

How to Install FLDIGI on the Raspberry Pi using the Bullseye OS

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I have compiled and installed the NBEMS suite of Amateur Radio programs on my RPi-4 running the Bullseye Operating System, and follows is what is required.

First off the many library routines need to be installed.

Download and use this script to make this painless. [AAA_install_lib.sh](#) (downloads from qso.com). Launch the script with this command: **sudo bash AAA_install_lib.sh** (make sure you are in the same directory as the script, or specify the full path to where it is). You must also be a member of the sudo group and know the password for your sudo command.

You also want ‘Hamlib’ but that must be download from <https://sourceforge.net/projects/hamlib/> and you will also need to compile it as shown below.

The script is executed with the console command "sudo bash AAA_install_lib.sh". You can rename it, I just wanted it to be at the top of my directory to make it easy to find. Once used you should not need it again unless you need to set up another computer.

Copy the files from the w1hkj.com site (copy the zipped (.gz) files). You will want; fldigi, flamp, flmsg, and flrig and flwrap. They should download into your download folder. I create a special NBEMS folder and move them from Download folder to the new folder (NBEMS).

In turn, right-click on each of the downloaded files (...gz) and select "Extract Here". This will create a new folder for the program you are going to compile.

Note: If you want to work from the console/terminal level, use **cd** to log to the directory where the downloaded tar.gz files reside. Then on each file in turn use the command **tar -xvzf [filename.tar.gz]** and it will do the same thing. Example: **tar -xvzf fldigi-4.2.27** will extract to the same directory as in “Extract Here”.

In turn, for each of the new program folders double-click the folder to open it, then right-click "open in Terminal" and then do the following commands (one folder at a time – do hamlib first):

```
./configure --enable-optimization=rpi4
```

```
# (note: the dash in front of enable is a double minus)
```

```
make clean
```

```
make -J4 # (number of cores) Takes 14 minutes to compile Fldigi on the RPi-4
```

```
sudo make install
```

That's it, the programs are installed however the programs do not show in the system menu.

Use the Main Menu Editor and create (if you wish) a new menu. I called mine "Amateur Radio", then go into that new menu folder and add each of the programs. You do not need the full path, for program name just use the name; fldigi or one of the other programs. The system knows where they are so you do

not need a full path. You can also find the icon that displays on the screen. You find it in each application folder in the 'data' sub-folder.

Once the menu is done then you can return to the normal screen and menu and right-click on each entry and add it to the desktop if you wish. Do not check the box to run in terminal, it works but you have an extra terminal window to clutter your screen.

Don't forget 'hamlib' because Fldigi and Flrig need it, although the programs will run without it but I don't recommend it.

Late note:

I found that a newer FLAMP file would not compile. The solution is to just run the './configure' command, leaving off the optimizations part of the command. Then run '**make clean**' followed by '**make -j4**' and then '**sudo make install**'.

Later Note: (2/5/24)

Bookworm is now the Raspberry Pi Operating System (Pi OS) and the previous 'Late Note' remains unchanged, but if you use either NoMachine or DWService remote Desktop programs, with the default settings they will not allow access to the desktop, it crashes the connection. The solution is to run:

<**sudo raspi-config**> and select the Advanced Options (6) selection, then locate <A6 wayland> and change the setting to <W1 X11>.

Still later note: (4/22/24)

Fldigi has grown in size that it can no longer compile on a Pi with less than 4 GB of RAM, which says you cannot run it on a Pi-3 or less. A Pi-4 with 4 GB RAM works but best is using the Pi-5 with 8 GB of RAM (it is so much faster than the Pi-4). The latest of the NBEMS software do not want the 'optimizations' stuff so the compile command is simply <make -j4> (no brackets).

If you have questions, I can be contacted at <mailto:cwa@qso.com?subject=Help with Pi>