

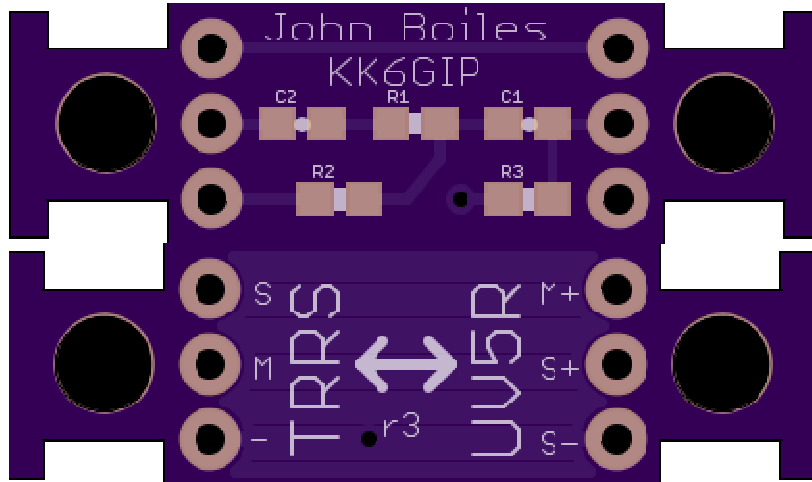
TECHNICAL ARTICLE

Baofeng UV5R TRRS Adapter – John Boiles

with thanks to David/VK4MDX via facebook for sourcing the article – can be also used for RTTY, SSTV, PSK etc.

<http://github.com/johnboiles/BaofengUV5R-TRRS>

Tiny board that allows you to connect the Baofeng UV5R radio to a smartphone or other device that uses a TRRS connector for audio. Useful for connecting the radio to a software TNC app such as [APRSdroid](#) or [PocketPacket](#). Solder on the components, solder on the cables, then provide some stress relief (I like zip ties and heat shrink), and you can use your UV5R with your smartphone for APRS on the cheap.



Notes

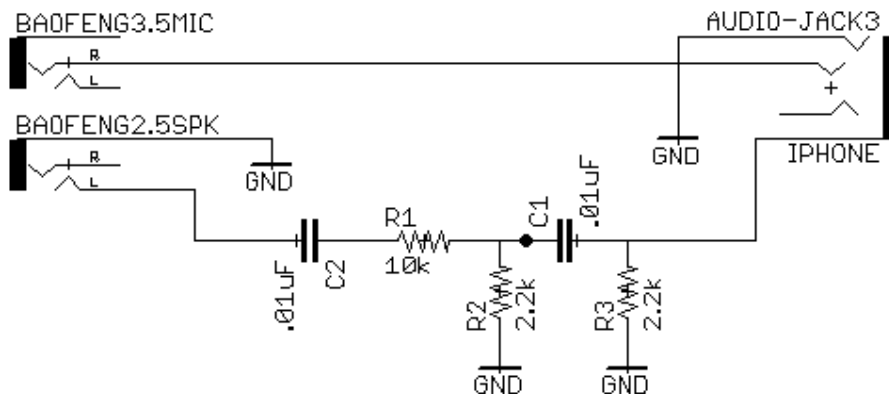
A small capacitor and 3 resistors to trick the iPhone into thinking a microphone was connected. This part of the schematic was inspired by an article on connecting Arduino to an iPhone.

<http://www.creativedistracted.com/demos/sensor-data-to-iphone-through-the-headphone-jack-using-arduino/>

A small capacitor on the speaker out of the radio removes any DC bias. (I'm not sure why this was necessary, but in my testing it made receipt of packets much more reliable.)

On my UV5R+, volume is maxed, VOX is set to 2 and, squelch is set to 1. On my iPhone volume is also maxed.

Schematic



Bill of Materials

- 1x 3.5mm Stereo Cable
- 1x 2.5mm Stereo Cable
- 1x 3.5mm TRRS Cable (Tip Ring Ring Sleeve)
- 1x 10k Resistor 0603
- 2x 2.2k Resistor 0603
- 2x .01uF Capacitor 0603

How to Order

You can order the double sided board directly through [OSHPark](http://oshpark.com/shared_projects/qy523INb) http://oshpark.com/shared_projects/qy523INb (\$1.70 for 3 boards with free shipping worldwide). Digikey, Jaycar, Solex or Mouser are good places to buy the resistors and capacitors. The radio connections can be changed to interface with other radios.