



Sonnox Oxford Plug-ins

Processing Plug-ins For Mac OS & Windows

There's a new look and a new home for Sony Oxford's suite of plug-ins, but the best news of all is that they are now available in VST and Audio Units formats.

Paul White

We have already covered most of the Sony *Oxford* range of plug-ins in *Sound On Sound*, and they've received uniformly excellent reviews. Recently, the software division of Sony that created these plug-ins have executed a management buyout led by Rod Densham, now MD of the new enterprise, an independent company

trading under the name of Sonnox. The processors have been renamed the *Sonnox Oxford Plug-ins*, and new plug-ins are in development. To help promote the range, various bundles are being offered to make buying multiple plug-ins more enticing, and most importantly, they have all now been ported to native VST, Audio Units and RTAS formats, meaning that all users of mainstream recording software now have access to them.

The EQ and dynamics were derived from

SOUND ON SOUND

Sonnox Oxford Plug-ins

pros

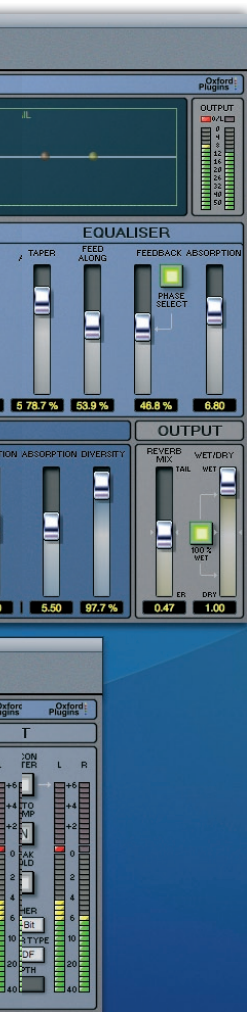
- True to the Sony hardware (where applicable).
- High-quality sound.
- Available in native, TDM and Powercore formats.
- *Transient Modulator* offers a unique take on dynamic processing to modify drum sounds in a way that's difficult or impossible by other means.

cons

- Somewhat costly for semi-pros.

summary

These plug-ins were impressive when they were first launched for Powercore and TDM, but they are available to a much wider range of users now that they have been ported to the most common native formats. As with most really high-quality plug-ins, they aren't cheap, but then quality rarely is.



Sony's flagship Oxford digital console. They use the same DSP code as the original hardware and so produce exactly the same sonic end result. The EQ is a straightforward enough five-band parametric design with additional high and low shelving filters, and, in my opinion, is up there with the best. The dynamics plug-in also has a great reputation, and a comprehensive feature set which includes both gating and compression, as well as expansion, side-chain EQ, a separate limiter and an adjustable warmth control. The *Inflator* plug-in is a little less conventional, as it takes a unique algorithmic approach to making mixes or individual tracks sound very loud and punchy, achieving extremely impressive results that have to be heard to be fully appreciated.

The limiter includes a unique Enhancement slider that increases subjective loudness and warmth in a way that sounds not unlike tape saturation. The reverb takes an algorithmic approach and, to my ears, delivers the type of sound you'd expect from classic hardware reverb units by the likes of Lexicon, Klark Teknik and AMS, yet without imitating any of them specifically. It has separate control sections for the early reflections and reverb tail, and comes with a useful library of presets covering everything from ambience to cathedrals. The control section strikes a good balance between flexibility and ease of use, and the CPU load is far less than for a convolution reverb.

Transient Modulator

The one Sonnox plug-in we haven't yet reviewed is *Transient Modulator*, so I'll take a more detailed look here. Like SPL's *Transient Designer*, *Transient Modulator* is a dynamics processor that reacts to the transient content of a signal rather than simply to its level. This approach allows the user to process dynamic material, such as drum parts, to enhance the attack of the drum hits or to push them back in the mix to soften over-aggressive attacks. In other words, the process can be used both to bring out and to suppress the transient elements of sounds. Furthermore, by enhancing the attack of a sound and then dropping the overall level, the original impact can be maintained while suppressing room ambience and drum ring. There are several other plug-in versions of this effect, but Sonnox's implementation is, as ever, unique in several respects.

The interface is visually similar to that of other Sonnox plug-ins, with only one plug-in window, and because of the relatively small number of controls, it occupies little screen real-estate. The native version is protected using an iLok key. ►

Prices

Plug-in	Native	TDM	Powercore
<i>Oxford EQ</i>	£200	£495	£350
<i>Oxford Dynamics</i>	£200	£495	£350
<i>Inflator</i>	£115	£275	£220
<i>Transient Modulator</i>	£115	£275	£220
<i>Oxford Limiter</i>	£195	£295	£250
<i>Oxford Reverb</i>	£235	£575	n/a

All prices include VAT. Sonnox also offer bundles which offer up to a 40 percent saving over individual plug-ins.

SONNOX OXFORD PLUG-INS

As far as I can work out, the transient modulation process looks at the 'rate of change' of the input rather than the instantaneous input signal level, as a standard compressor would do. Like a compressor, *Transient Modulator* has a Ratio control, but in this case it can go to both positive and negative values, where negative values denote gain reduction and positive values gain increase. The Overshoot Value control is roughly analogous to a compressor's Attack control (but on the processing side rather than the side-chain detecting side) so that at low settings only the start of the transient is processed, while longer settings extend the processing further into the beat. Very short settings can bring out instruments such as bells without significantly changing the sound of drums playing at the same time, though in a typical mix, I found that settings from around 50 percent upwards were usually the most effective. A vertical gain reduction meter at the centre of the plug-in window gives an indication of how much dynamic processing is taking place and whether transients are being enhanced or suppressed.

Recovery Time sets how long it takes for the processing to settle back to a neutral position, rather like a compressor's release time. If set too long, this could lead to the next transient not being processed effectively, while short values ensure that even fast passages are processed, but possibly at the expense of smoothness. Just

as you'd set a compressor's release time as fast as possible without incurring pumping or other artifacts, *Transient Modulator*'s recovery time would normally be set as fast as possible without compromising the sound or introducing unmusical side-effects.

Rise Time is a parameter that affects the transient detection algorithm. A fast rise time ensures that no transient goes unnoticed, while increasing the value allows shorter transients to be ignored, leaving only longer ones to be subjected to processing. In practice, this seems to be very close to the way a compressor's attack time control affects the side-chain performance.

Dead Band Value is a less familiar parameter, apparently intended to enhance the contrast between dynamic events. It is calibrated in decibels, and what it seems to do is prevent any processing occurring where the resulting gain increase would be less than the value set by the Dead Band Value control. For example, if you set the Dead Band value to 4dB, any processing resulting in a gain increase of less than 4dB will be 'cancelled', and only changes larger than 4dB will be carried out. This opens up all kinds of possibilities, such as setting the processing to treat only the snare drum in a drum loop, assuming the snare drum is the most dynamic sound in the loop.

We're back on more familiar ground with Threshold. As you'd expect, this sets a level (relating to the input signal) above which processing occurs and below which no

processing takes place. Unlike the transient modulation process in general, Threshold relates purely to level rather than perceived dynamic activity.

As the processing can increase the level of transient peaks (by up to 24dB), an output-level control is included to avoid clipping. It is also possible to modify the output signal by adding a fairly subtle overdrive, one function of which is to introduce soft clipping to help avoid digital overshoots. Signals that would have exceeded the maximum permitted level by 6dB can be accommodated without clipping taking place at maximum overdrive settings. In addition to acting as a safety net for clipping, the Overdrive section also adds tape/tube-style density and warmth to the sound, but still in a subtle and musical way. Stereo input- and output-level metering, with clip indication, is provided in the plug-in window.

Applications

The positive-ratio applications of *Transient Modulator* are fairly obvious, the main one being that drum hits can be emphasised without bringing up the room ambience or head ring between hits. Negative ratios, on the other hand, suppress transients, making drum sounds appear more ambient. With some signals, they also allow overall levels to be increased, because transient peaks within the signal have been reduced. Because the process uses 'lookahead' to anticipate peaks, processed transients remain clear and sharp, whether boosted or reduced.

Though I made an earlier comparison with SPL's *Transient Designer*, having played with both systems for a while I have come to the conclusion that they are very different, both in approach and sound. *Transient Modulator* doesn't materially affect the sound of transients but rather controls their level, while the *Transient Designer* actually reshapes both the attack and decay characteristics of percussive sounds, independently of input level, using just two simple controls. Which approach is best depends very much on your intended application and musical taste. I soon reached the conclusion that *Transient Modulator* is most appropriate for fine-tuning the dynamics of drum sounds without changing their inherent character too much, whereas the SPL process is more about shaping drum sounds. Both are fantastically useful processes but it would

Transient Modulator offers some unusual controls, including 'Dead Band', which forces the plug-in to ignore transients that would only result in a small amount of processing.



be pointless to try to decide which one comes out on top, as they are so different, both in operation and in their results.

With the Sonnox process, the result is not unlike varying the distance between mic and drums: you can 'zoom in' to get hard attacks with moderate room ambience, or you can pull back to get a more roomy sound with less of that 'in your face' drum impact, but without losing detail or crispness. It takes just a little experimentation to get familiar with the controls, but this isn't a difficult plug-in to use and the results can be exceptional.

It's also worth trying on non-percussion instruments that have a well-defined attack, such as guitar, where the process can be effective in improving definition or taming excessive string attack. This could be valuable on acoustic guitars that have been recorded using aggressive piezo pickup systems, but it also works on some bass guitar sounds, where the overdrive function can also be used to warm up sterile sounds. The designers even claim that the plug-in can be useful for treating vocals, where negative ratios can be used to reduce the effect of popping. It can also be used for processing stereo mixes, though some care has to be taken in this application, especially at the mastering stage. From my experiments so far, it's worth trying *Transient Modulator* in all kinds of different applications, because you often get better or more interesting results than you might imagine, but I still found the most immediate benefit was in improving slightly woolly-sounding drum recordings, where the audible benefits are very obvious.

Conclusions

If you work mainly with off-the-shelf drum loops or instrument samples that are already processed to perfection, *Transient Modulator* may be of less use to you than if you are processing real drum and percussion recordings, though there's no inherent reason not to use it with samples if you like the results. The process is also equally as applicable to electronically generated percussion sounds as it is to acoustic drums, and also works on non-percussion instruments providing they have a well-defined attack character. If 'real' drums feature heavily in your work, *Transient Modulator* is a very desirable tool for polishing those sounds without destroying their inherent character. The longer I work with this plug-in, the more it grows on me, and it genuinely offers something that no other competing product does.

As with all the Sonnox plug-ins I've tried so far, this one exudes class and is a truly professional processing tool. I've used them all for serious recording projects and they definitely deserve a closer look, especially now that they're available for native systems and not just tied to speciality DSP platforms. The EQ is one of the best I've come across, as is the comprehensive dynamics section, but the more specialist *Inflator* and *Transient Modulator* are great examples of non-mainstream processors that can really save the day in a difficult situation. Similarly, while there are loads of reverb plug-ins available, the Sonnox model has a very classy sound

with a character that's different to a typical convolution reverb. If any plug-ins deserve the 'Professional' suffix, these ones do. **SOS**

information

£ See 'Prices' box.
T Source Distribution +44 (0)20 8962 5080.
F +44 (0)20 8962 5050.
E sales@sourcedistribution.co.uk
W www.sourcedistribution.co.uk
W www.sonnoxplugins.com