



Harpsichord

Virtual Instrument Product Manual

Versilian Studios – 2015

Version 1.0

Manual © 2015 by Versilian Studios.

Performance and construction by Samuel Gossner

Maize Engine/Sampler developed by Xiang Cao/Maizesoft

Kontakt/“PLUS” Edition designed by Simon Autenrieth





Table of Contents

Table of Contents.....	1
Introduction.....	2
Making Of... ..	3
Installation Instructions (Windows)	4
Installation Instructions (Mac)	4
Uninstallation.....	5
Interface.....	6
Maize Interface	6
Kontakt Interface	8
Troubleshooting	9
Conclusion	12





Introduction

Harpsichords have been in use since the Renaissance, and as keyboard instruments, they represent a unique and now ignored method of performance- by plucking the strings (pianos hit the strings with a hammer). This leaves the harpsichord without functional dynamics. Builders of the time dealt with this by providing multiple stops, or “presets”, that enabled the keyboard to change timbres to match the ensemble size or music as needed.

When the piano came along, however, the harpsichord quickly fell into disuse for a number of reasons. While a fair number of instruments remain from the period, many in use are instead professional reconstructions and replicas. The wide range of sizes and shapes, and the hand-made nature of the instruments gives modern replica makers a broad range of inspirations and options when building replicas.

This manual will walk you through the background, installation, and usage of this virtual instrument plugin.



Making Of . . .

Finding a harpsichord in the wild is even harder than trying to find any exotic brass or wind instrument you could name. First, you must befriend either an early music performer or a musicologist (or someone who is a bit of both). Then you have to find enough of an excuse to hang out with them for a long enough time to see if you can find an early keyboards fanatic among their friend group. If you are lucky enough to find one, then it's a matter of persuading them to give you at least two hours of time alone with their expensive, somewhat delicate instrument. Normally something involving a transfer of money or books of early notation is involved in this process.

Finally, the day comes and you find yourself with quite the cold, lugging your equipment halfway across Boston. Of course, there are no precedents on how to mic a harpsichord, so some experimenting is required. Finally, you get the sound you want. Then you realize the keyboard is in A 415. Luckily, that's only an approximate equal-tempered half-step transposition, so sampling in C major would result in B major (might want to let the cutter know). A few hours of recording later, you have just sampled a harpsichord. Congratulations.



Rack of Renaissance recorders not included.



Installation Instructions (Windows)

For new or revised VSTi including this product, there is a custom installer that will assist you with installing the product. Simply follow the instructions provided to you during installation process to extract the files to their destination. On first run, enter your serial number as requested for the VSTi.

Note: You will still need to manually set the file directory location when installing the VSTi plugin. If you do not know where to set your directory, set it to the default location of your preferred DAW.

Installation Instructions (Mac)

For Mac users, the installation process will require the manual placement of the Audio Unit, Mac VSTi, or Kontakt instruments. Please follow the below instructions.

First, unzip the Harpsichord_Mac.zip file. Now select the Harpsichord_v1.0_AU.component file and press “cmd-c” or copy. In a finder window, browse to your OS hard drive (you can use the “Go” tab for this). In the hard drive, enter “Libraries”, then “Audio”, followed by “Plug-ins”, and then finally “Components”. Press “cmd-v” or paste to paste the .component file in the Components folder. A prompt will likely appear asking you to authorize this action. This is ordinary, as the library files are intentionally protected from accidental tampering. However, this is intentional. Enter required details and proceed.

The Audio Unit version will be copied into the Library. It may take a few minutes to finish copying and then to be recognized by the system. After that, it should be ready for use in any DAW or application which supports Audio Unit instruments. Enter serial number on first run as prompted.





(Mac Installation Instructions Cont'd.)

Similarly, you should carry out the same procedure with the Mac VSTi if you use Cubase before Cubase supported Audio Units or other DAWs that do not support Audio Units. There should be a vst folder in the Plug-ins directory.

The Kontakt edition will run from virtually anywhere you place it, as long as you move the entire Harpsichord folder with the two folders and two .nki files around together. The .nki (Kontakt Instrument patches) refer to content in the two folders through a relative path, so if they are **NOT** kept together, the patches will cease to function correctly and will require you to relink the samples every time you load up the patch.

Locate a place where you want to keep the Kontakt edition, perhaps near other Kontakt patches. Copy and paste the Kontakt Harpsichord folder to that location. To load the patch, simply open an instance of Kontakt, either standalone or within a DAW, then drag the .nki of the stop you wish to use into the main patch window in Kontakt (or use the supplied “Files” browser in Kontakt to locate the .nki files and double click the correct one). You’re all set!

Uninstallation

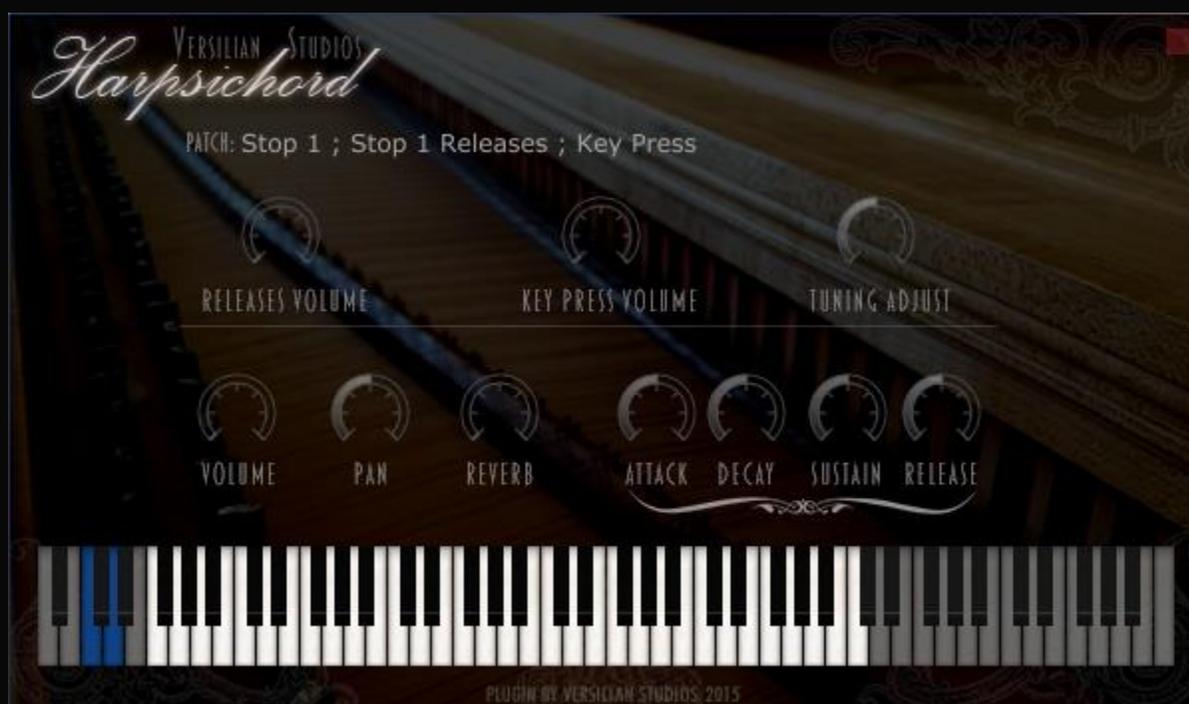
Uninstalling the Harpsichord only requires that you delete all of the installed files that you placed or had placed during the automatic installer process. For Windows users, this means the .dll file and .instruments folder per 32-bit and 64-bit versions, as well as the Harpsichord Kontakt folder and its contents. For Mac users, this means the .component file in your library and the Harpsichord Kontakt folder and its contents.



Interface

There are two possible User Interfaces (UI's) for the Harpsichord that you will be dealing with; the Maize interface, used for VSTi and Audio Units, and the Kontakt interface, used for the Kontakt version.

Maize Interface



- **Releases Volume:** The volume of the samples triggered when a key is released.
- **Key Press Volume:** An added key press sound ('clunk') for those who desire a more clunky, mechanical sound.
- **Tuning Adjust:** Allows you to microtonally adjust the intonation of the instrument as a whole to, for example, 415 or 465 to match period instruments. Note: this does NOT temper the instrument.
- **Volume:** The overall volume of the instrument. This corresponds to MIDI CC#7.
- **Pan:** The panning, left or right, of the overall instrument.

- **Reverb:** A basic reverb is available for use on the Harpsichord via the Maize engine. We recommend using your own favorite 3rd Party reverb plugin if you have one for best results.
- **Attack:** Controls the attack of the samples. Increasing this beyond half will give the instrument even more of a pad-like sound. Pulling it down will have no effect. Range of +/- 5 seconds is provided.
- **Decay:** The time between the end of the attack phase and the sustain phase's start. If sustain is not in the middle, the instrument will gain or lose volume during the duration of the decay. Range of +/- 5 seconds is provided.
- **Sustain:** The volume in decibels (dB) at which the instrument remains after the decay until the end of the sample (i.e. you let go of the note). If lower than half, the instrument will grow quieter until it reaches the sustain volume. If higher, it will grow louder until it reaches the sustain volume. A range of +/- 15 dB is provided.
- **Release:** Release is the length of the release of the notes of the glasses. The samples are set to a release of 100 ms, and this knob will modify that by +/- 5 seconds. Not recommended.



G. Washington, Inventor of the Boatichord, during test-sails.

Kontakt Interface



- **High Pass/Low Pass:** Permits you to add and fine tune a high and/or low pass filter to remove noise or alter the tone of the instrument as desired.
- **Release Volume:** Adjust the volume of the samples triggered when notes are released.
- **Key Vol.:** An added key press sound (“clunk”) for those who desire a more clunky, mechanical sound.
- **Width, Pan:** Stereo width and stereo pan (phase-based) allow you to place the instrument in a stereo field very accurately.
- **Pre Delay, Room, and Room Size:** Settings for convolution reverb. Experiment around to find the best results for your application. The white circle indicates if it is on (white) or off (grey, like the High Pass/Low Pass section shown in the image above).

Additional settings may be accessed via the wrench tool. Prior patch editing experience recommended.



Troubleshooting

Below are some possible issues and steps you can take to try to resolve them. If you cannot fix the issue following these steps, need additional assistance, or your issue is not below, feel free to send us an e-mail at contact@versilstudios.net or use our support page [here](#). We will reply as soon as possible to your request and help you through the fix. Follow each step below sequentially for best results. There's also the [Grand FAQ!](#)

Issue: My Host/DAW is not finding the plugin (VST/AU).

1. Make sure the plugin was the right version (64-bit (.dll)/32-bit (.dll)/Audio Unit (.component)/Mac VST (.vst)/Kontakt).
 - a. If you use ProTools, note that it does not natively support any form of plugin we develop aside from indirectly supporting Kontakt plugins. Please hang on and wait for the release of the Kontakt version, it's coming soon!
 - b. Cubase for Mac users among others may need to use a Mac VSTi, which is provided with this product.
2. Ensure that the place where you put the plugin is a place where your host looks for plugins.
 - a. If you use a program that has separate areas for effects and instruments, make sure it is in the right place.
3. Try scanning for the plugin in the host or manually adding it if such a function exists.
4. Try using another host to see if it can find the plugin.
 - a. If another host can use it, ensure that your host uses the format of plugin.



Issue: I am getting a “Cannot find any instruments.” Error. [WINDOWS]

1. The installer is designed to keep this error from happening. If you manually moved or copied the files after the installer placed them, consider two paths of recourse:
 - a. Reinstall the files by running the installer again. This time, make sure you install them to the final path you desire. The installer will make sure the relationships between the files are preserved.
 - b. Locate the location of the plugin with Windows Explorer. Ensure that there is a Harpsichord_[type]_v1.dll file, and a folder labeled Harpsichord_[type]_v1.instruments, inside of which is a file called Harpsichord_[type]_v1.mse. [type] is either 64B, or 32B.

Issue: The knobs aren’t turning as I move my controller knobs in the VSTi/Audio Unit version!

Unfortunately this is an issue with the engine itself. We’ve already requested this functionality be added.

Issue: I don’t hear anything!

1. Make sure your speakers are on and your system’s sound is functioning (try playing a song in Media Player/iTunes).
 2. Make sure your host has access to your sound system (try using another plugin or the ‘test’ function in your hosts’ settings).
 3. Make sure the gain is up a bit.
- 
- 
- 

- 
- Note that most instruments don't cover the entire keyboard so you may not hear any sounds if you press certain keys. Try to find the range of the instrument by moving up and down the keyboard.

Issue: Getting a time limit warning in Kontakt.

Due to the way the world works, we can only release products for the FULL version of Kontakt. Kontakt Player will only let you use the Harpsichord for a limited duration before needing to be restarted.

Issue: These samples suck!

Sorry. We didn't promise you \$1,000 worth of samples recorded on state-of-the-art microphones in state-of-the-art facilities. We are common musicians with an interest in interesting instruments and we want to share that with the world.

Issue: I am getting audio glitches/issues with samples (VST/AU only).

Please make a recording of the glitches/issues and check your CPU and Hard Drive disk usage if possible, as well as general information on your setup (RAM, OS, etc.). Send us an e-mail or use the contact us page and send this information to us. If you can figure out how to reliably replicate the issue, it'll help. Your information will be anonymously passed on to the developer of the Maize Sampler and that will hopefully help solve the bug.

Issue: I was looking for a harp, not a harpsichord!

Try out the Etherealwinds harp. Alternately, join our e-mail list. We always have new instruments in progress, such as harps!





Conclusion

I would like to personally thank you for purchasing and installing one of our plugins. We try to create things that are useful and at the same time enjoyable to play and use.

Developing plugins is something that is both an extremely demanding and extremely rewarding experience at the same time, much like pursuing a career in music. Through creating this instrument I've been able to write our story and I hope the end result will help you tell your own story.

Though it may sound cheesy, every time I see (or rather, hear) someone using one of my creations, it is like hearing someone cover an old standard in a new and refreshing way. There's just about nothing more humbling than submitting your pet project to the world and hearing the world submit their pet projects back!

If you have any questions, comments, want to let us know about your musical work that used our plugins, or even just want to chat, feel free to drop me a line at contact@versilstudios.net.

Keep compos(ed/ing)!



Sam Gossner, General Annoyance at Versilian Studios

