micro:bit car handle remote control

1.Learning goals

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

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/yahboom_mbit_en and https://github.com/lzty634158/GHBit to programming.

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/yahboom_mbit_en and https://github.com/lzty634158/GHBit, you can start programming.

3.About code

About micro:bit car code, please refer to the **micro:bit-car-code**.
About handle code, please refer to the **Handle-gravity-control-code** and **Handle-rocker-control-code.**

4.Steps:

4.1 Handle rocker control

First, we need to download the **micro:bit-car-code.hex** to micro:bit board of micro:bit car. Open the power switch, you can see that the micro:bit dot matrix shows an pattern as shown in Figure 1.1.

we need to download the **Handle-rocker-control.hex** to micro:bit board of Handle. Open the power switch, you can see that the micro:bit dot matrix shows an "heart", then, display "X", as shown in Figure 1.2.
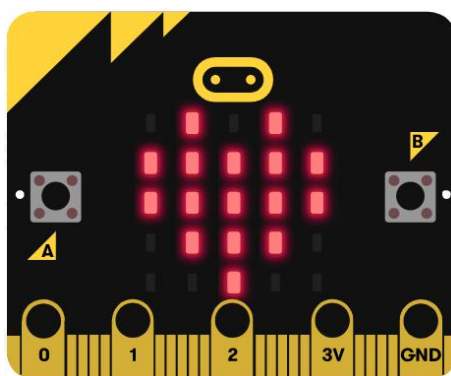

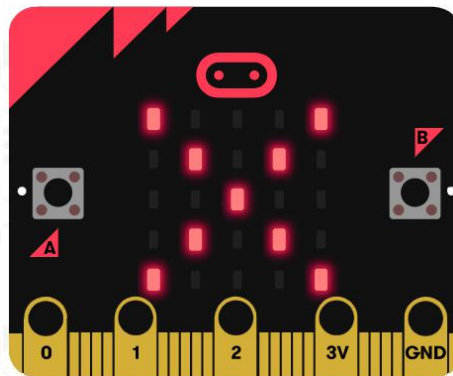Figure 1.1   Figure 1.2

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

You can use the rocker to control the forward, backward, turn left, and turn right .

And use the 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 **micro:bit-car-code.hex** to micro:bit board of micro:bit car. Open the power switch, you can see that the micro:bit dot matrix shows an pattern as shown in Figure 1.3.

we need to download the **Handle-gravity-control.hex** to micro:bit of Handle. Open the power switch, you can see that the micro:bit dot matrix shows an "heart", then, display "X", as shown in Figure 1.4.
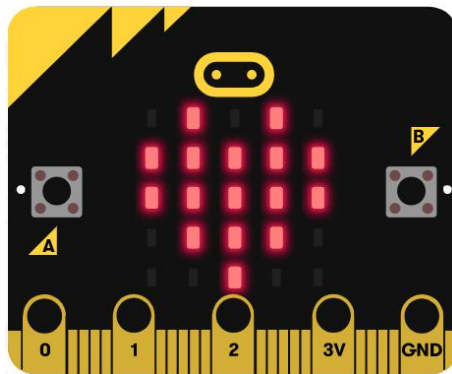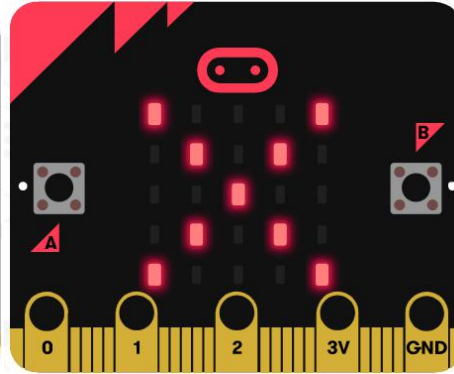

| Figure 1.3 | Figure 1.4 |

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

You can tilt handle to control the forward, backward, turn left, and turn right .

And use the handle button to switch the color of RGB light.