D-Comp

Transparent digital compressor

Description

D-Comp is a versatile digital compressor designed to control audio dynamics, either subtly or more aggressively. This plugin offers a wide range of adjustable parameters, allowing users to mold the sound according to their specific needs. This version of D-Comp focuses on offering a clear interface and intuitive controls, while maintaining the power and flexibility of a modern digital compressor.

Parameters

1. **Threshold (dB):** Determines the threshold from which the compressor begins to act. Signals that exceed this level will be processed. Lower values mean that the compressor will act over a wider dynamic range.
2. **Ratio:** Controls the amount of compression applied. A ratio of 2:1 means that for every 2 dB that the signal exceeds the threshold, the gain will be reduced by 1 dB. The higher the ratio, the greater the compression and the more drastic the reduction in profit will be.
3. **Attack (ms):** Defines the rate at which the compressor starts reducing gain once the signal exceeds the threshold. Lower values result in a faster response, ideal for transients and percussive sounds.
4. **Release (ms):** Controls the time it takes for the compressor to stop reducing gain once the signal drops below the threshold. Longer values soften compression and are useful for material with slower dynamics.

5. **Knee (%):** Adjusts the smoothness of the transition at the threshold. A value of 0% (hard knee) produces a more aggressive compression, while higher values (soft knee) result in a more gradual and natural compression.
6. **Output (dB):** Controls the output gain after compression. It allows you to compensate for the loss of volume that compression can produce, or to add gain if desired.
7. **SC HPF (Hz):** High-pass filter for the sidechain signal. Useful for preventing unwanted bass frequencies from triggering compression.
8. **S/C Sidechain:** Enables/disables the external sidechain. When active, the compressor responds to the signal sent to the sidechain inputs.
9. **Dry/Wet (%):** Mixes the original signal (dry) with the compressed signal (wet). It allows parallel processing, preserving part of the original dynamics.
10. **Trick:** Inverts the compressor action, attenuating signals below the threshold and enhancing those that exceed it.
11. **Bypass:** Enable/disable the plugin.

In the Menu

The plugin incorporates an interactive menu that is activated through the graphical interface. Among the options that can be found in the menu are:

- **Processing Modes:**
    - **On Playback, On Recording, On Stop:** Allows you to configure in which states (playback, recording or stop) the compressor will be active.
    - Selection is made by clicking on the menu, allowing each mode to be activated or deactivated independently.
- **Group Management:**
    - **Start Group / Add to Group:** Facilitates the assignment and synchronization of parameters between multiple instances of the plugin. Groups numbered from 01 to 16 are displayed, allowing you to start or join a group.
    - **Delete Group:** Option to delete the assignment to a particular group.
- **Display and Scale Options:**
    - **Automatic Scaling / No Scaling:** Toggles between the automatic scaling of the scope graph and a fixed scale, affecting the signal display and reduced gain.
    - **Scope View:** Allows you to activate or deactivate the view of scopes.
    - **Input Scope, Output Scope, Reduction Scope:** Options to display the different scopes (input, output and gain reduction) that help monitor the dynamic behavior of the compressor.

- **Help/Information:**
    - **Show Info/Help:** Displays a help window with information about the use of the plugin and the functions of each control, including indications on mouse modifiers for fine tuning.

Usage Tips

- **Adjust the Threshold and Ratio together:** Start by setting the threshold where you want the compressor to start operating, and then adjust the ratio to control the amount of compression.
- **Experiment with Attack and Release:** Try different combinations of Attack and Release to find the one that best suits your audio material. Fast Attack and Release values are useful for percussive sounds, while slower values are better for material with smooth dynamics.
- **Use the Knee to Smooth Compression:** A higher Knee value can help reduce compression roughness, especially with high ratios.
- **The HPF Sidechain is your ally:** To avoid unwanted pumping, use the sidechain's high-pass filter so that only the desired frequencies trigger compression.
- **Mixing with Dry/Wet:** Using the Dry/Wet control allows you to preserve the original dynamics of the signal, adding parallel compression for a more natural sound.
- **The "Trick" for Creative Effects:** The "Trick" mode can be useful for creative effects, such as enhancing the strongest parts of a signal or creating a reverse "expansion" effect.

Acknowledgement: "Powered by Tukan Studios"

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 – such as interface design and parameter adaptation – to achieve a graphical interface in the style of ReArtist Pro.

Summary

D-Comp is a powerful and versatile digital compressor that offers precise control over audio dynamics. With a wide range of adjustable parameters, this plugin can be used for both smooth and transparent compression, as well as for more aggressive and creative effects. Experiment with the controls and discover the possibilities of D-Comp to shape the sound of your tracks and mixes.