

# Cute Lab – Messed Up

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- [Manual PDF](#)
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[View the MessedUp Module Manual \(PDF\)](#)

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## Creating Hyper-Complex Percussion with MessedUp

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As a Eurorack musician seeking intricate, evolving rhythms, **MessedUp** is an invaluable module. It's designed specifically for metric modulation, polyrhythms, and non-standard clock patterns, making it perfect for your goals of **densely rhythmic music** and **complex percussion**. Below is a guide for maximizing MessedUp's potential in your modular setup.

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### 1. Internal & External Clocks for Syncopation

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- **Use MessedUp as a Clock Source:** With no external clock, MessedUp generates its own, settable via tap tempo or encoder adjustment. This is great for creating a master clock with swing or non-standard rates.
  - **Sync to an External Clock:** Patch an external sequencer, LFO, or drum machine clock into MessedUp. Now, you can stretch, divide, or modulate this master signal into unexpected time realms.
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## 2. Polyrhythm and Complex Meter Generation

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### Beat & Divide Controls

- **Beat** = Your “measure” length (e.g. 4 for 4/4 feel, 5 for quintuplets, etc.)
- **Divide** = Number of clock pulses spanned/played in that “measure.”

**Classic Polyrhythm Example:** - Set **beat** to 4 and **divide** to 3 → Output a 3-against-4 rhythm (triplets over quarter notes). - Reverse for 4-against-3 (divide 4, beat 3) or explore any non-integer relationship for hypercomplex rhythms (e.g. beat 7, divide 5).

### Truncate Output

- Adds *syncopation* by chopping the divide output at variable places in the measure. Sweep the truncate knob or modulate via CV for evolving, offset rhythms that land in unpredictable places within the cycle.

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## 3. Metric Modulation for Tempo Shifts & Temporal Distortion

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- **Modulate Button/Input:** Instantly stretch or compress the output clock by the current ratio (e.g.,  $120 \text{ BPM} \times 4/3 = 160 \text{ BPM}$ ). Great for live “time-warp” effects or compositional pivot points.
- **Round Trip/One Way:** Choose whether you want modulation to bounce back to normal, or recurse deeper into tempo labyrinths.

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## 4. Latch & Cue, Stay in Sync

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- **Latch beat/divide encoders** to the downbeat—changes snap in on the “1,” preserving phase relationships and maximizing funkiness and compositional control.

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## 5. Complex Time Signatures

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- **Go Beyond Standard Meter:** Set beat or divide to prime numbers (5, 7, 11), or highly composite numbers for shifting groupings (e.g. beat=12, divide=7 for a 7 over 12 groove).
  - Use **configuration menu** to fine-tune PPQN, duty cycle, and reset behavior, for fitting MessedUp to unusual gear or external logic.
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## 6. Patch Ideas for Hyper-Complex Patterning

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- **Percussion Modulator:** Feed MessedUp's outputs (*divide*, *truncate*, *beat*) into drum triggers, logic gates, or sample players. Each output gives you a mathematically related pattern.
  - **Sequencer Drive:** Use odd beat/divide combos to create shifting downbeats on sequencers or arpeggiators, creating patterns that only realign after many measures.
  - **Live "Time DJ":** Modulate live, flip between round trip/one way, and dynamically change beat/divide for ever-evolving polymeters. Use EoM (End of Modulation) output to trigger fills, FX, or scene changes in sync with metric modulations.
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## 7. CV Modulation for Algorithmic Funk

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- Patch random, stepped CV, envelopes, or another rhythmic source into **beat**, **divide**, or **truncate** CV inputs. Use the attenuverter for depth and direction. This makes your polyrhythms evolve in controlled or chaotic ways, generating "algorithmic" density and mutation.
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## 8. Presets & Performative Recall

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- Save setups (tempo, ratios, latch states) in one of nine presets for instant switch-ups during performance or composition.
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### Further Inspirations:

- Explore metric modulation techniques (see manual appendix), inspired by contemporary composers for mind-bending time feels.
  - Use the **truncate** output to “break” up static patterns for unexpected funk and glitch.
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## Summary Table: Outputs for Percussion Channels

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Output	Use For	Complex Pattern Ideas
Beat	Main clock, snare, hats	Odd beat length = shifting grooves
Divide	Kicks, toms, secondary drums	Prime divisions = never-repeating accents
Truncate	Clave, rim, syncopated triggers	CV-modulated = constantly morphing syncopation
Downbeat	Phrase markers, fills	Keeps structure amidst chaos
EoM	FX triggers, resets	Used on metric modulation for time-warp effects

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# References

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- [MessedUp Manual \(PDF\)](#)
- [Generated With Eurorack Processor](#)

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Feel free to experiment wildly—the combinatorial depth of *MessedUp* for polyrhythms and time manipulation is nearly inexhaustible.