Tiptop Audio — Z8000

[Z8000 Matrix Sequencer Manual (PDF)](#)

Using the Tiptop Audio Z8000 Matrix Sequencer to Build Full-Length Eurorack Songs

The Z8000 Matrix Sequencer is an exceptionally flexible modulation and pitch sequencer that can act as the backbone for song structure, variation, and modulation in a Eurorack setup. While building satisfying "loops" for beats, basslines, or melodies is relatively easy, arranging these into a cohesive, evolving full-length song requires planning, modulation, and control over structure. Here's how to leverage the Z8000 and some patch ideas to achieve that:

Key Features for Song Arranging

From the manual: - **Ten Sequencers:** 8x four-step (horizontal A/B/C/D; vertical 1/2/3/4), 2x sixteen-step (one horizontal, one vertical). - **Dedicated CV, Clock, Reset, and Direction inputs for each sequencer. - Programmable step direction and reset allow dynamic sequence manipulation. - Polyrhythmic capability via clocking sequencers at different rates. - CV range (0-5V or 0-10V), useful for direct VCO pitch or modulation targets.**

Song Creation Tactics

1. Parallel Melodic/Modulation Lanes for Sections

Use the Z8000's multiple sequencers to create "lanes" that represent different song sections or parts (e.g. verse, chorus, bridge): - Assign one sequencer (say, horizontal 16-step) for your main melody and another (vertical 16-step) for bass or rhythm. - Use clock modulation (clock divider/multiplier modules like Pamela's New Workout or Tempi) to "advance" the sequences at different speeds, lining up for certain bar structures.

2. Morphing and Modulation

- Use CV outs not just for pitch but for modulating filter cutoff, VCA levels, reverb/delay parameters, or wavetable positions.
- For evolving patches, patch a sequencer to the clock or direction input of another sequencer—making sequence directions switch for morphing variations, or altering "which" sequence is active.
- Feed a sequence output into the modulation input of a quantizer (like Tiptop's QuantiZer) for key/scale changes per section.

3. Manual and Automated Resets for Structure

- Use manual gates (e.g. via controller, MIDI-to-CV, or performance button module) or sequence-based triggers to send resets to certain sequencers at section changes.
- Automate resets for song structure by using a clock divider to send a reset pulse every 32 bars, causing the sequencer to return to step 1, creating cycles aligned with verse/chorus.

4. Duck, Drop, and Return

- Use sequencer gates or steps to automate muting: patch CV to VCAs controlling drum or melodic voices, bringing parts in and out automatically to structure the arrangement.

5. Polyrhythmic & Polyphonic Song Progression

- By running horizontal and vertical sequences at different clock rates, long non-repeating patterns are possible. This makes your song naturally cycle and evolve over minutes, ideal for ambient, IDM, techno, etc.

6. Switch and Blend Sequences

- Use sequential switches (like Doepfer A-151 or Livestock Maze) to select which sequencer CV stream is routed to a particular voice during a section.
- Patch one row/column sequence as a control for the clock or reset of another, creating dynamically shifting patterns—perfect for evolving sections or breakdowns.

7. Performance - Live Variation

- Use manual triggers for reset/direction during performance to move between predefined "sections" or jump to a breakdown by reversing direction or resetting a sequence.

8. Master Clock Sync

- Keep all sequences locked to a master clock, possibly from an external DAW or drum machine, ensuring tight arrangements and easy transition into/out of Eurorack jams.

Example Song Structure Patch

- **Verse:** Simple bass pattern from CV1, melody from CVA, both sequencers clocked at base rate.
- **Chorus:** At bar 17, send reset to vertical 16-step sequencer (via Pamela's), change melody to CVB, add modulation to filter cutoff via CVC, increase drum density by clocking sequencer 2 at double speed.

- **Breakdown:** Remove main drums by automated VCA muting, bring in modulation lane to modulate FX, reverse direction of primary bass sequence.
- **Outro:** Fade out sections by sending resets and stopping clocks.

Supporting Modules (Suggestions)

- **Clock Divider/Multiplier/swing generator:** Pamela's New Workout, 4ms QCD, etc.
- **Quantizer:** Tiptop QuantiZer, Intellijel Scales.
- **VCAs/Matrix Mixer:** For dynamically muting/mixing voices.
- **Switches:** Doepfer A-151, Livestock Maze, or similar.
- **Logic/Trigger Management:** For combining gate/reset signals for structure.

Final Tips

- **Label and color-code your patch if doing a long set—mapping 10 simultaneous sequences gets confusing!**
- **Think of song structure in terms of openings (reset/direction/clock change), build-ups (add sequencers/layers), drops (muting/polyrhythm/clock change), and variation (switching modulation targets).**
- **Record CV/gate changes or perform them live for added variability and a "human" feel to arrangements.**

Generated With Eurorack Processor