

# GNU/Linux Ham Radio Setups

Here's a quick list of pages I found promising about using GNU/Linux for ham radio.

- <https://hamwaves.com/linux.ham/en/index.html>
- <https://sourceforge.net/projects/kb1oiq-andysham/>
- <https://launchpad.net/%7Eubuntu-hams-updates/+archive/ubuntu/ppa/+index?batch=75>

If any of you are already using GNU/Linux to run ham radio programs, please feel free to edit this page to share your experience, tips, etc.

## HamPi

**HamPi** is a Raspberry Pi image that comes preloaded with tons of ham software. Here's the list (copied from their [README.docx](#) file:

### General Ham Radio Applications

- [HamLib](#) - Ham Radio Control Libraries
- [grig](#) - graphical user interface to the Ham Radio Control Libraries
- [CHIRP](#) - Radio Programming Software
- [APRS Message App for JS8Call](#) - GUI to send APRS messages via JS8Call
- [QTel](#) - EchoLink client
- [QSSTV](#) - Slow Scan TV (e.g. "Fax")
- [Gpredict](#) - Satellite prediction
- [FreeDV](#) - Free digital voice vocoder
- [BlueDV](#) - Client for D-Star and DMR
- [WsprpyPi](#) - [WSPR software](#)
- [ADS-B Flight Tracking Software](#)
- [Pi3/4 Stats Monitor](#) - by [W1HKJ](#)
- [VOACAP](#) - HF propagation prediction
- [GPS Support](#)
- [Auto WiFi Hotspot](#) - Automatically turn your Pi into a WiFi hotspot when in the field!
- [wxtoimg](#) - NOAA weather imaging software
- [twHamQTH](#) - an online callsign look up program
- [twclock](#) - a world clock and automatic ID for amateur radio operators
- [acfax](#) - Receive faxes using your radio and sound card
- [colrconv](#) - converts client with sound and ncurses color support
- [D-Rats 0.3.9 \(by new maintainer Maurizio Andreotti\)](#) - A communication tool for D-STAR
- [fbb](#) - Packet radio mailbox and utilities
- [gcb](#) - Utility to calculate long and short path to a location
- [glfer](#) - Spectrogram display and QRSS keyer
- [Xdx](#) is a DX-cluster client
- [DXSpider](#) - DX Cluster Server
- [fccexam](#) - Study tool for USA FCC commercial radio license exams.
- [gnuais / gnuaisgui](#) - GNU Automatic Identification System receiver
- [hamexam](#) - Study guide for USA FCC amateur radio (ham radio) license examinations.
- [hamfax](#) - Qt based shortwave fax

- [inspectrum](#) - tool for visualising captured radio signals
- [predict-gsat](#) - Graphical Predict client
- [splat](#) - analyze point-to-point terrestrial RF communication links
- [wwl](#) - Calculates distance and azimuth between two Maidenhead locators
- [AX.25](#) - Packet Radio drivers for ax.25 protocol
- [linpac](#) - terminal for packet radio with mail client
- [PyBOMBS](#) - GNU Radio install management system
- [AMBEServer](#) - AMBE vocoder chip support

## Antenna Ham Radio Applications

- [antennavis](#) - Antenna Visualization Software
- [gsmc](#) - A GTK Smith Chart Calculator for RF impedance matching
- [nec2c](#) - Translation of the NEC2 FORTRAN source code to the C language
- [xnecview](#) - NEC structure and gain pattern viewer
- [yagiuda](#) - software to analyse performance of Yagi-Uda antennas

## Digital Mode Ham Radio Applications

- [WSJT-X](#) - Weak Signal (FT8, FT4, etc.) by [W1JT](#)
- [GridTracker](#) - Graphical mapping companion program for WSJT-X or JTDX
- [JTDX](#) - Alternate client for Weak Signal (FT8, FT4, etc.)
- [JS8Call](#) - Messaging built on top of FT8 protocol by [KN4CRD](#)
- [JS8CallTools](#) - Get Grid coordinates using GPS
- (FLDigi is in its own section below.)
- [gnss-sdr](#) - GLONASS satellite system Software Defined Receiver
- [linpsk](#) - amateur radio PSK31/RTTY program via soundcard
- [multimon](#) - multimon - program to decode radio transmissions
- [multimon-ng](#) - digital radio transmission decoder
- [psk31lx](#) - a terminal based ncurses program for psk31
- [twpsk](#) - a psk program

## Software Defined Radio

- [CubicSDR](#) - Software Defined Radio receiver
- [cutesdr](#) - Simple demodulation and spectrum display program
- [GQRX](#) - Software defined radio receiver
- [SDRAngel](#) - SDR player
- [lysdr](#) - Simple software-defined radio
- [SoapyAudio](#) - Soapy SDR plugin for Audio devices
- [SoapyHackRF](#) - SoapySDR HackRF module
- [SoapyMultiSDR](#) - Multi-device support module for SoapySDR
- [SoapyNetSDR](#) - Soapy SDR module for NetSDR protocol
- [SoapyRemote](#) - Use any Soapy SDR remotely
- [SoapyRTLSDR](#) - Soapy SDR module for RTL SDR USB dongle
- [SoapySDR](#) - Vendor and platform neutral SDR support library
- [SoapySDRPlay](#) - Soapy SDR module for SDRPlay
  - Support for [RTL-SDR](#)
  - Support for [SDRPlay SDR](#)
  - Support for [HackRF SDR](#)
  - Support for [AirSpy](#) and [AirSpy HF](#)
- [SoapySDRAirSpy](#) - Soapy SDR module for AirSpy SDR
- [SoapySDRFUNCube Dongle Pro+](#) - Soapy SDR module for FUNCube Dongle Pro+

- [SoapySDRPlutoSDR](#)- Soapy SDR module for Pluto SDR
- [SoapySDROsmoSDR](#)- Soapy SDR module for Osmo SDR
- [SoapySDRRedPitaya](#)- Soapy SDR module for Red Pitaya SDR
- [SoapyUHD](#)- Soapy SDR module for Ettus ResearchUHD SDR
- [SoapySDRVOLKConverters](#) - Support for VOLK-based type converters

## APRS Applications

- [Xastir](#) - APRS GUI client / Digipeater / Igate
- [YAAC](#) - Yet Another APRS Client
- [DireWolf](#) - Software "soundcard" AX.25 packet modem/TNC and APRS encoder/decoder
- [aprsdigi](#) - digipeater for APRS
- [aprx](#) - APRS Digipeater and iGate
- [soundmodem](#) - Sound Card Amateur Packet Radio Modems

## FLDigi Application Suite from [W1HKJ](#)

- [flrig](#) - Rig Control program which interfaces with fldigi
- [fldigi](#) - [Digital Modes](#) Communications
- [flaa](#) - RigExpert Antenna Analyzer Control Program
- [flamp](#) - File transmissions via Amateur Multicast Protocol
- [flarq](#) - ARQ data transfer utility for fldigi
- [flcluster](#) - Telnet client to remote DX Cluster Servers
- [fllog](#) - Logbook application which can use same data file as fldigi
- [flmsg](#) - Editor for ICS 213 Forms
- [flnet](#) - Net Control Assistant for Net Activities (Check-In Application)
- [flpost](#) - NBEMs post office
- [flwrap](#) - File encapsulation and compression for transmission over amateur radio
- [flwkey](#) - Winkeyer (or clone) control program for K1EL Winkeyer series

## Logging Applications

- [TrustedQSL](#) - LotW client
- [CQRlog](#) - Ham Radio Logging Application
- [PyQSO](#) - Logging software (written in Python)
- [klog](#) - The Ham Radio Logging program
- [tlf](#) - console based ham radio contest logger
- [tucnak2](#) - VHF/UHF/SHF Hamradio contest log version 2
- [twlog](#) - basic logging program for ham radio
- [upload\\_adif\\_log](#) - Upload only new log entries to LotW, eQSL.cc and ClubLog
- [wsjtx\\_to\\_n3fjp](#) - Logging adapter to allow WSJT-X to log to N3FJP
- [xlog](#) - GTK+ Logging program for Hamradio Operators

## WinLink Applications

- [Pat WinLink](#) - WinLink for Raspberry Pi (and other platforms)
- [ARDOP](#) support for Pat WinLink
- [ARDOP-GUI](#) - Provides graphical representation of ARDOP connections
- [Find ARDOP](#) - Retrieves local ARDOP sources by [KM4ACK](#)
- [Pat Menu 2](#) - Menu for Pat by KM4ACK
- [PMON](#) - a PACTOR® Monitoring Utility for Linux

## Morse Code Applications

- [aldo](#) - Morse code training program
- [cw](#) - sound characters as Morse code on the soundcard or console speaker
- [cwcp](#) - Text based Morse tutor program
- [xcwcp](#) - Graphical Morse tutor program
- [cwdaemon](#) - morse daemon for the serial or parallel port
- [ebook2cw](#) - convert ebooks to Morse MP3s/OGGs
- [ebook2cwgui](#) - GUI for ebook2cw
- [morse](#) - training program about morse-code for aspiring radio hams
- [morse2ascii](#) - tool for decoding the morse codes from a PCM WAV file
- [morsegen](#) - convert file to ASCII morse code
- [qrq](#) - High speed Morse telegraphy trainer
- [xdemorse](#) - decode Morse signals to text