



## 4.3" 40-pin TFT Display – 480x272 with Touchscreen

Product ID: 1591



### Description

This 4.3" TFT screen has lots of pixels, 480x272 to be exact, an LED backlight and a resistive touchscreen overlay. Its great for when you need a lot of space for graphics or a user interface. These screens are commonly seen in consumer electronics, such as miniature TVs, GPSs, handheld games car displays, etc. A 40-pin connector has 8 red, 8 green, and 8 blue parallel pins, for 24-bit color capability.

This is a "raw pixel-dot-clock" display and *does not* have an SPI/parallel type controller or any kind of RAM. The display is supposed to be constantly refreshed, at 60Hz, with a pixel clock, V sync, H sync, etc. There are some high-end processors, such as that used in the BeagleBone, that can natively support such RGB TTL displays. However, it is extremely rare for a small microcontroller to support it, as you need dedicated hardware or a very fast processor such as an FPGA. Not only that, but the backlight requires a constant-current mode boost converter that can go as high as 24V instead of our other small displays that can run the backlight off of 5V

For that reason, we are carrying it only as a companion to the Adafruit RA8875 driver board in the store, which is a chip that can handle the huge video RAM and timing requirements, all in the background. That's the best way to interface this display to just about any microcontroller (including Arduino & friends) If you are an advanced electronics enthusiast you can try wiring this directly to your processor, but we don't have any support or tutorials for that purpose.

## Technical Details

- Dimensions: 67mm x 105.6mm x 4.3mm (2.6" x 4" x 0.2")
- Weight: 65g
- [CH430WQ12A-T display datasheet](#)
- [CH430WQ12A-T datasheet](#)

