

Flex 6000-Series WSJT-X Connections for Macintosh Users

3 August 2019 - George J Molnar, KF2T

PLEASE READ ALL THE WAY THROUGH BEFORE STARTING

First Things First:

With this procedure, you will be able to use the very popular WSJT-X application with your Mac and Flex 6000. It is also a stopgap solution for users of xCAT and xDAX (<https://dl3ism.blogspot.com>) who have updated their Flex to version 2.5 or beyond. It additionally allows users of Mac OS Catalina to operate without Loopback or SoundSiphon while those multi-channel virtual audio devices are being updated for the new OS. This procedure provides access to one slice's worth of rig control and audio routing.

Source-Nexus is a virtual audio device, like SoundSiphon (<https://staticz.com/soundsiphon/>) or Loopback (<https://rogueamoeba.com/loopback/>). We will use it as a DAX-like replacement for a physical sound card, which keeps our digital audio digital, eliminates an RFI/EMI pathway, and makes for simpler operation.

The application is free and un-crippled for the single channel version we will use here. Only one channel of audio is needed, since we are using one slice and either transmitting or receiving via the same virtual sound device.

Rig control without xCAT is accomplished due to the clever introduction of DX Labs (<https://www.dxlabsuite.com>) Commander server functionality to MacLogger DX (MLDX). DogPark applications "speak" to the Flex directly via IP while the Commander session in MLDX handles the c command and control with WSJT-X. Only one IP control port is supported (5002).

You will need:

- FlexRadio 6000-series transceiver (6300, 6400, 6500, 6600, 6700 -M or non-M)
- MacLogger DX (<https://dogparksoftware.com>)
- DogPark SDR (<https://dogparksoftware.com>)
- Source-Nexus virtual audio device (<https://www.source-elements.com/products/source-nexus>)
- WSJT-X (<http://physics.princeton.edu/pulsar/K1JT/wsjtx.html>)
- MacOS 10.10 or higher
- Ability to install software; both the knowledge how and the permission to.

Please make sure you have installed all software and configured it as necessary (your callsign and grid, license keys, system permissions, etc.) before going any further.

Source-Nexus Setup:

- Source-Nexus requires a reboot for the audio device to show up after installation.
- There is no application or control panel for the Source-Nexus device once it's installed. Don't worry - there's nothing to configure!
- If asked to allow access to the microphone or other system resources, say "Yes."

Easy Instructions:

- *Reproduce the screen shots below, in the order shown.*
- Don't worry about anything that's not circled in **RED**.
- In the DPSDR "Radio" pane, you need to unselect "Mac Audio" to adjust the Volume slider to 100. Remember to re-set it when using digital modes.
- Re-start MacLogger DX after you make the changes. Then launch WSJT-X. Always start MLDX before WSJT-X.
- Double check that DAX is off, both for receive and transmit.

If It Doesn't Work:

- Check your settings against the attached images.
- Re-start DPSDR, MLDX, and WSJT-X in that order, with a short pause between to allow each one to get going.
- In some cases, the virtual sound device will be created using a sampling rate WSJT-X doesn't like. Open the MIDI settings (search for MIDI from the Launchpad) and ensure both TX/RX on the Source-Nexus device are set to 48,000.

Bonus Setting:

The settings circled in **GREEN** refer to a customized Microphone profile I made. By narrowing the transmit bandwidth (vertical green oval) to match the "Fake It" tone scheme in WSJT-X, an even cleaner signal is obtained. Only in a very limited number of cases would anyone even notice (like when you and a neighbor are sharing 2 kHz). Unless you are comfortable with setting and using profiles, don't worry about this one.

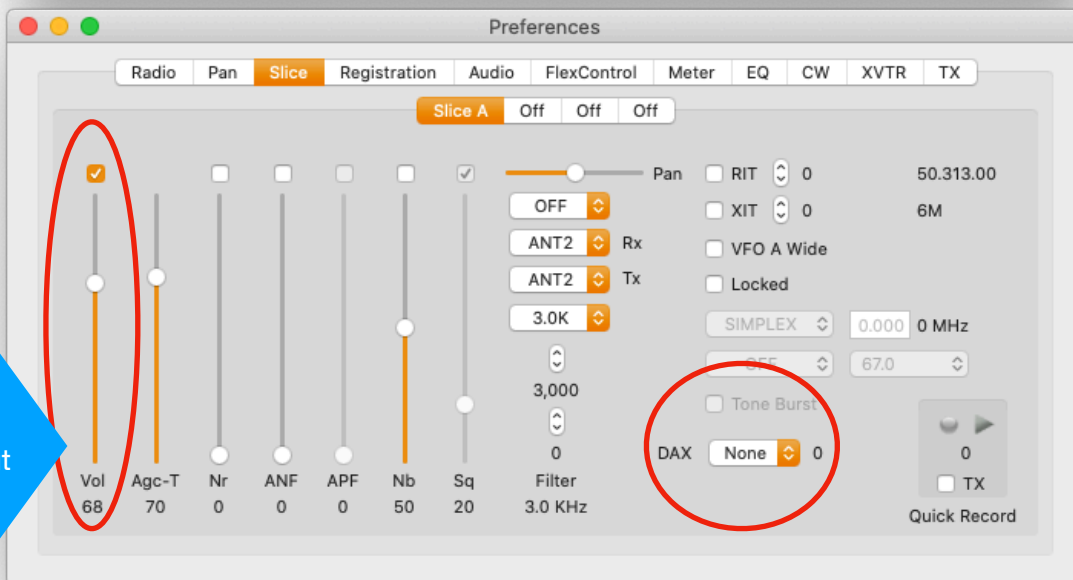
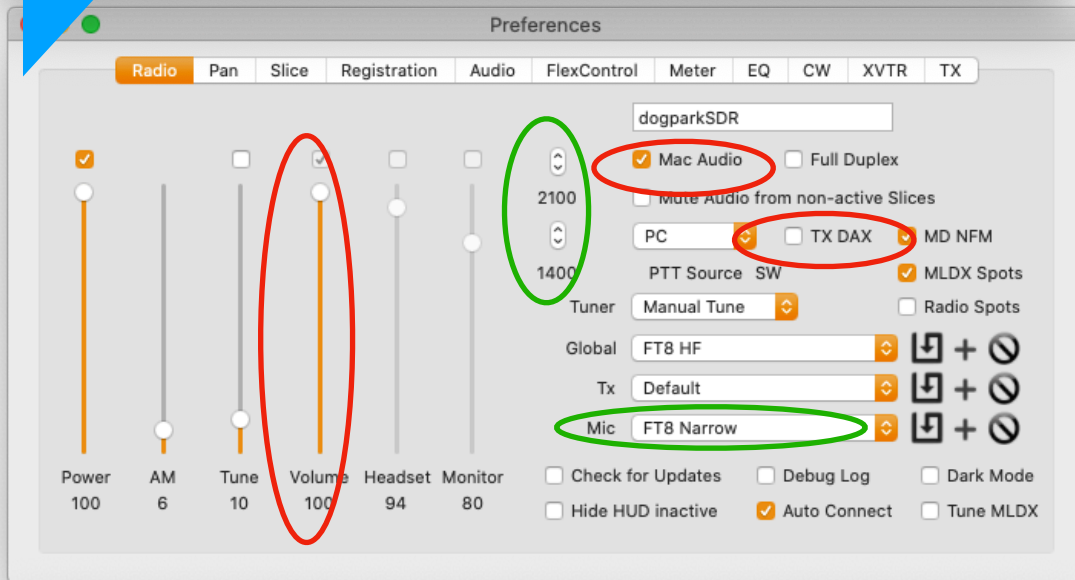
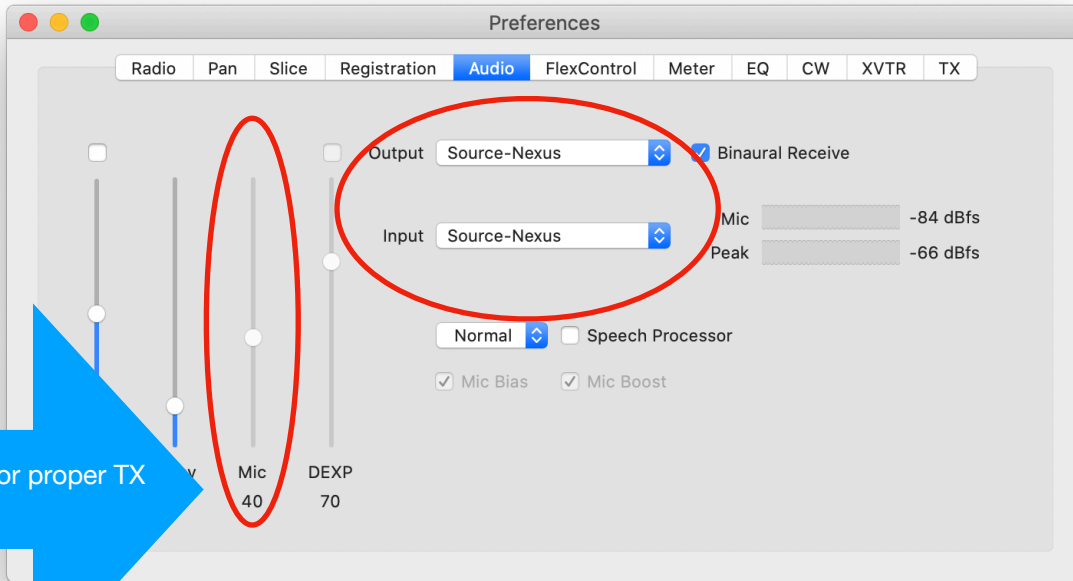
Support:

Contact me at George@Molnar.tv if you need assistance. I'm not a full-time tech support outlet, but am happy to help out where I can. Please, though, make sure you have read *all* of the instructions first.

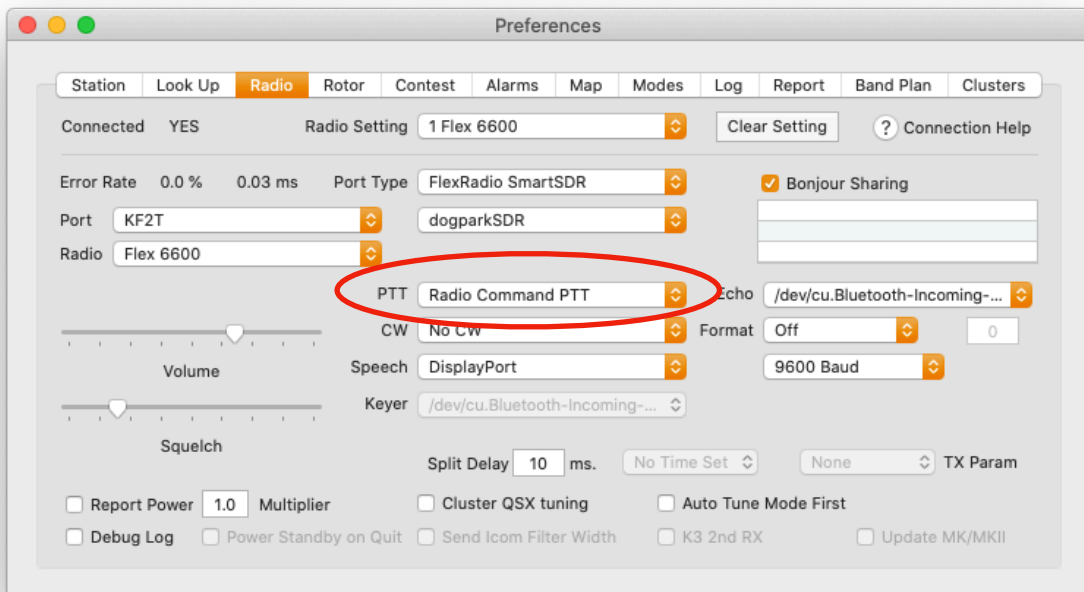
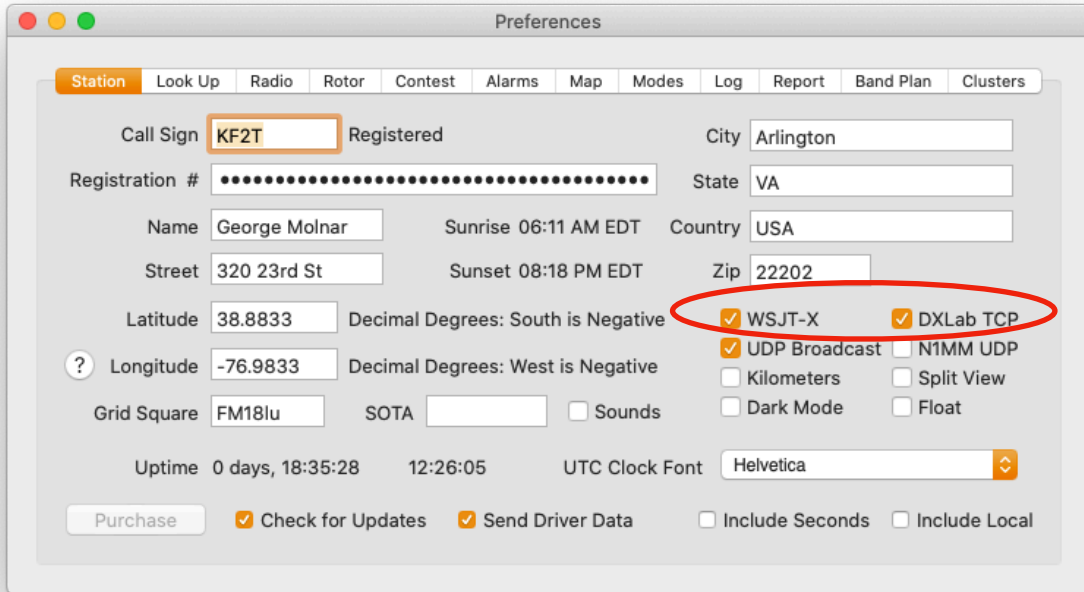
Special Thanks:

Scott Oakland, W1AL, for being the brave first tester of this procedure.

DogPark SDR Settings



MacLogger DX Settings



WSJT-X Settings

