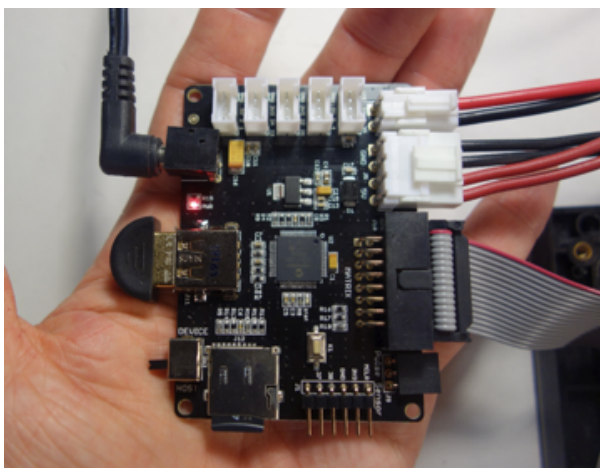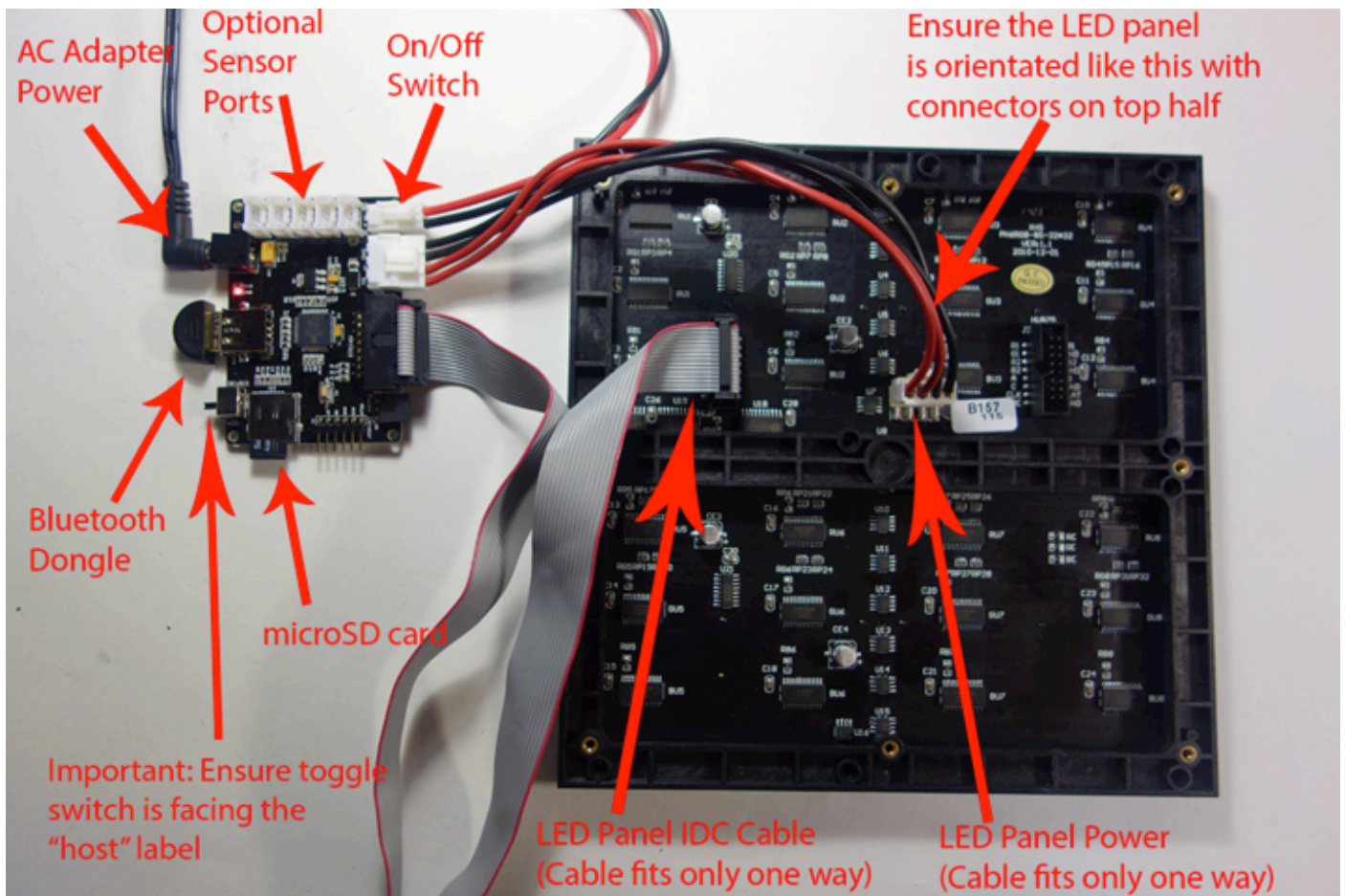# PIXEL

PIXEL GUTS QUICK START GUIDE

Wire PIXEL Guts per the diagram below:

1. Start by plugging in the Bluetooth dongle and microSD card.
2. Plug in the on/off switch cable (cable only goes in one way)
3. Connect the LED panel power cable from the PIXEL board to the LED panel (cable only goes in one way)
4. Connect the LED panel IDC data cable from the PIXEL board to the LED panel (cable only goes in one way)
5. IMPORTANT: Ensure the toggle switch is facing towards the "Host" label. "Host" is for Bluetooth connectivity and "Device" is for USB connectivity.
6. Plug in the included 5V/4A power adapter to the DC jack of the PIXEL board. Do not use a lower Amperage rated power adapter as the LEDs draw a good amount of current.

Typically you will control PIXEL from an Android device or Windows PC over Bluetooth.
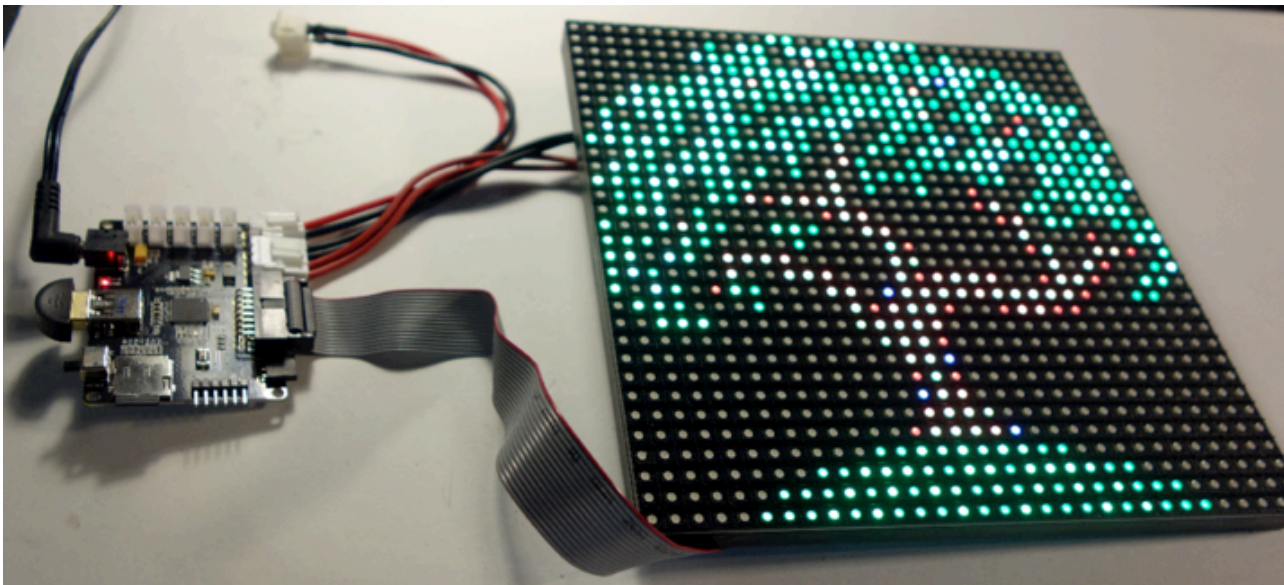
Bluetooth is not supported on Mac, Linux, and Raspberry Pi/BeagleBone Black however and instead you'll USB connect using the included USB A-A cable.

PIXEL's apps for Android, PC Windows, Mac, Linux, Raspberry Pi/BeagleBone Black are at http://ledpixelart.com/apps

If using Bluetooth from your Android or Windows PC, Bluetooth pair to PIXEL using code: 0000 before launching the apps.
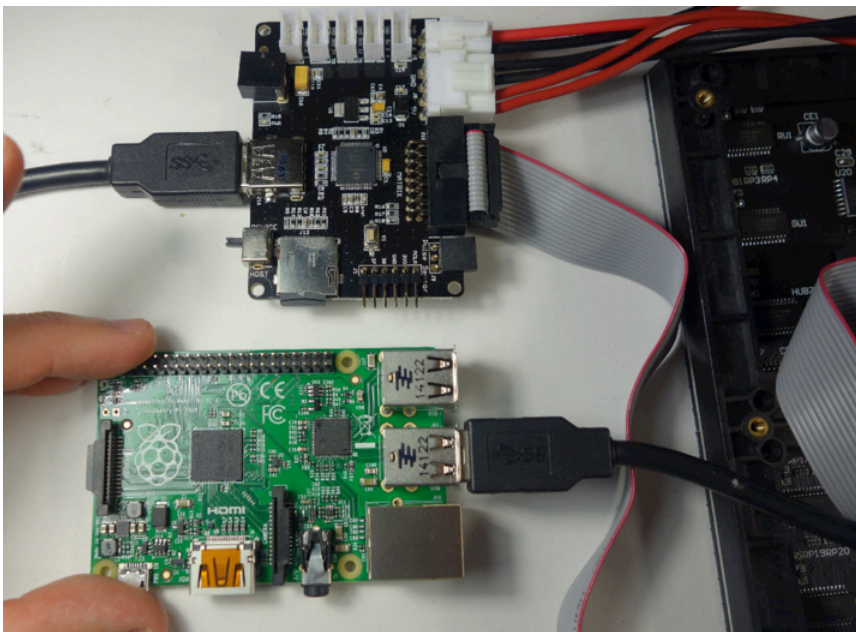
From PIXEL's apps, you can choose to stream a GIF, image, or scrolling text to PIXEL or you can write to PIXEL's microSD card for stand-alone playback. Streaming is instant and writing will take some time depending on the size of the item. Once your device has been disconnected from PIXEL, the last item written will continue to loop while PIXEL is in stand-alone mode.

Feature/App	Android	Windows	Mac OSX	Raspberry Pi
180+ original works of pixel art	Yes	Yes	Yes	Yes
Animated GIFs in stand alone mode	Yes	Yes	Yes	Yes
Add your own pixel art	Yes	Yes	Yes	Yes
USB connectivity	No	Yes	Yes	Yes
Bluetooth connectivity	Yes	Yes	No	No
Weather app	Yes	Yes	Yes	Yes
Camera and video capture app	Yes	No	No	No
Pixel Art editor	Yes	No	No	No
Command line app	No	Yes	Yes	Yes
Interactive animations with proximity sensor	Yes	No	No	No
Novelty alcohol detector app with alcohol sensor	Yes	No	No	No
Touch app	Yes	No	No	No
Message box (scrolling text)	Yes	Yes	Yes	Yes

If using USB, you must move the toggle switch to the "Device" position. And then if you later go back to Bluetooth, don't forget to move the toggle switch back to the "Host" position.

Wiring for Raspberry Pi using the included USB A-A cable

See this guide to configure your Raspberry Pi to connect to PIXEL
http://ledpixelart.com/raspberry-pi/

Using your Raspberry Pi, you can control PIXEL from a command line using the PIXEL Console app or turn PIXEL into an iOT device and control it from the Web including REST APIs using this PIXEL Server Application written by Roberto Marquez.

For custom installations, mounting hardware is included in the kit , see this CAD drawing for mounting dimensions.

More info can be found at http://ledpixelart.com