

In situ drift

1.Learning goals

In this lesson, we mainly learn how to control motor on the Super:bit expansion board and make the OmniBit car in situ drift.

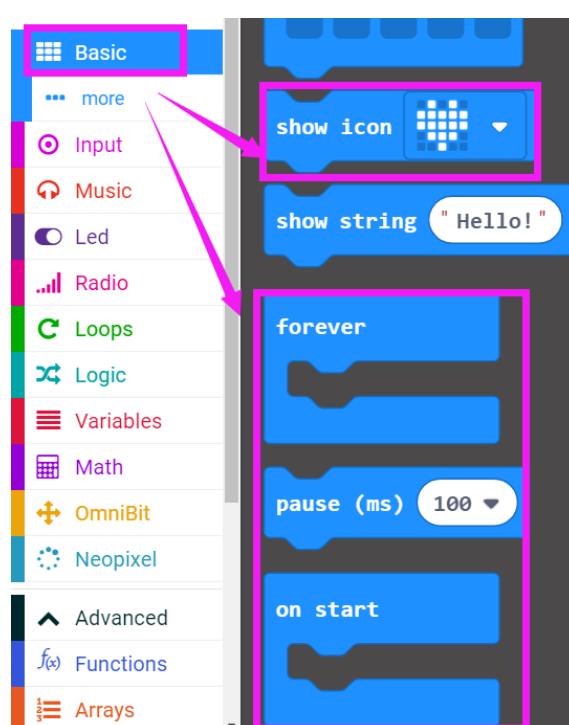
2.Programming method

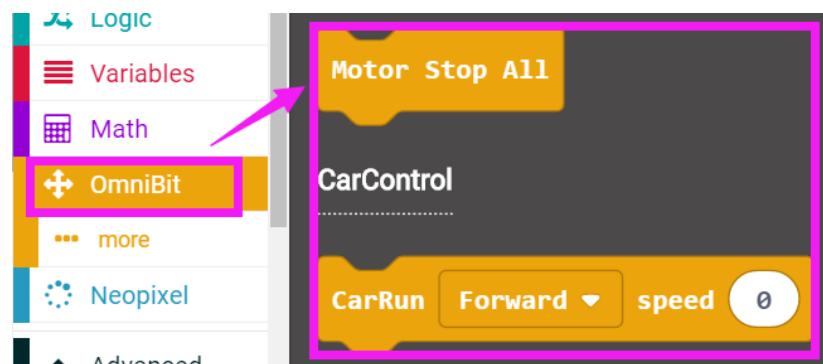
Mode 1 online programming: First, we need to connect the micro:bit to the computer by USB cable. The computer will pop up a USB flash drive and click on the URL in the USB flash drive: <http://microbit.org/> to enter the programming interface. Add the Yahboom package <https://github.com/lzty634158/OmniBit> to program.

Mode 2 offline programming: We need to open the offline programming software. After the installation is complete, enter the programming interface, click 【New Project】 , add Yahboom package:
<https://github.com/lzty634158/OmniBit>, you can program.

3.Looking for blocks

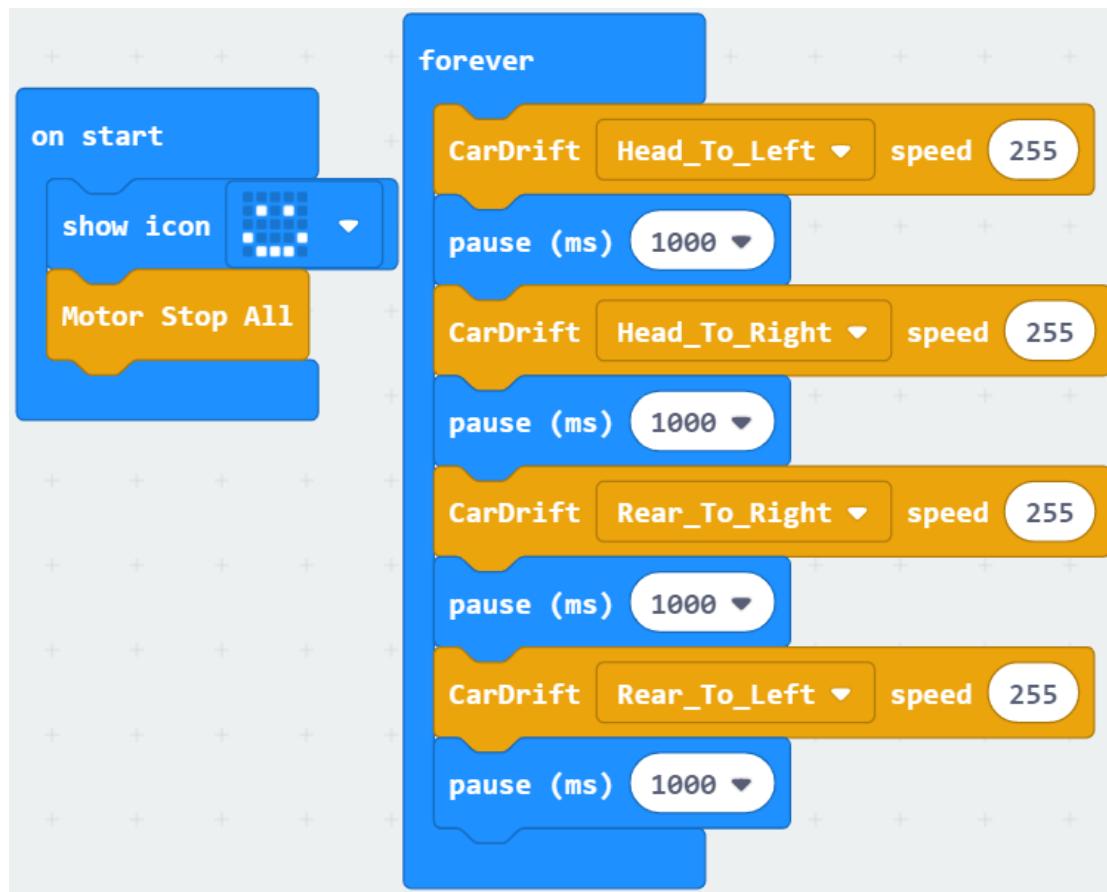
The following is the location of the building blocks required for this programming.





4. Combine building block

The summary program as shown below.



5. Assembly steps

Please refer to the **1.Omnibit installation steps** in the **1.Assembly steps** folder for building blocks assembly steps.

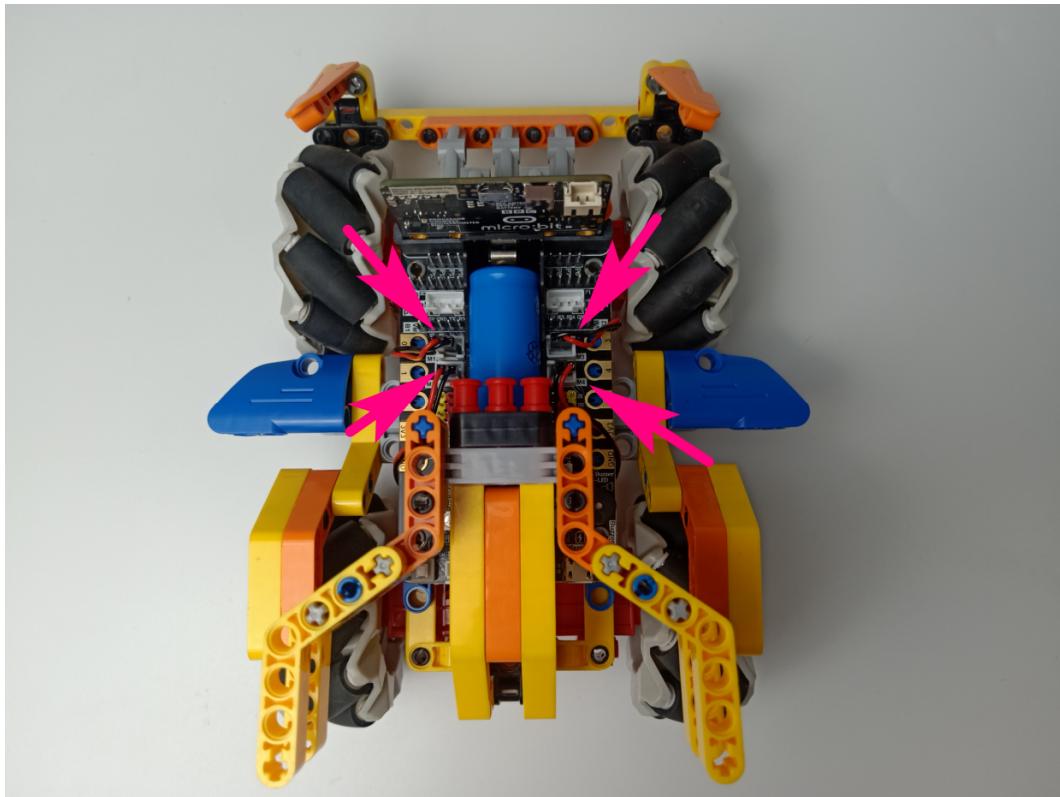
6. About wiring

The left front motor is connected to the M1 interface of the Super:bit expansion board. The black line is on the battery side;

The left rear motor is connected to the M2 interface of the Super:bit expansion board, The black line is on the battery side;

The right front motor is connected to the M3 interface of the Super:bit

expansion board, The black line is on the battery side;
The right rear motor is connected to the M4 interface of the Super:bit expansion board, The black line is on the battery side.
As shown below.



7.Experimental phenomena

After the program download is successful, the micro:bit dot matrix will display a smile.

The rear of the car does not move, the front of the car drifts to the left for 1 second, then drifts to the right for 1 second.

Then, the front of the car does not move, the rear of the car drifts to the right for 1 second, then drifts to the left for 1 second.