

Acrobatics **ALIENO**

OBJECT-ORIENTED SYNTHESIZER

Version 1.0.9

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 reptilian 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 on 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 two saw waves generating a more choired, widen 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 powerful leads and voices.

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 wild-sine), animated (an exclu-

sive 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.

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.



Tip: 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 8 slots of memory that also includes 7 additional template waves to start from and a random sequence generator. You can acces the sequences stored using the upper selectors that are independent from patch changes (read: you can copy/paste from a patch to another using the memorie slots).

Note: 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 the targeting 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 it can be driven very fast to produce very harsh and/or squeazy tones. Pan and volume are mixed in a special configuration across the stereo field, giving the sound a "position" in space suitable for weird effects and unusual positioning in the stereo field. The factor knob is a crossfade and the speed knob is labelled in fractions of a 4/4 bar. The sine wave produces soft modulations where the triangular one is more aggressive on your sound material.

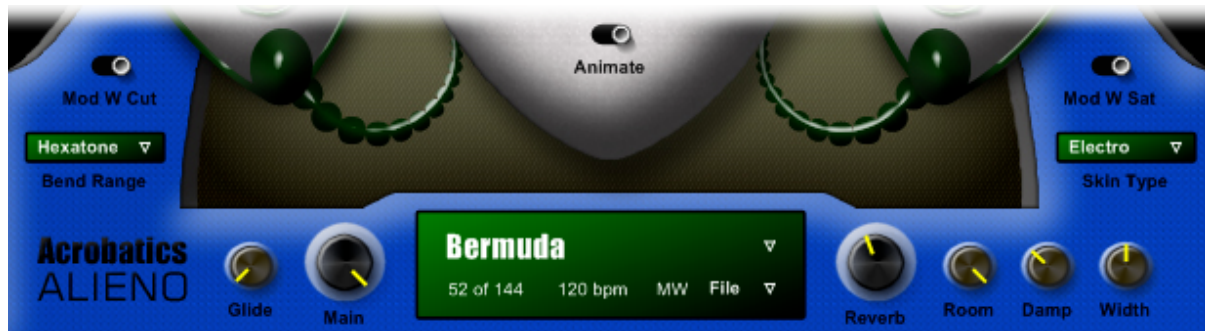
On the upper right corner of the cockpit there's the **"Repeater"** of signal, a stereo delay from 1/16 up to 1 bar covering all measures with additional feedback (the number of repetitions before the delay disappears) and mix controls (a simple dry/wet signal balance). Since the repeater mixes in the 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 reverb with 3 controls: room type (length between walls of reflections), damping (cut-off of frequencies at every reflection), width (stereo widening) and a dedicated volume knob.

MASTER SECTION & EXTERNAL CONTROLS



- MIDI monophonic control from host with auto-legato function.
- Adjustable **portamento** via a dedicated control, from instant to quasi-eter-nal glide.
- Extensive **pitchbend** control up to **4 octaves** shift, musical reference se-lection of common **occidental** ranges plus **arabian** quartertones (+25, +75, +125 cents of a tone).
- **Modulation wheel control** assignable to a dedicated, overall **highpass fil-ter** (12dB) and/or **saturation** effect.
- Convenient, separate amplification of Main Out and Reverb Out, then mixed together to the output of the plugin.
- Clipping prevention, 3 times oversampled filtering algorithm, samplerate-proof envelopes and modulation times, 4X - 10th order stereo oversampling algorithm for quality renderings to audio track.
- **Oscilloscope** for real-time visualization of the output signal (L+R sum plac-ed inside the Animator unit).
- LCD preset manager, patches and banks saving/loading functions in .txt file format independent from host, interactive display during edit that shows va-lue and parameter in realtime.
- A default and an alternative sound bank for a total of **144** quality presets for leads, monosynth voices, weird textures and special Sci-Fi effects.
- 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 value 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 (beats 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 bottom left of the sequence display. If it doesn't fit well yet and you want to finetune the speed, just **change the tempo** in your host and the plugin will set accordingly. Synchronization 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 view.
- 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 **hyperlink** to Acrobatics Software Website where you can download new versions, additional patches and banks, donate or get in contact with the developers.

MINIMUM SYSTEM REQUIREMENTS

- Windows Vista/2000/XP operating system.
 - Any VST 2.3 compatible host software.
- Pentium/AMD CPU with SSE/SSE2 instruction set support.
 - GDI+ graphics library (default with XP and Vista)

INSTALLATION INSTRUCTIONS

Simply decompress the ZIP archive, then carefully copy/paste all the contents inside the VSTPlugins folder of your system, the synthesizer will appear in your instruments list at the next host run.

KNOWN BUGS, ISSUES & SOLUTIONS

Acrobatics software recommends to avoid use of Acrobatics plugins with Ableton Live. Unfortunately there are some serious incompatibility issues with and only with the said host, especially if multiple instances of the plugins are in use. Apologizes goes to Live users, we hope to get the thing solved as soon as possible.

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

Note: Since Alieno VSTi is often updated and issue addresses frequently across versions, please also refer to the "What's New/ Release Informations" (next page of this user guide) for issues or new functions you might want added to the synthesizer, you may find it was already solved or added in the last version.



AUTHOR NOTES

If you like the software provided by Acrobatics Software, feel free to donate - 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 on this and other Acrobatics products!

A big thanks to those who have already donated or kindly contributed in various forms of collaboration: you really helped me in this wonderful voyage in the realm of sound-developing tools!

Best regards,
Andrea Capanna
March 2008

WHAT'S NEW / RELEASE INFORMATION

RELEASE 1.0.9

1. A dedicated LFO keep control of the new **vibrato** function, assignable to **aftertouch** via Users Settings page: the oscillator modulates the basic pitch of all Alieno sound generators and affects Strums detune value too, slightly increasing when a strong key pressure is detected. That all gives more life to the overall sound and will surely give more **expression** to your leads and bass lines.

2. New **intelligent randomize function**: produces a random patch (high quality algorithm from double-triangular distribution) for the single generator you're operating on, leaving **untouched** settings of other modules. To perform a randomization: for the Strums, use the new **violet** eye-button; for the Core, click on **machine's name**.

Both will activate a dropdown menu that features also a **reset** function to recall a useful basic setting for the module.

3. Re-coding of many elements under the hood: envelopes, Warp effect, Lumilux filter, Strums & Core voicing: that all ends up in better CPU performance, particularly on slower computers.

4. **User settings** expanded to allow more customization, including a **new ship style** (upper & lower cockpit skin) and new **GUI animated effects**, notable when User applies on pitchbend or aftertouch vibrato.

Some other new functions includes the ability to choose between **legato** and **retriggered** note-stealing system, aside the old velocity on volume, oscilloscope and oversampling on/off options.

Note: In off-line mode (read: when rendering to audio) oversampling is automatically activated and the oscilloscope bypassed, for maximum quality and minimum idle-times.

5. A new **User controls** section allows to select and browse through two different MIDI CC#s maps to access most of Alieno parameters from user's remote hardware controller, there's a **GM compatible** mapping and a **M-Audio Oxygen8** compatible map. The Map section of the page allows to monitor the assigned CC#s with a dedicated mini-browser.

User settings and user controls data are now stored in two separate .txt files, located in the same folder where the plugin resides. These files are generated from the plugin itself whenever the User make some changes and automatically recalled at each load.

RELEASE 1.0.8

1. Now Alieno remembers user settings across sessions (oversampling and spectroscope ON/OFF switches).
2. Significantly Improved loading times: loads 3-4x times faster than previous versions.

RELEASE 1.0.7

1. MIDI Control Changes added.
They quite follow General Midi standard in order to get Alieno quickly tweakable with the majority of MIDI/USB external controllers.
A reference table chart of CC#s is shown at the last page of the user guide.
2. Modified release envelope time to match compatibility with DualCore fast processors whose users were experiencing clicks on note-off messages.
3. Master section now includes "Oversampling" and "Spectroscope" activation/deactivation switches to save system resources (5% less CPU usage when both OFF). The two settings are patch-independent.
Velocity on volume is no more an option but hardwired to the synth engine.
The Spectroscope is automatically excluded when in offline mode, so rendering to audio should be faster too.
4. As users requested, all switches are now automatable in host including the two Modulation Wheel assignments.
5. Interactive display: buttons, knobs and sliders value changes are now monitored on the LCD, which tracks informations on the current parameter in editing. Interaction applies to all controls apart from droplists, which already have their visual feedback.
6. GUI optimization: a few minor glitches were fixed and the 12 skins re-rendered and re-imported in PNG format instead of JPEG (no more garbled pixels, better refined graphics). The Animator GUI has been improved a lot too, fixing some disalignment of smoothing curve and steps, modifying transparency and adding a new beautiful shading effect.
7. The File Manager save/load path was undefined since the first user intervention - now it initially points to your system's VSTPlugIn Folder (the one on which the Alieno .dll resides), then the destination can be setted at will and is remembered on a session basis (general, permanent settings will be implemented in a next release of Alieno).
8. The user guide was updated and put in sync with software versions, including informations on 1.0.6, 1.0.7 and 1.0.7 LE new features.

9. **Alieno LANDING EDITION** Bonus: that's a separate, special version of Alieno 1.0.7 simulating a damaged spaceship, forced to abandon the sound battle and landing on an unknown planet. It features a unique, dedicated skin and a completely redesigned audio effects section with **Shift** instead of **Warp**, **Echo** instead of **Repeater**:

SHIFT

The Shift effect provided by german SM programmer Myco offers the chance to twist the Alieno sound in astonishing new ways, performing realtime granular shift of frequencies with a plenty of controls at hand! Both the grain size (Particle knob) and the frequency shift (Twist knob) are available in different ranges to get futuristic bell-like sounds or metallic mangles of frequencies.

ECHO

This is a step forward to Repeater effect as it performs a progressive cut of frequencies through the feedback chain for more natural sounding results. Controls allow to choose between four different ambient simulations, the effect has faster and wiser measures to choose from, as well as an option to de-synchronize the delay working directly with samples.

Important note: Alieno 1.0.7 LE patches and banks are not compatible with Alieno standard version ones: do not try loading patches in the wrong plugin or it may lead to unexpected results, idle or even crashes of your host and/or system - keep patches in separate folders as already supplied with the Acrobatics software original archive.

RELEASE 1.0.6

1. Added two switches for MIDI velocity and oversampling options, located under the Lumilux filter. The left switch links velocity of notes to the amplitude of the three generators, modulating volume just before entering the effects section. The right switch performs a 4x, 10th order stereo oversampling just before the output, making the sound warmer and rounder - particularly pleasing when rendering to audio.

2. Added -1 and +1 preset buttons. Clicking on green wings around the LCD screen allows easier and faster browsing through the patches.

3. Added renaming for patches functionality: now you can rename sounds directly from the LCD right-clicking on the name of the patch, typing and then hitting Enter to store the change.

4. Added true randomizing of sequences in the Animator: now selecting "random" from the Recall drop-down menu will generate everytime a new random sequence.
5. Added 4 memory slots in the Animator Sequence manager: now there are 8 user-recordable sequences, and on load the slots are pre-filled with new sequence examples along with new useful presets like Comb1 and Comb2.
6. A bug caused parabolic waveform in the Core tilting the reverb on extreme settings: Fixed.
7. The ZIP package now include the new "Alternative" soundbank and a special "Full-Set" soundbank which combines all the available 144 patches together.

RELEASE 1.0.5

1. It is now possible to run multiple instances of the plugin and change presets without problems.
2. Added a denormal circuitry to eliminate unwanted rises in CPU use on idle state.

RELEASE 1.0.4

- Added compatibility with SSE-only processors (gets rid of the infamous "no sound" issue on Athlon XP and P3 computers).

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.

MIDI CONTROL CHANGE / IMPLEMENTATION CHART

When in **General Midi** mode, Fadeln controls are linked together on the same CC# to allow overall attack control as in classic GM modules; FX CC#s resemble as well a standard effects control.

When in **Oxygen8** mode, modules have the same controls scheme over the eight physical knobs and the user can swap over Alieno modules/octects of controls using Oxygen8 parts selector.

Module	Control	GM	OXYGEN
Built-In	Modulation Wheel	1	1
	Breath Controller	2	2
Cockpit	Glide Control	5	110
	Glide On/Off	65	65
	Main Out	7	112
	Reverb Out	91	113
	Warp Factor	92	114
	Repeater Mix	93	115
Strum A	Amplitude	16	17
	Detune	17	16
	Brilliance	70	14
	Fadeln	73 (linked)	15
	Animate	80	10
	Octave	84	13
Strum B	Amplitude	18	27
	Detune	19	26
	Brilliance	71	24
	Fadeln	73 (linked)	25
	Animate	81	20
	Octave	85	23

Module	Control	GM	OXYGEN
Core	Amplitude	12	77
	Detune	14	76
	Pulse Width	13	74
	FadeIn	73 (linked)	75
	Animate	82	70
	Octave	86	73
Lumilux	Cut-Off	74	84
	Resonance	75	85
	Tracking	76	86
	Animate	83	80
Animator	Smoothing	6	82
	Speed	3	83

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Acrobatics Software

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