Voxengo OldSkoolVerb Plus User Guide

Version 1.6

https://www.voxengo.com/product/oldskoolverbplus/

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Introduction

OldSkoolVerb Plus is an algorithmic reverberation plug-in for professional music production applications. This plug-in is an extended version of the free OldSkoolVerb plug-in. OldSkoolVerb Plus plug-in implements a kind of "classic" stereo reverb algorithm which is technically simple yet optimal. It produces a very clear spatial image that blends well with the mix.

OldSkoolVerb Plus offers you a comprehensive set of parameters permitting you to achieve various reverbs ranging from plate reverb to room reverb to hall reverb sound. OldSkoolVerb Plus is suited for all kinds of sounds: both percussive, hard-attack sounds like drums and picked guitars, and soft-attack sounds like vocals, piano, and pad sounds.

In comparison to freeware OldSkoolVerb plug-in, the Plus version features an additional spatialization module which provides additional control over reverb's spatial image and greatly increases reverb's density. However, the sound may have a "resonant" or "metallic" edge to it.

Features

- Plate, room, and hall reverbs
- 5 reverb modes
- Reverb mode editor
- Spatialization module
- Stereo processing
- Preset manager
- Undo/redo history
- A/B comparisons
- Contextual hint messages
- All sample rates support
- Zero processing latency

Compatibility

This audio plug-in can be loaded into any audio host application that conforms to the AAX, AudioUnit, VST, or VST3 plug-in specification.

This plug-in is compatible with Windows (32- and 64-bit Windows XP, Vista, 7, 8, 10 and later versions, if not announced otherwise) and macOS (10.11 and later versions, if not announced otherwise, 64-bit Intel and Apple Silicon processor-based) computers (2.5 GHz dual-core or faster processor with at least 4 GB of system RAM required). A separate binary distribution file is available for each target computer platform and audio plug-in specification.

User Interface Elements

Note: All Voxengo plug-ins feature a highly consistent user interface. Most interface elements (buttons, labels) located at the top of the user interface are the same in all Voxengo plug-ins. For an in-depth description of these and other standard features, and user interface elements, please refer to the "Voxengo Primary User Guide".

Character

This group of knobs affects reverb's subjective spatial image.

The "Pre-Delay" parameter specifies reverb's pre-delay time (in milliseconds). Imitates distance from the listener to the performer. Lower values produce denser early reflections.

The "Space" parameter specifies imaginary time (in milliseconds) between reflections: this effectively specifies room's dimensions. Extremely low values produce "plate reverb" sound and a denser reverb tail. Higher values produce hall reverb sound and a sparser reverb tail. Higher values also produce a more spacious, "transparent" reverb sound, suitable for application over the full mix.

The "Time" parameter specifies reverb's RT60 time (in milliseconds), the time it takes for the reverb loudness to fall down by 60 decibel. This parameter models both room's size and overall damping. The actual time can be lower depending on reverb damping settings.

The "Width" parameter specifies reverb's width (in percent). This parameter imitates room's width at listener's position.

Note that when applying reverb to percussive sounds it may be beneficial to use lower "Pre-Delay" and "Space" values to reduce roaring and produce a denser reverb sound. "Plate" reverb parameters will probably work best on drums while room and hall reverb parameters are best used on vocals and similar non-percussive sound material.

The "Mode" selector selects reverb algorithm's parameters.

Reverb Mode Editor

This editor allows you to change reverb algorithm's parameters.

The "Op Count" parameter selects the number of operators used by the reverb algorithm. The higher the "Op Count" parameter is, the denser the reverb will be, but at the cost of an increased CPU load.

The "Vol Ramp" parameter affects the overall reverb's spatialization. Positive values produce reversed reverb.

The "Delay Ramp" parameter affects reverb's pre-delay spatialization.

The "Length Ramp" parameter affects reverb's density.

The "Cross-Gain" parameter affects reverb's stereo width perception. This parameter controls the bleed between channels, in decibel.

The “Makeup Gain” parameter adjusts the overall reverb’s loudness, in decibel.

The “Ramp Type” parameter adjusts the internal behavior of all “Ramp” parameters.

Damping

Parameters of this group adjust room’s material damping qualities.

The “Damp Lo” parameter adjusts room’s low damping corner frequency (in Hertz).

The “Damp Hi” parameter adjusts room’s high damping corner frequency (in Hertz). This parameter can be set to lower values to reduce “roaring” of the reverb sound.

EQ

These parameters apply 3-band equalization to the resulting reverb sound. You may reduce the higher frequency band to further reduce “roaring” of the reverb sound.

Spatial Mode Editor

This editor allows you to subtly control the overall spatial impression of the reverb. This module is functionally similar to Voxengo Spatifier plug-in. Spatialization time is defined individually for a range of frequencies.

You may hold the right mouse button on the view to enable the “drawing” mode which allows you to quickly draw a sketch of the required curve. Note that when processing “rough” sounds like overdriven guitars setting the spatial time to low values may produce “flanging” or metallic sound.

Increasing the spatial time at lower frequencies tends to increase the early reflections feel or “boxiness”. Increasing the spatial time at higher frequencies tends to increase the impression of depth.

The “Impression” switch selects the overall spatial impression created by the module. Note that the “Spatial Time” sliders themselves can increase and decrease the spatial impression, but this switch further augments the impression.

The “Random Variation” entry field allows you to select a random variation of the spatial effect. The “R1/R2” switch selects the type of randomness generator to use, with the “R1” generally sounding rougher while the “R2” sounding somewhat smoother.

Out

The “Reverb” parameter adjusts resulting reverb sound’s output gain (in decibel).

The “Dry” parameter adjusts original input signal’s gain (in decibel).

The “Dry Mute” switch disables original input signal from being sent to plug-in’s output. Note that this switch is “persistent”: its state is not affected by preset loading using plug-in's preset features.

Credits

DSP algorithms, internal signal routing code, user interface layout by Aleksey Vaneev.

Graphics user interface code by Vladimir Stolypko. Graphics elements by Vladimir Stolypko and Scott Kane.

This plug-in is implemented in multi-platform C++ code form and uses “zlib” compression library (written by Jean-loup Gailly and Mark Adler), “LZ4” compression library by Yann Collet, “base64” code by Jouni Malinen, FFT algorithm by Takuya Ooura, filter design equations by Magnus Jonsson and Robert Bristow-Johnson, VST plug-in technology by Steinberg, AudioUnit plug-in SDK by Apple, Inc., AAX plug-in SDK by Avid Technology, Inc., Intel IPP and run-time library by Intel Corporation (used under the corresponding licenses granted by these parties).