2hp — Brst

- Manual PDF

Brst Manual PDF

Using the 2hp Brst for Complex Rhythmic Percussion & Polyrhythms

The 2hp Brst is not a sound source or effect itself—it's a **voltage controlled burst generator and trigger delay**. Its power lies in creating trigger streams in rapid, customizable, and controlled bursts, making it an exceptional utility for **advanced rhythmic creation**. Here's how you can leverage it to construct hyper complex percussion and polyrhythms:

Core Techniques for Dense Rhythmic Patterns

1. Polyrhythmic Trigger Layers

- **Patch** one or more Brst units to drum or percussive modules' trigger inputs (e.g. kick, snare, hats, metallic noise, etc.).
- Use **different PULSES and RATE settings** per Brst, so that each drum voice gets a different burst rhythm. This naturally generates superimposed, interlocking rhythms (polyrhythms), especially when you send them triggers divided or multiplied from your main clock.

2. Complex Time Signatures & Ratcheting

- Use an external sequencer or clock divider as the source for TRIG input.

- Manipulate the **PULSES knob/CV** for odd numbers (e.g. 5, 7, 11) to inject bursts corresponding to tuplets and unusual subdivisions.
- Vary the **RATE knob/CV**, especially using CV modulation via step sequencers or random sources, so each burst can have evolving speed and feel (ratcheting).

3. Hyper-Percussive Pattern Generation

- Combine Brst bursts with other rhythmic modules (Euclidean sequencers, logic modules, clocked LFOs).
- Use **envelope followers or random stepped voltages** patched to RATE CV or PULSES CV for organic, shifting percussive patterns.
- Stack Brst outputs via logic OR combiners to make composite triggers for layered sounds.

Advanced Usage: Manipulation & Sonic Tips

Uniqueness & Punch

- Since Brst only creates triggers, combine with envelopes and **VCAs** to sculpt the attack and decay of percussive sources for extra punch.
- Alternate PULSES and RATE ranges between very short bursts (staccato blips) and slower flurries for rhythmic contrast and dynamic buildup.
- Use the TRIG TOGGLE creatively:
- Include the initial trigger for tight "ratchet-like" sounds.
- Omit to shift the burst onset for syncopated, more humanizing feel.

Humanizing Rhythms

- Slightly modulate the RATE CV input with slow LFOs or sample & hold modules to add micro-timing fluctuations.
- Use attenuated random sources (e.g. Wogglebug, Turing Machine) for "groove" or swing in trigger timing, making machine rhythms feel more "played."

Percussion Not Possible with a Plain Clock

- Brst excels at molding generic clock triggers into rolling bursts—perfect for simulating realistic drum rudiments (rolls, flams, ghost notes) with only simple trigger outputs.
- Insert Brst into hi-hat or snare lines to add "machine gun" effects or detailed ghost note patterns impossible by hand or with plain clocking.

Chaining & Layering

- Chain two Brst modules: feed output of one into the TRIG input of another for **nested bursts** and even more complex cascades.
- Interleave Brst outputs with probabilistic gates (Mutable Branches, Doepfer A-150, etc.) to enhance randomness and variation.

Example Patch

Goal: IDM/Glitch Drums With Dense Polyrhythms
- Clock source → Brst TRIG
- Brst OUT → Snare drum's trigger
- Modulate Brst's PULSES CV with stepped random
- Modulate Brst's RATE CV with clock-synced LFO
- Main clock / 2 → Hi-hat
- Second Brst with different settings for rimshot/woodblock
Result: Polyrhythms and glitchy rolls interplay with regular patterns.

Further Expansion

- Mult Brst OUT to trigger multiple percussion modules at once for dense, coordinated bursts.
- Sequence RATE and PULSES CVs for evolving, morphing percussive textures through a performance.

Generated With Eurorack Processor