

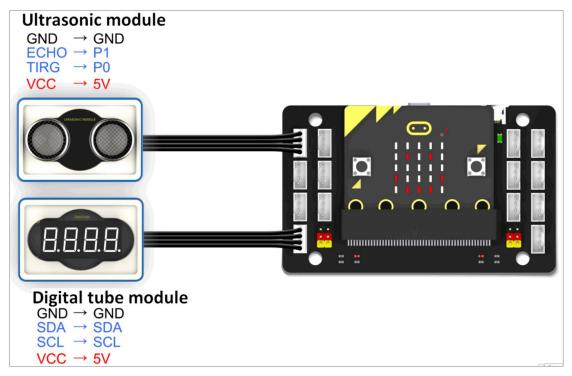
#### Handheld rangefinder

### 1.Learning target

In this course, we will learn how to use Micro:bit, ultrasonic module and digital tube module to achieve ranging function.

## 2. Preparation

Connect the module to Micro:bit board by 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: <a href="http://microbit.org/">http://microbit.org/</a> to enter the programming interface. Add the Yahboom package <a href="https://github.com/YahboomTechnology/Module-World">https://github.com/YahboomTechnology/Module-World</a> and <a href="https://github.com/YahboomTechnology/tm1650">https://github.com/YahboomTechnology/tm1650</a> to program.

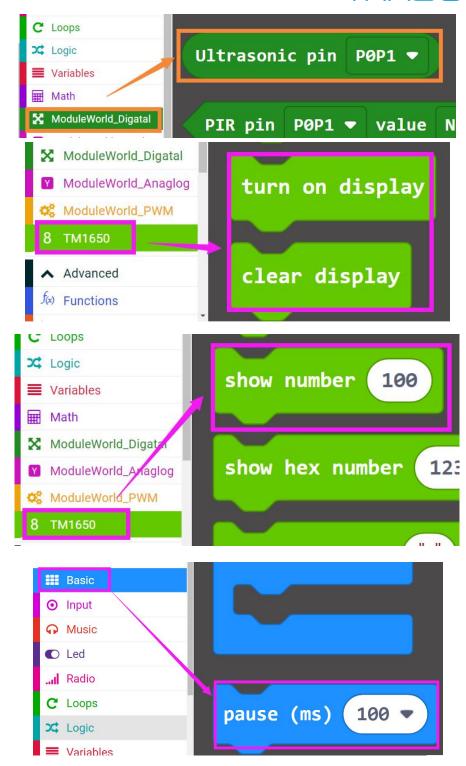
**Mode 2 offline programming:** We need to open the offline programming software. After the installation is complete, enter the programming interface, click 【New Project】, add Yahboom package:

https://github.com/YahboomTechnology/Module-World and https://github.com/YahboomTechnology/tm1650, you can start programming.

#### 4.Looking for blocks

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

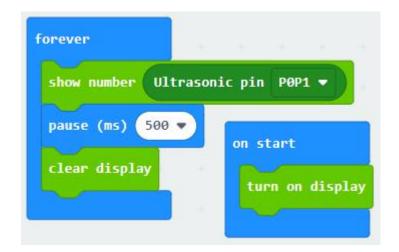




# 5.Combine block

The summary program is shown below.





# 6. Phenomenon

After the program is downloaded successfully. The digital tube will display the distance.