



# PSP Audioware PC MAC PSP Saturator \$99

Saturation can be a fantastic tool for bringing sounds to life, but does this new offering from PSP have what it takes?

> PSP Audioware is a well established developer with a portfolio of industry respected plugins, including classics such as VintageWarmer and SpringBox. One of their long established bundles is MixPack 2, which includes six mix bus processors covering dynamics, transient shaping, EQ, enhancement and saturation. It's the MixSaturator plugin from this bundle that forms the starting point for PSP's new saturator plugin.

Nevertheless, with 20 years on the clock, they have clearly decided it was time to go for a total overhaul. So, although there's a lot of familiarity here in terms of controls, the new plugin now runs on completely rewritten or substantially redesigned algorithms.

These not only take full advantage of PSP's current DSP know-how, but have also been tweaked sonically, making PSP Saturator a completely new plugin with no backwards compatibility issues.

## New for old

PSP Saturator (VST, VST3, AU, AAX) is designed to deliver everything from subtle enhancement to deep saturation but avoids extreme distortions. The main engine emulates valve and tape-style effects and uses a combination of harmonics, filtering and dynamics. It has three core algorithms with a main saturation option joined by more bespoke low and high saturation effects. The Low feature emulates a low frequency bump and includes adjustable frequency (20Hz to 400Hz), Level (+/-15dB) and amount (Warmth).

Meanwhile High emulates tape compression with adjustable frequency (1kHz to 20kHz), depth (Softness) and Level (+/-15dB). The core saturation engine has an overall depth (Saturation) coupled with eight different modes (Shape). This second control massively influences the character of saturation and moves from very subtle sounds (Soft Valve)

through to extreme clipping (Hard Clip), so you have lots of tonal flavours to play with. All three saturation stages can be bypassed either using their On/Off buttons or for the main saturation by choosing Shape setting None.

Although PSP Saturator doesn't include a frequency analyser, there's still plenty of metering, with peak and VU meters and a choice of metering sources. Meanwhile, saturation depth is indicated by yellow/red LEDs for each of the three saturation engines. At the bottom, an additional fold-down panel includes some additional parameters (see box out). Finally, you have Input and Output controls with reverse linking, a wet/dry Mix control with internal intelligent phase alignment and a final Output Shaping process (Off, Sat and Limit).

## Flavour

Saturator's core shapes offer an impressive selection of flavours. As noted, the general trend

“You can really get a feel for what PSP Saturator does in a matter of just minutes”

is from light to heavy as you move clockwise. But take both subjectively - and looking at the analyser - each setting has quite a specific harmonics balance primarily made up of odd harmonics. At the lower end we particularly like the difference between Hard Valve, which has strong lower harmonics but then tails off quickly, and Medium Valve, which has a more linear distortion across the higher harmonics.

Meanwhile, for the more aggressive settings, although Hard Clip has the most dominant higher harmonics, we are particularly drawn to the Ram setting, with its distinctly non-linear scooped harmonic shape. Indeed, one thing which is very apparent and we particularly like about PSP Saturator is that, as you change the saturation amount, not only do you get harmonics, but the overall frequency balance is also affected. This is far more in keeping with real world saturation behaviours, and something that isn't always replicated that well in plugins.

The two additional processors provide excellent sonic extension. Low adds a specific harmonic balance with both odd and even harmonics and the frequency setting lets you tailor the upper frequency limit. So, with a low frequency setting (50Hz for example), you'll only introduce harmonics up to about 300Hz, but open up the control and you're moving up to the 1kHz to 1.5kHz mark. High, meanwhile, adds odd harmonics and the frequency control helps you specify where they begin to kick in.

## Sounds

PSP Saturator's 200 presets provide a great springboard, not only because there are plenty to choose from, but also because they are



Saturator's browser has 200 presets with contributions from top industry engineers and producers



Saturator's bottom panel has a bunch of advanced parameters like HPF and oversampling

## Open sesame

Saturator has an advanced parameters panel at the bottom. This Internal Board contains five options alongside some retro-inspired circuitboard graphics. One key feature here is FAT mode. This applies the x4 quad oversampling algorithm and from the block diagram we can see this affects the High and Saturation processing engines, though not the Low saturation engine that precedes them. It's designed to reduce aliasing, particularly with heavy processing.

Next up, you have a sidechain high-pass filter (10Hz to 1kHz). This influences the main saturation engine and we found it great for focusing the

processing away from the lower frequencies. This is really handy when combining the Low saturation and main saturation engines as it allows you to prevent too much overlap. Following this is a Smooth control that, when increased, gradually reduces harshness and aliasing. Then there's a post-saturation Makeup control. Rounding things off is a regular high-pass filter (5Hz to 250Hz).

Rather excellently you can position this pre, post, or even both pre and post. This gives great flexibility to shape signal processing. In fact, we're not entirely sure why this significant option is hidden away in this panel.

properly categorised. Groupings include usage type (Mastering, Mix), saturation type (Tape, Valve, Drive) and also instrument type (Drums, Vocals, Keys and so on). This makes finding a suitable preset very easy indeed and you can really get a feel for what PSP Saturator does in a matter of minutes.

We like many of the 26 bass patches. As you would expect, there are patches for adding presence to a sub, or edge to bass guitar. But you've also got patches that are great for adding or even removing low end weight. With 40 drum presets you've got everything from subtle drum bus patches (Massive Analogue Mojo) and drum specific options (Snare Alive, 808 Saturation) to more extreme mangling style patches (Blitzed Drum Loop, Industrial Grind). Meanwhile for vocals there's subtle (Warm Lead Vocal) and not so subtle (Megaphone).

We've seen many approaches with saturation plugins and designing one that allows you to find the sweet spot you're after but is also flexible enough for different applications is no mean feat. PSP Saturator does a great job. With an easy-to-use interface, plenty of carefully categorised presets and a highly adjustable three saturator engine, it's definitely one of the most flexible saturators available. **cm**

## Alternatively

**FabFilter Saturn 2**  
cm179 » 10/10 » £114

Multiband distortion and saturation with FabFilter's excellent interface deliver a compelling processor

**Softube Harmonics**  
cm266 » 9/10 » £149

Modelled distortion effects and Softube's Dynamic Transient Control tech mean good things

## Verdict

**For** Flexible core saturation effect  
Additional low and high frequency saturation processors  
Sidechain high pass option  
Additional output limiter and saturation stage useful

**Against** Not much

Saturator is a highly flexible and well equipped processor that delivers a vast array of tape and valve saturation effects

**Web** pspaudioware.net

**10/10**