

# How to Guide: FT8 Setup

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## Introduction

This document is intended as a how-to for users that have installed SmartSDR v2.x or higher and have some familiarity with SmartSDR basics.

#### Requirements

- SmartSDR v2.49 or higher
- WSJTx V1.9.1 or higer
- SliceMaster v0.10.5e or higher

#### **Changes from Previous Versions**

There are several changes made to profiles that users should be aware of:

1. This is the initial version

## WSJT-x

WSJTx is the parent program for many modes of digital operation, not limited to: FT8, JT4, JT9, JT65, QRA64, ISCAT, MSK144, WSPR, Echo and FreqCal.

WSJTx can be download from the WSJTx home page at: https://physics.princeton.edu/pulsar/k1jt/wsjtx.html

I	WSJT-X is a complex program. B&sure to read the online WSJT-X User Guide for Version 1.9.
(	German translations of WSJT-X User Guide (Version 1.9.1) and associated documents by Enrico Schürrer, OE1EQW: WSJT-X Handbuch, FMT User, QRA64 EME.
5	Swedish translation of WSJT-X User Guide (Version 1.9.1) by Anders Rhodin, SM7VRZ: WSJT-X Användarmanual.
	Windows         • Latest full release, Version 1.9: wsjtx-1.9.1-win32.exe. (runs on Win XP, Vista, Win 7, Win 8, Win10, both 32- and 64-bit).         Linux         Installation instructions for Linux can be found here in the User Guide. Download the package file appropriate for your system, from the list below. (Versions installable be made available as soon as our package maintainers create the packages.)         • Latest full release, Version 1.9

0	Debian, Ubuntu, (32-bit):	<u>wsjtx 1.9.1 i386.deb</u>
0	Debian, Ubuntu, (64-bit):	wsjtx 1.9.1 amd64.deb
0	Fedora, RedHat, (32-bit):	<u>wsjtx-1.9.1.i686.rpm</u>
0	Fedora, RedHat, (64-bit):	wsjtx-1.9.1.x86_64.rpm
0	Raspbian Jessie, ARMv6 :	wsjtx 1.9.1 armhf.deb

Please review the WSJT-x documentation for the steps on installing WSJT-x.

It is critical that you start WSJT-x once and edit your station information with the F2 key. Once this is done, shut down WSJT-x cleanly by selecting File then Exit. This will save your station information.



#### **Slice Master**

Slice Master 6000's primary focus is on dynamically configuring and launching other third party programs to work with the slice receivers in your radio. Slice Master eliminates much of the complicated steps required in the past for configuring WSJT-x.

Slice Master has many features, but the focus of this document is for FT8 and other digital modes of operation.

A program instance can be launched for any active slice so long as its panadapter is associated with the necessary resources. Two way communication between Slice Master 6000 and the programs it launches is maintained. Clicking on a signal in CW Skimmer, for example, will cause the associated slice receiver to change frequency. Likewise, changing the frequency of a slice receiver will cause the associated CW Skimmer to follow along.

More of Slice Masters features can be found on the Slice Master home page on GitHub: <u>https://github.com/K1DBO/slice-master-</u> <u>6000/releases</u>. The ReadMe (how to document) can be found at <u>https://github.com/K1DBO/slice-master-</u> <u>6000</u>.

Slice Master is a program that does not have an installer program like most Windows programs. After you download the program, it is recommended that you move the entire program to a convenient location that you can easily reference for starting the program.





When Slice Master launches it will attempt to connect to the radio. You will require SmartSDR DAX to be running. On the Launch Tab, we want to focus on the WSJT-X section:



Picking your Launch choice tells Slice Master when you wish WSJT-X to be started. What is key is that no additional configuration on WSJT-x is required, however it is critical that your station information be accurate.

Assuming you wish to use Slice A, you will need to assign that Slice to a DAX channel.

You may change this at a later time, but keeping it simple for now allows for you to get on the air in FT8. What is key is that the Slice MUST be assigned to a DAX channel (in this case 1) and that in Slice Master under Tab A, it also shows the same Slice. Your DAX channel (in this case 1) is just like a physical Audio cable you may have used with a traditional radio.

At this point, you may be asking what about the Transmit Audio, CAT and the PTT part. This is the easy part. Slice Master handles this all for you.

## Operation

In order to get going, confirm the following:

- SmartSDR is running or you can also connect to your radio with a Maestro, iPad, or any other SmartSDR client
- 2. SmartSDR DAX is running and connected to your radio
- 3. SmartSDR CAT is running and connected to your radio.
- WSJT-x is <u>NOT running</u> Slice Master will start it for you.
- 5. Slice Master has been started.

When you start Slice Master, you want to check the tab on the Slice you are using (in this case A).

When set "By Mode" Slice Master will automatically start WSJTx for you and all ready to go.

Go to SmartSDR and select DigU as a mode.

That is it. Select your band in WSJTx and you are ready to go!

Launch Sync Mix
A B C D
CW Skimmer
Launch: By mode
CW DIGU DIGL
On Click: 🗹 TX 🗹 Select
DM780
Launch: Never
CW RTTY DIGU DIGL
Identity: <pre><not configured=""> </not></pre>
WSJT-X
Launch: By mode
When active
Settings: Slice-A



Should WSJT-x not start, you may have to toggle the radio in and out of DigU modes or in some cases stop and start Smart SDR DAX.

## For More Information

- FLEX-6000 Family Quick Start Guide

   (<u>http://www.flexradio.com/downloads/flex-6000-family-qsg-single-page-pdf/</u>)
- SmartSDR for Windows Software Users Guide

   (http://www.flexradio.com/downloads/smartsdr-software-users-guide-pdf/)
- SmartSDR Brochure
   (<u>http://www.flexradio.com/downloads/smartsdr-brochure-pdf/</u>)
- FlexRadio Systems Help Desk

   (<u>https://helpdesk.flexradio.com/hc/en-us/</u>)
- FlexRadio Systems Community

   (<u>https://community.flexradio.com/flexradio</u>)

For more information visit <u>flexradio.com</u> or call 512-535-4713.

