

# Preparing for the Newest Digital Contests

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Digital contesting has now been around for several decades in one form or another. The predominant mode of operation was RTTY, with a smattering of other digital modes mixed in. The advancement of digital signal decoding technology, including the introduction of newer digital modes such as PSK31 (*fldigi*) and FT4/FT8 (*WSJT-X*), which made multichannel decoding of received signals possible, changed the face of digital contesting. With the increasing popularity of FT4 and FT8, several contests designed specifically for operators of these modes have appeared. The FT Roundup (originally the FT8 Roundup), sponsored by [rttycontesting.com](http://rttycontesting.com), made its debut in 2018, and the World Wide Digi DX Contest, sponsored by the World Wide Radio Operators Foundation (WWROF) and the Slovenia Contest Club, was first held in 2019, allowing only the FT4 and FT8 modes to be used.

## The ARRL International Digital Contest

The ARRL International Digital Contest premiered during the first weekend of June 2022. The contest is designed for operators of digital amateur radio modes other than RTTY, as the January 2023 RTTY Roundup will become a RTTY-only event. The contest is a distance-scored event, with the center-to-center distances of the station's four-character Maidenhead grid squares used for the scoring calculations.

As with participation in any contest, preparation is the key. Make sure that you have the latest version of the mode-specific and logging software that you will be using installed and up to date. Once you've assured that all updates are installed and the software is operational, you'll need to configure the software to make sure you're sending

and receiving the correct exchange and logging the contacts correctly. In advance of the International Digital Contest, several participants had asked for guidance on properly configuring *WSJT-X* for the event.

## Setting Up *WSJT-X* for the Contest

As mentioned previously, the ARRL International Digital Contest and the World Wide Digi DX Contest require participants to send and receive four-character Maidenhead grid squares. The default exchange in non-contest FT8 contacts is a signal report (expressed in dB) as well as a grid square, but the contest exchange does not require signal reports. Assuming that you are using *WSJT-X*, and that you already have the program configured and working with your radio, the following steps will ensure that you're sending and receiving the appropriate exchanges.



Figure 1 — The main *WSJT-X* screen, showing the “Settings” option highlighted in the “File” menu.

From the main *WSJT-X* screen, select the “Settings” tab in the “File” menu (see Figure 1), this will bring up the “Settings” menu (see Figure 2). On the “Advanced” tab, click the “Special Operating Activity” checkbox and select “ARRL Digi Contest.” If you’re using *WSJT-X* version 2.5.4 or older, select “NA VHF,” as support for the ARRL International Digital Contest will be released in version 2.6.0, which is currently in beta test. The exchange is the same for both events, so the software will populate the correct exchange

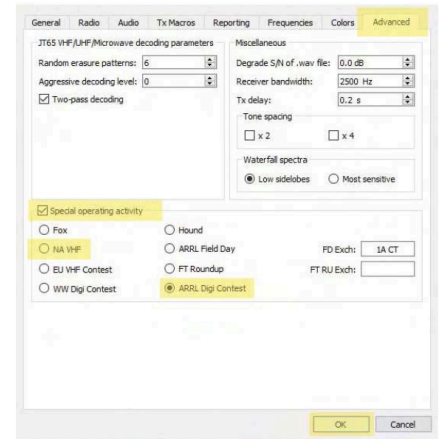


Figure 2 — The “Advanced” tab of the “Settings” menu, with relevant selections highlighted. See the text.

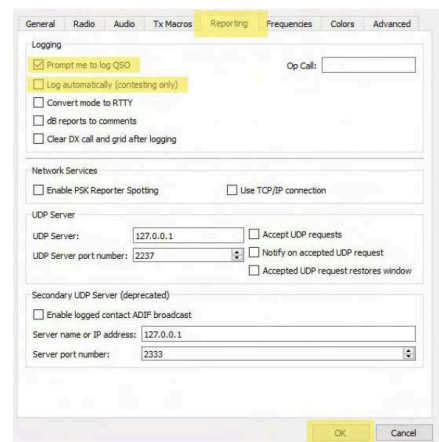


Figure 3 — The “Reporting” tab, with relevant selections highlighted. See the text.

messages using either choice. If operating in the World Wide Digi DX Contest, select that option instead.

On the “Reporting” tab, check either the “Prompt me to log QSO” or the “Log automatically” box, depending on your operating style (see Figure 3). I prefer to be prompted to log each QSO, as the final determination on whether a QSO is valid is up to the operator, not the software. Click the “OK” button on the bottom of the tab to save your settings.





**Figure 4** — Following the steps in this article will ensure that the messages in TX2 – TX6 will be properly generated.

The “Contest Log” window should now appear. If you’ve used the program in an earlier contest, the log from that contest will appear. If you’ll be using *WSJT-X* instead of a contest logging program to log, it is important to clear the log so that only QSOs from the current contest will be in the log. From the “File” menu on the main program screen, select “Reset Cabrillo log.” If you’re using an external logging program, such as *NIMM Logger+* or the *N3FJP* suite of loggers, be sure to follow the instructions for connecting *WSJT-X* to whichever logging software package you are using.

Following the steps above will make sure that the messages will be properly generated in the TX2 – TX6 messages, so that the proper information will be sent over the air (see Figure 4).

### To 73 or not 73?

One of the common questions that participants in digital contests ask is, “What makes a complete QSO?” Contest rules state that the required exchange is received and acknowledged by each participant. Improving the rate of contacts per hour will improve your score, so there’s no need to have to make any extra transmissions during each QSO. Let’s look at a specific example from the ARRL Digital Contest (see Figure 5).

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CQ TEST WA7BNM DM04 U.S.A.
WA7BNM N1SFE FN31
N1SFE WA7BNM R DM04
WA7BNM N1SFE RR73
CQ TEST WA7BNM DM04 U.S.A.
  
```

**Figure 5** — An example of a complete QSO.

In this QSO, I’m copying Bruce, WA7BNM, calling CQ (represented by the top line). The second line is my transmission to him, sending my grid square as the exchange. Bruce then sent “R DM04,” acknowledging my report to

him, and sending his grid back to me. My final transmission, “RR73,” acknowledges my receipt of his report. At this point, *WSJT-X* sees that I sent him an “RR73,” and prompts me to log the QSO. Because Bruce called CQ again without asking for a repeat of my report, I’m confident that we have completed the contact and can log the QSO.

Many participants ask if they should have waited for WA7BNM to send a final “73” before I logged it. As we have both acknowledged each other’s reports (Bruce sent an “R DM04” to my first transmission, and I sent an “RR73” back), the contact is valid, and should be logged by both QSO partners. If you look at the sequencing of the Standard messages that *WSJT-X* populates (see Figure 4) using the ARRL\_DIGI profile, you’ll see that the software’s Auto Sequencing feature handles the messages in the order shown in Figure 5.

### After the Contest

You’ve put the time in making contacts, so why not submit a log? It doesn’t matter how many QSOs you made. Send in your log to the contest sponsor; you might be surprised with the result! If you’re using an external logging program, follow the instructions in that particular program on how to export a Cabrillo log file. ARRL only accepts Cabrillo logs for its contest log

**Figure 6** — The dialog box for exporting your Cabrillo log file.

submissions, but don’t worry, there are third-party log converters that will convert your log for you.

If you’re using *WSJT-X* in contest mode, the log that you created during the contest can be exported in Cabrillo format within the program. From the main program window, select “Export Cabrillo log” from the “File” menu. A dialog box will appear, in which you’ll fill in the appropriate information, such as your RAC/ARRL Section or DX, and the correct Contest ID (see the rules of the contest you’re operating in) in the “Contest:” field. For the ARRL Digital Contest, the Contest ID is ARRL-DIGI.

Figure 6 shows the “Export Cabrillo” dialog box. The highlighted fields are required to properly create a Cabrillo log for submission to the contest sponsor’s website. The information in the blank fields will be filled in at the time of log submission. The other fields, such as your name, address, operators call sign list, and club name are optional. Once you’ve filled in the form, click the “Save” button, and a dialog box will appear asking where on your computer’s hard drive to save the Cabrillo file.

**Important:** Be sure to remember where you’ve saved this file (I usually choose the desktop) so that you’ll be able to find the file to upload to the contest sponsor. Read the contest rules to find out the log submission deadline and how to submit your log. For most ARRL contests, you’ll be directed to <https://contest-log-submission.arrl.org/>.

### Major FT4/FT8 Contests

ARRL International Digital Contest  
[www.arrl.org/arrl-digital-contest](http://www.arrl.org/arrl-digital-contest)  
 World Wide Digi DX Contest  
<https://ww-digi.com/>  
 FT Roundup  
<https://www.rttycontesting.com/ft-roundup/>

### Major RTTY Contests

ARRL RTTY Roundup  
[www.arrl.org/rtty-roundup](http://www.arrl.org/rtty-roundup)  
 CQ WPX RTTY  
<https://www.cqwxprtty.com>  
 CQ World Wide RTTY DX  
<https://cqwwrtty.com/>  
 BARTG HF Contest  
<https://bartg.org.uk/wp/bartg-hf-rtty-contest/>