

Tutorial.

This tutorial describes how to program an ICOM ID880 using Chirp (but a similar process will apply to many other radio brands). CHIRP is supported on Windows 2000/XP/Vista/7/8. I use Windows 7 64 Bit.

Chirp (<http://chirp.danplanet.com>) is a free application that can program many different radios. Have a look on the web site for the radios that are supported. Most radio produced in the last 10 or so years are supported. Download the latest version and install.

Download the latest WiaRep2 zip file from the WIA (<http://www.wia.org.au/members/repeaters/data/>) and unzip the file. The csv file we will use is called chirp.csv and it is in the \Output directory of the zip file. This zip file contains all the scripts I wrote to convert the WIA csv file into various different formats. Advanced users can run these scripts themselves using the various options to get customised filtering, but I expect most people to use the “pre canned” files.

Purchase a cable to connect your radio to the computer. I purchased an OPC-478U USB cable for ICOM radios on ebay, sourced from Hong Kong for less than \$10 (AUD), including postage. A USB cable is probably the best bet as most modern computers and laptops do not have a serial port. The cables are based on the Prolific USB chip and you may have to mess around with the Windows drivers to get it to work. There are plenty of tutorials on the web to show you how to do this. I also purchased a serial cable and can use this also, but I had an issue with a serial cable with my Wouxun Radio, so now I always buy both the USB and serial cable just in case. The cables can take up to 4 weeks to arrive so order it NOW!

ICOM also provide FOR FREE a programming application called CS-80_880 for used with an ICOM ID880. I used this application to get my cable talking to the radio. This is great and allows me to set up the radios advanced options via the computer, but CS-80_880 does not allow me to import data from a csv file, so I would need to enter all the WIA repeater information manually☹. You do not need to buy the software for your radio from the manufacturer to program your radio using CHIRP. This is just an optional extra for me and the application is FREE (this is uncommon for ICOM) and it sorted out that my cable was working. Usually the functionality of the manufacturer’s application is pretty limited and they charge an arm and a leg for it! The special functions of your radio such as the Turn Off Timer or Scan options can be set directly into the radio if you don’t have the software. Just follow the radios manual. CHIRP will not affect these settings.

Run Chirp and from the “Radio” menu select “Download From Radio”. Choose the correct COM port (COM 4 in my case), the Vendor (ICOM) and from Model choose Detect. The software will detect the correct radio and will clone the data from the radio into CHIRP. Save this data to disk as the initial state of your radio (Icom880Jan2014Initial.img). Clone the radio again and save this information into another file (Icom880Jan2014.img). If Detect doesn’t work choose your radio from the list. If still no luck then check your COM port or download a “Latest Daily Build” for CHIRP that may have added better support for your radio. If your radio is brand new you may see a couple of memory locations filled with some initial values set by the manufacturer.

Depending on the capability of your radio you will see some more tabs on the left hand side. In the current version of CHIRP I see Memories, Banks, Bank Names, D-STAR, Settings and Browser. This tutorial is not a tutorial on what CHIRP's options are and how to use CHIRP to an advanced level, but how to get the WIA repeater list into the radio. Have a look on YouTube for videos on using CHIRP. In 15 minutes you will be an expert on CHIRP.

To get the WIA supplied chirp.csv file into CHIRP go to the "File" menu and choose "Import". This presents the normal Windows File Open Dialog Box. Down the bottom change the filter from CHIRP Files (*.chirp) to CSV Files (*.csv) and navigate to \Output\chirp.csv that you unzipped from the WiaRep2 zip file. An "Import from File" dialog appears which has all the repeaters selected and you can choose which ones to import and to what memory location in the file. Don't be too intimidated by this dialog and have a play around. Nothing has been written to the radio and if you make a mistake then don't save the file, reopen it and try again.

Use CHIRP to shift memories around and organise your own band plan for your radio. Since I live in VK2 I just load all of the VK2 repeaters in, and reorganise the entries so that local repeaters appear first. I usually give the local repeaters a title such as TerryH (Terry Hills), SomesB (Somersby) or MADNSP (Maddens Plains). I usually assign Bank A to 2 Metres, Bank B to 70CM and Bank C to Sydney Airport as my kids like listening to the airplanes as they come into land. I reserve Bank D as my travelling bank and when I go Interstate I fill this bank with the repeaters from that state. Your radio may have different features and may not have banks. My Wouxun UV6d does not and I reserve the lower 50 memories for VHF, the next 50 memories for UHF, and the last 100 memories for travel.

Once you are happy with your memory layout and you've learned all the advanced features of Chirp (This takes about 15 mins) then you need to upload the file to the radio. To do this choose the "Radio" menu then Upload. CHIRP will have remembered your Port, Vendor and Model and will upload the data to your radio.

That's it you're done. Once you get used to the process the hardest bit is to work out the memory structure you want and what band.

Because it is so easy to program the radios with the latest information then I tend to do this yearly with my radios, or more often if I have a few interstate trips. The repeater configurations don't change that much, but new ones are added all the time. I have a number of different brands of VHF/UHF radio and I pretty much use the same personal band plan for all of them using chirp to program. When a simple update is published to a repeater then I can make the amendment directly to the radio, or via CHIRP and upload.

I update the WiaRep2 zip file on every update to the WIA repeater csv file, usually within a week. I have written a number of converters but I think that the CHIRP converter is the most useful. Give it a try and let me know how you get on. If you want to learn how to manipulate the wia csv file then have a look at my wiarep2text.vbs script which I wrote as a training exercise for new prospective coders.

Steve

VK2MD Jan 2014.