

## Spin left and spin right

### 1.Learning goals

In this lesson, we mainly learn how to control motor on the Super:bit expansion board and make Omni:bit spin left and spin right.

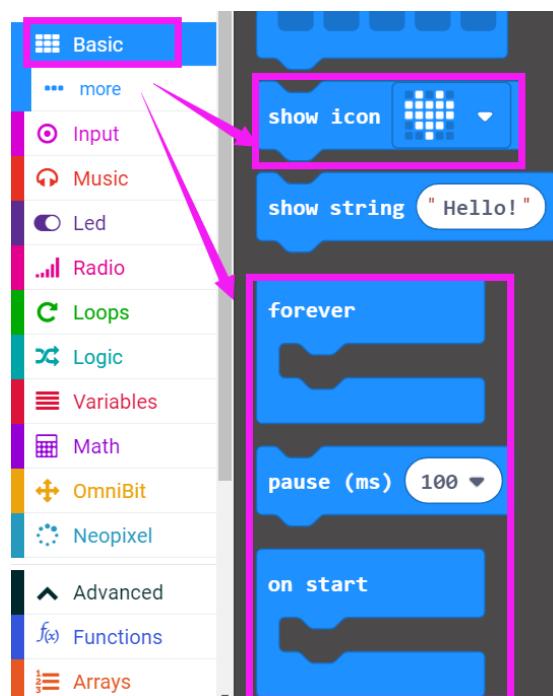
### 2.Programming method

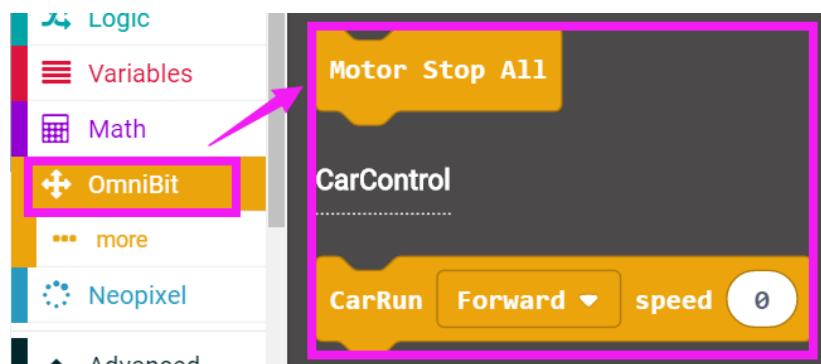
**Mode 1 online programming:** First, we need to connect the micro:bit to the computer by USB cable. The computer will pop up a USB flash drive and click on the URL in the USB flash drive: <http://microbit.org/> to enter the programming interface. Add the Yahboom package <https://github.com/lzty634158/OmniBit>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

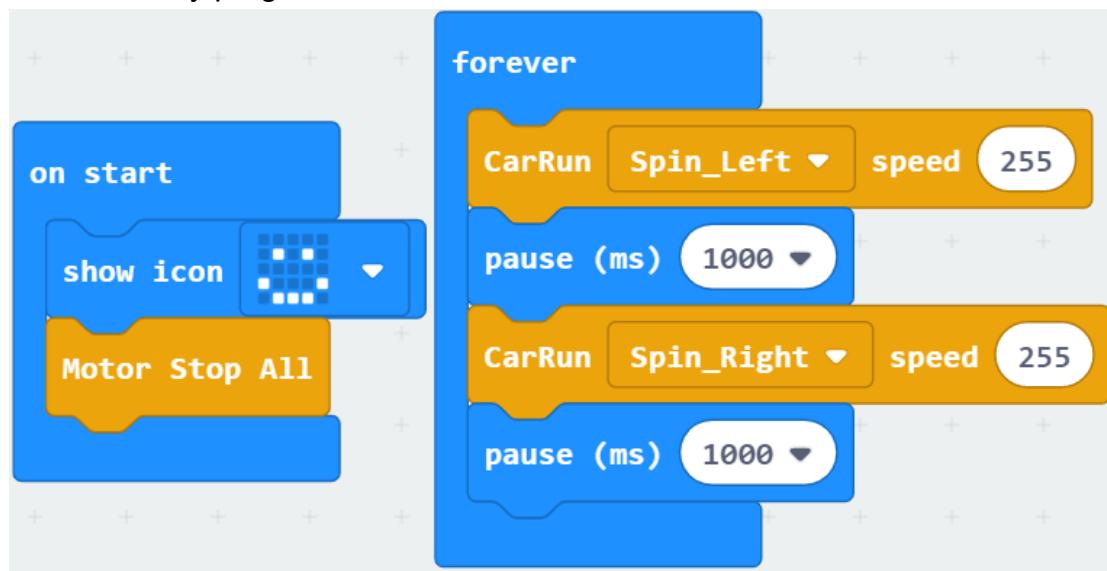
The following is the location of the building blocks required for this programming.





#### 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

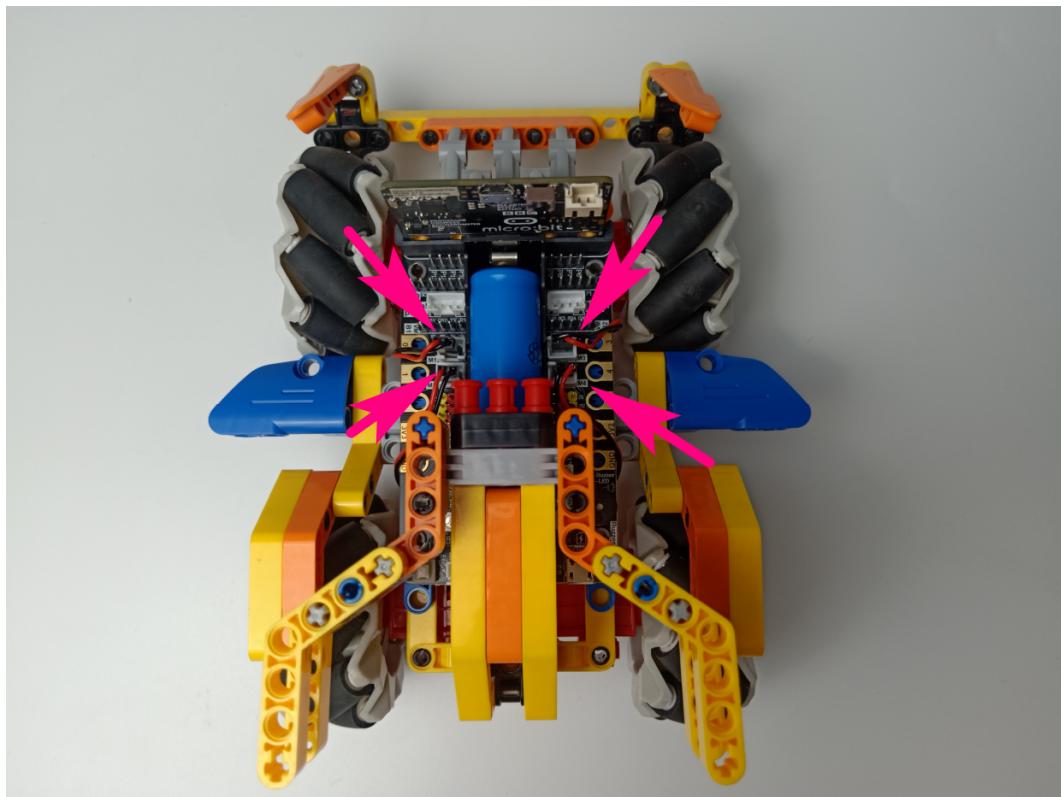
The left front motor is connected to the M1 interface of the Super:bit expansion board. The black line is on the battery side;

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 is successfully downloaded, the micro:bit dot matrix will display a smile. The car will spin left for 1 second with maximum speed. The car will spin right for 1 second with maximum speed. And keep the loop in such a state.

If you need to start over, press the reset button on the back of the micro:bit board.