

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

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

### **Introduction**

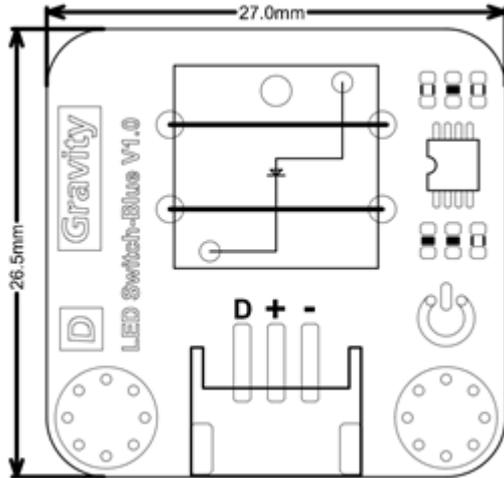
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This is a simple LED-illuminated self-lock switch button. It's just like a basic switch button, but it lights up color (red / yellow / green / blue / white) when pressed down, which gives you visual feedback. These little buttons can be used with micro:bit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



# Specification

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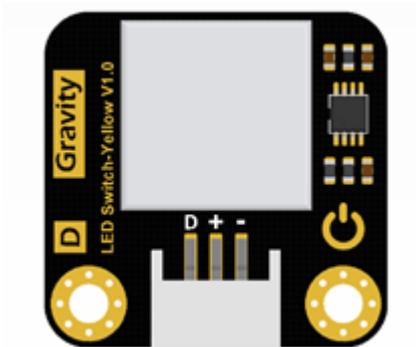
- Operating Voltage: +3.3-5V (3.3V is recommended)
- Output: digital
- Connector: PH2.0-3P
- Dimension: 27×26.5mm
- Colors Available: red, yellow, green, blue, white

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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

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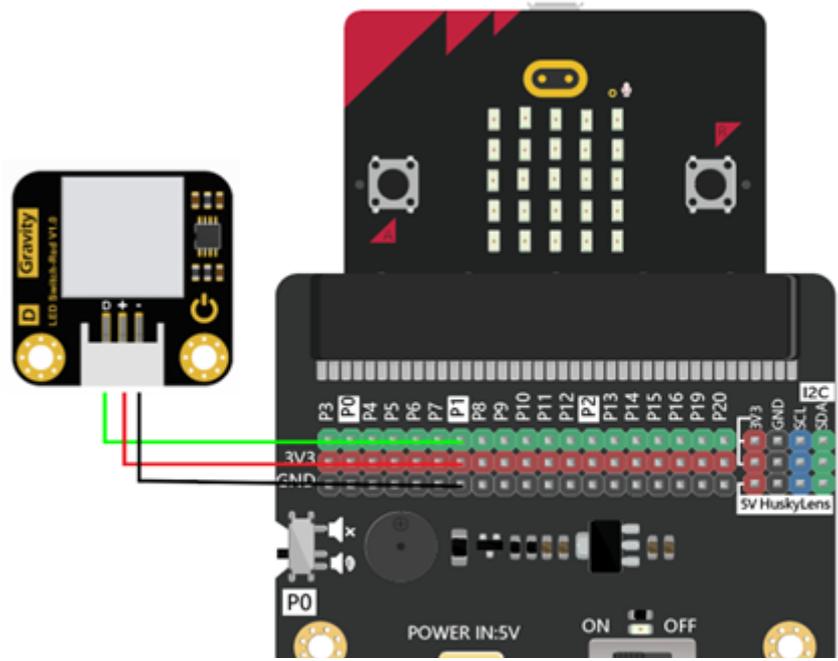


Num	Silk-screen	Description
1	D	Control port
2	+	VCC
3	-	GND

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".

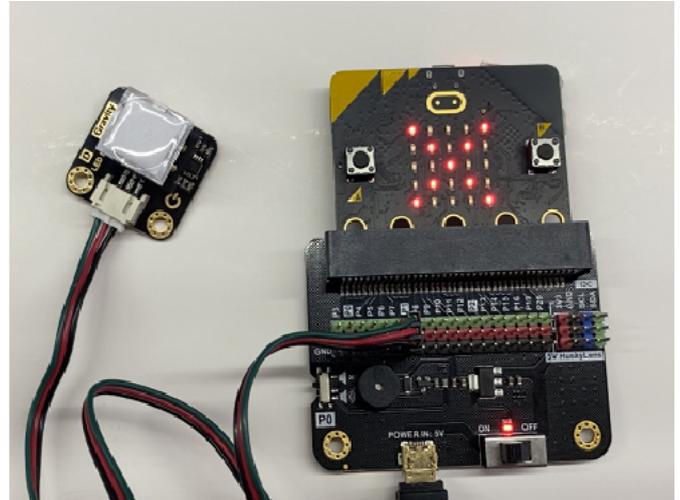
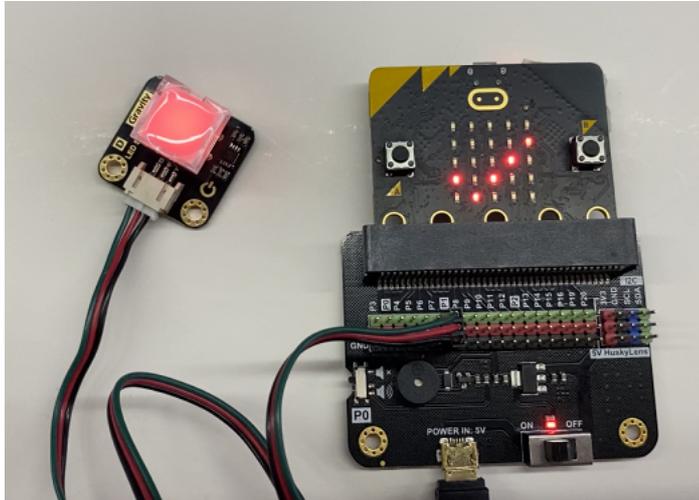
## Sample Programm

**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



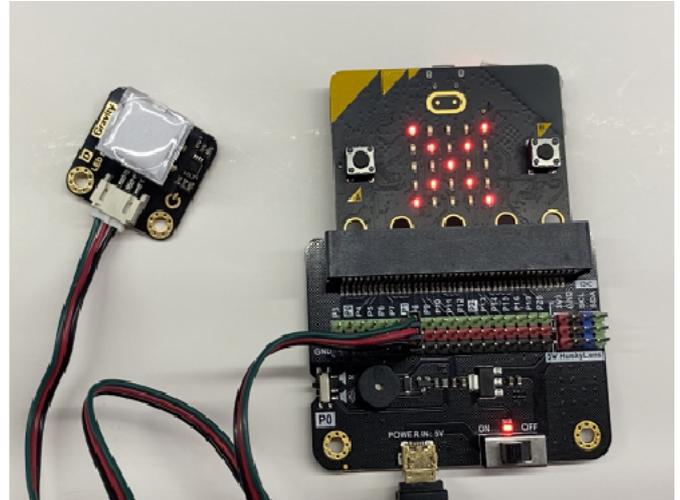
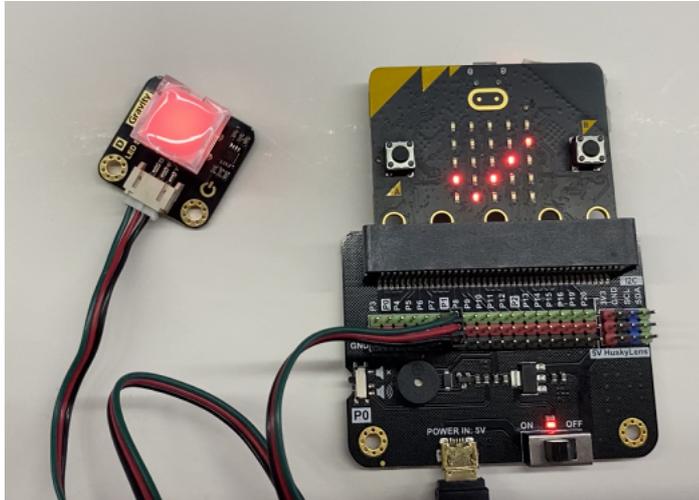
else



show icon

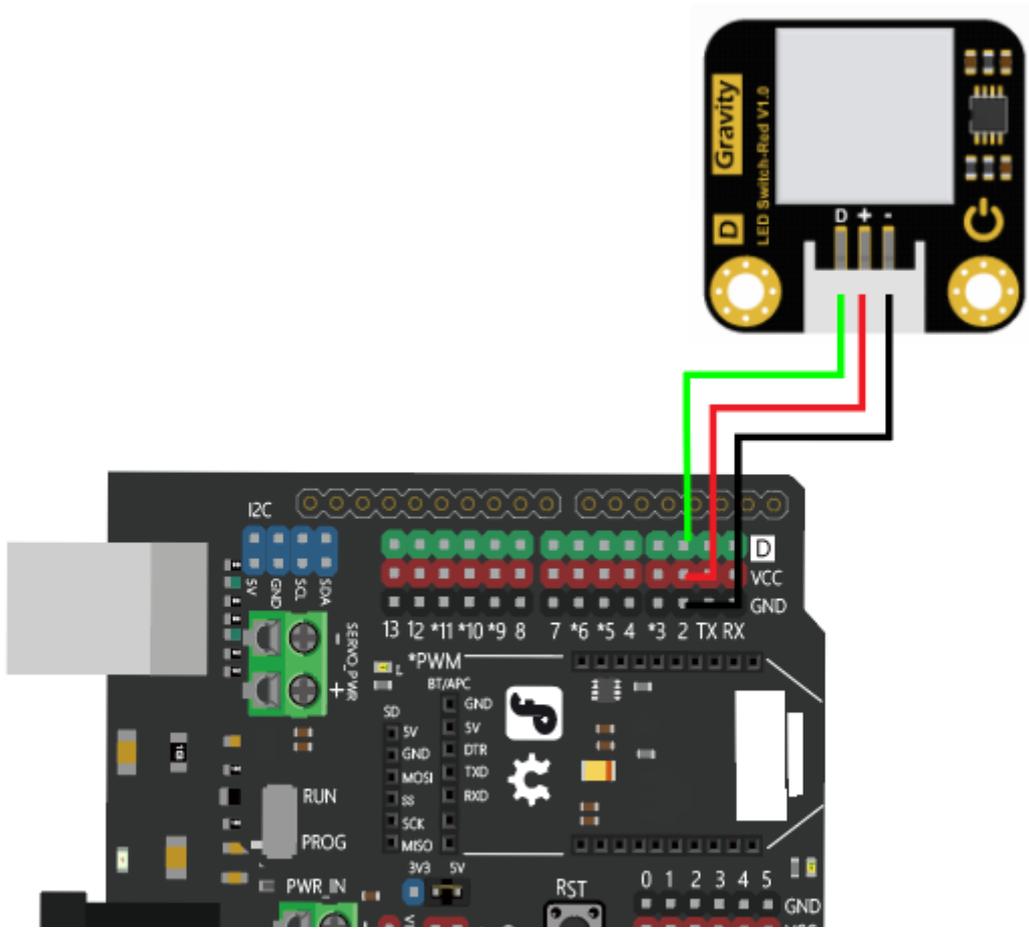


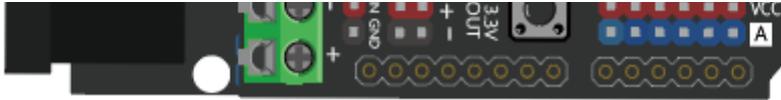
Program Effect:



## 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

*/

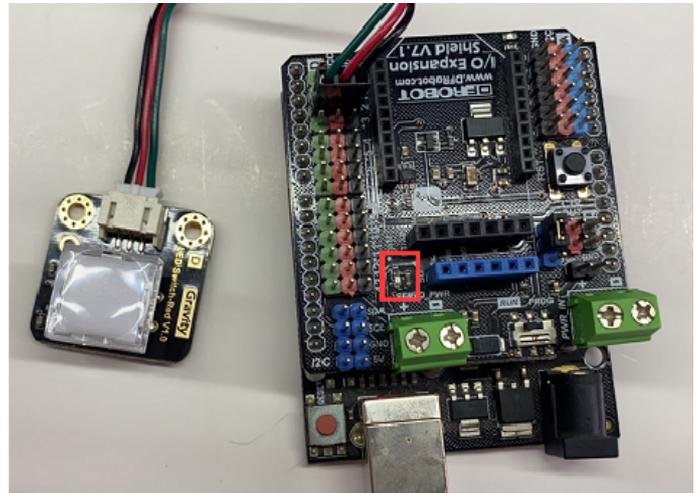
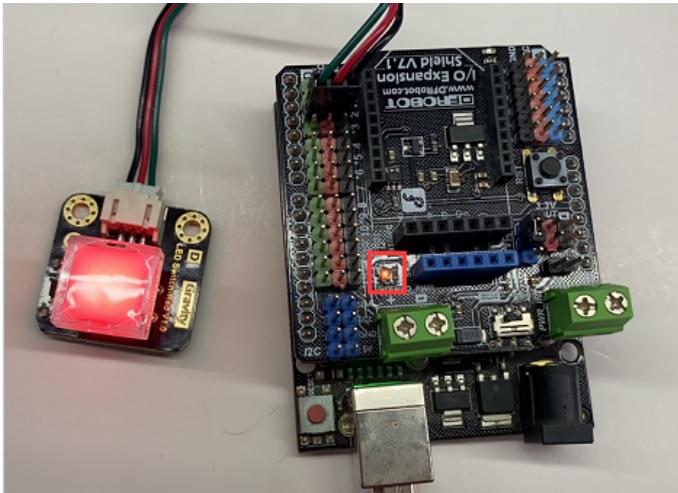
int ledPin = 13;           // Select the pin of light
int inputPin = 2;         // Sensor connect pin 2

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

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

## More Documents

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 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>)

**Turn to the Top**