



SINEVIBES

Alternator *motion synthesizer*

INTRODUCTION

Alternator is a monophonic synthesizer with a unique approach to sound creation – every single parameter of its engine is sequenced. It consists of three modules – an oscillator, going into a filter, and then into an effect – but they all have their own separate step sequencers which change every property of the patch in a rhythmical fashion: oscillator waveform and pitch, modulation envelopes, even filter and effect types. Each of Alternator’s sequencers has its own timing, looping and randomization features, making it unusually easy to create motion lead and bass sounds with almost never-repeating patterns.

Alternator’s unique design is reflected in the user interface: all of its elements are neatly laid out on a single screen, with no tabs or menus. The sequencers have fluid color-coded graphics that reshape according to their settings, showing an exact view of what your sound composition is. In addition to this, each preset in Alternator has 12 patch snapshots that you can switch via MIDI keyboard and host automation, making it just as fun in live performance as during production.

SOUND ENGINE

- Monophonic synthesizer with all sound engine parameters controlled via three independent sequencers.
- Oscillator module: individual tracks for gate, waveform (saw, square, FM sine, waveshaped sine), pitch and pitch modulation envelope.
- Filter module: tracks for filter type (low-pass, high-pass, band-pass, band-reject), frequency and frequency modulation envelope.
- Effect module: tracks for effect type (frequency shifter, phaser, flanger, decimator), parameter and parameter modulation envelope.
- Each sequencer has its own step count, duration, timing, swing, and lag settings.
- 12 separate parameter snapshots in a single preset, switchable via MIDI keyboard or host automation.

GRAPHIC INTERFACE

- Fluid sequencer graphics that visually reflect timing and swing settings.
- Multiple utility functions for copying, looping and shifting individual sequences or whole snapshots.
- Support for multi-touch gestures and force touch on compatible trackpad devices.
- Support for high-resolution Retina screens.

COMPATIBILITY

- Works with any application that supports Audio Unit instrument plugins.
- Supports OS X 10.6 or later running on 32 or 64 bit Intel Macs.

QUICK START

Individual oscillator sequence: set gate on/off switch, waveform and pitch per sequencer step

Individual filter sequence: filter type, frequency and modulation envelope per sequencer step

Individual effect sequence: effect type, parameter and modulation envelope per sequencer step

Individual step count, timing and shaping settings for each sequencer

The screenshot displays the Sinevibes Alternator 1.0.3 motion synthesizer interface, which is organized into three main sequencer sections: oscillator, filter, and effect. Each section has a 32-step sequencer grid and associated parameter modulation graphs.

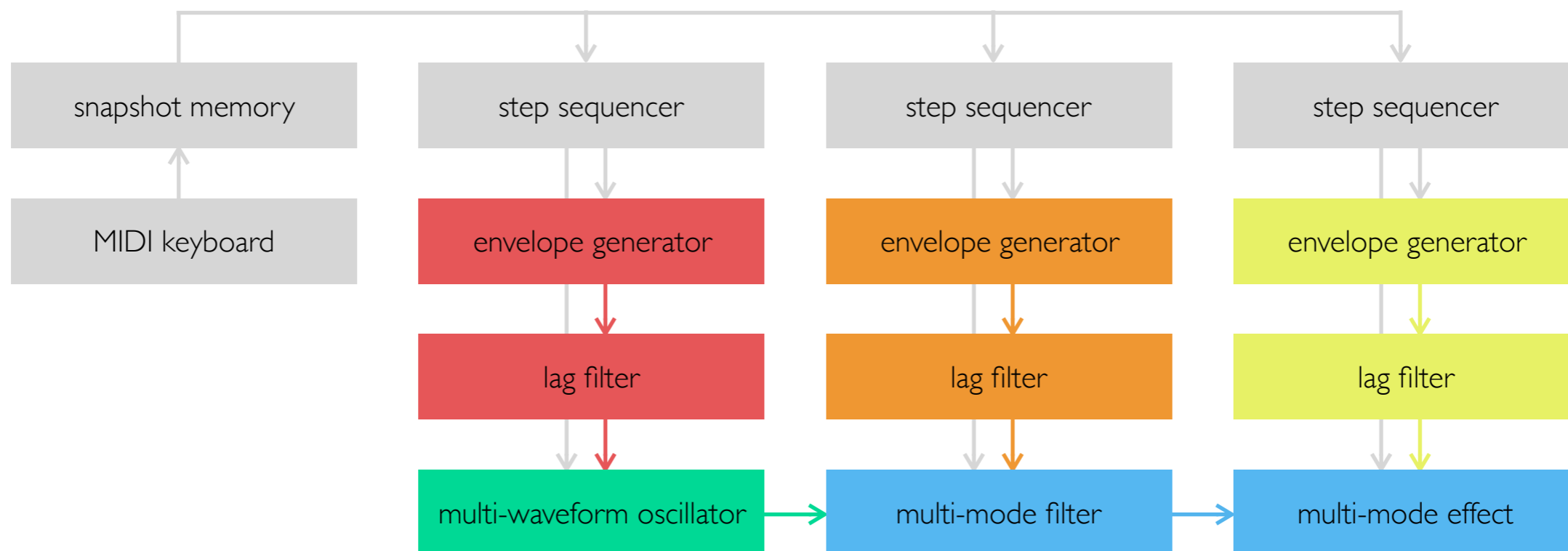
- Oscillator Section:** Includes a gate track (green bars), waveform selection (w-sine, fm sine, square, saw), and a pitch track (horizontal lines). A red line graph shows pitch modulation over the 32 steps.
- Filter Section:** Includes filter type selection (band-reject, band-pass, high-pass, low-pass), a frequency track (step function), and a frequency modulation track (sawtooth wave). A blue line graph shows frequency modulation over the 32 steps.
- Effect Section:** Includes effect type selection (decimator, flanger, phaser, shifter), a parameter track (step function), and a parameter modulation track (sawtooth wave). A yellow line graph shows parameter modulation over the 32 steps.

On the right side of the interface, there are control panels for each section, including duration, division, swing ratio, lag time, and copy/paste/loop options (loop x2, loop x4, loop x8). At the bottom, there are global controls for snapshot, glide mode (always, legato), glide time, master tune, and master level. The version number 'sinevibes alternator 1.0.3 motion synthesizer' is displayed in the bottom right corner.

BASICS & BLOCK DIAGRAM

Here is how Alternator works. Its sound generation path contains three main modules: oscillator, filter and effect processor. Each module has a dedicated step sequencer, with its own step count (up to 32) and timing settings (duration in bars, beat division into three or four steps, swing ratio). These three sequencers define which algorithms are currently engaged in each module, and they also control an envelope generator applied onto each module's main parameter. Each envelope generator also has a lag filter that adjusts parameter modulation smoothing (from instantaneous to slow glide).

Within a single Alternator preset it's possible to store up to 12 parameter "snapshots". These snapshots can be switched in real time via the lower MIDI keyboard octave (C0 to B0), using host automation ("snapshot number" parameter), and via the user interface.



INTERFACE OVERVIEW

Oscillator

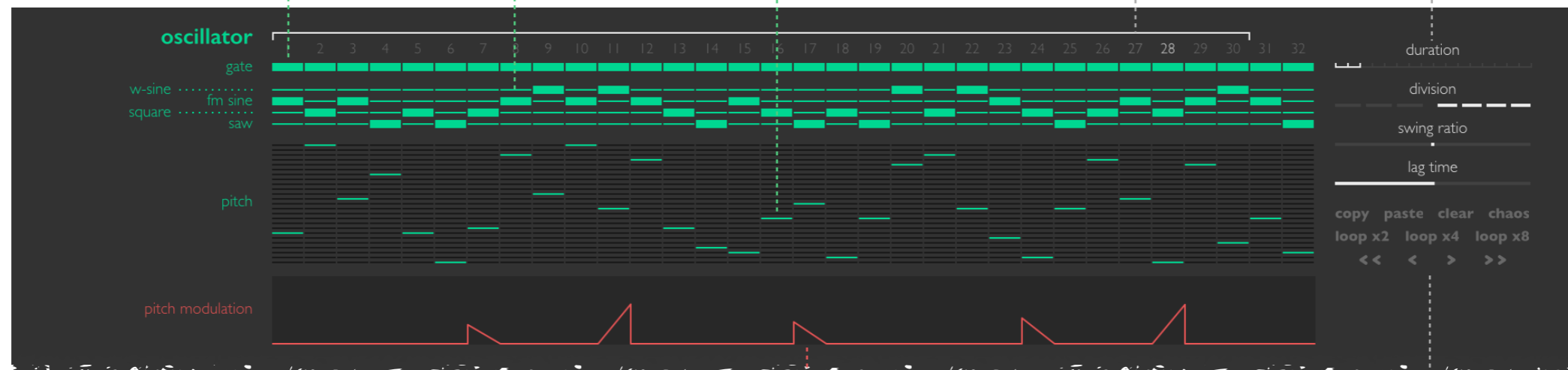
Oscillator **waveform**: defines what waveform is engaged on each step

Oscillator **gate**: turns the sound on each step on or off

Oscillator **pitch**: sets the tune of each step from 0 to +24 semitones relative to base key

Length ruler: drag left or right to change the sequencer step count

Oscillator sequence settings:
duration (1, 2, 4, 8 or 16 bars), beat **division** (triplet or quadruplet), **swing ratio** (from 25% to equal to 75%) and **lag time** (1 to 300 ms)



Oscillator **pitch modulation**: sets the envelope type and modulation intensity

Double-click or triple-click to change envelope shape; Control-click to invert polarity (see more options in [shortcuts](#))

Sequencer utility functions: copy, paste, clear or randomize the sequence; loop 1/2, 1/4 or 1/8 of the sequence; shift the sequence left or right by one bar or one beat

Note: copy/paste functions work for each sequencer independently (e.g. oscillator sequence cannot be pasted into the filter sequence)

INTERFACE OVERVIEW

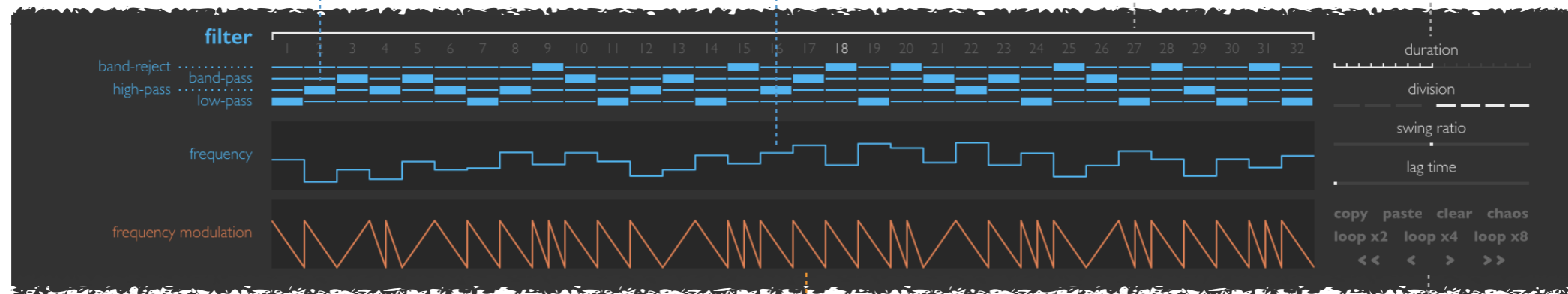
Filter

Filter **type**: defines what filter type is engaged on each step

Filter **frequency**: sets cutoff frequency for each step (20 Hz to 20 kHz)

Length ruler: drag left or right to change the sequencer step count

Filter sequence settings:
duration (1, 2, 4, 8 or 16 bars), beat **division** (triplet or quadruplet), **swing ratio** (from 25% to equal to 75%) and **lag time** (1 to 300 ms)



Filter **frequency modulation**: sets the envelope type and modulation intensity

Double-click or triple-click to change envelope shape; Control-click to invert polarity (see more options in [shortcuts](#))

Sequencer utility functions: copy, paste, clear or randomize the sequence; loop 1/2, 1/4 or 1/8 of the sequence; shift the sequence left or right by one bar or one beat

INTERFACE OVERVIEW

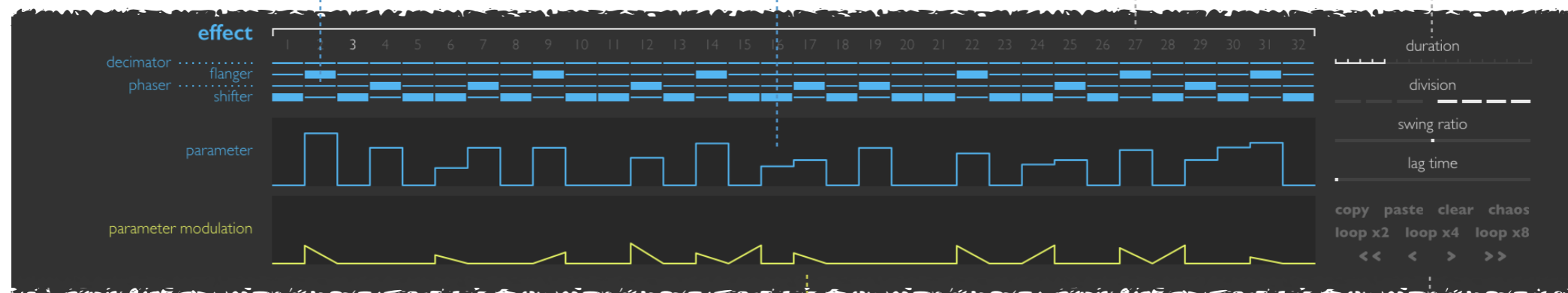
Effect

Effect **type**: defines what effect type is engaged on each step

Effect **parameter**: sets parameter value for each step

Length ruler: drag left or right to change the sequencer step count

Effect sequence settings:
duration (1, 2, 4, 8 or 16 bars), beat **division** (triplet or quadruplet), **swing ratio** (from 25% to equal to 75%) and **lag time** (1 to 300 ms)



Effect **parameter modulation**: sets the envelope type and modulation intensity

Double-click or triple-click to change envelope shape; Control-click to invert polarity (see more options in [shortcuts](#))

Sequencer utility functions: copy, paste, clear or randomize the sequence; loop 1/2, 1/4 or 1/8 of the sequence; shift the sequence left or right by one bar or one beat

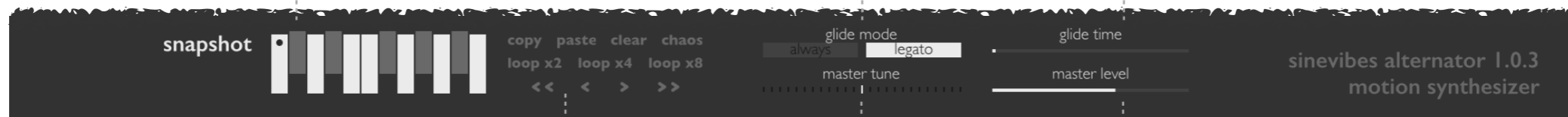
INTERFACE OVERVIEW

Snapshot & global settings

Parameter **snapshot** number: 1 to 12 (MIDI keys C0 to B0)

Pitch **glide mode**: glide between all notes, or between legato notes only

Pitch **glide time**: from 1 ms to 1 s



Snapshot utility functions (applied on all three sequencers simultaneously): copy, paste, clear or randomize the sequences; loop 1/2, 1/4 or 1/8 of the sequences; shift the sequences left or right by one bar or one beat

Sets **master tune** from -12 to +12 semitones

Master output level

SHORTCUTS

Alternator's graphic interface features multiple shortcuts that modify or automate the editing workflow. The shortcuts are activated by double-clicking, by clicking and dragging while pressing a key (such as *command* or *option*), and also using *multi-touch* gestures or *force-touch* clicks on a trackpad that supports them.

oscillator waveform *command-click (drag)* or *force-click (drag)* – set all steps to the same type
filter type *option-click* – set all steps to random values
effect type

oscillator pitch *command-click (drag)* or *force-click (drag)* – set all steps to the same value
filter frequency *option-click* – set all steps to random values
effect parameter

pitch modulation *command-click (drag)* or *force-click (drag)* – set all steps to the same envelope level
frequency modulation *double-click* – set envelope shape to double ramp
parameter modulation *triple-click* – set envelope shape to triple ramp
control-click – flip envelope polarity to negative or back to positive
option-click – set all steps to random envelope levels



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