Programming your HT with your computer

HTs are generally hard to program by hand – tiny buttons, complex menus, obscure sequences of keystrokes. But for most modern HTs there is an easier way—create a spreadsheet of your favorite frequencies on your computer and use software (and a cable) to transfer those frequencies to the memory of your HT. There are three basic ways to connect your HT to your computer and program the various memories in your HT:

1. Software and cable from the manufacturer of your HT
2. CHIRP software and cable from a third-party provider
3. Software and cable from a third-party solution provider, like RtSystems

Note that each radio is different—not only in terms of capabilities, but also in terms of the kind of cable used to program it (for example, ask yourself "where do I plug it in?"). Just because you have programmed one kind of HT with a computer, do not assume you know how to program every HT!

HT Manufacturer Software and Cables

This solution is clearly manufacturer specific – some manufacturers provide software and cables with their HTs, while other sell them separately. Web searches can show you software download/purchase sites and cable options. Make sure you have the exact model number of your HT before you download or buy. Note that most radio control software runs on Microsoft Windows and requires a dedicated COM port. Some cables even assume you have an old-style serial port on your computer (instead of a USB port)—if so you may need a USB to serial adapter (like ones sold by Keyspan).

CHIRP

CHIRP is a free, open-source tool for programming your amateur radio. It supports a large number of manufacturers and models, as well as provides a way to interface with multiple data sources and formats--https://chirp.danplanet.com/projects/chirp/wiki/Home . CHIRP software is built for Windows, Mac, and Linux and supports dozens, if not hundreds, of HT manufacturers/models. CHIRP provides a spreadsheet-like interface and allows you to read your HT's memories, update the frequencies, and store the result back into your HT. Not all functionality is provided for every HT, because HTs differ in intrinsic programming capabilities.

Download instructions are at https://chirp.danplanet.com/projects/chirp/wiki/Download
FAQ are at https://chirp.danplanet.com/projects/chirp/wiki/FAQ

In particular, check out the FAQ entries about cables and using USB:
What kind of cable do I need?
What if my computer does not have a serial port?
Can I use a USB cable?

Be aware that "there are many 3rd party cables available and they should all work just fine for the most part. … check the CableGuide page, which has details about potential pitfalls and some information about cables that are compatible with multiple radios."

RtSystems

There are providers that sell custom software and cables that are designed and tested to work with popular HTs—best known is RtSystems: https://www.rtsystemsinc.com/aboutus.asp . In general, these solutions cost more than a CHIRP solution, but if something goes wrong you have a single vendor to go to for troubleshooting. For example, a combination of RtSystems software and cable for a Yaesu FT-60 goes for around $50.

Most RtSystems solutions run on Windows, but their software is now available on Macs for a few popular HTs: https://www.rtsystemsinc.com/kb_results.asp?ID=309