N1MM+ Usage With WSJT-X for FT8

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Briefing for CMARA FD Operators

Presented at the last CMARA Club Meeting Before Field Day

This presentation describes how to interface N1MM+ to WSJT-X
For purposes of operating the FT8 mode

This is a first draft, to help prospective digital and FT8 users.
Information here may be incomplete or not entirely accurate.

Reference:
https://n1mmwp.hamdocs.com/n1mmwpfiles/Download/Additional%20Support%20Files/N1MMWSJTInstructions.pdf

TOPICS: N1MM+ and WSJT-X

- Install N1MM+: Full Install, then Latest Update
- Install WSJT-X
- N1MM+ Setup: Log Database, Log, Station Information
- Configure: N1MM+
- Configure WSJT-X

TOPICS: N1MM+ Installation

- **Download and Install N1MM+ Watch K8UT Video**
  - Software Installation – ***Full Install***, followed by ***Latest Update***
    - All this is necessary so that ***Networking*** will work properly
    - All stations ***must*** use same ***N1MM+ software version***
    - All stations ***must*** use same ***log database*** and ***log***
    - All stations ***must*** use same ***support files:*** country file, super check partial file
    - Enable "***Run as Administrator***" on Desktop Icon
      so ***Master Computer*** can update Time Clock on ***Slave Computers***
    - Install ***Log Database*** and ***Support Files*** provided by FD Chairman

Software Installation – Full Install

- Refer to K8UT Video: N1MMplusDownloadAndInstall_2017.mp4
- N1MM Logger + Website
  http://n1mm.hamdocs.com/tiki-index.php
- Select “Files”
- Download and Install “N1MM+ Full Install”
  - **FD Chairman will provide the Full Install to use at FD meeting or FD site**
  - Install by clicking on the self-installing .exe file
  - This can also be found on the CMARA FD Thumb Drive
- Use the default directories for everything (unless…)
- After Installation
  - Right Click on N1MM+ ICON
  - Use Properties at the bottom
  - Use Compatibility Tab
  - **Check: Run this program as an administrator**
  - This will assure that the slave computers can have their date time clocks updated
- Full Install Only Needs to be Done ONCE!

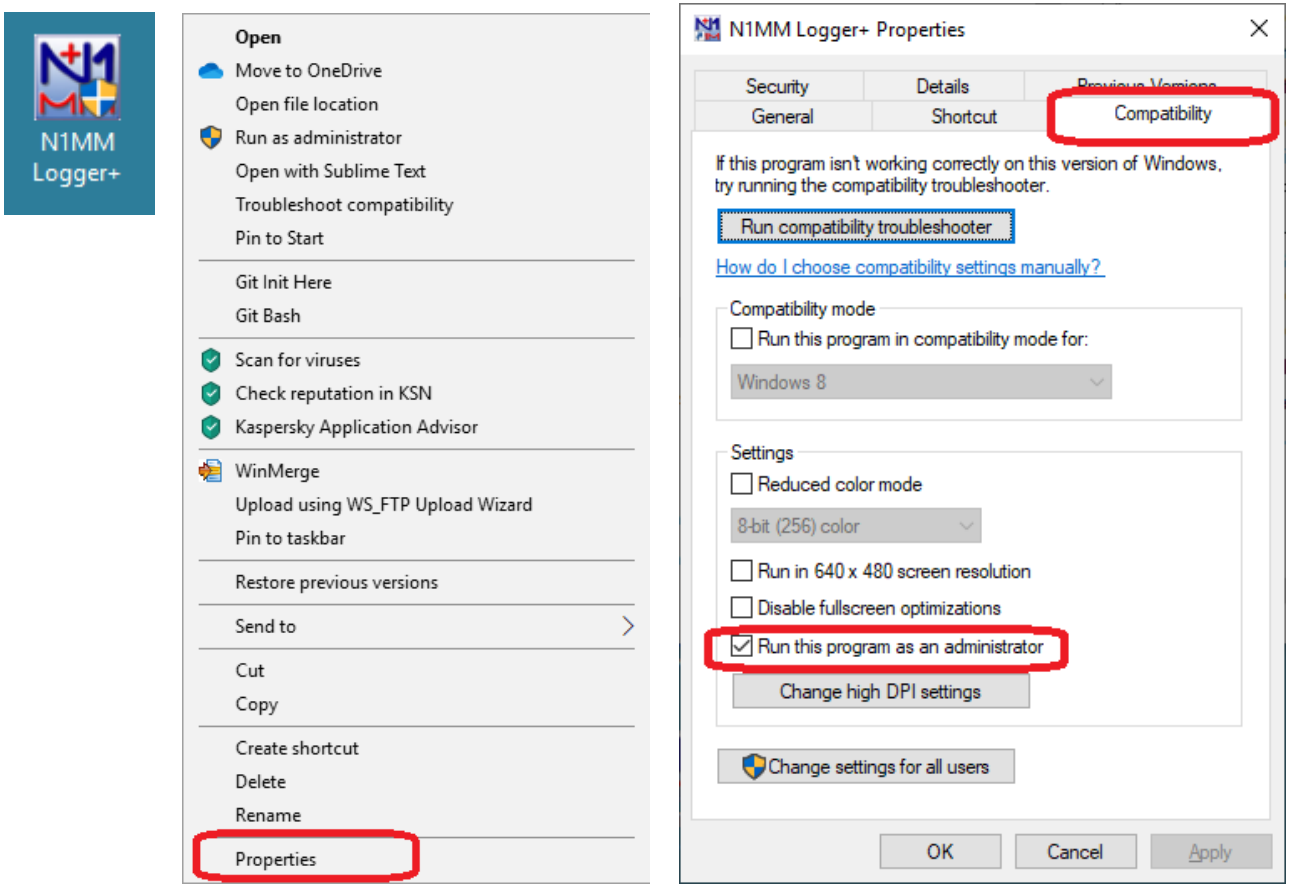
Software Installation – Install Update

- Refer to K8UT Video: N1MMplusDownloadAndInstall_2017.mp4
- N1MM Logger + Website
  http://n1mm.hamdocs.com/tiki-index.php
- Select “Files”
- Download and Install “N1MM+ Latest Update” use latest version
  - **FD Chairman will provide the latest update to use at FD meeting or FD site**
  - All computers must run the SAME version of N1MM+
  - Install by clicking on the self-installing .exe file
  - This file is also on the CMARA FD Thumb Drive
- Use the default directories for everything (unless…)
- Read the manual!
  - There is plenty of documentation:
  - N1MMplus Logger Manual.pdf
  - N1MMplus Quick Start Guide.pdf
  - N1MMplus User Guide.pdf
  - N1MM References (crib sheets)
- Help Files (some are on the Internet, you will need a connection)

N1MM+ Run as Administrator

Networking requires everyone to Update Time Clocks by Master

1. Right Click on N1MM+ Icon
2. Select Properties
3. Enable Run as Administrator



TOPICS: CMARA FD N1MM+ Use

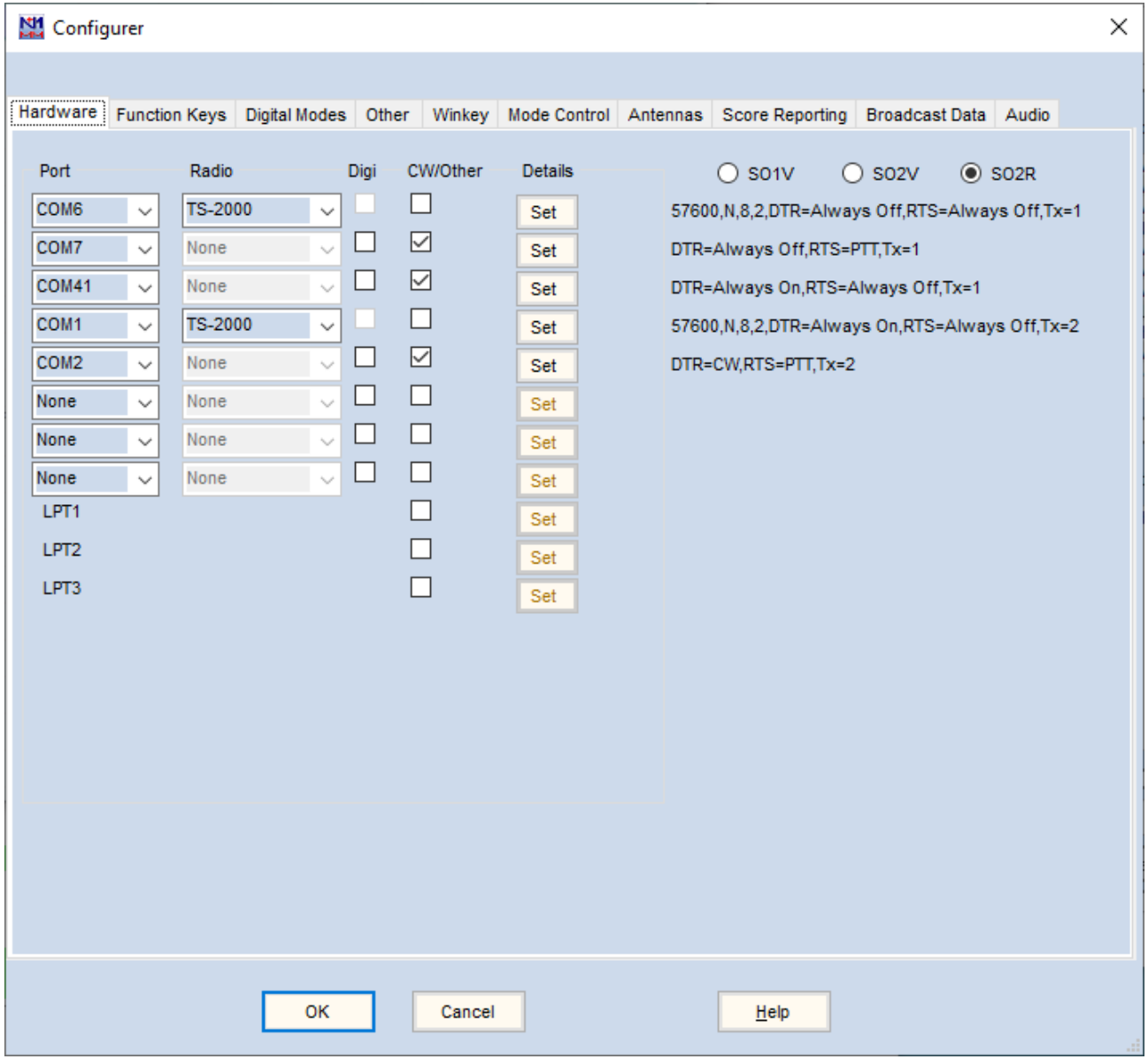
- **N1MM+ First Run and Setup Watch K8UT Video**
  - Hardware / Software Setup – different per radio and computer
    - USB/RS-232 **CAT** Control – ***Required*** for Network Reporting of Rig Frequency
    - USB/RS-232 **PTT** / CW / FSK – ***Required*** for Digital Voice Keyer (DVK), Auto CW, FSK RTTY
    - Computer **Sound Card Interface**– ***Required*** for DVK & Digital Modes including FT8
    - Digital PSK/RTTY/FT8 – ***Required***, Soundcard Interface and ***PTT*** required.
  - Network Setup – Open Network Status Window and Enable Networking
  - Operator Setup – use CTRL+O then callsign when starting to operate
    use ***OFF***, LUNCH, DINNER, SLEEP, etc. when leaving to indicate station is idle

N1MM+ Configuration:

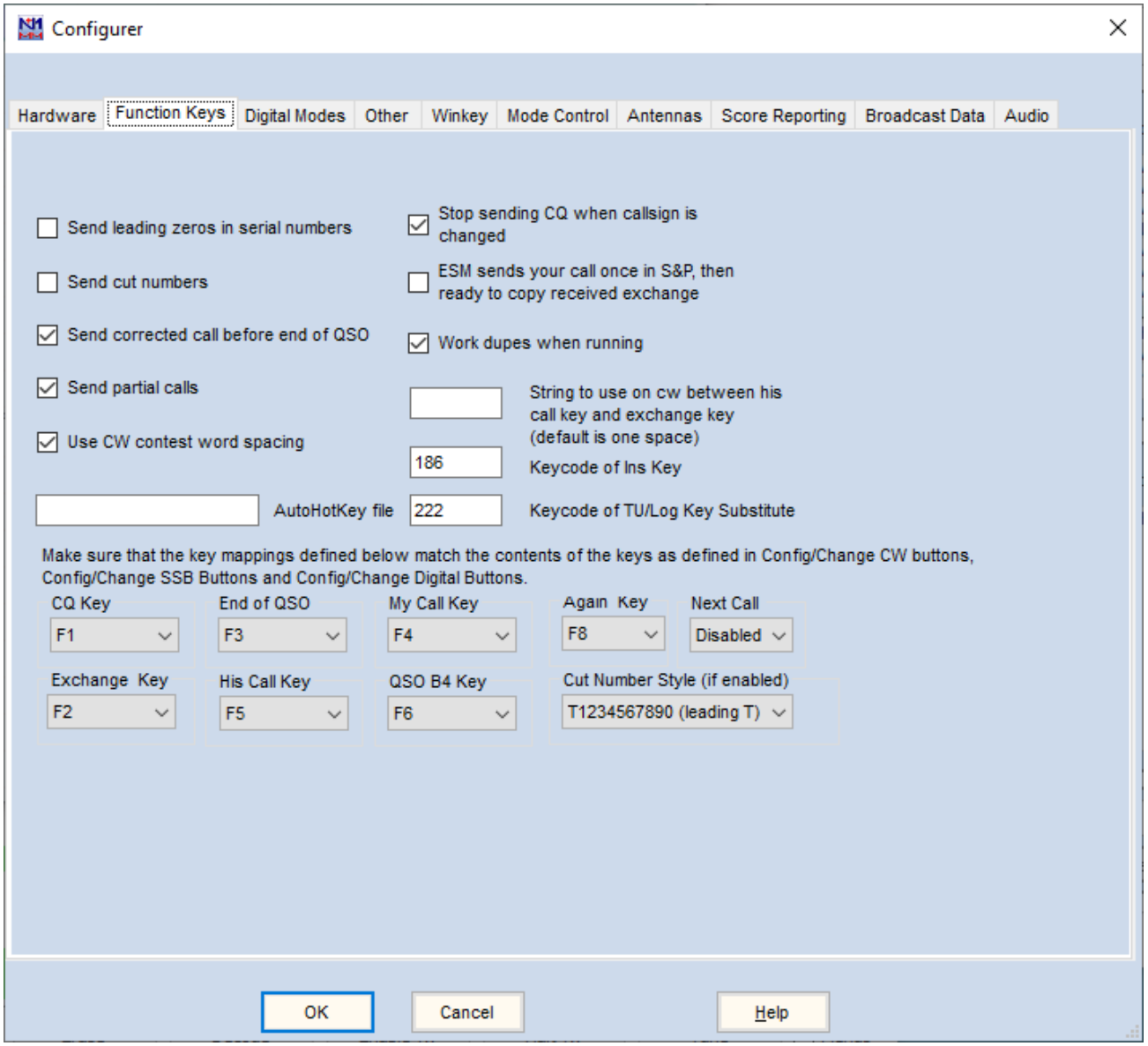
1) Hardware – CAT, PTT, FSK, CW, WinKeyer
2) Function Keys
3) Digital Modes – FLDIGI, MMTTY, MMVARI, WSJT-X
4) Other
5) WinKey
6) Mode Control
7) Antennas
8) Score Reporting
9) Broadcast Data
10) Audio

N1MM+ Configuration: Hardware

Configuration for CAT Control, PTT, CW, FSK, WinKeyer

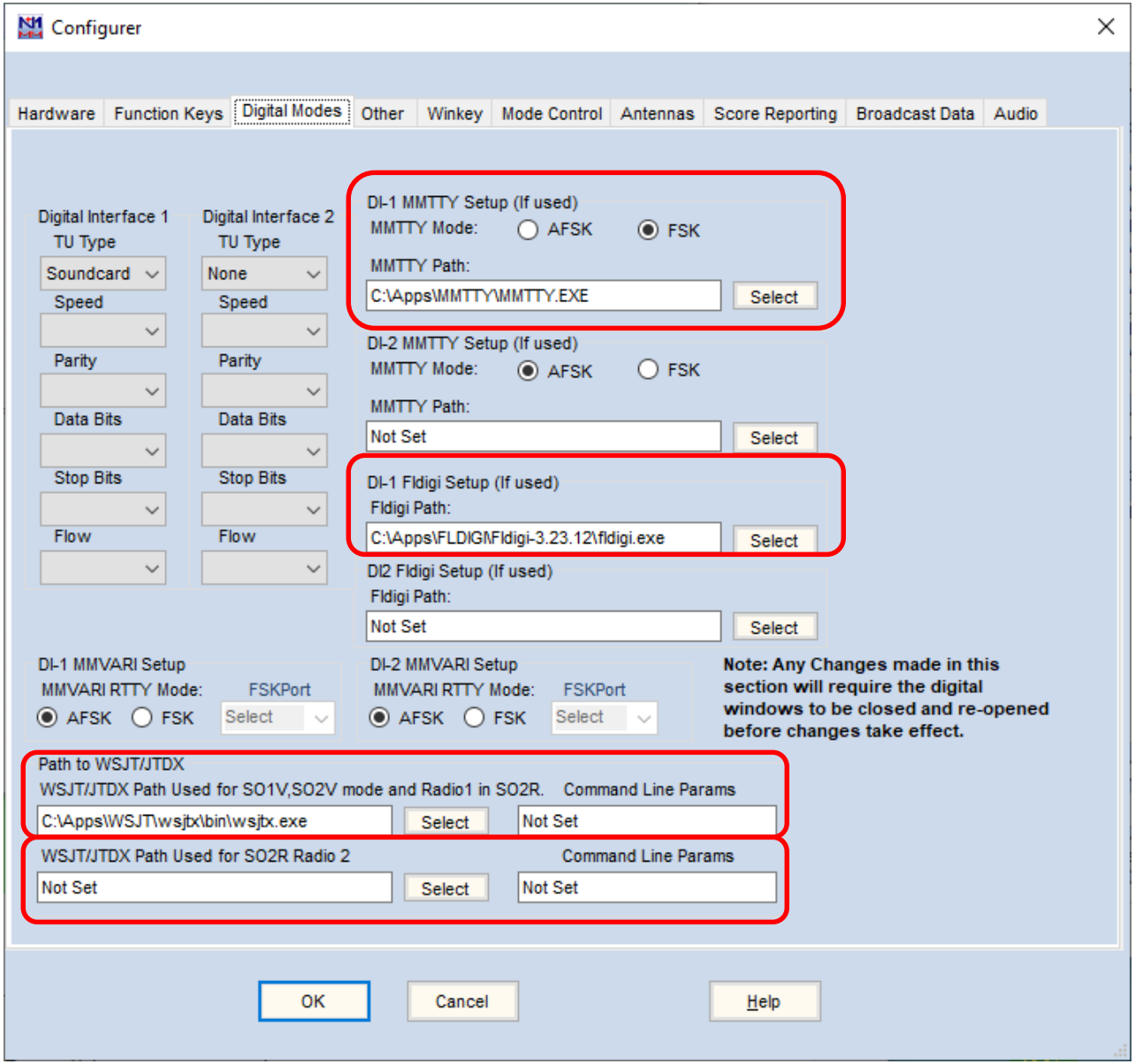


N1MM+ Configuration: Function Keys

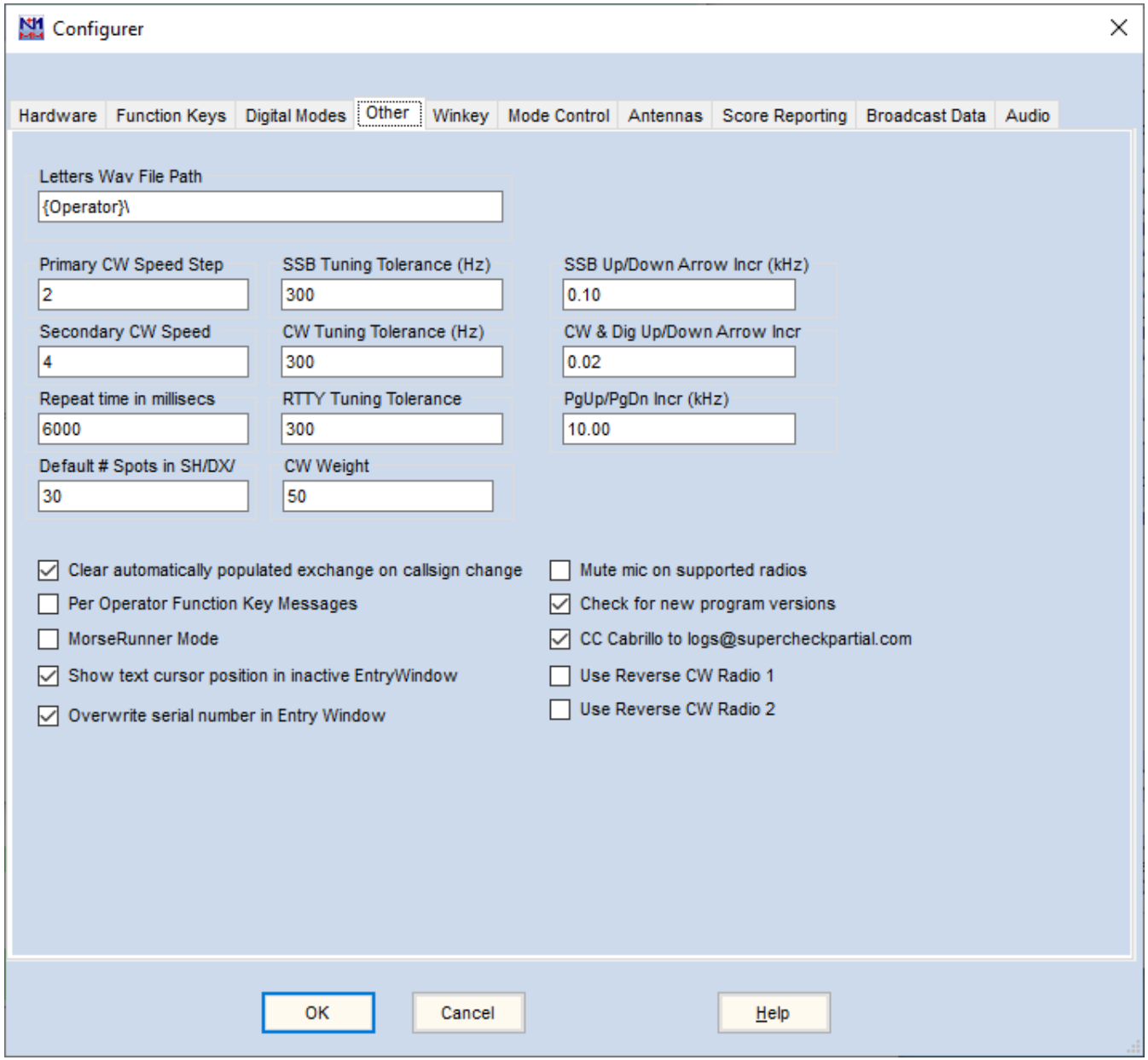


N1MM+ Configuration: Digital Modes

Provides Interface from N1MM+ to Digital Mode Application Executables

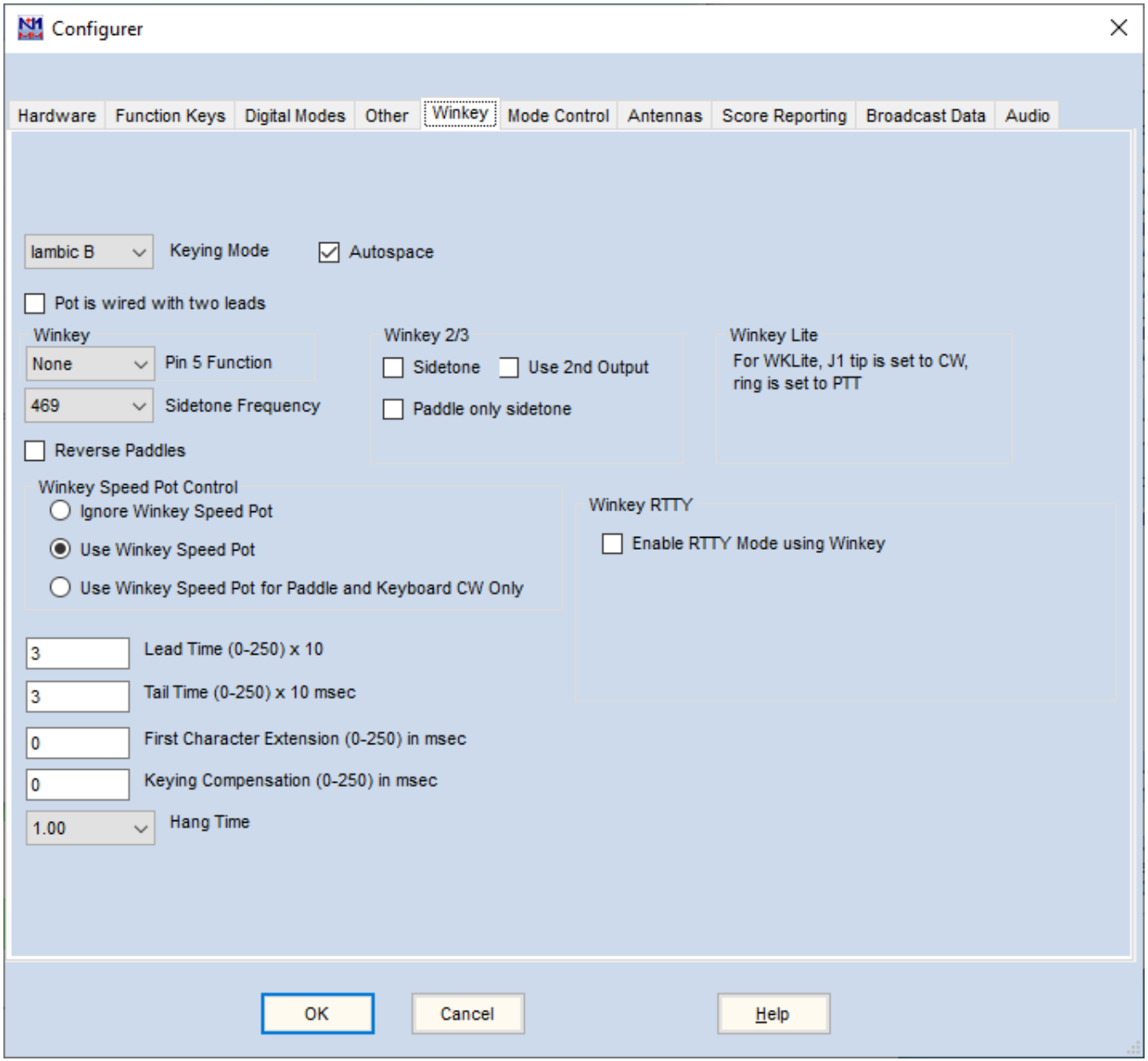


N1MM+ Configuration: Other



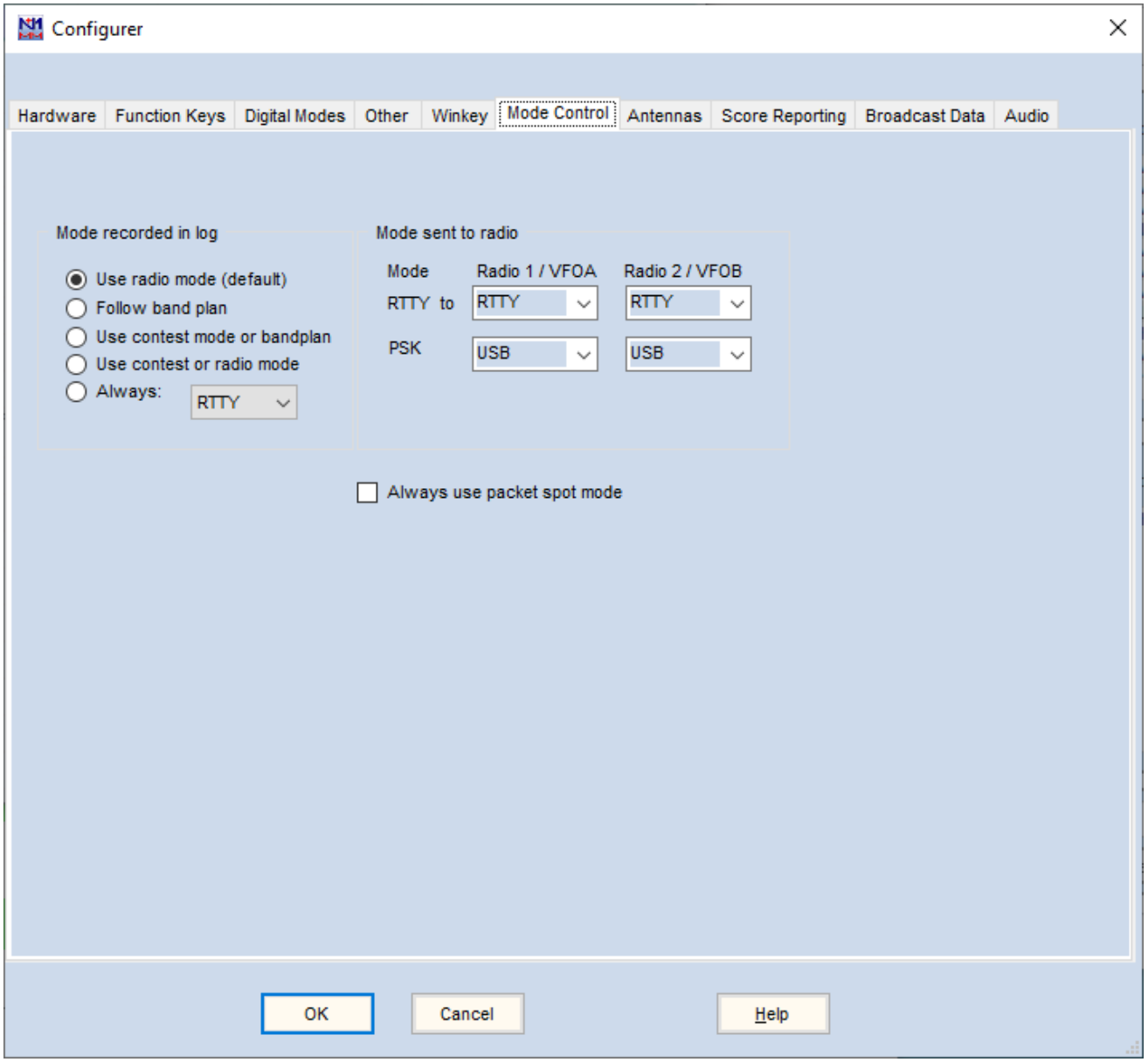
N1MM+ Configuration: WinKey

Use if K1EL WinKeyer is used for CW/RTTY



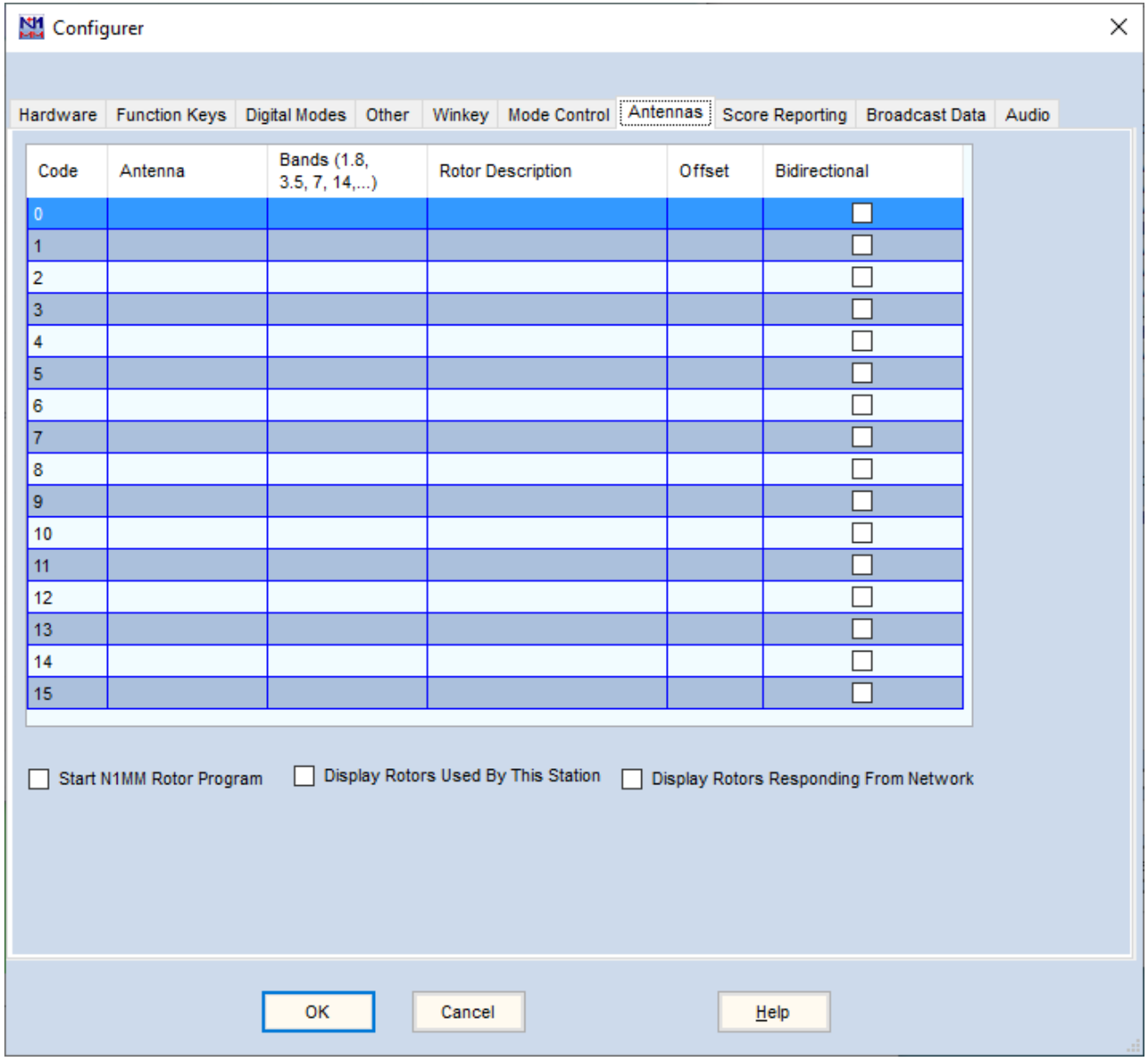
N1MM+ Configuration: Mode Control

Used to reconcile sound card modes and radio emission mode



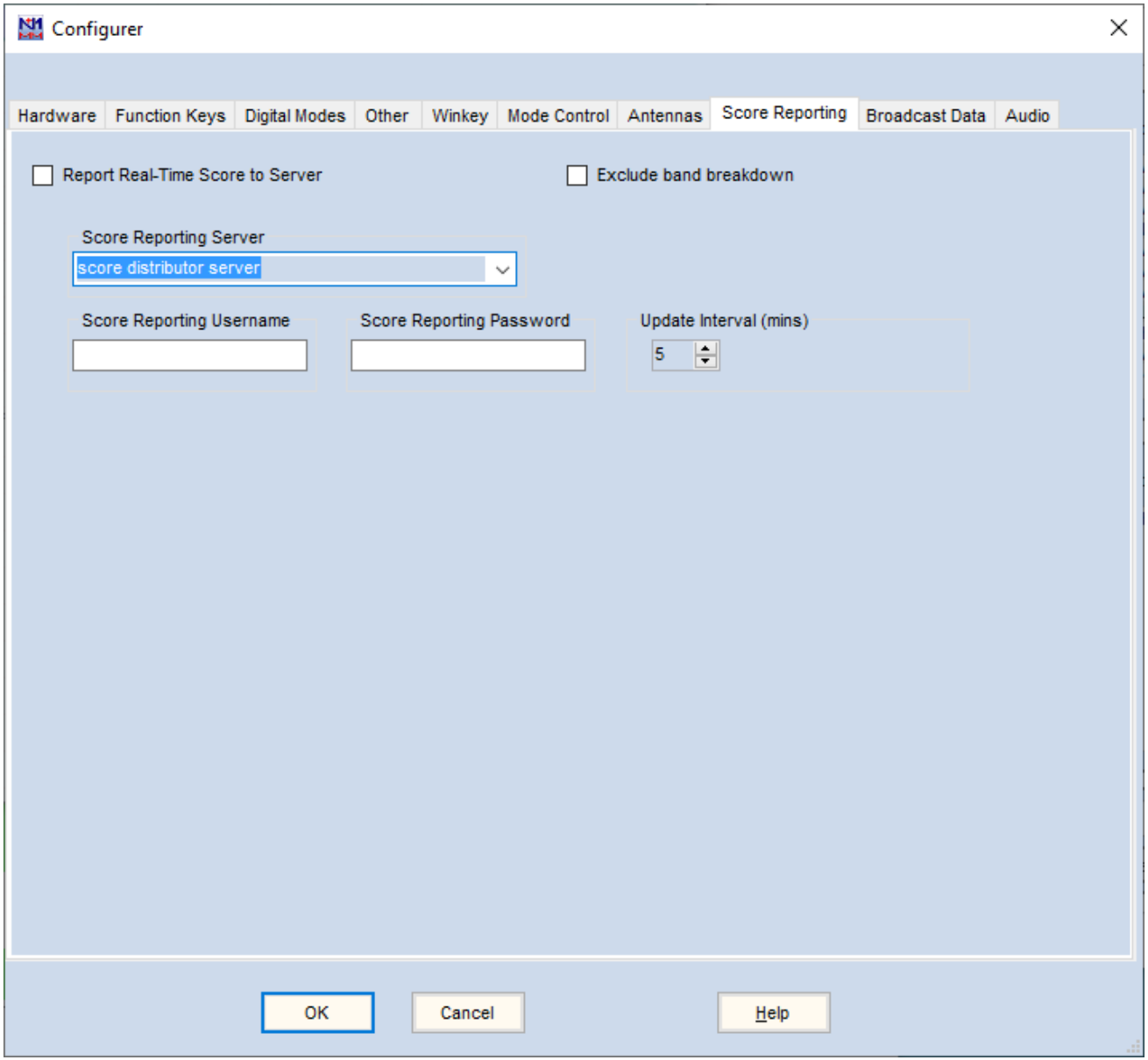
N1MM+ Configuration: Antennas

Use if N1MM+ is used to automatically switch antennas



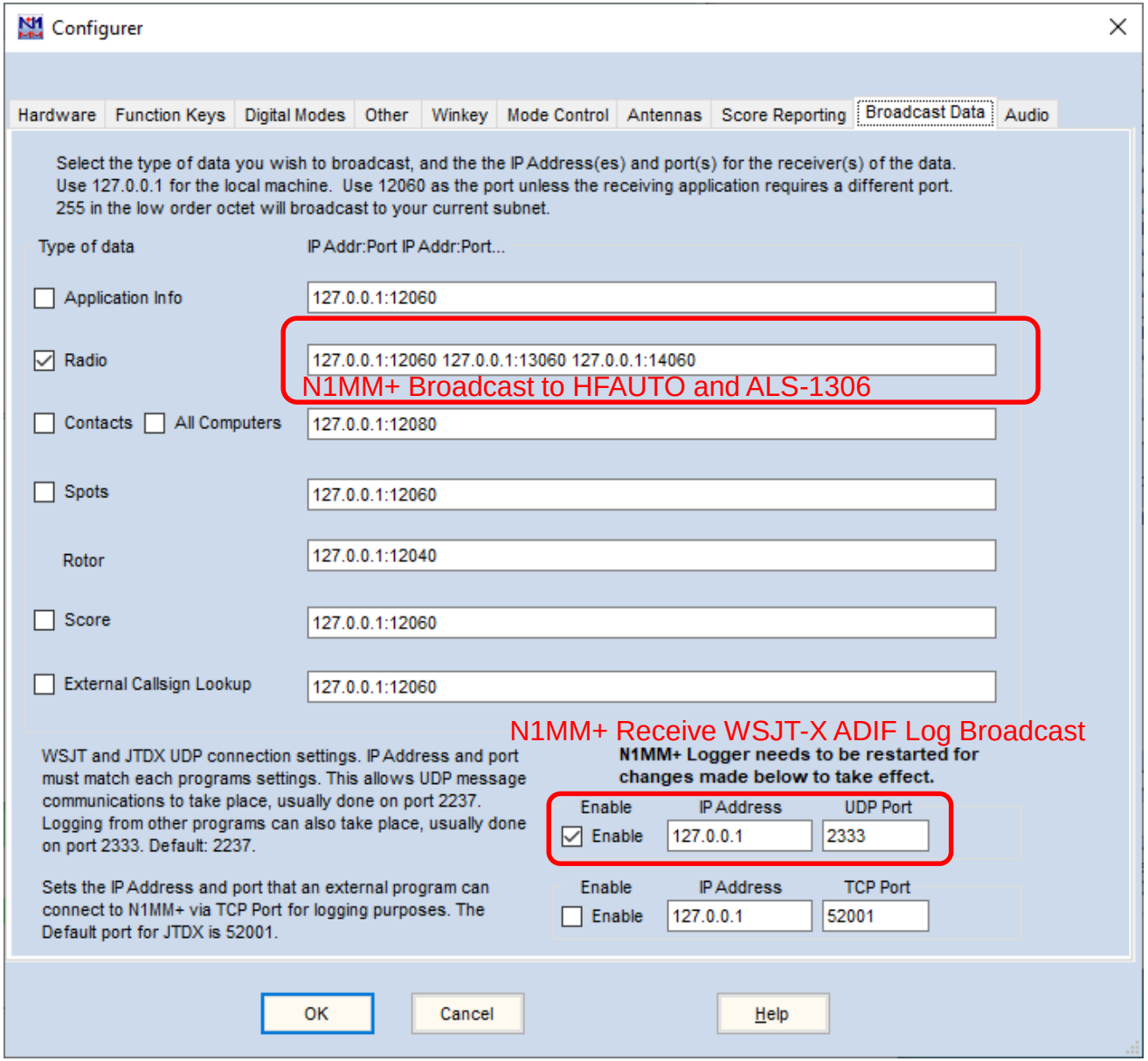
N1MM+ Configuration: Score Reporting

Use if N1MM+ is setup to automatically report scores



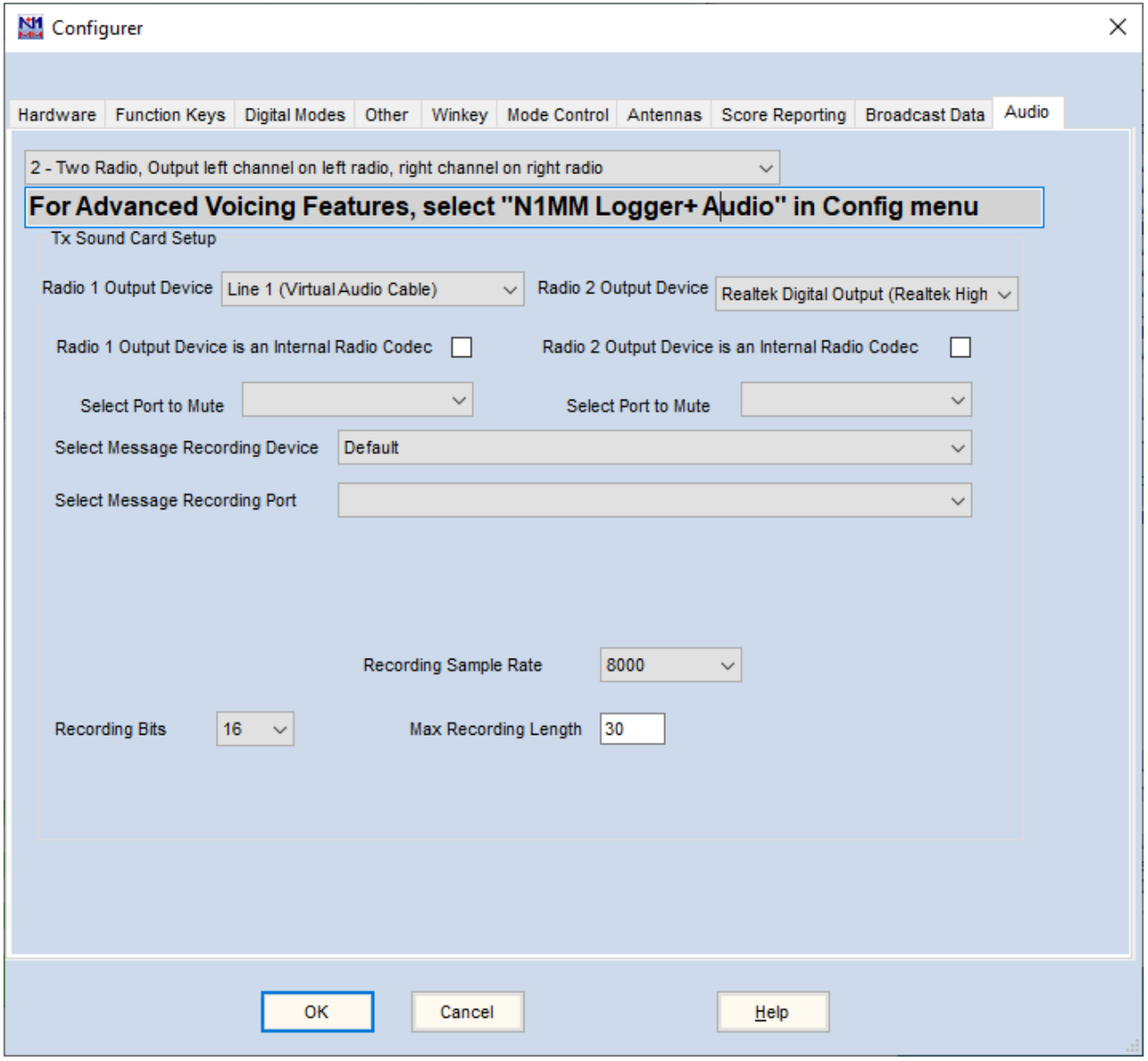
N1MM+ Configuration: Broadcast Data

Setup UDP and TCP/IP Interface to Other Applications



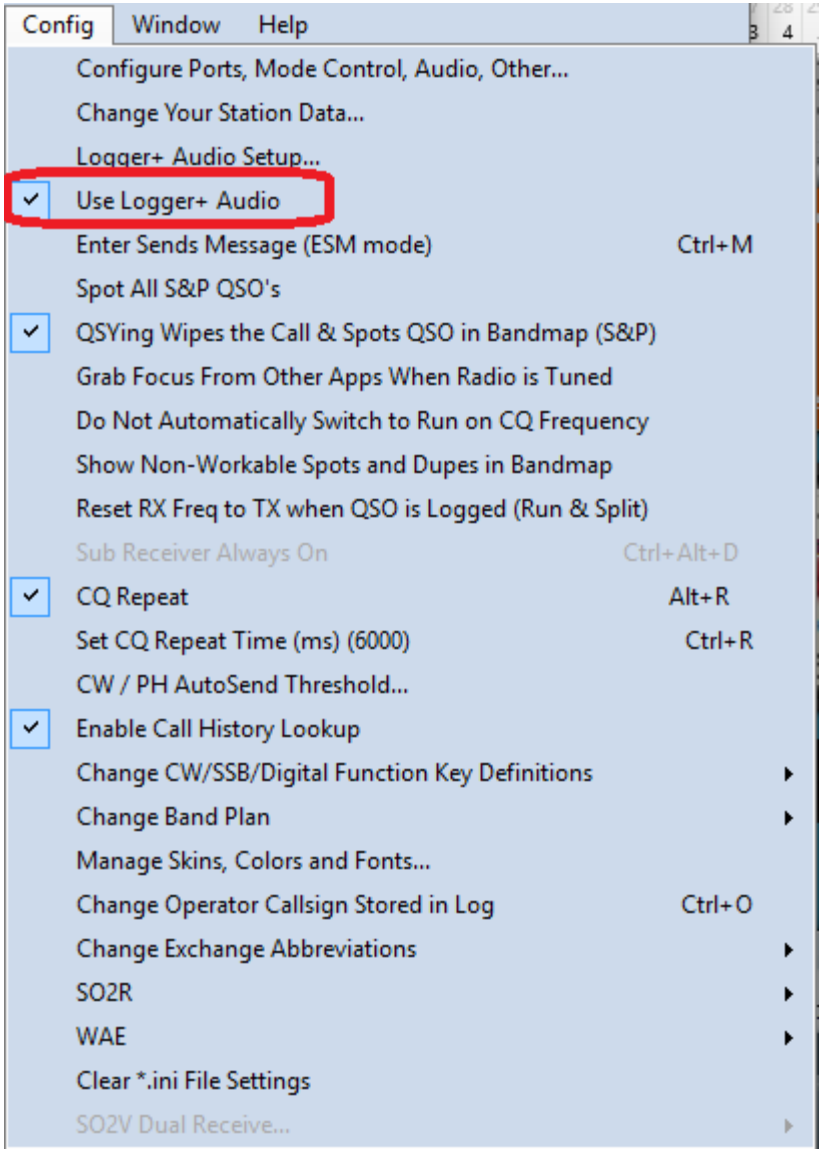
N1MM+ Configuration: Audio

Setup Audio Input / Output Devices



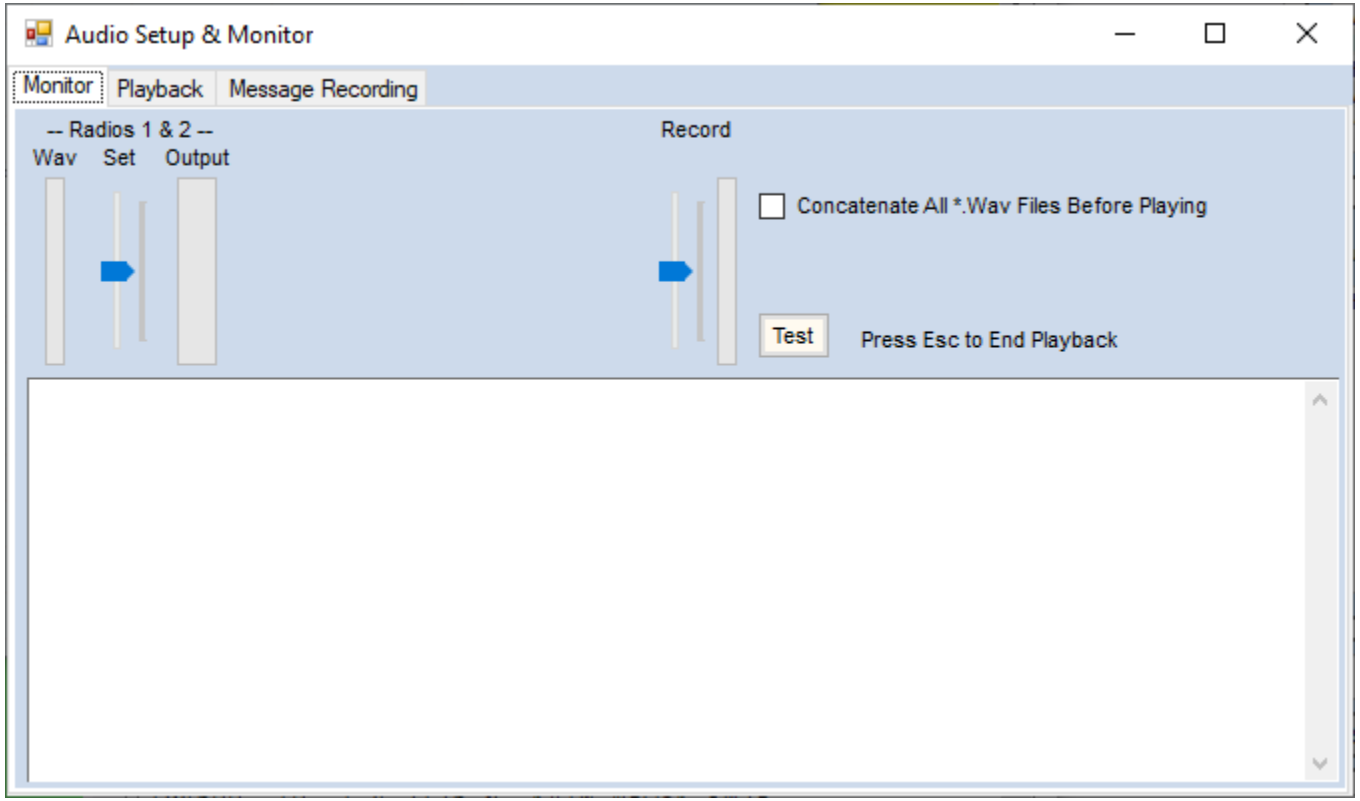
N1MM+ Configuration: Master List

Setup Audio Input / Output Devices



N1MM+ Configuration: Logger+ Audio

Setup Audio Input / Output Devices



WSJT-X Configuration: Settings

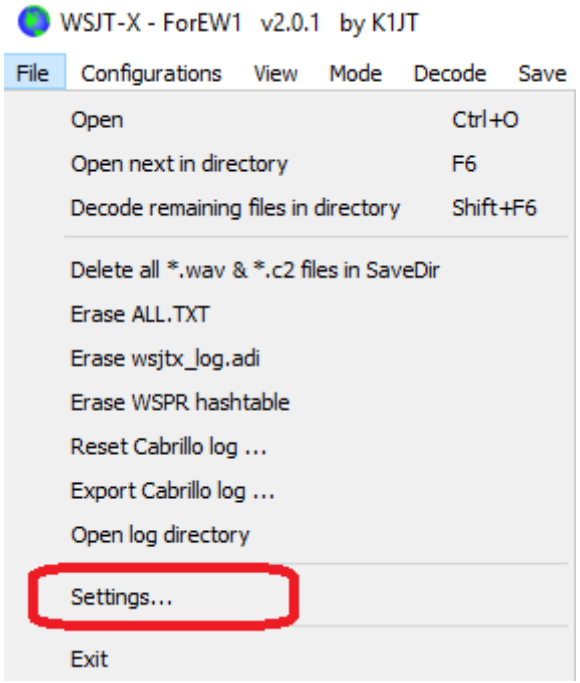
These items need to be setup

Other items optional

1) General – Station Callsign and Maidenhead Grid
2) Radio – Radio Type (CAT Commands), COM Port, Baudrate, PTT
3) Audio – Audio Input and Output
4) TX Macros
5) Reporting – UDP Broadcast to N1MM+ (ADIF Log Entry)
6) Frequencies
7) Colors
8) Advanced

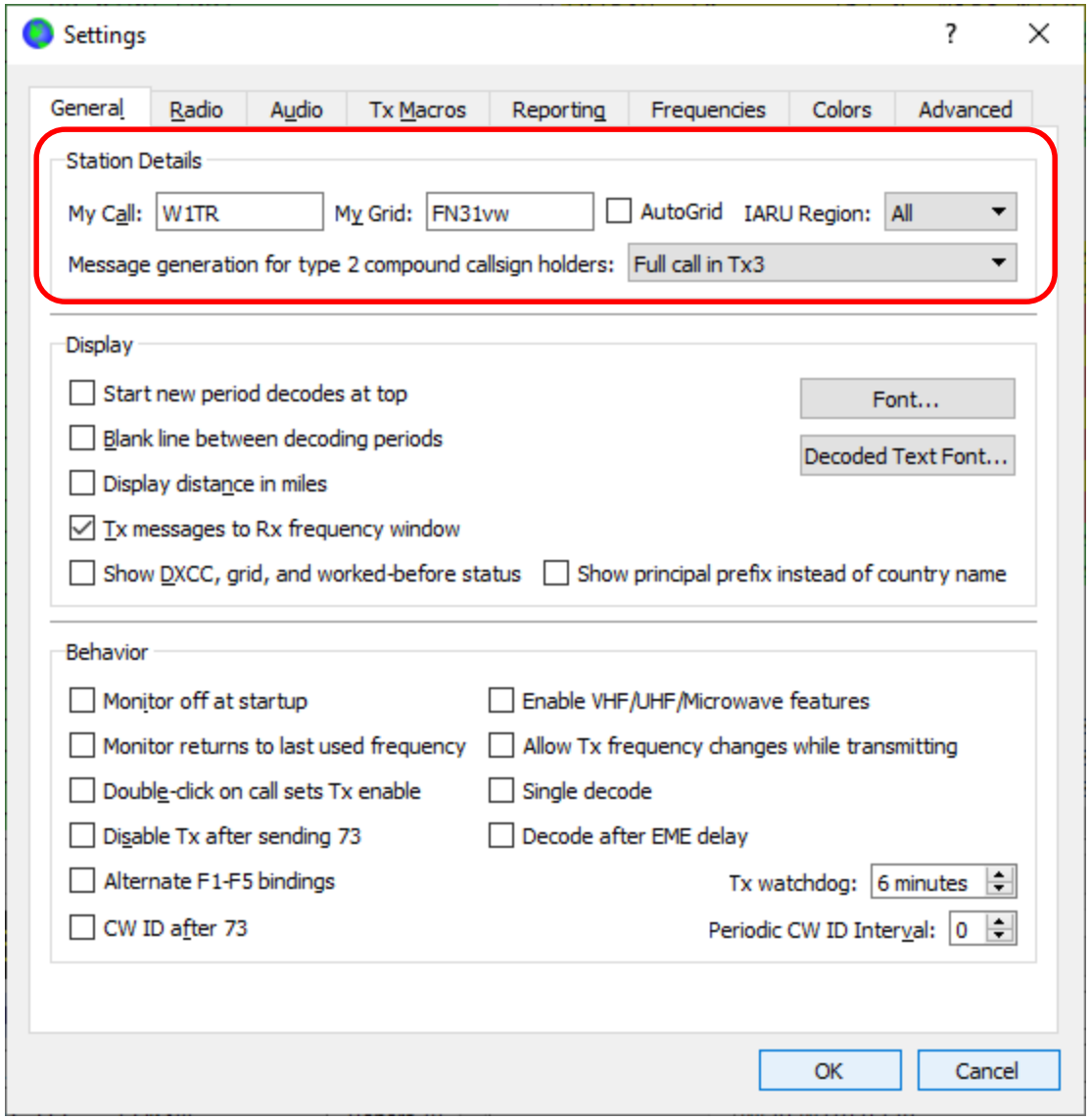
WSJT-X Configuration: Settings

Access Settings



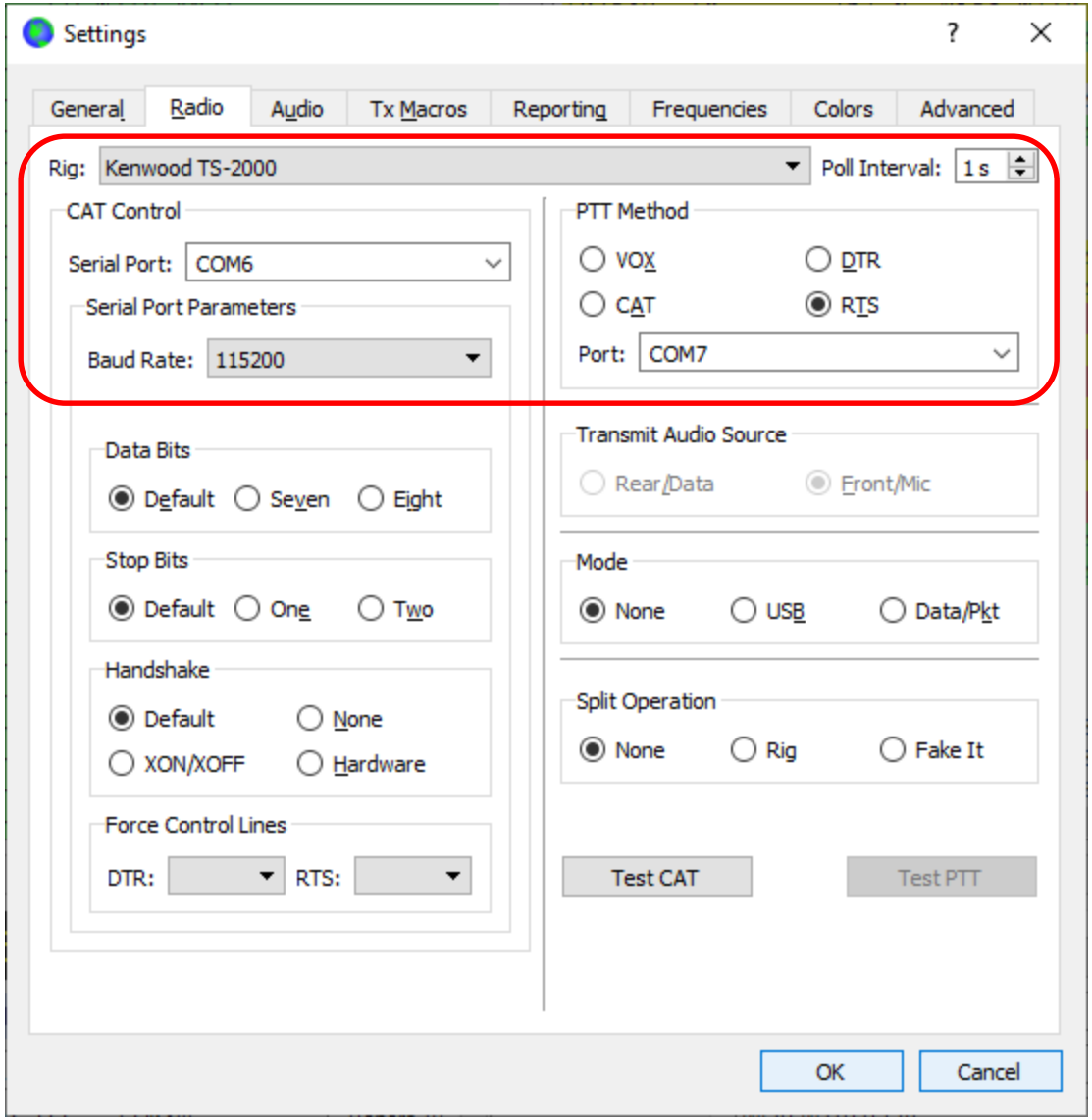
WSJT-X Configuration: General

Station: Callsign, QTH, General Options



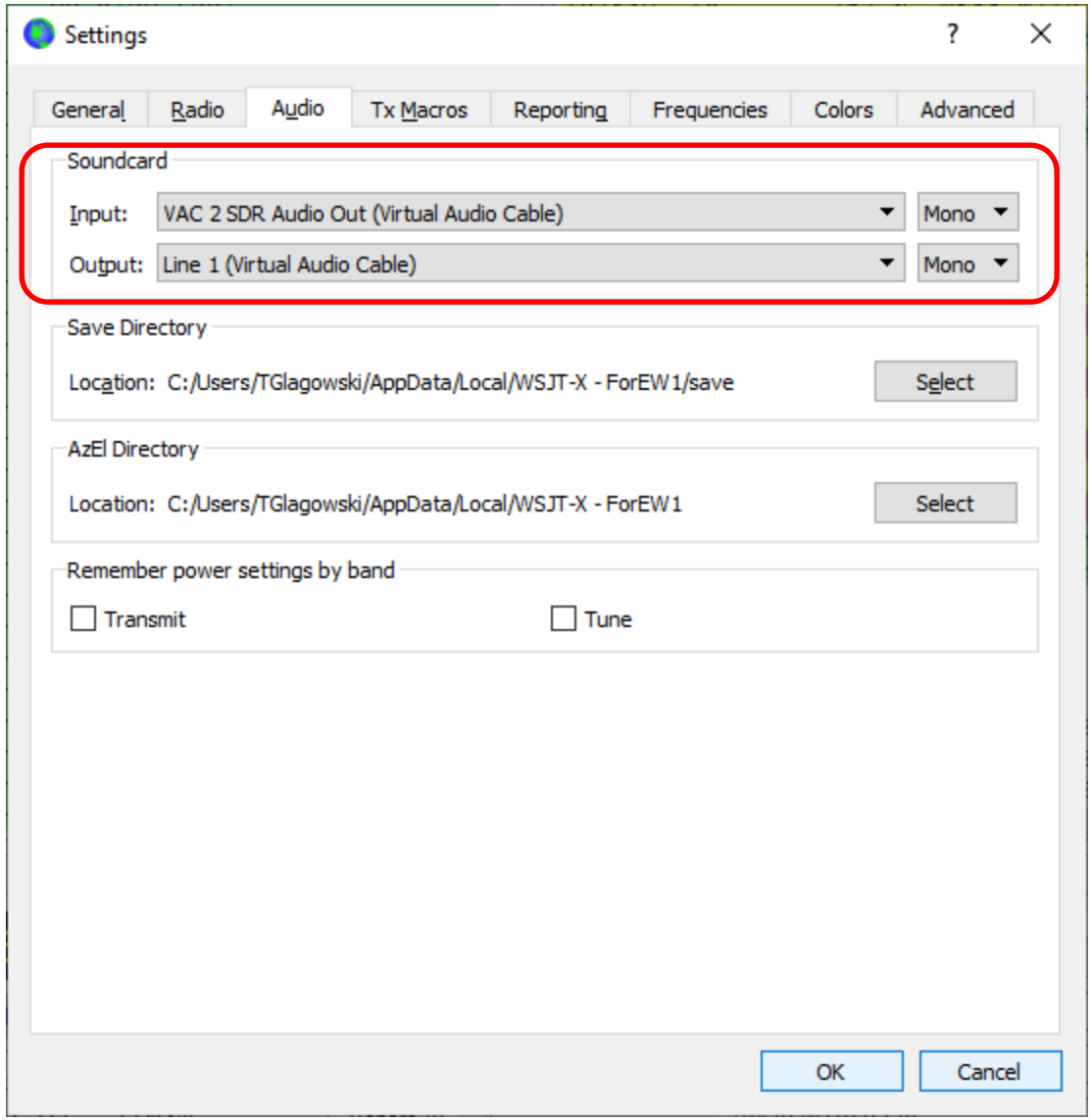
WSJT-X Configuration: Radio

Radio: Type, CAT Port, PTT



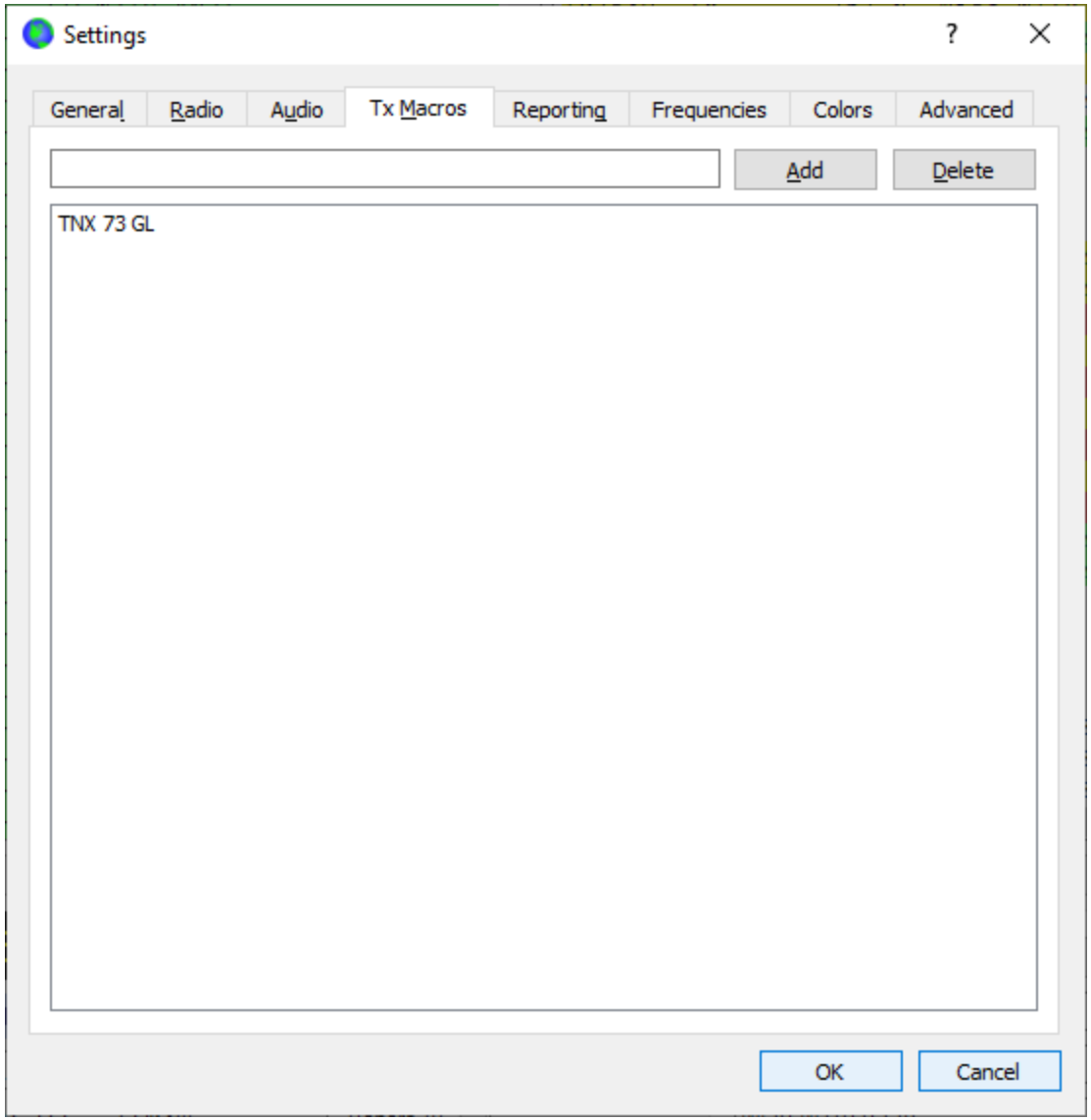
WSJT-X Configuration: Audio

Audio: Input / Output



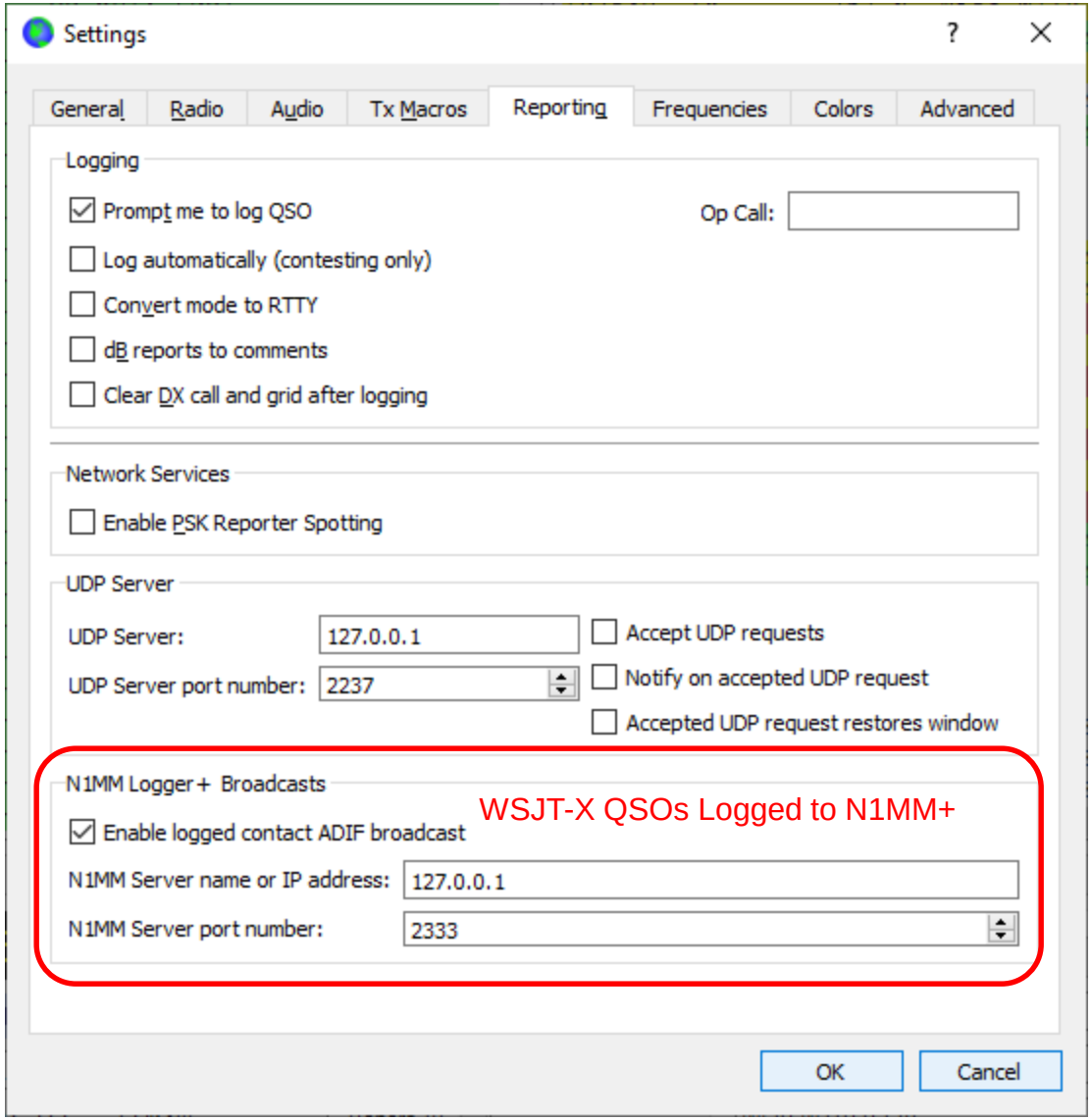
WSJT-X Configuration: TX Macros

TX Macro Definitions



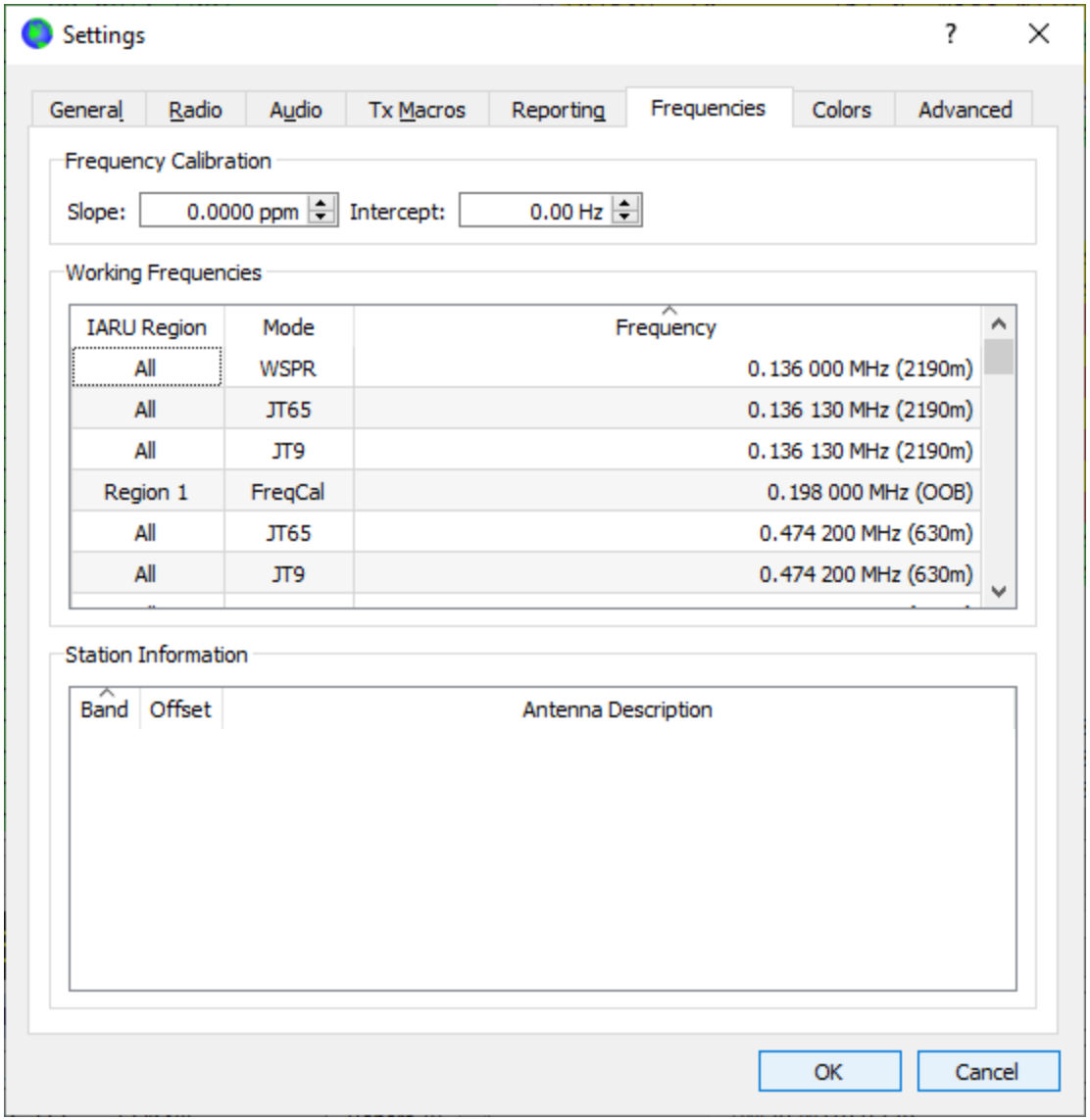
WSJT-X Configuration: Reporting

Reporting Options



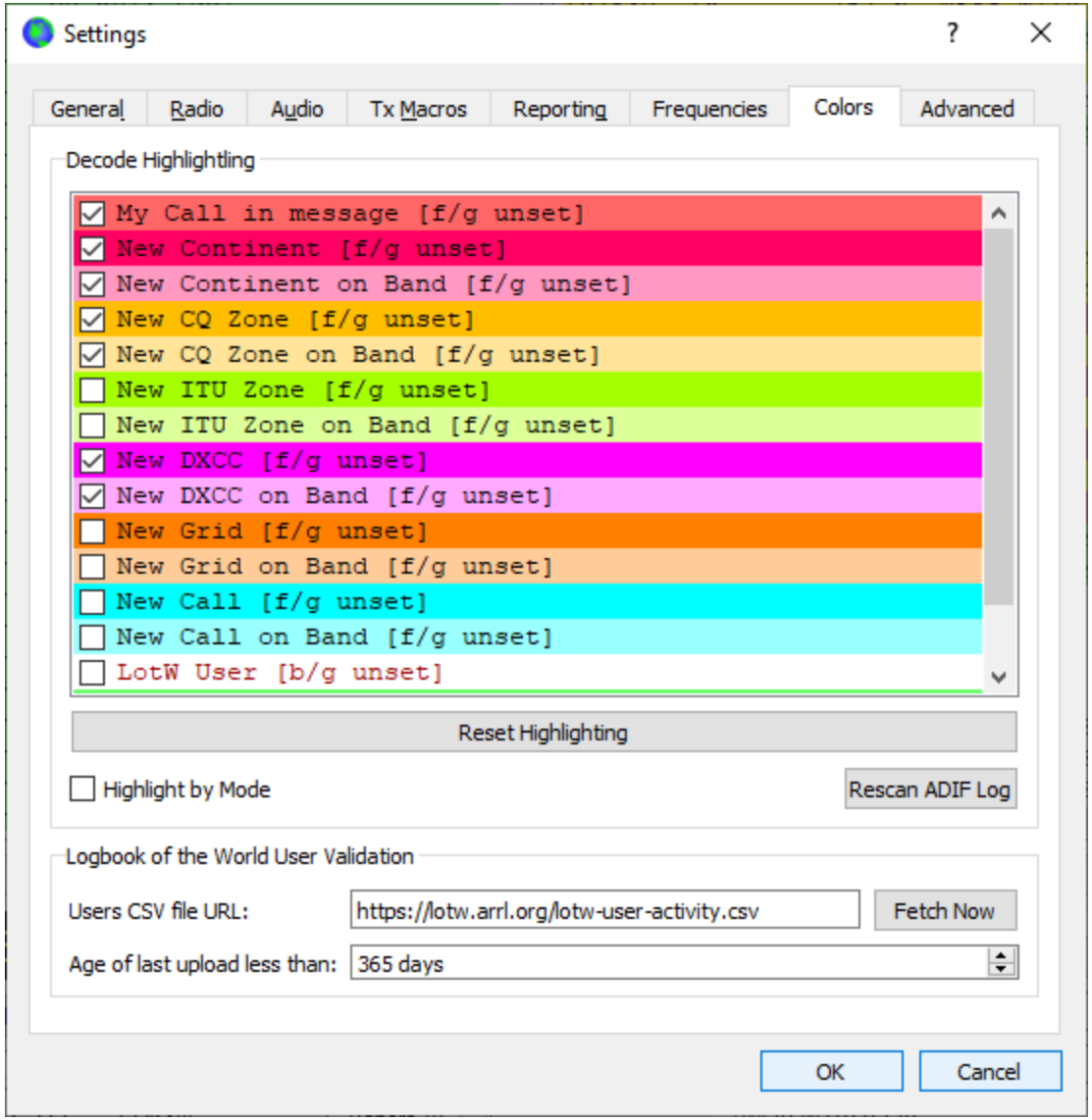
WSJT-X Configuration: Frequencies

Frequency Band Plan



WSJT-X Configuration: Colors

Color Coding Options



WSJT-X Configuration: Advanced

Advanced Options