

## Spider advance

### 1.Learning goals

In this lesson, we mainly learn how to control block motor by micro:bit and super:bit expansion board.

### 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/SuperBit> to program.

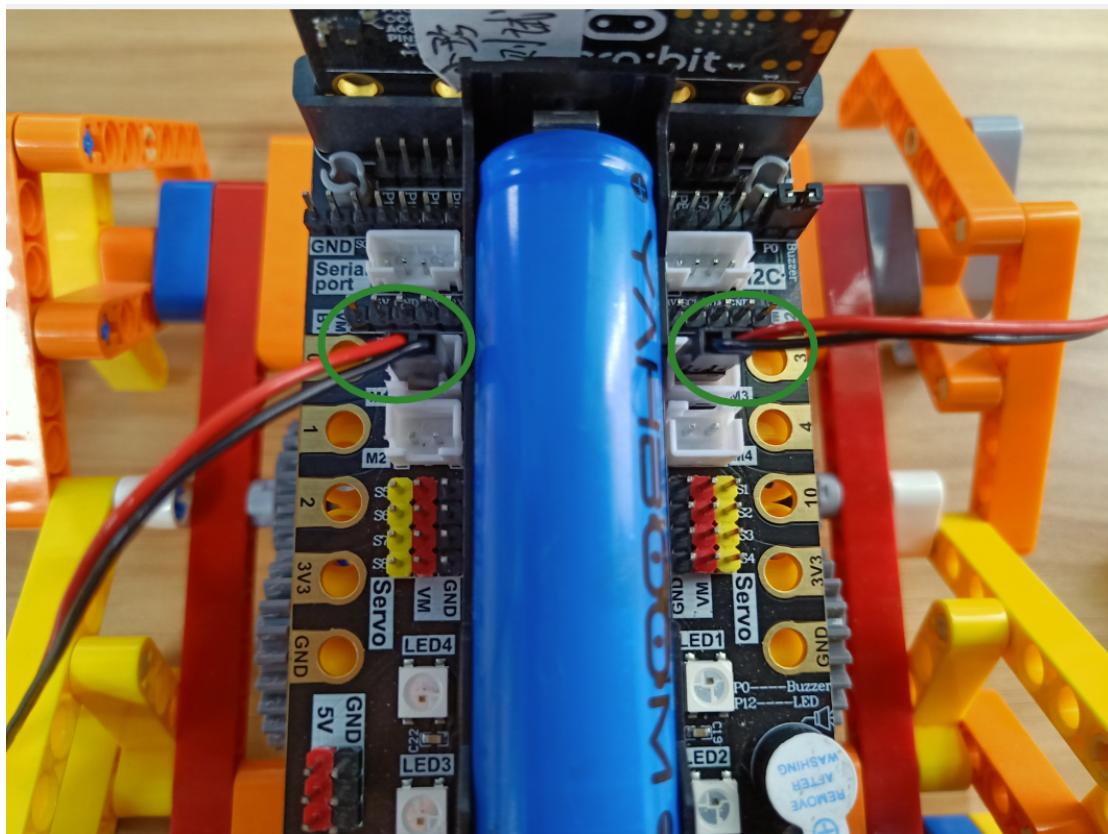
**Mode 2 offline programming:** We need to open the offline programming software. After the installation is complete, enter the programming interface, click 【New Project】 , add Yahboom package:

<https://github.com/lzty634158/SuperBit>, you can program.

### 3.About wiring

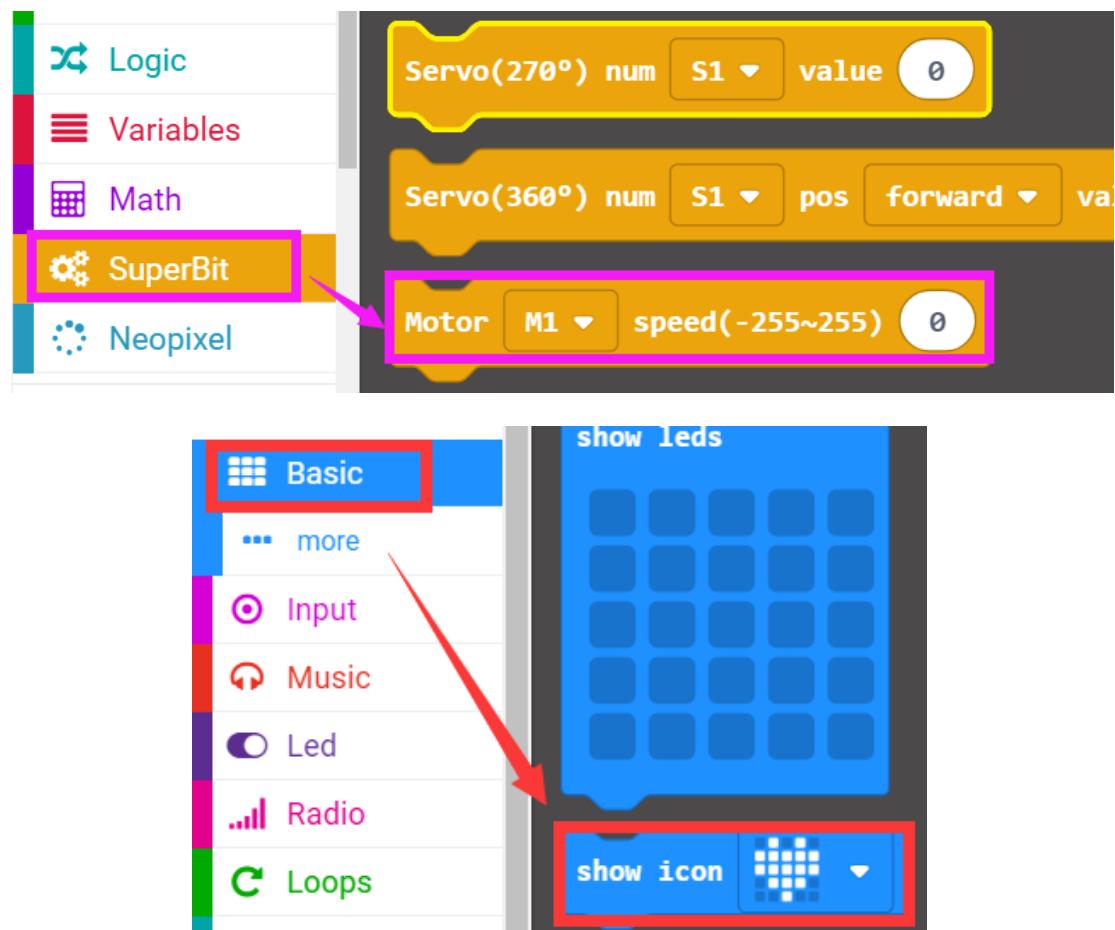
We need to connect two building block motors to the M1 and M3 interfaces of the Super:bit expansion board.

The black wiring of the motor is near the battery side. As shown below.



#### 4. Looking for blocks

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

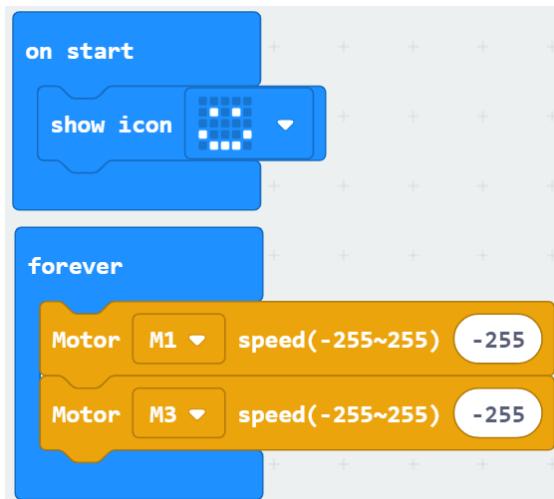


#### 5. Combine building block

The summary program is shown below:

**! Note:**

Due to the problem of the building block structure, if you want the spider to move forward, the direction of the building block motor needs to be set backward.



## 5. Experimental phenomena

After program download is complete, micro:bit dot matrix will display “Heart” and it will advance.

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