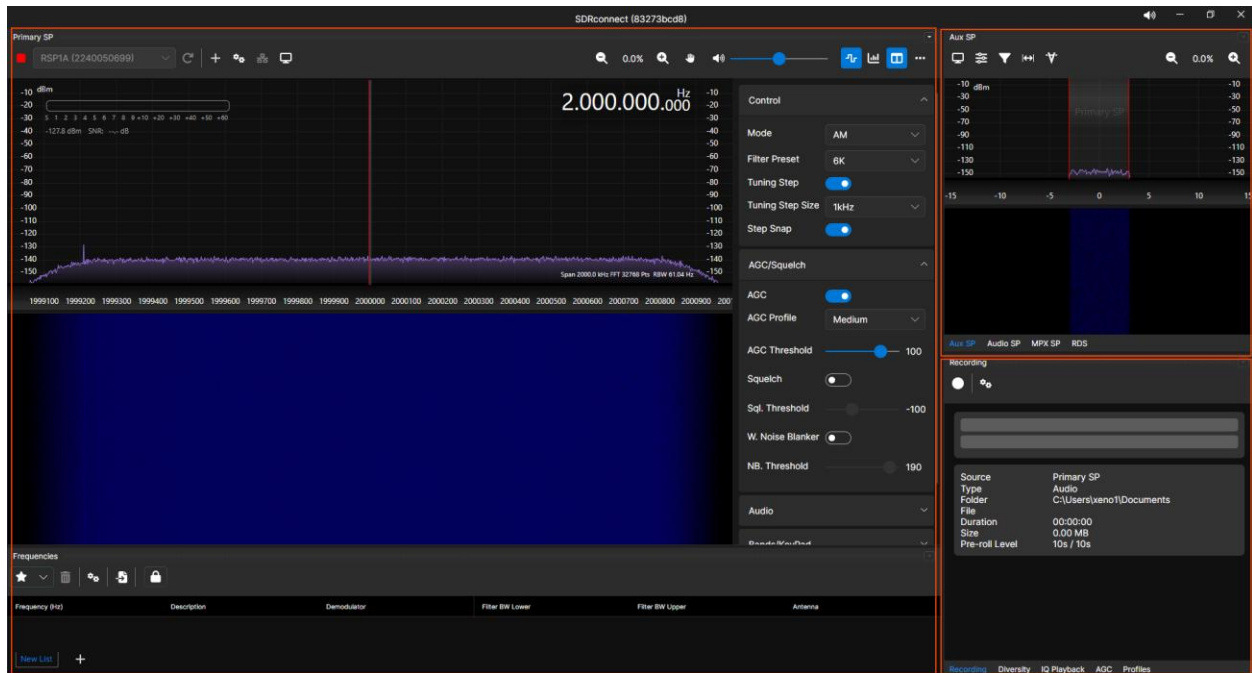




SDRconnect

The aim of this Quick Start guide is to provide you with basics of operation, using minimal technical acronyms.



All examples shown will use commercial Medium Wave broadcasts or commercial FM broadcast stations. These commercial broadcast transmissions are usually local, very strong, constant and can be received with the most basic antenna, a piece of wire.

When running SDRconnect, the application is divided into 3 areas shown above in RED. These sections are Left, top Right and bottom Right. This basics guide will outline each section and at the end, provide tuning examples for you to try.

Resource links

SDRplay Apps Catalogue

<https://www.sdrplay.com/apps-catalogue/>

Introduction to SDRConnect

<https://youtu.be/kHOVAJi1JBs>

Understanding Noise Blanking and Noise Reduction

<https://www.sdrplay.com/docs/SDRconnectNBNRappnote.pdf>

Asymmetrical filter

<https://www.youtube.com/watch?v=lvS3h4ZKxtc>

Direct frequency entry

<https://youtu.be/NPRIRzBKsAg>

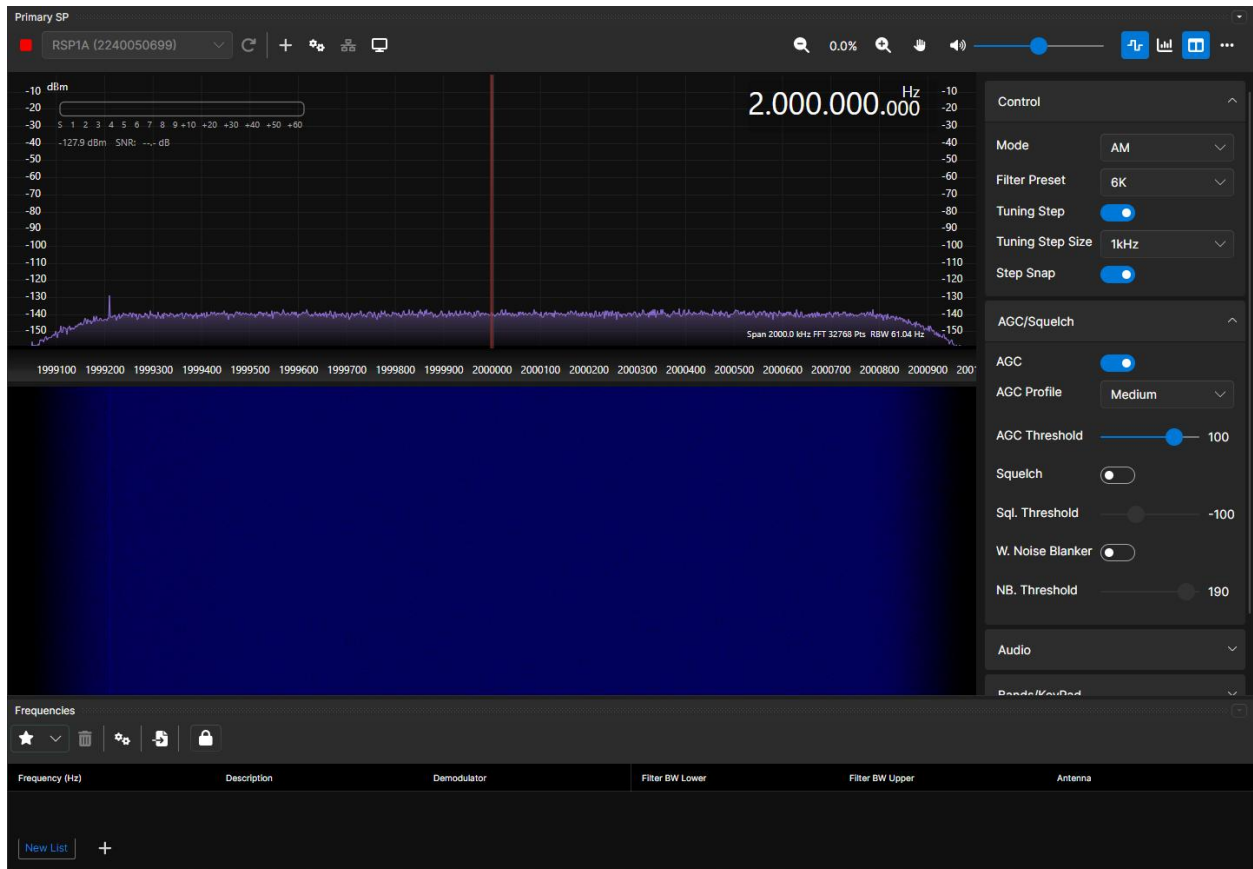
Layout options

<https://youtu.be/J0Enqz6nj5o>

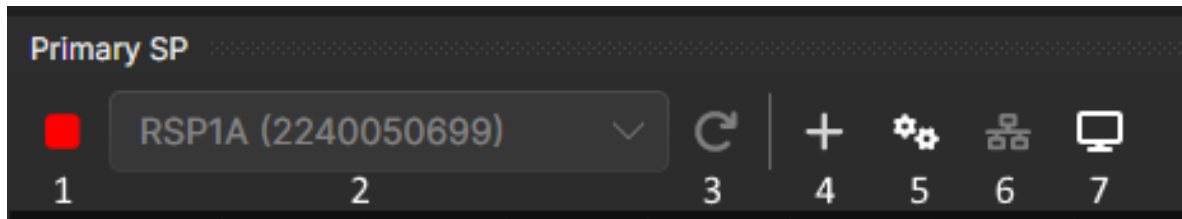
Audio recorder module

<https://youtu.be/BX4Ln8-2vuE>

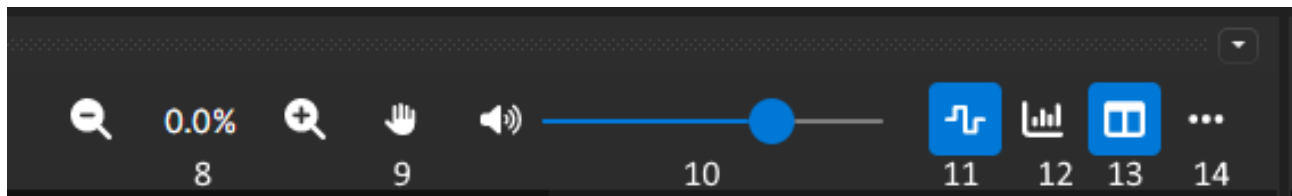
Left Panel



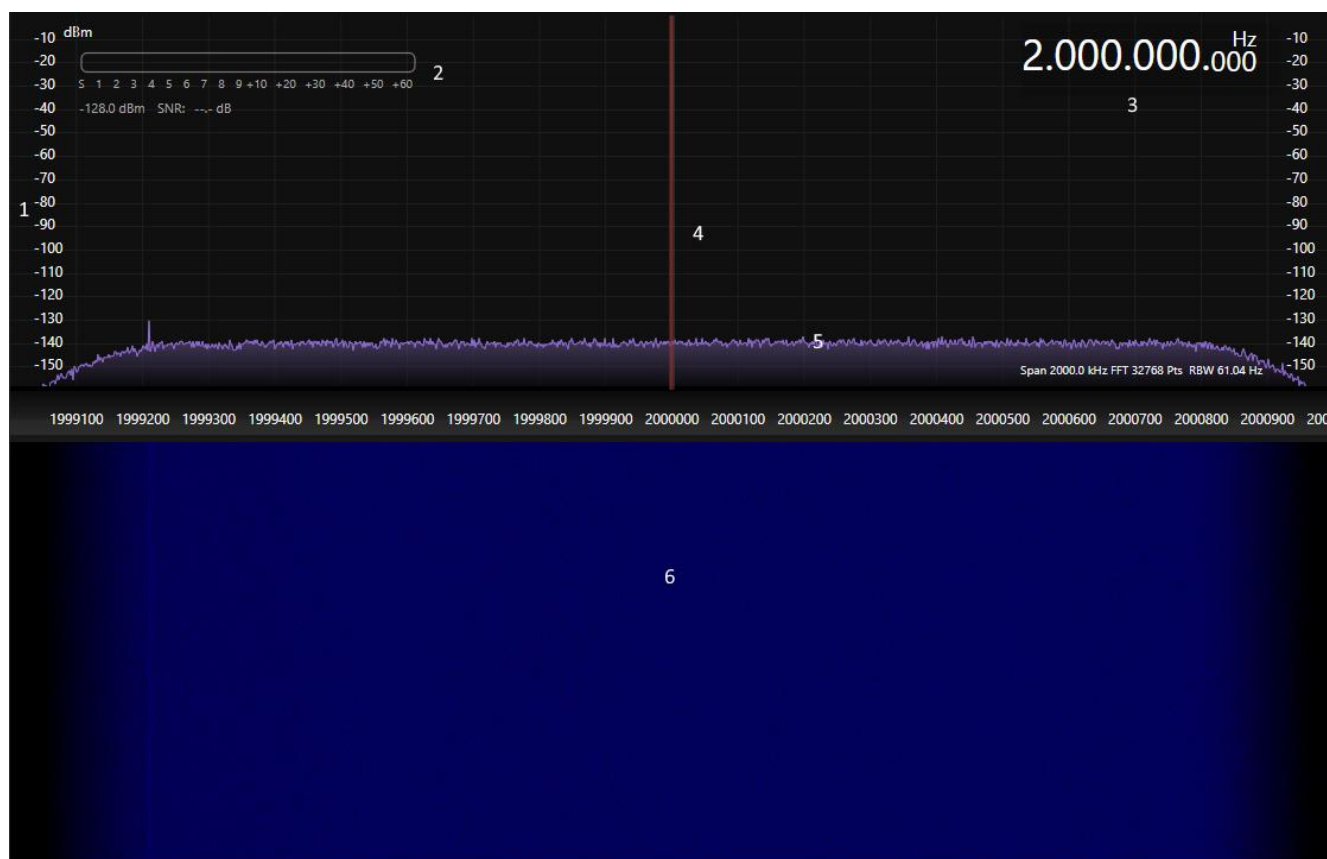
Primary SP



- 1 – Starts and stops the stream. Turns the device on and off.
- 2 – Local (USB) device and remote SDRconnect server selection. Select an RSP connected via USB or a RSP on remote SDRconnect server.
- 3 – Refresh. Refreshes the device & remote server list.
- 4 – Add VRX. Adds a virtual receiver.
- 5 – Device settings.
- 6 – Network Information. Bandwidth and Connection information (nRSP-ST or SDRconnect server).
- 7 – Primary SP display settings. Visual adjustments for the Primary SP.

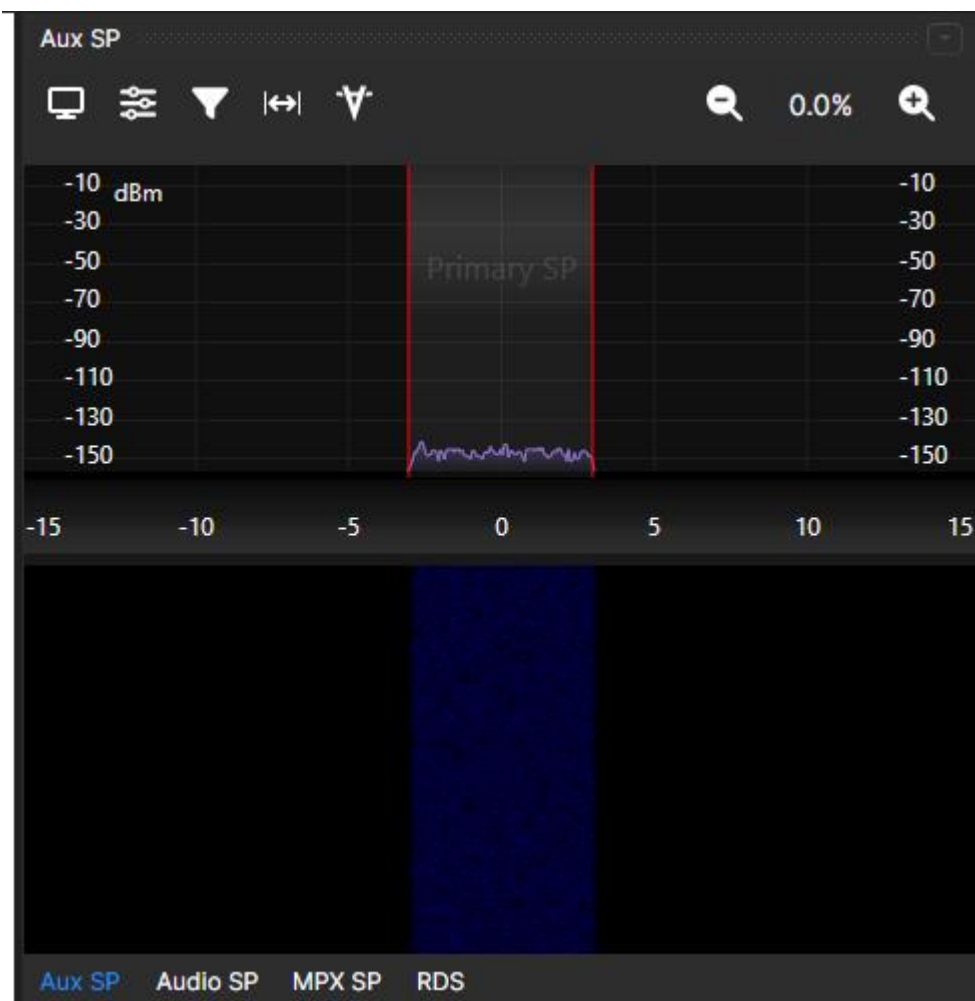


- 8 – Zoom control – Primary SP Spectrum/Waterfall display.
- 9 – Touch Control. Additional tuning options for touchscreen displays
- 10 – Mute & Volume adjustment.
- 11 – Enable Aux Display. VRX Selection for auxiliary display processing.
- 12 – Toggle Spectrum & Waterfall. Show or hide the Spectrum and Waterfall.
- 13 – Toggle Sidebar. Show or hide the sidebar options shown on Primary SP.
- 14 – Other options.

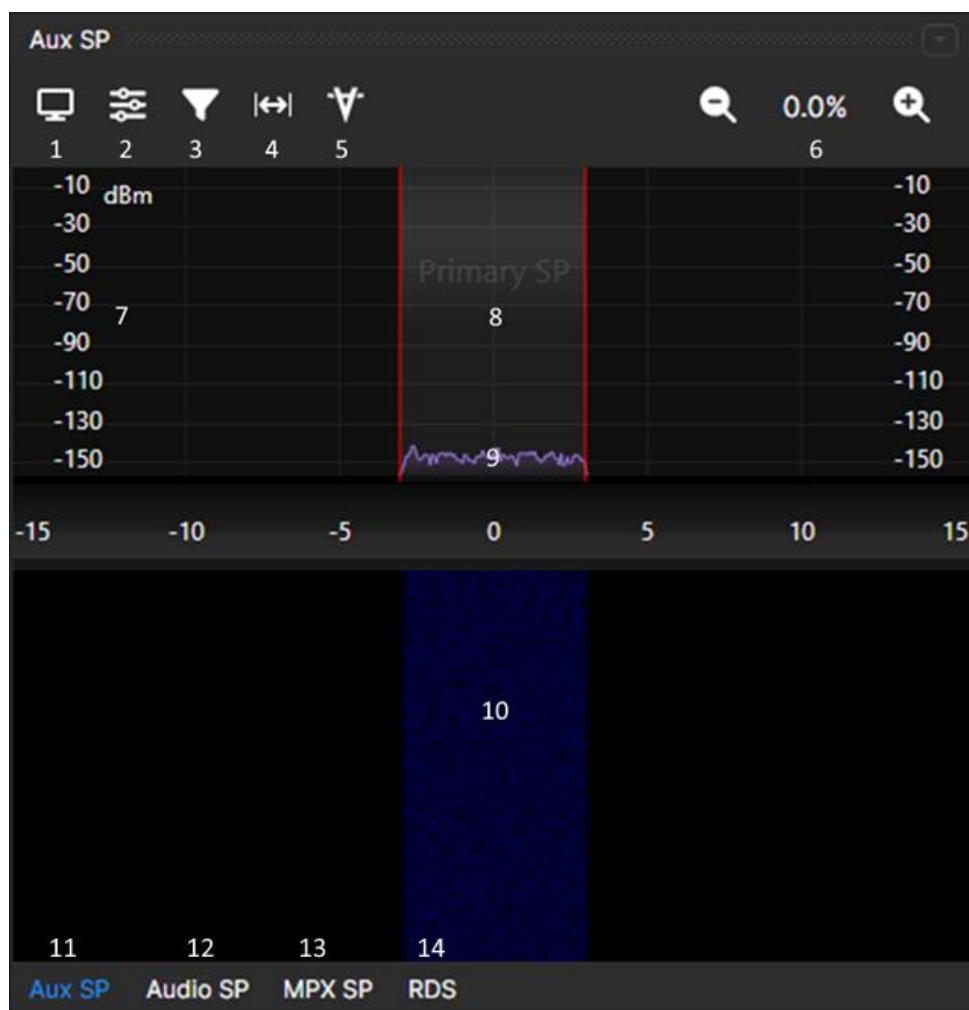


- 1 – Scale – In dB
- 2 – Signal strength & measurement
- 3 – Frequency readout – In Hz
- 4 – VFO – Tuned frequency
- 5 – Primary SP Spectral display
- 6 – Primary SP Waterfall display

Top right panel

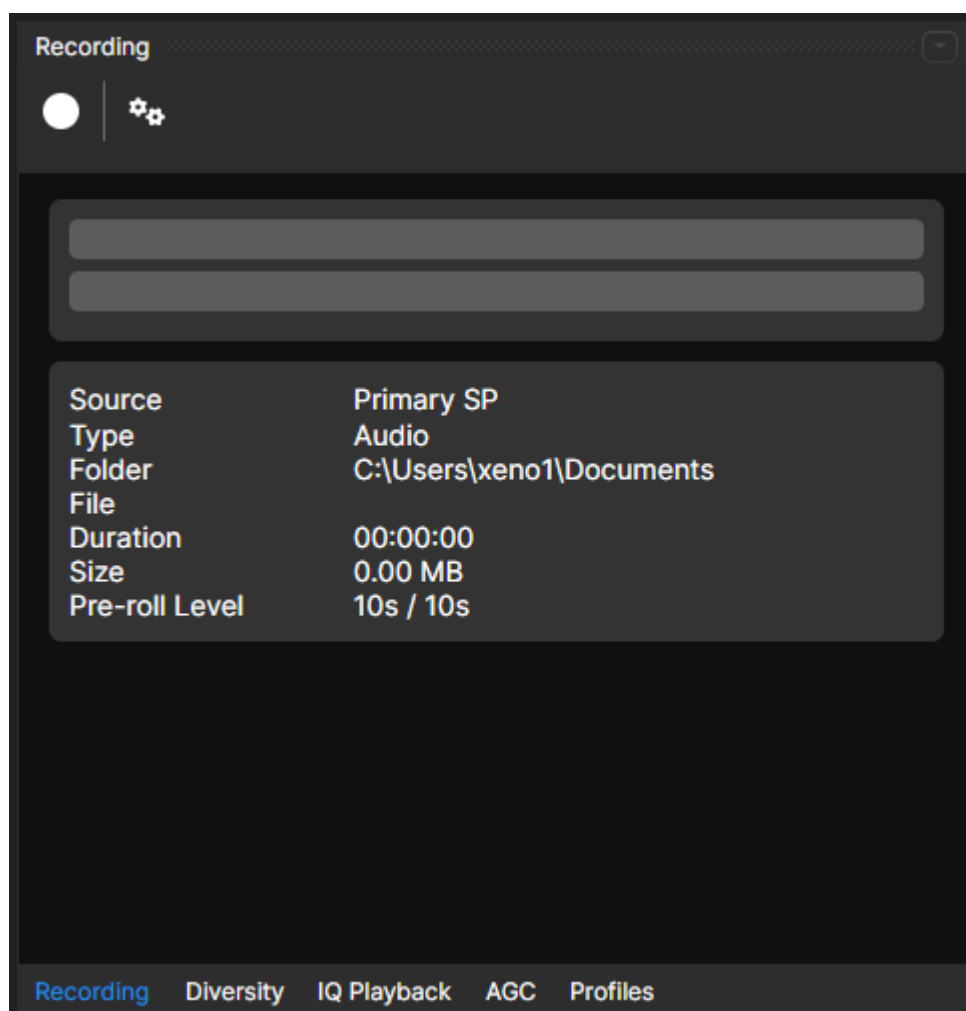


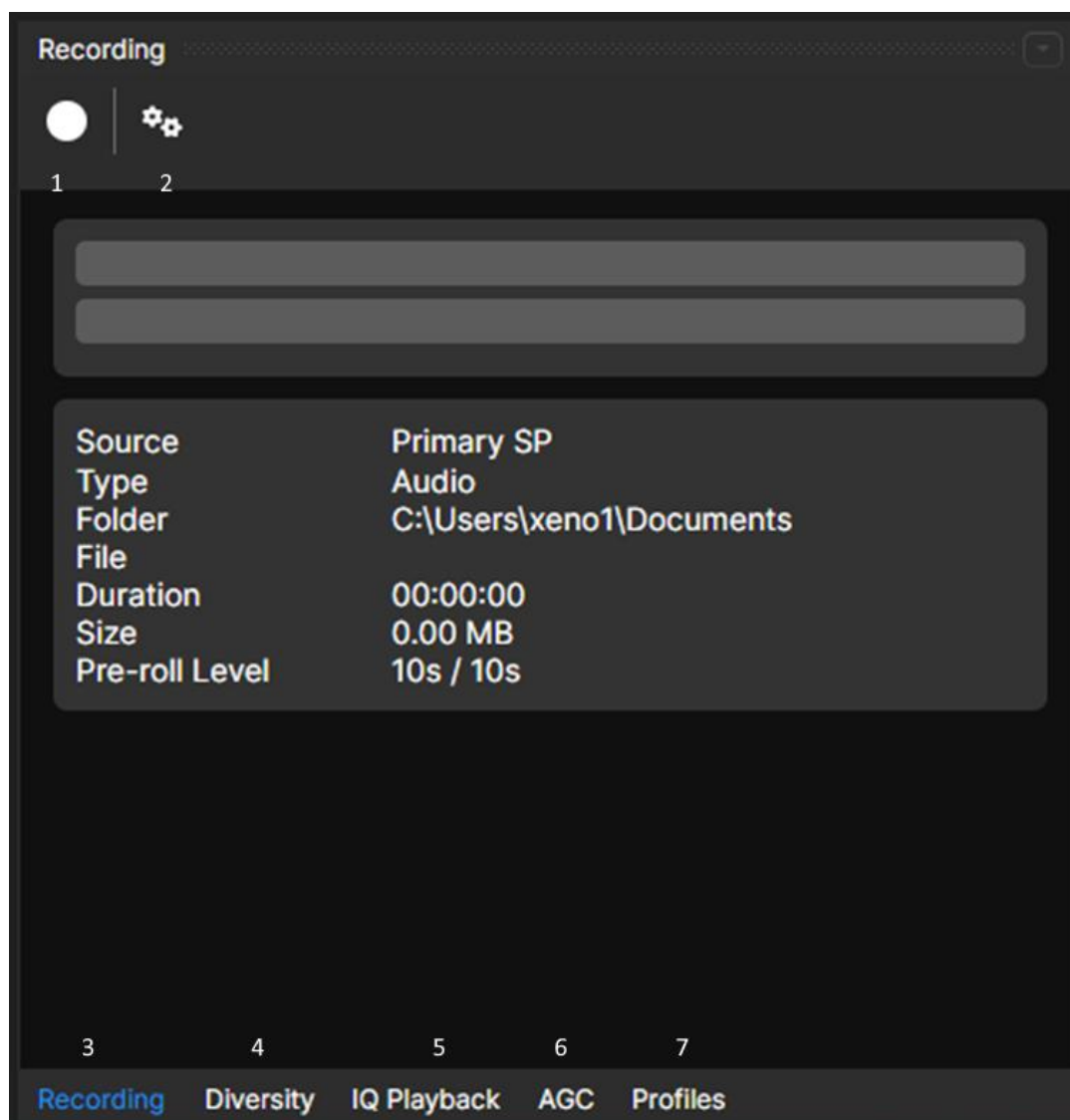
Aux SP



- 1 – Aux SP Display settings.
- 2 – Noise blanker settings.
- 3 – Toggle prefilter view.
- 4 – Toggle Asymmetrical filter adjustment.
- 5 – Toggle Notch editing.
- 6 – Zoom control – Aux SP Spectrum/Waterfall display.
- 7 – Scale – In dB.
- 8 – Filter passband.
- 9 – Aux SP Spectral display.
- 10 – Aux SP Waterfall display.
- 11 – Aux SP display.
- 12 – Audio SP display.
- 13 – MPX SP display.
- 14 – RSP display.

Bottom right panel





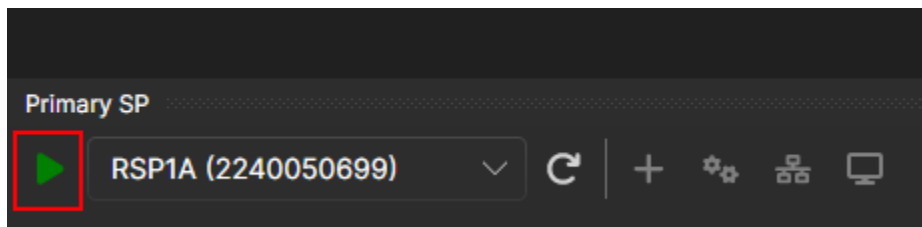
- 1 –Start / Stop Recording.
- 2 – Recording preferences.
- 3 – Recording display.
- 4 – Diversity display (RSPduo).
- 5 – IQ file playback control display.
- 6 – AGC (Audio) adjustment display.
- 7 – Device (RSP) profile display.

Hello World

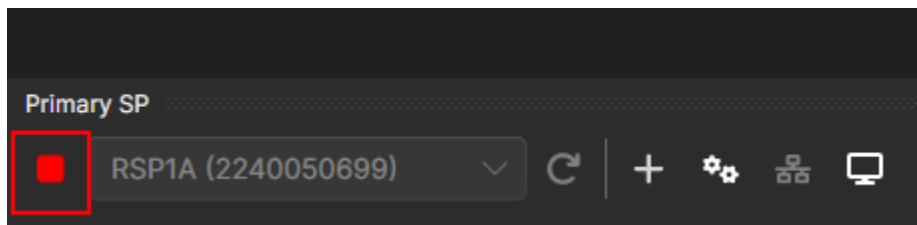
Tuning to FM broadcast or Medium Wave broadcast stations is recommended to familiarize yourself with SDRconnect. Commercial FM and Medium Wave broadcast stations are usually very strong, allowing you to use the most basic antenna.

You can manually tune to the FM or MW portion of the spectrum or use the Brand Framing buttons available on the sidebar. I will demonstrate both.

Start the data stream

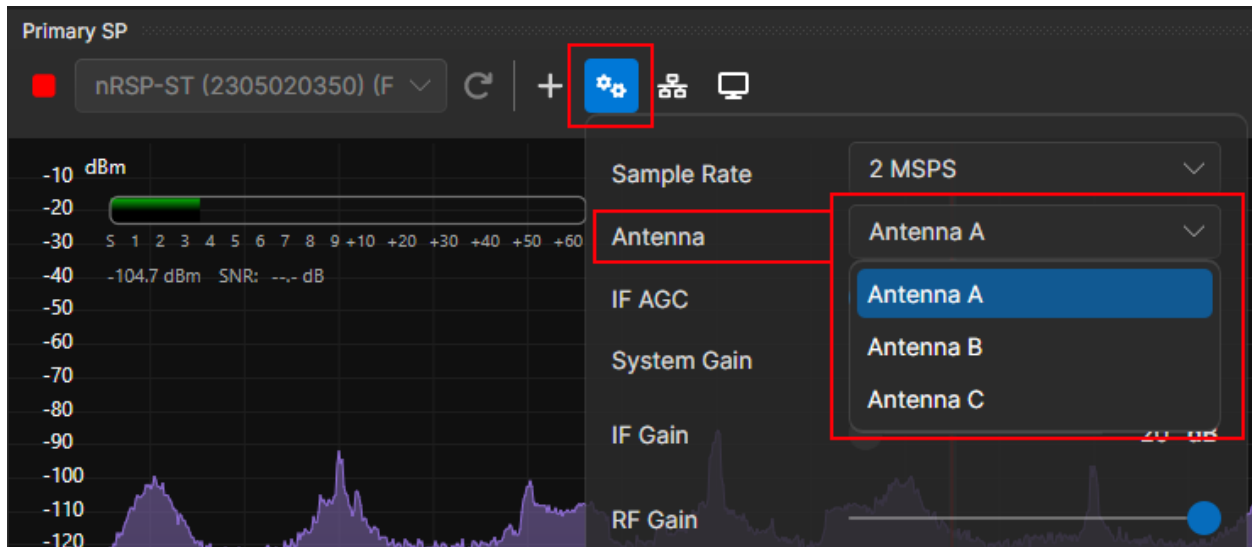


Clicking the PLAY icon on the MAIN panel will start the data stream.



Clicking the STOP button on the MAIN panel will stop the data stream.

Antenna input selection



Depending on the RSP model (1A,1B, 2, 2pro, duo, dx, dxR2 or nRSP-ST) you can select different inputs.

Please verify the correct input is selected within the device setting options (Gear icon) and that a physical antenna is terminated to the chosen input on the device. The RSP1A is a single input device, no additional input section will be available.

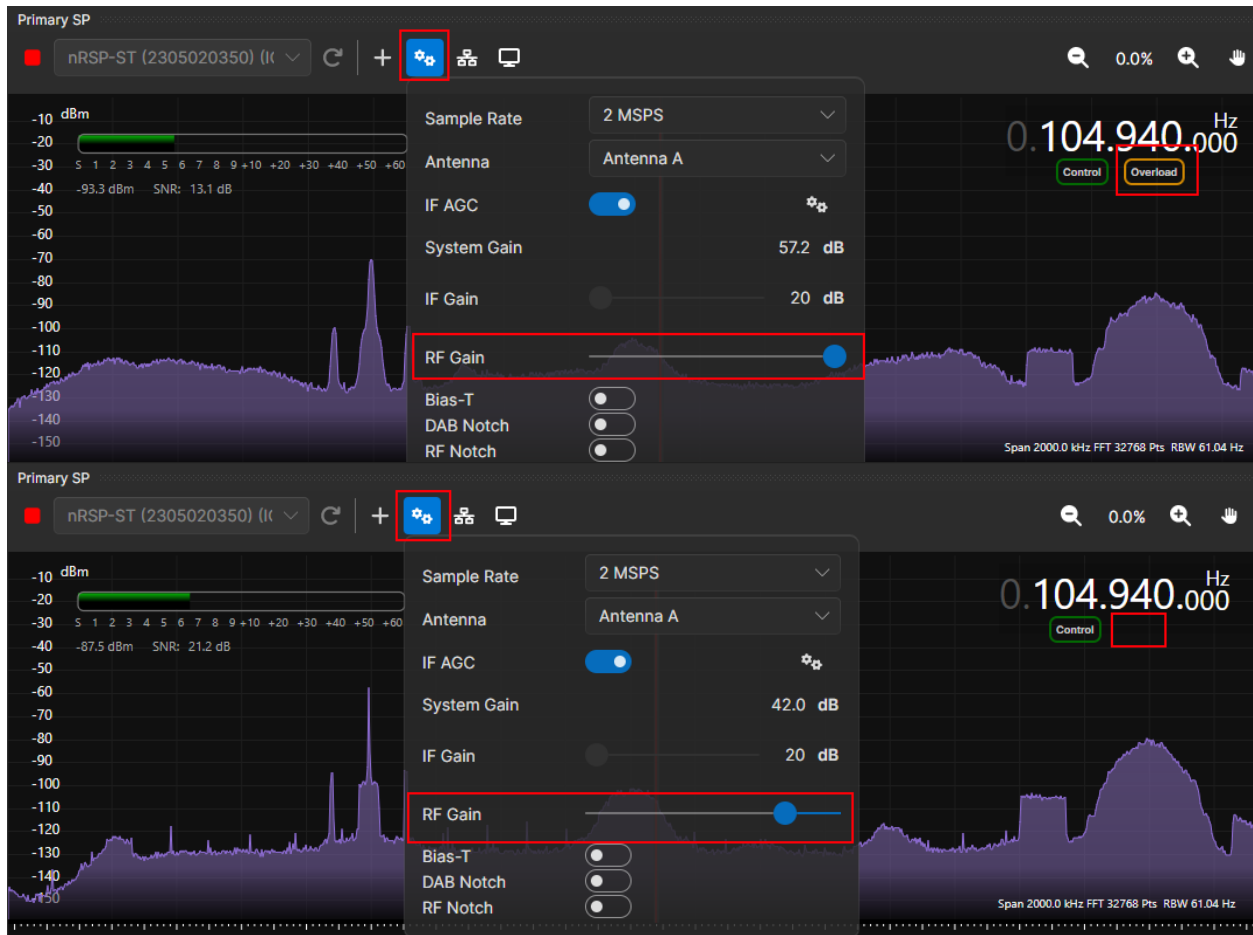
Note: Device inputs have frequency limitations:

The RSP2/RSP2pro and RSPduo HI-Z input is selectable from 1kHz – 30MHz.

The RSPdx/RSPdx-R2 & nRSP-ST input C input is selectable from 1 kHz – 200MHz.

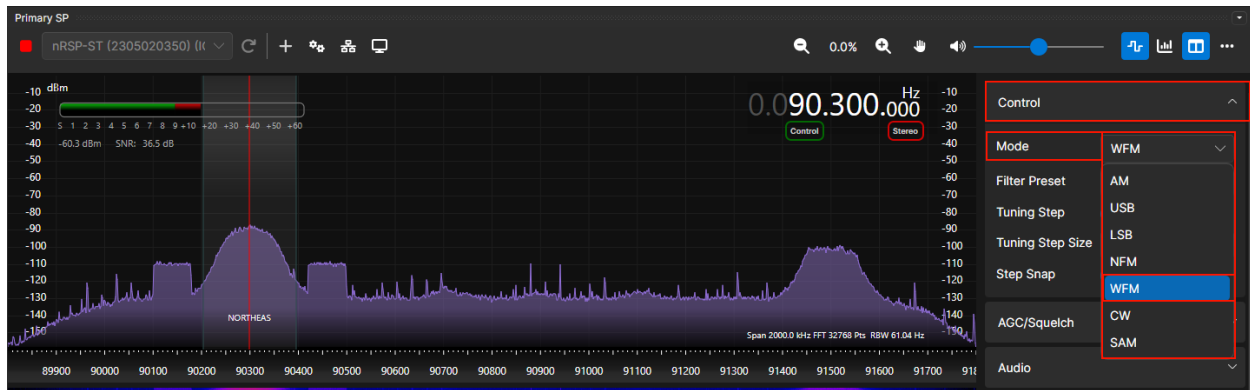
All other inputs (SMA) can tune across the device receiving range 1kHz– 2GHz.

Adjust the RF GAIN

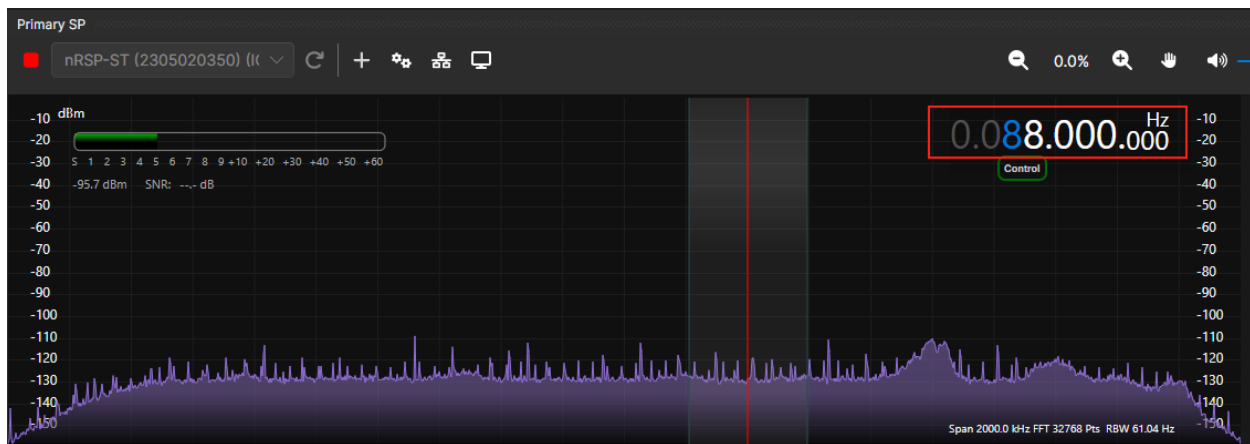


The RF GAIN should be placed at its maximum unless an OVERLOAD warning message is displayed on the Primary SP. If an OVERLOAD message appears, lower the RF GAIN until the OVERLOAD message is no longer shown.

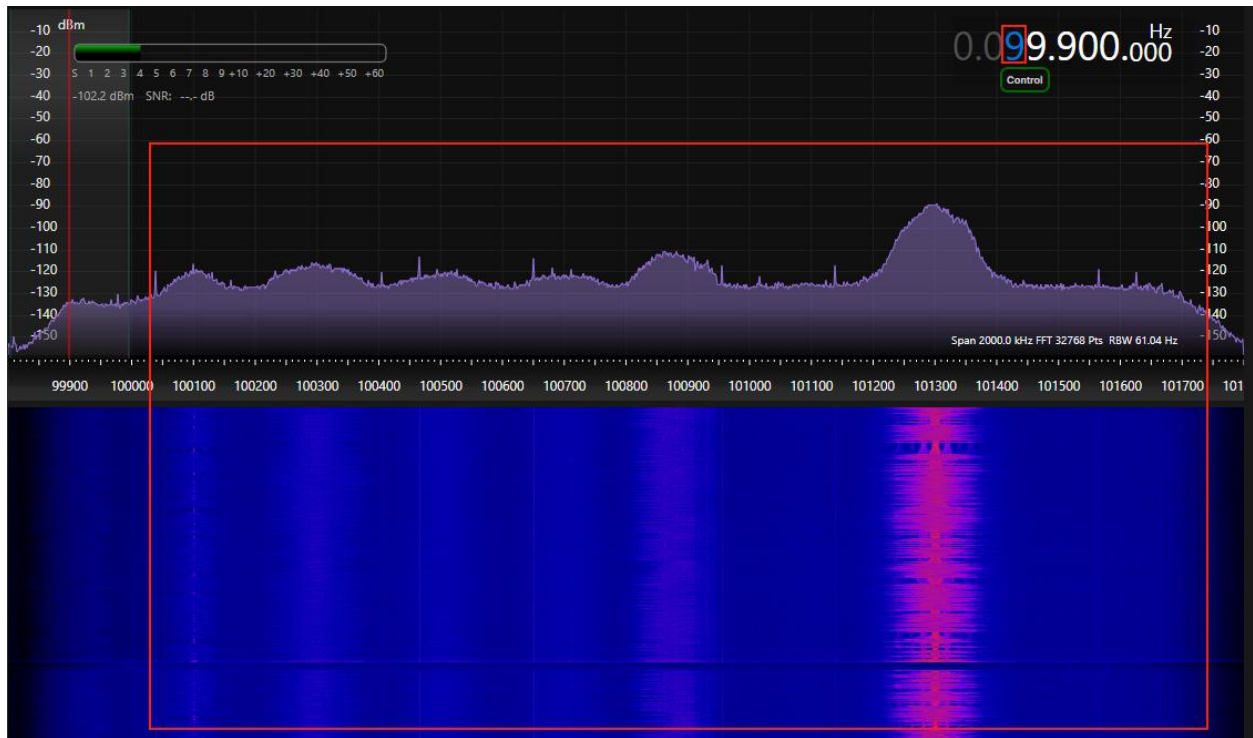
Manual Tuning



Select the mode within the Sidebar and under Control. AM for Medium Wave and WFM for FM Broadcast stations. For this Hello World test, we will choose WFM and tune to commercial FM broadcast stations.



Bring the mouse cursor to the frequency display of the Primary SP. The frequency is shown in Hz. In my region, commercial FM broadcasts are in between 88 MHz & 108 MHz. Bring your mouse cursor over the digit you would like to adjust, mouse wheel up to tune higher in frequency or mouse wheel down to tune lower in frequency. Have your frequency readout show 88.000.000 (88 MHz), place your mouse over the number 8 shown in blue and tune up in frequency using your mouse wheel.



Signals should start to appear within the spectral display.

Simply place your mouse cursor over the digit displayed and change the frequency digit using your mouse wheel up or down. An indicator will appear on the top of the digit that you can adjust using the mouse wheel.

Be sure the frequency you have entered is indeed your desired frequency. Note how the frequency is displayed in the RX CONTROL.

At this point you should be seeing signals in the Waterfall and RF Spectrum windows and be hearing sounds through your speakers. You can adjust the volume using the Volume slider in RX Control and/or your windows volume control.

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