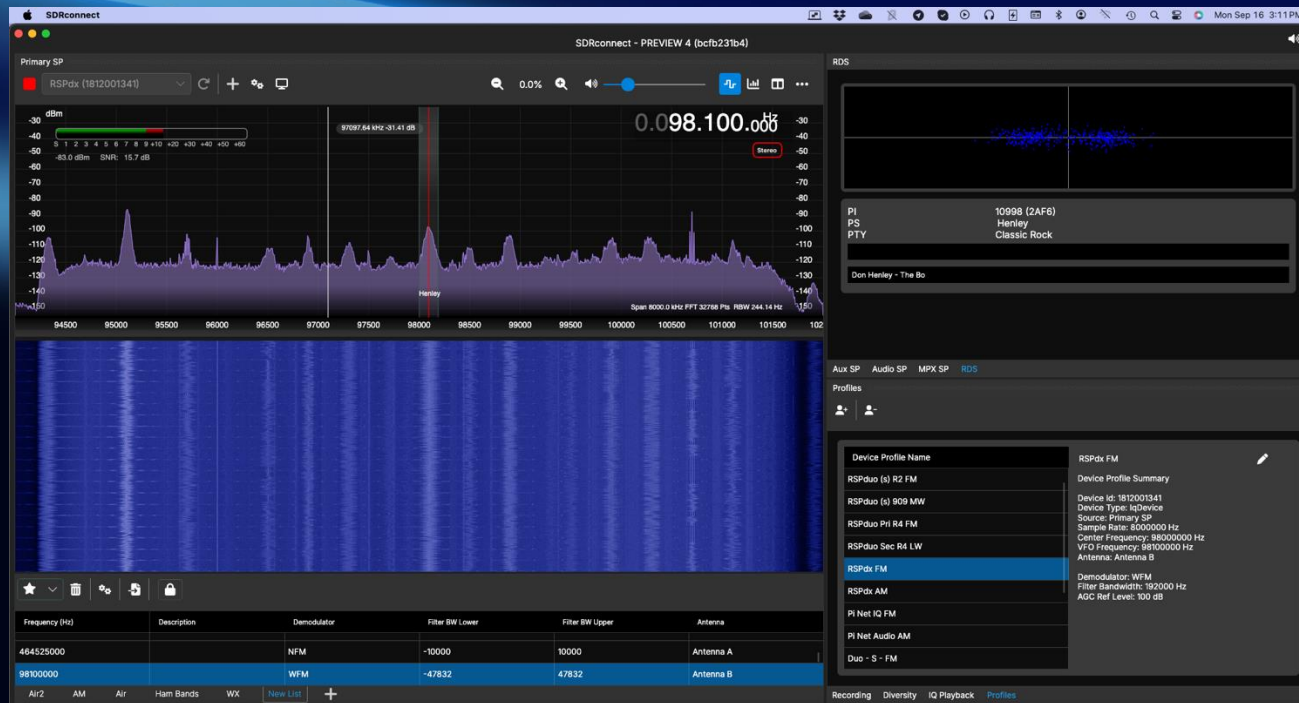


# SDRconnect Public Preview 5 (Oct 2024)

## Quick Overview

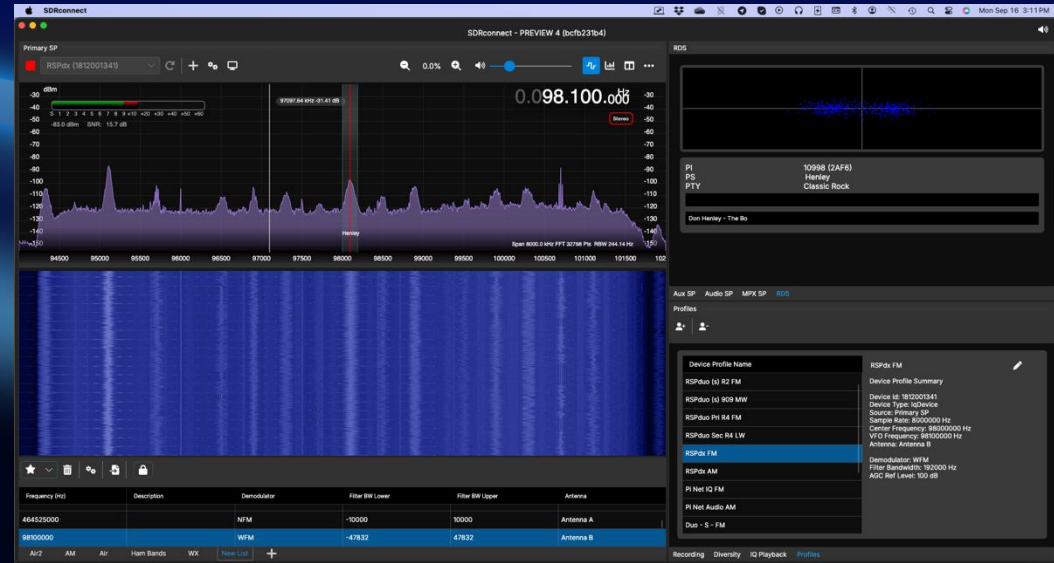


(VID689)



# Contents

- Downloading the Software
- NFM Low Cut Filter
- PPM Correction/Calibration
- Configurable Audio AGC
- Noise Blankers
- Noise Reduction
- Custom Filter Presets
- Peak Detection
- Improved Window Handling
- Raspberry Pi Server Service



*Note: SDRconnect will only run on a 64-bit OS*

# Downloading the Software



The screenshot shows the SDRplay website's page for downloading SDRconnect. The header features the SDRplay logo, navigation links (Home, Products, Purchasing), a search bar, and social media icons. The URL <https://www.sdrplay.com/sdrconnect> is highlighted in the address bar. The main content area includes a description of SDRconnect as the latest version for remote installation, a link to release notes, and a disclaimer about support. At the bottom, five download buttons are provided for different operating systems and architectures: Windows x64, Linux x64, Linux arm64, MacOS x64, and MacOS arm64. A link to video guides is also present.

**SDRplay** Support: Home Products Purchasing <https://www.sdrplay.com/sdrconnect> Twitter Facebook YouTube RSS Search

This is the latest version of SDRconnect, it includes the server software for installing on a remote device.

Release notes for all versions of SDRconnect can be found here ([https://www.sdrplay.com/docs/SDRconnect\\_Release\\_Notes.pdf](https://www.sdrplay.com/docs/SDRconnect_Release_Notes.pdf))

We believe this software is stable on all supported platforms. However, each release is another step in the long term development of a relatively new platform and future releases and modules will further enhance functionality.

**WE ARE NOT PROVIDING SUPPORT FOR THIS PREVIEW SOFTWARE VIA OUR TICKET SYSTEM.** You can report any bugs that you find be emailing: [software@sdrplay.com](mailto:software@sdrplay.com) – ONLY if you are using one of the supported platforms listed above. Please note that we will read any feedback sent to us, but we will only respond to you if we require further information.

|                                         |                                       |                                         |                                       |                                         |
|-----------------------------------------|---------------------------------------|-----------------------------------------|---------------------------------------|-----------------------------------------|
| Windows x64<br><a href="#">DOWNLOAD</a> | Linux x64<br><a href="#">DOWNLOAD</a> | Linux arm64<br><a href="#">DOWNLOAD</a> | MacOS x64<br><a href="#">DOWNLOAD</a> | MacOS arm64<br><a href="#">DOWNLOAD</a> |
|-----------------------------------------|---------------------------------------|-----------------------------------------|---------------------------------------|-----------------------------------------|

*[Click here for SDRconnect Video Guides](#)*

- Download the appropriate version for system
- Use Linux ARM64 for Raspberry Pi



# Narrow FM Low Cut Filter

The screenshot displays the SDRconnect software interface. The main window shows a frequency spectrum plot with a red vertical line at 145.000 MHz. The right sidebar contains various settings, including the 'Audio' section where the 'NFM Low Cut' is set to 225. A yellow box highlights this setting, with the text 'Adjust Cutoff Frequency' pointing to it. Another yellow arrow points to the 'Audio' dropdown menu, with the text 'Select Audio Dropdown' next to it. The bottom of the interface shows a table of frequencies and a recording status section.

SDRconnect - PREVIEW 5 (909e63216)

Primary SP  
RSPT1A (223B08ED99)

0.145.000.000

dBm

Span 2200.01 kHz FFT 32768 Pk RBW 67.14 Hz

Audio

Audio Device: Default

Audio Routing: Both

Noise Reduction: [Off]

Audio Filter: [On]

Audio Limiter: [On]

AM Low Cut: 50

SSB Low Cut: 200

NFM Low Cut: 225

CW Shift Offset: 600

RDS Decoder: [On]

WFM Stereo: [On]

WFM Deemph.: 50uS

WFM Low Cut: 30

Adjust Cutoff Frequency

Select Audio Dropdown

Frequencies

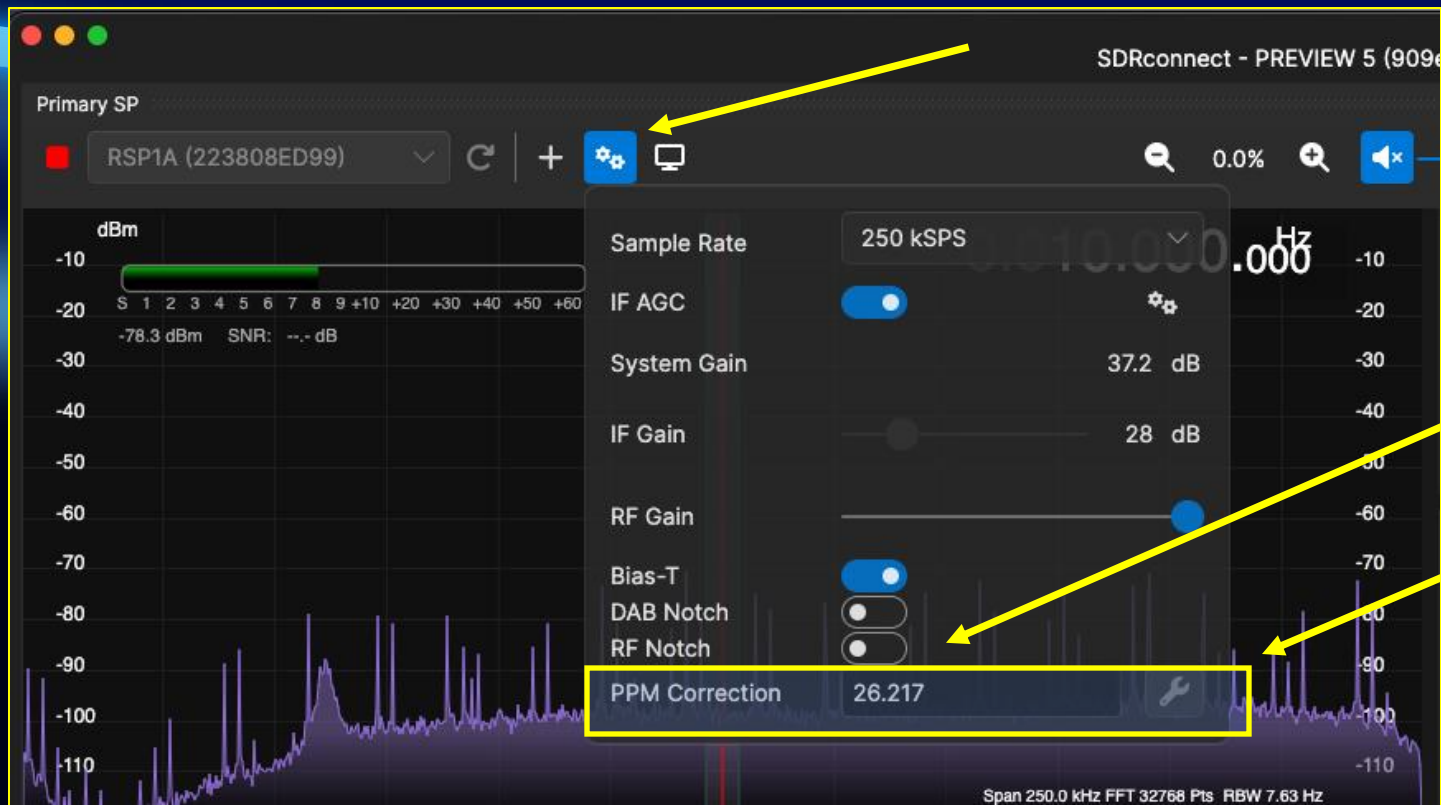
| Frequency (Hz) | Description | Demodulator | Filter BW Lower | Filter BW Upper | Antenna |
|----------------|-------------|-------------|-----------------|-----------------|---------|
| 97300000       |             | WFM         | -96000          | 96000           | 0       |
| 98500000       |             | WFM         | -96000          | 96000           | 0       |

Recording

Source: Primary SP  
Type: Audio  
Folder: /Users/steve/Documents  
File:  
Duration: 00:00:00  
Size: 0.00 MB  
Pre-roll Level: 10s / 10s

SDRplay

# PPM Correction/Calibration



Input Manually

Automatic Calibration  
(SAM mode)

# Audio AGC Settings

SDRconnect - PREVIEW 5 (909e63216)

0.0% 0.0% 0.0%

Tuning Step Size 10Hz

Step Snap ☒

AGC/Squelch

AGC ☒

AGC Profile Slow

AGC Threshold 84

Squelch ☐

Sq. Threshold -100

W. Noise Blanker ☐

NB. Threshold 139

Audio

Aux SP

-40 dBm

-50

-60

-70

-80

-90

-100

-110

-15

-10

RDS MPX SP

AGC

Attack

Hold

Release

Span 55.0 kHz FFT 32768 Pts RBW 1.68 Hz

10140 10145 10150

AGC

Fast

Attack 10.1

Hold 496

Release 603

Medium

Attack 10.1

Hold 0

Release 2000

Slow

Attack 10.1

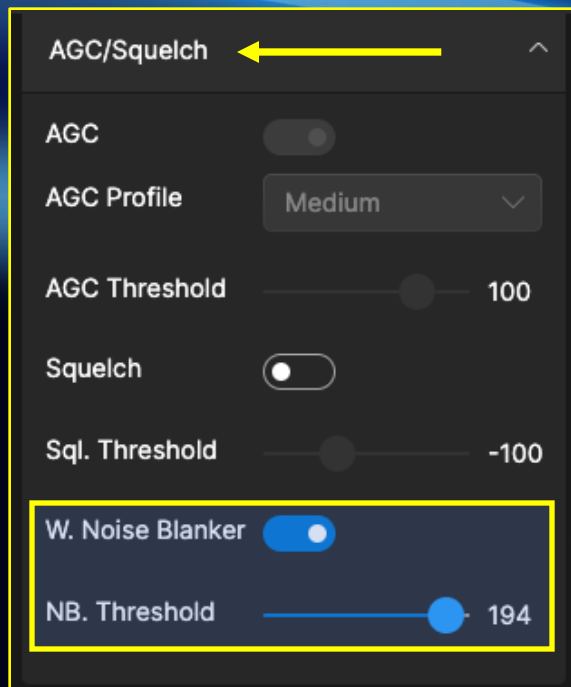
Hold 0

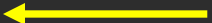
Release 2000

AGC IQ Playback Diversity Recording Profiles

# Noise Blankers

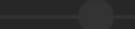
## Wideband



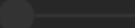
AGC/Squelch 

AGC 

AGC Profile Medium 

AGC Threshold  100

Squelch 

Sq. Threshold  -100

W. Noise Blanker 

NB. Threshold  194

## Narrowband



Aux SP 

0.0%  

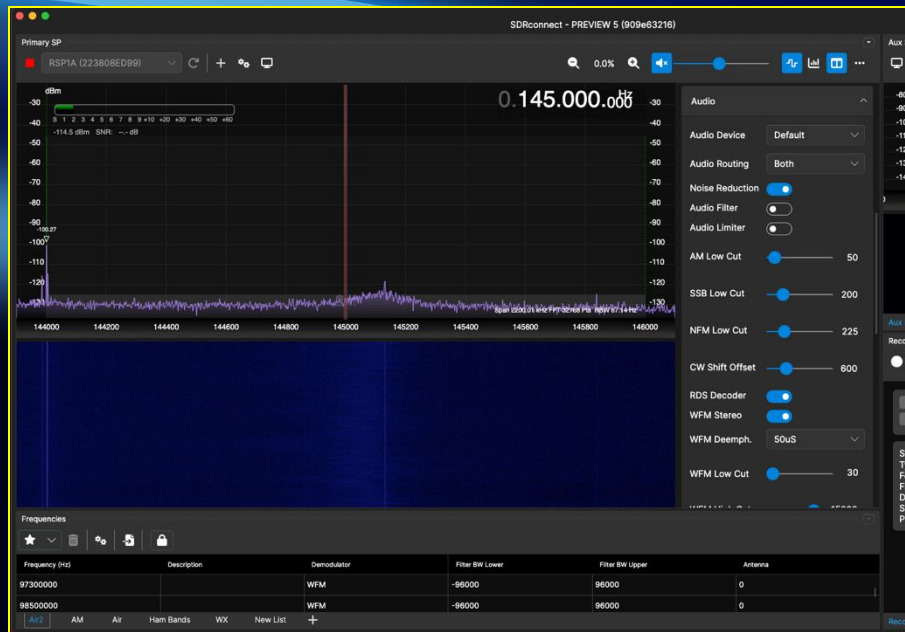
Noise Blanker 

Threshold  176

-80 -90 -100 -110 -120 -130 -140

-15 -10 -5 0 5 10 15

# Noise Reduction



Audio

Audio Device: Default

Audio Routing: Both

Noise Reduction: ☒

Audio Filter: ☐

Audio Limiter: ☐

AM Low Cut: 50

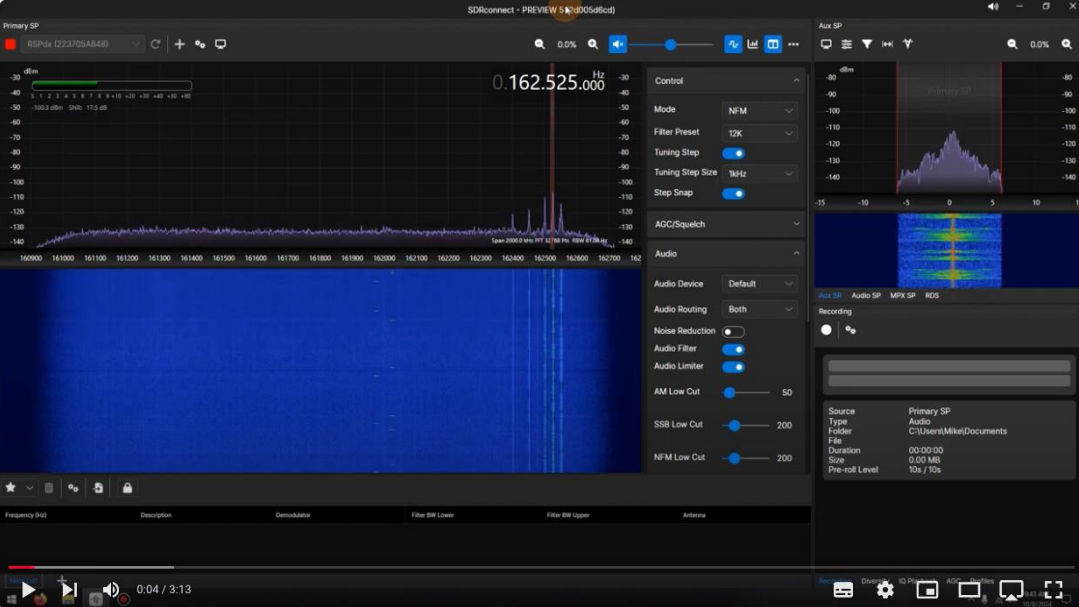
SSB Low Cut: 200

NFM Low Cut: 225

CW Shift Offset: 600

RDS Decoder: ☒

# Noise Reduction



The screenshot displays the SDRConnect software interface. The main window shows a spectrum plot with a frequency range from 160900 to 162700 Hz. A prominent signal is visible at 0.162525000 MHz. The interface includes various controls and settings:

- Primary SP:** RSPdx (223705AS48)
- Control:** Mode (NFM), Filter Preset (12K), Tuning Step (100 Hz), Tuning Step Size (16 Hz), Step Snap (On).
- AGC/Squelch:** AGC (On), Squelch (On).
- Audio:** Audio Device (Default), Audio Routing (Both), Noise Reduction (On), Audio Filter (On), Audio Limiter (On), AM Low Cut (50), SSB Low Cut (200), NFM Low Cut (200).
- Frequency Plot:** Shows a detailed view of the signal spectrum.
- Recording:** Recording is enabled, with a duration of 00:00:00 and a pre-roll level of 10s / 10s.

The video title is "SDRConnect Preview 5 Noise Reduction". The channel is "SDRplayHamGuides" with 6.65K subscribers. The video is marked as "Unlisted".

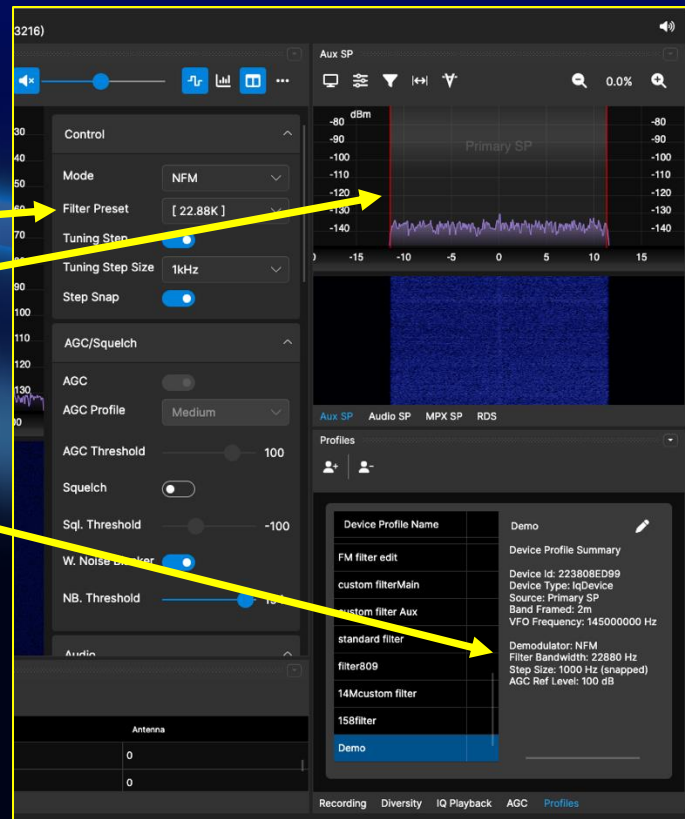
<https://youtu.be/pcpwFnjONp4?si=ciwtlvT7ktmykTnY>

<https://youtu.be/pcpwFnjONp4?si=ciwtlvT7ktmykTnY>

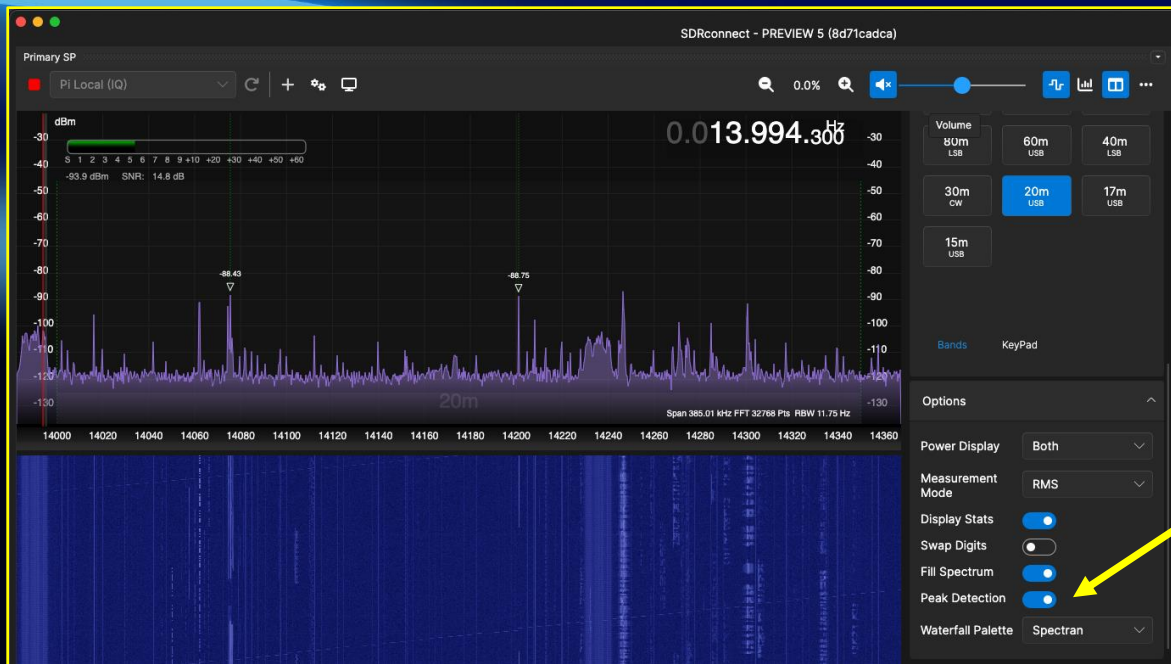


# Custom Filter Presets

- Select “Custom”
- Adjust in AUX SP
- Save to Profile
- One Custom Filter for each Mode

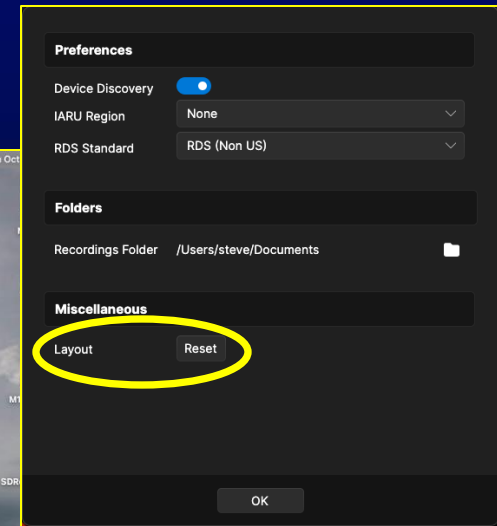
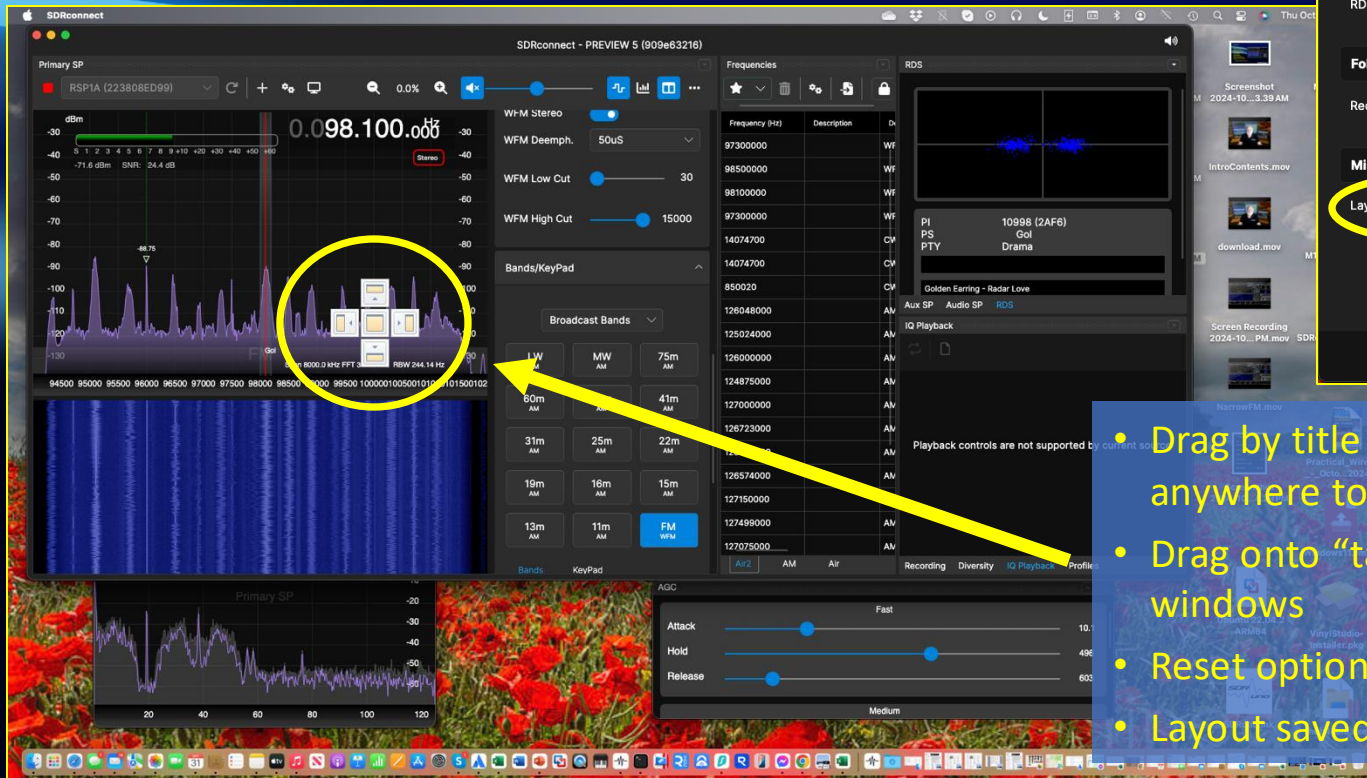


# Peak Detection



- Select “Options” dropdown
- Turn on the toggle
- Adjust Spectrum Base and Reference Level for best results

# Window Handling



- Drag by title bar (or tab) and drop anywhere to float
- Drag onto "target" to dock with other windows
- Reset option in Preferences window!
- Layout saved on exit

# Raspberry Pi Installer

```
SDRconnect_linux-arm64_909e63216.run --xwin
File Edit Tabs Help
Checking for package tools...apt found

Checking for libusb-1.0...found
Checking for libasound2...found
Checking for libuuid1...found
Checking for libudev1...found

udev directory found, adding rules for RSPs...Done

SDRconnect will be installed into /opt/sdrconnect
To change the installation path, enter the new location at the prompt.
Installation location [/opt/sdrconnect]:

SDRconnect will be installed to: /opt/sdrconnect
To start the installation press y and RETURN or n and RETURN to exit [y/n] y
Installing to /opt/sdrconnect.....Done

Create a system menu entry to launch SDRconnect client? [y/n] y
Installing menu entry.....Done

Checking SDRconnect Server Service status...installed, enabled, not active

Do you want this installation to continue to operate the SDRconnect server as
a continuous background service? [y/n] █
```

- Applies to Raspberry Pi only
- Select “y” to install server service
  - Server will run automatically
- Restart to run the server
- Select “n” to not install server service
- Change server parameters in  
/opt/sdrconnect/server\_options.txt
- Run Installer again to change your choice



# Summary

Public Preview 5 adds the following new features:

- NFM Low Cut
- PPM Correction/Calibration
- Configurable Audio AGC
- Noise Blankers
- Noise Reduction
  - See Mike's Video for more details: <https://youtu.be/pcpwFnj0Np4?si=ciwtlvT7ktmykTnY>
- Custom Filter Bandwidths
- Peak Detection
- Improved Window Handling

