

FT4 Tips and Hints – for the 2021 RSGB FT4 Contest Series

Log file for Upload to the RSGB robot

WSJT-X saves your log as an ADIF file as you are operating, unlike normal logging programmes, so you will have to do some housekeeping.

An ADIF file is written to as you make QSOs; this is called **wsjtx_log.adi**.

Before you start each FT4 contest you will need to get rid of your existing wsjtx_log.adi file; for this we suggest that you rename it. You can access the file to change the name from inside the WSJT-X programme using **File>Open log directory**.

You could rename wsjtx_log.adi to wsjtx_log_old.adi, for instance, by right-mouse clicking on the file name and selecting rename from the list.

Now, when you start operating in the contest, WSJT-X will create a new wsjtx_log.adi file and will write all your completed QSOs into it.

When you have finished the contest, please upload the wsjtx_log.adi file to the RSGB contest robot. To help you find the wsjtx_log.adi file to upload, you might find it easiest to move or copy it to the desktop using **File>Open log directory** from within WSJT-X.

Dupe Checking

WSJT-X can help you avoid working duplicates by using a colour code to differentiate callsigns that are not already in your wsjtx_log.adi file. To get this to work you can do the following:

From **File, Settings, General**, check the box to select “Show DXCC, grid, and worked before status”

From **File, Settings, Colours**, select only the following:

My Call in message
New Call on Band
CQ in message
Transmitted message

The 'ticked' boxes can be moved - and positioned in priority order - to the top of the list of boxes.

With these settings, stations who are calling CQ and who you have not worked on the band, will appear with a light-blue background. If you have already worked them, the background will be green.

Configuring the Contest Dial Frequencies 3.576, 3.579 & 3.582 MHz

In WSJT-X, from **File, Settings, Frequencies**, right-mouse click in the working frequencies table and select “Insert ...”. A new window “WSJT-X - Add Frequency” will be launched.

In the “Mode:” pulldown, select “FT4”.

In the “Frequency (MHz): field, enter “3.576”

Select OK to return to the **File, Settings, Frequencies tab**

Repeat the Insert process for 3.579 and 3.582 MHz

Select OK to return to the main WSJT-X window.

The dial frequencies for 40m and 20m are the standard FT4 allocations.

Providing FT4 is selected as the WSJT-X mode on the toolbar it should now be possible to select any of the recommended dial frequencies by using the frequency pulldown which is below the "Log QSO" button:

3.576 MHz (80m)
3.579 MHz (80m)
3.582 MHz (80m)
7.0475 MHz (40m)
14.080 MHz (20m)

Preparing to Operate in a Contest

In the 2021 FT4 series we will be using standard FT4 format as implemented in WSJT-X V2.3.0 or later or the equivalent in JTDX, MSHV etc.
DO NOT USE the dedicated Contest formats.

If you wish to make it clear that you are operating in a contest, you may amend your TX6 message to start "CQ TEST" or "CQ RSGB".

Missing Locators in my Log

There are two main reasons why your log may be missing some four-character locators:

1. You started a QSO but were not able to complete it immediately. When it was completed later in the contest, your logging software had lost the locator although the other station had sent it previously.
2. You may have been called by a station who is not participating in the contest or who is incorrectly skipping the first message TX1 that includes their four-character locator.

The rules for FT4 contests (only) now allow you to fill in any missing locators from your ALL.TXT file; here is a suggestion as to how you might do this.

If you open your ADI file using a text editor such as notepad, any missing locators will be visible in the log as:

<gridsquare:0> with an empty space in front of it.

This should read <gridsquare:4>XXNN where XXNN is the other station's four-character locator (gridsquare), IO93 for example.

To find missing grids, you can search your ALL.TXT file which records all FT4 messages that you have decoded, looking for the other station's callsign, where they have sent their grid. This might be in a CQ message or in a TX1 message where they called you earlier in the contest.

Having found the correct grid, you can simply edit your ADI logfile and save it with the new gridsquare data.

Don't forget to change the number after the colon from "gridsquare:0" to "gridsquare:4" as this is where the ADI format explains how many characters of data follow the label. Clearly this should be "4" for a four-character gridsquare.

SO2R Operating

The FT4 series stipulates that only one signal may be transmitted at any one time. But entrants may transmit in both FT4 cycles, alternating transmission on different bands. So a form of Single Operator 2 Radios (SO2R) is encouraged.

To achieve SO2R you may wish to run two instances of WSJT-X or equivalent, each on different bands. To prevent simultaneous transmission on two bands please ensure that the “TX even” checkbox is selected on one instance of your FT4 software. You will need to swap this selection between the two instances every so often in order to work stations who are transmitting in the same odd or even cycle as you are.

Operating using FT4

In WSJT-X. Shift-click (WSJT-X) on a clear space on the waterfall to put the red goalpost there – this is where you will transmit. Remember if you are calling CQ you have to stop briefly to see if your frequency is clear as you can only monitor the other cycle on the waterfall.

It is more effective not to “net” on a calling station when you reply to a CQ call but instead to transmit in a clear space on the waterfall in the same audio passband that the calling station is operating in.

It is also most effective to only change your operating audio passband by using the frequency pulldown and following that, to select an audio frequency on which to transmit using the waterfall display. Turning the radio dial may mean that you will not be transmitting in audio passband where a calling station will be listening.

Gary ZL2IFB has published a useful FT8 Operating Guide (https://www.g4ifb.com/FT8_Hinson_tips_for_HF_DXers.pdf) which will probably cover any issues that you have queries with.