

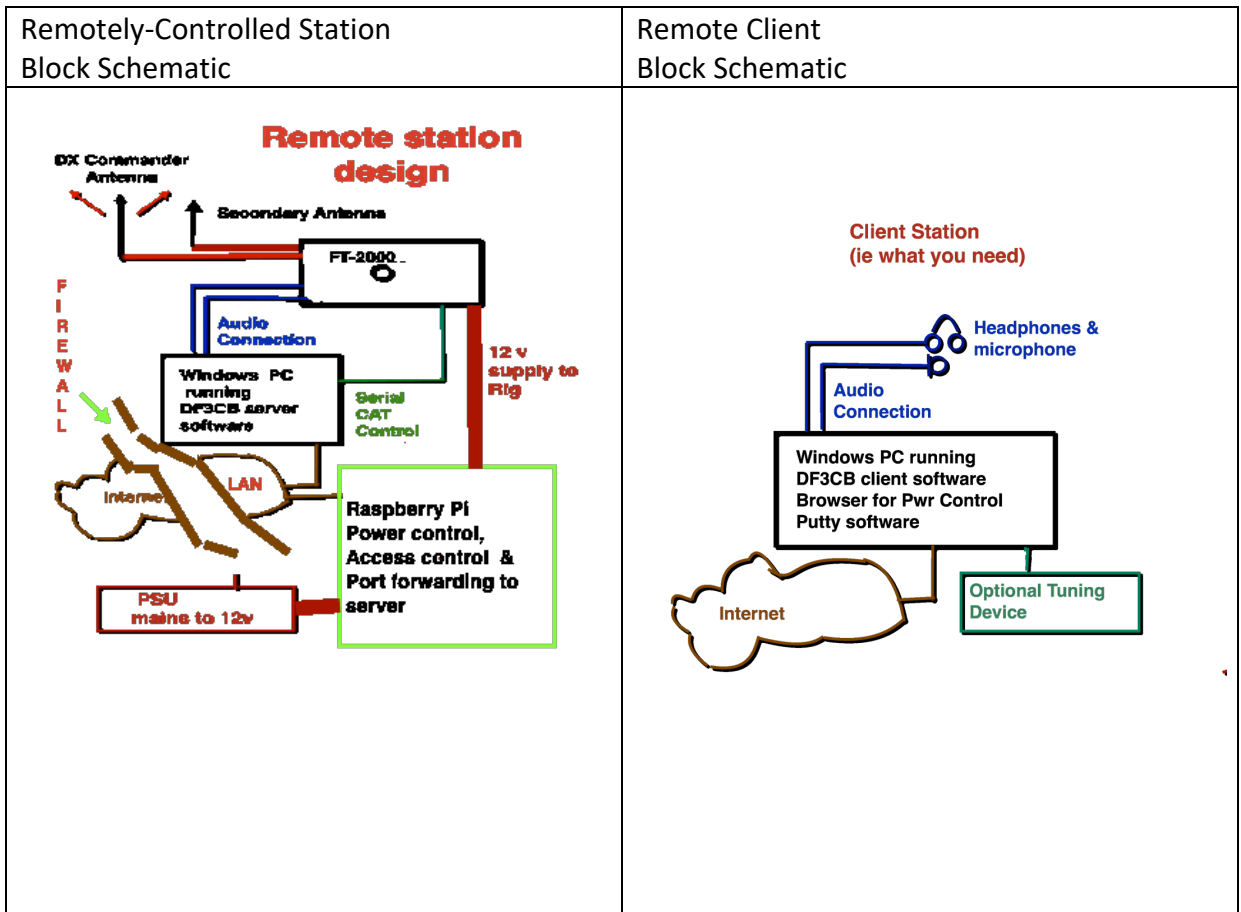
CDARC REMOTELY-CONTROLLED STATION

SOFTWARE INSTALLATION – REMOTE CLIENT

The CDARC Remotely-Controlled Station (RCS) is for use by members of CDARC who have received approval to operate the station. The RCS has already been set up by the RCS Administrator and these instructions describe the requirements for a Remote Client and how the necessary software is to be installed. If you have any related questions or encounter any difficulties, please e-mail: rcsadmin@cdarc.org.uk

GENERAL DESCRIPTION

The CDARC remote station is based on the club's Yaesu FT2000. This is controlled using FTDXRC software written by DB3CB. The access to this software is controlled by a Raspberry Pi running code written by GOLRD. The radio is usually connected to a DX Commander vertical (see <https://www.m0mcx.co.uk>), and one other aerial. The precise configuration is described in the "Message of the day" presented at each logon. Only one CDARC member is permitted to use the station at a time and a slot may be booked on a Teamup calendar (address confidential to users).



The access control run by the Raspberry Pi is key. Once you are logged onto the Raspberry Pi (using Putty software), you will then be able to

- Turn on the Server PC (which goes to sleep approximately 15 minute after no activity)
- Select 15 minutes of power for the FT-2000 (reselect before the 15 minutes is up to continue)
- Access the FTDXRC software to give full control of the FT-2000.

Minimum Hardware Requirement:

- Personal Computer, running 64-bit versions of Windows© 10 (and 7, 8), in Administrator mode.
- A screen resolution of 1280 x 800 (wide view) or 1033 x 800 (compact) or 1033 x 549 (basic).
- Internet connection.
- Sound Card along with Microphone and Headphones / Loudspeaker

Optional hardware to provide analogue tuning control:

- FlexControl™ Tuning Knob

(The cheap DJ controller devices no longer supported)

Documentation:

- Valid UK Full Amateur Radio Licence
- Approved application to operate the CDARC RCS
- RCS Software Installation & Settings Ver5_2 – this document
- RCS user name & password (confidential to user)
- RCS Operating Instructions Ver 5_2
- <https://df3cb.com/ftdxrc/> (**DB3CB extensive FTDXRC documentation**)

Software – to be downloaded from the Internet:

- DF3CB's Remote Control Software FTDXRC for the Yaesu FT-2000
<https://df3cb.com/ftdxrc/download/> (download the 64 bit version)
- Putty software
<https://www.chiark.greenend.org.uk/~sgtatham/putty/latest.html>
- Browser software

INSTALLATION:

Download and install the 64 bit version of FTDXRC

<https://df3cb.com/ftdxrc/download/>

This program is provided as donation software. If you find that you want to continue using it, please consider making a donation, suggest at least £10, to DB3CB (see <https://df3cb.com/ftdxrc/donate/>)

Once the software is loaded and running (administrator mode) the following settings are required.

Access these from “File” – “Settings”

General

Select “Remote client”
Fill in own callsign & locator

User interface

Select “FT2000”

Remote Client

Remote Connections

Create a “New Host” (ever user has the same details as the security is provide by the raspberry pi, not the FTDXRC software)

Host Name - **GX2XV**

- URL- **LOCALHOST**
- PORT- **12765**
- User Name- **GX2XV**
- Password- **Test321**
- Audio Port- **4000**

When created, ensure when done the “client” is clicked.

Remote Audio Client

General

Select “Auto connect to remote audio server”
“Send audio on MOX”
(& send on VOX if wish to use VOX as well)

Client Devices

Ensure that hese match the correct sound card/ headphones/ microphone for your PC.

Client codecs

Select “PCM uncompressed”
“Sample rate – 8 KHz”
“Bits per sample – 16bits”
“Channels – stereo”

(These codecs are actually enforced at the server end so if miss select should not matter)

Client Audio Buffers

Start with the default see for more detail at

https://df3cb.com/ftdxrc/documentation/setup/audio_client_buffers.php

Putty software

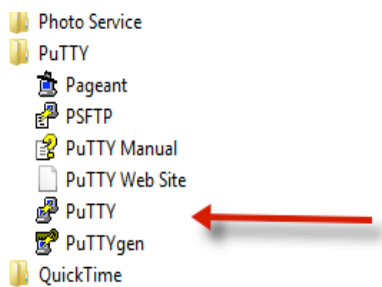
Download and install.

- <https://www.chiark.greenend.org.uk/~sgtatham/putty/latest.html>

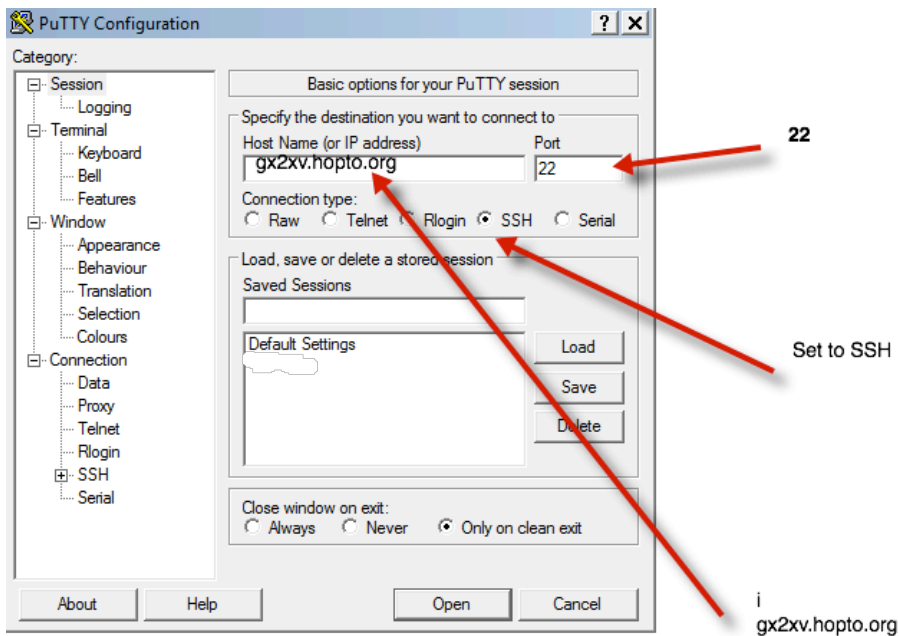
PUTTY CONNECTION

PUTTY Software

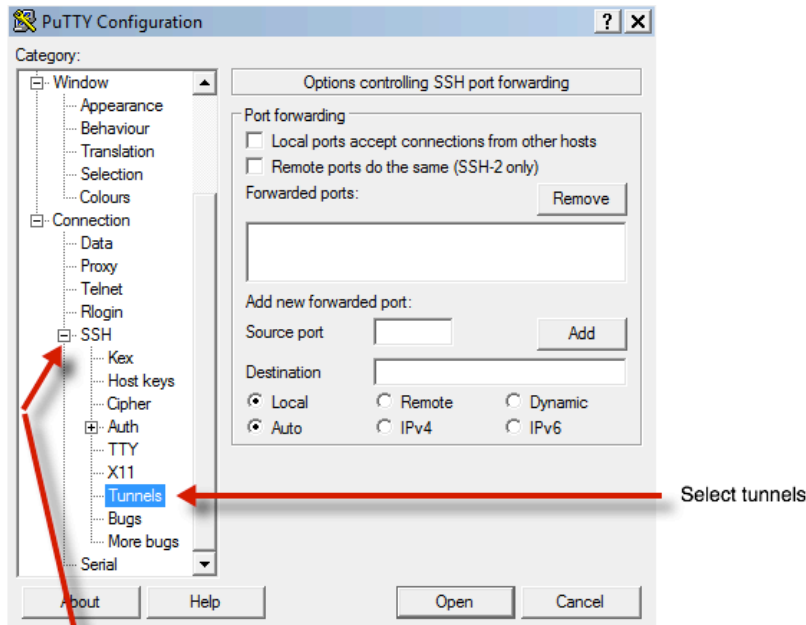
Run Putty and the configuration box will appear. Under 'Basic options':



- Set Connection type to SSH
- Set Host Name to [gx2xv.hopto.org](https://www.chiark.greenend.org.uk/~sgtatham/putty/latest.html)
- Set Port to 22

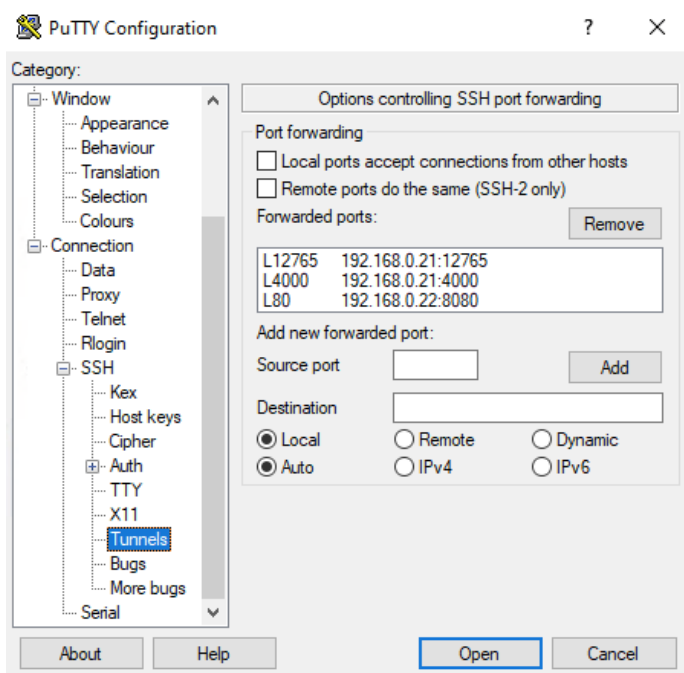


Now need to enter Tunnels, under SSH (click SSH in left hand column)



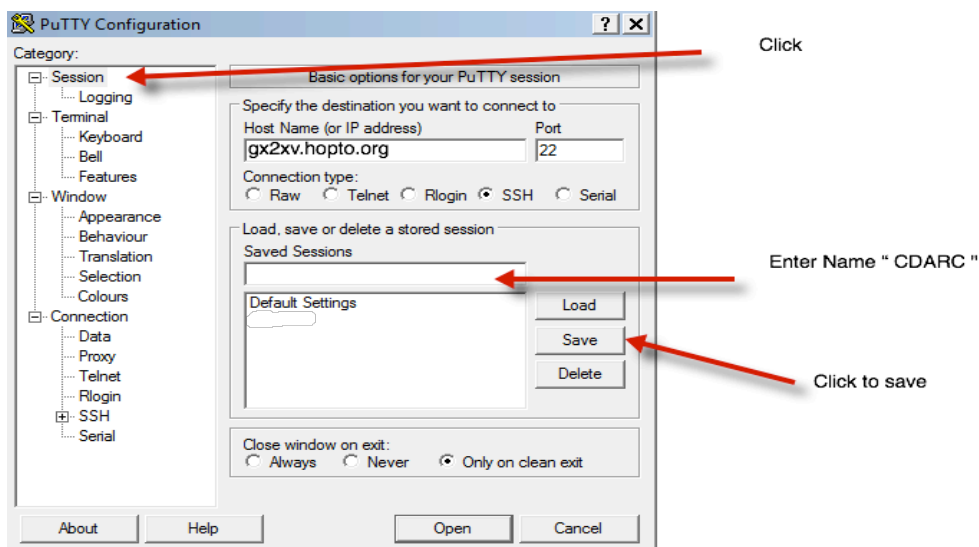
Click the '+' to expand options

Enter **4000** in 'Source Port', Enter **192.168.0.21:4000** in 'Destination', click Add.
Enter **12765** in 'Source Port', Enter **192.168.0.21:12765** in 'Destination', click Add.
Enter **80** in 'Source Port', Enter **192.168.0.22:8080** in 'Destination', click Add.



It should end up looking like picture above.

Scroll left hand column back to top,
Click "Session" on the left (at the top), enter a name (suggest CDARC) under
"Saved Sessions" and click Save.



Once the session is saved then the setting can be recalled easily. If the connection does not work (see operating instructions), suggest deleting the session and start again following the instructions carefully.

That's it. The software is now ready to use. To get on the air you'll need to follow the "RCS Operating Instructions" found in a separate document.

Richard G4AWP 15th December 2020

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Acknowledgement - see DF3CB's website <https://df3cb.com/ftdxrc/>