

V-Machine Edition



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Introduction

Congratulations on the purchase of the SonicProjects Stringer VM!

This is a specially adapted version of stringer for exclusive use within the SM Pro Audio V-Machine. Adaption details: see below.

The Stringer is a high end quality sample based string machine containing a selection of six string machine sounds sampled from three classic hardware units: the Logan String Melody II, the Arp Omni 2 and the Welson Symphony. These three machines all have a unique and different tonal character. The sounds are available in two independable engines (upper and lower) that can be mixed and splitted over the keyboard.

V-Machine adaptations:

- a completely new GUI (will come in the standard version soon too)
- keyboard animation is disabled to save cpu
- a new registration mechanism for easy licensing in VFX
- a separate "No-GUI" version (.vfxdll) for V-Machine internal use only
- no internal CC functionality since this job is more efficiently done with VFX
- the envelope response is automatically set to linear in dual mode

These measures have helped to reduce cpu usage up to 40% in peaks which was necessary to run it glitch free within the V-Machine. The logarithmic envelope response in the decay phase took a large amount of cpu, especially when both engines were stacked, which can lead to up to 20 voices which need a decay calculation at the same time.

The V-Machine optimization is clever: it switches the logarithmic response to linear automatically when both engines are active, which needs much less cpu. The decay phase is a bit stiff and unnatural then, but it's not that important in stacked sounds which live from the fullnes while playing and which are not made to listen to decay phases. When the lower engine (B) is switched off ("ON" switch inactive) however, the upper engine returns to more cpu intensive logarithmic response for natural release of single sounds. But not enough with this: You have the choice between 3 different response curves, each with a different character. These 3 types can be switched with the Attack knob (ATT) of the lower engine (which is inactive then anyway). Here are the 3 variants:

ATT set to 0:

Double logarithmic response with fast attack, very natural decay, suitable for precise and snappy sounds with fast attack (e.g. Organ). CPU: high.

ATT set to 5:

Logarithmic response with a bit softer attack, a bit less natural response, suitable for softer sounds (e.g. Solina Strings). CPU: mid.

ATT set to 10:

Linear response like in double mode. Suitable for cheezy stuff. CPU: low.

With these response options you have even more possibilities in the upper (A) engine than in the current standard version. The only thing that's not possible is logarithmic response in dual engine mode (both engines stacked).

Note that the CPU usage varies between the the 3 modes (see postfix).

The sampleset in the V-Machine is exactly the same as in the standard version. These are the three sampled string machines:

Logan String Melody II:

Absolutely fabulous sonding string machine built in 1978 by the Italian company Logan. In Germany, the String Melody II was distributed by Hohner. The massive wood case and tons of built in electronics gave the device a heavy weight. The string and organ sounds of this unit are absolutely fat, warm and exciting. Unlike the ARP units every key had its own envelope. This string machine has become extremely rare and looked after in the recent years.

Sampled for Stringer:

- Preset 0 (Chorus Strings)

- Organ

ARP Omni II:

The successor of the famous Solina String Ensemble and the Omni I. The Solina strings were THE strings of the seventies and eighties, used on every record and on every stage. The Omni units added some enhanced features, a simple poly synth and a bass synth. Still availabe sometimes, but mostly in bad shape. The electronics tend to break, and yes, the devices are quite heavy too. The string sound is very clear and shining and cuts through every mix.

Sampled for Stringer:

- Strings (=Solina Strings)
- Strings without chorus (=synth like)

Welson Symphony:

Quite rare and as well as no info around about it. Built by WEBO electronics in Passatempo / Italy. This unit has several sections like cello, violin, brass, piano and harp that can be combined to rich stereo textures (left and right out available). The sound is beautiful, warm and well balanced - not as aggressive as the logan. The sounds are ideal for layering to the other to ensembles.

Sampled for Stringer:

- Brass (the lower part is darker)
- Strings (Violin)

The sampling procedure:

To copy the original character of the instruments, every single key was sampled individually, with exeption of the Welson, where four keys per octave were sampled. Especially in the logan every key has a slightly different sound, so this method will bring you the real feel.

The instruments' outputs went directly to an apogee rosetta converter (amongst the best available) and the keys were recorded at 24bit/44.1kHz. So there's no loss in signal quality - it's all there as it was real - you have the full signal without any coloration or bad clock treatment.

There was much time spent to set unhearable loop points in every sample; the loops are up to 4 seconds and so you won't hear them at all.

The result of this expenditure is the presence of the absolutely original sound as you have never eperienced before in the virtual world - but without any noise and with full sequencer and midi control.

Installation

Please read the Installation Guide of the bundle where every step is described in detail. It's important not to move around single dlls since all files within the plugin folders are needed. E.g. the V-Machine needs the Non-GUI vfxdll. If then only move around the whole plugin folder. But the best only move around the whole library which too includes dedicated banks and effect plugins.

License and copyright

The plugin and the stringer data are bound to the registered user. It's not allowed to pass them on to third persons. The plugin contains a hidden serial that allows to identify the original user in case of irregular distribution.

The Master Control section



VOLUME

Master volume. Its setting is stored with the preset. Set it to a lower level if you hear clipping (especially in layer mode)

TUNE

Master Tune. Adapts the instruments tuning to acoustic instruments which are not in standard tuning.

The SPLIT section



The Stringer has two sound engines - an upper (called A) and a lower one (called B). They both contain all six sounds and can be used at the same time for layering. The Stringer also allows for splitting the keyboard to access the B engine by the lower keyboard section and the A engine by the upper keyboard section. The two sections also can overlap each other if wished.

SPLIT Knob

Sets the split point on the keyboard. This is the border point between the B and A section in split mode. Turn in right to move the split point to a higher note, turn it left to move the split point to a lower note.

SPLIT Button

Activates keyboard splitting. The split settings are dependent on the position of the SPLIT and OVER knobs.



OVER

Split zone overlap. In standard mode (zero) the lower and upper split zone don't overlap. When the split button is rised, the lower section is extended into the upper section. In this region, the two split layers do overlap now.

SP OUT

Separate Out. When this button is activated, the upper (A) and the lower (B) section are routed to individual stereo outs for separate treatment. In your sequencers' mixer the outputs are named "Stringer A" (upper section) and "Stringer B" (lower section). In standard (SP OUT not active) mode, both parts are routed to the "Stringer A" stereo output for global treatment.

The ENVELOPES section



In this section, the attack and release times for the upper and the lower section can be controlled. Long release times can cause higher cpu usage.

ATT

Attack. Sets the attack time (upper knob for the upper engine, lower knob for the lower section individually). If only the upper engine is active, the lower ATT knob can switch between several resonse modes. Details: See page 2.

REL

Release. Sets the release time (upper knob for the upper engine, lower knob for the lower section individually).

The Preset Chooser Section



In this section, the preset can be chosen for both sections individually. The two sections can be used at the same time for layer sounds and splits. If the presets refuse to switch, then click one time on the active preset before.

The upper buttons row sets the preset for engine A (upper). The lower buttons row sets the preset for engine B (lower).

LOGAN:

STR

Logan String. Preset 0 in the original. Every key sampled.

ORG

Logan Organ. Preset "Organ" in the original. Every key sampled.

OMNI:

STR

Omni String. It's the famous Solina string sound. Preset "Violin" in the original. Every key sampled.

SYN

Omni Synth. It's the Violin sound with deactivated chorus button. Every key sampled.

WELSON:

BRA

Welson Brass. Preset "Horn&Trumpet" in the original. Four keys per octave sampled.

STR

Welson Strings. Preset "Violin" in the original. Four keys per octave sampled.

The referring sections in the originals:

Logan String Melody II:



Sampled presets:

- 0 Strings (STR) - ORGAN (ORG)

ARP Omni 2:



Sampled presets:

- Violin (STR)
- Violin with deactivated chorus (SYN)

Welson Symphony:



Sampled presets:

- Horn&Trumpet (BRA) Violin (STR)

The sections settings section:



Individual controls for the upper and the lower engine. These are especially interesting when using both section in combination for rich layer sounds.

VOL

Individual volume of the section.

ON

Activates or deactivates the section without altering the controls.

ОСТ

Sets the octave (foot) of the section. Standard is center. The samples are not altered, simply the keyboard is routed to a higher or lower octave in the multisample. Don't alter it while playing because already playing samples will be pitch shifted which will result in a strange sound.

Purpose:

Octave layers (e.g. upper part omni string normal and lower part omni string one octave down for the simulation of original violin-viola layer)
Octave adaption of the lower section in split modus (to be able to access high notes with the left hand)

DET

Fine tune of the section. Standard is zero.

Purpose:

Especially interesting if the upper and the lower section is set to the same sound. A detuning of one of the sections will result in sort of a chorusing.

PAN

Sets the stereo pan of the section. Standard is center.

Purpose:

When the upper and lower sections are active, they can be spreaded away a bit from the center which results in a wide and broad sound. Also great in combination with the described detuning use in the DET section.

MIDI CC Implementation

In this adapted VFX version of Stringer the internal MIDI CC functionality was completely deactivated since this job is done more efficiently with the MIDI learn engine of VFX which connects to the VST automation functionality of the parameters. If there was an internal CC engine working in parallel this could lead to double mappings.

The included standard VFX bank however offers a useful mapping of the most important parameters that may be adapted during a live performance, including master volume, master tune, engine volumes and pans, as well as envelope attacks and decays. There's also an unmapped version available in the "Unmapped" folder.

The parameters either are mapped to the standard controls (like volume: 007 and master tune: 088) or to controls that are available as standard in most controllers, namely the ADSR controls for the filter and amp.

This allows for grouping the most important engine parameters in one "line" for each engine, which should be quite useful.

Of course you can add further controls by yourself anytime using the MIDI learn engine of the V-Machine. Don't try to map the preset controls however since they are GUI-related and won't work properly. Better use preconfigured presets as base for one sound (e.g. Solina, Logan, etc.).

The Midi CC mappings of the pre-mapped bank:

sorted by cc number

A = upper engine, B = lower engine

007	Master Vol. (VOL)	Pro53: Master Volume
051	Detune B (DET)	Pro53: Oscillator B Freq Fine
075	Attack A (ATT)	Pro53: Filter Attack
076	Release A (REL)	Pro53: Filter Decay
077	Volume A (VOL)	Pro53: Filter Sustain
078	Pan A (PAN)	Pro53: Filter Release
080	Attack B (ATT)	Pro53: Amplifier Attack
081	Release B (REL)	Pro53: Amplifier Decay
082	Volume B (VOL)	Pro53: Amplifier Sustain
083	Pan B (PAN)	Pro53: Amplifier Release

088 Master Tune (TUNE) Pro53: Master Tune

Trouble shooting

Problem1:

When starting the sequencer or loading the plugin there's an error message "can't find stringer dat.sf2"

Solution1:

The Stringer Data has not yet been installed or was installed in the wrong place because of altering the standard destination path.

If the Stringer Data has not been installed yet, then install it now. If the Stringer Data has been installed to the wrong place then remove the file (stringer dat) and reinstall it. The stringer dat file must be within the "Stringer" folder which is in the same folder as the stringer dll is located.

Problem2:

Although the lower section is active (ON) there's no sound coming out from it.

Solution2:

First check ist the VOL knob on the right is not set to zero. Then check if the SP OUT button in the split section is on. If so, the lower section is sent to a separate stereo out. Check your sequencers' mixer if this out (Stringer B) is there and check the volume.

Problem3:

The CPU load gets very high occassionally.

Solution3:

The CPU load is dependent on the number of voices played. It gets higher when the upper and lower engines are used simultaneously. Also check the release time. A very long release time can make the CPU usage higher.

Problem4:

The radio buttons don't react when I want to change the preset.

Solution4:

Simply click once on the active preset button to re-initialize. Now switching to other presets will work.

Impressum:

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