

Software Review: ircDDB remote for iPhone/iPad or Android

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One of the issues that many amateurs experience in moving to digital radio is that of firstly understanding the concept of it and then attempting to control it via programming of their radios.

In the DMR world they use a programming file commonly referred to as a codeplug. This is simply a file that you load into your DMR radio, with all the information required to operate the radio. In the D-STAR world the radios are programmed directly from the front panel of the radio (you cannot in general programme a DMR radio this way), with a cable, or via an SD Card. This programming is relatively straight forward.

The real next issue is to how to control the linking and unlinking of repeaters and reflectors you wish to use. In the DMR world this is controlled by the various Talk Groups. In the D-STAR world this is controlled much like IRLP by the

linking and unlinking commands. This software solves this process, by using your Smartphone or tablet to make this task as easy as possible.

The software is written by David PA7LIM, a relatively new amateur radio having first obtained a novice licence in 2013, before upgrading in 2015 to his full licence. With a background in Linux and Network engineering the ircDDB Remote software was born.

I use the software in two ways, one to control my D-STAR Hotspot via a Raspberry Pi and the other to control the two D-STAR RF Repeaters at Mt Climie (ZL2VH), above Upper Hutt, Wellington.

If you are running a D-STAR Hotspot, you'll probably be running

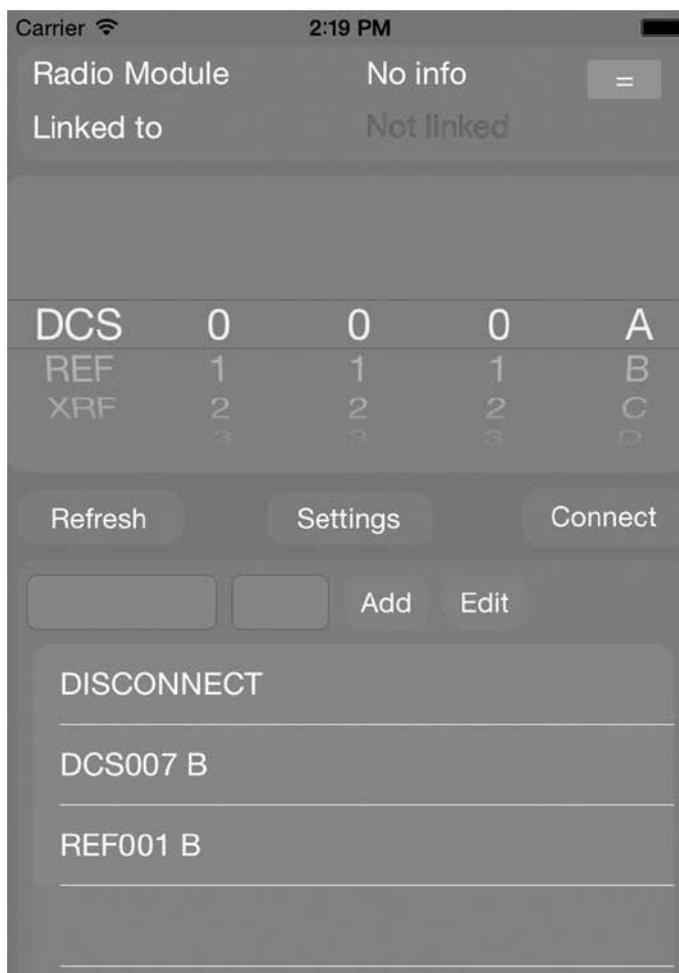


Figure 2: ircDDB Remote main screen

- press Settings button

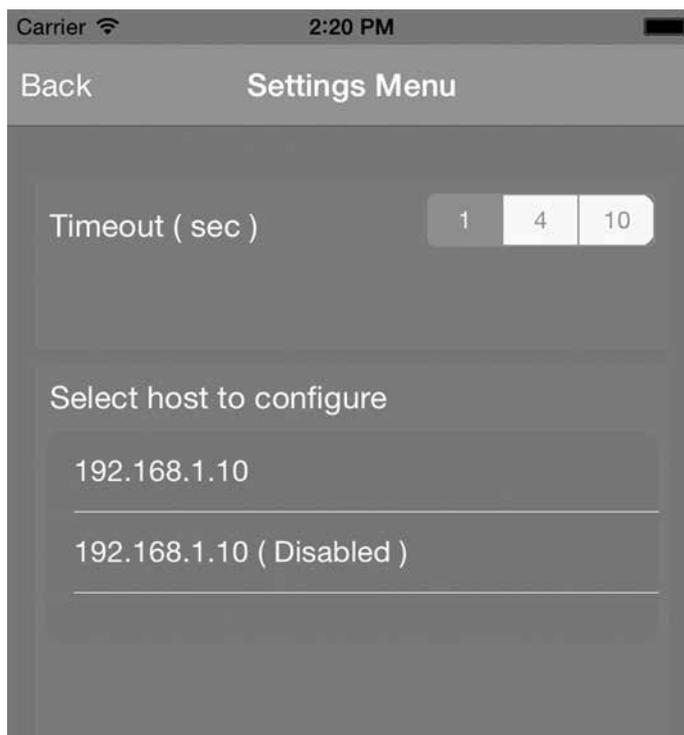


Figure 3: ircDDB Remote Settings Menu screen.



Figure 1: ircDDB Gateway remote setup tab on a Raspberry Pi.

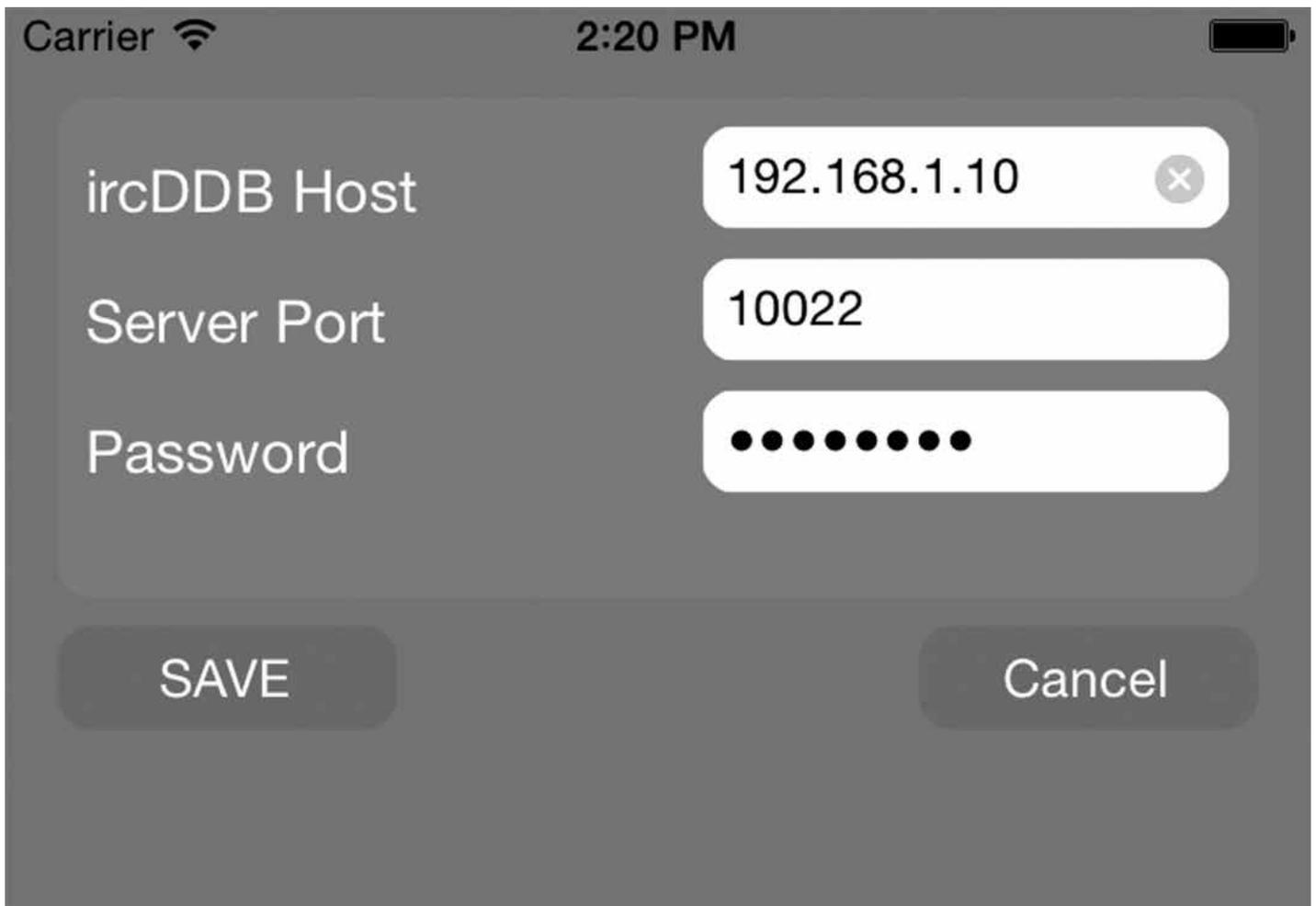


Figure 4. ircDDB Remote Host setup menu.

ircDDB Gateway software written by Jonathan Naylor G4KLX. The software forms part of the software stack to run the Hotspot. With a few simple setup commands in ircDDB Remote via the Graphic User Interface (GUI) then you can be up and running in no time!

Setup ircDDBgateway

Start the ircDDBgateway configuration editor on your Raspberry Pi/PC/server.

- Goto the tab “remote”
- Set the tab Remote to **Enabled**
- Enter a password
- Set Port to **10022**

Windows users: Press OK button and restart your computer or restart your ircDDBgateway application.

Linux users: File -> save. Restart your computer or restart your ircDDBgateway service. If you don't reboot or restart, the remote function will not work!

As I use the Apple iPhone as my device to control ircDDB Remote, the following instructions are based around that. The iPad and Android devices operate in a very similar way.

Setup The IOS device

Go to the Apple store and search for ircddb remote and download the ircDDBremote for your IOS device.

Now start the “ircDDB remote” app on your IOS device. The following screen will appear.

Select the first IP address in the list. (If you have more than one ircddbgateway you can select also the second IP address.)

- Fill in the **IP address** or **host-name** of your ircDDB server
- fill in the Server Port **10022**
- Fill in your password at Password.
- Press **SAVE**
- Press **Back**

On my system I use the IP address of 192.168.7.104 for my Raspberry Pi, your system may vary depending on what address range your router uses. I have also set the IP address to always be set to that address by setting a static IP address, thus ensuring my router always assigns that address to the piece of hardware I intend to use. If you are using Dynamic IP addressing then you could possibly have a different IP address each time you start your device, this

solves that issue.

The ability to control the local D-STAR RF repeaters is an added bonus, but your Repeater Trustee will need to allow you to do this, supplying the IP address, password and port to use.

So what does all of this do for the user? Well, when I am at home and using my Hotspot, with either a 2 m or 70 com DVAP (Digital Voice Access Point Dongle from Internet Labs—Robin Cutshaw AA4RC), then I can leave the handheld D-STAR radio on its simplex frequency and use my iPhone to command the linking and unlinking of the Raspberry Pi. How is this achieved? Well, as my iPhone is connected via Wi-Fi to my home network, and the Raspberry Pi is also on the same network, then the iPhone can issue the various commands.

The same concept applies, when my iPhone is connected to the Internet via my home Wi-Fi- (well any Wi-Fi that's connected to the internet), or via 3G/4G mobile data then I can command the RF Repeater in the same way!

The software has the ability to

save 'Favourite' repeaters or reflector channels that you use most often or the ability to dial up a Reflector on the DCS, REF or XRF systems.

The software is simple to use and does exactly what is required, no more no less, and is a great add-on for D-STAR users. I recommend you download it from either the Apple App Store for iOS users or from Google Play Store for Android users. The app is free although you can donate to the author via his web site and PayPal. ✉

References:

- [1] <<http://www.pa7lim.nl/ircddbremote/>>
- [2] <<http://www.pa7lim.nl/ircddb-remote-for-iphoneipad/>>
- [3] <<https://itunes.apple.com/nz/app/ircddb-remote/id930678750?mt=8>>
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