

Cubase 5 Effect Plug-Ins



Cubase • 5X



PC
VERSION

 **steinberg**

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Introduction

This document contains descriptions for the effects which can be found in the Cubase 5 plug-ins subfolder of your VST plug-ins if you chose to install any of these during the Cubase SX installation. Note that some of these plug-ins are duplicates of the standard Cubase SX plug-ins.

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Autopole



The Autopole is a filter effect containing two separate filters capable of operating in four different modes, an Envelope Generator and an LFO with four different waveforms. It also lets you choose between three different signal routing modes to control how an incoming signal should be sent through the filters.

The Autopole should be used as an insert effect. If you wish to apply it on several channels at once, you can use it as an insert effect on a group channel and then route the desired channels to the group channel.

The parameters for the different “sections” of the Autopole are the following:

The Filters

Parameter	Description
Filter Mode buttons (LP, BP, HP, Notch)	<p>These buttons let you decide in which mode the Filter should operate:</p> <p>LP: This is a Low-Pass Filter that “filters out” the high frequency content of the incoming signal, according to a certain set threshold level. Only signals below the threshold will pass through.</p> <p>BP: This is a Band-Pass filter that only lets signals around the set frequency through, filtering out all other content.</p> <p>HP: This is a High-Pass Filter that “filters out” the low frequency content of the incoming signal, according to a certain set threshold level. Only signals above the threshold will pass through.</p> <p>Notch: This is a filter that cuts off the signals around the set frequency, leaving all other content unaffected.</p>
Cutoff	<p>This is used for setting the Cutoff frequency, i.e. the threshold at which the filter should “kick in”. The farther to the right you drag the sliders, the higher the frequency.</p>
Resonance	<p>This affects the resonance of the filter. Increasing the resonance gives a more pronounced, lively filter sound. Be wary of extremely high levels of resonance since they might induce unpleasant distortion.</p>
LFO Mod	<p>These sliders govern how the filter cut-off frequencies are affected by the LFO (see below). The sliders are “zero-centered”, meaning that in the middle position (zero), no LFO modulation will be applied. By dragging the sliders to the left or right, you cause an increasing amount of modulation to the cut-off frequency. The difference is that if you drag the sliders to the left, the waveform of the LFO is inverted, creating a different effect.</p>
EG Mod	<p>These sliders work in conjunction with the Envelope Generator settings (see below). They control to which extent the cut-off frequencies of the filters should be affected by the Envelope Generator. Drag the sliders to the right if you want to raise the cut-off frequencies and if you want to lower the frequencies, drag the sliders to the left. Leave the sliders in the middle position if you don't want Envelope data to affect the cut-off frequencies.</p>

Signal Routing

By clicking one of the three buttons, you choose how an input *stereo* signal will pass through the filters. The signal flow chart to the left of the buttons indicates the path:

- Option # 1 will have the signal from each channel pass through both of the filters in series (one after the other).
- With option # 2, the signal from each channel will pass through both of the filters in parallel, and then be mixed at the output.
- Finally, option # 3 causes the signals from both channels to each pass through a separate filter. I.e. the left signal only passes through Filter A, and the right signal only passes through Filter B.

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- When using the Autopole with mono material, options 1 and 2 are the best choices (sending the signal through the filters in series or in parallel, respectively).**
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Envelope Generator

This section controls how the input signal is converted into Envelope data. This, in its turn, affects the EG Mod sliders in the Filter sections and the Modulation slider in the LFO section:

Parameter	Description
Attack	This regulates how fast the Envelope Generator will respond to an input signal as it rises in sound level. The farther to the left you drag the slider, the faster the response will be.
Release	This governs how fast the Envelope Generator will respond to an input signal as it drops in sound level. The farther to the left you drag the slider, the faster the response will be.

LFO

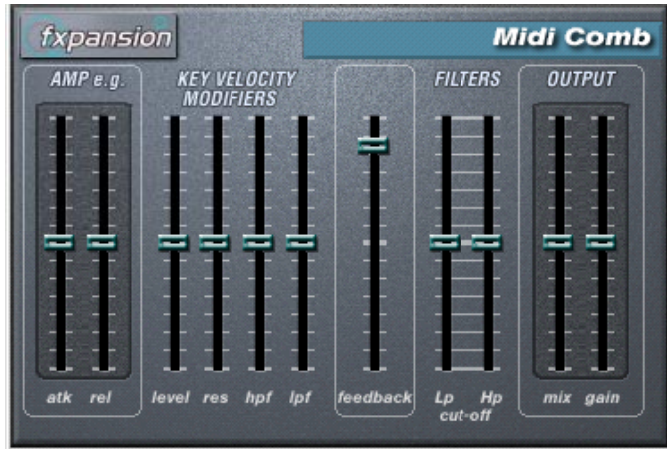
These are the controls for the Low Frequency Oscillator, used for adding continuous filter movement, wah-wah effects, etc:

Parameter	Description
Frequency	This slider controls the speed of the LFO. The farther to the right you drag the slider, the faster the oscillation will be.
Modulation	Use this slider to control how the speed of the LFO should be modulated by the Envelope Generator (and thus by the level of the input signal). If you drag the slider to the left, a loud input signal will cause the LFO to slow down and if you drag to the right, the LFO will speed up. In the middle position, the speed of the LFO is unaffected.
Waveform Buttons	These buttons are used for choosing a waveform for the LFO. You can choose between Square, Sine, Saw and Triangle.

Output Controls

Parameter	Description
Mix	This controls the balance between the output from the Autopole and the input signal. In the middle position, both signals are equally mixed. The higher you drag the slider, the more dominant the effect will be. Conversely, with lower settings the unaffected original signal will be more pronounced.
Gain	This slider regulates the output level from the Autopole. The higher you drag the slider, the higher the level.
Sync	When this is activated, the LFO will restart in intervals according to the current Song tempo, which is useful for tempo sync and special effects. Click the button to activate sync, and then click in the small display to the right to select at which note values the LFO should be restarted: 1/1, 1/2, 1/4, 1/8 or 1/16. For example, setting this to 1/4 will make the LFO restart on each beat (quarter note) according to the current tempo.

MIDI Comb



This is a comb filter, which can be described as one or several very short delays with high feedback, causing resonating peaks at certain frequencies. While the MIDI Comb is used as an insert effect on an audio channel, the signals that actually trigger it are the ones sent from a MIDI track.

Setting Up

The MIDI Comb requires both an audio signal and a MIDI input to function.

To set it up, proceed as follows:

1. Select the audio to be affected by the MIDI Comb.
This can be audio material from any audio track, or even a live audio input routed to a audio track (provided you have a low latency audio card). If a live audio input is used, the track has to be record enabled or in Monitor mode).
2. Select the MIDI Comb as an Insert effect for the audio channel.
Click the Edit button to open the MIDI Comb panel.
3. Select a MIDI track.
This can be an empty MIDI track, or a MIDI track containing data, it doesn't matter. However, if you wish to play the MIDI Comb in real-time – as opposed to having a re-recorded part playing it – the track has to be record enabled or in Monitor mode for the effect to receive the MIDI output.

4. Click in the Output column for the MIDI Track.
The Output pop-up menu appears, with the MIDI Comb as one of the items.
5. Select the MIDI Comb from the Output pop-up menu.
The MIDI Output from the Track is now routed to the MIDI Comb.

What to do next depends on whether you are using live or recorded audio and whether you are using real-time or recorded MIDI. We will assume for the purposes of this manual that you are using recorded audio, and play the MIDI in real-time.

Make sure the MIDI Track is selected and start playback.

6. Now play a few notes on your MIDI keyboard.
As you can hear, the audio track material is affected by what you play on your MIDI keyboard.
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- The MIDI Comb is polyphonic with up to 8 voices, i.e. you can play up to 8 MIDI notes at once and each note will produce a separate resonating tone.**
-

You can now make settings for the MIDI Comb using the following parameters:

Amp e.g.

Parameter	Description
Atk	Use this slider to set the attack time of the resonant tones created by the comb filter – i.e. how soon they will start to resonate after being triggered by MIDI notes. The farther down you drag the slider, the shorter the attack.
Rel	This controls the release time of the resonant tones created by the comb filter – i.e. how soon the sound will be cut off. The farther up you drag the slider, the longer the sound will resonate.

Key Velocity Modifiers

Parameter	Description
Level	This determines how the filter responds to MIDI notes with different velocity values. At the middle setting, all tones produced by the filter will sound at an equal level regardless of the velocity values of the MIDI notes that trigger them. If you move the slider upwards, MIDI notes with higher velocity values will produce louder comb filter tones. Conversely, moving the slider downwards causes the level of the filter tones to increase with lower MIDI note velocities.
Res	This affects the resonance (feedback) of the produced tones depending on the velocity value of the MIDI notes that trigger them. In the middle position, the resonance is unaffected regardless of velocity. By dragging the slider upwards, tones triggered by MIDI notes with a high velocity value will get increased resonance. By dragging the slider downwards, tones triggered by MIDI notes with a low velocity value will become more resonant.
HPF & LPF	The MIDI Comb features both a High-Pass filter and a Low-Pass filter (see "Filters" below) that can be used for "filtering out" certain frequencies of the resonating tones according to a certain set filter cutoff frequency. These two sliders determine how much the High-Pass and Low-Pass filters should be affected by the MIDI note velocity values. Positive values cause higher velocities to increase the effect of the filters, negative values cause higher velocities to decrease the effect.

Feedback

Parameter	Description
Feedback	This slider governs the amount of effect output from the MIDI Comb that is fed back in again. The more effect feedback, the more complex the sound. Drag the slider upwards to increase feedback.

Filters

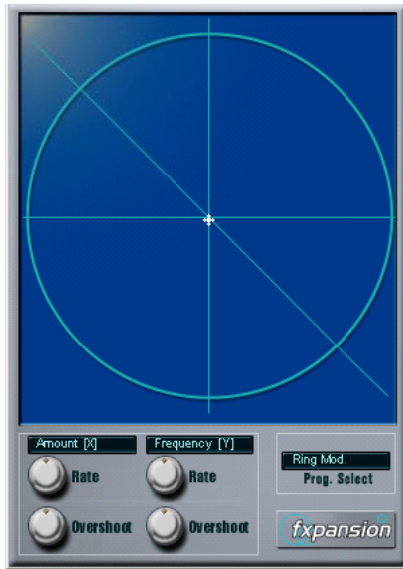
Parameter	Description
LP Cut-off	Use this to set the frequency threshold of the Low-Pass Filter. This filter cuts off all of the high frequencies relative to the set threshold. The farther up you drag the slider, the more of the high frequencies will be allowed to pass through.

Parameter	Description
HP Cut-off	Use this to set the frequency threshold of the High-Pass Filter. This filter cuts off all of the low frequencies relative to the set threshold. The farther down you drag the slider, the more of the low frequencies will be allowed to pass through.

Output

Parameter	Description
Mix	Use this to set the balance between the original, unprocessed signal and the signal affected by the MIDI Comb. In the middle position, they are equally mixed. Drag the slider upwards for a more dominant effect sound and vice versa.
Gain	This controls the output level from the MIDI Comb. Drag the slider upwards to increase the level.

Mysterizer



The Mysterizer is a multi-effect plug-in with a unique hands-on user interface. It can be used as an insert effect or a send effect, and allows you to choose between eight different effects. For each effect, you can control two parameters by clicking and dragging in the display, allowing for continuous real-time effect manipulation, subtle sweeping changes or weird, wild mutations.

Here's how to use the Mysterizer:

1. Play back some audio and route the audio channel through the Mysterizer (either as an insert or a send effect).
2. Open the Mysterizer effect control panel and click the Prog Select field to the right to select the desired effect.
Each time you click, the next effect is selected. For a list of the effects, see below.
3. When you have selected an effect you want to use, the two text fields to the left show you which parameters are controlled on the X-axis and Y-axis respectively.
In the figure above, the Ring Mod effect is selected, with Amount controlled on the X-axis and Frequency on the Y-axis.
4. Click in the display and drag the hair cursor to change the parameter settings.
The X-axis goes from left to right and the Y-axis goes from top to bottom, which means that the “zero setting” for both axes is in the upper left corner of the display.
5. Experiment!

The Rate and Overshoot knobs

When you move the hair cursor, you will see how the small white dot moves to follow your adjustments. This represents the actual parameter settings. The Rate and Overshoot controls at the bottom of the window control how quickly and accurately the white dot follows your movements – in other words how your mouse movements are “interpreted” by the effect.

- The Rate knobs determine how fast the Mysterizer will respond when you move the hair cursor to a new position.
You can make independent settings for the X- and Y-axis.
- The Overshoot knobs determine how far from the “target position” the white dot will be allowed to stray along the corresponding axis when moving the hair cursor.
Moderate settings can give a more natural feel when a parameter is changed. Maximum Overshoot settings (turning the knob all the way to the right) will cause constant movement back and forth along the corresponding axis relative to the target position, because the white dot will never “reach the target” and come to rest. This can create an undulating, LFO-like special effect, the speed and range of which can be controlled with the corresponding Rate knob.

The Effects

The following effects are available:

Effect	Description	X-axis param.	Y-axis param.
Ring Modulator	An effect with which the incoming audio is ring modulated by an internal, variable frequency oscillator, thereby producing new harmonics.	Amount of effect	Frequency of the built-in oscillator
Comb Delay	A delay with high feedback, causing resonating peaks at certain frequencies.	Feedback amount	Manual delay time (pitch) adjustment
Mono Delay	A monaural delay.	Delay feedback	Delay time
Stereo Delay	A stereo delay with which the repeats are heard in both the left and right channels	Delay feedback	Delay time
Low-Pass Filter (LP)	A filter that cuts off high frequencies according to a set frequency threshold. Only signals below the cut-off frequency will be heard.	Filter resonance	Filter cutoff frequency
High-Pass Filter (HP)	A filter that cuts off low frequencies according to a set frequency threshold. Only signals above the cut-off frequency will be heard.	Filter resonance	Filter cutoff frequency
Band-Pass Filter (BP)	A filter that cuts off all frequencies except those around the set cut-off frequency.	Filter resonance	Filter cutoff frequency
Distortion	A standard distortion effect.	Drive amount	Tone control

PhatSync



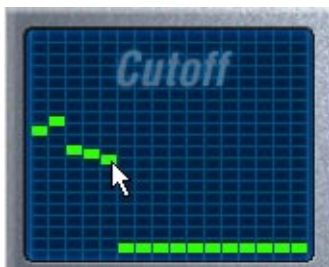
PhatSync is a pattern-controlled multimode filter that can create rhythmic, pulsating filter effects.

General Operation

PhatSync can produce two simultaneous 16-step patterns for the filter cutoff and resonance parameters, synced to the sequencer tempo.

Setting Step Values

- Setting step values is done by clicking in the pattern grid windows. Individual step entries can be freely dragged up or down the vertical axis, or directly set by clicking in an empty grid box. By click-dragging left or right consecutive step entries will be set to the pointer position.



Setting filter cutoff values in the grid window.

- The horizontal axis show the pattern steps 1-16 from left to right, and the vertical axis determines the (relative) filter cutoff frequency and resonance setting.
The higher up on the vertical axis a step value is entered, the higher the relative filter cutoff frequency or filter resonance setting.
- By starting playback and editing the patterns for the cutoff and resonance parameters, you can hear how your filter patterns affect the sound source connected to PhatSync directly.

Selecting New Patterns

- Created patterns are saved with the song, and up to 8 different Cutoff and Resonance patterns can be saved internally.
Both the Cutoff and Resonance patterns are saved together in the 8 Pattern memories.
- To select new patterns you use the Pattern Selector.
New patterns are all set to the same step value by default.



Pattern Selector.

Using Pattern Copy and Paste to create variations

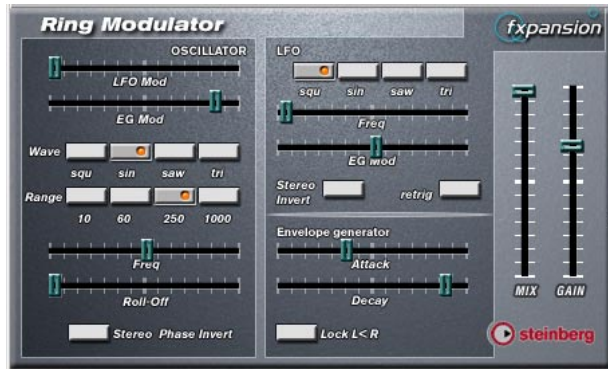
You can use the Copy and Paste buttons below the Pattern selector to copy a pattern to another Pattern memory location, which is useful for creating variations on a pattern.

- Click the Copy button with the pattern you wish to copy selected, then select another Pattern memory location, and click Paste.
The pattern is copied to the new location, and can now be edited to create variations using the original pattern as a starting point.

PhatSync Parameters:

Parameter/Value	Description
Base Cutoff	This sets the base filter cutoff frequency. Cutoff values set in the Cutoff Grid windows are values <i>relative</i> to the Base Cutoff value.
Base Resonance	This sets the base filter resonance. Resonance values set in the Resonance Grid windows are values <i>relative</i> to the Base Resonance value. Note that very high Base Resonance settings can produce loud ringing effects at certain frequencies.
Glide	This will apply glide between the pattern step values, causing values to change more smoothly.
Filter Mode (LP, BP, HP)	This selects between low-pass (LP), bandpass (BP) or high-pass (HP) filter modes.
Sync (1/32, 1/16, 1/8, 1/4)	This sets the pattern beat resolution, i.e. what note values the pattern will play in relation to the tempo.
Mix	Adjusts the mix between dry and processed signal.
Gain	Sets the overall volume.

Ring Modulator



The Ring Modulator can produce complex, bell-like enharmonic sounds. Ring Modulators work by multiplying two audio signals together. The ring modulated output contains added frequencies generated by the sum of, and the difference between, the frequencies of the two signals.

The Ring Modulator has a built-in oscillator that is multiplied with the input signal to produce the effect.

Parameters:

Parameter	Description
Oscillator LFO Mod	LFO Mod controls how much the oscillator frequency is affected by the LFO.
Oscillator EG Mod	EG Mod controls how much the oscillator frequency is affected by the Envelope (which is triggered by the input signal). Positive and negative values can be set, with center position representing no modulation. Left of center, a loud input signal will decrease the oscillator pitch, whereas right of center the oscillator pitch will increase when fed a loud input.
Oscillator Wave	Selects the oscillator waveform; square, sine, saw or triangle.
Oscillator Range	Determines the frequency range of the oscillator in Hz.

Parameter	Description
Freq	Sets the oscillator frequency +/- 2 octaves within the selected range.
Roll-Off	Cuts high frequencies in the oscillator waveform, to soften the overall sound. This is best used when harmonically rich waveforms are selected (e.g. square or saw).
Stereo Phase Invert	Flips the phase of the oscillator waveform on the right channel.
LFO Waveform	Selects the LFO waveform: square, sine, saw or triangle.
LFO Freq	Sets the LFO Speed.
EG Mod	Controls how much the input signal level – via the Envelope Generator – affects the LFO Speed. Positive and negative values can be set, with center position representing no modulation. Left of center, a loud input signal will slow down the LFO, whereas right of center a loud input signal will speed it up.
Stereo Invert	This inverts the LFO waveform for the right channel of the oscillator, which produces a wider stereo perspective for the modulation.
Retrig	Causes the LFO cycle to reset itself at the start of each bar during playback, which can be used for certain LFO effects synced to the tempo.
Envelope Generator	The Envelope Generator section controls how the input signal is converted to envelope data, which can then be used to control oscillator pitch and LFO speed. It has two main controls: Attack sets how fast the EG output level rises in response to a rising input signal. Decay controls how fast the EG output level falls in response to a falling input signal.
Lock L<R	When this switch is enabled, the L and R input signals are merged, and produce the same EG output level for both oscillator channels. When disabled, each channel has its own EG, which affect the two channels of the oscillator independently.
Mix	Adjusts the mix between dry and processed signal.
Gain	Sets the overall volume.

subBASS



The subBASS is a bass synthesizer, that can generate low frequency content and track the pitch from the audio material for deep, sub-sonic bass effects.

The parameters are as follows:

Parameter	Values	Description
Mode	Boost/Divide/ Trigger	Boost produces a warm bass boost to the signal. Divide generates a pitch tracking signal an octave below the input signal. Trigger adds a decaying “boom” produced by an oscillator, typically triggered by a kick drum.
Tune	20-500Hz	This sets the maximum frequency to be affected. Set as low as possible to avoid unwanted distortion. In “Trigger” mode this sets the oscillator frequency.
Drive	0-100	In Boost mode, raising the Drive parameter adds “crunch” to the effect. In Divide mode, increasing Drive to 50% overdrives the sub-octave signal producing a square wave, and increasing Drive to 100% produces a square wave one octave above (i.e. at the original input frequency). In Trigger mode this changes the tone of the oscillator, with higher settings producing a thinner sound.
Tone	0-100	This is a low-pass filter that can be used to change the brightness of the signal. In “Trigger” mode this sets the decay time of the generated oscillator boom.

Parameter	Values	Description
Threshold	-80dB to 0dB	This sets the threshold for the effect. Increase to “gate” the effect and to cut out unwanted background rumble.
Dry Level	0-100	Sets the level of the original, unprocessed signal.
FX Level	0-100	Sets the level of the processed signal.

Distortion

The Distortion effect plug-in is capable of producing anything from a soft “crunch” to all-out distortion. There is a selection of factory presets available. Note that these presets are not stored parameter settings, but different basic distortion algorithms. The basic characters of the distortion preset “models” are indicated by their names. The parameters are as follows:

Parameter	Values	Description
Input	-24dB to 0dB	Sets the Input level.
Output	-24dB to 0dB	Sets the Output level. As distortion generates harmonics, it increases the level of the processed signal. You can use the Output fader to compensate for the level increase.
Shapes	Linear, Non-linear 1, Non-linear 2	The Shape parameter determines how much the input signal is affected by the distortion effect. Non-linear 2 will produce the strongest distortion.
Contour	0-100%	This is a selective low-pass filter, altering the tonal quality of the distortion.
Drive	0-100%	Governs the amount of distortion.
Factory Presets	Soft, Crunchy, Dirty, Wracky, Evil	Select one of five presets, which can be used as they are, or as a basis for further “tweaking”.

Chopper2

Chopper2 is a combined tremolo and autopan effect. It can use different waveforms to modulate the level (tremolo) or left-right stereo position (pan), either using Tempo Sync or manual modulation speed settings.

The parameters are as follows:

Parameter	Values	Description
Input	0-100%	Sets the Input level.
Output	0-100%	Sets the Output level.
Mix	0-100%	Sets the level balance between the dry signal and the effect. If Chopper is used as a send effect, this should be set to maximum as you can instead control the dry/effect balance with the send.
Tempo Sync pop-up	No sync, 1/1 to 1/32, 1/1 to 1/32 Triplet, 1/1 to 1/32 Dotted	When tempo sync is activated (the “Sync” button is lit) clicking the field above the Speed knob opens a pop-up menu, on which you select a note value for tempo-syncing the effect. Note that there is no note value modifier for this effect.
Speed	0-50Hz	When tempo sync is activated (the “Sync” button is lit), this knob selects note values (the same as selecting from the pop-up menu). When tempo sync is deactivated (the “Sync” button is dark), this sets the tremolo/auto-pan speed freely.
Sync button	On/Off	Turns Tempo Sync on or off.
Stereo/Mono button	Stereo/Mono	Determines whether the Chopper will work as an auto-panner (button set to “Stereo”) or a tremolo effect (button set to “Mono”).
Waveform buttons	Sine, Square, Saw, reverse Saw, Triangle	Sets the modulation waveform.
Depth	0-100%	Sets the depth of the Chopper effect.

Reverb

Reverb is used to add ambience and “space” to recordings. The reverb effect features the following parameters:

Parameter	Values	Description
Mix	0-100%	Sets the level balance between the dry signal and the effect. If Reverb is used as a send effect, this should be set to maximum as you can instead control the dry/effect balance with the send.
Roomsize	0-100%	Governs the “size” of the simulated room environment.
Predelay	0-100%	This parameter sets a delay between the direct sound and the reverb effect output. A short predelay before the reverb reduces reverb “clutter” which blurs the sound, and makes the reverb effect more natural-sounding.
Reverb Time	0-100%	This parameter sets the length of the reverb effect.
Damp	0-100%	This parameter “dampens” the higher frequencies, producing a rounder and smoother sounding reverb.

Reverb 32

Reverb 32 is a reverb plug-in which provides smooth, dense reverb effects. Reverb 32 has the following parameters:

Parameter	Values	Description
Mix	Dry/Wet	Sets the level balance between the dry signal and the effect (wet). If Reverb 32 is used as a send effect, this should be set to maximum wet, as you can instead control the dry/wet balance with the send.
Room Size	20-100	This setting determines the "size" of the simulated room environment.
Predelay	0-100ms	This parameter sets a delay between the direct sound and the reverb effect output. A short predelay before the reverb reduces reverb "clutter" which blurs the sound, and makes the reverb effect more natural-sounding.
Reverb Time	0,2s - Forever	This parameter sets the length of the reverb time.
Filter Hi Cut	-15 to 0dB	This filters out high frequencies for the reverb, which can make the reverb sound softer.
Filter Lo Cut	-15 to 0dB	This filters out the lower frequencies for the reverb. It can be used to reduce low frequency "rumble".

Metalizer2

The Metalizer feeds the audio signal through a variable frequency filter, with Tempo sync or time modulation and feedback control.

Parameter	Values	Description
Tempo Sync pop-up	No sync, 1/1 to 1/32, 1/1 to 1/32 Triplet, 1/1 to 1/32 Dotted	When tempo sync is activated (the "Sync" button is lit) clicking the field above the Speed knob opens a pop-up menu, on which you select a note value for tempo-syncing the effect. There is no note value modifier for this effect.
Speed	0-10Hz	When tempo sync is activated (the "Sync" button is lit), this knob selects note values (the same as selecting from the pop-up menu). When tempo sync is deactivated (the "Sync" button is dark), this sets the modulation speed freely.
On button	On/Off	Turns on and off the filter modulation. When turned off, the Metalizer will work as a static filter.
Sync button	On/Off	Turns tempo sync of the modulation on or off.
Stereo/Mono button	Stereo/Mono	Determines whether the output of the Metalizer will be in stereo or mono.
Sharpness	0-100%	Governs the character of the filter effect. The higher the value, the narrower the affected frequency area, producing sharper sound and a more pronounced effect.
Tone	0-100%	Governs the feedback frequency. The effect of this will be more noticeable with high Feedback settings.
Feedback	0-100%	Sets the amount of feedback. Higher values produce a more "metallic" sound.

Tranceformer2

Tranceformer2 is a ring modulator effect, in which the incoming audio is ring modulated by an internal, variable frequency oscillator, producing new harmonics. A second oscillator can be used to modulate the frequency of the first oscillator, synchronized to the Song tempo if you wish.

Parameter	Values	Description
Input	0-100%	Sets the Input level.
Output	0-100%	Sets the Output level.
Mix	0-100%	Sets the level balance between the dry signal and the effect.
Pitch	1 - 5000Hz	Governs the frequency (pitch) of the modulating oscillator.
Tempo Sync pop-up	No sync, 1/1 to 1/32, 1/1 to 1/32 Triplet, 1/1 to 1/32 Dotted	When tempo sync is activated (the “Sync” button is lit) clicking the field above the Speed knob opens a pop-up menu, on which you select a note value for tempo-syncing the effect. There is no note value modifier for this effect.
Speed	0-10Hz	When tempo sync is activated (the “Sync” button is lit), this knob selects note values (the same as selecting from the pop-up menu). When tempo sync is deactivated (the “Sync” button is dark), this sets the modulation speed freely.
On button	On/Off	Turns modulation of the Pitch parameter on or off.
Stereo/Mono button	Stereo/Mono	Governs whether the effect output will be stereo or mono.
Sync button	On/Off	Turns tempo sync of the modulation on or off.
Depth	0-100%	Governs the depth of the pitch modulation.
Waveform buttons	Sine, Square, Saw, reverse Saw, Triangle	Sets the pitch modulation waveform.

Karlette

The Karlette is a four-channel delay, that emulates a “tape-loop” echo. The four “tape-heads” can be set to a certain note value, or a certain time, depending on whether Tempo Sync is activated or not. For each of the four “tape-heads”, you can set the following parameters:

Parameter	Values	Description
Delay	1/32, 1/16, 1/16*, 1/8, 1/4, 1/8*, 1/4, 1/2T, 1/4*, 1/2, 3/4, 1/1 Sync Off: 0 - 2 sec.	With the sync button activated, the delay can be set to a note value synced to the Cubase SX tempo. If the sync button is deactivated, the delay can be freely set to a time value.
Volume	Off to OdB	The amplitude of the delay. With the knob turned all the way to the left, the delay is muted.
Damp	0.000 to 1.000	The higher the value, the more the delay is dampened (the high frequencies are attenuated) to produce a more subtle effect.
Pan	L64/< C >/R64	Sets the stereo position for the delay.
Feedback	0.000 to 1.000	Sets the number of delay repeats.

In addition, the following global parameters are available:

Dry/Wet	0-100%	Sets the level balance between the dry signal and the effect. If Karlette is used as a send effect, this should be set to maximum as you can instead control the dry/effect balance with the send.
Sync	On/Off	Turns Tempo Sync on or off.