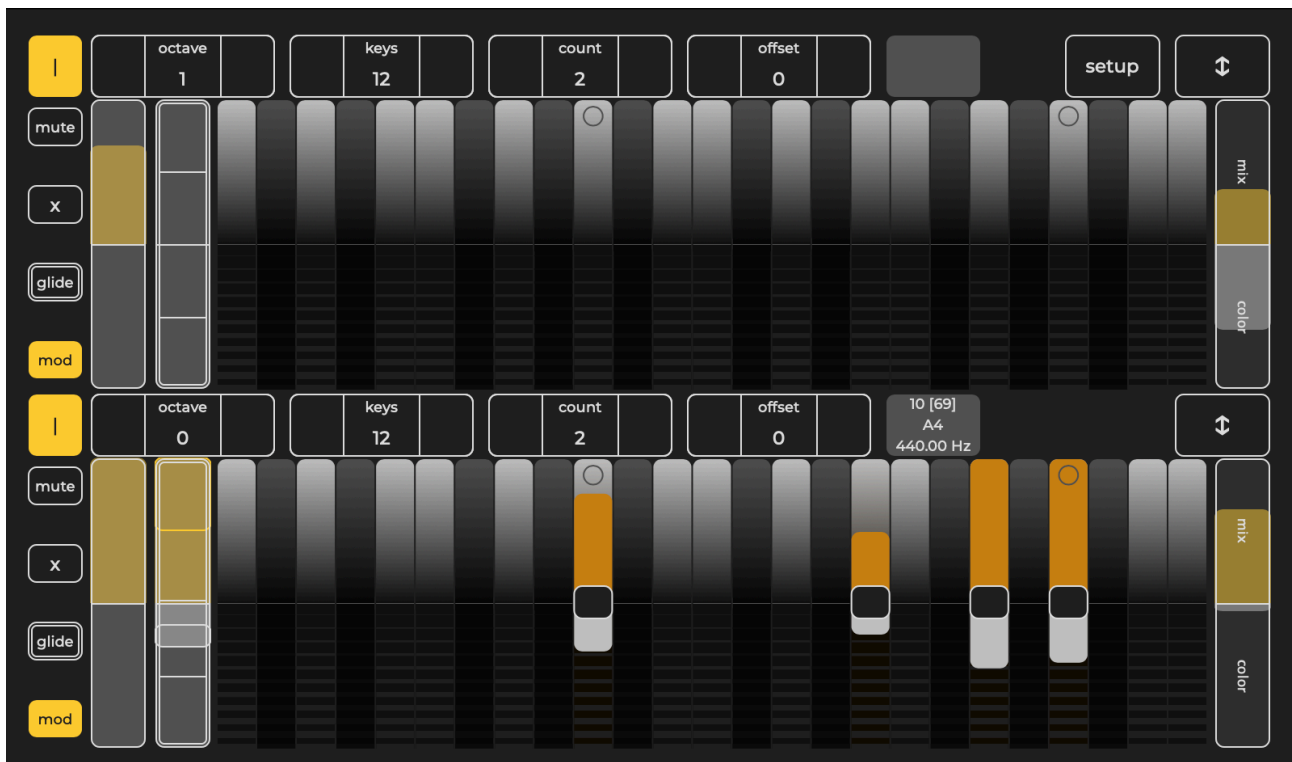


resonatedo

Quick start guide
v1.0.0

This application is a resonator effect with microtonal pitch control. It is available as the standalone and AUV3 versions for both iOS and macOS.



"resonatedo" is an audio-effect-counterpart for the sine synthesizer application, "sinusedo". See "User interface" and "Synthesis" sections of this manual for some basic details. The feature set related to the keyboards is the same so you can refer to a very detailed manual by David S. Collett to get more information:

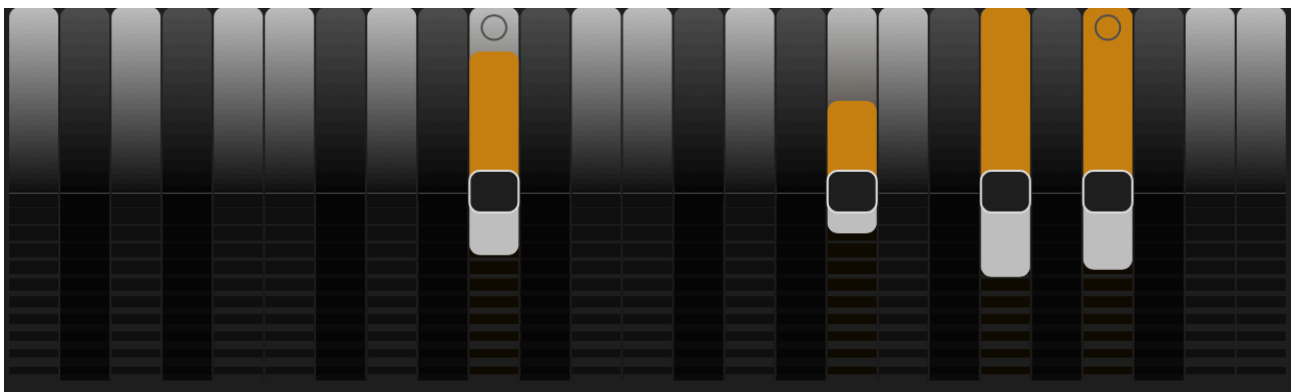
alexnadzharov.com/apps/sinusedo/sinusedo%20User%20Guide.pdf

User interface



1. Keyboard setup controls. These set the behaviour of each keyboard.

- "keys" sets the number of keys per octave. Each octave is divided in equal steps, this may be also referred as EDO number (equal divisions per octave)
- "count" sets amount of octaves per keyboard
- "octave" sets the starting octave. Number 0 represents octave starting with C3 (where "A4" = 440 Hz).
- "offset" allows you to start from n-th note in octave



2. Keyboard consists of special keys that have different modes according to the position of the press along the vertical axis.

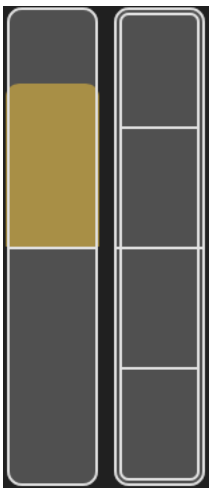
- The upper half of the keyboard with gradient keys works as momentary button. The vertical position represents volume / velocity (the higher - the louder)
- The lower half acts as a trigger. The position on the vertical axis represents attack/release time (the lower - the slower).
- When any of the notes (momentary and sustained) is active it has two sliders. Colored slider is for volume, white slider is for modulation.
- Grey button in the middle of the sustained note control switches it off.
- The circle marks the A key in each octave. The octave division is calculated relatively to A4 = 440Hz that will be consistent across all octaves.



3. Leftmost button opens a special panel with buttons and sliders:

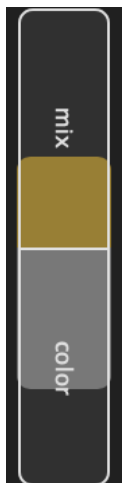


- "mute" button temporary switches off all currently active notes
- "x" button turns off all currently sustained notes
- "glide" button enables glissando. You can hit it for temporary action or double-tap to switch on
- "mod" temporary switches off all modulation on all active notes

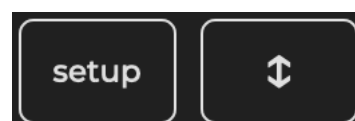


- Left sliders set next values for new notes. Colored (upper) slider is for volume, white (lower) one is for modulation
- Right sliders change values of all current sliders. Maximum value sets all sliders to maximum, minimal value sets all sliders to zero; the value in the middle sets all sliders to their original values
- You can double-tap any slider to reset its value

4. The sliders in the right part of the keyboard set mix for each set of resonators and "color" value (see synthesis section for some details)



5. Arrow button zooms each keyboard to full screen; "setup" button opens additional settings window



Synthesis

The "resonatedo" contains two sets of resonators controlled by separate keyboards. Each resonator has independent pitch (set by EDO division value of the keyboard), volume and modulation.

Each resonator is a delay with feedback that contains lowpass + allpass and bandpass filters. Each set has a common "color" parameter that changes balance between these filter sets in each single resonator. The "mix" control allows crossfade from dry to fully processed signal