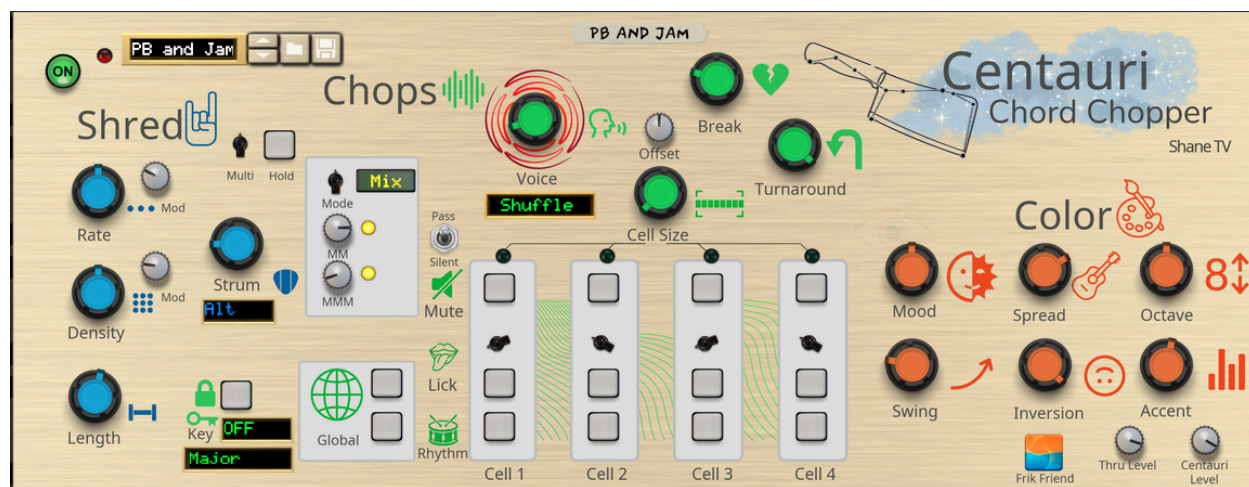


# Centauri Chord Chopper (CCC): Operation Manual

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## Overview

**Centauri Chord Chopper (CCC)** is a Reason Rack Extension Player Device designed to transform static chord progressions into complex rhythmic patterns, melodic movements, and "chopped" harmonic textures. It utilizes a 4-cell generative engine to create evolving loops ranging from 1 to 16 bars. By combining 23 distinct algorithmic performance "Voices" with high-precision randomization seeds, CCC allows you to find new melodic hooks while maintaining a deterministic, repeatable sequence.

## The Usuals

- **The "Power" Button:** Bypasses the Centauri Chord Chopper. When off, your incoming MIDI chords will pass straight through to the instrument unaltered.
- **The Patch Browser:** Use the standard Reason patch browser to load Factory Presets or save your own custom seed combinations and panel settings.

## Shred Section

The Shred section governs the foundational timing and density of the sequence.

- **Rate:** Sets the note size, featuring 13 musical divisions from **1/4** to **1/64**, including dotted and triplet variations.
  - **Rate Mod:** An internal LFO that shifts the current Rate based on the selected depth.
  - **Density:** Adjusts the probability of notes triggering on any given step versus a rest.
  - **Density Mod:** Applies an internal LFO to the Density parameter for evolving rhythmic textures.
  - **Length:** Controls the duration of generated notes, from short staccato plucks to long legato sustains.
  - **Multi:** Global multiplier for the strike rate and note length (0.5x, 1x, or 2x)
  - **Hold:** When active, the current rhythmic and melodic state is "latched," sustaining the pattern even after you release your MIDI keys.
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## Chops Section

The Chops section manages performance algorithms and the 4-cell loop structure.

### The Engine Modes: Strum, Mix, and Lick

Centauri processes your chords using three distinct "Engine Modes." Think of these as the primary playing style of your virtual musician.

- **Strum:** The Rhythm Player. This mode anchors tightly to your chords on the downbeats and plays sequential "sweeps" across the notes. It is highly rhythmic and perfect for creating natural, guitar-like backing patterns that glue a track together.
- **Lick:** Melodic, less polyphonic expressions of input chords. Designed to emulate riffs and leads.
- **Mix:** This is Centauri's most versatile mode, bouncing between strums and licks. It blends stepwise melodic playing with larger, expressive leaps across the keyboard. Because it reacts heavily to every single knob on your panel, this is your go-to mode for creating complex, evolving textures and leads.

### The 4-Cell System

Centauri doesn't just wander aimlessly; it thinks in musical phrases. The generative engine is divided into a **4-Cell System**, meaning your total loop is always broken down into four equal quadrants (Cell 1, Cell 2, Cell 3, and Cell 4).

- **Sizing Your Loop:** The **Cell Size** knob dictates how long each quadrant is. If you set the Cell Size to 1 Bar, your total loop will be 4 Bars long. If you set it to 1/4 Bar, you get a quick, 1-Bar loop.
- **Precision Editing:** Because the loop is divided into these four distinct blocks, you have absolute control over the arrangement. If you love the first three-quarters of your melody but hate the ending, you don't have to throw the whole thing away. You can simply hit the **Randomize** buttons on Cell 4 to generate a new ending, or use the **Mute** button on Cell 2 to create a sudden, localized rest in the middle of your phrase.

## Form Knobs and Buttons

- **Engine Mode:** Selects the mathematical foundation for chord processing: **Strum**, **Mix**, or **Lick**.

**Strums** strictly play the exact keys you hold down, arpeggiating your precise voicing.

**Licks**, however, have two distinct behaviors:

- **Chord-Aware:** Maps directly to the exact keys you press.
- **Genre-Baked:** Acts like a smart accompanist. It reads your lowest note and forces specific intervals (like a Blues scale or Diminished arpeggio) to create a distinct flavor, overriding your actual chord.

**Tip:** If your complex chords sound clashing, you're likely fighting a Genre-Baked lick! Try playing a simple 1-to-2 note interval and let Centauri do the heavy lifting.

**Mix** bounces between **Strum** and **Lick** mode in a rhythm dictated by the **Mix Mod** knob.

- **Mix Mod:** An evolving rhythmic gate that toggles between Offbeat and Downbeat patterns (1/2 to 1/16 divisions). Only active in Mix mode.
- **MixMode Mod:** Sets the depth of the gate LFO to fluctuate the rhythmic spacing. Only active in Mix mode.
- **Cell Size:** Sets the duration of each individual quadrant (Cell 1–4) from **1/4 bar** to **4 bars**.
- **Break:** Controls the probability of voice-specific "Breaks" occurring at the end of a cell.
- **Turnaround :** Controls the probability of voice-specific "Turnarounds" or melodic flourishes at the end of a cell.
- **Offset:** Shifts the start position of the loop forward or backward by up to 16 steps.
- **Strum & Direction:** Simulates the sweep of a plectrum across strings. Direction can be set to **Down**, **Up**, or **Alt**.
- **Global Seed (Lick & Rhythm):** Generates entirely new random seeds for the entire device.
- **Cell 1–4 Controls:** Each quadrant features dedicated **Mute**, **Lick Select**, and localized **Randomize** buttons for Pitch and Rhythm.

- **Mute Mode Switch:** Decides if muted cells' midi is silenced or passes through the device.

## Color Section

The Color section provides harmonic and humanizing offsets to polish the performance.

- **Mood:** Shifts harmonic flavor; negative values favor darker intervals, while positive values favor brighter ones.
- **Spread:** Determines the octave range of the melodic seeds.
- **Octave:** Transposes the sequence up or down by two octaves.
- **Swing:** Adds a rhythmic shuffle by rushing or delaying offbeat notes.
- **Inversions:** Mathematically re-voices the input chords. Options include: Root, 1st, 2nd, Drop, Spread, Random, or Smart, where the inversions are based off of the least physical distance from the last chords, leading to some very musical progressions.
- **Accent:** Introduces "Velocity Pocketing" and timing humanization for a more expressive feel. This adapts to the voice, but generally adds more velocity to the onbeat notes and less velocity to the offbeat notes.
- **Frik Friendly:** A safety mode that constrains generated pitches to a "Frikion friendly" range (MIDI 48–108). Allowing the user to still use Frikion's controls on the lower Octaves.
- **Thru Level:** Adjusts level of midi that passes through the device
- **Centauri Level:** Adjusts velocity level of Centauri's output
- **Key & Mode:** An integrated quantizer that snaps all output to 1 of 12 root notes and 9 scales (Major, Minor, Dorian, Phrygian, Lydian, Mixolydian, Blues, and Pentatonics).
- **Key Lock:** Preserves the Key and Mode while the user surfs through presets.

| Voice                | Style & Vibe   | Special Rules & Modifiers  |
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| 0.<br><b>Garage</b>  | The baseline generative sequencer. Natural, versatile phrasing.                    | <b>Breaks:</b> Silences the final beats of a cell to let the phrase breathe naturally.                     |
| 1. <b>Heavy</b>      | Metal-inspired. Automatically drops the bass note down an octave for extra weight. | <b>Mood Knob:</b> Pushing this to extremes introduces dark diminished 5ths or thick power-chord intervals. |
| 2.<br><b>Shuffle</b> | A bouncy, triplet-based rhythm with a natural groove.                              | <b>Groove:</b> Forces the sequencer into a triplet grid.   |

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| <p><b>3. Bramble</b></p> | <p>Bass-focused and sparse, anchoring heavily to the root and fifth.</p>  | <p><b>Turnarounds:</b> Triggers aggressive, rapid 16th-note syncopations in the final beats of a cell.</p>                                      |
| <p><b>4. Palm</b></p>    | <p>Tight, staccato pop voicing. Limits the chord to four notes to prevent muddiness.</p>  | <p><b>Strum:</b> Forces a deliberate, alternating upward sweep across the chord.</p>  |
| <p><b>5. Boss</b></p>    | <p>Bossa Nova flavor. Forces a perfect Major voicing (Root, 3rd, 5th, Octave) regardless of what you play.</p>                            | <p><b>Strum:</b> Tightens your strum settings for fast, snappy chord hits.</p>  |
| <p><b>6. Clave</b></p>   | <p>Latin-inspired syncopation. Shifts the lowest root note up an octave to keep the mix airy and light.</p>                               | <p><b>Strum:</b> Plays with tight, fast snaps.</p>  |
| <p><b>7. Island</b></p>  | <p>Plucky and percussive. Forces extremely short, staccato note lengths.</p>  | <p><b>Strum:</b> Enforces a minimum strum speed to emulate the pluck of acoustic strings.</p>   |
| <p><b>8. Harp</b></p>    | <p>Sweeping, wide arpeggios. Automatically shifts the entire progression up a full octave.</p>  | <p><b>Spread Knob:</b> Overrides narrow settings, forcing the melody to span a massive range. Strumming is slowed down for majestic sweeps.</p> |
| <p><b>9. Math</b></p>    | <p>Complex, shifting time signatures that alternate between 5-hit and 6-hit syncopated patterns per bar.</p>                              | <p><b>Strum:</b> Plays with tight, fast snaps.</p>  |
| <p><b>10. Chew</b></p>   | <p>A "lazy" strumming behavior. The bass note hits exactly on the grid, but the rest of the chord is dragged heavily behind the beat.</p> | <p><b>Timing:</b> Great for drunk, off-kilter lo-fi beats.</p>  |
| <p><b>11. Swamp</b></p>  | <p>A deep, drunken triplet groove.</p>  | <p><b>Swing:</b> Overrides your swing knob to ensure the sequence maintains a heavy, minimum shuffle at all times.</p>                          |
| <p><b>12. Motor</b></p>  | <p>Robotic, repeating 8-bit patterns.</p>   | <p><b>Overrides:</b> Completely ignores the Swing and Strum knobs for a rigid, machine-like feel.</p>   |
| <p><b>13. Pocket</b></p> | <p>Highly syncopated, bouncing around the offbeats. Shifts the bass note up an octave to sit perfectly above your actual bassline.</p>    | <p><b>Strum:</b> Plays with tight, fast snaps.</p>  |

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| <p><b>14. Hustle</b></p>   | <p>Driving, straight 16th-note momentum. Shifts the bass note up an octave to stay out of the mud.</p>   | <p><b>Turnarounds:</b> Forces alternating root and third intervals directly on the downbeats to lock in the groove.</p>          |
| <p><b>15. Fuego</b></p>    | <p>Aggressive, trap-style triplet rhythms that heavily accent specific steps in the grid.</p>  | <p><b>Groove:</b> Forces the sequencer into a triplet grid.</p>  |
| <p><b>16. Twang</b></p>    | <p>Plays rolling, banjo-like arpeggios.</p>  | <p><b>Behavior:</b> The direction of the arpeggio roll changes automatically from bar to bar to keep the pattern evolving.</p>   |
| <p><b>17. Neon</b></p>     | <p>Rigid, quantized 16th notes.</p>  | <p><b>Overrides:</b> Bypasses Swing and Strumming completely for a precise, electronic sequence.</p>                             |
| <p><b>18. Highlife</b></p> | <p>Syncopated, African-style guitar rhythms. Alternates between distinct rhythmic accent patterns.</p>   | <p><b>Overrides:</b> Plays the chords totally flat (bypasses the Strum knob).</p>  |
| <p><b>19. Tremolo</b></p>  | <p>Replaces standard rhythmic volume with a continuous, pulsing volume swell.</p>  | <p><b>Accent Knob:</b> Controls the depth and intensity of the volume pulsing.</p>   |
| <p><b>20. Ratchet</b></p>  | <p>Granular, glitchy sequences.</p>  | <p><b>Turnarounds:</b> Triggers extremely rapid, stuttering "machine gun" notes mimicking trap hi-hat rolls or IDM glitches.</p> |
| <p><b>21. Chip</b></p>     | <p>Classic 8-bit video game arpeggiator. Plays chords perfectly flat with no strum.</p>  | <p><b>Turnarounds:</b> Fires high-speed, laser-like arpeggio bursts within a single step.</p>                                    |
| <p><b>22. One Shot</b></p> | <p>A non-sequenced utility mode. The internal sequencer stops running completely. Does not have licks. Only responds to <b>Strum mode</b> and <b>Orange Knobs</b>.</p> | <p><b>Behavior:</b> Only triggers a single, slow, majestic strummed chord exactly when you press a new key.</p>                  |

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## CV Section



Centauri features a fully routable back panel for deep integration with the Reason Rack.

- **CV Inputs:** Routing available for **Rate (and Mod)**, **Density (and Mod)**, **Length**, **Strum (and Direction)**, **Offset**, **Variator**, **Delta**, **Global Seeds**, **Vibe controls**, **Hold**, **Multi**, and **Mix Modes**.
- **CV Outputs:** Unlike standard players, Centauri provides dedicated **Gate Out** and **Pitch Out** jacks to trigger external modular gear or instruments.

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## Tips and Tricks

- **Breathing Textures:** Route a slow LFO into the **Variator (Break)** CV input for a sequence that automatically thins out and introduces "rests" over time.
- **Dueling Melodies:** Load two Centauri instances. Use the same chord input but set one to **Garage** and the other to **Neon** for interlocking generative counterpoint.
- **The "Machine Drum" Trick:** Connect a drum machine trigger to the **CV Rand Rhythm** input. Every time the drum hits, Centauri will jump to a new rhythmic seed, keeping your topline evolving.