

## **Programming your handheld radio using CHIRP on your computer**

**Intro:** This is an addendum to KJ7YYI Woody Phillips' training presentation on Manual HT Programming.

### **What do you need?**

- Radio that allows programming & saving channels
- Computer –Windows10 laptop used today, but also possible on iOS, Android & Linux.
- CHIRP-next programming application for today, but there are others depending on the make/model of radio that you need to program.
- USB Cable to connect your radio to your computer.
- List of frequencies, CTCSS tones and other information required for your communications purpose (repeater, simplex frequency, etc)

**Programming Application:** CHIRP-Next (current version) FREE at:

<https://chirpmyradio.com/projects/chirp/wiki/Home>

**Also shown in the demo:** RT Systems Programming Software not-FREE, but very good!

<https://www.rtsystemsinc.com/>

### **USB Cable Considerations:**

Today's demo will focus on the Baofeng UV-5R handheld (ht) radio that uses a special USB cable that interfaces with the headset audio plug on the side of most ht radios.

NOT ALL RADIOS USE THE SAME CABLE! Consult your radio's manual or ask a friend with the same radio.

Counterfeit Cables: Unfortunately, there are many Baofeng USB cables out there that use a counterfeit version of the chip that manages the digital-to-analog conversion. If you try to use one of these counterfeit cables you will have a challenging time with Windows drivers since the currently supplied drivers do not work with the counterfeit cables.

***Get a cable with an 'FTDI' chip and you (and Windoze) will be much happier!***

Here is an Amazon link for a cable that works with the Baofeng UV-5R (and many others):

[https://www.amazon.com/Mirkit-Baofeng-Programming-Flashing-Radios/dp/B07M85L551?ref=ast\\_sto\\_dp&th=1](https://www.amazon.com/Mirkit-Baofeng-Programming-Flashing-Radios/dp/B07M85L551?ref=ast_sto_dp&th=1)

### **Reasons why you might want to use a computer rather than manual radio programming:**

- You can program (clone) several radios with the same channels easily
- You can keep a history of changes you have made so you can roll-back in case of \*%\$#@
- Once you know how, it is MUCH easier 😊

**Programming your handheld radio using CHIRP on your computer**

**Procedure:**

1. Hook up your computer & radio via USB cable with RADIO OFF
2. Turn on your radio and set volume at least to 50%
3. Open Windows Device Manager to find the COM Port used by your CHIRP cable
4. Start CHIRP
5. ALWAYS READ FROM RADIO **FIRST!**
6. Save existing radio programming before editing/changing anything. (backup, just in case)
7. Now rename the file you just read from your radio. I recommend including the date and the radio model so that you can identify it later if necessary.
8. Make changes to channels using the CHIRP-Next program.
9. Make changes to radio settings if necessary.
10. SAVE the modified file ***with a new filename*** (don't overwrite the file you just saved from your radio)
11. Upload the new file to the radio using CHIRP-Next.
12. Turn radio off when upload is complete. Unplug USB cable from the radio and turn radio back ON.
13. Test your new channels and/or settings.

This basic step-by-step procedure is a good practice no matter which program you choose to use to program one or more radios.