Building WSJT-X on Raspberry Pi

It already comes packaged for the Raspberry Pi.

* Raspbian Jessie, ARMv6 ... :  [wsjtx\_2.0.0-rc3\_armhf.deb](http://physics.princeton.edu/pulsar/K1JT/wsjtx_2.0.0-rc2_armhf.deb)

I’m using a fairly recent and clean Raspbian 9 (“stretch”) installation.

Download the source <wsjtx-2.0.0-rc3.tgz> , from <http://physics.princeton.edu/pulsar/K1JT/wsjtx.html> on an RPI 3, of course, and try to build it.

Incomplete Instructions are in the INSTALL file.

Dependencies are listed at the beginning but a few others were discovered along the way.

Boiled down:

(warning: sometimes ASCII – gets changed to some other similar looking character.  It looks OK but causes a problem if you copy-n-paste to command line.)

build-essential (singular, not plural) already there.

gcc 4.8.2 is mentioned but I’m already up to 6.3.0

sudo apt-get install gfortran                        (this gives us 6.3.0 rather than listed 4.8.2)

sudo apt-get install cmake

git is already there.

sudo apt-get install subversion

sudo apt-get install asciidoc                         (fails due to bad hash, a2x missing)

sudo apt-get install libqt5multimedia5    (no -dev version found)

sudo apt-get install libqt5serialport5-dev

sudo apt-get install qtmultimedia5-dev

sudo apt-get install automake

sudo apt-get install libtool

sudo apt-get install texi2html                     (not sure.  Texinfo might be the solution)

sudo apt-get install texinfo

sudo apt-get install libfftw3-dev

sudo apt-get install libusb-1.0

sudo apt-get install asciidoctor

This worked with the rc2 version but not rc3. It complains about a2x missing. As a work-around, I created shell script /usr/local/bin/a2x to fake it out:

#!/bin/bash

echo "Fake a2x"

Now we can build.

cd ~

mkdir build

cd build

cmake  –D WSJT\_SKIP\_MANPAGES=ON   ../wsjtx-2.0.0-rc3

cmake  --build .

sudo cmake  --build . --target install

We need to skip the man pages because a2x is missing due to asciidoc install failure.

The skip man pages option worked for rc2 but not rc3. Creating a fake a2x was necessary.

Depedencies don’t seem to be set up properly for rebuilds. If you modify source, and run cmake, the modified source files do not get recompiled. If you remove the \*.o files, the sources are not recompiled. There is probably a better way but after getting frustrated, I started doing this every time I modified a source file:

rm wsjtx-prefix/src/wsjtx-build/libwsjt\_cxx.a

cmake --build . --target wsjtx-build

cmake --build . --target wsjtx

sudo cmake --build . --target install

sudo cp ./wsjtx-prefix/src/wsjtx-build/wsjtx /usr/local/bin