



# Grove - Red LED User Manual

Release date: 2015/9/22

Version: 1.0

Wiki: [http://www.seeedstudio.com/wiki/Grove - LED](http://www.seeedstudio.com/wiki/Grove_-_LED)

Bazaar: <http://www.seeedstudio.com/depot/Grove-Red-LED-p-1142.html>

## Document Revision History

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Revision	Date	Author	Description
1.0	Sep 22, 2015	Jiankai.li	Create file

## Contents

Document Revision History .....	2
1. Introduction .....	2
2. Features .....	3
3. Specification .....	4
4. Usage .....	5
4.1 With Arduino .....	5
4.2 With Raspberry Pi .....	6
5. Resources .....	8

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## 1. Introduction

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Grove - LED is designed for the beginners of Arduino/Seeeduino to monitor controls from digital ports. It can be mounted to the surface of your box or desk easily and used as pilot lamp for power or signal. Its brightness can be adjust by potentiometer.



There are four products which can light different colors. They have the same work principle.

## 2. Features

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- Grove compatible interface
- 3.3V/5V Compatible
- Adjustable LED orientation
- Adjustable LED brightness

### 3. Specification

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Item	Description
LED Control Mode	Digital Pin of Arduino
Working Voltage	5V
Supply Mode	Grove Interface

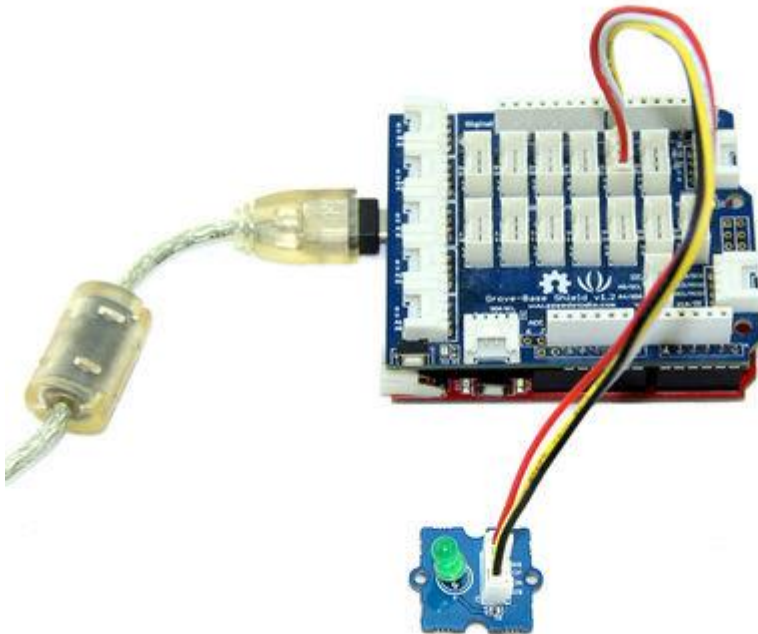
## 4. Usage

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### 4.1 With Arduino

Here we show how to use Arduino to control the state of the LED.

1. Connect the LED to Base Shield's **digital port 2** with 4pin Grove Cable. Of course you can change to other valid digital ports if it's necessary and the definitions of the port should be changed too.
2. Plug it onto the Arduino/Seeeduino. Connect the board to PC using USB cable.



3. Copy the demo code to your sketch, then upload to Arduino or Seeeduino board. Please click [here](#) if you do not know how to upload.

You will see the LED blink every second.

```
/****** 2012 Seeedstudio ******/
* File Name      : GroveLEDDemoCode.ino
* Author        : Seeedteam
* Version       : V1.1
* Date          : 18/2/2012
* Description    : Demo code for Grove - LED
*****/

#define LED 2 //connect LED to digital pin2
```



```
void setup() {  
  // initialize the digital pin2 as an output.  
  pinMode(LED, OUTPUT);  
}  
  
void loop() {  
  digitalWrite(LED, HIGH); // set the LED on  
  delay(500);             // for 500ms  
  digitalWrite(LED, LOW); // set the LED off  
  delay(500);  
}
```

## 4.2 With Raspberry Pi

Connect the **LED to Port D4** and power on the Raspberry Pi, using the Grove wire connector. This is a test to make led blinking. You can connect to GrovePi+ with it as the picture below.



```
# GrovePi LED Blink example  
  
import time  
from grovepi import *  
  
# Connect the Grove LED to digital port D4  
led = 4  
  
pinMode(led, "OUTPUT")  
time.sleep(1)  
  
while True:
```

```
try:
    #Blink the LED
    digitalWrite(led, 1)    # Send HIGH to switch on LED
    time.sleep(1)

    digitalWrite(led, 0)    # Send LOW to switch off LED
    time.sleep(1)

except KeyboardInterrupt:  # Turn LED off before stopping
    digitalWrite(led, 0)
    break
except IOError:           # Print "Error" if communication error encountered
    print "Error"
```

### *Run The Program*

- Find the path to the file(According to your own path)

```
cd GrovePi/Software/Python/
```

- Run Program

```
sudo python grove_led_blink.py
```