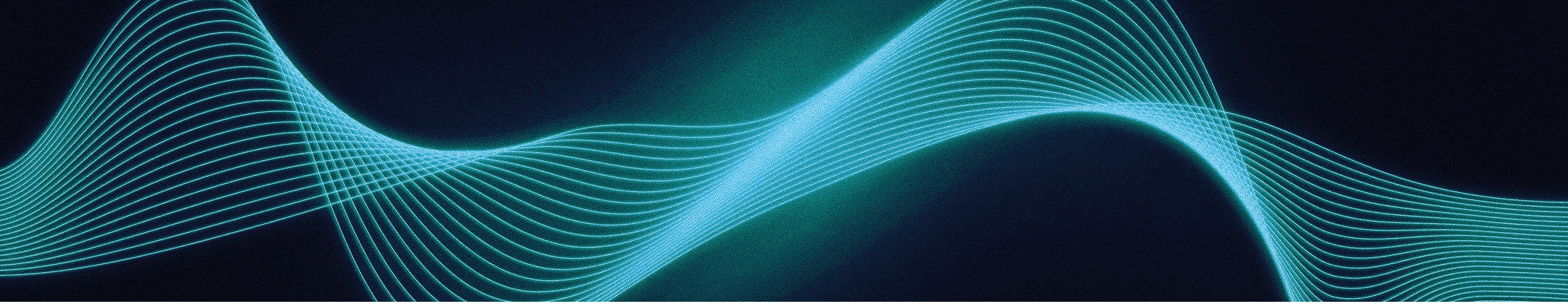


SpaceBlender

Imaginary Space Machine

User's Guide

Version 5.5 : For Mac and Windows

soundtoys

CONTENTS

Figure 1: The SpaceBlender Control Panel

THE BASICS - ABOUT SPACEBLENDER

Thank you for purchasing SpaceBlender! As always, we sincerely appreciate your support. There are lots of tools out there, and we're thrilled you chose ours. SpaceBlender is the result of years of research, analysis, and development at Soundtoys, where we've been pushing the boundaries of delay, reverb, diffusion, and sound design.

If you're familiar with Little Plate and SuperPlate, you know we've done our fair share of reverb exploration. But SpaceBlender is different – it's way more than just another reverb. It's a sound design tool that lets you create imaginary spaces and effects that don't exist in the natural world. With SpaceBlender, you can go beyond conventional reverb effects and enter a new sonic dimension of evolving and highly customizable spaces. Let's dive in!

WHAT'S AN IMAGINARY SPACE MACHINE?

Soundtoys is known (and loved) for plug-ins that accurately capture the magic of analog gear and enhance them with cool digital features and ultimate tweakability. SpaceBlender on the other hand, is pure Soundtoys imagination and innovation. It opens up a new sonic frontier we've always wanted to explore.

Unlike most reverbs that are based on delay networks with feedback or on convolution, SpaceBlender is a completely new algorithm inspired by swarm synthesis. SpaceBlender allows for massive, otherworldly, and evolving spaces that can have both normal and unnatural shapes – reverse, bloom, gated, and more – that you can define and sculpt using its interactive Visualizer interface.

SpaceBlender's spaces are like a "time tunnel" where sounds travel through a defined time window that can remain at a constant or decaying level, and then just stop! Think of it like a gated reverb effect that can extend from 2 bars and up to 60 seconds. In other words, the sound travels through SpaceBlender and just disappears (or it can be set to decay like a standard reverb). It all depends on the shape you create!

We designed SpaceBlender to be intuitive, interactive, and simple to use -- without extensive menus. You can tweak, modify, and mangle for instantaneous and real-time responses to control changes. Let's explore the interface that will introduce inspiring new sonics and get your creative juices flowing.

Figure 2: The SpaceBlender Visualizer

THE VISUALIZER CONTROL

The Visualizer is the central feature of SpaceBlender's user interface. It's where you'll define the shape of your space, as well as see your audio interacting within your created space. There are three components to the display: the sonar-like Cursor, the graphical shape display, and the Time text display which is directly related to the Time knob (more on this in a bit).

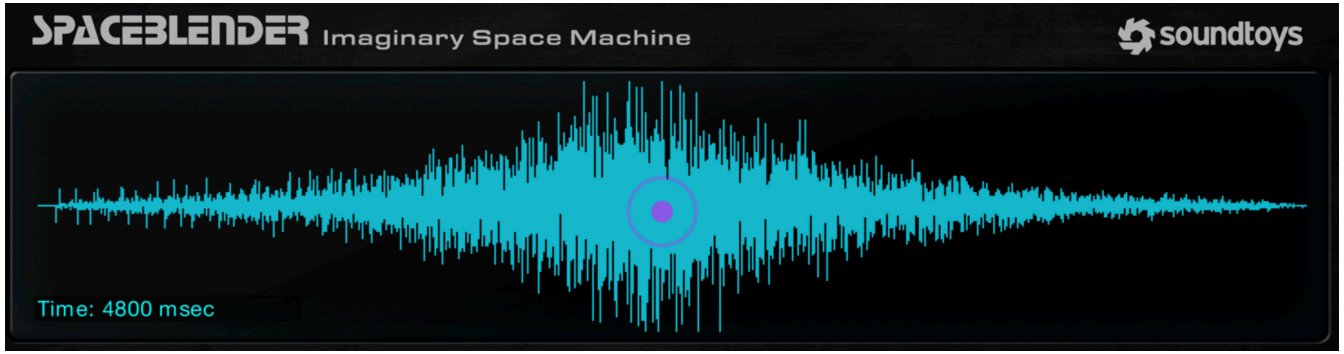


Figure 3: The SpaceBlender Cursor

THE CURSOR CONTROL

The pulsating, sonar-like Cursor is a grab-and-drag control that modifies the overall shape envelope and direction of the space in SpaceBlender. Simply click on the Cursor and drag it anywhere within the window. Moving the Cursor will dynamically change the graphical shape of the space/interaction and the effect. The combination of X and Y adjustments gives you extensive control over how the effect evolves.

The X-Axis controls the shape of the amplitude envelope. Moving the Cursor to the right creates a fade-in/fade-out effect, while far-right positions invert the envelope for reverse-sounding effects with a long build time.

The Y-Axis controls the amount of envelope shaping applied. When the cursor is positioned at the top of the display, there is no envelope applied. The sounds in SpaceBlender will travel through the defined timeframe at a constant level and then disappear. Moving the cursor down thins out the effect at the edges, creating a more drastic amplitude change.

IMPORTANT: Regardless of where you move the Cursor within the Visualizer, the overall time and length of the space remain constant. You'll dynamically change the amplitude and envelope of the space, but not the total time it takes a sound to travel through SpaceBlender.

Figure 4: The SpaceBlender Sound Display

DISPLAYED SOUNDS IN SPACEBLENDER

The display depicts the length and volume of each input sound. The image above shows how a group of notes (in purple) appear in SpaceBlender as they travel through time from left to right. Once the notes reach the end of the time window, they simply disappear. This is Soundtoys' imagination at work – this disappearance sets SpaceBlender apart from conventional reverbs that decay and fade away. This type of "shape modification" allows for limitless variations and gives SpaceBlender a fast and user-friendly way to define and mangle the shape of the affected sound. Give it a whirl. You'll quickly see how it responds and what it can do.

TIME DISPLAY

The Time display shows the total length of the space as set by the Time control knob. This can be either in milliseconds or Bars depending on if the Sync button is engaged.

Figure 5: The SpaceBlender Controls

OVERVIEW

SpaceBlender's controls are designed for fast, intuitive use. Each control affects how the sound evolves. SpaceBlender's controls can be automated within your DAW for real-time modifications and changes.

PRO TIPS:
1. Right-clicking on the knob names will display the knob's value as shown in figure 6 on the next page.
2. Holding Shift while turning a knob allows you to fine-tune values.
3. Holding Control+Option on a Mac or Control+Alt on PC allows you to lock a knob's value so it does not change as you select different presets.

TIME KNOB

Defines the length of the space, ranging from 100ms to 60,000ms (1 minute). When Sync is on, the Time knob sets the duration in beats (1–32 beats).

SYNC BUTTON

Allow sounds traveling through SpaceBlender to sync with your music for a set number of beats.

- With **Sync ON**, SpaceBlender will sync to your host clock and the space length will be set in beats from 1 to 32; the Time parameter within the Dynamic Space Display will show the number of bars selected.
- With **Sync OFF** your sound will not be time-synced and without quantization.

WARP BUTTON

Warp significantly impacts how changes in Time parameters respond. Tweaking and modulating Time with Warp mode engaged can create some fun effects.

Figure 6: The SpaceBlender Control Values

WARP BUTTON (Continued)

- **Warp ON** impacts the pitch and speed of the sounds within the space and adds smoothing to Time parameter changes. As you increase or decrease the length of Time, the sound will smoothly glide to the new setting – similar to how a tape echo responds to time or delay change
- With **Warp OFF**, time changes without pitch adjustments.

NOTE: With **WARP OFF,** there will be a very short, momentary volume ducking of the effect until it reaches the new value.

COLOR KNOB

The Color knob is like a tone knob that adjusts the tonal balance to modify the character of the effect. As a sound passes through the delay matrix, it evolves the tone over time rather than an instant adjustment as with standard equalization.

- When set at 12 o'clock it does not affect tonality.
- Turning clockwise raises a high frequency shelf causing the sound to grow brighter, while turning the control counterclockwise darkens it over time.

WARNING: Be careful when feeding a bright signal into SpaceBlender and cranking the Color up – it can get quite bright!

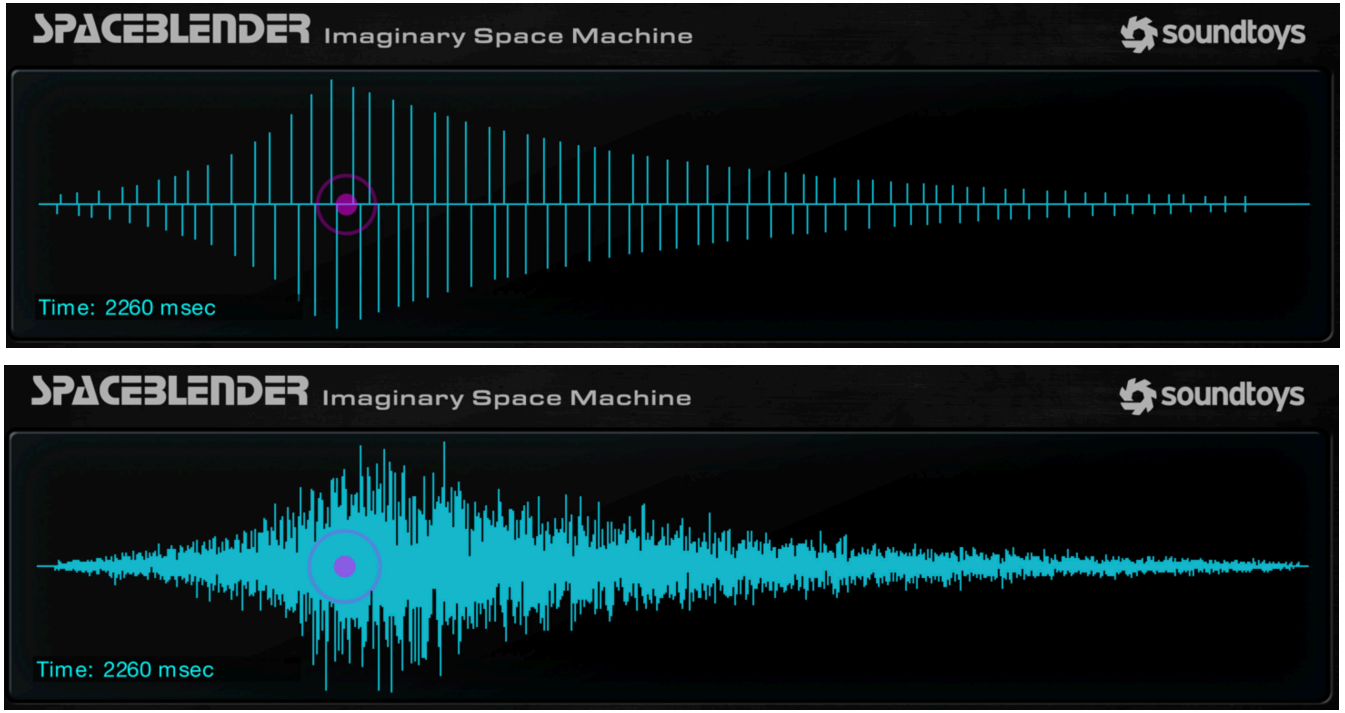


Figure 7&8: Low & High Texture Values

TEXTURE KNOB

Use this to manipulate the density, similar to a diffusion control.

- As you adjust the Texture knob to the left, you'll see a discrete set of delay taps as individual lines in the Dynamic Space Display.
- Low settings produce distinct delay taps; high settings create smooth, diffused textures.

CONTROLS - MOD, MIX & FREEZE

MOD KNOB

The Mod knob controls the amount of modulation for a chorus-like effect. The shape and rate of modulation is preset but the mod depth is adjustable, controlled by the Mod knob. The depth increases as the knob is turned up. Use subtle modulation for natural movement or crank it up to the extreme.

Modulation sounds really lush and wonderful on inputs like guitar, synth, and other electronic sounds. On vocals and other acoustic instruments, smaller doses are often more effective. But hey – choose your own adventure. It's a complex and evolving modulation totally unique to SpaceBlender.

MIX KNOB

Blend the dry and wet signals to taste. At 12 o'clock, the mix is 50% dry and 50% wet.

SpaceBlender's highly variable shaping and extremely long times can seem imperceptible at first depending on the shape of the effect. If you don't initially hear any effected space signal, just wait for it! There's always something going on under the hood.

FREEZE BUTTON

As you may have guessed, the Freeze button captures and loops the current sound. But remember that our imagination is at work here! With SpaceBlender, the captured sound will be modified each time it repeats through the space affecting amplitude and tone. Manipulate the captured sound with the cursor and other controls for evolving soundscapes.

Pre-Freeze Sound Display: With **Freeze OFF,** you'll see a detailed depiction of each sound's level, length and decay.

Frozen Sound Display: Now see that same source traveling through the space with **Freeze ON**. Individual notes are merged and diffused by the effect. The resulting audio becomes more of an ambient wash that repeats with each pass through SpaceBlender.

Figure 11: The SpaceBlender Presets

PRESET MANAGEMENT

Saving and recalling presets is easy. Use the standard Soundtoys preset manager to save your custom creations or explore the factory presets for inspiration. For more details, check out the Soundtoys User's Guide.

RESIZABLE INTERFACE

We're happy to note that SpaceBlender's interface is resizable (yay!) and can be changed either by clicking on the lower right corner of the interface and dragging to dynamically resize, or by choosing one of the predefined sizes of 75%, 100%, 125%, 150%, 175% and 200% under the new "Menu" icon in the upper right area of the control bar.

THE FINAL WORD

We hope you'll find SpaceBlender as creative, inspiring, and musically useful as we do. We're excited to have this out in the universe and continue along this orbit of pushing sonic boundaries and exploring new spaces and dimensions. Thanks again for your support and as always – mix on.

SUPPORT INFORMATION

Now that you've taken the time to learn all about SpaceBlender, have fun, experiment, and make greatness! If our plug-ins helped you take your production to the next level, let us know, we'd love to hear from you and what you were able to create with our software.

If along the way however you should run into any hiccups or anything unexpected, we offer free technical support for all registered users.

Our FAQ contains many helpful answers. you can find it at:

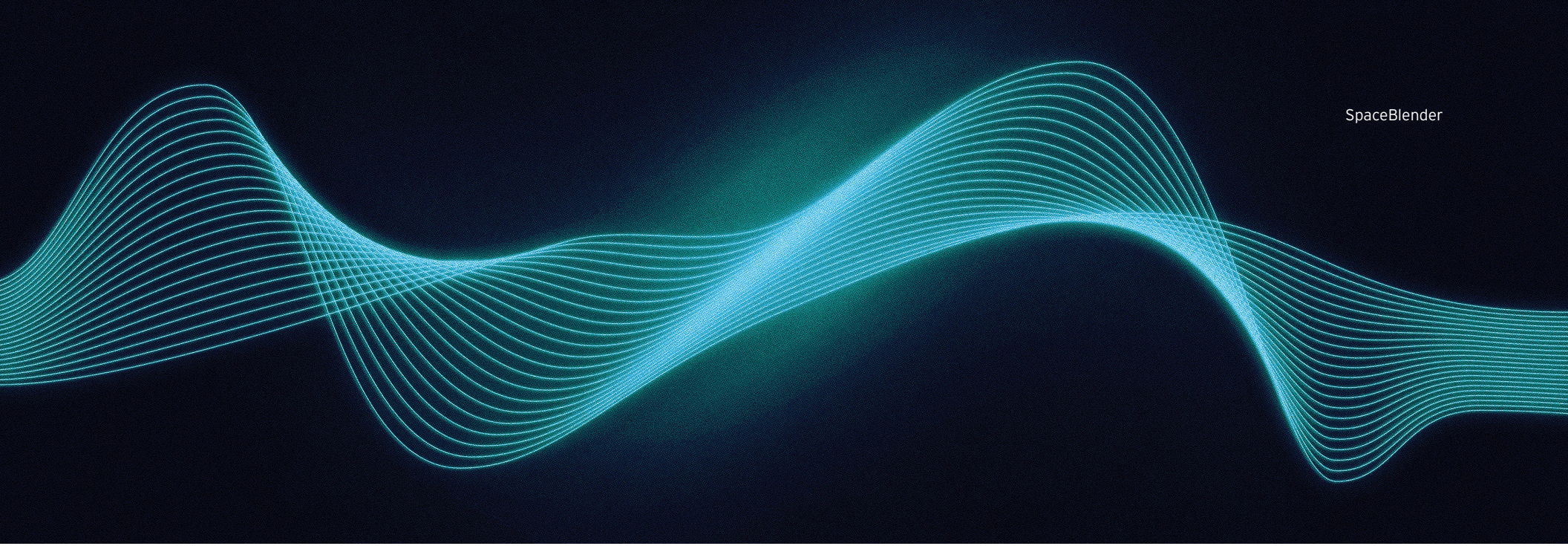
https://support.soundtoys.com

You can also reach our support staff by e-mail at:

support@soundtoys.com

Please have the following information available to help assist our support team:

- The product version and serial number or activation code
- The version number of your DAW (e.g Pro Tools 12 Cubase 9.5, Logic Pro X, Ableton Live 9.2.2)
- Your interface/hardware (e.g. Apogee Quartet, RME Fireface, etc.)
- Your computer make/model and operating system info (e.g. MacPro OS X 10.9.5, Windows 10, etc)
- A detailed description of the problem



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