

Header: The Culture Vulture Mastering Version
Strap: Thermionic Culture answers the calls of mastering engineers on their modern classic, but is it just for mastering? Robbie Stamp gets tweaking.

Review

Since its release the Culture Vulture has developed a niche with no real direct competition. So what do Thermionic Culture do? That's right, bring out a mastering version! It may seem an odd thing to do with a distortion unit, but demands from users have led Thermionic Culture to develop the Mastering Version (MV) having become a staple for many who can't get the Vultures range of audio colouring from existing mastering equipment.

So what's new?

The most obvious change on the MV is the use of indented (stepped) pots on the Drive and Output controls, thus making it more appropriate for mastering usage as recallable settings are essential when making A/B comparisons or re-mastering a project. Mastering equipment is the most common place for indented pots, but they are also useful for many tracking/mixing projects. Instead of the original 1 to 11 settings, these controls now measure in dB, with Drive ranging from -20dB to +13dB and Output from -25dB to +5dB. The Bias controls are not indented as the ammeters on the front offer a reference to their settings. The main signal path change to the MV is that transformers have been added to offer balanced input and output on TRS jacks. The output transformer can be bypassed, though this defeats the whole idea and means you miss the extra (if minimal) distortion caused by saturating the transformer. The only problem I found was that there's no marking to state whether bypass was up or down on the rear switches, though a little audio investigation provided the answer.

The layout of the knobs on the front can cause a little confusion as the two channels are arranged as mirrors of each other. Though this would be an awkward layout for a stereo parametric eq, I found it easy to work with when tweaking settings on stereo signals. The unit is aesthetically pleasing and its array of indented knobs, rotary selectors and switches inspires one to tease out those radical sounds. On a final point of aesthetics, the original Culture Vulture used the classic 'chicken-head' knobs for the Distortion Type, Bias and Drive settings, but only the Distortion Type now uses this style. The others are of a more modern style that gives the unit an old-school-meets-new look that I feel sums this unit up.

Tweakability

Having read all about the original model I was worried that I would turn the MV on and disparagingly think 'well, that's distortion for you'. Instead I found this to be the most tweak-able black box I have ever encountered and I became annoyed that I had to take my hands off it to carry out day-to-day functions (food, toilet, etc.). The problem is trying to describe the sonic magic found lurking beneath that gloss black finish.

The first stop was, of course, to use it in a mastering role. Using the prescribed nominal setting (first pentode setting with 0.4mA on the Bias) I found small adjustments to the Drive, balanced with a counter setting on the Output gave a subtle saturation effect that really helped fatten up a digital mix. The drums and bass (live in this example) seemed to cement together more. The vocals and horn section became softened and thicker without losing presence. What excited me in this context was that I could make several passes of the whole mix with a variety of settings (subtle saturation to rough distortion) and then comp the mix back together. The main body of the track sweetened up, whilst drum breaks got some real dirt and the fade out could go through increasing stages of pentode break-up. Used in this

way the indented pots and dB markings became a real boon for recalling settings when the distortion tweaks had gone too far.

With acts like the Chemical Brothers extolling the virtues of the Culture Vulture it would be remiss not to mention how this unit can affect the all important drum loop. In a word it's....well, there isn't just one word to sum up the possibilities. Obviously drums can do with that distorted edge to give them weight, especially in genres where they are the foreground element. The almost inexhaustible range of settings that are possible between the Distortion Type (triode, pentode 1 and pentode 2), the Bias and the Drive can create a fat distorted compression sound, or make a gated break-up that can remove any ambience to leave it dry and hard (Drum and Bass really benefits). Then reach for the overdrive switches, having backed off the Output level, and you get a distortion that would make Nine Inch Nails blush. It is in these extreme modes (usually with P2 selected) that the low-pass filters come into their own, trimming out the increase in harsh harmonics.

As a DI

The input sockets on the front of the MV accept high impedance sources (guitar, bass, electric piano etc.) which turn the unit into a DI distortion box. On nominal settings the sound is clean and of superior quality to most DI boxes and there's plenty of gain available. Of course the distortion is too much to resist and a whole world of dirt opens up. From a gentle roughing up and rounding off to super sustained fuzz or a biting, caustic gated sound that you'd have to destroy a valve guitar amp to achieve. The fine balancing possible with the Drive, Bias and Distortion Type knobs, as well as the Overdrive switch, allows for a considerable range of distortion tones that I could bin most of my stomp boxes for.

In a search for sounds that would not benefit from a touch of the MV I tried vocals, horn sections, electric pianos, organs and synths. Each one was easily spiced up and fattened with subtle settings that didn't trash the dynamic peaks. Though a massively distorted horn section was pretty unusable, the vocals, Rhodes, synths and organs could all be shaped in ways I've not experienced by running them through standard distortion boxes.

Conclusion –

The indented pots and balanced inputs/outputs have answered the demands of those mastering engineers using the original Culture Vulture without sacrificing its niche-making idiosyncrasies. Though it may not be obvious why a mastering engineer would need such a full-blown distortion unit, having spent some time with it I can see its potential in that environment. The MV inspires the kind of minute tweaking that a good mastering engineer should revel in, and its range of sonic alteration is unparalleled. Add to that the quality of signal path on offer (this is handmade with no puny solid state corner cutting) and you can see why this might be a 'must-have' for mastering houses. Obviously most of us are not mastering engineers, but that matters not. This unit has manifold uses, from warming up digital mix downs, beefing up drum loops and sub-mixes and providing two top quality balancing DI lines, to giving synths (especially virtual ones) the bite they so often lack and opening up a ridiculous range of mind-altering distortion. Ok, so it isn't cheap, but once you take into account the quality of the components, design and overall sound, try adding up the cost of two equal quality/range distortion boxes, two valve DIs and a stereo mastering valve/tape saturation unit. It doesn't seem so pricey then. My final word on the matter is that the adjustments to the MV are such that I would take this unit over the original, even if I didn't do mastering, just for the recall solution and the balanced I/O.

Verdict

A simple yet well implemented update to a true original. Considering what it offers, and what it can save you buying, it's worth every penny.

Build quality	10
Value for money	8
Ease of use	8
Versatility	9
Sound/results	10

Boxout: Vultures and Valves.

For those not already familiar with the beast that is the Culture Vulture here's a little recap. It is essentially a two channel, 2U rackmount valve distortion unit. It offers on each channel three distortion types (one triode* for even-number harmonics and two pentode* for odd-number harmonics) with adjustable input drive, bias (to adjust the current across the valve grids), an overdrive mode for extra distortion and a low-pass filter (7kHz and 4kHz). Distortion levels run from a nominal 0.2% to a monstrous 99.9%. Instead of VU meters on the front it has 2 ammeters (meters for measuring current in amperes, or amps for short) to indicate the current across the valve grids, which heavily affects the character of the distortion.

* Triode and pentode refer to different grid arrangements in the valve for voltage amplification. A triode has one grid controlling the flow of electrons between two plates (the transmitting cathode and the receiving anode). The pentode has an extra control grid and it has a flatter (linear) frequency response to a greater voltage range than the triode configuration. When overdriven the triode cannot keep up with the necessary voltage increase and squares off (compresses) the signal which can produce pleasant results, whilst an overdriven pentode becomes unpredictably non-linear and produces harsh, unpleasant results.