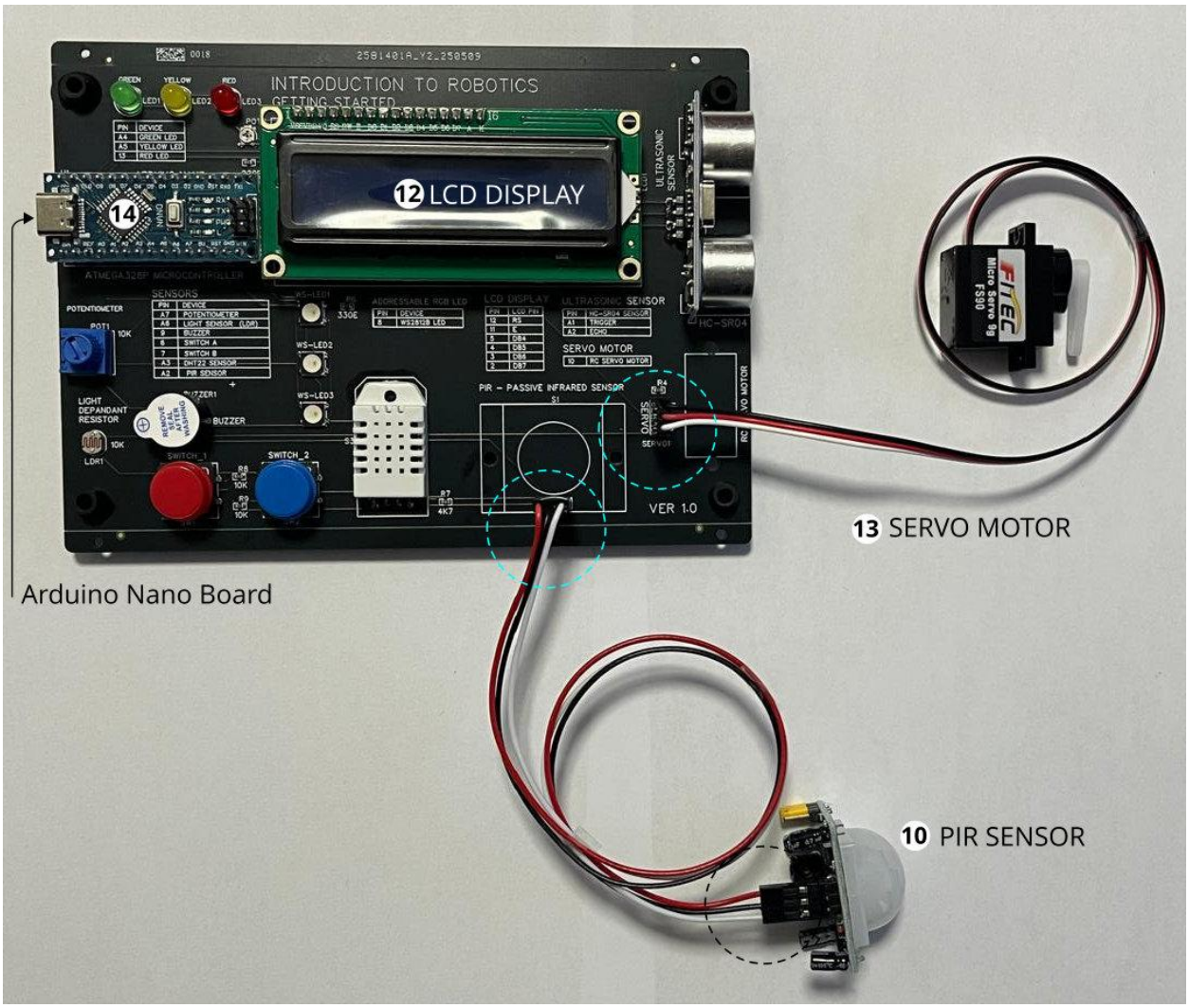
1. **Insert Arduino Nano (No. 14)**
   Align the Arduino Nano with the mainboard connector. Ensure the **USB-C port faces the board's edge**. The Nano's pins must **perfectly match the header below**—no offset allowed.
2. **Insert LCD Display (No. 12)**
   Carefully place the LCD onto the mainboard. Ensure the connector is **fully aligned**—no pins should be misaligned.

3. **Connect PIR Sensor and Cable (No. 10)**
   Connect the PIR cable between the sensor and the mainboard. **Double-check the connector orientation** on both sides—match it exactly to the diagram.



4. **Connect Servo Motor (No. 13)**
   Plug in the servo motor as shown in the reference image. Pay attention to the **signal, power, and ground pin positions**.

5. **USB-C Cable (No. 15)**
   Do not connect it yet. First, install the **CH340 USB driver** before plugging the board into your PC or notebook.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