

SKU:DFR0789 (<https://www.dfrobot.com/product-2350.html>)

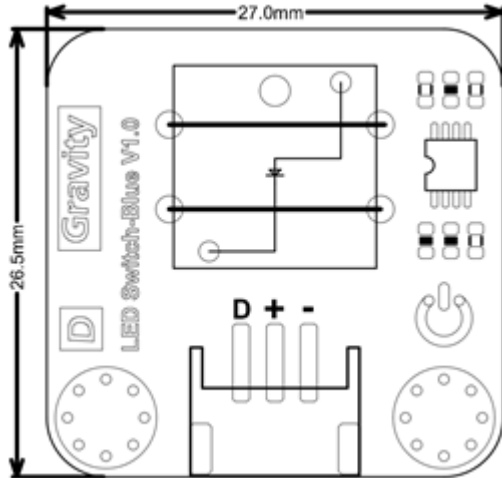
(<https://www.dfrobot.com/product-2350.html>)

Introduction

This is a simple LED-illuminated self-lock switch button. It's just like a basic switch button, but it lights up color (red / yellow / green / blue / white) when pressed down, which gives you visual feedback. These little buttons can be used with micro:bit to realize various fun interactive projects, such as, switch, backlight keyboard, music player panel, recording control panel, etc.



Specification

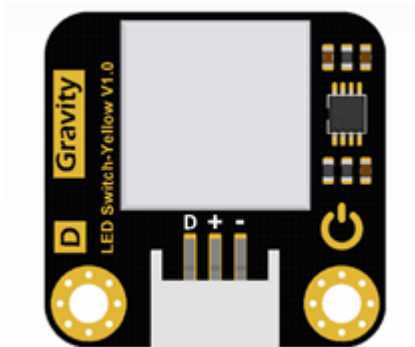


- Operating Voltage: +3.3-5V (3.3V is recommended)
- Output: digital
- Connector: PH2.0-3P
- Dimension: 27×26.5mm
- Colors Available: red, yellow, green, blue, white

- Colors Available: red, yellow, green, blue, white

Note: The module comes with self-lock function. When the button is pressed down, the module outputs High, and the LED lights up. When being pressed again, the module outputs Low and the LED turns off.

Board Overview

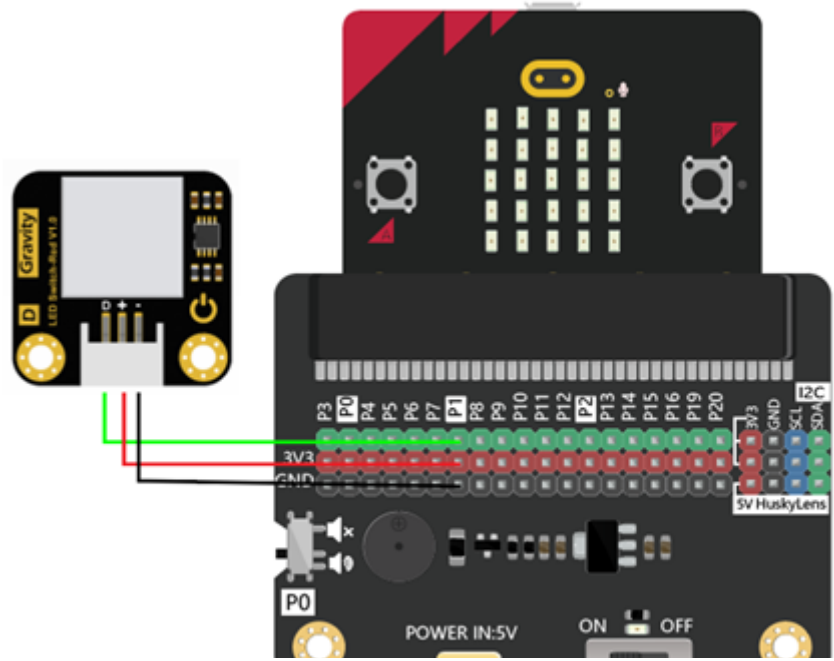


Num	Silk-screen	Description
1	D	Control port
2	+	VCC
3	-	GND

Num	File screen	Description
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Graphic Programming Tutorial

Connection Diagram





Mind+ Graphic Programming

1. Download and install the software. Download address: <http://mindplus.cc/en.html>
(<http://mindplus.cc/en.html>)
2. Switch to "offline mode". Detailed tutorial: <https://mindplus.dfrobot.com/microbit>
(<https://mindplus.dfrobot.com/microbit>)
3. In "expansion", select "Arduino Uno" in "main controller".

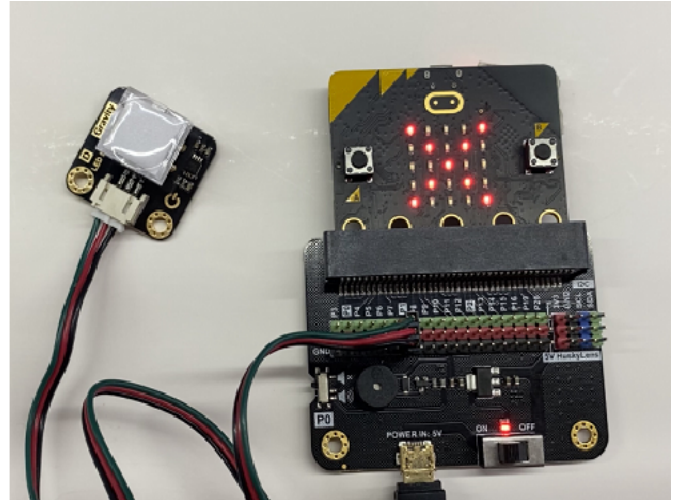
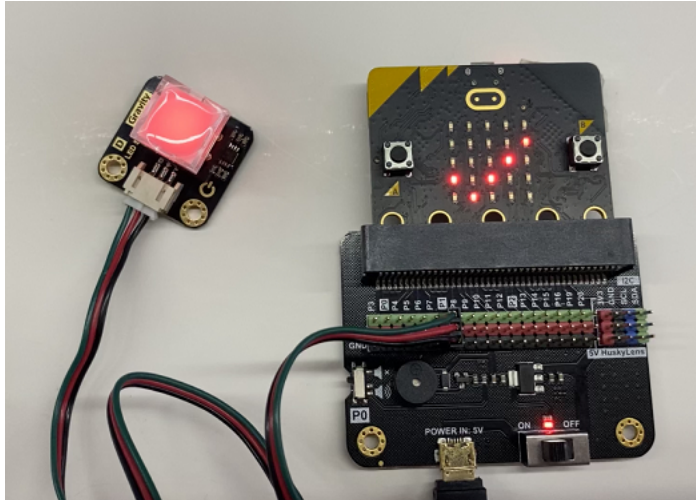
Sample Programm

Function Description: When you first press the button, the LED on it will be lighten up, and the micro:bit dot matrix screen will display "√". When you press the button again, the LED will be off, and the screen will display "×".



```
forever
  if read digital pin P1 = 1 then
    display pattern [Pattern 1]
  else
    display pattern [Pattern 2]
```

Program Effect:



MakeCode Graphic Programming

Click link to Basic operation tutorial for MakeCode (<https://wiki.dfrobot.com/Makecode%20Get-started%20Tutorial>).

Sample Program

Function Description: When you first press the button, the LED on it will be lightened up, and the micro:bit dot matrix screen will display "√". When you press the button again, the LED will be off, and the screen will display "×".

forever

if

digital read pin P1 ▼

= ▼

1

then

show icon



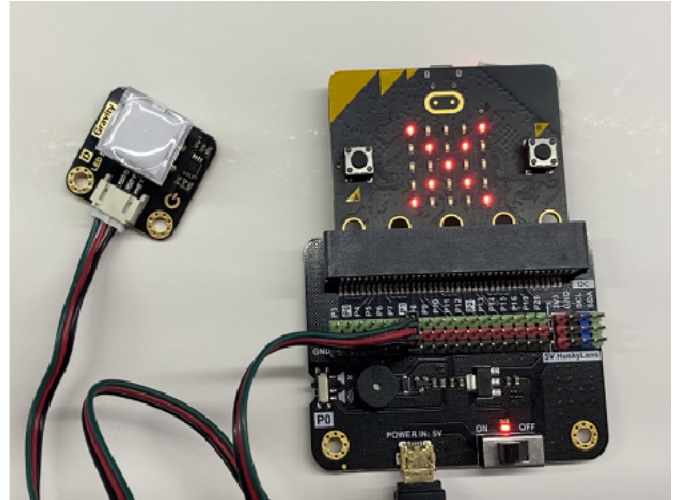
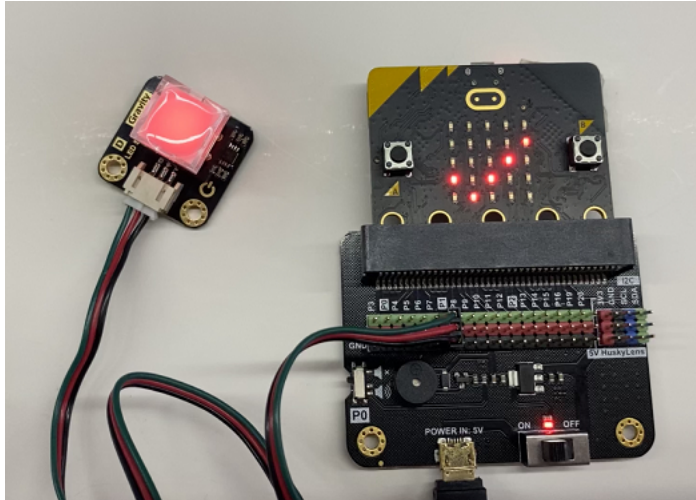
else



show icon

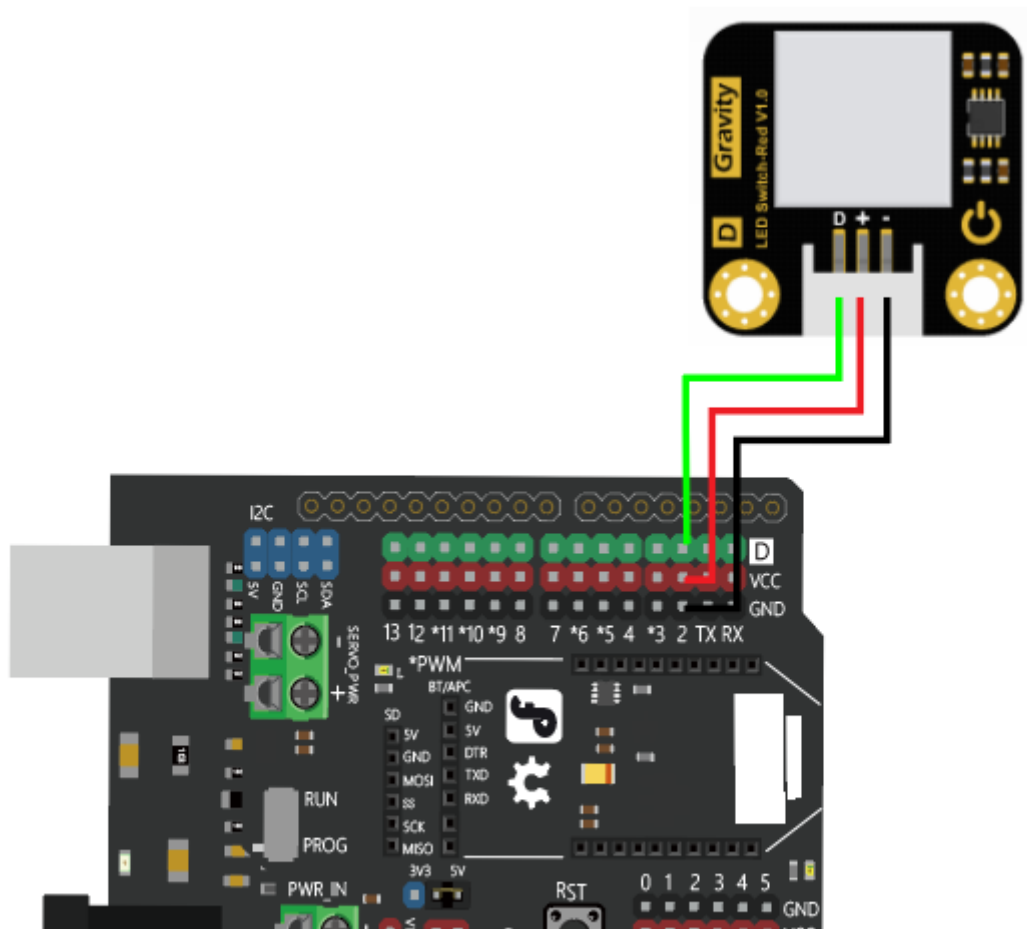


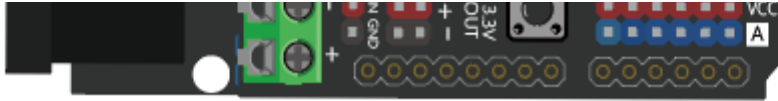
Program Effect:



Tutorial for Arduino

Connection Diagram





Requirements

- **Hardware**
 - Arduino UNO × 1
 - LED Switch Module × 1
 - Digital Cable × 1
- **Software**
 - Arduino IDE (<https://www.arduino.cc/en/Main/Software>)

Sample Code

```
/*
  Description:
  When you press the button for the first time, its inner LED will be lighten up. At t
  When you press the button again, its inner LED will be off, and the other one on pin

*/

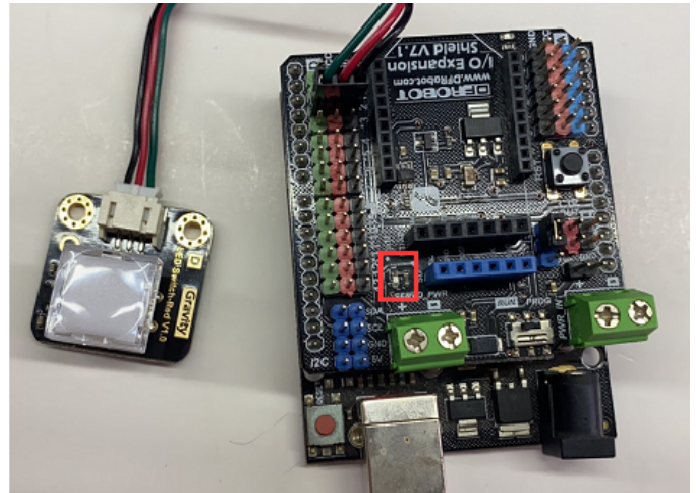
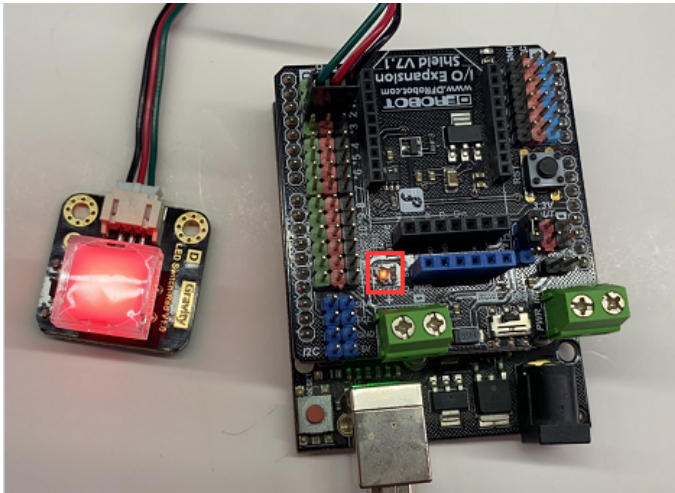
int ledPin = 13;           // Select the pin of light
int inputPin = 2;         // Sensor connect pin 2

void setup() {
  pinMode(ledPin, OUTPUT); // Define the pin of light as output pin
  pinMode(inputPin, INPUT); // Define the pin of button as input pin
}

void loop(){
  int val = digitalRead(inputPin); //Read input value
```

```
int val = digitalRead(inputPin); //read input value
if (val == HIGH) {                // Check if the input is high, high means the button is pressed
    digitalWrite(ledPin, HIGH); // LED light is on
} else {
    digitalWrite(ledPin, LOW);  // LED light is off
}
}
```


Program Effect:



FAQ

For any questions, advice or cool ideas to share, please visit the **DFRobot Forum** (<https://www.dfrobot.com/forum/>).

More Documents

 Get **LED Switch** (<https://www.dfrobot.com/product-2350.html>) from DFRobot Store or **DFRobot Distributor**. (<https://www.dfrobot.com/index.php?route=information/distributorslogo>)

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