2hp — Brst

- Manual PDF

Manual PDF

Brst — using it for melodic components

Brst is **not a pitch/CV sequencer by itself**. It's a **burst generator / trigger delay** that turns one trigger or gate into a fast series of triggers. That means its melodic usefulness comes from how it **drives other modules**:

- sequencers
- sample & hold
- quantizers
- envelopes/LPGs
- clock dividers/multipliers
- switches
- logic
- trigger-to-gate or trigger-to-envelope utilities

So for melody, think of Brst as a module that creates **repeated note events, ratchets, grace notes, strums, arpeggio-like trigger clusters, and delayed re-articulations**.

What Brst does

From the manual:

- **TRIG input** starts a burst when it receives a trigger/gate
- **PULSES** sets how many triggers are generated
- from **1 to 32**

- **RATE** sets the time between triggers
- about **10 ms to 500 ms**
- **PULSES CV** and **RATE CV** let you voltage-control those two parameters
- **TRIG toggle**:
- **left** = include the initial trigger
- **right** = omit the initial trigger
- **OUT** emits the burst as **0–5 V triggers**

This makes it especially good for: - ratcheting one note into many attacks - creating repeated sampling events - stepping a sequencer multiple times from one master clock - making a melody “flutter” or “bounce” - delayed note echoes in trigger form

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Best ways to use Brst for melodic music

1) Ratcheting a sequenced melody

Patch

- Send your main rhythm trigger or sequencer gate to **Brst TRIG**
- Send **Brst OUT** to the envelope or LPG that opens your melodic voice
- Keep your pitch sequence going from another sequencer into the oscillator pitch input
- Adjust:
- **PULSES** for number of ratchets
- **RATE** for ratchet speed

Result

Each note in your melody can fire multiple times quickly, creating: - trance-style ratchets - IDM stutters - ornamented melodic phrases - repeated plucks on a single pitch

Musical use

This is the most direct melodic use: - same pitch, multiple articulations - great for plucks, FM bleeps, acid lines, and arpeggio voices

Tip

Use the **TRIG toggle left** to include the first hit immediately, then the extra repeats follow.

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2) Burst-clocking a sequencer for fast melodic runs

Patch

- Main clock or manual trigger into **Brst TRIG**
- **Brst OUT** into the **clock input of a sequencer**
- Sequencer pitch CV into oscillator 1V/oct
- Envelope/VCA triggered either:
- by the same **Brst OUT**, or
- by a separate gate source

Result

One incoming trigger can advance the sequencer several steps very quickly, producing: - mini arpeggios - melodic fills - fast ascending/descending runs - pseudo-strums if the sequencer has chord-related voltages

Why this works

Brst effectively turns one musical event into **multiple sequencer advances**.

Tip

If you modulate **PULSES CV**, some notes create short runs and some create long runs. That gives phrases more expression.

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3) Quantized sample-and-hold melody generator

This is one of the strongest melodic pairings.

Patch

- Noise, random CV, or slow modulation source into **Sample & Hold input**
- **Brst OUT** into **Sample & Hold trigger**
- Sample & Hold output into **Quantizer**
- Quantizer output into oscillator 1V/oct
- Use the same **Brst OUT** or a derived gate to trigger your envelope

Result

Each burst creates several new quantized notes in quick succession: - random melodic flourishes - clustered ornamentation - “bouncing ball” melodies - generative lead lines

Tip

- Slow **RATE** = clearly separated melodic notes
- Fast **RATE** = clustered trills or grace-note runs
- Low **PULSES** = subtle ornamentation
- High **PULSES** = long random cascades

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4) Arpeggio-style phrases from sequential switching

If you have a switch or sequential switch, Brst gets very musical.

Patch

- Feed several fixed voltages or pitch CVs into a sequential switch
- Clock the switch with **Brst OUT**
- Switch output into a quantizer or directly to oscillator pitch if tuned
- Trigger your envelope from **Brst OUT**

Result

A single trigger produces a rapid sequence of different pitches: - chord strums - arpeggiated bursts - broken chord ornaments - harp-like plucks

Great source material

Put into the switch: - root / third / fifth / octave - notes from a chord - different rows of a sequencer - transposition voltages

This turns Brst into a **melodic phrase generator**.

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5) Delayed melodic echoes

Because Brst can omit the initial trigger, it can act like a trigger delay with repeats.

Patch

- Send your main melody gate to **Brst TRIG**
- Set **TRIG toggle right** to omit the initial hit
- Use **OUT** to trigger a second envelope/voice or re-trigger the same voice

Result

You get: - delayed note repeats - ghost notes - call-and-response attacks - melodic shadows

Especially effective with

- two oscillators tuned in intervals
- a second voice an octave up/down
- filtered echoes from a parallel voice

Instead of audio delay, you get a **compositional trigger delay** that can generate new melodic articulations.

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6) Ornament generation for sustained notes

Patch

- Main gate opens a long envelope on a voice
- Same gate also goes to **Brst TRIG**
- **Brst OUT** triggers:
- a second short envelope to FM index,
- a wavefolder CV accent,
- filter pings,
- or a VCA on a parallel voice

Result

The pitch may stay constant, but the burst adds melodic-style embellishment: - mordents - trills - flutter-tongue effects - repeated accenting on the note

This is useful when “melodic component” means not only changing pitch, but adding **expressive note structure**.

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7) Using Brst to create trills between two pitches

If you have a switch, logic-controlled transposition, or dual pitch source:

Patch idea

- Main pitch CV goes to oscillator
- A second interval voltage is available, such as +2 semitones or +7 semitones
- Use **Brst OUT** to toggle a switch between the base pitch and interval pitch
- Also use a related trigger to articulate the note

Result

One note becomes a fast alternation: - trill - mordent - alternating dyad gesture - baroque-style ornament

Brst is excellent for this because the **rate** is controllable and can be CV-modulated.

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8) Humanizing or varying melodic clocks

The manual specifically mentions humanizing a clock signal. For melody, that means:

Patch

- Main clock/gate into **Brst TRIG**
- Use low **PULSES** and moderate **RATE**
- Feed **OUT** to a sequencer clock or auxiliary melodic event

Result

Instead of every melodic step being equally plain, some steps have: - extra ticks - repeated notes - little rushes - phrase-ending fills

This is great in generative patches where a melody feels too rigid.

Voltage control strategies for melodic use

PULSES CV

Use this to vary how many notes/articulations a phrase produces.

Good modulation sources: - slow random CV - sequencer row - envelope - keyboard velocity/mod wheel if interfaced - another rhythmic modulation source

Musical effect

- some notes are single hits
- some are double/triple ratchets
- some become long flourishes

This adds **phrase hierarchy**.

RATE CV

Use this to vary the spacing of repeated notes.

Good modulation sources: - random stepped CV - LFO - envelope for accelerating/decelerating burst feel - sequencer accent row

Musical effect

- fast grace notes on some steps
- slower echoed notes on others
- changing density across a phrase

This is one of the easiest ways to make Brst feel alive.

Concrete melodic patch recipes

Patch 1: Simple ratcheted lead

Needs: pitch sequencer, oscillator, envelope, VCA

- Sequencer pitch CV → oscillator 1V/oct
- Main gate pattern → Brst TRIG
- Brst OUT → envelope trigger
- Envelope → VCA CV
- Oscillator → VCA → output

Settings - TRIG toggle left - PULSES: 2–5 - RATE: fast

Sound A lead line where selected notes repeat rapidly.

Patch 2: Random burst melody

Needs: noise/random source, sample & hold, quantizer, oscillator, envelope

- Random CV/noise → S&H input
- Brst OUT → S&H trigger
- S&H out → quantizer
- Quantizer out → oscillator 1V/oct
- Brst TRIG fed from a slow clock or manual gate
- Brst OUT → envelope trigger

Sound Each trigger creates a little cluster of quantized notes.

Patch 3: Chord strum

Needs: sequential switch or multiple fixed pitch voltages, quantizer optional

- Several tuned voltages or chord tones → switch inputs
- Brst OUT → switch clock/advance
- Switch output → oscillator pitch
- Main gate → Brst TRIG
- Brst OUT → envelope trigger

Sound One trigger strums through chord tones like a harp or guitar rake.

Patch 4: Sequencer fill generator

Needs: step sequencer, oscillator, envelope

- Master clock or fill trigger → Brst TRIG
- Brst OUT → sequencer clock
- Sequencer CV → oscillator pitch
- Brst OUT → envelope trigger

Sound Instead of one note, a single event makes the sequencer run through several notes quickly.

Great for: - phrase endings - transitions - fills between bass notes

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Patch 5: Delayed octave echo

Needs: 2 voices or one voice with transposition path

- Main melody gate → voice 1 envelope
- Same gate → Brst TRIG
- TRIG toggle right
- Brst OUT → voice 2 envelope
- Voice 2 tuned one octave above or fifth above

Sound Each note gets a delayed answering note above it.

Performance ideas

Manual triggering

Brst is very playable when fed from: - a manual gate button - keyboard gate - pressure pad gate - gate sequencer accents

You can use it to inject: - trills - fills - grace-note bursts - sudden arpeggios

Accent-based use

Instead of sending every note to Brst, only send: - accented steps - every 4th bar trigger - end-of-sequence trigger - probability-generated gates

That keeps the melodic bursts special.

Modulate only one parameter at a time

For musical clarity: - modulate **PULSES** if you want varying phrase length - modulate **RATE** if you want varying urgency - modulate both only if you want chaos

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Important limitations

Brst does **not** itself produce pitch CV. So to make truly melodic material, pair it with at least one of these:

- quantizer
- sequencer
- sample & hold
- precision adder/transposer

- sequential switch
- oscillator/envelope voice

Without those, Brst only creates rhythmic trigger structures.

But in a Eurorack system, that's often exactly what turns static pitch material into something musical and expressive.

Best musical roles for Brst in a melody-focused rack

Brst is especially strong as a:

- **ratchet generator** for sequenced notes
- **ornament generator** for trills and grace notes
- **burst clock** for fast sequencer runs
- **random melody trigger source** for S&H + quantizer patches
- **strum engine** for chord tone switching
- **delayed re-trigger tool** for echoes and call-response phrasing

If your system already has pitch sources, Brst adds the **articulation layer** that makes melodies feel less static.

Bottom line

Brst is best understood as a **melodic event multiplier** rather than a melody source. It takes one trigger and turns it into a cluster of note opportunities. When combined with sequencers, quantizers, switches, or sample-and-hold, it can produce:

- ratchets
- trills
- grace notes
- arpeggiated runs
- chord strums

- delayed melodic echoes
- generative note cascades

In short: **Brst adds phrasing, ornamentation, and motion to melodic patches**.

Generated With Eurorack Processor