

Send FT8 Spots to the RBN
Getting Started
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The Reverse Beacon Network (RBN) is now processing spots for FT8 stations. This paper describes how to add an initial capability to send FT8 spots to your current RBN node. This will send spots from just one band from an instance of WSJT-X running on the same computer with Aggregator. Here are the steps to follow:

1. Update your Aggregator to version 5.0 or newer from <http://reversebeacon.net/>
2. Obtain the current WSJT-X version from <https://physics.princeton.edu/pulsar/k1jt/wsjt.html>
3. Install WSJT-X on your Aggregator computer and follow the installation instructions so that WSJT-X is decoding FT8 messages from your receiver's audio output on your band of choice.
4. On WSJT-X click the File/Settings/Reporting option and look at the “UDP Server:” and “UDP Server port number:” text box. The default values should be 127.0.0.1 and 2237, respectively.
5. Make sure no other programs are using port 2237. There are ways to work around this restriction but I will skip these for this initial capability.
6. If Aggregator is not already running start it and set it up so it's sending CW spots to the RBN.
7. Go to Aggregator's FT8 tab. Click the “Use?” box for Source Number 11. The default Port Number and Calibration Factor for Source Number 11 should be 2237 and 1.000, respectively.
8. Click the “Apply Changes” button at the bottom of Aggregator's FT8 tab.
9. You should see WSJT-X UDP messages show up in the large text box on the right side of Aggregator's FT8 tab. Aggregator will process these messages and send spot data to the RBN as appropriate.

Success may inspire you to expand your FT8 capability to cover multiple bands. There are many ways to do this. I'm sending spots from seven bands using a QS1R, SkimServ, CWSL_Tee, cwsl_ssbwave, and virtual audio cables. Setting up all these parts to run together manually is very tedious. So I have written a program called FT8Startup to automate the process. FT8Startup and instructions are available at <http://reversebeacon.net/>