Array by Sinevibes
spectral sequencer
INTRODUCTION

Array is an effect for spectral animation. It filters the incoming audio into eight separate bands and allows you to individually pass or mute them in a rhythmical fashion, essentially working as a gate sequencer in the frequency domain. With macro controls for multiple parameters, Array is a quick yet capable tool for all kinds of spectral effects – morphed, stepped, strobed or glitched.

Array displays a live audio waveform on each filter band and allows to operate on it directly, giving you a true “what you see is what you get” workflow. Every element in its user interface is color-coded and features subtle animations, bringing unusual ease of use and interactivity. Plus, all this goodness is rendered right on your Mac’s graphics adapter meaning fast response and no extra load on the main processor, regardless of how new or old your system is.

SOUND ENGINE
- Sequencer with up to 32 steps, variable duration, division and swing ratio.
- Eight -24 dB/octave filters each with its own output gate sequence.
- Eight parameter snapshots within each preset, available for realtime switching and automation.
- Host transport synchronization with support for tempo and time signature changes.

GRAPHIC INTERFACE
- Live audio waveforms and fluid sequencer graphics visually matched to them.
- Support for multi-touch gestures and force touch on compatible trackpad devices.
- Fully hardware-accelerated rendering with support for Retina screen resolution.

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

**Step 1**
Start the host transport to see the live audio waveform on each filter band

**Step 2**
Adjust sequencer settings to match the rhythmic timing of incoming audio

**Step 3**
Click and drag on any band to mute or on-mute the sound at desired moments

**Step 4**
Play with filter frequency, resonance and relative level balance of the bands
Here is how Array works. First it sends the input audio into 8 separate -24 dB per octave filters: they are one low-pass, six band-pass and one high-pass, each tuned to a different frequency so that as a whole they cover the audible frequency range. Each filter goes through its own individual gate, and all eight gates are controlled by the main step sequencer that runs in sync with the host transport. The gates pass or mute each filter band according to the on/off switches set on each sequencer step, and finally the gate outputs are mixed together.
**INTERFACE OVERVIEW**

**Sequencer**

- **Sequencer loop** *duration*: 1 bar, 2 bars, 4 bars or 8 bars
- **Sequencer beat** *division*: into three steps (triplets) or four steps (quadruplets)
- Adjusts the *swing* ratio between odd and even steps: 25% to equal to 75% (available for quadruple beat division only)
- **Sequencer length ruler**: sets the *end step* of the loop
- **Running marker** showing current sequence position

*Diagram showing the sequencer loop with options for duration and division, and the swing ratio.*
INTERFACE OVERVIEW

Filterbank & gates

On each filter band, a live audio waveform is shown.

Click and drag directly on any band's waveform, it works as a gate: dark background means pass and no background means mute, various click actions also available via shortcuts.

Filter cutoff **frequency** offset: relatively shifts all bands up or down by up to 50%.

Filter **resonance**: increases the peak sound level around each band's cutoff frequency.

Filter band **balance**: relative level balance of low- and high-frequency filter bands.
INTERFACE OVERVIEW

Output & snapshot

Current parameter **snapshot** number; can also be changed with two-finger swipe **shortcuts**

- **snapshot**
- **copy**
- **paste**
- **reset**
- **evolve**
- **chaos**
- **1/2x**
- **1/4x**
- **1/8x**
- **<<**
- **>>**
- **sinevibes array 3.0.0**

Adjusts the **transition** time between on and off states of the filter band gates

Adjusts the overall output **level** of the filter bands, with a boost up to +6 dB

Adjusts the **dry/wet** balance between the input signal and the mixed filter bands

Snapshot functions to **copy**, **paste**, or **reset** the whole snapshot, as well as **evolve** (set some sequencer steps to random values) or **randomize** (set all sequencer steps to random values)

Functions to **clone** the first half, first quarter or first one eighth of the sequence (aware of current sequencer beat division)

Functions to **shift** the sequence left or right by one beat or by one step (aware of current sequencer beat division)
Array’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.

**sequencer**  
`command-click` or `double-click` on any control – reset to default value

**gate matrix**  
`command-click` or `force-click` – toggle all gates on or off on a single filter band  
`control-click` (`drag`) – lock adjustments to a single filter band  
`option-click` – set gates randomly on a single filter band

**filterbank**  
`command-click` or `double-click` on any control – reset to default value

**output**  
`command-click` or `double-click` on any control – reset to default value

**snapshot**  
`two-finger swipe right` – switch to previous snapshot  
`two-finger swipe left` – switch to next snapshot