**LCD\_InventOne**

One of the things that make a good project is it’s interface with the user. One way to have a good user interface is to use a good display.

This tutorial would take you through using the inventone board and an LCD display.

**Components**

1. LCD 16x2 with I2C serial adapter
2. Inventone board
3. Jumper wires (Female-Male)

You can get this components here. Please order for your inventone board from this link.

**Hardware**

An LCD is a liquid crystal display which can be used to display virtually any character (although limited by the amount stored in its memory), the LCD is this project serves as a means to communicate to the user. Am pretty sure google has a chunk of tutorials about liquid crystal displays.

To ease ourselves of the stress of using an LCD we would be using an I2C adapter with the LCD this reduces the number of pins needed to use the LCD to about four only at the cost of having to download a new library to use the adapter.

The adapter allows us to move most of the LCD control to software, for instance when the backlight jumper is in, to turn on the LCD backlight you can just do “*lcd.backlight();”* and it comes ON awesome right? I know.

The LCD is powered with a 5V voltage source. Over to software

**Software**

Since we are using an I2C serial adapter, most of the work would be done in software. The first thing is to ensure that you have a working Arduino, check out this great tutorial by Engr Victor Shoaga on how to setutp your IDE for inventone minicomputer. After that you need to get a library that supports LCD I2C: so we found this cool library from the manage library options on the Arduino IDE just install it and the IDE handles the rest.

Next we need to get the I2C address your inventone board assigns to the LCD, just run this scan code it does all the job for you.

When you have successfully gotten the address do well to adjust the address field in the “*LiquidCrystral\_I2C lcd (address, length, width);”* section of the code.