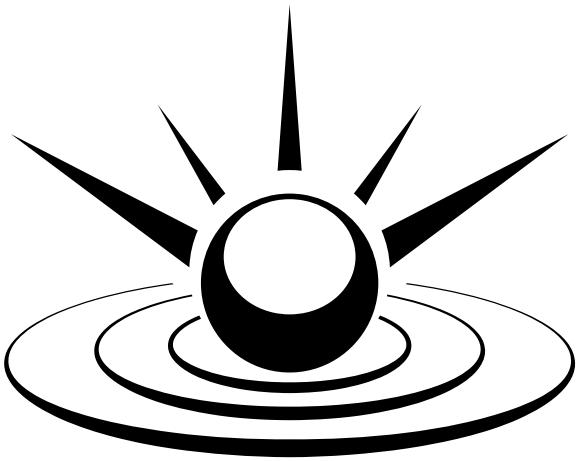

SPARKVERB™

Software User Manual

Software Version 1.5

EN 251205

End User License Agreement (EULA)

Use of this product is subject to the acceptance of our End User License Agreement, available **here**.

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Introduction

With a cutting-edge algorithmic design, Sparkverb breaks many boundaries of contemporary reverbs giving users modern and innovative controls that dramatically enhance usability, speed and creative freedom while delivering remarkable sound quality and CPU efficiency.

Easily traverse everything from natural sounding spaces to infinite, shimmering ambiences with stunning depth and fidelity throughout the entire spectrum. This type of range typically implies a dense and complex interface—not in Sparkverb. Usability was a pivotal consideration in development. A great deal of care was taken to allow a high degree of customization with the fewest controls possible, resulting in less time spent fidgeting and more time being productive. At the core of Sparkverb's interface is a frequency-based spectrum editor; use it to sculpt and refine your sound with phenomenal speed and control. Adjust decay globally and across multiple bands with hi/lo multipliers and crossovers directly on a single canvas. It's an entirely new way to work with reverb. All other controls are clearly arranged and labeled, including A/B comparison, making fine-tuning a painless process. Dialing in a reverb, simple or complex, has never been this fast.

Sparkverb shines in traditional mixing sessions but was designed to be an exceptionally flexible creative tool as well. Discover new spaces and explore the full range of sonic possibilities effortlessly with built in mutation and randomization. These functions are made even more useful by parameter locks available on every control. Experiment within prescribed boundaries such as a fixed mix amount or pitch modulation to find exciting variations that work for your specific need. Another innovative tool comes in the form of the Preset Voyager. At launch, Sparkverb creates a 2-dimensional array of all presets on your machine; simply toggle the Preset Voyager display and click-drag between preset nodes to freely interpolate new settings. Watch controls update in real time to see what's happening and create new presets to redefine the space—the possibilities are limitless.

Under Spark's elegant exterior lays a powerful and extensively optimized DSP engine. Built on UVI's Parametric FDN Engine, Sparkverb can be instanced near-limitlessly. The dramatic performance gives you unprecedented access to Sparkverb's high-fidelity sound throughout your sessions. Use it on as many tracks and busses as you need without worrying about CPU overload.

Additionally you'll find numerous features which help to make Sparkverb indispensable such as fully continuous parameters; freeze; multiple operation modes; variable densities; unique and decorrelated multi-channel operation; full automation control; advanced diffusion algorithms and tunable modulation for pitch accuracy regardless of scale. Add a generous helping of factory presets and you've got a versatile and powerful sonic tool suited for the most demanding studio environments.

Whether you're working with small ensembles, massive orchestras, sound design or anything in-between, Sparkverb offers a unique experience and innovative feature set that helps you work faster, smarter and more creatively than ever before. Let Sparkverb redefine the way you resound.

Version 1.5 Change Log:

- Refined UI
- Added UI Scaling
- Added Spectrum Analyzer
- Added new presets including some by Venus Theory

For system requirement and compatibility: click here

For information on the installation process, please refer to the document: Install Guide

Main Interface

1 Menu Toggle

Displays current preset name. Click to toggle the drop-down menu to load or save a preset.

» **Load**: Opens a browser to locate a preset in your file system

» **Save:** Save current settings as a new preset

» **Show Spectral Analyzer:** Enable/disable real-time spectrum analyzer

» **Scaling:** Changes UI window size up to 200%

2 Preset Voyager

Toggles the center display between *[Spectral Decay Visualization] and [Preset Voyager]*

3 A/B Snapshot

Use to store two different plugin states for A/B comparison

» **First Click**: Store current state to slot A

» **Following Clicks**: Store current state to slot A (resp B) and load the previous state from slot B (resp A)

4 Randomize/Mutate

» **Randomize:** Click to randomize all (unlocked) parameters

» **Mutate:** Click to mutate all (unlocked) parameters

NOTE: Mutate is a random function that considers current settings.

5 Reverb Controls

» **Size:** Set the mean room dimension in meters with continuous control (from tiny rooms to huge halls)

» **Pre-Delay:** Add a delay to the reverb tail *(use to increase voice intelligibility by delaying early reflections)*

» **Shape:** Change the delay distribution and distort the room. 0% = highest echo density, 100% = highest spectral mode density

» **Modulation:**

- ***Depth*** - modulated tails, lush pads, unisons and chorus/reverb ensembles
- ***Rate*** - Controls the relative rate of modulation (different for each delay line)

» **Mode:**

Set the reberb algolith:

- ***Lo-Fi*** - Low-fi interpolation mode, generated lots of high frequency diffusion
- ***Dark*** - Default mode, exhibit some additional high-frequency decay damping for dark and natural room sounds
- ***Bright*** - Precise mode, more expensive, respects the high frequency decay specifications more accurately

6 Freeze

Freezes the reverbs with infinite decay *(Input gain is kept very low during freeze to avoid endless energy accumulation in the reverb)*

Main Interface (continued)

7 Output Controls

» **Mix:** Set the Dry/Wet amount

» **Rolloff:** Lowpass filter cutoff frequency to control the reverberation bandwidth *{from oldschool reverberation units with limited sampling-rate to high-end contemporary devices}*

» **Width:** Changes the perceived room width

» **Diffusion Toggle:** Enable the short-term diffusion section *{percussive material may benefit from diffusion to reach suffiently high short-time echo density}*

8 Decay Controls

» **Decay:** Main decay time in seconds (e.g. the time it takes for the reverb to decay about 60dB aka RT60. For more naturalness, changing the room size will also affect the actual decay time in order to keep the room absorbtion properly constant)

» **Lo Decay:** Decay time multiplier at low frequencies

» **Hi Decay:** Decay time multiplier at high frequencies

» **Hi and Lo Crossover:** Cutoff *f* between Mid/High and Low/Mid bands

» **Hi and Lo Cut:** Each toggles between shelving and low or high pass filtering, and disables the high and low multipliers.

9 Diffusion

» **Start:** Changes the delay-time of the first diffuse. *{Short values have a quick and compact spread but can sound metallic. Longer values create more time-spread, sound less metallic but can be heard as discrete echoes instead of diffusion.}*

» **Amount:** The optimal diffusion amount lies around 0.618 *{Shorter values have a more pronounced attack-time while longer values sounds more like long-term reverberation and less like short-term diffusion. Longer values sounds more metallic.}*

» **Density:** Change the echo density *{affects the number of internal delays; from sparse echoes to dense reflection patterns}*

10 Meters/Display

» **I/O Metering**
- *Left side* - input level meter
- *Right side* - Output level meter

» **Display :** The following operations can be performed in the Decay Editor:
- Click-drag in the Center Column to modify [*Decay Time*]
- Click-drag in the Left-Column to modify [*Lo Decay*] and [*Lo Crossover*]
- Click-drag in the Right-Column to modify [*Hi Decay*] and [*Hi Crossover*]
- Horizontal drag modifies *Crossover f*
- Vertical drag modifies *Decay Time*

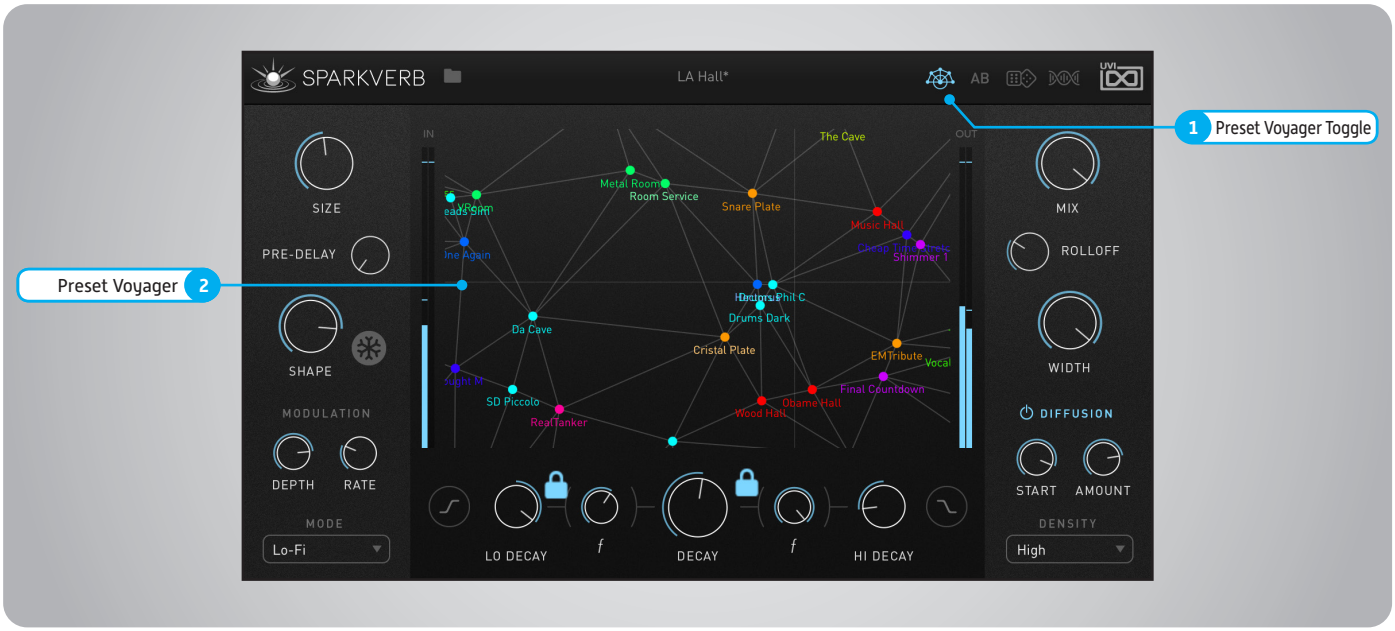
11 Tool Tips

Display instructions for any parameter by hovering over it with your mouse

Right-Click Any Parameter

Toggles a contextual menu where you can enable and reset Parameter Locks, and toggle MIDI Learn/MIDI UnLearn

Preset Voyager



1 Toggle

Toggles the main display between [Decay Editor] and [Preset Voyager]

2 Preset Voyager

Overview

The Preset Voyager displays all factory and user presets in a cloud arranged according to their similarity and color-coded based on their category

The array is generated at Launch, so if you save a new preset it won't show up in the Preset Voyager until Sparkverb has been reloaded

Operation

» **Click-dragging in the cloud**
Changes the current reverb setting by interpolating between the parameters of the adjacent presets

» **Right-click anywhere in the display**
Opens a contextual menu where you can show/hide [Text Labels], [Legend] and [Triangulation Lines]

» **Use the scroll-wheel** on your mouse to zoom for increased fidelity

» **Hold the [alt/option] key while zooming** to center the array

» **Double-click on a preset** to load it

Creating a New User Preset

Changing the Dynamic

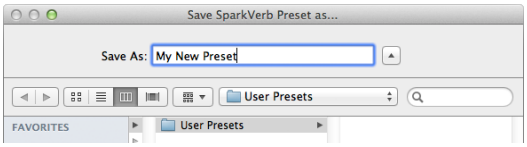
Creating a user preset is a task most will be quite familiar with. The functionality is pretty standard but it comes with an added perk in Sparkverb. Everytime you create a new preset you update the Preset Voyager's node array. So how does it work? At launch, Sparkverb builds a 2-dimensional array of all factory and user presets, mapping the presets in space based on the bias of their settings. The more varied the presets the more interesting the array becomes, allowing you to travel and interpolate new settings with each addition. The result will be personal to each user based on the types of presets they create.

In the following example we'll save a new preset that we've made, and name it 'My New Preset'.
Remember: the Preset Voyager's node array is calculated at launch, so you'll need to re-instance Sparkverb for it to update

1 Select 'Save' in the Toolbar Menu

Within the Toolbar Menu are the Save and Load Preset commands, as well as all User and Factory Presets and two GUI resolution options

2 Give Your Preset a Name



3 Finding Your Preset Later

You can now find your preset under 'User Presets' in the Toolbar Menu

Using Parameter Locks

Controlling the Chaos

Sparkverbs features such as Randomize, Mutate and the Preset Voyager allow you to modify multiple parameters at once, making subtle shifts to extreme changes with one click. This can be a powerful way to quickly preview numerous configurations. However, to make the most of these features you will want to lock certain parameters from time to time. That's where Parameter Locks come in.

In the following example we'll lock the Mix Amount to 50%. As a result the Mix Amount parameter will be ignored by global functions like Randomize, Mutate and the Preset Voyager. *Parameter Locks are available on every control in Sparkverb.*

1 ▶ Right-click the 'Mix Amount' knob

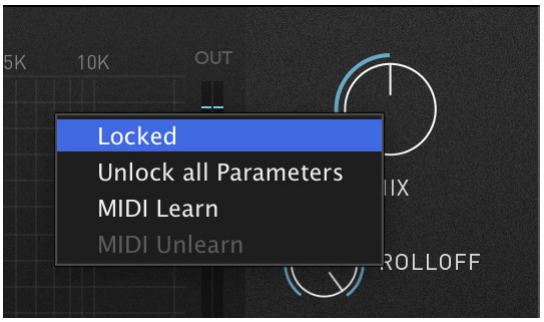
Right-clicking any parameter in the Sparkverb UI will open a contextual menu where two commands are available:

» Locked (toggle)

» Unlock All Parameters

Locked: toggles the parameter lock for that control on/off

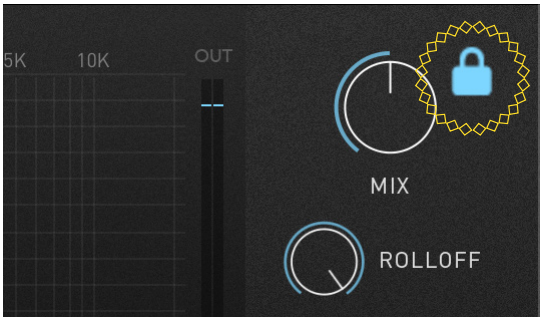
Unlock All Parameters: does just that



2 ▶ Select 'Locked'

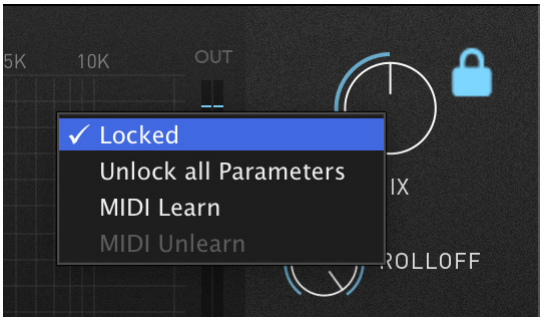
By selecting the 'Locked' toggle in the contextual menu we've now locked the Mix Amount knob

○ You'll see a blue lock appear next to the parameter signifying the state change



If you right-click the Mix Amount knob again you'll see the 'Locked' toggle has been switched on, signified by a √

To deactivate the lock, simply select the 'Locked' toggle again or select 'Unlock All Parameters' to disable parameter locks globally



Links

UVI

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FAQ	ilok.com/supportfaq

SPARKVERB™

Credits and Thanks

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Venus Theory
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Documents
Nathaniel Reeves
Kai tomita

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UVI.NET