

O.CAMBusComp

OPERATION MANUAL



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1 Introduction

DCAM BusComp is based on a classic bus compressor design from the centre section of a well-known British large-format mixing console.

It is usually intended to be inserted on subgroups like drum mixes or the entire master output to add 'glue' and power to a mix of tracks. However, it also works very well as a channel compressor.



Standard controls/indicators

Bypass/On/Off

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

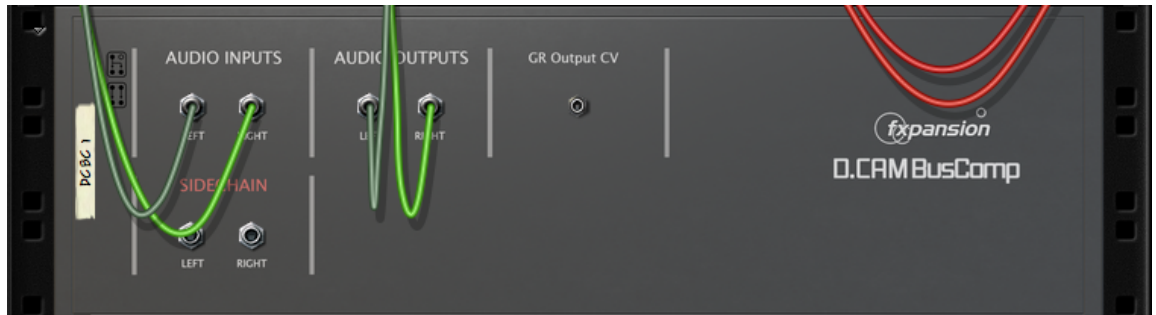
Patches

DCAM BusComp 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 BusComp panel.

2 Using DCAM BusComp

Rear panel audio connections



DCAM BusComp 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 BusComp on a mono signal, use the Left input and output channels.

If the **Sidechain** input is connected, the audio source feeding it is used to drive DCAM BusComp's peak detection circuit instead of the main signal, meaning that you can affect the input signal's dynamics with the characteristics of another signal entirely.

The **GR Output CV** connector outputs the peak detection envelope as a CV source to automate CV-controllable parameters elsewhere in your Reason project.

Note that the absence of any audio signal causes DCAM BusComp to stop processing, except when the **Sidechain** and **GR Output CV** are connected - in this case DCAM BusComp can be used purely as a device to generate an envelope CV source from the **Sidechain** input.

Front panel controls



Detection section

HP Freq

The **HP Freq** control allows you to apply a variable high pass filter on the key signal that is used for the compressor's amplitude detection circuit.

This can be useful when there is too much low-end in the signal fed into the peak detection circuit, which can result in the compressor reacting too heavily.

Listen

Activating the **Listen** button allows you to monitor the signal used for the compressor's detection circuit (if the Sidechain input is connected on the rear panel of DCAM BusComp, the signal connected to it is monitored).

The signal is monitored after the **HP Freq** function is applied.



Dynamics section

Attack

The **Attack** control adjusts the speed at which the input signal's gain is reduced when a peak is detected.

Six attack times are available: 0.1 ms, 0.3 ms, 1 ms, 3 ms, 10 ms, 30 ms.

Release

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

The following Release settings are available: 0.1 secs, 0.3 secs, 0.6 secs, 1.2 secs and Auto.

Compressor section

Threshold

The **Threshold** represents the input level at which the compressor starts to react - any signals over the Threshold level engage the compressor circuit.

Ratio

The **Ratio** specifies the gain reduction applied by the compressor.

3 Ratio settings are available: 2:1, 4:1 and 10:1. The numbers represent the change in gain after compression.

For example, assuming that the threshold level has been breached, then a Ratio of 4:1 would mean that for every 4 dB of increased signal level coming into the compressor, the output level rises by 1dB.

Makeup

The **Makeup** control increases the output gain after the compressor circuit has applied gain reduction to the input signal.

Master section**In Gain**

The **In Gain** control adjusts the level of the input signal, from -inf dB to +18 dB.

Out Gain

The **Out Gain** control adjusts the level of the final output signal, from -inf dB to +6 dB.

Mix

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

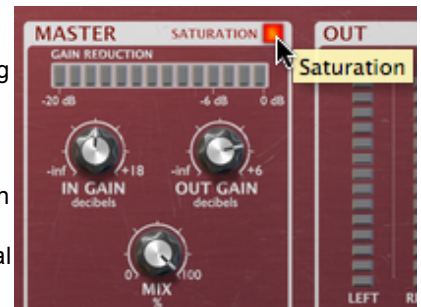
This is useful for quickly introducing parallel dynamics processing without having to perform extra routing in your DAW/host, allowing you to achieve a compressed sound while also keeping the transients of the original signal intact.

Gain Reduction

This meter represents the amount of gain reduction currently being applied to the input signal.

Saturation

Activating the **Saturation** button enables the BusComp's saturation circuit. The saturation behaviour is dependent on the level of the input signal. Note that this function is not a peak clipper - the signal can still exceed 0dB depending on the input level and compression settings.

**Input and Output metering****In**

This meter represents the level of the audio input to be processed.

Out

This meter represents the level of the output audio signal.

3 Credits

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Special thanks to Propellerhead Software and the Propellerhead test pilots.

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