## 

## Overview

The Synchronized Loop Orchestration & Timing Machine is a versatile rhythm platform designed for creative beat-making and sound experimentation. In each of its 16 “slots”, users can load an individual sample, apply an independent rate “multiplier” and manipulate its volume and decay parameters. Users can then mute, solo and trigger samples in real time, creating dynamic polyrhythmic grooves or tight, sequenced patterns. Its intuitive layout and responsive interface make it ideal for both live performance and studio production.   
  
A sample with a rate of “1.0000” will trigger in sync with the Master BPM, while a sample with a rate of “2.0000” will trigger the individual slot at double the rate of the Master BPM. Thinking in fractions will allow for unique and often complex arrangements on the fly. Experimentation is highly encouraged. Loading drum samples is the intuitive approach, but loading synthesizer samples with a series of different notes will open the door to unique riff building. Currently, fractions as small as 1/16 (0.0625) and as large as 4/1 (4.0000) will be accurately synchronized by the S.L.O.T. Machine.

## Starting the App

* Launch the executable directly.
* On startup, Slot Machine initializes with a default pattern and BPM setting.
* Audio input is disabled; output is stereo only for clean playback.

## Master Controls

|  |  |
| --- | --- |
| **Control** | **Function** |
| Master BPM Slider | Sets the global tempo (10–522 BPM). |
| Start | Begins playback of all active slots in perfect sync. |
| Reset Loop | Resets all slot playback positions to the start of the loop. |
| Reset UI | Deletes all but the main tab, resets all sliders, knobs, and toggles to defaults. |
| Options | Opens settings for glow color, pulse color, and visual scaling; toggle master/slot progress bars; Select bit rate output |
| Export MIDI / Export Audio | Exports your current pattern as a MIDI or audio file. You can select the number of cycles to export as well. |
| Tap to Beat: | Clicking rhythmically on the master control area sets the Master BPM to the tapped beat. |

## Slot Controls (Per-Channel)

Each of the 16 slots acts like an independent drum pad with its own playback parameters:

|  |  |
| --- | --- |
| **Control** | **Description** |
| Load | Load a .wav or .aiff sample. Drag‑and‑drop works too. |
| Clear (X) | Removes the current sample from the slot. |
| Mute | Mutes the selected slot. |
| Solo | Plays only the slot with SOLO selected. All other slots will be temporarily muted. |
| Rate | Master BPM “multiplier” that adjusts sample trigger speed (0.0625x-4.000x). |
| Vol | Controls sample volume (0–100%). |
| Decay | Controls how quickly the sound fades after triggering (10 ms–4000 ms). Used to shorten the playback of the sample. |
| Click to trigger | Click in slot to manually trigger. Great for auditioning sounds. |

## Pattern Management

* Multiple pattern tabs let you create and organize different grooves.
* Right‑click the tab bar to rename, duplicate, create, or import new patterns.
* You can save the current pattern’s state and recall it instantly. SAVE will save all tabs. LOAD will restore all tabs in the saved file.
* IMPORT will let you import a saved pattern from a saved file. If there is more than 1 tab saved in a file, you can choose which tab to import.
* Switching patterns while playing will finish playing the current pattern, and then begin the playing the newly selected tab.

## Exporting

### MIDI Export

* Generates a Type 1 MIDI file with up to 16 channels — one per slot.
* Each slot outputs a single note (C5, midi note 60) per active beat.
* Great for transferring grooves to DAWs like FL Studio, Ableton, or Logic.

### Audio Export

* Renders your current groove to a stereo audio file.
* Exports one or more full cycles including per‑slot rate, decay, and gain settings.

## Visual Options

* Customize glow and pulse colors for the interface.
* Adjust vertical slot row scaling (75–100%). Use if the slots won't all fit on screen
* Toggle display of master and slot progress bars.

## Tips

* You can manually trigger samples even when playback is stopped — handy for sound‑checking.
* Mono samples are automatically duplicated to stereo.

## Technical Summary

* Audio:Stereo output only, no input.
* Slots:16 independent sample players.
* Sample Length:~8 minutes per file.
* Envelope:Exponential decay per slot.
* Export:Audio (WAV) & MIDI (Type 1).
* Framework:JUCE 7; standalone & plugin (VST3/AU).

© Slot Machine — User Manual (HTML edition)



**Lone Pear Logic, Copyright 2025**