

G-Stomper Studio

G-Stomper Rhythm

G-Stomper VA-Beast

G-Stomper Producer

User Manual

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10 Effects

10.1 FX Overview

All G-Stomper apps provide various Effect Units across the signal chain.

Depending on the used App, the location and appearance of the Effect Units might be different.

10.1.1.1 G-Stomper Studio, G-Stomper Rhythm, G-Stomper VA-Beast (standalone)

3 free assignable Effect units on the FX screen



2 Sum Effect units on the Master/SumFX screen



2 per Channel Insert Effect units on the Mixer



Note: From any screen, use the "View" menu to navigate to one of these sections.

10.1.1.2 G-Stomper Producer

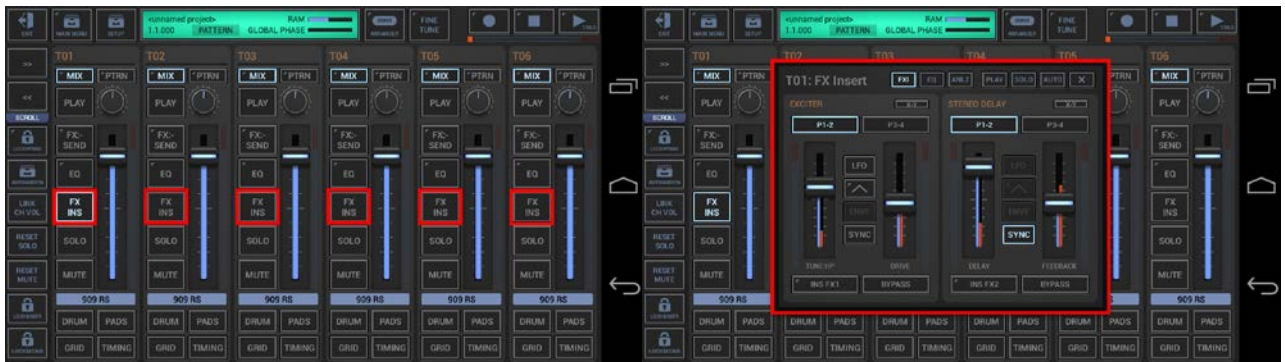
3 free assignable Effect units in the Send FX channel of the Mixer



2 Master Insert Effect units in the Master channel of the Mixer

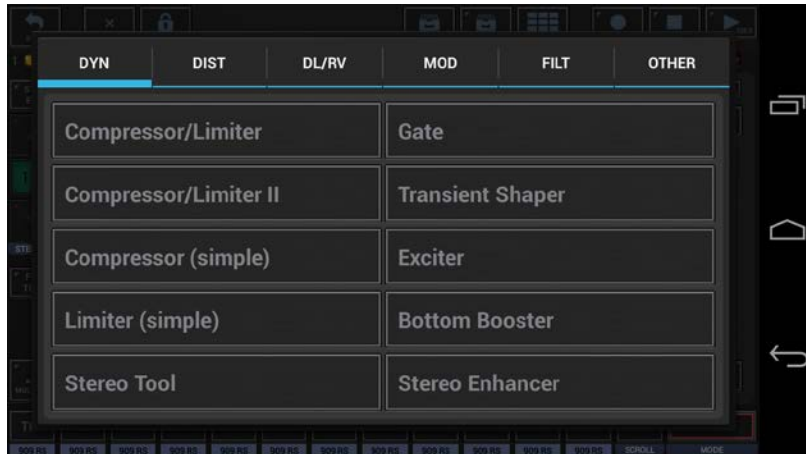


2 per Channel Insert Effect units on the Mixer



10.2 FX Unit

Each unit can load and process one Effect at a time.



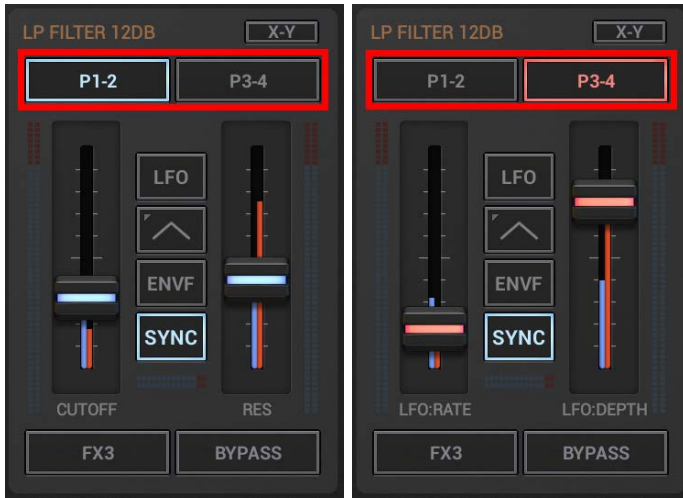
To load an Effect to a particular unit, push the button in the lower left corner of the Effect unit.

Note:

The used Effects can be different for each Pattern, and as a matter of course, you can use the same Effect in multiple units.

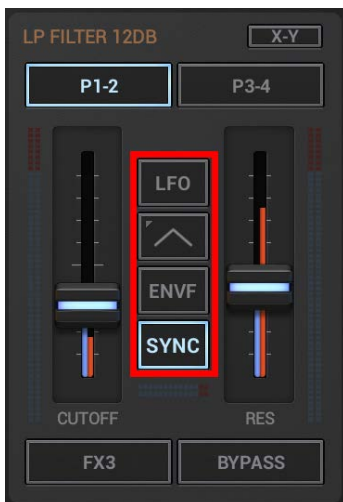
10.2.1 FX Parameters

Each Effect unit provides up to 4 Parameters to control the Effect. The Parameters are located on two Parameter pages.



The name and purpose of the particular Parameters depend on the Effect.

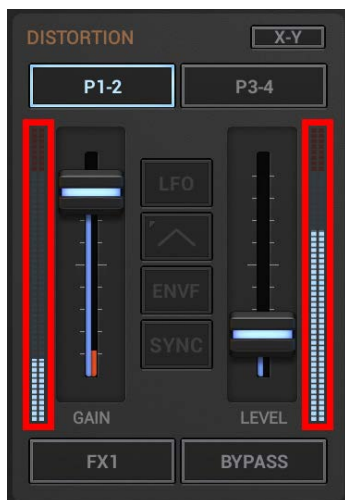
The parameters can either controlled by faders or in use of the X-Y controller.



The button block in the middle is available (full or partial) depending on the Effect Type (see Chapters: FX Types, Effect Reference)

- LFO** : LFO ON/OFF (depending on the FX type)
- Waveform** : Select LFO Waveform (depending on the FX type)
: Long click to invert the Waveform
- Envf** : Envelope Follower ON/OFF (depending on the FX type)
- Sync** : Synchronize Tempo ON/OFF (depending on the FX type)

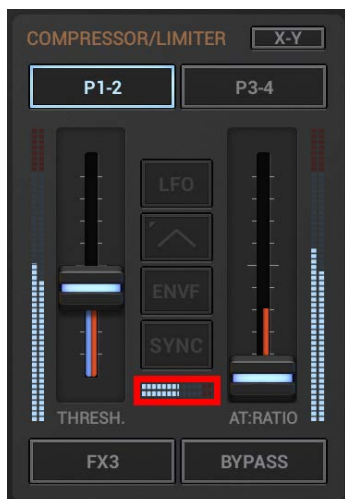
10.2.2 FX VU Meters



Each Effect unit provides two main VU meters:

Left VU: FX Input Signal

Right VU: FX Output signal



Exclusive in the regular FX Chain, Effect Types with Side Chain Support provide one additional VU meter in the middle to monitor the Side Chain signal from FX Input 2. (see Chapter: FX Side Chaining)

Center VU: FX Input 2 Signal

10.3 FX Types

G-Stomper provides a total of 47 different Effect types which can be loaded into the Effect Units.

10.3.1 Main FX Chain Types



The 3 Effect Units in the main FX chain provide the complete set of Effect types:

<p>Dynamic Processors</p>	<p>Compressor/Limiter *sc Compressor/Limiter II *sc Compressor (simple) *sc Limiter (simple) *sc Stereo Tool Gate *sc Transient Shaper *sc Exciter ** Bottom Booster ** Stereo Enhancer **</p>
<p>Distortion Effects</p>	<p>Distortion Overdrive Overdrive II Saturation Bit Crusher Waveshaper Bender Distortion</p>
<p>Delay/Reverb</p>	<p>Stereo Delay * Single X-Delay * Dual X-Delay * LFO X-Delay *, ** Reverb *(pre-delay) Reverb (X-Large) *(pre-delay) Short Delay **</p>

Modulation Effects	<p>Tremolo ** Auto Panner ** Chorus/Flanger ** Phaser ** Static Phaser (no LFO)</p>
Filters	<p>LP Filter 12dB **, *ef, *sc HP Filter 12dB **, *ef, *sc LP Filter 24dB **, *ef, *sc HP Filter 24dB **, *ef, *sc BP Filter 12dB **, *ef, *sc Notch Filter 12dB **, *ef, *sc Moog LP Filter 24dB **, *ef, *sc Moog HP Filter 24dB **, *ef, *sc EQ (1-Band) ** EQ (2-Band)</p>
Other Effects	<p>Single Pitch Shifter Dual Pitch Shifter Granulator Pan/Vol Vocoder A (8-Band) *sc Vocoder B (8-Band) *sc Vocoder C (8-Band) *sc Vocoder D (8-Band) *sc</p>

* Tempo sync

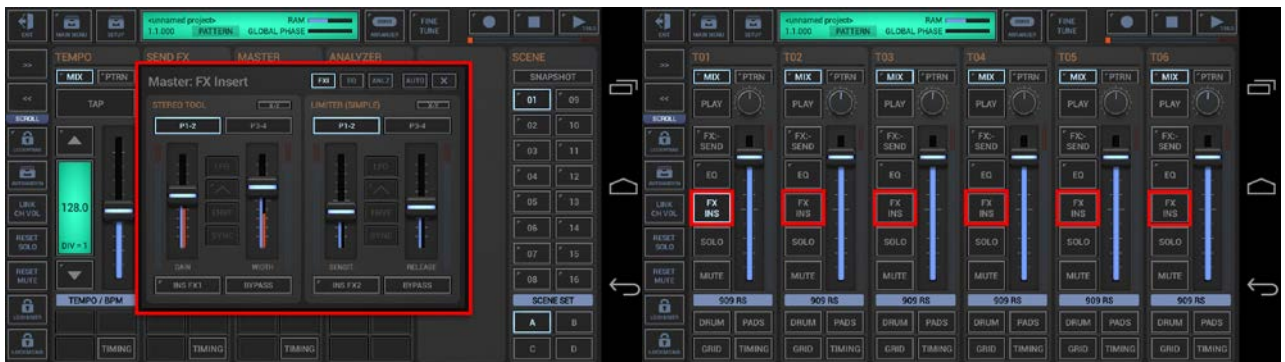
** Tempo synchable LFO

*ef Envelope Follower

*sc Side Chain Support (regular FX Chain, FX1-FX3 only)

(for details about the particular Effects, see Chapter: Effect Reference)

10.3.2 Master Sum/Insert FX and Mixer Channel Insert FX Types



The Sum/Insert FX Units in the Master section and the Mixer per Channel Insert FX Units come without Side-Chain support; therefore the Vocoders are excluded (Vocoders work with Side-Chaining only).

The 2 Sum Effect Units in the Master Section provide the following subset of Effect types:

<p>Dynamic Processors</p>	<p>Compressor/Limiter \neq Compressor/Limiter II \neq Compressor (simple) \neq Limiter (simple) \neq Stereo Tool Gate \neq Transient Shaper \neq Exciter ** Bottom Booster ** Stereo Enhancer **</p>
<p>Distortion Effects</p>	<p>Distortion Overdrive Overdrive II Saturation Bit Crusher Waveshaper Bender Distortion</p>

Delay/Reverb	Stereo Delay * Single X-Delay * Dual X-Delay * LFO X-Delay *, ** Reverb *(pre-delay) Reverb (X-Large) *(pre-delay) Short Delay **
Modulation Effects	Tremolo ** Auto Panner ** Chorus/Flanger ** Phaser ** Static Phaser (no LFO)
Filters	LP Filter 12dB **, *ef, *sc HP Filter 12dB **, *ef, *sc LP Filter 24dB **, *ef, *sc HP Filter 24dB **, *ef, *sc BP Filter 12dB **, *ef, *sc Notch Filter 12dB **, *ef, *sc Moog LP Filter 24dB **, *ef, *sc Moog HP Filter 24dB **, *ef, *sc EQ (1-Band) ** EQ (2-Band)
Other Effects	Single Pitch Shifter Dual Pitch Shifter Granulator Pan/Vol Vocoder A (8-Band) *sc Vocoder B (8-Band) *sc Vocoder C (8-Band) *sc Vocoder D (8-Band) *sc

* Tempo sync

** Tempo synchable LFO

*ef Envelope Follower

*sc Side Chain Support (regular FX Chain, FX1-FX3 only)

(for details about the particular Effects, see Chapter: Effect Reference)

10.4 Main FX Chain

The free assignable Effect units on the FX Edit screen can be freely chained together, to send one or more signals through FX1 and the processed FX1 output through FX2 for example.

Depending on the used App, the location and appearance of the “Chain” controls might be different.

10.4.1.1 G-Stomper Studio, G-Stomper Rhythm, G-Stomper VA-Beast (standalone)



Simply tap the FX Chain button. Each click changes to the next Chain Mode:

Chain Modes:

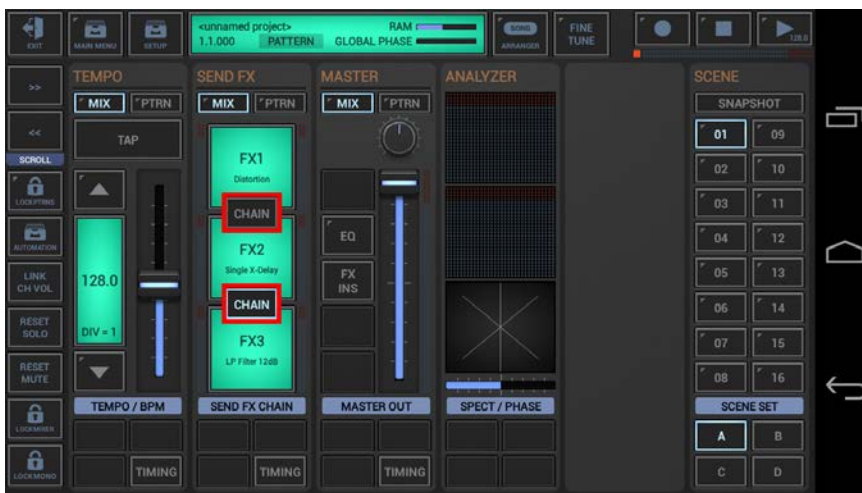
OFF

FX1 : FX2

FX2 : FX3

FX1 : FX2 : FX3

10.4.1.2 G-Stomper Producer



Simply toggle the Chain buttons between the FX Units on or off.

10.5 FX Send

To send an audio signal of a particular Track through one of the free assignable FX1, FX2 or FX3, you can use the FX Send button of the Track.

For the sake of simplicity and for best performance, FX Sends in G-Stomper are technically implemented as Group Inserts. This means, rather than sending a part of the signal to an Effect like in the usual sense of a Send Effect, you're actually sending one or more Mixer Channels to one of the Send FX Groups, FX1, FX2 or FX3. The mixdown of the Group FX1 then gets passed entirely through the FX1 Effect unit.

The reasons why it's handled that way are obvious. G-Stomper provides a huge amount of FX Types. Some are typical Send/Return FX Types like Delay, Reverb, etc. (most of that kind have a dry/wet slider). Then there are typical Insert FX Types like Filters, Distortion, Transient Shaper, Gate, Vocoder, etc. To get these under one hood while keeping the performance under control, the FX have been technically implemented as Group Inserts. We've named them Send FX for easier understanding, 1) because the Groups are entirely hidden in the core of the Main FX Chain and therefore not visible as such, and 2) to clearly differentiate from the Channel Inserts.

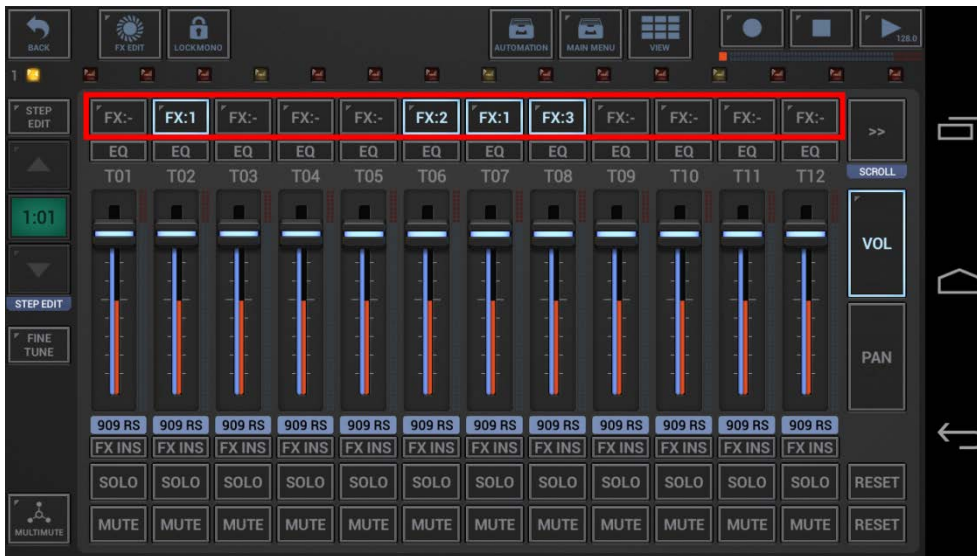
Depending on the used App, the location of the FX Send buttons might be different.

10.5.1.1 G-Stomper Studio, G-Stomper Rhythm, G-Stomper VA-Beast (standalone)

The FX Send in the Toolbar is always related to the selected Track.
Select the desired Track and then assign the FX.



Likewise, you can assign the Send FX on the Mixer where you have an FX Send button for each channel.



Short click : Switch between FX1, FX2 and FX3

Long click : Switch between Input1 and Input2 of the assigned FX

Note:

Input2 is only available on Effects with Side Chain support.
On all other Effects Input2 ignored (routed to Input1)

(for details about Input1 and Input2, see Chapter: FX Side Chaining)

10.5.1.2 G-Stomper Producer

Assign the Send FX on the Mixer where you have an FX Send button for each channel.



Short click : Switch between FX1, FX2 and FX3

Long click : Switch between Input1 and Input2 of the assigned FX

Note:

Input2 is only available on Effects with Side Chain support.

On all other Effects Input2 ignored (routed to Input1)

(for details about Input1 and Input2, see Chapter: FX Side Chaining)

10.6 FX Side Chaining

10.6.1 Side Chaining - Definition

Side Chaining uses the signal level of a secondary input to control the modulation/manipulation (e.g. the compression level) of the main signal.

In case of a Compressor, when the secondary (side chain) signal is stronger, the compressor acts more strongly to reduce output gain. This is used by disc jockeys to lower the music volume automatically when speaking; in this example, the DJ's microphone signal is routed to a stereo compressor's side chain input. The main music signal is routed through compressors main input, so that whenever the DJ speaks, the compressor reduces the volume of the music, a process called ducking.

10.6.2 Side Chaining in G-Stomper

The following Effects in G-Stomper support Side Chaining over FX Input2:

Compressor/Limiter
Compressor/Limiter II
Compressor (simple)
Limiter (simple)
Gate
Transient Shaper
LP Filter 24dB *
LP Filter 12dB *
HP Filter 24dB *
HP Filter 12dB *
BP Filter 12dB *
Notch Filter 12dB *
Moog LP Filter 24dB *
Moog HP Filter 24dB *
Vocoder A (8-Band) **
Vocoder B (8-Band) **
Vocoder C (8-Band) **
Vocoder d (8-Band) **

* In case of the Filters the Side Chain signal controls the Envelope Follower.

** In case of the Vocoders the Input2 is used to provide Carrier (Synth) signal to the Vocoder (while Input1 provides the Modulator (Voice) signal).

By default, when you use the FX Send button to pass a track audio signal to an FX, it uses Input1.

To send a signal to the Input2, long click the FX Send Button.



10.6.3 Compressor/Limiter Example (no Side Chaining)

Without side chaining, the Compressor/Limiter effect reduces the volume of the main input signal (Input1) depending on the main input level. As louder the input signal is as more the reduction.

1. Create a simple kick drum Track (Triggers on step 01, 05, 09, 13; typical straight beat) and send it to the FX unit where you loaded the Compressor/Limiter (route it normal to the default Input1, no Side Chaining).
2. Create a simple Track using a long synthesizer sound and send it to the Compressor/Limiter as well.
3. Adjust the kick drum so that it's louder than the synthesizer signal.
4. With a bit of adjusting on the Compressor/Limiter (on FX Edit screen), you'll hear the typical ducking effect, known from many music productions.

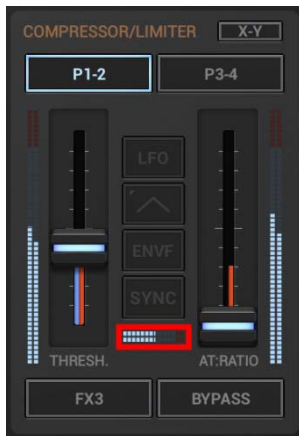
What happens in the Compressor/Limiter is as followed:

The output volume of the Compressor/Limiter is reduced each time the kick drum starts to play, and as soon as the kick drum is over, the volume gets louder again. As a matter of course, this is depending on the settings of the Compressor/Limiter: attack, release, ratio and threshold.

This is sounding nice, but what if you want the ducking effect on the synthesizer (on step 01, 05, 09, 13), but you don't want to hear the kick drum which is controlling the Effect? This can be achieved with Compressor Side Chaining.

10.6.4 Compressor/Limiter with Side Chaining

1. Long click the FX Send of the kick drum Track to send it, still to the Compressor/Limiter, but to Input2 instead of Input1.



Hint: Use the VU Meter in the middle to monitor the Input2 signal.

2. Now you don't hear the kick drum anymore. But it still controls the ducking effect.

This is what Compressor Side Chaining does:

Let a second signal (which is not on the main mix) control the Compression level.

The same can be applied to the Resonant Filters. The only difference is that the side chain signal (Input2) controls the Envelope Follower instead of the Compression level.

Note:

Side Chaining is only possible in the main FX Chain (FX1, FX2 and FX3).

The Master Sum/Insert FX and Channel Insert FX do not allow Side Chaining.

10.6.5 Vocoder Example

A Vocoder (short for voice encoder) is a category of voice codec that analyzes and synthesizes the human voice signal for audio data compression, multiplexing, voice encryption, voice transformation, etc. A vocoder can be used in a wide range of musical genres. What you can pass through a vocoder goes of course far beyond simple voice signals (e.g. drum loops, FX Noise, etc.).

A Vocoder analyses the frequency bands of a Modulator signal (usually Voice) and applies them to the Carrier (Synth) signal.

The Modulator signal (in G-Stomper FX:Input1) is passed through a multiband filter, each band is passed through an Level Analyzer, and the control signals from the Level Analyzers are transmitted to the decoder. The decoder applies these (amplitude) control signals to corresponding filters for re-synthesis.

The Carrier signal on the other hand (in G-Stomper FX:Input2) is passed through the corresponding filters in the decoder, where the frequency Bands of the Modulator get applied.

1. Modulator:

Create a simple Vocal Track (Trigger on step 01) and send it to the FX unit where you loaded the Vocoder A (route it normal to the default Input1, no Side Chaining).

Press Play!

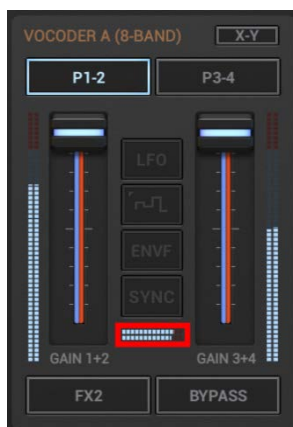
What you hear now is the “vocoded” signal of the Vocal Track.

Since we didn't pass a Carrier signal to Input2 yet, the default Carrier (a static Synth sound) is used instead.

3. Carrier:

Create a simple Track using a long synthesizer sound (ideally Sawtooth or similar) and send it to the Vocoder A as well. It can be a VA-Beast Synthesizer or a Sampler Track, just make sure that the result is a continuously playing Synth Sound. You'll get best results when using a Carrier with large harmonic content.

- Now long click the FX Send of the Synth Track to send it, still to the Vocoder A, but to Input2 instead of Input1.



Hint: Use the VU Meter in the middle to monitor the Input2 signal.

Press Play again!

What you hear now is the “vocoded” signal of the Vocal Track, but in use of the Carrier signal from Input2.

10.7 Effect Reference

10.7.1 Dynamic Processors

10.7.1.1 Compressor/Limiter

Parameter 1: Threshold (-30..-0dB)
Parameter 2: AT:Ratio (1:12..12:1)
Parameter 3: Attack (7..200ms)
Parameter 4: Release (50..500ms)

Input 1: Main Signal
Input 2: Side Chain Signal

10.7.1.2 Compressor/Limiter II

Identical with Compressor/Limiter, but with higher AT:Ratio.

Parameter 1: Threshold (-30..-0dB)
Parameter 2: AT:Ratio (1:20..20:1)
Parameter 3: Attack (7..200ms)
Parameter 4: Release (50..500ms)

Input 1: Main Signal
Input 2: Side Chain Signal

10.7.1.3 Compressor (simple)

Parameter 1: Sensitivity (0..100)
Parameter 2: Attack (7..200ms)
Parameter 3: Release (50..500ms)
Parameter 4: -

Input 1: Main Signal
Input 2: Side Chain Signal

10.7.1.4 Limiter (simple)

Parameter 1: Sensitivity (0..100)
Parameter 2: Release (50..500ms)
Parameter 3: -
Parameter 4: -

Input 1: Main Signal
Input 2: Side Chain Signal

10.7.1.5 Stereo Tool

Stereo Tool provides Mid/Side processing to narrow or widen the Stereo image. It furthermore has a gain control, it lets you invert the phase of one or both channels, you can use the left or right channel instead of the whole Stereo signal or you can swap the Stereo channels.

More details about Mid/Side processing [here](#).

Parameter 1: Gain (0..100)

Parameter 2: Width (0..200%) 0% = Mono / Mid only, 100% = Stereo / Mid+Sides, 200% = Sides only

Parameter 3: CH:Mode (L+R:Stereo, L:Only, R:Only, L+R:Swapped)

Parameter 4: Phase (Normal, L:Inverted, R:Inverted, L+R:Inverted)

Input 1: Main Signal

Input 2: (not available)

10.7.1.6 Gate

Parameter 1: Threshold (-30..-0dB)

Parameter 2: Floor (0..100)

Parameter 3: Attack (1..200ms)

Parameter 4: Release (1..500ms)

Input 1: Main Signal

Input 2: Side Chain Signal

10.7.1.7 Transient Shaper

Parameter 1: Threshold (-30..-0dB)

Parameter 2: Attack:Gain (-100..+100)

Parameter 3: Decay (1..200ms)

Parameter 4: Sustain:Gain (-100..+100)

Input 1: Main Signal

Input 2: Side Chain Signal

10.7.1.8 Exciter

Parameter 1: Tune:HP (1200..9000Hz) only the signal above this frequency gets enhanced

Parameter 2: Drive (0..100)

Parameter 3: LFO:rate (100s..50Hz | 16/1..1/64)

Parameter 4: LFO:depth (0..100)

(LFO assigned to p2:drive)

Input 1: Main Signal

Input 2: (not available)

10.7.1.9 Bottom Booster

Parameter 1: Tune:LP (0..100) only the signal below this frequency gets enhanced

Parameter 2: Drive (0..100)

Parameter 3: LFO:rate (100s..50Hz | 16/1..1/64)

Parameter 4: LFO:depth (0..100)

(LFO assigned to p2:drive)

Input 1: Main Signal

Input 2: (not available)

10.7.1.10 Stereo Enhancer

Parameter 1: L:Delay (0..30ms)

Parameter 2: R:Delay (0..30ms)

Parameter 3: LFO:rate (100s..50Hz | 16/1..1/64)

Parameter 4: HP:Freq (328..8000Hz) only the signal above this frequency gets enhanced

(LFO cycles the stereo room)

Input 1: Main Signal

Input 2: (not available)

10.7.2 Distortion Effects

10.7.2.1 Distortion

Parameter 1: Gain (0..100)
Parameter 2: Level (0..100)
Parameter 3: EQ:Gain (-100..+100)
Parameter 4: EQ:Freq (100..10000Hz)

Input 1: Main Signal
Input 2: (not available)

10.7.2.2 Overdrive

Overdrive Effect with tube characteristics.

Parameter 1: Gain (0..100)
Parameter 2: Level (0..100)
Parameter 3: Amp Model (A-01, A-02)
Parameter 4: -

Input 1: Main Signal
Input 2: (not available)

10.7.2.3 Overdrive II

Overdrive Effect with variable hardness.

With a low hardness value you'll get a soft overdrive effect.

As higher the hardness value as more the output gets distortion characteristics.

Parameter 1: Gain (0..100)
Parameter 2: Level (0..100)
Parameter 3: Hardness (0..100)
Parameter 4: -

Input 1: Main Signal
Input 2: (not available)

10.7.2.4 Saturation

Saturation Effect with tape characteristics.

Parameter 1: Gain (0..100)
Parameter 2: Level (0..100)
Parameter 3: Hardness (0..100)
Parameter 4: -

Input 1: Main Signal
Input 2: (not available)

10.7.2.5 BitCrusher

Parameter 1: Bit-Depth (16..2.58bit)
Parameter 2: SampleRate (44100..500Hz)
Parameter 3: EQ:Gain (-100..+100)
Parameter 4: EQ:Freq (100..10000Hz)

Input 1: Main Signal
Input 2: (not available)

10.7.2.6 Waveshaper

Parameter 1: Gain (0..100)
Parameter 2: Waveform (W-01..W-05)
Parameter 3: EQ:Gain (-100..+100)
Parameter 4: EQ:Freq (100..10000Hz)

Input 1: Main Signal
Input 2: (not available)

10.7.2.7 Bender Distortion

Parameter 1: Gain (0..100)
Parameter 2: Level (0..100)
Parameter 3: EQ:Gain (-100..+100)
Parameter 4: EQ:Freq (100..10000Hz)

Input 1: Main Signal
Input 2: (not available)

10.7.3 Delay/Reverb

10.7.3.1 Stereo Delay

Classic Stereo (Ping Pong) Delay with Delay Time, Feedback, Panorama for the first Tap and Dry/Wet Mix.

Parameter 1: Delay (2..1000ms | 1/64..1/4)

Parameter 2: Feedback (0..100)

Parameter 3: Pan (-100..+100) 1st Tap

Parameter 4: Mix dry/wet (0..100)

Input 1: Main Signal

Input 2: (not available)

10.7.3.2 Single X-Delay

Classic X-Delay (Ping Pong) with Delay Time, Feedback and Dry/Wet Mix. The main difference to the Stereo Delay is that the panorama is given by the input signal rather than being controlled by the Effect.

Parameter 1: Delay (2..1000ms | 1/64..1/4)

Parameter 2: Feedback (0..100)

Parameter 3: Mix dry/wet (0..100)

Parameter 4: -

Input 1: Main Signal

Input 2: (not available)

10.7.3.3 Dual X-Delay

The Dual X-Delay is very similar to the regular Single X-Delay, but with independent Delay Times for each Stereo Channel. Using different times for each Stereo Channel produces very unique results.

Parameter 1: L:Delay (2..1000ms | 1/64..1/4)

Parameter 2: R:Delay (2..1000ms | 1/64..1/4)

Parameter 3: Feedback (0..100)

Parameter 4: Mix dry/wet (0..100)

Input 1: Main Signal

Input 2: (not available)

10.7.3.4 LFO X-Delay

Classic X-Delay Effect, but with an LFO aboard which lets you control the Feedback Parameter.

Parameter 1: Delay (2..1000ms | 1/64..1/4)
Parameter 2: Feedback (0..100)
Parameter 3: LFO:rate (100s..50Hz | 16/1..1/64)
Parameter 4: LFO:depth (0..100)

(LFO assigned to p2:feedback)

Input 1: Main Signal
Input 2: (not available)

10.7.3.5 Reverb

Parameter 1: Time (0..2000ms)
Parameter 2: Mix dry/wet (0..100)
Parameter 3: pre-delay (1..500ms | 1/64..1/8)
Parameter 4: damping (0..100)

Input 1: Main Signal
Input 2: (not available)

10.7.3.6 Reverb (X-Large)

Parameter 1: Time (0..5000ms)
Parameter 2: Mix dry/wet (0..100)
Parameter 3: pre-delay (1..500ms | 1/64..1/8)
Parameter 4: damping (0..100)

Input 1: Main Signal
Input 2: (not available)

10.7.3.7 Short Delay

The Short Delay does (other than regular delays) pitch the existing delay Buffer when changing the Delay Time. This gives some kind of Pitch Shifter characteristics, but in a different way than a regular Pitch Shifter does.

Parameter 1: Delay (2..150ms)
Parameter 2: Feedback (0..100)
Parameter 3: LFO:rate (100s..50Hz | 16/1..1/64)
Parameter 4: LFO:depth (0..100)

(LFO assigned to p2:feedback)

Input 1: Main Signal
Input 2: (not available)

10.7.4 Modulation Effects

10.7.4.1 Tremolo

Parameter 1: Rate (100s..261.63Hz | 16/1..1/64)

Parameter 2: Depth (0..100)

Parameter 3: -

Parameter 4: -

(LFO assigned to the output volume)

Input 1: Main Signal

Input 2: (not available)

10.7.4.2 Auto Panner

Parameter 1: Rate (100s..261.63Hz | 16/1..1/64)

Parameter 2: Depth (0..100)

Parameter 3: -

Parameter 4: -

(LFO assigned to the output panorama)

Input 1: Main Signal

Input 2: (not available)

10.7.4.3 Chorus/Flanger

Parameter 1: Rate (1000s..50Hz | 16/1..1/64)

Parameter 2: Depth (0..100)

Parameter 3: Delay (1..15ms)

Parameter 4: phase invert (ON/OFF)

Input 1: Main Signal

Input 2: (not available)

10.7.4.4 Phaser

Parameter 1: Rate (100s..50Hz | 16/1..1/64)

Parameter 2: Depth (0..100)

Parameter 3: Color (0..100)

Parameter 4: phase invert (ON/OFF)

Input 1: Main Signal

Input 2: (not available)

10.7.4.5 Static Phaser (no LFO)

Parameter 1: Sweep (0..100)

Parameter 2: Depth (0..100)

Parameter 3: Color (0..100)

Parameter 4: phase invert (ON/OFF)

Input 1: Main Signal

Input 2: (not available)

10.7.5 Filters

10.7.5.1 LP Filter 12dB

Parameter 1: Cutoff (0..14000Hz)
Parameter 2: Resonance (0..100)
Parameter 3: LFO:rate (100s..261.63Hz | 16/1..1/64)
Parameter 4: LFO:depth (0..100)

(LFO assigned to p1:cutoff)

Input 1: Main Signal
Input 2: Side Chain Signal (to control the envelope follower)

10.7.5.2 HP Filter 12dB

Parameter 1: Cutoff (0..14000Hz)
Parameter 2: Resonance (0..100)
Parameter 3: LFO:rate (100s..261.63Hz | 16/1..1/64)
Parameter 4: LFO:depth (0..100)

(LFO assigned to p1:cutoff)

Input 1: Main Signal
Input 2: Side Chain Signal (to control the envelope follower)

10.7.5.3 LP Filter 24dB

Parameter 1: Cutoff (0..14000Hz)
Parameter 2: Resonance (0..100)
Parameter 3: LFO:rate (100s..261.63Hz | 16/1..1/64)
Parameter 4: LFO:depth (0..100)

(LFO assigned to p1:cutoff)

Input 1: Main Signal
Input 2: Side Chain Signal (to control the envelope follower)

10.7.5.4 HP Filter 24dB

Parameter 1: Cutoff (0..14000Hz)
Parameter 2: Resonance (0..100)
Parameter 3: LFO:rate (100s..261.63Hz | 16/1..1/64)
Parameter 4: LFO:depth (0..100)

(LFO assigned to p1:cutoff)

Input 1: Main Signal
Input 2: Side Chain Signal (to control the envelope follower)

10.7.5.5 BP Filter 12dB

Parameter 1: Cutoff (0..14000Hz)
Parameter 2: Bandwidth (0..100)
Parameter 3: LFO:rate (100s..261.63Hz | 16/1..1/64)
Parameter 4: LFO:depth (0..100)

(LFO assigned to p1:cutoff)

Input 1: Main Signal
Input 2: Side Chain Signal (to control the envelope follower)

10.7.5.6 Notch Filter 12dB

Parameter 1: Cutoff (0..14000Hz)
Parameter 2: Bandwidth (0..100)
Parameter 3: LFO:rate (100s..261.63Hz | 16/1..1/64)
Parameter 4: LFO:depth (0..100)

(LFO assigned to p1:cutoff)

Input 1: Main Signal
Input 2: Side Chain Signal (to control the envelope follower)

10.7.5.7 Moog LP Filter 24dB

Parameter 1: Cutoff (0..14000Hz)
Parameter 2: Resonance (0..100)
Parameter 3: LFO:rate (100s..261.63Hz | 16/1..1/64)
Parameter 4: LFO:depth (0..100)

(LFO assigned to p1:cutoff)

Input 1: Main Signal
Input 2: Side Chain Signal (to control the envelope follower)

10.7.5.8 Moog HP Filter 24dB

Parameter 1: Cutoff (0..14000Hz)
Parameter 2: Resonance (0..100)
Parameter 3: LFO:rate (100s..261.63Hz | 16/1..1/64)
Parameter 4: LFO:depth (0..100)

(LFO assigned to p1:cutoff)

Input 1: Main Signal
Input 2: Side Chain Signal (to control the envelope follower)

10.7.5.9 EQ (1-Band)

Parameter 1: EQ:Gain (-100..+100)
Parameter 2: EQ:Freq (100..10000Hz)
Parameter 3: LFO:rate 50Hz | 16/1..1/64
Parameter 4: LFO:depth

(LFO assigned to p2:frequency)

Input 1: Main Signal
Input 2: (not available)

10.7.5.10 EQ (2-Band)

Parameter 1: Gain1 (0..100)
Parameter 2: Gain2 (0..100)
Parameter 3: Freq1 (100..10000Hz)
Parameter 4: Freq2 (100..10000Hz)

Input 1: Main Signal
Input 2: (not available)

10.7.6 Other Effects

10.7.6.1 Single Pitch Shifter

Parameter 1: Pitch1 (-12..+12semitones)

Parameter 2: Mix dry/wet (0..100)

Parameter 3: -

Parameter 4: -

Input 1: Main Signal

Input 2: (not available)

10.7.6.2 Dual Pitch Shifter

Parameter 1: Pitch1 (-12..+12semitones)

Parameter 2: Mix dry/wet (0..100)

Parameter 3: Pitch2 (an additional pitch shifter to mix to the wet signal)

Parameter 4: Pitch2:level (0..100)

Input 1: Main Signal

Input 2: (not available)

10.7.6.3 Granulator

Parameter 1: Grain Length (4..50ms)

Parameter 2: Space Length (2..50ms)

Parameter 3: Fade Length (10..50% of the Grain Length)

Parameter 4: Pitch (-12..+12semitones)

Input 1: Main Signal

Input 2: (not available)

10.7.6.4 Pan/Vol

Parameter 1: Pan (-100..+100)

Parameter 2: Vol (0..100)

Parameter 3: -

Parameter 4: -

Input 1: Main Signal

Input 2: (not available)

10.7.6.5 Vocoder A, B, C, D (8-Band)

The controls of Vocoder A, B, C, D are identical, but they vary in the band frequencies, which gives each a unique sound. Which of those will bring the best results depends on the used Modulator and Carrier signal.

Parameter 1: Gain Band 1+2 (0..100)

Parameter 2: Gain Band 3+4 (0..100)

Parameter 3: Gain Band 5+6 (0..100)

Parameter 4: Gain Band 7+8 (0..100)

Input 1: Modulator (Voice) signal

Input 2: Carrier (Synth) signal

If you don't send a Carrier (Synth) signal to input 2 of a Vocoder, then an internal Carrier is generated (static at note C2).

Note:

Please keep in mind, that a Vocoder is in fact much more than a simple effect. An 8-Band Vocoder uses around 20 times more CPU than a regular Band-Pass Filter and around 30 times more than a Delay Effect.