



TimeVerb-X

USER'S MANUAL

Version 1.0.0

www.GenuineSoundware.com

INTRODUCTION

TimeVerb-X is a new plugin from GSi that combines GSi's "classic" *Type4* spring reverb, first released in 2008, and a new algorithmic digital reverb. The "Type4" spring reverb emulation was originally inspired by an *Accutronics* reverb tank type 4, like those used in classic *Hammond* organs of the A100 series, also used in many famous electric guitar amplifiers. The digital reverb, instead, was first developed for the *GSi Gemini* sound module, but was also included in some *Crumar* hardware instruments. Both effects have been slightly expanded and further improved for the release of *TimeVerb-X*, as the spring reverb now features a self-oscillating feedback decay adjustment and a stereo width knob, and the digital reverb includes the early reflections section that was missing in the original project. Both reverbs put together make up a great sound when working in parallel, and create some interesting atmospheres when working in serial.

TimeVerb-X main features:

- Spring reverb "Type 4" with feedback and stereo operation
- Digital reverb with pre-delay, early reflections and room size adjustment
- Built-in programmer with 128 Programs
- Import/export of Programs and Banks
- Built-in MIDI Learn function with import/export of custom Midi maps
- Integrated help with tool-tips and readout displays

NOTES ABOUT THIS MANUAL

It's important to read this manual before operating the software, mostly because not all parameters have an immediate audible effect, and moving them without knowing what each parameter does exactly and how it can affect the sound could totally void the experience of extreme realism offered by this software.

SYSTEM REQUIREMENTS

TimeVerb-X is available in the following formats:

- for Windows: VST2 x64, VST3 x64, Standalone x64
- for OSX: VST2 x64, VST3 x64, Audio Unit x64, Standalone x64

Windows:

- any Windows computer manufactured after 2010 running Windows 7 x64 or higher
- ASIO compatible sound card for low latency performance

OSX:

- OSX version 10.11 or greater

INSTALLATION ON WINDOWS

An automatic installer is provided. Double click its icon, accept the EULA and follow the on-screen instructions.

INSTALLATION ON OSX

An automatic installer is provided. Double click its icon, accept the EULA and follow the on-screen instructions. At some point you might be asked to insert your user's log-on password, this is required by OSX to authorize the copy of the files into your Library.

AUTHORIZING YOUR LICENSE

When the product is installed, it runs in DEMO mode so that you can test its sound and functionality, but with some minor limitations: the sound will be interrupted every 30 seconds, and importing / exporting Programs and Banks won't be allowed.

If you have purchased a license, you can authorize your copy by doing copy & paste of the 24 characters license code into the registration screen.



GET A LICENSE / REGISTER YOUR COPY

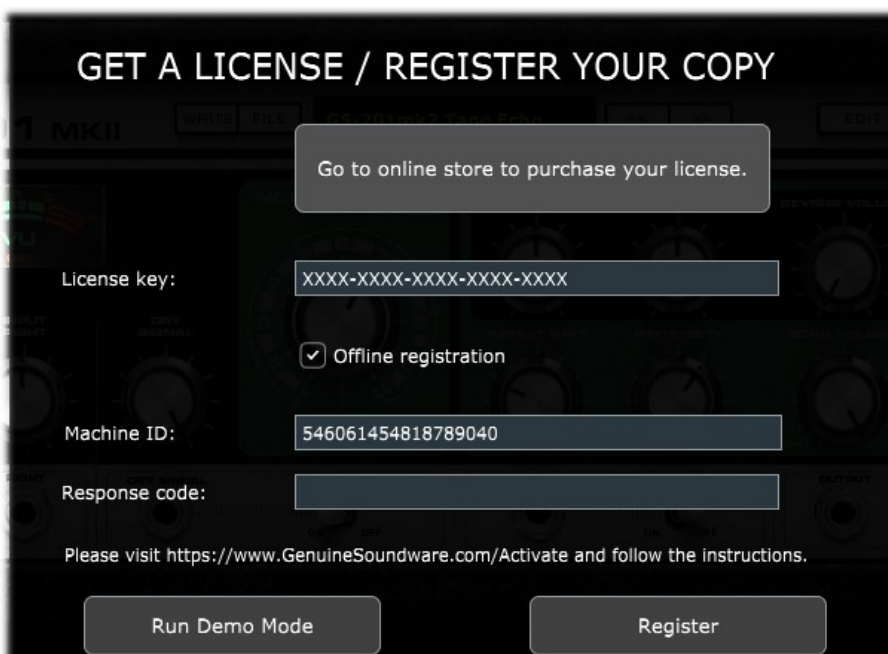
Go to online store to purchase your license.

License key:

Offline registration

Run Demo Mode Register

If the computer is connected to the Internet, just insert the license code and click REGISTER, the rest of the process is fully automatic. In case you wish to install this product on a computer that isn't connected to the Internet, click the "Offline registration" option after inserting the license code, you'll be presented a numerical code in a read-only text box, copy that code somewhere (on paper or in a text file that you'll later save onto a USB stick), then go at a computer connected to the Internet, point your browser to <http://www.genuinesoundware.com/activate> and follow the instructions. The basic personal license allows three installations; extra installations can be purchased separately. Please contact GSi for this.



GET A LICENSE / REGISTER YOUR COPY

Go to online store to purchase your license.

License key:

Offline registration

Machine ID:

Response code:

Please visit <https://www.GenuineSoundware.com/Activate> and follow the instructions.

Run Demo Mode Register

THE MAIN WINDOW

The interface is organized in three sections: the top section contains the programmer and the product logos; the middle section is split in two parts: the spring reverb with the dark yellow knobs, and the digital reverb with light blue knobs. The bottom section includes the audio mixer with VU meters and a button for selecting between three routing options. There are no extra windows, except the Global Settings panel that is reached from the FILE menu.



SPRING REVERB SECTION

- **Low Pass, High Pass:** the high pass filter is put at the input of the reverb effect and is needed to cut some very low frequencies that might compromise the correct operation of a real spring reverb, and would also sound somehow disturbing during the reverberation; the low pass filter, instead, is put at the end of the reverb, to cut some metallic shrillness.
- **Decay:** this knob adjusts the average length of the reverb tail. If you reach the “red zone” the springs start self-oscillating... You might find some creative use out of what is an undesired effect from the electronic point of view.
- **Damp:** this adjusts the brightness or darkness of the whole reverberation; in fact, it's a low-pass filter put within the reverberation chain; in the real world, this is equivalent to the size of the springs: the thicker the springs, the darker the sound. As a matter of fact, some of the earlier spring reverberators, like those used in *Hammond PR-40* cabinets, used very long and thin springs.

- **Spring tension:** in order for the springs to reverberate correctly, they should be loose, certainly not in tension... but what if you stretch them? This somehow changes the “pitch” of the reverberation, creating some funny robotic sounds.
- **Timbre:** this is a complex filter that recreates the material used for the springs, blending from steel to brass, whereas brass springs have a somewhat warmer sound.
- **Dispersion:** this parameter adjusts the typical so-called “boingy” sound of a spring reverb.
- **Stereo width:** the effect itself is mono, but this parameter doubles it with a short adjustable delay so you can obtain a wide stereo effect.

DIGITAL REVERB SECTION

- **Low shelf, high shelf:** these are attenuating shelving filters applied both at the input of the effect. Adjust the cutoff point of both so that only the portion of the frequency spectrum that you need is affected by the reverb.
- **Decay:** adjusts the average length of the decay. The actual length is also affected by the room size parameter.
- **Damp:** adjusts the coloration of the reverberated sound.
- **Pre Delay:** applies an adjustable delay at the reverb input, so that the reverberated sound starts delayed. This is useful to imitate large environments where the reflecting elements are located very far from the sound source.
- **Early Reflections:** adjusts the amount of audible echo coming from the reflecting elements closest to the sound source.
- **Diffusion:** the reverberation is an acoustic phenomenon that occurs when sound waves reflect on distant surfaces and return back on other surfaces, creating a sort of loop going from point to point until the wave amplitude fades out completely. This parameter adjusts the amount of regeneration of the sound waves reflecting in the virtual environment.
- **Room Size:** this knob adjusts the size of the virtual room from a small room to a huge canyon.

MIXER SECTION

Here is where you can adjust the levels of the two reverbs individually and also adjust the level of the dry input signal.

Consider that if you're using this effect in series on an audio channel strip, you probably want the dry audio signal pass through unaltered, so the Dry Signal knob should be kept at the maximum value. Instead, if you're using this effect in parallel, on an effect buss, you already have the dry signal going through its own path, so you'd have to set this knob at zero, or it will double the volume of your dry signal that could result in digital clipping.

Also in this section you have the ROUTING button. Click this button to cycle between three options, indicated by the red dot.

From top to bottom:

- Serial: Spring into Digital
- Parallel: Spring plus Digital
- Serial: Digital into Spring

ABOUT THE VU METERS

The VU meters shown in TimeVerb-X display the signal level over a 60 dB range with the 0 dBFS as reference. When the top red dot lights up, the signal is reaching 0 dBFS. However, an internal soft-clipping algorithm prevents the output from the effects to generate digital clipping.

The two meters close to the reverb level knobs display the output level of the two reverbs and are positioned post-knob; the third meter is pre-knob, displays the input dry signal level regardless of the Dry Signal knob position.

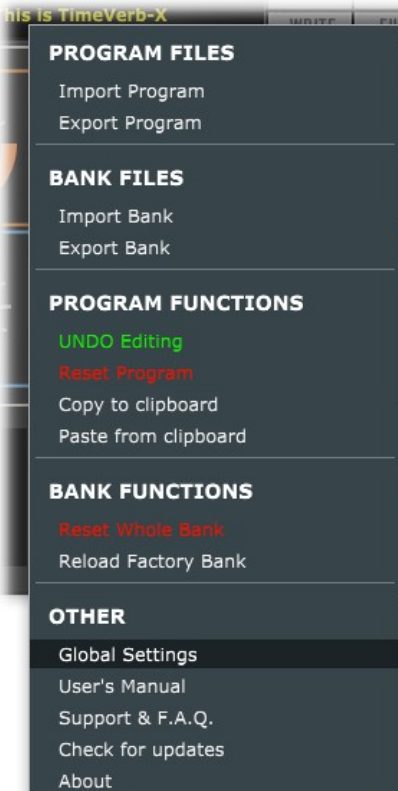
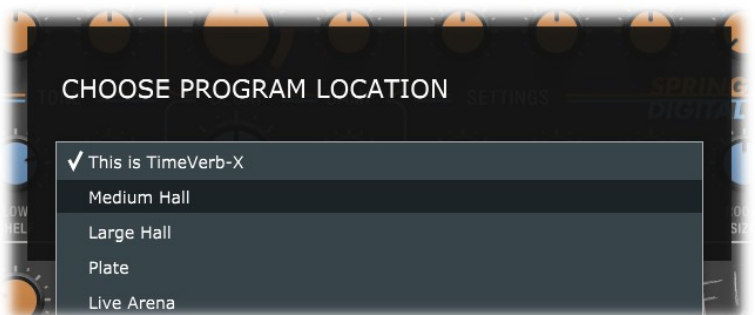
THE PROGRAMMER

One of the most interesting features of TimeVerb-X is the programmer. This section allows to Write / Recall user Programs, import / export single Programs or entire Banks, also copy & paste Programs from one location to another, or initialize the current Program for a fresh start.



Each Bank consists of 128 Programs numbered from 0 to 127, like the good old MIDI protocol required. To recall a Program, either use the Left / Right arrows on the right of the main display, or click on the Program name label for a full pop-up list of the 128 available Programs, or recall them from MIDI Program Change events (needs to be activated from the Settings Window).

To store a Program: once you're done with all your tweakings and you decide it's time to store the Program, just click the WRITE button to overwrite the current Program. If you want to give it a new name, right-click the name label and type the new name, press <ENTER> to confirm. In case you wish to store it to a new location, right-click the WRITE button, a dialog window pops up asking you to select a location from a drop-down menu.



Other operations with Programs and Banks can be performed from the FILE menu that you can access by clicking on the FILE button. Here you can export or import single Programs or entire Banks. Programs and Banks use a proprietary format and are saved in binary files, and the built-in bank is automatically saved every time a Program is written or the application / plugin is closed. The functions "Copy to clipboard" and "Paste from clipboard" can be used for reorganizing Programs in a Bank, and "Reset Program" recalls an initialized program with default parameter settings. Click "UNDO Editing" in case you wish to restore the status of all parameters as they were when the program was recalled. Operations such as import, reset or paste, that apparently overwrite the current program, actually use a temporary volatile memory that is lost unless the WRITE function is used. Lastly, it's also possible to reset the whole Bank or restore the factory Bank.

From the FILE menu you can also reach this User's Manual on the GSi website, or access the Support section, or invoke the automatic update check, or show the about screen (that also displays the version number).

Most importantly, from this menu you can also open the Global Settings panel that features a few options.



Settings are:

- **Show Tool Tips:** enables or disables the tool tips that appear when the mouse stops over a parameter control. If you feel the tips are disturbing, you can disable them here.
- **Show VU Meters:** check this if you want the VU meters to be shown on the interface. If you for some reason find them distracting or annoying, uncheck this to hide them.
- **Receive MIDI Program:** check if you wish to switch between Programs by sending MIDI Program Change events. *Please note that the VST3 format doesn't support this type of MIDI event.*

OPTIONS FOR THE STANDALONE APPLICATION

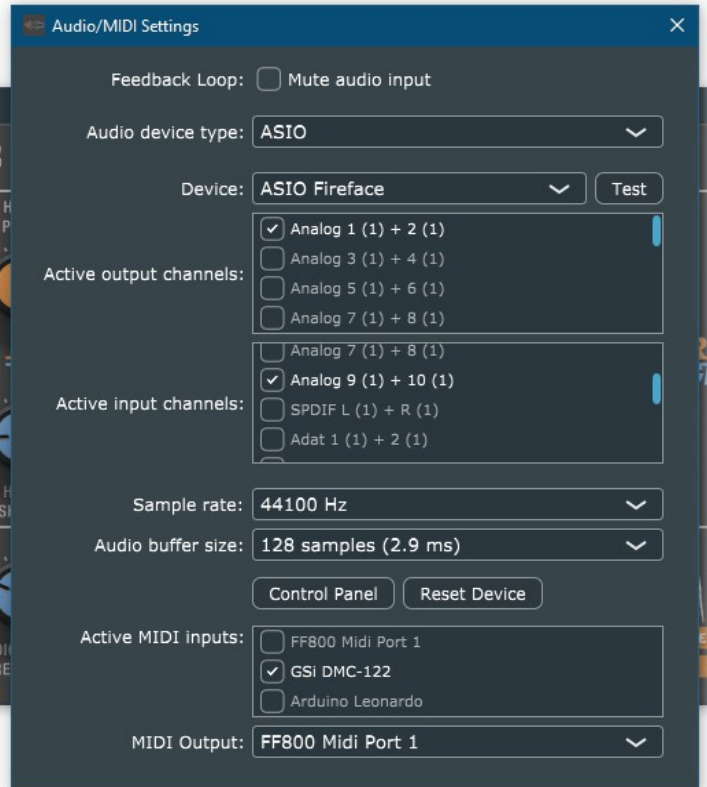
The standalone application offers an extra menu for setting the AUDIO and MIDI devices. Under Windows it is possible to select between the available audio driver types. For better performance, use a low-latency ASIO driver, possibly the most recent driver released from your sound-card's manufacturer. Select the stereo output port, the stereo input port, the sampling rate, the buffer size, and the MIDI input and output devices.

TimeVerb-X supports sample-rates from 44100 up to 384000. However, the best performance is achieved at 44100.

If you have two or more controllers connected to your computer, you can enable them all at the same time, their MIDI streams are internally merged.

The settings are immediately applied as soon as they're changed. Close this window when done.

Please note: the standalone application always stores the last status, regardless of the Program that was selected the last time it was used.



MIDI LEARN

TimeVerb-X features an advanced MIDI “Learn” system for helping with mapping MIDI CC messages to the parameters. By default, no parameters are mapped, but it's very easy to change the assignments to fulfill different requirements.

Right click on any parameter on the interface (also in the separate editing windows) to access the MIDI Learn menu.

Click on “Start MIDI Learn” to start learning the MIDI parameters coming from your controller. A dialog window appears which you should give confirmation to if your assignment is done as expected, or you can click on “Abort” and abandon the operation.

If you're creating your map but you don't need to catch the CC numbers from your controller, you can still use the other menu options to set the values manually. Set the CC number, the MIDI Channel (1 to 16 or OMNI), the min and max values. If min and max are swapped (i.e. min is major than max) the parameter will respond reversed.

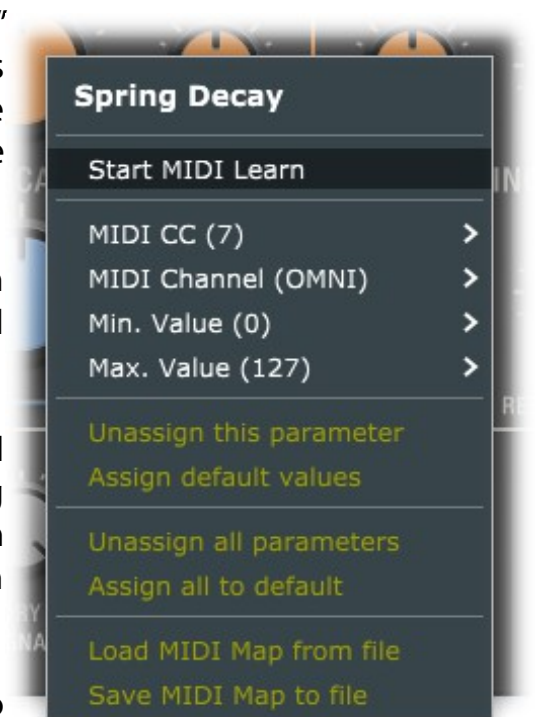
You can “unassign” a parameter if you don't want it to be controlled by any MIDI message, or you can assign default values if you're unsure what assignment to give to it.

Last but absolutely not least important, you can save your entire MIDI map to a file or load it from a previously saved file, so you can have more mappings ready for different controllers that you might have.

MIDI OUTPUT

TimeVerb-X also supports MIDI Output. It sends the values of all controllers that have been assigned. This is useful in case a controller that needs feedback is used, like those with motor-faders or other kind of controlled that need to be updated by the software.

PLEASE NOTE: you should avoid MIDI loops (i.e. the MIDI output coming from TimeVerb-X that is fed back into its MIDI input), this could cause some unwanted behavior or even cause a crash. Some DAW host programs have a built-in MIDI Loop check, but it's a good practice to pay particular attention to all MIDI routing.



This page was intentionally left blank. Until we put this line on it.

END USER LICENSE AGREEMENT

This License Agreement is a legal agreement between the User, hereafter called "you", and GenuineSoundware regarding TimeVerb-X software. TimeVerb-X in the following of the contract includes the computer software named TimeVerb-X and associated media, CD and product documentation. TimeVerb-X also includes any updates and supplements to the original TimeVerb-X provided to you by GenuineSoundware. By installing, accessing or otherwise using TimeVerb-X, you agree to be bound by the terms of this License Agreement.

1 TimeVerb-X License

Subject to the limitations described below, GenuineSoundware, as licensor, hereby grants you, the licensee, a non-exclusive, perpetual License to use TimeVerb-X in accordance with the documentation provided by GenuineSoundware.

1.1 GRANT OF LICENSE

This License Agreement grants you the following rights:

- (a) Software. You may install and use TimeVerb-X for an unlimited period on at most three Computers provided that these Computers belong to you and that TimeVerb-X is used only on one Computer at a time.
- (b) Reservation of Rights. All rights not expressly granted are reserved by GenuineSoundware.

1.2 LIMITATIONS

- (a) Strict personal use. Your use of TimeVerb-X is limited to strict personal use. You may not rent, lease or share TimeVerb-X with another user. Transfer of License to another user is allowed once for each licensed product. A License transfer fee must be paid by the current License holder before the transfer takes place. For this purpose, please contact sales@genuinesoundware.com.
- (b) Sound produced by TimeVerb-X can only be distributed within a musical context, and not in forms that allow the sounds to be used as sample based instruments or sample libraries.
- (c) Limitations on Reverse Engineering, Decompilation, Disassembly and Modification. You may not reverse engineer, decompile, disassemble or modify TimeVerb-X.
- (d) Limitations on usage. You may not merge TimeVerb-X into another software nor create derivative works based on TimeVerb-X.
- (e) Separation of Components. TimeVerb-X is licensed as a single product. Its component parts may not be separated.
- (f) Termination. Without prejudice to any other rights, GenuineSoundware may terminate this Agreement if you fail to comply with the terms and conditions of this Agreement. In such event, you must destroy all copies of TimeVerb-X and all of its component parts.

1.3 COPYRIGHT

TimeVerb-X is protected by copyright laws and international copyright treaties, as well as other intellectual property laws and treaties. All title and intellectual property rights related to TimeVerb-X are owned by its authors. Unauthorized copying of TimeVerb-X, in whole or in part, is expressly forbidden. All title and intellectual property rights in and to the content which may be accessed through use of TimeVerb-X is the property of the respective content owner. This Agreement grants you no rights to use such content. You may print one copy of the documentation provided in TimeVerb-X.

1.4 BACKUP COPY

After installation of TimeVerb-X, you may keep one copy of the file provided by GenuineSoundware solely for backup or archival purposes, provided that its component parts are not separated. You may not distribute copies of TimeVerb-X or accompanying documentation.

1.5 OWNERSHIP

TimeVerb-X is licensed to you, not sold nor given. This License Agreement does not constitute a transfer or sale of ownership rights for TimeVerb-X. Except for the License rights granted above, GenuineSoundware retains all right title and interest for TimeVerb-X including all intellectual property rights therein.

2 WARRANTIES

TimeVerb-X is licensed without any warranty. It is provided on an “as is” basis.

3 LIMITATION OF LIABILITY

You agree that in no event will GenuineSoundware be liable for any kind of damages, material, immaterial or corporal, that arise as a result of the malfunctioning or misuse of TimeVerb-X. You assume full responsibility for all possible consequences of your use of TimeVerb-X.

4 DISPUTE

This License Agreement is governed by the laws in force in Italy, and, in respect of any dispute which may arise hereunder, you consent to the jurisdiction of the courts sitting in Treviso, Italy.

All software by Guido Scognamiglio. All rights reserved.

Graphic design by Pierre Collard. Special thanks to Michele Picaro and Paolo Guidorzi.

All trademarks used herein are the property of their respective owners.

VST technology by Steinberg. AU technology by Apple.

GSi software is distributed as shareware by: GSi di Guido Scognamiglio - P.IVA: 04790400263 – Treviso, Italy.

Last update: 2020/02/02

www.GenuineSoundware.com