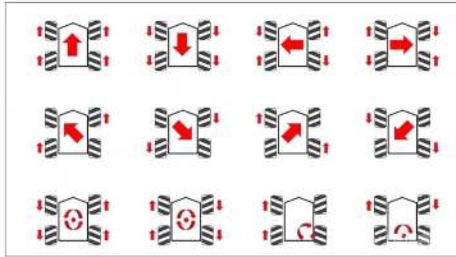




**Description**

RoverC is a programmable omnidirectional mobile robot base compatible with M5StickC and can be started by inserting the M5StickC. The main controller of the base is the stm32f030 microcontroller. The base comes with N20 worm gear motors which are directly driven by a four channel motor driver. These motors are connected to mecanum wheels which can move in all directions. In addition, two grove compatible I2C ports are provided to facilitate the expansion for other modules. The base is also compatible with LEGO bricks and can be expanded in structure. A 18340 battery is installed on the back of the base to meet the power and endurance requirements of the car and can be controlled by an independent switch.



**Product Features**

- I2C Address 0x38
- Remote Control
- Programmable
- Four-channel motor driver
- I2C/Grove ports
- 2x Grove ports for expansion
- Equipped with 18340 battery holder
- Traceable movement in all directions
- Size: 70mm \* 70mm \* 45mm
- Weight: 23g (without Battery)

**Instructions**

Before use, please make sure that the roverc is fully charged. Charging method: Insert m5stickc into the roverc, and connect the USB cable for charging. Burn the easyloader firmware of JoyC and roverc with two M5StickC respectively, insert JoyC and roverc respectively after burning. After power on, roverc will display the MAC address name and battery power. At the same time, JoyC will scan the MAC address name of roverc. Long press the A key of M5StickC on JoyC, and the work will be matched. Left rocker up and down control front and back, left and right control translation, right rocker left and right control steering.

**Usage**

Two M5StickCs will be burned into the easyloader firmware of JoyC and RoverC respectively. After burning, they will be inserted into JoyC and RoverC respectively. After booting, RoverC will display the hotspot name of 'M5A1+2 bytes mac address', and JoyC will scan the mac address name of RoverC. Press and hold the A5 button of the M5StickC on the JoyC for 3 seconds to start scanning the hotspot of the car, and the pairing is successful. After successful pairing, the link icon is highlighted in the upper left corner of the screen, and the joystick value is displayed on the screen. The left and right joysticks are controlled up and down, the left and right controls pan, and the right rocker controls the steering.

**Motor Control**

Motor serial number	Encoder address	Default motor value
01	0x00	-127-127
02	0x01	-127-127
04	0x02	127-127
05	0x03	127-127

**Pi4 Map**

M5StickC	GPIO28	GPIO20	5V	GND
M5StickC	SCL	SDA	5V	GND
RC1B	SCL	KEY4	5V	GND
RC1B	SCL	KEY5	5V	GND



**Applications**

- Autonomous Rover
- Mini RC car/robot car
- Smart and programmable toys

**Package Includes**

- 1x RoverC base (without 18340 Battery)

**EasyLoader**

[Click to download EasyLoader](#)

EasyLoader is a simple and fast program burner. Every product page in EasyLoader provides a product-related case program. This can be burned to the MS device through simple steps, and a series of function verifications can be performed.

After downloading the software, double-click to run the application, connect the MS device to the computer through the data cable, select the port parameters, click "Burn" to burn the program. (For MS8884C, set the baud rate to 115200 or 750000.)

## Example

UIFlow



Arduino IDE