ATOMIC LABS

INSTRUMENT

LOTUS

Drawable-wave morphing synthesizer

INSTRUMENT · VST3 · WINDOWS 64-BIT · 300 PRESETS · V1.0



USER MANUAL

VERSION 1.0 · 2026

01 About Lotus

Lotus lets you draw your own waveforms. Two single-cycle waves, A and B, can be drawn with the mouse or picked from a shape library, and are turned into band-limited tables, so they never alias at any pitch. A Morph control blends between them.

Phase warp, soft hard-sync, bit reduction, unison, sub and noise shape the oscillator. A ladder filter can snap its cutoff to the harmonics of the note. Three envelopes, three LFOs (including a drawable 16-step sequence) and an FX chain complete the instrument.

TYPE	FORMAT	SIGNAL	LATENCY
Instrument	VST3 · Win x64	MIDI in → stereo out	none

FACTORY PRESETS	CONTROLS	WINDOW	VERSION
300 + Init	82 automatable	Resizable	1.0

02 Quick start

1. Pick a preset, then draw on wave A or B and hear the change immediately.
2. Move Morph to blend from wave A to wave B, or let an LFO do it.
3. Try Harmonic Snap on the filter for resonance that always fits the note.
4. Your drawings and step sequences are saved with your presets.

INSTALLATION

Install

Copy the folder `Lotus.vst3` into `C:\Program Files\Common Files\VST3\`, then restart your DAW or rescan plug-ins. It appears under the manufacturer **Atomic Labs**.

This manual

A copy of this PDF lives inside the plug-in folder, next to `Contents`. Your DAW ignores it; it is there so the manual always travels with the plug-in.

03 The interface



Waves A and B

Draw each single-cycle wave with the mouse or pick a shape from the library. Your drawings are saved with the preset.

Oscillator

Morph A > B, Warp (pulse width / phase warp), Sync, Bit Reduction, Octave, Semitone, Fine, Unison with Detune, Spread and Phase Random, Sub and Noise. Mod Wheel > Morph.

Filter

Filter Type (LP 24, LP 12, Band Pass, High Pass), Cutoff, Resonance, Drive, Key Track, Env B > Cutoff, Velocity > Cutoff and 'Filter Snaps On Harmonics'.

Envelopes

Env A (amp), Env B (filter) and Env C, each attack, hold, decay, sustain, release. Env C has its own Destination (pitch, morph, warp, sync, cutoff, amp, pan) and Amount.

LFOs 1-3

Shape (sine, triangle, saw, inverse saw, square, sample & hold, drift or a drawable 16-step sequence), Rate or tempo Division, Key Sync, Destination and Amount. Step Glide smooths the step sequence.

Voice and FX

Voice Mode, Polyphony, Portamento, Bend Range. Tube, Multi FX (chorus, flanger, phaser), tempo delay with filter, reverb with colour, Master Level.

04 Presets

Lotus comes with **300** factory presets in 10 categories, plus an **Init** program to start from scratch. Every preset was designed for this plug-in and level-matched, so you can browse without jumps in volume.

- **30** Basses
- **30** Leads
- **30** Pads
- **30** Plucks & Keys
- **30** Morph Motion
- **30** Step Sequences
- **30** Sync & Warp
- **30** Digital & Lo-Fi
- **30** Bells & Organs
- **30** FX & Drones

A FEW TO TRY

- Deep Bass
- Acid Low End
- Thick Sub
- Punch Bass
- Cutting Solo
- Bright Lead
- Sharp Voice
- Neon Solo
- Floating Layer
- Velvet Wash
- Wide Pad
- Warm Layer
- Bright Keys
- Muted Pick
- Glassy Harp
- Shifting Morph
- Folding Motion
- Drifting Wave
- Rolling Morph
- Running Steps
- Stepped Sequence
- Ticking Run
- Robot Steps
- Bent Sweep
- Warped Lead
- Ripping Sync
- Synced Sweep
- Grainy Tone
- Chip Signal
- Arcade Lead
- Chapel Bell
- Mallet Chime
- Church Organ
- Vintage Bell
- Endless Texture
- Dark Drone

05 Tips

> Draw two very different waves and morph slowly with LFO 1 for evolving pads.

> Use the step-sequence LFO on the filter for rhythmic patches.

06 Atomic Labs essentials

These work the same way in every Atomic Labs plug-in.

Preset browser

Use the arrows next to the preset name to step through the presets, or click the name to open the menu sorted by category. The current category is shown above the name.

SAVE: your presets and banks

SAVE stores the complete state as your own preset (.atp) in Documents\Atomic Labs\Lotus\Presets. From the same menu you can delete presets and export or import a whole bank (.atb) to share or back up. Your presets appear at the end of the preset menu.

DICE

DICE rolls a brand-new patch: it starts from a factory design and changes the main settings at random. Not happy? Roll again, or step back to a preset.

SIZE and resizing

Drag the bottom-right corner to resize the window, or pick a fixed zoom from SIZE. The size is remembered with the project.

Automation

Every control can be automated and is listed with its full name in your DAW. Changes are smoothed, so automation never clicks.

Project recall

The whole state (including drawn waves, patterns, steps and window size where available) is saved with your project.

STABILITY

Every Atomic Labs plug-in is tested at sample rates from 44.1 to 192 kHz and at block sizes from 1 to 8192 samples, before and after the host prepares it, and with every factory preset. The audio code never allocates memory while playing, and signals are protected against invalid values, so it stays quiet and stable in long sessions.

07 Control reference

Every automatable control as your DAW lists it, with its range and default value. Where a set of controls repeats (for example several identical layers, bands or slots), it is shown once.

General

CONTROL	RANGE / OPTIONS	DEFAULT
Morph A > B	0 % to 100 %	0 %
Warp (Pulse Width)	0 % to 100 %	50 %
Sync	0 % to 100 %	0 %
Bit Reduction	0 % to 100 %	0 %
Octave	-3 to 3	0
Semitone	-12 to 12	0
Fine	-50.0 ct to +50.0 ct	0.0 ct
Sub	0 % to 100 %	0 %
Noise	0 % to 100 %	0 %
Filter Type	LP 24 · LP 12 · Band Pass · High Pass	LP 24
Cutoff	20 Hz to 20.00 kHz	3.56 kHz
Resonance	0 % to 100 %	15 %
Filter Drive	0 % to 100 %	0 %
Key Track	0 % to 100 %	50 %
Env B > Cutoff	-100 % to +100 %	+30 %
Velocity > Cutoff	0 % to 100 %	20 %
Filter Snaps On Harmonics	Off · On	Off
Velocity > Level	0 % to 100 %	50 %
Step Glide	0 % to 100 %	20 %
Mod Wheel > Morph	0 % to 100 %	50 %
Voice Mode	Poly · Mono · Legato	Poly
Polyphony	1 to 8	8
Portamento	Off to 1505 ms	Off
Bend Range	0 to 24	2
Tube	0 % to 100 %	0 %
Master Level	-36.0 dB to +6.0 dB	-6.0 dB

Unison

CONTROL	RANGE / OPTIONS	DEFAULT
Unison	1 to 8	1
Unison Detune	0 % to 100 %	25 %
Unison Spread	0 % to 100 %	60 %
Unison Phase Random	0 % to 100 %	100 %

Env

CONTROL	RANGE / OPTIONS	DEFAULT
Env A (Amp) Attack	0 ms to 10.00 s	4 ms
Env A (Amp) Hold	0 ms to 5.00 s	0 ms
Env A (Amp) Decay	1 ms to 10.00 s	300 ms
Env A (Amp) Sustain	0 % to 100 %	80 %
Env A (Amp) Release	2 ms to 10.00 s	300 ms
Env B (Filter) Attack	0 ms to 10.00 s	4 ms
Env B (Filter) Hold	0 ms to 5.00 s	0 ms
Env B (Filter) Decay	1 ms to 10.00 s	400 ms
Env B (Filter) Sustain	0 % to 100 %	30 %
Env B (Filter) Release	2 ms to 10.00 s	400 ms
Env C Attack	0 ms to 10.00 s	500 ms
Env C Hold	0 ms to 5.00 s	0 ms
Env C Decay	1 ms to 10.00 s	500 ms
Env C Sustain	0 % to 100 %	50 %
Env C Release	2 ms to 10.00 s	500 ms
Env C Destination	Off · Pitch · Morph · Warp · Sync · Cutoff · Amp · Pan	Off
Env C Amount	-100 % to +100 %	0 %

Multi

CONTROL	RANGE / OPTIONS	DEFAULT
Multi FX Type	Chorus · Flanger · Phaser	Chorus
Multi FX Mix	0 % to 100 %	0 %
Multi FX Depth	0 % to 100 %	50 %
Multi FX Rate	0.05 Hz to 8.00 Hz	0.23 Hz
Multi FX Feedback	0 % to 90 %	30 %

Delay

CONTROL	RANGE / OPTIONS	DEFAULT
Delay Mix	0 % to 100 %	0 %
Delay Feedback	0 % to 95 %	35 %
Delay Sync	Off · On	On
Delay Division	1/32 · 1/16 · 1/8T · 1/8 · 1/8. · 1/4 · 1/2 · 1 bar · 2 bars · 4 bars	1/8.
Delay Time	20 ms to 2000 ms	350 ms
Delay Filter	0 % to 100 %	60 %

Reverb

CONTROL	RANGE / OPTIONS	DEFAULT
Reverb	0 % to 100 %	0 %
Reverb Size	0 % to 100 %	60 %
Reverb Color	0 % to 100 %	50 %

LFO 1–3

3 identical sets - LFO 1 shown

CONTROL	RANGE / OPTIONS	DEFAULT
Shape	Sine · Triangle · Saw · Inv Saw · Square · Sample & Hold · Drift · Step Seq	Sine
Rate	0.010 Hz to 30.00 Hz	5.00 Hz
Tempo Sync	Off · On	Off
Division	1/32 · 1/16 · 1/8T · 1/8 · 1/8. · 1/4 · 1/2 · 1 bar · 2 bars · 4 bars	1/4
Key Sync	Off · On	Off
Destination	Off · Pitch · Morph · Warp · Sync · Cutoff · Amp · Pan	Off
Amount	-100 % to +100 %	0 %



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Atomic Labs makes original instruments and effects with futuristic, animated interfaces, deep sound design and hundreds of presets in every plug-in.

Version 1.0 · VST3 for Windows 64-bit · Manual generated 2026-11-13

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