

Spider motion

1.Learning goals

In this lesson, we mainly learn how to control spider motion with different direction by micro:bit and super:bit expansion board.

2.Programming method

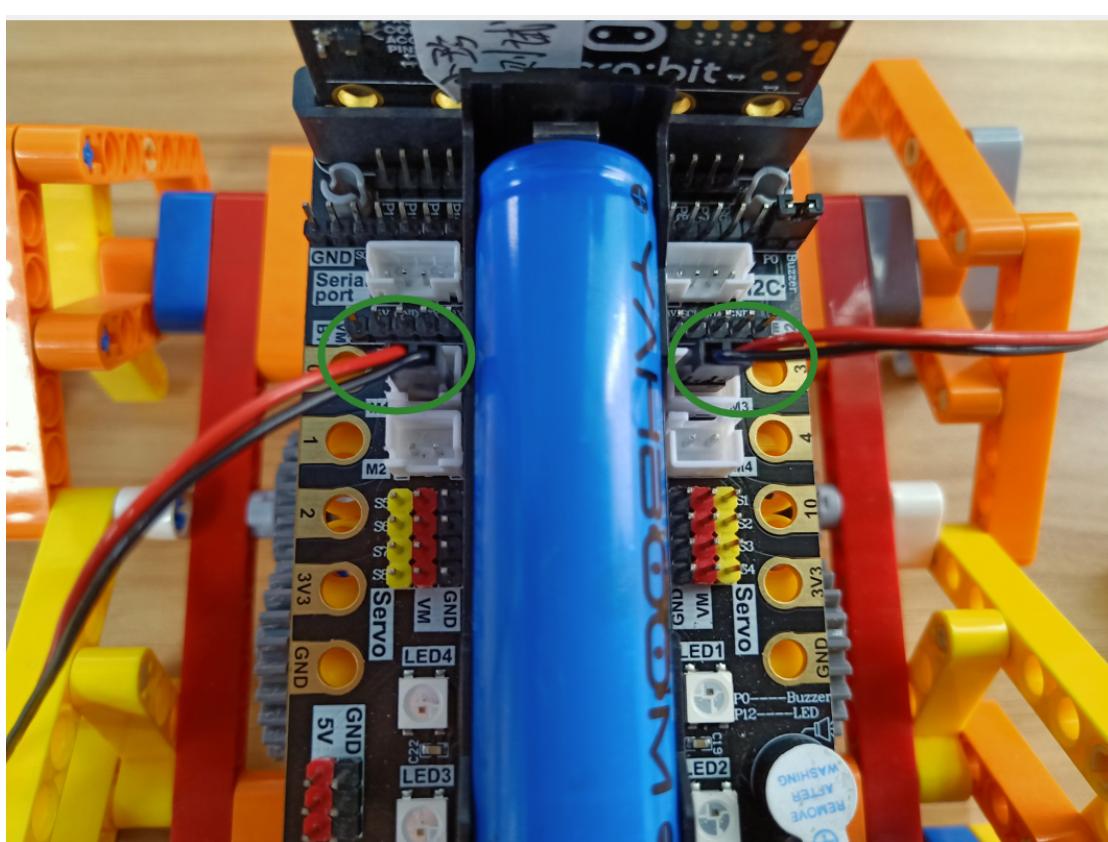
Mode 1 online programming: First, we need to connect the micro:bit to the computer by USB cable. The computer will pop up a USB flash drive and click on the URL in the USB flash drive: <http://microbit.org/> to enter the programming interface. Add the Yahboom package <https://github.com/lzty634158/SuperBit>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

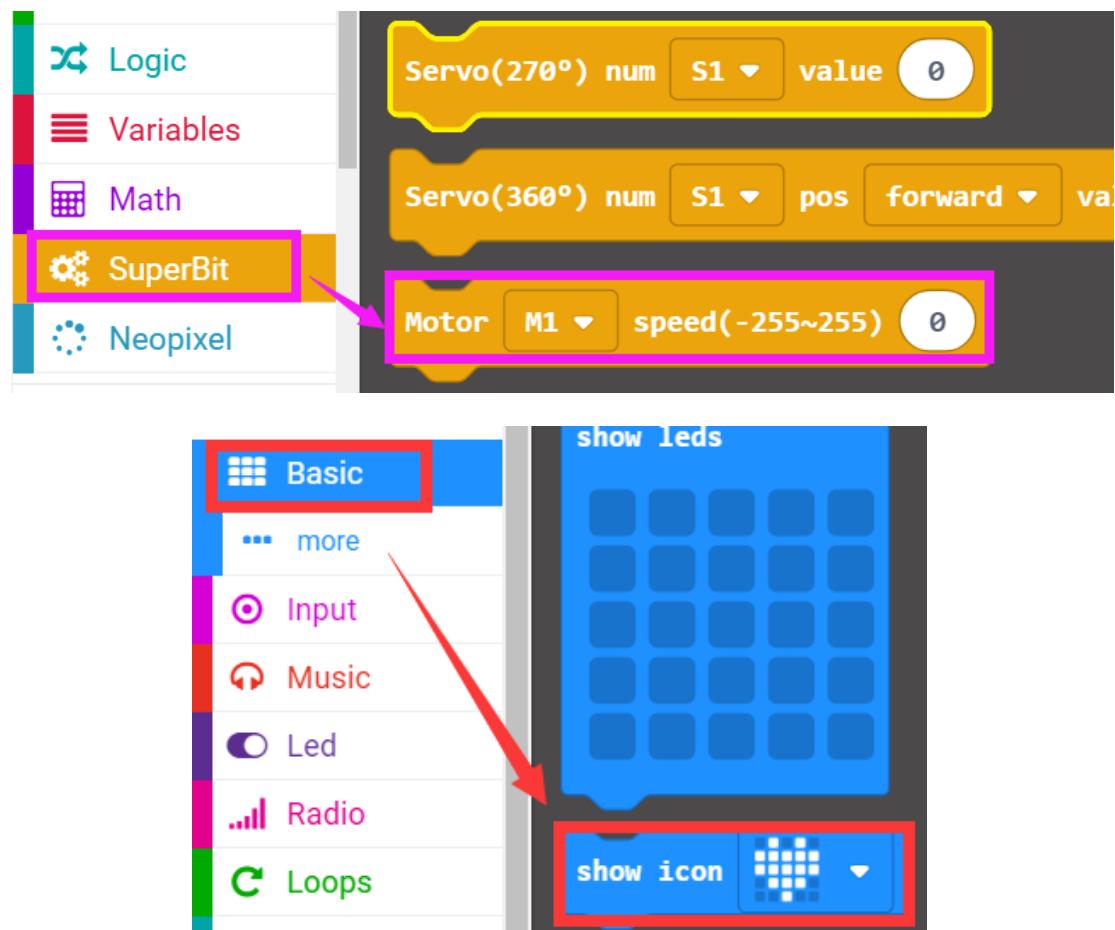
We need to connect two building block motors to the M1 and M3 interfaces of the Super:bit expansion board.

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.

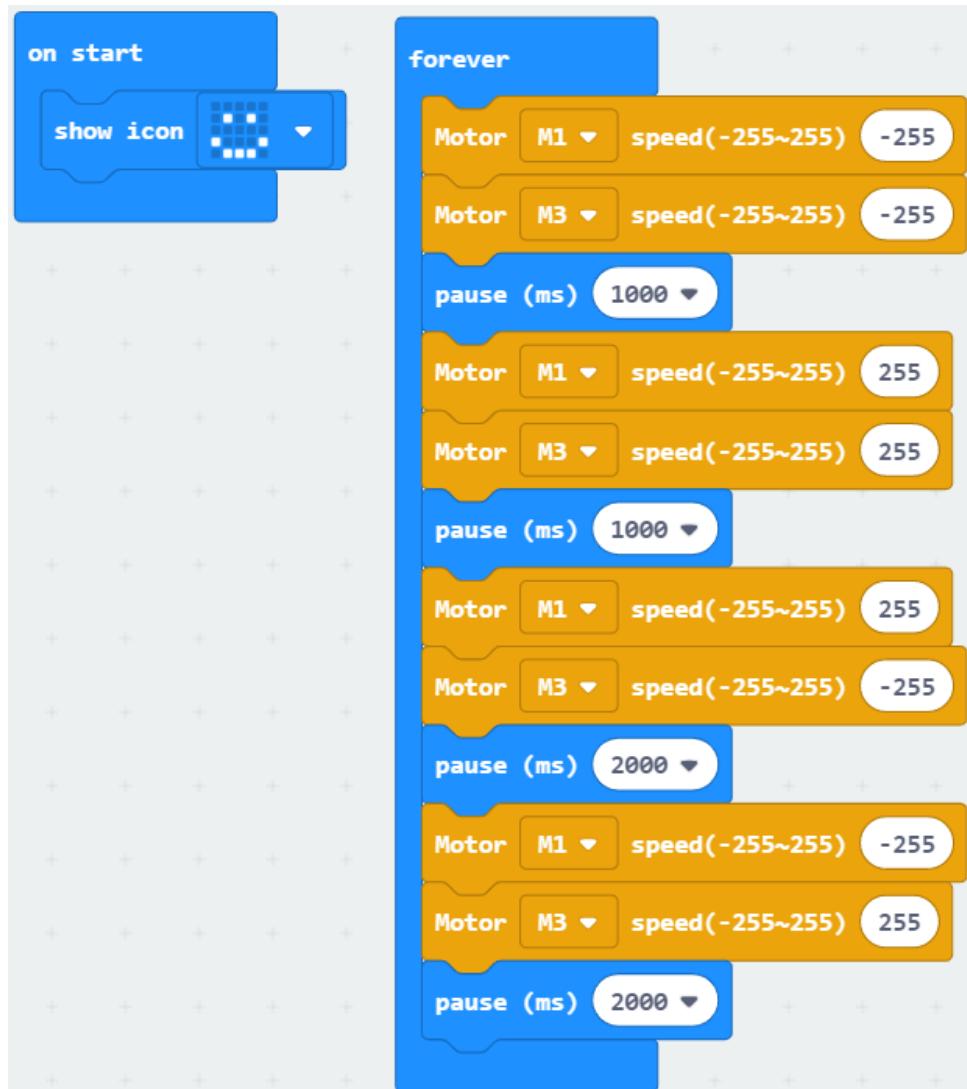


5. Combine building block

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 “Smile” and spider will advance 1s, back 2s, turn left 2s, turn right 2s, keep loop with this status.

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