

LYNX SONG FINISHER

Operation Manual - Shane TV - Reason Rack Extension

General Purpose

Lynx: Song Finisher is an advanced, algorithmic MIDI note player and chord sequencer designed to end writer's block and bring your musical ideas to the finish line. Beneath its interface lies a complex Markov-chain generation engine and deep music theory logic capable of understanding your existing chord progressions, matching their style, and mathematically deducing what should come next—or what should have come before. Whether you are generating complex, genre-specific voicings from scratch, mapping out tension and release across a timeline, or feeding it a loop to generate a perfectly complementary bridge or chorus, Lynx acts as a virtual co-writer. It translates raw mathematical probabilities, negative harmony, and voice-leading algorithms into immediate, deeply human musical performances.



Front Panel Controls

Set Up Controls



- **Root Note & Scale:** Manually sets the home key and scale (Major, Minor, Dorian, Phrygian, Lydian, Mixolydian).
- **Input Source (Listen / Generate):** In *Listen*, Lynx records incoming MIDI notes, analyzes them to determine the chord, and plots them onto the Input Lane and Matrix. In *Generate*, Lynx's algorithmic engine takes over to sequence chords in the Output Lane.
- **Generate Direction:** This decides if generated progressions are meant to come before or after the progression held in the Input Lane.
- **Listen Length:** Determines the maximum length (in bars) of the Input Lane loop.
- **Output Length:** Determines the length (in bars) of the generated Output Lane loop.
- **Logic Direction (Before / After):** Dictates how Lynx's Markov chain connects to your Input Lane. The *After* setting generates chords that logically follow your input. The *Before* setting generates chords that logically lead *into* your input.

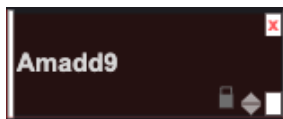
Matrix Controls



- **Clear:** Erases the Input Lane and resets the recorded chord memory.

- **Import:** Copies the sequence currently sitting in the Output Lane directly into the Input Lane. Generate will then listen to what is in the input lane and create progressions that are musically complimentary.
- **Populate:** Fills the 16-hex Chord Matrix with a fresh palette of chords based on your current Key, Scale, Voice, and Tone settings.
- **Generate:** Builds a new chord progression in the Output Lane based on your parameters. (Locked chords will not be overwritten).
- **Subdivision Tabs (4 Bar to 1/16):** Determines the grid resolution for the timeline, and the size of the chords you drag and drop from the matrix.
- **Red Arrows:**  Navigate across progressions more than 4 bars long in the input or output lane.

Output Lane Controls (Per-Chord)



- **Delete (x):** Removes the chord block from the timeline.
- **Length Handle (Bottom Right White Block):** Click and drag left or right to freely resize the duration of the chord.
- **Octave Arrows & Exponent:** Click the top arrow to raise the chord by +1 octave, or the bottom arrow to lower it by -1 octave (up to +/- 3 octaves). The active direction turns yellow.
- **Padlock:** Locks the chord. Locked chords will not be altered or overwritten when you press the Generate button.

Allowed Lengths



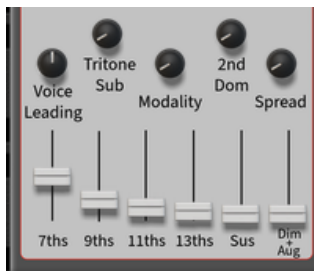
- **4 bar, 3 bar, 2 bar, 1 bar, 1/2, 1/4, 1/8, 1/16:** The lengths of chords that are allowed to be generated

Tone & Voicing



- **Voice Preset:** Selects the genre/style of the chord voicings (Pure, Pop, Grit, Folk, Club, Dreamy, Smooth, Boom, Funk, Island, Soul, Chill, Gospel, Cinematic, Synthwave, Jazz, Modal, Bossa, Flamenco, Abstract). This heavily dictates the spacing, dropped notes, and default extensions, effectively weighing how potent the other knobs are to steer the user towards the sound of certain genres .
- **Tone:** Guides the emotional color of the generated chord progressions (Resolved, Suspenseful, Wandering, Dark, Bright, Suspended).
- **Section Target:** Guides the generated progression's structural tendencies (Intro, Verse, Chorus, Bridge, Outro). For example, *Intro* tends to build tension, while *Outro* favors resolving cadences.

Harmonic Modifiers



- **Voice Leading (Inversions):** When turned up, Lynx automatically inverts chords to minimize the distance between the notes of consecutive chords, resulting in smooth, realistic transitions.
- **Spread:** Drops the middle notes of a chord down an octave, mimicking open guitar voicings or wide two-handed piano chords.
- **Sec Dom Prob (Secondary Dominant):** Introduces out-of-key dominant 7th chords that resolve a fifth down into the next chord in the progression.
- **Tritone Sub:** Introduces jazz-style tritone substitutions for dominant chords.
- **Modality:** Introduces modal interchange (borrowing chords from the parallel major or minor scale).
- **Negative Harmony (Switch):** Flips the progression upside down around a perfect fifth axis, swapping major intervals for minor ones while retaining the exact same functional gravity.
- **Tension Map (Switch):** Forces the progression to start simple and gradually add complex extensions (9ths, 11ths, 13ths) as the timeline progresses.
- **7th, 9th, 11th, 13th, Sus, Tension:** These vertical faders dictate the random probability that Lynx will add these specific extensions/qualities to a generated chord.

Performance Macros



- **Velocity Shift:** Adjusts the baseline MIDI velocity output.
- **Humanize:** Introduces micro-timing jitter to the MIDI notes so chords don't sound perfectly quantized and robotic.
- **Strum Amount:** Delays the onset of each note in a chord slightly, mimicking the strum of a guitar or the roll of a piano chord.
- **Strum Direction:** Determines if the strum plays low-to-high (*Up*), high-to-low (*Down*), or alternates back and forth (*Alt*).
- **Syncopation:** Pushes the MIDI trigger slightly ahead of the beat.
- **Fill Prob:** The probability that Lynx will generate ghost notes, passing chords, or rhythmic flourishes between sustained chords.
- **Bass Logic:** Extracts the root note of the chord and plays it as a dedicated bassline. Options include: *Off*, *Root -1 Octave*, *Root -2 Octaves*, *Walking Bass* (adds passing notes), and *Octave Bounce*.
- **Octave (Global):** Shifts the entire progression up or down in pitch

Back Panel CV Connections



Outputs

- **Top Gate Out:** Sends a gate signal whenever a chord is playing.
- **Top Pitch Out:** Sends the pitch CV of the highest/lead note of the current chord.
- **Bass Gate Out:** Sends a gate signal specifically for the Bass Logic notes.
- **Bass Pitch Out:** Sends the pitch CV of the Bass Logic notes (perfect for routing to a separate Sub synth!).
- **Leader Note Out / Leader Gate Out:** PolyCV output. Used to chain multiple Lynxes or Ocelots together, or drive PolyCV compatible instruments.
- **+Bass Out:** toggles sending the bass note out with the Leader Gate Out and L=Leader Pitch Out

Inputs

- **Strum Mod:** CV input to dynamically modulate the Strum Amount.
- **Fill Mod:** CV input to dynamically modulate the Fill Probability.
- **Syncopation Mod:** CV input to dynamically modulate the Syncopation timing.
- **Voice Lead Mod:** CV input to dynamically modulate the Voice Leading (Inversion) intensity.
- **Velocity Mod:** CV input to dynamically modulate the Velocity Shift.

- **Follower Note In / Follower Gate In:** PolyCV input. Used to slave Lynx to another PolyCV device or another instance of Lynx.

Controlling your whole song from one Lynx

By connecting one Lynx's **Leader CV outputs** to the **Follower CV inputs** of other Lynx devices, you can seamlessly synchronize the chord progressions across all the tonal tracks in your song. For even greater control and to save rack space, use Shane TV's **Ocelot** to route a single Lynx's polyphonic chords to every track in your project simultaneously.

Workflow Examples: How to use Lynx

Lynx is highly flexible and can be adapted to whatever stage your song is in. Here are a few common ways to integrate it into your workflow:

1. Starting a Song from Scratch If you have a blank canvas, Lynx is the perfect brainstorming tool.

- Set your desired **Root Note** and **Scale**, and select a **Voice Preset** (e.g., *Cinematic* or *Synthwave*) and **Tone** (e.g., *Dark* or *Wandering*).
- Click **Populate** to fill the Chord Matrix with a curated palette of chords that fit your parameters.
- Click **Generate** to instantly build a logical progression in the Output Lane.
- Not quite right? Adjust the **Extension Probabilities** (like adding more 9ths or Sus chords) and click Generate again. Once you have a progression you love, use the performance macros to add strumming, humanization, and syncopation.

2. The "Song Finisher" Workflow (Building the Next Section) You have a great 4-bar Verse, but you are stuck on where to take the Chorus.

- Flip the Input Source to **Listen** and play your Verse progression via your MIDI keyboard. Lynx will analyze your playing, detect the key, identify the chord extensions, and map them to the Input Lane and Chord Matrix.
- Flip the Input Source back to **Generate**.
- Set the **Logic Direction** switch to *After*, and set the **Section Target** to *Chorus*.
- Click **Generate**. Lynx's Markov engine will look at the exact chord your Verse ended on, and logically generate a brand new 4-bar Chorus progression that naturally flows out of it.

3. The Prequel Workflow (Building an Intro/Buildup) You came up with a massive drop or hook, but you don't know how to lead into it.

- Play your hook into the Input Lane using **Listen** mode.
- Set the **Logic Direction** switch to *Before*, and the **Section Target** to *Intro* or *Verse*.

- Click **Generate**. Lynx will calculate the mathematical "leads-to" probabilities in reverse, generating a progression that builds the perfect tension to resolve exactly into the first chord of your existing hook.

4. Iterative Tweaking and "Locking" You generated an 8-bar progression. You love bars 1 through 4, but bars 5 through 8 feel too resolved.

- In the Output Lane, click the **Padlock** icon on the bottom right of the chord blocks you want to keep.
- Turn up the **Tension** and **Sec Dom** (Secondary Dominant) knobs, and click **Generate** again.
- Lynx will leave your locked chords completely untouched, but will dynamically regenerate the rest of the timeline to feature more complex, suspenseful turnarounds.

5. Importing and Merging You recorded a progression into the Input Lane, but you want to apply Lynx's advanced performance macros (like Guitar Spread, Strumming, or Bass Logic) to it.

- Click **Import**. Lynx will instantly copy your live-played Input Lane directly into the Output Lane.
- From here, you can pin specific chords, change their lengths, adjust their octaves (+1, -1) individually using the timeline arrows, or use the performance macros to drastically alter how your progression is played without changing the chords themselves.