Tutorial

Raspberry Pi Pico Advanced Kit


Raspberry Pi Pico * 1


IR tracking sensor * 2


IR receiver module * 1


Infrared remote control * 1

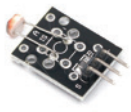

LED * 5


RGB LED * 1


Button * 1


Sound Sensor * 1

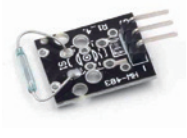

PIR Sensor * 1


Light sensor * 1


Red Laser Transmitter * 1


Buzzer * 1

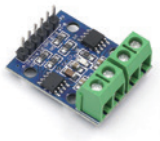

Vibration Sensor * 1


Reed Switch * 1


Round Magnet * 1


Soil moisture sensor (with cable) * 1


Potentiometer * 1


Motor drive module * 1


Motor * 1


Flabellum * 1


Servo * 1


Joystick module * 1


RFID module * 1


RFID radio frequency card * 2

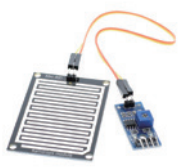

TM1637 4 Bits Digital Tube * 1

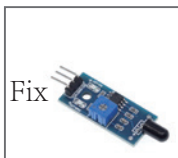

Traffic Light Module * 1


Rotary encoder * 1

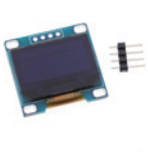

LCD1602 * 1


DHT11 * 1


Raindrop sensor * 1



Flame sensor * 1


SSD1306 OLED * 1


4*4 matrix membrane keyboard * 1


Ultrasonic sensor* 1


Collision sensor * 2


Car Chassis Kit * 1


USB Cable * 1


Medium breadboard* 2


small Breadboard * 1


Dupont Line * 40

Screw(M2.5*6mm)*8

Nut (2.5mm) * 4

Double-pass copper column 2.5*30 * 2

Male-male short line * 60

Male-male short line * 1

Assembly steps:

1. Tear off the protective film on the surface of all acrylic devices.

2. Connect the red and black wires to the two ports of the motor according to the connection method shown in the figure below. (*It can be Fix by welding, or directly through the holes on the port to screw and fix*)

3. As shown in the figure below, fix the motor on the acrylic panel car body with acrylic fasteners. *(The installation position of the red and black wires determines the direction of rotation of the motor.)*

4. In the same way, fix another motor in the symmetrical position of the acrylic board.

5. As shown in the figure below, connect the red and black wires of the two motors to the L9110s motor drive module ports respectively, and insert 8 DuPont lines to the 8 pin headers on the other side.

6. Fix the L9110s motor drive module.

7. Fix the double-pass copper column on the acrylic board.

8. Fix the universal wheel.

9. Fix the battery box.

10. Fix the button.

11. Connect the button to the battery box. （*One end is connected to the positive electrode of the battery (red wire), and the other end is connected to the VBUS of the Pico.*）

12. Install the wheels.

13. Connect the Raspberry Pi Pico and the breadboard.

14. Fix the breadboard.

15. Insert the dupont line to the breadboard. *(Refer to point 4 for the pin port where the dupont line is connected).*