Acrobatics
ALIENO

Virtual Monophonic Synthesizer: Overview & Specifications

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Version 1.0.5 - 25 / 9 / 2007

PREFACE / PLOT

In the year 2008 the independent organization named "United Sounds Alliance" declares war against the reptilian conspiracy oppressing the human race. There are just 5 years left before they build the "artificial black hole" that will stop the time flow as we all know and, therefore, destroy the world.
The U.S.A. discovered the secret plan but was immediately detected by the reptialian forces. Anyway, since we're ll evolved beings, it happens to be a kind of a simulated war with no blood-sweating: the "battle" will just set up in space, where the population will be not offended and the contenders will face one another with special spaceships equipped with the best sound technologies and creative tools available.
You are one of the fighters engaged, trying to save the earth from the evil dominance of the serpent's egg conspiracy. It's your time to set the world free!

GENERATORS

You had been given two **"Strums"** to engage the battle of sound, that were recollected from broken alien spaceships and mounted over yours in use. Each of the 2 units produces what appears to be a voicing combination of 2 saw waves with independent volume, transpose, detuning, fade-in (attack) and brilliance controls. Detune factor is essential to characterize the sound produced by Strums: the vertical slider progressively spreads by very small values the tuning of 2 saw waves generating a more choired, widened voice.

Note: long tests of our laboratories showed that the alien-design units share the same architecture while are not identical in built, so you can layer'em onto a 4 oscillators mega-stack or, giving the two units identical settings, produce subtle phase-modulation and irregularities that are particularly useful when synthesising leads and effects.

The frequency of each Strum can be altered by the step-LFO producing in-note pitch modulations of all kinds.

The **"Core"** is an earthy technology, located at the center of your Alieno cockpit. It produces two different voices: one is white noise and the other is a waveform to choose between sine, triangle, pulse (a band-limited square with pulse width control), parabolic (an absolute sine), wild (a wildsine), animated (an exclusive square/saw hybrid with PWM control hard-wired to the step-LFO module). The white noise generator (very useful to enrich the sound or making special effects) has a dedicated amplitude control, while it shares the fade-in control of the basic waveform.

Here again, the frequency of the Core module can be altered by the step-LFO producing in-note pitch modulations at will.

FILTERING

Like the Strums, the **"Lumilux"** module is another rip-off from an alien spaceship destroyed by the United Sounds Alliance.

It is located below the Core and collects the sound generated by the Strums and the Core. It will help you shaping the sound before passing it to the effects section.

It is clearly a multimode filter, switchable between lowpass, highpass, bandpass, notch or peaking. It has cutoff, resonance and tracking controls. Since the Strums already have kind of a filtering feature, the saw waves result shaped from a cascaded, combined cut.

The frequency cutoff of the Lumilux filter can be altered by the step-LFO to produce automated, long and mellow sweeps as well as fast, abrupt changes.

MODULATION

The **"Animator"** is a 16-steps modulation unit located over the Core, in the upper part of the cockpit. It is one of the most characterizing features of the sound produced by Acrobatics Alieno and acts both as an LFO and an in-note sequencer synced to the host tempo.
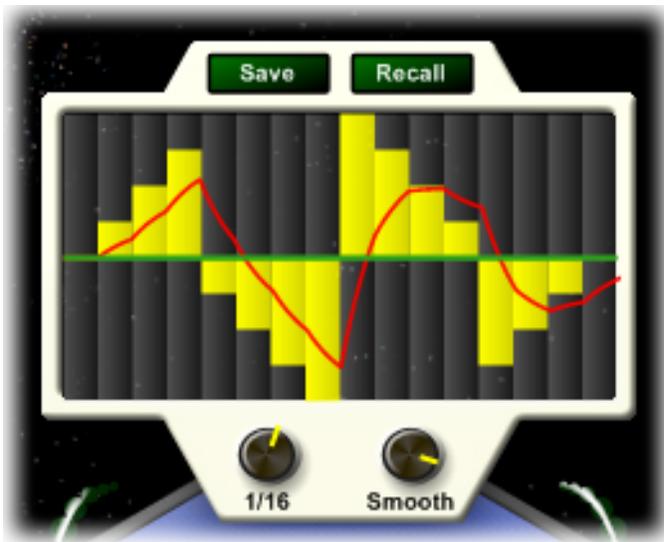
It features step control (the position of the step acts as a multiplier for the addressed modulated unit) dragging the mouse over the screen or either clicking on each bar, speed (from 1/256 to half of a 4/4 bar) and smooth knob controls. This last control blend the sequence from scaled/steppy value changes (arpeggio) to a total meltdown (sweep) and the resulting wave is visualized as a red curve over the yellow sequence.

The sequence is repeated endlessly in a loop and always start from the first step everytime you trigger a new note event. Beside, the animator understands and compute legato of notes never stopping the modulation while you are moving through a solo or a melody line that doesn't include note-off messages, retriggering only when the sustain is interrupted,

Bars in the sequence represent the alteration in pitch from the note value coming from your MIDI keyboard controller or from the part programmed in the host sequencer. In case the unit is assigned to the Lumilux filter, that modulation apply to filter frequency cutoff, summed up to the base frequency control and tracking.

When you edit a sequence, it is saved within the patch and it can be copy/pasted through different patches using the 4-slots memory that also includes 4 additional template waves to start from. You can acces the 8 sequences stored using the upper selctors that are independent from program changes.

Since it is engineered to modulate signal, the unit doesn't produce sound on its own, but is assignable in any combination to Strum 1, Strum 2, Core pitch and to the Lumilux filter cutoff using the "Animate" switch on each addressable module.

EFFECTS

On the upper left corner you'll find the **"Warp"**, which is a combined pan/tremolo effect synced to host tempo with speed control, modulation type (sine or triangle) and mix control). It is the lightspeed option of your spaceship and infact can be driven very fast to produce harsh and/or squeezy tones. Pan and volume are mixed in a special cofiguration across the stereo field, giving the sound a "position" in space suitable for special effects and weird positioning in the stereo field. The factor knob is a crossfade and the speed knob decides, indeed, a speed expressed in fractions of a 4/4 bar. The sine wave produces soft modulations where the triangular one is more aggressive on your sound material.

On the upper right corner of the cockpit there's the **"Repeater"** of signal, a stereo delay from 1/16 up to 1 bar covering all measures with additional feedback (the number of repetitions before the delay disappears) and mix controls (a simple dry/wet signal balance). Since the repeater mixes in the same headroom of the whole plugin, the activation of this unit via mix knob might result in a lower sound, so we suggest to raise a bit the master volume of the patch when the repeater is in use.

MASTER EFFECTS

Although integrated in the master section of the plugin, Alieno features also a third effect, a **Reverb** unit (the last in chain) featuring the very comprehensive and natural sounding Freeverb giving room type, damping, width knobs and a dedicated volume control.

MASTER SECTION & EXTERNAL CONTROLS
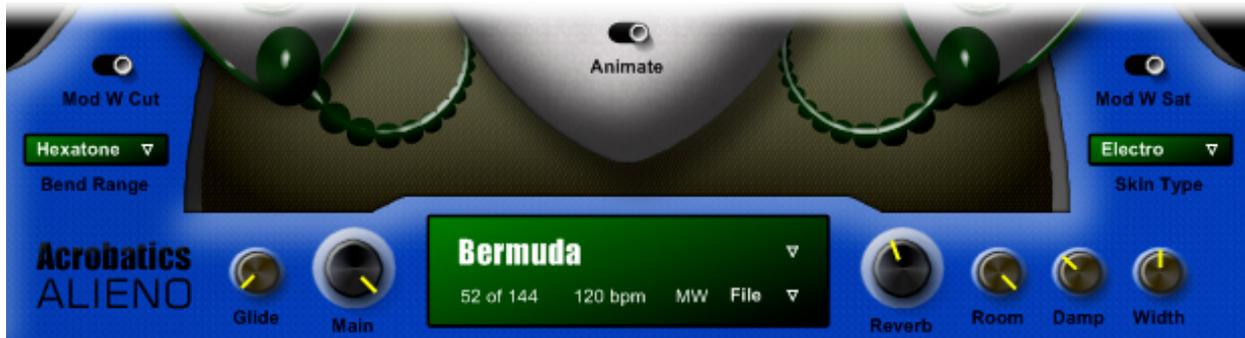
- MIDI monophonic control from host with auto-legato function.

- Adjustable **portamento** via a dedicated control, from instant to quasi-eternal glide.

- Extensive **pitchbend** control up to **4 octaves** shift, musical reference selection of typical **occidental** ranges plus **arabic** quartertones (+25, +75, +125 cents of a tone).

- **Modulation wheel control** assignable to a dedicated, overall **highpass filter** (12dB) and/or **saturation** effect.

- Convenient, **separate** amplification of Main Out and Reverb Out, then mixed together to the output of the plugin.

- Ultra-fast assembler coded **clipping** prevention, 3 times oversampled filtering algorhythm, samplerate-proof envelopes and modulation times.

- **Spectroscopic** real-time visualization of the output signal (L+R sum green scan inside the Animator unit).

- LCD Preset manager with preset name and number, patches and banks saving/loading functions in .txt file format **independent** from host.

- Default bank including **72** quality presets for leads, monosynth voices, weird textures and special Sci-Fi effects, with support for **144** patches each bank.

- Additional characterization and instant visual recognition of patches with **12** different **skins**, assignable and memorized in each patch/bank.

ADVANCED CONTROLS

- **Left clicks** are the basic way to change valus in **knobs** and **sliders**, but you can also **shift-click** to have **finer resolution** of movement (i.e. when you are recording automations in host) and **CTRL-click** to set a knob or slider in its **default** position.

- The LCD screen shows the BPM (bumps per minute) tempo of the VST host in which Alieno is loaded. This information depends on the host and cannot be changed by the plugin itself: in order to play **slower** or **faster** the sequence you have created, act on the Animator multiplier knob located at the bottm left of the sequence display. If it doesn't fit well yet and you want to fine-tune the speed, just **change the tempo** in your host and the plugin will set accordingly. Syncronization applies as well to every tempo-based feature of Alieno such as the **speed** of Warp and **rate** of the Repeater effect.

- **Double right-clicking** on the animator screen **resets** the sequence in use.

- Clicking on the "Acrobatics Alieno" signature in the window lower-left corner activates a special **slideshow** on the Animator screen showing plugin version, developer, credits & thanks. You can stop the slide clicking again in the same signature or FFWD the tabs clicking on the screen.
When the slideshow is active, the **preset manager** turns automatically into a **weblink** to Acrobatics Software Website.

MINIMUM SYSTEM REQUIREMENTS

- Windows 2000/XP operating system.
- Any VST 2.0 compatible host software.
- Pentium/AMD CPU with SSE/SSE2 support.

KNOWN BUGS, ISSUES & SOLUTIONS

Please refer to http://www.blank-media.it/acrobatics for more informations, bugs and/or issues and solutions regarding special system configurations.

RELEASE INFORMATIONS

- Release 1.0.5: Now it is possible to run multiple instances of the plugin and change presets without problems, added also a denormal circuitry to eliminate unwanted rises in CPU use on idle state.
- Release 1.0.4: Adds compatibility with SSE-only processors (gets rid of the infamous "no sound" issue on Athlon XP and P3 computers).
- Release 1.0.3b: beta release.
- Release 1.0.2: Fixed modulation wheel (CC1) not addressing correctly the saturation effect depth.
- Release 1.0.1: The envelope times were slightly modified to avoid clicking on release.
- Release 1.0.0: First public release.

- If you like the software provided by Acrobatics Software, feel free to donate to keep this free work alive - the PayPal payments will be activated as soon as possible. Please always refer to http://www.blank-media.it/acrobatics for more detailed and/or updated informations!

- This plugin uses the SSE/SSE2 instruction set. SSE is a physical feature of your CPU, all newer CPUs should support SSE; however, if yours does not, the plugin will not function.

- There will be additional banks and patches will be available @ our website, with contributions from new and/or well-known artists and musicians - stay tuned!