ReValver™ HP SE

INNOVATION. AMPLIFIED.™

Owner's Manual

Table of Contents

Introduction

ReValver HP SE is a revolutionary 64-bit amplifier modeling software that captures the true characteristics of vacuum tubes, making ReValver HP SE the most advanced virtual amplifier on the planet! This program works both as a standalone using miscellaneous sound card driver models, or as a VST/AU plug-in on various hosts. The program is designed for minimal latency (input/output delay) which is only limited by the plug-in host.

Technical requirements

Mac Requirements: OS X 10.4 or later, 1 GHz CPU; 512 MB RAM; 1024x768 screen resolution; VST/AU host or sound card

The Live Host of ReValver HP SE requires CoreAudio for playback, and MIDI for MIDI control. (MIDI optional.)

AU plug-in requires AU host.
VST plug-in requires VST host.

PC

Windows Requirements: 1 GHz CPU; 512 MB RAM; 1024x768 screen resolution; VST host or ASIO/WDM sound card

OS: Microsoft Windows 2000/XP or later

The Live Host of ReValver HP SE require either ASIO, MME, WDM or DirectSound for playback, and MIDI for MIDI control. (MIDI optional.)

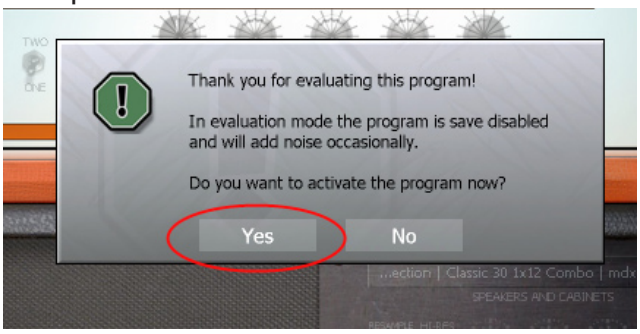
VST plug-in requires VST host.

Compatibility issues

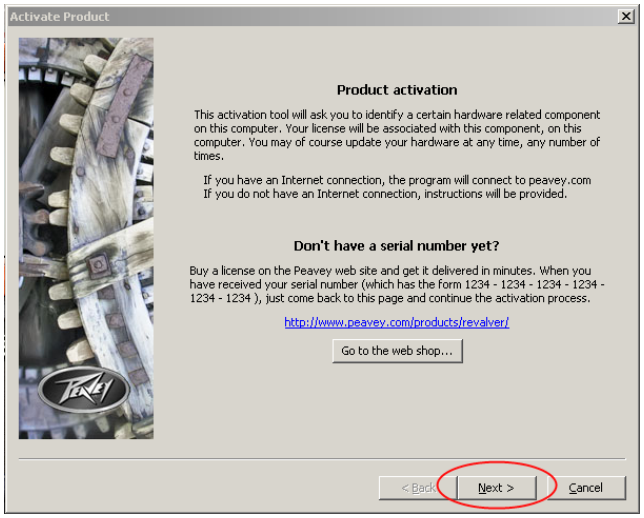
While every measure has been made to resolve any compatibility issues with various VST/AU hosts and sound cards, some issues may remain. If you believe you have found a new compatibility problem, please browse to www.peavey.com/products/revalver. There you will find product updates and user forums.

Product Activation and Authorization

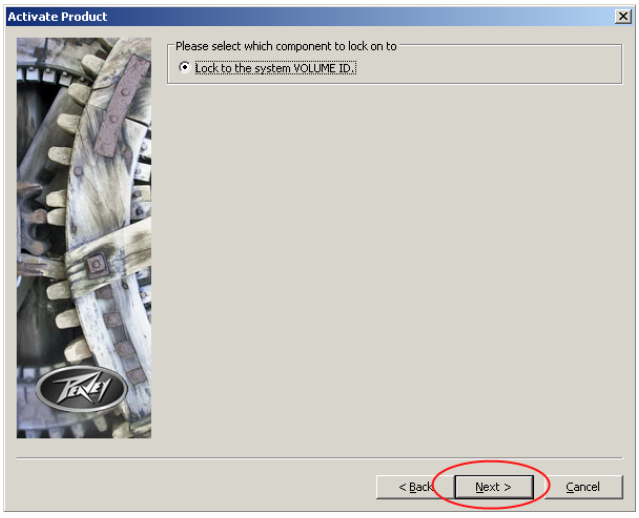
When ReValver™ is installed, it defaults to "demo" mode until activated with a valid ReValver serial number. Everytime you start ReValver you will be asked if you wish to activate or continue in demo mode. Click on the "Yes" button to begin the activation process.



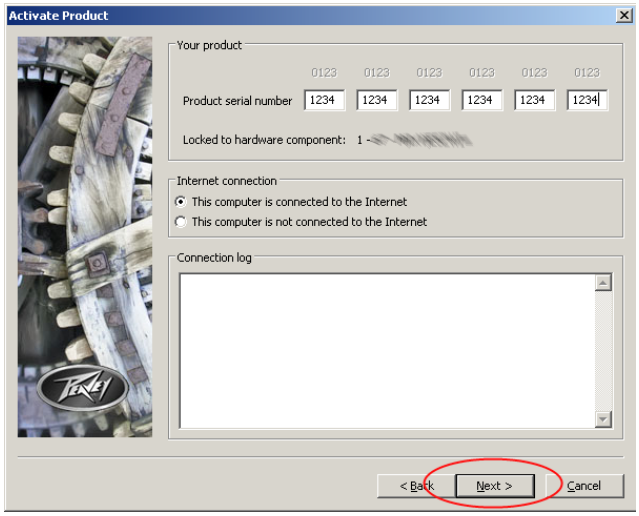
The next screen provides details into the product activation process. If you do not yet have a ReValver serial number, this screen also provides a link to the ReValver web site, where ReValver serial numbers can be purchased. If you have a serial number, click the "Next" button.



All ReValver serial numbers are associated with a hardware component on your computer. Upon activation, that serial number is registered along with that hardware component. The following screen reflects the hardware component that will be used during the activation. To proceed, click the "Next" button.

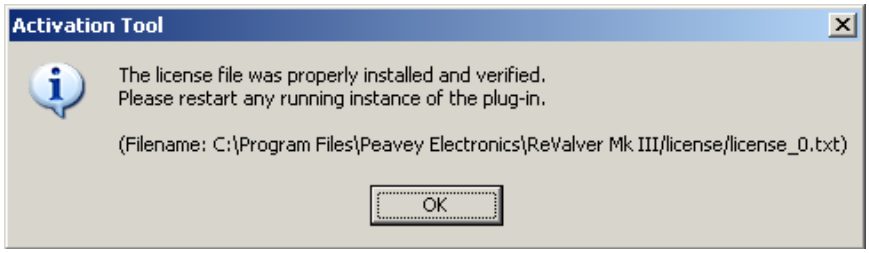


On the following screen, enter your ReValver™ serial number. If you have an Internet connection, the activation process will register your copy of ReValver online. If you are ready to activate, click the "Next" button.

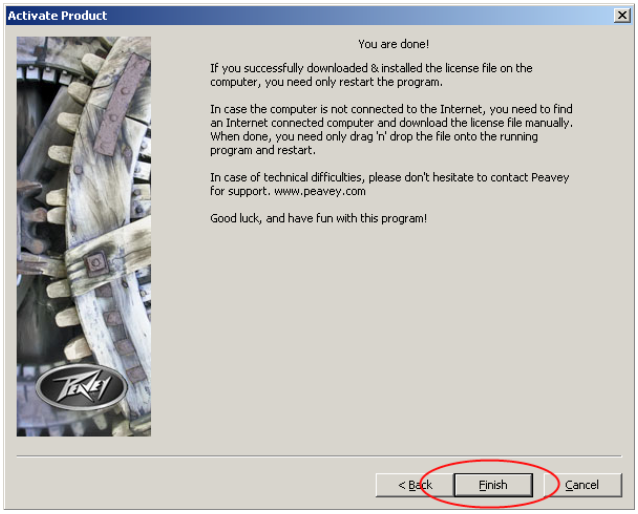


During the online activation process, you will see the current status of the activation in the "Connection log" window at the bottom of the activation screen.

Once the online activation is complete, you will see the following window stating that the activation was successful. To proceed, click the "OK" button.



To finish the activation process, click the "Finish" button.



Product Activation and Authorization Without An Internet Connection

If you do not have an Internet connection on the computer on which you are installing ReValver™, choose "This computer is not connected to the Internet" in the Internet Connection portion of the product authorization window.

When you click the "Next" button, a window will pop up with instructions on how to activate ReValver from another computer. Carefully follow those instructions to activate ReValver.

ReValver Operating Modes

ReValver has two modes of operation: ***Stand-alone*** and ***Plug-in***

In stand-alone mode, ReValver runs alone without any other required software. If you are looking to use ReValver as a computer-based live rig or just want to play some guitar, this would be the mode to choose.

In plug-in mode, ReValver runs within a host. If you are recording, your host would be the DAW of your choice. In this case, ReValver would be used as an insert or track effect.

Loading the VST or AU plug-in into the DAW

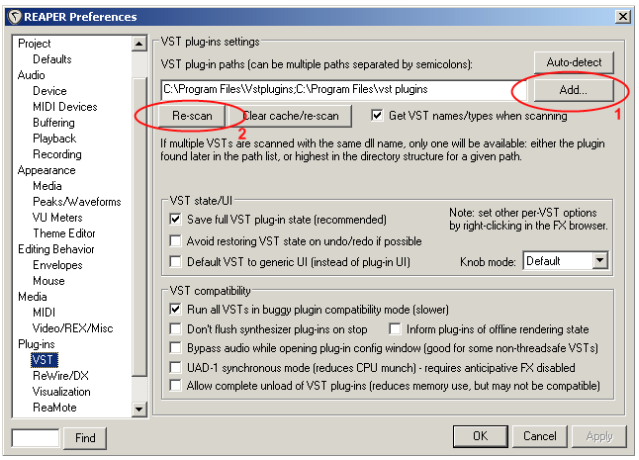
On a Mac, a plug-in in the VST or AU format is automatically located by the host and no action needs to be taken for the host to find the ReValver plug-in. It should be automatically listed among the available plug-ins after a rescan.

In Windows, it is possible to install the VST plug-in at any location. To make the VST host aware of this location, it must be manually pointed to. During the installation of ReValver, you are given a choice of locations to install the VST (separate from the stand-alone version). We recommend that you install ReValver to a location you have already used with your host. Most DAWs provide a means to list available VST paths. Below are details for adding the VST path to various hosts and using ReValver within the DAW:

Reaper

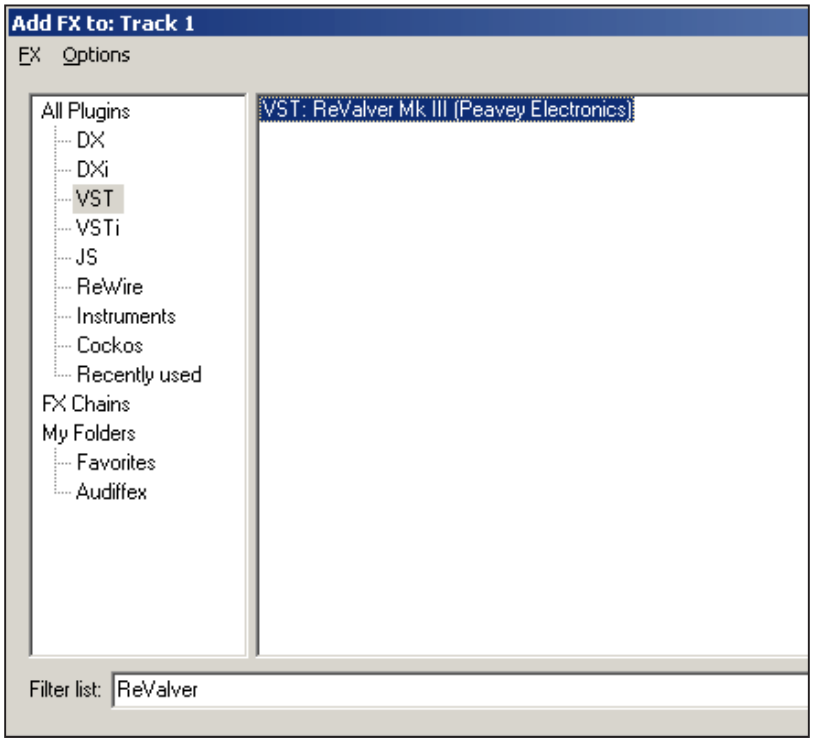
Adding the VST path (Windows)
Menu: Options ⟶ Preferences ⟶ Plug-ins ⟶ VST

Press "Add" (1) to browse to the VST path where the ReValver VST is installed. You then press "Rescan directory" (2).



To use ReValver™ on a track in Reaper, click on the "fx" button in the track.

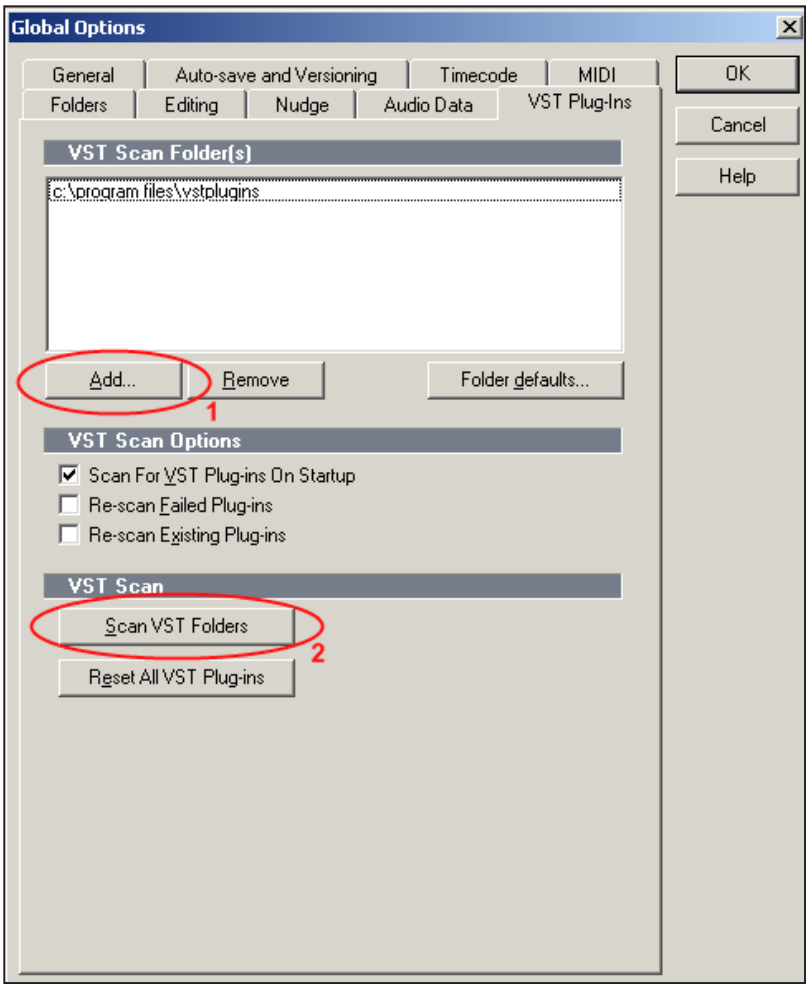
In the FX window, click on "VST" in the menu to the left and locate ReValver in the list of effects to the left. If you have a lot of VST plug-ins installed, typing "ReValver" in the Filter list at the bottom of the window will speed up your search. Once you have located ReValver, double click to load the plug-in.



Sonar

Adding the VST path (Windows)
Menu: Options ——→ Global ——→ VST Plug-ins (tab)

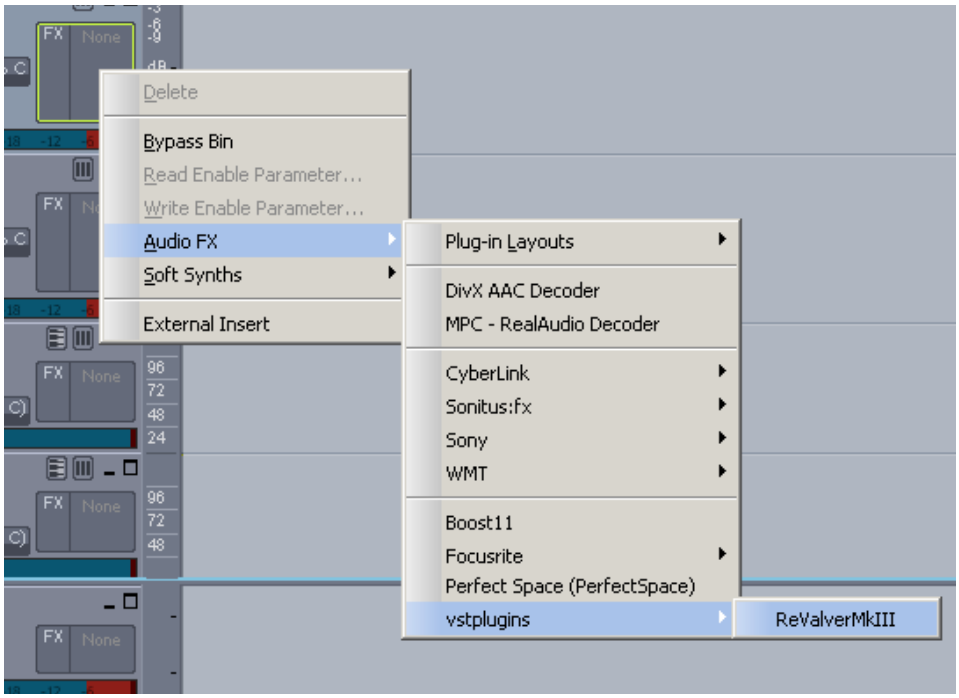
From the VST Plug-ins tab, click the "Add" button (**1**) and browse to your plug-in folder. Once you have added the path, click the "Scan VST Folders" button (**2**) to rescan for all available plug-ins.



Loading ReValver™ into a track

To use ReValver on a track in Sonar, right mouse click in the "FX" window of the track.

In the pop-up menu, navigate to Audio FX ⟶ VST Folder ⟶ ReValver. Click on ReValver™, this will load ReValver into an effects slot for the track.

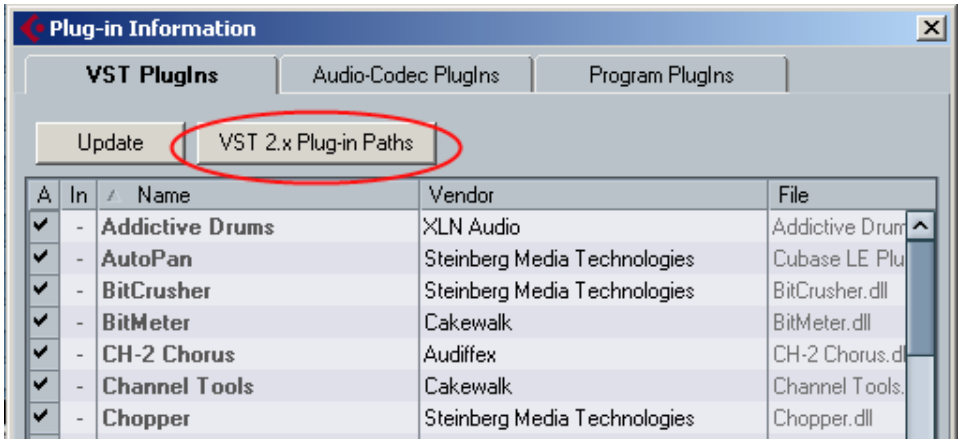


Cubase

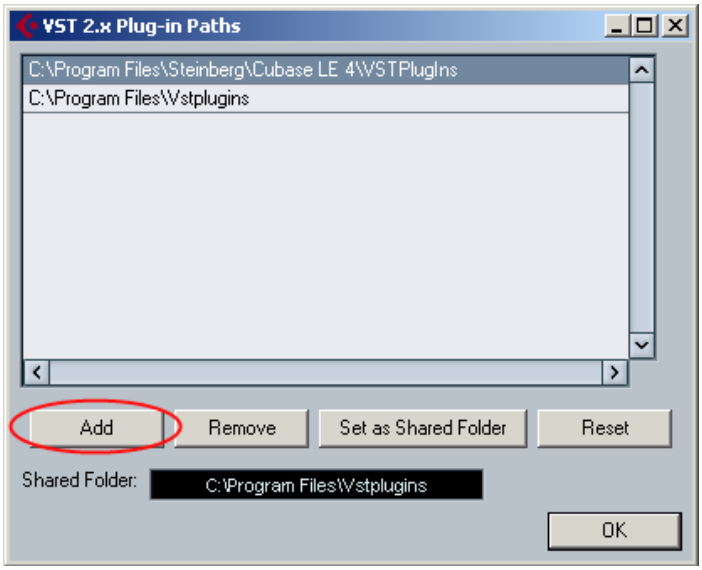
Steinberg Cubase is available on Mac and PC. This host only loads VST plug-ins. It does not load AU or RTAS plug-ins. The ReValver installer automatically installs the VST plug-in in the default location, allowing Cubase to find it with no additional set-up. On Windows, the ReValver installer allows you to install the VST plug-in at an alternative location, if you prefer.

Adding the VST path (Windows)
Devices ⟶ Plug-in Information ⟶ VST Plug-ins (tab) ⟶ VST 2.x Plug-in Paths (button)

From the VST PlugIns tab, click the "VST 2.x Plug-in Paths" button

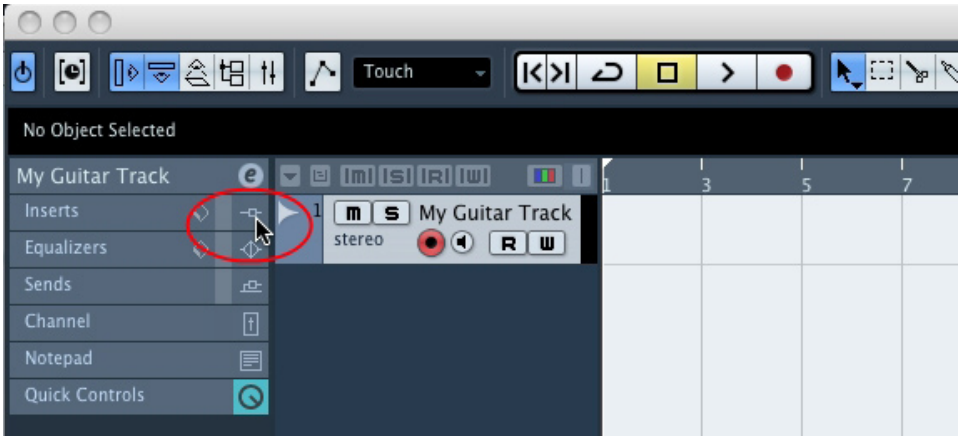


In the VST 2.x Plug-in Paths window, click on the "Add" button and browse to your plug-in folder to add your folder path.

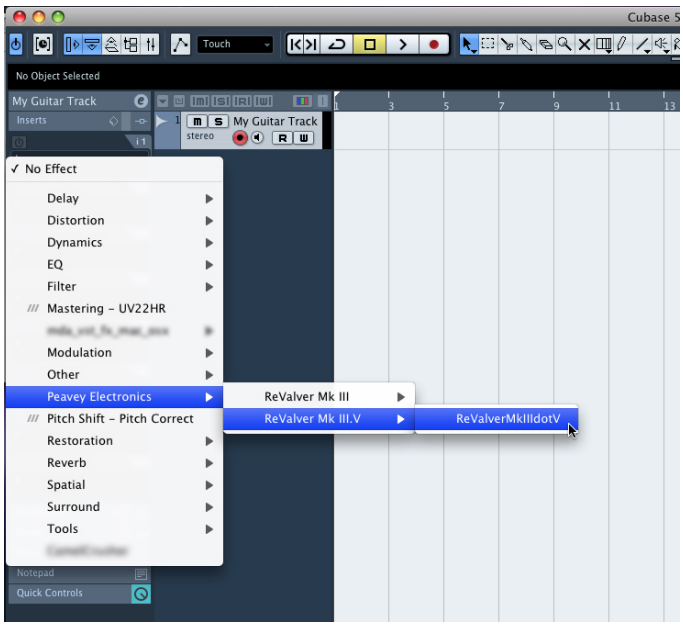


Loading ReValver™ into a track

Click on the "Insert" bar to open the inserts.



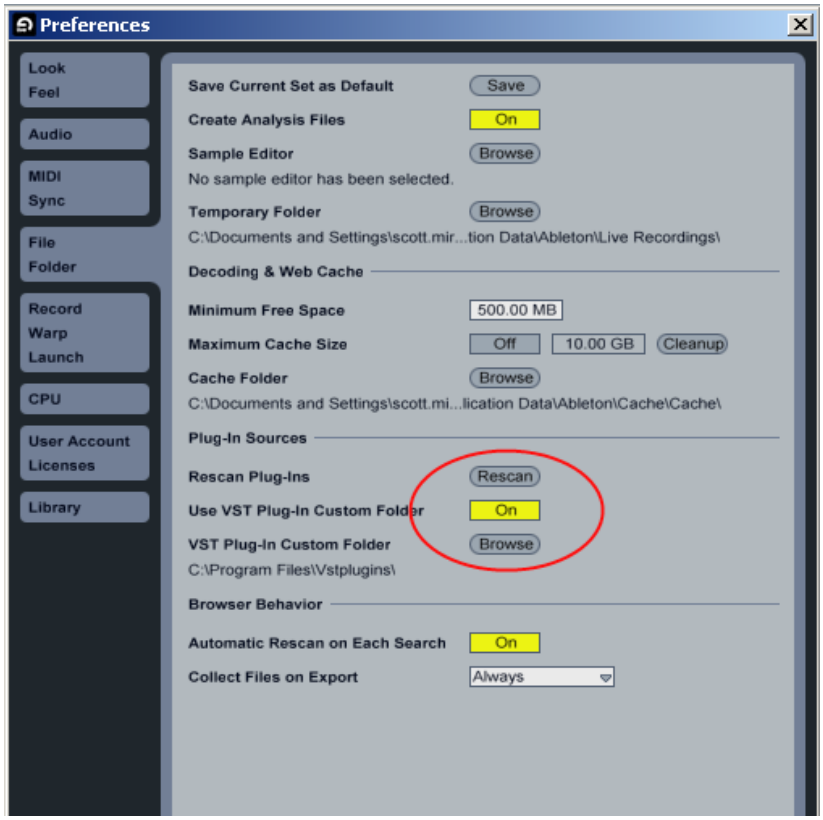
Click on the desired insert to choose the ReValver plug-in from the menu.



Adding the VST path (Windows)

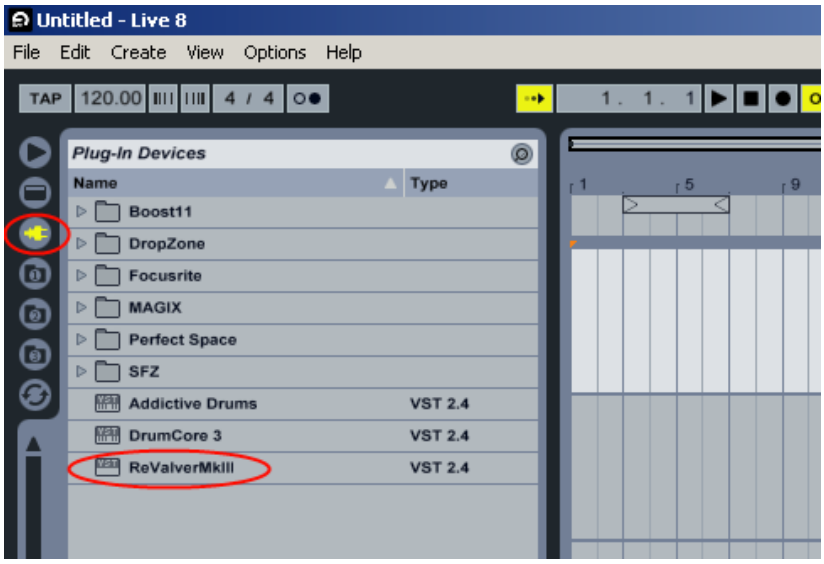
Options ⟶ Preferences ⟶ File Folder ⟶ Plug-in Sources section

In order to use a custom folder as a source of VST plug-ins in Live, set the "Use VST Plug-in Custom Folder" option to "On" and then use the "Browse" button below to locate the folder. To complete the process, click the "Rescan" button to rescan for all available plug-ins.

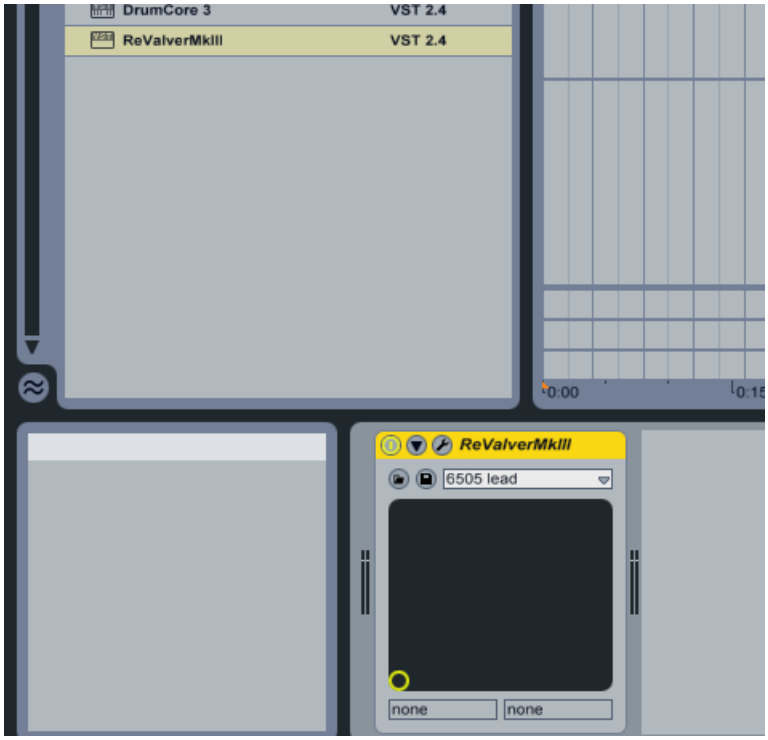


Loading ReValver™ into a track

With a track selected in Live, click on the "Plug-In Devices" icon from the left menu. ReValver should show up in the list of available plug-ins.



Either double click on ReValver™ or drag ReValver from the plug-ins list to the device chain in the Track View Selector.

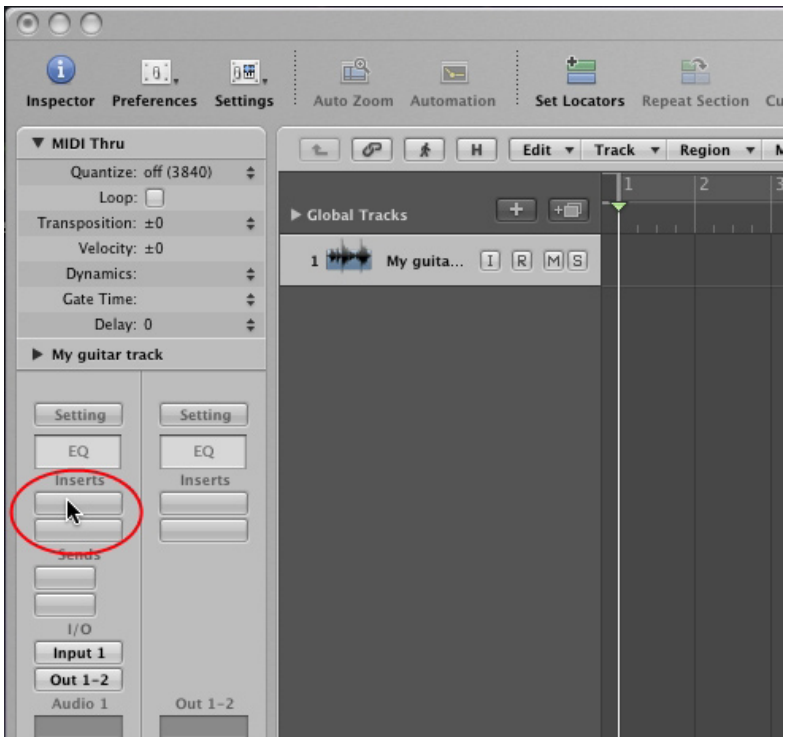


Logic Pro

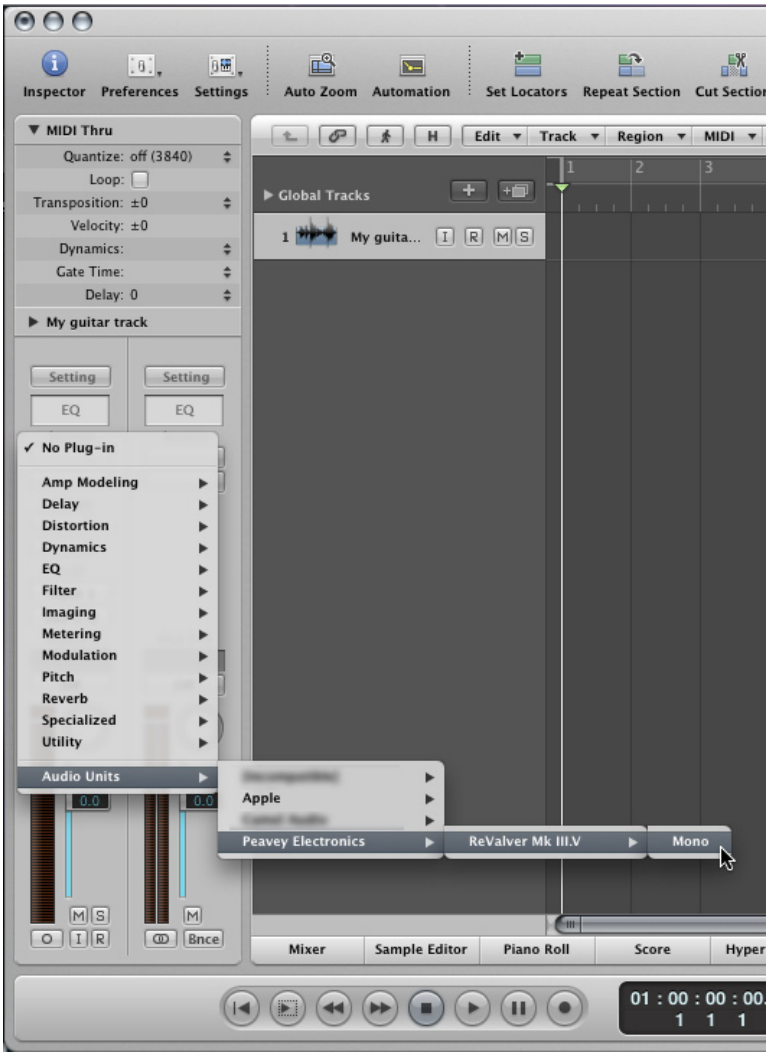
In Apple Logic Pro, ReValver will appear as an AU plug-in. All AU plug-ins are installed in a default location and will after installation appear automatically in the AU hosts plug-in menu. Logic Pro does not support VST or RTAS plug-ins.

Loading ReValver into a track

To insert ReValver on a track, click on "Inserts"



From the menu, under "Audio Units", select Peavey Electronics ⟶ ReValver™ HP SE.



Choose "Mono" or "Stereo" according to your situation.

Recording the Guitar

Recording a Guitar is not as easy as it might seem, but it doesn't have to be difficult. If your Guitar is not powered by a battery (and very few are), then it is generating an electrical signal which is not compatible with most sound cards.

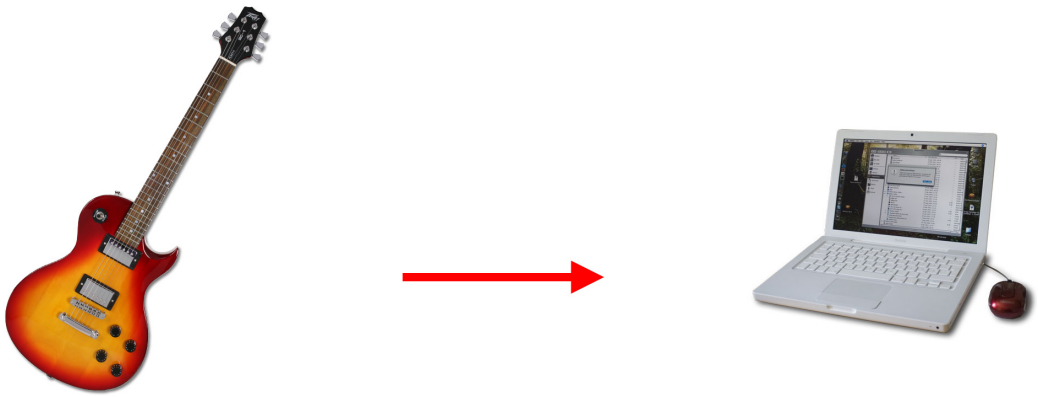
There are common electrical standards between audio gear, and unfortunately the Guitar falls completely outside those standards because it is **passive**. The electrical signal from the Guitar is the result of the movement of metallic strings over a magnetic pickup, and this is rarely acceptable as an electrical source when you connect it directly to a computer sound card

Connecting the Guitar to the sound card
Here are three ways to connect your Guitar to the computer:

1) The simplest option is to hook it up to the sound card Line-In jack using a suitable connector, usually a 1/4" to 1/8" adapter. The advantage is that you don't have to buy any additional gear (except maybe the cable adapter) but the sound is not ideal, probably not even good. The reason for the dull and boring sound is due to an impedance mismatch.

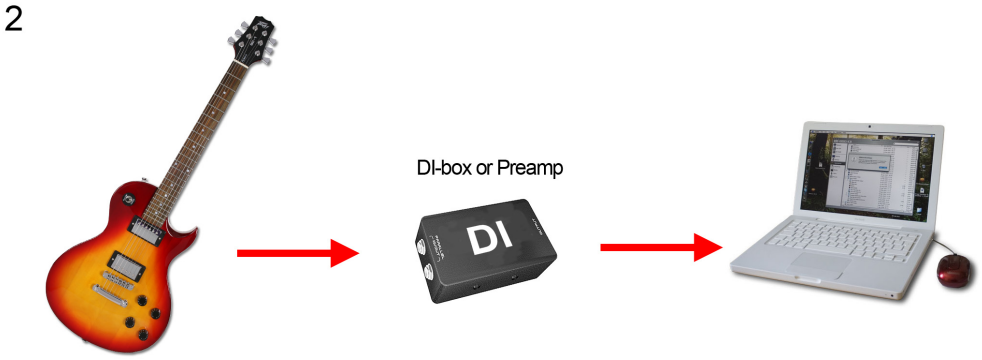
The sound card input is designed to accept input from electrical devices which have adequate driving signal; a Guitar does not have enough signal. The input impedance of a sound card is in the order of a few thousand ohms (kOhm), while ideally, you want it to be around a million ohms (1 meg ohm).

1



2) Another option is to use a Direct (D.I.) box or Preamp. DI stands for Direct Input or Direct Interface. It is an electrically powered box that can be used to match the input impedance of the sound card and the output impedance of the Guitar. The simplest DI box could cost around $20, but there are boxes that could easily cost $200 if you want all the "extras," too. A DI box has a Hi-Z input ("Z" is the unit of Impedance; High Impedance input, in other words). To record, you just plug the DI box directly into the computer Line-In jack.

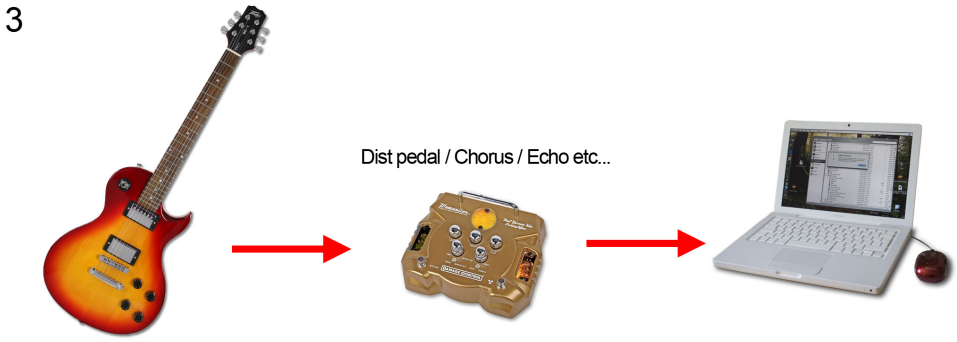
2



3) The middle road, which probably won't cost you anything, but could be almost as good as a DI box, is the use of an ordinary stomp box, which in fact is a sort of DI box. It could be a pedal of any kind: a distortion pedal, chorus, echo, etc., as long as:

a) It is electrically powered, and you actually use the battery or power source
b) You use it in bypassed mode, i.e "off"
c) It is not a "true bypass" device (In other words, in "off" mode, if the sound disappears when you remove the battery, then it is a device that you do want to use as a DI box)

A Guitar pedal is obviously a device which is designed to be used with a Guitar. To record, just plug the pedal directly into the sound card Line-In. Adjust the output levels on the pedal. A Guitar pedal is an example of a device with a Hi-Z input. If you could find another device with Hi-Z inputs ("Instrument input") you should try that as well.



4) The best option is, of course, to purchase a good quality Digital Audio Interface, such as the Peavey Xport™. Look for a device with ASIO (audio stream input/output) drivers, which is an industry standard and will work well with ReValver™ HP SE. After you install the device, the Audio Devices menu under the File menu will allow you to choose that device for input and output, then the Control Panel button will be activated, and serve as a link to your device. Since there are so many available options on the market, it is impossible for us to comment on the specifics of a particular product. Just keep in mind that most ASIO-driven audio interfaces operate in a similar fashion, and the control panel will enable you to make changes to the buffer size, changing the length of time the computer has to make calculations, and resulting in more or less latency. Generally, the smaller the buffer size, the lower the latency. However, you will have to experiment with buffer sizes to find the optimum settings for your computer, based on your processor speed and amount of memory.

A word about latency

Latency is a technical term that basically means the time lapse between playing a note and hearing it. When using ReValver as a stand alone program, you need to set the latency to as low a number as your computer will allow. If you are using your PC or Mac's original factory sound card, you are almost guaranteed to have latency issues. It really does make sense to get a high-quality sound card, and there are many models available at various price levels.

ReValver by itself does not control how much latency you will experience with the program, neither the stand-alone nor the plug-in. (In plug-in mode, the latency is controlled entirely by the DAW). To control the latency in stand-alone mode, you are advised to set the appropriate numbers in the sound card driver. ReValver provides a shortcut to the ASIO control panel of your card. (In the "Audio Devices" menu, select ASIO, your sound card, then press Control Panel).

The latency is directly proportional to the "sample chunk size." Short latency equals small chunk size. Recommended chunk size is 128-256 samples. If the sound is breaking up (choppy sound, stuttering), increase the buffer size. (Try these standard values: 64, 128, 256, 512, 1024, 2048). It is advisable to start with a smaller number and gradually increase until the sound is no longer choppy.

Recording the Guitar with or without effects?
Should you use hardware compressors, distortion or other effects before you record the signal? It is your personal preference. If you can't live without "that special sound," then you should probably record it that way. But when it comes to compression, EQ, reverb and other special effects that could be produced in software, then you should produce it in software and not in hardware. That way you can always change your mind afterward.

To truly access all of the incredible tone shaping that ReValver™ allows, you should take advantage of a process called "re-amping." In a nutshell, re-amping simply means to record the Guitar dry and then use the ReValver plug-in to change the tones. In this way, you will have unlimited access to all of the amazing tones ReValver can offer. Of course, as in the paragraph above, if you can't live without a certain distortion tone, you can still use ReValver's effects modules as a rack of effects. The sky is the limit and it's all at your fingertips! There is one "effect" you generally should use before sampling the signal, namely "limiting." It is a function which keeps the signal from clipping digitally in case you happen to use a too strong signal. Some audio interfaces have a soft limiter built in; however, when you are recording a dry Guitar the presence of distortion means you are sending too hot a signal to the computer. If you are recording a dry Guitar to re-amp, there should be no distortion whatsoever.

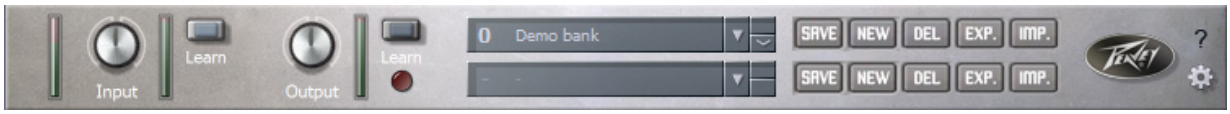
Using 16 bit or 24 bit sampling?
Many sound cards today offer 24-bit sampling at high sample rates. While the CD audio standard is only 16-bit and still sounds quite good, it makes perfect sense to use as many bits as possible during recording. In general, it is always good thinking to use more bits than you will need in the very end.

16-bit audio gives you about 96 dB of dynamic range. 24 bits gives you an additional 48 dB. A high gain preset in ReValver HP SE amplifies the signal a lot, probably 40 - 80 dB, and with those levels you would start to hear the sound card "quantization noise" (bit noise). With more bits there is less digital noise. You will still hear electrical noise, but that is usually significantly less.

Using 44.1/48kHz, 96kHz or higher?
The higher the better, normally, but in ReValver HP SE, all vital parts are oversampled to the double-sample rate to make sure there is a minimum of aliasing noise. Aliasing noise, simply put, is an unpleasent background noise that can occur with any modeling software or amplifier when the CPU is asked to do more than it can do. You should also consider that most good Guitar sounds are very bandwidth-limited and you probably don't need the high frequency range that even 44.1kHz sample rate offers.

Working with ReValver™ HP SE

The title module



At the top of the graphical interface of the program is a module containing general setup functionality, including the **Input volume +-16dB adjustment** (with pre and post LED indicators) and **Output volume -32dB adjustment** (with post LED indicator). The adjustment knobs can automatically adjust the input and output volume to 0dB by pressing the "**Learn**" buttons.

Pressing the gearwheel icon brings up the Options window.

The **Title module** also hosts the **bank & preset** management; see below.

Presets and banks
A preset of ReValver HP SE is constructed from one or more sub-modules. The **signal path** moves down the path of modules from top to bottom. If the "signal splitter" has been inserted, the chain is split into two parallel chains until they are merged in the "signal merge module."

There is no restriction on how to combine modules, as they can be "chained" in any combination (although some combinations are undesirable). The idea is to imitate the behavior and application of real-life amps and effect units.

Normally you would find **combinations with this order**: Stompbox (if any), Amp, Speaker and Effect (if any). An amp consists of a preamp and a power amp, and you may replace a module in the "Amp" category with a combination of a "Preamp" and "Power Amp."

Presets are organized in "banks." To select a preset from a bank, that bank must first be selected from the title module at the top of the chain. A bank and preset can also be selected through MIDI command.

To save a preset or bank in a new position, press "New" beside the drop-down menu. You will be asked to name it. When you have entered a name, press the "Done" button or the Enter key. To cancel, press the Escape key.

After you rename a preset or a bank, ReValver automatically saves it.

Pressing "Save" will save the current preset or bank into the currently selected position, overwriting the old.

To import or export a preset or a whole bank, press the "**Imp.**" (import) or "**Exp.**" (export) buttons.

Quality modes
By pressing the gearwheel icon on the title module you can select the **Startup quality mode.**
The mix-down quality mode forces 64-bit processing at 4x oversampling. This mode fully exposes the qualities of the program, whereas the normal "real time" mode may be a little more noisy and is likely to contain some aliasing noise (especially in high gain amps).

It is recommended to always use the "mix-down mode" when freezing/rendering or when mixing a track. Please be aware that the additional requirements of mix-down mode could make the multitracker stutter or drop out if run at real time. The CPU requirement is more than 5 times that of the real-time mode. To switch the mode, you must restart the VST/AU/RTAS host to allow all instances of ReValver to fully reload. Every new instance of ReValver™ will be started in the current startup mode. In some cases, the sound of ReValver can be different when switching modes. That is because not all features can be accurately expressed in real-time mode, but only in mix- down mode.

Selecting modules
To insert a module anywhere in the signal chain, right-click your mouse on "click for a new module here." The module selector allows you to select modules from their categories, and will display a brief description about each module.

Moving modules

One of the coolest features in ReValver HP SE is how easy it is to move modules around, totally reconfiguring the signal chain on the fly. To move a module, simply move the cursor to the right of the module over the rack screw until your cursor turns into a 4-pointed cross, then hold the mouse button down and move the module where you want it. Release the button and you're done! Be mindful, however, that not all routing will sound good. For example, putting your amp directly into a Chorus pedal is not very pleasing to the ear!

Toggling between mono and stereo
Each module can be set individually to process the signal in either mono or stereo. It either merges the channels or expands them depending on how the previous module is set. Some modules, such as REVERB, VOLUME EFFECTS and DELAY, are set to STEREO by DEFAULT.

If the host (VST, AU, DirectX) has patched ReValver HP SE on a mono track, all processing will be converted to stereo.

The Modules

Complete amps

The modules in this category are integrated preamps and power amps; thus, no module from the "preamp" or "power amp" categories is needed along with an "amp" in a ReValver™ HP SE preset.

Module name = Peavey ValveKing®
Description = A true tone monster in its own right, The ValveKing delivers a tone ranging from bluesy clean to crunchy and classic rock. The amp has a built-in spring reverb and separate tonestacks for the Clean and Lead channels. The amp's preamp and power sections use 12AX7 and 6L6GC tubes, respectively. The ValveKing also features global resonance, presence and reverb controls.

Module name = Peavey 3120™
Description =The Ultimate tone machine. The 3120 rips, with four 12AX7 preamp tubes and four 6L6GC power amp tubes. The amp is controlled by a master volume pot and independent volume knobs for each of its three channels. The Ultra and Crunch channels have gain controls to further assist in taming this beast. Tone contour is accomplished through passive controls on the Clean channel, while the Ultra and Crunch channels utilize active controls.

Preamplifiers

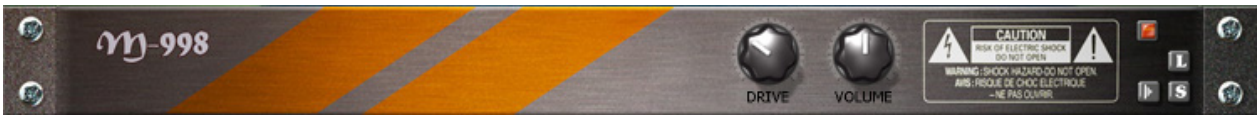
A module from this category is preferably placed before a module from the "power amp" category.

Module name = Peavey ValveKing® preamp
Description = The preamp section of the ValveKing amplifier.

Power amplifiers

A module from this category is preferably placed after a module from the preamp category.

Module name = Peavey ValveKing® power amp
Description = The ValveKing 's power amp section features the classic 4 x 6L6 lineup. The ValveKing, however, adds the patented Peavey Resonance control, as well as a Presence control.



Module name = M-998
Description = This simple power amp uses 2 triodes in series for extra gain, and also uses a pair of tonal character filters that can be tweaked in the Tweak GUI.

Stomp boxes / pedals

A module from this category is usually placed before an amp module. They are designed to shape the sound before it is colored by the amp.

Module name = Chorus CS-1
Description = This is a versatile stereo chorus with adjustable speed and modulation depth, stereo width, feedback, delay and 3 individually adjustable filter bands on the wet signal. A chorus can be used to enrich the sound.

Module name = ACS-CS1 compressor
Description = This compressor is used to even out the volume so that the lower levels do not completely disappear, making the soft sounds louder and the loud sounds softer and adding a certain sustain.

Module name = Greener
Description = A classic, yet so simple. This late '70s solid state stomp box utilizes a diode clipping circuit, shaped by pre and post filtering for optimal smooth overdrive/distortion.

Module name = Wow-Wah!
Description = A Wah pedal is a low-, high-, or band-pass filter with adjustable frequency. At the point of cut off, there is a peak with adjustable resonance, making the Guitar sound "waaaoooowwwoooaaa". The resonance has similarities with the human mouth, hence the name. The frequency can be controlled either by a MIDI pedal (or the main knob) or by automatic rotation. The resonance can range between any 2 frequencies of your choice. An extra knob adds overtones that enhance tonal clarity.

Speakers / cabinets

A module from this category is usually placed after any amp module.

Module name = Convolution speaker simulation
Description = This module uses real-time convolution to mimic actual speaker and cabinet setups. Convolution can be very CPU-intensive so there are 2 optimization options, "Resample" and "Hi-Res." Forcing downsampling of the signal reduces the CPU utilization to an amazing 25%, while still retaining virtually the same tonal quality. (This is possible because Guitar speakers generally do not have a frequency range of more than 5-6 kHz.) The available speakers and cabinets were sampled with several microphones placed at varying angles. One sampling (an "Impulse Response") is a fixed moment in time and cannot be adjusted. The Load button allows you to import your own Impulse Responses in .wav format.

General effects

Module name = ACS R2 Stereo Reverb
Description = Stereo reverb designed to be placed last in the chain to give ambience or width to the sound, with adjustable pre-delay and room size. Three filters can be programmed to shape the character of the wet signal. This reverb is thicker than the Reverb R1; it also has different default filter parameters.

Module name = Gr8 Graphical equalizer
Description = This simple 8 band graphic equalizer has frequency bands placed strategically for bass and Guitar. The bands can be adjusted manually by pressing the "T" button. Pressing "R" will reset the band.

Miscellaneous utilities

Module name = Leveler
Description = A utility module that can be inserted wherever you wish to monitor or change the volume levels. The module monitors both the left & right channels. This module has a volume adjust and a "Learn" button to automatically adjust level to 0dB.

Module name = Tuner
Description = Guitar tuner with two simultaneous displays, needle and strobe. With anti-aliased graphics, this tuner displays your tuning with incredible accuracy. The "A" is adjustable between 425 Hz and 455 Hz. Never go out of tune again!

MIDI control and automation

In the stand-alone version, all knobs, faders and buttons can be controlled by MIDI. The VST and AU plug-in can be controlled using native automation, but not all parameters can be automated.

MIDI

To setup MIDI control in the standalone version, please select your MIDI interface from the menu (File -\> MIDI devices...). If you have added a new MIDI interface after starting the program, please restart to allow the program to find it. To assign a MIDI event to a GUI control, please right-click on the control (button/knob/fader) and select "MIDI learn" from the menu. You will then be asked to activate the controller on the external MIDI controller. It is recommended that you assign a MIDI button to a GUI button, and a MIDI fader/knob to a similar GUI element. To remove the specific mapping from the GUI element, right-click and select "MIDI clear." It is not possible to map the "Load module preset,""Save module preset,""Mono / stereo" or "Tweak" buttons to MIDI, but you can map the "Enable/disable" module.

If you have assigned a GUI element in a module, you are free to move the module around anywhere in the preset, but if you delete the module the mapping will be cleared. MIDI mapping is stored inside the preset and will be restored when you reload the preset.

Plug-in automation

ReValver has an automation feature that allows you to make changes when you are mixing a song. This can be particulary important when recording a virtual wah-wah track, for example, where you need to be able to make those changes just like you would with the pedal. However, due to the modular structure of ReValver™ HP SE it is not possible to map **all** GUI elements to plug-in automation events. For example, if you have two distortion pedals in the chain, only the first in the chain will receive the events, even if they were recorded from the second. To use automation, your VST/AU host must be capable of reading and writing automation events from plug-ins.

Table 1: Plug-in automation parameters

VST name	AU name	Description
Ped Gain	Distpedal Gain	Primary gain knob on a dist effect
Ped Gain2	Distpedal Gain2	Secondary gain knob on a dist effect
Ped Out	Distpedal Output volume	Distpedal Output volume

Table 1: Plug-in automation parameters

VST name	AU name	Description
Ped Bass	Distpedal Bass	Distpedal Bass control
Ped Mid	Distpedal Mid	Distpedal Mid control
Ped Treb	Distpedal Treble	Distpedal Treble control
Ped Tone	Distpedal Tone	Distpedal Tone control
Ped Mix	Distpedal Mix	Distpedal wet/dry mix
Pre Gain	Preamp Gain	Preamp Gain
Pre 1	Gain type 1	Preamp Gain 1
Pre 2	Gain type 2	Preamp Gain 2
Pre 3	Gain type 3	Preamp Gain 3
AmpBass	Amp Bass (tone control)	Ampmodule tonestack, bass control
AmpMid	Amp Mid (tone control)	Ampmodule tonestack, mid control
AmpTreb	Amp Treble (tone control)	Ampmodule tonestack, treble control
AmpPres	Amp Presence	Ampmodule, presence control
CleanDrt	Clean	Clean / dirty switch
Drive	Power amp drive	Power amp master / drive
Out Vol	Output level	Output level
TremDpt	Tremolo depth	Tremolo depth
TremSpd	Tremolo speed	Tremolo speed
Type A	Type A	Type A
Type B	Type B	Type B
Type C	Type C	Type C
Type D	Type D	Type D
Type E	Type E	Type E
RevrbMix	Reverb amount	Reverb amount
RevrbLen	Reverb length	Reverb length
Wah Pos	Wow-Wah Amount/Position	Wow-Wah Amount/Position
Wah Mix	Wow-Wah Mix	Wow-Wah wet / dry mix

Table 1: Plug-in automation parameters

VST name	AU name	Description
Amp Out	Power amp Output level	Output adjust knob on amp or powerampmodule
Pre Out	Preamp Output level	Output adjust knob on preamp module

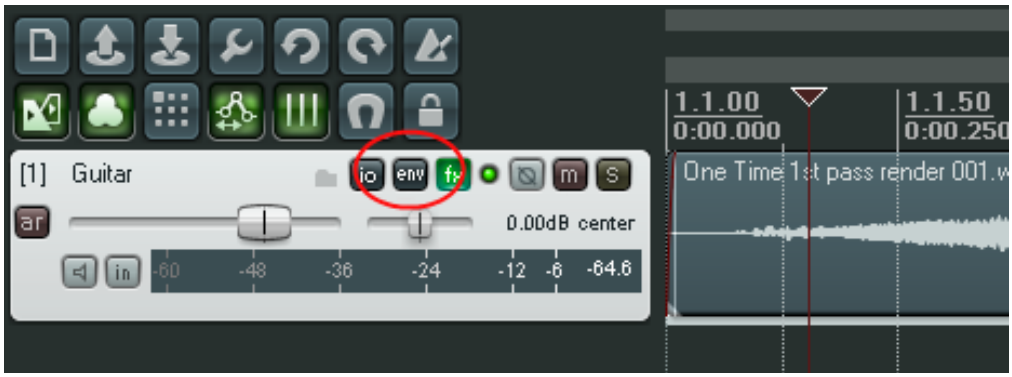
MIDI control and automation example

To demonstrate native plug-in automation in a host, the following example will automate a parameter of a ReValver™ stompbox module in Reaper. Since many different hosts will have a different method of achieving plug-in automation, please refer to your DAWs manual for more information on its use of automation.

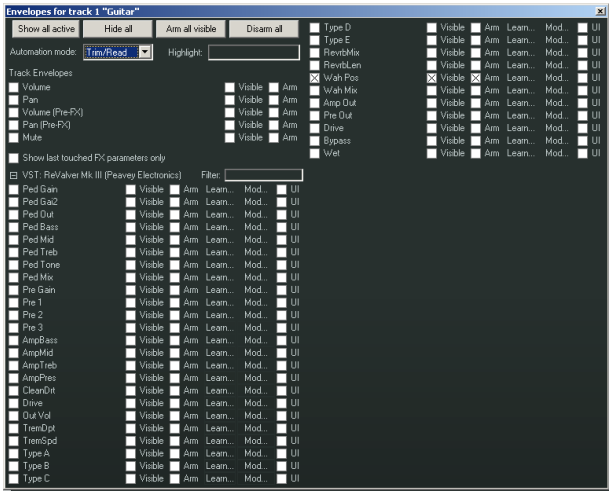
It is important to note that there are a fixed number of automatable parameters in ReValver that are exposed to the host, regardless of whether the current preset has modules that make use of the parameters. For example, a stomp box 'gain' parameter is visible in the host even though there is no such module in your preset. Also, each automatable parameter can be mapped to a maximum of one (1) knob, and this is the first applicable knob found in the preset. This means that if you have two similar stompboxes, only the first will become automated. Furthermore, if automation is enabled and you move the knob of the SECOND of such a pair of modules, the FIRST module will recieve the automation. Don't worry, your computer does not have a "ghost in the shell."

To begin, we have added ReValver to a guitar track in Reaper and added a "Wow-Wah!" module to our ReValver patch. The sweep of the "Wow-Wah!" is the parameter that we will automate in this exercise.

On your guitar track in Reaper, click on the "env" button. This will bring up a window showing all of the available parameters that can be automated on this track.

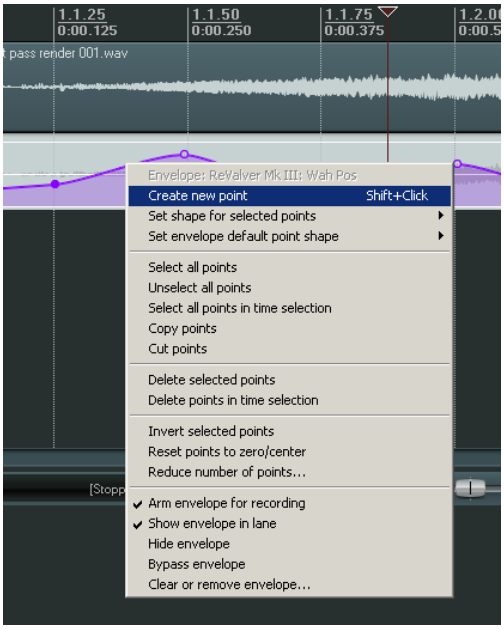


In the envelopes window, locate all of the parameters listed under "VST: ReValver HP SE (Peavey Electronics)". We will be automating the "Wah Pos" parameter. This will control the sweep of the wah pedal. Locate "Wah Pos" and click on the box before the name. Also make sure that you click the "Visible" box so that the automation envelope is displayed in Reaper.



Now you will see a new automation "lane" under your guitar track in Reaper.

Now you will be able to modify the envelope by manually adding and moving envelope points or by arming the automation lane and creating the envelope in realtime using an external midi controller.



As you can see, plug-in parameter automation is a very powerful feature of ReValver and when leveraged, will bring your guitar recordings to life.

Finding a great sound: FAQ

Q. What can I do to improve the frequency response of a preset?

A. Use an EQ or change the tonestack of an amp, but most of all, experiment with the speakers. A surprisingly large part of the sound comes from the speakers. Most amps have bass, mid and treble controls to adjust the tonestack's filter parameters. You should assume the default values are actually the best for most users, for that amp. However, the power of Revalver™ is the ability to experiment with all aspects of an amp's design. Remember one important thing: every EQ you use *before* an amp will affect the frequency range of the distortion harmonics. If you only wish to fine-tune the sound of a preset, primarily use the EQ the *farthest down* the chain as possible.

Q. How much does the sound of the Guitar matter?

A. It matters a lot! One must never think that the final sound is the same if you switch to another Guitar. The sound of a single -coiled pickup is very different from that of a humbucker pickup. Everybody has their favorite, and the sound and feeling differs as much as any two amps.

Q. Do the tonestacks in ReValver HP SE actually sound like the "originals"?

A. Yes. The software version of the tonestacks are very similar to those on the original amps. All capacitors, resistors and pots have been accurately modeled.

Q. What about the presence controls?

A. The presence controls are usually not a part of the tonestack but are part of the power amp. Most amps use "negative feedback" to control distortion and output linearity of the power stage. By applying a filter in the feedback path, and controlling this filter with a knob, a very nice mid/high-mid presence can be achieved.

Q. Are the amps in ReValver™ HP SE modeled after real amps?

A. Most of them are. The program is able to model about 90-95% of the electronic components in any given real amp, including the tubes, diodes, filters, transformers, power supply and more. When modeling a real amp in ReValver HP SE, the original or reissue schematics have been used. Sometimes a blend of schematics were used, and some amps have components that were tweaked by ear afterward and do not totally match the original.

Licensing and copy protection

ReValver™ HP SE utilizes a copy protection system that is entirely software based. There is no need to buy or purchase a driver to make the program work. A license for the program, or a sub feature of the program, is handled through license files in text format. These license files are locked to a particular hardware component on the computer in question. The actual component can be chosen from a number of types (but at the time of writing, only the "system drive" can be chosen). You may upgrade your hardware any number of times, requiring a new license file (which can be downloaded through the Peavey web site, or the accompanying Activation Tool).

Credits and copyrights

Copyrights

ReValver HP SE relies in part on the following technologies:

PortAudio, copyright Ross Bencina and Phil Burk. PortMIDI, copyright Ross Bencina, Phil Burk and Roger B. Dannenberg. FFTReal, copyright Laurent de Soras. ASIO, VST PlugIn Interface Technology by Steinberg Media Technologies GmbH. Some speaker IR samples, copyright Chris Hurley, Dimitar Nalbantov, Murray McDowall. FamFamFam Silk icons (http://www.famfamfam.com/lab/icons/silk/)

NOTES

NOTES

NOTES

Features and specifications subject to change without notice.

Peavey Electronics Corporation • 5022 Hartley Peavey Drive • Meridian, MS 39305
(601) 483-5365 • FAX (601) 486-1278 • www.peavey.com