



▶ The Culture Vulture is a valve effects unit that will bring class to your distortion

# CULTURE VULTURE

▶ VALVE PURISTS THERMIONIC CULTURE ENTER THE DISTORTION ARENA WITH THEIR CULTURE VULTURE. JON MUSGRAVE CIRCLES THE CARCASS...

YOU COULD BE forgiven for thinking that every single development in pro audio is about computers. There is, after all, a small group of people who still like to do things the old fashioned way. Take, for example, the latest album by The White Stripes. Recorded, mixed, and, if you buy it on vinyl, mastered without a computer to be seen.

You'd be right in thinking that's OK for a garage rock band, but how does it relate to music that's technology driven? Well, the answer, no doubt, comes from the sound and that's where a company like Thermionic Culture comes in. Set up by former Chiswick Reach Studios maestro Vic Keary and electronics designer Jon Bailes (with the added input of renowned engineer Nick Terry), their philosophy is rooted not only in the analogue tradition but also in the supremacy of valve circuits.

Their first product, the Phoenix valve compressor, was derived from Vic's Chiswick Reach compressor design, and is one of only a few 'variable Mu' valve designs to take on the highly regarded (and highly expensive) Fairchild compressor. Thankfully for us they haven't stopped there and their latest product is a completely different beast altogether. Enter the Culture Vulture stereo valve distortion unit.

## The rackmount decision

For many of us our first experience of distortion processing comes in the

You might expect more pro labelling than  the white stickers on the back panel

form of guitar pedals. In fact many mix engineers favour such pedals over and above rack multi-effects when they're looking for a little extra crunch.

However, although you'll typically find valve preamp stages in guitar amplifiers, these pedals (with a couple of notable exceptions) tend to be solid-state. So quite rightly Thermionic's original decision to package the valve distortion stage of an amplifier as a rack effects unit makes a lot of sense.

But given the task of building a rack distortion that's tailored more for signal processing than a gigging guitarist does raise a number of issues. The most significant of these is that minor subtleties will be far more obvious in a studio environment. So part of the CV's design philosophy is to offer everything from the most subtle to the most extreme effect (that's 0.2% to 99.9% according to their spec!). Also significant is the decision to go for a twin-channel design, which opens up the option of processing stereo signals.


## First impressions

As you will see, the Culture Vulture comes as a 2U rack unit with suitably retro knobs and switches. The twin channel controls are arranged either

side of two meters and are laid out as a mirror image. This may take a bit of getting used to. Connections are pretty straightforward with audio ins and outs all on quarter-inch-jacks and mains delivered via standard IEC. It's also worth noting that the input impedance is quite high allowing you to plug a guitar in direct.

A quick look under the lid reveals a pretty tidy though obviously hand-made construction. The majority of the components are housed on the underside of the chassis and with no printed circuitboard in sight they're all individually wired together. On the top side of the chassis you simply get the valves with a perforated case lid allowing plenty of air to circulate.

So how does the Culture Vulture work? Well, you get to choose from three modes: triode, pentode 1 and pentode 2. In triode mode you'll get even harmonics, pentode 1 odd harmonics and in pentode 2 a combination of both. Each mode is then affected by the level of drive you apply and the level of current you apply to the valve circuit (with the Drive and Bias controls respectively).

To give you a better idea of where you're at, the current is represented 



 FMCD TRACK 8

£992

## INFO

**Thermionic Culture Culture Vulture**  
Valve distortion box

### Connections

Two analogue ins and outs (quarter-inch jack).

### Max output level

+20dBv

### Distortion

0.2% to 99.9%

### Noise

Better than 75dB below MOL at most settings

### Impedance

30kΩ input, 2.5kΩ output

### Frequency response

+/-1.75dB, 50Hz to 15kHz at low distortion


### Contact

Unity Audio:  
01440 785843

### Website

[www.unityaudio.co.uk](http://www.unityaudio.co.uk)  
[www.thermioniculture.com](http://www.thermioniculture.com)



Being hand-made  the Culture Vulture looks and feels solid

 FMCD TRACK 8

First up is an acoustic and synth bass moving from subtle to more extreme distortion in triode mode. Next comes a synth bass in pentode 1 and 2 mode then with overdrive. Next are drums in P2 mode, then overdriven plus drums with bias set to cause gating. Finally is a rez sound flat then distorted with P1 and P2 distortion.

by the ammeter. There is an additional drive boost labelled as Overdrive, and an output low-pass filter with 4kHz and 7kHz options. Each channel can be completely bypassed but this also bypasses the output level control (which, like all the other controls, goes up to 11!).

**In use**

The first thing you'll notice about the Culture Vulture is that although it's sturdily constructed it's not extremely heavy (probably no bad thing). Even so, once racked up and powered up (with the large green light showing activity),

found this particularly useful for electric guitar or drum sub-mixes.

Interestingly, as you increase the Bias control (thus reducing the current), the character of the distortion becomes thinner. Even so, with the overdrive engaged this mode is still capable of quite heavy distortion.

P1 mode is clearly a more audible distortion from the outset and certainly more toppy. For some applications, such as drum loops, I found myself reaching for the low-pass filter, but if you're looking to generate higher frequency harmonics this is a good place to start. I suppose if you're really going to town

**DISTORTIONS**

Harmonic distortions are related to the fundamental frequency of a signal. They're referred to as multiples of that frequency (2nd, 3rd, 4th order, etc) and can be conveniently divided into odd and even harmonics. The harmonics up to the 6th order are generally considered to sound musical, but beyond that point the majority sound increasingly discordant.

If you're trying to distort a signal, the nastiest effects are typically produced by driving solid-state circuits as these then produce a lot of high-order harmonics. However, if you're looking for more musical distortions valves are the way to go, hence the success of valve guitar amps.

Different valve arrangements produce different types of harmonics, with triodes generally producing even harmonics and pentodes odd harmonics. These have their own specific characteristics with 2nd and 4th order making the sound fuller and 3rd and 5th making the sound more metallic. As you can see, the Culture Vulture makes use of all these characteristics, but unlike many amps or pedals it gives you full control over valve operation mode and biasing, going for a more scientific approach than you'll find on the average stompbox.

❖ “Being a bit of a distortion pedal fan, it certainly feels a bit strange plugging up such a grand box to do this sort of job, but inevitably the results speak for themselves” ❖

you certainly feel like you're using a quality unit.

The mirrored panel set-up on the other hand does take a bit of getting used to. This certainly isn't the only unit that I've seen with this and in practice you'll find yourself taking extra care to make sure you don't screw up your settings.

Like most all-valve boxes you'll immediately get a sense of just how inter-related all the controls are. Turning the Bias control up, for example, reduces the current across the valve (and inevitably affects its characteristic), but it also reduces the level so you have to adjust the output level accordingly.

Essentially you'll find the interplay between the drive, bias and distortion type necessitates much tweaking of the output level. The other thing that's rather interesting is that at certain bias levels, especially when in P2 mode, the signal actually breaks up causing a sort of gating effect... a strange but very usable effect not unlike a dying battery in a pedal!

As far as the various levels of distortion are concerned, the CV certainly covers a lot of ground. In triode mode, low-level, subtle distortion is great for adding some thickness to things, and I

on something (possibly D'ing a guitar) P2 mode is the best option, with the added bonus of that fantastic break-up effect at certain bias levels.

**Conclusion**

The Culture Vulture is without doubt one of the more interesting boxes I've had the opportunity to play with in recent times. Being a bit of a distortion pedal fan, it certainly feels a bit strange plugging up such a grand box to do this sort of job. But inevitably the results speak for themselves.

For many sorts of music, getting the track to sound big but also contained is half the battle. If used carefully the Culture Vulture can increase the energy of elements in the same way that compression can but without quite the same effect on the signal's dynamics. At the other end of the scale it can produce a blistering, sustained signal out of just about anything. For certain types of music I would not hesitate putting the whole track through it, which when you consider it's nominally a distortion is saying something.

Needless to say, this is not a budget unit and is more likely to find a home in the arsenal of a mix engineer or producer than a budget-conscious project

studio owner or gigging guitarist. Still, if you should ever be lucky enough to find yourself in that position, this box deserves your attention. **FM**

**ALTERNATIVELY**

**Mesa Boogie V-Twin (£475)**

Probably about as posh as a guitar pedal can get, the V-Twin follows similar lines as their dual-rectifier amps and includes valves and a line level out for recording direct. [www.mesaaboogie.com](http://www.mesaaboogie.com)

**Line6 DM4 (£179)**

In theory this distortion modeller is as non-valve as you can get, but if you want access to many different styles of distortion, Line6 are highly regarded for their modelled versions of the classics. [www.line6.com](http://www.line6.com)

**Empirical Labs Fatso Jr (£2,300)**

Expensive but highly regarded stereo solid-state saturation processor. Will do the subtle end of things but not the more extreme sounds of the Culture Vulture. [www.empiricalabs.com](http://www.empiricalabs.com)

VERDICT	Culture Vulture
Build quality	8.5
Value for money	7.5
Ease of use	7.5
Versatility	7.5
Sound/results	8.5

An interesting take on the distortion box that may wean a few people off their stompboxes, but this luxury comes at a price.