D-Shaper

Envelope Shaper

Description

D-Shaper is an **envelope shaper** designed to process and modify the dynamics and transients of the audio signal. This effect allows precise intervention on the dynamic contour of a signal. Its functionalities include attack and release modeling using exponential curves, global gain control of the process and an automatic bypass system.

The plugin processes the signal at the sample level and uses exponential algorithms to calculate attack and release curves. In addition, it incorporates an internal limiter to control the final output. Thanks to its ability to adjust both percentages (e.g. in attack and release) and absolute values in dB for output control, **D-Shaper** accommodates both subtle corrections and extreme dynamic changes.

Parameters

The plugin has four main controls (plus a bypass control) that are displayed in the graphical interface:

1. **Attack**

    o **Range:** -100 to +100

    o **Function:** Controls the percentage of modulation in the attack phase. A negative or positive value will modify the way in which the initial signal is "raised" or compressed, influencing the speed or slowness of the response at the start of the sound.

2. **Time**

   o **Range:** 1 to 60

   o Determines sustain time in milliseconds

3. **Release**

   o **Range:** -100 to +100

   o **Function:** Adjusts the percentage of modulation in the release phase. This control affects how the signal is "released" after the peak, determining how quickly the molding action fades away.

4. **Output**

   o **Range:** -24 dB to +8 dB (with 0.1 dB steps)

   o **Function:** Adjusts the output gain of the processor in decibels. It allows you to compensate for the signal level after envelope shaping, ensuring that the output is maintained in the desired range.

5. **Bypass**

   o **Rank:** 0 or 1

   o **Function:** Enables or disables plugin processing. With the bypass active, the signal is transmitted without modification.

In the Menu

- **Dynamic Processing:**
  Allows you to turn processing on or off depending on the playback, recording, or stop state of the project. This makes it easy to automate and sync with your workflow in Reaper.

- **Graph and Scale Options:**
  Scaling options (auto or fixed zoom) can be adjusted, allowing the envelope display to adapt to different resolutions or visual preferences. In addition, options are provided to show or hide additional information (such as the display of the pre-processing curve).

- **Grouping and Linking:**
  The "link group" system allows you to group instances of the plugin so that changes in certain parameters are reflected in all linked instances, which is especially useful in productions with multiple channels or parallel tracks.

- **Help/Info:**
  The menu includes a "Help" section that shows information about the plugin, instructions for use and practical advice, making it easy to quickly consult the documentation without leaving the session.

Usage Tips

1. **Fine-tuning of Attack and Release:**

   o Use the *Attack (%)* control to modify the initial signal response. Test negative and positive values to see how the aggressiveness of the sound onset affects it.

   o Combine with the *Attack parameter (t)* to define the actual response time, achieving more natural or more abrupt transients depending on the desired style.

2. **Departure Compensation:**

   o Adjust the Output control *(dB)* to balance the final gain after modeling. This is especially useful when making extreme changes in dynamics and maintaining a consistent output level is required.

3. **Using the Bypass:**

   o Activate the bypass (Slider5) to compare the processed signal with the original. This will help you evaluate the effectiveness of the processing and make precise adjustments without losing the original character of the audio.

4. **Integration into dynamic processes:**

   o D-Shaper can be used to highlight or attenuate transients in mixing or mastering situations. Use it to give more "punch" to percussion or to soften signals that are excessively aggressive.

5. **Experimentation with the Envelope Curve:**

   o The relationship between *Attack (%)* and *Release (%)* determines the overall shape of the curve. Experiment with extreme combinations for creative effects, such as transient compression or expanders, and watch the dynamics being modeled.

Acknowledgments

This plugin is based on technology and libraries created by Tukan Studios. Special thanks are due to John Matthews, whose exceptional work served as the basis for the plugin series. On that basis, Edu Serra has added and modified features of the design of the graphic interface renewed in the visual style of ReArtist Pro.

Summary

D-Shaper (ReArtist Pro) is a versatile and powerful envelope shaper that allows creative and precise control of the transients and dynamics of a signal. With its intuitive attack and release controls – both in percentage and time terms – and a dB gain compensation system, the plugin adapts to a variety of applications, from improving punch on percussion to fine-shaping vocals and other instruments. Its integration with Tukan Studios' advanced libraries and ReArtist Pro's revamped interface make it a must-have tool for producers and sound engineers looking to take dynamic processing to a new level.