Using

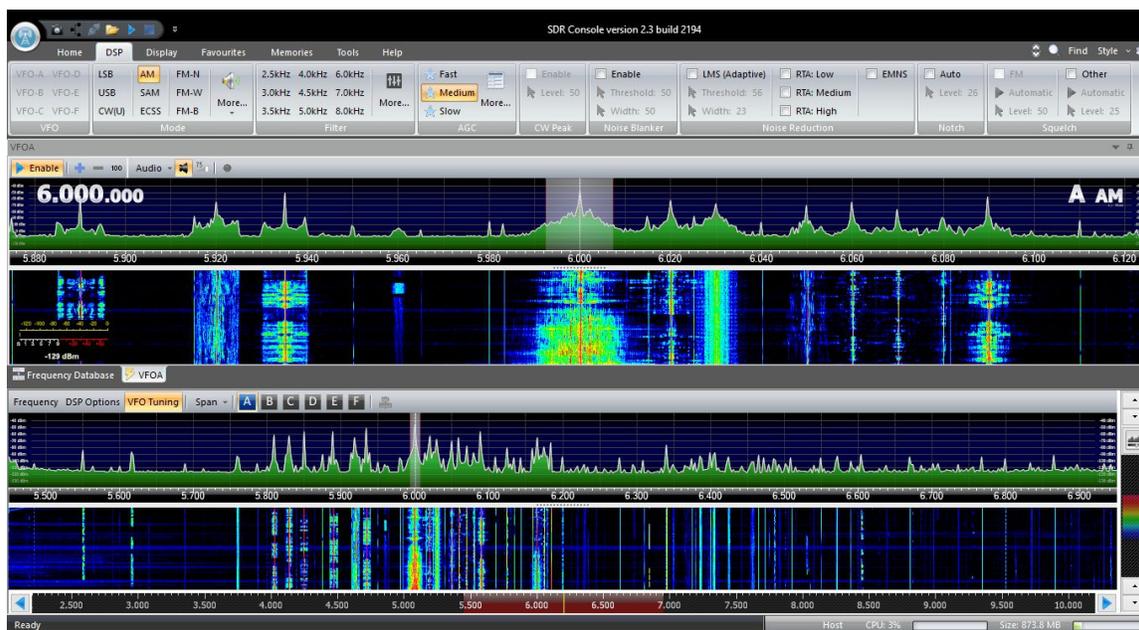**SDR-Console by Simon Brown**

Quick Start Guide
&
Hints & Tips

Welcome, this is a quick start guide that will be a constantly upgraded document as changes are made to the SDRPlay RSP and to SDR-Console.

Step 1.

Firstly visit SDRPlay.com and click on the platforms tab and select windows. We are about to download the Windows API software, this is the hardware driver for your RSP, so that windows will recognize the RSP.
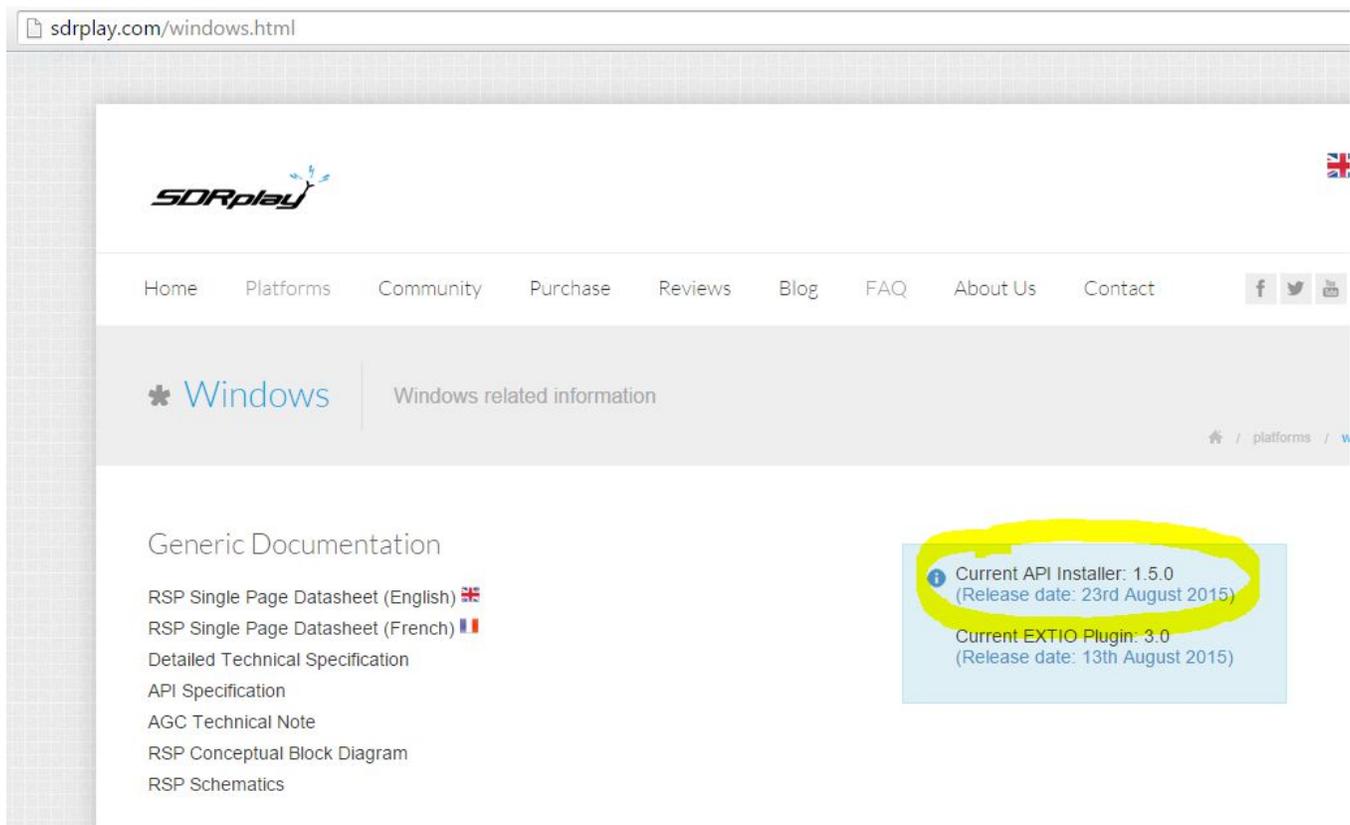
Select the Current API installer on the right hand side of the page, this will download the software, once downloaded, run and it will install your API driver, plug in your RSP, and windows will finish the install of the hardware driver.

SDR-Console does NOT use the EXTIO Plugin (HDSDR & Others) so it is not needed at this time, but you can download for later use if you so wish.

Step 2.

We need to download the latest version of SDR-Console.

http://www.sdr-radio.com/Software/Download/Download-Kits

Simon is always releasing new versions, so always PLEASE check you have the latest version downloaded and only download from sdr-radio.com

Once downloaded run and install the program, we will now go through the simple setup procedure for SDR-Console.

Step 3.

We will now configure SDR-Console to use the SDRPlay RSP.

Firstly launch the SDR-Console and you will get a select radio screen
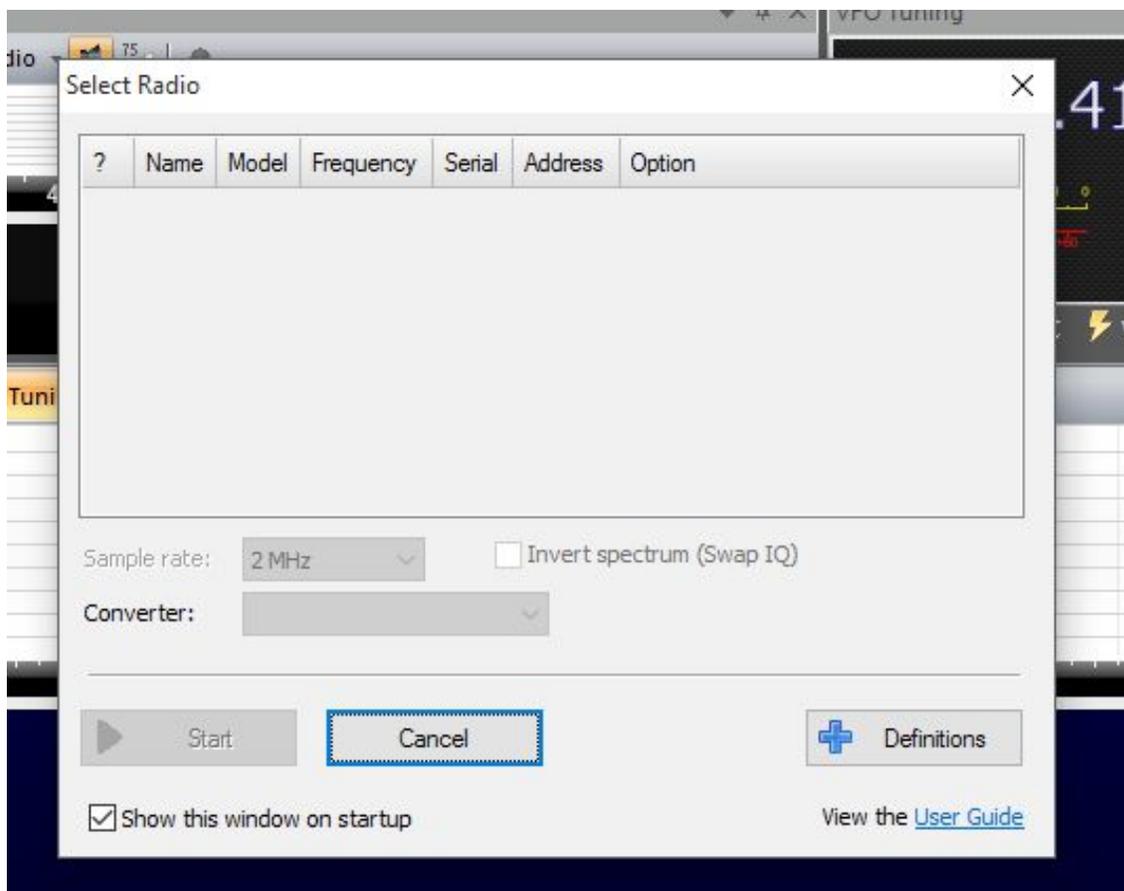
At this point the screen will show NO radios listed, so click on the Definitions button at the bottom right of the screen, this will pop up another window.
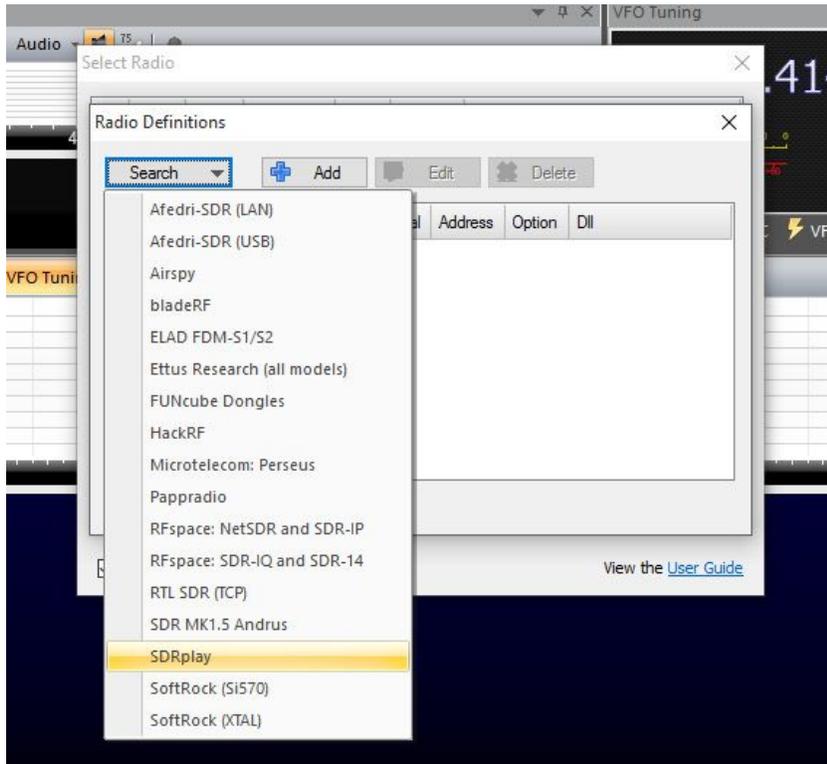
From the search button at the top of this window, click on the drop down and you will see SDRPlay listed, select and it should say 1 entry found update list? Click on YES, then click on OK
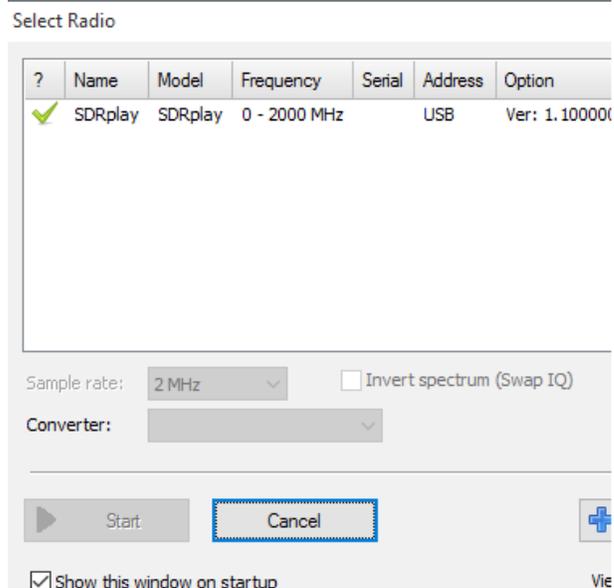
Now you should have the SDRPlay listed in the window with a green check next to it, click on it once so it's highlighted, and you can also select your Sample Rate, on this screen from 250Khz to 8Mhz, so now the start button should become un-greyed and you can click on start.

Now you should (fingers crossed) have a running SDR-Console
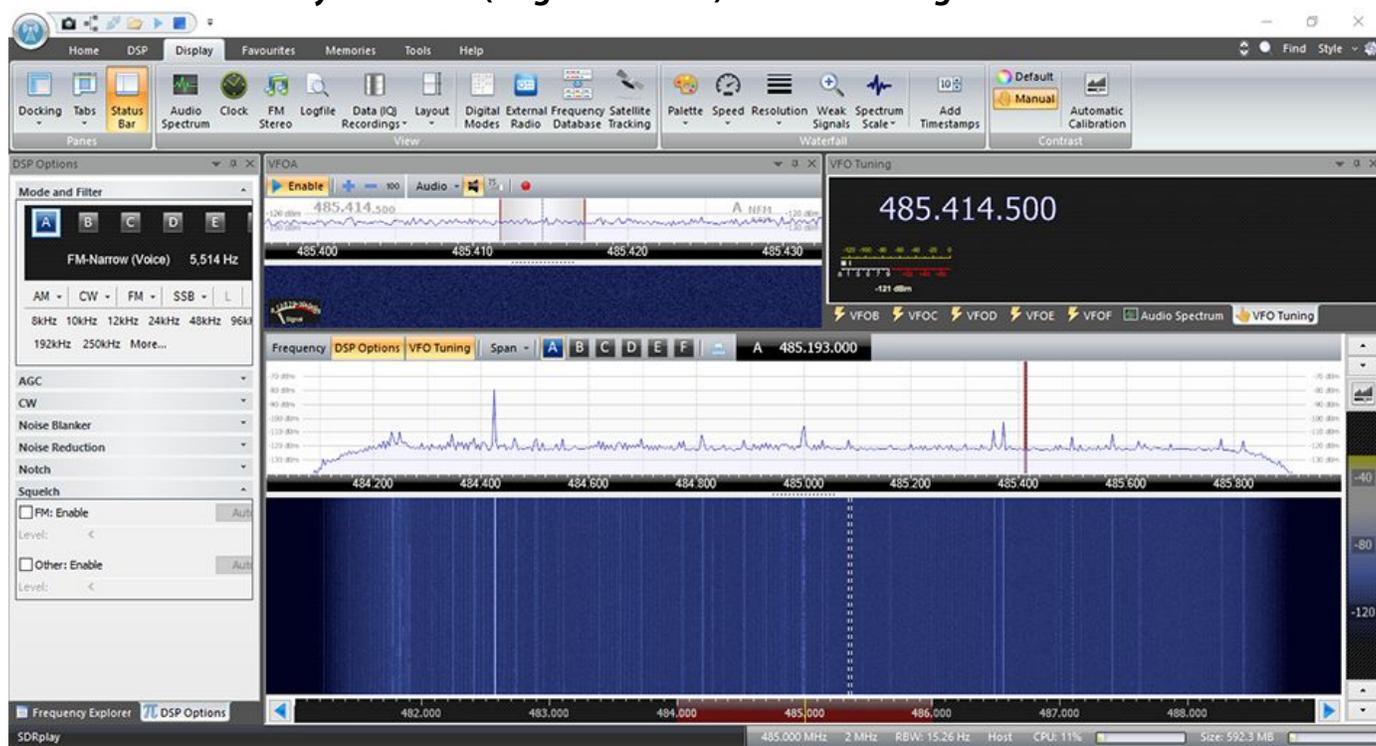
This is the default layout screen, this program is highly customizable and we will give you some quick shortcuts and options to get you going and picking up signals right away.

Under the Home Tab click on Options
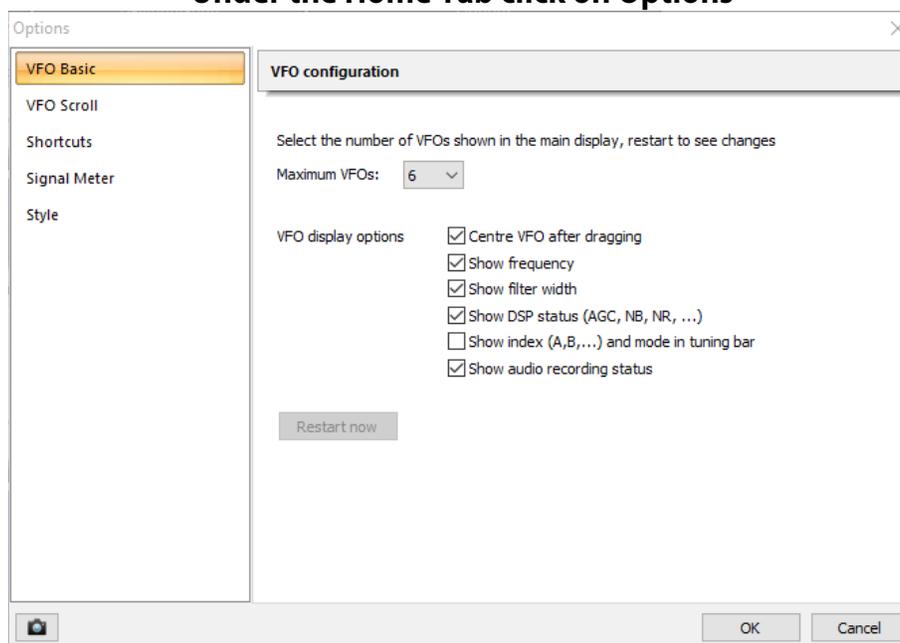
This is where you can tell the program how many VFO's you want active, 2 is the default, but you can have up to 6 VFO's active at any one time, the only limitation is that all the VFO's must be within the current bandwidth (sample rate) that you picked on startup.

From this same window click on shortcuts, this will allow you to have quick keyboard shortcuts
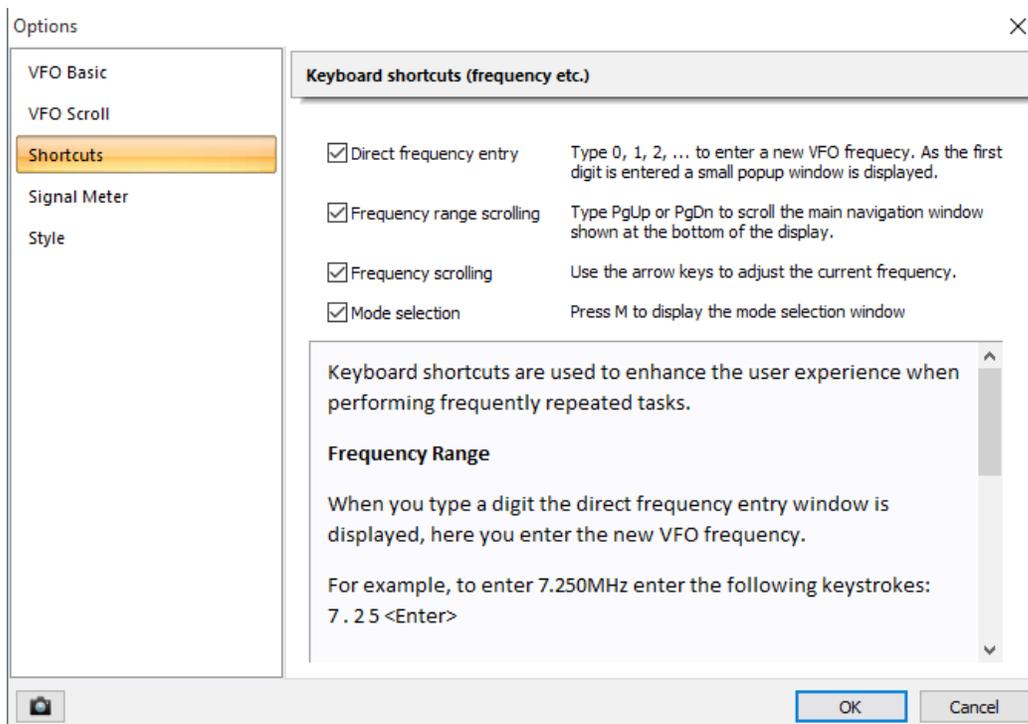
This will allow Direct Frequency Entry, Frequency Range Scrolling, Frequency Scrolling and Mode Selection. So entering a number on your keyboard with bring up a frequency entry window, where you can enter 14.200.00 for example. Pressing M will bring up a MODE pop-up
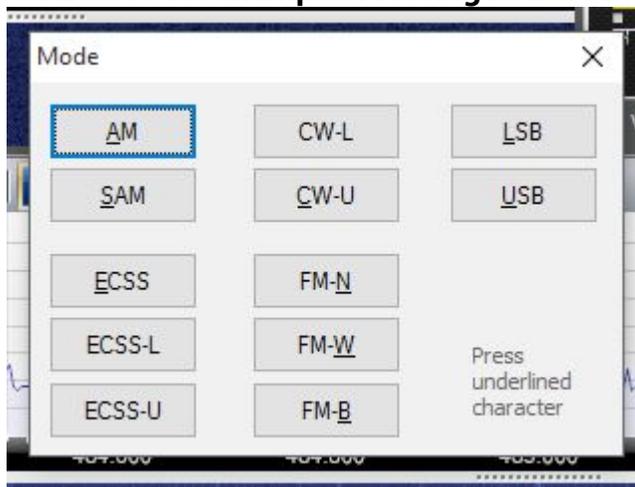
Each mode has an underlined character, so A for AM, U for USB etc, makes for very fast selection of mode change.

OK so now lets get down to some more tips for the SDRPlay...

Gain Controls. Beta 2.3 Build 2274

The Gain controls for the RSP are on the HOME tab, I'll cover the basic setting, but it all depends on what band you are on and what antenna you are using, for this I'll give two examples

HF using a 65ft longwire

The LNA gain can normally be left at the 59db setting and we will concentrate on the Gain reduction and Visual Gain. For a large antenna on HF you will want the GR set at -65 to -80 to get the best results and so as not to overload the radio, but you may find the display will drop off the screen, so no waterfall is visible, this can be altered under the display tab and the spectrum scale, I run mine on AUTO for the HIGH and -140db for the LOW, this normally displays signals all the time, you can then add more visual gain if needed, or less, this will add more to the signal, on HF, I run 0 to -10 on the VG

VHF/UHF on a Discone

I still tend to leave the LNA at 59db, but on VHF/UHF you will want to push the Gain Reduction up to the Smaller values, so 5-25 for example and the Visual Gain also in the PLUS range, for example, crazy but true, I managed to pick up some UHF satellites using my HF longwire, I had the GR set at -5db and the VG set at the +25db and the signals were very visible.

Again the Gain is really dependent on your setup, what band you are on and what antenna you are using at the time. As we all know, gain will vary from HF to UHF....

The LO Mode has four options, Auto/120Mhz/144Mhz/168Mhz

When originally released, the SDRPlay had a gap from 370mhz-420Mhz, this has since been removed, the original LO frequency was 120Mhz, this is still an option to choose, and you will still have the gap from 370-420 (approx) you can also choose to use a LO of 144Mhz with gaps of 250-255Mhz and 400-420Mhz or LO of 168Mhz which will give a gap of 250-265Mhz and Auto which switches between LO's to give you a NO GAP coverage of 100Khz-2Ghz . Normally you can leave

this on Auto, but if you do switch to any other be aware that you may need to stop and start the sdrplay if tuning through the gap frequencies. The advantage this gives, is that some frequencies may give images but changing the LO may well remove these images from the display. If you do see any images, try changing the LO to one of the other options to see if they disappear. (V2274 Bug ‑ The Gain Reduction currently defaults to zero when starting up, this has been reported)

Some More Info…. The Displays
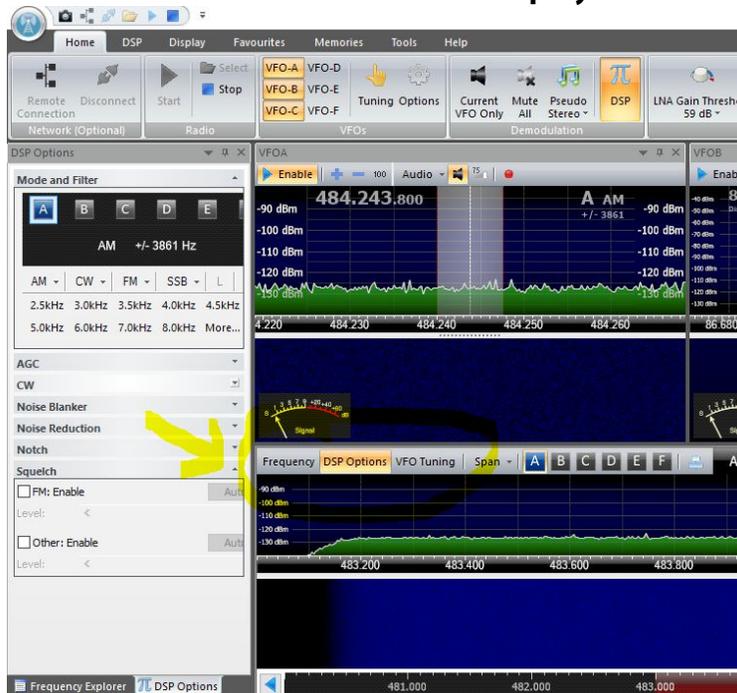
In the default layout, the side panel for the Frequency Explorer and DSP options are turned on, by clicking the buttons highlighted in the center, you can turn these panels on or off, turning them off will make the waterfall/VFO windows expand to fill the screen.

Under the *display tab,* the spectrum scale has a couple of settings, you can see by the above pictures, the first has the settings of high set to -30dbm and the low on -140dbm, the second image has the low on -140dbm still, but the high setting is on AUTO, this allows the scale to change depending on the signal being received, and as you can see, it is zoomed in, giving a better view of the signal scale to the left of the screen, makes it more readable, and if a strong signal should appear the window will automatically zoom out.

This document will be updated and revised constantly, so please check for revisions on the facebook SDRPlay group page, but this will get you started and up and running, and I will update next week with more settings for DSP, Display Options, External Radios, Databases and more…

Current version is 1.03

Thanks, Paul ‐ NN4F

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