RESTRUKT

Ambience Restuctor

REAL PROBLEM

In modern audio production, natural acoustics are notoriously difficult to control. Drum loops often carry muddy room resonance or mic bleed. Snares ring out too long and clutter the mid-range. Acoustic instruments recorded in untreated home studios carry cheap room reflections that wash out a mix.

Standard utility gates are too crude for this problem—they simply shut off the audio abruptly.
Adding standard reverb on top only piles more clutter onto an already messy acoustic foundation, resulting in a muddy, unprofessional mix.

SOLUTION THAT WORK

RESTRUKT is a spatial reconstruction engine designed to strip away unwanted natural acoustic environments and replace them with pristine, driven, synthetic space.

Instead of fighting messy rooms or long decays, RESTRUKT tears down the acoustic footprint of any signal.
It uses a precise, multiband subtractive engine to shave off unwanted bleed and sustain. Then, it runs the dry, punchy transients through a warm tape saturation circuit before injecting a sparkling, highly controlled, shimmering burst of synthetic space.

RESTRUKT allows you to restructure the spatial DNA of your tracks, delivering the punch, warmth, and modern air required for professional mixes.

TOP-3 FEATURES

Subtractive Acoustic Shaving (The Reducer)

A precise, multiband envelope shaper that surgically extracts unwanted room bleed, ring, and muddy sustain from the input signal without destroying transient punch

Harmonic Excitation (Tape Saturator)

An analog-modeled tape circuit that adds rich, cohesive harmonic distortion and warm compression, giving the dry transients the energy they need to cut through a mix.

Adaptive Space Injection (Tail Verb)

A dynamic, particle-style shimmer reverb designed to "spray" a localized, sparkling burst of synthetic space exactly where the excited transients hit, avoiding global reverb wash.

HISTORY OF CONCEPT

The core philosophy of RESTRUKT is rooted in the history of drum production and creative acoustic manipulation.

In the early 1980s, legendary producer Hugh Padgham and engineer Peter Gabriel accidentally discovered the "gated reverb" sound. By routing a massive, ambient drum room mic through a heavily compressed talkback channel and a fast-acting noise gate, they realized they could capture a massive, explosive snare hit that vanished instantly into dead silence. This sound defined a decade of pop and rock production.

By the late 1990s, hardware transient designers introduced envelope-shaping to the masses, allowing engineers to mechanically shorten or lengthen the sustain of hits without relying on traditional signal thresholds.

In the modern digital era, producers frequently combine transient gates, analog saturation, and short, bright reverbs to "synthesize" artificial room sounds for dry sample libraries.

RESTRUKT is the evolution of this heritage. It streamlines this historically complex, multi-plugin routing into a single, cohesive interface. By linking multiband sustain reduction, analog tape drive, and modern particle shimmer in series, RESTRUKT gives you classic acoustic control with modern, pristine digital fidelity.

MAIN CONTROLS

AMBIENCE REDUCER	The subtractive stage of the plugin. It splits the incoming signal into two frequency bands and reduces the sustain (decay) of the sound based on independent thresholds
REDUCE	Controls the overall intensity of the sustain reduction. At 0%, the envelope is untouched. At 100%, the sustain and tail parts of the sound are aggressively muted, leaving only the sharp transients.
DIVIDER 40-2500 Hz	Sets the crossover frequency at which the signal is divided into low and high processing paths. This allows you to treat low-end decay (like a boomy kick) differently than high-end decay (like ringing cymbals).
HIGH THRESHOLD	Defines the upper frequency band threshold level. When the high-band signal drops below this level, the sustain reduction kicks in.
LOW THRESHOLD	Defines the lower frequency band threshold level. When the low-band signal drops below this level, the sustain reduction kicks in.
SATURATION TAPE	The harmonic excitation stage. It colors and compresses the cleaned-up transients to add warmth and cohesive weight
DRIVE	Adjusts the input gain into the analog tape emulation. Increasing this adds warm harmonic saturation, grit, and natural analog compression. Note: AutoGain is always active under the hood, keeping your perceived volume consistent as you increase the drive).
LEVEL	Controls the output level of the saturation module before it enters the Tail Verb. Use this to feed more or less signal into the spatial generator.
TAILS VERB	The additive spatial stage. It generates a tight, shimmering synthetic environment that reacts to the processed transients.
SPACE	Blends the processed signal with the reverb. Maximum internal mix is kept to prevent the reverb from overwhelming the core punch of your transients
TAIL	Controls the perceived size and decay time of the reverb space. Lower values create tight, metallic room bursts; higher values create wider, expanding spaces.
SHIMMER	Adds a bright, pitch-excited, shimmering high-frequency quality to the reverb tail, mimicking expensive digital plate hardware
POST FX	The final mixing and utility stage.
HP POST	12dB/oct HP filter. Use to shave off low-frequency rumble or to protect your sub-bass.
LP POST	12dB/oct LP filter. Use this to roll off harsh high-end sizzle or to create a darker, distant spatial vibe.
MASTER LVL	Controls the final global output volume of the plugin.

HOW TO USE:

1. Strip the Room (Subtractive Stage):

Start with the Saturation and Tail Verb modules disabled. Play your loop or drum track. Turn up the Reduce knob until the unwanted natural room decay, ringing, or cymbal bleed disappears. Adjust the Divider and the High/Low Thresholds until the gating action sounds natural and snappy.

2. Inject the Heat (Saturation Stage):

Slowly increase the tape saturation Drive. The natural room noise was removed in Step 1, the tape saturation will only drive the clean, punchy transients. This will make your drum hits sound fat, warm, and highly defined.

3. Apply the Space (Tail Verb Stage):

Turn up the Space control to introduce the synthetic reverb. Adjust the Tail to set the length of the burst, and use Shimmer to add modern, high-end air.

4. Sculpt for the Mix (Filter Stage):

Use the HP filter to cut out any low-end mud generated by the tape or reverb (typically around 80–120 Hz for snares). Use the LP filter to gently soften the high-end shimmer so the track sits naturally in your project.

WHAT TO USE FOR:

Acoustic Drum Loops & Breaks: Perfect for taking old, muddy, or poorly recorded drum breaks, stripping away the old room acoustics, and replacing them with a modern, expensive-sounding virtual space.

Snares, Handclaps, and Percussion: The ultimate treatment for snares. It chokes out ugly ring and bleed, saturates the snap, and adds a lush, shimmering tail.

Synth Plucks & Arpeggios: It tightens the decay of synth plucks to make them incredibly punchy, then wraps them in a wide, shimmering holographic halo.

Acoustic Guitar Loops: Removes the annoying "boxy" room resonance of home recordings while adding tape warmth to the string plucks and a beautiful high-end shimmer to the chord strums.

Untreated Vocals: Use the Reducer to remove cheap home-studio room reflections, add tape warmth to the vocal midrange, and apply a high-end shimmer plate reverb.

Trick 1: The "Modern 80s" Gate Snare

Capture the massive, explosive gated snare sound of the 1980s but with modern clarity and shimmer.

- Feed a dry snare drum into RESTRUKT.

- Set Reduce to 80% to aggressively cut any natural decay.

- Push Drive to +15 dB to heavily saturate and compress the transient.

- Set Space to 80%, Tail to 30% (for a short, violent burst), and Shimmer to 90%.

- Set the HP12 filter to 150 Hz to keep the low-mids completely clean.

The Result: A massive, sizzling snare that explodes with bright shimmer on the impact and disappears instantly into pitch-black silence.

Trick 2: The Acoustic Loop Purifier (Room Replacement)

The Goal: Take a dirty, muddy acoustic drum loop and make it sound like it was recorded in a pristine, high-end studio.

- Load a busy, room-heavy acoustic drum loop.

- Adjust the Divider to around 150 Hz. Set Reduce to 70% to choke out the messy acoustic room reflections of the mid/high frequencies while keeping the kick drum relatively natural.

- Add +6 dB of tape Drive to glue the remaining clean transients together.

- Set Space to 35% and Tail to 50% with Shimmer at 20% to overlay a clean, modern, and expensive-sounding artificial room.

Trick 3: The Holographic Synth Pluck

The Goal: Make a fast EDM synth pluck sound incredibly wide and atmospheric without washing out the melody.

- Load a fast, melodic synth arpeggio or pluck.

- Set Reduce to 90% and pull the High/Low Thresholds up. This turns the pluck into an ultra-short, almost clicky transient.

- Set tape Drive to +10 dB to add harmonic grit.

- Set Space to 100%, Tail to 80%, and Shimmer to 100%.

- Set the LP12 filter to 12,000 Hz to make the shimmer sound dark and velvety.
The Result: The synth pluck remains incredibly tight and rhythmically precise in the center of the mix, while a massive, wide, shimmering cloud of dark space dances around the stereo field.