ENVOSOUND Quick Start Guide

Relativistic Sequencer - The sequencer is at the core of envosound. It takes the input MIDI notes and breaks them into a sequence of steps.

Unlike a traditional arpeggiator or step sequence, Envosound applies a series of pitch intervals to the played note. This relative approach allows unique and rich patterns to be created from sound effects to harmonic sequences (especially when used in conjunction with custom scales)

Sequences are constructed from the four step groups which apply a pitch interval a number of times before moving to the next step.

The intervals and counts of each step can be modified over time using the count delta and pitch delta parameters.

Step Clock - the sequencer advances at a rate determined by the clock. The clock is synced to the DAW BPM and can be set in multiples or fractions of beat including triplets and dotted time.

Clock display - shows the current clock rate, a chart showing recent changes to clock rate, the time in beats remaining for a clock rate transition to complete, and the eventual final clock rate at end of transition.

Clock modulation - the the clock rate is modulated using pitch bend. The range of modulation is determined by the modulation knob but it is constrained to powers of 2 - i.e. doubling or halving the set rate. The glide knob determines how fast changes to modulation complete - i.e. a setting of 0 causes instantaneous changes and a setting of 8 causes the change to take place over 8 beats.

Envosound uses a phase locked clock which ensures that even after rate transitions the clock will transition in time with with the beat.

Step Visualizer - a graphic representation of the emergent note sequence. Time is along the x-axis with up to 4 bars show. The y-axis shows midi notes from C-2 at bottom to C7 at top.

Flow Visualizer - realtime display of notes being output.

Looping - after the last step has finished the sequencer will move back to the first step in REPEAT mode, in STOP mode the sequence will terminate, and in HOLD mode the final note will continue indefinitely.

Inline help - toggle to [i] button to enable and disable popup help for each control in the user interface. When disabled this space display the current presets description text.

Preset navigation - move to previous, next or random preset.

Octave Range - controls the range of outputted notes, from C-2 (midi note 0) to C7 (midi note 119)

Visualizer toggle - toggle between step and flow visualizer.

Envelope - The envelope is a classic ADSR envelope which is triggered when an input note is played and released when note is released.

Two separate envelopes are used for modulation of the amplitude of generated notes and for the filter. The velocity knob determines how much the velocity of pressed notes scales the envelope.

The filter envelope has an additional amount knob which determines how much it modulates the filter cutoff.

Out of range - when the sequencer generates notes outside of the selected octave range they are handled according to this parameter. WRAP mode caused notes too high to wrap to low notes, and too low notes to wrap to high. STOP mode causes the step sequencer to stop. SILENT mode causes out of range notes to be silently ignored. CLAMP mode causes notes to be constrained to selected range.

Randomizer - generate new unique presets with one click. Select the amount of randomization between 1-10 then click the dice. Multiple levels of undo if you don't like the changes.

Menu - About box and various configuration.

Light/Dark Click to toggle between light and dark mode.

Tuning Section - select a scale and all generated intervals and output notes are from this to this scale. Choose chromatic for all notes. Choose as_played to determine scale in real time based on chord patterns played.

Microtonal scales uniformly divide a semi-tone up into equal intervals to create smoother frequency transitions for sound effects.
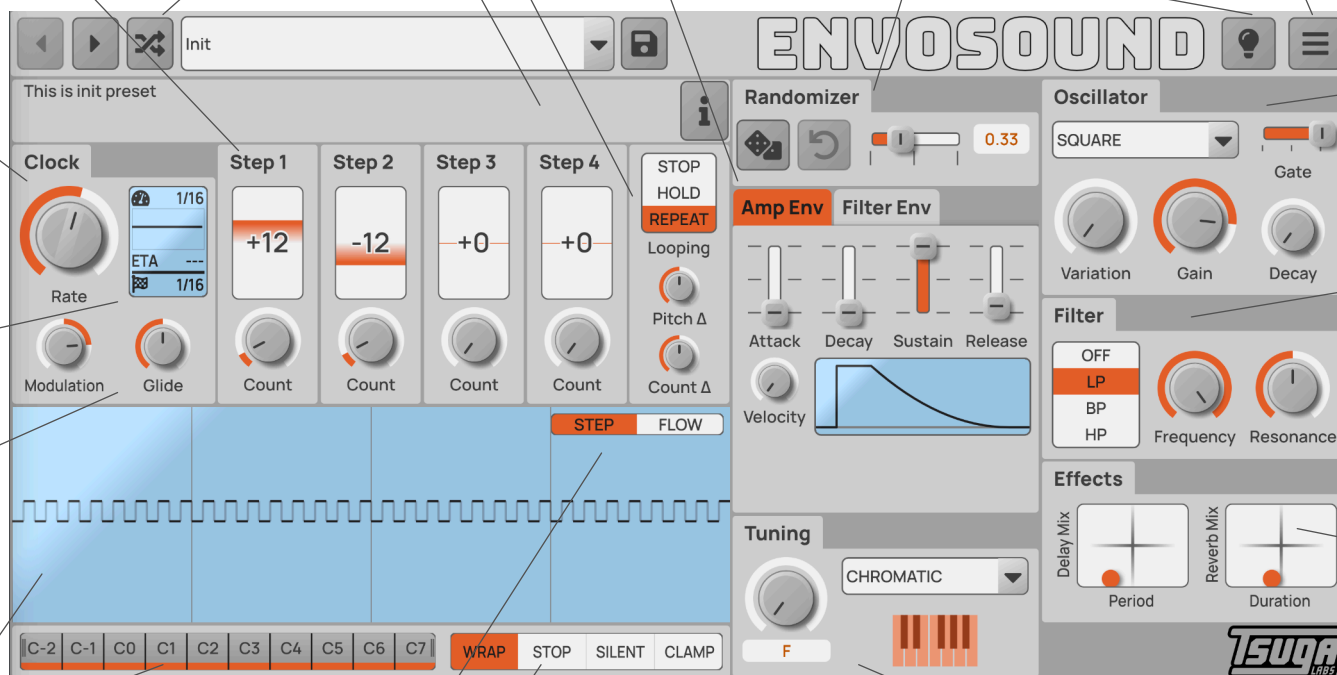
Oscillator - select between SINE-TRI, SQUARE, SAW, SIMPLEX NOISE, RETRO NOISE, and FRACTAL waveforms. Each waveform has additional tweaking with the variation knob.

SINE-TRI morphs between a pure sine wave and triangle. SQUARE morphs to narrow pulse widths. SAW detunes a second unison oscillator. Simplex variation controls the repeat period of the noise, where progressively shorter intervals become more engine like. Retro noise simulates the linear shift register approach to generating noise from old games consoles, again variation shortens the repeat interval. The fractal waveform generates waveforms from the internal oscillations of fractals. This can produce sounds ranging from clear tones, through inharmonic FM like tones, to noise. The variation knob moves to different places in the fractal.

Filter - select a low-pass LP, band-pass BP, or high-pass HP filter to remove frequencies from the waveform using a 6dB per octave filter. Resonance accentuates frequencies around the cut-off.

Filter cut-off is modulated by both the filter envelope and the modulation wheel.

Effects - apply feedback delay and or reverberation to the sound. For both effect the vertical axis of the XY pad controls the mix/feedback level, and the horizontal axis the duration.