

## CompressiveCM

CompressiveCM is an external side chain analogue modeled RMS compressor with a brickwall limiter. The external side contains a 3-band EQ and mid/side controls to allow complete control of audio dynamics.



## **Main Features**

RMS compressor

Brickwall limiter

Short attack and release times

Frequency dependent compression

External side chain

Mid/side processing

Adjustable knee

Analog tube/valve modeling

Makeup gain

Dry/wet mix to allow parallel compression

64 Bit Internal Processing

Low CPU usage

## **Controls - Compressor**

Threshold – controls the audio level at which the compressor is activated.

Ratio – the amount of compression applied to audio above the threshold value.

Attack – the length of time the audio signal is required to be above the threshold before the compressor is activated.

Release – the length of time the compressor remains active once the audio level has dropped below the threshold.

Knee – smoothes the transition around the threshold from uncompressed to compressed audio

## **Controls – Side Chain**

Low gain – modifies low frequencies in the side chain by  $\pm 20$  dB. Note, the EQ only acts upon the audio passing through the side chain and, therefore, does not directly affect the output.

Mid gain – modifies mid frequencies in the side chain by  $\pm 20$  dB. Note, the EQ only acts upon the audio passing through the side chain and, therefore, does not directly affect the output.

High gain – modifies high frequencies in the side chain by  $\pm 20$  dB. Note, the EQ only acts upon the audio passing through the side chain and, therefore, does not directly affect the output.

Mid/Side – controls the level of the left/right channels of the audio field. This can be used to isolate specific instruments, such as the kick drum or high hats.

Monitor – listen to either the output of the compressor or the side chain itself

### **Controls – Brickwall limiter**

Threshold – controls the audio level at which the brickwall limiter is activated.

Ceiling – sets the maximum volume of the brickwall limiter's output. Please note that this control comes before the master gain control in the process chain so the gain can be boosted higher than the ceiling.

Release – the length of time the brickwall limiter remains active once the audio level has dropped below the threshold.

Limiter – switches the brickwall limiter on or off

### **Controls – Main**

Side Chain Input – choose whether the left, right or stereo input of the compressor is used as the side chain.

Side Chain – set the side chain to the audio input or external input.

Valve – the virtual analogue modeling can provide a more natural, realistic warmth to digital audio. CompressiveCM comes with two different models, soft and dirty.

Makeup Gain – extreme levels of compression can reduce the level of the audio output, therefore, makeup gain can be used to automatically modify the output to help normalize it to the level of the input. Please note that this controls both the makeup gain for the compressor and the limiter.

Dry/Wet Mix – controls the level of the original input and the compressed output to allow parallel compression. Please note that the brickwall limiter comes after the mix control in the process chain, therefore, mix only controls dry/wet compression and does not alter the limiter.

Master – modify the level of the output by  $\pm 20$  dB.

## Datasheet

Compressor:

Threshold: -50 – 0 dB

Ratio: 1:1 – 20:1

Attack: 1ms – 1000 ms

Release: 1ms – 1000 ms

Knee: Hard to soft (0 – 100%)

Limiter:

Threshold: -50 – 0 dB

Ceiling: -50 – 0 dB

Release: 1ms – 1000 ms

Equalizer:

+/-20dB 0 – 800 Hz

+/-20dB 800 – 5000 Hz

+/-20dB 5000 – 24000 Hz

Processing: 64 Bit Floating Point

Latency: 1024 samples

Gain: -20 – 20dB

## Acknowledgments

Infinity API by EXP digital

VST is a trademark of Steinberg

HUGE thanks to Paul Chana for Infinity API and for porting CompressiveCM to Apple Mac.

<http://www.expdigital.co.uk/>

Thanks to Rick Christy (aka grymmjack) for the cool graphics.

<http://designermonkey.rekkerd.org>

Please see <http://www.martineastwood.com> for news about Martin Eastwood Audio