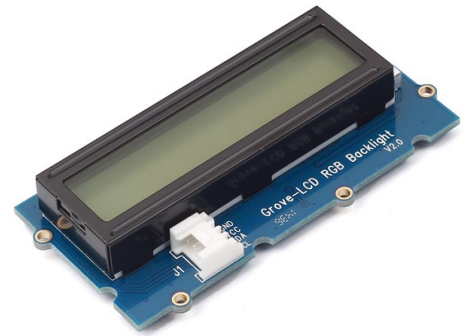


Afficheur LCD I2C Grove 104030001

Grove - LCD RGB Backlight

Done with tedious mono color backlight? This Grove enables you to set the color to whatever you like via the simple and concise Grove interface. It takes I2C as communication method with your microcontroller. So number of pins required for data exchange and backlight control shrinks from ~10 to 2, relieving IOs for other challenging tasks. Besides, Grove - LCD RGB Backlight supports user-defined characters. Want to get a love heart or some other foreign characters? Just take advantage of this feature and design it! This product is a replacement of Grove - Serial LCD. If you are looking for primitive 16x2 LCD modules, we have green yellow backlight version and blue backlight version on sale also.



Note : This document works for Grove-LCD RGB Backlight Version 1.0, 2.0 and 4.0.

Version¶

Product Version	Changes	Released Date
Grove-LCD RGB Backlight V1.0	Initial	June 2012
Grove-LCD RGB Backlight V2.0	Optimize PCB layout	Nov 2013
Grove-LCD RGB Backlight V4.0	Optimize PCB layout	Sep 2016

Features¶

- RGB Backlight
- I2C communication
- Built-in English fonts
- 16x2 LCD

Tip

More details about Grove modules please refer to [Grove System](#)

Specification¶

Item	Value
Input Voltage	5V
Operating Current	<60mA
CGROM	10880 bit
CGRAM	64x8 bit

Item	Value
LCD I2C Address	0X3E
RGB I2C Address	0X62
Note	

There are 4 I2C addresses and we use 2 I2C addresses for LCD and RGB.

Getting Started

Note

If this is the first time you work with Arduino, we firmly recommend you to see [Getting Started with Arduino](#) before the start.

Play With Arduino

Hardware

- **Step 1.** Prepare the below stuffs:

Base Shield (optional)



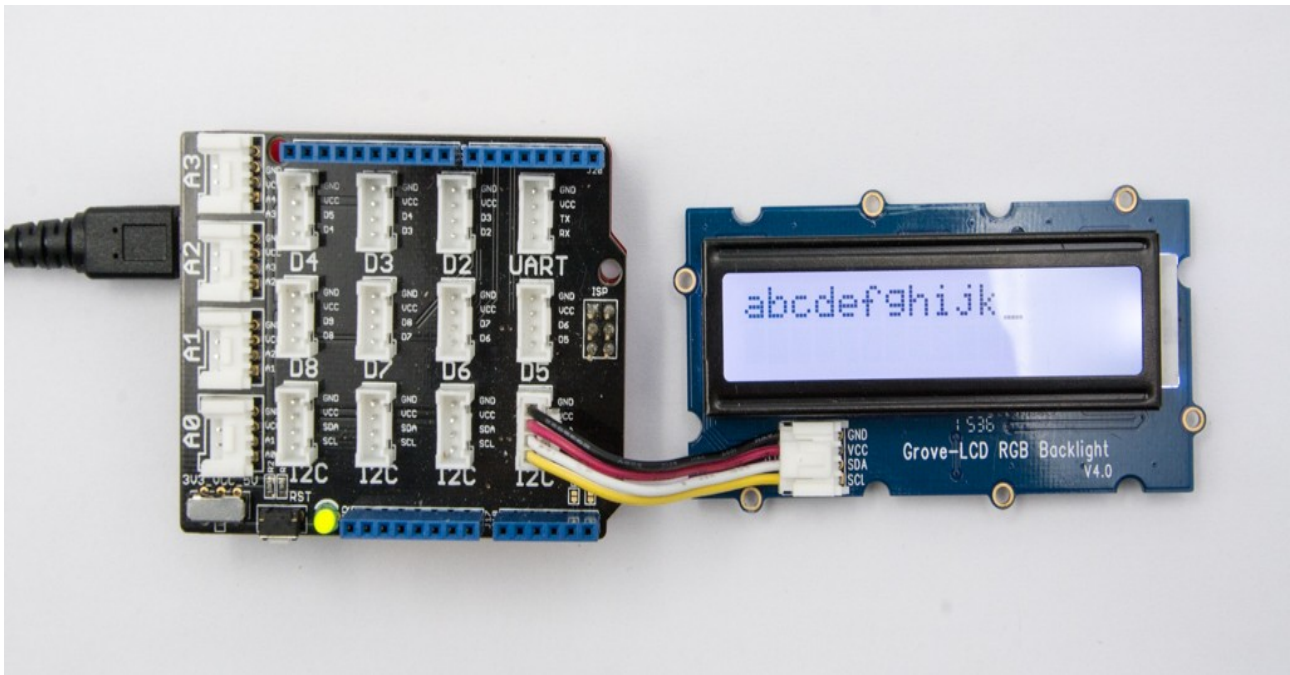
[Get One Now](#)

Grove-LCD RGB Backlight



[Get One Now](#)

- **Step 2.** Connect Grove-LCD RGB Backlight to **I2C** port of Grove-Base Shield.
- **Step 3.** Plug Grove - Base Shield into Seeeduino.
- **Step 4.** Connect Seeeduino to PC via a USB cable.



Note

If we don't have Grove Base Shield, We also can directly connect Grove-LCD RGB Backlight to Seeeduino as below.

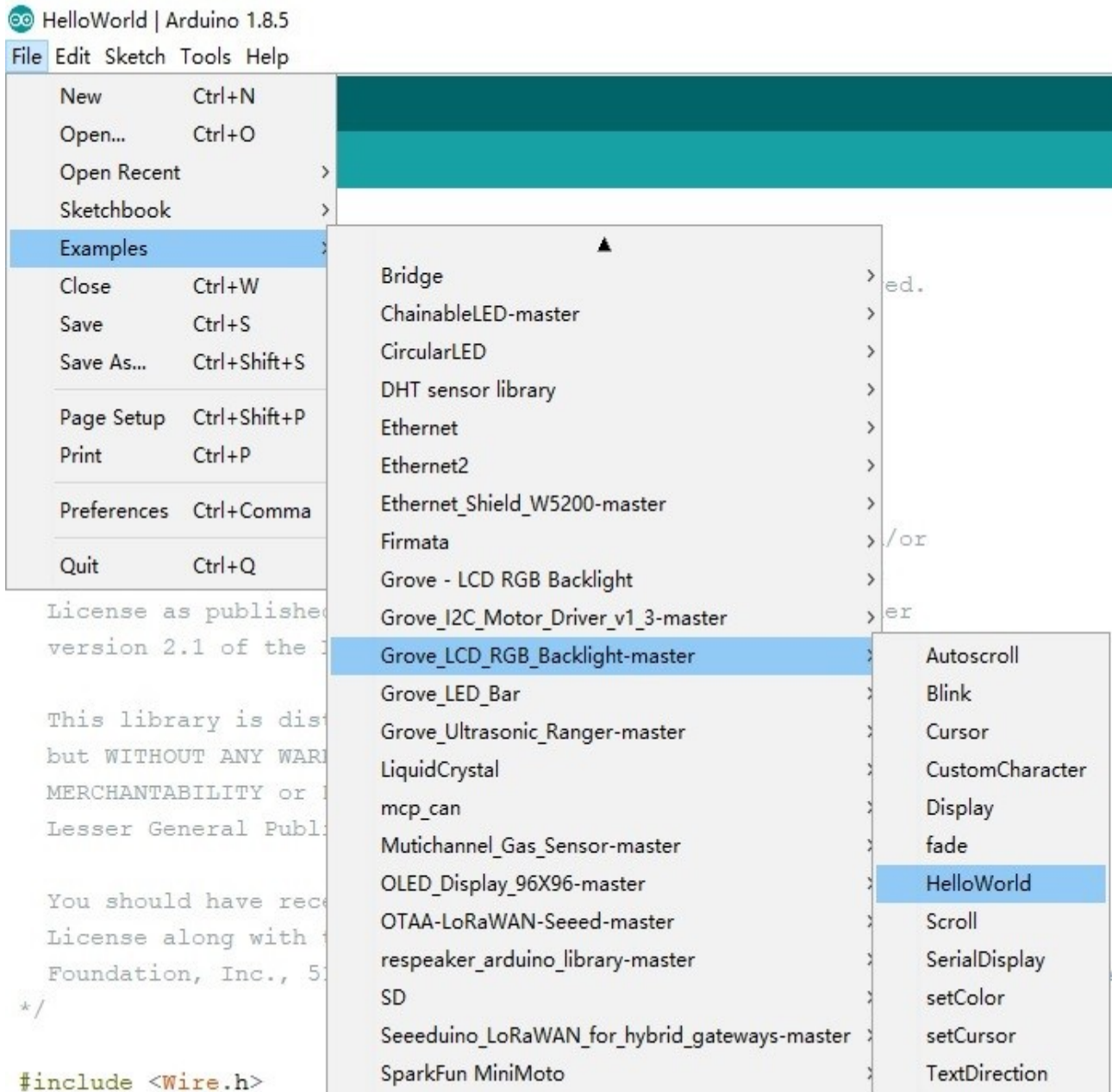
Seeeduino Grove-LCD RGB Backlight

5V	Red
GND	Black
SDA	White
SCL	Yellow

Software

- **Step 1.** Download the [Grove-LCD RGB Backlight Library](#) from Github.
- **Step 2.** Refer [How to install library](#) to install library for Arduino.
- **Step 3.** Here are 12 examples in the library as below.
 - Autoscroll
 - Blink
 - Cursor
 - CustomCharacter
 - Display
 - fade
 - HelloWorld
 - Scroll
 - SerialDisplay
 - setColor
 - setCursor

- TextDirection
- **Step 4.** Please follow below picture to select example **HelloWorld** and upload the arduino. If you do not know how to upload the code, please check [how to upload code](#).



Here is the code of HelloWorld.ino.

```
#include <Wire.h>
#include "rgb_lcd.h"

rgb_lcd lcd;

const int colorR = 255;
const int colorG = 0;
const int colorB = 0;

void setup()
{
    // set up the LCD's number of columns and rows:
```

```
lcd.begin(16, 2);

lcd.setRGB(colorR, colorG, colorB);

// Print a message to the LCD.
lcd.print("hello, world!");

delay(1000);
}

void loop()
{
    // set the cursor to column 0, line 1
    // (note: line 1 is the second row, since counting begins with 0):
    lcd.setCursor(0, 1);
    // print the number of seconds since reset:
    lcd.print(millis()/1000);

    delay(100);
}
```

- **Step 4.** We will see the hello world on LCD.