



## **Arduino Compatible Color Touchscreen Controller**

The ARLCD is a full featured Arduino UNO-R3 compatible controller. It accepts over 300 plug in input/output modules called shields to interface and control virtually anything! EarthMake made a better Arduino by combining the award winning ezLCD smart LCD GPU with the best-selling Arduino UNO! No more antique push buttons and flashing LED's. A full feature smart phone like touch screen graphical user interface makes your Arduino applications snappier and easier to use. There is no complicated doggy or fruity Linux OS to deal with. With the easy to use Arduino library for the ARLCD, existing Arduino projects, you can have a touchscreen interface the same day you open the box!

Not only does the ARLCD GPU not take any computing resources from the Arduino, it takes zero hardware resources. The ARLCD uses the programming port (D0 & D1) for loading sketches and for sending smart LCD commands to the dedicated 16 bit Graphics Processing Unit. With this offloading most graphical widgets like buttons, meters, and gauges can be implemented in one line of code!

The ARLCD features a 320 x 240 resolution, 65,536 colors, 250 nit color TFT with resistive touchscreen. The ARLCD is actually a dual processor controller with a 16 bit processor for Graphic Processing, Flash Drive, Touch Control and USB programming. The second processor is an 8 bit Atmel AVR (Arduino UNO) for control. The 3.5" LCD has 64% more display area than a 2.8" LCD Shield. Development using the Arduino IDE allows for rapid product development under Windows, Linux and OS X operating systems.

## **Product Specifications**

### **LCD Display**

- 3.5" color TFT LCD
- 320 x 240 Resolution
- 65k colors
- LED backlight
- 250 Nit (cd/m2) Brightness
- 500:1 contrast ratio
- Resistive Touchscreen

### **GPU Controller**

- Powerful 16-bit Processor
- RGB TFT LCD Controller
- 256K Graphics Library Storage
- Full range of widgets including ( buttons, sliders, and meters)
- 2 Megabyte LCD Frame Buffer
- 4MB flash memory for storing fonts, bitmaps
- USB 2.0

### **Arduino Controller**

- Arduino UNO R3 compatible
- Processor: 5 volt 16 MHz ATmega328
- Digital I/O: 14 (with PWM available on 6)
- Analog Input: 6
- Memory: Flash: 32k-.5k for boot loader
- SRAM:2K
- EEPROM 1K
- .1 inch Female headers for direct connection to I/O Shields Power Port: 5.5mm x 2.1mm Jack

### **Overall**

- Dimensions: 3 x 3 x .9 inches
- 6-9V operating voltage
- Current: less than 200mA
- -20 to 60C Operating temperature
- RoHS compliant

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