Gqrx SDR receiver
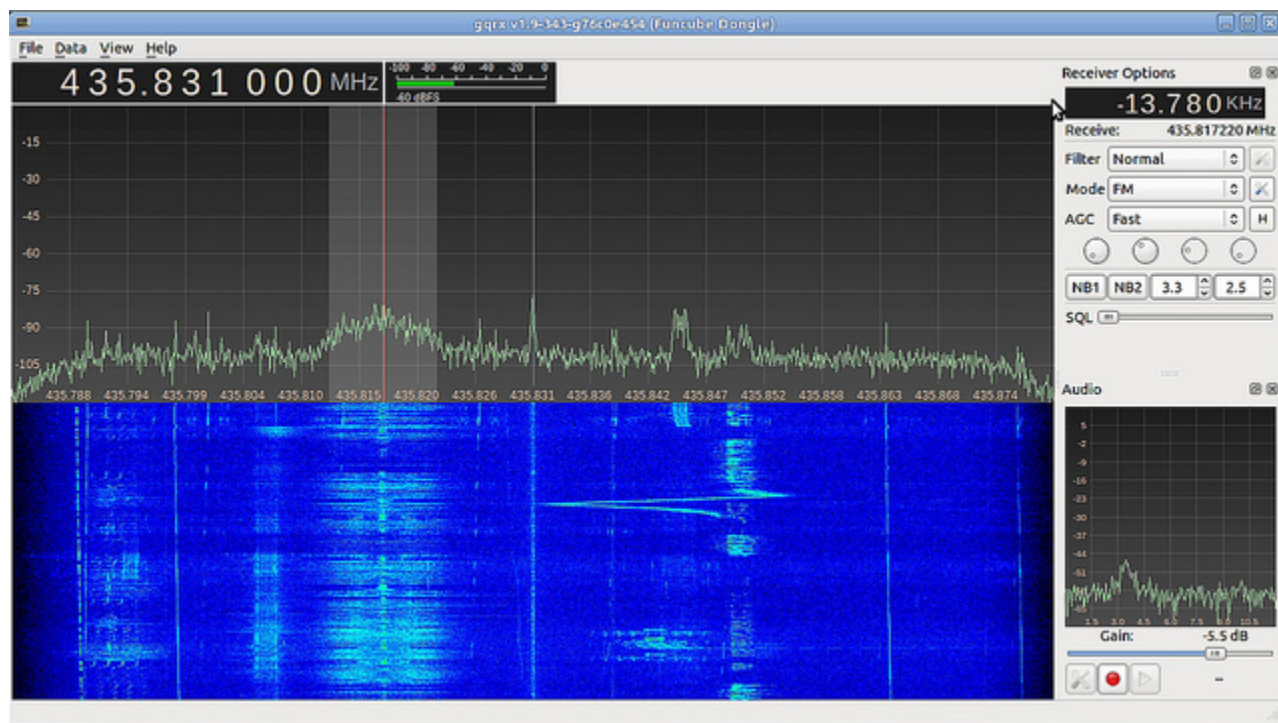
Saturday, 30 July 2011 14:37   Alexandru Csete Radios - GNU Radio

Gqrx is a software defined radio receiver for Funcube Dongle (FCD), RTL2832U-based DVB-T devices (RTL-SDR), Universal Software Radio Peripherals (USRP) and Osmo SDR devices. It is powered by GNU Radio and the Qt GUI toolkit.

Gqrx is free and open source software and anyone is invited to hack the source code to suit their needs.

Status

Gqrx 2.0 is more or less finished and is awaiting packaging. It supports the Funcube Dongle on Linux.

Gqrx 2.1 is a work in progress and adds support for RTL2832U-based DVB-T dongles, USRP and Osmo SDR devices via the excellent gr-osmosdr package.

Currently, gqrx offers the following features:

Automatically detect supported devices attached to the computer

Process I/Q data from Funcube Dongle, RTL2832U SDR, USRP and OSmo SDR

Change frequency, gain and apply various correction (freqeuncy, I/Q blanace)

AM, SSB, FM-N and FM-W modulations

Variable band pass filter

Squelch, noise blankers and AGC

FFT plot and waterfall

Record audio to file (play back is planned)

Spectrum analyzer mode where all signal processing is disabled

Watch gqrx in action in these YouTube videos.

Download and install

Binary and source packages containing official releases are available from its Sourceforge project page. The latest development code can be forked from Github. Installation instructions depend on version and are included in each package.

Tutorials

Howto receive and decode NOAA APT images with Funcube Dongle and Gqrx

Credits

Design and implementation by Alexandru Csete OZ9AEC

Many of the GUI widgets were adopted from Cutesdr by Moe Weatley

The icons come from the GNOME, Tango and Mint-X icon themes.

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