Wave Arts MasterVerb 7

User Manual

April 29, 2025

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1.0 Introduction

MasterVerb is multi-algorithm reverb with a musical sound reminiscent of classic studio digital reverbs.

MasterVerb features the following:

- Two late reverb algorithms – Hall (for all sizes of rooms) and Plate (for super dense plate reverbs).
- Early reflection section- halls, rooms, plates, chambers, echo, cathedral, nightclub, ping-pong.
- 3-band EQs for early and late frequency response adjustment.
- Triggered envelope control for special effects such as gated and reverse reverb.
- Ducking compressor ducks reverb during foreground sounds.
- Beat synchronization options for delays and envelope times.
- Graphical displays for EQ curves, time response, and 3-D frequency response.
- Normal and detailed view modes.

1.1 Overview of interface

Label	Description
1	Menu bar: Bypass, Undo/Redo, Presets, A/B buffers, View options, and Settings.
2	Character control lets you quickly adjust the size and decay time of the space.
3	Early damping 3-band EQ display, sets overall equalization of reverb.
4	Late damping 3-band EQ sets frequency dependent decay times.
5	Early reflection controls.
6	Optional information tips.
7	Envelope and Ducker enables and meters. The Envelope and Ducker are edited in the detailed view.
8	Time response display diagrams the different components of the response and the Envelope.
9	Frequency response display shows the time-frequency decay of the late reverb algorithm.

10	Output controls.
11	Late reverb controls.

1.2 Detailed View

The detailed view can be selected in the View menu found in the menu bar. It provides Envelope, Ducker, and Modulation controls, and individual controls for the EQs.

Label	Description
1	Early reflection controls.
2	Frequency response display.
3	This area shows either the time response or the EQ displays, depending on the controls the user is adjusting.
4	Early damping 3-band EQ controls
5	Envelope controls.

6	Ducking compressor controls.
7	Late reverb controls.
8	Late damping 3-band EQ controls.
9	Output controls.
10	Modulation controls.

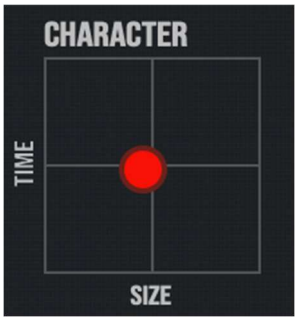
1.2 What's new in MasterVerb 7

Compared to MasterVerb 6, here are the major changes:

- All new interface with dark theme.
- Algorithm tweaks.
- Beat synchronization options for delays and envelope times.
- New ducking compressor.
- Improved envelope processor.
- Modulation controls.
- Stereo width control.
- New presets.
- Optional info bar shows help tips for controls and presets.
- Infinite undo/redo per edit buffer.

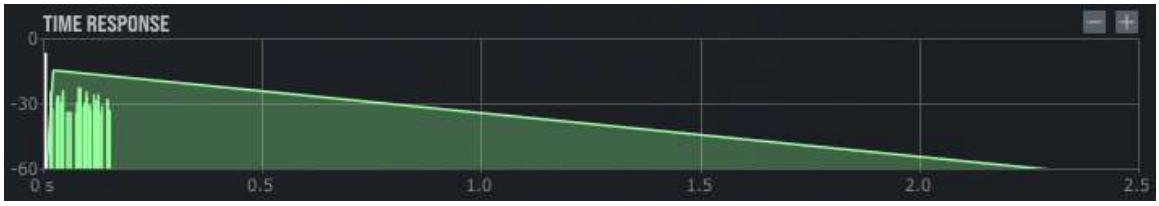
2.0 User Interface

2.1 Character control

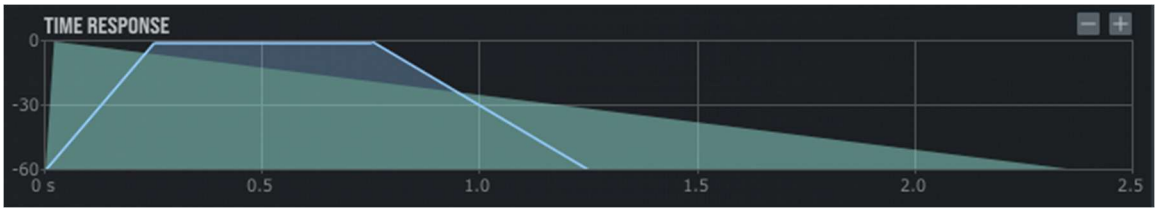


The character control provides a quick way to adjust both the size and decay time of the space. Click/drag the control left-right to change the size, this adjusts both the late algorithm size and the early reflections. Drag up-down to adjust the decay time.

2.2 Time response display



The time response display diagrams the various components of the time response. The late reverb contour is shown with the shaded green region; it moves right with increasing wet delay, and the decay slope reflects the late reverb time. The bright green spikes represent the early reflections, they spread apart as the early size is increased. The white spike represents the dry sound, it will move to the right as the dry delay is increased, which lets the reverb precede the dry sound in the output. If the envelope is enabled, it is shown as a blue shaded region depicting the attack, hold, and release segments, shown below. The levels of the display components respond to the wet mix and late mix controls. The zoom controls in the upper right scale the time axis.

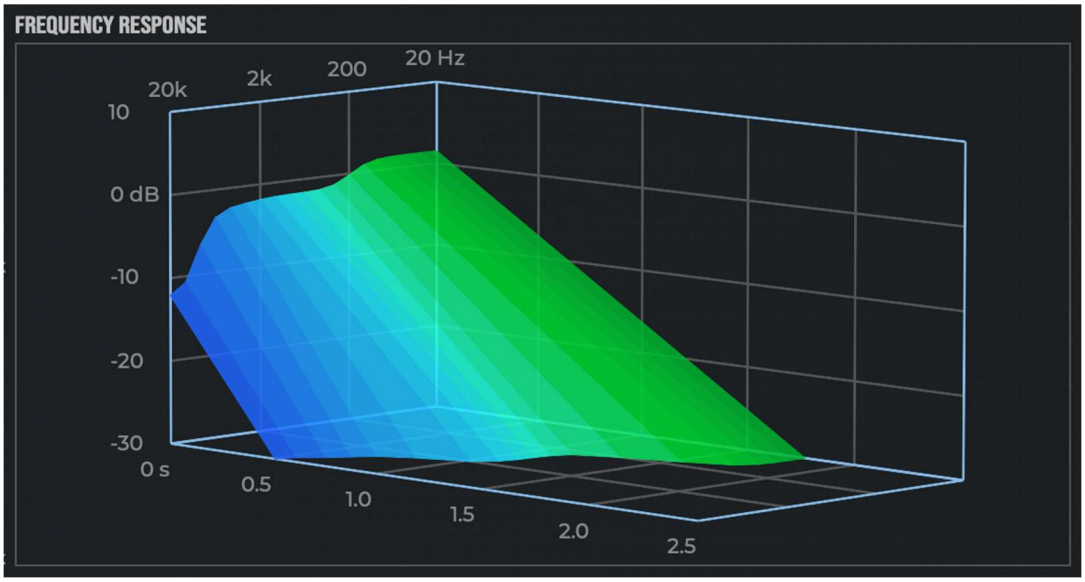


2.3 Damping EQ displays

Label	Description
	This control point changes the frequency and gain of the low band.
	This control point changes the gain of the mid band.
	This control point changes the frequency and gain of the high band.

Both early and late damping EQs function as a low and high shelving filter relative to a mid-band gain. The early EQ sets the EQ for the reverb, while the late EQ scales the reverb decay times as a function of frequency.

2.4 Frequency response



The frequency response visualizes the time-frequency decay shape of the reverb. The contour at time 0 is determined by the early EQ shape. The decay slope at each frequency is determined by the late EQ shape.

Note that the frequency axis is flipped with respect to the EQ displays, with high frequencies at the left and low frequencies to the right. This is done because natural reverb decays slower at low frequencies and faster at high frequencies, so plotting this way yields a fully visible surface for typical reverbs.

2.5 Early reflection controls

Parameter	Description
Relection Type	Sets the pattern of (stereo) early reflections. There are different choices, each determined by analyzing an existing room/reverb response. You can also select "Anechoic" which disables the early reflections, in which case you'll hear the initial reflections inherent in the late algorithm.
Diffusion	Sets the amount of diffusion applied to the early reflections.
Size	The size parameter scales the timeline, larger sizes spread out the reflections, smaller sizes compress them.
Dry Delay	Delays the dry signal prior to the wet/dry mix. Delaying the dry signal is useful when creating reverse reverb effects where the reverb precedes the foreground (dry) sound.
	Set time or beat synchronization mode for the delay. See below section on beat synchronization.

2.6 Beat synchronization

There are beat synchronization controls in the early reflection, late reverb, and envelope sections. The controls determine whether the corresponding times are set in milliseconds (clock mode) or in beats (beat mode).

Control	Description
	Sets clock mode. The corresponding time will be specified in milliseconds.
	Sets beat synchronization mode. The time will be determined based on the BPM (beats per minute) tempo of the DAW's transport. The note value on the button indicates the duration; the quarter note shown at left is one beat, hence at 120 BPM this would be 500 msec. SHIFT/right-click on the button to select different note values via a popup menu. When beat mode is selected the corresponding time knob becomes a scale control that can be used to further adjust the time.

2.7 Late reverb controls

Parameter	Description
Reverb Type	Sets the late reverb algorithm, either Hall or Plate. The hall algorithm emulates a large acoustic space, it can be scaled to emulate rooms of different sizes. The plate algorithm emulates a plate reverberator which is characterized by a rapid and dense echo buildup.
Time	Sets the 60 dB decay time of the reverberator.
Size	The size parameter scales the delays in the reverberation algorithm. This has a predictable effect with the hall algorithm, changing it to different room sizes. Scaling the plate algorithm has less effect.
Wet Delay	Delays the wet signal prior to the wet/dry mix. This is typically called "Pre-delay." Delaying the wet signal can increase the audibility of the reverb and also create an echo effect.
	Set time or beat synchronization mode for the delay. See section on beat synchronization.

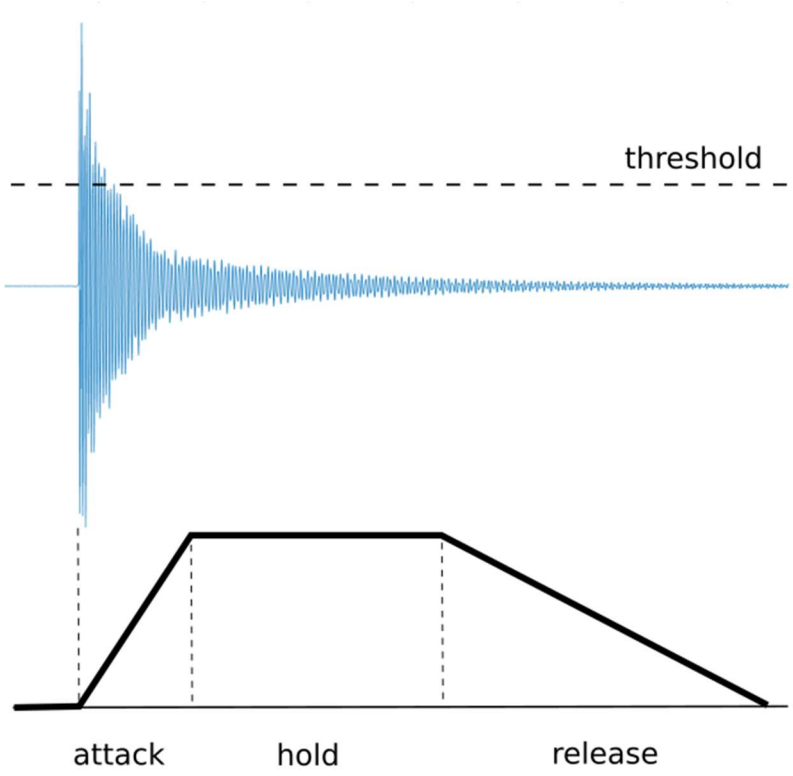
2.8 Output controls

Label	Description
	Lock the output controls. Enabling this locks the values of Wet Mix, Width, and Gain, so the current values persist as you step through presets. This is useful if you place MV7 on an effect bus and set Wet Mix to 100%, you can then lock output and step through presets and the Wet Mix stays at 100%. Locking has no effect on loading session state from DAW.
	Peak output levels, will show red if clipped. Click to reset.
	Stereo output meters with peak hold indicators.
Late Mix	This sets the mix of early reflections and late reverb. 0% means all early, 100% means all late.
Wet Mix	The sets the mix of dry input signal and wet reverb signal. The wet signal includes early reflections and late reverb. 0% means all dry, 100% means all wet.

Width	Stereo width control. 0% will mix output to mono, 100% has no effect (stereo), > 100% will widen the stereo reverb, 200% (max) will drive stereo outputs out of phase. Settings over 100% should be used judiciously.
Gain	Output gain in dB.

2.9 Envelope

The envelope processor modulates the reverb signal, providing a way to achieve gated and reverse reverb effects. The envelope is triggered when the input exceeds threshold. The envelope grows to full amplitude during the attack section, then holds for a certain time, and finally releases. The shape of the envelope is specified by attack, hold, and release times.



Label	Description
1	Envelope enable button. When the envelope is enabled, the output of the envelope modulates the reverb, so reverb is muted until the envelope triggers.
2	Input meter.
3	Envelope output meter shows the current level of the envelope.
4	Input threshold slider mirrors the threshold knob.
Thresh	Sets the input level that must be exceeded for the envelope to trigger.
Attack	Sets the attack time of the envelope, the time to go from -inf dB to 0 dB.
Hold	After attack, the envelope will stay at 0 dB for the hold time before starting the release segment.
Release	Sets the release time of the envelope, the time to decay 60 dB. When releasing, the envelope will retrigger if the input signal falls below threshold (minus a small margin) and then rises above threshold.
	Set time or beat synchronization mode for the envelope times. See section on beat synchronization.

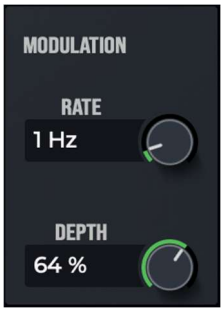
2.10 Ducking compressor

The ducker attenuates the reverb during loud foreground sounds, thus preventing the reverb from muddying the foreground, and increasing clarity. This is beneficial for both voice and instrument sounds.

Label	Description
1	Ducker enable button. When the ducker is enabled, the wet reverb signal is ducked when the dry signal exceeds threshold.
2	Ducker attenuation meter. The meter range can be changed in the preferences.
3	Ducker input meter, shows the level of the dry input signal.
4	Input threshold slider mirrors the threshold knob.
Thresh	Sets the input level that must be exceeded for the ducker to begin attenuating.
Attack	Sets the attack time constant of the ducker, how quickly it reduces gain.
Ratio	Sets the amount of ducking.
Release	Sets the release time constant of the ducker, how quickly gain is restored after signal falls below threshold.

2.11 Modulation

The reverb algorithms in MasterVerb employ slow frequency modulation to smooth the sound of the response. Without any modulation the tail of the response can sound resonant and metallic, with too much modulation the response can sound swooshy. Because the tradeoff depends on the sound being processed, some users may find it useful to adjust the default modulation settings.

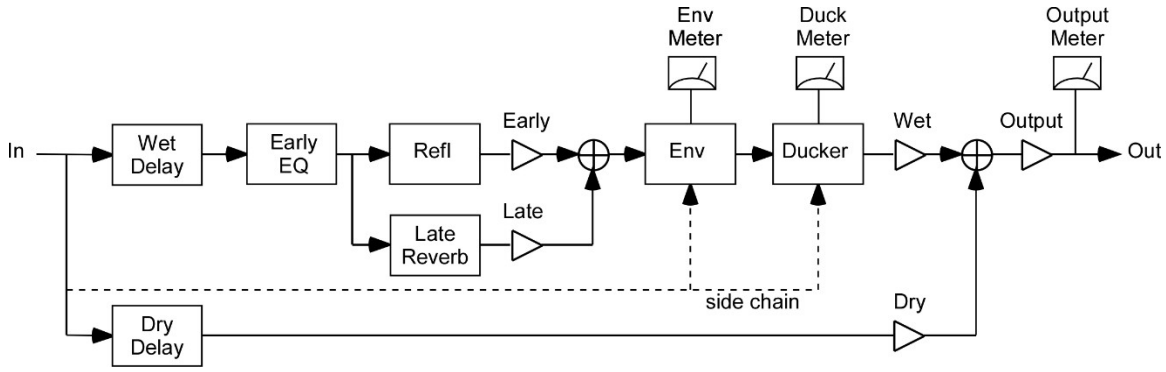


Parameter	Description
Rate	Sets the modulator LFO rate in Hz.
Depth	Sets the amount of frequency modulation.

3. Detailed Description of MasterVerb

3.1 Audio routing

MasterVerb's audio routing and meter placement is shown in the diagram below:



MasterVerb 7 audio routing diagram.

The input signal is split into wet and dry paths. The wet path is delayed by the wet delay (also known as pre-delay) and is then processed by the early damping equalizer. The wet signal is then split into early and late paths; the early path is processed with the early reflection generator, while the late path is processed by the late reverb. Note that the late damping equalizer is embedded in the late reverb algorithm. The early and late reverb components are mixed and fed into the envelope processor. The envelope processor is triggered by the non-delayed dry input signal. The output of the envelope processor feeds the ducking compressor. The side-chain of the ducker also comes from the non-delayed dry input signal. The final wet signal is mixed with the delayed dry signal and the result is processed by the final output gain.

3.2 About reverberation

When an object in a room produces a sound, a soundwave expands outward from the source reaching walls and other objects where sound energy is both absorbed and reflected. Assuming a direct path exists between the source and the listener, the listener will first hear the direct sound, followed by reflections off nearby surfaces, called early reflections. After a few tenths of a second, the number of reflected waves becomes very large, and the resulting reverberation is characterized by a dense collection of soundwaves traveling in all directions, called diffuse reverberation.

The time required for the reverberation to decay 60 dB below the initial level is defined as the reverberation time. Generally, reverberation in a small room decays much faster than reverberation in a large room, because in a small

room the soundwaves collide with walls much more frequently, and thus are absorbed more quickly, than in a large room.

Reverberation is an important acoustic phenomenon. There is at most one direct path from the source to the listener, whereas there may be millions of indirect paths, particularly in a room where a sound can bounce around hundreds of times before being absorbed. Thus, in typical listening situations, most of the energy we hear from a sound source is reverberation.

3.3 Perception of reverberation

The perception of reverberation depends on the type of reverberation and the type of sound. In small room with fast decaying reverberation, the reverberation imparts a tonal quality to the sound that is readily identified as a small room signature. In a larger room, the reverberation can create a background ambience that is easily distinguished from the foreground sound, and this is readily identified as a characteristic of large spaces. In this manner, reverberation imparts useful spatial information about the size of the surrounding space.

Early reflections arriving within the first 80 msec after the direct sound tend to become perceptually fused with the direct sound. Hence the early reflections modify the character of the sound itself whereas much later reverberation becomes associated with the background ambience. A prominent reflection that occurs soon after the direct sound will create a comb filtering effect, as frequencies are either amplified or attenuated due to the reinforcement or cancellation caused by adding the delayed reflection to the direct sound. This comb filtering effect happens with any reflection, but is most noticeable with very early reflections which cause broad frequency effects. The result is a timbre modification of the sound, possibly hollow sounding, which can readily be associated with an enclosed space or a small room.

Early reflections can also modify the apparent size of the sound source. Reflections that arrive in staggered order from the left and right directions confuse our sound localization perception. Instead of perceiving a narrowly localized sound source, the result will be a fuzzier, wider perception. Hence the early reflection pattern can affect both the timbre and apparent size of the source.

Reverberation that contains a lot of high frequency energy in the decay is associated with rooms that have hard, reflective walls, which do not readily absorb high frequencies. Similarly, reverberation that is dull sounding is associated with rooms that contain soft materials, such as plush carpets and drapes, which readily absorb high frequencies. In this manner, reverberation imparts useful information about the composition of the surrounding space.

Reverberation is also important for establishing distance cues. In a reverberant space, when the distance between the source and the listener is increased, the level of the direct sound decreases considerably, but the level of reverberation does not decrease much. Thus, the level of direct to reverberant sound can be used as a distance cue, with dry (non-reverberant) sounds perceived as being close, and reverberant sounds perceived as being distant.

Reverberation gives information about the size and character of the surrounding space and the distance of the sound source. For recordings that are made with close microphone techniques, artificial reverberation must be added to restore spatial context. Reverb is thus an essential tool for imparting a sense of space to your recordings.

3.4 Reverberation algorithms

Before digital reverbs were available, recording studios had to use other means to generate reverberation. One method required building a very reverberant room into which speakers and microphones were placed. Sounds to be reverberated were piped into the room, and the resulting reverb was picked up by the microphones. These rooms were known as reverb chambers.

An alternative method of generating artificial reverb that requires much less space than a chamber is the plate reverb. Essentially the reverb chamber is replaced by a suspended steel plate. Signals are injected into the plate using transducers mounted on the plate, causing the plate to vibrate. The resulting vibrations are picked up by additional transducers mounted on the plate. The reverberation created by a plate is quite dense and diffuse. Although a plate's reverberation doesn't sound like a room's reverberation, the sound is pleasing and often used on vocals and drums.

Digital reverbs model acoustical and mechanical reverbs using a large number of delay lines through which the signal is recirculated. Each reverb algorithm has its own characteristic sound and idiosyncrasies. MasterVerb contains two reverb algorithms, the Hall and Plate algorithms. The Hall algorithm sounds like a concert hall. The Plate algorithm sounds like a plate reverb, characterized by a very rapid buildup of densely spaced reflections.

The Hall algorithm can be scaled to sound like small rooms or very large spaces. Scaling a reverb algorithm is done by scaling the delays within the algorithm. The Plate algorithm can also be scaled but because the Plate response is so dense, the effect of scaling the Plate is less pronounced than scaling the Hall.

3.5 Early reflections

MasterVerb models the early reflection pattern using a stereo tapped delay line. Each individual reflection is implemented with a single tap in the delay line. Typical reflection patterns may have 25 to 60 reflections per channel. The output of the tapped delay line is further processed by a diffuser circuit that smears out the response in time, causing the reflections to sound less discrete.

The reflection patterns in MasterVerb are based on real and synthetic reverberation responses. Patterns are included for real acoustic spaces including halls, a cathedral, and some rooms, and for synthetic reverb responses including chambers and plates.

The Anechoic reflection type has a single unit gain reflection at time 0 (in both left and right channels), so it simply passes the input signal unchanged to the diffuser circuit and onto the early plus late mixer. If late mix is set below 100% this will pass diffused dry signal into the wet path. To completely mute the early reflections set the late mix to 100%.

The user should note that the CPU processing required for the early reflection generator is about the same as for the late reverb algorithm, hence if you need a really CPU efficient reverb, try bypassing the early reflection generator by selecting the "Anechoic" pattern, then set the late mix to 100%.

3.6 Mixing with MasterVerb

For music production, it is common to place a reverb plug-in on an aux bus in your host application program, and use the aux send on the tracks you want to be processed with reverb. In this case the reverb wet mix should be set to 100%, therefore the aux return gain will set the wet level, and the track gain will set the dry level. Using reverb in this way not only saves CPU resources but lends to a more natural sound, since each track is in a sense sharing the same "space."

When placed on an aux bus, it's also a good idea to enable the output lock parameter. When lock is enabled, preset changes made by the user will not affect the wet mix, width, and output gain parameters. So you can set wet mix to 100% and then step through presets and the wet mix will stay at 100%.

When using reverb as an insert effect, you will want to use much drier mix levels to prevent the sound from becoming too muddy with reverb. The presets are designed assuming the reverb will be used as an insert effect, so the preset mix levels are a good place to start.

3.7 Parameters

This section describes all the internal parameters of MasterVerb 7 as would be displayed by a generic parameter-value plug-in interface. Most of these have a one-to-one correspondence with controls on the user interface.

Parameter name	Values
Bypass	0 = Off, 1 = On
Reflection Type	0 = Bypass, 1 = Hall1, 2 = Hall2, 3 = Cathedral, 4 = Room1, 5 = Room2, 6 = Chamber1, 7 = Chamber2, 8 = Plate1, 9 = Plate2, 10 = Echo, 11 = Ping-pong
Reflection Size	x0.5 to x1.5
Early Damping Lo Freq	20 to 640 Hz
Early Damping Lo Gain	-24 to 0 dB
Early Damping Mid Gain	-24 to 0 dB
Early Damping Hi Freq	640 to 20,000 Hz
Early Damping Hi Gain	-24 to 0 dB
Late Reverb Type	0 = Hall, 1 = Plate
Late Reverb Decay Time	0.5 to 60 sec
Late Reverb Size	x0.5 to x1.5
Late Damping Lo Freq	20 to 640 Hz
Late Damping Lo Scale	x0.25 to x4
Late Damping Mid Scale	x0.25 to x4
Late Damping Hi Freq	640 to 20,000 Hz
Late Damping Hi Scale	x0.25 to x4
Envelope Enable	0 = Off, 1 = On
Envelope Thresh	-72 to 0 dB
Envelope Attack Time	1 to 2000 msec
Envelope Attack Scale	x0 to x2
Envelope Hold Time	1 to 2000 msec

Envelope Hold Scale	x0 to x2
Envelope Release Time	1 to 2000 msec
Envelope Release Scale	x0 to x2
Envelope Sync	0 = Time, 1 = Whole note, 2 = Half note, 3 = Quarter note, 4 = Eighth note, 5 = Sixteenth note
Ducker Enable	0 = Off, 1 = On
Ducker Thresh	-72 to 0 dB
Ducker Ratio	1:1 to 50:1
Ducker Attack	0.1 to 1000 msec
Ducker Release	1 to 1000 msec
Dry Delay	0 to 500 msec
Dry Delay Sync	0 = Time, 1 = Whole note, 2 = Half note, 3 = Quarter note, 4 = Eighth note, 5 = Sixteenth note
Dry Delay Scale	x0 to x2
Wet Delay	0 to 500 msec
Wet Delay Sync	0 = Time, 1 = Whole note, 2 = Half note, 3 = Quarter note, 4 = Eighth note, 5 = Sixteenth note
Wet Delay Scale	x0 to x2
Wet Mix	0% to 100%
Late Mix	0% to 100%
Output Gain	-24 to 24 dB
Diffusion	0% to 100%
Modulation Rate	0 to 10 Hz
Modulation Depth	0% to 100%
Width	0 to 1.0: 0 = mono, 0.5 = stereo, 1.0 = max

4. Installation and Registration

4.1 Installation

Installers for MasterVerb are found on the downloads page of the Wave Arts website. There are separate installers for Mac and Windows. Mac installers are ".dmg" files which after downloading will expand into a ".pkg" installer file; double-click on the ".pkg" file to launch the installer. Windows installers are ".exe" files; double-click on the ".exe" file to launch the installer. The installers provide various options for selecting which plug-in formats to install and whether to use Pace/iLok or Wave Arts licensing.

4.2 Registration

We support two licensing methods – Wave Arts licensing and PACE/iLok. When installing the plug-ins you must select which version of the plug-ins you wish to use. When you purchase a plug-in, you will be e-mailed a serial number (looks like WA-PPP-XXXX-XXXX where PPP is a product code and X is a hex digit). Use the serial number to unlock the plug-in as described below.

4.3 Wave Arts licensing

Prior to registration, the plug-ins operate in demonstration mode; they are fully functional but stop operating after 30 days. To unlock the plug-in after purchasing, open the plug-in, select the Tools->Register option, and enter your name, email address, and serial number. The plug-in will contact our registration server and download a license file which will unlock the plug-in. You should see a message saying your registration was successful.

If your computer is not connected to the internet, use the Tools->Offline Register option and follow the instructions to generate a keyfile at our website registration page and import the keyfile.

If you have purchased a plug-in suite, when you unlock any one of the plug-ins within the suite, the entire suite will be unlocked.

4.4 PACE/iLok licensing

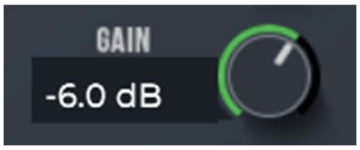
All our plug-ins support PACE/iLok. Prior to activation, the plug-ins will allow you to start a 30-day trial by creating an iLok account. To unlock the plug-in after purchasing, go to our Product Registration page, select "PACE/iLok", and enter your serial number. A PACE redeem code (looks like XXXX-XXXX-

XXXX-XXXX-XXXX-XXXX-XXXX-XX) will be displayed and also emailed to you. There are two ways to redeem the code and generate a license. When opening the plug-in a dialog window will appear and give you the option to Activate the plug-in, you can paste the PACE redeem code there, and proceed to create or login to an iLok account and then transfer the license to an iLok or your machine. Otherwise, go to http://www.ilok.com, create an iLok account, and download and install the iLok License Manager. Within the manager, under the Licenses menu, select "Redeem Activation Code" and paste your redeem code. Then transfer the license to either an iLok dongle or your machine. The plug-in will run only if it can find a license on an iLok or the machine.

When purchasing a plug-in suite, the redeem code will generate multiple licenses, one per plug-in in the suite, but the licenses are grouped together.

5. Plug-in Control Operation

5.1 Knobs



Please refer to the following guide for information about the various ways you can use knobs:

Function	Mac	Windows
Increase/Decrease a parameter value (rotate clockwise/counterclockwise)	Click on the knob + drag up/down -or- Mousewheel	Click on the knob + drag up/down -or- Mousewheel
Fine adjustment — increase/decrease	Shift + click + drag up/down -or- Command + click + drag up/down	Right click + drag up/down -or- Shift + click + drag up/down -or- Control + click + drag up/down
Reset knob to default value	Double-click	Double-click

By default knobs follow up/down mouse motion, but this can be changed in the preferences settings.

5.2 Text Entry

Many value displays are editable text. A text field is editable if your mouse cursor changes to an I-beam when moved over the text. Following is a table that fully describes how to use the text editing features:

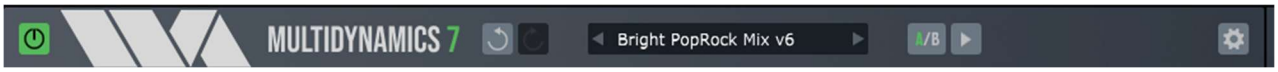
Function	Mac	Windows
Enter text entry mode	Click in the display	Click in the display
Select text	Click + drag	Click + drag

Select entire text	Double-click	Double-click
Delete character to left of cursor	Delete	Backspace
Delete character to right of cursor	Fn+Delete	Delete
Move the cursor left/right	Left/Right arrow keys	Left/Right arrow keys
Extend the current selection	Shift + click + drag -or- Shift + left/right arrow keys	Shift + click + drag -or- Shift + left/right arrow keys
Exit text entry mode	ESC -or- Return/Enter -or- Click on panel	ESC -or- Return/Enter -or- Click on panel
Select next parameter to edit	Tab	Tab
Select previous parameter to edit	Shift + Tab	Shift + Tab

You'll find that many parameters, such as frequency, will recognize units typed into the text field. The following values, when typed into a frequency value box, are equivalent:

2k = 2 kHz = 2000 = 2000 Hz

6. Menu Bar and Preset Manager



This section describes the operation of the menu bar, preset manager, and the other functions available in the menus.

6.1 Enable

The enable button looks like a power button. When lit the plug-in is enabled, and when unlit the plug-in is bypassed – it passes audio but without modification.

6.2 Undo/Redo

Clicking the Undo button causes the parameters and view options to revert to their settings prior to the last edit. The undo stack is unlimited, so you can keep clicking and revert back to the settings when the plug was initially opened. Clicking Redo restores the last undo. You can continue to redo back to the settings before undo was first used. However, if you make any edits the redo stack is discarded.

The A and B buffers (described below) have independent undo/redo stacks. The undo/redo stacks store all parameters and many of the UI view options. Plug-in preferences are not stored in the undo/redo stacks.

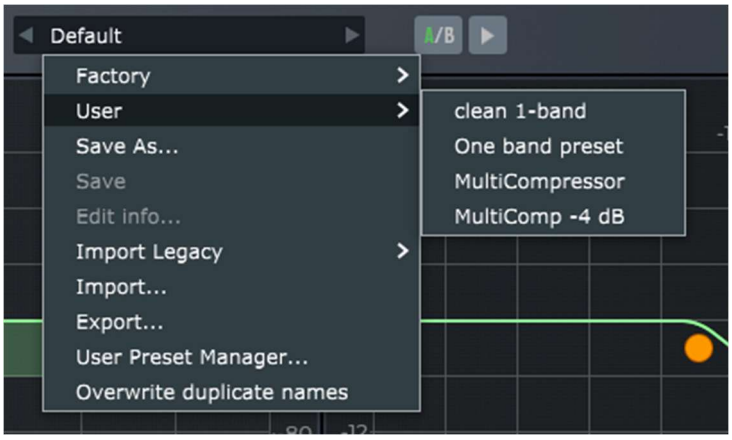
6.3 Preset name and arrow controls

The currently selected preset name is displayed in the text field in the menu bar. Changing any parameters causes an asterisk (*) to be displayed at the end of the name. This indicates that changes have been made to the preset. In order to save the changes to a user preset you must select the "Save…" item in the Preset menu, described below.

The arrow controls to the left and right of the preset name cycle through the set of factory and user presets. Clicking the right arrow goes to the next preset, clicking the left arrow goes to the previous preset.

6.4 Preset menu

The Preset menu contains lists of factory and user presets for easy selection, and options for managing presets. The functions are described in the following sections.



6.4.1 Factory Presets

Factory presets are selected from a rolloff menu at the top of the Preset menu. Factory presets cannot be modified or deleted.

6.4.2 User Presets

User presets are selected from a rolloff menu just below the Factory presets in the Preset menu. When you first run a Wave Arts plug-in, there will not be any user presets and the menu will be empty. When you save a preset using the "Save" option the preset is added to the User menu. All instances of a plug-in share the same set of user presets. So, after you save a preset with one instance of a plug-in, you can go to another instance and find that the preset can be found in its User preset menu too.

User presets are stored in an XML format file called "<plugin> Presets.xml", where <plugin> is the name of the plug-in you are using. If the file is deleted, an empty preset file will be created automatically the next time the plug-in runs. User presets files are stored in the following directory, depending on the operating system, where <username> is your login name:

Mac OS-X:
/home/<username>/Library/Application Support/Wave Arts/<plugin>/

Windows:
C:/Users/<username>/AppData/Roaming/Wave Arts/<plugin>/

6.4.3 Save As...

When you have created an effect you want to save as a preset, select the "Save As…" option. You will be asked to name the preset and the preset will be saved in the set of User presets. If you supply the same name as an existing user preset, the existing preset will be either be overwritten with the

new preset or the new preset will be given a unique name, based on the setting of the "Overwrite duplicate names" option.

6.4.4 Save

The Save option is used to save changes to a user preset. The Save option is enabled when the current preset is a user preset and you have made changes, in which case an asterisk (*) will be appended to the preset name. Select the Save option to save the changes to the preset.

6.4.5 Import Legacy

Import legacy will find any user preset files from earlier versions of the same plug-in and will display them in a rolloff menu. Selecting a preset file will import the presets into the current user presets, converting the legacy presets to the current version.

6.4.5 Import…

User presets can be written to files using the "Export" function, and read from files using the "Import" function. Selecting the "Import…" option will open a file chooser to select the preset file for importing. After selecting the file the presets are read and will appear in the User Presets menu.

Duplicate preset names are handled according to the "Overwrite duplicate presets" setting.

Import can be used to import presets from an earlier version of the plug-in; the preset parameters will be converted to the current version of the plug-in.

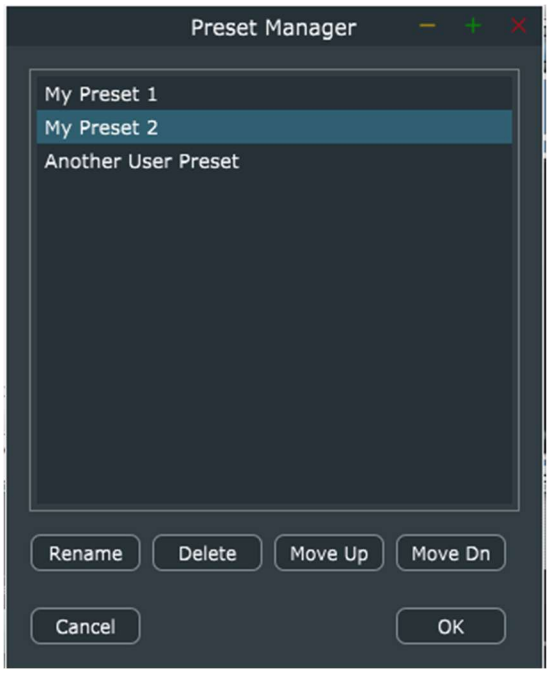
6.4.6 Export…

Selecting the "Export…" option will open a file chooser to specify the output file. Then your user presets are written to the file.

Preset Export is also useful for making backup copies of your user presets. If you have a large set of user presets, be sure to export them to a backup file.

6.4.7 User Preset Manager

The User Preset Manager provides a simple interface to organize user presets. You can rename presets, delete presets, and organize them by moving them up/down in the list. You can select multiple items at once to delete or move. Select OK to accept the changes, or select Cancel or close the window to abort without making any changes.



6.4.7 Overwrite duplicate names

If this option is selected, then when you save a preset using "Save As…" using the same name as an existing preset, or when you import a preset with the same name, the existing preset is deleted and replaced with the new preset. If the overwrite option is not select, the duplicate preset name is handled by renaming the new preset, appending "(Copy)", "(Copy 1)", "(Copy 2)", etc. as needed to avoid a duplicate name.

6.5 A/B buffers

The A/B edit buffers allow you to compare two different sets of parameters or presets. One of the A or B indicators is always lit; the one that is lit shows the current buffer. Clicking the A/B button will switch to using the other buffer, thus changing the effect settings (assuming different settings are stored in A and B). This is quite literally an A/B compare function.

Once you have settings you like in buffer A, switch to buffer B and setup different settings, then click A/B to switch between the two.

6.6 Copy buffer

Clicking the Copy (arrow) button switches to the other buffer *while also copying the buffer*, hence the two buffers will be equal after the copy. The arrow points to the right when A is selected, and points left when B is selected.

Typical buffer use is:

1) Get settings you like in buffer A.
2) Copy to B, switching to buffer B.
3) Further edit the settings in buffer B.
4) Click A/B to compare the two buffers.

6.7 Tools menu

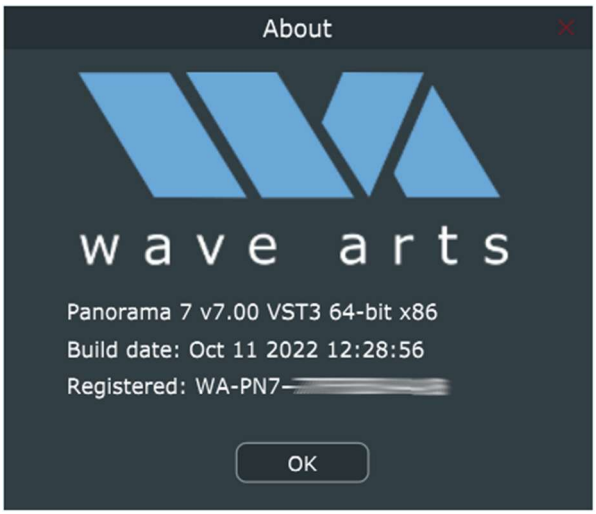
The Tools menu contains various important options, described below.

6.7.1 Size

The Size menu rolloff lets you change the interface size with one mouse gesture. After changing the size, clicking the plug-in title in the title bar will toggle between the last two selected sizes. Sizes that would be too large for the display are disabled.

6.7.2 About...

The About option displays important information about your plug-in. An example is shown below:



On the top line, the plug-in name and version are displayed, along with the current plug-in format (AAX, VST3, AU), bit depth, and CPU architecture. This is useful to determine which format of the plug you are running. The build date of the plug-in is displayed on the next line. If the plug-in is using Wave Arts licensing, the registration status is displayed on the next line. If the plug-in is operating in demo mode, the time remaining (if any) is displayed. If the plug-in has been successfully registered (unlocked), the serial number is displayed. If the plug-in is using Pace/iLok licensing, it will display "Pace/iLok licensing".

6.7.3 Register…

Select this option to register (unlock) your plug-in. Enter your name, email address, and serial number, and click OK. This option is not available if using Pace/iLok licensing.

6.7.4 Offline Register…

Select this option to register the plug-in when your computer is not connected to the internet. This option is not available if using Pace/iLok licensing.

6.7.5 Unregister...

Select this option if you no longer need to use the plug-in on this machine. The license file will be deleted and the serial number usage count will be decremented, allowing you to register on another machine. After confirming, the plug-in will revert to an unlicensed state, either bypassed or demo mode. The unregister option requires an internet connection. This option is not available if using Pace/iLok licensing.

6.7.6 Open User Manual...

Select this option to open this user manual in a browser.

6.7.7 Preferences...

This option opens the Preferences dialog to customize the plug-in operation.

Trademark Notices

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Support

For assistance, please send email to:

support@wavearts.com

If you are having problems with a plug-in, please include the following information: plug-in name, operating system, and host software you are using. The version numbers are also helpful.

For software updates, revision history, frequently asked questions (FAQ), and more, please visit our website at:

www.wavearts.com

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