

Color recognition machine

1. Learning target

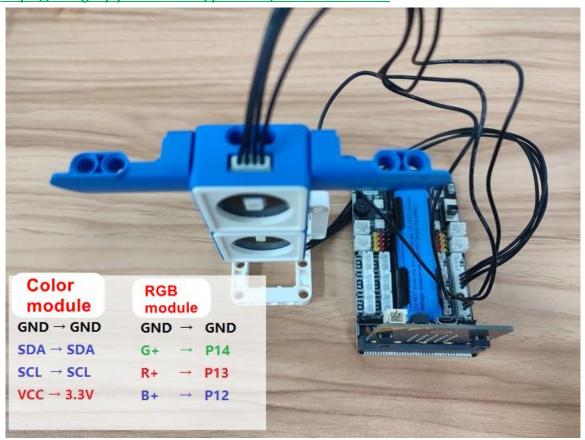
In this course, we will learn how to use Micro:bit and color recognition module to make a color recognition machine.

2. Preparation

Connect the module to Micro:bit board by expansion board, as shown below.

Note: The RGB module used in this course needs to be purchased additionally.

Link:https://category.yahboom.net/products/world-of-module



3. 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/YahboomTechnology/module_world_color and

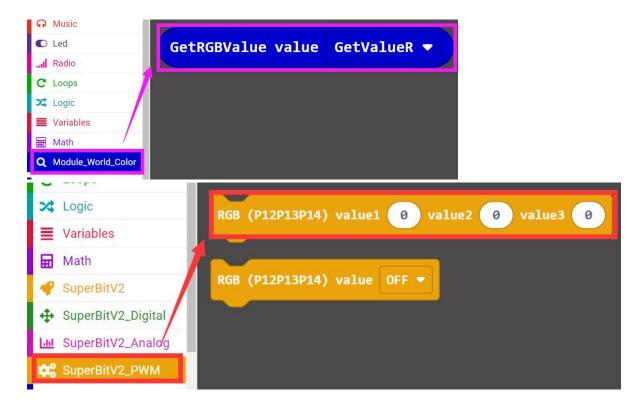
https://github.com/YahboomTechnology/SuperBitLibV2 to program.

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/YahboomTechnology/SuperBitLibV2, you can start programming.



4.Looking for blocks

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



5.Combine block

The summary program is shown below.

```
forever

RGB (P12P13P14) value1 GetRGBValue value GetValueR ▼ valueZ GetRGBValue value GetValueG ▼ value3 GetRGBValue value GetValueB ▼ pause (ms) 100 ▼
```

5. Phenomenon

After the program is downloaded successfully. RGB lights will turn on different color light according to the recognized colors.