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

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

|                                | @ 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/](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...

![Zadig screenshot](image)

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:

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


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

License Agreement
Please review the license terms before installing SDR-Radio.com (RTL Dongle DLLs).

Press Page Down to see the rest of the agreement.

This dll provides support for the RTL dongles when using the SDR-Radio.com software.
Install in the same folder as the SDR-Radio.com files.
This dll was compiled and packaged by WCES Inc. of North Carolina, USA.

If you accept the terms of the agreement, click I Agree to continue. You must accept the agreement to install SDR-Radio.com (RTL Dongle DLLs).

RTL Dongle support for SDR-Radio.com (NSIS installer)
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)

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

Space required: 2.8MB
Space available: 752.9GB

RTL Dongle support for SDR-Radio.com (NSIS installer)
Plug the SDR on the USB connector,
You will hear a sound on PC speaker indicating that Windows have found the device.

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

Select the RTL SDR USB

The ezcap USB will turn 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


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/

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

Gnu radio Linux software: [http://rtlsdr.org/softwarelinux](http://rtlsdr.org/softwarelinux)
Enjoy the new World of the radio on a SDR device.

Best 73

Tony

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