

# Voxengo OldSkoolVerb User Guide



Version 2.13

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

# **Contents**

```
Features 3
Compatibility 3
User Interface Elements 4
Reverb Character 4
Reverb Mode Editor 4
Reverb Damping 5
Reverb EQ 5
Out 5
Credits 6
Questions and Answers 7
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## Introduction

OldSkoolVerb is a free algorithmic reverberation plug-in for professional streaming, sound, and music production applications. This 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 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 is best suited for non-percussive and soft-attack sounds like vocals, piano, and pad sounds. A narrow "plate" range of settings, however, can be used on percussive sounds, with good results.

#### **Features**

- Plate, room, and hall reverbs
- 5 reverb modes
- Reverb mode editor
- Stereo processing
- 64-bit floating point 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".

#### **Reverb 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. At "plate"-range setting of this parameter the "Damp Hi" parameter should be lowered considerably, if a convincing plate reverb sound is a goal.

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 rumble and produce a denser reverb sound. "Plate" reverb settings will probably work best on drums while room and hall reverb settings 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 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.

### **Reverb 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 "rumble" of the reverb sound.

## Reverb EQ

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

#### Out

The "Reverb Gain" adjusts resulting reverb sound's output gain (in decibel).

The "Dry Gain" 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), 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).

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## **Questions and Answers**

# Q. I'm curious, what exactly is it about this reverb that makes it best suited for non-percussive and soft-attack sounds?

**A.** From developer's point of view, this reverb is not "dense" enough for percussive sounds – e.g. drums. You may dial in an acceptable setting from drums, but this isn't always possible. In most cases only "plate" range of settings is dense enough for drums and other percussive sounds.

For your information, when the reverb is not dense enough for the program material, reverb's sound may "rumble" and sound like it is "falling apart", "edgy".