2hp — Tape

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2hp Tape Stop: using it to turn loops and patterns into full-length songs

The **2hp Tape Stop** is a **performance transition and phrasing module**. On paper it's "just" a clock-synced tape-stop effect, but in a song-building context that is exactly what makes it valuable: it gives you a **repeatable, musical way to mark sections, create tension, reset energy, and signal arrangement changes**.

A lot of modular patches get stuck at the "cool 8-bar loop" stage because everything is always on, always cycling, and changing too continuously. Tape Stop helps because it creates **clear, section-defining events**: - intros - breakdowns - transitions - fills - fake endings - drops - outros

It is especially useful because it can be: - **manually performed** with the Trig button - **gated from other modules** via the Trig input - **clock-synced** so the slowdown length matches the structure of your patch - **CV controlled** with the Lag CV input - used in **momentary or latching** mode - set to **50/50 dry/wet at boot**, which makes it much more arrangement-friendly

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What the module does, in practical musical terms

From the manual:

- **Audio in/out**: 10 Vpp
- **Clock input**: syncs tape-stop timing to external clock
- **Trig button / Trig gate input**: starts the tape-stop effect
- **Lag knob**: sets stop length from instant to 4 seconds, or clock divisions/bars when clocked
- **Lag CV**: modulates stop length
- **Momentary vs latching toggle**:
- **momentary** = effect lasts while held/gated
- **latching** = one trigger starts, another stops
- **50/50 mode on boot**: hold Trig while powering on for dry/wet blend of 50%

This means Tape Stop can behave as: 1. a **live DJ-style brake effect** 2. a **bar-length transition tool** 3. a **section marker controlled by sequencer gates** 4. a **dynamic send effect** when combined with mixers/VCAs 5. a **structural disruption device** that makes repeating material feel arranged

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Why Tape Stop is good for song structure

A full song usually needs: - **contrast** - **phrasing** - **section boundaries** - **energy management** - **returns** - **moments of surprise**

Tape Stop is not a composition module by itself, but it is excellent at creating **boundaries between sections**. In a modular system, these boundaries often matter more than adding yet another oscillator or sequencer.

Think of it like this:

- Your sequencers and voices make the **content**

- Your mixers, VCAs, switches, and mutes make the **arrangement**
- Tape Stop makes the **transitions feel intentional and musical**

A repeated pattern becomes a “verse” or “chorus” when it is **introduced, interrupted, paused, dropped, or resumed in a controlled way**. Tape Stop gives you a very recognizable language for doing that.

Best roles for Tape Stop in a song

1. End-of-phrase transition

Patch your full drum bus, melodic bus, or full mix through Tape Stop and trigger it every: - 4 bars - 8 bars - 16 bars

This creates a recurring structural cue. Even if the pattern content is almost unchanged, listeners perceive a larger arrangement.

Example

- 16-bar groove plays normally
- on bar 16, Tape Stop slows the entire drum bus for an 8th or quarter note
- bar 17 comes back with:
- open filter on bass
- hi-hats added
- new melody transposition

That one tape-stop event tells the ear: **“new section.”**

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2. Breakdown generator

Instead of muting everything abruptly, use Tape Stop on: - full mix - drum bus - melodic bus - sampler loop bus

Then bring back only selected parts.

Example breakdown flow

- Full groove playing
- Trigger Tape Stop on the whole mix for a half-note or whole-note stop
- During the slowdown:
- mute kick
- leave reverb tail
- bring in pad drone
- Restart only bass + pad
- Reintroduce drums 8 bars later

This works because Tape Stop provides a **musical deceleration**, not a hard mute. That makes the arrangement feel composed rather than patched.

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3. Fake ending / restart

A great song trick in modular is making the audience think the piece is ending.

Patch idea

Run the master bus through Tape Stop in **latching mode**.

At the apparent “end”: - trigger Tape Stop with a long lag (whole note, 2 bars, or 4 bars if clocked) - simultaneously reduce other voices via VCAs or mutes - let the sound collapse - then relaunch clocked material with a new variation

This creates: - tension - drama - a “second act” - room for a new melody or denser percussion layer

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4. Transitional fill substitute

If your system lacks dedicated drum fill modules or probability logic, Tape Stop can function as a fill event.

Instead of adding more notes, create variation by **interrupting time itself**.

Example

Every 8 bars: - tape-stop the drum bus for a 16th or 8th - at the same moment: - switch to alternate snare pattern - advance sequencer to a new page - transpose bass line

This is especially effective for techno, electro, synthwave, ambient breaks, and live improvised sets.

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5. Intro/outro builder

Many modular pieces start too suddenly and end too abruptly. Tape Stop can help both.

Intro

Begin with: - only texture, pad, or noise - a loop or melodic fragment through Tape Stop - repeated momentary stops synced to clock

This gives a “warped startup” feel before the beat fully appears.

Outro

At the end of the song: - send entire mix through Tape Stop - trigger progressively longer lag values - remove percussion layers underneath - let delays/reverbs decay - final long stop = ending

This produces a much more convincing ending than simply muting the master.

How to combine Tape Stop with other modules to build songs

The manual itself suggests pairings with: - **2hp Lo-Fi** - **2hp Play** - **2hp VCA** - **2hp Loop**

Those are all useful arrangement partners. More broadly, here is how to combine Tape Stop with common Eurorack categories.

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1. With sequencers: create section changes

Use a sequencer, trigger sequencer, or gate sequencer to send triggers to Tape Stop at specific phrase lengths.

Good partners

- trigger sequencers
- clock dividers
- Euclidean sequencers
- sequential switches
- song mode sequencers
- gate programmers

Song use

Program Tape Stop triggers only at: - end of bar 8 - end of bar 16 - just before chorus/drop - final bar before breakdown

This gives your patch a **macrostructure**.

Strong technique

Use a **clock divider**: - /16, /32, /64, /128 outputs - route one division into Tape Stop trig - route another division to pattern change/reset

Now your patch has **periodic form**: - every 16 bars: transition - every 32 bars: bass pattern changes - every 64 bars: melody resets

That's the skeleton of a full song.

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2. With VCAs and mixers: control where the effect applies

This is one of the most important uses.

Tape Stop is more song-useful when you don't always put the entire mix through it. Use VCAs, mixers, aux sends, and submixes.

Put Tape Stop on:

- drum bus only
- bass bus only
- melody bus only
- sample loop only
- full mix only during major transitions

Why this matters

Full songs need **selective contrast**. If the whole patch gets tape-stopped constantly, the trick gets old. But if: - verse = melody only gets tape-stopped - pre-drop = drums only get tape-stopped - breakdown = full mix gets tape-stopped

then the effect becomes part of arrangement language.

Great patch

- mult lead synth signal
- one copy dry to mixer
- one copy through Tape Stop to second mixer channel
- use VCAs to crossfade dry/wet
- optionally engage 50/50 mode for more natural blend

This makes Tape Stop feel less like an insert effect and more like a performable texture layer.

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3. With samplers and loopers: transform loops into sections

This is perhaps the most direct path to full songs.

If you use a sampler, phrase looper, or sample player, Tape Stop can turn a repetitive loop into a staged performance.

Good partners

- 2hp Play
- 2hp Loop
- Morphagene
- Arbhar
- Bitbox
- Assimil8or
- Rossum, Make Noise, 1010music, etc.

Song use

- play a stable vocal chop, field recording, pad loop, or drum loop
- apply Tape Stop only at section ends
- restart or replace sample after slowdown
- switch sample banks during or immediately after the stop

This feels like a DJ moving between scenes or clips.

Example song arrangement

- Intro: ambient loop through Tape Stop
- Verse: drum loop enters dry
- Pre-chorus: apply short tape stop to loop every 4 bars
- Chorus: new sample loaded, no Tape Stop
- Breakdown: long tape stop on full sampled texture

- Outro: one final stop and decay

Tape Stop helps conceal abrupt sample switching and makes section handoffs sound deliberate.

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4. With clock dividers/multipliers: make transitions land musically

Because Tape Stop has a **clock input**, it can quantize its lag timing into useful musical lengths: - instant - 32nd - 16th - 8th - quarter - half - whole - 2 bars - 4 bars - 8 bars - 16 bars

This is huge for song construction.

Why

Without sync, transitions can feel arbitrary. With sync, they become part of the groove architecture.

Powerful uses

- short values for fills
- 1 bar for pre-drop brake
- 2–4 bars for breakdown entry
- 8–16 bars for ambient collapse or outro

Song strategy

Map different sections to different lag lengths: - verse transition = 8th note - chorus entry = quarter note - breakdown = 2 bars - ending = 8 bars

Now one module provides a recognizable but evolving transition vocabulary.

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5. With logic and gate utilities: automate structure

Logic modules are amazing for getting beyond loops.

Patch ideas

- use **AND** so Tape Stop only triggers when both:
- phrase reset pulse occurs
- performance gate is high
- use **OR** so either a manual button or a sequencer can trigger it
- use **probability/skipping** so some section transitions stop and others don't
- use **burst generators** to create repeated stop/release gestures

This gives you larger-form variation without manually repatching.

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6. With sequential switches: create A/B song sections

A sequential switch can move between: - two melodies - two drum patterns - two basslines - dry vs processed routing

Tape Stop is ideal for masking the moment of change.

Example

- 8 bars of pattern A
- Tape Stop on full mix for quarter note
- switch to pattern B during the slowdown
- release into new section

This is one of the best ways to create "verse/chorus" contrast in modular.

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7. With filters and envelopes: exaggerate transitions

Tape Stop gets stronger if something else changes at the same time.

During tape stop, also:

- close lowpass filter
- increase reverb send
- reduce kick VCA
- slow LFO rate
- open noise wash
- fade in drone

This makes transitions feel cinematic.

Example

At the end of 16 bars: - trigger Tape Stop on drums - trigger envelope that closes bass filter - open reverb send on lead - switch melody octave

By combining several coordinated changes, a loop becomes an arranged section.

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8. With effects chains: build distinctive song identities

The manual suggests pairing with **Lo-Fi**, which is smart: wow/flutter/noise plus Tape Stop gives an old machine aesthetic.

Other strong partners: - reverb - delay - chorus - distortion/saturation - granular processors - compressors on buses

Example chains

- **Sampler → Lo-Fi → Tape Stop → Reverb**
- nostalgic intros, degraded breakdowns

- **Drum bus → Saturation → Tape Stop**
- aggressive drop transitions
- **Pad → Tape Stop → Huge reverb**
- ambient sectional boundaries
- **Full mix → Tape Stop → Delay feedback tail**
- dramatic endings

For full songs, these combinations help each section have a distinct emotional quality.

Specific song-building patch concepts

Patch 1: Techno arrangement engine

Goal

Turn a 2–3 pattern techno patch into a 6-minute performance.

Modules involved

- kick, hats, clap voices
- bass voice
- lead/stab voice
- clock source
- clock divider
- trigger sequencer
- mixer/submix
- Tape Stop
- VCAs/mutes
- reverb/delay

Routing

- drum bus through Tape Stop
- bass and lead dry to mixer
- clock to Tape Stop clock input
- /64 pulse from divider to Tape Stop trig input
- manual override trigger button for live fills

Structure

- bars 1–16: drums and bass
- bar 16: short tape stop on drums only
- bars 17–32: add lead
- bar 32: quarter-note tape stop on full drum bus, mute kick under it
- bars 33–48: breakdown, only hats + delay lead
- bar 48: long tape stop on full mix
- bars 49–64: full drop with bass variation
- final section: progressively longer tape stops every 16 bars for outro

Why it works

You’re using Tape Stop as a recurring phrase marker, not a gimmick.

Patch 2: Ambient-to-beat evolving song

Goal

Create a piece that slowly transforms from texture to rhythm and back out.

Modules

- granular/sample source
- looping module
- melodic voice
- drum voice or soft pulse

- Tape Stop
- clock
- random CV
- VCA mixer
- reverb

Routing

- granular/loop source through Tape Stop
- drums bypass Tape Stop initially
- random stepped CV to Lag CV for changing stop length
- clock sync connected

Structure

- Intro: sparse loop repeatedly tape-stopped in momentary mode
- Mid section: melody enters dry, loop still stopping occasionally
- Beat enters after 2 minutes
- Main section: only loop bus gets stopped every 8 bars
- Breakdown: full mix through Tape Stop for 2 bars while reverb blooms
- Return: drums come back dry, loop reduced
- Outro: long synced stop on ambient bus, then silence

Why it works

The piece has directional movement because Tape Stop marks transitions between density levels.

Patch 3: Modular “verse/chorus” song

Goal

Create pop-like section differentiation.

Modules

- two melodic sequences
- bass sequence
- drum pattern A/B
- sequential switch
- Tape Stop
- utility mixer
- VCAs
- filter
- delay/reverb

Routing

- melodic sequence A/B switched by sequential switch
- drum pattern A/B switched separately
- full melodic bus through Tape Stop
- clocked lag set to quarter or half note

Structure

- Verse: sequence A, reduced drums
- Transition: tape-stop melodic bus
- Chorus: sequence B, brighter filter, fuller drums
- Transition back: tape-stop full mix briefly
- Verse 2
- Bridge: long tape stop + no kick + sustained pad
- Final chorus: all parts active
- Outro: repeated shorter stops, then final long stop

Why it works

Tape Stop becomes your “section punctuation mark.”

Patch 4: Performance sampler song

Goal

Use prepared samples/clips and make transitions feel live.

Modules

- sample player
- drums
- bass
- Tape Stop
- VCA
- cue mixer or performance mixer
- trigger controller/pads

Routing

- sample player through Tape Stop
- dry sample multed to second channel
- 50/50 mode enabled on Tape Stop
- manual pad controller to Trig input

Performance method

- trigger Tape Stop at end of sample phrases
- switch sample bank during slowdown
- bring in bass underneath
- use longer lag for vocal sample transitions, shorter lag for drum fills

Why it works

This is close to DJing with phrases, but still modular.

Using momentary vs latching for arrangement

Momentary mode

Best for: - fills - brief transitions - hands-on performance - rhythmic pumping stop effects - “grab and release” phrasing

Song use

Use momentary on: - drums during turnarounds - lead synth at the end of vocal-like phrases - loops during intro texture work

It feels expressive and playable.

Latching mode

Best for: - full breakdowns - longer dramatic stops - section changes - sustained transitions

Song use

Use latching when you want: - one trigger to begin the section collapse - time to mute/unmute/repatch/switch patterns - another trigger to release into the next section

This is better for macro-arrangement.

Using Lag CV to keep transitions from getting repetitive

A common problem in modular is that transitions become too predictable. Lag CV helps.

Patch ideas

- send slow random CV to Lag CV
- send stepped CV from a sequencer row
- send envelope to create longer stops at stronger accents
- use attenuator/offset to constrain values to useful ranges

Song benefit

Different sections can have different stop lengths automatically: - verse = short and subtle - chorus = tighter and punchier - breakdown = much longer - outro = longest

That gives the song contour.

Using 50/50 mode musically

The manual notes:

> Holding the Trig button at boot up sets dry/wet mix to 50%.

This is very useful for arrangement.

Why 50/50 mode matters

A fully wet tape stop can be dramatic, but it can also remove too much clarity. In a song context, 50/50 mode lets the audience still hear: - pulse - note identity - section continuity

while getting the slowdown gesture.

Best uses

- on melodic bus
- on vocals/samples
- on full mix in subtle genres
- on intros and transitions where total collapse would be too extreme

If you want even more control, the manual's suggestion of using a **VCA with separate dry/wet paths** is excellent.

Practical full-song workflow with Tape Stop

Here's a very workable method.

1. Build three states, not one loop

Before using Tape Stop, define: - **State A**: minimal groove - **State B**: main groove - **State C**: breakdown or alternate groove

Tape Stop works best when it transitions between pre-planned states.

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2. Decide where the effect lives

Choose one: - full mix - drum bus - melodic bus - sample bus

Don't overcommit too early. Usually **drum bus** or **melodic bus** is more flexible than full mix.

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3. Clock it

Patch the master clock to Tape Stop’s clock input.

This is critical if you want: - repeatability - section timing - song-friendly transitions

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4. Assign section lengths

Use divider pulses or sequencer triggers for: - every 8 bars - every 16 bars - every 32 bars

These pulses can: - trigger Tape Stop - switch patterns - mute channels - transpose sequences

Now your modular patch is beginning to behave like a song machine.

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5. Reserve different lag times for different formal roles

For example: - **16th / 8th** = fill - **quarter / half** = transition - **1 bar / 2 bars** = breakdown entry - **4+ bars** = ending or ambient collapse

This creates a consistent arrangement language.

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6. Layer another change with every tape stop

Never rely on Tape Stop alone for the full song effect.

At each stop, also do one or more of: - mute kick - change sequence - transpose bass - open filter - switch samples - alter clock division - change probability density - increase reverb send

That is how transitions become sections.

Genre-specific ideas

Techno

- tape-stop drum bus every 16 or 32 bars
- long stop before drop
- pair with mutes and filter sweeps

House

- short synced stops at phrase ends
- use on drum bus or sampled chords
- fake vinyl/tape DJ transitions between sections

Ambient

- apply to loopers and textures
- use long bar-based lag values
- combine with reverb and Lo-Fi coloration

Hip-hop / beat tape

- use 50/50 mode
- route sampled phrases or full beat bus through it
- trigger at scene changes for cassette-stop character

Synthwave / electro

- use on full mix sparingly for dramatic breakdowns
- pair with chorus, delay, and nostalgic sample material

Experimental

- CV the lag heavily

- use logic and random triggers
- alternate between synchronized and manual gestures
- place before or after loopers for extreme time-feel disruption

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Limitations to keep in mind

Tape Stop will not, by itself: - create melodies - store song sections - sequence arrangements - mix multiple layers - perform mutes for you

So for full-length songs, it works best alongside: - sequencers with resets/pages/song mode - mixers/performance mixers - VCAs - mutes - switches - clock dividers - samplers/loopers - effects

Think of Tape Stop as a **section punctuation module**, not a complete arrangement brain.

Best complementary module types for full-song writing

If your goal is complete songs, Tape Stop is especially strong with:

- **performance mixers**: bring parts in/out around stops
- **clock dividers**: place transitions every 8/16/32 bars
- **switches**: move between verse/chorus material
- **VCAs**: separate dry/wet or animate buses
- **samplers/loopers**: transition clips and phrases
- **logic/probability**: automate when transitions happen
- **reverb/delay**: make stop events bloom into space
- **filters**: shape energy around transitions
- **macro controllers**: one gesture changes several things at once

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Bottom line

The **2hp Tape Stop** is not a song generator, but it is a very effective **song-finishing module**.

Its real power in Eurorack is that it helps convert: - loops into phrases - phrases into sections - sections into performances

Use it to: - mark 8/16/32 bar boundaries - create breakdowns and drops - hide pattern or sample switching - build intros and outros - perform fake endings and restarts - differentiate verse/chorus/bridge states - make transitions feel musically intentional

If you combine it with **clocked structure, VCAs/mutes, pattern switching, and submixes**, Tape Stop can be one of those deceptively small modules that makes the difference between a cool patch and an actual full-length song.