

Activity

Follow Me Robot

Assembly and Circuitry



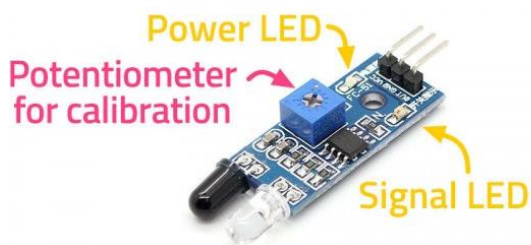
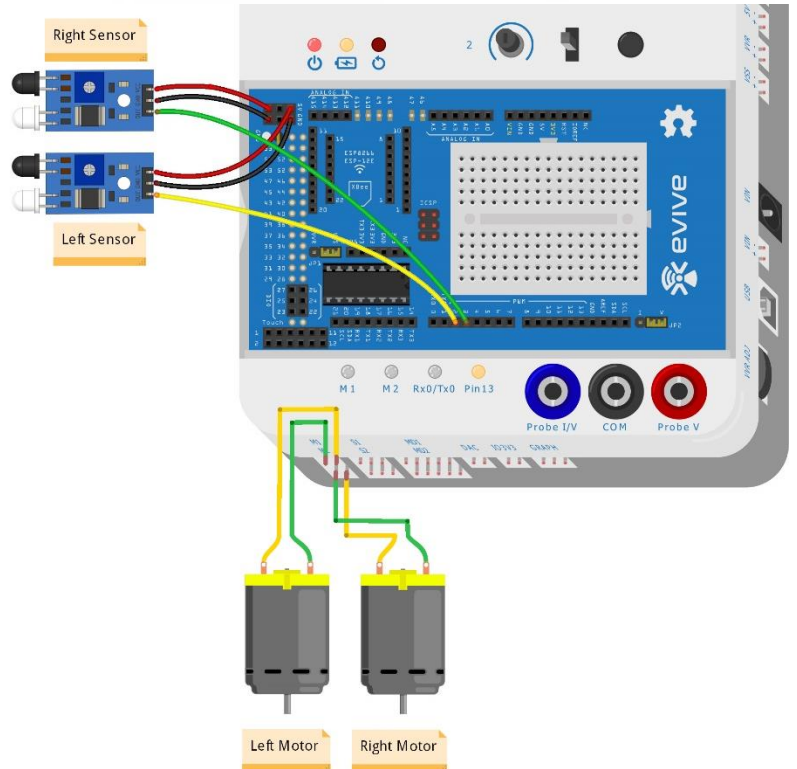
In this activity, you will attach the two IR sensors on the 2 wheel drive robot to make a follow me robot. You will also learn how to calibrate the IR sensors to detect objects in front of it.

COMPONENTS

Assembled 2 Wheel Drive Robot, 2 IR Sensors and Male to Female Jumper Cable.

STEP-BY-STEP

1. Fasten two **IR sensors** at the top of the **chassis** using **12mm M3 bolts** and **M3 nuts**. That's it for the assembly.
2. Connect the sensors as following:
 - a. VCC of the sensors with 5V on evive.
 - b. GND of the sensors with GND on evive.
 - c. Signal pin of the **left sensor** with **digital pin 2** on evive.
 - d. Signal pin of the **right sensor** with **digital pin 3** on evive.
3. To calibrate sensor, place an object *at least* 15cm away from the robot.
4. If the *signal* LED is **OFF**, the sensor is working properly. Otherwise gently turn the potentiometer with a screwdriver in the anti-clockwise direction such that the LED turns **OFF**.
5. Similarly, place an object about 5cm from the sensor. If the signal LED is **ON**, then it is working properly. Otherwise turn the



potentiometer in the clockwise direction such that the LED turns **ON**. And your sensor is calibrated.

6. Connect the left motor in the M1 slot and right motor in the M2 slot. Check the connections by running the motors using menu.

