

SPL VITALIZER MK2-T

gold blend

There can be few devices available in so many different versions as the SPL Vitalizer. This series of analogue enhancers combines EQ and a number of largely secret

processes, with the aim of making your music sound bigger, brighter, fuller and generally more appealing. First there was the Classic, which is still in production and is considered by many to be the definitive Vitalizer. Then there was a dedicated stereo model, a cheaper version with jack connectors, a Mk2 version, the hugely expensive Tube Vitalizer, and now the Mk2-T. Forgive me if I've missed any out, but even as a confirmed Vitalizer fan I lose count! The styling also varies from model to model — the high-end Tube version sports a gold front panel, the Mk2 has a black anodised panel with blue veins (rather like a Swiss cheese that's just been shot by a Dalek), and the Classic has a fairly conventional-looking screened panel.

Inside The Box

The newcomer to the series is the Mk2-T, and it's definitely worth a look, as it combines many of the features of the esoteric Tube Vitalizer in a much less expensive, dedicated stereo format. Like the Tube Vitalizer, the Mk2-T has a gold panel, with a mesh window through which can be glimpsed the glowing filament of a valve. The package is 1U high, and there's a choice of both balanced jack and balanced XLR connectors on the rear panel.

The Mk2-T is really a valve-enhanced version of the regular Mk2: there are two dual triodes inside the case, one of which is used in the Mid/High filter, ostensibly to sweeten up the mid-range, with the other being used in the stereo width expander circuit, where its sonic attributes affect the whole of the signal being processed. At the HF end, the circuitry employs LC (coil and capacitor) networks because of the subjectively smooth sound of this type of filter.

Unlike most other enhancers, Vitalizers are designed to affect the whole of the audio spectrum — they are not just high-end enhancers with a bass boost control to balance up the low end. A single control selects between a tight, punchy bass enhancement or a very deep, rounded effect, and some clever dynamic circuitry prevents this bass enhancement from spilling over into the mid-range. One feature that will be familiar to those who've used the Tube Vitalizer or the Mk2 is a stage of compression on the bass end that treats only the enhanced component of the signal. This can be useful for increasing the average bass level without allowing the peak levels to rise

SPL VITALIZER MK2-T PSYCHOACOUSTIC ENHANCER

significantly. Additional controls address how the mid-range and high end are processed.

Controls

The enhancement effect produced by the Mk2-T is level dependent, so the first control, Drive, sets the input gain to match signals between -20dB and +6dB in amplitude. The more Drive you apply, the more intense is the effect of processing — but keep an eye on the clip LED to make sure you don't apply too much.

Next comes the Bass Sound knob, which has a centre null position and is moved anti-clockwise to increase the Soft bass effect or clockwise to increase the Tight bass effect. The Bass Compression control affects only the added LF component, so it doesn't influence the sound of the high end at all. A blue LED shows when compression is taking place.

The Mid/High Tune control affects the mid-range enhancement and also the signal being fed to the high LC-EQ. Turning the control tunes the Mid/High filter from 1kHz to 22kHz, though I find that frequencies of between 3kHz and 10kHz work best for most material. The process involves amplitude-dependent phase shift coupled with a rise in level above the set frequency. (The shape of the frequency response curve is apparently derived from the well-known Fletcher Munsen loudness curves, which describe how the human hearing system responds to different sound levels.) When material that is already too sharp-sounding is being processed, the Mid/High control can be set to a higher frequency (generally 10kHz or above), in which case the offending frequencies are below the filter frequency and are damped as the Process control setting is increased.

The Process control governs the overall contribution of the enhanced bass plus high/mid components and simultaneously damps the mid-range to produce the loudness curve mentioned earlier. To take care of the high end of the spectrum there's the LC equaliser, which has two controls: LC-EQ, for setting the filter frequency (2kHz to 20kHz); and Intensity, for setting the amount of EQ boost. The idea behind using the coil mentioned earlier is to recreate the sound of vintage studio equipment, where the saturation effects of coils and audio transformers often played a greater part than the valves in shaping the sound. In broad terms, the LC equaliser is used to add presence and 'air' to a mix and, unlike the



The latest incarnation of SPL's enigmatic Vitalizer offers a mixture of the qualities of other models in the range. **Paul White** finds out whether it has anything new to offer.

SPL VITALIZER MK2-T £680

pros

- Easy to set up.
- Smooth yet transparent sound that combines deep bass with high-end detail.
- Looks great.

cons

- Costs rather more than a basic enhancer.

summary

This box does the things that we often hope equalisers will do, but later find out they can't. Using the Mk2-T is an easy way to put a very professional polish on your mixes.

SOUND ON SOUND



New & Improved?

I did a direct comparison between the Mk2-T and a regular Mk2 Vitalizer. The Mk2 has the same controls (with the addition of a separate bypass button for the width expander, which the Mk2-T lacks) but doesn't have valves or an LC filter. At the same physical control settings the Mk2 sounded quite different, and when used with unbalanced leads it also exhibited a significant level increase when the effect was switched in, which the Mk2-T did not. Readjusting the controls brought the sound of the two units closer together, but I still felt that the Mk2-T sounded noticeably more musical and focused.

bass and mid controls, it still has an effect when the Process control is turned fully down. That's because this filter uses a mix of the original signal and the mid/high filtered signal as its source.

The final control is for Stereo Width, and it operates on a very simple and well-known principle. Some of the left-channel signal is inverted in phase and fed into the right channel, while some of the right-channel signal is reversed in phase and fed into the left channel. This has the effect of widening the stereo image beyond the speakers, but you have to be careful not to go too far, otherwise centre sounds start to drop in level. Though simple, this process has the advantage of being both effective and fully mono compatible, and the designers claim that using a valve in this stage adds depth to the sound, while reducing the sharpness of off-centre sounds. The Active bypass switch takes the enhancement and stereo expander out of circuit, but the stereo expander can be used on its own if required, simply by making the effect active and then setting the Process and Intensity controls to minimum.

Using the Mk2-T


I don't know why, but I found the Mk2-T much easier to set up than the big Tube Vitalizer, and having one set of stereo controls rather than two mono sets doesn't really account for the difference. Adjusting the Mk2-T is more like setting up an equaliser — but the results combine the best attributes of EQ with dynamic enhancement. For example, the low-end power you can get from using the bass control never ceases to amaze me — it's hard to believe the unit is not synthesizing sub-bass, but apparently that's not the way it works. The bass can be made huge, deep, powerful or punchy, but, unlike conventional equalisers, the process doesn't trash the lower mid-range and never feels out of control. The compressor is also very useful, as it holds the peak

level down while still enabling the user to add a lot of subjective bass energy to a mix.

The Mid/High Tune control can produce quite a bright sound when set lower than 2kHz, especially with high Drive and Process control settings. This can be useful for adding bite to soggy drum recordings, but for processing complex mixes it's probably better to use it higher up the range, so that it actually smooths out the mid frequencies a little. Then the LC-EQ control can be used at a higher frequency still, to add the 'air' back into the top end. The result is the kind of clarity and definition that most equalisers don't deliver — at least, not the sort you and I can afford. What's more, the setting up process is far more intuitive than adjusting a parametric equaliser.

Though the stereo width expander is pretty basic, it also works extremely well, and the results rival far more complicated systems that may have serious mono compatibility problems.

Conclusion

I really like the Mk2-T. It's easy to use, it delivers a very classy sound, and it works on whole mixes as well as on individual tracks or submixes. Of course, it is dedicated to stereo use, so it's not as flexible as the Classic or Tube when it comes to working with individual mono sources, but it's a useful thing to have patched into a stereo subgroup so that you can send it anything that needs enhancing. I don't know exactly what contribution the valves or coil filters make to the overall sound and what's due to other circuit tweaks, but however the result is achieved, I've no complaints. The Mk2-T is useful on virtually every type of music, from pop to new age to dance, and in the latter application the floor-crumbing bass it can produce is almost reason enough to buy it before you even listen to what else it can do. It's not the cheapest enhancer on the market, but it could be the best value. 

information

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