

Adafruit RGB Positive 16x2 LCD+Keypad Kit for Raspberry Pi -
ID: 1109



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This new Adafruit Pi Plate makes it easy to use an RGB 16x2 Character LCD. We really like the RGB Character LCDs we stock in the shop. (For RGB we have **RGB negative** and **RGB positive**.) Unfortunately, these LCDs do require quite a few digital pins, 6 to control the LCD and then another 3 to control the RGB backlight for a total of 9 pins. That's nearly all the GPIO available on a Pi!

With this in mind, we wanted to make it easier for people to get these LCD into their projects so we devised a Pi plate that lets you control **a 16x2 Character LCD, up to 3 backlight pins AND 5 keypad pins using only the two I2C pins on the R-Pi!** The best part is you don't really lose those two pins either, since you can stick I2C-based sensors, RTCs, etc and have them share the I2C bus. This is a super slick way to add a display without all the wiring hassle.

This pi plate is perfect for when you want to build a stand-alone project with its own user interface. The 4 directional buttons plus select button allows basic control without having to attach a bulky computer.

The plate is designed for both Revision 1 and Revision 2 Raspberry Pi's. It uses the I2C (SDA/SCL) pins. We have a special xtra-tall 26-pin header so the plate sits above the USB and Ethernet jacks.

This product comes as a kit! Included is a high quality PCB and all the components (buttons, header etc). **A 16x2 Character RGB positive LCD is included!** Assembly is easy, even if you've never soldered before and the kit can be completed in 30 minutes. [Check the product tutorial page for assembly instructions before purchasing](#)

We also have some handy Python code to help you easily talk to the LCD and buttons You can also easily query the 5 keypad buttons to get input through the library, so you get extra buttons without using any more pins. The buttons are automatically de-bounced inside the library.

At this time, the code and plate can control the RGB backlight of our character LCDs by turning each LED on or off. This means you can display the following colors: Red, Yellow, Green, Teal, Blue, Violet, White and all off. There is no support for PWM control of the backlight at this time, so if you need to have more granular control of the RGB backlight to display a larger range of colors, this plate can't do that (the I2C expander does not have PWM output).

[Product page with tutorials, documentation and assembly information](#)

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