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1 Introduction

DCAM ChanComp is based on a classic limiting amplifier design commonly used as a channel or track compressor. It features a very fast attack response and is usually intended to be applied to individual elements such as drums and vocals.



Standard controls/indicators

Bypass/On/Off

This control exists on all Reason devices for managing the state of the entire device.

Patches

DCAM ChanComp features programmable effect presets, called Patches. It includes a number of factory Patches which can be used as they are or provide you with a good starting point for further tweaking.

Patches use the '.repatch' file extension. Loading and saving Patches is done in the same way as for other instruments and effects in Reason, using the Patch Browse and Save controls at the top of the DCAM ChanComp panel.

2 Using DCAM ChanComp

Rear panel connections



DCAM ChanComp features a set of various inputs and outputs on its rear panel.

The **Audio Inputs** connectors should be used for the input signal (to be processed) while the **Audio Outputs** should be connected to a suitable destination.

If you need to use DCAM ChanComp on a mono signal, you should use the Left input and output channels.

The **GR Output CV** connector outputs the gain reduction envelope as a CV source for automating CVcontrollable parameters elsewhere in your Reason project, effectively using DCAM ChanComp as an envelope follower.

Front panel controls



In Gain

Increase the **In Gain** control to make the sound more compressed - higher signals engage the compression circuit more heavily. The control can attenuate the input by up to -20dB or add up to 40dB of gain.

Envelope section

Attack

The **Attack** control adjusts the speed at which the level of the input signal is reduced when a peak is detected.

DCAM ChanComp is designed for fast compression with Attack times from 0.02ms to 1.2ms.

Release

The **Release** control sets the speed at which the gain level returns to normal after a transient has passed.

The Release time ranges from 50ms to 1.2 seconds.

Ratio section

The Ratio specifies the gain reduction applied by DCAM ChanComp.

Five Ratio settings are available: 4, 8, 12, 20 and Nuke. The numbered settings correspond to ratios of 4:1, 8:1, 12:1 and 20:1. The numbers represent the change in gain after compression.

For example, when a transient is detected, then a Ratio of 4:1 would mean that for every 4dB of increased signal level coming into the compressor, the output level rises by 1dB.



The Nuke setting is an emulation of the 'all buttons' ratio mode on a classic limiting amplifier design. This mode affects the compression characteristics in various ways, affecting the attack and causing limiting and distortion effects, resulting in rather brutal, heavy sounds.

Gain Reduction

This meter represents the amount of gain reduction imparted by the compression circuit.

Master section

Bias

The **Bias** control continuously varies between different capacitor values which were used on various hardware revisions of the hardware on which DCAM ChanComp is based.

Settings between -25% and +25% result in subtle sonic variations in the compression characteristics. More extreme settings are useful for driving the compression circuit harder.

Mix

The **Mix** control allows you to blend the final output mix between the input signal (0%) and output signal (100%).

This is useful for quickly introducing parallel dynamics processing without having to perform extra routing in your DAW/host, allowing you to achieve a compressed sound while retaining the original punch of the signal's transients.

Out Gain

Use the Out Gain control to adjust the final level as required.

3 Credits

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