User Manual

Complete feature, mode and workflow documentation.

Available for macOS and Windows.



Concept

Spectral Saturator is an audio effect plugin for macOS and Windows. AU is available on macOS; VST3 and Standalone are available on both platforms.

Instead of applying one broad drive curve to the whole signal, it analyzes overlapping spectral frames, estimates the envelope, reacts to transients and resonances, then shapes harmonics inside the spectrum.

Parameters

Drive	Global strength of the spectral drive field.
Mode	Selects band emphasis, harmonic bias, density behavior and rolloff.
Harmonics	Generated harmonic energy around detected peaks for richness and presence.
Even/Odd	Balances round even harmonics and sharper odd harmonics.

Density	Raises quieter spectral detail for more body and sustain.
Smooth	Controls spectral smoothing across bins and time.
Transient	Protects attacks during high spectral flux.
Mix	Blends processed and latency-compensated dry signal.
Output	Final output trim for level matching.

Saturation modes

Warm	Soft, dark, low-focused saturation with strong even-harmonic warmth.
Tube	Lively second-harmonic presence with smooth mid detail.
Tape	Darker glue, density and rounded highs for buses and drums.
Transformer	Harder mid punch and odd-harmonic bite for aggressive sources.
Spectral	Signature resonance-aware sheen with polished harmonic cohesion.
Focus	Emphasizes resonant musical energy so notes speak with body.
Air	Silky top-end lift and controlled high-frequency richness.
Density	More body, sustain and fill through stronger density processing.
Exciter	Open clarity and harmonic presence for forward detail.

Preset workflow

Factory presets cover common source categories and sound goals. User presets save your own states. A/B, COPY, Mix Lock and Output Lock are designed for fast comparisons in real sessions.

Practical starting points

- Drum bus: Tape, Drive 35–55, Density 30–55, Transient 70–90, Mix 50–80.
- Bass: Warm or Focus, Drive 25–50, Harmonics 25–55.
- Vocals: Tube or Air, Drive 15–35, Harmonics 20–45, Smooth 35–60.
- Master bus: Warm, Tape or Spectral, Drive 8–25, Mix 10–35.
- Sound design: Transformer, Spectral or Exciter, then blend with Mix.