

Photo-resistor

1.Learning goals

In this lesson we mainly learn about photo-resistor and learn how to use the pin blocks to read the analog values of the pins,and make micro:bit to display the analog value of pin P2 by programming.

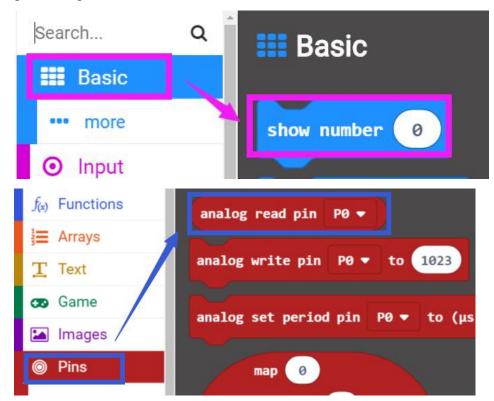
2.Programming method:

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 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 **]** to program.

3.Looking for blocks

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



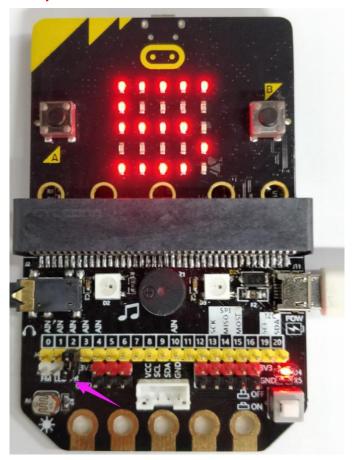
4.Combine building block

The summary program is shown below:





Note: The jumper cap needs to be connected to the P2 and PR pins on the on the basic expansion board. As shown below.



5. Experimental phenomena

After the program is successfully downloaded, the analog value of the P2 pin will be displayed on the micro:bit dot matrix. If the environment is bright, the value displayed on the micro:bit dot matrix will become smaller; otherwise, the value will become larger. As shown below.



