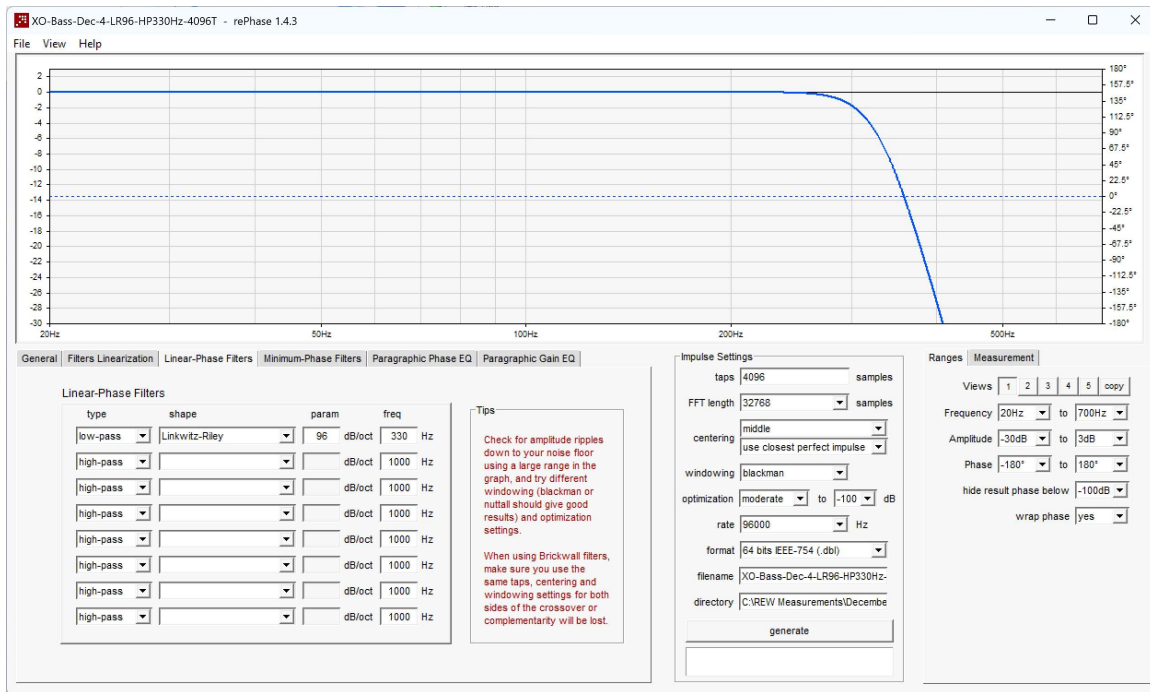


## 2. Create Linear Phase XO in Rephase and Add to the Pipeline in CamillaDSP.

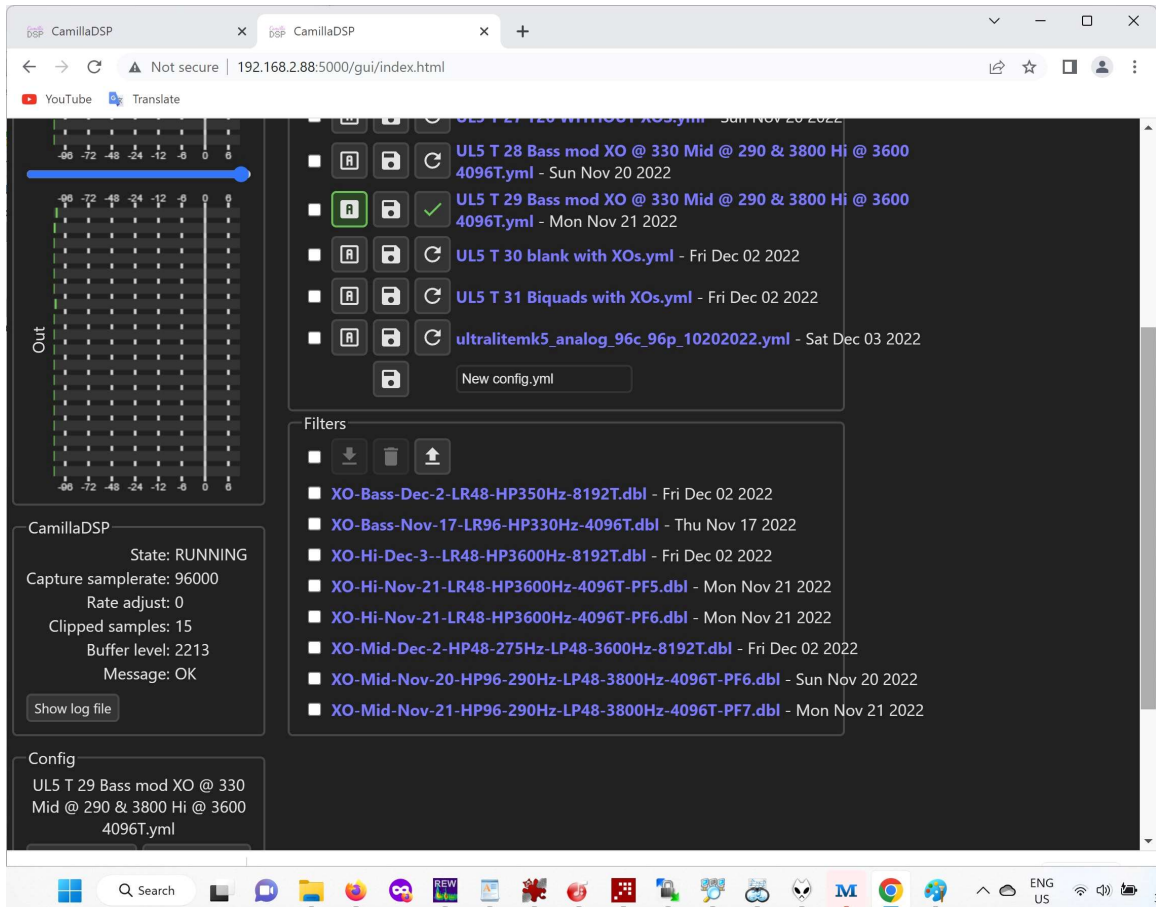
rePhase showing Linear Phase Filter for bass low pass filter.



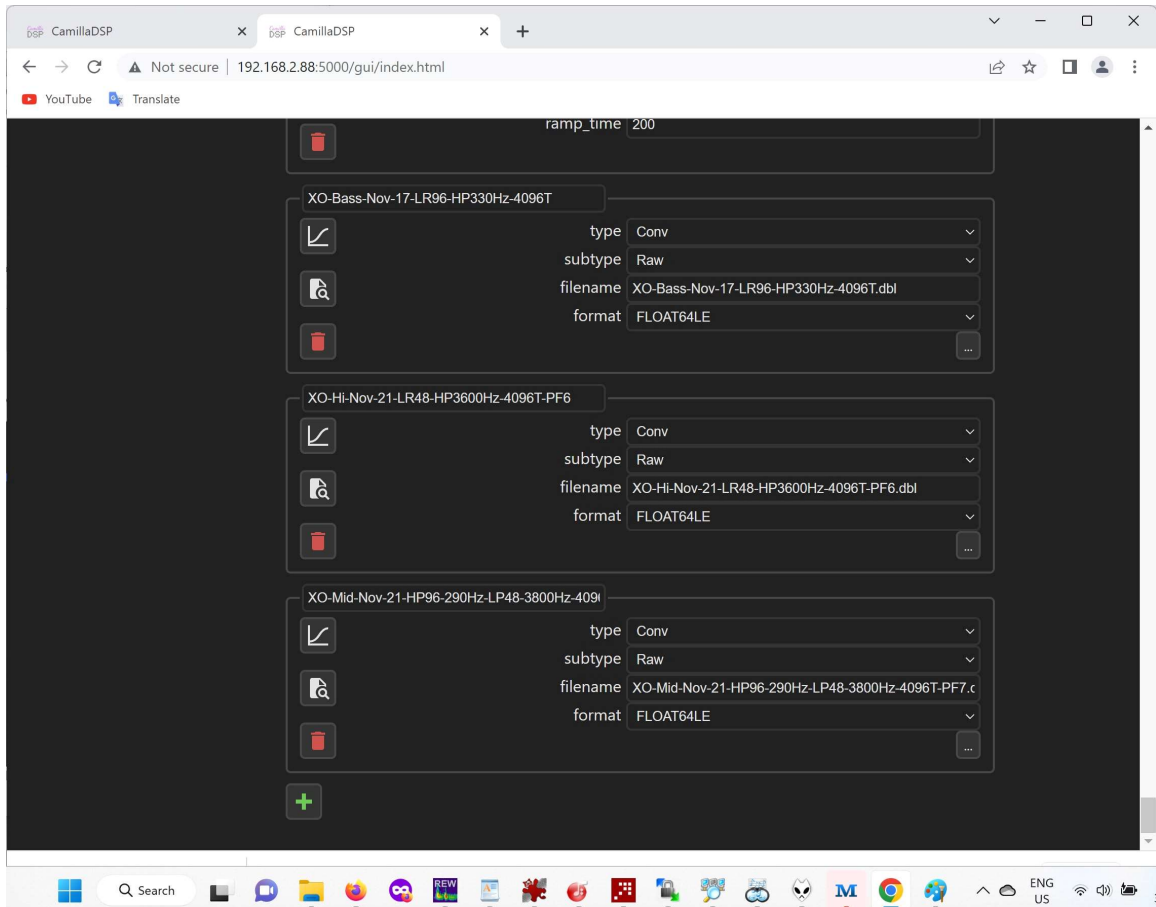
This is how I do my XOs. When you click Generate, rePhase will calculate the FIR filter with the filename and directory specified. These settings work for me, maybe a rePhase guru could suggest better. The blue line is the predicted response, rePhase will write a red line of it's calculated result. The resulting .dbl file is copied to /home/camilla/camilladsp/coeffs.

Save the rePhase settings (File/Save Settings As ...) so that the Phase can be manipulated later.

Here are the XOs in CamillaDSP.



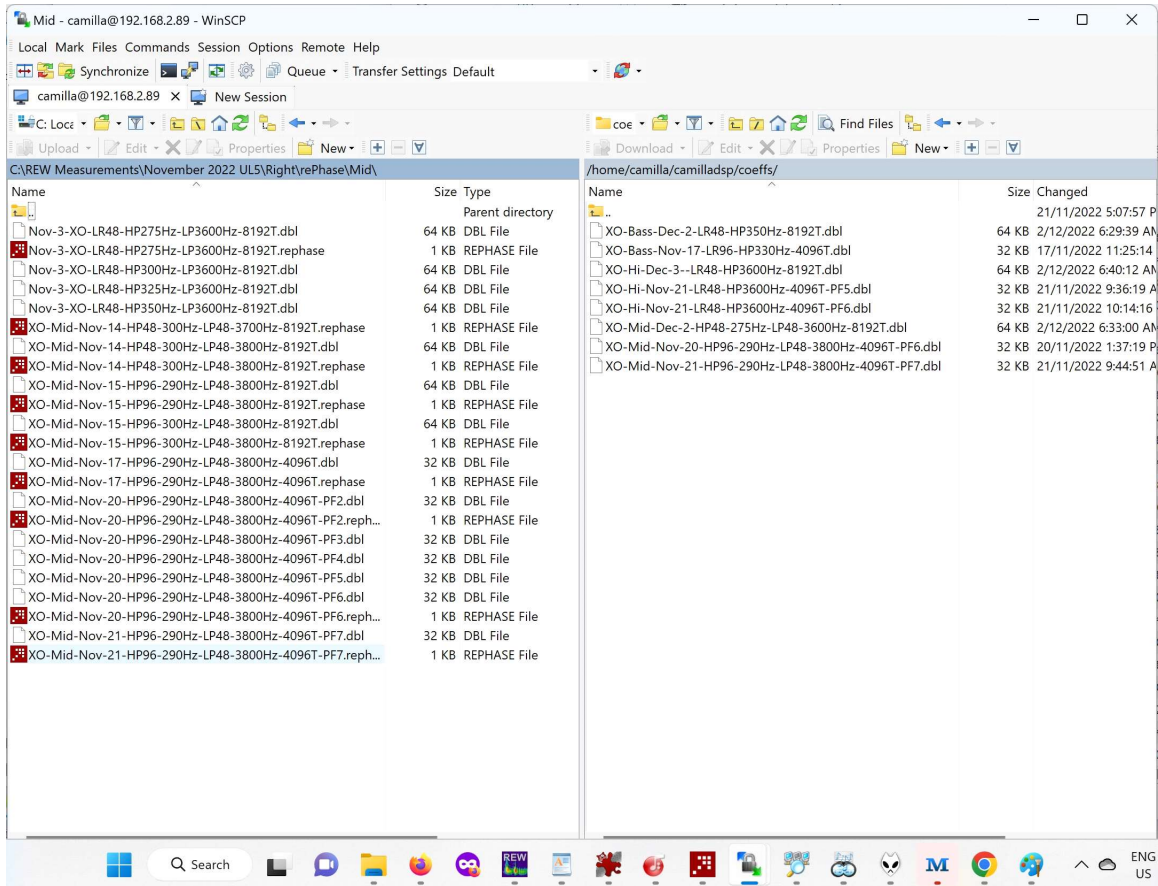
and here is a screenshot of a portion of the Filter tab



Note that the mid and hi XO have a suffix of PFn meaning Phase Fix n, more about that later.

### **A note about transferring files from Windows 11 to CamillaDSP on Ubuntu and a RPi.**

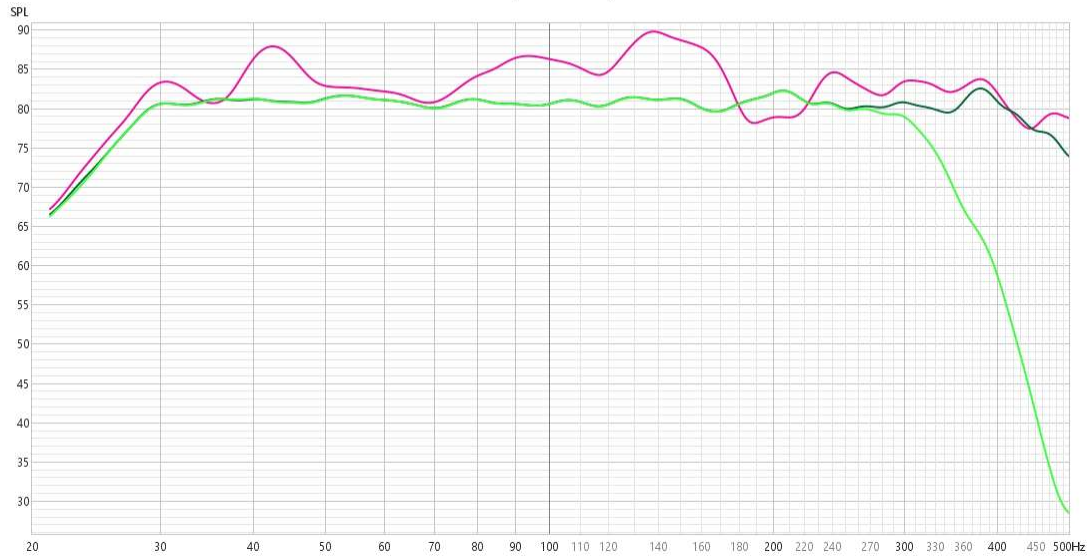
I use WinSCP, here is a screenshot showing the Windows folder on the left and the CamillaDSP config folder on the right.



It is drag and drop, simple. There is also an excellent built in editor, simply double click a file. This is how I copy biquad filters created by the REW EQ function and rePhase to a CamillaDSP config. The .rephase files are the saved settings files, double click on one of them and rePhase is fired up and the settings loaded ready for you.

At this stage we have the three drivers Equalized and the first attempt of XO's done. Here are overlaid measurements of each driver showing the "raw" response, the EQ'd response and the EQ'd response with XO applied.

Bass 20-500, Red - Raw, Dark Green - biquads applied, Light Green - XO applied - XO LR 96 db, 330Hz, 4096 Taps



Mid 200-5,000Hz. Dark Green - Raw, Orange - Biquads applied, Brown - XO applied. XO LR 96 Hi Pass 290Hz, LR 48 Lo Pass 3800Hz



Hi 2,000-20,000Hz. Purple - Raw, Dark Green - Biquads applied, Light Green - XO applied. XO LR 48,  
Hi Pass 3600Hz

