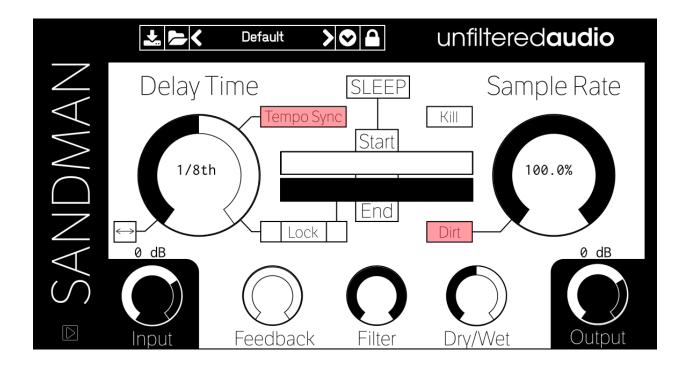
# Sandman 1.2 Manual

# by unfilteredaudio





## Introduction

Sandman is a delay and loop-mangler capable of creating beautiful, evolving ambient textures or busy, hyper-stuttered glitch beats.

#### **Features**

- "Sleep" mode freezes your delay buffer, creating locked loops. Loops can be further manipulated by changing the start and end points or manipulating the buffer size.
- Variable Sample Rate expands your delay times (up to five minutes!) while enabling amazing
  creative possibilities. Use it to repitch a frozen buffer, add a bit of grittiness and warmth to a
  delay line, or simply decimate everything.
- Tempo Sync
- Wide-ranging delay times (down to 5 milliseconds). At its smallest settings, you can use Sandman as a flanger, a wavetable oscillator, a micro-delay, or to turn percussion into string tones.
- Dual LFOs with bipolar modulation destinations. Keep your loops from going stagnant and explore some wild modulation opportunities.
- Optional de-clicking algorithm makes your loops invisible. You can automate this algorithm's state, giving you glitchy clicks and cuts when you want them.
- Feedback filtering helps you control more intense patches or add a bit of murk to your loops.
- Intelligent "Lock" modes keep your delay length and loop lengths intact, even with a modulated sampling rate.
- "Dirt" switch adds some nastiness to the heart of the delay line for that extra-vintage feel.
- Ping-Pong mode bounces your delayed audio back-and-forth, creating ultra-wide sounding loops.
- Automatable Kill Switch: use it as a panic button when your feedback starts to run away, or punch rhythmic holes in your audio in a click-free manner.

# Getting Started

## Installing Sandman

Simply run the provided installer. On Windows, you will need to select your VST directory if the installer doesn't pick the right one by default.

# **Browsing Presets**

Sandman comes with a wide array of presets to get you started. The preset manager on the top of Sandman's interface is used to load, save, or browse presets. If you want to get a good feel for the power of Sandman, spend some time with these presets before browsing the manual.

### Standard Unfiltered Audio Features

#### **CONTROLS**

- -All knobs and vertical sliders are controlled in a smooth up-and-down motion.
- -All horizontal sliders are controlled in a smooth left-to-right motion.
- -Hold Command (on OS X) or Control (on Windows or OS X) to fine-tune controls.
- -Double-click or Alt-click on a control to return it to a default setting.

#### **PRESETS**

- -All presets are saved with a .uap file extension. These presets are compatible across all platforms and plug-in formats.
- -Use the "Lock" menu to prevent specific parameters from changing while browsing presets.

# Controls

#### Main Controls

**Delay Time**: Sets the length of Sandman's delay buffer. This ranges from 5 milliseconds to 5 seconds. This control is exponential to allow easy manipulation of smaller delay times.

**Sample Rate**: Controls the sampling rate of Sandman's DSP. Unlike "sample/bit crusher" effects, this control literally affects the speed of Sandman's audio processor. When dropping the sampling rate, you will hear a combination of pitch-warping and lo-fi signal degradation. Without any locks enabled, changing the sampling rate will change the effective size of the delay buffer. As an example, a 400 ms delay will loop every 800 ms when the sampling rate is at 50%. If locks are disabled, the delay time's value label will display the affected value.

**Tempo Sync**: Enables syncing of Sandman's delay time to your DAW's tempo. For instance, you can create 8th-note echoes perfectly in time with your project's tempo. "T" means "triplet", and "D" means "dotted". Please note that enabling tempo sync does not prevent the sampling rate from affecting the delay time. If you want the delay buffer to always be tempo synced, you must enable both Tempo Sync and Lock Delay Time. Also please note that Sandman's delay buffer size maxes out at 5 seconds at 100% sampling rate. If a specified time unit is longer than 5 seconds, Sandman will default to five seconds. You will only encounter this behavior at extremely slow tempos (Whole notes at 60 BPM would take four seconds, for instance).

**Sleep**: Freezes the delay buffer. No new information will be written to the delay buffer. This effectively takes the contents of the delay buffer and forces it to loop until "Sleep" is disabled. Once slept, the loop is not affected by the "Filter" or "Feedback" controls, but will be affected by changes to the sampling rate.

**Kill**: Empties the delay buffer. No new information will be written to the delay buffer. Before emptying the delay buffer, an extremely short envelope is applied to the delay buffer to ensure that an audible click is not produced. When Kill is turned off, another short envelope is applied, ensuring that there is not a click at the beginning of your new loop. This switch can be very useful if your delay buffer is extremely long and needs to be immediately emptied. It can also be used creatively, as you can punch rhythmic holes into your audio without worrying about clicks.

**Start/End**: These controls affect the start and end points of the frozen delay buffer. If locks are disabled, changing these points will affect the playback time of the frozen buffer.

<->: Enables Ping-Pong mode. In this mode, the delayed audio is moved back and forth across the stereo field. This creates a very interesting, wide effect. One thing to note is that the Feedback control behaves differently in this mode, and can approach runaway behavior around 85%. This mode is not available when Sandman is used as a Mono plug-in.

**Lock Delay Time**: This lock will force the delay buffer to remain the same size, no matter what the sampling rate is. As an example, a 400 ms delay buffer will still take 400 ms to loop, even at

a 25% sampling rate. Use this lock if you would like to maintain a specific loop tempo, but want to explore unusual manipulations of the sampling rate.

**Lock Frozen Buffer**: This lock will force the frozen buffer to maintain its length, no matter where the start and end points are. As an example, a 400 ms delay buffer will always take 400 ms to complete, no matter where the start and end points are. As a side effect, moving the start and end points will affect the pitch of the frozen buffer. Enabling both locks and turning on a lot of modulation can result in some incredible, unusual effects. Try it out!

**Dirt**: When enabled, this adds an amount of pink noise to the delay buffer depending on the sampling rate. At 100% sampling rate, this will add no noise. At lower sampling rates, this contributes to a lo-fi feeling. With high feedback and Dirt enabled, you can get a larger accumulation of noise in the buffer.

**Feedback**: Affects the volume of the delay buffer written back into itself. Commonly, you would use this to control the number of echoes that you hear. With short delay times and high feedback, you can create unusual string-like sounds from percussive sources. Feedback doesn't affect anything while the delay buffer is in Sleep mode.

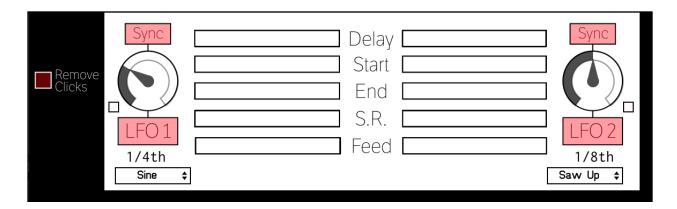
**Filter**: Applies a low-pass filter to the feedback path. Use this to remove a build-up of hissy high frequencies, or to give the echoes an underwater or "room next door" type of feel.

**Dry/Wet**: Control the balance between the unaffected "dry" signal and the delayed "wet" signal. Please note that the "gain" knobs do not affect the level of the dry signal.

**In Gain**: Boosts the level of the audio being written to the delay buffer.

Out Gain: Boosts the level of the output of the delay buffer.

#### Modulation Controls



To access the modulation menu, click the arrow on the bottom left corner of Sandman.

The modulation menu contains two LFO's with the following waveforms:

- Sine
- Triangle
- Saw Up
- Saw Down
- Sample & Hold

Each LFO is unipolar, meaning that they provide one direction of modulation only. Five sliders on each LFO allow you to set modulation destinations and depths. The center of each slider is the current knob value for each modulation destination. The LFO can add either a positive or negative modulation amount to that value.

**Sync**: Turns on Tempo Sync for the LFO. When Tempo Sync is on, the rate of the LFO is locked and will not be affected by the Sample Rate. When the LFO is not tempo synced, its speed will be affected by the Sample Rate.

**Remove Clicks**: Activates an algorithm that attempts to remove clicks and discontinuities from a frozen buffer.

# **Options**

Sandman 1.2 introduces an expanded Options Menu, featuring screen resizing and "Legacy" options.

**Enable Tooltips**: When active, helpful tooltips will appear over each control if the mouse cursor is left on top of the control for around 2 seconds.

**Legacy Filter**: In Sandman 1.0 and 1.1, the lowpass filter only acted upon the feedback line. This behavior is kept if Legacy Filter is active. If Legacy Filter is turned off, the lowpass filter acts upon the entire wet signal (except for the Sleep buffer).

**Legacy Sleep**: In Sandman 1.0 and 1.1, clicks could occur if the Sleep buffer looped while the user was manipulating the Start time. When active, Legacy Sleep keeps this original behavior. If Legacy Sleep is turned off, the Sleep buffer no longer resets automatically if the Start time is ahead of the playhead.

100/150/200%: This determines the amount of scaling applied to Sandman's interface.