

Digital Voice PC Client Software Setup Guide

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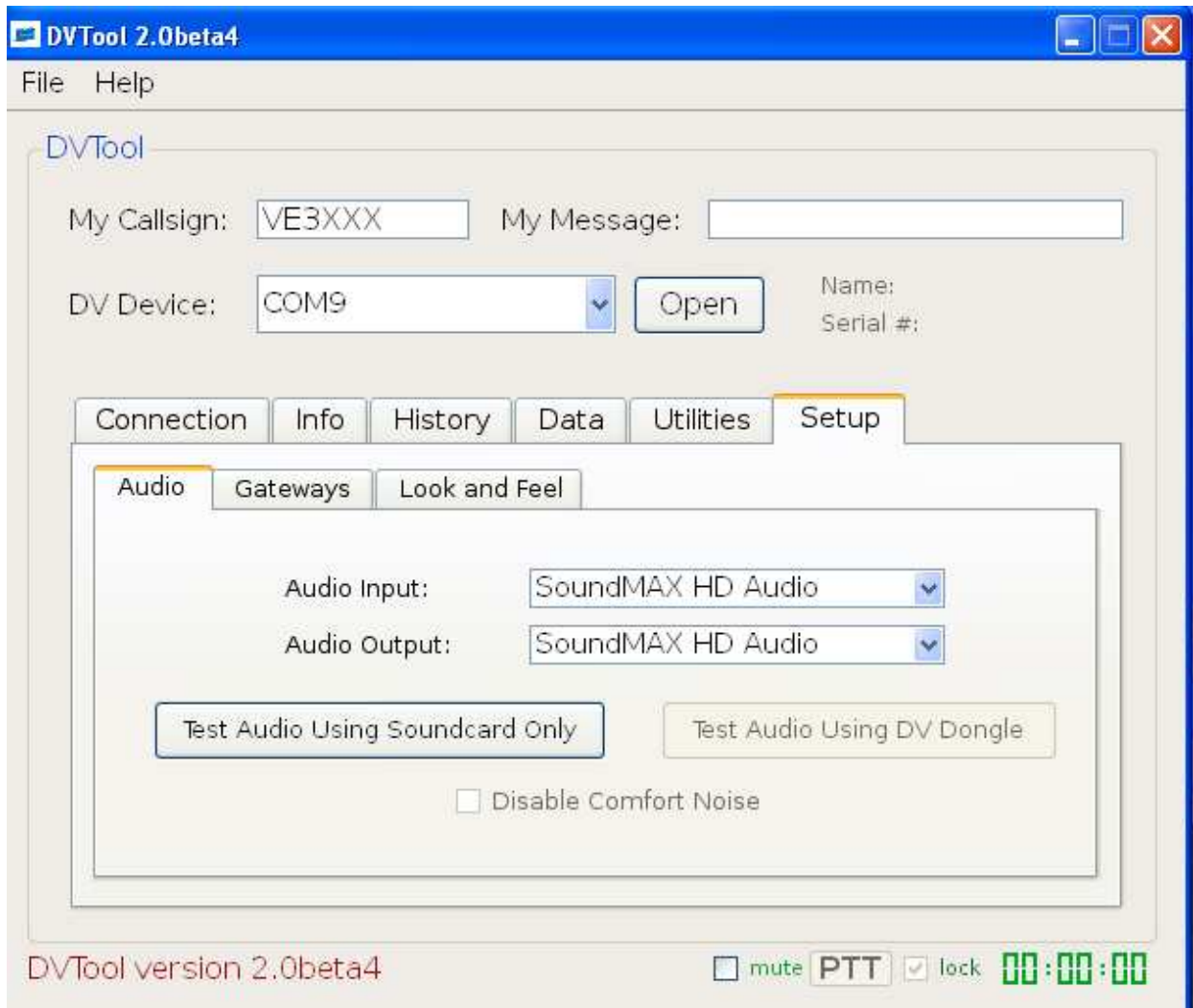
The information in this guide is for the use of a DV Dongle in conjunction with the Digital Voice Client¹ software to enable PC users (with a DV Dongle) to connect to XRF Reflectors, FREE STAR* systems and ICOM G2 systems running the dextra application.

Pre-requisites:

1. This setup guide;
2. Digital Voice Software: http://www.va3uv.com/Digital_Voice-20110120.exe

NOTE: If you already have the DV Dongle drivers installed for use with the DVTOOL software, you can skip steps 1 and 2, and proceed to step 3 of this document. However, you will need to know the COM Port # that Windows had previously assigned to the Dongle. This can be determined from the DVTOOL software as shown below:

¹ Digital Voice Software is a product from Jonathan Naylor, G4KLX



In the above example, Windows has assigned COM9 to the DV Dongle. You can now proceed to step 3.

1. Installation of the DV Dongle USB UART Driver

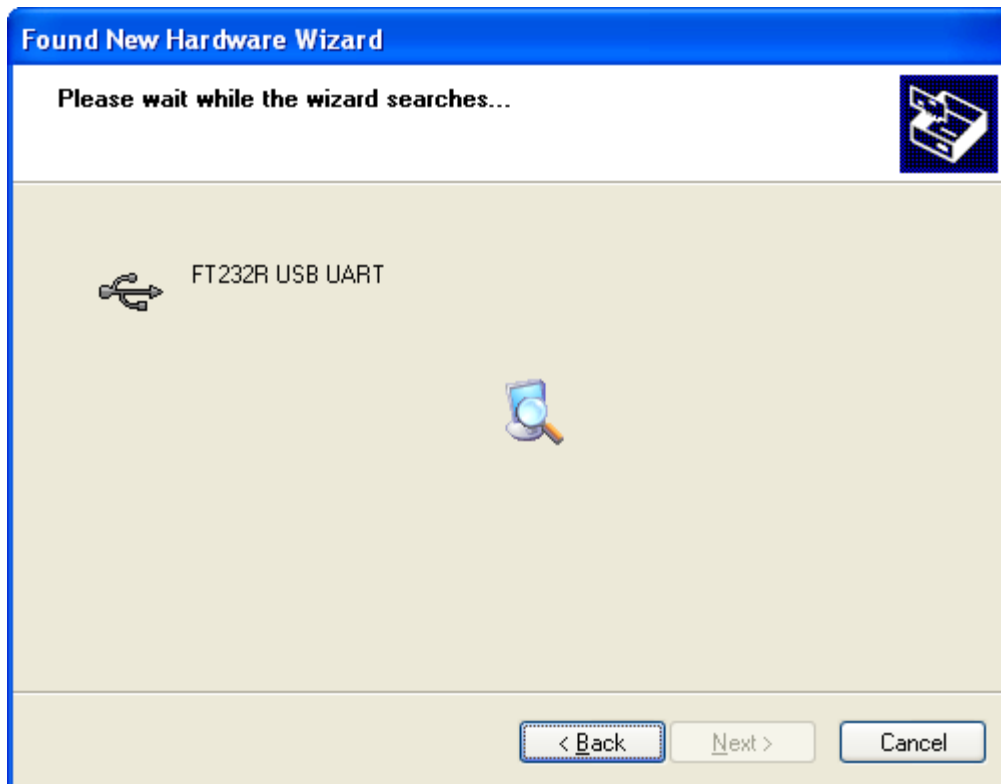
If this is the first time you are connecting your DV Dongle to your PC, you will need to install the drivers as explained in this section.

(a) Plug in your DV Dongle into a USB port on your PC.

The 'Found New Hardware' wizard will appear as follows:



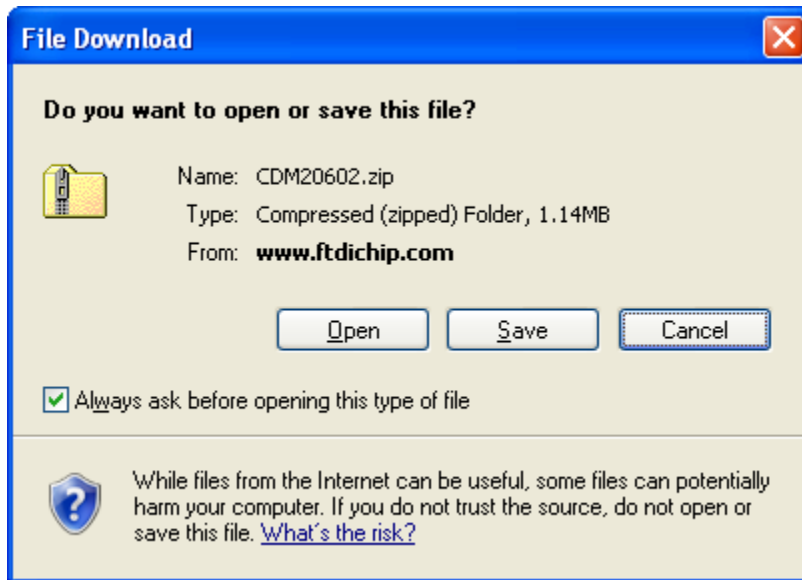
(b) Check the "Install the software automatically (Recommended)" radio button and then click on Next.



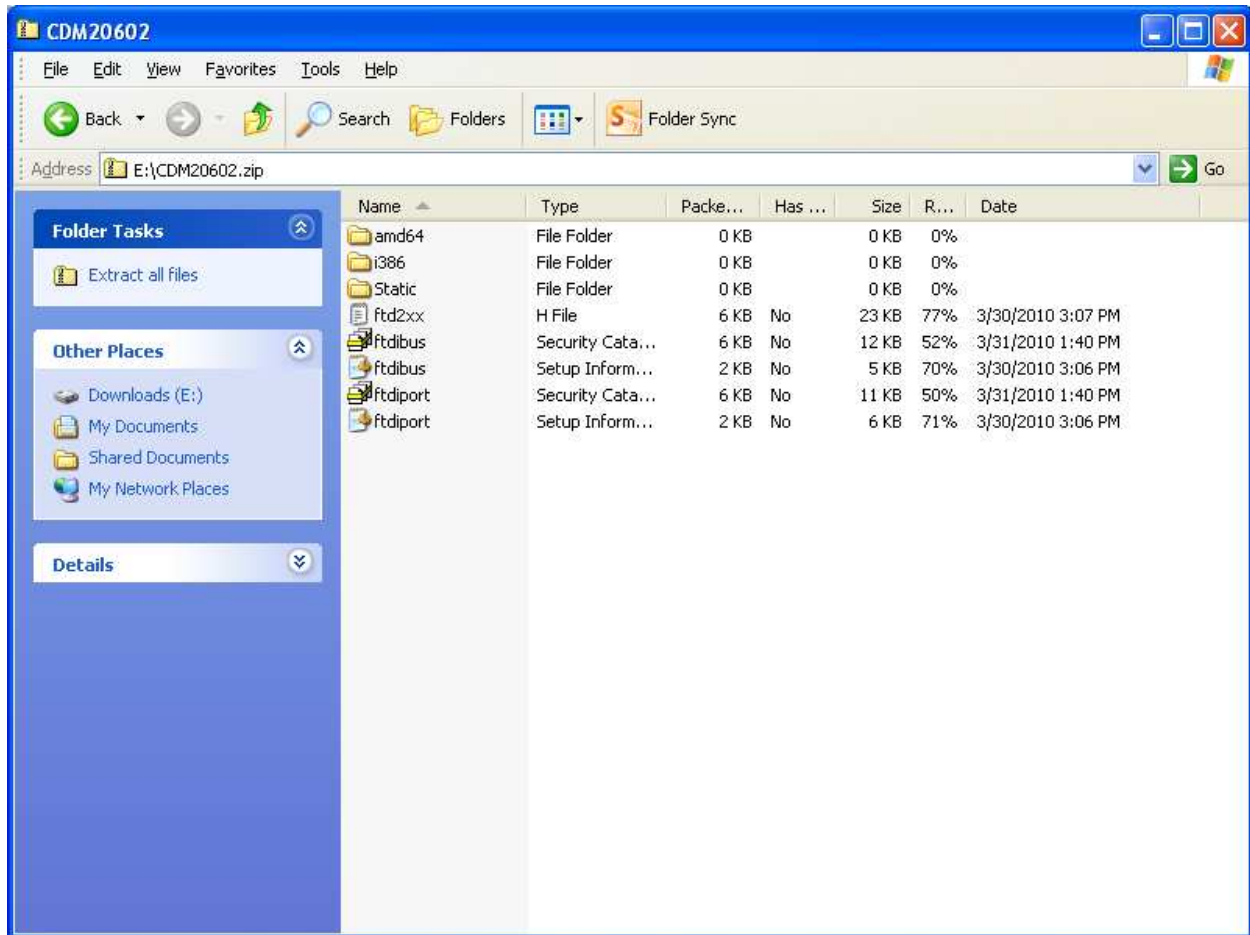
(C) If the driver is not found, you can download it from here:

<http://www.ftdichip.com/Drivers/VCP.htm>

Be sure to download the correct driver for your Operating System. For Windows XP, the latest driver is CDM20602 (as of July 28, 2010). Download the driver and save it to your hard disk.



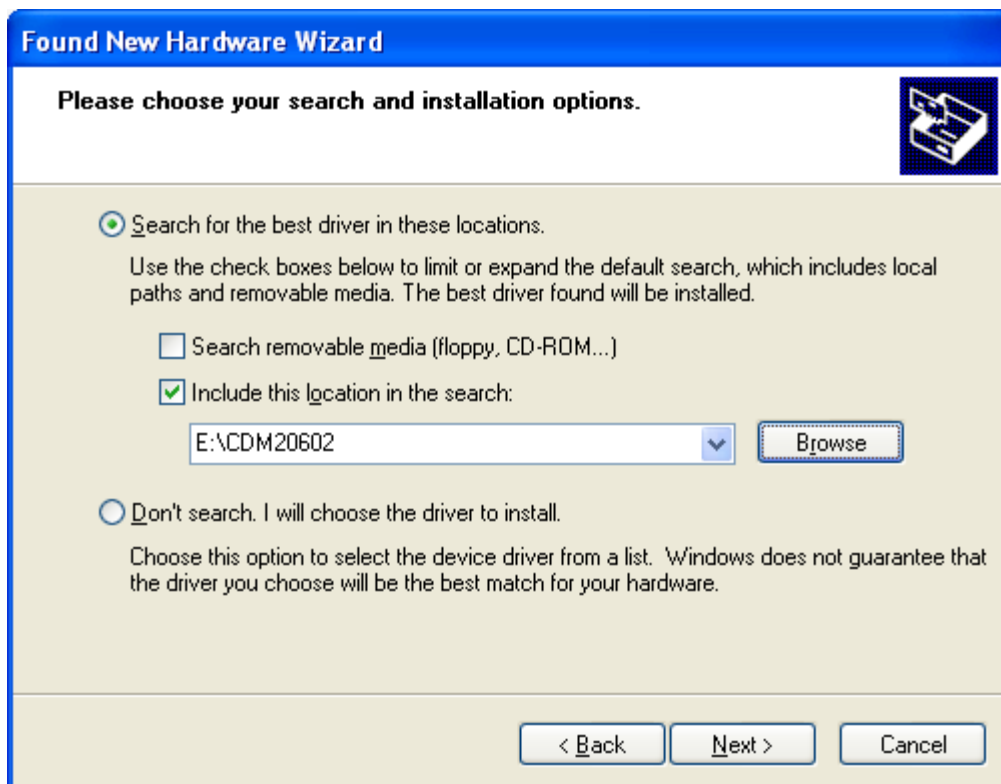
(d) Once saved, navigate to the directory where you saved the zip file and double-click on it:



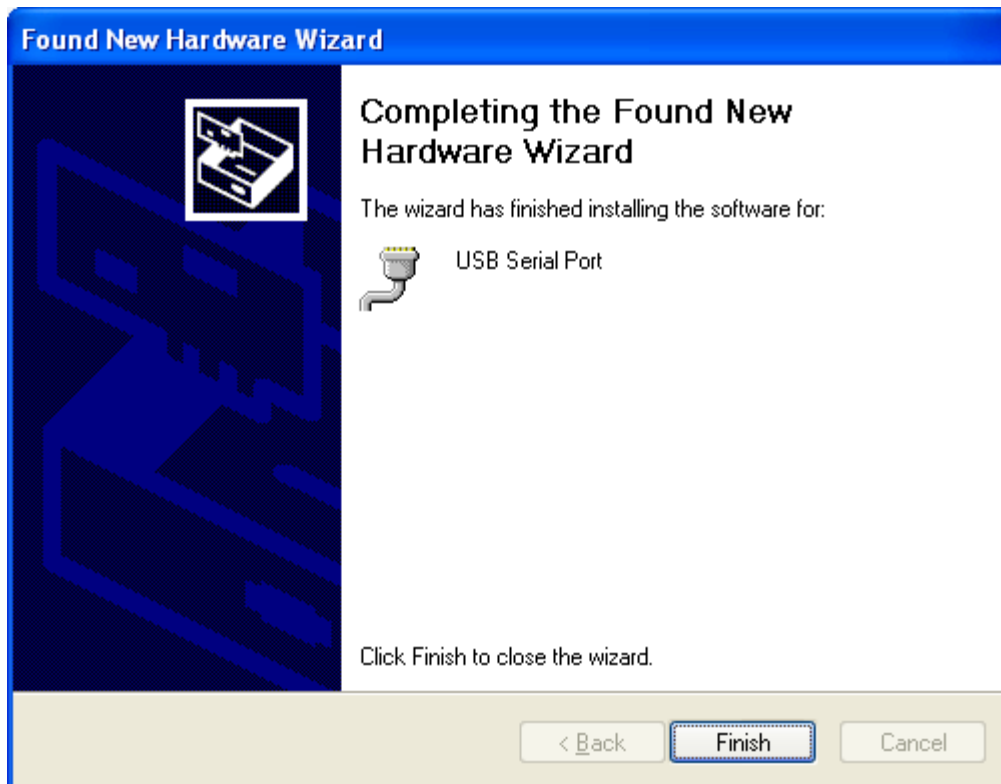
(e) Click on 'Extract all files' and extract the contents of the zip file to a folder on your hard disk – e.g., E:\CDM20602.

(f) Assuming that step (b) did not find the driver, you can go back to the "Found New Hardware" dialog box and this time, select the "Install from a list or specific location (Advanced)" option:





Specify the location where the CDM files were saved (e.g., E:\CDM20602).

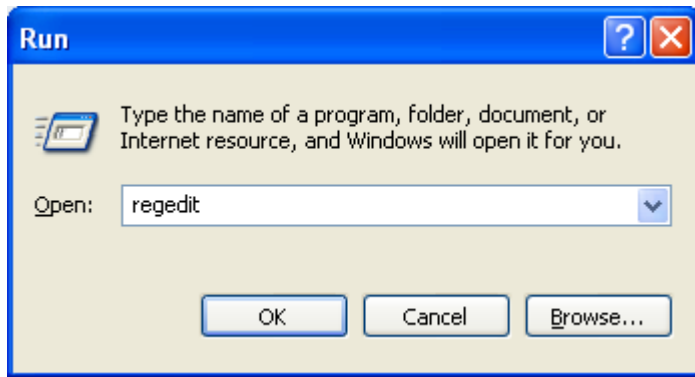


Click on Finish – this completes the DV Dongle driver software installation.

2. Determining the Serial Port for the DV Dongle

Windows creates a virtual COM port for the DV Dongle, we need to determine the port # so that we can specify it in the `dstar_hotpoint` software configuration file.

- (a) Click on the Windows Start icon at the bottom left of your screen (on the status bar). Click on 'run' and then enter 'regedit'



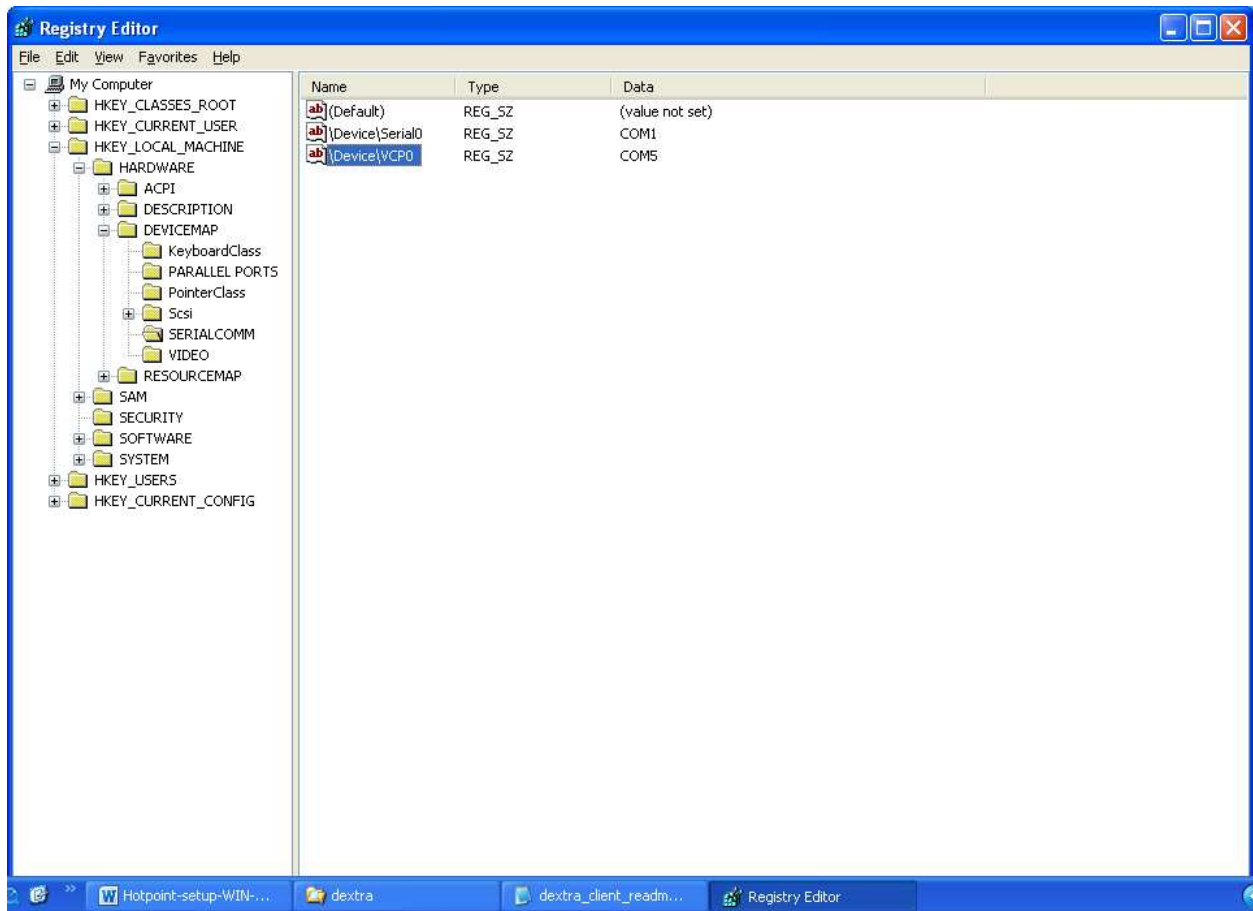
On the left side of the screen, navigate to:

HKEY_LOCAL_MACHINE > HARDWARE > DEVICEMAP > SERIALCOMM

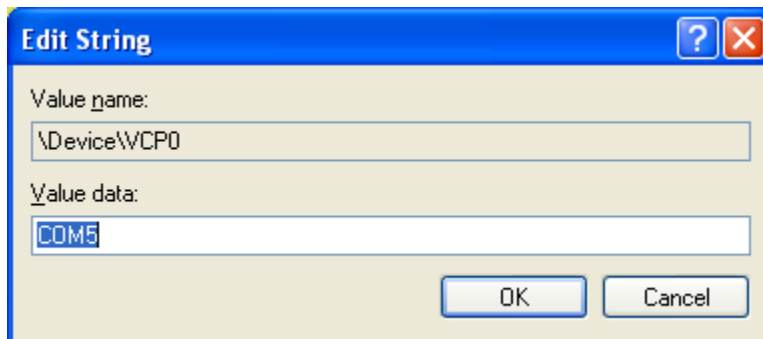
Look at the entries under the DEVICEMAP category.

Disregard any entries with the name \Device\Serialx (where x is a number)

Look at only the entries with the name \Device\VCPx (where x is a number)



Double click the '\Device\VCP0' item on the right side of the screen. You should see the following:



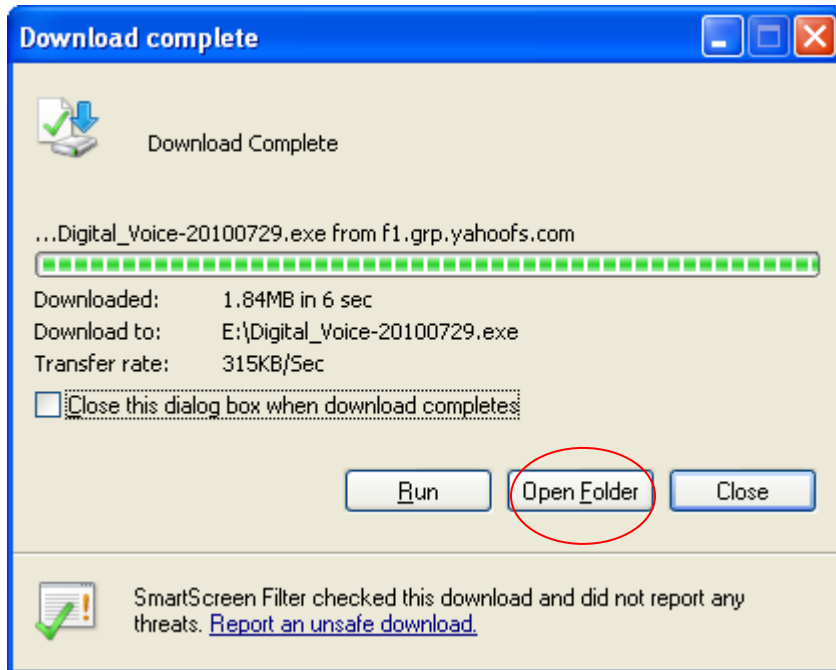
Note the 'Value data' – COM5 in this example, this will differ from system-to-system.

Close all registry (regedit) windows.

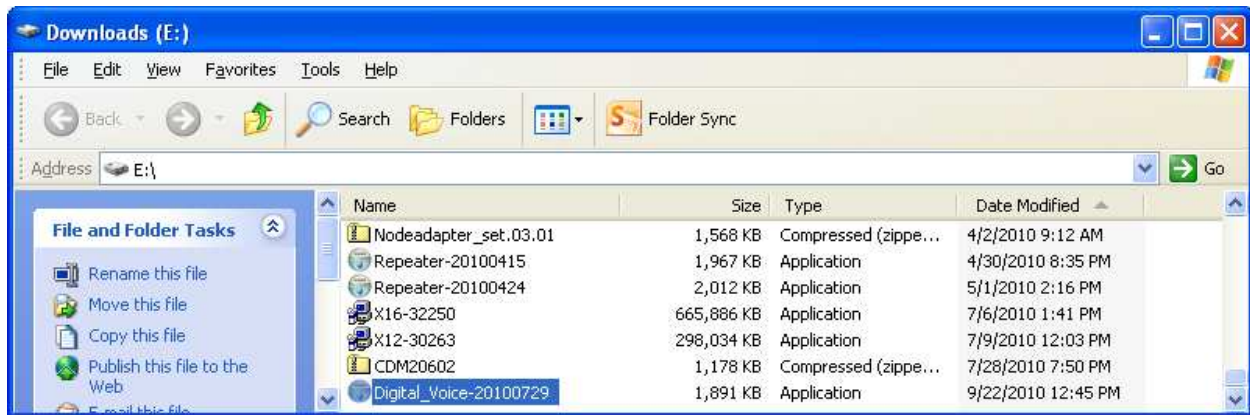
3. Installing the Digital Voice Software

NOTE – the screen shots shown here are from a previous release of the software; the process / workflow of installing the software is the same.

Step 1: Download the Software from the URL Provided in the pre-requisites section



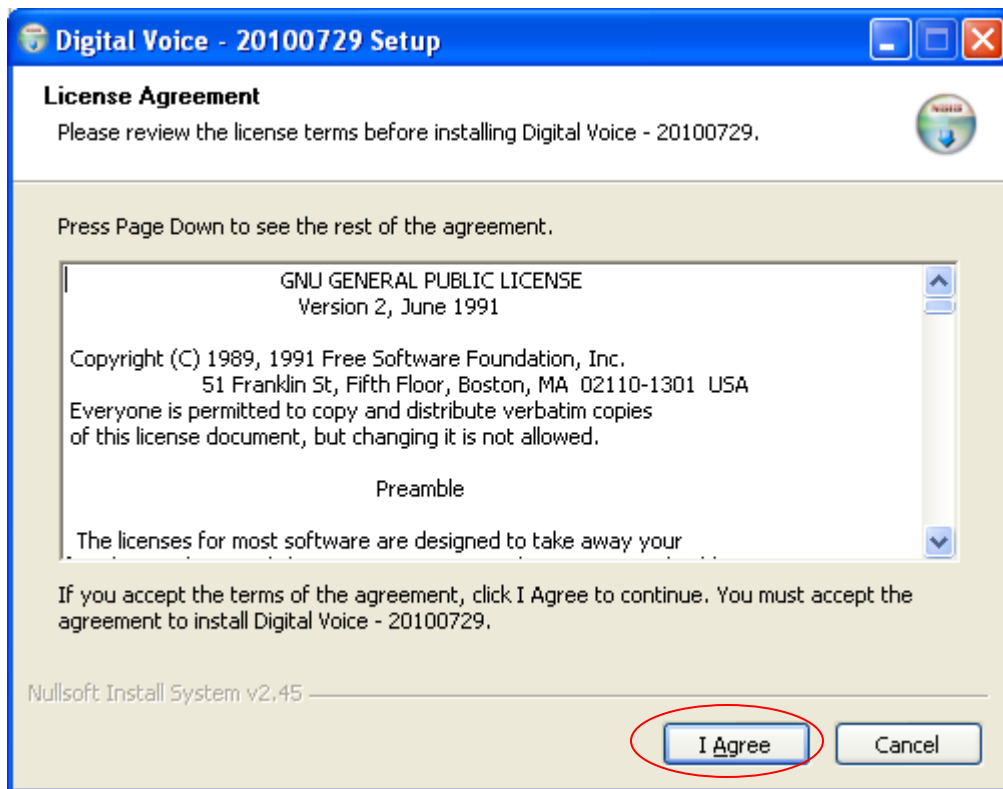
Step 2: Click on Open Folder and locate the exe file that you just downloaded; double-click on it to start the installation.



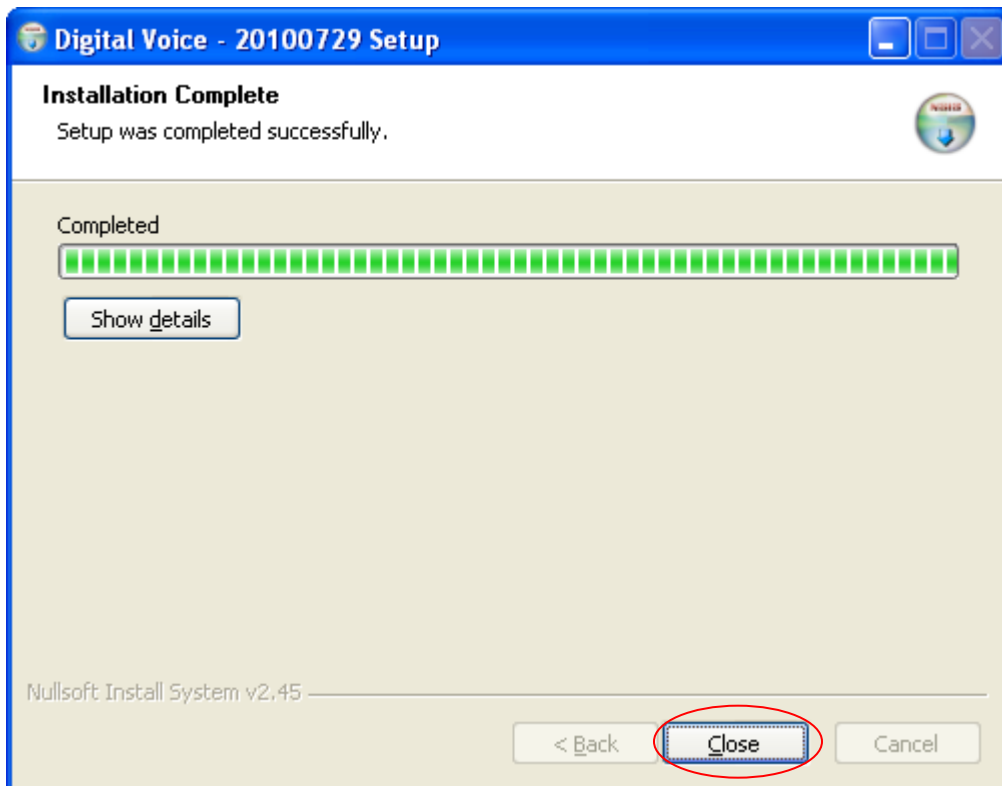
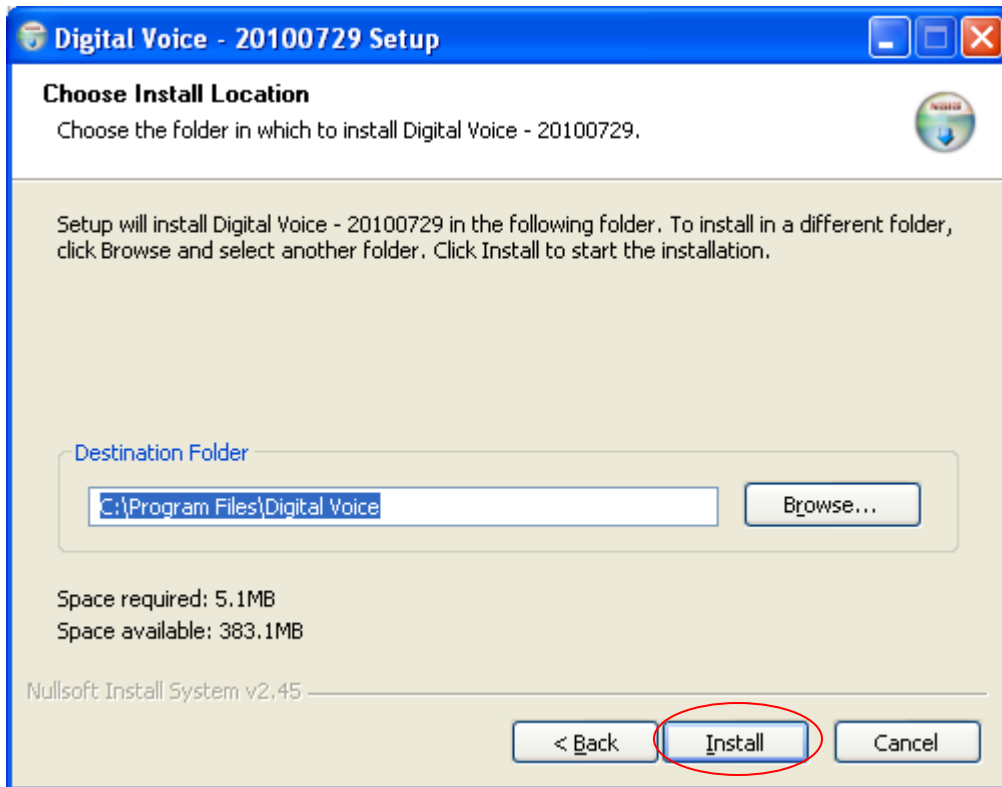
Step 3: Click on Run when prompted



Step 4: Click on "I Agree" when prompted to accept the license agreement:



Step 5: Accept the default installation location:

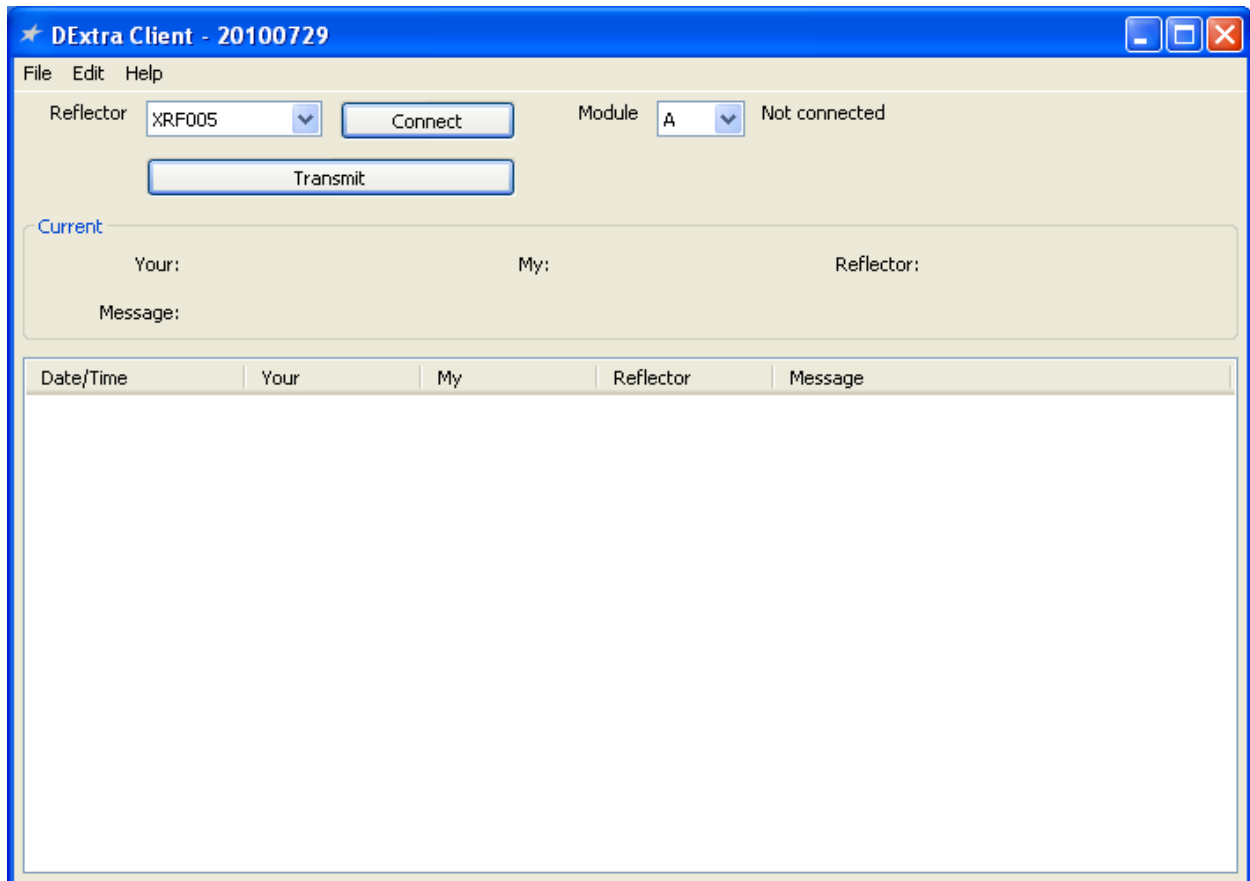


Step 6: Installation is complete – now run the program

Start > All Programs > Digital Voice > DExtra Client

NOTE – if the program fails to start and you are presented with a configuration error, please install the Microsoft Visual C++ run-time libraries available from here:

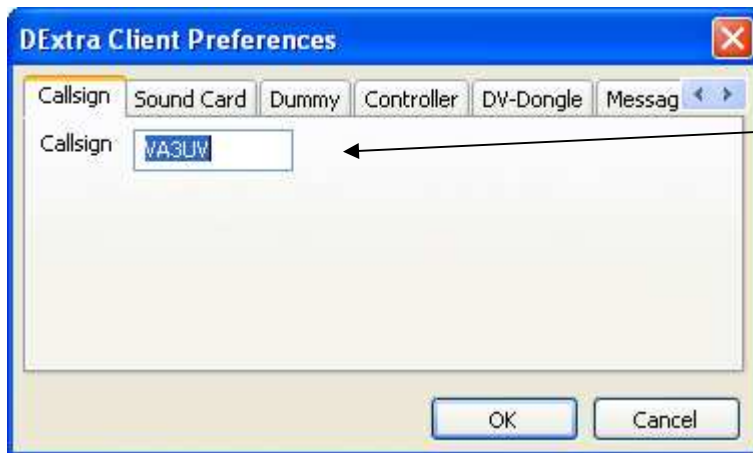
<http://www.microsoft.com/downloads/details.aspx?FamilyID=9b2da534-3e03-4391-8a4d-074b9f2bc1bf&displaylang=en>



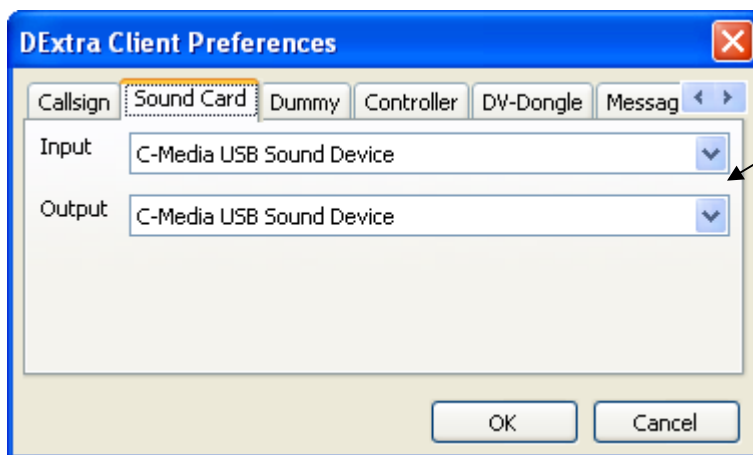
Step 7: Edit Preferences

Click on Edit > Preferences

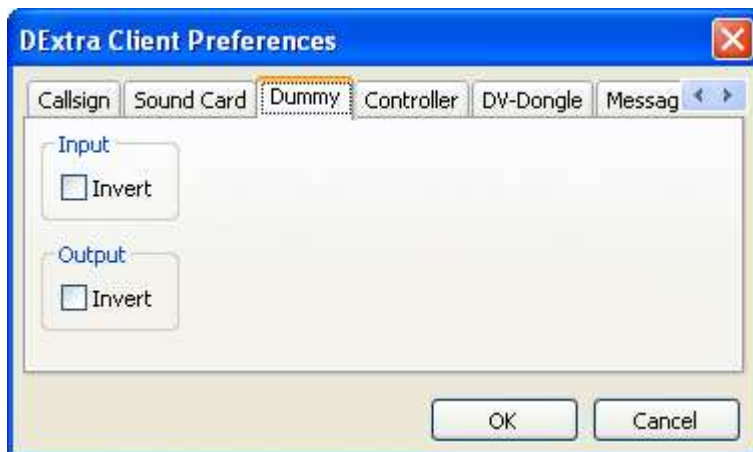
There are 7 tabs; I have provided screen shots from my system – edit to suit:



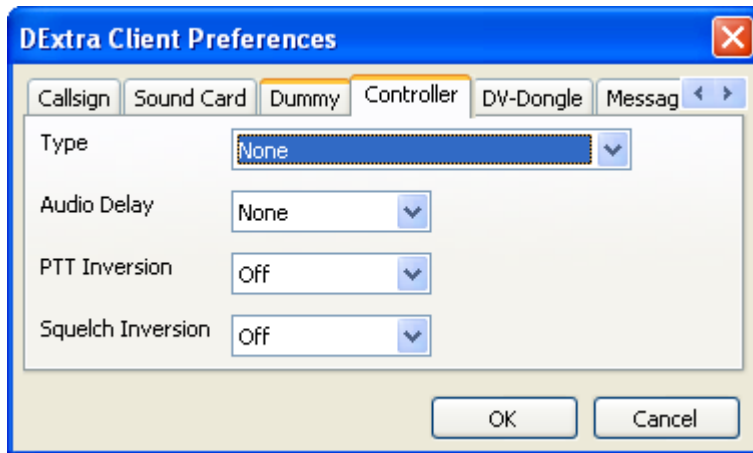
Enter Your Registered Callsign



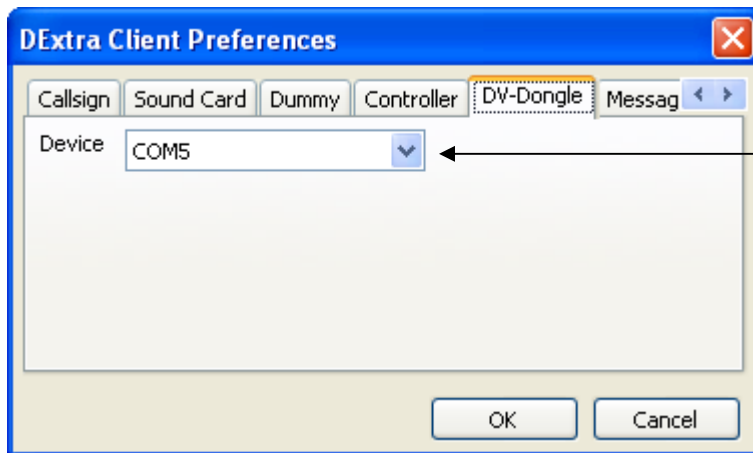
Select your sound card from the drop down box



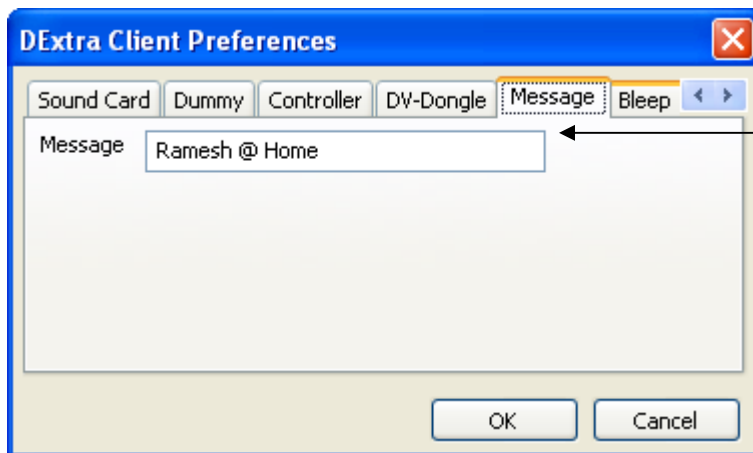
No action required



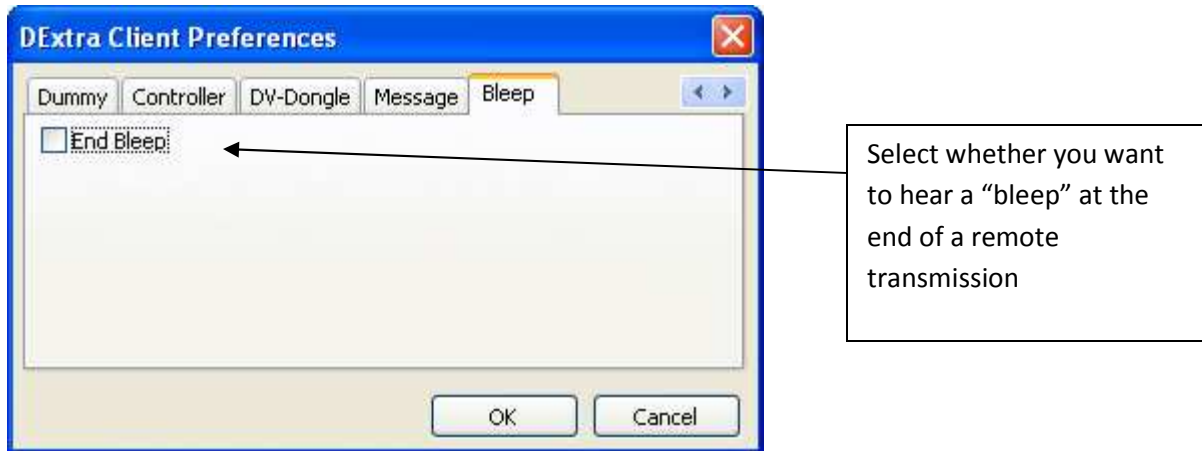
No action required



Select the Serial (COM) Port for your DV Dongle (as determined in Section 2)

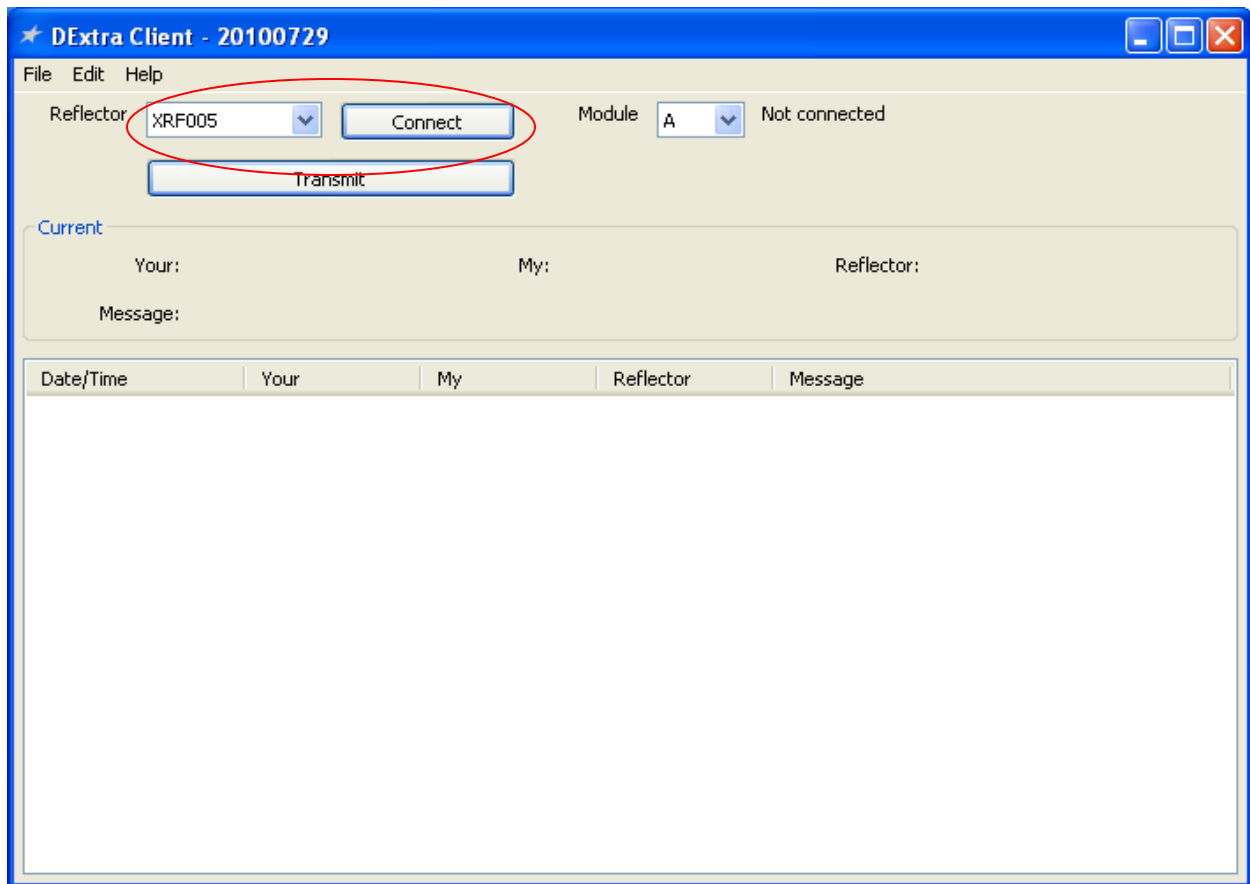


Enter short text message (20 chars max)



Click OK. You will see a message advising that the changes will not take affect until the next time that you run the program. Close the DExtra Client and run it again.

Now you are ready to connect to a reflector – select XRF005 from the drop down list and click on Connect:



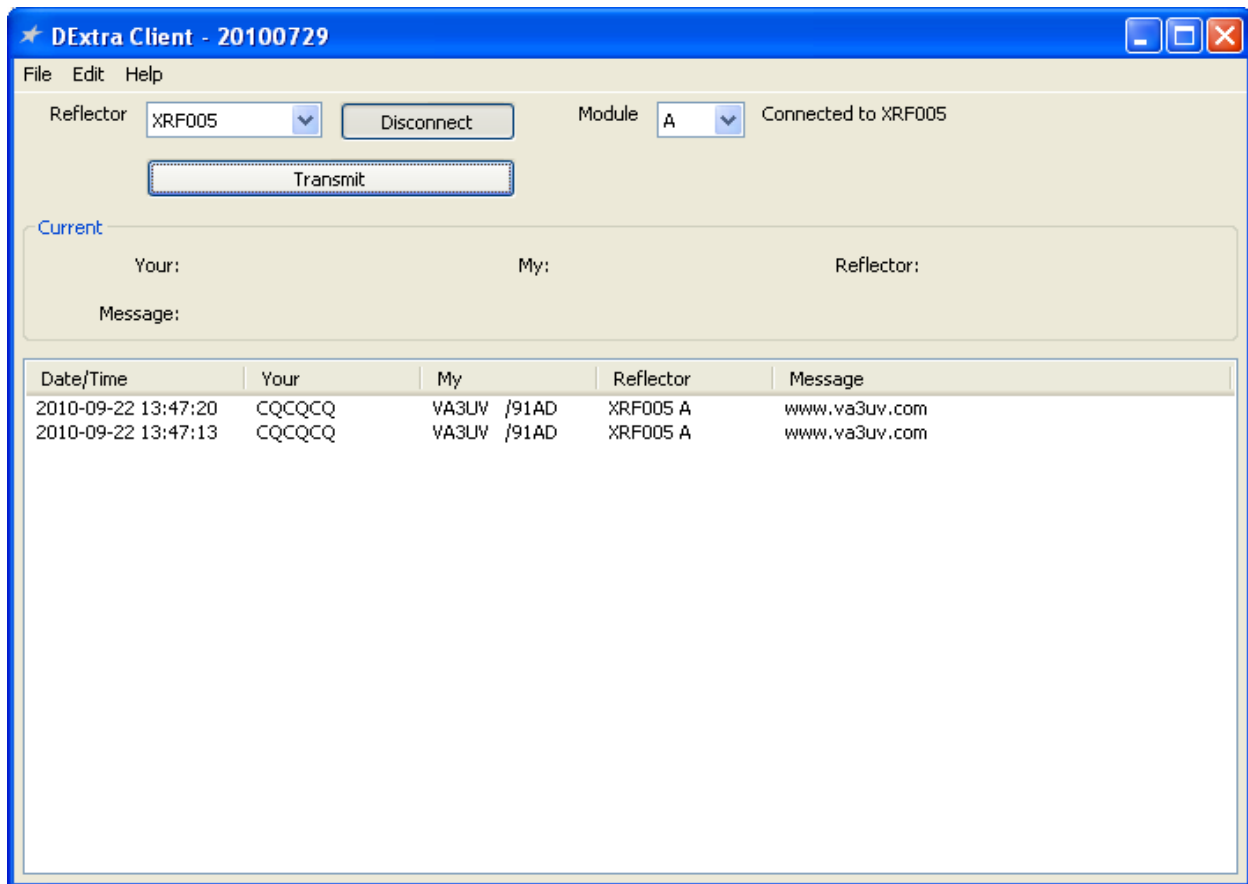
If you have a firewall enabled, you will see a security message as follows:



Click on “Unblock”

That’s it – the software is now operational.

Click on the Transmit bar with your mouse to toggle the TX on and off.



4. Adding New Reflectors / FREE STAR* Systems

The DExtra client does not rely on an external server to obtain destination calls and IP addresses. The advantage of this is that each user is in control of where he/she wants to connect to and more importantly, a third-party administrator can not block or deny you from having access to a callsign list and therefore deny you of the privilege of connecting to XRF reflectors and FREE STAR* systems.

DExtra uses a text file; by default this is located in C:\Program Files\Digital Voice\DExtraClient\DExtra_Hosts.txt

To add new reflectors / repeaters, simply add them as follows:

CALL <TAB>	Host name or IP Address
VE7QAZ	my.host.ca ← Example, for a local repeater – do not add this!
XRF020	69.90.18.45
XRF021	va3uv.ve6pte.ca

Save changes and restart the DExtra client for the new systems to become available via the DExtra client.

ICOM G2 systems running dextra can also accept inbound connections via the DExtra client. However, one should remember that due to politics, there is NO connectivity between dextra (on port 30001) and dplus (on port 20001). Thus if you connect to an ICOM system using DExtra, and that ICOM system is connected to an REF reflector, the DExtra client will NOT hear any traffic from the REF reflector. However, if the ICOM system running dextra is connected to an XRF reflector, then the DExtra client will hear traffic from the XRF reflector as well as the local RF activity.