



***VENGEANCE***

**Vengeance Producer Suite**

**Essential FX Bundle**

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# Introduction

Dear Customer,

Thank you for choosing the “Vengeance Producer Suite – Essential FX Bundle” (hereafter called the “EFX bundle”). With this collection, you now own some of the most efficient effects plug-ins available, tools which should serve you well in any production situation. To make full use of all the available functions, we recommend that you read this manual thoroughly.

Here’s wishing you lots of fun and success with your new EFX Bundle!

the **Vengeance Sound** team



An overview of all EFX bundle plug-ins!



# Installation

## Installation eLicenser

First off, make sure that you have a Steinberg Key (also called Syncrosoft / eLicenser Dongle) plugged into one of your PC's USB ports.

The Dongle can be ordered relatively cheaply, e.g. from:  
[www.steinberg.net/en/products/accessories/usb\\_licenser.html](http://www.steinberg.net/en/products/accessories/usb_licenser.html)  
The Dongle serves as copyright protection for the software.

The corresponding software (eLicenser Control Center, or LCC) can be found here:  
[www.licenser.net](http://www.licenser.net)

Please ensure that you have downloaded and installed the latest LCC version.

Immediately upon confirmation of your EFX bundle order, you should receive your Dongle license per email. Then simply activate the license in the LCC (Internet connection required).

## Installation (Windows)

Simply start VPSFX.exe and install the plug-in in your sequencer's "Plugins" folder.  
Follow further instructions on the screen.

The plug-in should be selectable the next time you start your sequencer.

## Installation (Mac)

Unpack the data VPS EFX Installer.zip and then start VPSEFX.pkg"  
Follow the instructions on the screen.

The default path for the VST Version is: ~/Library/Audio/Plug-Ins/VST  
The default path for the VST3 Version is: ~/Library/Audio/Plug-Ins/VST3  
The default path for the AU Version is: ~/Library/Audio/Plug-Ins/Components  
The default path for the RTAS Version is: ~/Library/Application Support/Digidesign/Plug-Ins

Following installation, please check whether it contains all EFX bundle data.  
The plug-in will then appear for selection the next time your start your sequencer.



## What is the VPS Essential FX Bundle?

The Vengeance Producer Suite - Essential FX Bundle is a collection of 15 useful effect plug-ins required in almost every production imaginable. The bundle includes dynamic effects (Compressor, Limiter, EQ, Clip Distortion, Multiband Distortion), modulation effects (Chorus, Flanger, Phaser, Multi Mod), delay and reverb (Impulse, Delay, Trash Verb, Gated Reverb) as well as such special effects as Stereo Matrix and Bitcrusher. The effects can be hosted by any music sequencer on the market (VST, AU, RTAS) and are available in 32Bit as well as 64Bit.

## Common Operating Elements

The following controls and options are included in almost every EFX bundle plug-in:

**Mix:** Ratio from dry (original signal) to wet (effect signal). A 0% value corresponds to the unaltered original signal. Values from 1-50% add the effect signal to the original signal. Values over 50% reduce the level of the original signal without lowering the volume of the effect signal. At 100% only the pure effect signal is audible, with no trace of the original signal.

**Input Gain:** The input level should remain below 0dB, or better still it should remain around -6dB to allow the effect plenty of headroom.

**Output Gain:** Main level. If the signal starts distorting (clipping) and the level is above 0dB, you can switch on the integrated limiter (a button in the upper bar) to restrict the maximum level to 0dB.

**Cog symbol:** A button located in the lower right hand corner. Clicking the cog symbol takes you to the System Page, where you can change the preset library path as well as specify limiter settings.

**Preset Browser:** Click on the field labelled “Preset” to open the menu for direct selection. You can also cycle through presets using the left/right arrows. Note: the correct preset folder must be entered in the System Page before it will appear. Some presets can be saved by clicking on the rectangular File symbol (Save Preset as). Should you unintentionally delete or overwrite a factory preset, or no factory presets appear in the list, this is where you can also **Restore Factory Presets**.

**Data:** The wide field at the bottom of each plug-in window displays relevant information/values while you are editing parameters.



## The Individual Effects

### Equalizer (EQ)

The Equalizer raises or lowers certain frequency ranges. Per band, you can select one of 3 different types: Peak, Low/Hi Shelf, Low/Hi Cut. The settings for Frequency, Gain and Width (Q-factor) can be specified either directly within the graphic editor, or by entering a numeric value.



Vengeance Producer Suite – Essential FX Bundle – Equalizer

**Freq:** Frequency of the corresponding band in Hertz

**Width:** Width of the corresponding band. Also called Q-factor or resonance.

**Gain:** Level (in dB) of the corresponding band

**Type:** Filter type. The following options are available:

- Peak: the most common type, used to raise or lower a region around the specified frequency. The extent of this region is determined by the Width value.
- Highpass: As its name suggests, all parts of the signal above the specified frequency are passed through, while those below are removed.
- Lowpass: The opposite of Highpass: all parts of the signal below the specified frequency are passed through, while those above are removed.
- High Shelf: An entire range above the specified frequency is raised/lowered according to the Gain factor, while the rest of the signal remains unchanged.
- Low Shelf: The opposite of High Shelf: the entire range below the specified frequency is raised/lowered according to the Gain factor, while the rest of the signal remains unchanged.



## Chorus

This effect thickens the audio material and gives it “body”, extra movement and stereo width. In principle, a Chorus adds multiple copies of the original signal, which are delayed as well as modulated in pitch (Rate, Depth). The chorus effect is ideally suited for “Lead” sounds.



Vengeance Producer Suite – Essential FX Bundle – Chorus

**Time:** Determines the actual delay of the chorus signal to the original signal

**Speed:** Indicates the speed of the LFO's chorus signal

**Stages:** The number of chorus effects / copies of the original signal are set here

**Offset:** Delay offset between stages, for tonal diversity

**Depth:** The depth of the chorus signal's pitch modulation LFO

## Delay

Arguably the most often used type of effect. Delay units add rhythmic echoes to the original signal. The VPS Delay offers a series of unique functions and delay types: Mono, Stereo, PingPong (left/right) and pattern delays (rhythmic L/R patterns). The Ghost Q control makes the fading echoes sound increasingly brighter, with a resonant whistling feedback at maximum. The modulation control (Mod) adds Vibrato to the delays (thus avoiding the flanging effects of stacked delays). The LoFi control effectively mangles individual echoes in one of two ways: turned to the left, it reduces the bit-depth; to the right, it reduces the sample rate.



Vengeance Producer Suite – Essential FX Bundle – Delay

**Type:** Here you can change the delay type: Mono, Stereo, PingPong (L/R) or specific patterns

**Time:** This setting goes hand in hand with the selected type. You can set the time of the delay or the rhythm (in Pattern Mode)

**Kill FB:** A small but useful “Panic” button that immediately empties the buffer, effectively stopping all delays. Especially useful when working with high feedback values!

**Feedback:** The delayed signal is fed back into the input, which increases the number of repetitions. High values mean that the delay is virtually endless.

**Bitcrusher<->Rate:** Turning the control to the left adds a bit-crusher effect. Turning it to the right activates a rate-reducer effect. Excellent for Tape (Bit) as well as LoFi (Rate) effects.

**Modulate:** Pitch modulation (vibrato) of the delay signals, making the delay effect smoother by minimizing unwanted flanger-type artefacts caused by stacked delays.

**Ghost Q:** A filter effect, which successively narrows the frequency range with every repetition, resulting in resonances with sharper delays. Only noticeable with some feedback, of course.

**Filter Bar:** The left control sets the frequency of the highpass filter, the right control sets the frequency of the lowpass filter within a range of 20Hz (far left) to 16kHz (far right).

## Flanger

The Flanger is related to the Chorus effect, but the significantly shorter delays cause heavy **phase cancellations** for a roaring, highly animated sound. This effect can be further enhanced via the Feedback control, which can even lead to an aggressive whistling effect.



Vengeance Producer Suite – Essential FX Bundle – Flanger

**Speed:** This determines the rate of the pitch modulation LFO

**Feedback:** Feedback effectively strengthens the flanging effect. The flanger sounds more aggressive and starts whistling at higher values

**Depth:** The amount of LFO pitch modulation

**Phase Feedback:** Switch this on to invert the phase of the feedback signal

**Phase Output:** Switch this on to invert the phase of the effect output

**Time:** Sets a delay for the flanger relative to the original track. Lower values can enhance the “roaring” effect, while higher values preserve a milder chorus/unison character

**Spread:** This determines the flanger’s stereo width.

## Phaser

Like the Flanger, the Phaser also works with phase cancellations. In the Phaser, however, the cancellations and peaks in the frequency spectrum are not caused by a delay, but by a filter. The frequencies can be periodically modulated. The “Stages” determine how many notches (Combs) occur in the frequency spectrum. More stages result in a “heavier”, richer sound.



Vengeance Producer Suite – Essential FX Bundle – Phaser

**Speed:** Here you can set the rate of the phasing effect

**Feedback:** Feedback effectively strengthens the phasing effect. The phaser sounds more aggressive and starts whistling at higher values

**Depth:** Higher values cause the phaser to affect a wider range of frequencies

**Stages:** Determines the phaser’s number of notches (combs). For a more subtle effect, use smaller values. If the phaser is to sound big and powerful, use higher values

**Spread:** This determines the phaser’s stereo width

**Filter Bar:** The left control sets the frequency of the highpass filter, the right control sets the frequency of the lowpass filter within a range of 20Hz (far left) to 16kHz (far right).



## Distortion

The EFX Bundle offers Clip Distortion for simple signal **distortion**. High signal peaks above 0db are immediately cropped, producing additional harmonics. Make sure you compensate any resulting boost in volume by lowering the Output Gain.



Vengeance Producer Suite – Essential FX Bundle – Clip Distortion

**Level:** This determines the actual degree of distortion. The signal level is effectively moved towards the 0dB mark, at which point it is simply clipped (Clip Distortion). Additional harmonics are produced due to the resulting angular curves.

**Mix:** Balances the clipped signal with the original dry signal

**Gain:** Use this to compensate for boosts in volume caused by higher Level values. Should it be necessary to further reduce the volume, you can turn the Gain down a bit (increasing the volume is also possible, of course).



## Multiband Distortion

A similar effect to Clip Distortion, but with up to 3 separate distortions, each affecting specified frequency ranges. For instance, you can distort only the low bass frequencies, leaving the higher frequencies unaffected – or vice versa.



Vengeance Producer Suite – Essential FX Bundle – Multiband Distortion

**Distortion B1, B2, B3:** These controls determine the degree of distortion for each frequency band: the higher the value, the more harmonics are generated and the sound becomes more distorted.

Band 1 is for bass frequencies, Band 2 is for mid frequencies and Band 3 is for high frequencies.

**Band Gain:** Alternatively, volume levels can be set using the graphic panels by dragging the horizontal bars up or down with the mouse. The middle (0) position means no change. Dragging the band downwards makes it softer, upwards makes it stronger. These volume controls are post-effect.

**Band Freq:** Similarly, the frequency range of individual bands can be adjusted by moving the yellow, vertical dividing lines.

**M/S (mute/solo):** These buttons let you solo/mute individual bands.



## Trash Verb

This reverb is anything but natural – it sounds metallic, artificial, it “shatters”. So Trashverb is perfect for LoFi effects and wherever a subtle, natural-sounding space is definitely **not** required!



Vengeance Producer Suite – Essential FX Bundle – Trash Verb

**Time:** Determines the length of the reverb tail

**Stereo Width:** This control lets you vary the stereo width of the room

**Pre Delay:** This controls the length of delay after which the reverb effect is applied. It can be used rhythmically (reverb appears in between the beats) or for artificially enlarging the size of the room.

**Damp:** If the reverb is too bright, you can use this control to tame the high frequencies.

**Color:** A highpass filter applied to the reverb signal – unwanted bass frequencies can be filtered out

**Modulate:** An artificial chorus effect causes the reverb to sound less metallic. If set carefully, even smooth reverb is possible in Trash Verb.



## Gated Reverb

A “bouncing” reverb **effect**. The distance from the source track can be adjusted in note values: a setting of 1/8 results in the reverb of a bass drum bouncing up on the offbeat (range between two bass drums, or beat number 3). Techno music at the turn of the millennium made lavish use of this effect.



Vengeance Producer Suite – Essential FX Bundle – Gated Reverb

**Damp:** The gated reverb signal can be suppressed with this control, resulting in a dramatic “snapping” sound at 100%. At 0%, the reverb sounds cleaner and brighter;

**Color:** Add some character to the reverb sound e.g. by turning down the bass frequencies

**Time:** The most important control, this determines the beat where the gated reverb happens. For instance, a value of 1/8 means that the reverb sits precisely on the “offbeat” and will always be heard between two bass drum hits. This is the most common setting, as used in countless dance tracks of the last decade. Triplet values e.g. 1/4T are also possible (for shuffle beats etc.).



## Multi Mod

This plugin offers four related effects: **Ring Modulation**, **Autopan** and two **FM Modulation** modes. Ring modulation involves a very rapid amplitude (volume) modulation that can go so far as to create “robot” vocal sounds. Autopan mode replaces simple volume modulation with L/R panning. The two FM modes offer frequency modulation, capable of extremely “trashy” aggressive sounds. The FM mode “Nasty” has an even broader range as well as extra stereo width.



Vengeance Producer Suite – Essential FX Bundle – Multi Mod

**Mode:** Lets you choose between the two modulation modes described above

**Rate:** This determines the modulation speed

**Strength:** This determines the intensity (depth) of modulation

**LFO->Rate:** Determines how much the Rate is modulated by Multi Mod’s LFO

**LFO ->Strength:** Determines how much the Strength is modulated by the LFO

**LFO Rate:** This is where you set the LFO speed

**LFO Phase:** Determines the LFO phase (position within the wave). Useful for setting a specific starting point

**Sync:** The LFO can optionally be synchronised to song tempo / BPM

**LFO Shape:** Selects the LFO’s waveform



## Compressor

This **compresses** the signal, meaning that it makes loud signals that cross a certain threshold quieter, by a user-defined factor/ratio. A ratio of 2:1 means that the compressor will reduce the part of the signal exceeding the threshold by a factor of 2. The “Attack” time determines the compressor’s start-up delay, so percussive transients can pass through uncompressed. The “Release” time determines how slowly the signal level rises after being compressed.



Vengeance Producer Suite – Essential FX Bundle – Compressor

**Attack:** Attack determines how quickly the compressor reacts to loud transients. Longer attacks allow percussive transients to pass through before the level is clamped down i.e. compressed.

**Release:** This parameter controls how quickly the compressor returns the volume to its original level after being lowered. Setting the release to minimum (0) activates “Auto” mode: the release time then becomes dynamic, it follows the gain reduction – the higher the gain reduction, the longer the release time). Very short Release values can cause fluttering, but carefully set, fairly fast release yields the greatest perceived volume.

**Ratio:** This is where you set the compression ratio. For instance, a ratio of 2:1 means that the compressor will attenuate (reduce) the part of the signal exceeding the threshold by a factor of 2.

**Autogain:** If this control is switched on, the compressor will try to counteract the loss of overall volume due to compression, so you will hear the signal almost as loud as if it were dry, but more strongly compressed.

**Threshold:** This fader determines the level at which the compressor starts to kick in. Any transients in the signal exceeding this value will be compressed according to the specified Ratio.



## Limiter

The Limiter is basically a compressor with a ratio of infinity and an attack of 0. It is implemented as a so-called a **Brickwall Limiter**, as no signal above 0db is allowed through. This effect is perfect for preventing clipping (distortion) due to very high peaks. Tip: Each effect in the EFX Bundle has its own output limiter to prevent the clipping often caused by “overly adventurous” editing (e.g. extreme use of EQ etc.).



Vengeance Producer Suite – Essential FX Bundle – Limiter

**Release:** This parameter controls how quickly the Limiter returns the volume to its original level after being lowered. Setting the Release to minimum (0) activates “Auto” mode: the release time then becomes dynamic, it follows the gain reduction – the higher the gain reduction, the longer the release time). Very short Release values can cause fluttering, but carefully set, fairly fast release yields the greatest perceived volume.

**Gain Reduction:** This indicator displays the gain reduction in realtime. Normal values range between -3 and -6dB. If the reduction reaches -12, this means that the limiter is doing a lot of work!

## Bitcrusher

Use the Bitcrusher plugin to mangle your signal **quality** (LoFi effect) in two ways: you can reduce the signal's bit-depth as well as its sample rate. Bit-crushing is a very popular, modern effect.



Vengeance Producer Suite – Essential FX Bundle – Bitcrusher

**Bit:** This control determines the bit depth of the effect signal. Low bit depths lead to signal noise and ultimately to extreme distortion. Should the signal break off entirely, you should increase the input gain (as the signal is too quiet to be represented by only a few bits).

**Rate:** This reduces the sample rate, a well known effect in old computer games (which were not only 8-bit, but also had a very low sample rate). This effect, one of most widely used in modern dance music, is excellent for adding digital “dirt” to drum loops, vocals or even bass lines.



## Stereo Matrix

This plug-in gives you comprehensive control over the **Stereo Field** using the “Haas effect”. The two upper controls delay the left and right within a range of a few milliseconds. The Mono Level and Stereo Level controls let you individually balance the mono and stereo portions of the signal.



Vengeance Producer Suite – Essential FX Bundle – Stereo Matrix

**Delay Left:** This is a delay (in milliseconds) applied to the left channel. Certain values can cause total phase cancellation in mono monitoring situations, so please take care to avoid this!

**Delay Right:** This is a delay (in milliseconds) applied to the right channel

**Mono Level:** Stereo Matrix has an M/S matrix i.e. it isolates the mono and stereo portions of a signal. The Mono Level control determines the volume of the mono portion

**Stereo Level:** This controls the volume of the stereo portion. High values introduce more stereo width while retaining 100% phase neutrality.



## Impulse

This is a very powerful **Convolution Reverb** plug-in, the reverb of a real space or processor can be simulated 1:1. This simulation is achieved by recording an impulse response (a very short, percussive sound) in the original “space” and importing the resulting .WAV file as an “impulse”. Simply pressing the Load Button lets you import existing .WAV files: an extensive library of excellent reverb impulses is already preinstalled. The reverb signal can be processed further, for instance you can extend or reduce the stereo width, pitch the reverb signal (longer or shorter), add pre-delay, or draw your own volume envelope using the graphic display.



Vengeance Producer Suite – Essential FX Bundle – Impulse

**Load Impulse:** This button lets you import your own impulse responses. For dramatic effects, you should try out various other sources such as effect sweeps, percussion sounds etc..

**Gain:** If an impulse response is distorting because it is too loud or is too soft to create a strong effect, you should adjust the level here

**Pitch:** This determines the pitch of the impulse response. Use this to prolong, shorten, or damp the reverb, or to give it more treble;

**Mono/Stereo Level:** Similar to the stereo matrix plug-in, here you can separately set the mono and stereo parts, in order to widen or narrow the reverb in the stereo field.

**Pre Delay:** This determines the delay of the reverb effects. Higher pre-delay times produce the impression of even greater ambience.

**Filter Bar:** The filter bar lets you colour the reverb by taking out the bass or treble, or both simultaneously. The left control sets the cutoff of a highpass filter (reduces **low** frequencies), the right control sets the cutoff of a lowpass filter (reduces **high** frequencies). The bar corresponds to the entire audible frequency spectrum from 20Hz to 16kHz.



## Practical Tips:

### Right Click, Context Menus

Whenever possible, check to see whether a right click (mouse button) will open a context menu. Many areas of our plug-ins give you access to additional parameters by right-clicking and then selecting an option from the context menu.

### The Centre Mouse Button

Practically every element of the EFX Bundle – control, envelope curve, fader, or number field – can be reset to its default value by clicking on the centre mouse button (Mac: Ctrl+click).

### Turning the Control (fine)

Left click + hold, then moving the mouse lets you turn a control – as everyone knows. Less well-known is that using the right mouse button instead of the left adjusts the control with a much higher resolution i.e. more finely than with the left. This is ideal for the fine adjustment of the more important parameters.

### Effects as Send Effects

Effects such as reverb, delay or chorus are appropriate for immediate use as “send effects”: you only need to open the effect (e.g. a reverb) once and can send every track of your project through this same reverb. This saves CPU significantly and keeps the overall routing structure clear. For information about setting up a send effect, please refer to your sequencer program’s documentation.

### Output Limiter

We recommend using the output limiter, which every single plugin has built in. You can find it on the upper menu bar. You can just switch it on by pressing the “Limiter” button. If it’s yellow, the limiter is active. It prevents any clipping that may occur, so you always have a smooth signal, no matter how “hot” your signal is. For additional settings for the limiter, just go to the “System Page” by pressing the gear wheel at the lower right corner of the plugins.



## Tips and new Features per Update

We intend to continually improve and expand the **Vengeance Producer Suite – Essential FX Bundle** with new updates and functions. As soon as new features become available, they will be explained in this section.

## Changes

v1.00 (December 2012): Official Release

Please download updates when available from [www.vengeance-sound.com/plugins/updates](http://www.vengeance-sound.com/plugins/updates)

## Support & Contact

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