Xaoc Devices — Batumi

- Manual PDF

Xaoc Devices Batumi II + Poti II Official Manual (PDF)
(Based on the images provided and referencing the official documentation)

Using Batumi II for Hyper-Complex Percussive & Rhythmic Eurorack Patches

Xaoc Devices **Batumi II** is an extremely powerful and flexible tool for generating and modulating complex rhythms and polyrhythms. While not a sound source on its own, its LFOs—capable of running into audio rates and tracking 1V/oct—make it an expansive modulation hub for percussion and rhythm-based eurorack systems. Adding the **Poti II** expander multiplies the creative possibilities.

Below are strategies to leverage Batumi II for intricate rhythmic and percussive music:

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1. Polyrhythmic Clock Generation

- **Divide Mode:**
- Set channel A to your base clock (e.g., 120 BPM / 2 Hz).
- Use channels B, C, and D in **divide mode** to output subdivisions like /3, /5, /8, etc (non-standard, polyrhythmic ratios).
- Patch Batumi II's **RECT outputs** into percussive voice trigger/gate inputs.
- **Mult Mode:**

- Conversely, assign B, C, D to **multiply** A's rate, creating complex interlocked rhythms (e.g., channel A = quarter notes, B = eighths, C = dotted eighths).
- **Creative resets:**
- Periodically reset channels independently via external triggers for evolving, phase-shifting patterns.

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2. Complex Time Signatures & Pattern Evolution

- **Phase Mode:**
- Lock all LFOs to A’s frequency.
- Use the PHASE sliders (and CVs for modulation) on B, C, D to set non-orthogonal phase angles (e.g., B at 90°, C at 150°, D at 270°). This causes outputs to trigger at mathematically interesting offsets within A’s cycle.
- Use phase-modulated RECT or “asgn” (assignable) outputs to clock different drum modules or envelopes.
- Add random or CV sequencing to phase sliders to mutate polyrhythms.
- **Random Waves:**
- Assign stepped or smooth random waveforms to one or more outputs. Use the resulting (sample & hold-esque) rhythms to trigger or modulate percussion for “non-repeating” beats.

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3. Creating Unique, Punchy & Percussive Modulations

- **Audio-Rate LFOs:**
- Crank Batumi II into audio range and use its outputs as oscillators to feed drum voices’ pitch or timbral parameters for metallic or FM percussion.
- **Wave Morphing (with Poti II):**

- Use Poti II CV inputs to morph the assigned waveform (asgn) or to perform wavefolding on sine outputs (great for snappy, clangorous percussive CV).
- Modulate the RECT output's pulse width per channel for punchy, variable-width triggers—essential for dynamic "swingy" clocks or velocity-mapped gates.
- **Attenuation:**
- With Poti II, carefully attenuate outgoing CV to sculpt the intensity of envelopes, filter sweeps, or FM amounts for percussive voices.

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4. Advanced Techniques for Hyper-Complexity

- **Stacking/Combining Outputs:**
- Mix or logic-OR multiple RECT outputs (via OR combiner/module) to generate unpredictable composite trigger streams—ideal for glitch/noise hi-hats or fills.
- **Tempo Sync & Tap Tempo:**
- In "Sync" mode, lock complex polyrhythms to an external clock, DAW, or modular sequence so that your hyper-rhythmic patterns always follow master tempo but mutate per your slider/CV settings.
- **Evolving Mutations:**
- Use slow random or phase-shifted LFOs to modulate percussion processing parameters (e.g., VCA, filter, distortion, effects sends for each percussion module).

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5. Example Patch Ideas

Polyrhythmic Drum Sequencer: - Channel A RECT: Kick drum trigger (1:1) - Channel B RECT (Divide by 3): Snare drum trigger (for a 4:3 polyrhythm) - Channel C RECT (Divide by 5): Hi-hat or rimshot trigger - Channel D stepped random: Percussion sample trigger for "aleatoric" sequence

Evolving Percussive Groove: - Channel A: Master clock (triggers all others) - Channels B, C: Phase mode, sliders modulated by slow LFOs/random - RECT outputs to drum triggers - SINE/ASGN outputs to modulate drum decay/filter envelopes

Glitch Generator: - Stack all four RECT outputs into a logic OR (use a logic module) - Use the combined “hyper-fast” clock for glitchy percussion or a stuttering effect

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More Tips:

- Combine Batumi II outputs with step sequencer gates for even more complex, humanized rhythms.
- Patch rectified (RECT) outputs into slew/lag processors for variable-length envelope triggers.
- Use Batumi II as a source of polyphonic cycling envelopes to modulate distortion or reverb parameters in sync with your percussion.

Batumi II is not a sound source, but a rhythm architect. Think of it as four modular “heartbeat brains” that can phase, multiply, divide, randomize, and pulse your system into unprecedented rhythmic territories.

Manual PDF:
https://xaocdevices.com/manuals/xaoc_batumi_ii_manual_ENG.pdf
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