

# OneTrick KEYS

## User Guide

The interface features a dark theme with a stylized clapperboard graphic at the top. The controls are organized into several sections:

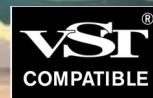
- Mix:** Gain, Saturation, and Pan.
- Strings:** Brightness, In Tune, and Detuned.
- Body:** Size and Damp.
- Reverb:** Amount, Size, Damp, and Highpass.
- Media:** Tape, Noise, Mono, Flutter, Speed, and Shape.
- Sampler:** Samplerate, Bits, Low Cut, and High Cut.
- MIDI:** Sensitivity, Bend Range, and Sustain Lock.

A Presets panel on the right lists various sound profiles, with "Cassette Memories" selected. At the bottom, a piano keyboard is visible.

Version 1.0.1  
Created by Punk Labs



Functional  
Audio  
Stream



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# Introduction

## What is OneTrick KEYS

A physically modeled piano synth that produces a chill lo-fi sound without samples. It's powered by a vintage algorithm developed at Stanford in 1995 called "Commuted Piano Synthesis". The signal is then run through studio reverb, vinyl or tape noise, flutter, bitcrushing, and saturation to capture the vibe of chillhop and hiphop.

## Features

- 25 factory presets
- 16 voice polyphony
- Simulated vinyl and tape noise
- Flutter controls
- Studio reverb and saturation
- Lo-fi bitcrusher
- Preset browser with tags and editing
- Sustain and Sostenuto pedal support
- Nondestructive modulation (CLAP only)
- All parameters are automatable
- No telemetry or analytics
- No DRM
- Open source to inspect, learn from, adapt, and improve

## Available Plugin Formats

CLAP, VST3, and Audio Unit

## Supported Platforms

Linux with glibc 2.31 or later (x86\_64), Windows 10 or later (x64), and macOS 10.13 or later (64bit, M1/M2/M3). OpenGL 2.0 or above is required for all platforms.

## About Open Source

OneTrick KEYS's source code is available under a GPLv3 (or later) license for anyone to inspect, adapt, learn from, and improve. We've all had an app we rely on become outdated, incompatible, or move in a direction we don't like; by releasing the source code, we hope to protect users from these types of situations, and provide a guaranteed availability long after regular development has ceased. We believe that everyone benefits when users have control over their software.

## Who is Punk Labs

Punk Labs is run entirely by just two people, Oren Kurtz and Tara Bellafiore. We've been designing software, web projects, video games, and writing music professionally since 2005. Our journey has been long, and we've managed to remain independent. We sincerely hope you enjoy our creation and find it useful.

# Getting Started

## Installing

There is an assisted installer available for each platform. After downloading, run and follow the on-screen instructions. By default installation will be in the current user's data folder for the corresponding plugin format. As an alternative, an archive is available for manual installation. Your DAW/Host might need to scan for new/updated plugins once installation is completed. Please consult your DAW/Host's documentation for details. The following directories are used:

		User	System
<b>Linux</b>	CLAP	~/ .clap/	/usr/lib/clap/
	VST3	~/ .vst3/	/usr/lib/vst3/
	Documentation	~/ .local/share/doc/onetrickkeys/	/usr/share/doc/onetrickkeys/
	Presets	~/ .local/share/onetrickkeys/Presets/	
	Uninstaller	~/ .local/share/onetrickkeys/Install Data/	/opt/onetrickkeys/Install Data/
<b>Windows</b>	CLAP	%LOCALAPPDATA%\Programs\Common\CLAP\	%COMMONPROGRAMFILES%\CLAP\
	VST3	%LOCALAPPDATA%\Programs\Common\VST3\	%COMMONPROGRAMFILES%\VST3\
	Documentation	%USERPROFILE%\Documents\	%PROGRAMFILES%\PunkLabs\OneTrick KEYS\
	Presets	%LOCALAPPDATA%\PunkLabs\OneTrick KEYS\data\Presets\	
	Uninstaller	%LOCALAPPDATA%\Programs\PunkLabs\OneTrick KEYS\Install Data\	%PROGRAMFILES%\PunkLabs\OneTrick KEYS\Install Data\
<b>macOS</b>	Audio Unit	~/Library/Audio/Plug-Ins/Components/	/Library/Audio/Plug-Ins/Components/
	CLAP	~/Library/Audio/Plug-Ins/CLAP/	/Library/Audio/Plug-Ins/CLAP/
	VST3	~/Library/Audio/Plug-Ins/VST3/	/Library/Audio/Plug-Ins/VST3/
	Documentation	~/Documents/	/Library/Application Support/com.PunkLabs.OneTrick-KEYS/
	Presets	~/Library/Audio/Presets/Punk Labs/OneTrick KEYS/	

*Tip: On Windows, you can paste a directory listed with the environment variable (ex. %LOCALAPPDATA%) into the File Explorer address bar to be taken to that location. On macOS you can paste the directory listed into "Go to Folder..." located in the Finder, "Go" menu.*

## Basic Navigation

There are three types of controls: knobs, faders, and switches. Each control can be clicked and dragged to modify its parameter. Holding the Shift key on your keyboard while dragging allows for finer control. Single clicking on a switch will increment its value by one. Parameter values are displayed while hovering your mouse cursor over a control. To reset any control hold the Control key on your keyboard and either single click or hit Enter/Return, alternatively you can double click without holding any modifier keys.

The interface is also fully keyboard navigable. Tab will focus on the next control, while holding Shift and hitting Tab will focus on the previous control. You can also navigate using Arrows. Enter/Return or Space will activate a preset or buttons. Holding Control while using the Arrows will adjust a parameter's value. Holding Control and Shift while using Arrows will allow for finer adjustments.

## Audio Bus Layouts

There is one supported layout providing a main stereo output bus with all processing applied.

# Overview



*Tip: You can click on the logo to view the version number and credits.*

The following is a breakdown of each control and how it shapes the sound of the piano.

## Mix

The overall volume, panning and saturation.

**Gain:** The volume in decibels.

**Saturation:** The amount of saturation in percent.

**Pan:** The left/right panning.

## Strings

The tuning and timbre of the strings.

**Brightness:** The stiffness/brightness of the string simulation in percent.

**In Tune:** How perfectly in tune the piano is in percent. Lowering this value can make the piano feel older as individual notes go out of tune in different amounts.

**Detuned:** How far apart the pairs of strings are for each note. Increasing this value will give a chorus / honky tonk effect.

## Body

The body resonator of the piano.

**Size:** The size of the piano's body resonator in percent.

**Damp:** The amount of dampening applied to the piano's body resonator in percent. Increasing this value will make the resonator warmer.

## Reverb

The room reverb effect.

**Amount:** The amount of room reverb to apply in percent.

**Size:** The size of the room in percent.

**Damp:** The amount of dampening to apply in percent. Increasing this value will make the reverb warmer.

**Highpass:** The cutoff frequency for the reverb highpass filter in hertz. This can be used to control the reverb's muddiness.

## Media

Noise and flutter to simulate media playback.

**Vinyl/Tape:** This switch controls the type of synthesized noise added to the signal. This noise is gated along with the key signal to create the impression that the noise is part of a "sample". Holding any note down, regardless of it being audible, will keep the noise simulation running.

**Noise:** The amount of noise added to the signal in percent.

**Mono:** The amount of stereo width to remove from the signal in percent. This can result in an effectively mono signal.

**Flutter:** The depth of the flutter effect in percent.

**Speed:** The speed of the flutter oscillator in RPM.

**Shape:** The shape/ratio of the flutter cycle in percent. This can be thought of as duty cycle, but with a sine wave instead of a pulse wave.

## Sampler

Bitcrushing, and filtering to degrade the signal.

**Samplerate:** The Samplerate of the bitcrusher with additional nyquist filtering in hertz.

**Bits:** The bit-depth of the bitcrusher in bits.

**Low Cut:** The cutoff frequency of a highpass filter in hertz.

**High Cut:** The cutoff frequency of a lowpass filter in kilohertz.

## MIDI

Sensitivity, pitch bend, and sustain controls.

**Sensitivity:** The amount of velocity sensitivity in percent.

**Bend Range:** The range of the pitch wheel in semitones.

**Sustain Lock:** Locks the sustain pedal on. Note: this setting will not be saved in presets.



## Preset Browser

Displays a list of the Factory and User presets. Click on a preset to load it, or browse through them with the Arrow keys and press Enter. Selecting a preset will bring up an info pane with details. The controls are listed from left to right.

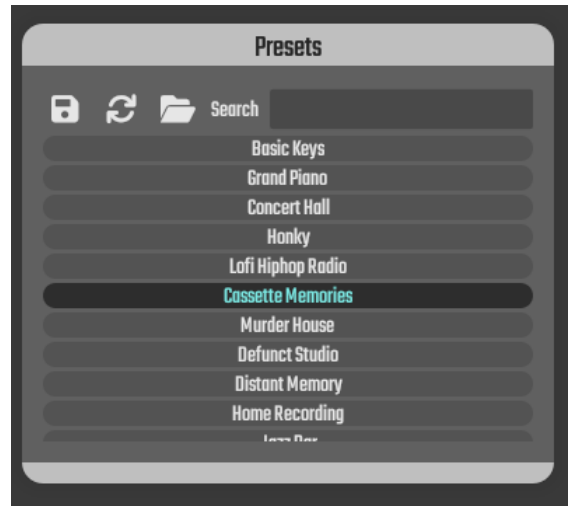
**Save:** Displays the *save dialog* to save the current settings as a user preset.

**Refresh:** Refreshes the list of installed presets. Press this if you've added any presets while the plugin was open.

**Open:** Opens the preset folder with your system file browser.

**Search:** Filters the list of presets to match your query. You can search for title, description, author, or

tags. If you search for tags you must type the full tag, but other fields use a substring search.



Presets are stored as simple plain-text JSON files with a .preset extension. This makes it easy to edit them in a text editor, or manipulate with a language like python. Install new presets by copying them into the presets folder, or delete existing ones. You can find the presets folder by hitting *open* in the *preset browser*, or by referencing the directories table in the *Getting Started, Installing* section.

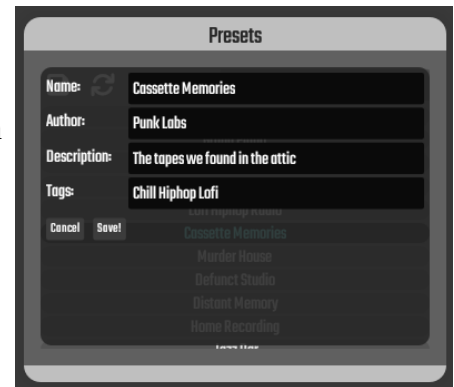
### Save Dialog

**Name:** A title for your preset, this will show up in the list of presets.

**Author:** Your name, useful if you decide to distribute your presets. This will show up in the info popup when selecting a preset.

**Description:** A brief description of your preset. This will show up in the info popup when selecting a preset.

**Tags:** A space-separated list of tags. These are used when searching. This will show up in the info popup when selecting a preset.



## MIDI Map

Effect	Control
Pitch	Pitch Wheel
Filter	Mod Wheel (CC 1)
Sustain	Sustain (CC 64)
Sostenuto	Sostenuto (CC 66)

# Changelog

## 1.0.1 (July 8, 2024)

Fixed:

- Crashing on Linux caused by OpenGL/window multithreading.

## 1.0.0 (March 12, 2024)

- Initial release

# Support

Product Home Page: <https://punklabs.com/ot-keys>

E-mail: [contact@punklabs.com](mailto:contact@punklabs.com)

News and Updates: <https://punklabs.com/blog>

# Notices

*OneTrick is a trademark of Punk Labs LLC*

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