Robaux — DCSN-3

- Manual PDF

Robaux DCSN3 Decision Tree Manual (PDF)

Generating Densely Rhythmic & Hyper-Complex Percussion with the Robaux Decision Tree (DCSN3)

The **Robaux DCSN3 Decision Tree** is a super versatile tool for anyone wanting to push into polyrhythmic, complex rhythmic, and densely layered modular territory. Here's how you can use it to create intricate, unpredictable percussion patterns and evolve your rhythmic palette with maximum modular creativity:

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1. Polyrhythms and Complex Time Signatures

2/3/5 Divider Mode

- **Activate**: Set the knob `o` to center.
- **Exploit the Triple Division Banks**:
    - **Outputs B, E, F, G**: divisions of 1/2, 1/4, 1/8, 1/16
    - **Outputs C, H, I, J**: divisions of 1/3, 1/6, 1/12, 1/24
    - **Outputs D, K, L, M**: divisions of 1/5, 1/10, 1/20, 1/40
- **How to Use**: Patch different divider outputs to trigger different parts of your modular percussion setup (kick, snare, hats, extra percussions, samples, envelopes on noise, LPG plucks, etc.)
- **Result**: This instantly generates complex polyrhythms—1/3 and 1/5 are not simple subdivisions, making for constantly evolving, phase-shifting, and cross-rhythmic sequences.

Spread Mode

- **Activate**: Turn knob `o` fully right.
- **Endless Subdivisions**: Outputs provide clock divisions like 1/2, 1/3, 1/4, 1/5, 1/6, 1/7, 1/8, 1/9, 1/10, 1/11, 1/12, 1/13, etc.
- **Patch Suggestion**: Assign lower divisions (1/2, 1/3, 1/4) to main percussion, high divisions (1/7, 1/9, 1/13) to auxiliary sounds or subtle CV modulations.
- **Pro Tip**: Layering outputs with prime number relationships (e.g., 1/7, 1/11, 1/13) injects an uncopiable, mathematically hyper-complex groove into your patch.

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2. Chaotic & Dynamic Percussion Patterns

Random Modes (Mono/Poly/Latch)

- **Modes**: Mono/Mono, Poly/Mono, Poly/Poly, and their “Latch” variants (hold gates until next trigger)
- **Dynamic Distribution**: Feed a fast clock or a sequence of gates to input `a`, then set randomness using knob `n` (fully counterclockwise = most random, clockwise = 16-step repeatable "memory").
- **Routing**: Outputs B, C, D each split further into EFG, HIJ, and KLM.
- **Percussion Network**: Send each of the 9 suboutputs to a different drum module, percussive synth voice, envelope, LPG pluck, or even a sample player.
- **Result**: A robotic “conductor” that creates permutations of drum patterns, creating generative IDM, glitch, or polymetric polyrhythms automatically.

Switching Random/Repeatability

- Press `o` to quickly generate a new random sequence; sweep `n` to morph between pure chaos and locked step-based repetition. Automate this knob for rhythmic "mutation."

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3. Using as an Effect or Percussive Voice Source

Creative Gating & Randomized Audio Rate Effects

- Feed audio-rate oscillations (square waves) instead of clocks to the input—the divider modes output wild subdivided square waves (great for digital percussive clangs, metallic FM, or clocked modulation → event granulator FX).
- Patch to LPGs or VCAs: Use each output to envelope audio (noise bursts, metallic pings, samples) for "sputtery," highly detailed rhythmic percussive layers.

Glitch, Cuts, and Percussive Gater

- In Latch modes, a gate stays open until next input—use this to freeze-glitch samples or stutter percussion.
- Try sending DCSN3 outputs to CV control “mute” or “send” parameters on effects (distortion, delay, ring mod, filters); the random/latch switching creates evolving FX rhythms.

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4. Extra Complexity Tips

- **Hidden Reset Jack (M):** Patch external gates here to force a return to step 1 (excellent for live fills, breakdowns, or precise polyrhythmic resets).
- **Debug Mode LED Chaser:** Use it to test/visualize outputs when building a complex percussion network.

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5. Example Advanced Patch Concepts

1. **IDM Drum Madness**
2. Input: Fast clock to input A
3. Mode: Poly/Poly + Latch
4. Outputs E, F, G: Kick, Rim, Snare triggers
5. Outputs H, I, J: Noise LPG hits, sampled glitch, hi-hat
6. Outputs K, L, M: CV send to randomize pitch, filter, sample start/end (modulate parameters, not audio triggers)

7. Periodically generate new pattern with “o” button
8. **Techno Polyrhythm Machine**
9. Input: 16th-note clock, or syncopated rhythm from another module
10. Mode: 2/3/5 Divider
11. Assign fast divides for main groove, long divides to CV modulate effect sends or bass decay for rolling, ever-shifting complexity
12. **Meta-Sequencer**
13. Use DCSN3 as clock divider and random pattern source, feed its outputs into probability gates, logic, or sample & hold to generate even more unpredictable, but structured, rhythm sources.

In Summary:

- **Mix divider outputs for polyrhythms**
- **Morph between random & repetitive**
- **Use latch for holds, freeze FX**
- **Explore audio-rate gating for digital percussion**
- **Sequence more than drums—modulate anything for evolving patching**

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