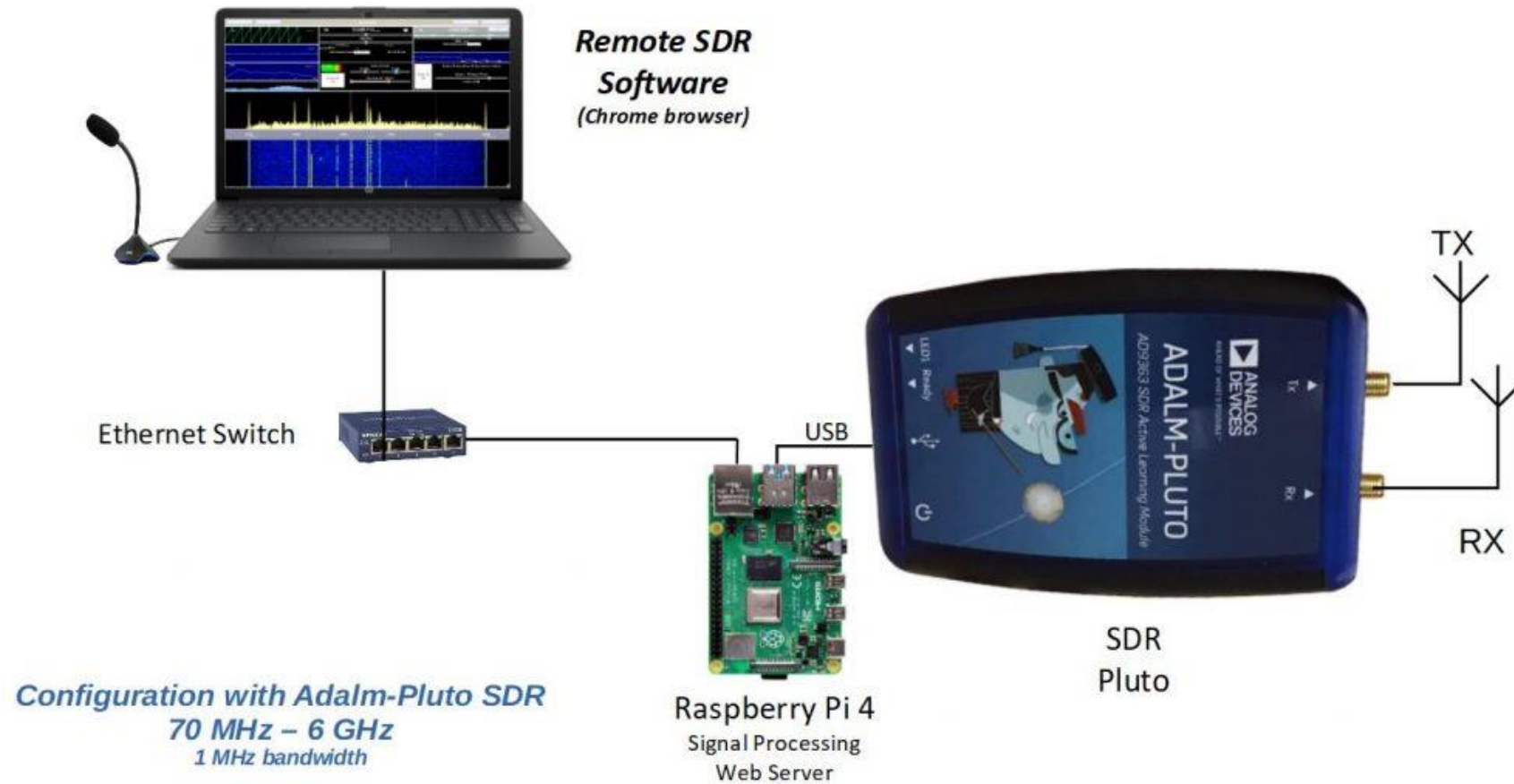


COMPACT CONFIGURATION with an ADALM-PLUTO – Raspberry Pi 4 – ETHERNET



COMPACT CONFIGURATION with an ADALM-PLUTO – Opi Zero 2 – Wifi

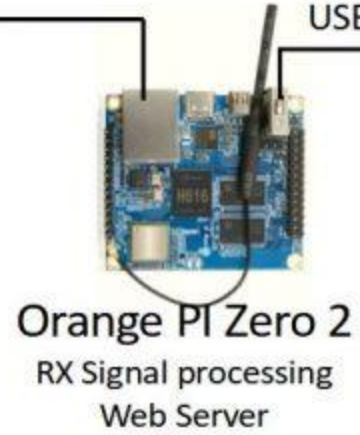


M

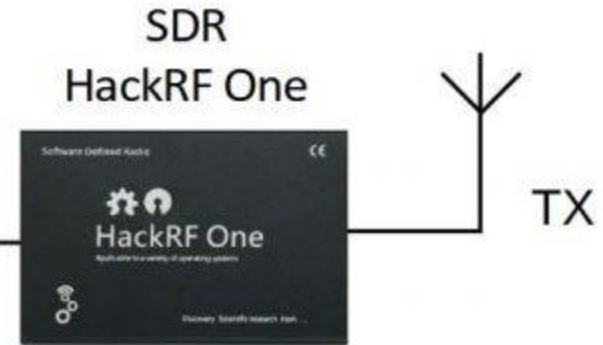
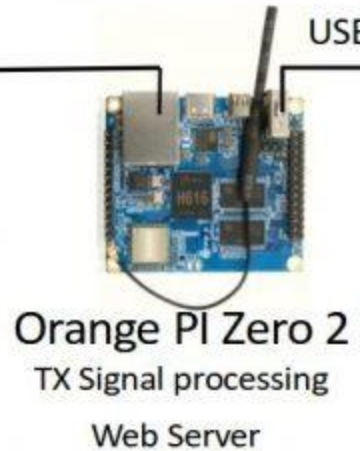


**Application
Remote SDR**
(Navigateur Chrome)

Ethernet Switch

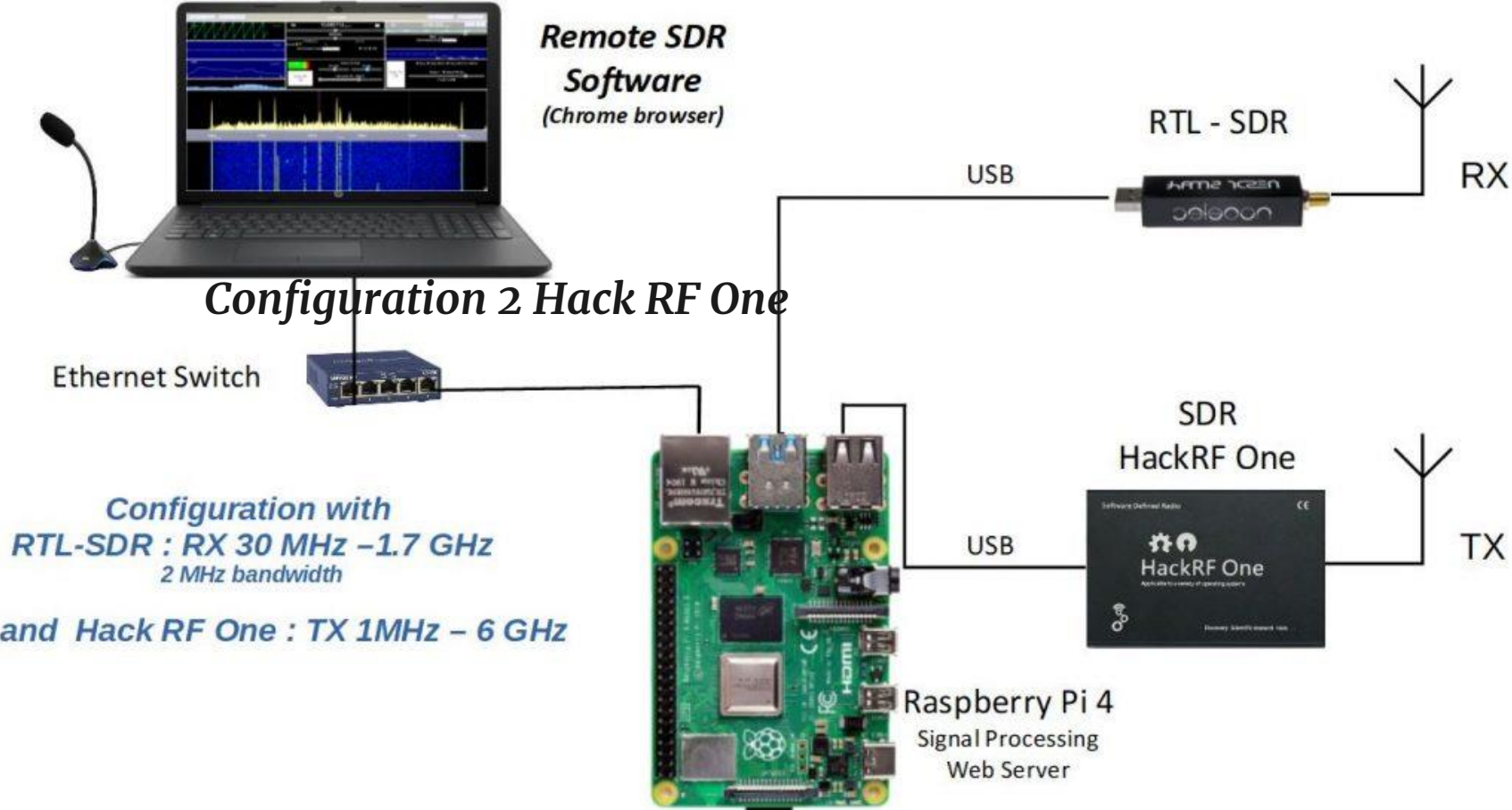


**Configuration with RTL-SDR and
Hack RF One 30 MHz -1.7 GHz**
2 MHz bandwidth

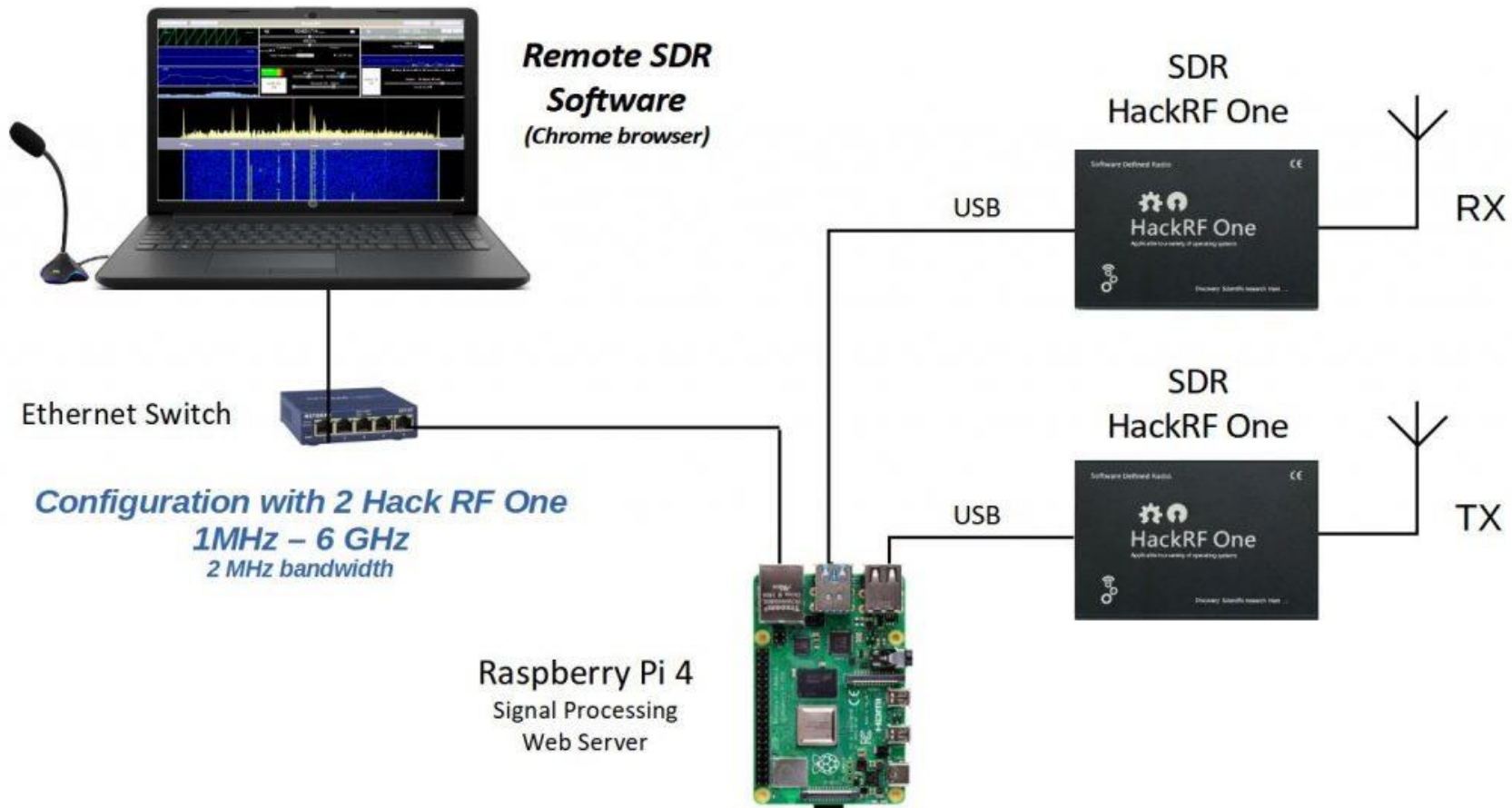


2

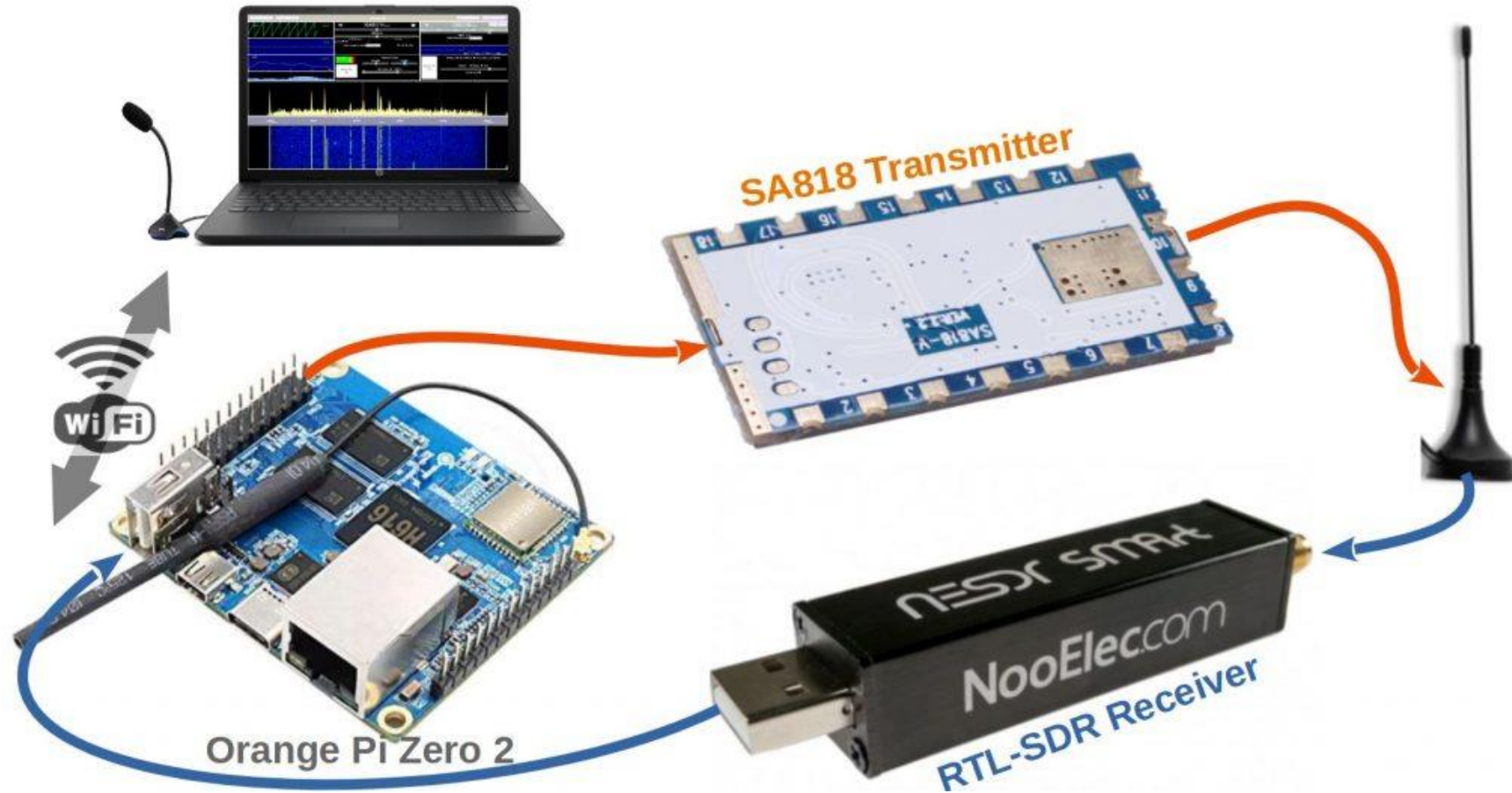
Mixed Configuration HackRF – RTL-SDR – Raspberry Pi 4



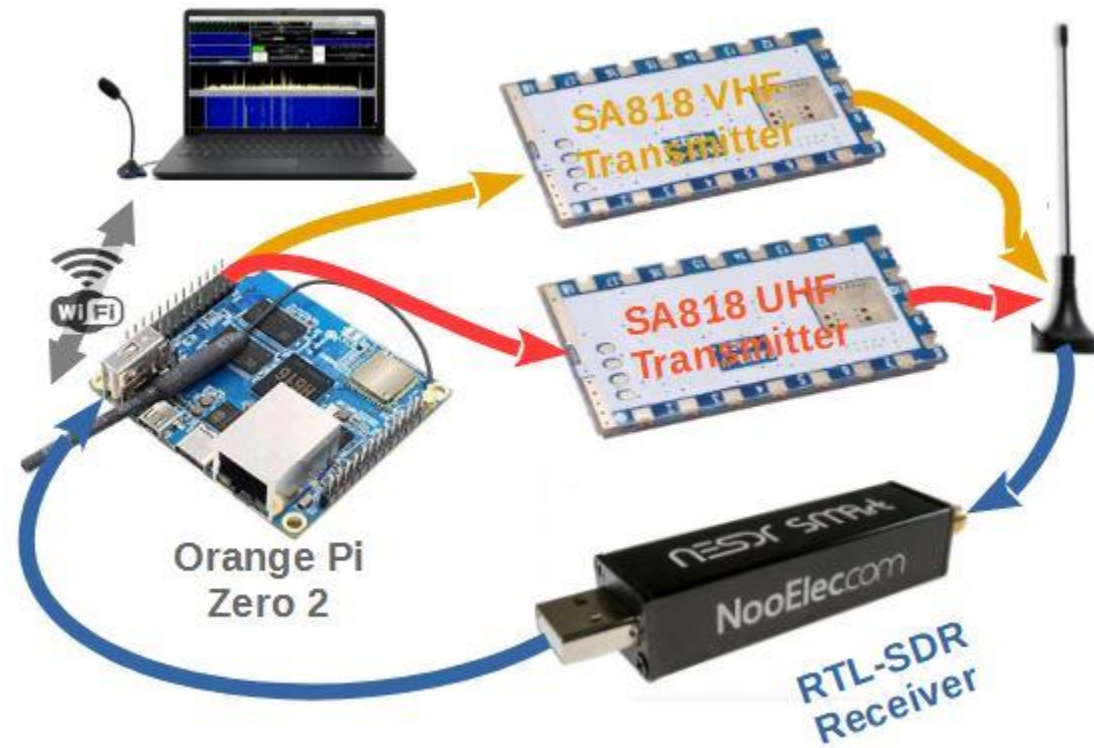
Configuration 2 Hack RF One



Configurations RTL-SDR and SA818



Configurations RTL-SDR and SA818



QO-100

*Remote SDR
Software
(Chrome browser)*



Parabole / Dish
120cm



Ethernet Switch



USB



SDR
HackRF One

Receiver 10GHz → 740 Mhz



LNB

USB



SDR
HackRF One

Transmitter 2,4GHz



BandPass Filter
2400 MHz



Amplifier
SPF5189Z



Amplifier
SPF5189Z

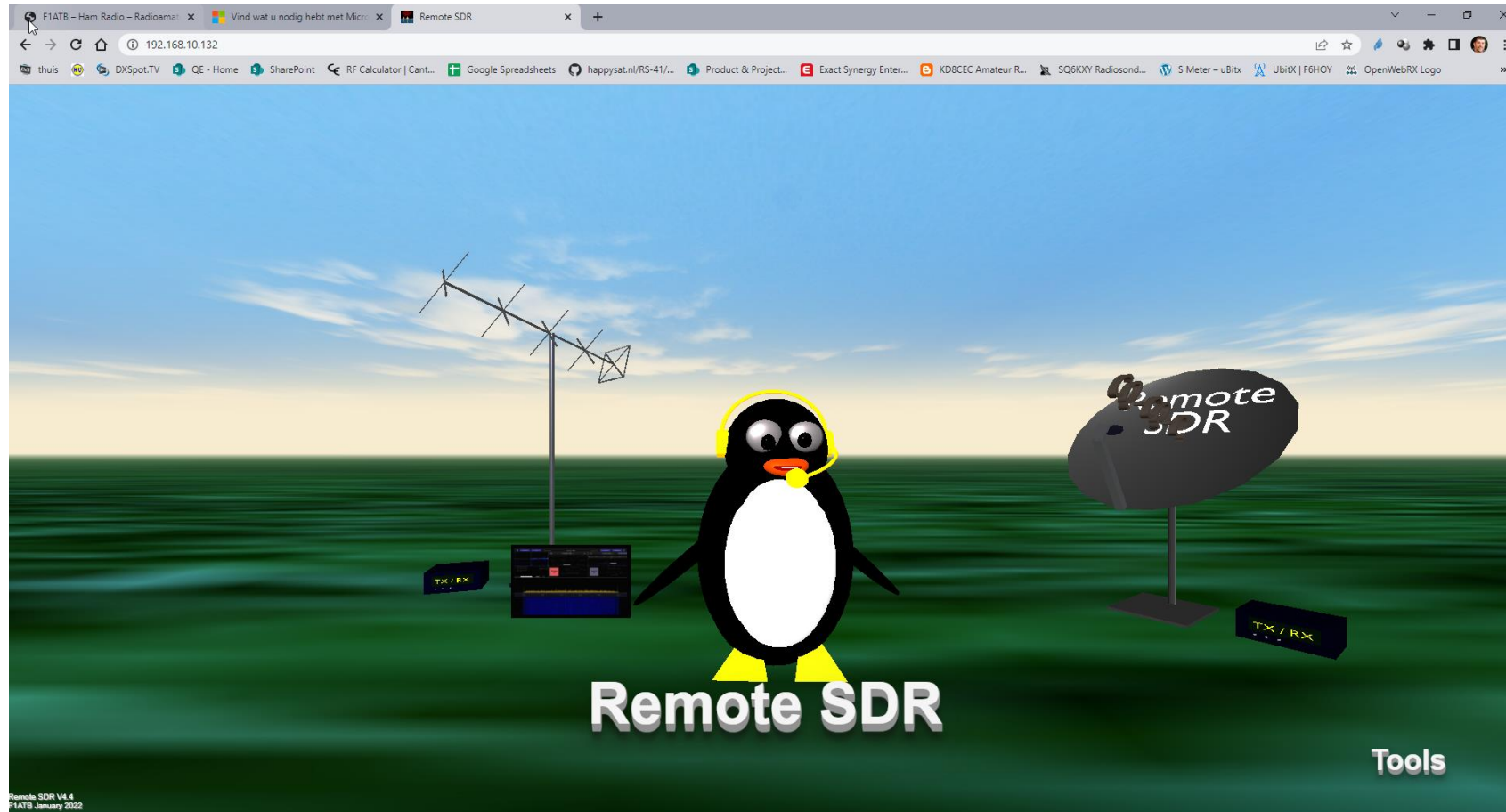


WIFI Amplifier
EP-AB003



Raspberry Pi 4B - 2Go

Start in de webbrowser op PC Tablet of telefoon



TOOLS

Tools - Remote SDR

- CPU Model
- CPU Temperature
- RX configuration
- TX configuration
- List USB Devices / Liste les périphériques USB
- Events Historic
- Apache Server Errors / Erreurs Serveur Apache
- Changes Log / Journal des modifications
- Reboot Orange PI or Raspberry PI
- Shutdown Orange PI or Raspberry PI

RX / TX
IP 192.168.10.132
Raspberry PI
47°C

SDR Adalm-Pluto
RX / TX

- Pluto Help / Aide Pluto
- Pluto Reboot (Needed when SDR RX On or SDR TX On Led's are Blue or Red)

Hack RF One
RX / TX

DEMO

The screenshot displays the Remote SDR software interface, which is divided into several functional sections:

- Top Bar:** Includes navigation tabs for "RX Gains", "Log", and "Parameters". It also shows the status "SDR RX On" and "Remote SDR".
- RX Section (Left):** Features a "Spectrum" plot and an "RX Audio FFT" plot. Below these is a list of beacon frequencies: 10 489 500 Lower Beacon, 10 489 635 Winlink VARA-sat, 10 489 750 Mid Beacon, 10 489 860 Emergency, and 10 490 000 Upper Beacon. A "Store" button is visible next to the frequency 10 489 942.
- RX Section (Center):** Shows the current RX frequency as 10 489 942 879 Hz. It includes controls for "Central Freq." (10 489 750 kHz), "Bandwidth" (500 kHz), "SDR Freq." (739 783 986 Hz), "Freq. Offset" (-9 750 000 000 Hz), and "Man. correct." (33 986 Hz). It also has a "Scan" button and a mode selector (HF band: GO-100 Down, CW-LSB, CW-USB, LSB, USB, AM, NBFM, WBFM).
- RX Section (Right):** Contains "RX AF Gain" sliders for "While RX" and "While TX", and an "Audio Filter Hz" slider. The "RX Audio" status is currently "Off".
- TX Section (Right):** Shows the TX frequency as 2 400 442 879 Hz. It includes controls for "Central Freq." (2 400 442 879 Hz), "Bandwidth" (500 kHz), "SDR Freq." (2 400 447 257 Hz), and "Man. correct." (4 378 Hz). It also has a "Scan" button and a mode selector (Full duplex: checked, Select frequency band: GO-100 Up, Relays: dropdown, Auto: checkbox).
- TX Section (Bottom Right):** Contains "TX Audio" controls, including "Micro" selection, "Mic Gain" slider, and tone options (800 Hz Tone, 500 Hz and 1900 Hz Tone). The "TX Audio" status is currently "Off".
- Waterfall Plot (Bottom):** A large waterfall plot showing frequency activity across the range from 10 489 500 to 10 490 000 Hz. It includes labels for "Lower Beacon", "Winlink VARA-sat", "Mid Beacon", "Emergency", and "Upper Beacon".
- Bottom Left:** A small text box indicating "Remote SDR V4.4 FIATD January 2022".

Extern sound card programma's

The screenshot displays the Remote SDR software interface, which is used for controlling an external sound card. The interface is divided into several sections:

- Top Bar:** Includes a penguin icon, a refresh button, and tabs for "RX Gains", "Log", "SDR RX On", "Remote SDR", "SDR TX On", and "Parameters".
- Frequency Displays:** The RX section shows a central frequency of 10 489 942 879 Hz and a bandwidth of 500 kHz. The TX section shows a frequency of 2 400 442 879 Hz. Both sections include "Scan" buttons and "Manual correct" fields.
- Audio Processing:** The RX section features "RX AF Gain" sliders for "While RX" and "While TX", and an "Audio Filter 307 - 3014 Hz" slider. The TX section has "TX Audio Off" and "TX Audio Source" options (Microphone, Auxiliary).
- Filters and Spectrum:** The RX section includes "Filters" (Notch, Noise) and an "Audio Spectrum" plot. The TX section also has an "Audio Spectrum" plot.
- Equalizer:** The RX section has an "Equalizer" with sliders for "Bass Freq." (1300 Hz), "Bass Level" (0 dB), "Treble Freq." (1450 Hz), and "Treble Level" (0 dB). The TX section has an "Equalizer" with sliders for "Bass Freq." (1150 Hz), "Bass Level" (4 dB), "Treble Freq." (2900 Hz), and "Treble Level" (5 dB).
- Output Destination:** The RX section has an "Auxiliary RX Audio" section with "Output destination" (Audio Output: CABLE Input (VB-Audio Virtual Cable)) and "Audio Gain" slider.
- Log and Beacons:** The "Log" tab shows a list of beacons: 10 489 500 Lower Beacon, 10 489 635 Winlink VARA-sat, 10 489 750 Mid Beacon, 10 489 860 Emergency, and 10 490 000 Upper Beacon. A "Store" button is also present.

Remote SDR V4.4
F1ATB January 2022

Instellen waterval en spectrum

The screenshot displays the Remote SDR software interface, which is used for controlling a software-defined radio. The interface is divided into several sections:

- Top Bar:** Includes a penguin icon, a refresh button, and tabs for "RX Gains", "Log", "SDR RX On", "Remote SDR", "SDR TX On", and "Parameters".
- RX Section:** Shows the current frequency as 10 489 942 879 Hz. It includes controls for Central Freq. (10 489 750 kHz), Bandwidth (500 kHz), SDR Freq. (739 784 396 Hz), Freq. Offset (-9 750 000 000 Hz), and Manual correction (34 396 Hz). There are also buttons for "Scan" and "Auto correction" (set to 1 Hz).
- TX Section:** Shows the current frequency as 2 400 442 879 Hz. It includes controls for SDR Freq. (2 400 100 Hz), Manual correction (4 378 Hz), and a "Link RX/TX freq." checkbox.
- Audio Controls:** Features "RX Audio Off" and "TX Audio Off" buttons, along with "RX AF Gain" and "Audio Filter 307 - 3014 Hz" sliders.
- Spectrum View:** A green waveform plot showing the frequency spectrum. A control panel for the spectrum view is visible, with options for "Average" (checked), "Color", and "Background Color".
- Waterfall View:** A spectrogram showing the frequency spectrum over time. A control panel for the waterfall view is visible, with a "Color" option.
- Frequency List:** A list of frequencies and their corresponding labels: 10 489 500 Lower Beacon, 10 489 635 Winlink VARA-sat, 10 489 750 Mid Beacon, 10 489 860 Emergency, and 10 490 000 Upper Beacon.