



## Ultra Wide-band Coverage SDR Receiver MK4

- Full coverage reception from 100KHz to 2GHz SDR
- Direct Sample Mode \*
- Very High performance Pre-amplifier +33dBm IP3\*
- Front-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

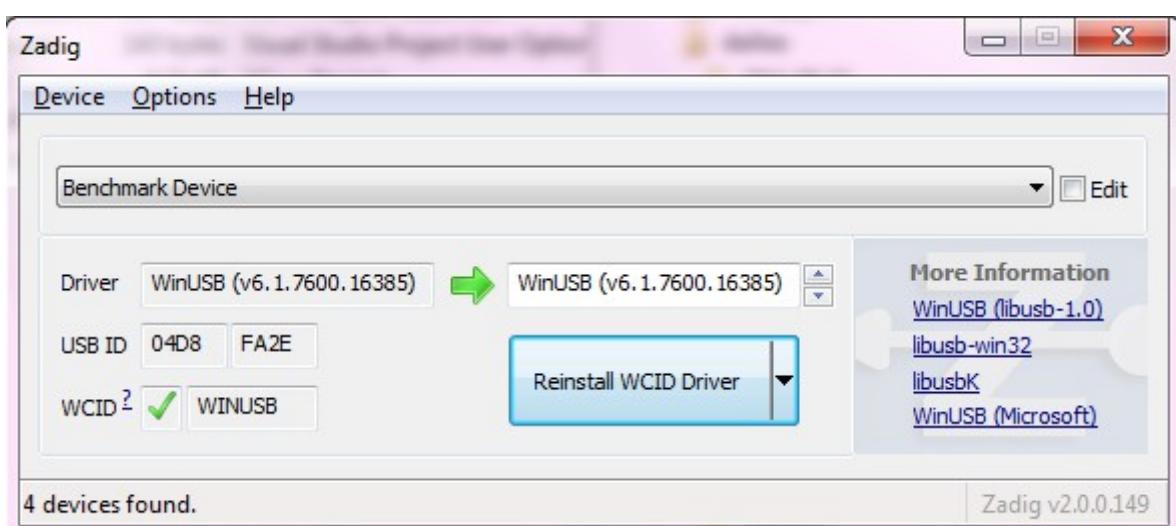




The blue LED light color will indicate.

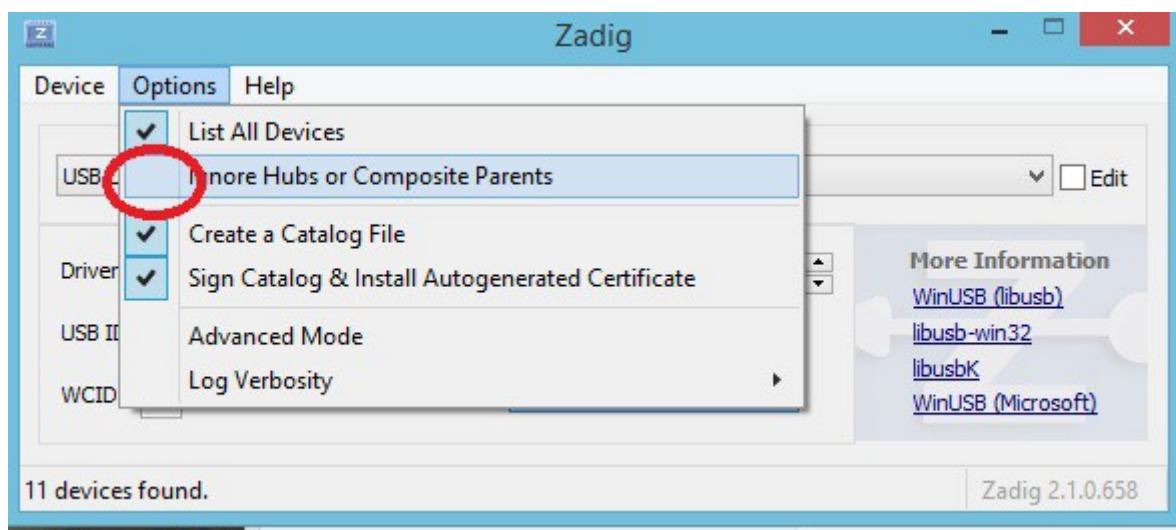
USB is Cable connection to PC and Cable OTG Male-Male to use in any  
Tablet/Smartphone

## Drivers Installation for Windows

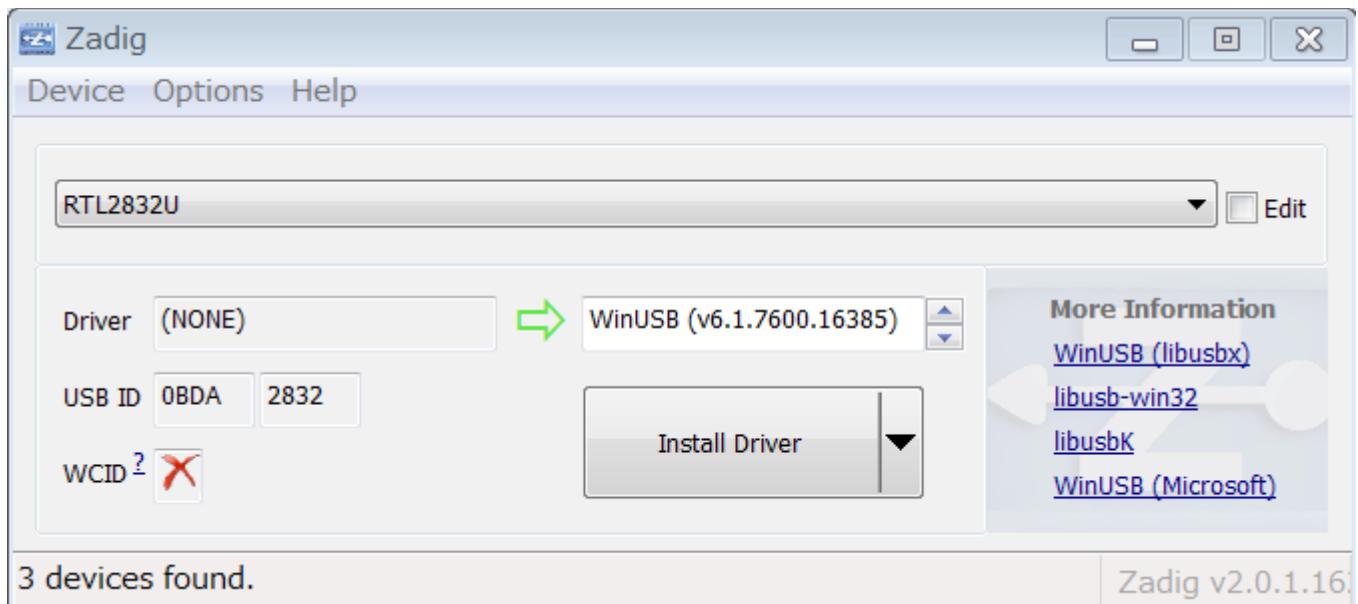


First of all run the Zadig. Download here: <http://zadig.akeo.ie/>  
Connect the DX-patrol to the PC with USB standard cable and run Zadig.

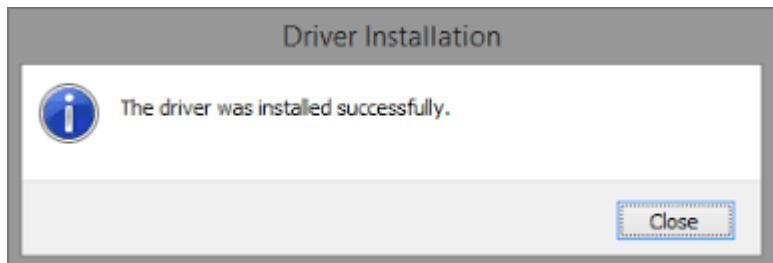
- If “device not found” please look on > options
- Off click the second line > Ignore Hubs or Composi...



RTL2832U ( or similar ) found



## Install Driver



Great! Time to have fun.

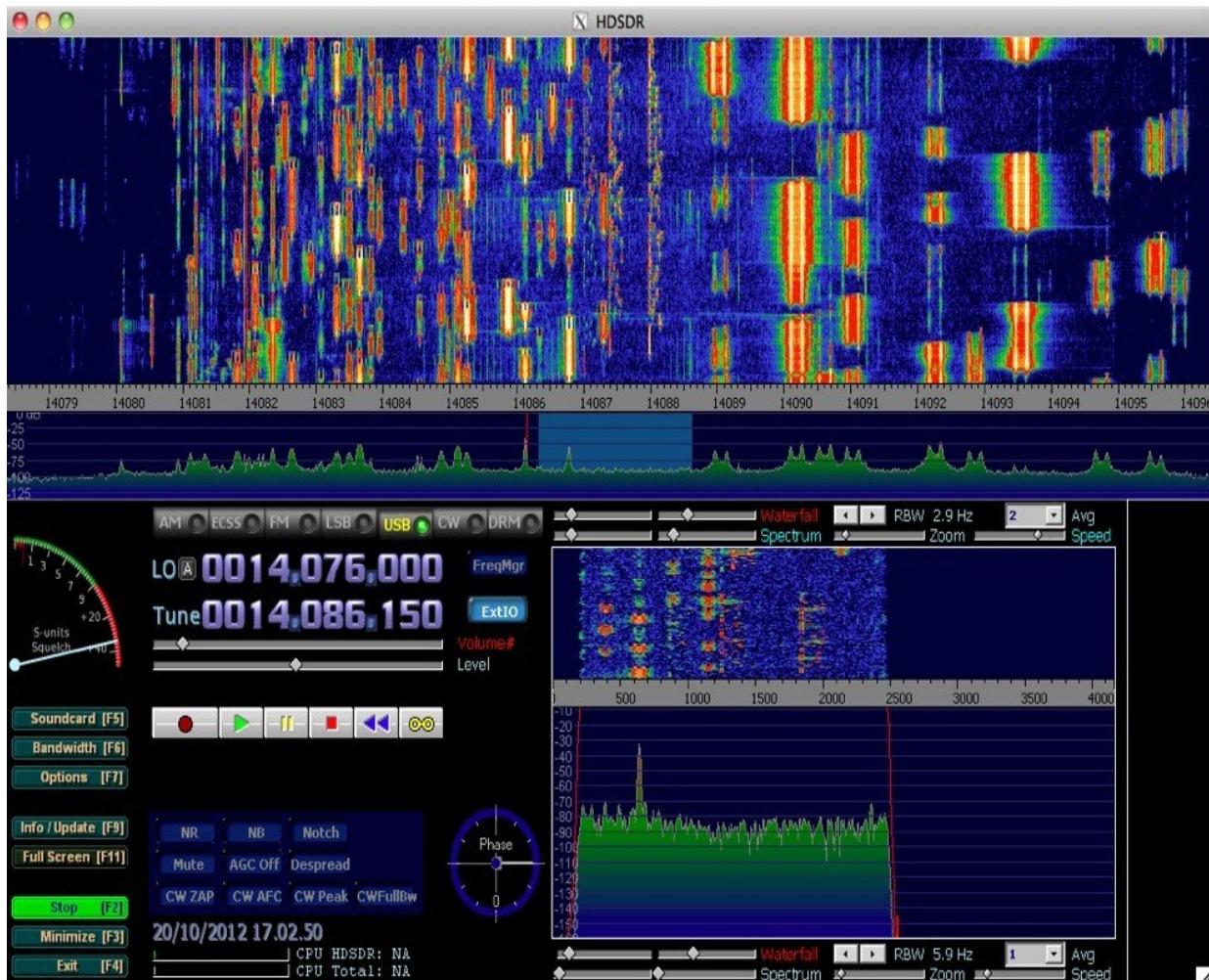
There are a lot of good free software you can now download and play

Here some suggestions

HDSDR get here: <http://www.hdsdr.de/>

And also this DLL here how to:

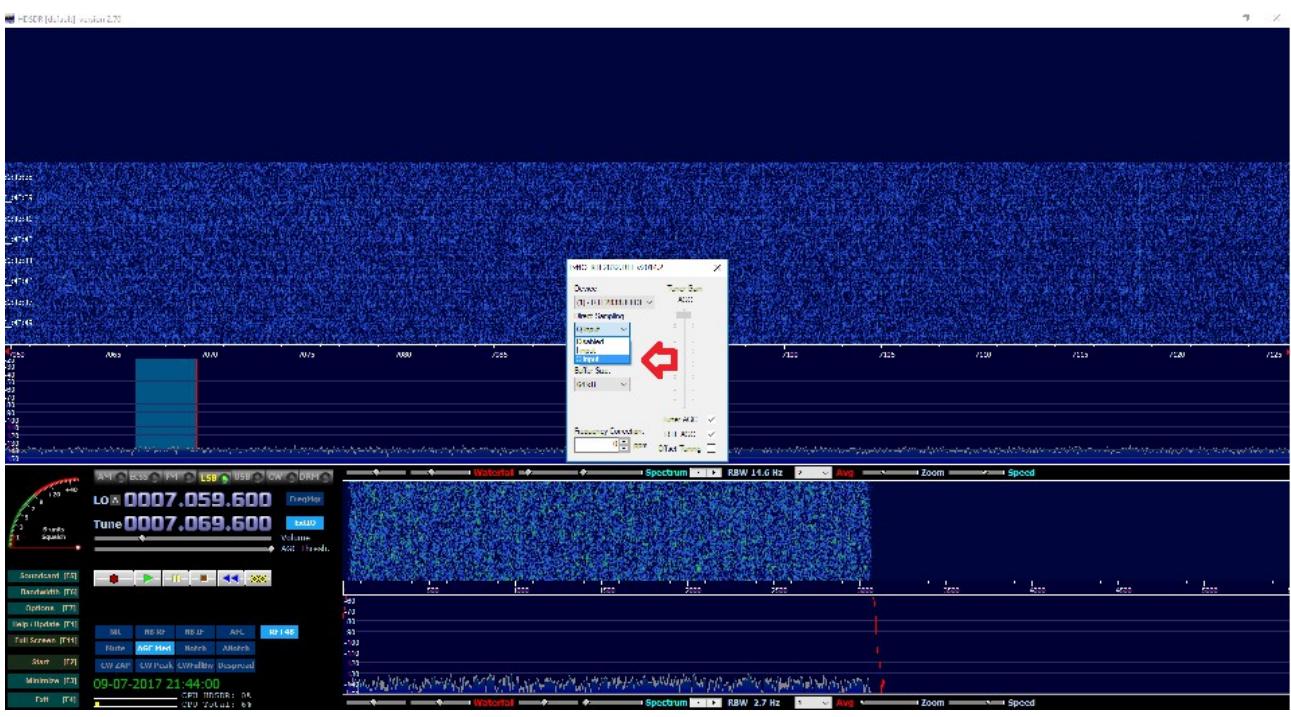
[http://hdsdr.de/RTLSDR\\_with\\_HDSDR.pdf](http://hdsdr.de/RTLSDR_with_HDSDR.pdf)



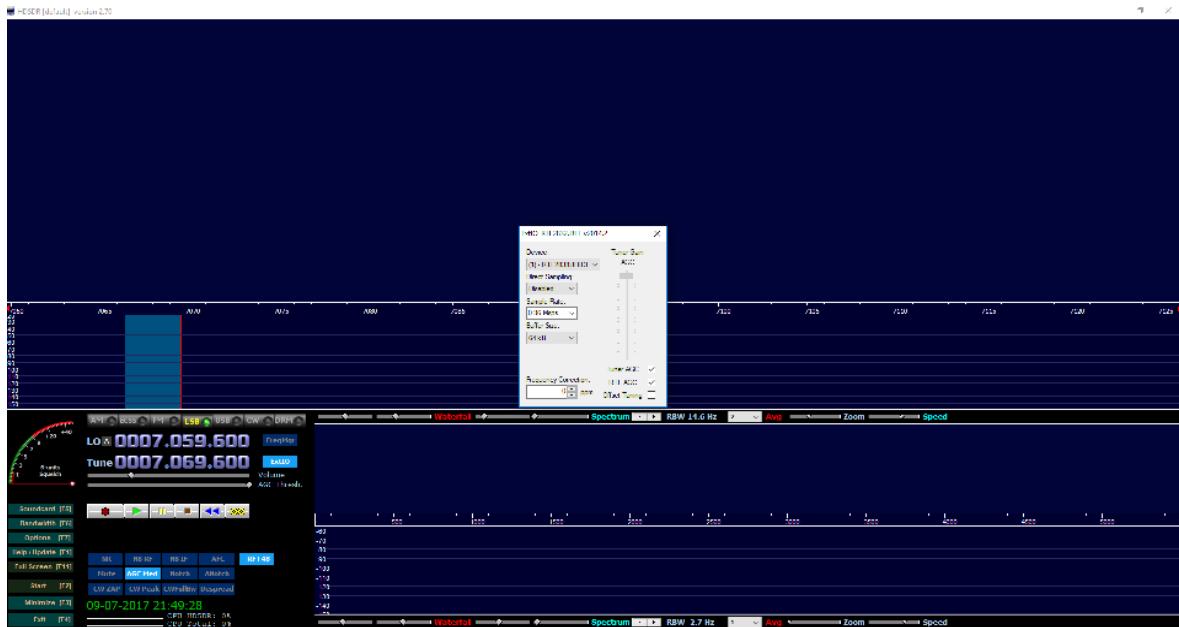
## To Listen HF with HDSDR:

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**

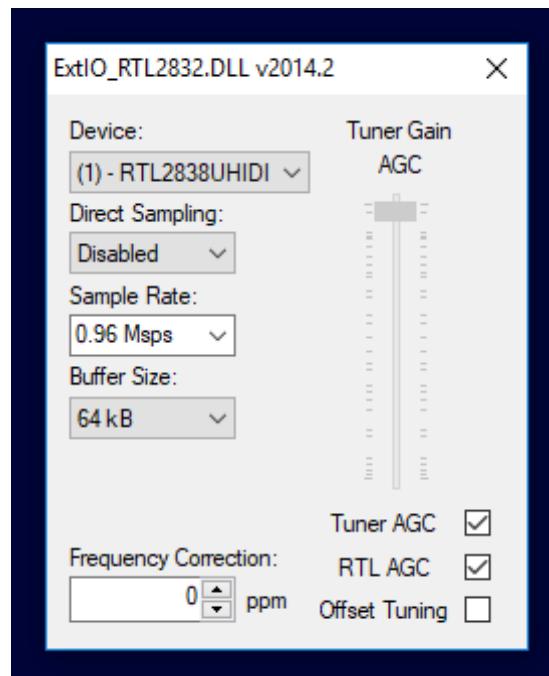
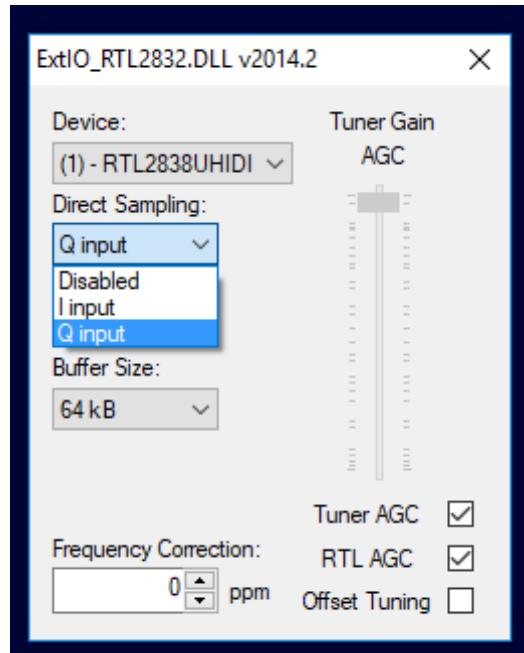


Use the Same procedure on every Software you using :  
 SDRSharp, HDSDR, SDR-RADIO, CubicSDR, SDRTouch etc

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

Q-Input is HF - Reception from 100Khz to 30Mhz

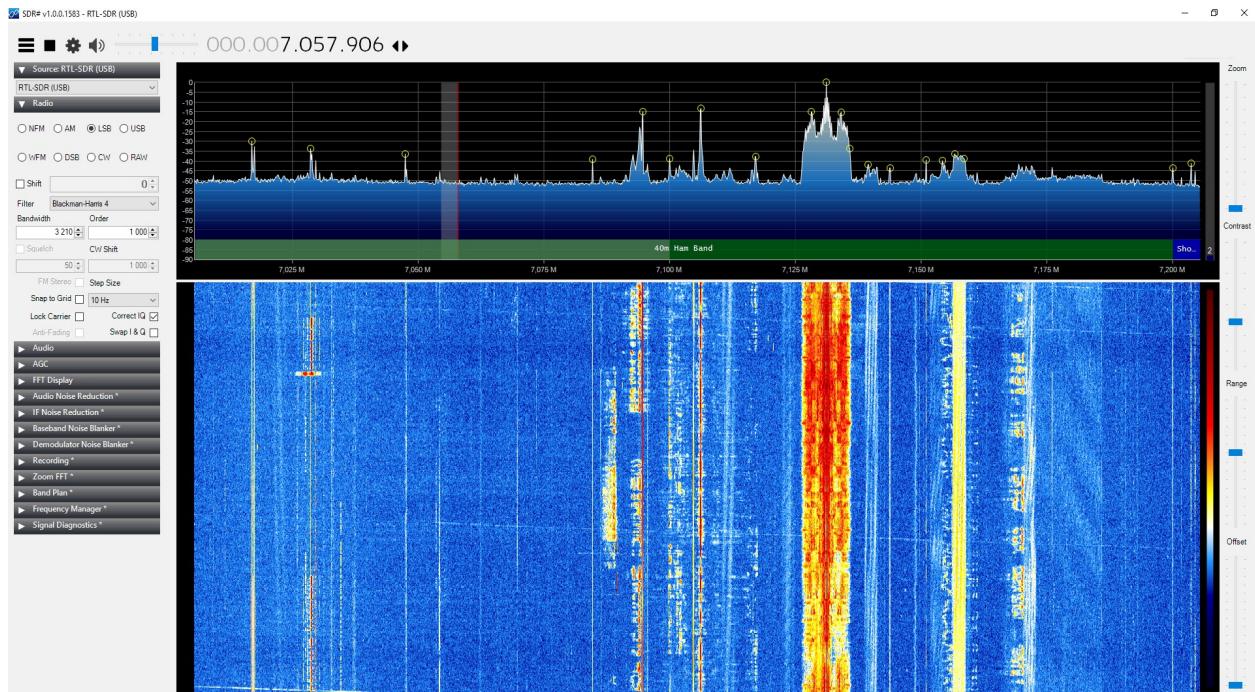
Disabled . Is VHF and UP Reception from 30Mhz to 2000Mhz



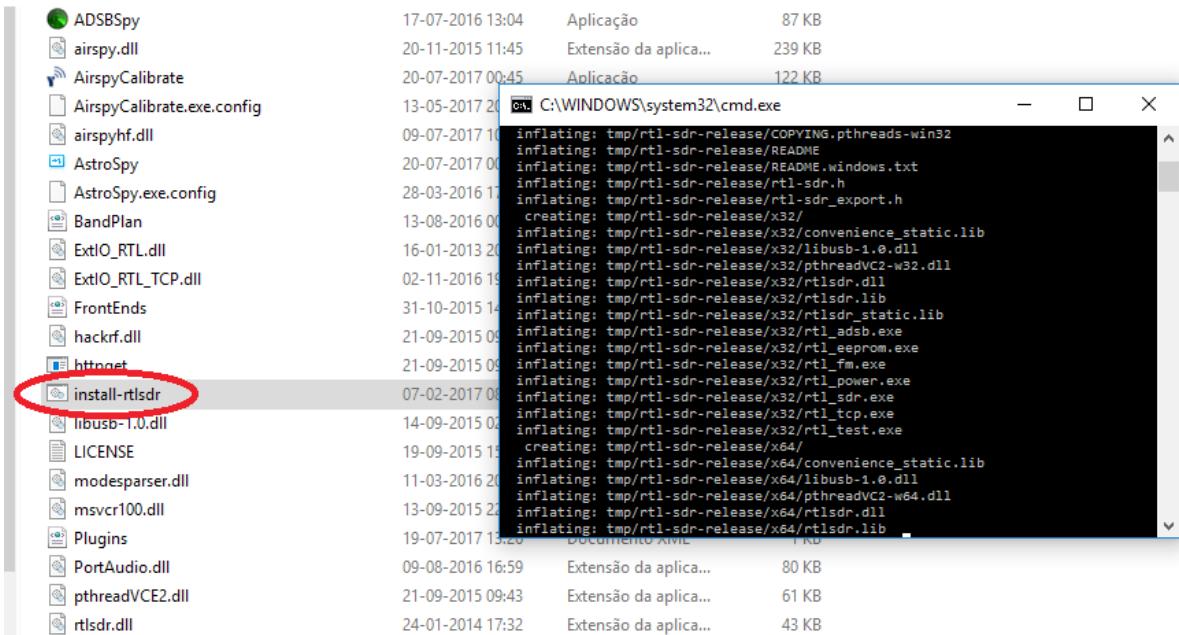
More Software installation:

## SDR SHARP

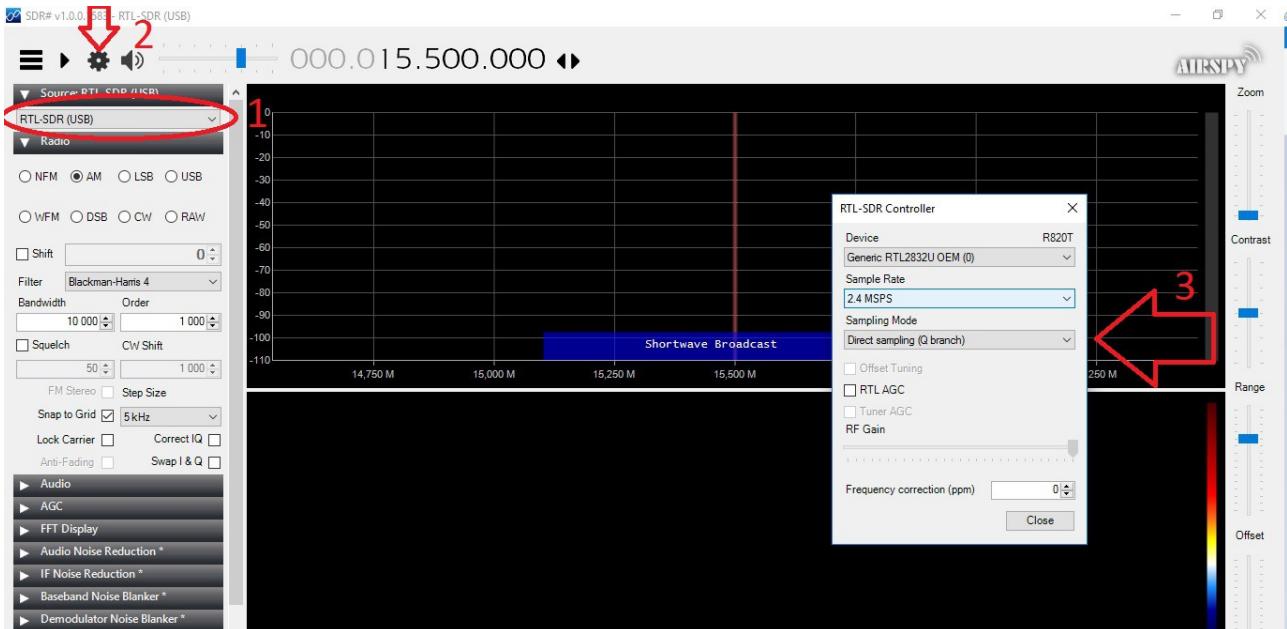
After download and install in a folder sdr#



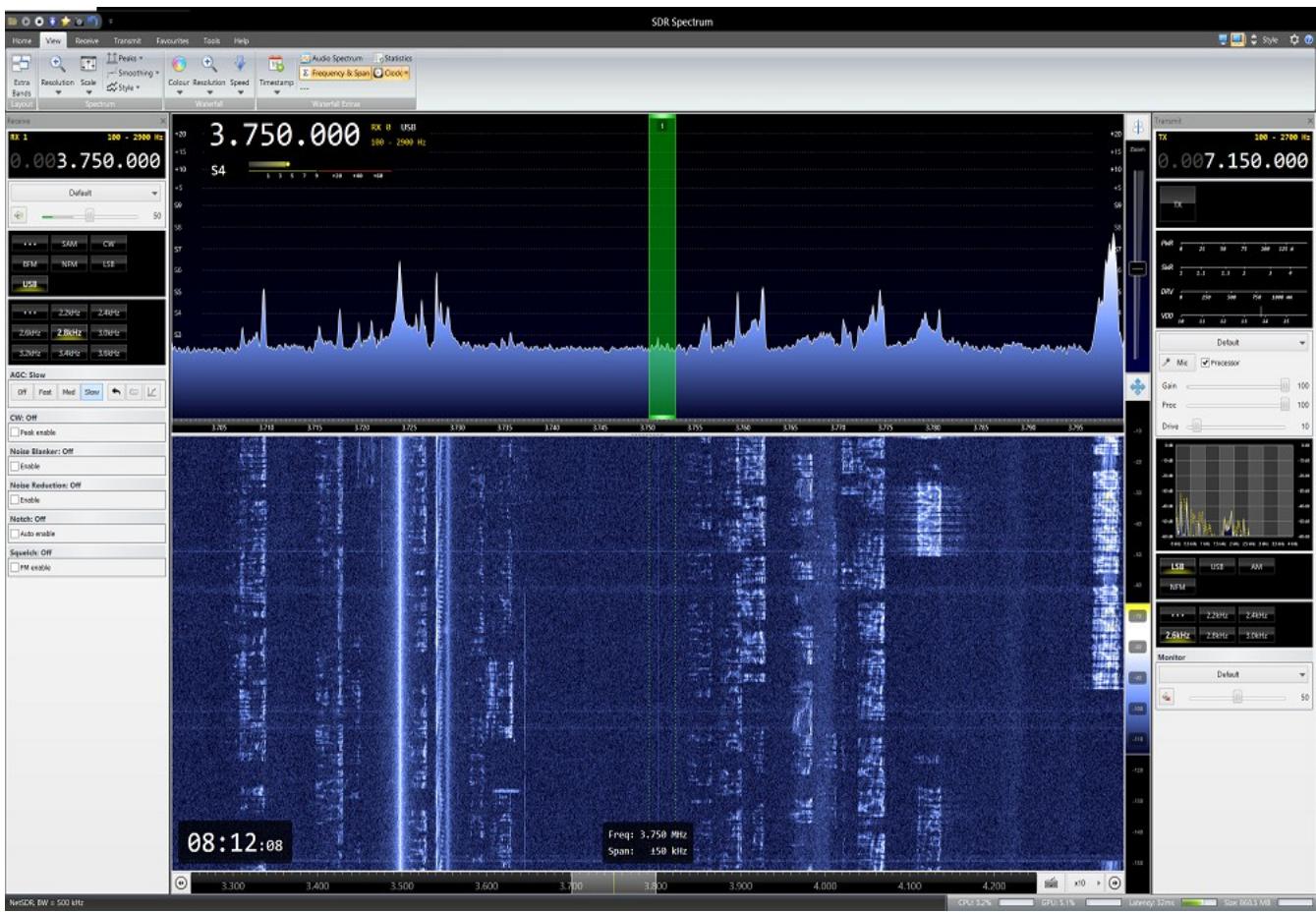
Open Folder and look for link “install-rtlsdr” click on it  
a black box will open and install all necessary drivers.  
Also run the Zadig included on folder.



Run program normally.



Download from here: SDR-RADIO



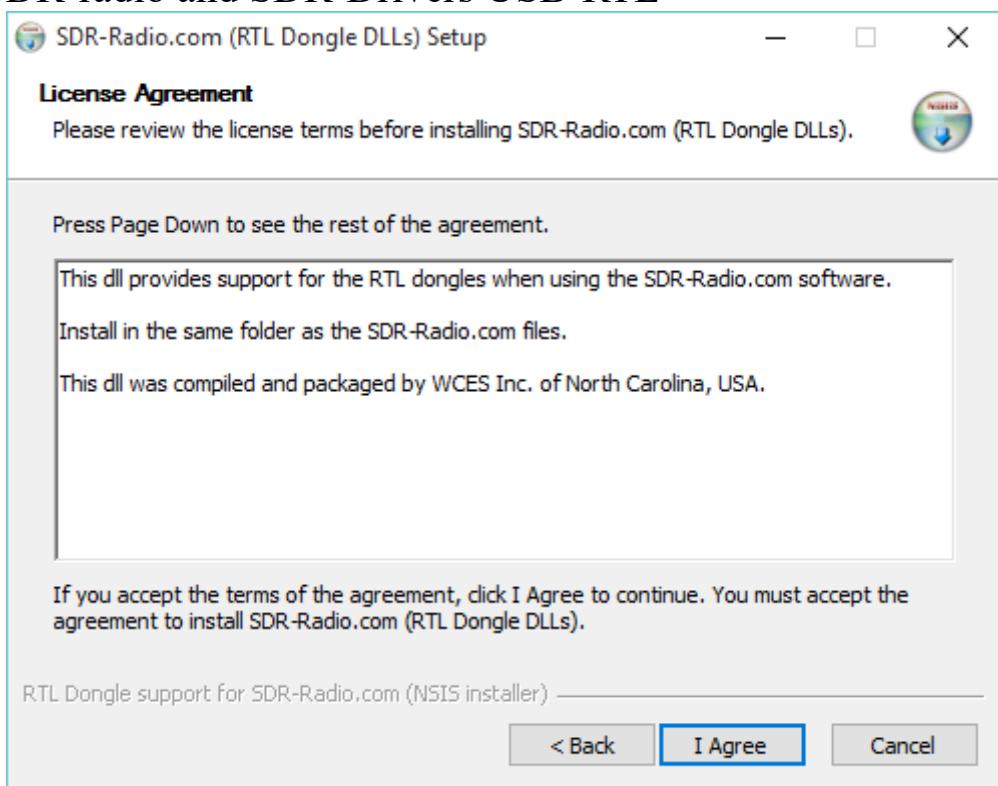
<http://sdr-radio.com/Software/Download/Download-Kits>

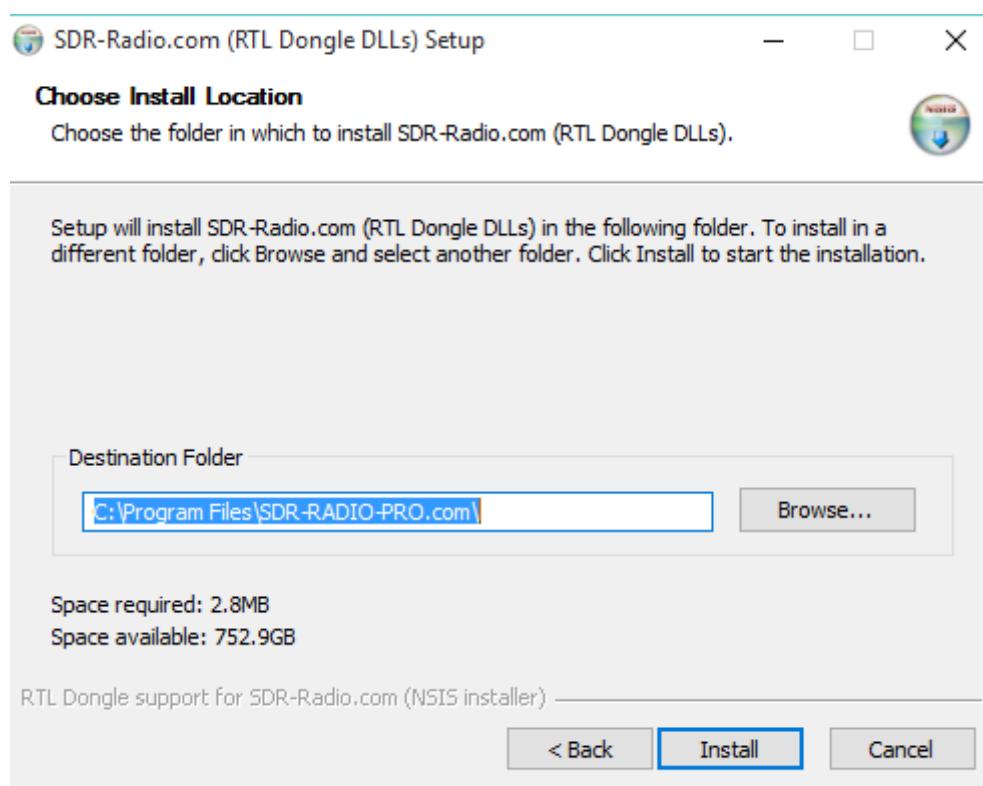
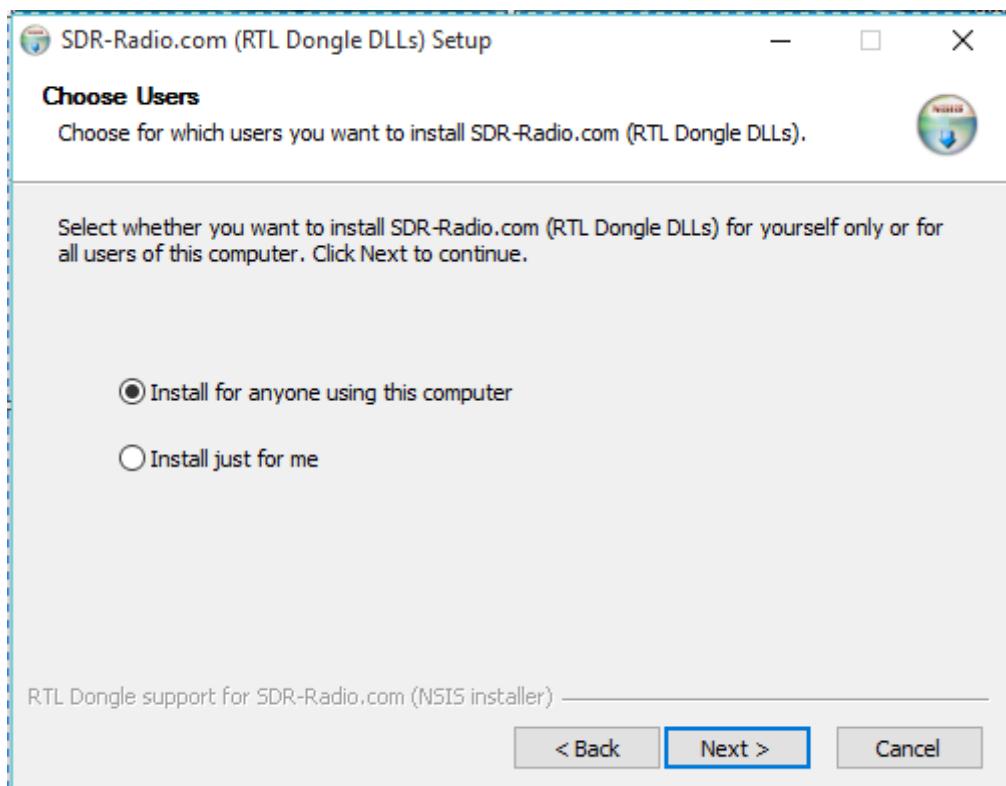
Download and install the latest version os SDR-Radio SDR software

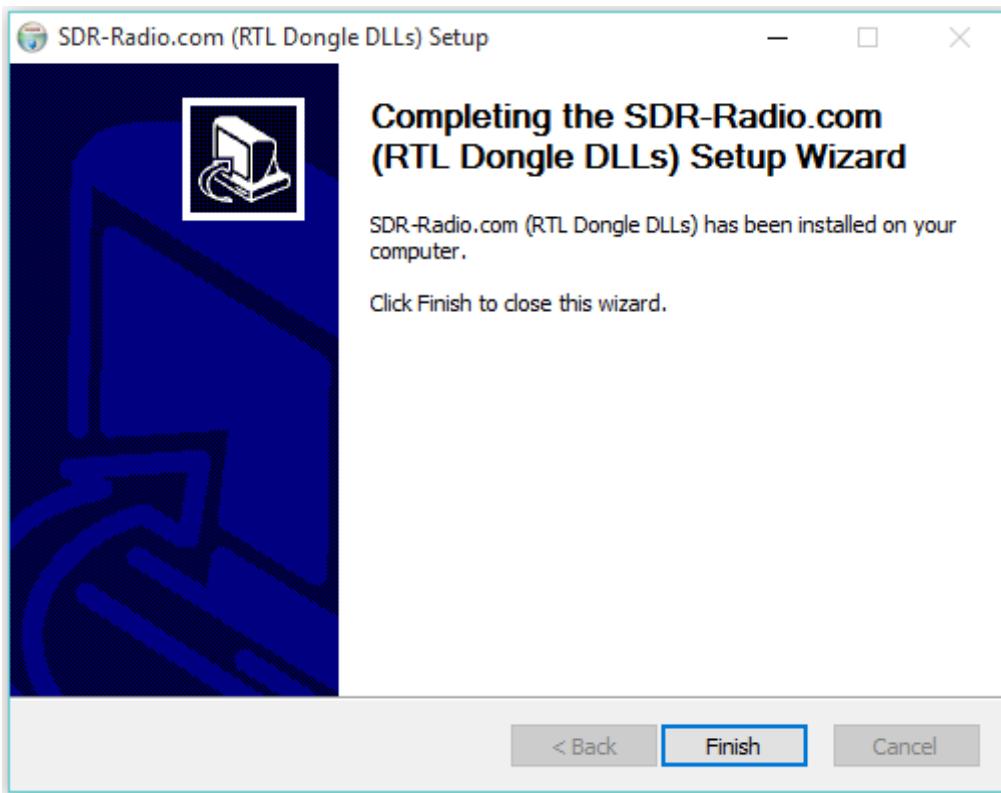
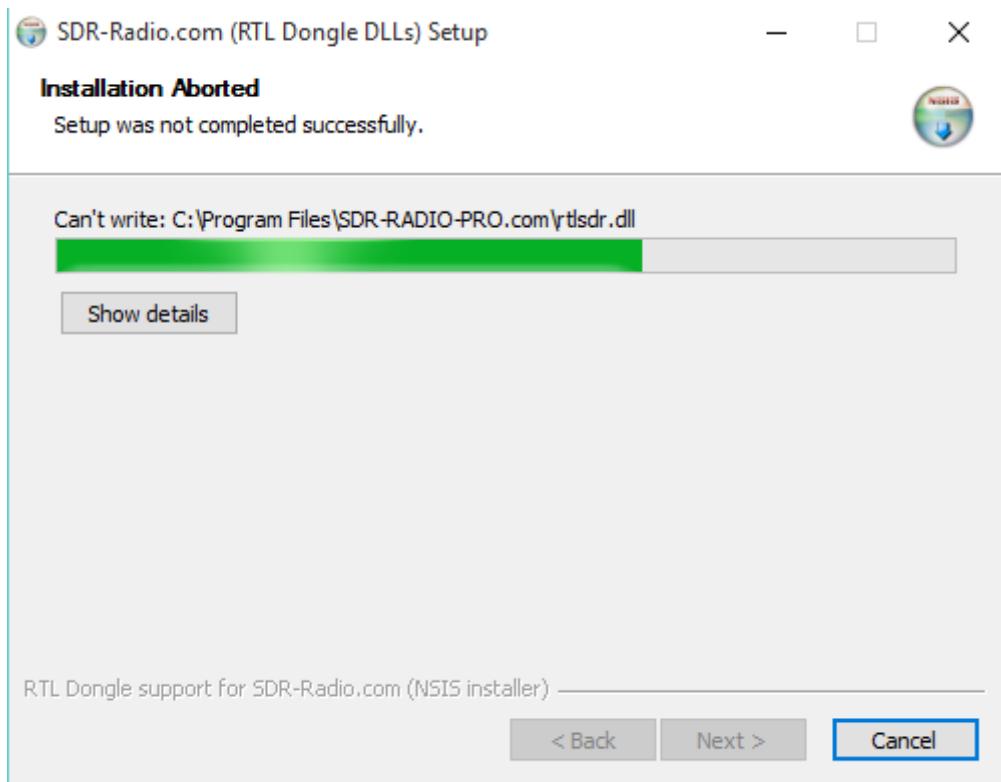
Also download the USB drivers here:

[https://meocloud.pt/link/a894d7f9-1fcf-4412-a5fe-eced48addd0/-SDR-RADIO-Pro\\_RTLDongleSupport.exe/](https://meocloud.pt/link/a894d7f9-1fcf-4412-a5fe-eced48addd0/-SDR-RADIO-Pro_RTLDongleSupport.exe/)

# Install SDR-radio and SDR-Drivers USB-RTL





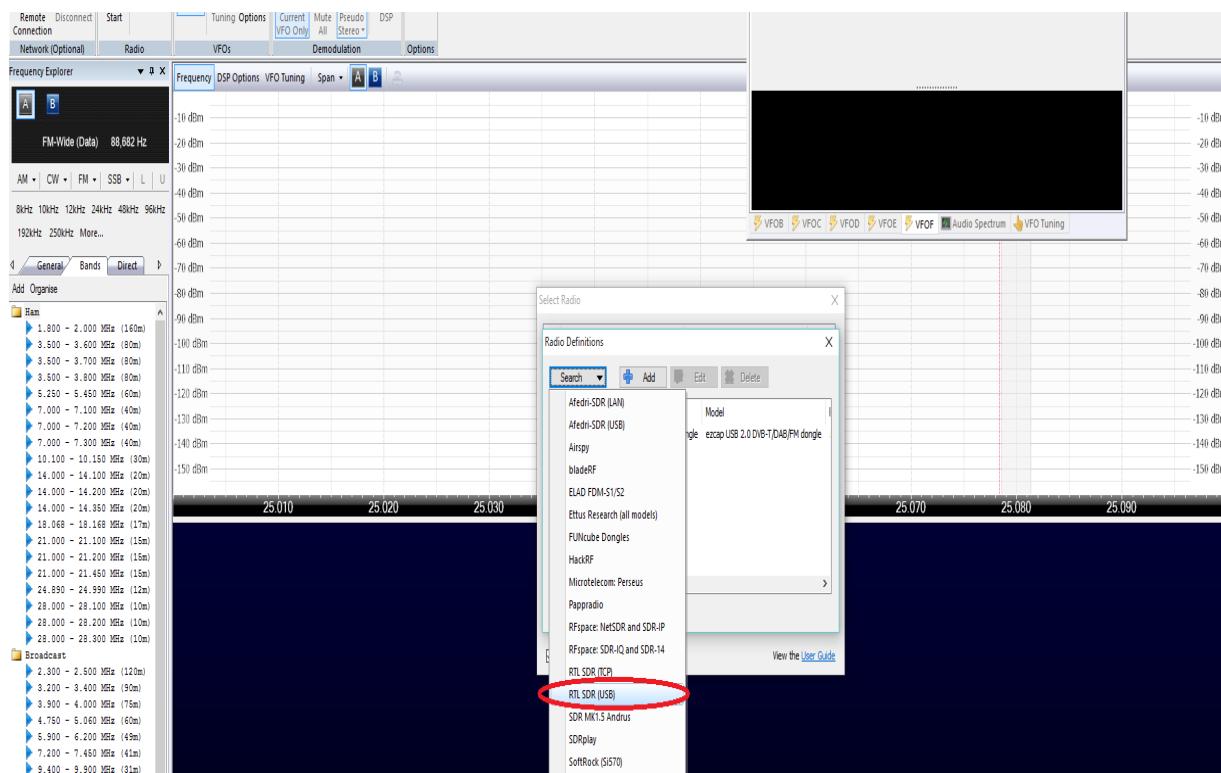


Plug the SDR on the USB connector,

You will ear a sound on PC speaker indicating that windows have found the device.

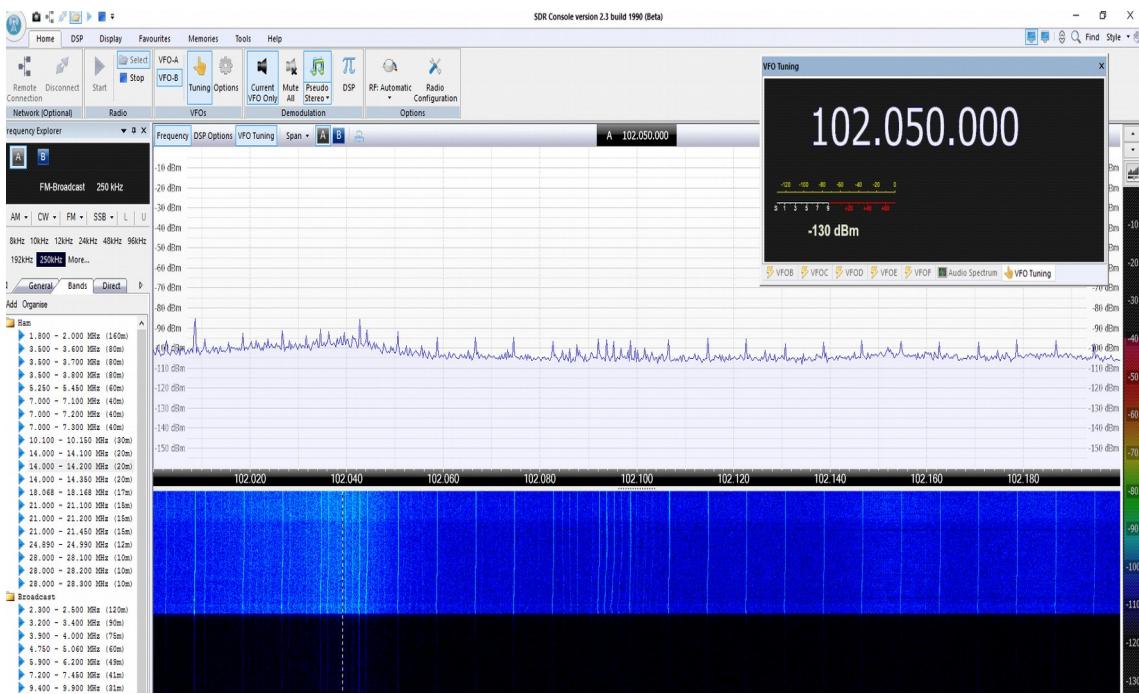
The SDR-Radio program will automatic alert you to choose the device on source

Select the RTL SDR USB



The ezcap USB will turns as Green!

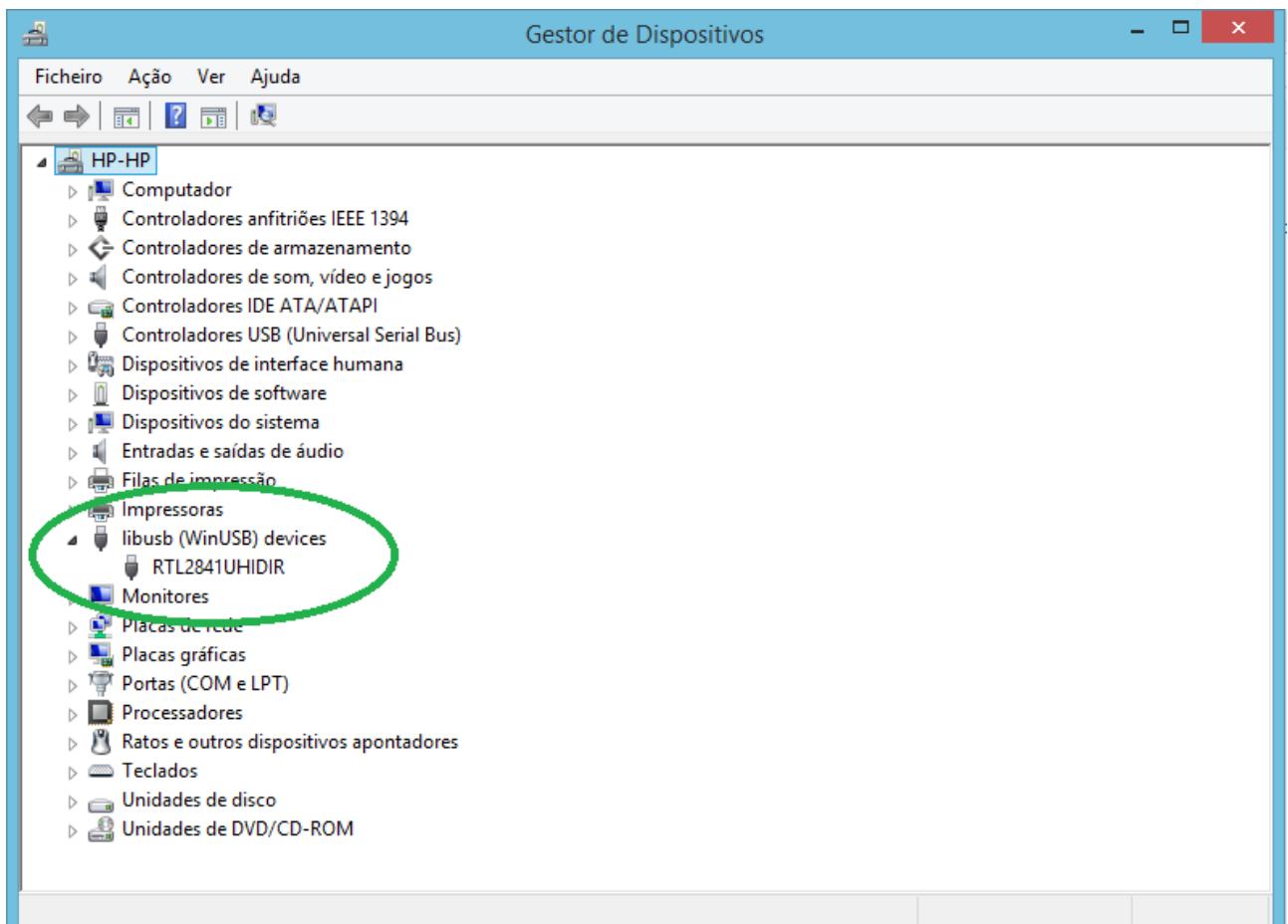
The SDR is ready to operate on HF and VHF & UP



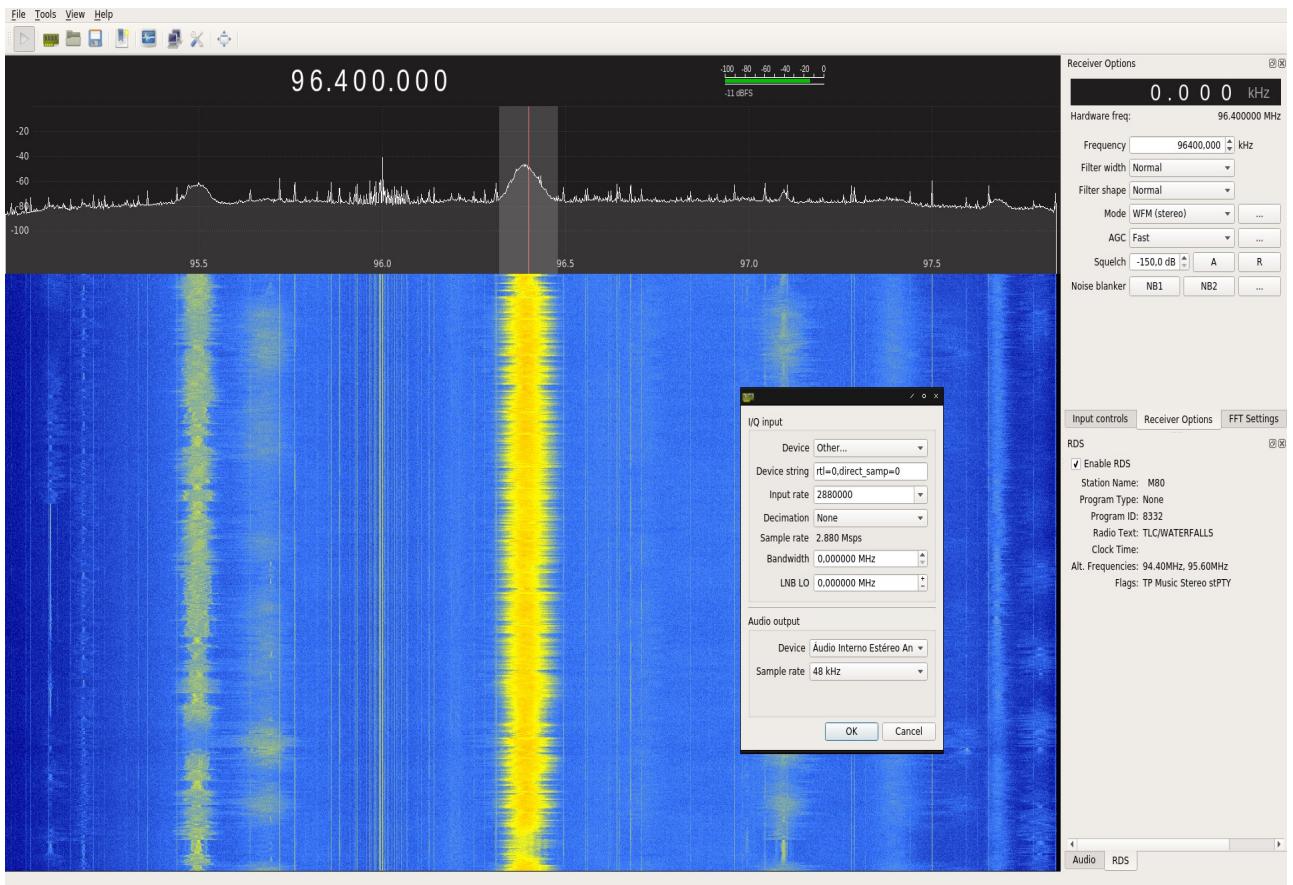
The SDR-radio program is very easy to work.  
You have all modes for decoding as well lot's of memories broadcast bands, amateur bands etc.

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.



Linux with GQRX



To listen HF open input box for IQ  
 on device string : Sample\_rate=0 ( for VHF and up)  
 Sample\_rate=3 ( for HF)

more info on <https://ct7aez.blogspot.pt/2017/09/dxpatrol-mk4-sdr.html#more>

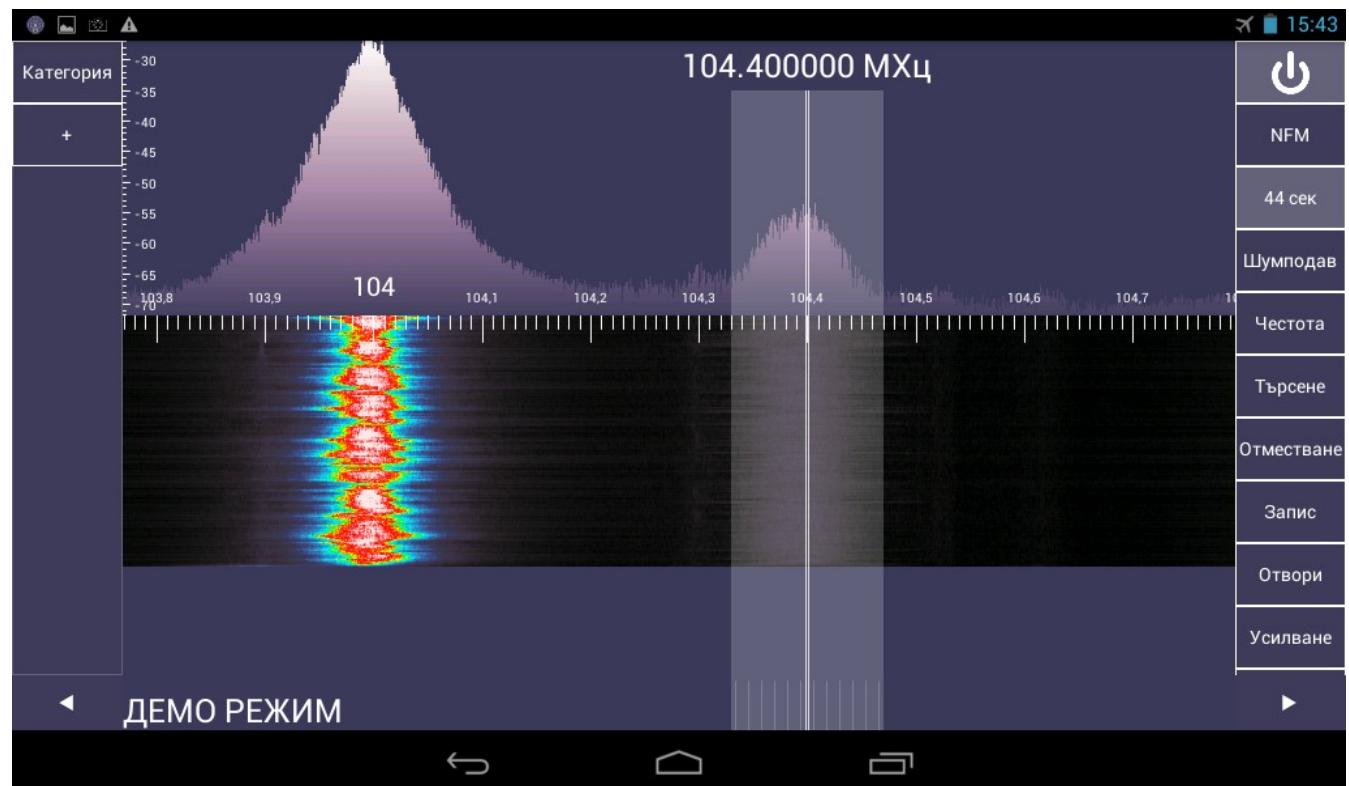
## About Android



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



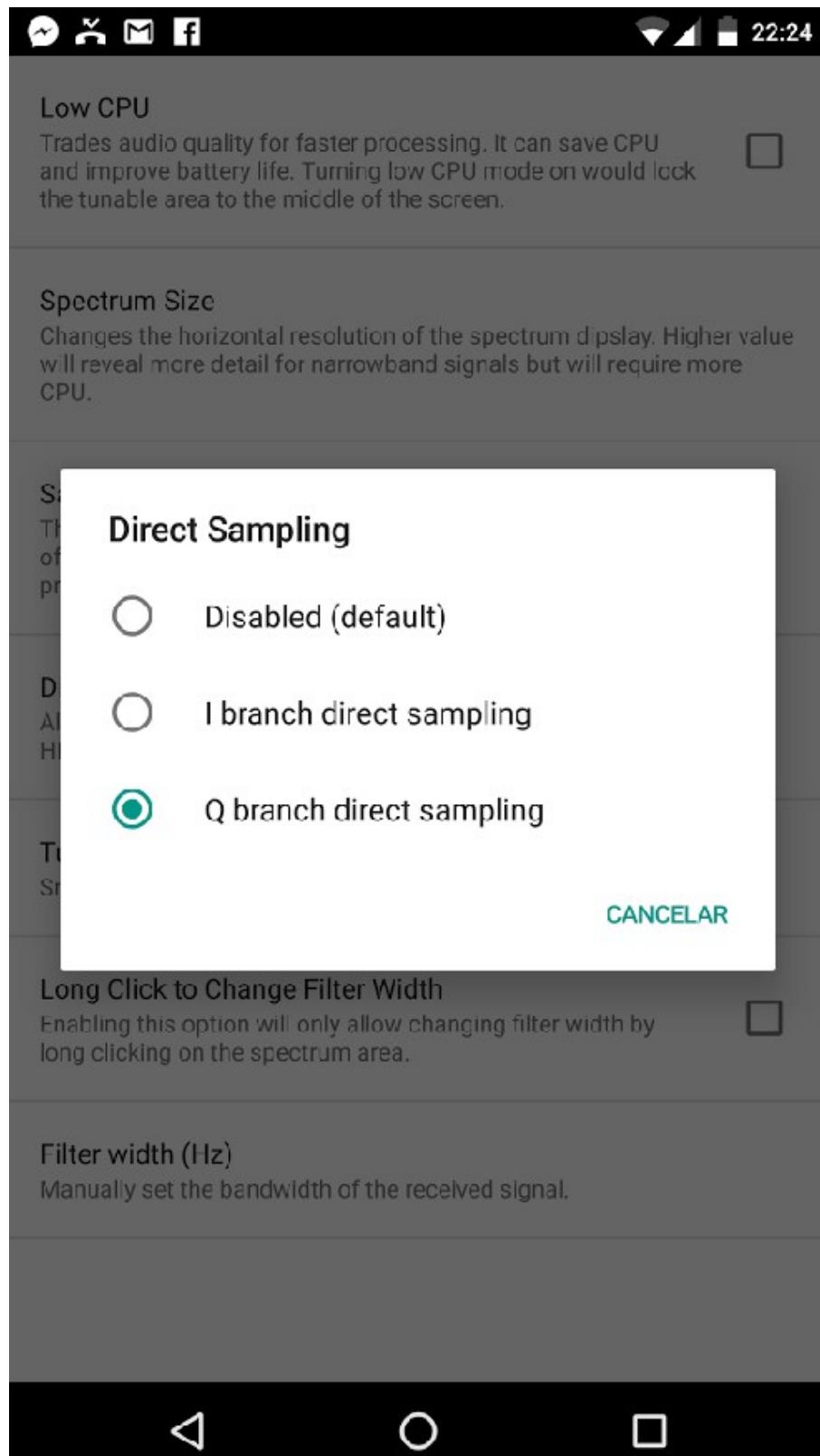
SDRTouch



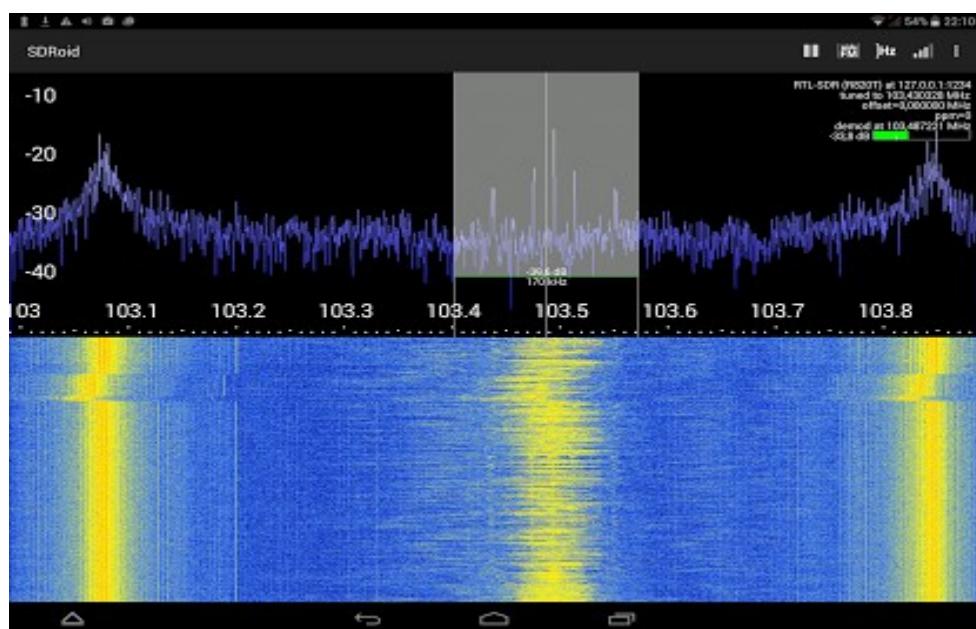
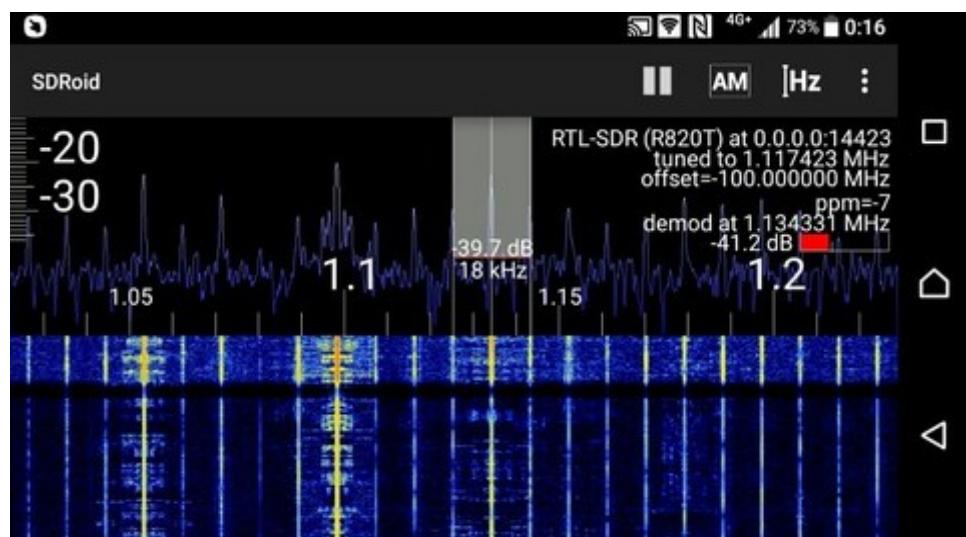
Note:

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



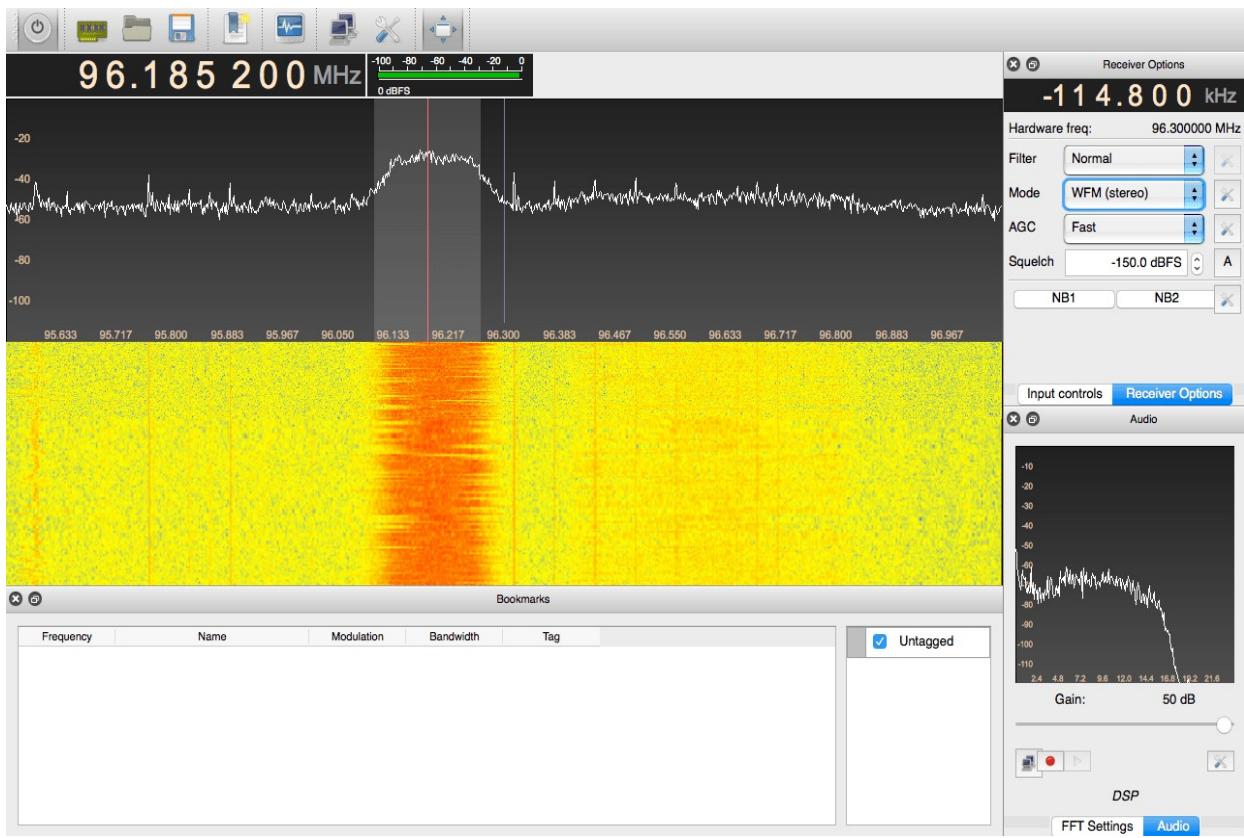
## Operation with

### 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/rtl-sdr-up-and-running-in-mac-osx-yosemite-with-gqrx-gnuradio/>

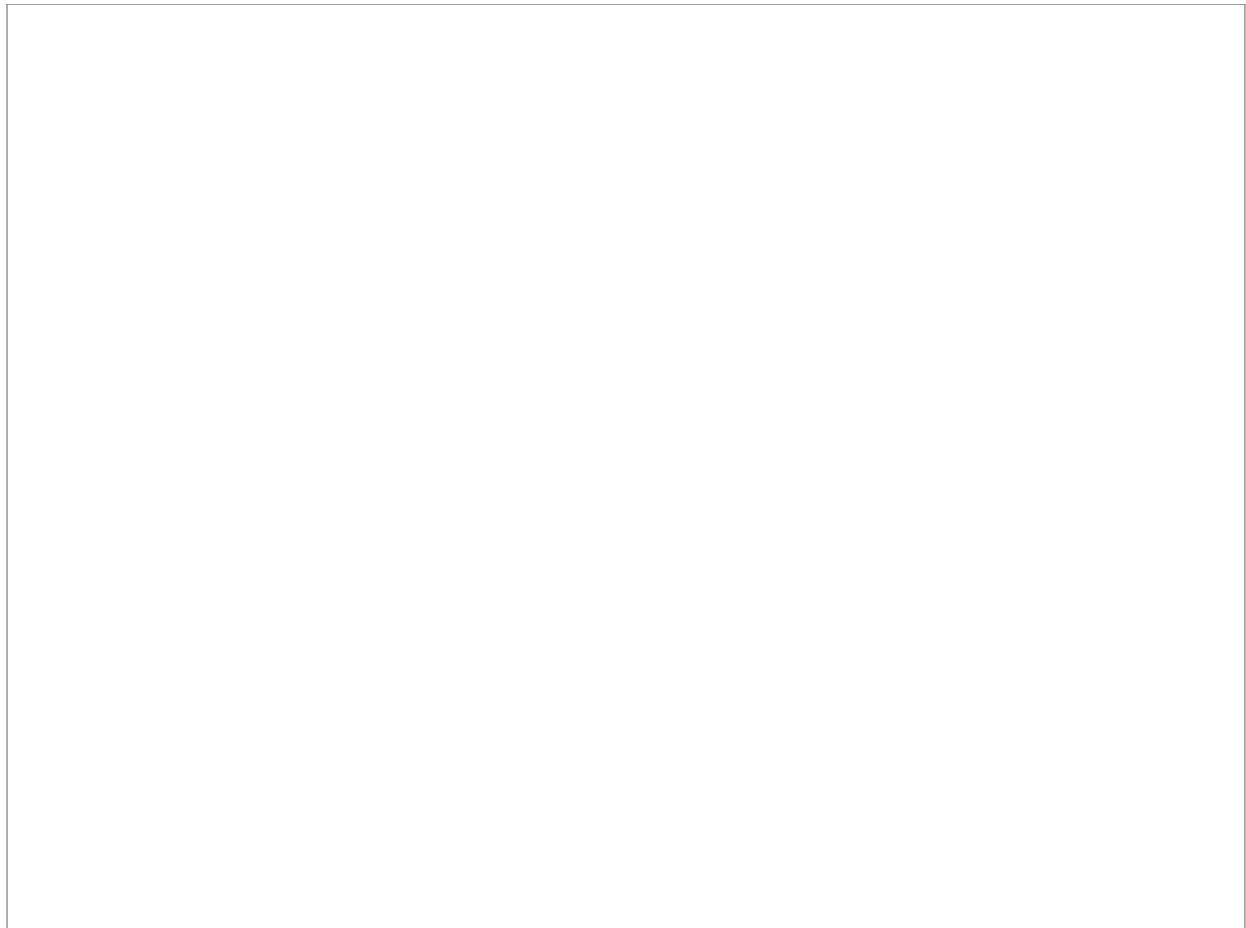
NOAA Weather satellites RX : <http://www rtl-sdr com/rtl-sdr-tutorial-receiving-noaa-weather-satellite-images/>

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

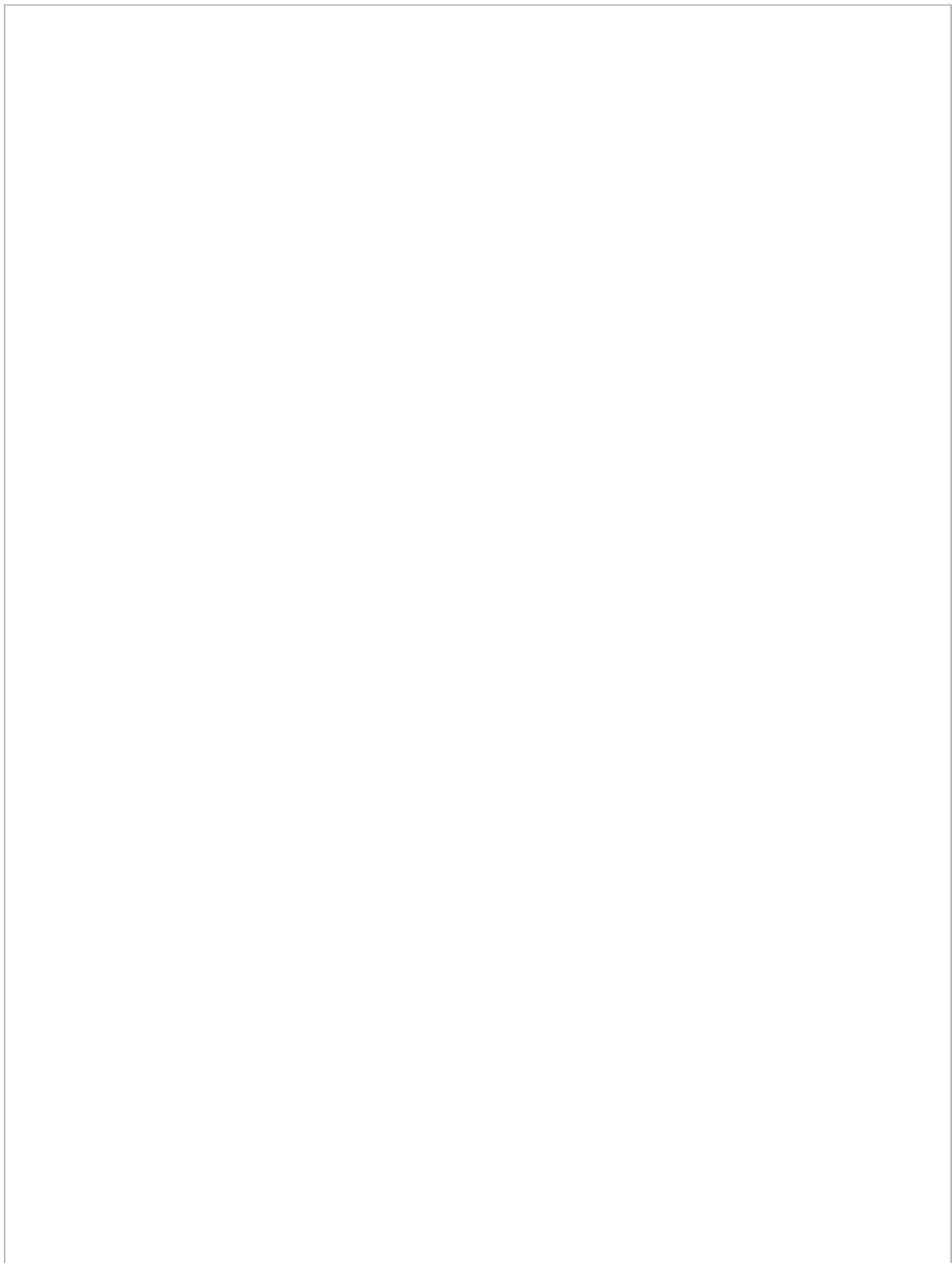
Gnu radio Linux software:  
<http://rtlsdr.org/softwarelinux>



Android: [https://play.google.com/store/apps/details?id=marto.rtl\\_tcp\\_andro&hl=pt\\_PT](https://play.google.com/store/apps/details?id=marto.rtl_tcp_andro&hl=pt_PT)







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

Best 73

Tony

CT1FFU

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