# Notes on the APRS Tracker.

Your Mileage May Vary.

On my cheap Baofeng radio, there was quite a bit of reflected RF coming back into the circuit that wouldn’t allow the PTT circuit to properly disengage.

To resolve this, you need a ferrite choke on the AUDIO and PTT lines to your radio. (Just loop the whole cable through the choke a couple times and test to see if it works).

The original schematic shows a 4.7uf Cap to couple the audio. One version shows an electrolytic and another version shows a ceramic. I don’t believe it matters. I ran the circuit successfully with both a 1uf and a 10uf cap, neither electrolytic.

To debug, hook up 2 of the modems together. Use the LINE out from the sending modem. If you use the Mic out signal, it won’t be high enough voltage wise to decode. (The Arduino adc isn’t sensitive enough).

I had problems getting packets to be decoded by the digipeaters. To resolve this, I put in the 100k trimmer replacing a 100k resistor. Then I turned it down almost as far as it would go. And, I broadcast to another radio that I could listen to and listened to my audio signal to see if it was distorting. Then, adjusted the trimmer as high as I could make it until just before it starts to distort.

This made so some of the packets were decoded.

The original page for a lot of this is at <http://unsigned.io> and my circuit is nearly a clone of Mark’s. The folks in the forum there are pretty helpful. If you get stuck, try them out.

I order the Arduino / gps / display from a local guy. His store is: <http://squareup.com/market/just-for-fun-6>

And my layout: