



VSS3

Stereo Source Reverb

Virtual Space Simulation plug-in for Pro Tools and other DAWs.

User Manual



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Introduction

About this manual

Read this manual to learn how to install and use your TC Electronic software.

This manual is only available in PDF format from the TC Electronic website.

To get the most from this manual, please read it from start to finish, or you may miss important information.

To download the most current version of this manual, visit the web page tcelectronic.com/support/manuals/

Getting support

If you still have questions about your TC Electronic product after reading this manual, please get in touch with TC Support:

tcelectronic.com/support/

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Installation and authorization

You may already be familiar with PACE-based software licensing and authorization based on the iLok hardware. VSS3 uses a license management concept/technology that allows you to authorize your plug-ins without a physical iLok 2 key.

Instead of the iLok 2 key, you can use your computer as a “key.” All you need is a (free) iLok ID, and the license(s) you purchased will be associated with this ID.

You then install the iLok License Manager software on your computer and use your iLok ID to activate the plug-in(s) you have purchased on this computer. Licenses can later be deactivated and then activated on another computer, allowing you to easily use your VSS3 wherever you need it. No iLok key to lose – one less thing to worry about.

During installation, the plug-in version for Pro Tools and the VST2 and VST3 version of VSS3 will be installed on your computer. Your license covers all product versions, but you cannot activate and use the plug-in on more than one computer at the same time. If you want to use VSS3 on another computer, you need to deactivate your license on the first computer and activate it on the second computer.

You can still use an iLok 2 key to store your licenses if this is what you prefer, but it is not a requirement. In that case, you can use your license on another computer simply by attaching your iLok 2 to it. The iLok 2 key is a USB dongle device connected to one of the USB ports on the computer used. It can be purchased on-line through the iLok website shown below.



The iLok system is also used by other software, for example, if you are running Pro Tools, then you will already be familiar with the iLok system. It requires an iLok 2 device, and the VSS3 plug-in can be added to it.

Obtaining an iLok ID

Please note that you only need to create one account for all your PACE-based software licenses. If you already have an iLok ID, proceed with “Obtaining and installing the iLok License Manager.”

To obtain an iLok ID, proceed as follows:

Go to the iLok website: www.ilok.com

Click on “Create Free Account.”

Fill the Free Account Setup form and click “Create Account.”

After finishing the registration process, a confirmation message will be sent to the e-mail account that you have specified when registering on the iLok website. You can now use this account to log into the iLok website and activate software licenses on your computer using the iLok License Manager application.

Obtaining and installing the iLok License Manager

Please note that describing all iLok License Manager features is beyond the scope of this manual. If you need more information on account management, activation, deactivation and transfer of licenses, please install the iLok License Manager as described below, and refer to its Help file, user manual, or quick start guide. Alternatively please visit:

www.ilok.com/support.html

This website contains a large amount of up-to-date information, including videos that will help answer any question you may have about iLok licensing.

To download the iLok Licence Manager, proceed as follows:

Go to the iLok website to download the iLok License Manager: www.ilok.com

iLok Download Menu

Download the appropriate iLok License Manager installer for your operating system. If you are considering using the VSS3 plug-in on multiple computers (but only one at a time), then download and install the License Manager on each computer.

After downloading the iLok License Manager installer, unzip it and run it.

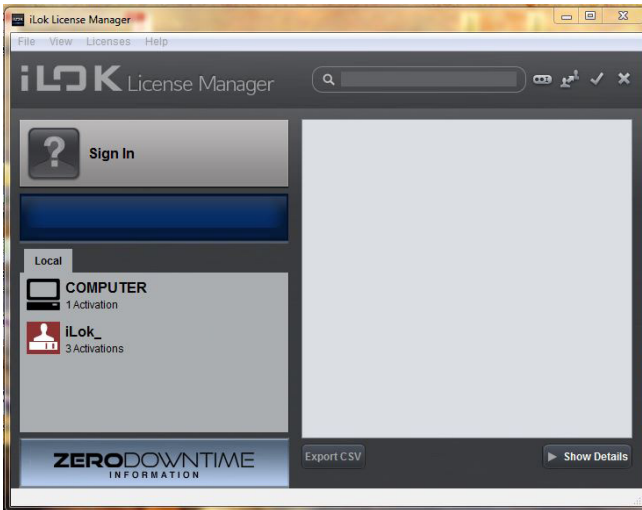
Follow the iLok License Manager installer’s instructions. During installation, you may be asked to enter your iLok user account password.

Running the iLok License Manager

After the iLok License Manager installer is finished, launch the iLok License Manager.

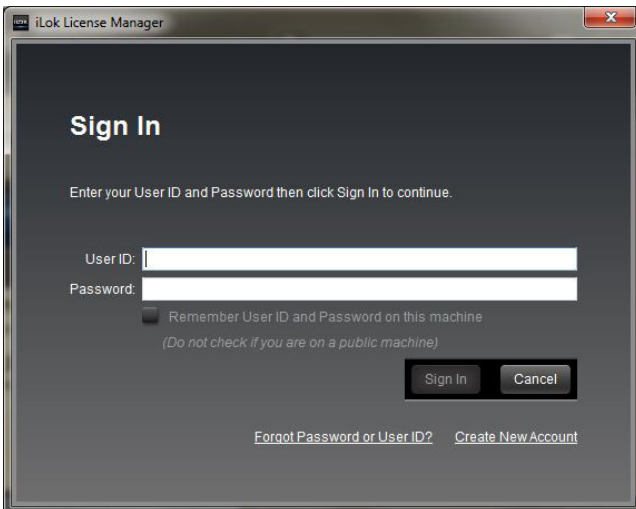
The following example shows that in the "Local" area there is one activation for the computer, and 3 activations for an attached iLok 2. The iLok 2 is connected to one of the USB ports on the computer used in this example.

Note that the iLok 2 key is not required for the VSS3 plug-in activation, but it is required if you are using Pro Tools (as in this example).



The iLok License Manager

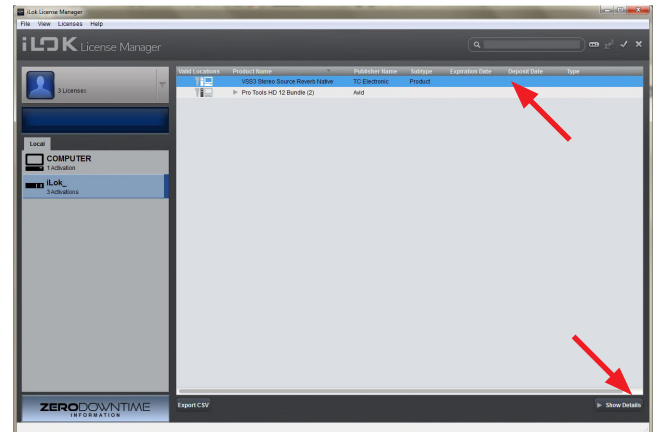
Click on "Sign in" and provide the credentials (your account name and your password) that you entered when you created your iLok ID.



iLok License Manager: Sign In dialog

Activating the VSS3 plug-in

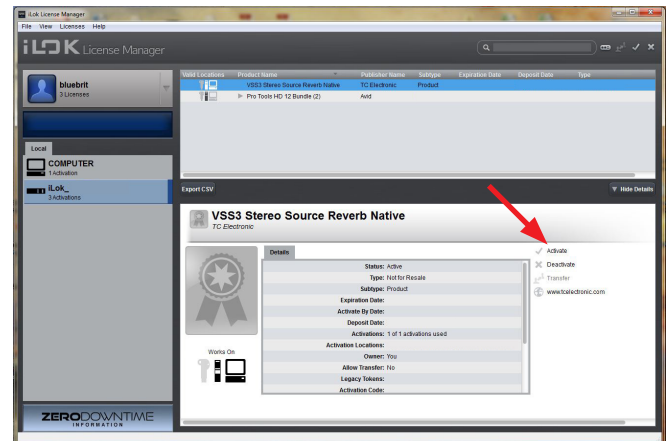
After signing in, the plug-ins that were registered to your iLok ID will be available for activation and deactivation. When you purchase the plug-in from us, the license is transferred to your iLok account. All you have to do is to transfer the code from your iLok account to the computer (or iLok2 key) that you wish to activate.



iLok License Manager after signing into an account

Select the VSS3 plug-in in the license list.

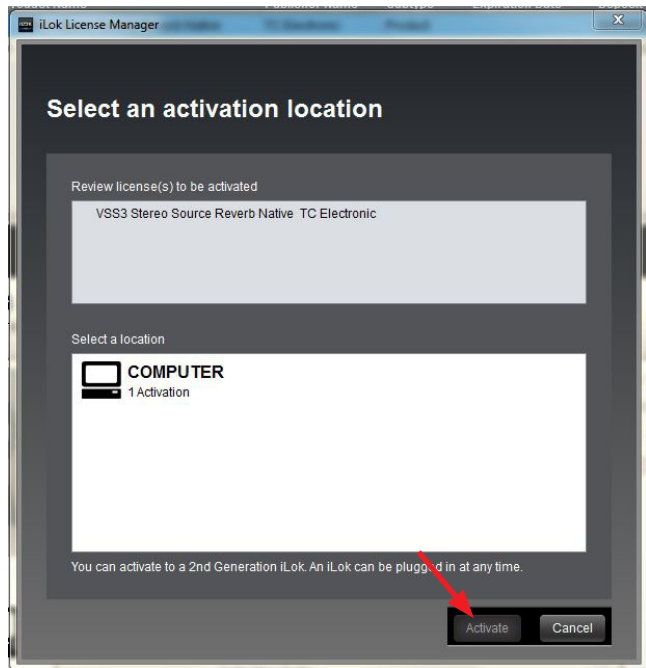
Click on "Show Details" in the lower right, to display additional information, including options to Activate and Deactivate your plug-in(s).



iLok License Manager showing more details of the selected plug-in

Click on "Activate."

In the next dialog "Select an activation location," select the activation location such as the computer or your iLok 2 key, and click "Activate" in the lower right.



Plug-in activation from iLok License Manager

You will be asked to confirm the activation process.

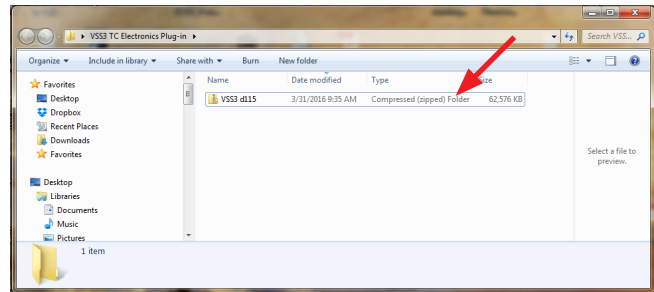
Click on "OK" to confirm activation.

You can now quit iLok License Manager and continue with the installation of VSS3. (The iLok License Manager does not have to run while you are using your plug-in.)

Installing VSS3 on a PC

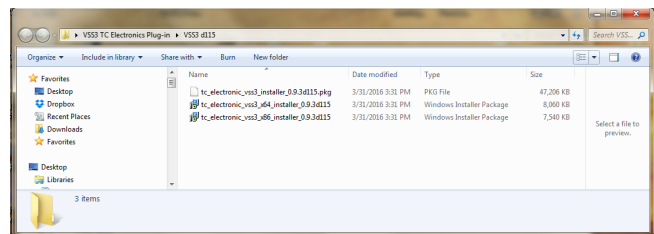
Make sure your host software (such as Pro Tools) is not running.

Download the installer for the VSS3 plug-in from <http://www.tcelectronic.com/vss3-native/support>



The VSS3 installer

Unzip the installer, making sure that all internal folders are unzipped correctly.



The unzipped VSS3 installer

Select the correct installer for your computer system, and run the installer.

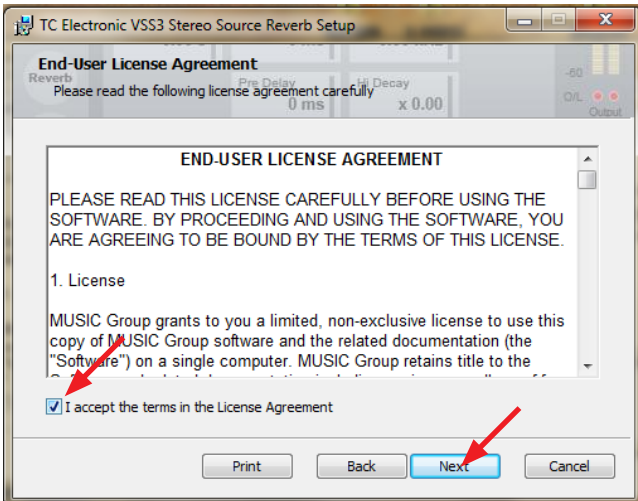
Note: you may need an administrator account name and password to run the installer, it depends on your computer's security preferences.



The installation Setup Wizard

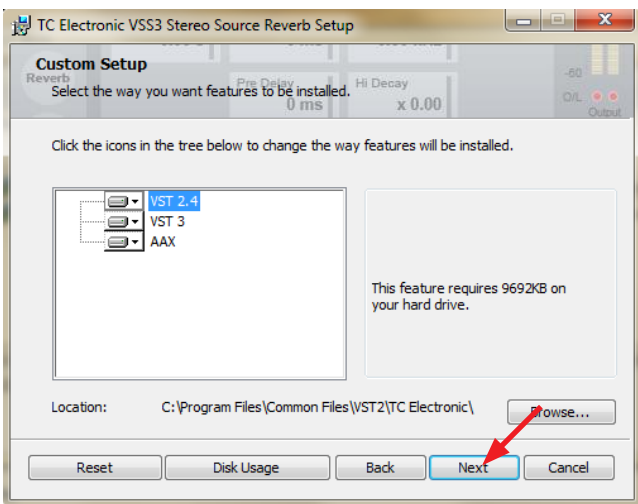
Click "Next" to begin

Read and accept the End-User License Agreement.



End-User License Agreement

The next menu shows various installation options. It allows you to select where the plug-in files are stored on your computer, or you can select "Next" to select the default locations and installation.



Custom Setup Menu

The default Windows plug-in locations are as follows:

VST 2.4

C:\Program Files\Common Files\VST2\TC Electronic

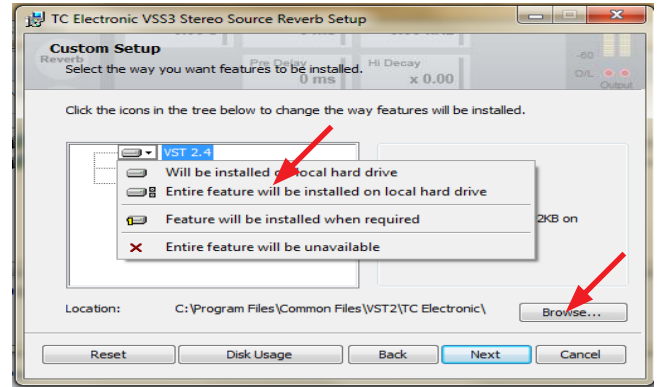
VST 3

C:\Program Files\Common Files\VST3\TC Electronic

AAX

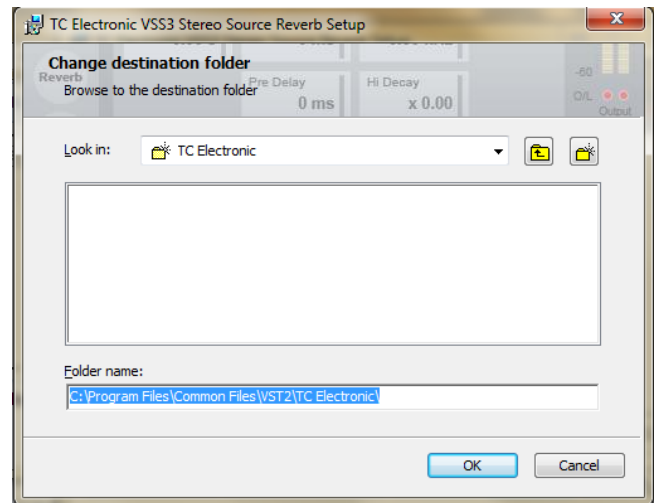
C:\Program Files\Common Files\Avid\Audio\Plug-ins\TC Electronic

If you want to customise the installation, click on one of the icons, and a menu will appear showing installation options.



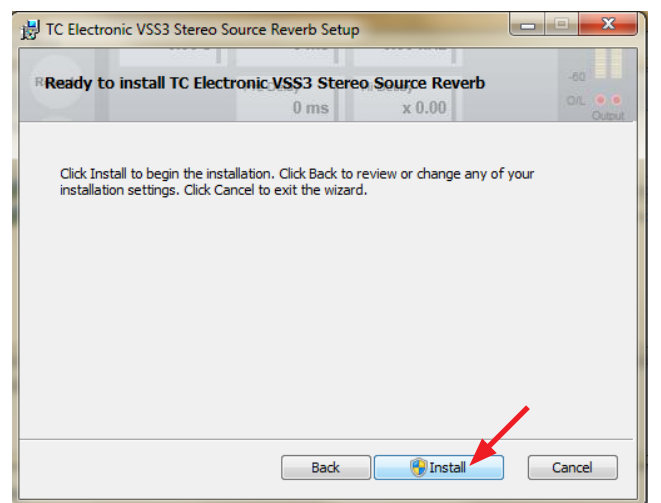
Custom Setup

To select different destination folders, press "Browse" to bring up the Change Destination menu. Enter the required destination folder. You can also create a new folder.



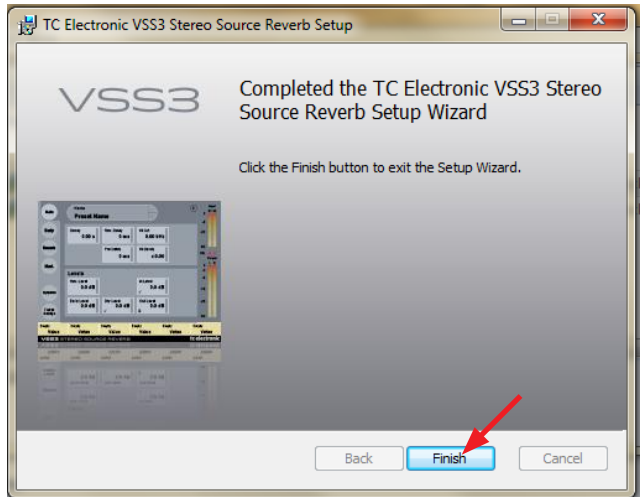
Change Destination Menu

When you are happy with the selection, press "OK" and then "Install." Alternatively, you can press "Back" to review and change your settings, or press "Cancel" to cancel and delete the installation.



Ready to Install

Finish the installation of the plug-in and quit the installer.



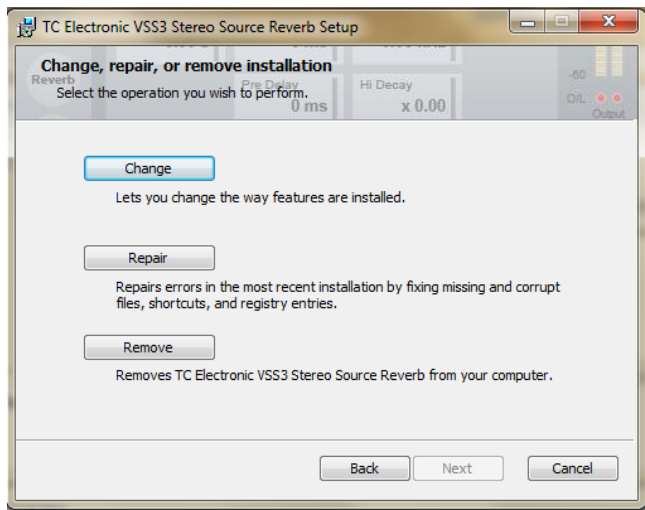
Finish Menu

This completes the installation.

Updating VSS3

To update the VSS3 plug-in to a newer version, just run the installer for the update as described under "Installing VSS3" on page 7. The currently installed software version will be replaced by the new version. You do not have to activate the plug-in again after updating.

If you want to make changes to the installation, run the installer again. It will detect the existing installation and allow you to make changes, repair the installation, or remove it.



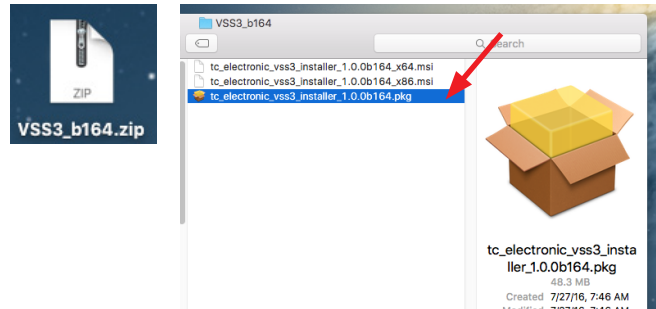
Change, Repair, or Remove Menu

Installing VSS3 on a Mac

Make sure your host software (such as Pro Tools) is not running.

Download the installer for the VSS3 plug-in from <http://www.tcelectronic.com/vss3-native/support>

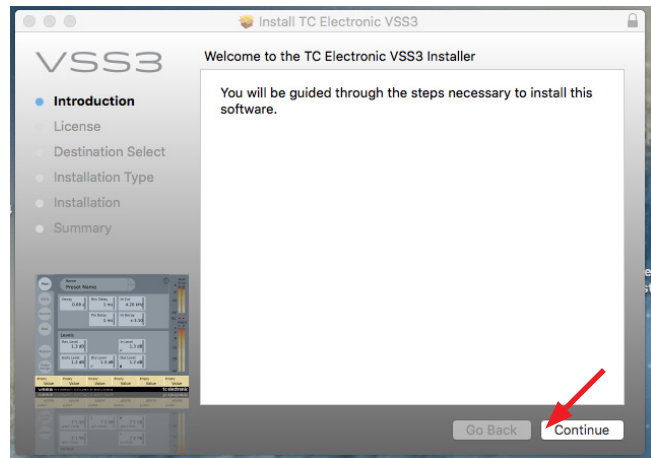
Unzip the installer, making sure that all internal folders are unzipped correctly.



The zipped and unzipped VSS3 installer

Select the correct installer for your computer system, and run the installer.

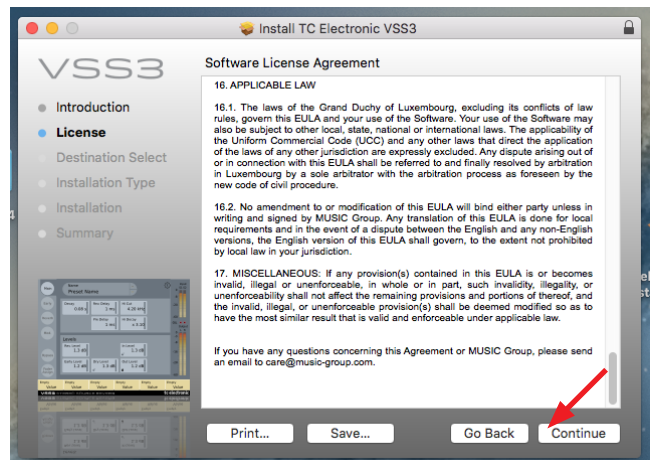
Note: you may need an administrator account name and password to run the installer, it depends on your computer's security preferences.

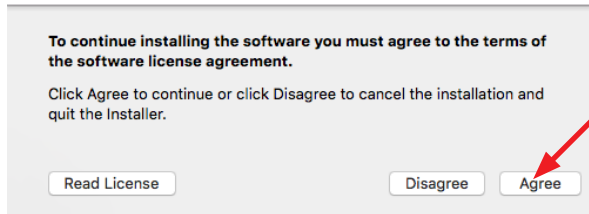


The installation Setup Wizard

Click "Continue" to begin

Read and accept the End-User License Agreement.





End-User License Agreement

The next menu shows various installation options. It allows you to select where the plug-in files are stored on your computer, or you can select "Install" to select the default locations and installation.

The default Mac plug-in locations are as follows:

VST 2.4

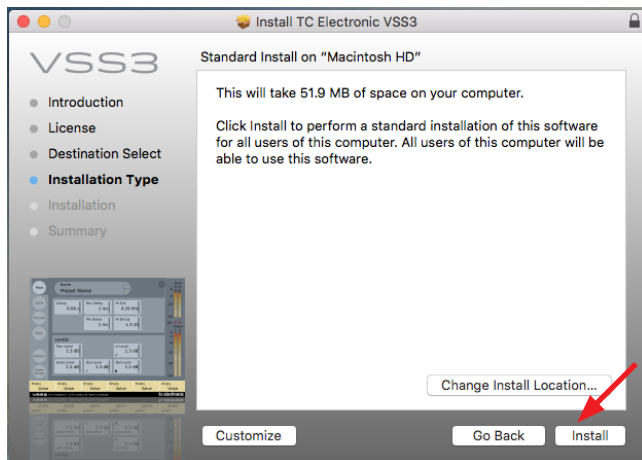
Library/Audio/Plug-ins/VST2/TC Electronic

VST 3

Library/Audio/Plug-ins/VST3/TC Electronic

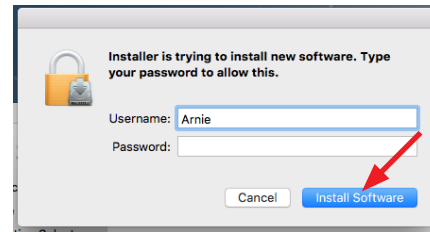
AAX

Library/Application Support/Avid/Audio/Plug-Ins/TC Electronic

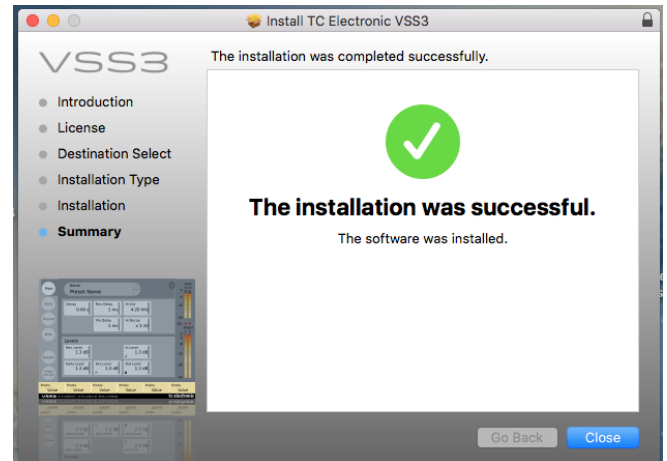


Standard Install Menu

The next security menu may appear. Enter your system password and select "Install Software" to proceed.



Security Menu



Success!

Select "Close" to exit the installer

Selecting VSS3 with your DAW

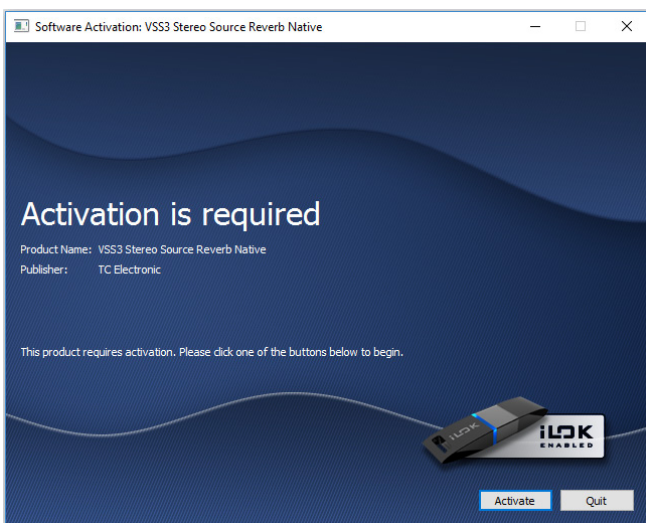
Run your Digital Audio Workstation software and follow the instructions to locate your new plug-in. Each DAW has its own preferred method for locating new plug-ins by browsing for the folder location where the plug-in was installed. Check the format that your DAW requires, such as VST2 or VST3.

Page 8 shows the default folder locations.

The DAW will find the VSS3 plug-in if you point it to the correct folder location.

If you have already activated the recently installed plug-in using the iLok License Manager as described on page 5, then the VSS3 plug-in will be available for use in your DAW. The activation is automatically checked each time you open your DAW, and as long as there have been no changes in the activation, then this is seamless, and you will not even notice it.

If you are using the plug-in on a new computer, or if you are using an iLok2 key, but it is not present, then screens will appear telling you that the plug-in needs to be activated. You can follow the procedure, or run the License Manager to correct the problem.



iLok Activation prompt

EN Using VSS3

VSS3 Stereo Source Reverb

Congratulations on the purchase of your new VSS3 (Virtual Space Simulation) plug-in.

With this plug-in, you now have one of the best sounding, most versatile and easy-to-use professional reverbs for music and film/post applications available directly within your Digital Audio Workstation. Combining ultimate control of directivity in the early reflections, with a transparent and harmonically magnificent diffused field, the art of reverberation is brought to a new and higher level.

The VSS3 enables you to add the softest and cleanest ambience to your work that you have ever heard. The wide range of presets will give you the exact post production reverb you are looking for: The VSS3 Reverb algorithm incorporates dedicated Early Reflection types for motion picture use, e.g. Car, Bathroom and Conference Rooms.

The VSS3 plug-in runs on Pro Tools 11 or higher, and runs on other DAWs as a VST2 or VST3 plug-in, at sample rates from 44.1 kHz to 96 kHz.

The following paragraphs on this page give some general helpful guidelines about the usage of the VSS3 plug-in.

Enjoy!

Constructing a Reverb Preset

The relationship of Early Reflections and the Reverb tail is very important in this algorithm. Adjusting the balance between the Early Lev and the Rev Lev parameters is one of the easier ways to make a HUGE difference in the sound of your reverb!

- When you start building your preset you should try this:
- First turn the Rev Lev all the way down and also turn the Dry level a little down (or all the way down if you are in a send/return configuration). In a send/return configuration, push up the return level. You should now hear Early Reflections, a little of the Dry signal and no Reverb Tail.
- Then begin changing the Early Type and Early Size parameters until you select a room shape that compliments the program material.
- Re-adjust the wet/dry balance until it is pleasing, then bring up the Rev Lev until the tail of the reverb becomes audible. Add just enough tail to make it work together.
- Adjust the Decay time accordingly.
- On some presets you may choose to have very little Early Reflections or none at all. Certain “ambience” style presets might have little or no “tail”. This is up to you.

The VSS3 was designed to have the smoothest Reverb tail ever developed, but it is the Early Reflections that define the “personality” of the room, so try and experiment with this relationship! By using these parameters correctly you can create a BIG sound without having a mix swimming in reverb wash.

Note: When using small room sizes and short Decay times on percussive signals, the Reverb level and Early level must have a level difference of approximately 4 dB in order to prevent a slap effect.

Getting the most out of the Early Reflection Patterns

Early Reflections define the actual feel of the room, where the Reverb tail is the less defined “bowl” of reflections that follows. The major part of the Early Reflection patterns of the VSS3 are simulations of existing rooms and are based on a large number of reflections (40-100), which have been processed through an advanced algorithm.

There are a number of different types and sizes covering a lot of different acoustic spaces that you need for music and post production. As the patterns are simulations of real rooms, the delay times of the first reflections are sonic and spatially “connected” to the direct signal. Using Pre Delay together with Early Reflections should therefore be considered very carefully, as the acoustic space created by the pattern tends to “collapse” if too much Pre Delay is added. If you want the well-known “slap back” reverb effect, you should use Rev Delay on the Reverb tail instead, and reduce the level of the Early Reflections.

Finding the right Early Type and Early Size

- Select Early Type and Early Size on the Early page
- Turn the Rev Level to -100 dB
- Turn the Early Level to 0 dB
- Select an appropriate size. (Note that some sizes of the different types may overlap, e.g. Church Small is bigger than Conc Hall medium etc.)
- Switch between the different types until it matches the signal and the illusion that you wish to create.

Generally it is advisable to use small room sizes for drums and perc; medium sizes for piano, guitar & horns, and large sizes for vocals & strings. Large Church and Venue simulate very big rooms and can therefore be used to create an “echo like” effect if turned up loud. Many of the patterns can be used as a “Doubling” effect if the Reverb tail is not added.

Using the Hi Color and Lo Cut parameter on the Early Reflection page

Once you have selected the desired type and size you can use the Hi Color and the Lo Cut controls to filter the Early Reflections. The Hi Color parameter is an advanced Hi Cut function. Please note that in most real rooms the reflections are generally much softer than the direct signal.

Often it is advisable to use the Hi Color parameter in the range between -4 to -9, to make the Early Reflections blend properly with the direct signal rather than competing with it. The Lo Cut filter is very useful if you want to reduce the Early Reflections in the area between 125-400 Hz. Try this if the Early Reflections seem to make the sound too full.

We hope that you will enjoy working with the VSS3 !

Global Plug-In Controls

Keyboard Commands

In most host applications, the VSS3 Stereo Source Reverb supports keyboard commands for certain functions. The following key commands are available for all plug-in parameters:

Key Commands in Mac OS X:

Fine Adjust = Apple key + mouse movement

Key Commands in Windows:

Fine Adjust = Ctrl + mouse movement

Automation

Please be aware that automation of certain parameters, like Reverb Type or the modulation parameters can cause audible artifacts.

In case you need to automate these parameters, make sure that changes only take place in parts where no audio is sent to the plug-in.

This is especially valid for the following parameters: Early Type, Early Size, Reverb Type, Reverb Width and all parameters on the Modulation page.

Focus Fields

You can place your most-used parameters in the 6 focus fields in the horizontal bar near the bottom of the plug-in user interface. The bar is always visible and accessible from any of the four pages.

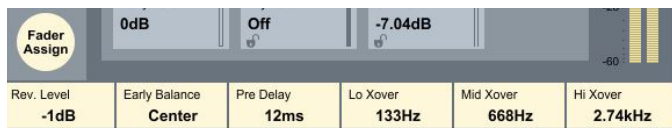


Making use of the focus fields can give you a better workflow, since you will not have to switch pages all the time to find the parameters that you work with most often. (The focus field is shown, no matter which page you are on.)

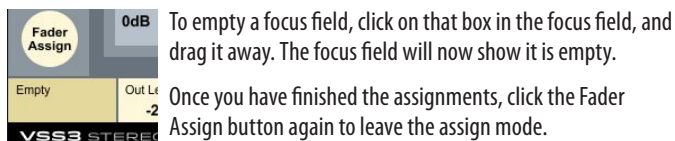
You can assign any parameter to the focus fields, and the focus fields are stored with the session as well as when you save your presets.

To change the assignment:

Press the Fader Assign button. The Fader Assign button will be highlighted. (Fader assignments can only be changed when the button is highlighted.)



Select a parameter you want to save in a focus field by clicking on that parameter's box and dragging it down to one location in the focus field. For example, click on the "Rev. Level" box, and drag it to the first box on the left of the focus field. This box will now show the Rev. Level and its current dB level.



To empty a focus field, click on that box in the focus field, and drag it away. The focus field will now show it is empty.

Once you have finished the assignments, click the Fader Assign button again to leave the assign mode.

Overload Indication (O/L)



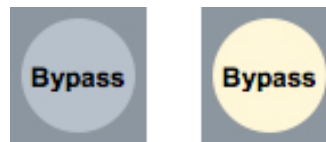
The O/L LEDs in the metering section, between the input and output meters, will light up when internal DSP overloads are detected. You should lower the input level to avoid these overloads. To reset the indication, click on the O/L LED.

Tool Tips



Each control on the plug-in user interface (UI) will show a small help text when you move the mouse over it, called a "Tool Tip". If you do not want these Tool Tips showing up, click on the question mark icon on the top-right corner of the "Main" UI page. The Tool Tip setting is kept globally for this plug-in.

Bypass

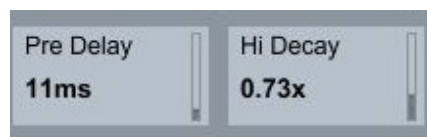


This button allows you to quickly compare the effect of the plug-in on your music. Press this button to listen to the music with no effect from the plug-in.

The Plug-In Parameters

The plug-in parameters are available for editing and review on 4 User Interface pages. They are grouped into the most important parameters on the **Main** page, the parameters relevant for the **Early** Reflections, the **Reverb** Tail and finally for **Modulation**.

Changing a Parameter



The parameters can be changed by clicking on the parameter and dragging the mouse vertically until the preferred level is reached. Alternatively, clicking on the numerical value will allow you to enter a precise value with the computer keyboard. Clicking on a non-numeric value, for example in the Early Reflections page, will show a drop-down list of available settings. A small vertical meter at the right of each parameter's box, shows the position of the current value within the maximum and minimum limits.

VSS3 Plug-in Details



Click on the VSS3 text at the bottom, to bring up typical "about" details of the VSS3 plug-in, such as revision number, copyrights, number of inputs and outputs, platforms, etc. Use this information when checking for updates to the plug-in.

EN Main Page

On the VSS3 Main page, we have grouped the most important parameters of the VSS3. Also, on the top of this page you can find the plug-ins preset handling. More about the preset handling can be found in the section "Preset Handling" later in this manual.

Decay

Range: 10 ms to 20 s

The Decay time of the Reverb. Usually associated with the time it takes the Reverb Tail to decay 60dB. This is the overall Master Decay for the four band Decay parameters (found in the REVERB page below) which are multiples of this base Reverb time.

Rev Delay

Range: 0 to 200 ms

A delay to the diffuse field part of the Reverb. Adds additional time between the Early Reflections and the onset of the "diffuse field" of the Reverb.

Pre Delay

Range: 0 to 100 ms

A delay placed at the input of the algorithm. This parameter defines how long after the dry sound the Early Reflections and the diffuse field will begin.

Hi Cut

Range: 20 Hz to 20 kHz

Rolls off the top end as it enters the Reverb. Used in conjunction with Hi Soften and Hi Decay to "darken" a room.

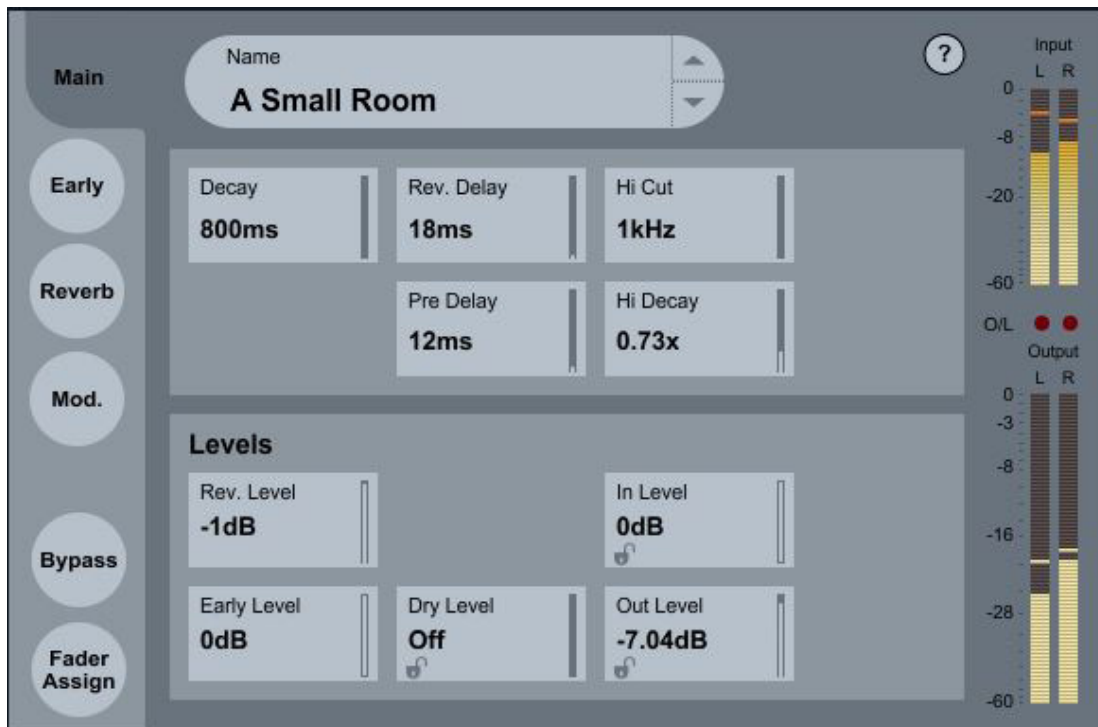
Hi Decay

Multiplier Range: 0.01 to 2.5x

This is a multiplier for decay time of frequencies above the Hi Cut crossover frequency. For example, if the main Decay parameter is set to 2.0 seconds, and this Hi Decay parameter is set to 1.5x, frequencies above the Hi Cut crossover will decay for 3 seconds ($=2.0 \times 1.5$). Conversely, if this parameter is set to 0.5x, then frequencies above the Hi Cut crossover will decay for 1.0 second ($=2.0 \times 0.5$).

Main Page continued

Levels



Rev Level

Range: Off, -100 dB to 0 dB

The output level of the diffuse field part of the algorithm. When Rev Level is set to "Off", the effect will consist entirely of Early Reflections.

Early Level

Range: Off, -100 dB to 0 dB

The output level of the Early Reflections. When Early Level is set to "Off" the Reverb effect will consist entirely of Reverb Tail.

Dry Level

Range: Off, -100 dB to 0 dB

Attenuates the Dry signal level on the output of the plug-in, thus leaving the Reverb and Early Levels unaffected. "Off" equals a "kill-dry" setting.

If you click on the lock in the lower left corner of the control, this will prevent the Dry Level from changing whenever you select a different preset.

In Level

Range: -100 dB to 0 dB

Sets the Input Level for the algorithm.

If you click on the lock in the lower left corner of the control, this will prevent the Input Level from changing whenever you select a different preset.

Out Level

Range: Off, -100 dB to 0 dB

The overall Output level of the Reverb. Use this parameter to adjust the output level to fit for following effects in your host application.

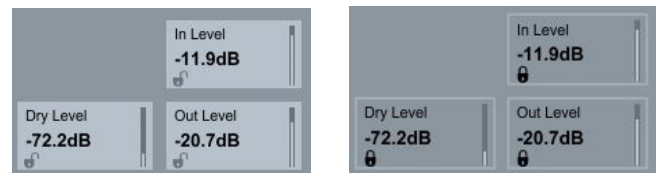
If you click on the lock in the lower left corner of the control, this will prevent the Output Level from changing whenever you select a different preset.

Locking Parameter values

The parameter lock function allows you to lock the Dry Level, In Level, and Out Level parameters, and prevent them from changing when you change preset.

By using these locks, you can easily browse through the extensive set of presets that comes with the VSS3, without having to change the Dry Level, In Level or Out Level all the time.

To lock a parameter, simply click on the small lock in the bottom left corner of the parameter field. To unlock it, click again.



The parameter lock only affects preset changes made with the mouse. The parameter lock does not affect automation data or preset changes initiated from the host application. These changes will always pass.

An example:

You have inserted the VSS3 on a channel.

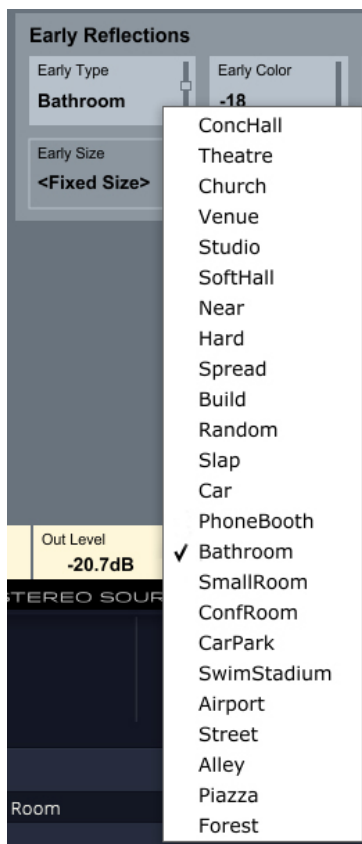
When you use the VSS3 as an insert effect, you would probably like the dry part of the signal to go through the VSS3, and therefore you'd probably turn up the "Dry Level."

Now, if you try to browse through a couple of presets, using the up and down arrows on the right side of the preset name, you will see that most of the presets have the Dry Level set to "Off". In other words, the Dry Level goes to "Off" all the time - which is quite annoying.

And here comes the Parameter Lock. Simply press the small lock in the Dry Level parameter field, and the Dry Level will stay at the value that you've set it to - no matter what is saved with the preset you choose.

EN Early Reflections Page

On this page, you can find all the important parameters for the Early Reflections generated by the VSS3.



Early Type

Several types are available - for example, Airport, Bathroom, Car, Street, etc. Click in the box to show a list of available types, or click and move the mouse up and down to cycle through them.

Pick the type that best compliments your material, or best represents the effect you are going for.

Early Color

Range: -40 to +40 (0 = default)

Adjusts the spectral balance in the high end frequencies. This is actually a simple way of adjusting a complex selection of frequencies.

Early Pos

Here you can select between a Close and a Distant listening position setting. This enables you to change the distance between the listening position and the source in the same Early Reflection pattern.

Please note that some of the Early Types only have one position available. The Early Pos parameter field will be grayed out and show the text "<Fixed Pos>".

Early Size

Range/Type: Small, Medium or Large

Changes the size of the Early Type parameter.

Some of the Early Types have only a fixed size. For these Early Types, the Early Size parameter field will be grayed out and show the text "<Fixed Size>".

Early Balance

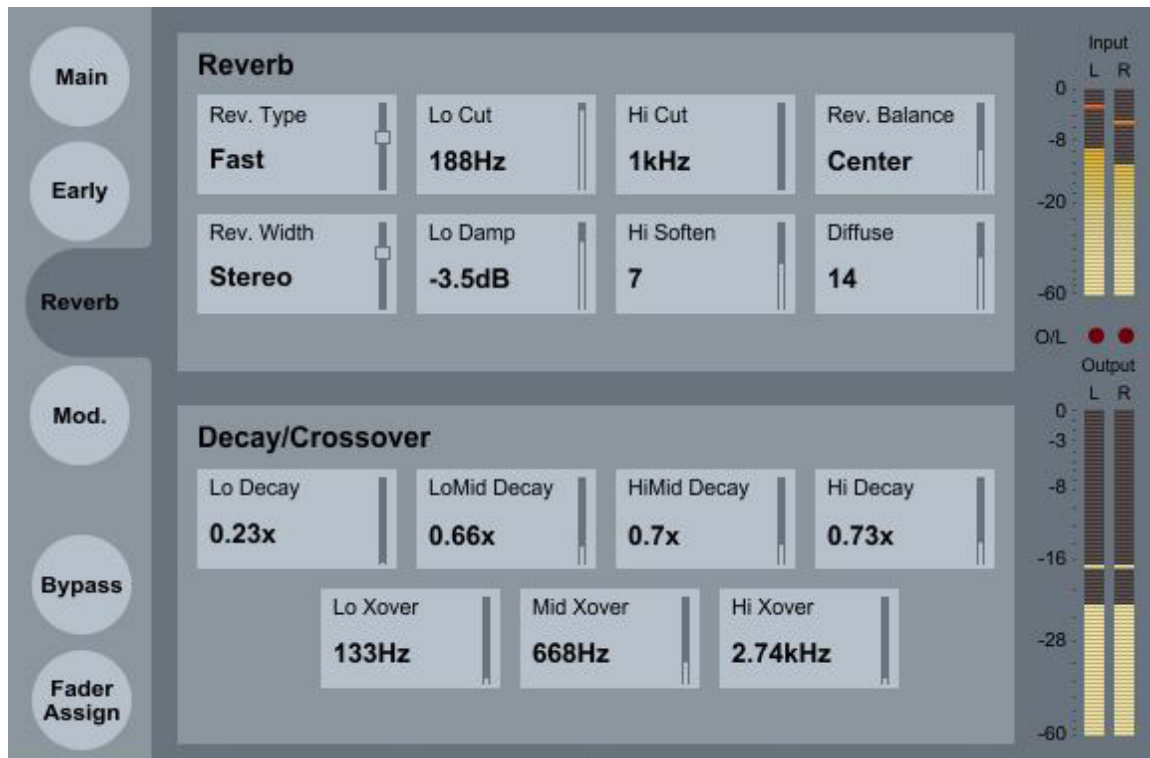
Range: -100 dB R, Center 0 dB, -100 dB L

The left/right balance of the Early Reflections. Allows you to offset the Early Reflections from the normal center position by attenuating the Early Reflections on the right or left channel.

Reverb Page

On this page, you can find all the important parameters for the Reverb Tail generated by the VSS3, including the setup of the crossover frequencies and decay time multipliers for the individual frequency bands.

Reverb



Rev. Type

Range: Smooth, Natural, Alive, Fast, Alive/Wide, Fast/Wide

Adjust this parameter with the Early Level turned all the way off and the Rev Level all the way up. Change the type to get a feel of what each one sounds like.

Rev. Width

Range: Mono, Center, Stereo or Wide

With this parameter you can change the width of the diffuse field. The Mono setting is where the left and right Reverb Tails are completely identical, the Center setting opens a bit up in the middle, Stereo is the normal stereo image width, and Wide covers the outside of the stereo image.

Note: The Rev Types Fast Wide and Alive Wide only have one width, indicated as "Xtra Wide" (extremely wide).

Lo Cut

Range: 16 Hz to 200 Hz

Adjustable filter that allows you to remove low frequencies from the Reverb Tail. The Lo Cut frequency can be thought of as a Threshold frequency. The cut will be performed according to the Lo Damp parameter.

Lo Damp

Range: -18 dB to 0 dB

Sets the amount of cut in dBs. (See the Lo Cut description above).

Hi Cut

Range: 20 Hz to 20 kHz

Rolls off the top end of the signal as it enters the Reverb. Used in conjunction with Hi Soften and Hi Decay to "darken" a room.

Hi Soften

Range: -50 to +50 (0 = default)

Hi Soften is a special filter used to "soften" the high frequencies of Reverb. This is not a simple Hi Cut filter but a complex set of filters working together to remove those frequencies that make a Reverb sound "brittle" or harsh. Hi Soften is scaled/linked to the Hi Cut and Hi Decay.

Rev. Balance

Range: 100 dB R, center 0 dB, -100 dB L

The left/right balance of the Reverb. This allows you to offset the diffuse field from the normal center position by attenuating the Reverb Tail level on the right or left channel.

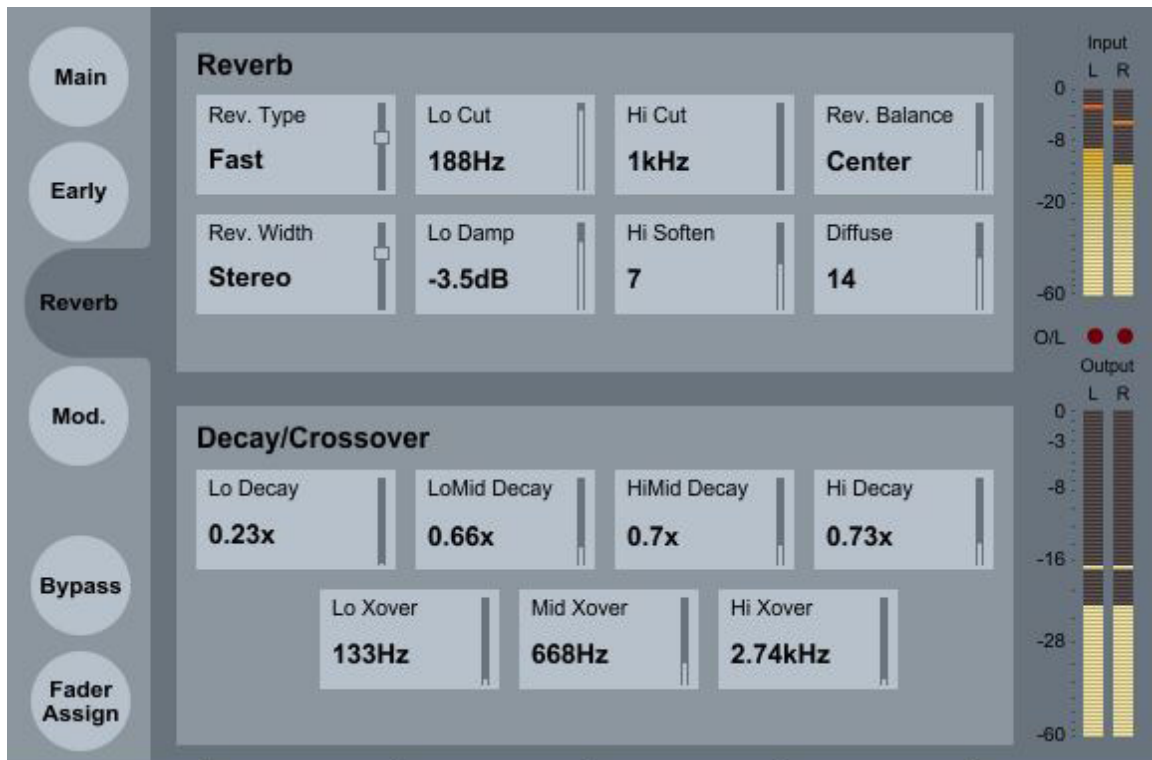
Diffuse

Range: -50 to +50 (0 = default)

This parameter gives you more or less diffusion than the algorithm designer intended for the given Decay time. For optimum performance, the diffusion is automatically adjusted behind the scenes whenever you change Decay times. This parameter gives you the added control to vary the diffusion around this automatic setting.

Reverb Page continued

Decay/Crossover



Lo Decay

Multiplier Range: 0.01 to 2.5x

Multiplier for the frequencies below the Lo Xover frequency.

Example: If the Main Decay parameter is set to 2.0 sec and the Lo Decay parameter is set to 1.5x, frequencies below the Lo Xover will decay for 3.0 sec. (=1.5 x 2.0sec). Conversely if this parameter is set to 0.5x, then the Decay time below the Lo Xover point will be only 1 sec (=0.5 x 2.0 sec).

Lo Xover

Range: 20 Hz to 1.0 kHz

Sets the frequency at which the transition from the low to the low-mid frequencies takes place.

Lo Mid Decay

Multiplier Range: 0.01 to 2.5x

The Ratio control multiplier for the low-mid frequencies.

Mid Xover

Range: 100 Hz to 2 kHz

Sets the frequency at which the transition from the low-mid to the mid frequencies takes place.

Hi Mid Decay

Multiplier Range: 0.01 - 2.5x

The Ratio control multiplier for the mid frequencies. This parameter is normally set to 1.0 as it is the main parameter adjusted by the main Decay parameter. This mid-range decay control would normally be omitted, however, TC Engineers felt you could use this parameter as a fine adjustment tool to “tweak” a preset to sound just right without having to adjust the master Decay parameter.

Hi Xover

Range: 500 Hz to 20 kHz

Sets the frequency at which the transition from the mid frequencies to the high frequencies takes place.

Hi Decay

Range: 0.01 to 2.5x

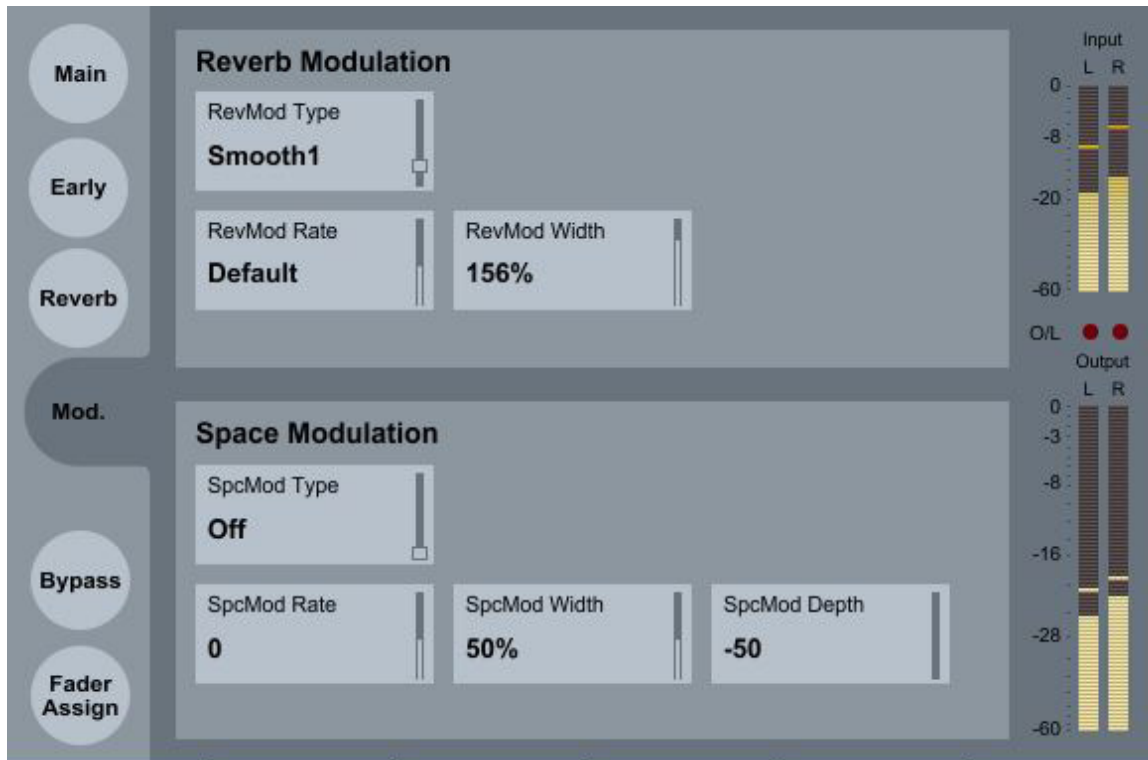
Multiplier for the frequencies above the Hi Xover frequency.

Example: If the main Decay parameter is set to 2.0sec and the Hi Decay parameter is set to 1.5, frequencies above the Hi-Xover will decay for 3.0 sec (=1.5 x 2.0sec). Conversely if this parameter is set to 0.5 the Decay time above the Hi Xover point will be 1 sec (=0.5 x 2.0 sec).

Modulation Page

The VSS3 offers intense modulation facilities and to control these, the Modulation page gives you an extensive series of parameters. All these parameters are condensed into 2 easy-to-use modulation sections, where you control different aspects of the modulation.

The modulation part of the VSS3 has an in-built set of randomization methods. Every room in this world sounds different from one second to the next, and with the “random” feature this is perfectly simulated.



Reverb Modulation

The reverb modulation type is a set of very complex LFO patterns that modulates various parts of the reverb, and these patterns are developed based on the many years of experience and knowledge of the TC crew.

RevMod Type

Off, Smooth 1, Smooth 2, Perc, Wow, Vintage, Wild

Selects the type of modulation.

RevMod Rate

Range: -100, default, +100

Allows you to offset the speed of the LFO from the factory default assigned to each Type.

RevMod Width

Range: 0% to 200%

Sets the Width of the modulation.

Space Modulation

The space modulation part imitates the air movement of a room, and this is one of the things that make the VSS3 very good at simulating the complex patterns of natural rooms. You can choose a modulation type, and then adjust its rate, width and depth.

SpcMod Type

(Off, Normal, Fast, Slow, MidFreq, Sync)

Selects the type of Space Modulation.

SpcMod Rate

Range: -100, default, +100

Allows you to offset the speed of the LFO from the factory default assigned to each type.

SpcMod Width

Range: 0 to 100%

Sets the width of the modulation.

SpcMod Depth

Range: -50, default, +50

Allows you to offset the amount of space modulation from the factory default.

EN Preset Management

TC's comprehensive file-based preset architecture makes archiving presets a simple process. This allows you to organize your presets the way you find most comfortable for your workflow, and to exchange presets with other users, no matter the platform or application. User presets are saved as discrete files on your hard drive. Once a preset is saved into the default location, it will be available to load every time you use the plug-in. The files can then be organized into subfolders, where you can delete, rearrange or create your own sub-folders to accommodate your needs.



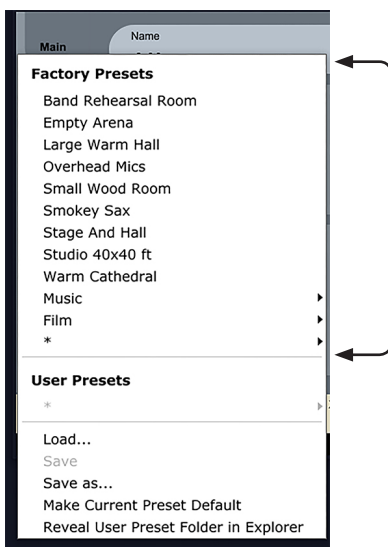
Next/Previous Presets

From the plug-in's Main page, you can directly jump from one factory preset to the next (or previous) by clicking on the up/down arrows to the right of the preset name.

All user presets available at the default plug-in preset location will also be shown, so you can reach every preset this way.

Factory and User Preset Menu

Clicking near the Preset name will open the factory and user preset menu. The various options are described below:



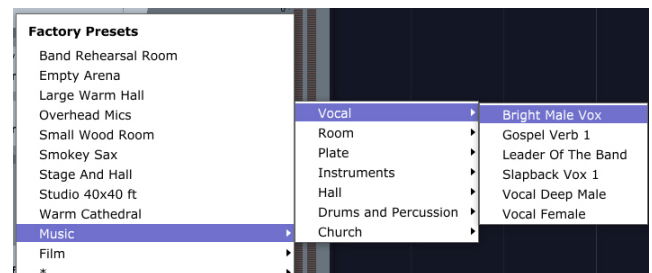
Factory Presets

We have created many presets that help simulate the reverb effects of various venues, furnishings, surfaces, and so on. These vary in size from small booths all the way up to stadiums. Use them as they are, or as an initial template for experimenting and saving your own presets.

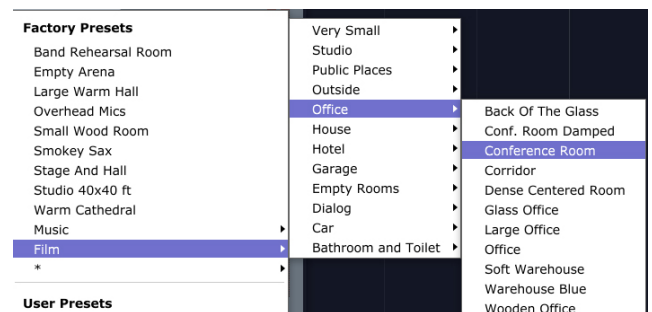
If a factory preset is loaded and you change any of the parameters, the preset title will change to *Italic text*, as a reminder that what you are listening to is a changed factory preset, and not the original. You can save your changes as a new user preset, using the Save As option.

The first few presets shown in the drop-down menu are favorite settings.

Music – leads to various typical presets grouped together for use in music production. (See page 29 for a table of available presets.)



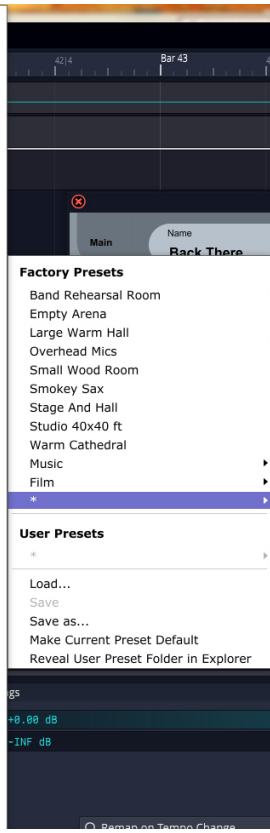
Film – leads to various typical presets grouped together for use in film production. (See page 28 for a table of available presets.)



* – shows all the available factory presets.

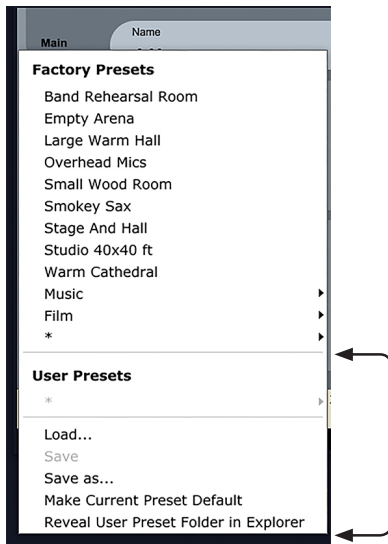
Factory Presets

A Small Room	CB Small Tower Hall	Empty Corridor	Locker Room	Small Dense Hall
A Van	CB Throne Room	Empty Indoor Pool	Long Swimmingpool	Small Foley Blue
Acoustic Gtr Ambience	Centered Hallway	Empty Nightclub	Louvre Pyramid Hall	Small Perc Room
Acoustic Guitar Space	Chamber	Empty Restaurant	Meat Locker	Small Stairway
AES Show Lobby	Church Piano	Empty Stairwell	Medium Church	Small Wood Room
Airport PA	Church	Empty Store	Medium Vocal Hall	Smokey Sax
Ambient Hall	City Foot Chase	Enhancer Verb 2	Mine Corridor	Snare Room Bright
Ambient Plate	Classroom	Factory	Modern Kitchen	Snare Room Long
Back Of The Glass	Claustro-Phonebooth	Forest in Autumn	Natural Wood Room	Soft Warehouse
✓ Back There	Claustrophobia	Frankfurt Hbf	Near The Wall	Stage And Hall
Backyard Quantec Wide	Clear Guitar Room	Furnished Basement	Office	Stairway Plate
Backyard Quantec	Clear Room	Furnished Room 2	Oil Drum	Storage Room
Backyard	Close Breathing	Furnished Room	On The Street	Store Room 1
Ballad Vocal Hall	Closet With Clothes	Garage	Open Mics	Store Room
Band Practice Room	Concert Arena	Glass Office	Overhead Mics	Studio 20x20 ft
Band Rehearsal Room	Concert Piano	Gospel Verb 1	Parking Distant	Studio 40x40 ft
Basement 1	Conf. Room Damped	Grand Ballroom	Parking Garage	Studio Small
Basement 2	Conference Room	Grand Vocal Hall	Party Chitchat	Subway Platform 1
Basement Large	Corridor	Hallway	Pentagon Corridor	Subway Tunnel
Bathroom Blue	Courtyard	Hard Drum Space	Perc Modulation	Sweeping Weirdverb
Bathroom Stall	Crazy Phasey	Home Garage	Perc Straight Tail	The 2nd Bedroom
Beetle Interior	Dance Snare	Hotel Lobby	Phonebooth Tight	The Abbey
Big City	Dance Studio	In The Air Vent	Phonebooth	The Studio
Big Empty Club	Dark Tunnel	In The Kitchen	Piano Hall 1st Row	Tight & Natural
Big Room	Deep Valley	In The Room	Piano Plate	Tight & Smooth
Big Stairway	Dense Centered Room	In The Shower	Plaster Walls	Toilet Stall
Big Stairwell	Dialogue + Music Slap	Indoor Parking Lot	Public Mens Room	Tom-Tom Reverb
Big Toilet	Dialogue 1	Inside Truck	Public Toilet	Too Small Mens Room
BK Large Clear Hall	Dialogue 2	Interior Kitchen	Real Living Room	Under a Blanket
Blackface Amp	Dialogue 3	Kellars Cell Blue	Reception Area	Unfurnished Room
BMW Limo	Dining Room	Kick & Bass Ambience	Recording Booth	Venue Warm 1
Bossa Nova Perc Room	Distance in Jungle	Kitchen	Rhodes Thicken	Vintage Snare Room 2
Boston Garden Hall	Dog in The Alley	Lap Dance Snare	Room Conversation	Vocal Deep Male
Bright Guitar Hall	Down The Hall	Large & Stage Blue	Room With A View	Vocal Female
Bright Male Vox	Drapes and Curtains	Large Hall Clear	Scissorhands Parlor	Vocal Hall 1
Bright Plate	Drum Perc Soft 1	Large Locker Room	Scoring Stage 1	Walk in Closet
Bright Theatre	Drum Plate Stuff	Large Office	Scoring Stage 2	Warehouse Blue
Brill Building Lobby	Drum Room Xpander	Large Warm Hall	Semifurnished Quantec	Warm Cathedral
Budapest West Railwayst.	Drum Trash Stuff	Leader Of The Band	Silky Gold Plate	Watchtower Inside
Car Front 2 Backseat	Drum Wood Plate	Limo Interior	Slapback Piano	Wide Ambient Chamber
Car Frontseat Dialogue	Elevator Shaft	Live VO Booth	Slapback Plate	Wide Garage
Car Interior Blue	Empty Arena	Living Room Blue	Slapback Vox 1	Wine Cellar
Cardoor at Midnight	Empty Auditorium	Living Room	Small Bathroom	Wood Floor
Cathedral	Empty Basement	Livingroom	Small Booth	Wooden Office



User Presets

You can adjust the parameters of the reverb until it sounds just the way you like, and then save the settings as a user preset for later recall. All the VSS3 parameters will be saved as a snapshot into the new user preset.



User Presets Area (with no user presets created yet)

* – shows all the available user presets (if you have created any).

Load – use to load any user presets that you have previously created and saved. You can navigate to any folder on the system that you have read-access to, including any shared folder. By default, these will be loaded from the default location for VSS3 presets. Only presets located in the default file location will appear in the VSS3 pop-up preset menu.

Save – this option is available if you have loaded a previously-saved user preset. You can make any changes to the settings and then immediately save over the preset with the same preset name. Any previous settings will be written over, so if you want to keep them, use "Save as" instead, and save the file as a different preset name.

Save as – use to save your current settings as a user preset. You can save your preset to any folder on the system that you have write access to, including any shared folder. By default, presets are saved to the default location for the VSS3 presets. Choose a simple appropriate name for your preset at the time of saving it.

Make Current Preset Default – use to set the current preset so it will be loaded whenever VSS3 is started.

Reveal Preset Folder in Finder/Explorer – Use to show the location of the preset folder on your machine.

Default User Preset Locations

The user presets are stored in a default folder in the following locations:

Mac OS X: \Users\your.name\Library\Audio\Presets\TC Electronic\VSS3

Windows: (System Drive):\C:\Users\your.name\My Documents\TC Electronic\VSS3

Deleting a User Preset

To delete a file, simply move it to the "Trash" or "Recycle bin."

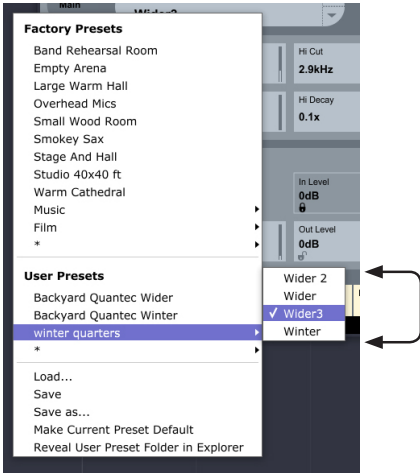
Creating a User Preset Subfolder

To create a new subfolder that appears in the plug-in menu, create a new folder inside the VSS3 default preset location.

NOTE: A subfolder will not appear in the Preset File Menu unless it has at least one preset inside.

User Preset Example

The example below shows the drop down preset menu after the creation of 2 user presets (Backyard Quantec Wider and Backyard Quantec Winter) and one subfolder (winter quarters) that contains 4 user presets (Wider 2, Wider, Wilder3, and Winter).

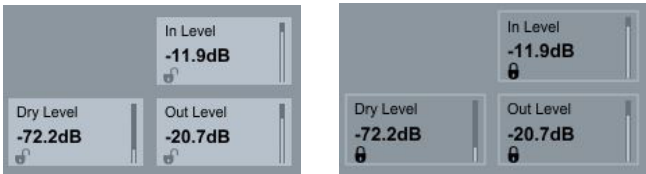


User Preset Example (with some user presets created)

Locking Parameter Values

Three of the VSS3 parameters can be "locked" so they do not change level when presets are changed: Dry Level, In Level and Out Level.

Click on the small Lock icon in the lower left to lock/unlock the parameter. See page 15 for more details.



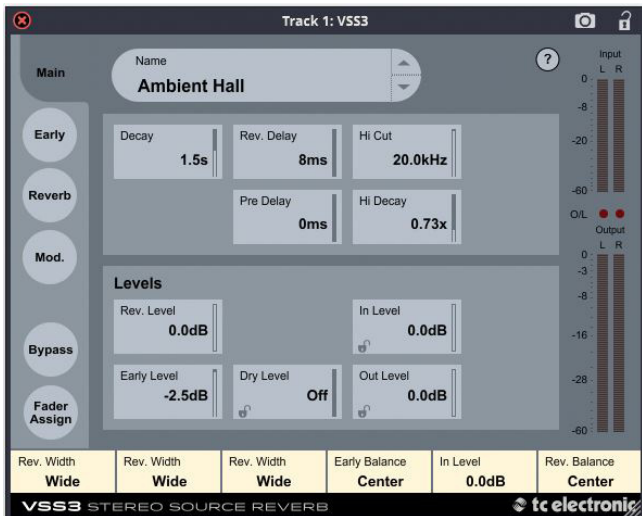
Unlocked Parameters

Locked Parameters

Creating User Presets

The following example shows how you can create a user preset.

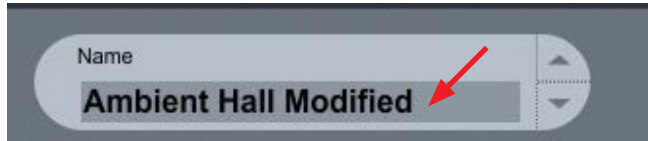
Suppose that we have loaded the existing factory preset "Ambient Hall"



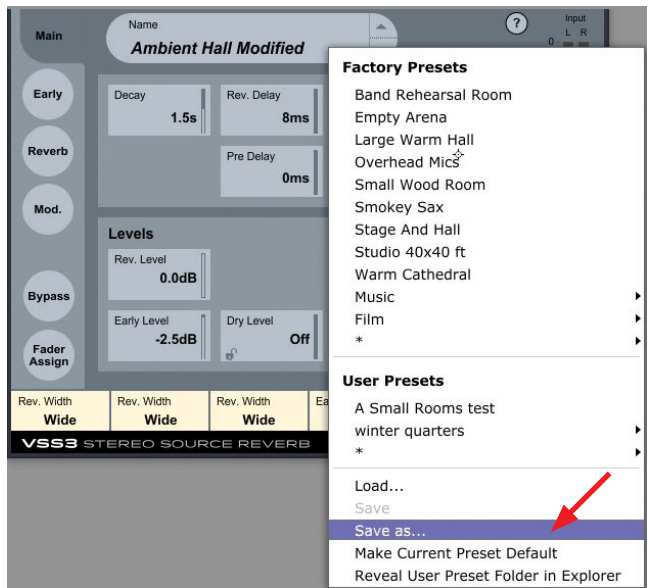
Move the mouse over to the preset name and click. The name will be highlighted in yellow and the text can be edited.



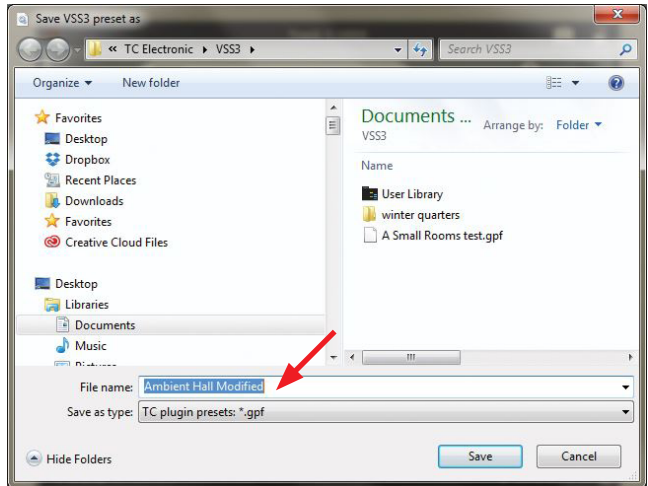
Type in a new name, and then press enter. (If you do not press enter, then the new name will not be saved.)



Click near to the name (but not on the name) and the preset menu will appear. Now select "Save As."

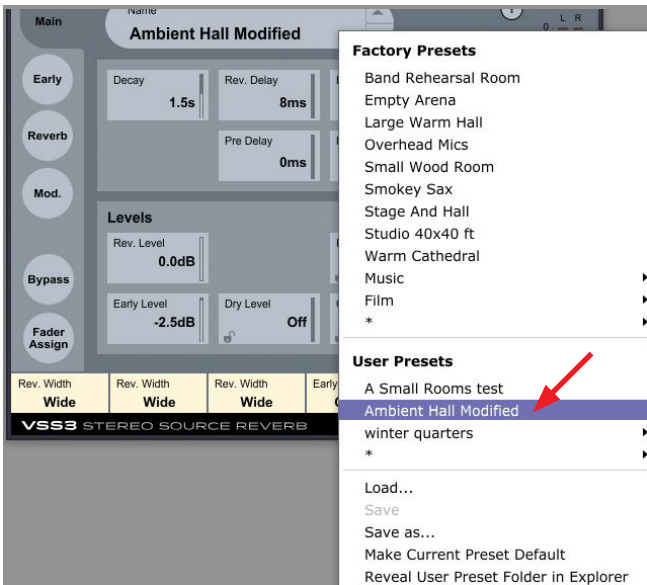
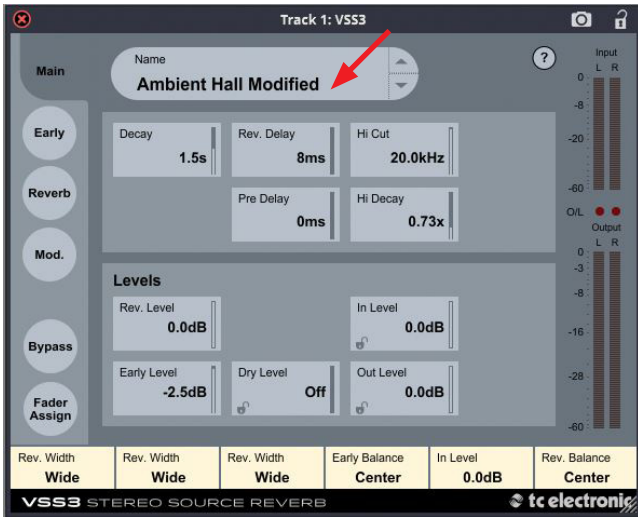


Save the new preset in the default user preset file location.



EN

The new preset will now appear in the preset list at the top, and in the drop down list of user presets.



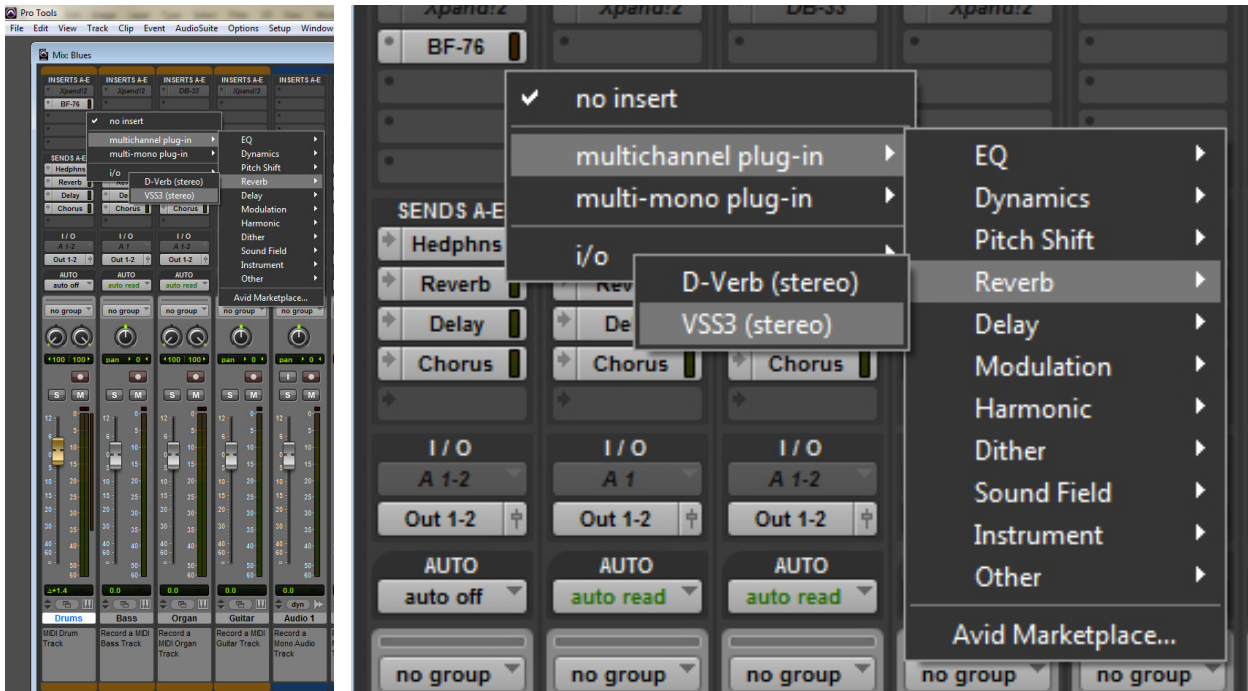
Opening VSS3 in Pro Tools

Launch Pro Tools, open your project, in the MIX view.

The plug-ins can be added to the top area of each channel strip.

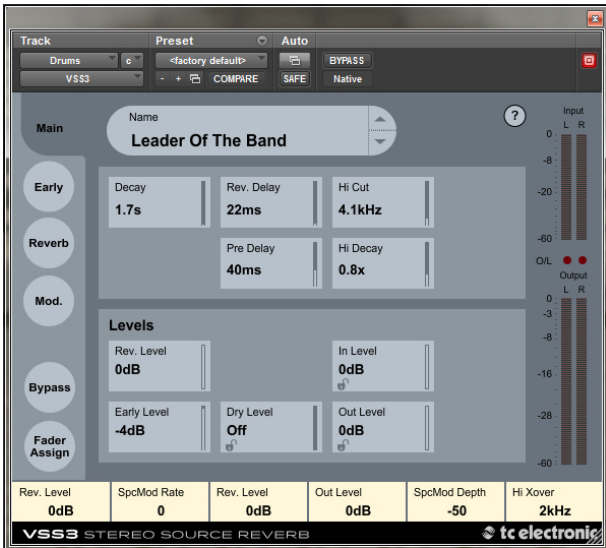
Click on one of the rectangular boxes at the top, and a drop-down menu will show all the available plug-ins. Select "Reverb" and you will see the VSS3 plug-in.

If the VSS3 plug-in is added to a stereo channel, then VSS3 is available as a stereo in/stereo out version.



Adding VSS3 to a stereo channel

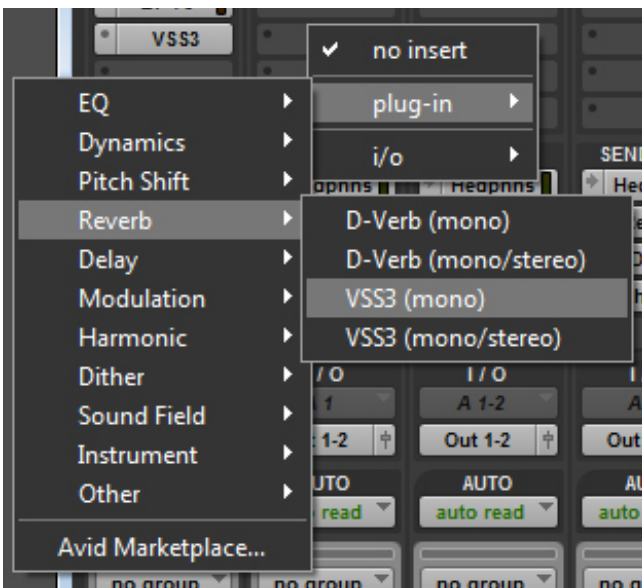
EN



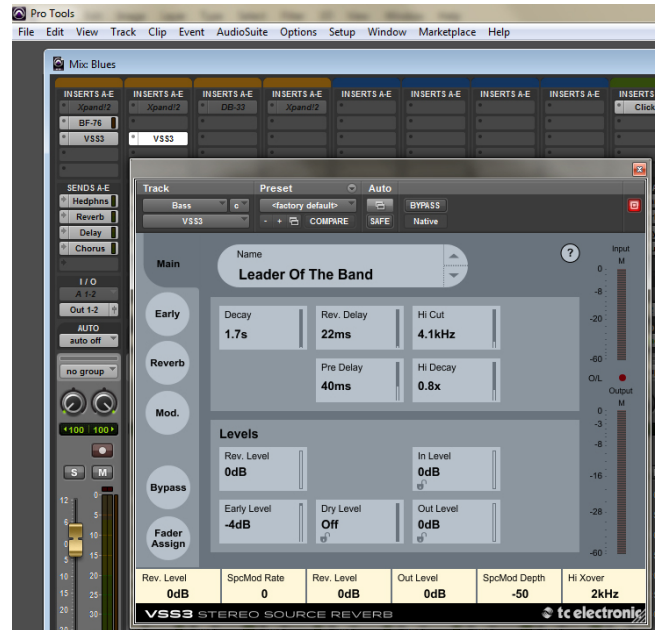
VSS3 user interface in Pro Tools, showing stereo output meters

Pro Tools adds extra controls to the top of the VSS3 user interface, as shown above.

If the VSS3 plug-in is added to a mono channel, then VSS3 is available as a mono in/mono out, or mono in/stereo out version.

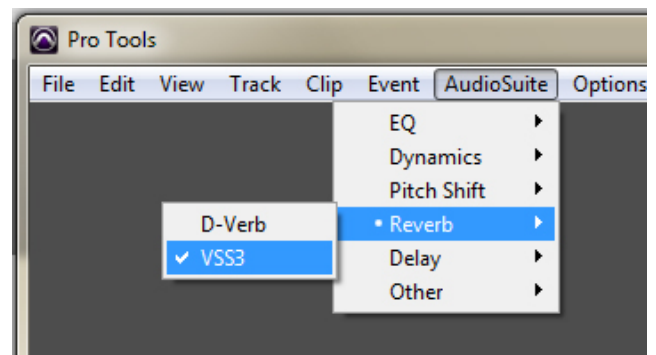


Adding VSS3 to a mono channel



VSS3 user interface in Pro Tools, showing mono input and output meters

Plug-ins in Pro Tools can also be accessed from the Audio Suite menu.



Open Audio Suite > Reverb > VSS3

System Requirements

Copy Protection

The VSS3 plug-in is copy protected by iLok (PACE), but you don't need a physical iLok key to use them. With VSS3 you can choose to store your iLok license either on an iLok USB key or on your computer.

No matter what, you need an iLok ID, which you can get by registering a free user account at ilok.com.

System

Supported Sample Rates

Low: 44.1 kHz, 48 kHz

Medium: 88.2 kHz, 96 kHz

High: 176.4 kHz, 192 kHz

Supported Audio Formats

Mono in, mono out

Mono in, stereo out

Stereo in, stereo out

Resizing

Resizing is supported, depending upon DAW

Mac

OS X 10.9 (Mavericks) or above 2 GB RAM

Pro Tools 11 or above or a VST/AU compatible host

Plug-in Formats:

VST2.4

VST3

Audio Units

AAX Native 32/64-bit

AAX AudioSuite 32/64-bit

Windows

Windows 7 or above

Pro Tools 11 or above or a VST compatible host

Plug-in Formats:

VST2.4

VST3

AAX Native 32/64-bit

AAX AudioSuite 32/64-bit

Hosts

You can use VSS3 with any host that supports any of the plug-in formats listed above.

VSS3 has been tested to be working with the following hosts*:

Avid Pro Tools

Apple Logic Pro

Nuendo

Wavelab

Cubase

Ableton Live

Steinberg Sequel

Cakewalk Sonar

*Support isn't limited to these hosts.

Factory Presets (subject to change)

Film

Bathroom and Toilet

Bathroom Blue
 Bathroom Stall
 Big Toilet
 In The Shower
 Public Mens Room
 Public Toilet
 Small Bathroom
 Toilet Stall
 Too Small Mens Room

Car

A Van
 Beetle Interior
 BMW Limo
 Car Front 2 Backseat
 Car Frontseat Dialogue
 Car Interior Blue
 Cardoor at Midnight
 Inside Truck
 Limo Interior

Dialog

Dialogue + Music Slap
 Dialogue 1
 Dialogue 2
 Dialogue 3
 Room Conversation

Empty Rooms

Empty Auditorium
 Empty Basement
 Empty Corridor
 Empty Indoor Pool
 Empty Nightclub
 Empty Restaurant
 Empty Stairwell
 Empty Store

Garage

Garage
 Home Garage
 Indoor Parking Lot
 Parking Distant
 Parking Garage
 Wide Garage

Hotel

Big Stairway
 Big Stairwell
 Centered Hallway
 Down The Hall
 Elevator Shaft
 Grand Ballroom
 Hotel Lobby
 In The Air Vent
 In The Room
 Meat Locker
 Reception Area
 Wine Cellar

House

A Small Room
 Basement 1
 Basement 2
 Basement Large
 Big Room
 Chamber
 Closet With Clothes
 Dining Room
 Drapes and Curtains
 Furnished Basement
 Furnished Room 2
 Furnished Room
 Hallway
 In The Kitchen
 Interior Kitchen
 Kitchen
 Living Room Blue
 Living Room
 Livingroom
 Modern Kitchen
 Natural Wood Room
 Real Living Room
 Room With A View
 Semifurnished Quantec
 Small Stairway
 Storage Room
 Store Room 1
 Store Room
 The 2nd Bedroom
 Under a Blanket
 Unfurnished Room
 Walk in Closet
 Wood Floor

Office

Back Of The Glass
 Conf. Room Damped
 Conference Room
 Corridor
 Dense Centered Room
 Glass Office
 Large Office
 Office
 Soft Warehouse
 Warehouse Blue
 Wooden Office

Outside

Backyard Quantec Wide
 Backyard Quantec
 Backyard
 Big City
 City Foot Chase
 Deep Valley
 Distance in Jungle
 Dog in The Alley
 Forest in Autumn
 Mine Corridor
 On The Street

Public Places

AES Show Lobby
 Airport PA
 BK Large Clear Hall
 Back There
 Boston Garden Hall
 Brill Building Lobby
 Budapest West Railwayst.
 CB Small Tower Hall
 CB Throne Room
 Classroom
 Courtyard
 Dark Tunnel
 Factory
 Frankfurt Hbf
 Kellars Cell Blue
 Large Locker Room
 Locker Room
 Long Swimmingpool
 Louvre Pyramid Hall
 Medium Church
 Party Chitchat
 Pentagon Corridor
 Plaster Walls
 Scissorhands Parlor
 Subway Platform 1
 Subway Tunnel
 The Abbey
 Watchtower Inside

Studio

Band Practice Room
 Dance Studio
 Enhancer Verb 2
 Live VO Booth
 Open Mics
 Recording Booth
 Scoring Stage 1
 Scoring Stage 2
 Small Foley Blue
 Studio Small

Very Small

Claustro-Phonebooth
 Claustrophobia
 Close Breathing
 Near The Wall
 Phonebooth Tight
 Phonebooth

Music

Church

Cathedral
 Church Piano
 Church
 Warm Cathedral

Drums and Percussion

Bossa Nova Perc Room
 Dance Snare
 Drum Perc Soft 1
 Drum Room Xpander
 Drum Trash Stuff
 Hard Drum Space
 Kick & Bass Ambience
 Lap Dance Snare
 Overhead Mics
 Perc Modulation
 Perc Straight Tail
 Small Perc Room
 Snare Room Bright
 Snare Room Long
 Tom-Tom Reverb
 Vintage Snare Room 2

Hall

Ambient Hall
 Ballad Vocal Hall
 Big Empty Club
 Bright Guitar Hall
 Bright Theatre
 Concert Arena
 Empty Arena
 Grand Vocal Hall
 Large & Stage Blue
 Large Hall Clear
 Large Warm Hall
 Medium Vocal Hall
 Piano Hall 1st Row
 Small Dense Hall
 Stage And Hall
 Venue Warm 1
 Vocal Hall 1

Instruments

Acoustic Gtr Ambience
 Acoustic Guitar Space
 Blackface Amp
 Concert Piano
 Crazy Phasey
 Oil Drum
 Rhodes Thicken
 Slapback Piano
 Smokey Sax
 Sweeping Weirdverb

Plate

Ambient Plate
 Bright Plate
 Drum Plate Stuff
 Drum Wood Plate
 Piano Plate
 Silky Gold Plate
 Slapback Plate
 Stairway Plate

Room

Band Rehearsal Room
 Clear Guitar Room
 Clear Room
 Small Booth
 Small Wood Room
 Studio 20x20 ft
 Studio 40x40 ft
 The Studio
 Tight & Natural
 Tight & Smooth
 Wide Ambient Chamber

Vocal

Bright Male Vox
 Gospel Verb 1
 Leader Of The Band
 Slapback Vox 1
 Vocal Deep Male
 Vocal Female

Favorites

Favorites

Band Rehearsal Room
 Empty Arena
 Large Warm Hall
 Overhead Mics
 Small Wood Room
 Smokey Sax
 Stage and Hall
 Studio 40 x 40 ft
 Warm Cathedral

User Presets

User Presets

User Presets

