

Gravity I2C LCD1602 Arduino LCD Display Module SKU DFR0555 DF0556 DFR0557

SKU:DFR0555

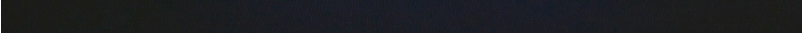
(<https://www.dfrobot.com/product-1722.html>)

(<https://www.dfrobot.com/product-1722.html>)

Introduction

Referring to the LCD16020, I believe that everyone is not unfamiliar the square shape, green color, a row of 2.54 pin header.... LCD1602 module is a product of the





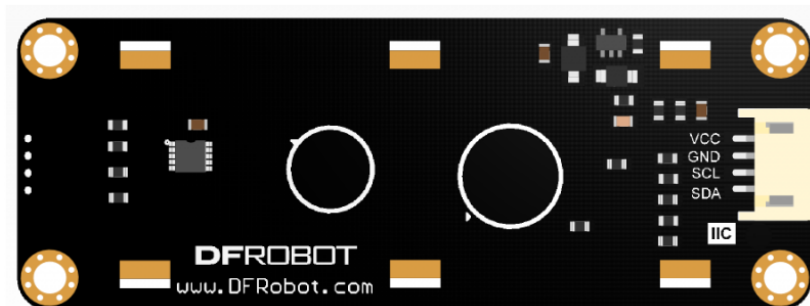
DFRobot Gravity IIC series, which has been greatly optimized for its original LCD1602 appearance. This module does not need to adjust the contrast, retain the backlight controllable function, simultaneously compatible with 3.3V and 5V voltage. The optimization of function and the appearance brings you the different experience. This kind of module has the blue screen, the green screen, the gray screen.

Specification

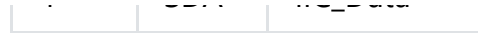
- Operating Voltage: 3.3V~5.0V
- Operating Current: $\leq 20\text{mA}$
- Display Description: 16*2
- Communication Mode: IIC/I2C
- Backlight: Blue/Green/Gray
- Operating Temperature: -20 to +70°C
- Storage Temperature: -30 to +80°C

- Dimension: 87.0*32.0*13.0mm/3.43*1.26*0.51in

Board Overview



Num	Label	Description
1	VCC	3.3~5V
2	GND	GND
3	SCL	IIC_Clock
4	SDA	IIC_Data



Tutorial

Follow the pin description to connect the hardware, then download the sample code to UNO. After upload finished, you can see the LCD display and backlight gradient effect.

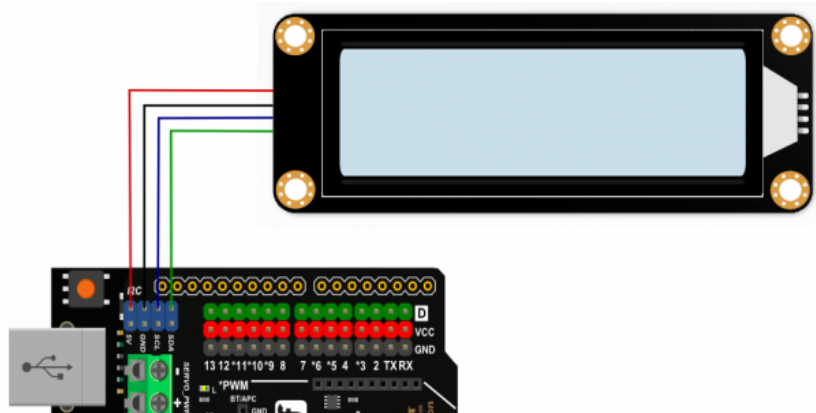
Requirements

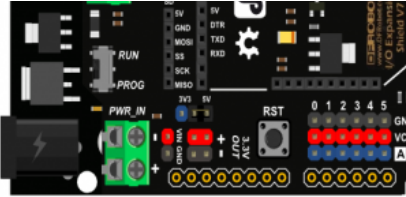
- Hardware
 - DFRduino UNO R3
(<https://www.dfrobot.com/product-838.html>) (or similar) x 1
 - Gravity: IO Expansion Shield
(<https://www.dfrobot.com/product-1009.html>) x

1

- Gravity: I2C LCD1602 Arduino LCD Display Module.
- **Software**
 - Arduino IDE, Click to Download Arduino IDE from Arduino®
(<https://www.arduino.cc/en/software>)

Connection Diagram





Sample Code

Download DFRobot LCD Library

(https://github.com/DFRobot/DFRobot_RGBLCD1602)

How to install Libraries in Arduino IDE

([https://docs.arduino.cc/software/ide-](https://docs.arduino.cc/software/ide-v1/tutorials/installing-libraries#.UxU8mdzF9H0)

[v1/tutorials/installing-libraries#.UxU8mdzF9H0](https://docs.arduino.cc/software/ide-v1/tutorials/installing-libraries#.UxU8mdzF9H0))

```
/*!  
 * file Fade.ino  
 * brief Fade.  
 *  
 * Copyright [DFRobot](https://www.dfrobot.com)  
 * Copyright GNU Lesser General Public License  
 *  
 * version V1.0  
 * date 2018-1-13  
 */  
  
#include "DFRobot_RGBLCD1602.h"  
  
/*  
Change the RGBAddr value based on the hardware
```

```

-----
          Moudule          | Version| RGBAddr|
-----
    LCD1602 Module        |  V1.0  | 0x60   |
-----
    LCD1602 Module        |  V1.1  | 0x6B   |
-----
    LCD1602 RGB Module    |  V1.0  | 0x60   |
-----

*/

DFRobot_RGBLCD1602 lcd(/*RGBAddr*/0x6B ,/*lcd

void breath(unsigned char color){
    for(int i=0; i<255; i++){
        lcd.setPWM(color, i); // set backlig
        delay(5);
    }

    delay(500);

```

```
        for(int i=254; i>=0; i--){
            lcd.setPWM(color, i);
            delay(5);
        }

        delay(500);
    }

    void setup() {
        // initialize
        lcd.init();
        // Print a message to the LCD.
        lcd.setCursor(4, 0);
        lcd.print("DFRobot");
        lcd.setCursor(1, 1);
        lcd.print("lcd1602 module");
    }

    void loop() {
```

```
    breath(lcd.REG_ONLY);  
}
```

Expected Results

- In the first row, the fifth pane of the screen shows "DFRobot"
- The second row, the second pane of screen shows "lcd1602 module"
- The screen backlight shows the breathing state while the caption is displayed

FAQ

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

More Documents

- LCD1602 Datasheet
(<https://dfimg.dfrobot.com/nobody/wiki/ee1c5bd150fc6b78f8cb8e8306898ab9.pdf>)

Back to Top 