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Contest Logger Setup

How to setup N1MM+ for

CQWW WPX SSB 2021

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Topics[1]

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1 - Based on Doug Reece, AK4AO N1MM-Setup-and-Operations-for-Field-Day.pdf 2017

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CQWW WPX SSB Rules extract

- For amateurs worldwide to contact as many amateurs and prefixes as possible during the contest period.
- SSB: March 27-28, 2021
- 48 hours. Single Operator stations may operate 36 of the 48 hours – **off times must be a minimum of 60 minutes during which no QSO is logged.** Multi-operator stations may operate the full 48 hours.
- Only the 1.8, 3.5, 7, 14, 21, and 28 MHz bands may be used.
- RS report plus a progressive contact serial number starting with 001 for the first contact. Note: Multi-Two, Multi-Unlimited, and Multi-Distributed entrants use separate serial number sequences on each band.
- Entry Categories
  - Single Op High (<1500W), or Low (<100W) or QRP (<5W) Power
  - Multi Op Single TX or Two TX or Multi TX or Multi Distributed
  - Checklog
- Full rules can be found here: https://cqwpx.com/rules.htm

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N1MM+ OVERVIEW

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N1MM+ Overview

- N1MM+ is a free contest logging tool that can be used for most contests
- N1MM+ records exactly what is required for each individual contest and scores contacts according to the contest rules
- N1MM+ helps you to avoid duplicate contacts that will waste time and not add to your score
- To do these things, it has to be set up with a new log for each contest
- N1MM+ can display several windows. We'll cover the two most important in this overview.

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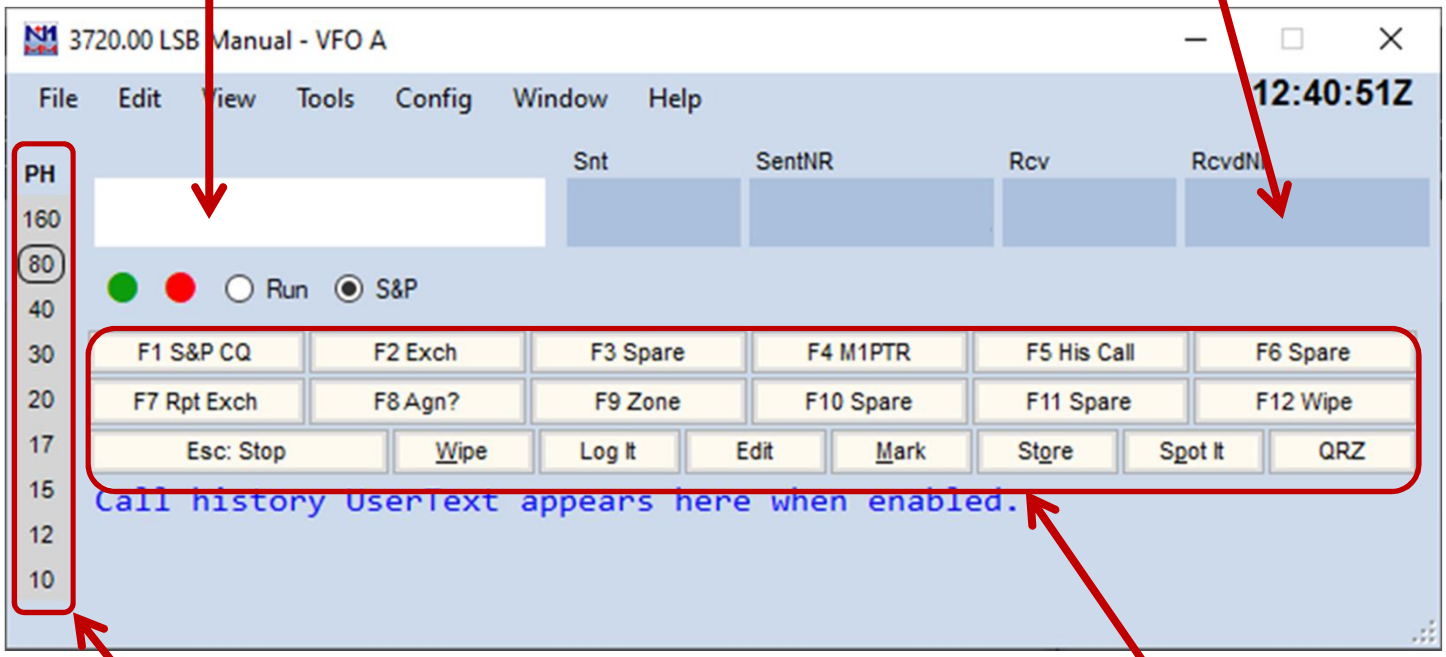
N1MM+ Entry Window

Enter call signs, frequency, mode, other commands here

Enter contest exchange here. Use space bar, tab or mouse click to move among fields. Press Enter key to log.



Change band/mode by clicking here

These buttons are (mostly) for automated sending of messages in CW, digital, or with voice recordings

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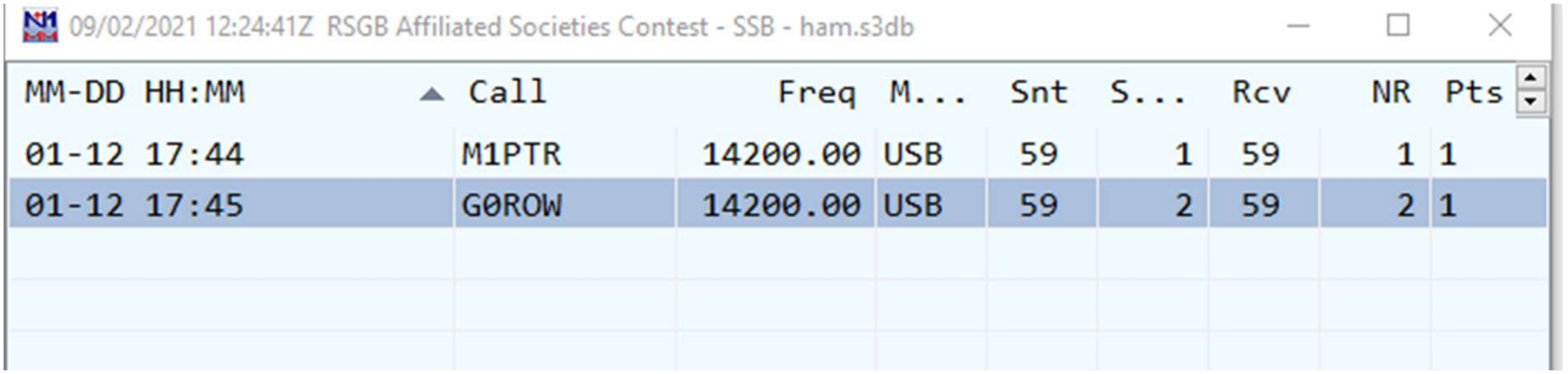
N1MM+ Log Window



From Entry window select Window -> Log to view Log (Ctrl L)

Double click any field to edit it.

Right click an entry to get a menu for editing or deleting.

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SETUP

How to setup N1MM+

Assumes a Single Operator using 20m SSB only without any DX Cluster assistance

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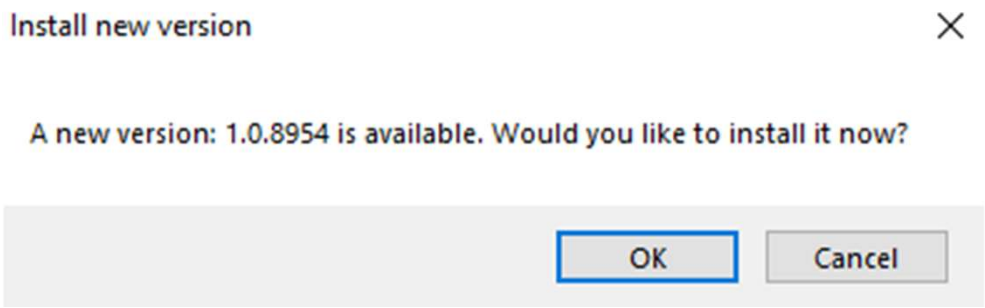
Install or Update N1MM+

- If N1MM+ is not installed first follow the Full Install instructions at this link:
  - https://n1mmwp.hamdocs.com/downloads/n1mm-full-install/
  - Accept defaults for locations of files
- A new installation or an existing installation should be updated to the latest version of N1MM+. Start N1MM+ while connected to the internet, and select OK when this dialog box appears:



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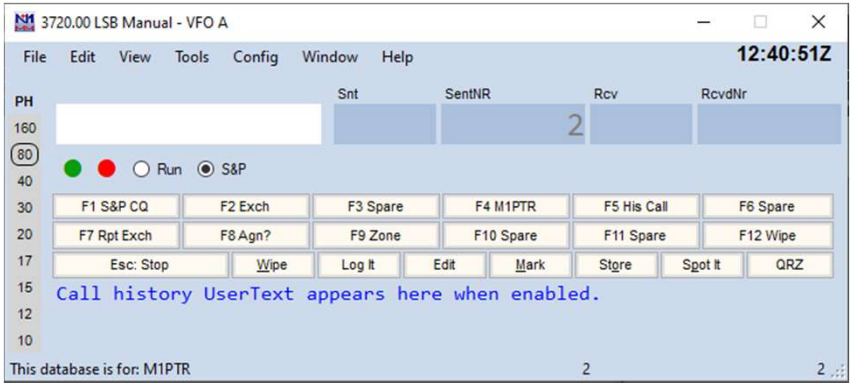
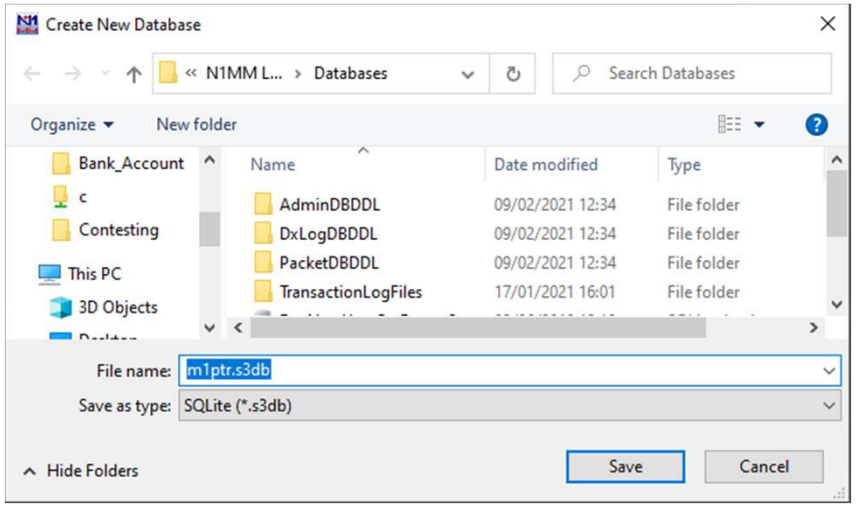
Create a Database for Contests

- New installations – a dialog box should appear offering option to create a new database. Best to use the default (ham.s3db) or can change e.g. *your callsign*.s3db
- Existing installations – From the Entry window select File->New Database (Use an existing database ONLY if you already have one already set up)





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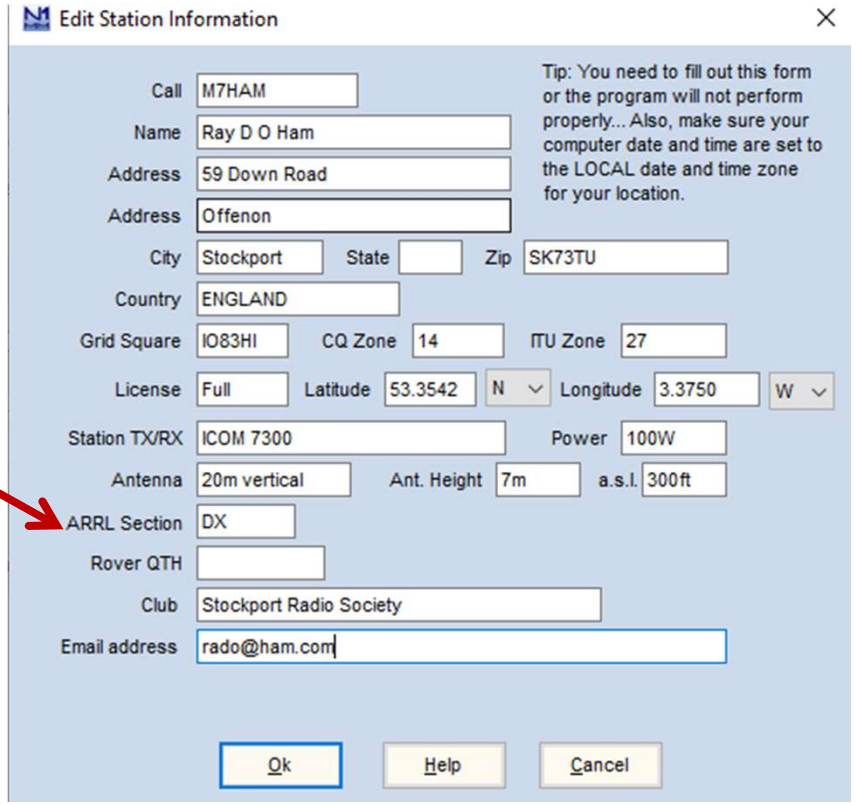
Configure Station Data – Mandatory!

- If the dialog box below doesn't pop up, from the Entry window select Config -> Change Your Station Data…

Must use DX for a non US station.



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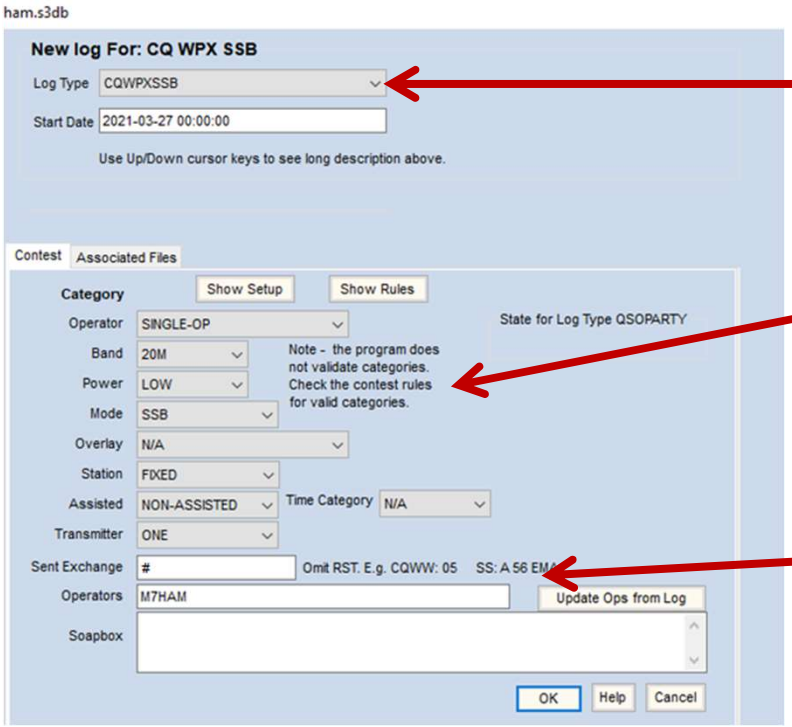
Create Log for a contest

- From Entry window select File -> New Log in Database ham.s3db. Set station parameters:



Select CQWPXSSB from drop down

Enter information applicable to your station and what is allowed in the rules

Enter # as the Exchange for WPX i.e. incrementing number
Enter the callsign you are using for the contest

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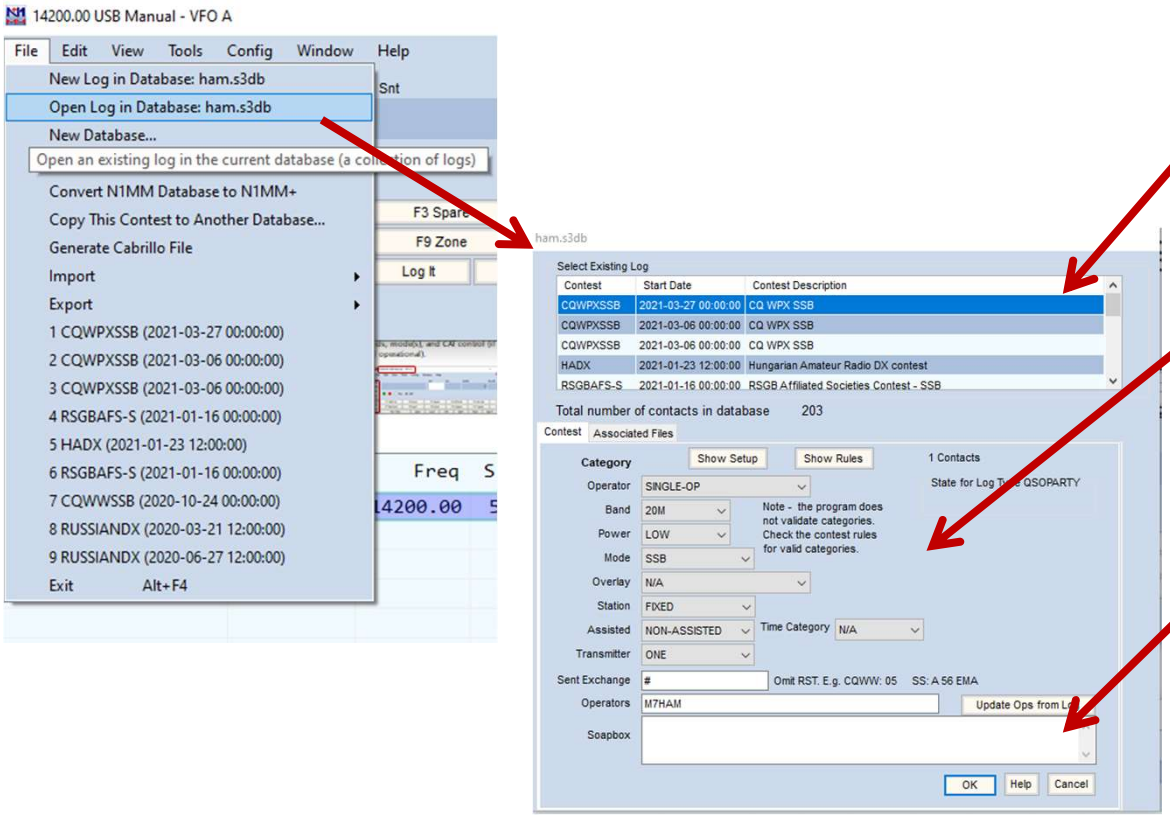
Open an Existing Log for a contest

- From Entry window select File -> Open Log in Database ham.s3db. Check contest parameters:



Select CQ WPX SSB from drop down

Check information is applicable to your station and what is allowed in the rules

Add any comments you wish to make about the contest before submitting the log.

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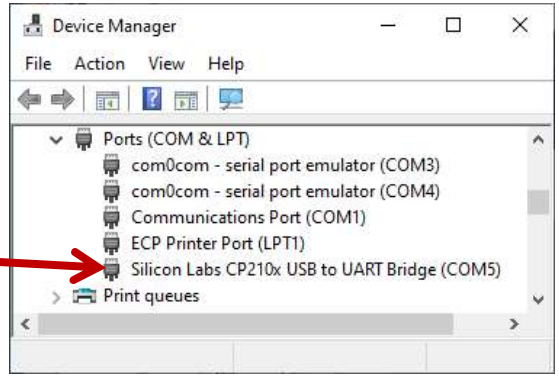
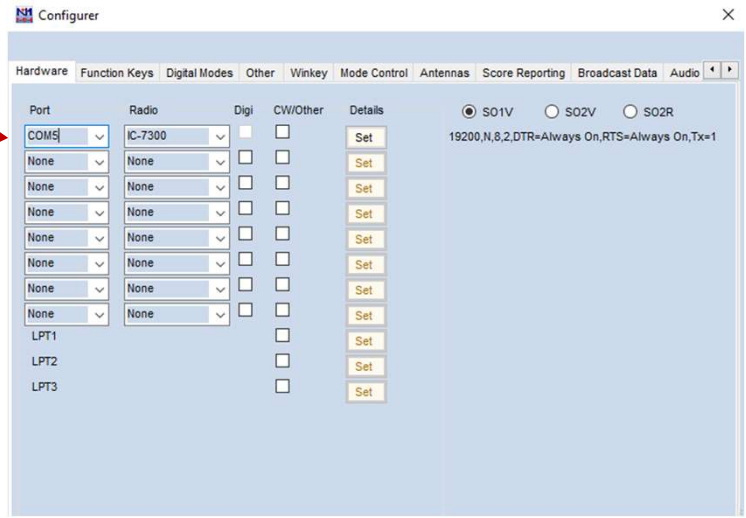
CAT Control Setup

- CAT allows N1MM to sense and change frequency and mode
- Requires serial interface to PC
- Use Device Manager to find Com port number
- From Entry window select Config ->Configure Ports, Mode Control, Audio, Others…

Cat Port and Rig

Com Port





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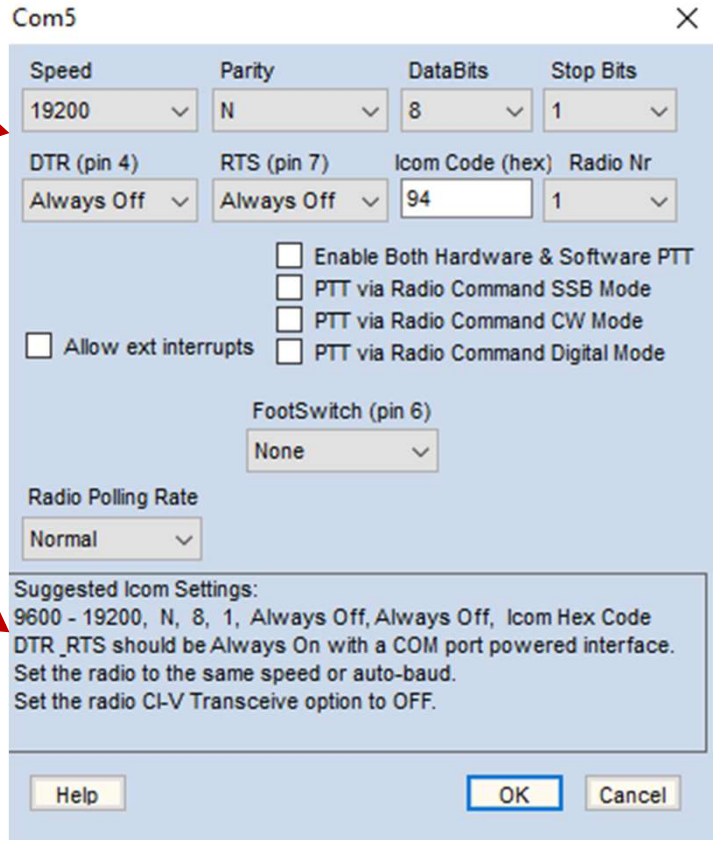
CAT Control Details

- Access this menu from Set button

Set these values to match your radio

Note the suggested settings here



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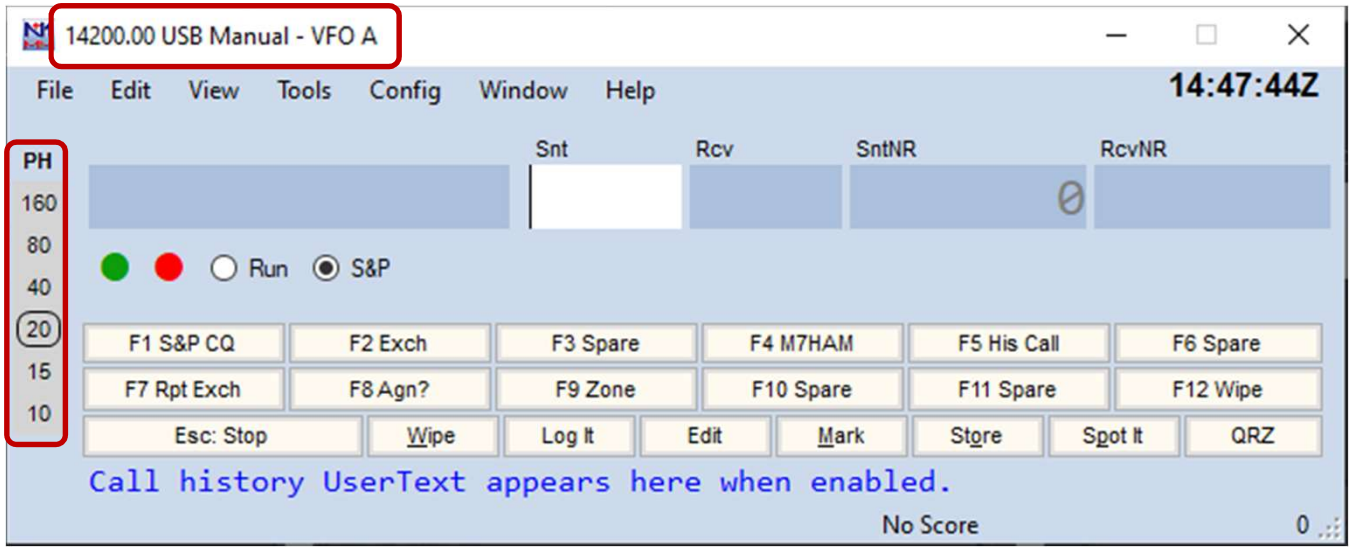
Testing

- Start N1MM+ and verify that the Entry window appears with expected entry fields, bands, mode(s), and CAT control (if installed and operational).



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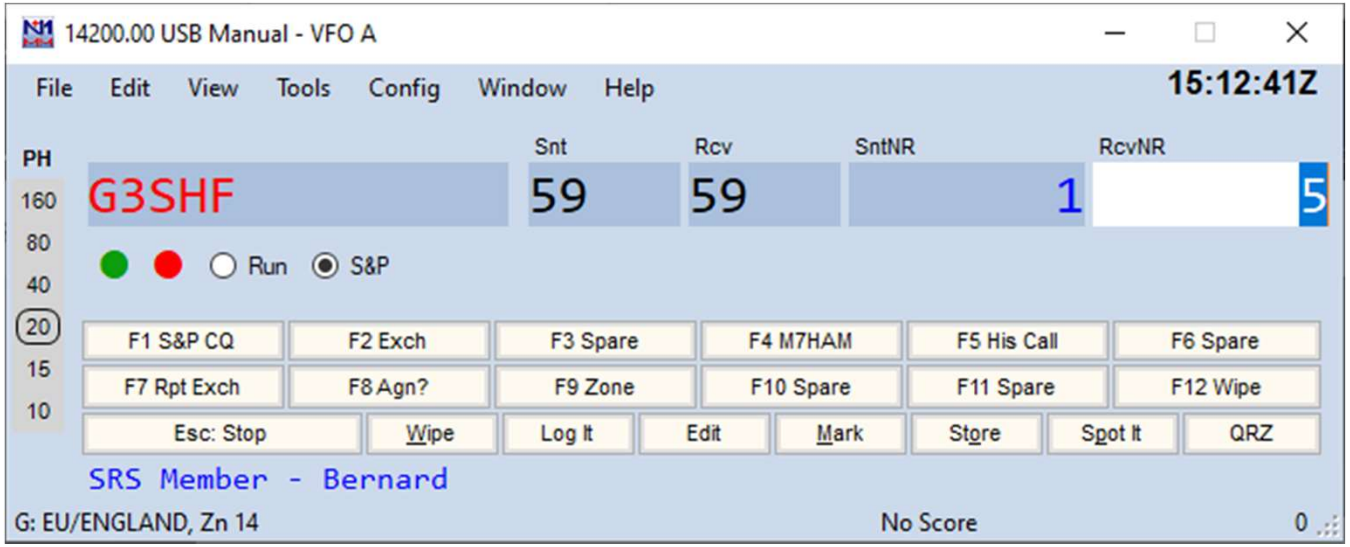
Test Logging

- Enter a dummy QSO in the Entry window



Use Space Bar (preferred) or Tab to go to next field

Use Enter to enter into log

Note. Function key F12 will clear entry fields (useful as a reset after error)

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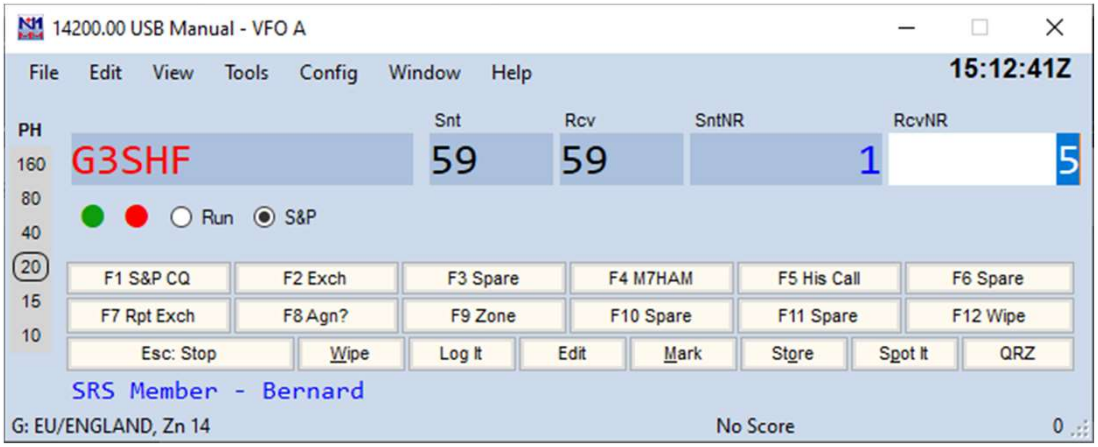
Verify Log

09/02/2021 15:16:18Z CQ WPX SSB - ham.s3db

MM-DD	HH:MM	Call	Freq	Snt	Rcv	Sent	NR	Wpx	M1	Pts
02-09	15:15	G3SHF	14200.00	59	59	1	5	G3	✔	1
02-09	15:15	G3SHF	14200.00	59	59	1	5	G3	✔	1



From Entry window select Window -> Log to view your Log (Ctrl L)
Check the log matches with the information entered in the Log Entry window

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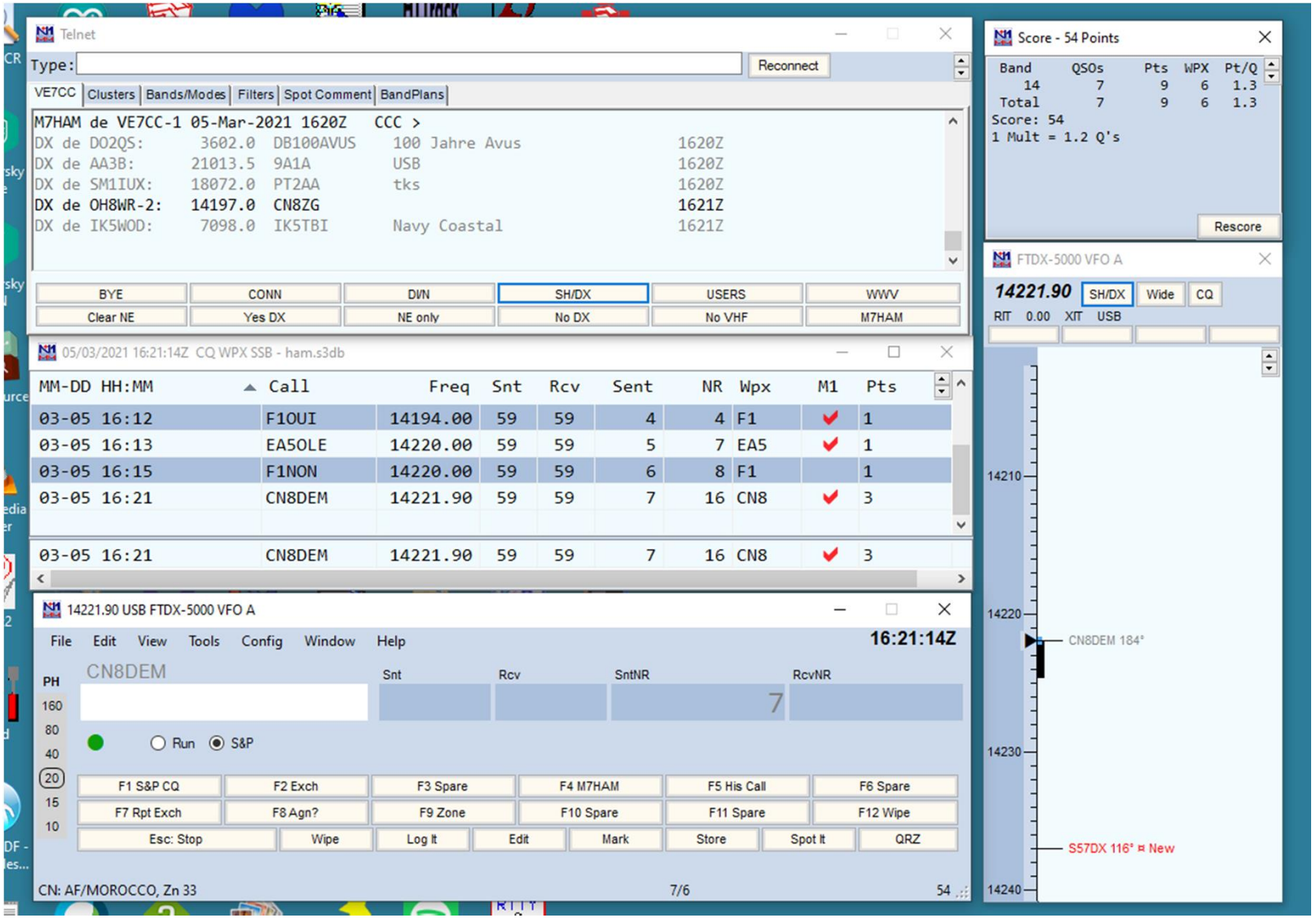
Typical N1MM+ Screen Layout



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OPERATIONS

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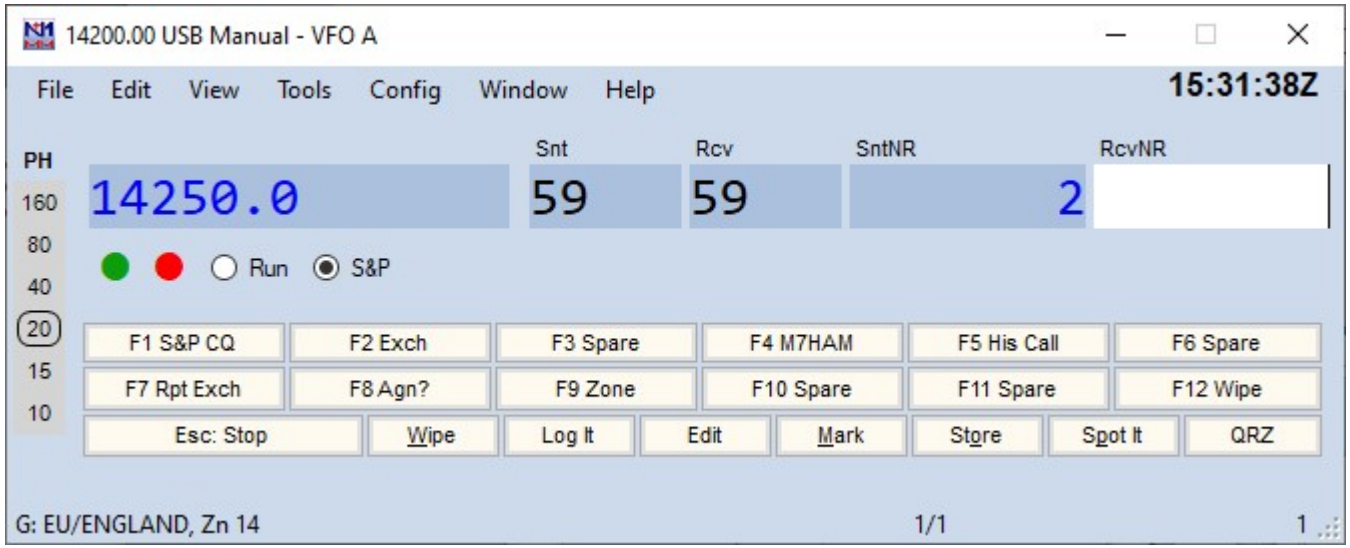
Setting Frequency

- With CAT control, just verify that Entry window shows radio dial frequency and correct mode
- Without CAT control, either click band/mode at left of Entry window or enter frequency in kHz



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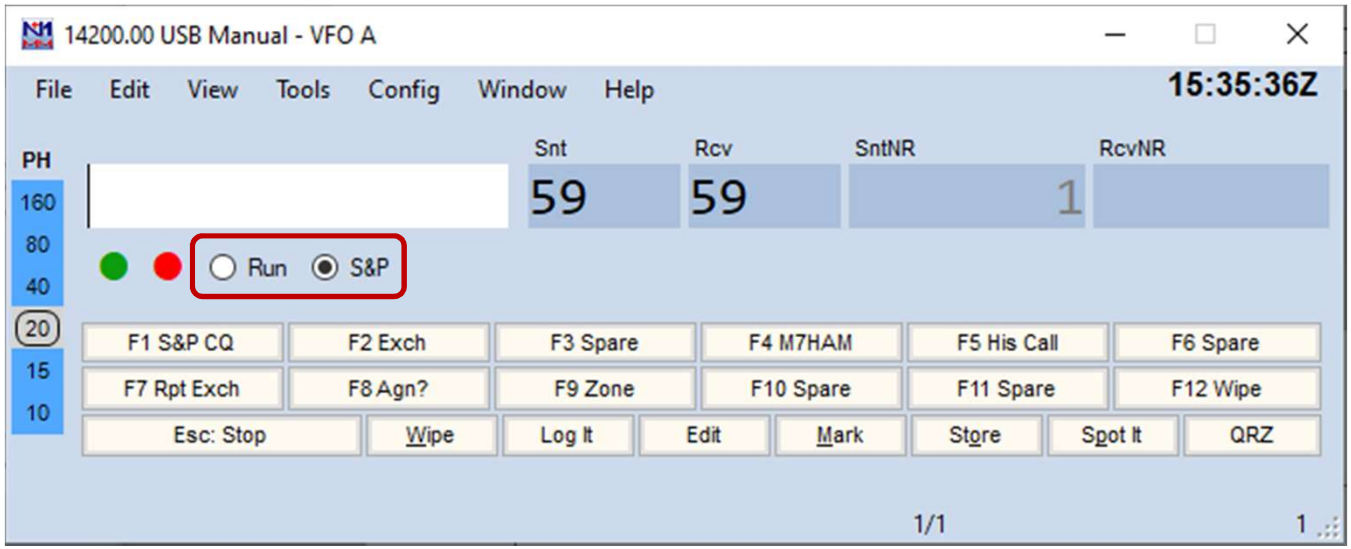
Set Run or S&P

- Run = I will call CQ
- S&P = “Search and Pounce” – I will answer CQs



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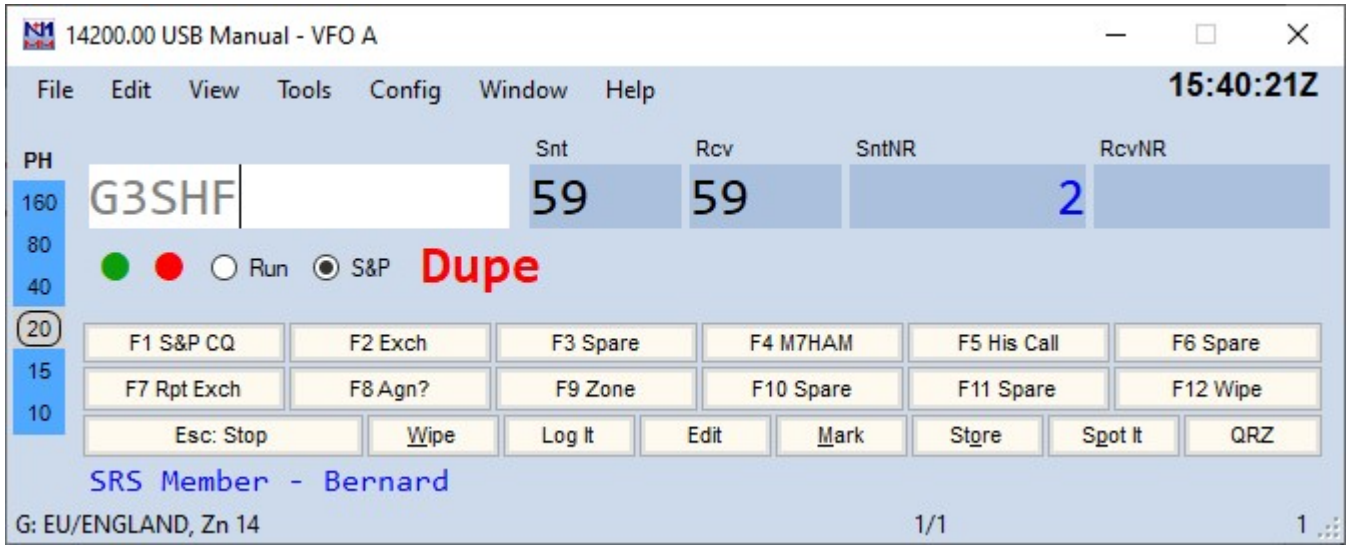
Dupe Checking

- A “Dupe” is a station already worked on the current band and mode. Working a dupe doesn’t add to our score.
- N1MM+ will identify a duplicate station when the call sign is entered. Note. Function key F12 will clear entry fields



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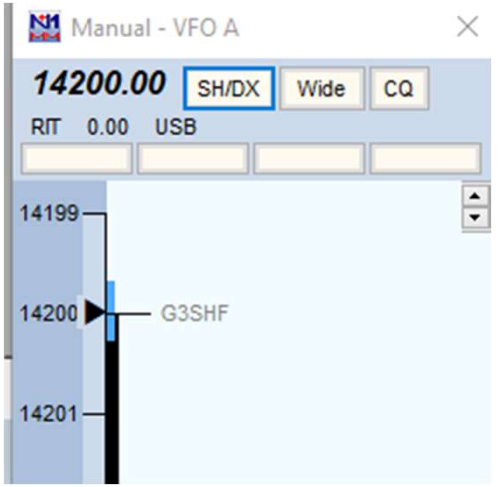
The Bandmap

- You can use the Bandmap window to return to a station you need but can't work at the moment
- Open the Bandmap window by selecting Window ->Bandmap from the Entry window
- Enter at least the call sign in the Entry window, then click "Store" to add to the Bandmap
- With CAT control, you can return to the station by clicking on the bandmap entry



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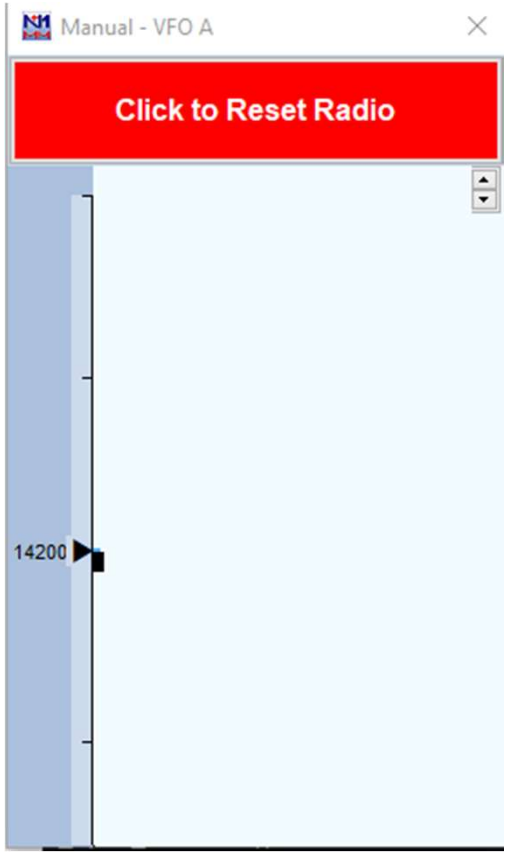
CAT Interface

- It is not uncommon during a contest that the CAT interface can lock up. Reasons are varied and include RFI or PC slow down
- If this happens a Reset button will appear in the Bandmap window
- Click on the button and a timer window appears while radio interface is reset



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Submitting the Log after the contest

- A copy of the log in Cabrillo format needs to be submitted at the end of the contest in a timely manner. Check the Rules before the contest starts.

- Recommended procedure
  - From the Entry window select File -> Generate Cabrillo File
  - Follow the instructions and note where the log is stored
  - Using a browser navigate to https://cqwpx.com/logcheck/
  - Follow the instructions and upload the log file stored above. Select *Stockport Radio Society*$_2$ from the drop down as your club

2 – Select the club name containing Stockport if an exact match is not displayed

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Backing Up the Log to Clublog

- A copy of the log in ADI format maybe also needed for upload to Clublog

- Recommended procedure
  - From the Entry window select File -> Export -> Export ADIF to File->Export ADIF to File…
  - Select a directory and give the backup a unique name. Eg.“M7HAM_CQWPX_SSB_2021.ADI”
  - Using a browser navigate to https://clublog.org/upload_html5.php
  - Follow the instructions, select the file stored above and be careful to merge with (and not replace) any existing log

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Final Note

- N1MM+ is thoroughly documented. The slides only covered the basic configuration to enter a contest.

  Much more info is here: https://n1mmwp.hamdocs.com/

- Any member of the SRS Contest Group will be happy to assist you with N1MM+ or advise you how to prepare for a contest such as CQWW WPX

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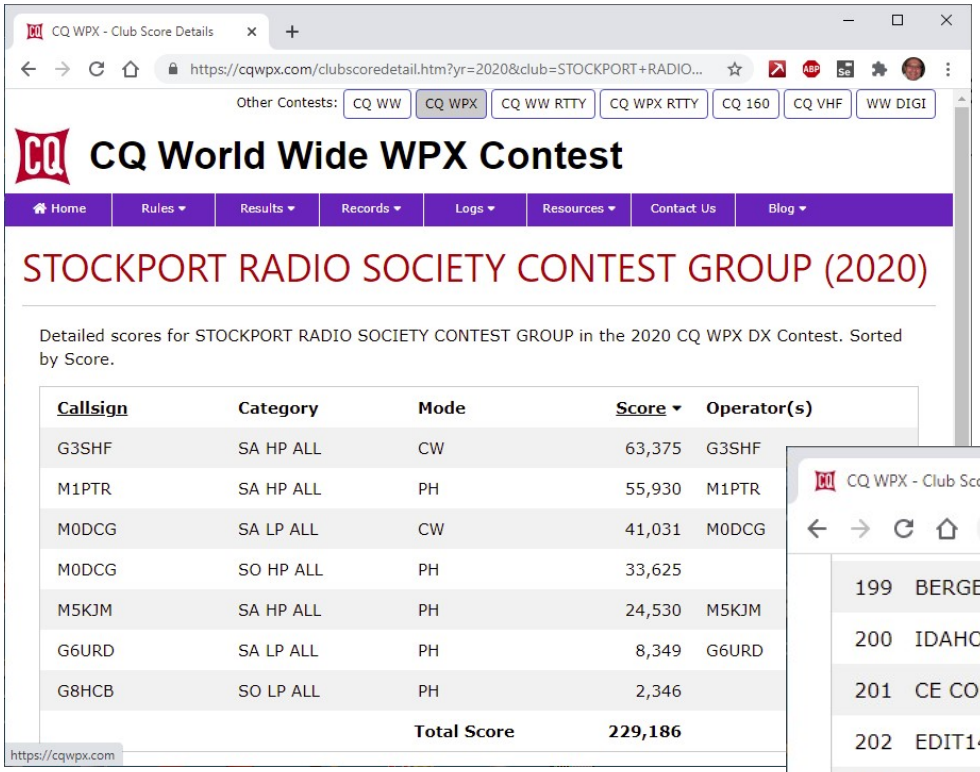
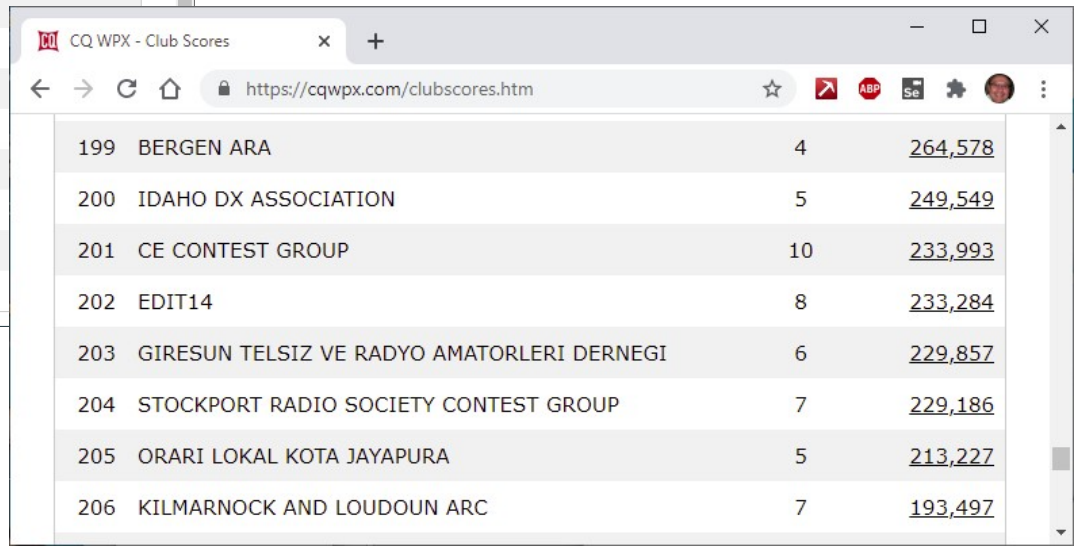
WPX Club League





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Q & A

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ADDITIONAL INFORMATION
Beyond the basic setup

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Additional Info

- Add a DX Cluster feed for assisted operation
- Using a Voice keyer to automate CQ calls
- Automatic PTT using F-Keys

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DX Cluster

- The DX Cluster is a world wide network of connected computers where users are logged in and add "DX spots“
- A DX spot is a piece of information sent from one station to every other one logged in on the DX Cluster, in real time.
- N1MM can be configured to connect to a DX Cluster so that DX Spots appear in the bandmap as callsigns
- During a contest clicking on a callsign in the bandmap automatically sets a radio with a CAT connection to the frequency of that station and places the callsign in the Entry window

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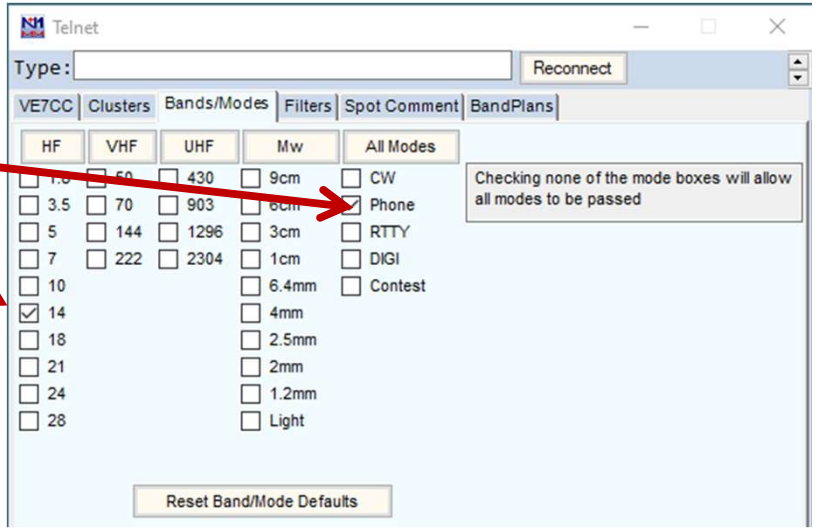
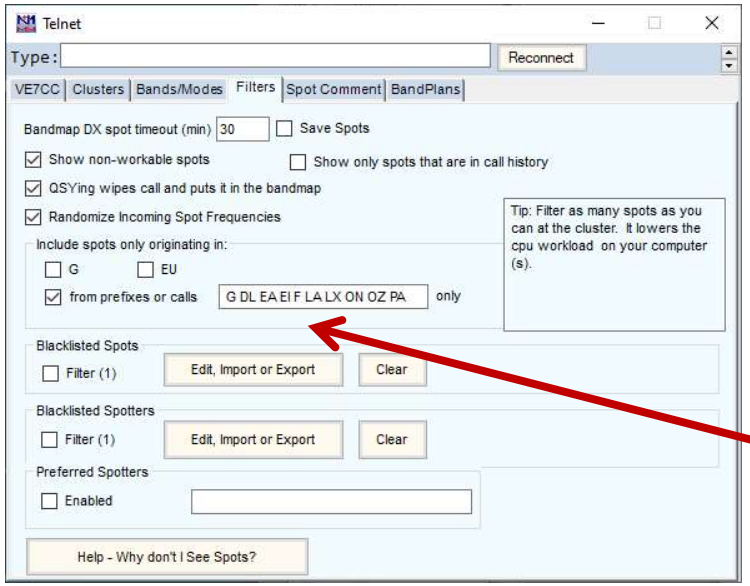
Setup DX Cluster

- Open a Telnet window from the Tools menu

Under Bands/Mode tab
Select band and mode to those of interest





Under Filter tab select local spot origins to improve your chances of hearing the spotted station

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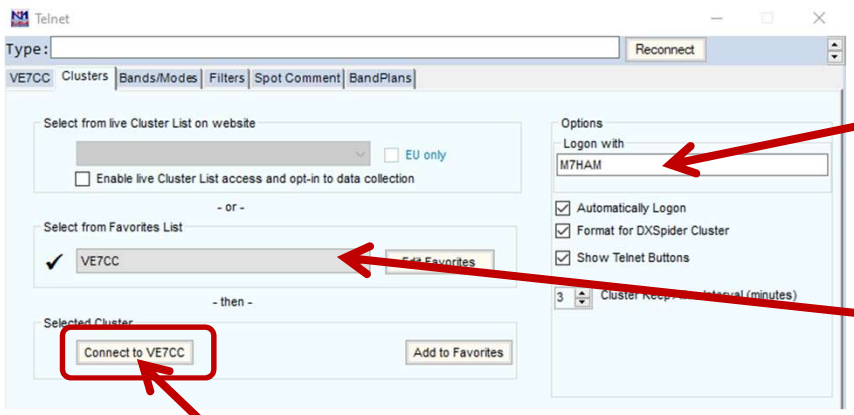
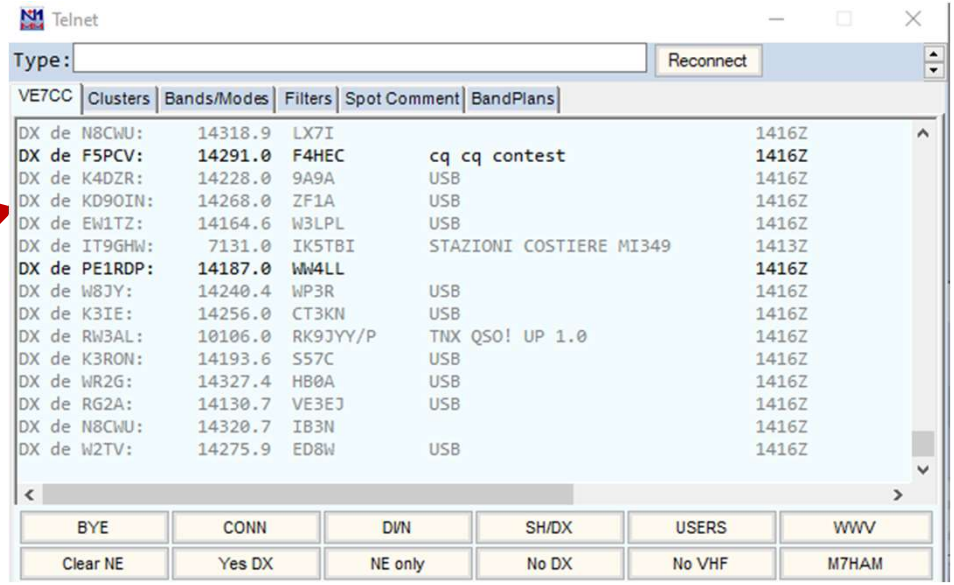
Connect to DX Cluster



Under Clusters tab enter your callsign and check automatic login

Select the DX Cluster node from the drop down. VE7CC or GB7MBC are popular nodes

Click Connect and open the node tab (e.g. VE7CC) to view the DX spots.
Greyed out spots are filtered to not appear in the bandmap



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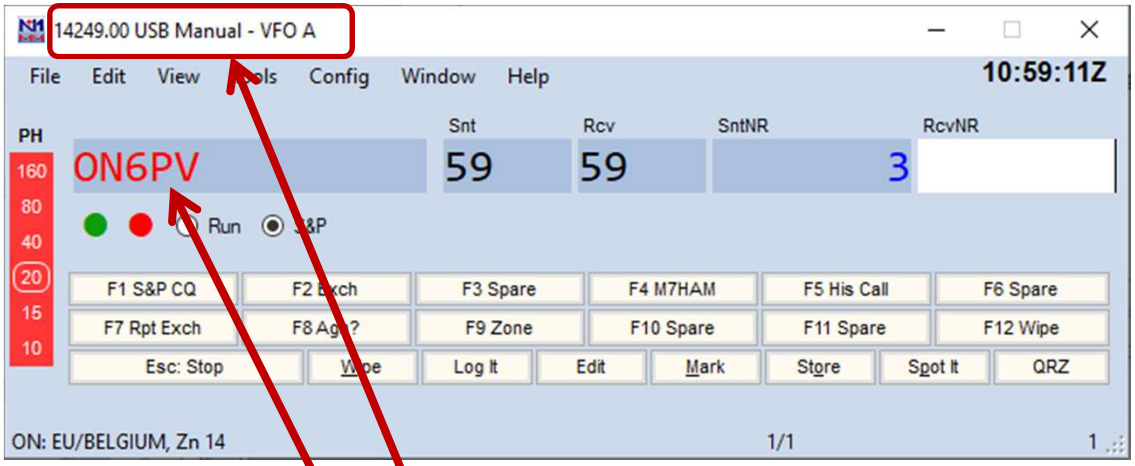
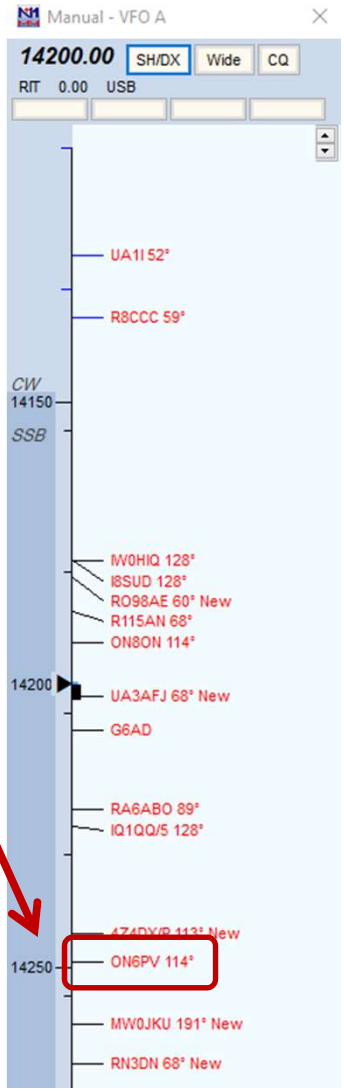
Using DX Cluster





Click on a callsign in the bandmap

Radio is set via CAT to station frequency
The callsign is placed in the Log Entry window ready for a QSO

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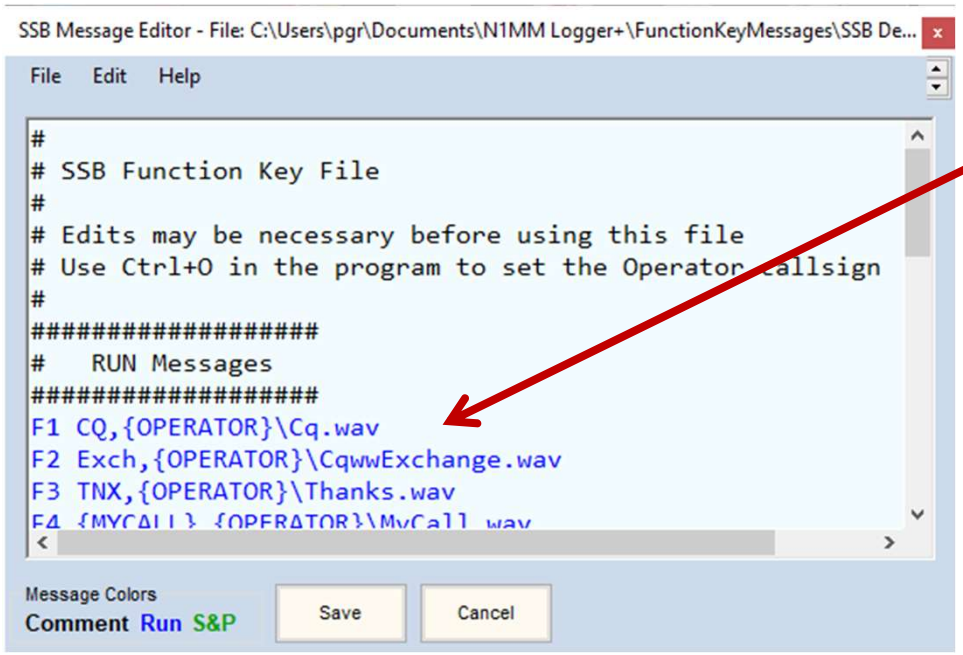
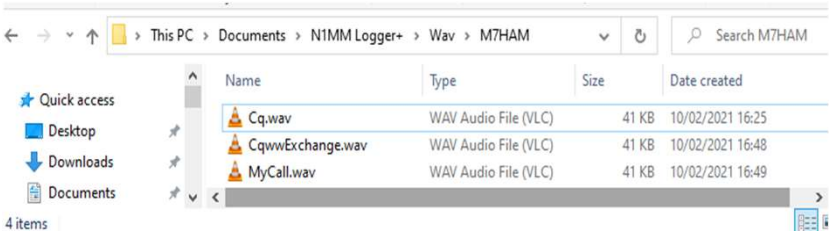
Setup a Voice keyer

- A voice keyer uses a sound file to play automated messages
- Function keys are used to select the required message .wav file.
- If the PC audio is wired to the rig's audio input and PTT is active the sound is transmitted when a Function key is pressed. E.G F1 is a CQ message
- Select Config > select Change CW/SSB/Digital Function Key > Change SSB Function Key definitions to view or change settings



Pre-recorded .wav files for each function key need to be stored in an operator directory e.g.

MyDocuments\N1MM Logger+\Wav\M7HAM



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Setup automatic PTT

- Push-to-Talk (PTT) can be switched a number of ways to allow automatic transmittal of stored messages using F-Keys
  - via serial or parallel port. This option uses the RTS or DTR lines on a serial port or pin 16 on an LPT port with a simple transistor interface circuit
  - via Winkeyer PTT output
  - via radio command - For radios that support it, this option eliminates any need for external hardware other than a serial port cable or a serial to USB converter. Check your radio manual for details

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References

- N1MM Website https://n1mmwp.hamdocs.com/
- N1MM Support https://groups.io/g/N1MMLoggerPlus
- VE7CC DX Cluster http://www.bcdxc.org/ve7cc/
- CQWW Website https://www.cqww.com/
- Clublog guide https://www.g8srs.co.uk/hf-ladder-2/

THE END