Manuals+ — User Manuals Simplified.

JOY-it I2C 16X2 LCD Module Owner's Manual

JOY-it I2C 16X2 LCD Module
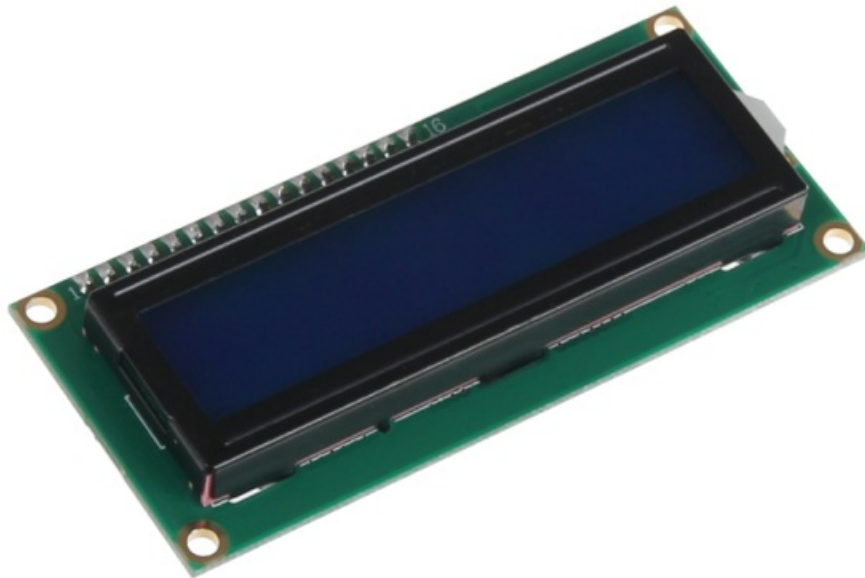
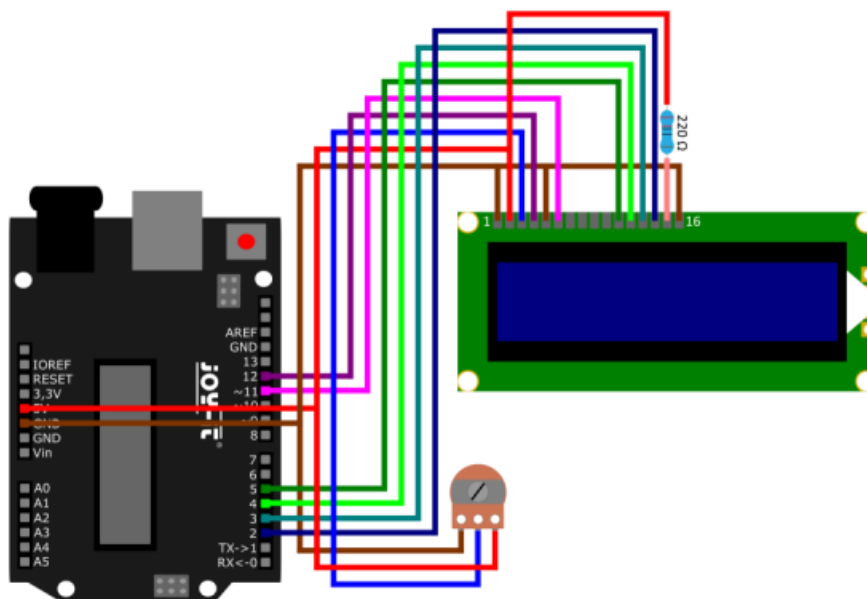**Contents**

GENERAL INFORMATION

Dear customer,

thank you very much for choosing our product.
In the following, we will introduce you to what to observe while starting up and using this product.
Should you encounter any unexpected problems during use, please do not hesitate to contact us.

USE WITH THE ARDUINO

Connection

Arduino	Display	Potentiometer
GND	Pin 1	–
5V	Pin 2	+
	Pin 3	Signal
D12	Pin 4	
GND	Pin 5	
D11	Pin 6	
D5	Pin 11	
D4	Pin 12	
D3	Pin 13	
D2	Pin 14	
5V through a 220Ω resistor	Pin 15	
GND	Pin 16	

Code example

For use, you can use the library **LiquidCrystal** from **Arduino Libraries**, which is released under the **Creative Commons Attribution-ShareAlike 3.0 License**.

You can download the library **here**. You can include the downloaded library into your Arduino IDE by adding the .zip file under **Sketch → Include Library → Add .ZIP Library.**.. . So select the downloaded library there and restart your Arduino IDE to be able to use the library. You can also go to **Tools → Manage Libraries**… search for Liquid Crystal and include the library that way.

Copy the following code into your IDE to test your display.
To run the code sample, click **Tools Upload.** Make sure that **Board** and **Port** are selected correctly under Tools.

```
// Import the required library
#include <Liquid Crystal.h>
// initialize the library by linking each required pin
// LCD interface to the Arduino pin number it is connected to
const int rs = 12, en = 11, d4 = 5, d5 = 4, d6 = 3, d7 = 2;
Liquid Crystal lcd(rs, en, d4, d5, d6, d7);
void setup() {
```

```
// set the number of columns and rows of the LCD
lcd.begin(16, 2);
}
void loop() {
// Set cursor to column 7, line 1
lcd.setCursor(7, 0);
// Output of the text on the LCD
lcd.print("joy-IT");
lcd.setCursor(8, 1);
// Output of the time in seconds since the last restart
lcd.print(millis() / 1000);
}
```

USE WITH THE RASPBERRY PI

ℹ️ These instructions were written under Raspberry Pi OS Bookworm for the Raspberry Pi 4 and 5. It has not been checked with newer operating systems or hardware.

Connection
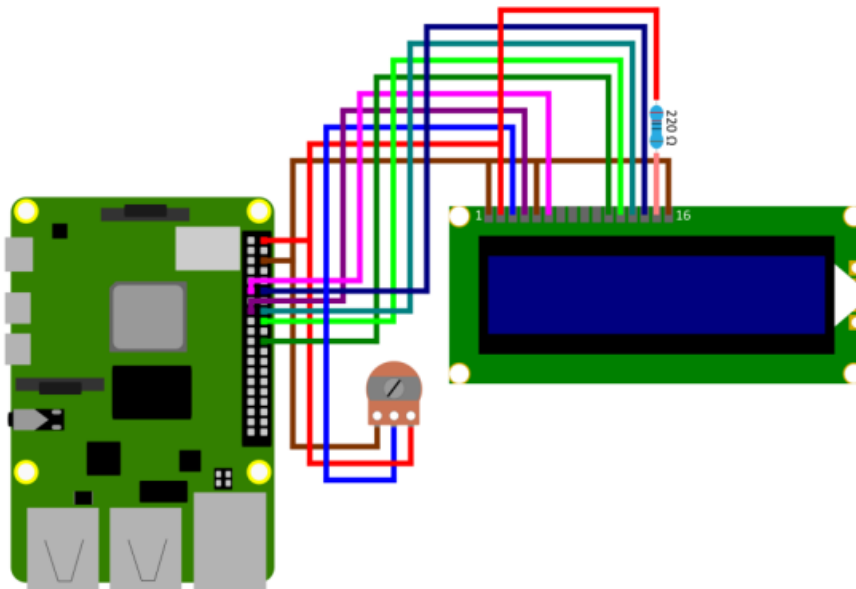
ℹ️ Since the display works with a 5V logic level, you must use a logic level converter if you want to read data from the display with the Raspberry Pi. In this example, the display is only written to, so the Raspberry Pi can be connected directly to the display.

Raspberry Pi	Display	Potentiometer
GND	Pin 1	GND
5V	Pin 2	+
	Pin 3	Signal
GPIO 22 (Pin 15)	Pin 4	
GND	Pin 5	
GPIO 17 (Pin 13)	Pin 6	
GPIO 25 (Pin 22)	Pin 11	
GPIO 24 (Pin 18)	Pin 12	
GPIO 23 (Pin 16)	Pin 13	
GPIO 18 (Pin 12)	Pin 14	
5V through a 220Ω resistor	Pin 15	
GND	Pin 16	

Now, you can download the program to your Raspberry Pi with these 3 simple commands, unzip it and then run it.

wget **https://joy-it.net/files/files/Produkte/com-LCD16x2/COMLCD16x2.zip**

unzip **COM-LCD16x2.zip**

python3 **COM-LCD16x2.py**

ADDITIONAL INFORMATION

Our information and take-back obligations according to the Electrical and Electronic Equipment Act (ElektroG)

 Symbol on electrical and electronic equipment:

This crossed-out dustbin means that electrical and electronic appliances do not belong in the household waste.
You must return the old appliances to a collection point.
Before handing over waste batteries and accumulators that are not enclosed by waste equipment must be separated from it.

Return options:

As an end user, you can return your old device (which essentially fulfils the same function as the new device purchased from us) free of charge for disposal when you purchase a new device.
Small appliances with no external dimensions greater than 25 cm can be disposed of in normal household quantities independently of the purchase of a new appliance.

Possibility of return at our company location during opening hours:

SIMAC Electronics GmbH, Pascalstr. 8, D-47506 Neukirchen- Vluyn, Germany

Possibility of return in your area:

We will send you a parcel stamp with which you can return the device to us free of charge. Please contact us by email at **Service@joy-it.net** or by telephone.

Information on packaging:

If you do not have suitable packaging material or do not wish to use your own, please contact us and we will send you suitable packaging.

SUPPORT

If there are still any issues pending or problems arising after your purchase, we will support you by e-mail, telephone and with our ticket support
system.
Email: service@joy-it.net
Ticket system: https://support.joy-it.net
Telephone: +49 (0)2845 9360-50 (Mon – Thur: 09:00 – 17:00 o'clock,
Fri: 09:00 – 14:30 o'clock)
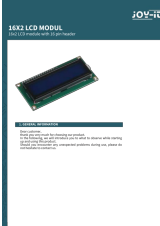For further information please visit our website: **www.joy-it.net**
www.joy-it.net
SIMAC Electronics GmbH
Pascalstr. 8, 47506 Neukirchen-Vluyn

Documents / Resources

JOY-it I2C 16X2 LCD Module [pdf] Owner's Manual
COM-LCD16x2_Manual_2025-02-18, I2C 16X2 LCD Module, I2C, 16X2 LCD Module, LCD Module, Module

References

- ⚑ **ITnet | Servizi di Colocation e Cloud**

- **For Makers and Professionals | Joy-IT**
- **Deed - Attribution-ShareAlike 3.0 Unported - Creative Commons**
- **Arduino Libraries · GitHub**
- **GitHub - arduino-libraries/LiquidCrystal: Liquid Crystal Library for Arduino**
- **For Makers and Professionals | Joy-IT**
- **Joy-IT Helpdesk**
- **User Manual**