

# README First – WSPR Transmitter

Thank you for purchasing the WSPR Without Tears Transmitter. We trust you'll be happy with it. Below are the steps to assemble and operate your kit.

This page was intended as a starting point. The remainder of the instructions are downloaded from the following website -

[TAPR WSPR Without Tears Documentation](#)

In addition to the WSPR kit, you'll also need the following to have a complete transmitter -

1. **Raspberry Pi 2 Model B or Raspberry Pi 3** (we're referring to the Raspberry Pi as *rPi* from here on out). If you're buying an rPi for this project then we recommend getting an rPi 3. The cost is the same as for an rPi 2 and it has built in WiFi and faster processor ... One source is MCM (<http://www.mcmelectronics.com/product/83-17300>). We have no connection with MCM.
2. **2 amp power supply w/micro USB connector**. This plugs into the micro USB connector of the rPi. MCM is a possible source (<http://www.mcmelectronics.com/product/28-19336>). A word of caution: don't cheap out on the power supply. A weak power supply will cause intermittent problems that are **very** hard to diagnose. Make sure the power supply will deliver at least 2 amps. This is cheap insurance.
3. **Ethernet cable**. You need to connect the rPi to your network over Ethernet (wired connection) for initial setup. You can switch to WiFi after that.
4. **WiFi USB dongle**. You only need this if you're using an rPi 2 and you want to use WiFi. Here is one WiFi dongle that I've used successfully: [http://www.newegg.com/Product/Product.aspx?Item=N82E16833315091&cm\\_re=WiFi\\_usb\\_-\\_33-315-091\\_-\\_Product](http://www.newegg.com/Product/Product.aspx?Item=N82E16833315091&cm_re=WiFi_usb_-_33-315-091_-_Product).
5. **Soldering Iron and solder**. A small tip iron with adjustable temperature is good. Rosin core solder only.
6. **DVM**. You'll need a digital voltmeter to make adjustments and verify resistance values.
7. **10 lb hammer**. (Just kidding, a 3 lb hammer will work just fine for those delicate adjustments ;-)

Download the *Quickstart Guide* from the website ([tapr.org/kits\\_WsprWithoutTears](http://tapr.org/kits_WsprWithoutTears)) to get started.

Happy WSPRring!

73, TAPR