



VERTIGO SOUND VSM-2 MIX SATELLITE

It's back-to-back hits for this German boutique audio company, first with the VSC-2 compressor, now with the launch of its Satellite.

Text: Robin Gist

With the success of its VSC-2 Quad Discrete Compressor, German newcomer Vertigo Sound has been making quite a name for itself in the pro audio market. Its latest offering, the VSM-2 Mix Satellite, is a fully analogue mastering hub that offers level matching, LED metering, dual balanced inserts, Mid/Side functionality and two colouration stages that provide the user with a vast choice of distortion flavours.

V FOR TWO

The VSM-2 comes in two different versions: the fully-featured model that includes the colouration circuitry and a less expensive unit that doesn't. A cover plate on the front panel of the cheaper model replaces these missing controls but behind it the connectors and supply rails for said modules remain intact. Should you therefore decide later on to have a factory-fitted upgrade to the full version then – as the Vertigo Sound website says – you will have a “happy end”! Must be a German translation thing...

It's the 'burger with the lot' incarnation that we'll be biting into in this review and hopefully this too will engender a “happy end”.

BOX CRAFT

Built into a 2U case this device has been manufactured with longevity in mind. Made in Germany, the VSM-2 adheres to the highest standards of Teutonic precision construction and craftsmanship that we've come to expect. All the pots and switches have a positive and sturdy feel and I am confident that this unit is capable of withstanding the rigours of studio use and abuse for many years to come.

The electrical specs on the VSM-2 are also impressive: 128dB dynamic range, +30dBu maximum output level, a frequency response of 10 – 100kHz (± 1 dB), a signal-to-noise ratio of 104dB (20Hz – 20kHz, unweighted RMS), and all the ins and outs are electronically balanced on gold-

plated Neutrik XLR connectors. If you want to explore the unit in more technical and pictorial detail, there's further information (and a PDF of the VSM-2 manual) on the Vertigo website: www.vertigosound.com

PARALLEL LINES

Working left to right through the unit's various stages begins with, not surprisingly, the input section. The rotary input trim control is calibrated from -10 to +10, with the '12 o'clock' position marking unity gain. This is complemented by a four-segment, stereo LED input meter. The 'Global System' bypass switch, as the name suggests, removes any insert or colouration stage processing from the signal path. Speaking of bypass – a nice feature of the VSM-2 is that the unit passes audio via relay switching when it's powered down. All the rotary controls on the unit are stepped, allowing for old school – read pencil and paper – analogue recall, and of course you can always take a photo (analogue or digital) of your settings.

Next up is the first insert section. Designed primarily for connection to an outboard two-channel compressor, this stage gives the user control over the amount of parallel compression that's applied to the signal. This is done via the Dry/Wet knob – you can blend as much parallel compression in and out as you desire, from none (Dry) to 100% (Wet). This control can also be switched out, in which case 100% parallel compression is applied to the signal. The MS/Off/LR switch is where things start to get interesting.

MS VS LR

In the LR position, your inserted outboard compressor is configured as a normal left/right, two-channel device. However, in the MS position the left (or first) channel of your compressor now processes the 'Mid' or centre information of the signal while the right (or second) channel takes care of the 'Side' component. If you normally

run your two-channel compressor in 'link' mode for stereo operation it's recommended that you switch to 'dual' or 'independent' mode for MS operation. The VSM-2's MS encoder automatically takes care of level compensation for the Side signal during the MS encoding so you don't need to have a particularly low threshold setting on your compressor. This level compensation is then readjusted during the return trip through the MS decoder. Nice.

If you have never tried using a compressor in this way (MS) it can be a revelation. Amongst other applications, it's particularly useful for making lead vocals – assuming they have been placed in the centre of the mix – more apparent and present. Having separate control over the 'Side' information generally means you can independently process reverbs and some instrumentation without unduly affecting your centre mixed vocal or instruments.

The second insert section is intended for use with an outboard dual-channel equaliser, although you can, of course, plug in anything you want to incorporate into your mastering chain – a reverb unit maybe. The two insert sections work in tandem when operating in MS mode and this second section provides a soloing function via a switch for the Mid and Side signals. A blinking red LED accompanies both of the solo positions to alert you of its status.

This section also incorporates a Mid-to-Side 'blend' knob that effectively works as a stereo width control. Moving the knob left from its 12 o'clock centre position increases the mono content of the overall signal, making the mix sound narrower. Conversely, moving it to the right increases the 'Side' content and makes the mix seem wider – 'opening the curtains', so to speak.

Just like the 'insert one stage', this section can be switched to work in LR mode – in which case the MS/LR knob then acts as a normal left to right panpot. As expected, both insert sections one and two can be individually bypassed for a comparison between processed and unprocessed signals.

SILICON IN THE KITCHEN

This brings us to the two distortion stages. These stages have identical controls, but differ in the fundamental types of distortion they generate. The first colouration stage is called a '2nd Harmonic FET Crusher' with the second being a '3rd Harmonic Zener Blender' – this latter stage could be most useful when you're 'cooking up some tracks!' Jokes aside, these modules have quite different and distinct tonal characteristics – ranging from full-on crunch to a subtle edge. In keeping with the design ethos of the VSM-2, both these stages can also work in either LR or MS modes and are also able to be individually bypassed.

The controls for these sections include drive, level, shape, distortion mix (parallel) and a six-position rotary switch for the input filter. This filter determines the frequency range that the distortion is applied to. The first four positions

conform to the low/mid/high-mid/high scheme familiar to us all, while the 'Full' (120Hz – 20kHz) and 'Track' (10Hz – 20kHz) positions offer wide bandwidth application of distortion. As the name suggests, the Track position allows for using the VSM-2 for a bit of FET or Zener mojo during recording of individual or grouped sounds.

Lastly, the final output stage provides individual left and right output level controls, calibrated from –20 to +10, again with unity gain at the 12 o'clock position. In addition to this there's a 16-segment, stereo LED output meter indicating the overall signal output level of the unit.

EVERYTHING IN MODERATION

In use, I found that a small amount of both the FET and Zener tones added some edge and fullness to the guitar-based rock tracks I first tried. In particular, running the FET stage on the Mid signal and the Zener on the Side resulted in improved vocal definition and gave more edge and cut to the guitars. Bass clarity was also improved. On some older jazz recordings I had, I found that the VSM-2, again in MS mode for both of the colouration modules, added some nice bottom-end warmth to the bass and distinction to the brass. It also gave the recordings an overall improvement in cohesion and imaging. I then tested some orchestral recordings I had mixed a while back and they were also noticeably improved by small amounts of MS FET and Zener colouration.

Finally, in what I thought would be the most revealing test, I tried some a capella choir tracks. After listening to all the permutations of LR and MS processing, with and without colouration, I still thought the inclusion of a small amount of the FET and Zener processes in MS mode improved the mixes overall. Again, a warmth and clarity in the bottom-end and lower mids was noticeable with the tenors and altos also having more presence – I was now starting to have a "happy end."

THE HAPPY END

Having the ability to compress and EQ in MS mode is a powerful tool in the mastering process and the VSM-2 has been very well thought through in its implementation of the control and auditioning of the MS components. The inclusion of the FET and Zener colouration stages with VSM-2's level of control distinguishes it from other devices of a similar ilk and it might become a 'must have' piece of gear just for this aspect alone.

Top-end analogue hardware is what sets most professional mastering houses apart from the DIY ITB crowd and with its weighty price tag the Vertigo Sound VSM-2 probably won't be making its way into too many bedroom or project studios any time soon. But if you're in the market for a well made device that can form the nucleus of a quality analogue mastering setup, provide powerful MS processing with colouration options aplenty, level matching and metering, then I suggest you look very closely at the Vertigo VSM-2. ■

NEED TO KNOW

Price

Mastering Hub: \$5146
Mix Satellite: (With Harmonic Generators): \$8277

Contact

Mixmasters
(08) 8211 6211
sales@mixmasters.com.au
www.mixmasters.com.au

Pros

MS processing.
Lots of colouration options.
Great specs.
Beautifully constructed.

Cons

Expensive.

Summary

A very well built piece of pro audio kit that forms the hub of an analogue mastering setup, facilitates MS processing and provides myriad tonal options.

