Prism - v1.8

What's New:

1. **Tone Multi-Seq** — Each tonal track runs 4 independent sequencers with their own notes, lengths, WARP, and FX pass-thru.

2. **LFOs** — 6 per track: 3 pattern-tied + 3 profile-tied CC LFOs; arm, drag to assign, cascade mod.

3. **Step FX** — Per-trig, stack up to 4; Tone: Velocity/Pitch/Ratchet/Strum; Drum: Velocity/Length/Ratchet/Flam, plus project-wide clipboard.

4. **Speed FX** — Speed as its own FX: quick polyrhythms, ratio stepping, continuous sweep, LFO-moddable.

5. **Triplet Grid** — Triplet-native sequencing; long-press Length to toggle.

6. **Arp Sync/Free** — Switch between host-sync and free-run (Hz); long-press Rate.

7. **Per-Note Edit** — In trig focus, tap note labels to tweak length/velocity and shift pitch.

8. **Chord Block Params** — Stack-level Vel Randomization and Strum from Block Edit.

9. **CC Home + Profiles** — Quick CC shaping (X/Y → CC Mod 1/2); values save with Sound Profiles.

10. **Humanize & Swing (Advanced)** — Choose style, set amounts, link tracks to global groove controls.

11. **Drum Melt Filters** — First-pass filtering of Melt output before target tracks; finish shaping with WARP.

12. **Shift Drum Trigs Across Pads** — Move selected trigs between drum sequences within a track.

13. **Launchkey Mini MK4** — Native mapping and color feedback for pads/transport/controls.

14. **Improved Clock** — Tighter timing with smooth BPM change handling.

15. **Piano Roll (8 bars)** — Extended view for longer phrases and edits.

16. **Dusty Color Scheme** — Refined palette for softer contrast.

17. **X/Y Control** — Smoother feel with adjustable sensitivity / bipolar control.

Multi-Seq (Tonal Tracks)

What it is

Each tonal track contains **four independent sequencers (Seq 1–4)**.

- Each sequence can have its own length, loop settings, and note data.

- Each sequence can also be routed through FX differently, giving you per-sequence control over timing and sound.

Where to Access

- **Track Select → Note Keypad:** The top four pads pick Seq 1–4.

- **Multi-Seq Button (upper-right in Note mode):** Opens the Multi-Seq Keypad.

Using the Multi-Seq Selector Keypad

- **Top row (Seq 1–4):** Selects the current sequence for editing.

    - **Bright:** active sequence
    - **Dim (track color):** contains trigs but not active
    - **Grey:** empty sequence

- Standard pad actions (Copy, Paste, Shift) work here as usual (copy, paste, mute).

- **Conditional & Sidechain Rows (4 rows below):**

    - **Chance / Every:** Use the bottom 8 pads to assign probability or playback patterns.
    - **Chokes / Choked:** Assign sequences so that "Chokes" cut off any playing sequences assigned to "Choked."

Editing with Track-Select Mixer Values

Track Level Mixer

Seq Level Mixer

Each track has **track-wide values** (Velocity Offset, Delay, Swing, Humanize) and **per-sequence values**.

- **Velocity & Delay:** Track and sequence values combine for the final output.

- **Swing & Humanize:** Can link to the track-wide setting. Long-press Swing/Humanize to toggle **Link** for the current sequence.

- Each sequence can be **muted** or **soloed** independently.

Switch scope: Tap any Seq 1–4 pad or the central Prism graphic to toggle between track scope and sequence scope.

- The prism graphic changes shape to show scope (square = single tonal sequence).

FX per Sequence

- **Independent per-sequence FX:** Gate, Speed, and WARP are fully separate per sequence, allowing granular speed/shift combos.

- **Shared per-track FX:** Arp, Harmonizer, and Hue share global settings, but you can decide which sequences use them.

  - Make a sequence active, enable the FX, and it will apply only to that sequence.

- **Muting FX:** Hold **[Shift] + FX nav button** or long-press an FX in the selector to mute for the active sequence.

FX with Sources (Hue, Peek, Echo, Melt)

Some FX require a **source track**. After selecting a source:

- You can also choose a specific Multi-Seq from that track via the keypad or the four buttons beneath sequence trigs.

- A sequence can even use another sequence from the *same* track as its source.

TRACK 6

SONG

FX

CC

SEQ

Bars
1

+16ths
-

Res.
1/16

Steps
16

LEGATO

CUTOFF

FOLLOW

DRONE

1	2	◎	4	5	6	7	8
9	10	11	12	13	14	15	16

| ◎ | SEQ 2 | SEQ 3 | SEQ 4 |

| SEQ ◎ | SEQ 2 | SEQ 3 | SEQ 4 |

LFOs (Per-Track)

What it is

Each track includes **six LFOs**. They'll appear as three buttons at the bottom of the GUI screen when applicable.

- **3 Track LFOs** – modulate Prism's internal FX/parameters and will appear when available. They are saved with the track's **Pattern**, since they affect notes and events.
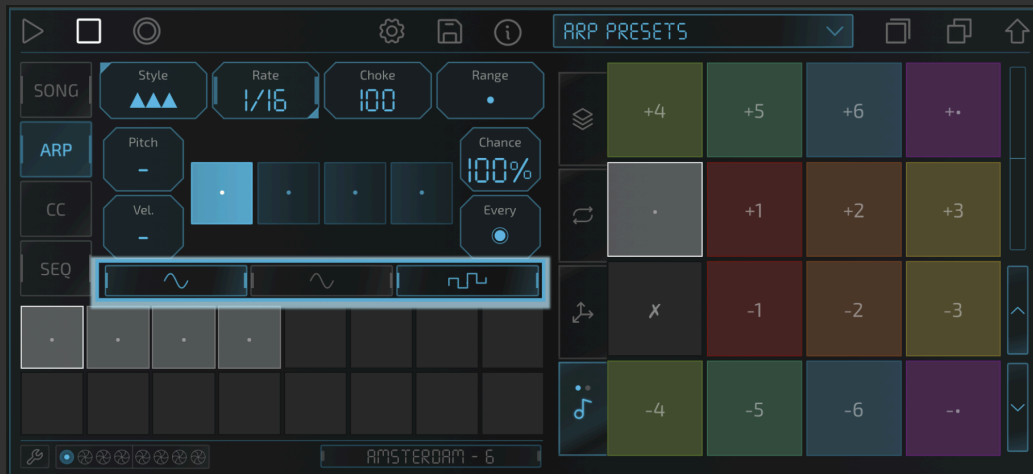
- **3 CC LFOs** – modulate mapped MIDI CC/PC/pressure on your instrument. They are saved with the **Sound Profile**, shaping the external sound.
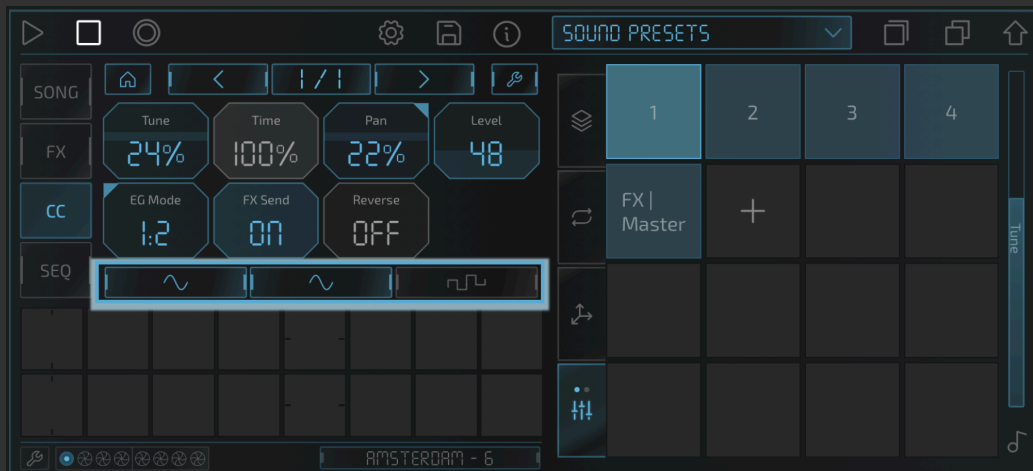
Controls

- **Arm:** Tap an LFO button (it highlights in green).

- **Assign:** While armed, drag any white parameter to set LFO depth (green = currently modulated).

- **Clear target:** Double-tap a green parameter.

- **Uni/Bi:** Long-press a target parameter to toggle unipolar/bipolar.

- **Edit shape:** Long-press any LFO button to open the Shape Editor.

Shape Editor

Long press any LFO button to access the LFO's waveshape editor.

Top four parameters:

- **Shape:** SINE, SAW, TRIANGLE, SQUARE, RANDOM

- **Rate:** Sets cycle speed. Long-press to toggle **Sync** (musical divisions) vs **Free** (milliseconds).

- **Mode:**
    - *Run* — plays continuously
      Trig — restarts with each trig
      Hold — holds the value at trig time for the trig's duration
      Half — plays half a cycle per trig
    - *Once* — plays one cycle per trig
    - *Pattern* — restarts when the pattern loops

- **Depth:** Master amount across all targets; negative depth flips polarity.

Other controls:

- **Elastic Grid:** Drag the on-screen wave shape (X/Y) to adjust slope and phase.

- **Target View:** Press *Target* to view all mapped targets.

- ○ Drag a row to change modulation amount
- ○ Double-tap to reset
- ○ Tap *X* to clear a mapping
- ○ Tap *dice* to randomize all amounts
- ○ Exit Target View by pressing the white *Target* button or the active LFO button

- **Trash (long-press):** Clears all targets and resets this LFO.

- **Exit Shape Editor:** Tap the active LFO or the white navigation button you entered from (*SEQ / CC / FX*).

Cascading Modulation

A fixed cascade lets LFOs modulate the shape parameters of others:

- **LFO 2 & 3 → LFO 1**

- **LFO 3 → LFO 2**

- **(none → LFO 3)**

To assign: Open the target LFO's Shape Editor, then **long-press** the source LFO. Adjust parameters to set modulation depth.

Saving LFOs

- **CC LFOs (3):** Saved with the **Sound Profile** (targets, depths, shapes). Loading a profile recalls them.

- **Track LFOs (3):** Saved with the **Pattern** (internal, per-track modulation).

- **LFO Groups across projects:** Use the LFO Preset Manager (appears in place of the text notification box when editing an LFO shape) to save presets. Each preset stores all three LFOs and their current shape settings (not targets).

Step FX (Per-Trig)

Overview

Step FX are **per-trig processors** that add movement, variation, and groove at the micro-level of your sequence.

- Each trig can hold up to **four Step FX**, and they stack together.

- FX are stored on the trig itself — they copy/paste with the trig and follow **Chance, Every, and Selection** conditions just like notes.

- The available step FX differ for tone and drum tracks.
    - Tone:
        - Velocity FX
        - Pitch FX
        - Ratchet FX
        - Strum FX

    - Drums
        - Velocity FX
        - Length FX
        - Ratchet FX
        - Flam FX

Anatomy of a Step FX

Each Step FX has three main control layers:

1. **Top Controls (4 knobs):** The primary parameters that shape the effect.

2. **Visualizer:** A graphic display of the effect; drag X/Y to quickly set its two main values.

3. **Keypad Options:** Extra settings and patterns.

   ○ **Top row:** FX name (back button) + 3 snapshot slots*

   ○ **Second row:** Toggleable option groups

   ○ **Bottom rows:** Controls for the active config group

   ○ **No group active:** Last row shows quick toggles, reset, and remove

Snapshots: Each Step FX has 3 slots for saving settings. Tap an empty slot to save, tap a filled slot to recall (copying the data into the Step FX), and long-press to overwrite. If the current settings match a slot, that slot will glow. Snapshots are not linked—once recalled, the Step FX becomes independent, and later changes to the slot will not affect it. Slots are shared across tracks, for example a configuration saved to slot 3 on Track 2 can be recalled on Track 4.

Adding & Editing Step FX

1. Enter **Trig Focus** (long-press a filled trig; multi-select supported).
2. Open **Step FX**, then tap an FX pad to add.
   a. Press the step FX tab on the focus state GUI screen or use the keypad buttons in the transformation tab.

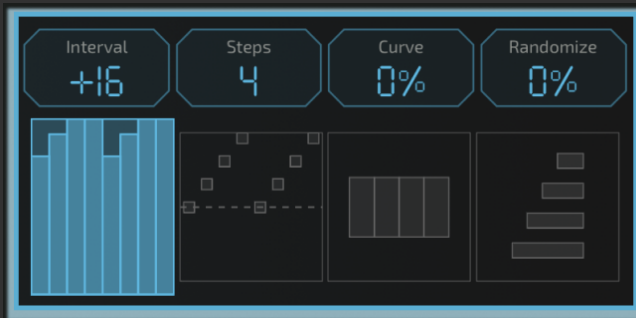3. Adjust using Top Controls, Visualizer, or Keypad Options.

Removing Step FX

● Double-tap the Step FX shape in the GUI, **or**
● Press **Trash** on the keypad, **or**

● Double-tap the Step FX icon.


Tonal Step FX

1. Velocity FX

What it is: Scales or offsets a trig's velocity; can increment per loop for evolving dynamics.
 Quick Controls:

- **Interval:** Velocity change applied each cycle
- **Steps:** Number of increments before reset
- **Curve:** Ramp of velocity change across steps
- **Randomize:** Adds randomized offset per trig

Additional Options: Condition · Range · Accent · Hold · Link
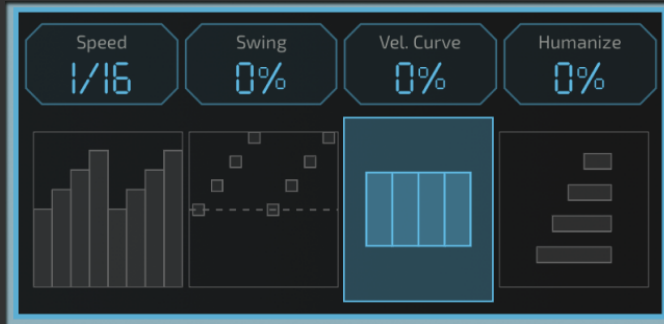
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2. Pitch FX
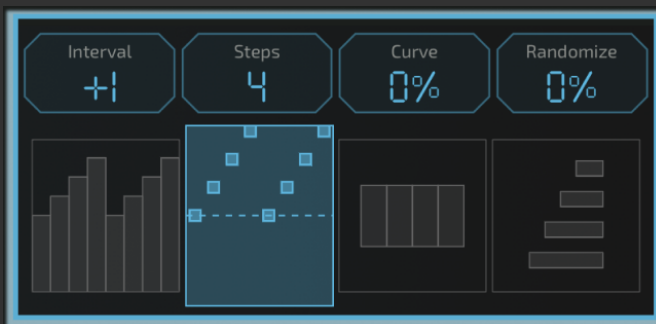
What it is: Transposes a trig's pitch (in semitones). Can increment per loop for melodic motion.
 Quick Controls:

- **Interval:** Pitch change per cycle (semitones)
- **Steps:** Increments before reset
- **Curve:** Ramp of pitch change across steps
- **Randomize:** Randomized semitone offset

Additional Options: Condition · Range · Accent · Hold · Link
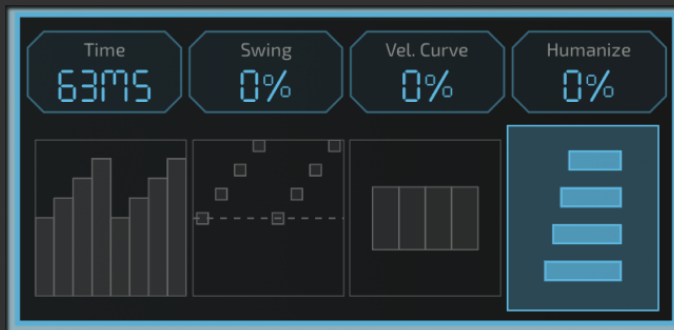
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3. Ratchet FX

What it is: Subdivides a trig into rapid repeats (rolls/buzzes).
 Quick Controls:

- **Speed:** Spacing between repeats
- **Swing:** Push/pull timing across repeats
- **Vel Curve:** Velocity slope across repeats
- **Humanize:** Randomized timing/velocity

Additional Options: Condition · Limit · Pattern · Humanize Style · Free/Sync

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4. Strum FX

What it is: Spreads chord notes in time to simulate a strum.
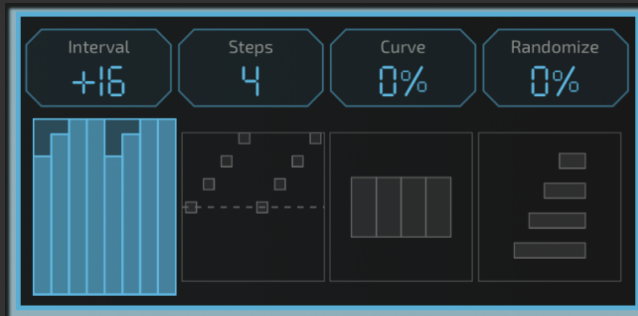 **Quick Controls:**

- **Speed:** Spacing between chord notes
- **Swing:** Push/pull across the chord
- **Vel Curve:** Velocity slope across notes
- **Humanize:** Random looseness for natural feel

Additional Options: Condition · Invert · Humanize · Free/Sync

Note: Strum Step FX overrides any strum set in a chord block.

Drum Step FX
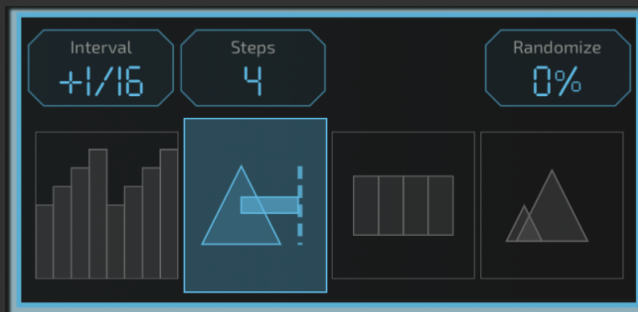
1. Velocity FX

What it is: Scales or offsets hit intensity; can increment per loop for evolving patterns.
 Quick Controls:

- **Interval:** Velocity change per cycle
- **Steps:** Increments before reset
- **Curve:** Ramp across steps
- **Randomize:** Varied offset on each hit

Additional Options: Condition · Range · Accent · Hold · Link
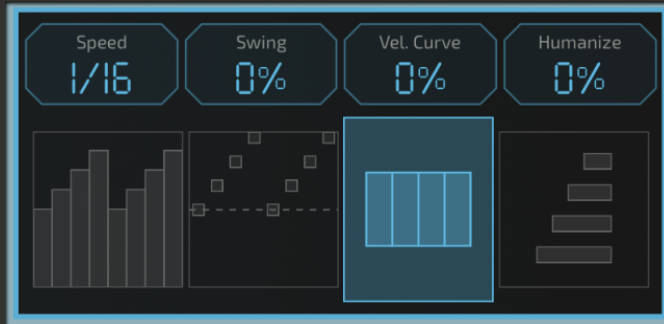
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2. Length FX

What it is: Controls gate length (how long a hit rings), with optional per-loop increments.
 Quick Controls:

- **Interval:** Gate change per cycle
- **Steps:** Increments before reset
- **Randomize:** Varied length per hit

Additional Options: Condition · Range · Accent · Hold · Link

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3. Ratchet FX

What it is: Subdivides a drum hit into rapid repeats.
 Quick Controls:

- **Speed:** Spacing between repeats
- **Swing:** Push/pull across repeats
- **Vel Curve:** Velocity slope across repeats
- **Humanize:** Random timing/velocity

Additional Options: Condition · Limit · Pattern · Humanize Style · Free/Sync

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4. Flam FX

What it is: Adds one or more pre-hits leading into the main strike.
 Quick Controls:

- **Time:** Offset of first flam hit (early)
- **Vel Offset:** Velocity difference between flam hits and main hit
- **Humanize:** Randomizes time/velocity (time random only in Free mode)

Additional Options: Condition · Strikes · Humanize · Free/Sync

Step FX: Additional Options

Setting	Applies To	What it does	How to use	Behavior notes & examples
Condition	All Step FX	Decides *when* the FX executes.	Set Chance (probability) and Every (e.g., play every 2nd loop).	Example: Chance 50% + Every 3 → FX triggers only on every 3rd loop, half the time. Great for subtle variation.
Range	Velocity, Pitch, Length	Limits the absolute offset the FX is allowed to reach.	Set Min/Max range; choose limit behavior: Restart, Bounce, Mirror, Plateau.	**Restart**: snap back to base, apply any leftover change. **Bounce**: reverse direction at the limit (±2, ±1, 0, −1, −2…). **Mirror**: when you hit the upper limit, jump to the equivalent distance on the opposite side of base and continue (like reflecting across the base). **Plateau**: once the limit is reached, hold that value until the next cycle.
Accent	Velocity, Pitch, Length	Emphasizes selected positions within a short cycle.	Long-press to set pattern length (up to 8). Tap steps to accent; use Accent slider to set strength.	Example: Accenting steps 1 and 4 inside a 4-step micro-pattern gives back-beat emphasis on that FX.
Hold	Velocity, Pitch, Length	Repeats each increment for multiple plays before advancing.	Set Hold count (up to 4).	Example: Interval = +1, Hold ×2 → melodic ladder: C → D, D → E, E → F, F… (the bold notes repeat).

Link	All Step FX	Locks multiple FX to a shared counter so they advance together.	Toggle Link on any FX you want coupled with the seq step FX count.	With Link on, increments happen per linked event, not just per local cycle.
Limit	Ratchet	Caps how many repeats can play.	Choose Max Repeats and whether extra repeats land at Start or End of the step.	Example: Limit = 3 at Start → always places repeats at the beginning of the step window.
Pattern	Ratchet	Manually programs which repeats play.	Long-press to set pattern length (1–8). Tap to Play/Skip steps; pattern loops if more repeats remain.	Example: Pattern = 1101 (len 4) with 6 repeats → plays 1,1,0,1 then 1,1 again (loops) to fill all repeats.
Humanize	Ratchet, Strum, Flam	Adds natural variation to timing and/or velocity.	Choose Style and Amount.	Styles bias timing vs velocity differently (e.g., tight timing/loose dynamics vs loose timing/steady dynamics). Start low (5–15%) for realism.
Invert	Strum	Changes chord voicing per position in a short pattern.	Set pattern length (1–4). For each step choose Root/None, 1st, 2nd, Spread.	Example: 1st → 2nd → Spread → Root cycles inversions as the strum plays, adding motion without editing notes.
Strikes	Flam	Adds extra pre-hits within the Time window; can vary per cycle.	Choose number of strikes; optionally set a 1–4 step strikes pattern.	Example: Time = 1/4 note, Strikes = 2 → two pre-hits at 1/8 spacing. Pattern 1-2-1-3 varies the count each cycle.

Free /Sync	Ratchet, Strum, Flam	Sets the timing reference for the FX.	Toggle Free (ms) or Sync (tempo divisions).	Ratchet/Strum: Speed uses ms in Free or beat divisions in Sync. Flam: Time is ms in Free or beat divisions in Sync. *Flam Humanize* randomizes Time only in Free.
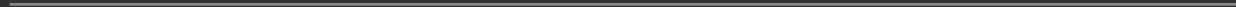
Launchkey Mini Mk4 Integration

Prism has deep integration with the Novation Launchkey Mini Mk4, giving you direct hands-on control of sequencing, mixing, and performance.

Setup

1. Connect your Launchkey Mini Mk4 through your host.
   a. Route Prism -> Launchkey DAW In
   b. Route Launchkey DAW Out -> Prism
   c. Route Launchkey MIDI Out -> Prism

2. In Prism, go to Settings → Ext. Control → Launchkey Mini.

3. Launchkey and Prism are now connected.

Main Sequencer State

1. **Pads:** Add and edit trig steps just like inside Prism.

2. **Knobs:** Control note input parameters and sequence timing. The Launchkey's display (2.b) always shows which parameters the knobs are mapped to.

3. **Page navigation:** Use the Up/Down arrows to move between pages.

4. **Shift/Param buttons:**

    a. Top-right arrow button = Shift

    b. Button beneath = Param

Parameter Mode

- **Press Param:** Load MIDI profile parameters onto the 8 knobs.

- **Press again:** Cycle between two views:

  - **Soft Param View –** shows sequence trigs alongside parameter controls (good for adding plocks or editing while jamming).

  - **Full Param View –** replaces sequence trigs with parameter status (lets you remove p-locks or add/edit LFOs). The top 8 rows represent the param status (normal/PLocks/LFO). The lower row gives access to the three CC LFOs.
    - Use the large up/down buttons to change the profile page

- **Long-press Param:** Opens Profile Groups, selectable through the pads.

Copy & Paste Trigs with Shift

- **Hold Shift to enable copy/paste.**

  - Press a filled trig = Copy step.

  - Press an empty trig = Paste step.

- This expands shift beyond its normal use and integrates editing shortcuts.

State Selector

- **Right Button:** Opens the state selector menu or returns to the sequencer home state.

    - In menu mode, seq trigs are used to select options such as Patterns, Sequence Setup, or Track FX. The launchkey displays the available states along the pads.

    - If you're already in a submenu, pressing again returns to the home sequencer.

Track Select Mode

- **Func button:** Acts as Track Select.

    - **Press/hold** to enter track select state.

    - **Use Pads** to choose the active track.

- ○ **Use Knobs** to adjust velocity offset.

- ○ **Use the Up/Down arrows (left of the pads)** to toggle between Track Mixer and Seq Mixer levels.

- ○ **Press Func again** to exit.

General Controls

- ● **Modulation Slider:** Functions as a velocity control, like the velocity slider in Prism's keypad.

- ● **Play / Record:** Work the same as in Prism—seamless transport control.

Speed FX — True Polyrhythms & Elastic Timing

What it is
Speed is its own FX module. Apply musical ratios, continuous drifts, and LFO-driven tempo effects per track.

Controls

- **Quick Time**: one-tap ratios (e.g., 2/3×, 3/4×, 5/4×).

- **Arrows "<< | >>"**: step through ratios.

- **Main Speed graphic**: slide up/down for continuous sweep; double-tap to reset to **1×**.

- **LFO Mod**: arm an LFO, then drag the speed control to assign.

Tips

- Layer different ratios across tracks for evolving canons.

- For tape-style slowdowns, use a smooth random or triangle LFO with low depth.

Triplet Grid (Sequencer View)

What it is
Instantly remap the step sequencer for drawing in triplets.

Where
SEQ page.

Use
Long-press the **Length Param** to toggle **Triplet Grid** on/off. All placement/quantize adapts to triplet spacing while enabled.

Arp — Sync / Free Timing

What it is
Arpeggiator timing can be **Sync** (host-linked) or **Free** (Hz).

Where
Arp page.

Use

- Long-press **Rate** to toggle **Sync/Free**.

- In **Free**, **Rate** is in **ms**. In **Sync**, **Rate** uses musical divisions.

Trig-Level Note Editing (Per-Note)

What it is
Edit notes inside a trig (length, velocity, pitch offsets) via the inline note graphic.

Use

1. Enter **Trig Focus** (long-press a filled trig).

2. Tap any note label to select it.

3. Drag to adjust length/velocity; move up/down to transpose that note.

Chord Block — Playback Parameters

What it is
Block-level **Velocity Randomization** and **Strum** that shape how every note in the chord stack is articulated.

Where
Chord Blocks → **Block Edit** — long-press a Chord Block with **Edit** enabled (edit icon at bottom-right of the keypad).

Use
Open the Block Edit parameter screen and set **Vel Rand** and **Strum**.
Notes: Settings apply to all blocks in the stack so related chords stay cohesive.

CC Home Screen — Profile-Tied Values

What it is
A simplified CC Home for quick shaping/mapping when a full profile isn't configured. **CC Mod 1 & 2** are tied to the X/Y Pad.

Where
 CC Home.

Use

- Long-press the **CC Mod** params (to the right of the X/Y pad) to assign/update CC outputs.

- Values set to **CC Mods**, **Program Change**, and **Pressure** are saved with the **Sound Profile**.

Track Humanize & Swing — Advanced Options

What it is
Fine-grained groove controls at the track level.

- **Swing** shifts off-beats; choose style/curve and optionally link to **Global Swing**.

- **Humanize** adds controlled variation to **Timing**, **Length**, and **Velocity**; optionally link to **Global Humanize** and set per-dimension blends.

Where
Track Select → long-press **Humanize** or **Swing**.

Use

- **Open panel**: long-press **Swing** or **Humanize** on Track Select.

- **Swing**: choose style/curve and set **Amount (0–100%)**. Toggle **Link to Global Swing** to derive from the global control; unlink for local.

- **Humanize**: set **Overall Amount** and blend across **Timing/Length/Velocity**. Toggle **Link to Global Humanize** to derive from global; unlink for local.

- **Reset**: double-tap any amount control to default.

Drum Melt Filters

What it is
First-stage shaping of **Drum Melt** output before it reaches targets.

Where
SEQ (Drum) → SEQ Setup → Melt → Select Source

Use

1. In SEQ Setup for the **source** pad, enable **Melt**.

2. Use **sequencer trigs** to pick the source sequence for pitch derivation.

3. Use the **keypad** to set output targets (tracks/pads).

4. Apply **Melt Filters** to prune/shape generated events.

5. On each **target** track, add further shaping with **WARP FX** as needed.

Shift Drum Trigs Across Pads

What it is
Move selected drum notes between pads within a track.

Where
SEQ (Drum) → GUI Arrows or Transformation Keypad

Use

1. Select one or more trigs.

2. Press the GUI **Up/Down** arrows or use **SEQ Keypad → Transformations → Shift**.

3. Notes on **Pad 1** shifted **Up** move to **Pad 2**, etc. (wrapping follows track pad order).