

Gaines Transient Shaper TS-1

SHAPE THE PUNCH • CONTROL THE TAIL

USER MANUAL • v2.0 • macOS (Apple Silicon) • AU / VST3

OVERVIEW

TS-1 reshapes the transient envelope of any sound — independent of EQ, independent of compression. It separates a sound into its attack (the initial punch) and sustain (the tail that follows), and lets you push each one up or down without touching the other. The result: drums that punch harder without getting louder, or basslines with more sustain without losing their snap.

Underneath the two headline controls is a full detection engine — frequency-focused triggering, adjustable threshold and lookahead, and a split point that determines where "attack" ends and "sustain" begins in time.

WHY TRANSIENT SHAPING ISN'T EQ OR COMPRESSION

EQ changes tonal balance across the whole signal, all the time. Compression reacts to level. Transient shaping reacts to *shape* — the difference between the sharp leading edge of a sound and everything that follows it. That's why you can add attack to a kick drum without making it louder overall, or extend a bass note's sustain without boosting its low end.

QUICK START

- Insert TS-1 on a drum bus, individual drum track, or bass track.
- Turn **ATTACK** up to add punch, or down to soften a harsh transient.
- Turn **SUSTAIN** up to extend the tail/body, or down to tighten it.
- Use the central **PUNCH** knob as a quick macro — it moves attack and sustain in tandem toward a punchier or softer overall character.
- Watch the envelope display (top right) to see the attack/sustain/threshold relationship in real time.
- Fine-tune detection with **FREQ**, **THRESHOLD**, **LOOKAHEAD**, **SPEED**, and **SPLIT** if the default response doesn't lock onto your material's transients correctly.

INTERFACE GUIDE

Header

Control	Function
STEREO	Indicates/toggles stereo processing mode for the current input.
BYPASS	Bypasses all processing.

Control	Function
LINK	Links left/right channel detection so stereo material shapes coherently instead of each channel triggering independently.
M/S	Switches processing to Mid/Side — shape the center image and the sides separately by running two instances, or use this to isolate mono content from stereo width.

M/S and LINK both dim automatically when the input is mono — there is no side signal or left/right relationship to process.

Hero Controls

Control	Range	Function
ATTACK	–100% to +100%	Boosts (positive) or reduces (negative) the initial transient.
SUSTAIN	–100% to +100%	Boosts or reduces the body/tail following the transient.
PUNCH	0 – 100%	Macro control blending toward a punchier (higher) or smoother (lower) overall character. Moves ATTACK and SUSTAIN together; the two knobs still respond independently if you adjust them directly afterward.

Detection Controls

Control	Range	Function
FREQ	35 Hz – 16 kHz	Focuses transient detection on a specific frequency region — set this to the fundamental of what you want TS-1 to react to (e.g., low for kick, higher for a snare's crack).
THRESHOLD	–60 dB to 0 dB	Level above which a transient is recognized and processed.
LOOKAHEAD	0 – 10 ms	How far ahead TS-1 looks to catch a transient before it happens. Zero lookahead is a fully real-time, zero-latency response; small amounts improve catch accuracy on fast material at the cost of a few milliseconds of latency.
SPEED	0.5 – 20 ms	How quickly the shaping envelope reacts once a transient is detected.
SPLIT	1 – 50 ms	The time point separating "attack" from "sustain." Everything before this point is shaped by ATTACK; everything after is shaped by SUSTAIN.

THE ENVELOPE DISPLAY

The display above the detection sliders shows the actual shaped envelope in real time — the curve rises through ATK, holds or decays through SUS, and the dashed threshold (THR) line shows where detection is currently set. Behind the curve, a live spectrum (teal) shows the frequency content driving the detector, which is especially useful when dialing in FREQ.

METERING & OUTPUT

Control	Function
GAIN REDUCTION	Shows the real-time level change being applied by the shaping process — not a traditional compressor's gain reduction, but the net effect of the attack/sustain shaping.
MIX	Blends shaped and unshaped signal — useful for a parallel transient-shaping effect.
OUTPUT	Final output trim, applied after all shaping.

PRESETS

Step through built-in presets with the arrow buttons, or click the preset name to browse the full list. Presets like *Kick Punch* are starting points tuned for common sources — expect to adjust THRESHOLD and FREQ for your specific material.

SPECIFICATIONS

Formats	Audio Unit (AU), VST3
Platform	macOS — Apple Silicon (Windows in development)
Latency	Zero by default; up to 10 ms if LOOKAHEAD is increased
Channel config	Mono and stereo, with Mid/Side processing

SUPPORT

Questions, issues, or feature requests: gainesaudio63@gmail.com. Please include your Stripe receipt, your DAW and macOS version, and a short description of what you're hearing or seeing.