



The Culture Vulture Mastering Version

Thermionic Culture answer the call of mastering engineers on their modern classic. **Robbie Stamp** gets tweaking...

DETAILS

PRICE £1,469

CONTACT

Supplier: Unity Audio Ltd Tel: 01440 785843 Web: www.unityaudio.co.uk

TECH SPEC Frequency response (low

gain): 30Hz-26kHz Frequency response (overdrive): 70Hz-7kHz Max output level (dBu): +18dB Noise: -83dB (weighted reference M.O.L.) Input impedance: 50K Ohms Output impedance: to drive 10K Ohms

Connections

2x rear input (transformer balanced TRS ¼" jack)
2x rear output (transformer balanced TRS ¼" jack – transformer bypass switch for unbalanced operation)
2x front input (TRS ¼" jack) – bypasses rear inputs

INCE ITS RELEASE the Culture Vulture has had no real direct competition. So what do Thermionic Culture do to stay in this niche market? 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).

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 meters 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, but this defeats the whole idea and means that you miss the extra 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.

When I turned the MV on I found it to be the most tweak-able black box I have ever encountered. 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

Vultures, valves and va-va-voom!

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 per cent to a monstrous 99.9 per cent. Instead of VU meters on the front it has two 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 wo 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 regater voltage range than the triode configuration. When overdriven the triode cannot keep up with the necessary voltage increase acquares off



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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 also became softened and thicker without losing any 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



"THE MU IS THE MOST TWEAK-ABLE BLACK BOX I HAVE EVER ENCOUNTERED"

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. 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 compressed sound, or make a gated break-up that can remove any ambience to leave it dry and hard. 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 box...

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 a super sustained fuzz or a biting 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. Though a massively distorted horn section was unusable, the vocals, Rhodes, synths and organs could 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 nichemaking 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.

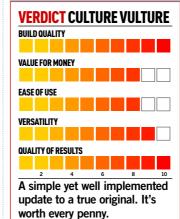
The MV inspires the kind of minute tweaking that a good mastering engineer should revel in, and its range of sonic alteration is unparalleled. Add to that the quality of signal path on offer, and you can see why this might be a 'must-have' for mastering houses. Obviously most of us are not mastering engineers, but that matters not. This

unit has manifold uses, from warming up digital mix downs, beefing up drum loops and submixes and providing two top quality balancing DI lines, to giving synths the bite they so often lack, and opening up a ridiculous range of mind-altering distortion.

OK, it isn't cheap, but once you take into account the quality of the components, design and overall sound, add 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. 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. FM

ON THE DVD

Check out the sound of The Culture Vulture MV for yourself on our DVD. Go to page 136 for further details.



ALTERNATIVES

SALE PROPERTY

EMPIRICAL LABS EL7 FATSO JNR (£2,050)

Digitally controlled analogue saturation processor for modeling the 'musical non-linearities' of tape, valve and class-A circuits. A lot less distortion oriented than the MV, and a lot more expensive. www.empiricallabs.com

CRANESONG HEDD192 (£2,300)

'Harmonically Enhanced
Digital Device' for tape and
valve (triode and pentode)
saturation/harmonic
enhancement processing for
the mastering process. All
digital, though also works as
an A/D and D/A converter.
24-bit processing at sample
rates up to 192kHz. More
subtle and expensive than the
MV, and not a valve in sight.
www.cranesong.com

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