925 Compressor MkII

User Guide

MIA LABORATORIES

Greetings and Welcome!

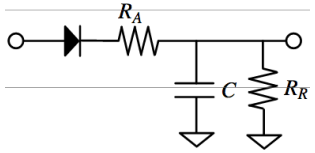
Thank you for choosing MIA Laboratories.

Please take the time to read through this user guide in order to get familiar with the components and use of the 925 Compressor MkII.

Overview:

925 Compressor MkII is the second generation of our preferred main-mix compressor. This plugin is designed using physical modelling principles.

Its characteristic dynamic response stems from the sidechain detection stage, which is based on the basic analog envelope detector circuit:



The high speed of this compressor's detector allows it to follow the actual waveform instead of the envelope of the program material and -along with the Logarithmic gain reduction- produce more natural compression. This is often the case in hardware vintage and modern equipment, and has resulted in the 925s' broad range of compression characteristics. It is especially suited for main-mix applications but also buss-mix or multiple separate channels.

925 features Variable knee response, allowing more compression to be applied, especially on high-transient sounds like percussion, samples, vocals etc. In this version, we are introducing the Slope / Ratio mode selection, which significantly changes 925's compression curve, resulting in completely different character and dynamic response.

The specially developed 'Damping' control is also introduced in 925 MkII, which allows for smoothing and fine-tuning the detector's response, adding to the versatility of this tool and providing the user with greater control and shaping of the signal's envelope.

29 carefully tuned Presets provide a solid starting point for a variety of use cases. A host of new features has also been included in MkII, including Sidechain Filtering, Band Compression and Dry/Wet control.

Features

Slope / Ratio

Toggling between Slope and Ratio changes the compression curve. ‘Slope’ is more sensitive but tends to result in smoother compression, while ‘Ratio’ is more precise with a sharper knee. In contrast to fixed-value switch ‘preset positions’, the Slope / Ratio is controlled by a continuously adjustable dial allowing accurate and ‘tunable’ setting of the compression slope.

Stereo Link Operation

In “Stereo Link” mode, the same amount of compression is applied to both Left and Right channels, based on the sum of the two. With Stereo Link disabled, compression takes place independently for each channel, whilst retaining common controls for both.

Damping

This control limits how quickly gain reduction is varied, according to the signal’s envelope. Ranging from 25µs to 0.5ms (0 - 10 in the control) controls the minimum rise-time of the detector output. Increasing this control gradually thickens-up and ‘sets’ together the process producing smoother compression, also changing the timbre and character of the actual content.
*By design, the compression response of 925 tends to produce a subtle distortion effect when used in extreme settings on bass-heavy sounds with long sustain. You can use this Damping control to reduce or even tune this distortion, according to your program material.

External Sidechain

Use any other channel of your mix as an input to the side-chain of 925 Compressor MkII

Sidechain Filter

Applies a 12dB/oct High Pass and Low Pass filter to the sidechain’s input. These filters are only applied to the sidechain of the compressor and do not affect the audio being processed directly. The actual filter response can be auditioned by pressing the “Sidechain Monitor”.

Band Compression

Utilises the 12dB/oct High Pass and Low Pass filters to compress a single band, leaving the rest of the signal untouched. The actual filter response can be auditioned by pressing the “Sidechain Monitor”.

Sidechain Monitor

Enabling “Sidechain Monitor” allows the user to actually hear and closely examine the input of the sidechain, by routing it to the output for

audition. This is especially useful when filtering the sidechain input in order to hear and tune the filters according to the material, or even listen to an external ‘keying’ signal. Since the 925 is a feed-back type process compressor, the Sidechain Monitor audio will sound compressed.

ChangeLog:

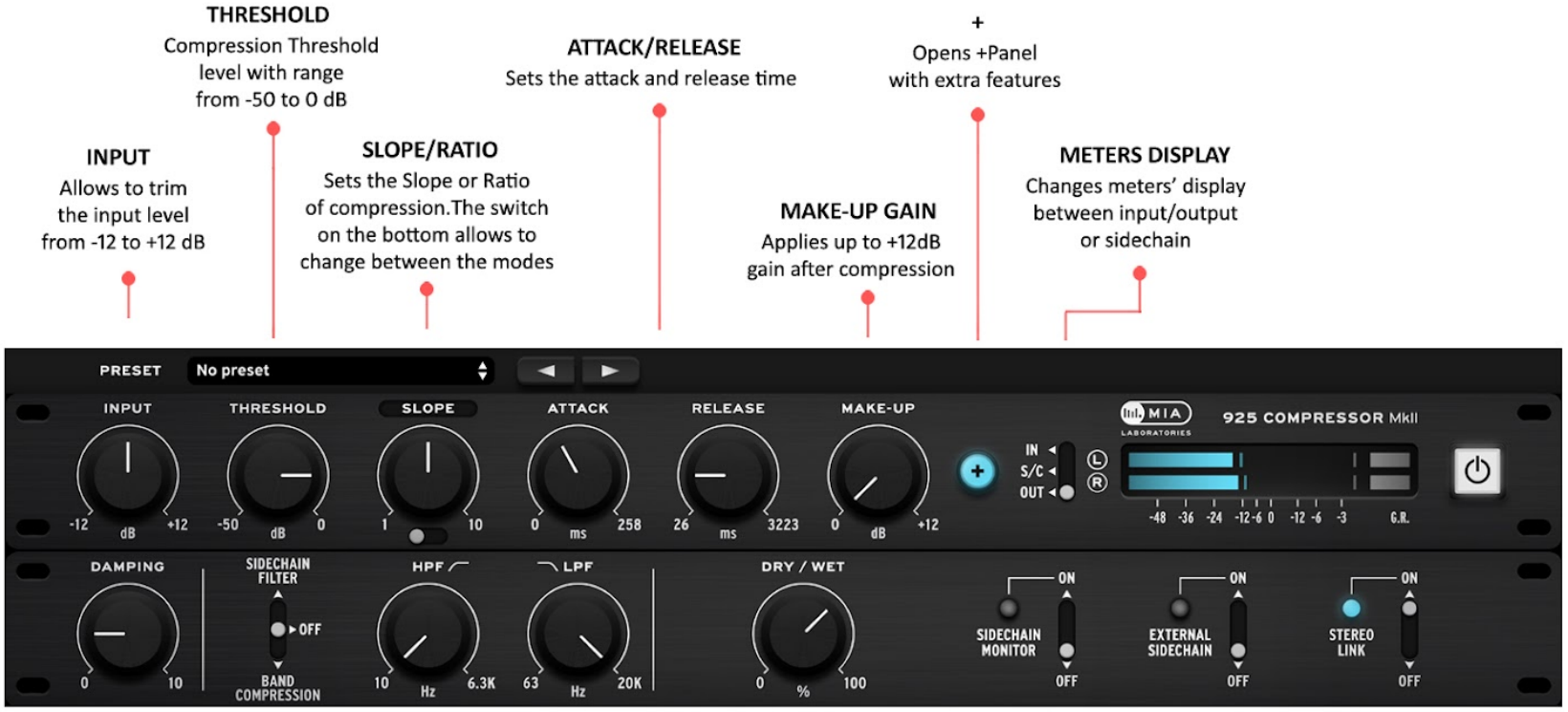
- Vst3
- Improved cpu performance
- Slope/Ratio selection
- Damping
- Sidechain Filtering
- Band Compression
- Dry/Wet control
- New extendable GUI

Installation:

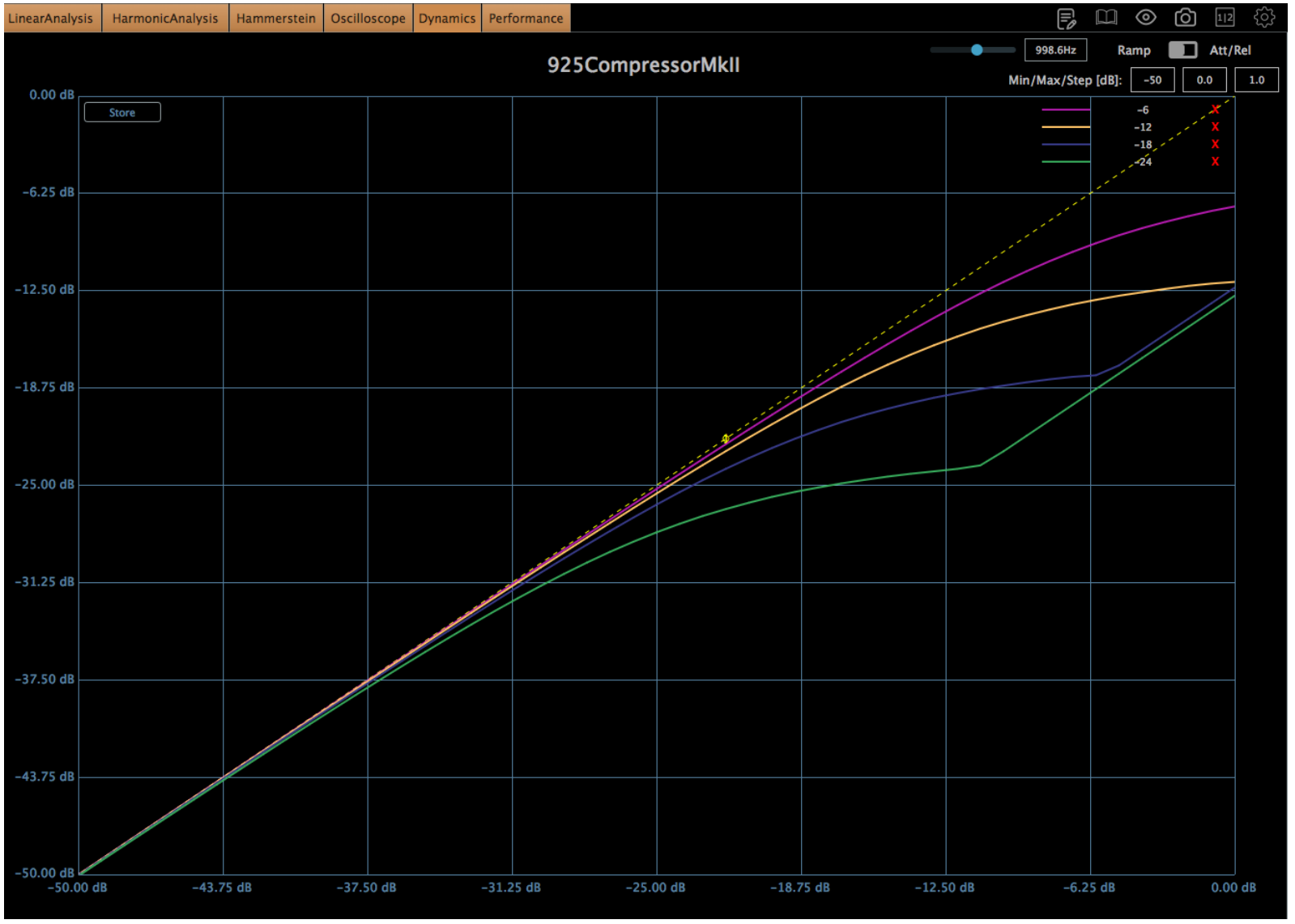
Installing 925 Compressor MkII is fairly easy, just download and run the appropriate installer for your operating system. The license for this plugin requires the use of iLok license manager software and an iLok account. The license can be deposited on a physical iLok (2nd generation or higher) or on iLok Cloud. For further information regarding the activation process, please refer to the activation guide provided. In case that you do not have the iLok License Manager, or you have an outdated version, you can download it for free here: license-manager

Note for Windows users: 925 Compressor MkII will be installed by default on the following directory - C:\Program Files\VSTPlugIns. (If this directory is not included in the search path list for vst plugins of your DAW, you can add it manually or change the installation location from the Browse menu of the installer to the one you are using).

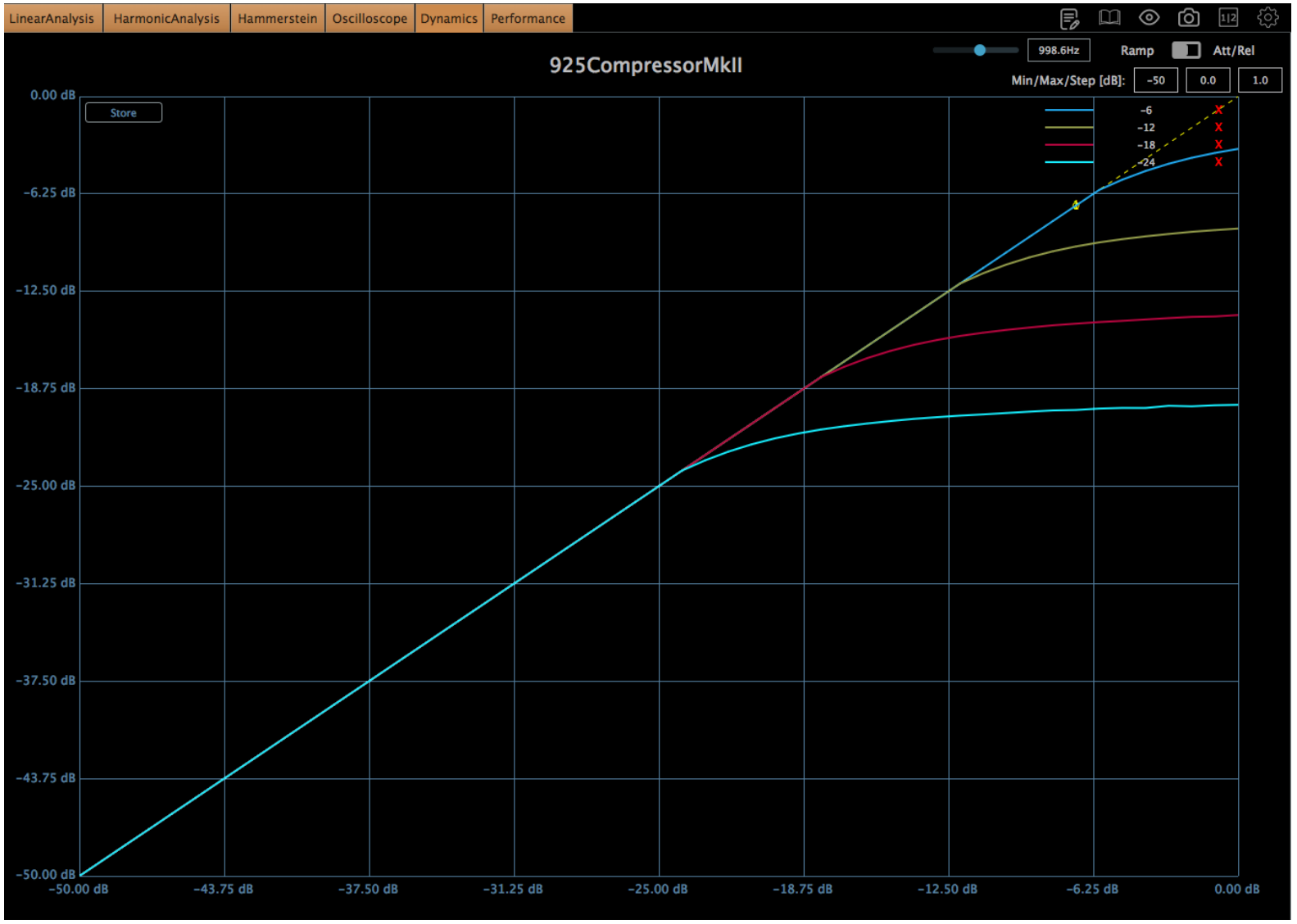
925 MkII Controls layout



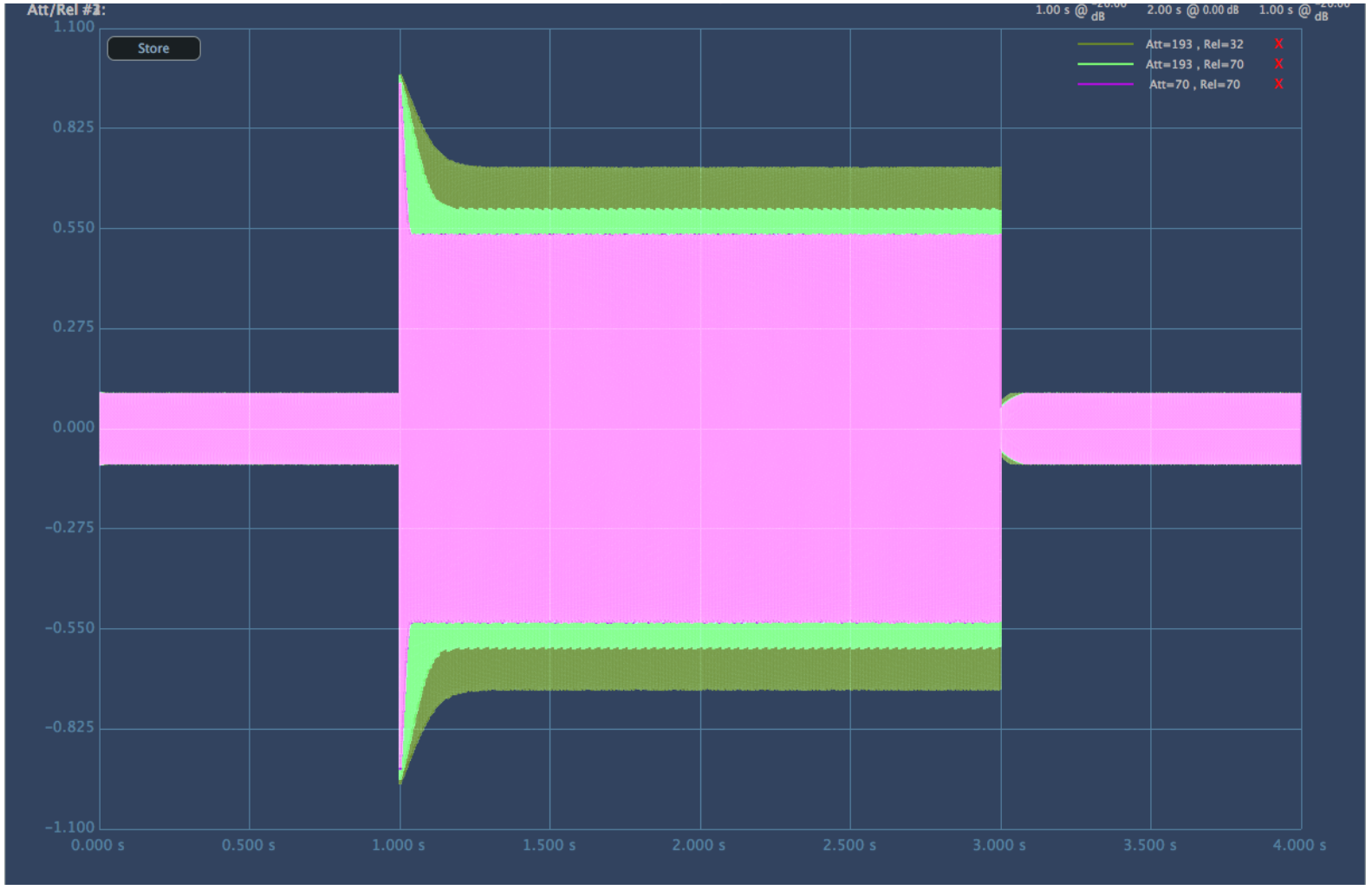
925 MkII Reduction Knee Response SLOPE MODE



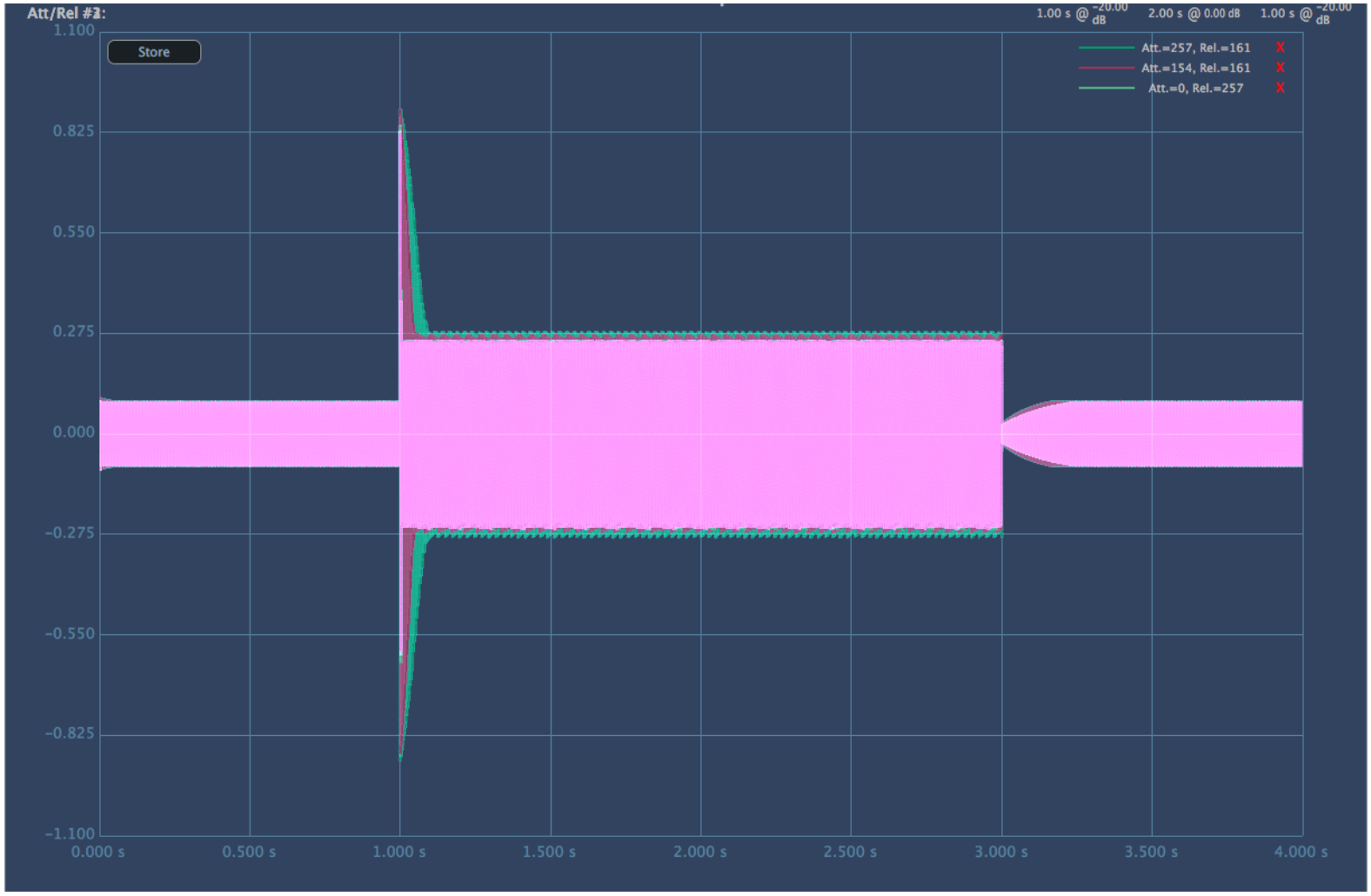
925 MkII Reduction Knee Response RATIO MODE



925 Envelope Response #1



925 Envelope Response #2



Appendix:

External Sidechain

External Sidechain in Cubase:

1. Open the **Devices** menu in Cubase and choose the entry **VST Connections**.
2. In the VST Connections window, click the button **Add Group**.
3. Open the **Configuration** menu and click on **More…**. From the menu that opens, choose **Quadro**. Click the **Add Track** button.
4. Right-click on the group you just created. In the menu that opens, select **Add Child Bus to *Group Name***. In the sub menu, choose **Stereo**.
5. Repeat step 4 and choose **Stereo (Ls Rs)**. You should now see two sub busses below the group - **Stereo** and **Stereo (Ls Rs)**.
6. Go to the channel settings of the group track you just created and load MiaCompressorOne into an insert.
7. Set the output of the track you want to process with MiaCompressorOne to the **Stereo** output of the group track you created before.
8. Set the output of the track you want to use as a sidechain to the **Stereo (Ls Rs)** output of the group track.
9. Open the MiaCompressorOne window and activate the **EXT. SIDECHAIN** button.

(Source: https://support.native-instruments.com/hc/en-us/articles/209592229)

External Sidechain in Ableton Live:

Sidechaining in Live 10.1 and later

1. Add 925 Compressor MkII to a track.
2. Enable ***External Sidechain*** within the plug-in GUI.
3. Create a track with a sound source to be used as the sidechain trigger.
4. In Live's plug-in GUI, enable "Sidechain". Then choose the sidechain trigger source in the "Audio From" dropdown
5. Adjust the gain and mix as required.

Sidechaining in all versions of Live until 10.0.6

In order to prepare for this, you should set up the following tracks:

- A Track with 925 Compressor MkII. Enable External Sidechain within the plug-in GUI.
- A second Track with the source for the sidechain signal trigger (Sidechain Trigger Track)
- An additional Audio Track which is used to route the audio signal (Audio Signal Routing Track).
- In case the Track's In/Out section is hidden press [cmd][alt][I] on Mac or [ctrl][alt][I] on PC.

How to route the sidechain signal from the sidechain trigger Track to the plug-in in the other Track

1. Make sure that the Monitor of the Audio Signal Routing Track is set to "In".
2.In the Input Type chooser of the Audio Signal Routing Track, select the Sidechain Trigger Track. The Input Type chooser is the top "Audio From" chooser.
3.In the Output Type chooser of the Audio Signal Routing Track, select the Track with the 925 Compressor MkII. The Output Type chooser is the top "Audio To" chooser.
4. In the Output Channel chooser of the Audio Signal Routing Track, select 925 Compressor MkII. The Output Channel chooser is the bottom "Audio From" chooser

(Source: https://help.ableton.com/hc/en-us/articles/209775325-Sidechaining-a-third-party-plug-in)

External Sidechain in Reaper:

1. Insert 925 Compressor MkII to the channel you want to compress and enable EXTERNAL SIDECHAIN
2. Go to the mixer, select the channel you want as the sidechain input
3. Go to the routing section of the channel

4. Drag and drop this to 925 Compressor MkII

(Source:http://reaper.fm/guides/ReaEffectsGuide.pdf)