Icom 7100 Automated Logging to Amateur Contact Log when using WSJT-X and JTAlert

This instruction document assumes that you have at least basic knowledge about Amateur Contact Log, WSJT-X, JTAlert and Windows 10. I have also assumed that you have correctly configured your computer sound card to use the WSJT-X microphone and speaker codecs correctly. The description of that process is significantly beyond the scope of this document.

Most of this document will be valuable to you whether you use a one-cable or two-cable method to control your Icom 7100.

This is a detailed description of how to use two separate cables to run your rig: one separate cable for CI-V rig interface control and another for communicating data to and from your IC-7100.

While the 7100 can be controlled completely with the USB A/B that ships with it, some like to split the rig interface control off separately to meet their CI-V needs. When using the two-cable method *I use two separate USB ports on my computer*. I cannot confirm that connecting the two cables to a USB hub will work correctly.

The USB A/B cable attaches from one computer USB port to the 7100's USB port and is used for transferring digital data.

Attach the computer USB port for CI-V rig interface control to the radio using an RT-Systems interface/programming cable available for $29 at:

https://www.dxengineering.com/parts/rtp-usb-rts01

This interface cable connects to the 7100's Remote Control jack via a 3.5 mm plug. When viewed from the 7100's rear the Remote Control jack is immediately to the right of the 7100's USB port.

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Amateur Contact Log: Rig Interface Setup

Make sure the hex digits "64" in the commands to read frequency and mode are replaced with the code for the Icom 7100: "88"
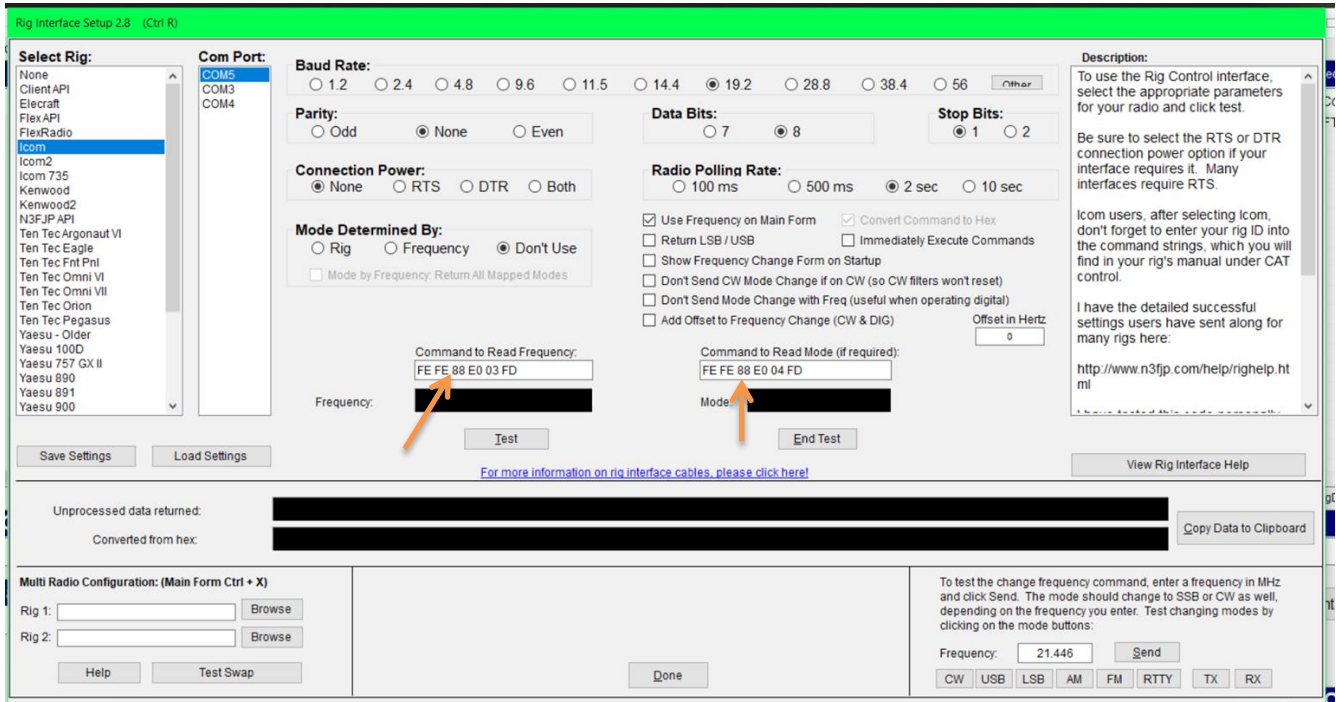
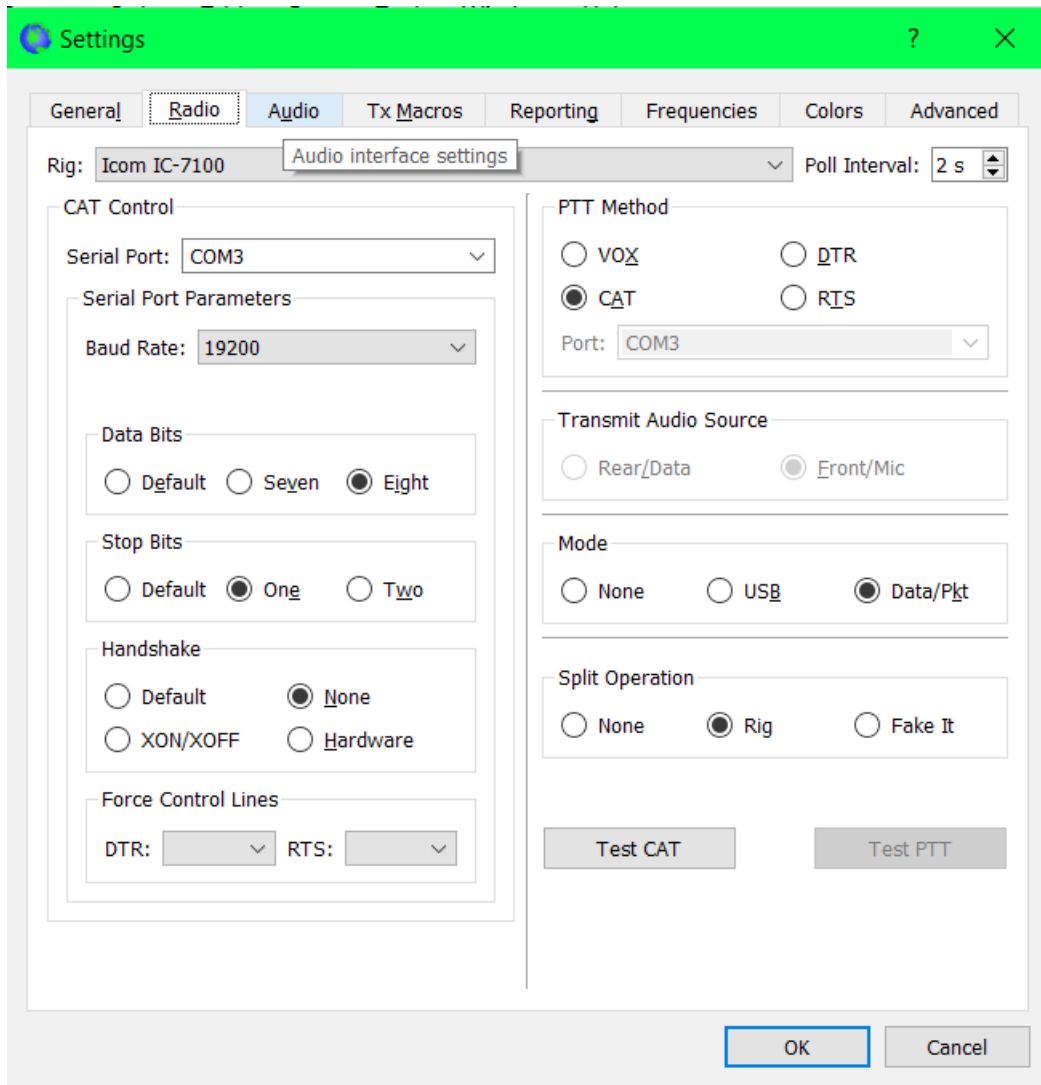**Icom 7100 Automated Logging to Amateur Contact Log when using WSJT-X and JTAlert**

Amaterur Contact Log: Application Program Interface (API) Setup

Please see the yellow-highlighted text in the figure below. **Check the box, this setting is essential!**

WSJT-X: radio setup at File > Settings… > Radio

JTAlert: setup from Settings > Manage Settings… > Logging > ACLog
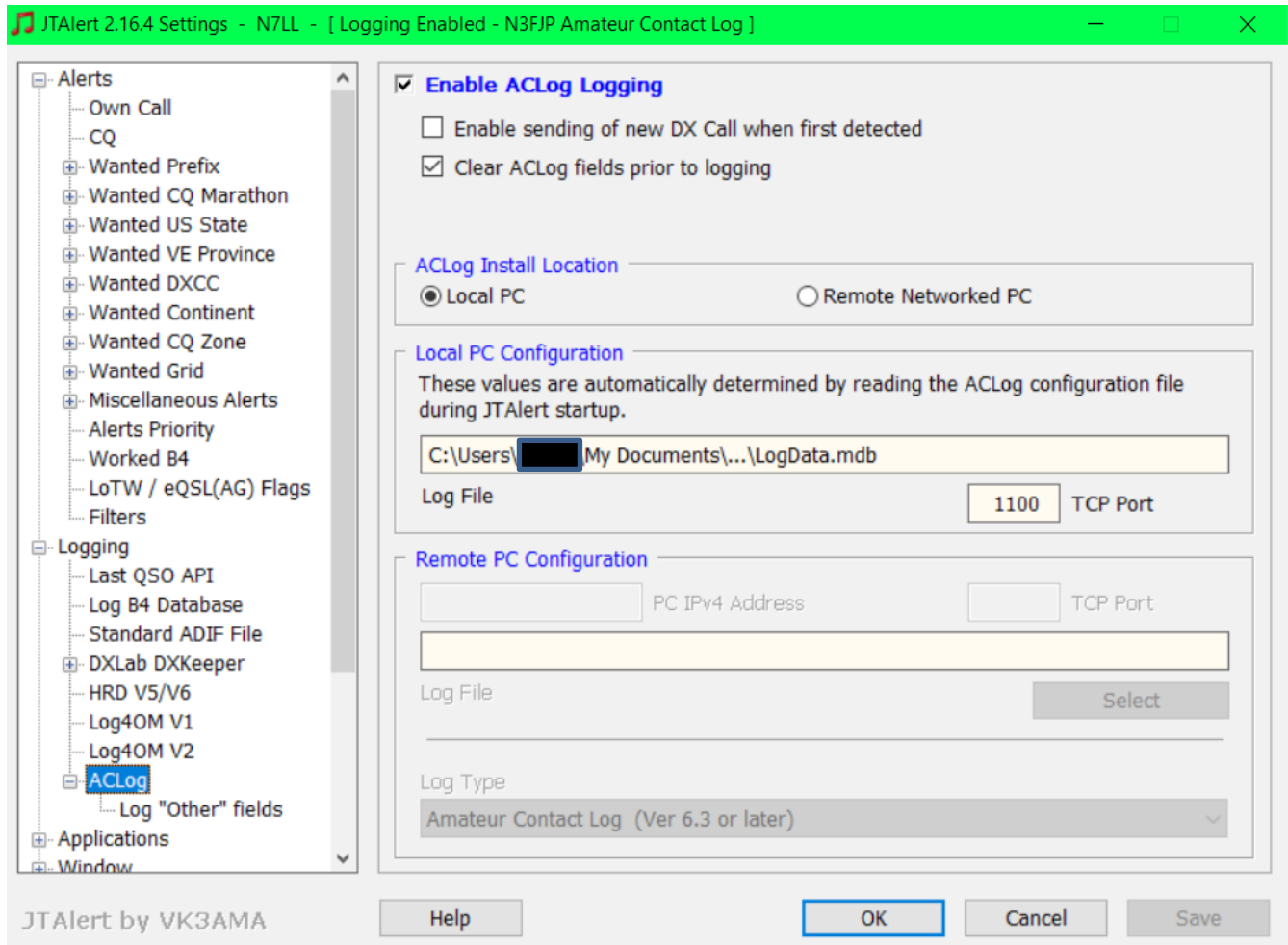
JTAlert: setup from Settings > Manage Settings… > Sound Card

If you want to receive audio alerts on your computer, ***carefully follow the warning in red shown below.*** Otherwise you will be sending *.wav sound files on the air as digital data!
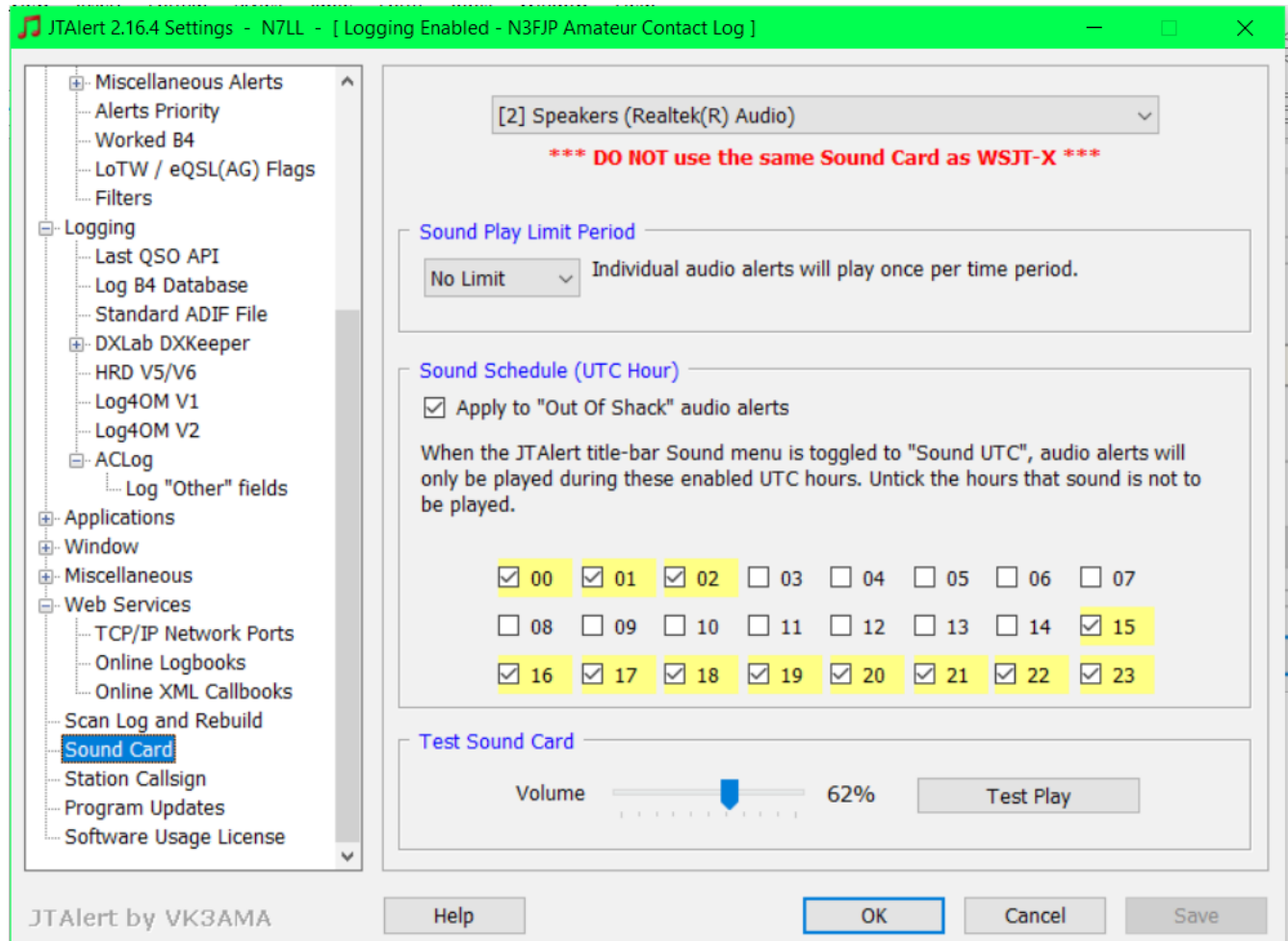
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Icom 7100: setup in the Connectors menu

These are the settings that have allowed me to a) prevent splatter when transmitting and to b) use the Power slider in WSJT-X to fine tune my output power setting. These percentage values are estimates only…experiment to find the ones that work for you. The rest of the settings must be entered as shown.

ACC/USB Output Select: AF
ACC/USB AF Level: 14%
DATA MOD level: 25%
USB MOD level: 20%
DATA OFF MOD: MIC,ACC
DATA MOD: USB
CI-V:
      CI-V Baud Rate: 19200
      CI-V Address: 88h
      CI-V Transceive: ON
      CI-V Output (for ANT): OFF

For additional information, read the fine manuals for Amateur Contact Log, WSJT-X, JTAlert, Windows 10, and a superb article by Alan W. Dye, W6AWD.

Alan's article is particularly useful for Mac users. He is the one who helped me understand the critical importance of having very minimal engagement of the ALC control in order to prevent transmitting splatter in such a narrow bandwidth environment.

His article, entitled **WSJT-X WITH THE IC-7100, 7200, 7300, AND 7410** can be found at:

    http://w6awd.us/blog/wsjt-x.html

73,
David Oglesby
N7LL

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