

الحمادي للإلكترونيات
ALHAMMADI FOR ELECTRONICS

AA015

LCD2004 Blue Backlight

V1.0.23.10.20

Preface

OurCompany

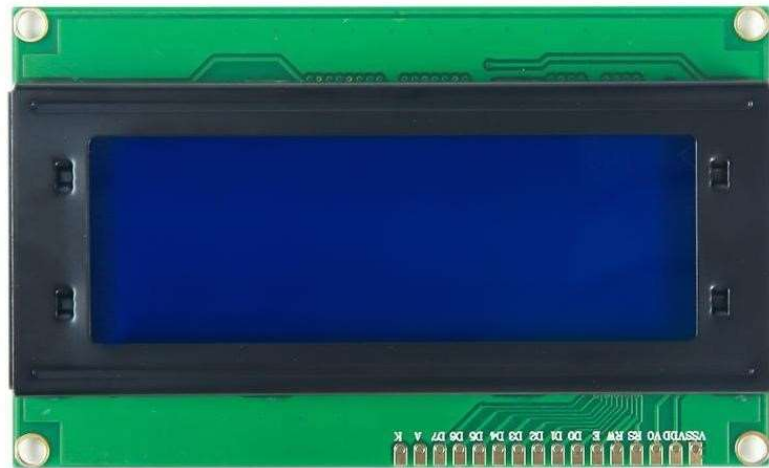
KUONGSHUN Electronic Company is a supplier and manufacturer of electronic components, it is committed to board and starter kit for Arduino, Raspberry PI, Smart Robot Car, 3D printer. It is also a collection of scientific research, design, production,

maintenance and sales of high-tech enterprises, in the field of automation with professional standards and mature technology, we rapid rise in the field of foreign trade. Relying on technology and development, continuing to provide users with high-tech products, is our constant pursuit. Fully introduction of foreign advanced technology to enhance the value of our products.

Company gains users' praise for supplying first-class quality product and superb technical services, has now become the first choice of domestic and international procurement company.

Official Website: <https://www.kuongshun-ks.com>

AA015 LCD2004 Blue Backlight



Product Description

This is a dot matrix LCD module that can be used exclusively for displaying letters, numeric elements, symbols, and so on. It can display 4 lines, 20 characters per line, the LCD screen displays white characters on a blue background.

The module provides an internal power-on automatic reset circuit, which automatically initializes the module when the applied power supply voltage exceeds +4.8V, setting the module to the default display operating state.

Product Parameters

Logic Supply Voltage (VDD-VSS): DC +4.8 ~ +5.2V

LCD Supply Voltage (VDD-V0): DC +4.0 ~ +4.4V

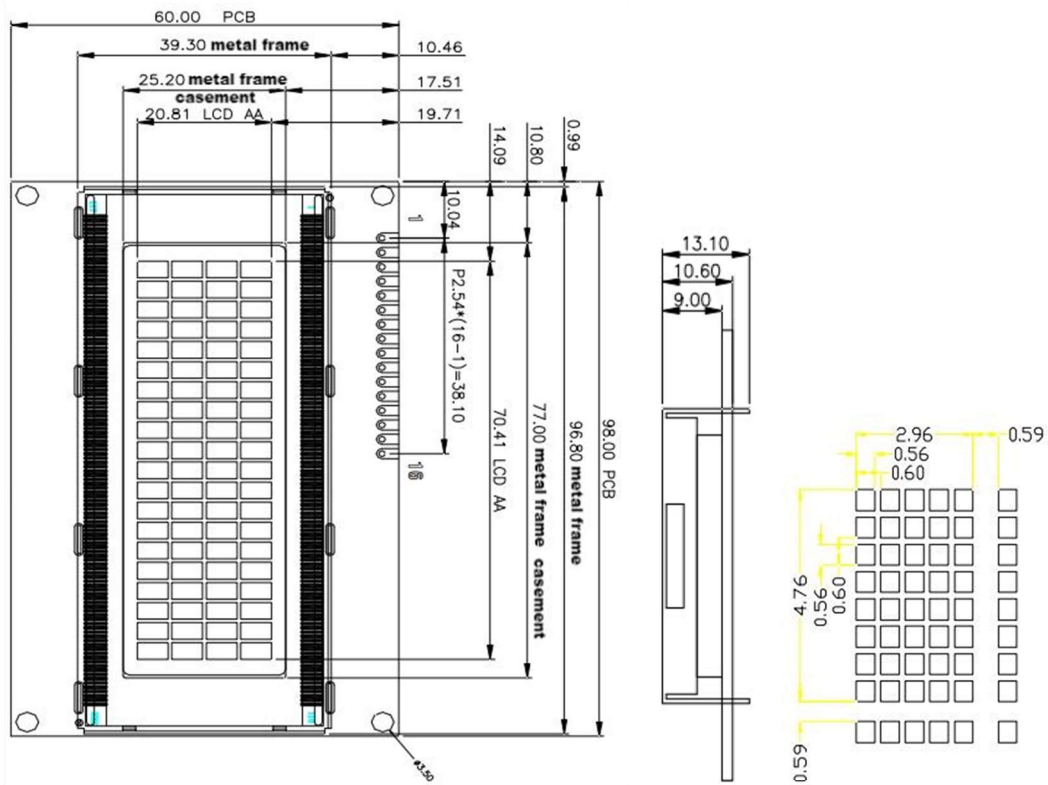
Operating Temperature: -20 ~ +70°C (Wide Temperature)

Storage Temperature: -30 ~ +80°C (Wide Temperature)

Current consumption (IDD): 1mA(max)

Display format: 20 (characters) x 4 (lines)

Display color: white characters on blue background

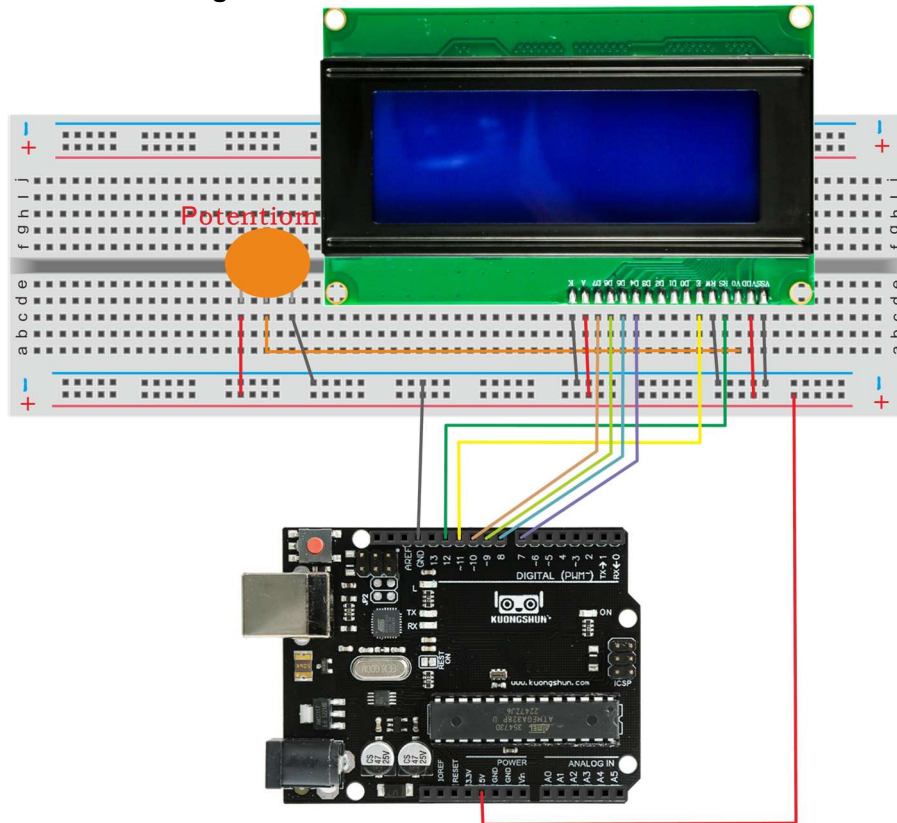


Pin Description

Pin NO.	Symbol	I/O	Description
1	VSS	--	Power GND(0V)
2	VDD	--	Power positive(5V)
3	V0	--	LCD voltage bias signal
4	RS	I	Select data/command(V/L)
5	RW	I	Select read/write(H/L)
6	E	I	Enable signal
7	DB0	I/O	Date 0
8	DB1	I/O	Date 1
9	DB2	I/O	Date 2
10	DB3	I/O	Date 3

11	DB4	I/O	Date 4
12	DB5	I/O	Date 5
13	DB6	I/O	Date 6
14	DB7	I/O	Date 7
15	A	--	Back light power positive (5V)
16	K	--	Back light power negative(0V)

Connection Diagram



Sample Code

```

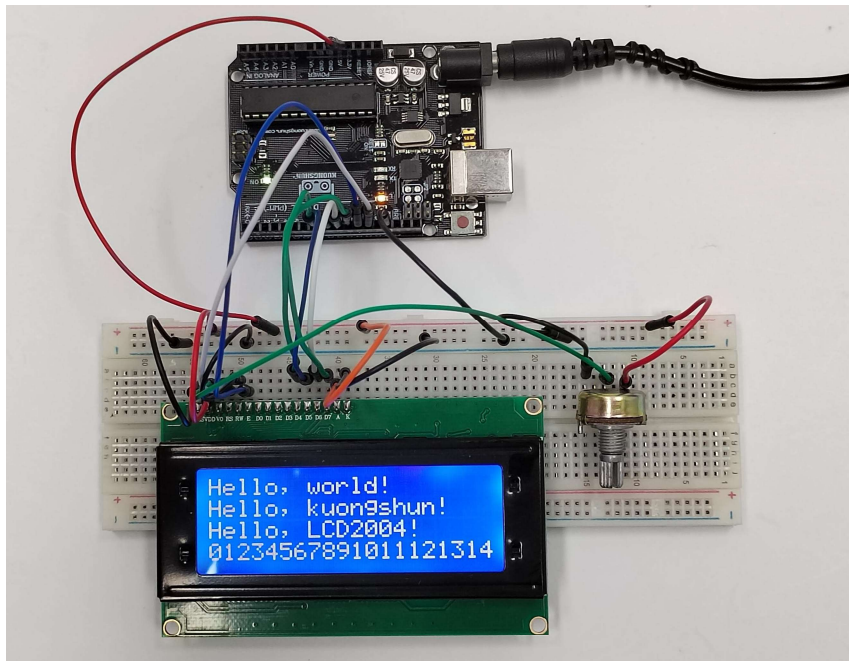
/*
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*/
#include <LiquidCrystal.h>
// initialize the library with the numbers of the interface pins
LiquidCrystal lcd(12, 11, 7, 8, 9, 10); void setup() {
  // set up the LCD's number of columns and rows
  lcd.begin(20, 4);
  // Print a message to the LCD.
  lcd.setCursor(0,0); lcd.print("Hello,
world!"); lcd.setCursor(0,1);
  lcd.print("Hello, kuongshun!");
  lcd.setCursor(0,2); lcd.print("Hello,

```

```
LCD2004!"); lcd.setCursor(0,3);  
lcd.print("01234567891011121314");  
}  
void loop() {  
}
```

Test Result

After successfully uploading the program to the control board, the first line of the display will show "Hello, world!" characters, the second line will show "Hello, kuongshun!" characters, the third line will show "Hello, LCD2004!" characters, and the fourth line will show "01234567891011121314" characters, as shown in the figure below.



Note: If you can't read the words clearly, you can turn the potentiometer on the breadboard to adjust the contrast.

Resources

Related code and library files are linked below: