Basic 16x2 Character LCD - RGB Backlight 5V

This is similar to other 16x2 character LCDs that you’ve seen before but with one vibrant difference: The backlight is actually an RGB LED. This means that you can change the backlight of this display to any color you want by controlling the three backlight levels. It also utilizes an extremely common parallel interface so code is freely available (check below for an Arduino example). You will need ~11 general I/O pins to interface to this LCD screen, plus an extra 3 pins for the RGB backlight.

**Note:** It is recommended to use a current limiting resistor with the backlight colors. You can burn out your LEDs if you do not use a current limiting resistor. Try using a 1k Ohm resistor. The backlight is controlled by pins 18, 17, and 16.

**SKILLS NEEDED**

**Core Skill:** **Soldering**

This skill defines how difficult the soldering is on a particular product. It might be a couple simple solder joints, or require special reflow tools.

**Skill Level:** **Noob** - Some basic soldering is required, but it is limited to a just a few pins, basic through-hole soldering, and couple (if any) polarized components. A basic soldering iron is all you should need.

**Core Skill:** **Programming**

If a board needs code or communicates somehow, you’re going to need to know how to program or interface with it. The programming skill is all about communication and code.

**Skill Level:** **Rookie** - You will need a better fundamental understand of what code is, and how it works. You will be using beginner-level software and development tools like Arduino. You will be dealing directly with code, but numerous examples and libraries are available. Sensors or shields will communicate with serial or TTL.

**Core Skill:** **Electrical Prototyping**

If it requires power, you need to know how much, what all the pins do, and how to hook it up. You may need to reference datasheets, schematics, and know the ins and outs of electronics.

**Skill Level:** **Competent** - You will be required to reference a datasheet or schematic to know how to use a component. Your require basic features like power requirements, pinouts, or communications type. Also, you may

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I need a power supply that's greater than 12V or more than 1A worth of current.

See all skill levels

Customer Reviews

5 out of 5

Based on 1 ratings:

- 5 star: 1
- 4 star: 0
- 3 star: 0
- 2 star: 0
- 1 star: 0

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Works perfectly

about a year ago by Member #739434 verified purchaser

I am using the LCD to display oven temperature on a custom BBQ setup. Setup went smoothly and the readout works exactly as needed.

In 2003, CU student Nate Seidle blew a power supply in his dorm room and, in lieu of a way to order easy replacements, decided to start his own company. Since then, SparkFun has been committed to sustainably helping our world achieve electronics literacy from our headquarters in Boulder, Colorado.

No matter your vision, SparkFun's products and resources are designed to make the world of electronics more accessible. In addition to over 2,000 open source components and widgets, SparkFun offers curriculum, training and online tutorials designed to help demystify the wonderful world of embedded electronics. We're here to help you start something.

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General

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