DXPATROL

ham-radio antenas

Ultra Wide-band Coverage SDR Receiver MK4

- Full coverage reception form 100KHz to 2GHz SDR
- Direct Sample Mode *
- Very High performance Pre-amplifier +33dBm IP3*
- Font-end input antennas protection*
- Shielded Aluminum box*
- Independent antenna inputs for Shortwave and VHF&Up
- USB computer connection (micro-usb)
- Accurate and efficient band filters

- Very clean audio reception
- SMA golden antenna connectors
- LED power indication
- Small size
- Freeware software Windows, Linux, Android, IOS.
- Up to 3.2 M Sample rate.

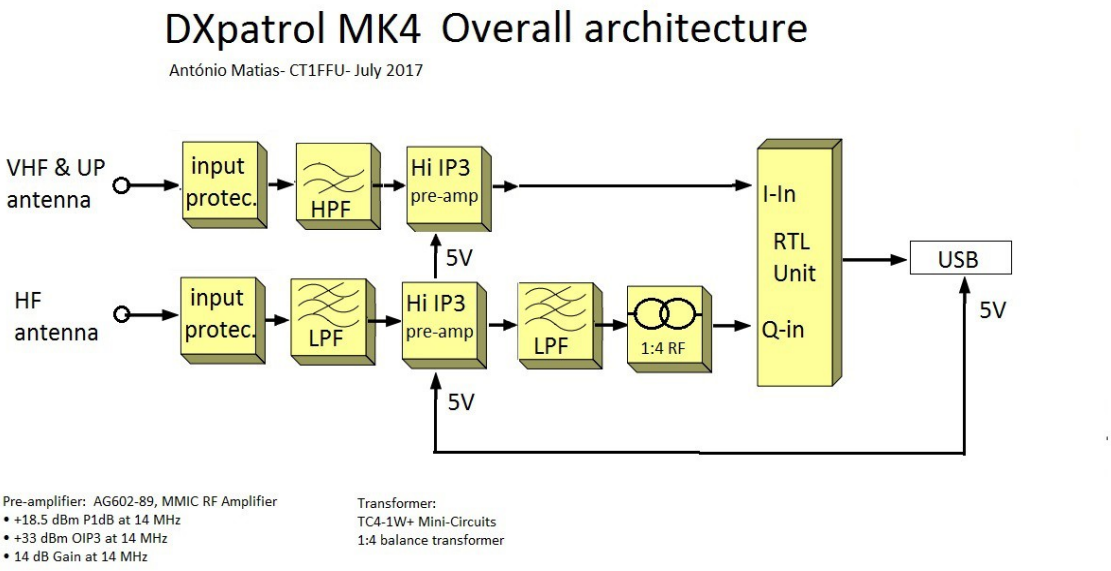
*New

What can we listen with DXpatrol?

The Dxpatrol can be used as a wide band radio scanner. Applications include:

- Listening to unencrypted Police/Ambulance/Fire/EMS conversations.
- Listening to aircraft traffic control conversations.
- Tracking aircraft positions like a radar with ADSB decoding.
- Decoding aircraft ACARS short messages.
- Scanning trunking radio conversations.
- Decoding unencrypted digital voice transmissions.
- Tracking maritime boat positions like a radar with AIS decoding.
- Decoding POCSAG/FLEX pager traffic.
- Scanning for cordless phones and baby monitors.
- Tracking and receiving meteorological agency launched weather balloon data.
- Tracking your own self launched high altitude balloon for payload recovery.
- Receiving wireless temperature sensors and wireless power meter sensors.
- Listening to VHF amateur radio.
- Decoding ham radio APRS packets.
- Watching analogue broadcast TV.
- Sniffing GSM signals.
- Use on your Android device as a portable radio scanner.
- Receiving GPS signals and decoding them.
- Use as a spectrum analyzer.
- Receiving NOAA weather satellite images.
- Listening to satellites and the ISS.
- Radio astronomy.
- Monitoring meteor scatter.
- Listening to FM radio, and decoding RDS information.
- Listening to DAB broadcast radio.
- Use as a panadapter for your traditional hardware radio.
- Decoding taxi mobile data terminal signals.
- Use as a high quality entropy source for random number generation.

•Use as a noise figure indicator.
•Reverse engineering unknown protocols.
•Triangulating the source of a signal.
•Searching for RF noise sources.
•Characterizing RF filters and measuring antenna SWR.



Technical data DX-Patrol

@ 14MHz, CW, 500Hz, SDR#	
Noise Floor:	-117dBm
AGC Threshold:	22 µV (wideband 2MHz w/ max RF gain -45dBm total)
100 kHz Blocking Range:	77dB (useful range, top-bottom = 77dB)
Reciprocal Mixing Dyn. Range:	76dB
Narrow spacing dyn. range IMD3:	66dB
@ 50MHz	
Narrow spacing dyn. range IMD3:	73dB
@ 144MHz	
Narrow spacing dyn. range IMD3:	63dB

New MK4 SDR
It offers a better connection via micro-USB cable into a PC
 or a Android Smartphone and Tablets

The SDR as two micro-USB A and B.

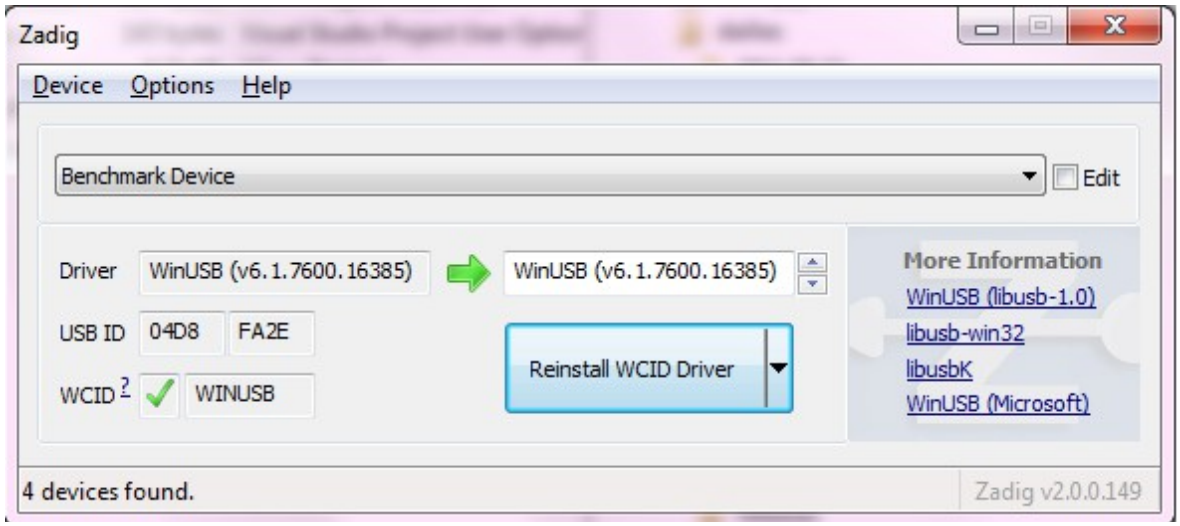
USB-B is data and must be the one connected to PC/Phone/Tablet.
USB-A is Power assistance connections. (Charging wile operating)

Due the short life of batteries of Smartphones and tables, and the power consumption of SDR, you can at same time use the SDR and charge the tablet just by connecting you charger on USB-A

Toggle switch will turn power ON or OFF
The blue LED light color will indicate.
USB-B is Cable connection to PC and Cable OTG Male-Male to use in any Tablet/Smartphone

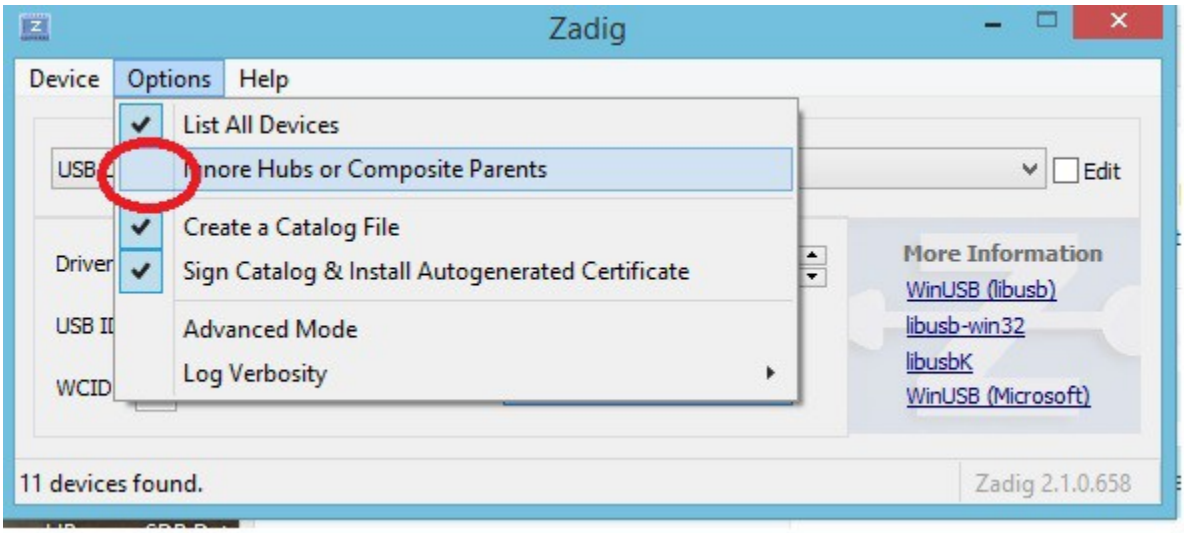
USB-A it´s only power.

Drivers Installation for Windows

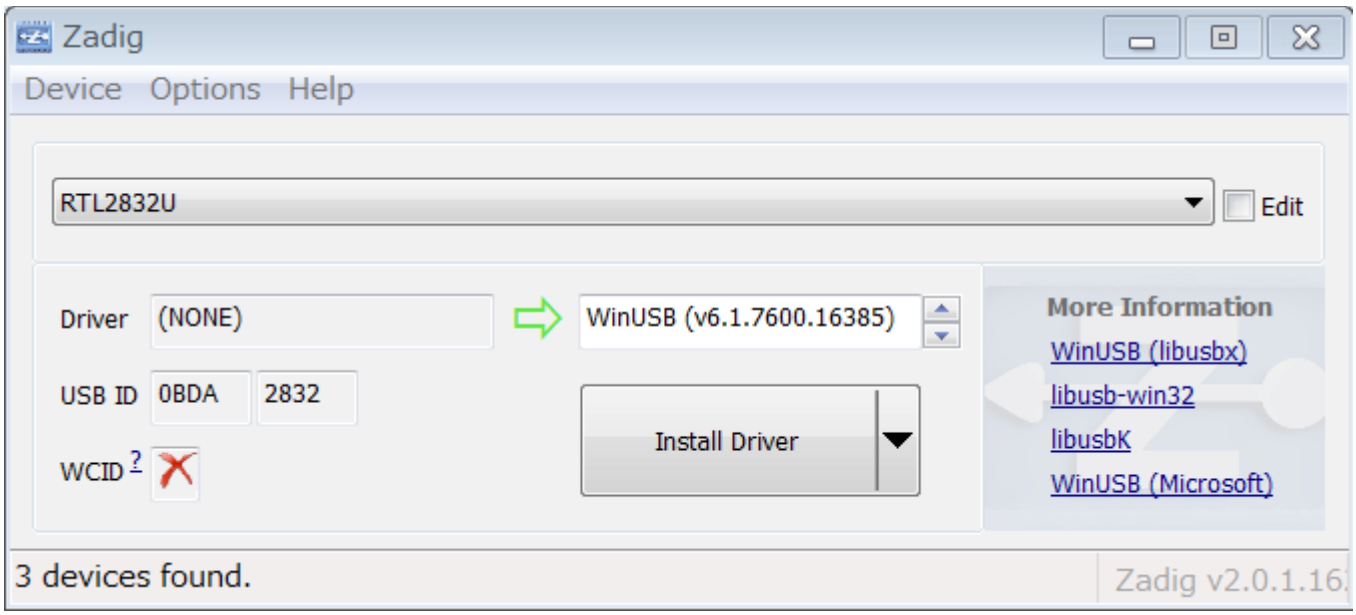


First of all run the Zadig. Download here: http://zadig.akeo.ie/
Connect the DX-patrol to the PC with USB standard cable and run Zadig.

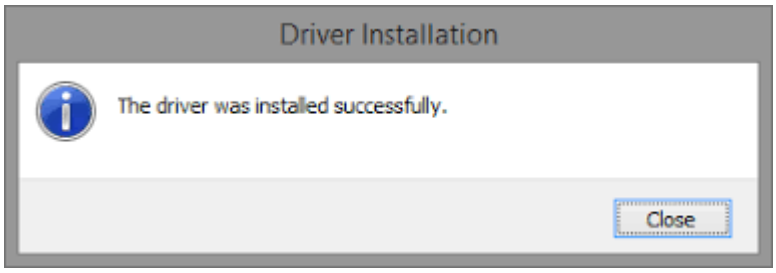
- If “device not found” please look on > options
- Off click the second line > Ignore Hubs or Composi...



RTL2832U (or similar) found



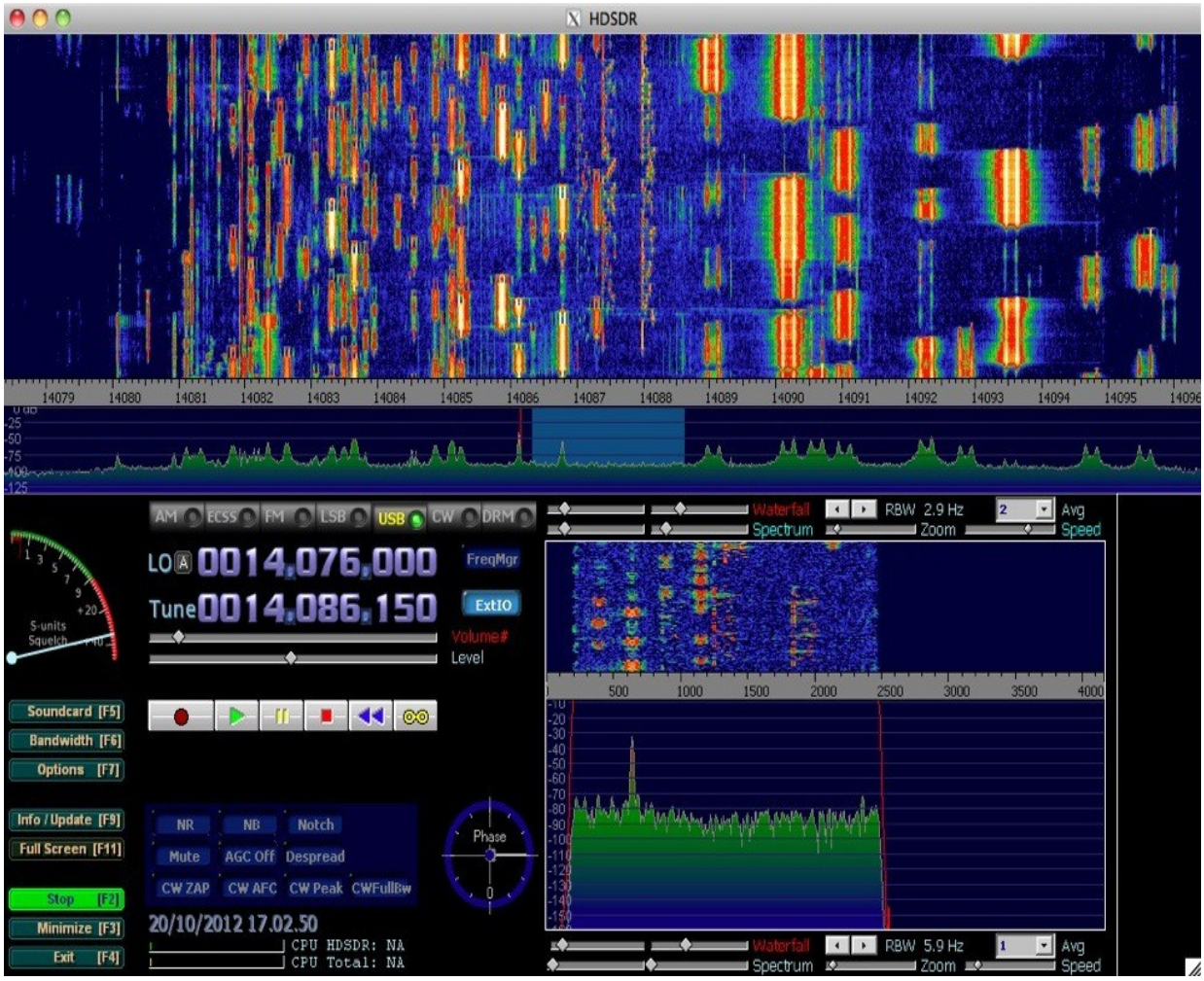
Install Driver



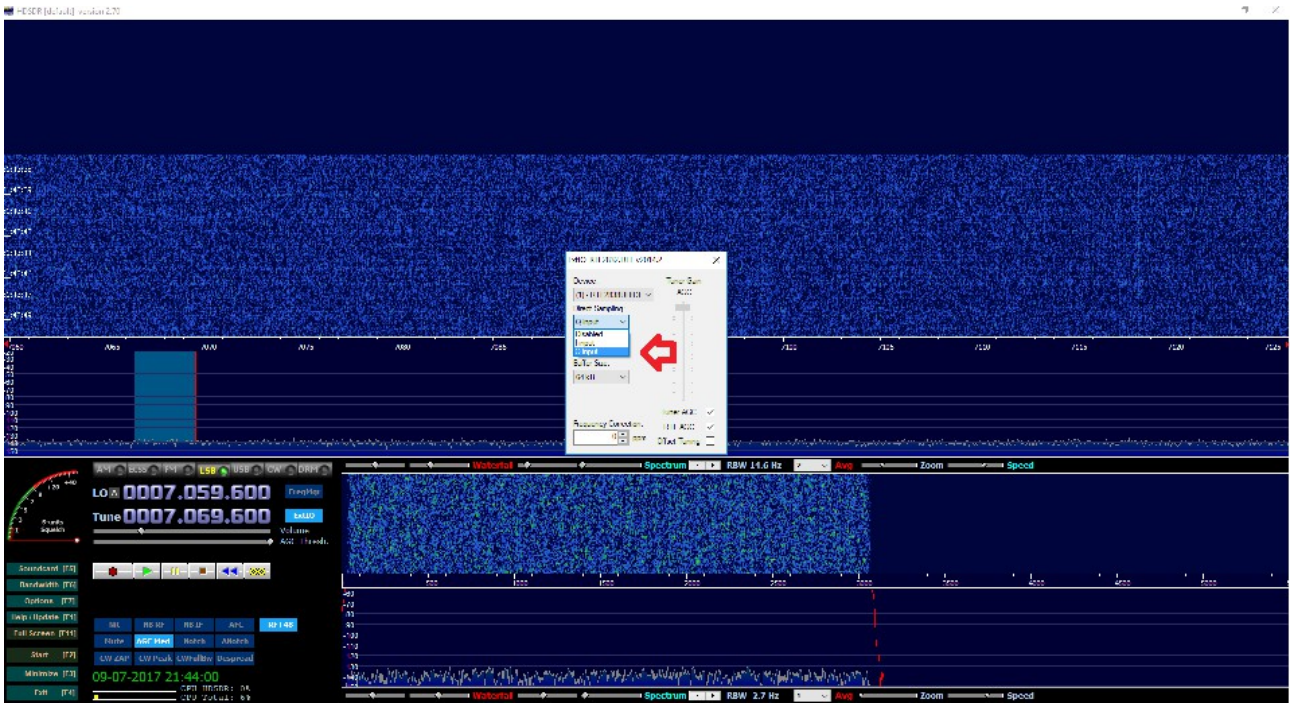
Great! Time to have fun.
There are a lot of good free software you can now download and play

Here some suggestions

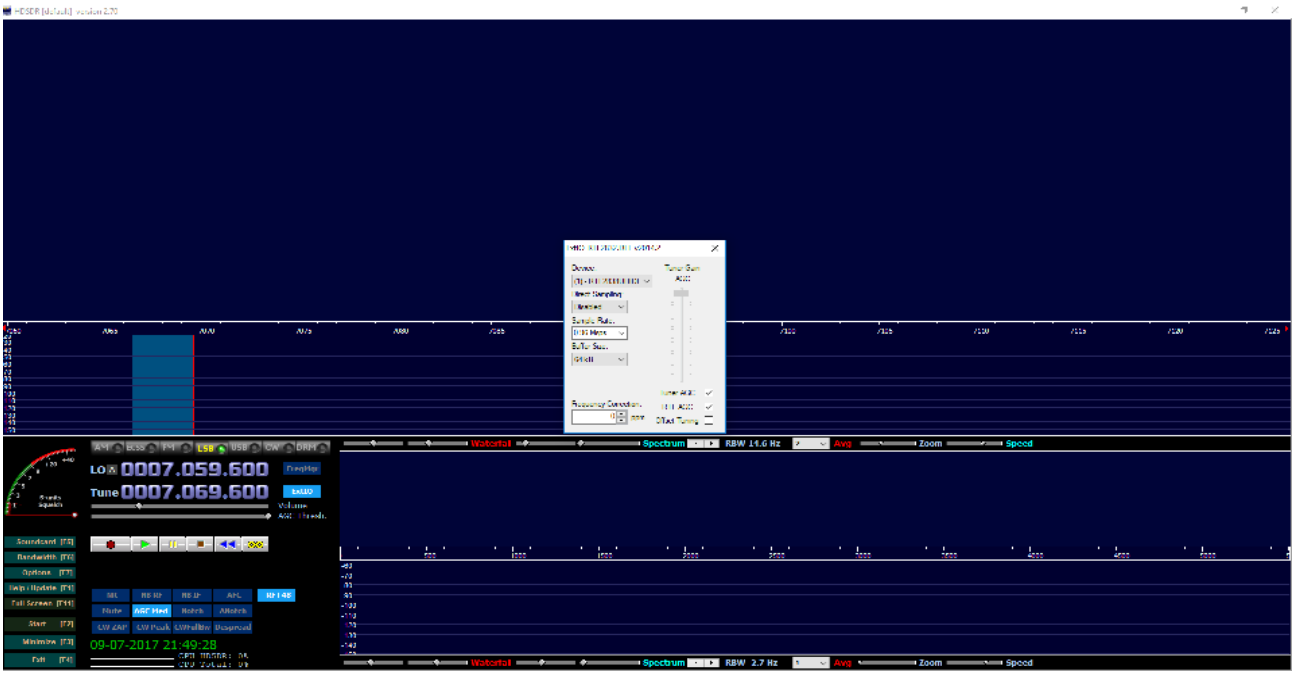
HDSDR get here: http://www.hdsdr.de/
And also this DLL here how to:
http://hdsdr.de/RTLSDR_with_HDSDR.pdf



To Listen HF with HDSDR:
Just click ExtIO (before start) and choose **Q- Input**
The HF antenna will be automatic selected by SDR



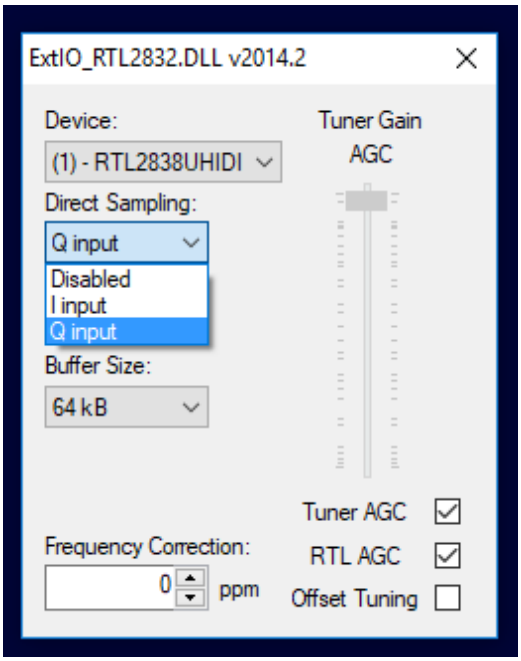
To Listen VHF and UP with HDSDR
Just click on ExtIO and select **Disabled**
VHF and UP antenna will be automatic selected by SDR

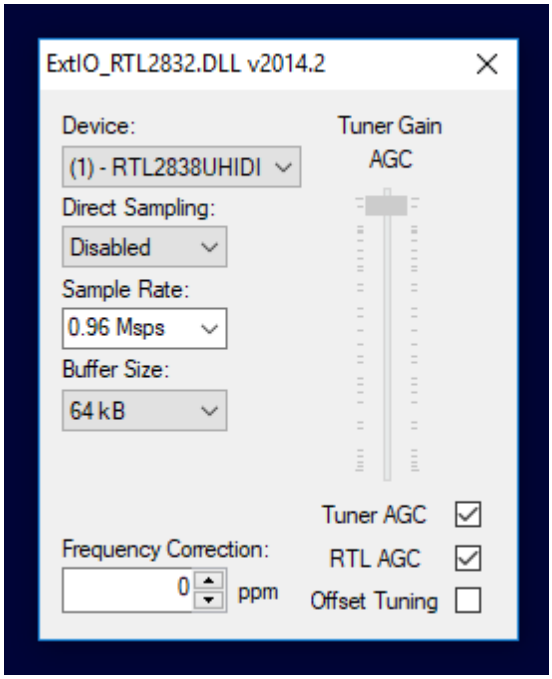


Use the Same procedure on every Software you using :
SDRSharp, HDSDR, SDR-RADIO, CubicSDR, SDRTouch etc

Note: there is no Up-conversion on MK4. Tuning is direct on display.

Q-Input is HF - Reception from 100Khz to 30Mhz
Disabled . Is VHF and UP Reception from 30Mhz to 2000Mhz



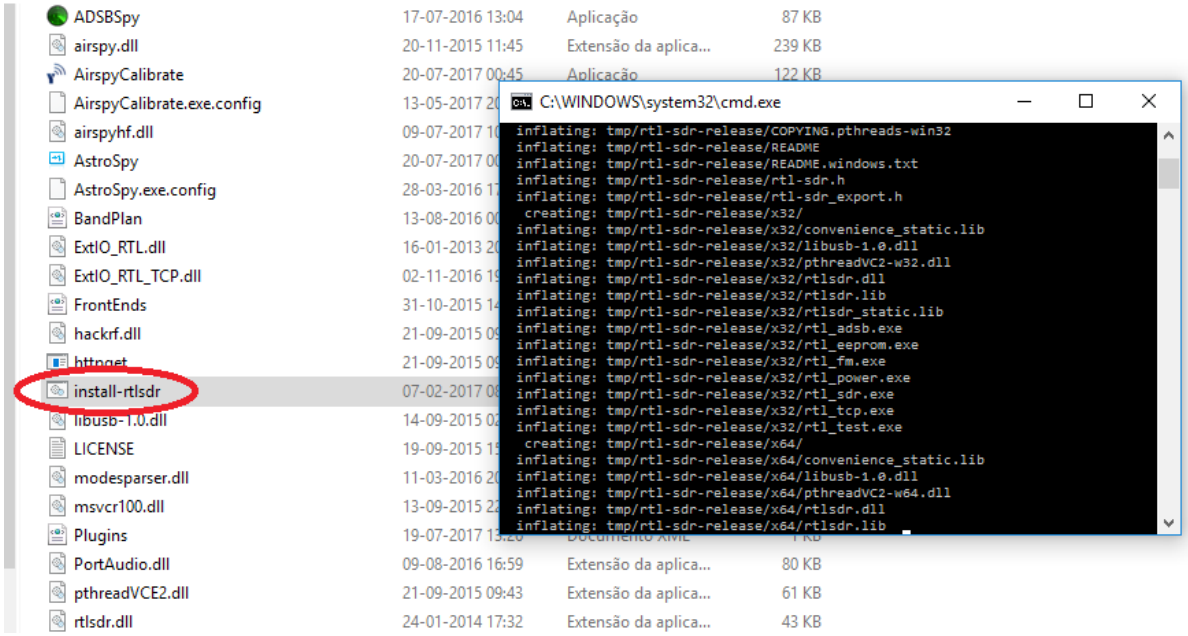


More Software installation:

SDRSHARP.

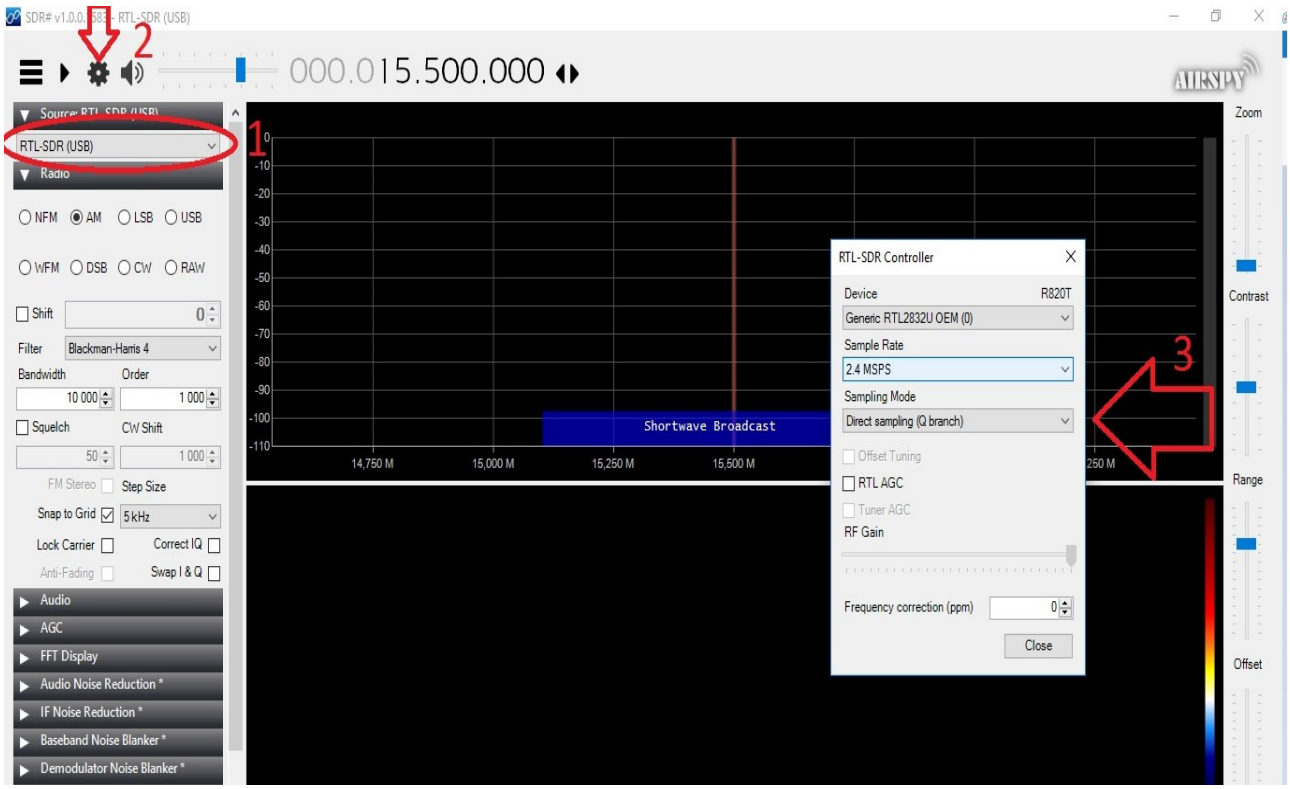
Look here and download the latest SDR# http://airspy.com/download/

After download, extract all files into a folder in your PC
Look for this file on list and double click on it as picture below:
A black box will open and several files will be installed.

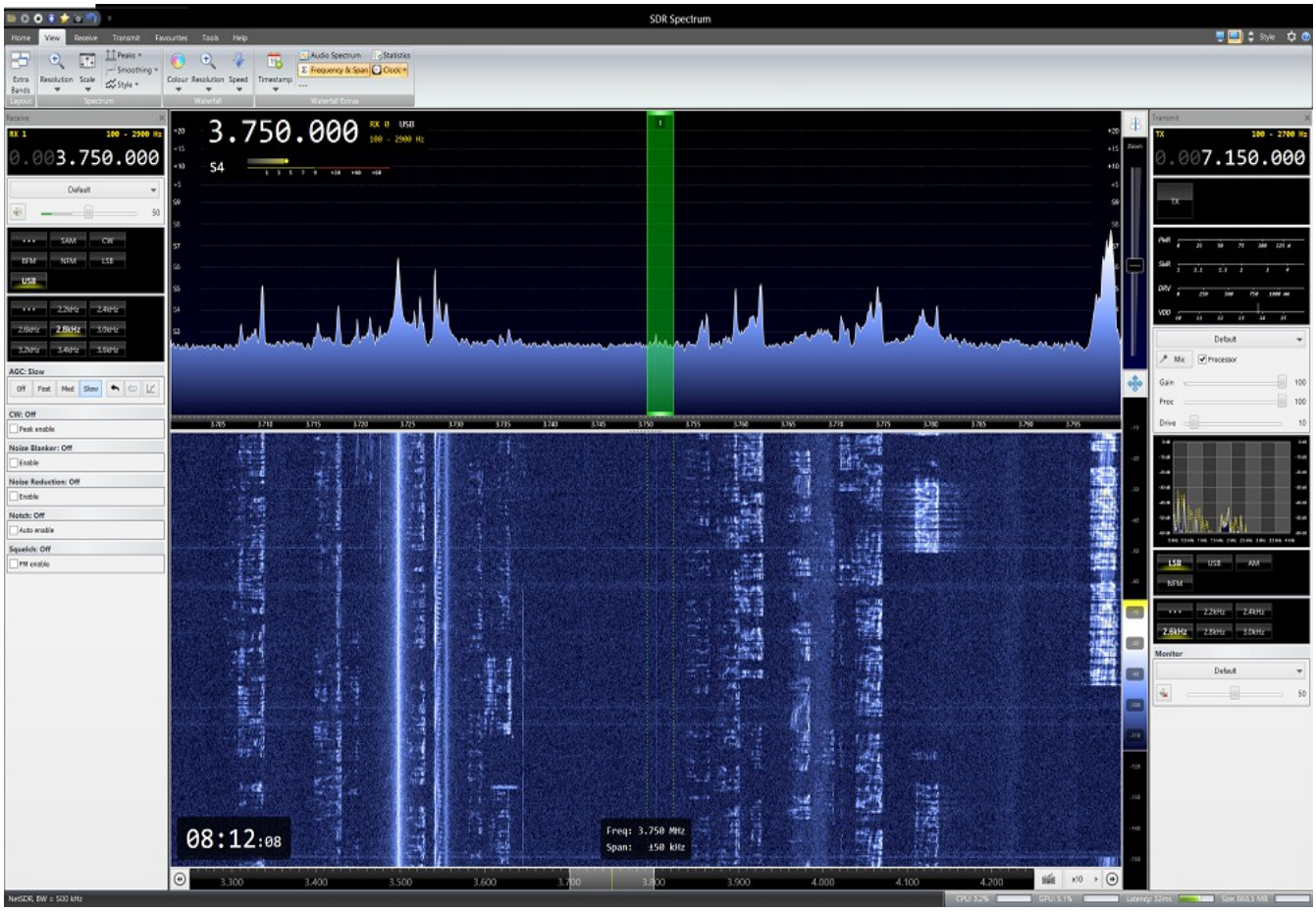


After installed all files, run Zadig. (it´s in the end of list)
Open SDRSharp and select Sourse:
Look for RTL-SDR (USB) on list, open " configure" box and select

Sample rate for bandwith and Sampling rate for VHF (disable) or HF (Q)



Download from here: SDR-RADIO

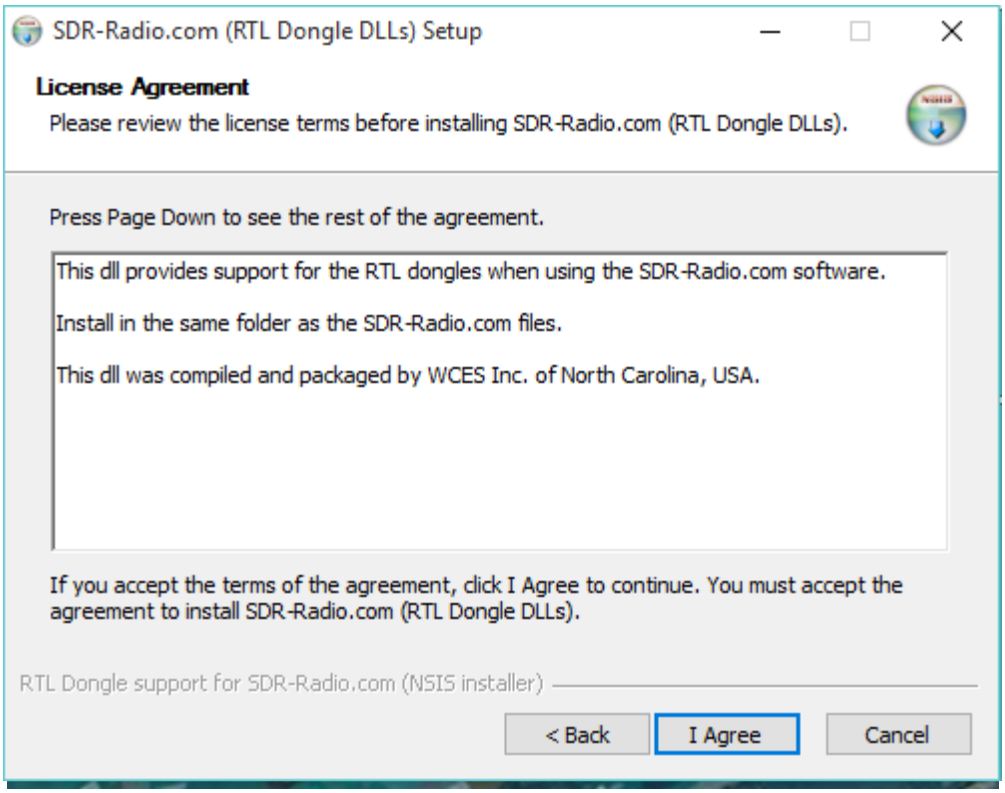


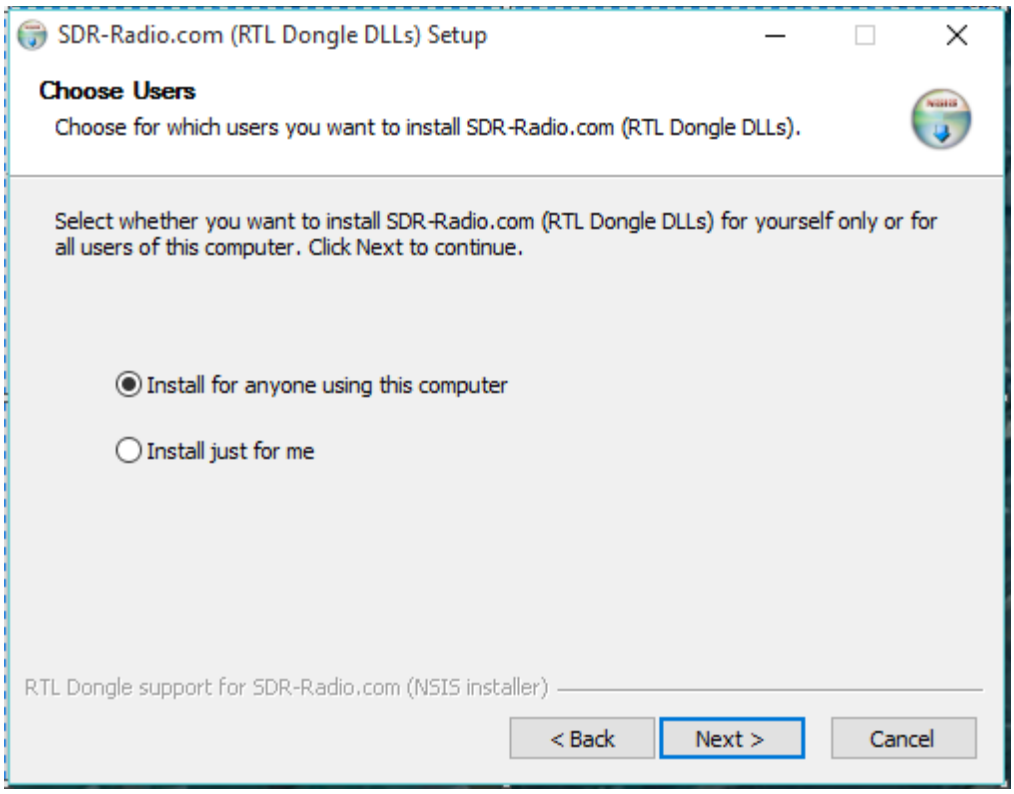
http://sdr-radio.com/Software/Download/Download-Kits

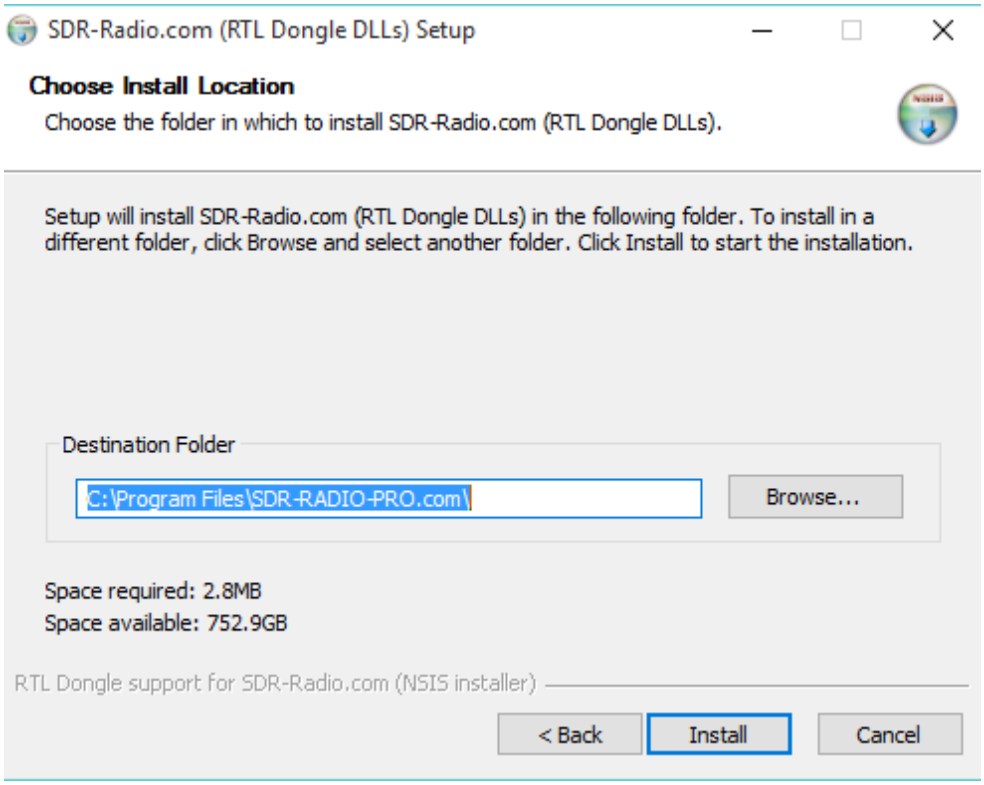
Download and install the latest version os SDR-Radio SDR software

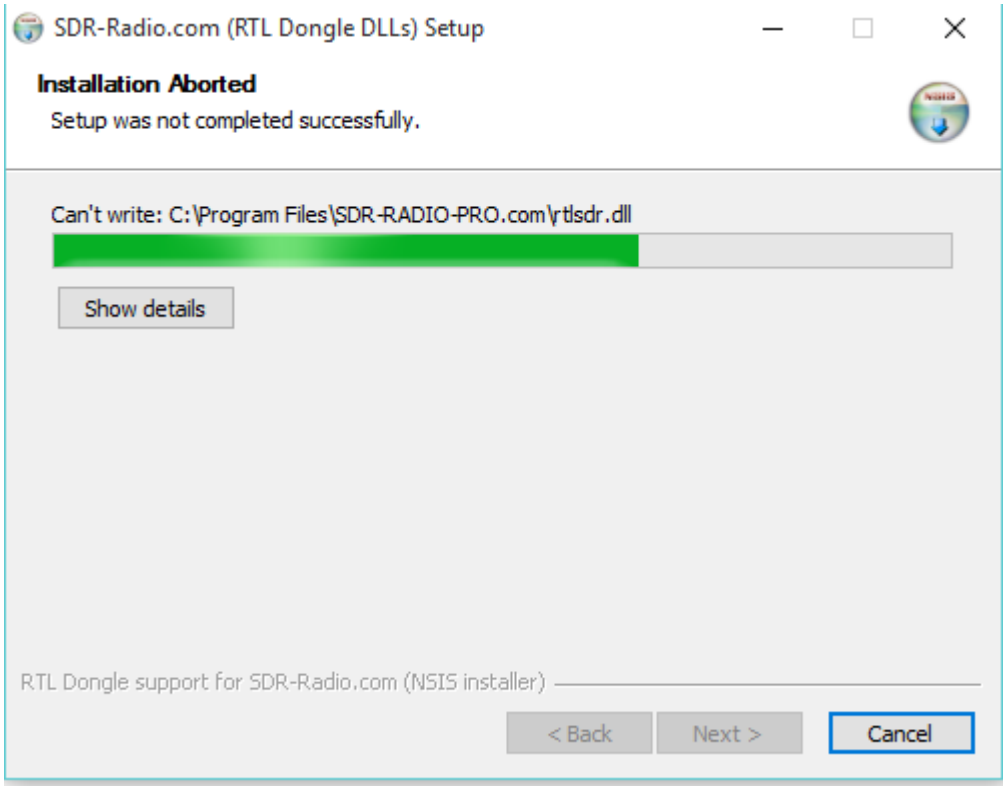
Also download the USB drivers here:
https://meocloud.pt/link/a894d7f9-1fcf-4412-a5fe-eced48adddd0/-SDR-RADIO-Pro_RTLDongleSupport.exe/

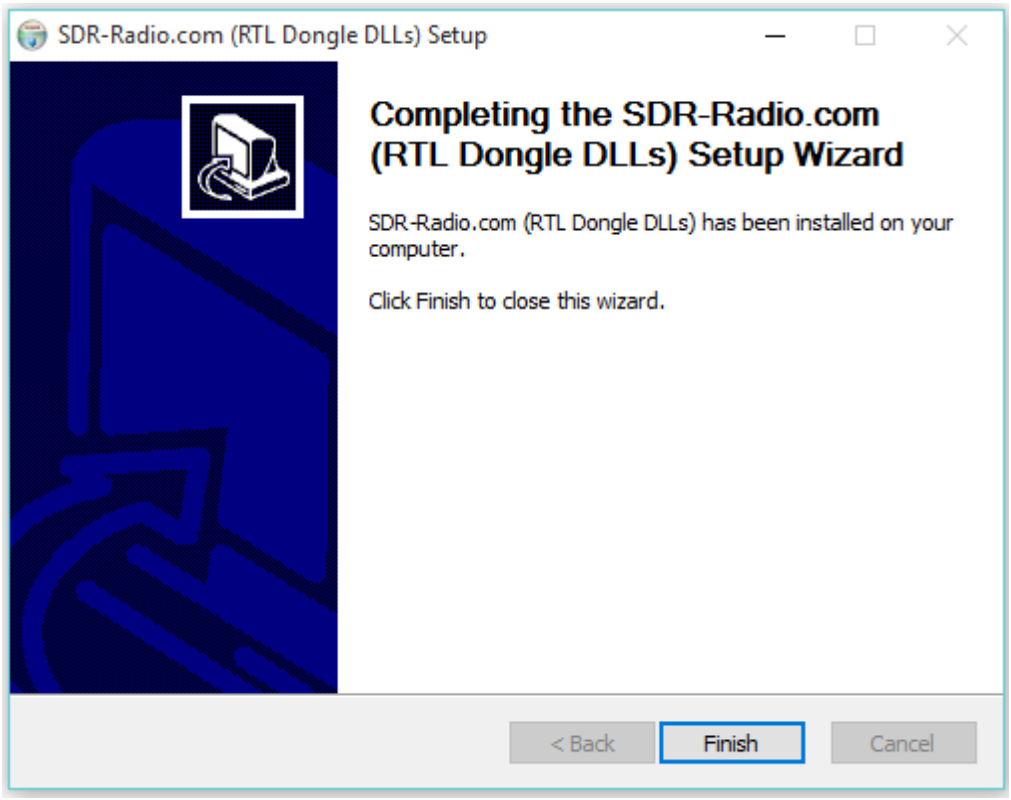
Install SDR-radio and SDR-Drivers USB-RTL




SDR-Radio.com (RTL Dongle DLLs) Setup
Choose Users
Choose for which users you want to install SDR-Radio.com (RTL Dongle DLLs).
Select whether you want to install SDR-Radio.com (RTL Dongle DLLs) for yourself only or for all users of this computer. Click Next to continue.
Install for anyone using this computer
Install just for me
RTL Dongle support for SDR-Radio.com (NSIS installer)
< Back
Next >
Cancel


SDR-Radio.com (RTL Dongle DLLs) Setup
Choose Install Location
Choose the folder in which to install SDR-Radio.com (RTL Dongle DLLs).
Setup will install SDR-Radio.com (RTL Dongle DLLs) in the following folder. To install in a different folder, click Browse and select another folder. Click Install to start the installation.
Destination Folder
C:\Program Files\SDR-RADIO-PRO.com\
Browse...
Space required: 2.8MB
Space available: 752.9GB
RTL Dongle support for SDR-Radio.com (NSIS installer)
< Back
Install
Cancel

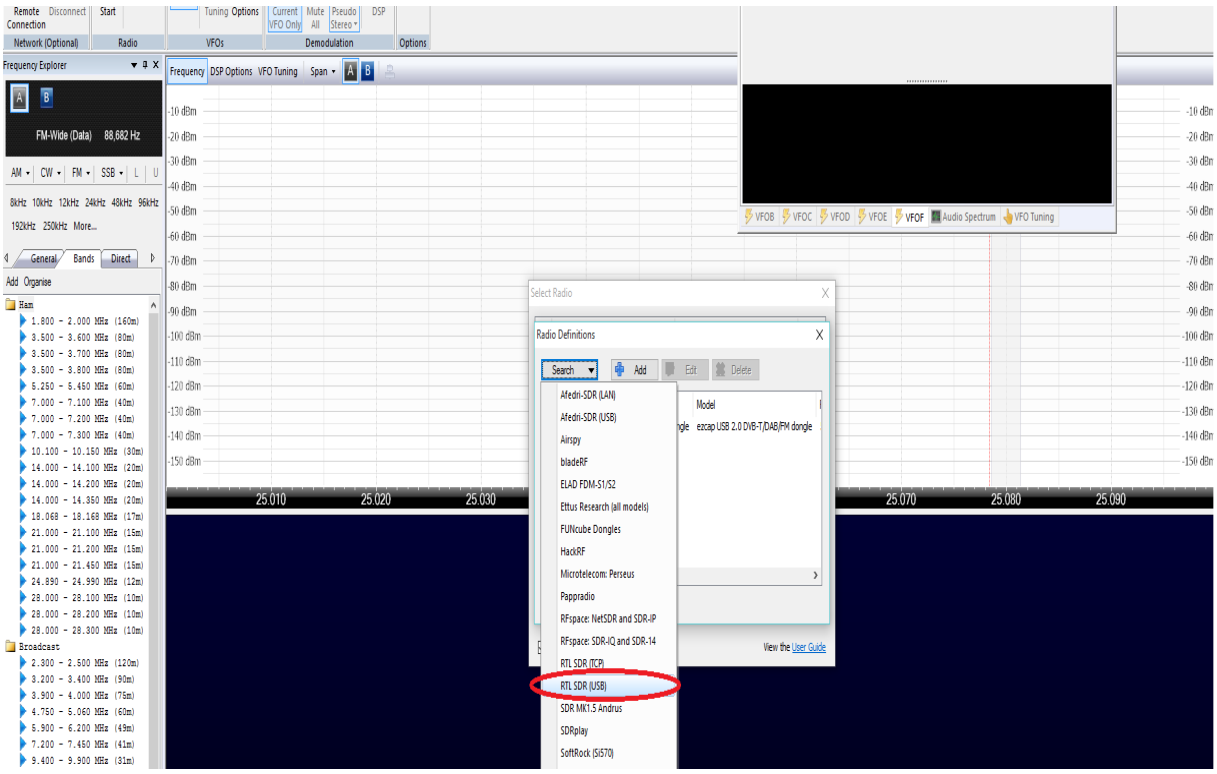

SDR-Radio.com (RTL Dongle DLLs) Setup
Installation Aborted
Setup was not completed successfully.
Can't write: C:\Program Files\SDR-RADIO-PRO.com\rtlsdr.dll
Show details
RTL Dongle support for SDR-Radio.com (NSIS installer)
< Back
Next >
Cancel



Plug the SDR on the USB connector,
You will ear a sound on PC speaker indicating that windows have found the device.

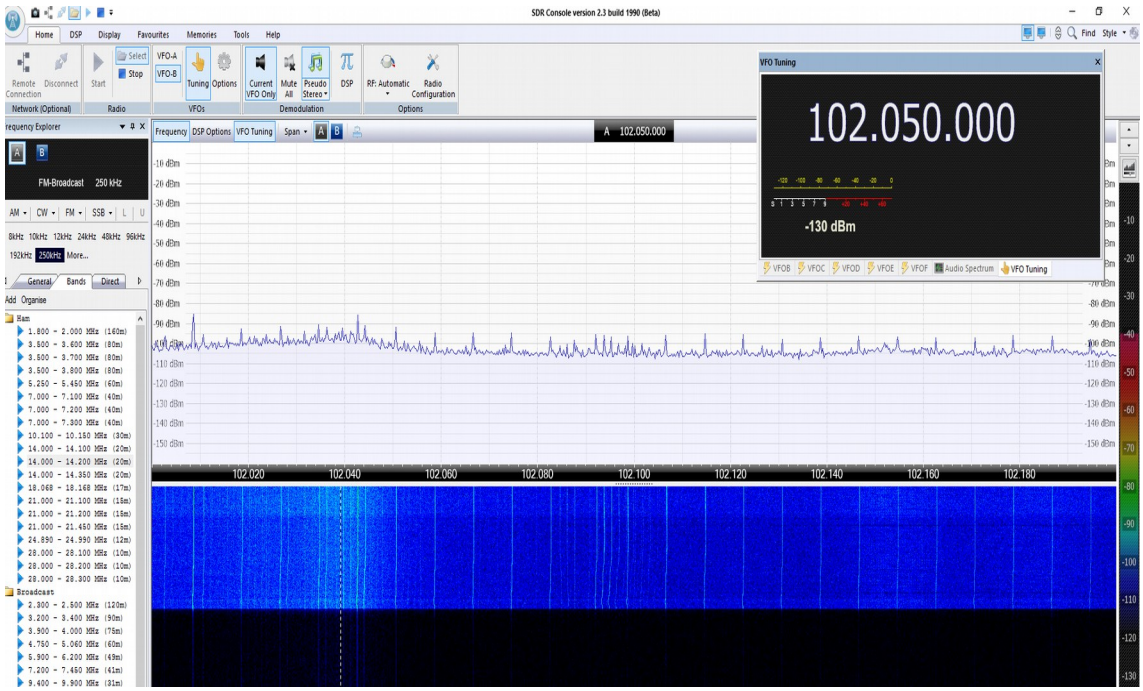
The SDR-Radio program will automatic alert you to choose the device on source

Select the RTL SDR USB



The ezcap USB will turns as Green!

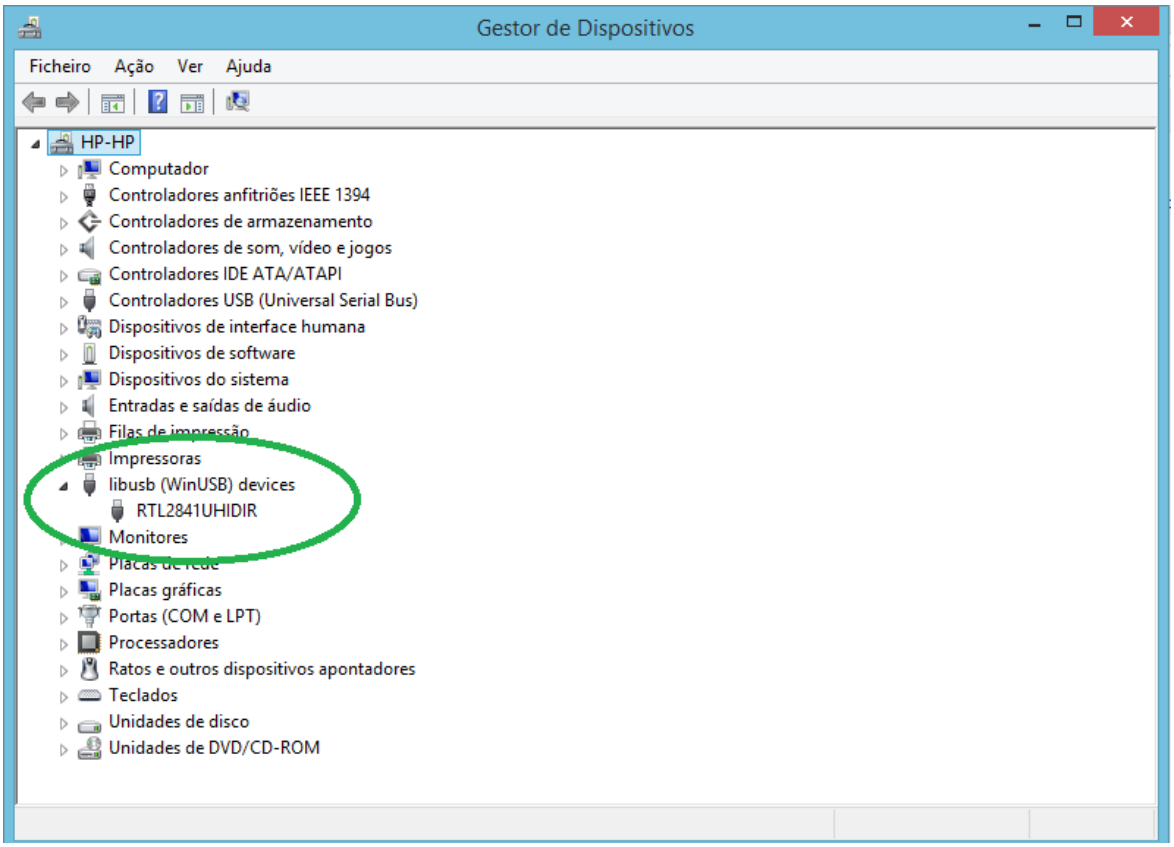
the SDR is ready to operate on HF and VHF & UP



The SDR-radio program is very easy to work.
You have all modes for decoding as well lot´s of memories broadcast bands, amateur bands etc.

Yahoo Google group: https://groups.yahoo.com/neo/groups/sdr-radio-com/info

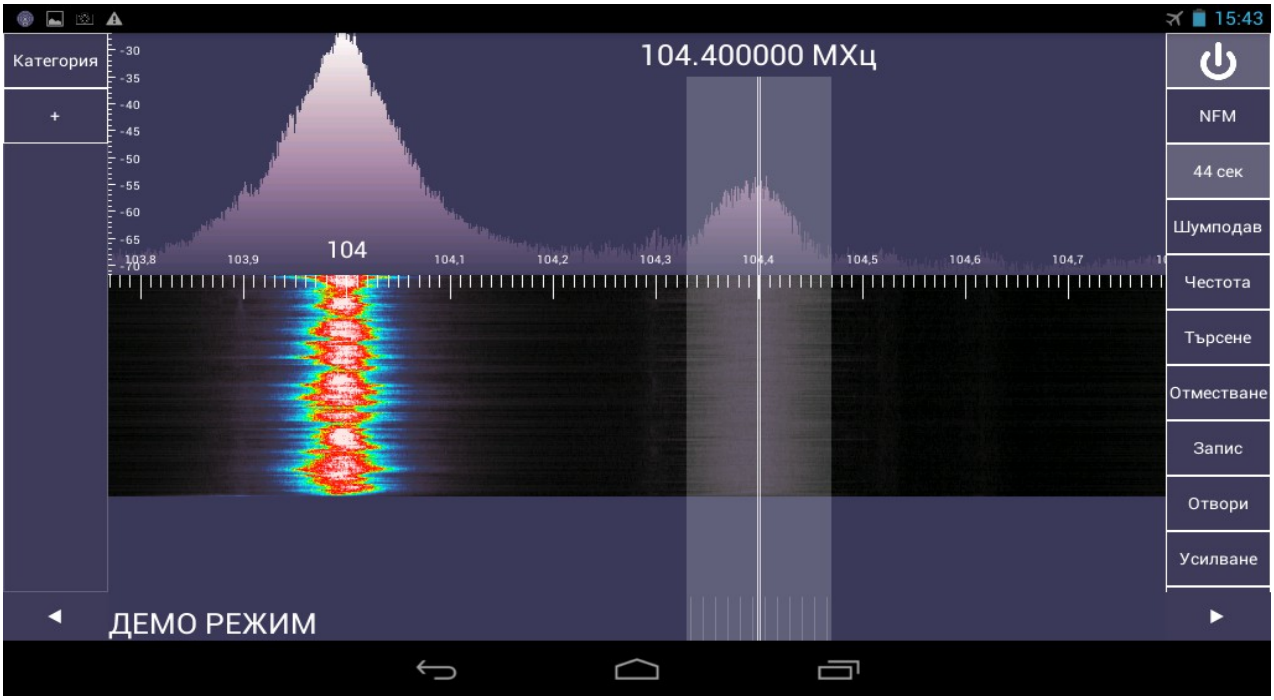
When all drivers are OK, you can check on you Device Manager
Must be as picture.



About Android

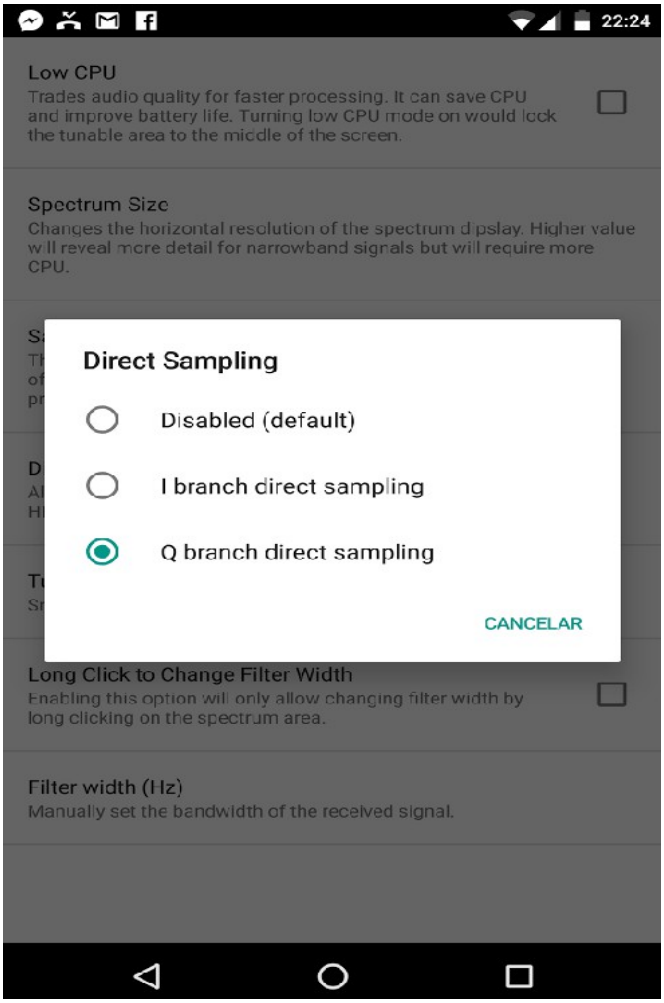
There are a Lot of software’s available in Google Play

SDRTouch

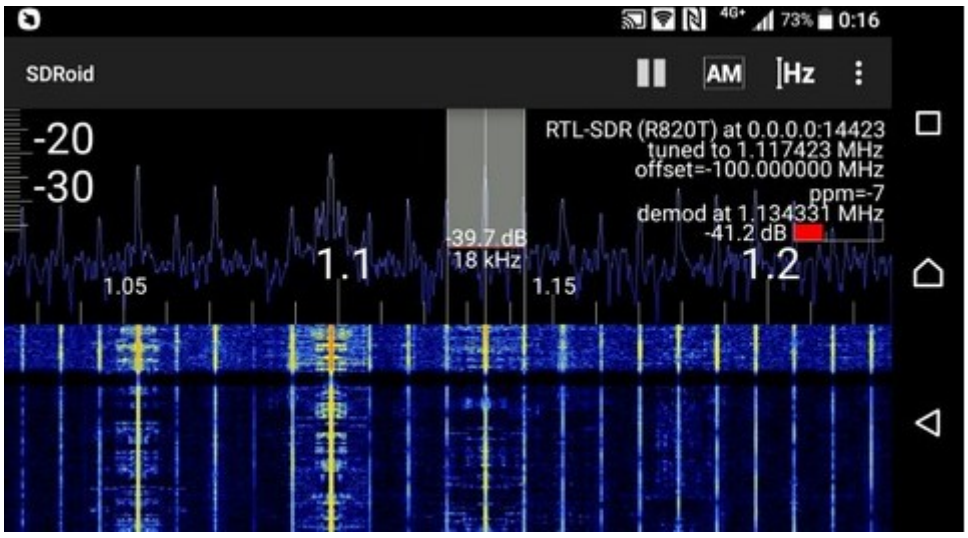


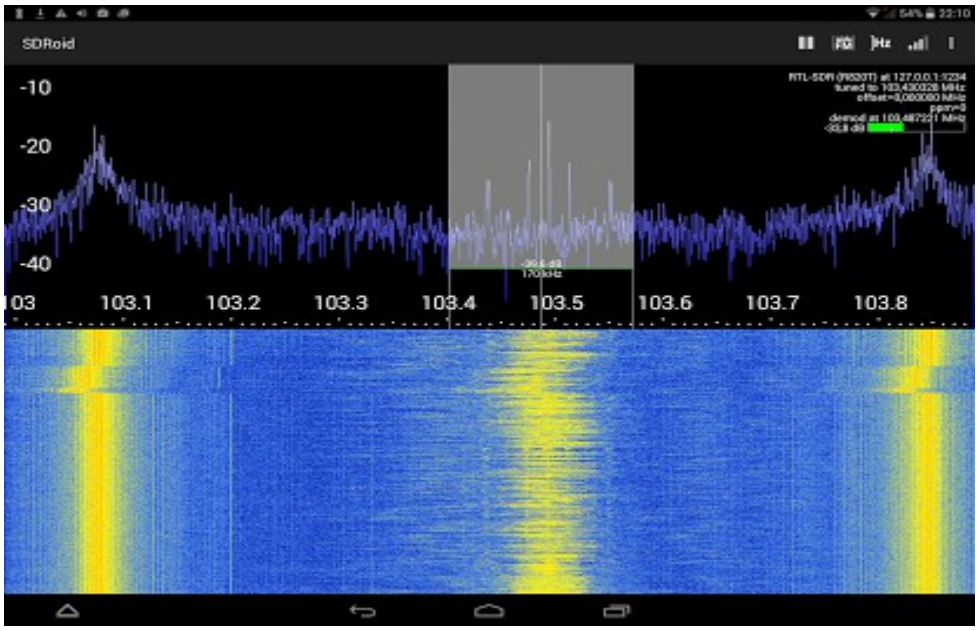
Note:
On SDRtouch is same thing, when band select is needed.

Go on PREFS> Direct Sampling > Q Branch (for HF) or Disable (for VHF and UP)



SDRoid

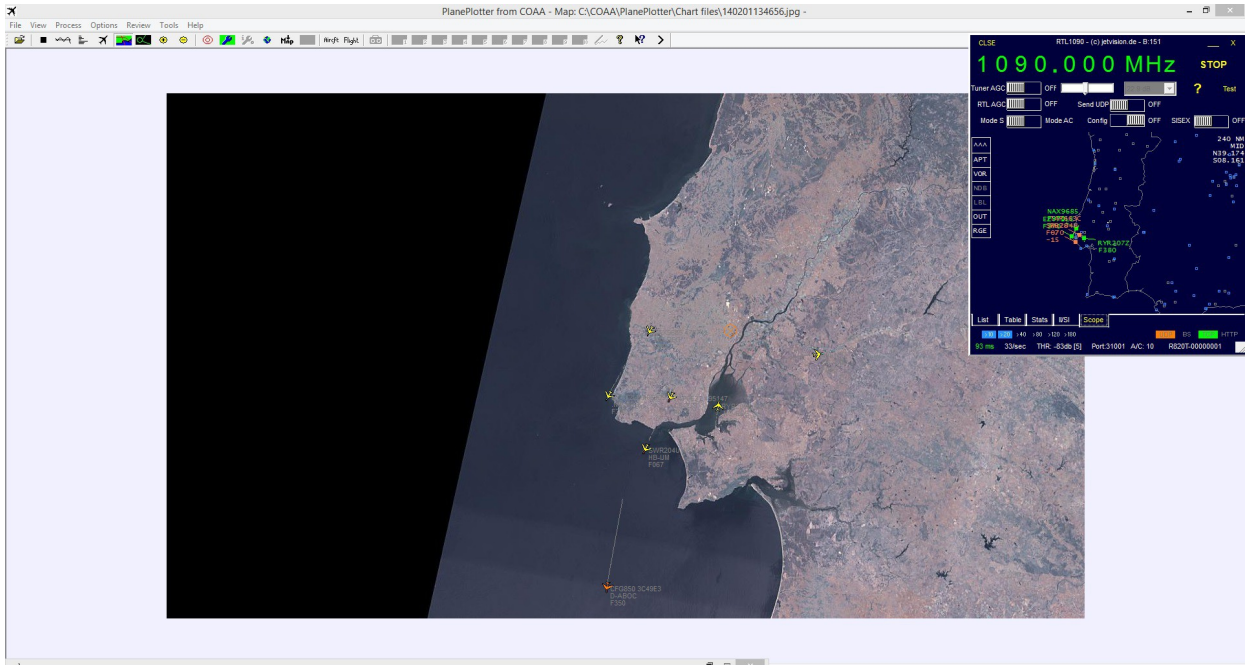




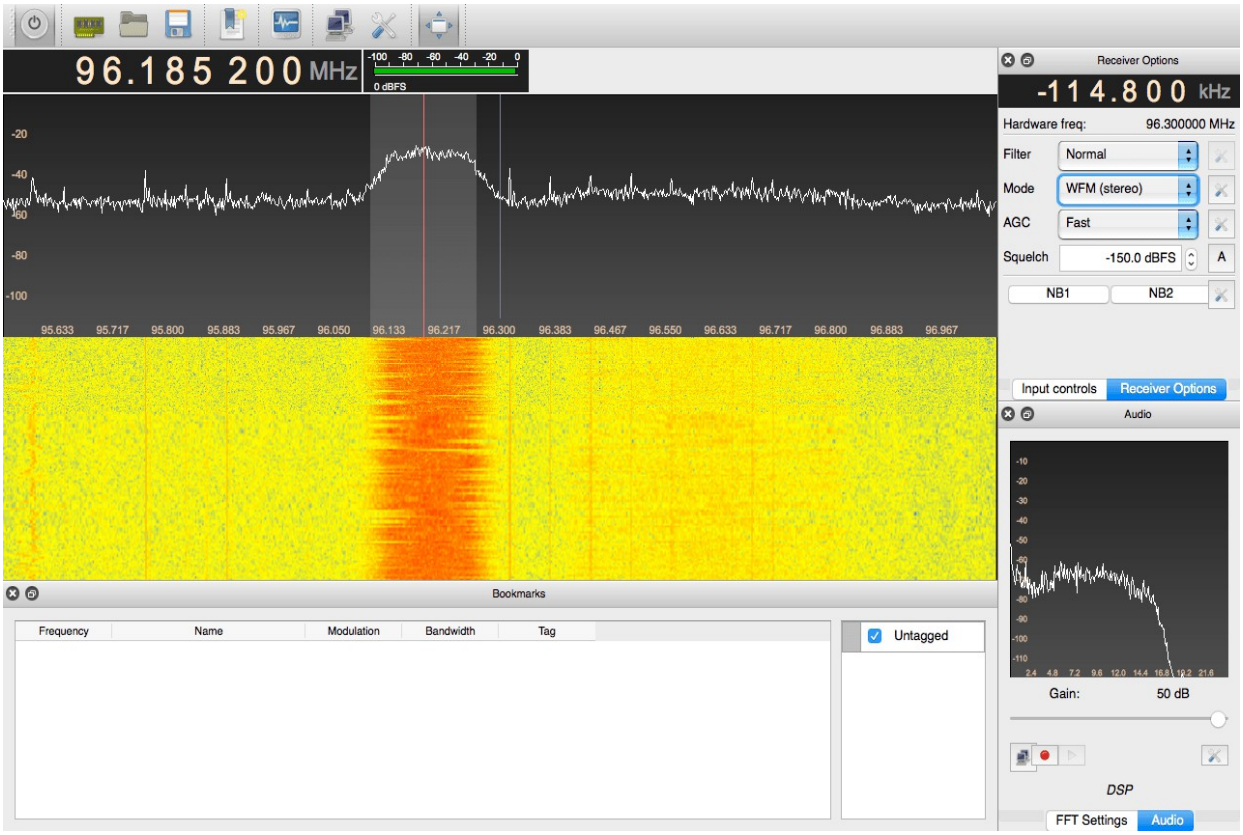
Operation with

Plain Viewer RTL1090

GET software here: http://rtl1090.web99.de/



MAC Using Patrolman with GQRX



Here how to install GQRX

https://www.smittix.co.uk/rtlsdr-up-and-running-in-mac-osx-yosemite-with-gqrx-gnuradio/

NOAA Weather satellites RX : http://www.rtl-sdr.com/rtl-sdr-tutorial-receiving-noaa-weather-satellite-images/

There are also many other freeware software's available on internet that you can try.

Gnu radio Linux software:

http://rtlsdr.org/softwarelinux

Android: https://play.google.com/store/apps/details?id=marto.rtl_tcp_andro&hl=pt_PT

VERY WIDE
SDR RECEIVER
100KHZ TO 2GHZ
DX PACROL
ON / OFF
USB B
USB A

Enjoy the new World of the radio on a SDR device.

Best 73

Tony

CT1FFU

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