

## Chameleon

### 1. Learning target

In this course, we will learn how to use Arduino, RGB light module and color recognition module to chameleon function.

### 2. Preparation

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



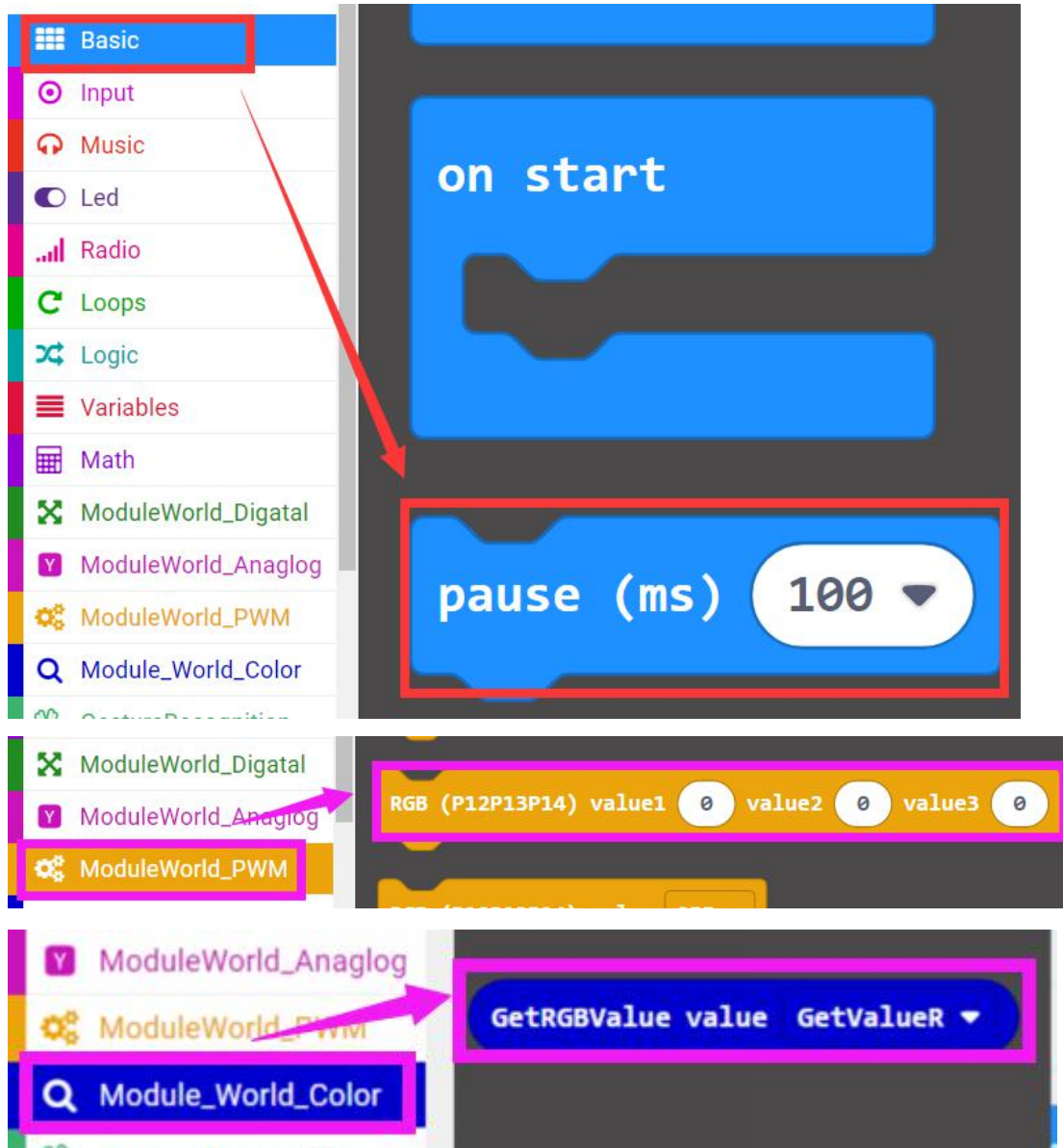
### 3. Programming method

**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> 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/Module-World>, 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.



### 6.Phenomenon

After the program is downloaded successfully. When the color sensor recognizes different colors, the RGB lights display the corresponding colors.