

# 925 COMPRESSOR

## 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.

*“No two compressors sound alike...each one is inaccurate in its own unique way”*

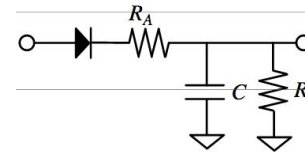
(Roey Izhaki, Mixing Audio: Concepts, Practices and Tools)

### Overview:

The 925 is MIA Laboratories' preferred main mix compressor.

It is designed using physical modelling principles, based around the classic 'feed-back' topology in hardware circuit-design.

The sidechain detection stage is based on the basic analog envelope detector circuit:



Key design features include:

- Variable knee response allowing more compression to be applied, esp. on high-transient sounds like percussion, samples, vocals etc.
- Logarithmic gain reduction, since the ear's sense of sound level is roughly logarithmic.

When used in extreme settings on sounds with long sustain, it can produce a distortion effect. This happens when due to the high speed of the detector, it follows the actual waveform instead of the envelope of the program material.

This is normal for such a design and in some cases desirable.

After a lot of consideration it was decided not to exclude setting range, as the process is very much program-dependent. Instead the user is given full control, since even if some settings will not be suitable for a specific material, often they are perfect for a different situation.

This is often the case in hardware vintage and modern equipment, and has resulted in the 925s' very broad range of compression characteristics, esp. suited for main-mix applications but also buss-mix or multiple separate channels.

## **Features:**

- **Stereo Link Operation**

In “Stereo Link” mode the same amount of compression is applied to both L/R 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.

- **External Sidechain**

Use any other channel of your mix as an input to the side-chain of MIA 925 Compressor, or to process the sidechain signal independently of the program material. Note we have not included any filtering process to the sidechain path in order to provide flexibility in the eq or filters used externally.

- **Output Level / Gain Reduction Meters**

Very fast and detailed display, to give you an accurate and clear perception of the compression process.

- **29 MIA Presets**

29 carefully designed MIA Presets, to achieve quick and balanced results, or to act as a perfect kick start towards your desired result.

## **Installation:**

Installing 925 Compressor 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 (2<sup>nd</sup> 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 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).

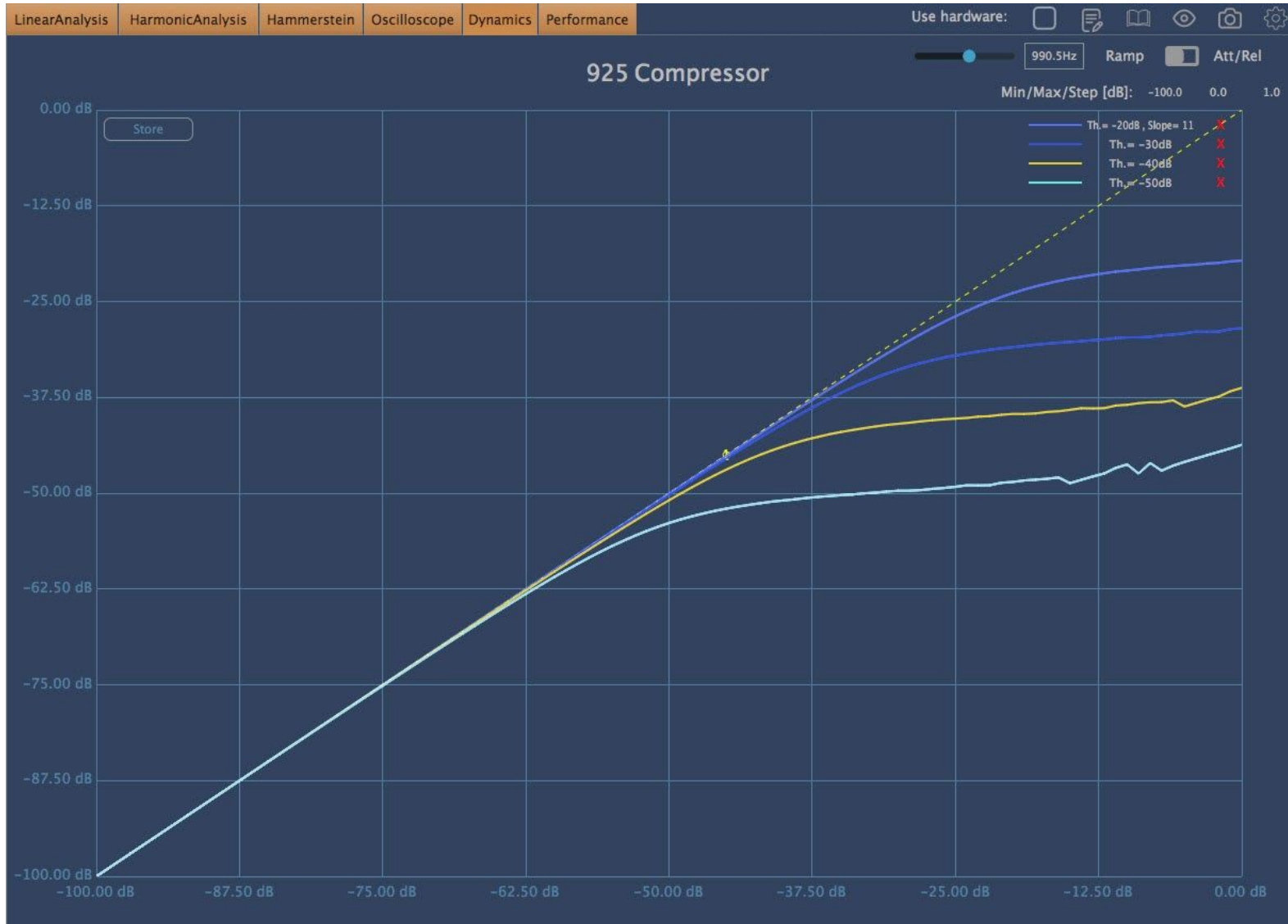
## 925 CONTROLS:



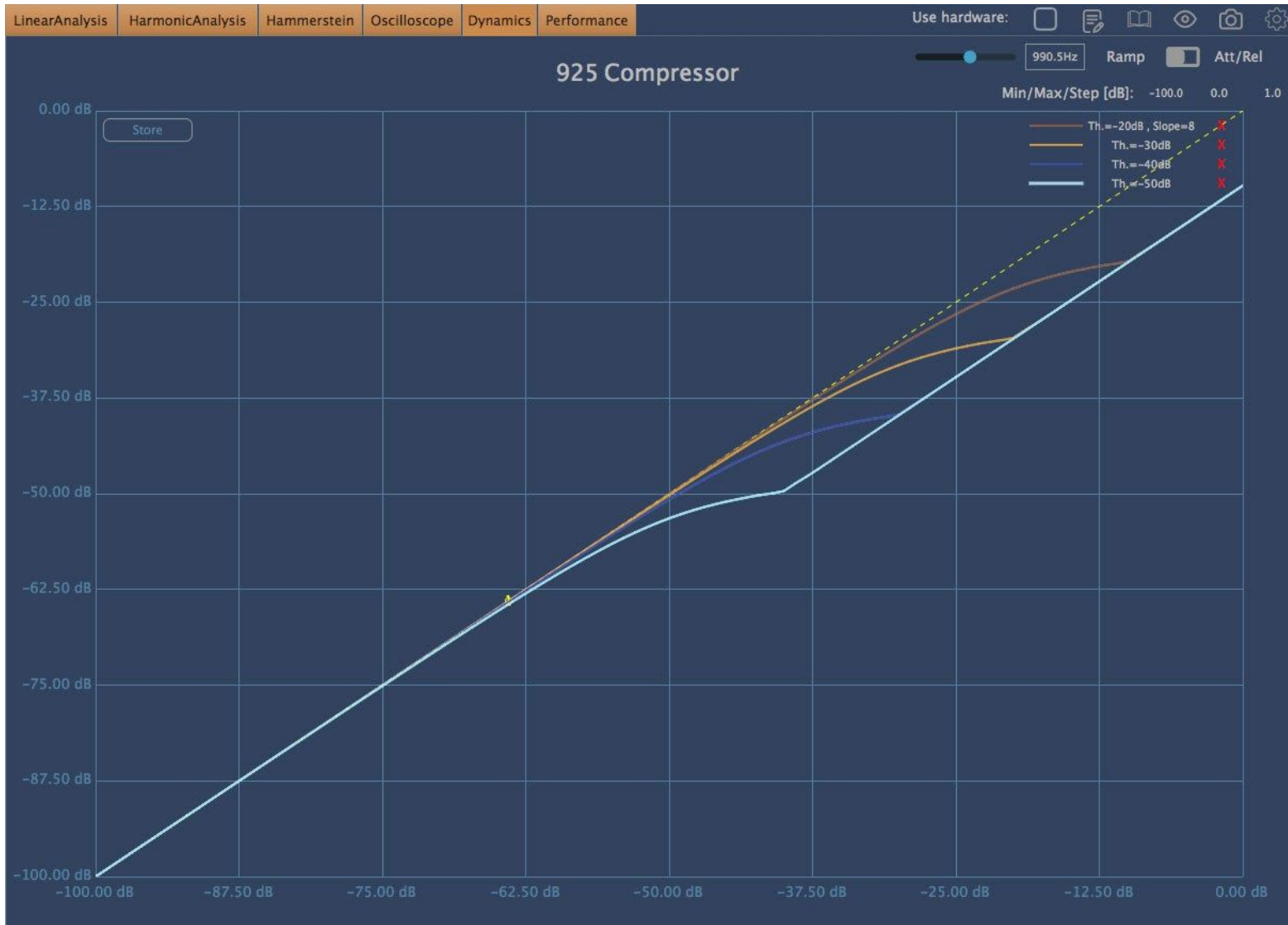
INPUT ATTEN.:	THRESHOLD:	SLOPE:	ATTACK:	RELEASE:	MAKE-UP GAIN:
Attenuates the level of the <b>input</b> signal.	Sets the threshold level above which compression begins	Determines the slope characteristic of the gain reduction being applied.	Sets the Attack time of compression in <b>ms</b> .	Sets the Release time of compression in <b>ms</b> .	Applies gain to the compressed <b>output</b> signal.

EXT. SIDE CHAIN:	STEREO LINK:	LEVEL:	G.R.:
Enable to allow access to the sidechain input.	Enable to apply the same amount of compression to both channels. Disable it for independent compression on each channel, with common set of controls for both.	Displays the output level of the signal, in <b>dBfs</b> .	Displays the Gain Reduction level taking place, in <b>dB</b> .

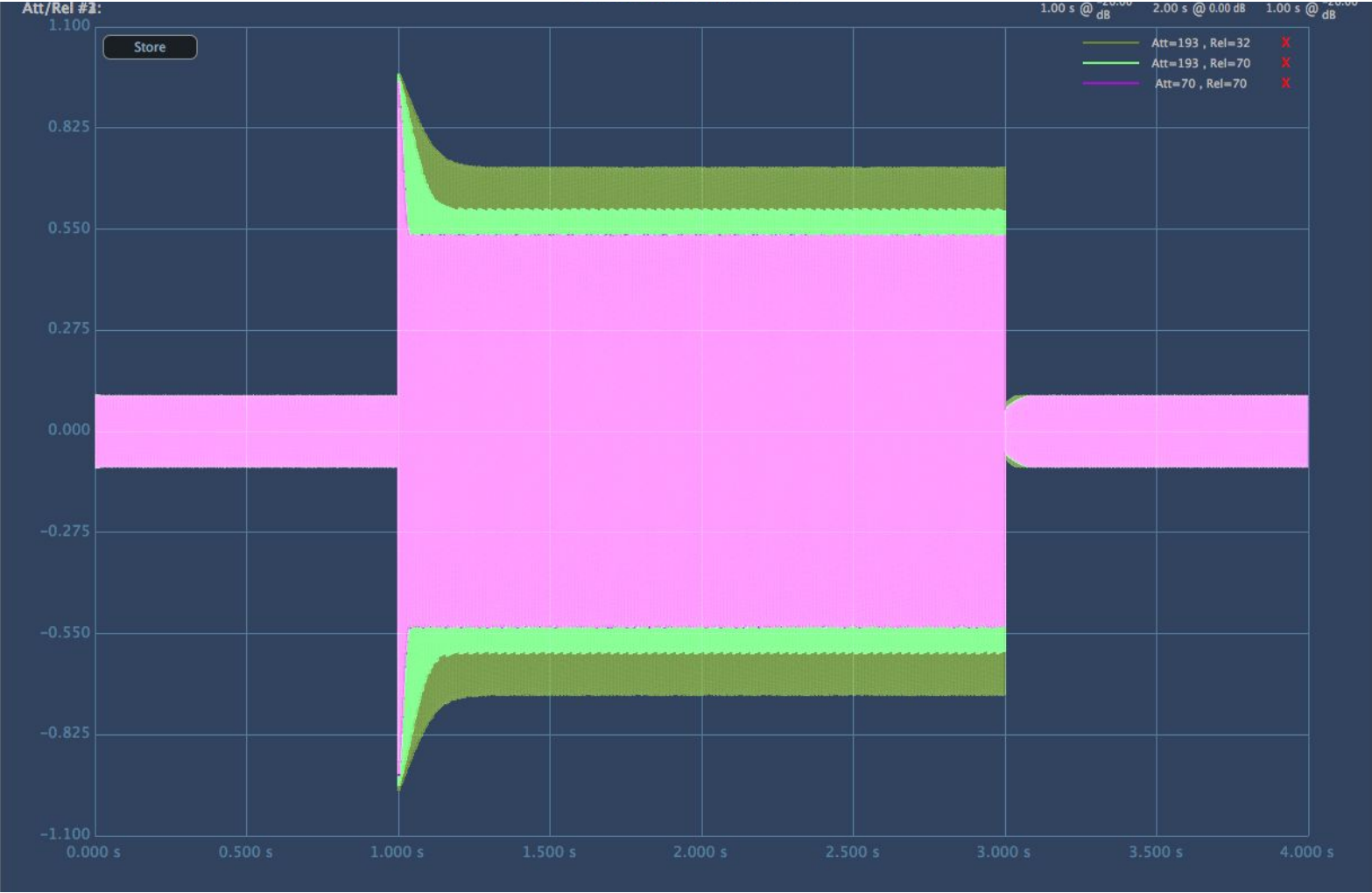
# 925 Reduction Knee Response



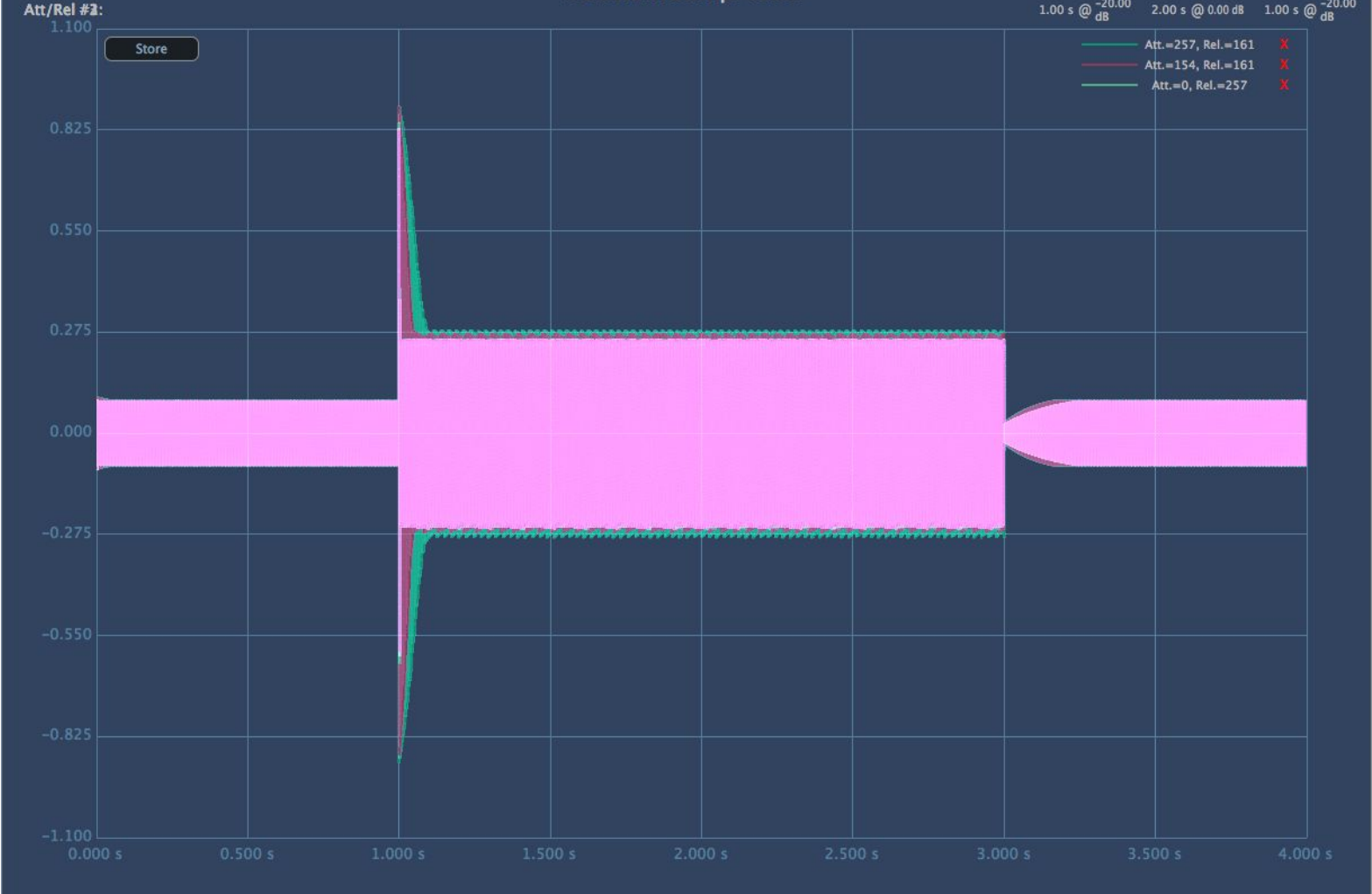
# 925 Partial Knee response



# 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 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. 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. 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. 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 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

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



