

URYAN AUDIO

LUTHARA VEYL

EXPRESSIVE ACOUSTIC PLUCKED INSTRUMENTS



USER GUIDE | VERSION 1.0.1

Physical-modelled strings. Instrument-aware performance. Real-time expression.

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This guide follows the signal flow from performance input to final output. Use the chapter list for learning and the appendices for quick reference.

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DOCUMENT SCOPE

This manual describes the Windows VST3, macOS VST3 and macOS Audio Unit builds of Luthara Veyl 1.0.1. All control names, ranges, instrument counts, tuning names, chord types, and factory preset names match the released parameter set.

1. Getting Started

Luthara Veyl is a real-time acoustic plucked-string instrument based on digital waveguide and Karplus-Strong techniques. It does not simply replay a fixed recording. Each note excites a physical string model, interacts with an instrument-specific body, and can respond continuously to MIDI performance data.

Formats and requirements

- Windows 64-bit: VST3 plug-in. macOS: Universal VST3 and Audio Unit.
- DAW: Any modern 64-bit VST3 host with MIDI input.
- Display: The interface is 1180 x 740 pixels.
- MIDI: Notes 0-127, velocity, sustain, pitch bend, channel pressure, polyphonic aftertouch, and CC11 expression.
- Runtime: The Windows build uses the Microsoft Visual C++ x64 runtime.

Installation

CONTROL	RANGE / OPTIONS	WHAT IT DOES
Windows VST3	Luthara Veyl.vst3	Place the complete bundle in C:\Program Files\Common Files\VST3, then rescan plug-ins in the DAW.
macOS VST3 / AU	Luthara Veyl.vst3 / .component	Install into the matching /Library/Audio/Plug-Ins folder, then restart or rescan the DAW.
User presets	*.lvpreset	Saved by default under %APPDATA%\Uryan Audio\Luthara Veyl\Presets. Files may also be stored elsewhere.

Five-minute quick start

1. A fresh instance opens on Classics / Classical Nylon Guitar, the clean reference sound.
2. Play across the keyboard. The complete MIDI note range is available; the selected tuning changes the physical open-course layout, not the keyboard limit.
3. Turn the Touch orb or choose a Play Style to change the excitation.
4. Set Body to Natural and raise Bloom until sympathetic resonance becomes audible.
5. Choose Physical decay for natural string energy loss or ADSR for keyboard-style release control.
6. Add a small Hall reverb, then save the result as an .lvpreset.



Sample-accurate performance events feed the physical strings before body resonance and effects.

2. Interface and Global Controls

The top bar remains available on every page. It handles preset navigation, emergency silencing, controlled variation, product information, and movement between the eight main work areas.



The Main page with the persistent header, page navigation, performance panel, three macro orbs, and bottom control strip.

CONTROL	RANGE / OPTIONS	WHAT IT DOES
Bank	9 factory banks	Selects Atmospheric, Acoustic, World, Rhythmic, Intimate, Cinematic, Experimental, Performance, or Classics.
Preset	81 factory sounds	Loads the selected sound and intentionally stops active notes and effect tails so old and new states cannot overlap.
Previous / Next	Wrap-around	Moves through the complete factory collection.
Panic	Immediate	Stops notes, scheduled Chord and Arpeggiator events, sustain state, and effect tails.
Inspire	Bank-aware creation	Builds a new sound from the current preset bank. A deterministic low-discrepancy sequence, musical ratios, harmonic filter targets, and bank-specific ranges create broad but usable variations without accumulating changes from the previous Inspired sound.
Evolve	Conservative variation	Perturbs the current sound while keeping its central identity and mode choices.
About	Version panel	Displays the product name, Uryan Audio identity, version 1.0.1, and website.

SAFE PRESET CHANGES

A preset change clears currently sounding notes. This is deliberate: a physical string may retain energy for a long time, and allowing it to survive a body, tuning, or effect reconfiguration would produce an unpredictable hybrid tail.

3. Main Tab

Main is the performance page. It combines instrument selection, tuning, playing style, decay behavior, expressive macros, MIDI response, and the most frequently adjusted tone controls.



Main page. The large orbs support direct circular positioning and mouse-wheel adjustment.

The three macro orbs

TOUCH

Selects one of sixteen excitation and articulation profiles, from finger and pick attacks to harmonics, legato gestures, rasgueado, golpe and chikari.

BODY

Chooses Off, Natural, Focused, Deep, or Open. The selected body name appears directly below the Body heading.

BLOOM

Scales sympathetic string coupling from 0 to 400%. Higher settings create audible energy transfer and longer resonant halos, especially on harp, sitar, koto, and guzheng.

ORB GESTURE

Click or drag around the circular sweep to set a value directly. The mouse wheel moves in parameter steps. The active perimeter point shows the current value.

Body characters

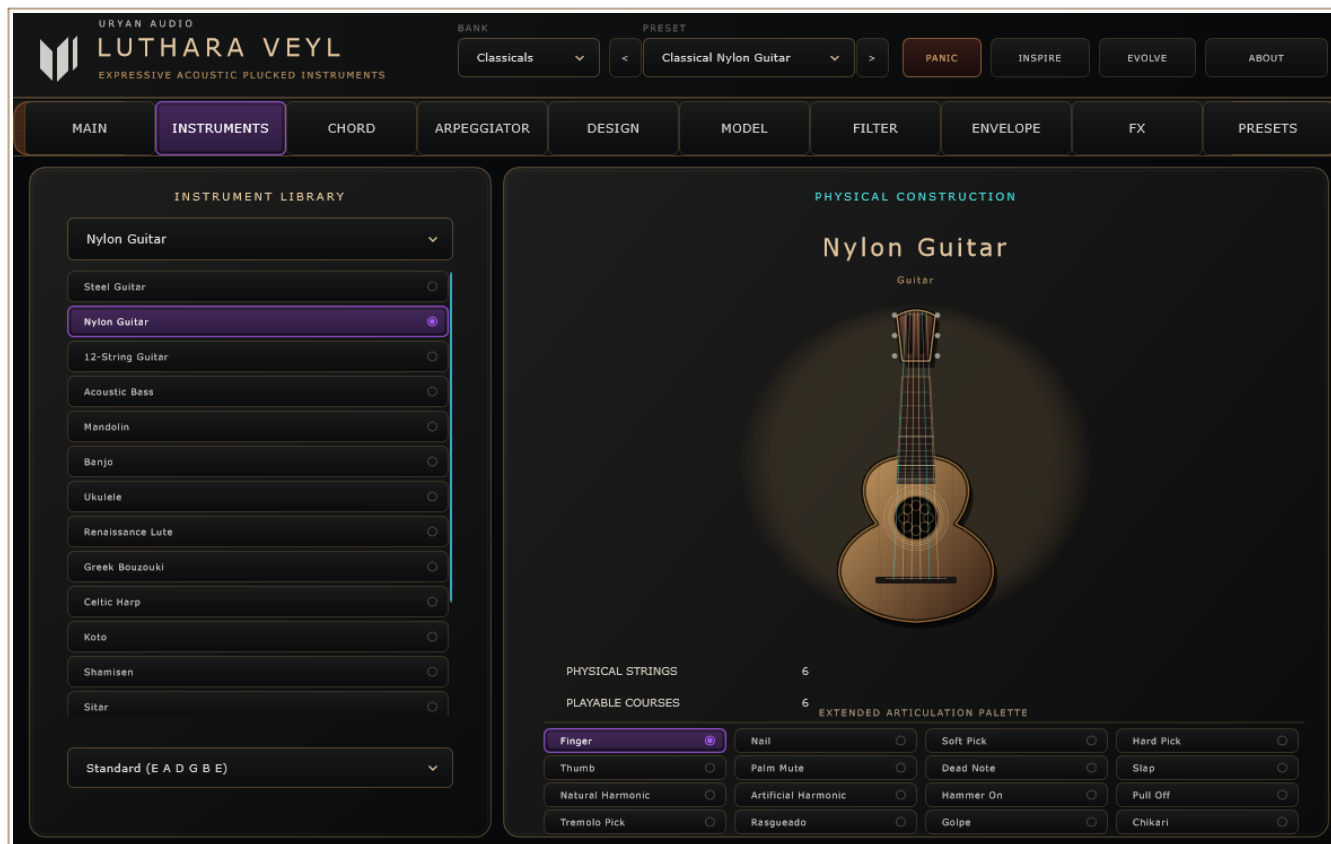
CONTROL	RANGE / OPTIONS	WHAT IT DOES
Off	Body bypassed	The driest view of the modeled strings. Useful for diagnosis or radical external processing.
Natural	Default	Balanced body level and feedback. Start here when evaluating an instrument.
Focused	Tighter	Lower body contribution and feedback for cleaner attacks and denser arrangements.
Deep	Enhanced body	Higher body mix and stronger low-mid resonance for weight and sustain.
Open	High feedback	A broad, breathing response with the strongest body-to-string interaction.

Main performance controls

CONTROL	RANGE / OPTIONS	WHAT IT DOES
Tuning	8 per instrument	Retunes the physical open strings or courses. The available names update when the instrument changes.
Character	Soft - Bright	A compact duplicate of Tone for quick spectral shaping.
Stereo	Mono - Wide	Sets physical-string stereo distribution before the effects.
Play Style	16 styles	Chooses the excitation, transient and physical gesture. It mirrors the Touch orb.
Decay Mode	Physical / ADSR	Chooses natural energy loss or an amplitude envelope with a controllable note-off release.
Humanize	0 - 200%	Adds bounded timing, velocity, and excitation variation for less mechanical repetition.
Velocity	1 - 127	Scales incoming MIDI velocity before it reaches the string excitation.
Expression	0 - 127	Sets output expression. Incoming MIDI CC11 multiplies this value.
Attack	0 - 10000 ms	ADSR fade-in time.
Decay	1 - 30000 ms	ADSR movement from peak to sustain.
Sustain	0 - 100%	ADSR held level.
Release	5 - 60000 ms	ADSR note-off fade. It is intentionally extended for slow, cinematic tails.
Tone	0 - 100%	Global brightness shaping after the modeled instrument.
Damping	0 - 100%	Darkens and shortens the response and partially restrains sympathetic Bloom.
Width	0 - 200%	Same stereo control as the compact Stereo slider.
Output	-48 to +18 dB	Final output trim before the calibrated safety limiting stage.

4. Instruments Tab

Each instrument profile has its own physical string count, playable course count, loss, dispersion, bridge contact, stereo spread, and resonant body configuration.



The Instruments tab shows the selected construction, physical string count, playable course count, tuning, and four essential tone controls.

Physical strings and playable courses

A course is the unit played by one musical gesture. A mandolin has eight physical strings but four paired courses; a 12-string guitar has twelve strings but six courses; the sitar has nineteen physical strings but seven directly playable courses because twelve strings serve the sympathetic system. Chord and String Pattern modes use playable courses.

FULL-KEYBOARD BEHAVIOR

Selecting a naturally high instrument such as ukulele or mandolin does not restrict the MIDI keyboard. Notes below and above the physical open tuning remain playable. The tuning still matters because it guides course allocation, chord voicing, resonant behavior, and display.

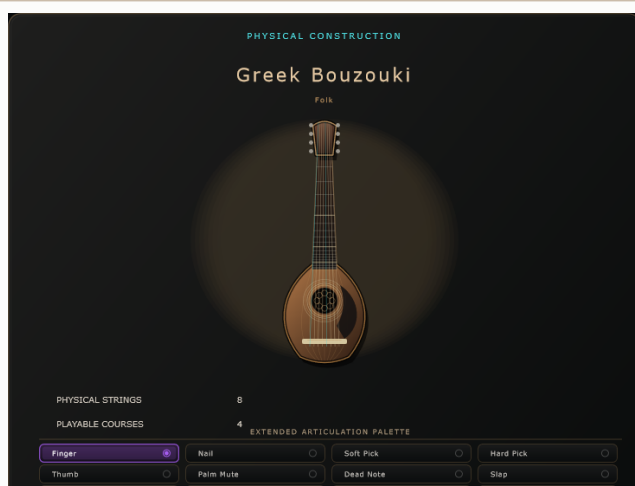
5. Instrument Library

PHYSICAL CONSTRUCTION Steel Guitar Guitar  PHYSICAL STRINGS6 PLAYABLE COURSES6 EXTENDED ARTICULATION PALETTE Finger Thumb Nail Palm Mute Soft Pick Dead Note Hard Pick Slap	PHYSICAL CONSTRUCTION Nylon Guitar Guitar  PHYSICAL STRINGS6 PLAYABLE COURSES6 EXTENDED ARTICULATION PALETTE Finger Thumb Nail Palm Mute Soft Pick Dead Note Hard Pick Slap
Steel Guitar Guitar 6 physical strings 6 playable courses A balanced steel-string model with clear pick definition, broad body response, and enough sustain for fingerstyle or cinematic processing.	Nylon Guitar Guitar 6 physical strings 6 playable courses A rounder, softer transient with warm fundamentals and a restrained upper spectrum. Excellent for intimate parts and room-style reverbs.
PHYSICAL CONSTRUCTION 12-String Guitar Guitar  PHYSICAL STRINGS12 PLAYABLE COURSES6 EXTENDED ARTICULATION PALETTE Finger Thumb Nail Palm Mute Soft Pick Dead Note Hard Pick Slap	PHYSICAL CONSTRUCTION Acoustic Bass Bass  PHYSICAL STRINGS4 PLAYABLE COURSES4 EXTENDED ARTICULATION PALETTE Finger Thumb Nail Palm Mute Soft Pick Dead Note Hard Pick Slap
12-String Guitar Guitar 12 physical strings 6 playable courses Six paired courses with octave pairs in the bass and unison pairs above. Natural beating creates width before any chorus is added.	Acoustic Bass Bass 4 physical strings 4 playable courses Long, weighty low-frequency energy with controlled upper noise. Use Thumb or Finger and moderate damping for convincing fundamentals.

5. Instrument Library – Continued

PHYSICAL CONSTRUCTION Mandolin Folk  PHYSICAL STRINGS 8 PLAYABLE COURSES 4 EXTENDED ARTICULATION PALETTE Finger Nail Soft Pick Hard Pick Thumb Palm Mute Dead Note Slap	PHYSICAL CONSTRUCTION Banjo Folk  PHYSICAL STRINGS 5 PLAYABLE COURSES 5 EXTENDED ARTICULATION PALETTE Finger Nail Soft Pick Hard Pick Thumb Palm Mute Dead Note Slap
Mandolin Folk 8 physical strings 4 playable courses Four bright unison courses with fast response and paired-string shimmer. Works especially well with short repeated patterns.	Banjo Folk 5 physical strings 5 playable courses A five-string open-G design with the short drone string and a membrane-like resonant body. Pick and Nail emphasize the classic snap.
PHYSICAL CONSTRUCTION Ukulele Folk  PHYSICAL STRINGS 4 PLAYABLE COURSES 4 EXTENDED ARTICULATION PALETTE Finger Nail Soft Pick Hard Pick Thumb Palm Mute Dead Note Slap	PHYSICAL CONSTRUCTION Renaissance Lute Historical  PHYSICAL STRINGS 12 PLAYABLE COURSES 6 EXTENDED ARTICULATION PALETTE Finger Nail Soft Pick Hard Pick Thumb Palm Mute Dead Note Slap
Ukulele Folk 4 physical strings 4 playable courses Compact, immediate, and naturally re-entrant in High G. The full MIDI range remains playable even when the physical open tuning is high.	Renaissance Lute Historical 12 physical strings 6 playable courses Six paired courses with a dry, elegant body and octave basses. Finger or Thumb gives the most historically restrained onset.

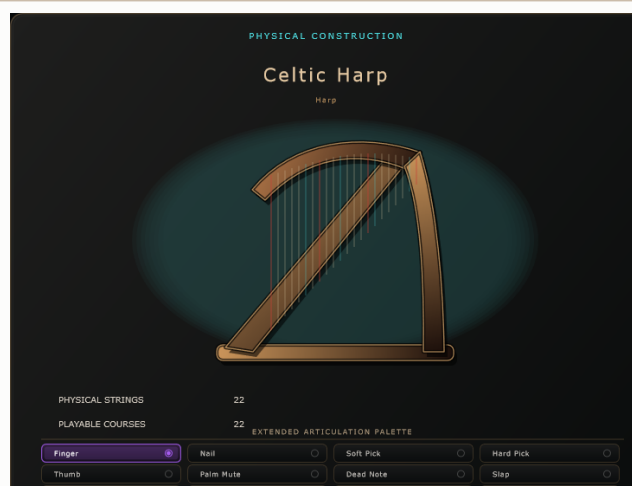
5. Instrument Library – Continued



Greek Bouzouki

Folk | 8 physical strings | 4 playable courses

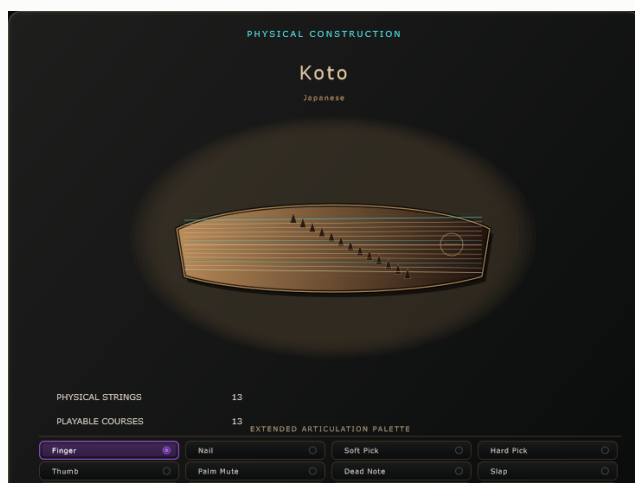
Four paired courses, a bright metallic onset, and long-neck resonance. Ideal for rapid rhythmic patterns and modal tunings.



Celtic Harp

Harp | 22 physical strings | 22 playable courses

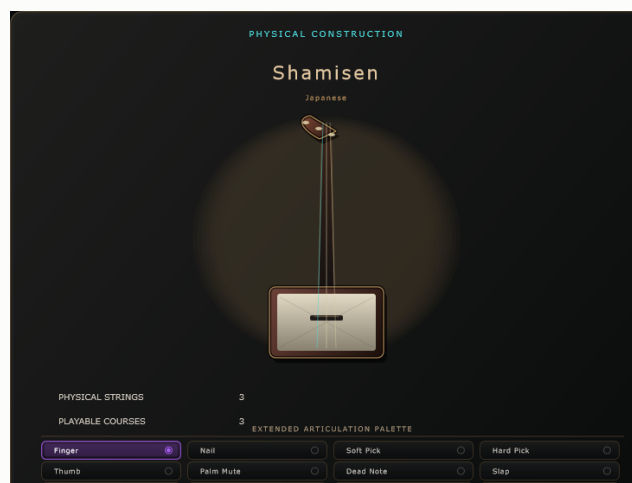
A broad 22-string range with transparent attacks and rich cross-string resonance. Bloom and Open body settings produce large evolving tails.



Koto

Japanese | 13 physical strings | 13 playable courses

A thirteen-string Hira-choshi starting point with a focused wooden transient and pitch-rich decay. Nail adds a crisp traditional edge.



Shamisen

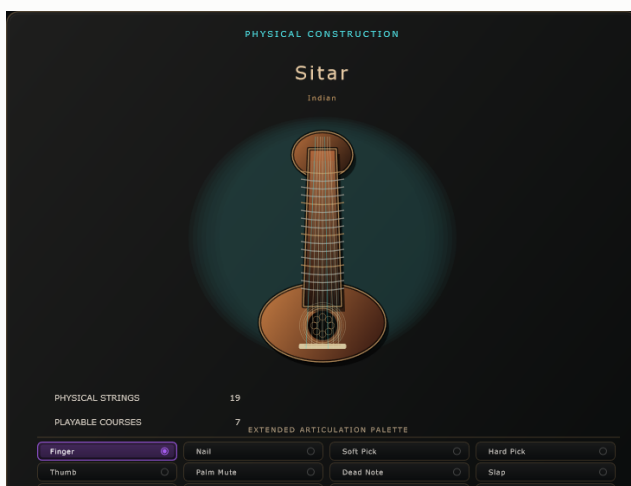
Japanese | 3 physical strings | 3 playable courses

A highly direct three-string response with skin-like body coloration. Hard Pick approximates a stronger bachi-style attack.

SYMPATHETIC SPECIALISTS

Celtic Harp, Koto, Sitar, and Guzheng reveal Bloom most clearly because their profiles expose many resonating strings. Begin around 70%, then increase while listening to note releases and intervals.

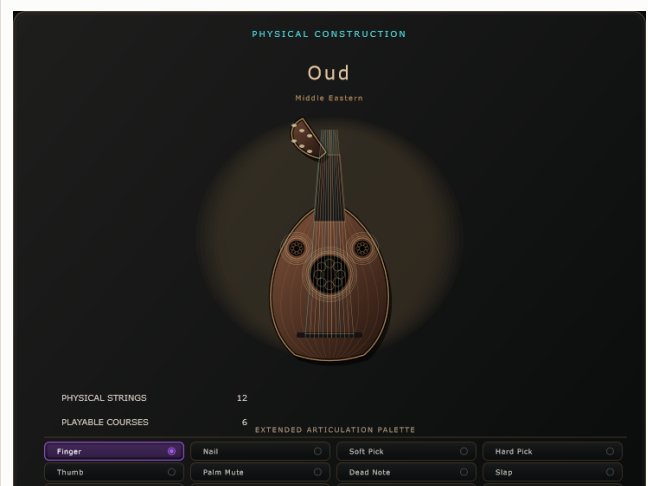
5. Instrument Library – Continued



Sitar

Indian | 19 physical strings | 7 playable courses

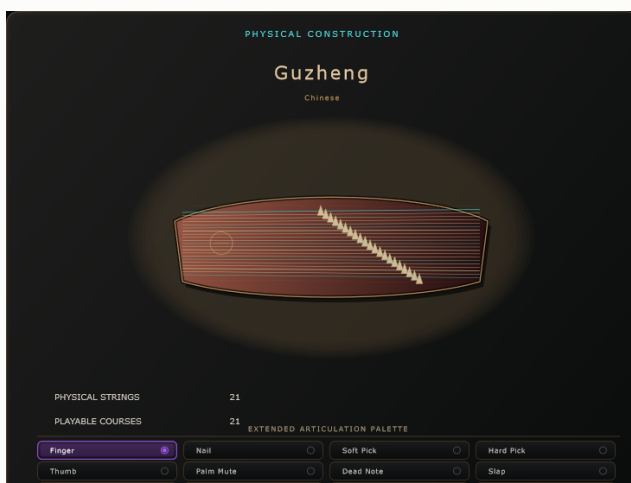
Seven playable strings plus twelve sympathetic strings. Its bridge profile and strong Bloom response create the characteristic jawari-like halo.



Oud

Middle Eastern | 12 physical strings | 6 playable courses

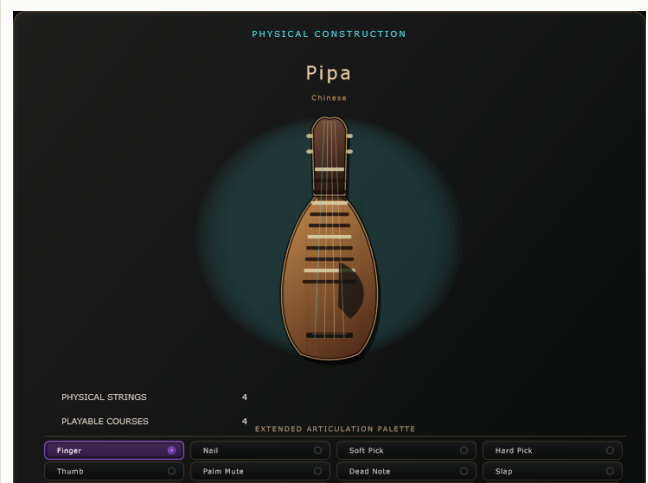
Six paired, fretless-style courses with a warm bowl body and rounded low-mid focus. Finger and soft attacks preserve detail.



Guzheng

Chinese | 21 physical strings | 21 playable courses

A wide 21-string pentatonic model with clear upper transients and strong resonant interaction across the instrument.

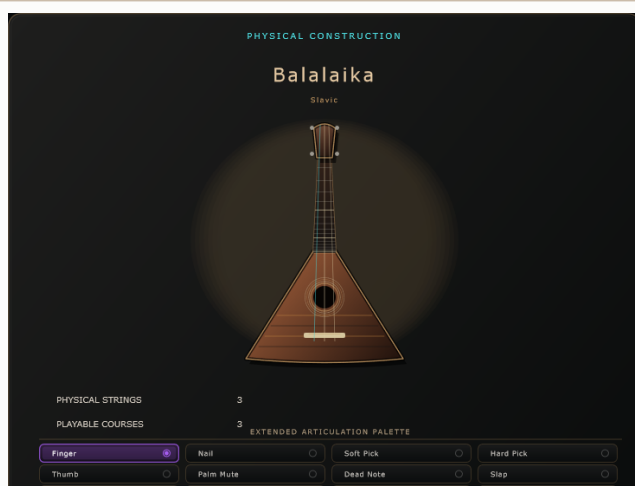


Pipa

Chinese | 4 physical strings | 4 playable courses

A fast, articulate four-string voice that responds well to Nail, Hard Pick, and rhythmic Arpeggiator patterns.

5. Instrument Library – Continued



Balalaika

Slavic | 3 physical strings | 3 playable courses

A compact three-string instrument with a focused triangular-body signature and strong suitability for repeated folk patterns.

CHOOSING AN INSTRUMENT

Use the Classics bank when comparing models. Each preset presents one instrument in a clean, standard-tuned state, making differences in attack, course layout, body, and decay easier to hear.

Paired-course instruments naturally produce beating and width. Harp, sitar, koto, and guzheng reveal the largest changes when Bloom is raised, while compact three- and four-course models respond most clearly to articulation and damping.

Listening checklist

Compare the dry transient first, then the natural tail. Match the playing style to the source before adding Bloom or effects. Finally, test both low and high MIDI registers: every model supports the complete 0-127 note range.

6. Playing Styles and Articulation

Playing Style changes how energy enters the string. This affects far more than brightness: the excitation spectrum, onset amplitude, transient noise, and effective damping all change together.

CONTROL	RANGE / OPTIONS	WHAT IT DOES
Finger	Soft, rounded	Reduced high-frequency excitation with an organic, slightly compliant attack.
Nail	Clear, detailed	More upper-mid definition and a firm initial transient.
Soft Pick	Balanced	The neutral plectrum reference and a versatile starting point.
Hard Pick	Bright, assertive	Higher transient energy and additional mechanical edge.
Thumb	Dark, full	A broad low-frequency onset with less sharp pick noise.
Palm Mute	Short and controlled	Adds strong damping while retaining pitch and a tactile transient.
Dead Note	Very short	Prioritizes contact noise and a brief pitched component for percussive patterns.
Slap	Aggressive	Adds a bright impact component and strong initial energy.
Natural Harmonic	Bell-like	Excites a lightly damped harmonic node for a clear, glassy partial.
Artificial Harmonic	Focused harmonic	Adds a brighter stopped-string harmonic colour.
Hammer-On	Legato onset	Transfers energy into a new pitch on the same physical course without a normal pluck.
Pull-Off	Legato release	Moves down to a new pitch with a short finger-release excitation.
Tremolo Pick	Rapid excitation	Shapes the string for repeated-pick textures and arpeggiator patterns.
Rasgueado	Broad attack	Adds a forceful, spreading multi-finger guitar-style onset.
Golpe	Body impact	Combines a pitched strike with a stronger percussive body contact.
Chikari	Bright drone	Emphasizes the crisp, high drone-string character associated with sitar gestures.

Choosing a style by instrument

GUITARS AND OUD

Finger, Thumb, and Soft Pick preserve body detail. Hard Pick works for defined rhythm parts.

MANDOLIN AND BOUZOUKI

Nail or Hard Pick enhances paired-course shimmer; combine with short Arpeggiator gates for rhythmic precision.

BANJO AND SHAMISEN

Hard Pick or Nail emphasizes the membrane response. Use Damping to control sharp upper resonances.

HARP AND EAST ASIAN ZITHERS

Finger is smooth, Nail adds articulation, and moderate Bloom connects neighboring notes naturally.

REPEATED-NOTE REALISM

A new strike does not hard-clear an already vibrating string. The engine crossfades into the new excitation and applies a short, smooth restrike transition to prevent clicks while retaining continuity.

7. Instrument Tunings

Every instrument provides eight physical tuning maps. Tuning changes the open strings or courses used by the model and by instrument-aware chord voicing. It is not a global transpose control.

PRACTICAL DIFFERENCE

If you play ordinary single notes, two tunings may sound subtly different because course allocation and resonance change. In All Strings Chord mode the difference becomes obvious: the selected open layout strongly influences fret choice, register, and repeated chord tones.

INSTRUMENT	EIGHT PHYSICAL TUNINGS
Steel Guitar	1. Standard (E A D G B E) 2. Drop D (D A D G B E) 3. DADGAD (D A D G A D) 4. Open G (D G D G B D) 5. Open D (D A D F# A D) 6. Double Drop D (D A D G B D) 7. Open C (C G C G C E) 8. Eb Standard (Eb Ab Db Gb Bb Eb)
Nylon Guitar	1. Standard (E A D G B E) 2. Drop D (D A D G B E) 3. DADGAD (D A D G A D) 4. Open G (D G D G B D) 5. Dropped C (C A D G B E) 6. Open D (D A D F# A D) 7. Lute-style (E A D F# B E) 8. D Standard (D G C F A D)
12-String Guitar	1. Standard 12-string (E A D G B E) 2. Drop D 12-string (D A D G B E) 3. DADGAD 12-string (D A D G A D) 4. Open G 12-string (D G D G B D) 5. Open D 12-string (D A D F# A D) 6. Double Drop D 12-string 7. Open C 12-string (C G C G C E) 8. Eb Standard 12-string
Acoustic Bass	1. Standard (E A D G) 2. Drop D (D A D G) 3. Eb Standard (Eb Ab Db Gb) 4. D Standard (D G C F) 5. Low B (B E A D) 6. Tenor (A D G C) 7. Fifths (C G D A) 8. Piccolo (E A D G +8va)

7. Instrument Tunings – Continued

INSTRUMENT	EIGHT PHYSICAL TUNINGS
Mandolin	1. Standard (G D A E) 2. Sawmill (G D A D) 3. Cross G (G D G D) 4. Cross A (A E A E) 5. Calico (A D A E) 6. Dead Man (D D A D) 7. Open G (G D G B) 8. Drone D (D A D A)
Banjo	1. Open G (g D G B D) 2. Double C (g C G C D) 3. Sawmill / Modal (g D G C D) 4. Open C (g C G C E) 5. Old G (g D G D E) 6. Open D (f# D F# A D) 7. C Tuning (g C G B D) 8. Double D (a D A D E)
Ukulele	1. High G (g C E A) 2. Low G (G C E A) 3. D Tuning (a D F# B) 4. Baritone (D G B E) 5. Low A (A D F# B) 6. Slack Key (g C E G) 7. Open C (g C G C) 8. Canadian D (a D F# A)
Renaissance Lute	1. Renaissance G (G C F A D G) 2. Renaissance A (A D G B E A) 3. Renaissance F (F Bb Eb G C F) 4. Baroque D minor (D F A D F A) 5. Open G (G D G B D G) 6. Dorian (G D G Bb D G) 7. Archlute Bass 8. Extended Bass

7. Instrument Tunings – Continued

INSTRUMENT	EIGHT PHYSICAL TUNINGS
Greek Bouzouki	1. Greek (C F A D) 2. Irish (G D A D) 3. Irish GDAE (G D A E) 4. Open A (A D A D) 5. DADA (D A D A) 6. CGDG (C G D G) 7. DAEA (D A E A) 8. Open D (D A D F#)
Celtic Harp	1. C Major 2. Eb Major 3. G Major 4. D Major 5. F Major 6. D Natural Minor 7. A Harmonic Minor 8. C Pentatonic (C D E G A)
Koto	1. Hira-choshi 2. Kumoi-choshi 3. Hon-kumoi-choshi 4. Nogi-choshi 5. Gaku-choshi 6. Iwato-choshi 7. Nakazora 8. Kokin-choshi
Shamisen	1. Honchoshi C (C F C) 2. Niagari C (C G C) 3. Sansagari C (C F Bb) 4. Honchoshi D (D G D) 5. Niagari D (D A D) 6. Sansagari D (D G C) 7. Honchoshi E (E A E) 8. Tsugaru B (B E B)

7. Instrument Tunings – Continued

INSTRUMENT	EIGHT PHYSICAL TUNINGS
Sitar	1. Kharaj Panoram - C 2. Kharaj Panoram - C# 3. Kharaj Panoram - D 4. Kharaj Panoram - Eb 5. Gandhar Panoram - C 6. Gandhar Panoram - C# 7. Gandhar Panoram - D 8. Raga Yaman - C
Oud	1. Arabic C (C F A D G C) 2. Old Arabic (D G A D G C) 3. Turkish Bolahenk 4. Turkish Mansur 5. Iraqi (F# B E A D G) 6. Arabic F (F A D G C F) 7. Deep C 8. Open D (D A D G C F)
Guzheng	1. D Major Pentatonic 2. C Major Pentatonic 3. G Major Pentatonic 4. A Major Pentatonic 5. F Major Pentatonic 6. Bb Major Pentatonic 7. D Minor Pentatonic 8. Low D Pentatonic
Pipa	1. Standard (A D E A) 2. G Mode (G C D G) 3. B Mode (B E F# B) 4. Open D (D A D A) 5. Open A (A E A C#) 6. Open G (G D G B) 7. Low A Drone 8. Fifths (G D A E)
Balalaika	1. Academic (E E A) 2. Guitar Style (G B D) 3. Folk (D F A) 4. Folk (C E G) 5. Drone A (A A E) 6. Drone D (D D A) 7. Open E (E B E) 8. Open G (G D G)

8. Chord Mode

Chord Mode turns one incoming MIDI note into an instrument-aware chord performance. It can use only the theoretical chord tones or voice the harmony across every playable course.



Chord Mode with All Strings and String Pattern selected. The display previews the exact number, order, course, pitch, and delay of the notes that will sound.

Chord construction

CONTROL	RANGE / OPTIONS	WHAT IT DOES
Chord Mode	Off / On	Enables single-key chord generation.
Chord Library	44 types	Chooses triads, suspended chords, sevenths, added tones, and extended harmonies.
Quick Chords	8 buttons	Immediate access to Major, Minor, Major 7, Minor 7, Dominant 7, Sus 2, Sus 4, and Power.
Inversion	Root - 5th	Raises successive chord members by an octave. Unavailable inversions are safely constrained by the selected chord size.
String Use	Chord Tones / All Strings	Chord Tones plays no more voices than the chord contains. All Strings distributes chord members across every playable course.
Start From	MIDI Note / Instrument	MIDI Note unfolds upward from the played key. Instrument uses playable open courses and fret-like choices while preserving the chord pitch classes.
Playback	Sweep / String Pattern	Sweep uses one total strum time. String Pattern exposes individual course order and gap controls.
Direction	Down / Up / Alternate	Controls pitch-travel direction for Sweep. Alternate flips the direction after every played chord.
Strum Time	0 - 8000 ms	Total duration from the first to the last pluck in Sweep mode.
Velocity Flow	0 - 200%	Gradually reshapes velocity along the stroke for a more natural gesture.

8. Chord Mode – String Pattern

String Pattern editor

- Each visible row represents one pluck, not an entire repeated chord.
- Use Physical String / Course to choose the first course, second course, and so on.
- Use Wait Before Next Pluck to set the independent gap after each row. Every gap supports 0 to 8000 ms.
- Duplicate course selections are resolved to an unused course so one row cannot accidentally retrigger the full chord on the same string.
- The editor shows only as many rows and display nodes as the current performance will play.

SLOW BROKEN CHORDS

For a six-course instrument, try gaps of 250, 400, 650, 900, and 1200 ms. The result is a deliberately unfolding texture rather than a conventional guitar strum.

FINGERPICKED OPENING

Choose the lowest course first, then alternate outward. Use gaps of 90 to 220 ms and a low Velocity Flow value for an even, deliberate arpeggio.

SLOW CINEMATIC SPREAD

Order the courses from low to high and increase each gap progressively. Values from 250 to 1500 ms can turn one chord into a long-form texture.

REVERSE FLOURISH

Begin on the highest course and descend through unused courses. A short final gap keeps the gesture connected while preserving a clear reverse direction.

COURSE-AWARE EDITING

The available rows follow the selected instrument. A four-course mandolin or ukulele therefore exposes four plucks; a six-course guitar exposes six.

8. Chord MIDI Drag and Drop

The purple DRAG MIDI field creates a standard MIDI file and starts an external file drag. Drop it onto a MIDI or instrument track in the DAW. The clip follows the current chord root, chord type, inversion, course voicing, direction or string pattern, strum timing, and velocity flow.

- Play the desired root note first so the display and exported file use the correct root.
- Configure Chord Tones or All Strings and verify the display nodes.
- Set Sweep or String Pattern and confirm the timing labels.
- Drag the MIDI field into the DAW. The file contains a tempo event using the current host tempo, 960 ticks per quarter note, and a 4/4 time signature.
- All notes end one second after the final onset, giving the DAW a clean editable clip.

DAW COMPATIBILITY NOTE

External MIDI-file drag behavior is controlled partly by the host. If a DAW does not accept the drop directly into an empty arrangement area, create a MIDI track first and drop onto that track.

9. Arpeggiator

The Arpeggiator is a sample-accurate 16-step performance sequencer. It can process held notes directly or arpeggiate the chord generated by Chord Mode.



The Arpeggiator page combines transport-aware performance controls with an editable 16-step velocity, pitch, and gate grid.

Engine controls

CONTROL	RANGE / OPTIONS	WHAT IT DOES
Arpeggiator	Off / On	Enables note generation. Turning it off flushes scheduled Arpeggiator notes safely.
Latch	Off / On	Keeps the current input set active after keys are released. Playing a new set replaces the latched notes.
Pattern Preset	16 designs	Loads a complete pattern including rate, direction, octave range, active steps, transpose shape, velocity, gate, and swing.
Clock Source	Host Sync / Free Clock	Uses the DAW tempo or an independent frequency in hertz.
Musical Rate	1/4 to 1/32	Includes straight, triplet, and dotted divisions.
Direction	6 modes	Up, Down, Up / Down, Down / Up, As Played, or Random.
Octave Range	1 - 4 octaves	Expands the source note set upward.
Velocity Mode	4 modes	Input, Fixed, Step, or Input x Step.
Restart	3 modes	Restart on First Note, Every Note, or run Continuously.
Pattern Length	1 - 16 steps	Defines the active loop length without deleting the remaining step data.
Gate	2 - 400%	Global note length relative to each step. Values above 100% may overlap.
Swing	0 - 120%	Delays alternating steps for a progressively stronger shuffle.
Free Rate	0.05 - 60 Hz	Independent clock speed when Free Clock is selected.
Fixed Velocity	1 - 127	Used when Velocity Mode is Fixed.

Editing the 16-step grid

- Step number: click to switch the step between Play and Rest.
- Velocity lane: drag vertically to set the step velocity.
- Pitch lane: drag vertically from -36 to +36 semitones. Use the mouse wheel over a step for precise semitone movement.
- Gate lane: drag horizontally inside the step column to set 5 to 400% gate.
- Live marker: the active generated step is highlighted while the engine runs.

Factory Arpeggiator patterns

#	PRESET	#	PRESET
1	Straight Up	2	Cascading Down
3	Pendulum	4	Down-Up Mirror
5	Fingerstyle 6/8	6	Celtic Roll
7	Mandolin Pulse	8	Koto Steps
9	Shamisen Triplets	10	Harp Cascade
11	Balkan Drive	12	Raga Spiral
13	Broken Octaves	14	Syncopated Air
15	Euclidean Five	16	Cinematic Bloom

10. Design: Fretboard, MPE and Body Studio

Design exposes the advanced physical-performance and construction controls. It combines fretboard behavior, microtuning, body and microphone design, per-string adjustment, quality modes and MIDI workflow tools.



The Design page groups performance, tuning, construction and DAW workflow controls without crowding the main playing page.

Fretboard and legato

CONTROL	RANGE / OPTIONS	WHAT IT DOES
Fretboard Legato	Off / On	When enabled, nearby overlapping notes can remain on the same physical course.
Capo	0 - 24 frets	Raises the physical open-course constraint while the complete MIDI keyboard remains playable.
Legato Range	1 - 48 semitones	Largest interval that may reuse a ringing course for a hammer-on, pull-off or slide.
Transition	2 - 5000 ms	Pitch glide time for course-preserving transitions.

MPE and world tuning

CONTROL	RANGE / OPTIONS	WHAT IT DOES
Temperament	11 modes	12-TET, Just, Pythagorean, quarter-comma meantone, Werckmeister III, Rast, Hijaz, Pelog, Slendro, Custom Scala and MTS / MTS-ESP.
Root	C - B	Sets the pitch-class reference for built-in temperaments.
Reference	380 - 500 Hz	Sets the frequency of MIDI A4.
Load Scala .scl	File import	Loads scale degrees outside the audio thread and maps them across MIDI 0-127.
MTS / MTS-ESP	Continuous	Accepts MTS SysEx and connects through the official ODDSound client. Held strings glide to updated tuning without being cancelled.
MPE	Off / On	Routes per-note pitch bend, pressure and CC74 timbre. Bend range extends to 96 semitones.

10. Design – Body and Workflow

Body Studio

CONTROL	RANGE / OPTIONS	WHAT IT DOES
Morph Target	17 instruments	Chooses the second resonant construction used by the Body Morph control.
Body Morph	0 - 200%	Continuously blends the selected instrument body toward and beyond the target construction.
Mic Array	Mono / XY / ORTF / Wide	Selects the virtual microphone geometry.
Mic Position	0 - 100%	Moves the virtual pickup point across the radiating body.
Mic Distance	0 - 100%	Moves from close, direct detail toward a more integrated body response.
Mic Angle	0 - 100%	Changes spectral balance and stereo relationship.
External Exciter	0 - 200%	Feeds the optional sidechain audio into the string and resonant body as physical excitation.

Per-string designer and workflow

CONTROL	RANGE / OPTIONS	WHAT IT DOES
Physical String	1 - 24	Selects the string whose model will be edited.
Detune	-100 to +100 cent	Applies precise physical-string pitch offset.
Brightness	-100 to +100%	Offsets the selected string's spectral loss.
Decay	0.10x - 5x	Scales the selected string's physical energy loss.
Hardness	-100 to +100%	Offsets excitation hardness for the selected string.
Quality	Live / High / Ultra	Controls modal/body detail. Offline DAW rendering automatically promotes to Ultra.
Real-time MIDI	Off / Generated / Thru + Generated	Outputs the actual direct, chord and arpeggiator performance to the host.
Recorder	Fixed rolling capture	Captures generated performance without audio-thread allocation; Clear Take resets it and Drag Performance MIDI exports it.
A / B	Two full states	Stores and recalls two complete sound-design states.
Undo / Redo	Parameter edits	Steps through recent edits using the shared parameter undo manager.
Lock Design	Off / On	Protects body, tuning and per-string design while presets or variations are loaded.

11. Model Tab

Model exposes the excitation, performance response, and string-complexity layers behind the instrument presets. These are deliberately wide sound-design controls: each one changes the physical response rather than applying a cosmetic EQ after the instrument.



The three color-coded modules feed the live Physical Model Response display: violet for excitation, cyan for playing dynamics, and amber for string complexity.

Excitation Source

CONTROL	RANGE / OPTIONS	WHAT IT DOES
Exciter Material	8 sources	Uses the current instrument profile or substitutes Soft Finger, Felt, Plectrum, Glass, Metal, Noise, or Impulse excitation.
Playback Rate	0.125x - 8x	Changes the speed and spectral placement of the attack source without transposing the sustained string.
Attack Pitch	-48 to +48 st	Transposes only the excitation transient, independently of the played MIDI pitch.
Transient	0 - 400%	Scales initial impact energy from a very soft onset to an exaggerated physical strike.

Playing Dynamics and String Complexity

CONTROL	RANGE / OPTIONS	WHAT IT DOES
Velocity Timbre	0 - 200%	Expands the mapping from MIDI velocity to attack brightness and filter opening.
Bell Morph	0 - 200%	Introduces independently decaying inharmonic modes. It is intentionally zero in every acoustic factory preset.
Pickup Point	0 - 100%	Moves the virtual sensing point along the string and changes harmonic cancellations.
Pickup Spread	0 - 200%	Widens the virtual sensing aperture for stronger multi-point harmonic interaction.
Nonlinearity	0 - 200%	Increases amplitude-dependent bridge and string interaction.
Dispersion	0 - 200%	Stretches upper partials to model stiffness and metallic complexity.

READING THE RESPONSE DISPLAY

The response display is a live diagnostic view, not a second set of hidden parameters. Its three curves update from the controls above so you can see how excitation, playing dynamics, and string physics combine before the body and effects.

11. Model Tab – String Geometry

String Geometry works inside the physical string. It controls where and over how much of the string energy is injected, where a passive damper removes energy, and where the travelling wave is observed. These are not post-filter macros: changing them changes the harmonic structure and decay produced by the waveguide itself.



The String State display visualizes the finite pluck contact, localized damper, and moving pickup. Drag PLUCK, DAMPER, or PICKUP to edit the same automatable parameters shown above.

Excitation Geometry

CONTROL	RANGE / OPTIONS	WHAT IT DOES
Contact Shape	Profile + 4 shapes	Instrument Profile recalls the current instrument's contact. Point, Triangle, Rounded, and Broad progressively redistribute onset energy across the string.
Pluck Point	0 - 100%	Moves the centre of the finite contact along the string and changes harmonic cancellations.
Contact Width	0.10x - 4x	Scales the selected shape from a precise contact toward a broad, softer excitation aperture.
Velocity > Point	-100 to +100%	Moves the contact in either direction as velocity increases.
Velocity > Width	-100 to +100%	Makes harder notes narrow or broaden the physical contact.

Physical Damper and Pickup Motion

CONTROL	RANGE / OPTIONS	WHAT IT DOES
Damper Mode	Profile / Off / Note-Off / Always	Selects instrument behavior, disables contact, applies it after note-off, or keeps it touching the string.
Damped Decay	0.10x - 12x	Scales the instrument-specific released-string decay. Internally this is T60: the time needed to fall by 60 dB.
Hardness	0 - 100%	Moves from a soft, spectrally gentle contact toward a firmer localized stop.
Damper Point	0 - 100%	Places the passive contact along the string.
Pickup Motion	Off / LFO / Aftertouch / LFO x Aftertouch	Chooses how the actual observation point moves.
Motion Depth	0 - 100%	Sets pickup travel around the Core Model Pickup Point.
Motion Rate	0.02 Hz - 20 kHz	Ranges from slow acoustic scanning to audio-rate harmonic motion.

RELEASE-MODE RELATIONSHIP

The localized damper belongs to Physical release mode. In ADSR mode, amplitude Release remains fully controlled by the Envelope page and is not shortened by the physical note-off damper. Aftertouch pickup motion can operate alongside the normal string-bend expression route.

12. Filter Tab

The performance filter runs independently for every physical string. It can follow key position and velocity, uses its own bipolar ADSR modulation, and keeps fast repeated notes separate while parameters are edited or automated.



Both Filter displays are interactive: the upper handle controls cutoff and resonance; the lower envelope handles edit amount, Attack, Decay, Sustain, and Release.

Filter and envelope controls

CONTROL	RANGE / OPTIONS	WHAT IT DOES
Mode	Off / LP / HP / BP / Notch	Selects bypass, low-pass, high-pass, band-pass, or notch response.
Cutoff	20 Hz - 22 kHz	Sets the base cutoff before key, velocity, and envelope modulation.
Resonance	0 - 200%	Emphasizes the cutoff region across a deliberately broad but protected range.
Key Track	-200 to +400%	Moves cutoff with pitch. Negative values invert tracking; 100% follows one octave per octave.
Velocity	-200 to +200%	Maps performance force to cutoff. Negative values darken hard notes; positive values brighten them.
Env Amount	-144 to +144 st	Applies the filter envelope downward or upward by as much as twelve octaves.
Attack	0 - 10000 ms	Time from base cutoff to the envelope peak.
Decay	1 - 30000 ms	Time from the peak to the Sustain level.
Sustain	0 - 100%	Held filter-envelope level.
Release	1 - 60000 ms	Filter-envelope return time after MIDI note-off.
Drive	0 - 200%	Adds protected saturation around the per-string filter.
Mix	0 - 100%	Blends the filtered path with the unfiltered physical string.

Editing the two displays

- Drag the response handle horizontally for Cutoff and vertically for Resonance.
- On the envelope graph, drag the peak horizontally for Attack and vertically for bipolar Env Amount.
- Drag the decay handles to change Decay and Sustain, then drag the tail for Release.
- Every display gesture uses the same host parameters as the knobs, so DAW automation and project recall remain synchronized.

13. Envelope and Decay Modes

The Envelope page provides a direct visual editor for Attack, Decay, Sustain, and Release. The graph and the four knobs are linked to the same host-automatable parameters.



The ADSR graph can be edited by dragging its four highlighted handles. The knobs provide an alternative precise control method.

Editing the graph

- Drag the first handle horizontally to set Attack.
- Drag the second handle horizontally to set Decay.
- Drag the central sustain handle vertically to set Sustain.
- Drag the final handle horizontally to set Release.
- All gestures are reported to the host as parameter-change gestures and can be automated.

Physical versus ADSR

CONTROL	RANGE / OPTIONS	WHAT IT DOES
Physical	Natural energy loss	The string loop, dispersion, bridge losses, articulation, damping, body, and sympathetic transfer determine the tail. ADSR amplitude shaping is bypassed.
ADSR	Envelope-controlled	Attack, Decay, Sustain, and Release shape the amplitude while the physical string remains the tone source. Release continues after MIDI note-off for up to 60 seconds.

WHY RELEASE SOMETIMES APPEARS INACTIVE

Release belongs to ADSR mode. In Physical mode, releasing a MIDI key does not apply the ADSR fade; the modeled energy follows the physical-loss path. Switch Decay Mode to ADSR when an exact keyboard-style release duration is required.

14. Effects

The effects rack follows the physical instrument and global tone stage. Chorus adds motion, Delay creates rhythmic or free-time echoes, and the custom long-form Reverb provides the final acoustic space.



The complete FX rack. Every section has independent mode selection and expanded parameter control.

Chorus

CONTROL	RANGE / OPTIONS	WHAT IT DOES
Mode	Classic / Ensemble / Dimension / Vibrato	Selects the internal modulation topology and characteristic depth, delay, and feedback behavior.
Mix	0 - 100%	Blends the chorus output.
Rate	0.01 - 24 Hz	Sets modulation speed.
Depth	0 - 100%	Controls pitch and timing movement.
Centre	0.5 - 80 ms	Sets the central modulated delay.
Feedback	-98 to +98%	Adds recirculation. Negative values change the cancellation pattern.

CLASSIC

A conventional single-voice chorus with balanced movement.

ENSEMBLE

A broader, slower multi-player impression with reduced feedback.

DIMENSION

Shallow, decorrelated movement with characteristically negative feedback.

VIBRATO

A deeper, faster pitch-focused motion with no feedback.

Delay

CONTROL	RANGE / OPTIONS	WHAT IT DOES
Mode	Stereo / Ping-Pong / Tape / Diffuse	Selects stereo routing and feedback character.
Mix	0 - 100%	Dry/wet balance.
Rate	Free + 13 synced values	Free uses the time knob. Sync includes 1/1 through 1/32 with dotted and triplet choices.
Free Time	1 - 12000 ms	Delay time when Rate is Free.
Feedback	-98.5 to +98.5%	Controls repeat count and phase relationship.
Tone	80 Hz - 22 kHz	Low-pass tone inside the feedback path.
Mod	0 - 200%	Adds slow delay-time modulation. Tape and Diffuse modes use distinct rates.
Stereo	0 - 200%	Creates left/right delay-time separation.

LONG SYNCHRONIZED ECHOES

At slow host tempos, whole-note and dotted-half divisions can become very long. Luthara Veyl reserves enough delay memory for a 12-second synchronized delay plus stereo and modulation offsets.

STEREO

A conventional left/right echo field. Raise Stereo for separation while retaining a stable center and predictable feedback rhythm.

PING-PONG

Alternates repeats across the stereo field. It is most effective with moderate feedback and a clear synchronized division.

TAPE

Adds slower pitch movement and a softer feedback character. Reduce Tone for worn, dark repeats behind bright pick attacks.

DIFFUSE

Smears individual taps into a broader echo cloud. Use it between a rhythmic delay and a reverb when the source should remain recognizable.

TEMPO WORKFLOW

Choose Rate first. Free uses milliseconds; every other position follows the host. Then set Feedback and Tone before adding Mod or Stereo width.

SAFE FEEDBACK

Long synchronized repeats can accumulate energy. Lower Delay Mix or Output before pushing Feedback toward either extreme.

14. Effects – Reverb

The Reverb is an eight-line feedback delay network designed for stable, long acoustic tails. Its dry and wet gains are smoothed, and extreme feedback conditions are bounded for real-time use.

CONTROL	RANGE / OPTIONS	WHAT IT DOES
Mode	Room / Chamber / Hall / Plate / Cathedral	Changes time scaling, density, damping balance, and reflection character.
Mix	0 - 100%	Dry/wet balance.
Decay	0.10 - 90 s	Approximate time for the late field to decay. Cathedral supports the longest evolving spaces.
Size	15 - 300%	Scales the delay network and perceived enclosure.
Pre-delay	0 - 1000 ms	Separates the dry pluck from the beginning of the reverb field.
Damping	0 - 100%	Removes high-frequency energy from each recirculation.
Diffusion	0 - 100%	Moves from sparse echoes toward a dense late field.
Width	0 - 300%	Sets stereo spread of the reverb network.

ROOM

Compact and natural. Use 0.6 to 2.5 seconds for a close acoustic recording.

CHAMBER

Denser early interaction with a polished studio character.

HALL

Balanced long-form depth for solo or ensemble parts.

PLATE

Smooth, bright, and less literal than a room. Excellent for melodic plucks.

CATHEDRAL

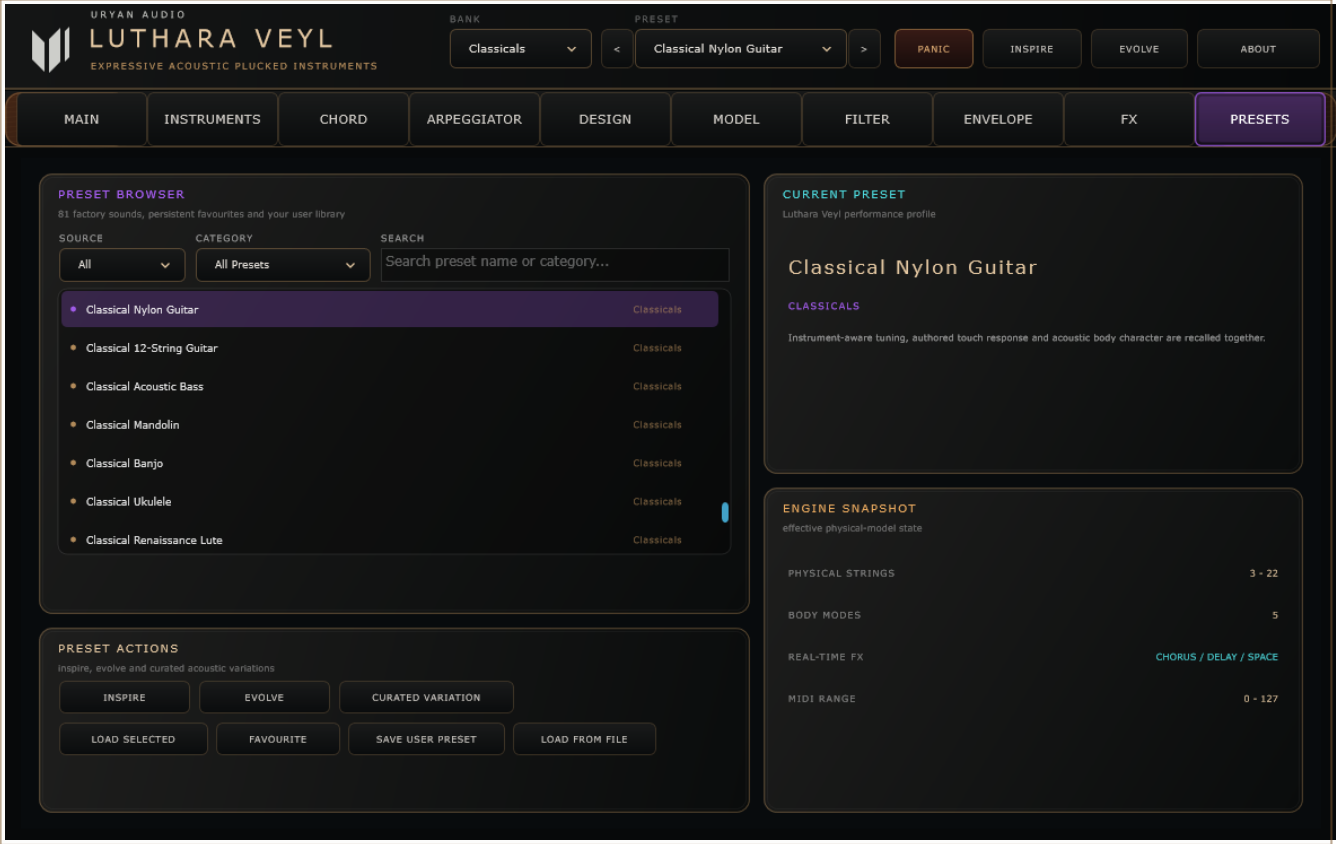
Large scale, high diffusion, and extended decay for atmospheric presets.

GAIN STAGING

Long delays and reverbs accumulate energy. Lower Output or effect Mix before reducing musical resonance if the safety limiter becomes audible.

15. Presets

The preset system combines immediate header navigation with a full browser for filtering, searching, favorites, variation, and portable user preset files.



The Presets page contains source and category filters, search, a factory list, current-preset details, actions, and an engine snapshot.

CONTROL	RANGE / OPTIONS	WHAT IT DOES
Source	All / Factory / Favourites	Filters the browser. Favorite marks are available for the current plug-in instance.
Category	9 banks	Restricts the list to one factory bank.
Search	Name or category	Filters immediately while typing.
Load Selected	Factory preset	Loads the selected row and stops the previous sounding state.
Favourite	Toggle	Marks or unmarks the current factory preset in the browser.
Inspire	Bank-aware creation	Starts from a curated preset in the selected bank, then derives a deterministic musical variation. Repeated clicks explore distinct bank-appropriate sounds rather than randomizing or mutating the previous Inspired result.
Evolve	Near variation	Makes a restrained variation around the current state.
Curated Variation	Deterministic step	Moves to a musically spaced factory preset in the collection.
Save User Preset	*.lvpreset	Saves the complete current plug-in state.
Load From File	*.lvpreset	Validates and restores a Luthara Veyl preset file.

CLASSICALS BANK

Classicals contains one clean, standard-tuned starting point for every instrument. Use this bank for auditioning a model, designing a sound from scratch, or comparing tunings without heavy effects.

16. MIDI and Performance Control

Luthara Veyl treats MIDI as continuous physical performance data. Notes trigger modeled excitations; controllers reshape held strings or the gain path without rebuilding the sound.

CONTROL	RANGE / OPTIONS	WHAT IT DOES
Notes	0 - 127	The complete MIDI keyboard is playable for every instrument.
Velocity	1 - 127	Controls excitation energy and transient intensity, scaled by the Main Velocity fader.
Note Off	Per note	Releases the correct occurrence even when the same note is triggered repeatedly.
CC64 Sustain	0 - 127	Defers note-off events. Chord and Arpeggiator modes maintain their own correct held-note lifecycle.
Pitch Bend	+/- 2 semitones	Smoothly bends all currently held strings.
Channel Pressure	0 - +2 semitones	Models pressing and pulling the strings upward across the held performance.
Poly Aftertouch	0 - +2 semitones	Bends the addressed note in direct mode. Chord and Arpeggiator modes apply the gesture to the generated held performance.
CC11 Expression	0 - 127	Multiplies the Main Expression value with smoothing.
Reset All Controllers	MIDI standard	Releases sustained notes as required and resets bend, aftertouch, and CC11 safely.
All Notes Off	MIDI standard	Uses the active release behavior and clears scheduled performance state.
All Sound Off	MIDI standard	Uses a very short emergency release.

Aftertouch as a string gesture

Aftertouch does not create tremolo. Pressure progressively bends the modeled string by up to two semitones, similar to pulling a real string sideways. The curve is intentionally non-linear so light pressure produces fine control while stronger pressure reaches the full bend.

COMBINING BEND SOURCES

Pitch wheel and aftertouch are additive. A full upward pitch bend plus full aftertouch can therefore produce a larger combined displacement. Return pressure and wheel to zero before recording a new phrase if you need an exact unbent start.

17. Sound Design Workflows

The fastest way to create convincing sounds is to work from the physical source outward. Choose instrument, tuning, excitation, and decay behavior before adding space.

Natural solo instrument

- Load the matching Classics preset.
- Select Natural body and Physical decay.
- Choose Finger, Nail, or Soft Pick according to the instrument.
- Set Bloom between 35 and 80%, Damping between 15 and 35%, and Humanize between 8 and 20%.
- Use Room or Chamber reverb below 15% Mix. Keep Chorus and Delay near zero.

Cinematic evolving pluck

- Choose harp, 12-string guitar, sitar, koto, or guzheng.
- Use Deep or Open body and raise Bloom above 100%.
- Switch to ADSR, use a short Attack, high Sustain, and a 4 to 12 second Release.
- Add slow Ensemble or Dimension chorus, a wide synchronized Delay, and Hall or Cathedral reverb.
- Lower Output early. Long physical and effect tails can add substantial energy.

Rhythmic folk pattern

- Choose mandolin, banjo, bouzouki, shamisen, pipa, or balalaika.
- Use Nail, Hard Pick, Palm Mute, or Dead Note.
- Enable the Arpeggiator and begin with Mandolin Pulse, Celtic Roll, Balkan Drive, or Shamisen Triplets.
- Shorten Gate and reduce Bloom for separation; add a short Stereo or Ping-Pong delay if desired.

Slow multi-string texture

- Enable Chord Mode and All Strings.
- Select String Pattern and arrange each course explicitly.
- Use independent gaps from 150 ms to several seconds.
- Set Start From to Instrument for playable, tuning-aware positions or MIDI Note for a strict upward harmony.
- Drag the final chord into the DAW and edit individual notes if the composition needs further variation.

START DRY

An effect can hide whether the string, articulation, body, and tuning are correct. Build the source first.

USE CONTRAST

Strong Bloom often needs less Reverb. Wide Chorus often needs less physical Width.

AUTOMATE MUSICALLY

Slow Body, Bloom, Tone, or Reverb changes are usually more convincing than rapid full-range jumps.

PROTECT HEADROOM

Reduce Output before stacking All Strings, long Release, high feedback Delay, and Cathedral tails.

18. Automation, Sessions, and Real-Time Behavior

All visible sound and performance controls are host parameters and are saved with the DAW project. The engine is designed to remain allocation-free in the real-time processing loop.

- Automation: Move a control once so the DAW can expose its parameter name, then record or draw automation normally.
- Session recall: Instrument, tuning, chord patterns, all Arpeggiator steps, effects, and performance controls are stored in the plug-in state.
- Legacy recall: Older state schemas are migrated to the current parameter tree with safe defaults for newly introduced controls.
- Preset recall: Active notes are silenced before and after a parameter batch to prevent partial old/new configurations.
- Offline bounce: The physical engine and scheduled events remain sample-accurate during non-real-time host rendering.
- High sample rates: The delay lines cover the full MIDI range and normal downward bend at professional rates up to 384 kHz.

CPU and memory guidance

CONTROL	RANGE / OPTIONS	WHAT IT DOES
Most demanding instruments	Harp, sitar, guzheng	More physical strings and sympathetic paths require more processing than a three- or four-string instrument.
Most demanding tails	High Bloom + long FX	Long resonant and feedback tails keep more processing active.
Efficient workflow	Freeze / render	For dense productions, commit finished parts or use the DAW freeze function.
Real-time safety	No audio-loop allocation	String, delay, reverb, and event storage are prepared ahead of processing.

19. Troubleshooting

SYMPTOM	CHECK
No sound	Check the DAW track input, monitor/record enable, Main Expression and Output. Press Panic once, then play a fresh note.
Low keys seem silent	Version 1.0.1 supports MIDI notes 0-127 for every instrument. Confirm that the DAW is not filtering or transposing the input and rescan the current VST3 build.
A note returns after release	Send Panic or MIDI All Notes Off, then verify that CC64 sustain is not held by a pedal, automation lane, or MIDI clip.
Long Release stops immediately	Select ADSR Decay Mode. Physical mode follows natural string energy loss rather than the ADSR Release parameter.
Chord plays too few strings	Select All Strings. Chord Tones intentionally limits voices to the chord definition.
String Pattern behavior is wrong	Use the current 1.0.1 build. Each row addresses one playable course and duplicate course assignments are resolved safely.
Chord direction feels reversed	Direction is labeled by pitch movement: Down travels from higher toward lower courses; Up travels from lower toward higher.
Arpeggiator does not stop	Disable Latch, release sustain, or press Panic. Check for held MIDI notes from another input device or clip.
Delay ignores Free Time	Set Delay Rate to Free. Any musical division uses host tempo instead.
FX tail is too loud	Lower effect Mix, Feedback or Decay, then reduce Output. Extremely long tails accumulate energy naturally.
MIDI drag does not start	Begin inside the purple DRAG MIDI field and move at least a few pixels. Some DAWs require an existing MIDI track.
User preset will not load	Load an intact .lvpreset created by Luthara Veyl. Other XML, MIDI, or audio files are rejected.
Plug-in missing in DAW	Confirm the complete .vst3 bundle is in the system VST3 folder, install the current x64 Visual C++ runtime, and force a rescan.

Appendix A. Parameter Range Reference

Core and performance

CONTROL	RANGE / OPTIONS	WHAT IT DOES
Instrument	17 choices	Physical instrument profile.
Playing Style	16 choices	String excitation style.
Body Character	5 choices	Off, Natural, Focused, Deep, Open.
Tuning	8 choices	Instrument-specific physical tuning.
Decay Mode	2 choices	Physical or ADSR.
Sympathetic Resonance	0 - 400%	Bloom macro.
Stereo Width	0 - 200%	Physical model spread.
Output	-48 to +18 dB	Final output trim.
Velocity Scale	1 - 127	Input velocity scaling.
Expression	0 - 127	Base expression level.
Humanize	0 - 200%	Bounded performance variation.
Attack	0 - 10000 ms	ADSR attack.
Decay	1 - 30000 ms	ADSR decay.
Sustain	0 - 100%	ADSR sustain.
Release	5 - 60000 ms	ADSR release.
Tone	0 - 100%	Global brightness.
Damping	0 - 100%	Energy and brightness restraint.

Chord and Arpeggiator

CONTROL	RANGE / OPTIONS	WHAT IT DOES
Chord Type	44 choices	Interval definition.
Chord Inversion	Root - 5th	Chord-member rotation.
Chord Direction	Down / Up / Alternate	Sweep order.
Chord Playback	Sweep / String Pattern	Timing model.
Chord Voicing	Chord Tones / All Strings	Voice count.
Chord Start	MIDI Note / Instrument	Register and course strategy.
Chord Strum Time	0 - 8000 ms	First-to-last Sweep duration.
Chord Velocity Spread	0 - 200%	Stroke dynamics.
Pattern course	1 - 24	Course chosen per pattern step.
Pattern gap	0 - 8000 ms	Independent wait per step.
Arp Gate	2 - 400%	Global gate.
Arp Swing	0 - 120%	Alternate-step delay.
Arp Free Rate	0.05 - 60 Hz	Free clock.
Arp Fixed Velocity	1 - 127	Fixed mode value.
Step Transpose	-36 to +36 st	Per-step pitch.
Step Velocity	1 - 127	Per-step velocity.
Step Gate	5 - 400%	Per-step length multiplier.

Appendix A. Parameter Range Reference – Model and Filter

Physical model

CONTROL	RANGE / OPTIONS	WHAT IT DOES
Exciter Material	8 choices	Instrument Profile, Soft Finger, Felt, Plectrum, Glass, Metal, Noise, Impulse.
Exciter Rate	0.125x - 8x	Excitation playback speed.
Exciter Pitch	-48 to +48 st	Transient-only pitch.
Transient Level	0 - 400%	Initial impact energy.
Velocity Timbre	0 - 200%	Velocity-to-brightness mapping.
Bell Morph	0 - 200%	Inharmonic mode blend.
Pickup Point	0 - 100%	Virtual sensing position.
Pickup Spread	0 - 200%	Dual-point sensing aperture.
Nonlinearity	0 - 200%	Amplitude-dependent string interaction.
Dispersion	0 - 200%	Upper-partial stiffness.
Contact Shape	5 choices	Instrument Profile, Point, Triangle, Rounded, Broad.
Pluck Point	0 - 100%	Finite-contact centre.
Contact Width	0.10x - 4x	Finite-contact aperture scale.
Velocity > Point	-100 to +100%	Velocity-dependent contact movement.
Velocity > Width	-100 to +100%	Velocity-dependent aperture change.
Damper Mode	4 choices	Instrument Profile, Off, Note-Off, Always.
Damped Decay	0.10x - 12x	Instrument-relative released decay (T60).
Damper Hardness	0 - 100%	Localized contact character.
Damper Point	0 - 100%	Localized contact position.
Pickup Motion	4 choices	Off, LFO, Aftertouch, LFO x Aftertouch.
Motion Depth	0 - 100%	Moving-observation travel.
Motion Rate	0.02 Hz - 20 kHz	Moving-observation speed.

Per-string performance filter

CONTROL	RANGE / OPTIONS	WHAT IT DOES
Filter Mode	5 choices	Off, Low-pass, High-pass, Band-pass, Notch.
Cutoff	20 Hz - 22 kHz	Base cutoff.
Resonance	0 - 200%	Cutoff emphasis.
Key Track	-200 to +400%	Pitch-to-cutoff mapping.
Velocity	-200 to +200%	Velocity-to-cutoff mapping.
Envelope Amount	-144 to +144 st	Bipolar cutoff modulation.
Filter Attack	0 - 10000 ms	Envelope rise.
Filter Decay	1 - 30000 ms	Envelope decay.
Filter Sustain	0 - 100%	Held envelope level.
Filter Release	1 - 60000 ms	Envelope tail.
Drive	0 - 200%	Protected saturation.
Filter Mix	0 - 100%	Filtered/unfiltered blend.

Appendix A. Parameter Range Reference - FX

CONTROL	RANGE / OPTIONS	WHAT IT DOES
Chorus Mix	0 - 100%	Wet blend.
Chorus Mode	4 choices	Classic, Ensemble, Dimension, Vibrato.
Chorus Rate	0.01 - 24 Hz	Modulation speed.
Chorus Depth	0 - 100%	Modulation amount.
Chorus Centre	0.5 - 80 ms	Base delay.
Chorus Feedback	-98 to +98%	Recirculation.
Delay Mix	0 - 100%	Wet blend.
Delay Mode	4 choices	Stereo, Ping-Pong, Tape, Diffuse.
Delay Rate	Free + 13 divisions	Time source.
Delay Time	1 - 12000 ms	Free-mode time.
Delay Feedback	-98.5 to +98.5%	Repeat energy.
Delay Tone	80 Hz - 22 kHz	Feedback filtering.
Delay Modulation	0 - 200%	Delay movement.
Delay Stereo	0 - 200%	Left/right offset.
Reverb Mix	0 - 100%	Wet blend.
Reverb Mode	5 choices	Room, Chamber, Hall, Plate, Cathedral.
Reverb Decay	0.10 - 90 s	Late-tail duration.
Reverb Size	15 - 300%	Network scale.
Reverb Pre-delay	0 - 1000 ms	Dry-to-wet separation.
Reverb Damping	0 - 100%	High-frequency loss.
Reverb Diffusion	0 - 100%	Tail density.
Reverb Width	0 - 300%	Stereo spread.

Appendix B. Chord Library

Intervals are shown in semitones above the incoming root before inversion. All chord types work on all twelve chromatic roots.

CHORD	INTERVALS	CHORD	INTERVALS
Major	0, 4, 7	Add 9	0, 4, 7, 14
Minor	0, 3, 7	Minor add 9	0, 3, 7, 14
Diminished	0, 3, 6	Add 11	0, 4, 7, 17
Diminished 7	0, 3, 6, 9	9	0, 4, 7, 10, 14
Augmented	0, 4, 8	Minor 9	0, 3, 7, 10, 14
Power 5	0, 7, 12	Major 9	0, 4, 7, 11, 14
Sus 2	0, 2, 7	7 b9	0, 4, 7, 10, 13
Sus 4	0, 5, 7	7 #9	0, 4, 7, 10, 15
Sus 2 / 4	0, 2, 5, 7	9 b5	0, 4, 6, 10, 14
6	0, 4, 7, 9	9 #11	0, 4, 7, 10, 14, 18
Minor 6	0, 3, 7, 9	11	0, 4, 7, 10, 14, 17
6 / 9	0, 4, 7, 9, 14	Minor 11	0, 3, 7, 10, 14, 17
Dominant 7	0, 4, 7, 10	Major 11	0, 4, 7, 11, 14, 17
Major 7	0, 4, 7, 11	13	0, 4, 7, 10, 14, 21
Minor 7	0, 3, 7, 10	Major 13	0, 4, 7, 11, 14, 21
Minor Major 7	0, 3, 7, 11	Altered	0, 4, 10, 13, 15, 20
Minor 7 b5	0, 3, 6, 10	Augmented 9	0, 4, 8, 10, 14
7 b5	0, 4, 6, 10	Minor Major 9	0, 3, 7, 11, 14
Major 7 b5	0, 4, 6, 11	Minor 6 / 9	0, 3, 7, 9, 14
Major 7 #5	0, 4, 8, 11	Major 7 sus2	0, 2, 7, 11
Augmented 7	0, 4, 8, 10	Min Maj 7 b5	0, 3, 6, 11
7 sus4	0, 5, 7, 10	Minor Major 11	0, 3, 7, 11, 14, 17

Appendix C. Factory Preset Index

The first eight banks contain eight curated sounds each. Classics contains one clean starting point for every instrument, bringing the factory total to 81.

ATMOSPHERIC

- 01 Ethereal Pluckscape
- 02 Moonlit Koto
- 03 Desert Jawari
- 04 Celtic Bloom
- 05 Silk Road
- 06 Harp of Glass
- 07 Bamboo Rain
- 08 Guzheng Mist

ACOUSTIC

- 01 Bronze Horizon
- 02 Velvet Nylon
- 03 Amber Fingerstyle
- 04 Satin Mandolin
- 05 Dusty Banjo
- 06 Island Lanterns
- 07 Open Road Steel
- 08 Intimate Nylon

WORLD

- 01 Renaissance Air
- 02 Aegean Courses
- 03 Shamisen Shadow
- 04 Sitar Constellation
- 05 Midnight Oud
- 06 Jade Guzheng
- 07 Pipa Firefly
- 08 Balalaika Snow

Appendix C. Factory Preset Index – Continued

RHYTHMIC

- 01 Bouzouki Pulse
- 02 Shamisen Dance
- 03 Pipa Silk
- 04 Volga Triangle
- 05 Muted Caravan
- 06 Palm Mute Machine
- 07 Dead Note Ritual
- 08 Slapwood

INTIMATE

- 01 Deep Timber Bass
- 02 Copper Nail
- 03 Low G Sunset
- 04 Lute Nocturne
- 05 Thumbprint
- 06 Focused Cedar
- 07 Small Wooden Room
- 08 Quiet Luthier

CINEMATIC

- 01 Cathedral Twelve
- 02 Paired Starlight
- 03 Hard Pick Cinema
- 04 Wide Resonance
- 05 Deep Rosewood
- 06 Chorus of Strings
- 07 Tape Courtyard
- 08 Ancient Hall

Appendix C. Factory Preset Index – Continued

EXPERIMENTAL

- 01 Koto Garden
- 02 Raga Dawn
- 03 Oud Chamber
- 04 Echoing Gourd
- 05 Infinite Courses
- 06 Bright Ensemble
- 07 Dark Soloist
- 08 World Pluck Atlas

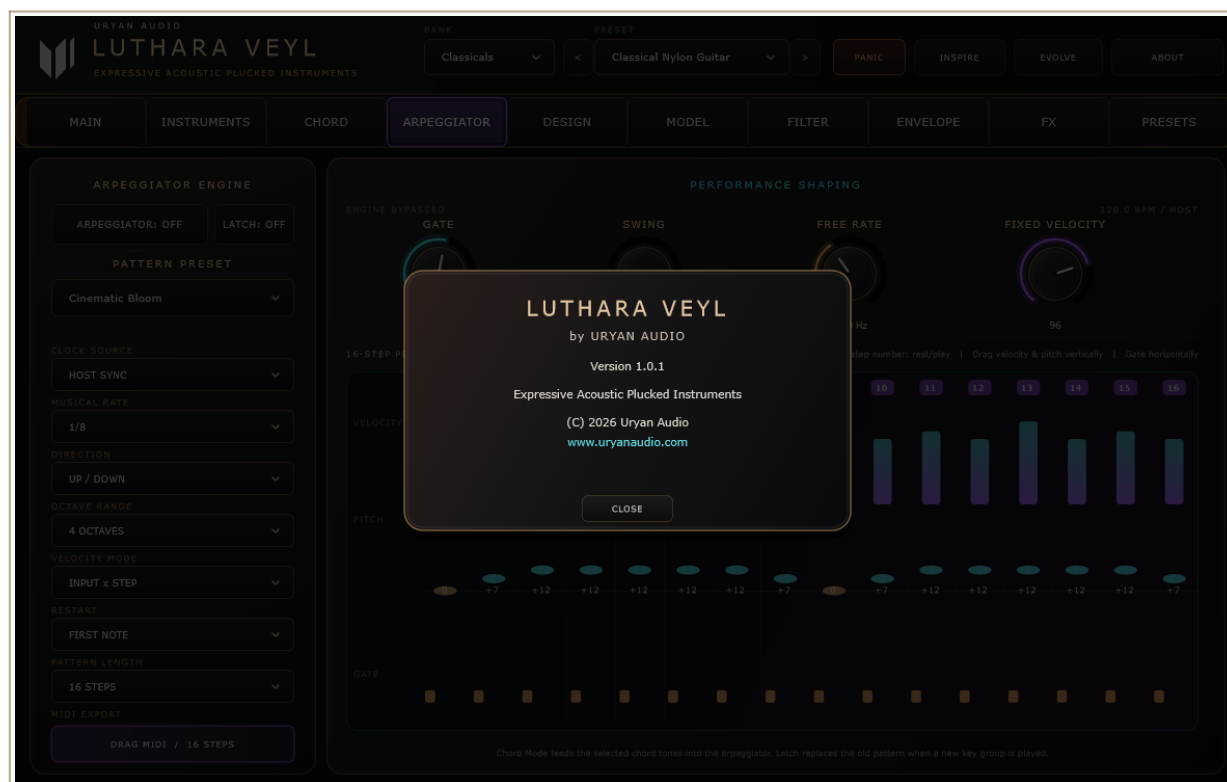
PERFORMANCE

- 01 Porchlight Banjo
- 02 Harp Harmonics
- 03 Open Mahogany
- 04 Human Hands
- 05 Close Microphone
- 06 Distant Gallery
- 07 Golden Release
- 08 Uryan Signature

CLASSICALS

- 01 Classical Steel Guitar
- 02 Classical Nylon Guitar
- 03 Classical 12-String Guitar
- 04 Classical Acoustic Bass
- 05 Classical Mandolin
- 06 Classical Banjo
- 07 Classical Ukulele
- 08 Classical Renaissance Lute
- 09 Classical Greek Bouzouki
- 10 Classical Celtic Harp
- 11 Classical Koto
- 12 Classical Shamisen
- 13 Classical Sitar
- 14 Classical Oud
- 15 Classical Guzheng
- 16 Classical Pipa
- 17 Classical Balalaika

Support, Credits, and Version



About panel in Luthara Veyl 1.0.1.

Product: Luthara Veyl

Version: 1.0.1

Developer: Uryan Audio

Website: www.uryanaudio.com

Formats covered: Windows VST3, macOS VST3 and Audio Unit

Copyright: (C) 2026 Uryan Audio

BEFORE CONTACTING SUPPORT

Record the DAW name and version, Windows version, sample rate, buffer size, controller model, the preset or instrument involved, and the exact steps that reproduce the problem. A short MIDI file is often more useful than a long written description.

Thank you for choosing Luthara Veyl.