

Pretty car Micro:bit handle control

1.Learning goals

In this course, we mainly learn how to use handle control pretty car.

2.Building block assembly steps

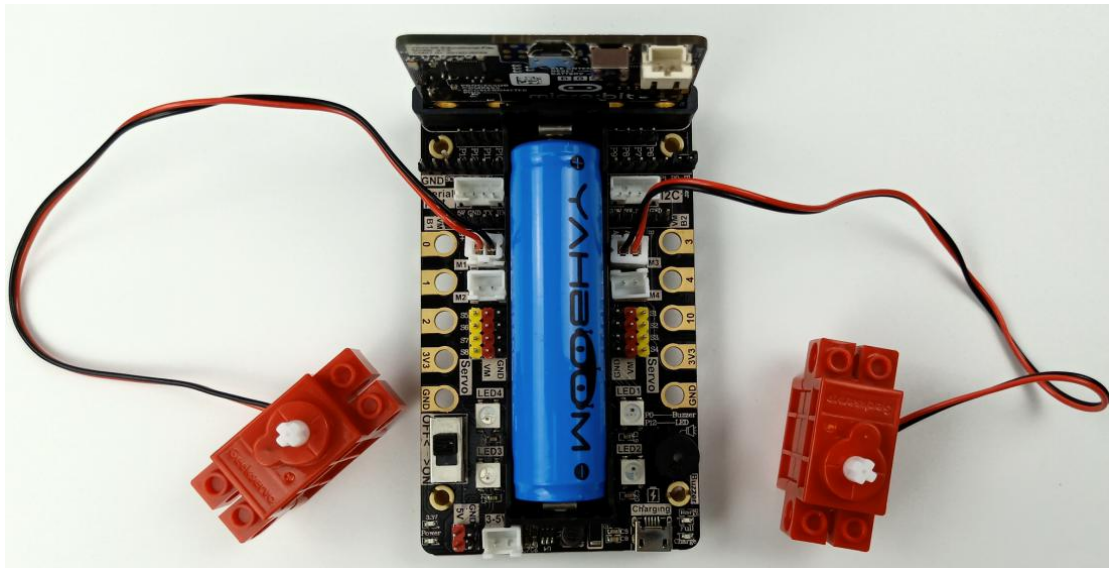
For the building block construction steps, please refer to the installation manual or building block installation picture of [Assembly course]-[Pretty car].

3.Wiring of motor

The motor wiring on the left side of the car is inserted into the M1 interface of the Super:bit expansion board, and the black wire is close to the battery side;

The motor wiring on the right side of the car is inserted into the M3 interface of the Super:bit expansion board, and the black wire is close to the battery side;

As shown below:



4. 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> and <https://github.com/lzty634158/GHBit> to program.

Mode 2 offline programming: We need to open the offline programming software.

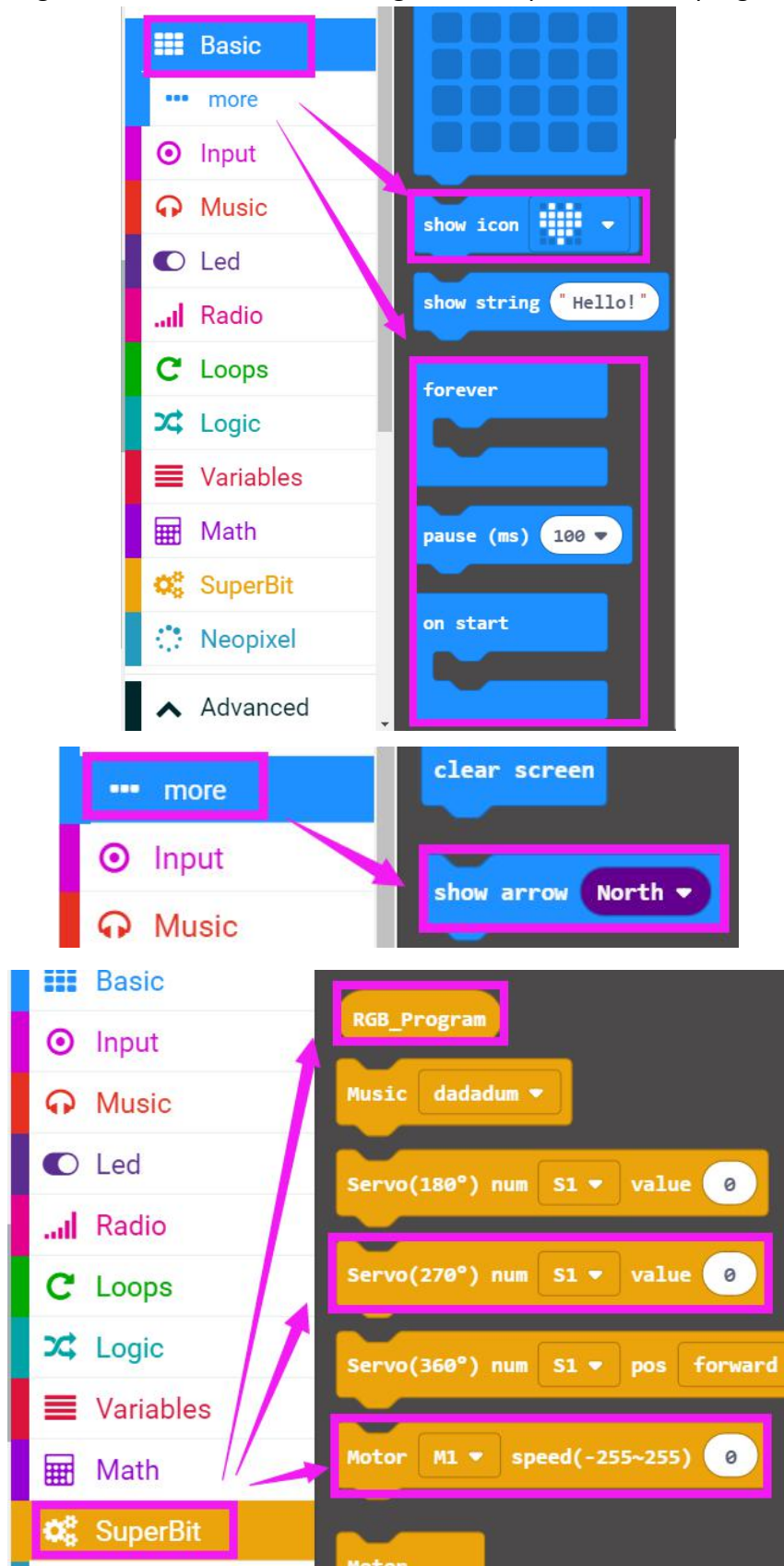
After the installation is complete, enter the programming interface, click 【New

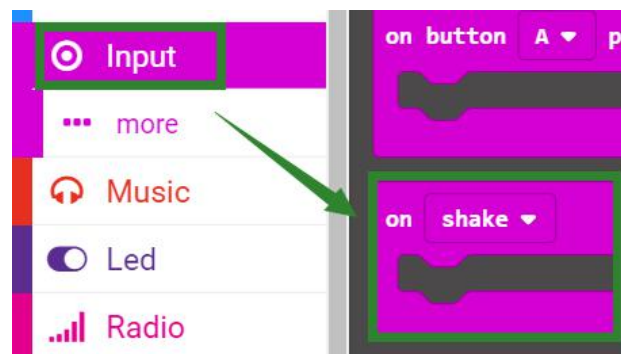
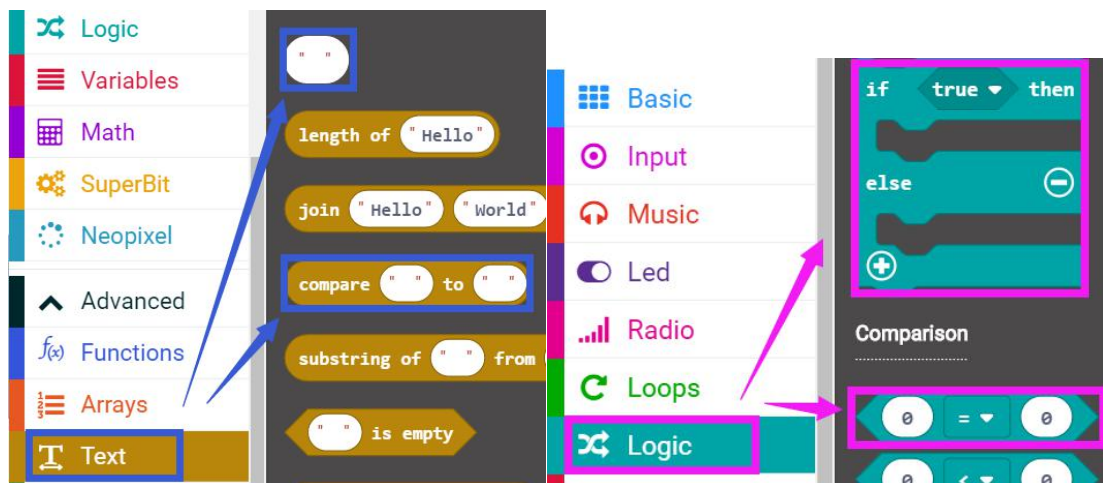
Project】 , add Yahboom package: <https://github.com/lzty634158/SuperBit> and

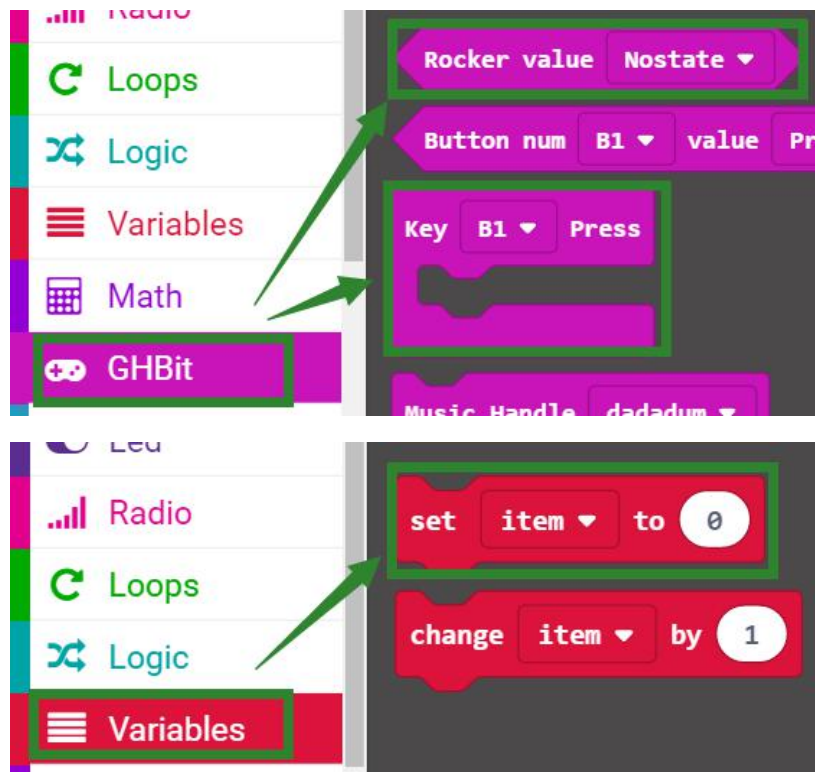
<https://github.com/lzty634158/GHBit> , you can program.

5.Looking for blocks

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

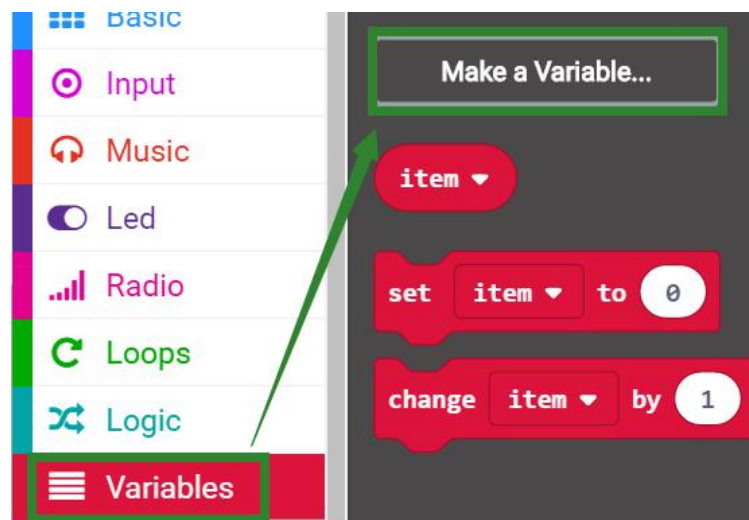






How to create a new variable

- ① Find the [Variable] option in the building block column-[Make a Variable]



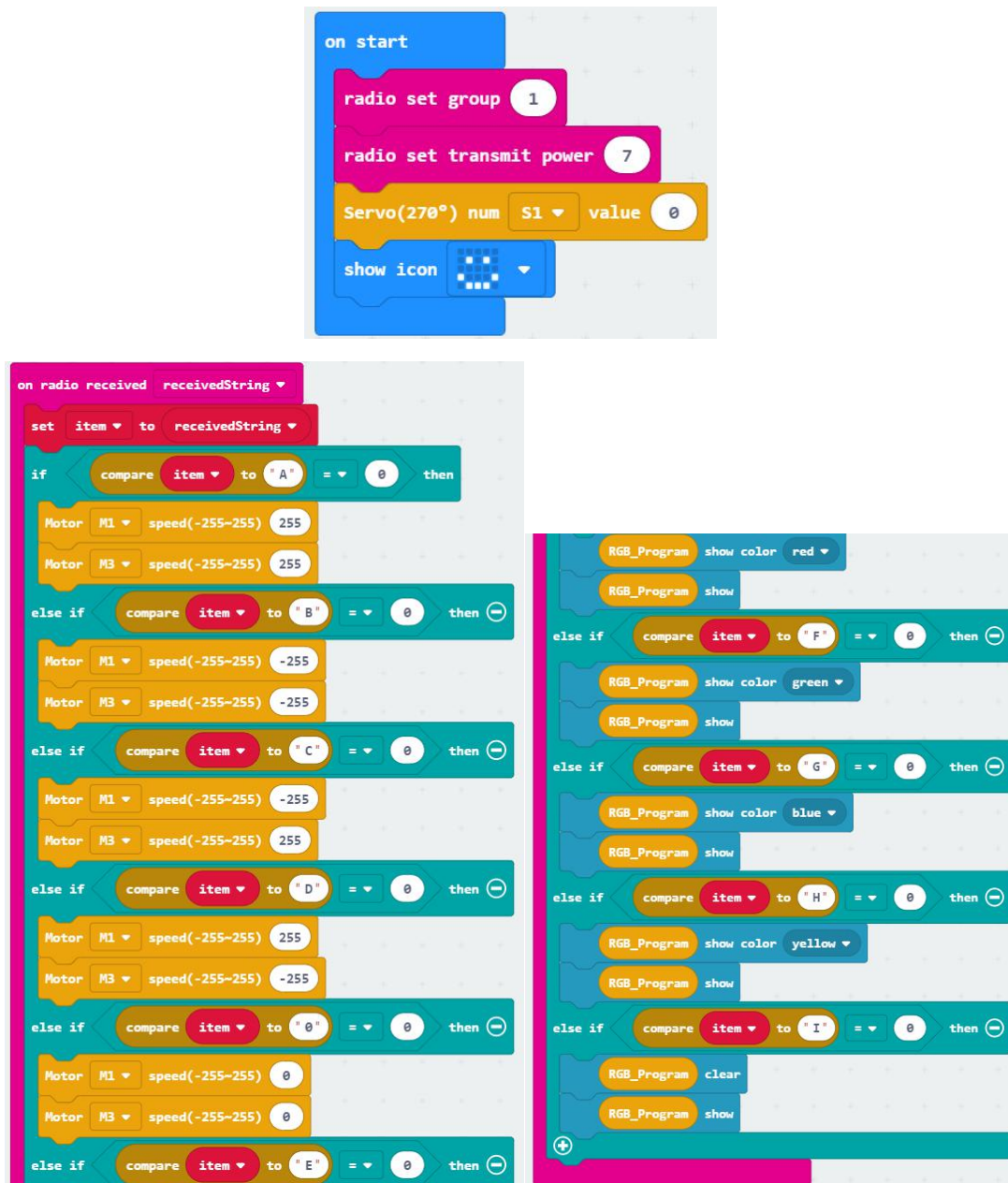
- ② Enter the name of variable to complete the new variable.

New variable name:

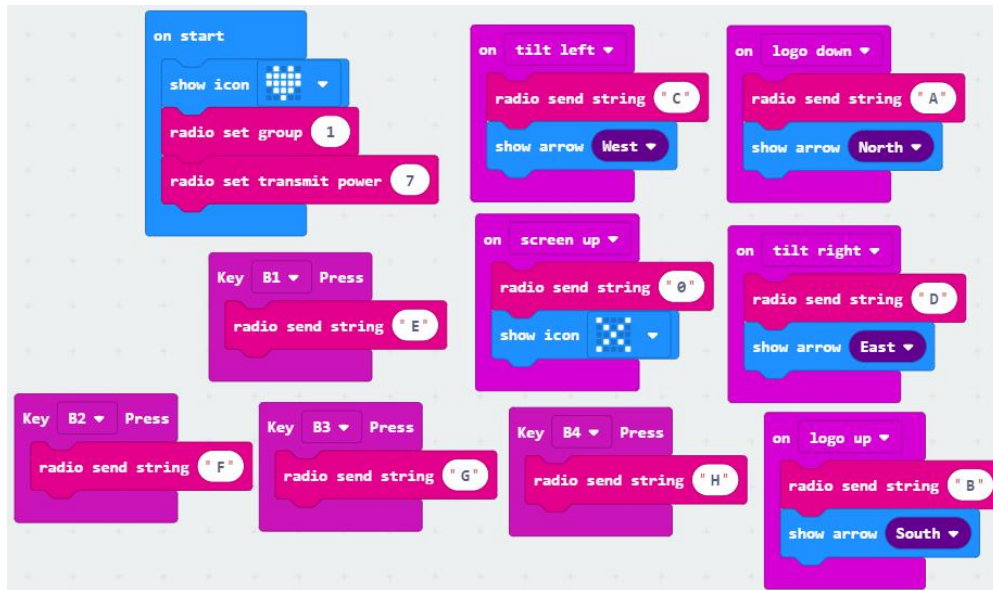
Ok ✓ Cancel ✕

6.Combine block

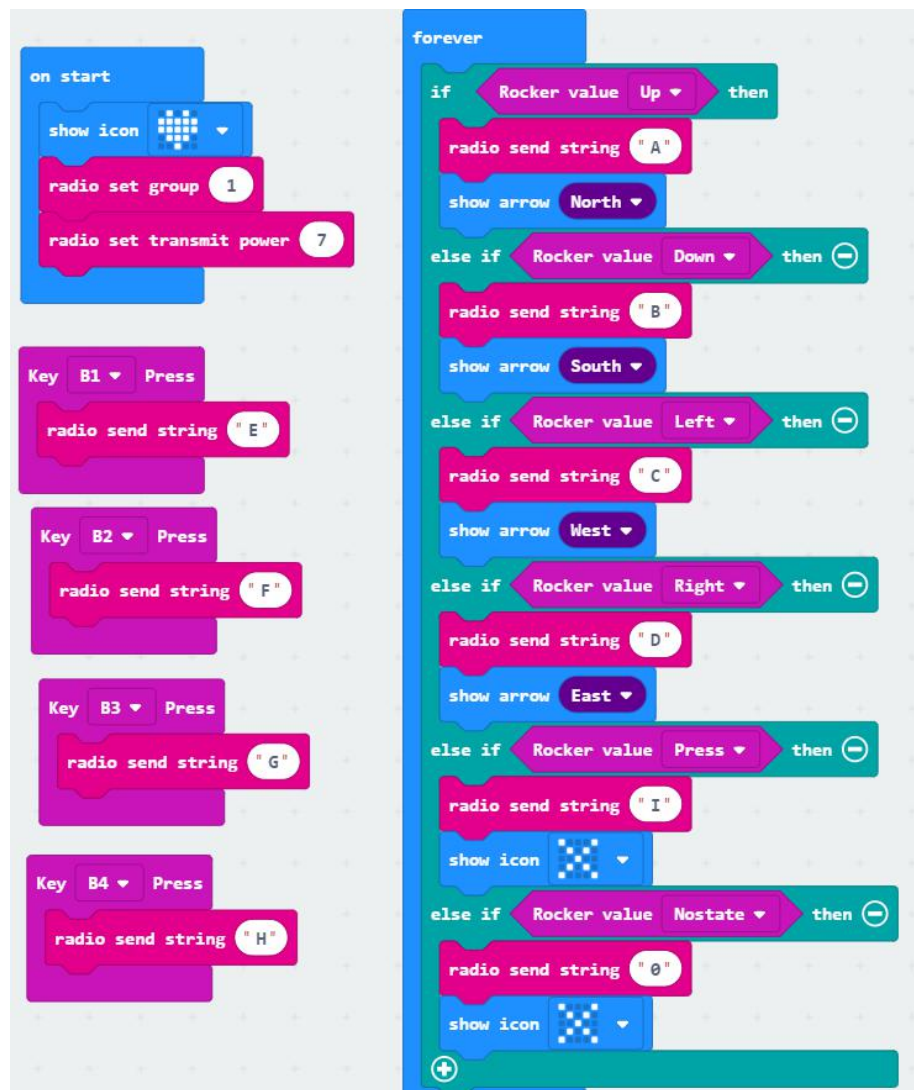
The pretty car program is shown below.



Handle gravity control code, as shown below.



Handle rocker control code, as shown below.



7.Experimental phenomena

We need to download the Pretty car code into the micro:bit board of the pretty car.

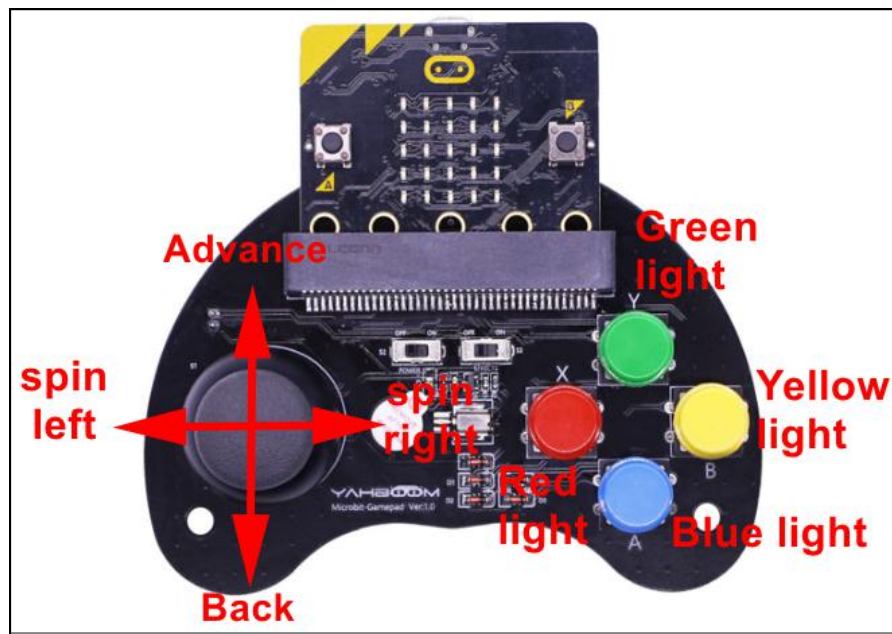
Open the power switch of the car, we can see a smile pattern displayed on the micro: bit dot matrix;

We need to download the Handle code into the micro: bit board of the handle.

Open the power switch of the handle, we can see that the micro: bit dot matrix will initially display a heart pattern, and then display an "X" pattern, indicating that the handle is in the default(no data is sent).

They will automatically pairing, then, we can start remote control the car by handle.

The handle functions are shown below.



! Note:

In case of handle rocker control, press the rocker to control the RGB light closed. In case of handle gravity control, this function is not available.