Spider_handle_remote_control

In this lesson we will learn to use the Handle to remotely control the building blocks.

1.Programming method:

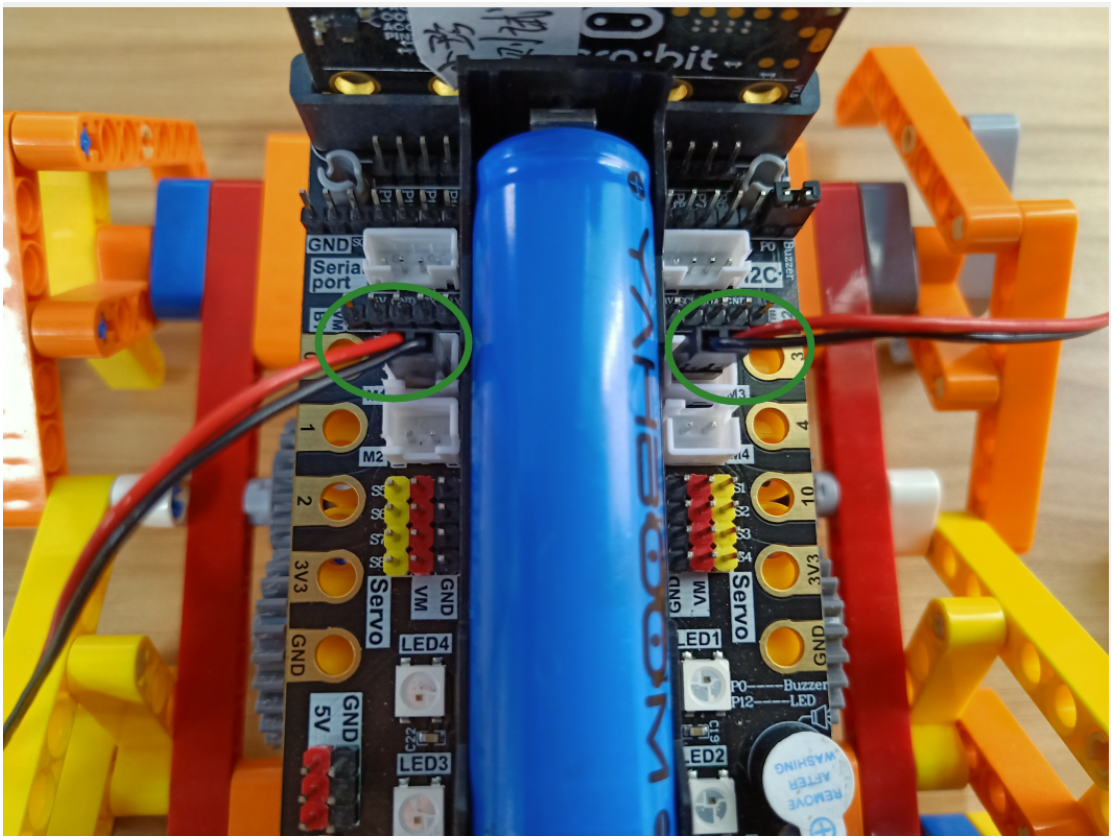
Mode 1 online programming: First, we need to connect the micro:bit to the computer by USB cable. The computer will pop up a USB flash drive and click on the URL in the USB flash drive: **http://microbit.org/** to enter the programming interface. Add the Yahboom package https://github.com/lzty634158/SuperBit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

2.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.



3.About spider code:

Please refer to the **Spider_code** file of this experiment.

Please refer to the **Handle_code** file of this experiment.

4.Steps:

4.1 Handle rocker control

First, we need to download the **microbit-Spider-handle-control.hex** to micro:bit of Spider, you can see that the micro:bit dot matrix shows an pattern as shown in Figure 1.1.

we need to download the **microbit-Handle_rocker_control.hex** to micro:bit of Handle, you can see that the micro:bit dot matrix shows an “heart” as shown in Figure 1.2.

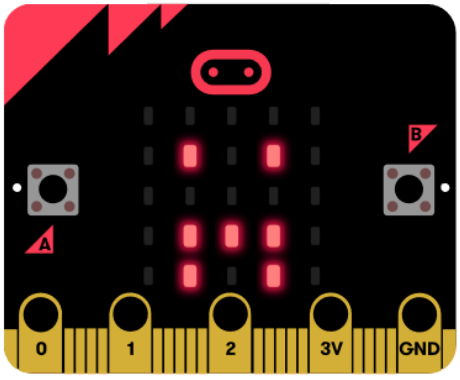


Figure 1.1

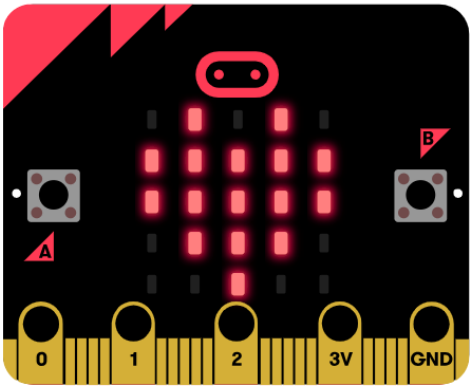


Figure 1.2

Then, open the micro:bit handle. After the handle is connected with the micro:bit building block spider, you can use the joystick to control the forward, backward, turn left, and turn right .

And use the handle button to switch the Color of RGB light. Press the rocker to turn off the RGB light.

4.2 Handle gravity control

First, we need to download the **microbit-Spider-handle-control.hex** to micro:bit of Spider, you can see that the micro:bit dot matrix shows an pattern as shown in Figure 1.3.

we need to download the **microbit-Handle-gravity-control.hex** to micro:bit of Handle, you can see that the micro:bit dot matrix shows an “heart” as shown in Figure 1.4.

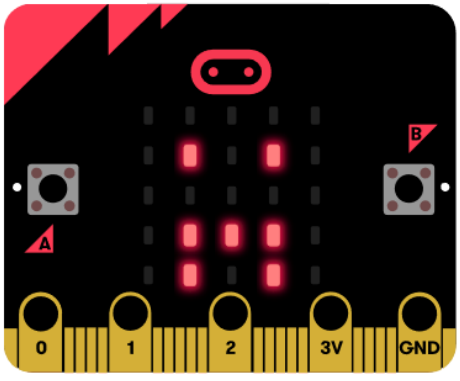


Figure 1.3

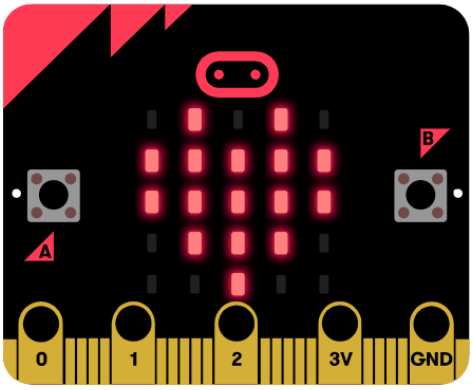


Figure 1.4

Then, open the micro:bit handle. After the handle is connected with the micro:bit building block spider, you can shake handle to control the forward, backward, turn left, and turn right .
And use the handle button to switch the Color of RGB light. Press the rocker to turn off the RGB light.