

1. Overview and Introduction

- a) FLDigi is the “Swiss Army Knife” of AmRRON digital communications. A single program that includes most of the modes and tools used by AmRRON. It is something of a “set it and forget it” program that once you configure it for AmRRON use, you typically will not have to go back in and configure. Even if you upgrade the program, your settings will typically all move to the newer version.
- b) FLDigi fits in to AmRRON’s toolbox as the foundational and primary tool for digital communications. Most Nets are transacted using FLDigi. If FLDigi was the only tool in your digital communications toolbox, you could get a good picture of what was going on.
- c) There are two companion tools (programs) that work with FLDigi, FLMsg and FLamp. These two programs are related to messages and especially messages sent as content for AmRRON Custom Forms. We will not discuss FLMsg and FLamp in this document.
- d) What this paper will cover:
 - i. Overview Introduction
 - ii. Setting up FLDigi
- e) Not covered in this document
 - i. Installing Fldigi
 - ii. Full explanation of all configuration settings.
 - iii. Companion programs such as FLMsg and FLamp
- f) Notice: This document uses print screens for FLDigi 4.1.20 on a Windows 10 computer. Configuration for Linux and Pi will be very similar except for file locations and Soundcard settings

2. Waterfall Designations (Sharing the frequency with other AmRRON modes:

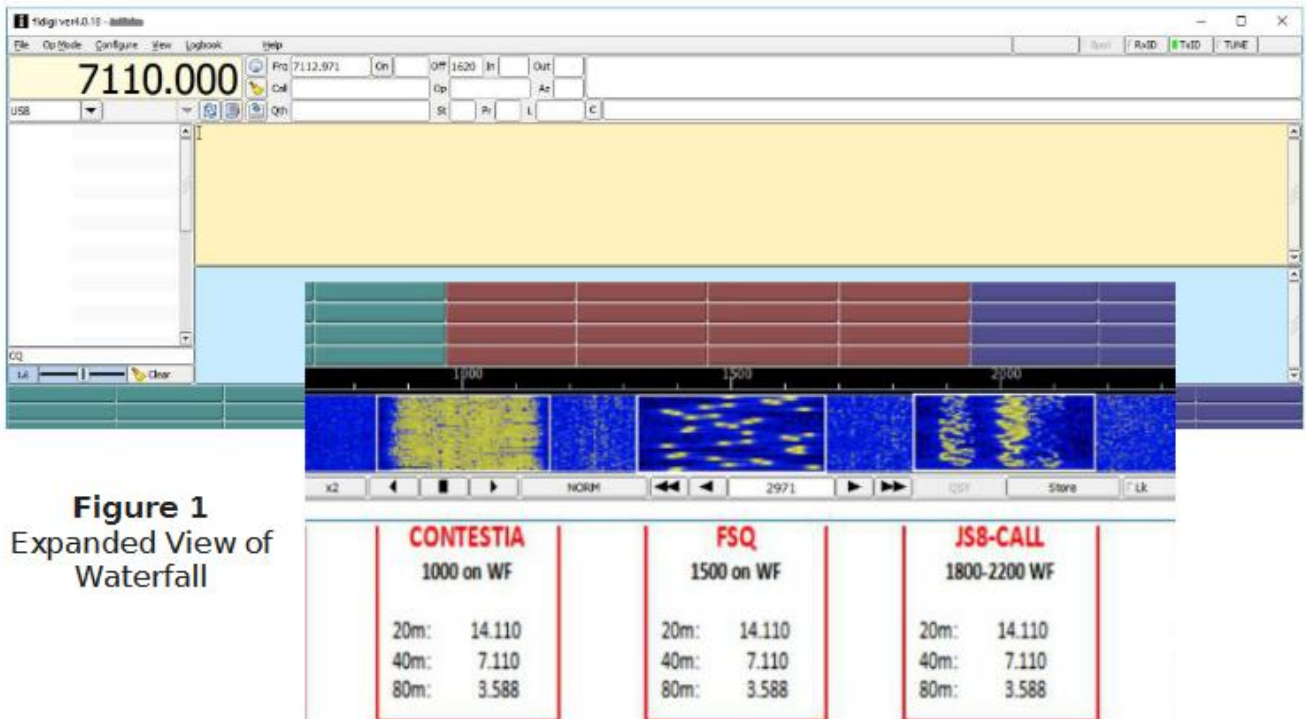


Figure 1
Expanded View of Waterfall

Figure 0

- a) White paper: <https://amrron.com/2019/05/08/digital-mode-waterfall-designation-white-paper/>

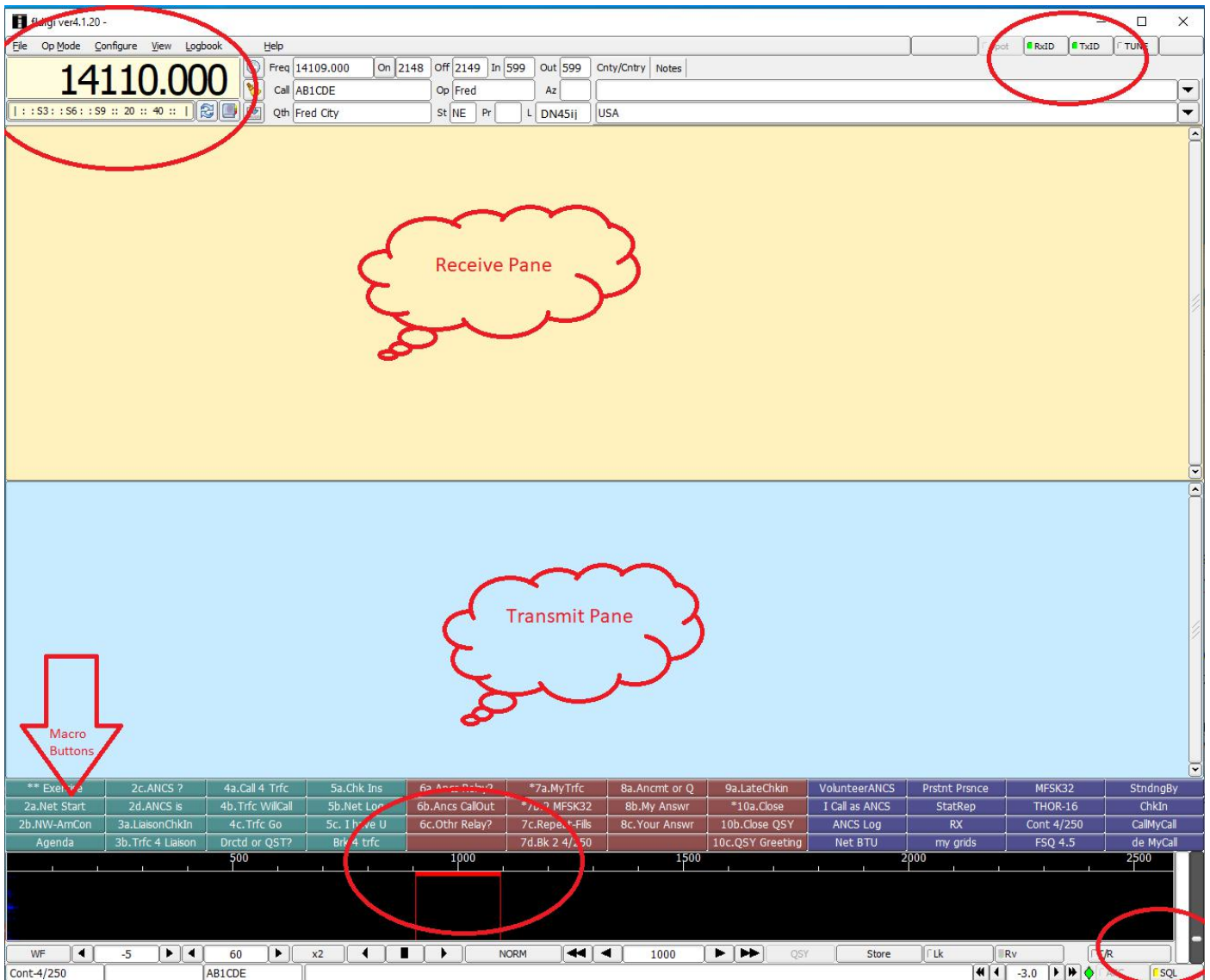


Figure 1

3. Main Screen

- a) Top Left oval: We will focus on the Configure menu
- b) Top Right oval:
 - i. RxID: On. TxID: On except when monitoring a net. Always on when originating traffic.
 - Passband:
- c) Center Top cloud: The “receive pane”. This is where decoded signals print
- d) Center Bottom cloud: The “transmit pane”. This is where you enter the text you wish to transmit.
- e) Bottom Right oval: Squelch slider must be slightly above your “noise floor”
- f) Bottom Center circle: “Sweet Spot”. Waterfall location must ALWAYS be at 1000 when using FLDigi (except when using FSQ)
- g) Bottom Left arrow: Macro buttons are user assignable and when pushed will display pre-typed text. (Example: notice button labeled 2aNet Start. As an NCS I use this button to launch the opening text for my net. It contains several sentences I use every net and using the button allows me to push the button instead of live typing with fat fingers.)

4. Configuration Menu AmRRON Norms

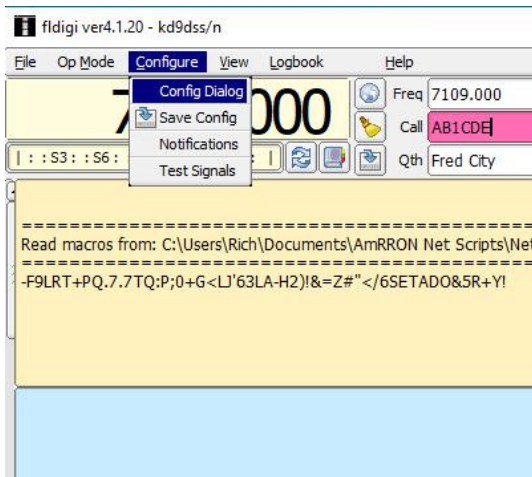


Figure 2

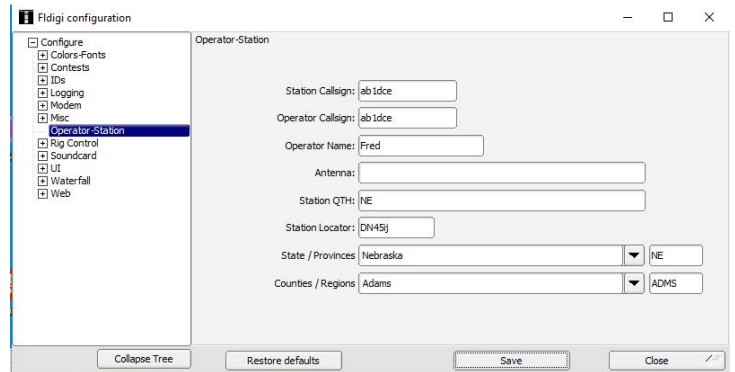


Figure 3

5. Misc/Operator Station

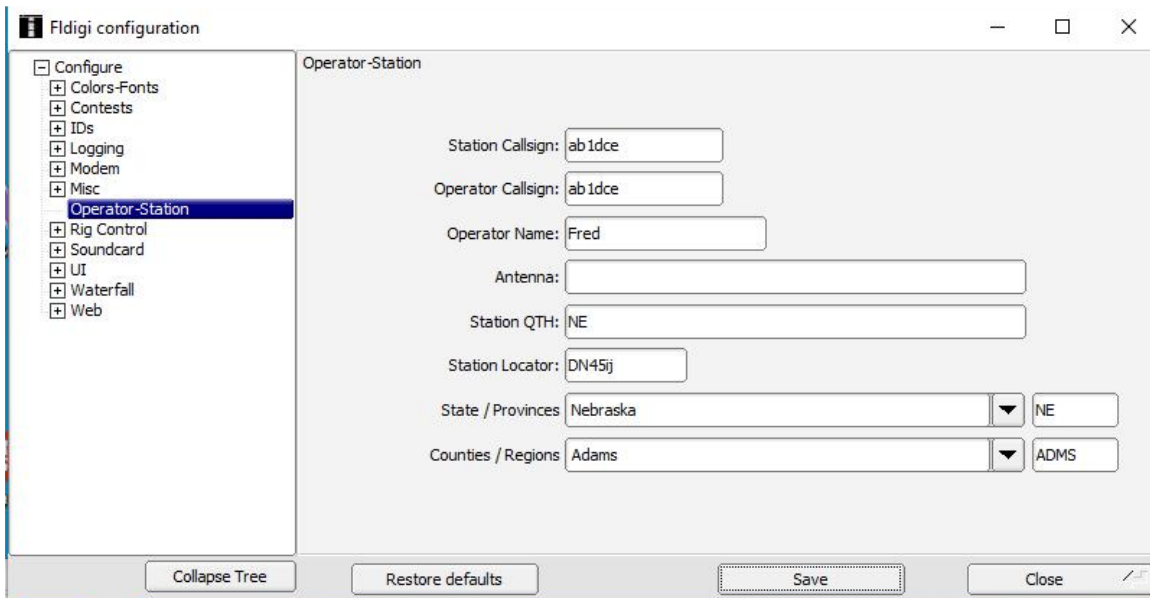


Figure 3

6. Logging/Call Lookup:

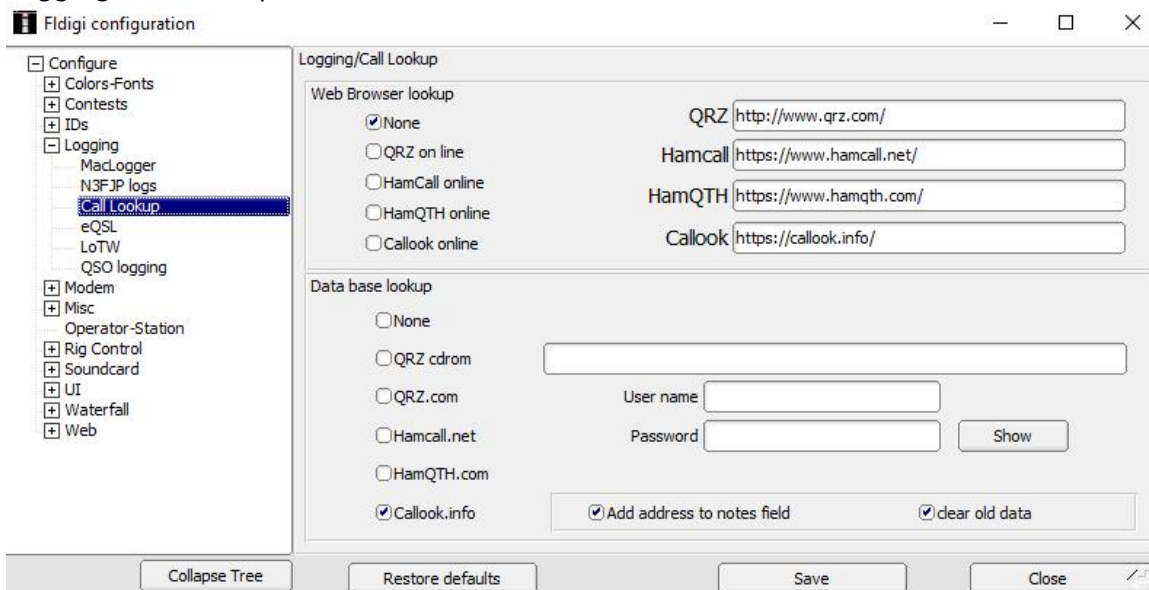


Figure 4

7. Modem/FSQ

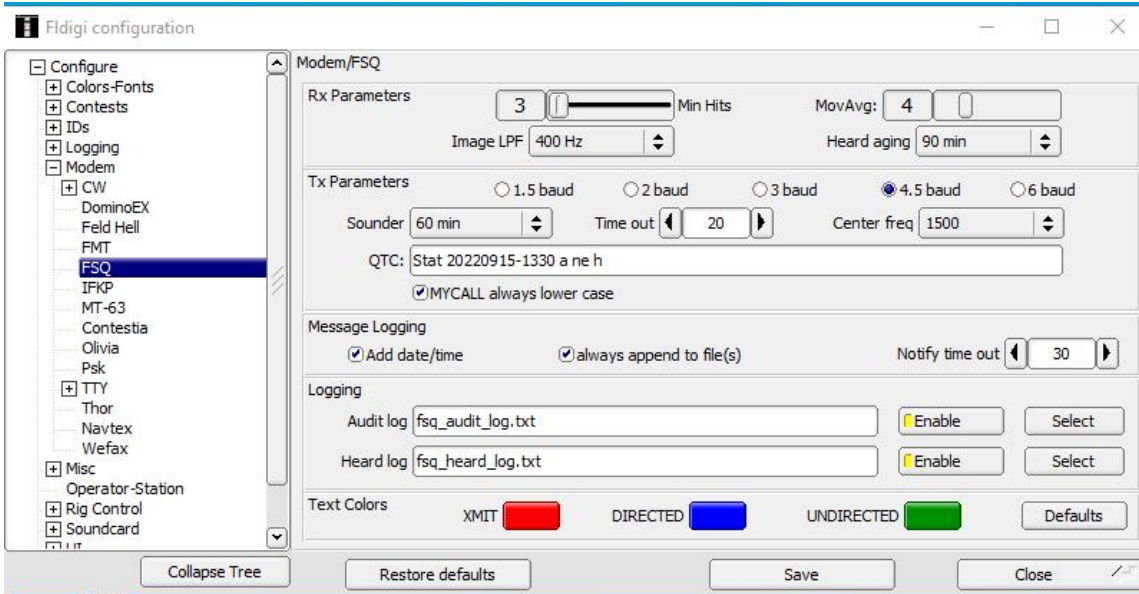


Figure 5

a) Introduction to FSQ : <https://amrron.com/2020/02/26/fsq-training-101v-1-3-white-paper/>

8. Misc/SweetSpot

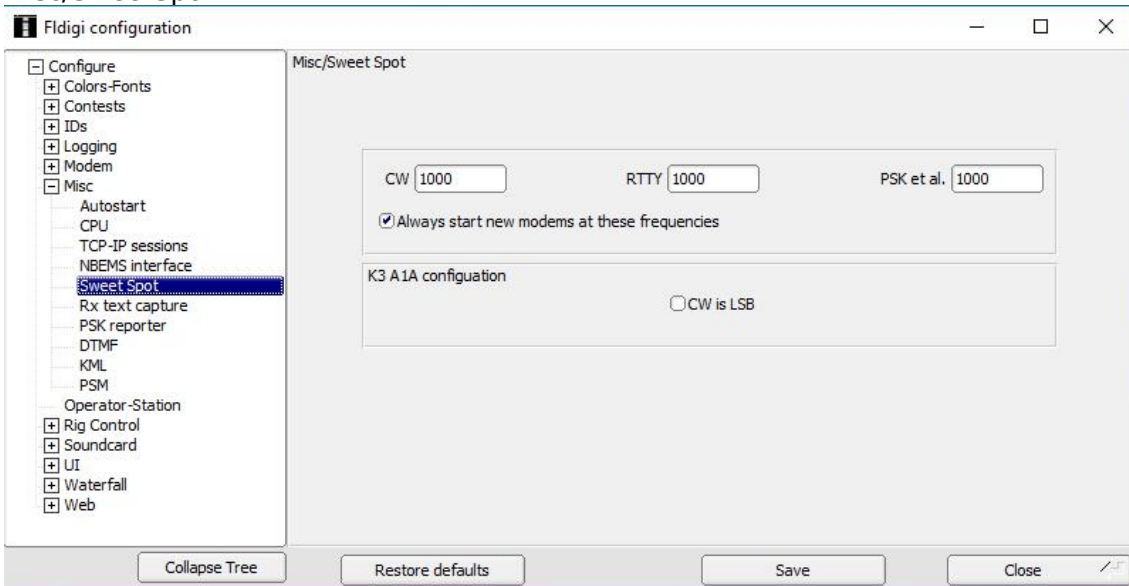


Figure6

a) As mentioned at the beginning of this document since FLDigi shares the frequency with other AmRRON modes it is important to keep FLDigi centered at 1000 on the waterfall. These are the Sweet Spot settings

9. Misc/NBEMS interface to link FLDigi to FLMsg

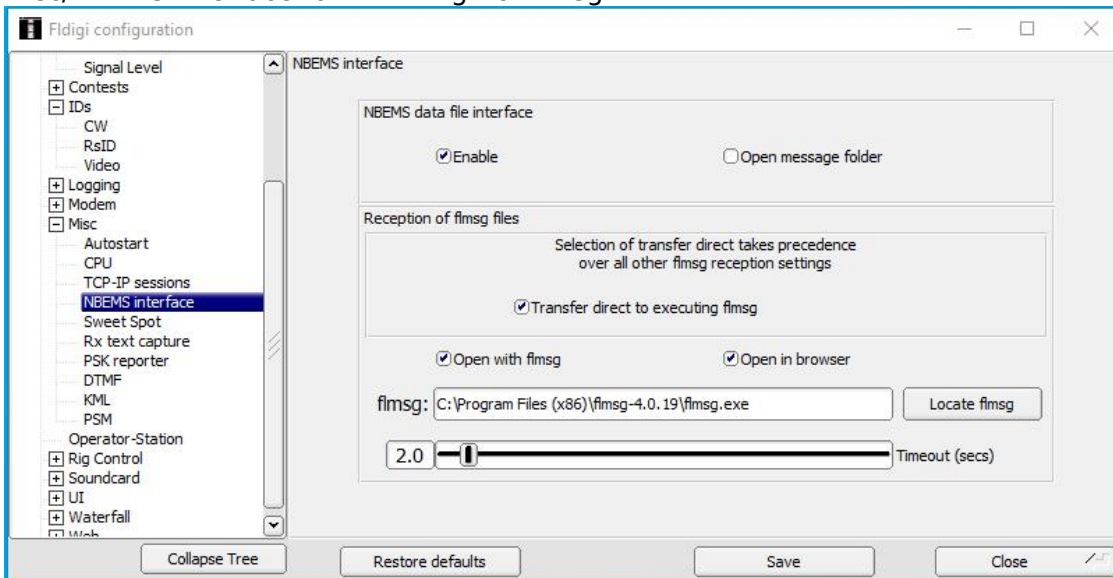


Figure 6a

10. Soundcard/Devices

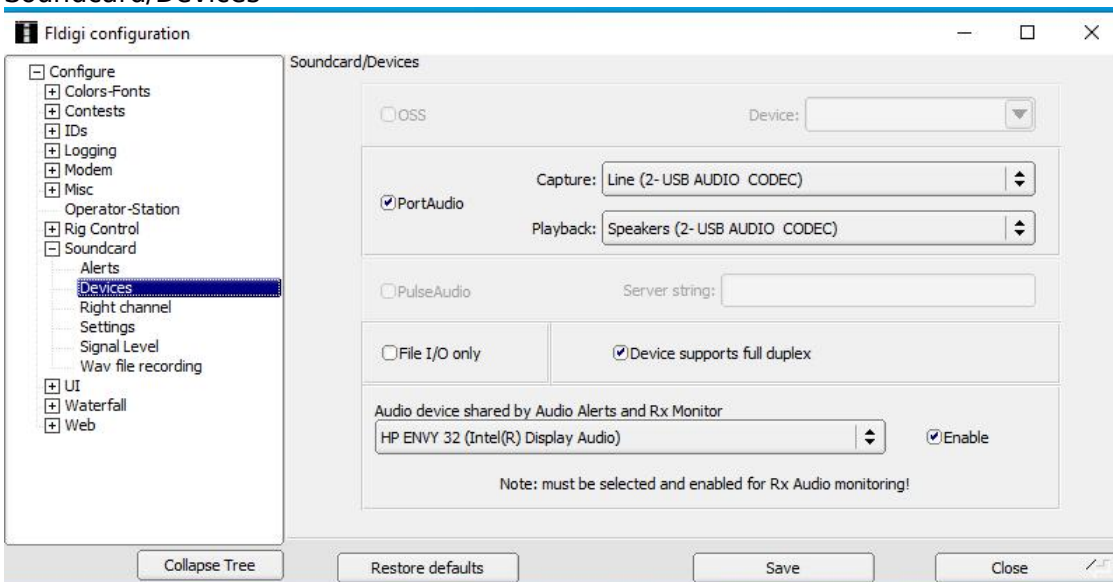


Figure 6

a) Settings using Signalink on Windows 10

11. UI/Macro buttons

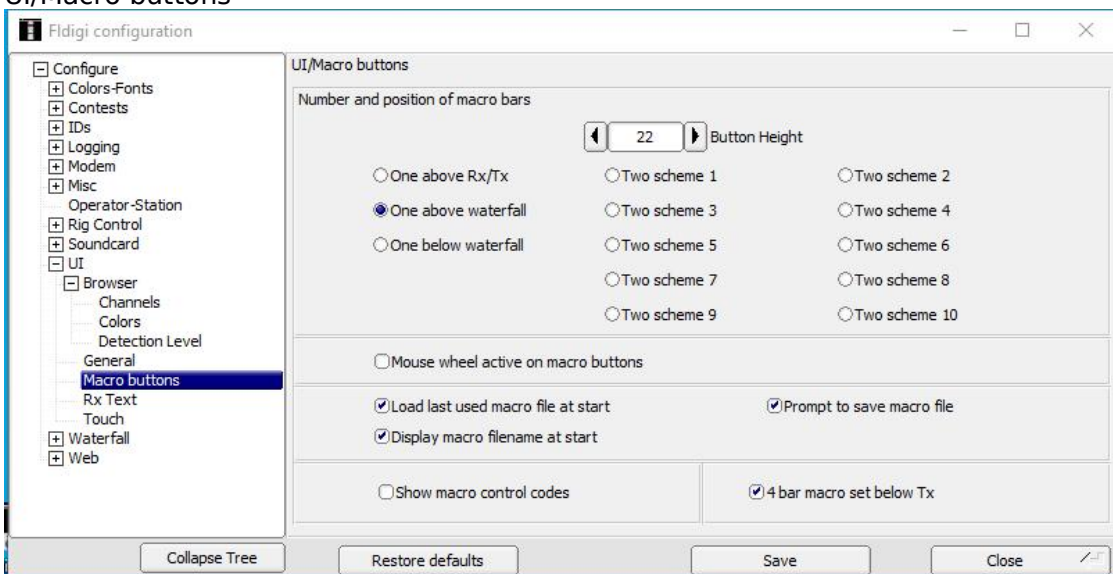


Figure 7

- a) Customize your macro display and defaults
- b) Toggle "View/Hide 48 macros"

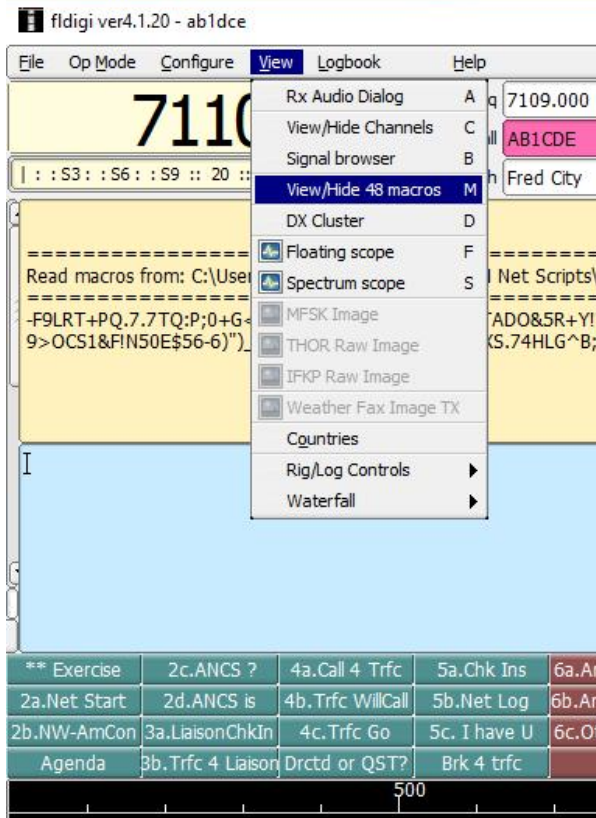


Figure 8

- 12. Squelch: The Squelch slider should be positioned slightly above your noise floor (green signal to the left of the slider).

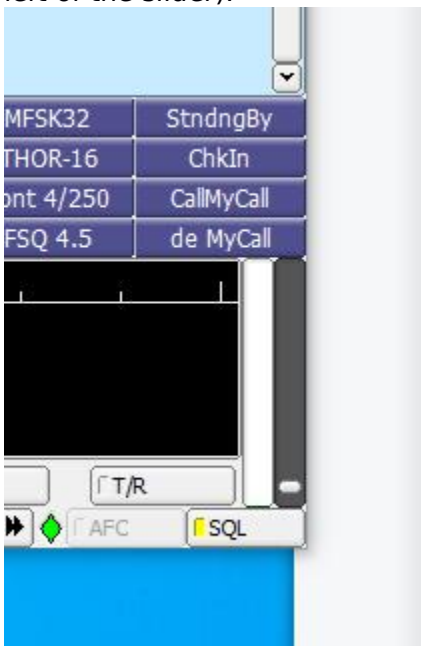


Figure 9

13. RxID & TxID and Passband

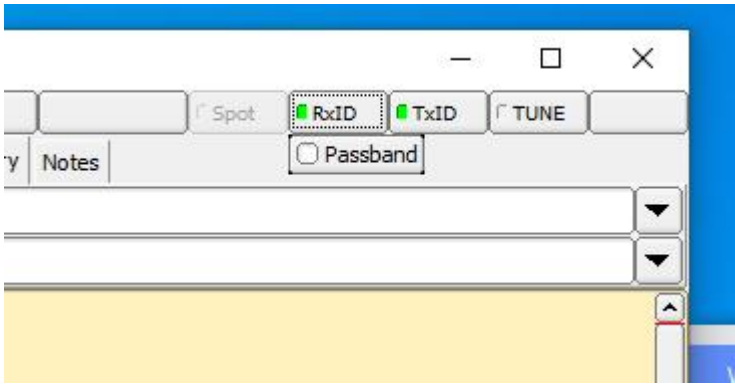


Figure 10

- a) RxID is typically active (green). This allows FLDigi to “hear” a mode command (the TxID from another user) and automatically change to that mode and location on the waterfall.
- b) TxID causes your transmission to be preceded by a mode command allowing a listening station to automatically adjust to that mode and location on the waterfall. Since TxID will trigger a mode and/or waterfall change on all listening stations, turn it off during a net and let the NCS control mode and waterfall location.
- c) Passband.....don’t really understand this but I know it should not be active.

14. Modes in FLDigi that AmRRON typically uses

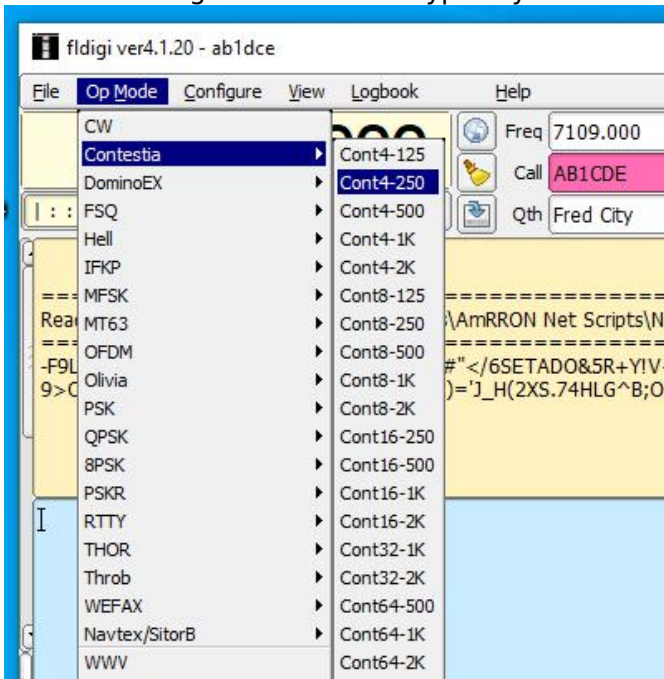


Figure 11

- a) Contestia 4/250: Most net communications and instructions from the NCS use this mode.
 - b) MFSK-32: Mode used when sending message traffic
 - c) FSQ4.5: Mode used for simple chats, signal reports to specific stations, sending, receiving and retrieving small text files.
15. Logbook: the logbook is a powerful tool to build a “off line” database of stations you have received. Once you have “looked up” their call (using the button) and saved the information (using the button) you have a permanent database that can be used in a grid down situation. When you click on the call sign in the receive pane, the call info will automatically appear at the top of your fldigi. You will be reminded that AB1CDE is Fred in Fred City, NE.. If Fred is reporting a power outage you have a better idea where that is.

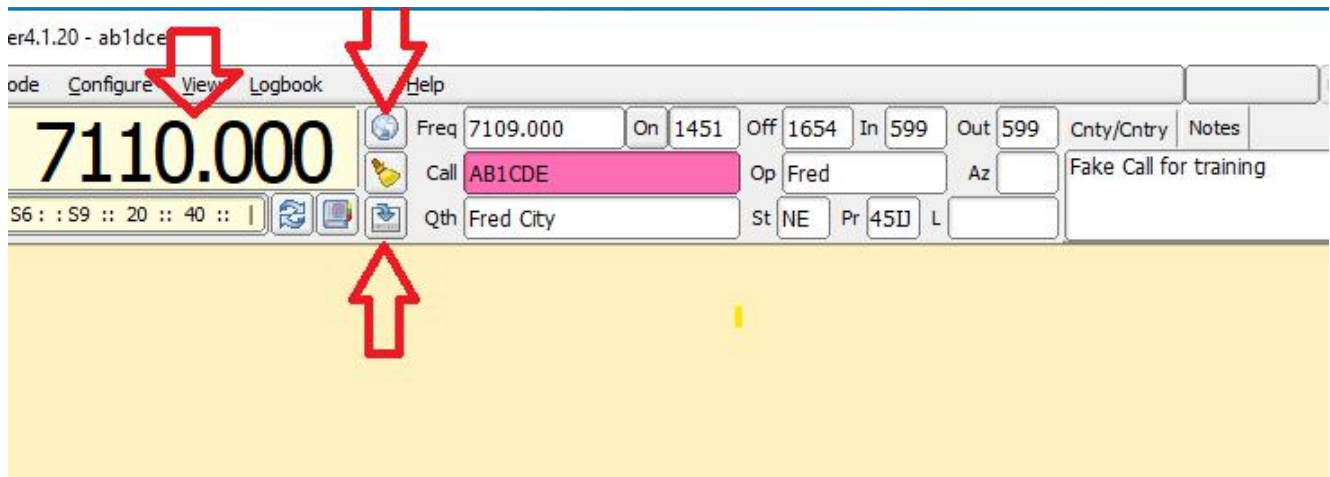


Figure 12

- a) Frequency: Though not necessary to using FLDigi, it is helpful if you want your log to reflect the frequency that you heard a station
 - b) Globe button: triggers FLDigi to look up the call information and display it in the fields. (Must be on-line for the lookup to work for a previously un-saved station)
 - c) Save button: triggers FLDigi to save the call information to your database for instant display (even if you are offline)
16. Resources
- a) Excellent "must view" Tutorial Videos for FLDigi, FLMsg, FLAmp. Though not AmRRON specific these videos give an excellent tutorial from installation to settings.
<https://amrron.com/2017/03/23/fldigi-tutorials-videos/>
 - b) Introduction to FSQ : <https://amrron.com/2020/02/26/fsq-training-101v-1-3-white-paper/>
 - c) White paper: <https://amrron.com/2019/05/08/digital-mode-waterfall-designation-white-paper/>
 - d)