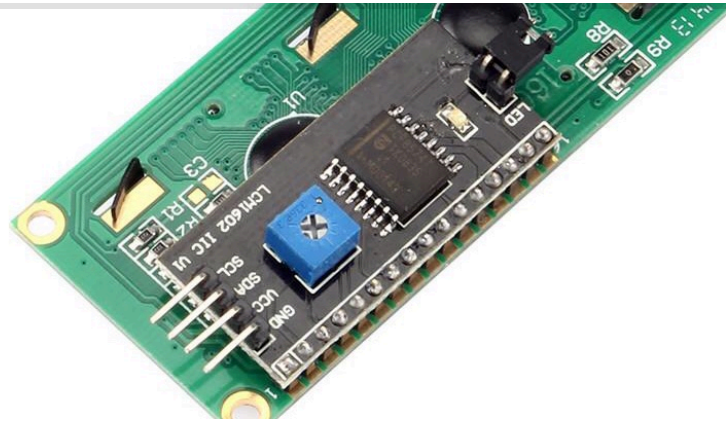# I2C Liquid Crystal Displays

All you need to know about I2C LCD screens on an Arduino Uno.

Nov 11, 2019 • 461793 views • 21 respects

arduino uno   i2c   lcd   arduino uno

Components and supplies

1	Male/Female Jumper Wires	
1	I2C 16x2 Arduino LCD Display Module	

arduino_uno_guy

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Project description

This project is for people who have an I2C lcd screen and can't find any videos or projects on how to code them.

The first step is to find a working library of them. I use liquid crystal I2C, and wire. link for liquid crystal here ,

link for wire here

The second step is to add the libraries to your arduino

GND-> ground

VCC-> +5V

SDA-> A4

SCL-> A5

The last step is to upload the code

(be sure to delete everything from your blank sketch before pasting the sketch into it)

Code

Code for screen

c_cpp
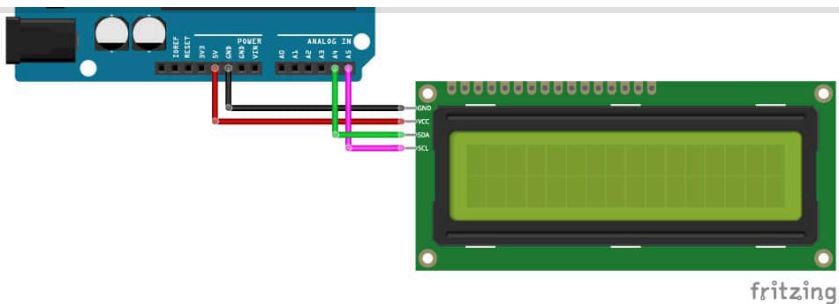
```
     https://create.arduino.cc/projecthub/arduino_u
     no_guy|
4    //   |
     _____
     _____|
5
6
7    #include LiquidCrystal_I2C.h
8
```

Downloadable files

wiring diagram

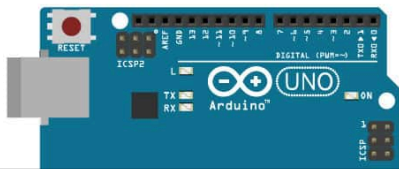wiring diagram   ⤓

35
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wiring diagram

wiring diagram ⬇

fritzing

Comments

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M   **mitulkotak169**   10 days
ago

this is the code I used for my JHD 162a:

```
#include <LiquidCrystal_I2C.h>

LiquidCrystal_I2C lcd_1(39, 16, 2);

void setup()
{
lcd_1.init();

lcd_1.backlight();
lcd_1.print("hello world");
}
```

hope this helps!

I   **imre78**   a month ago

I think most users used IIC to connect the LCD display. You can download the file "LiquidCrystal_I2C.h" from http://downloads.arduino.cc/libraries/github.com/marc

R **RickMK** 5 months ago

OK, to get the above code to work using copy/paste you need to do a few bits.

Add "< >" to the below includes.

#include <Wire.h>
#include <LiquidCrystal_I2C.h>

Add ";" to the end of delay(1000)
delay(1000);

change the quotes on both of the output text to the correct types...

" " not " "

That should compile, if it does and you get no display

A **ahhnnna**   5 months ago ⚑

If you are having trouble with the code above, try this as your setup and library info.

```
#include <Wire.h>
#include <LiquidCrystal_I2C.h>

LiquidCrystal_I2C lcd(0x27, 16, 2);

void setup() {
lcd.init();
lcd.backlight();
Serial.begin(9600);
}
```

R **rhombus_octogon**   7 months ago ⚑

R rhombus_octogon   7 months ago

i cant download the wire file. does anyone have an idea for how i could get it to work?

R rigter   a year ago

at last it worked! don't copy/paste the code. type it in yourself and it will work :)

Jackpbass   a year ago

Sadly, this is not a simple beginner level project that was able to walk you through the needs of making it work in a easy way. It requires some basic knowledge

steeleb   a year
                                               ago

I am new to this but, maybe change:

13//the 2nd parameter is how many "COLUMNs" are on
your screen
14//the 3rd parameter is how many ROWs

steeleb   a year
                                               ago

I know this is a comment but it is 16 columns and
two rows huh maybe a bit confused

A   **asitold**   a year
                                               ago

it with lcd.begin(16,2);.
As about the address, 0x27 works fine. Tested it on
WOKWI simulator.

cuppermo   a year
ago

Code does not work

cuppermo   a year
ago

Hello, Can you tell me what is the Purpose have this

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CAN YOU TEACH ME HOW TO CREATE AN ANIMATIOON DISPLAY PLEASE

A **Anonymous user**

2 years ago

If you're having the problem "class 'LiquidCrystal_I2C' has no member named 'init'", it's because your lcd is using a newer version of library. Try changing :

lcd.init()

into :

lcd.begin()

and it will work just fine.

LOL Still broken! Won't even compile - fix it or dump it.

Anonymous user   2 years ago

Bonjour, lorsque j'installe ce code et que je le vérifie il se met en défaut et m'indique
exit status 1
#include expects "FILENAME" or <FILENAME>
Comment corriger le code
Merci d'avance

Anonymous user   2 years ago

If you're getting the \\342 error check out this link. I used this code with the pinout described above and it worked without an issue.

https://create.arduino.cc/projecthub/Oniichan_is_ded/l

Hello! If I2C connector is soldered to display, I can't wire it up in general way, not I2C ?
With general LiquidCrystal library and not wired I2C adapter, display turns on the first row, thats all.
Thanks!

D **deltacovid**   2 years ago

Please help. I cannot open the wire library.

A **Anonymous user**   2 years ago

If anybody is having no luck with this code there maybe be a chance that the LCD_I2C module you have is hardwired to a have different "Address".

The example here assumes the address 0x27, as used

wire up the LCD module as above but run this sketch, it will output the address of any found I2C devices.

https://playground.arduino.cc/Main/I2cScanner/

Replace the address of your module in the line.

LiquidCrystal_I2C lcd(**YOUR_I2C Address**, 16, 2);

Good Luck

A   **Anonymous user**   2 years ago

Is there anyway to change which Pins SDA and SCl go to? does it have to be A4 and A5 or is there a way to change which one it goes to?

D   **deltacovid**   3 years

Anonymous user   4 years ago

If you're having the problem "class 'LiquidCrystal_I2C' has no member named 'init'", it's because your lcd is using a newer version of library. Try changing :

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into :

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Anonymous user   5 years ago

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LOL Still broken! Won't even compile - fix it or dump it.

A **Anonymous user**   5 years ago

Ive attempted this but the text is really faint and the screen isn't bright at all. I've played about with the potentiometer but it doesn't make it any brighter. Any suggestions?

A **Anonymous user**   5 years ago

I just thought I'd 'borrow' this code to get a LCD up and running quickly.
Didn't quite work out that way!
I used the Copy Code button and pasted it into a project but kept geting an error:-
sketch_may03b:27:3: error: stray '\\342' in program
lcd.print("Hello, From");

keyboard)

I assume \\342 is a character code for the symbol used.

Not easy to see but important.

Hope that helps someone.

Phil

PS. also missed out ';' after delay(1000)

PPS. I2C base address can also be 0x3F depending on which I2C controller chip you have.

(0x38..0x3F or 0x20..0x27 are possible)

D   **deltacovid**   2 years ago

I type the problem and it solved.

if it does not print the information. what should I do about that. could u help me with that?

Anonymous user

5 years ago

Hello! If I2C connector is soldered to display, I can't wire it up in general way, not I2C ?
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Thanks!

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Replace the address of your module in the line.

LiquidCrystal_I2C lcd(**YOUR_I2C Address**, 16, 2);

Good Luck

M   **MisterBotBreak**   5 years ago   🏳

Life isn't kind ! Every time I want to make a project, people makes it before me :-(. Nevertheless good project

---

A   **Anonymous**   5 years   🏳

G **glennedi**

2 years ago

(I assume you mean 20 by 4 display, never seen a 16 by 4)

Yes, I2C backpacks can be used to control 20 by 4 LCD displays.
You would need to alter the initializer:

//initialize the liquid crystal library
LiquidCrystal_I2C lcd(0x27, 16, 2);//alter the 16 to 20 and the 2 to 4

and use the appropriate line numbers in setCursor().

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