

# Thermionic Culture

## Solo Vulture

### Valve Distortion Processor

When it comes to valve distortion, few want it more than guitarists— and few know more about it than Thermionic Culture...

MATT HOUGHTON

It seems only yesterday that UK-based company Thermionic Culture came to my attention with their 'Culture Vulture' valve processor, but they've been around since 1998. Almost a decade and a half later, the company have developed an enviable line of valve-based processors, the names of which have all been inspired by our feathered friends: how time flies!

At the time of writing, Thermionic Culture were on the cusp of celebrating their 1000th sale of the original Vulture — although, with various special editions, the total number of sales is closer to 1750. That's an impressive feat for a processor of this price, and something that's testament to the affection so many engineers feel for the design. The Vulture is all about distortion, and while some things have changed over the years — notably, designers Vic Keary and Jon Bailes

claim a 15dB decrease in the noise floor since the original SOS review by Hugh Robjohns — it's the same basic design: a two-channel, valve distortion processor, based around a 6AS6/5725 distortion stage, with line inputs on the rear, which cut out when plugging into the direct inputs on the front panel.

What was unique about the Vulture when launched was the degree of control it gave you over the nature of the distortion, with selectable distortion types, and a 'Bias' control enabling you to vary the current flowing through the distortion valve. There are also two outputs per channel: a line-level one, and a 'low' one, intended to feed into guitar amps. All of which brings me on to the subject of this review, the Solo Vulture.

#### Flying Solo

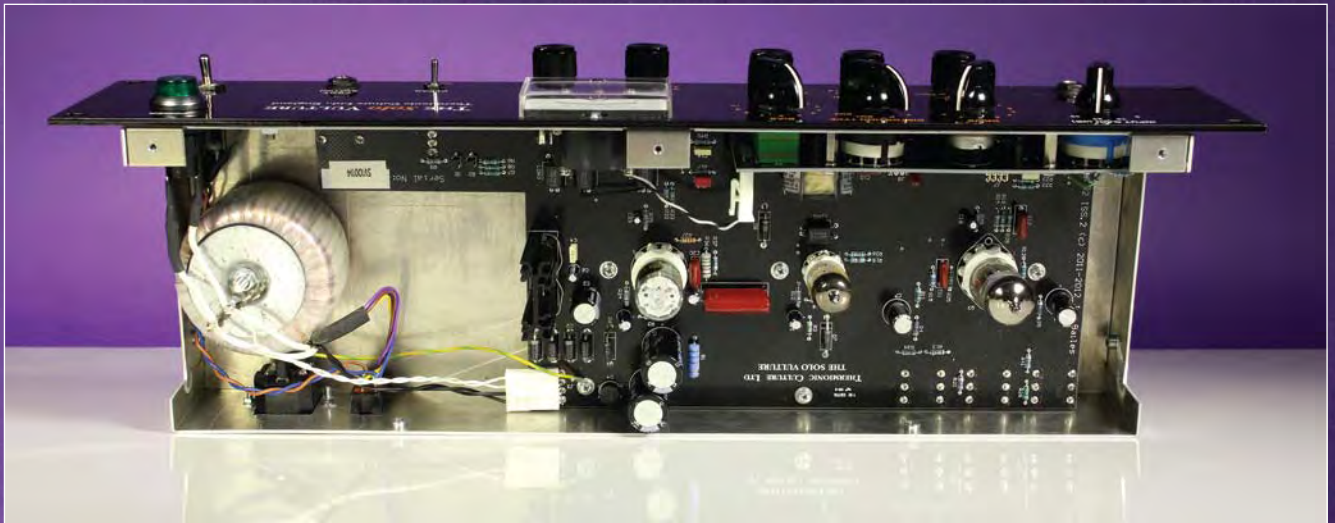
As the name implies, the Solo Vulture is, in essence, a mono version of the Culture Vulture — and it is, indeed, based around

similar valve stages — but that description paints a less than complete picture. The preamp stage uses a 12AX7, compared with the original's EF86, to provide two stages of gain, the reasons for which will become apparent. The output valve is a 5965 type, compared with the original's 5963. The reason for this is to provide greater gain and a higher output.

While the Solo Vulture offers all the features you'd expect from the Vulture, it has also taken some of the shiny marvels from the special edition (perhaps they should have called this one the Maggie?), and incorporates some features that will be of particular interest to electric guitar and bass players, who together should form a significant part of the market for a mono distortion channel such as this.

The shiny black front panel is printed with a two-tone legend, the white lettering dedicated to the 'clean' functions — the stepped input gain, the DI input, a footswitch input, on-off toggle switch, and half of the clean/dirty switch, which is, again, a toggle type. The orange printing describes the functions dedicated to the art of distortion. These include controls that will be familiar to anyone who's used a valve amp or pedal, and some that won't be, and many of





Lifting the lid of the case reveals neat construction and circuitry.

them run from a spineless '1' all the way up to a presumably *Spinal Tap*-inspired '11' setting. The non-detented 'drive' control does exactly what you'd expect, as does the stepped Presence control, which offers two settings for a broad presence boost (the third being 'off'). Another switched rotary control governs a low-pass filter that rolls the top end off the dirty channel (with settings of 'out' and 15, 9 and 4 kHz available).

That's all pretty standard stuff, though, and the controls responsible for the more interesting aspects of this device are the Mid-Lift, Distortion Type and Bias controls. The Mid-Lift, which has been carried over from the Vulture Anniversary Edition, is a narrow, mid-frequency boost. Like the low-pass

filter, it's switchable, this time with centre-frequency options of 0.5, 0.63, 0.85, 1.1 and 1.6 kHz, as well as Off. By changing the centre frequency of any boost, you change how your amp reacts to the signal. The brief, but helpful and user-friendly, manual suggests setting the Mid-Lift frequency to the key of the song you're playing, as well as suggesting suitable settings elsewhere on the Solo Vulture to use with this feature.

The Distortion Type switch presents the user with four different options compared to the original Vulture's three, with the legend describing the settings as 'T', 'P', 'SQ1' and 'SQ2'. As on the Vulture, the 'T' position provides a triode configuration, which generates mainly even-order (ie. smooth-sounding) harmonics, and the single 'P' option (there were two on the original) puts the device into a pentode configuration, generating mainly odd-order harmonics, for a more aggressive sound. SQ denotes 'squash' options, which are intended for anyone wanting more filth and a bit of compression/saturation.

The Bias control, with its adjacent mA meter, was for me the most interesting feature of the Solo Vulture, and the one that makes this device really stand out from the crowd of distortion processors. Basically, it enables you to starve the distortion valve of current or to over-feed it, the practical outcome of which is that the user has a very interesting tone control: in keeping with the feeding terminology, when you starve the valve the sound gets thinner, and as you feed it more, it becomes increasingly rounded. When you get into over-feeding territory, though, the sound really starts to break up, as if the device is faulty — it's not, but my point is that there's more control here >>



## Thermionic Culture Solo Vulture £1332

### PROS

- Reassuring build quality.
- All-analogue signal path, including switching.
- Intuitive in operation, but with a helpful manual, should you come unstuck.
- Applications both in the studio and a bassist's/guitarist's live rig.

### CONS

- Output levels vary significantly between distortion types.
- A few extra features could benefit a lot of users.

### SUMMARY

One of the best distortion processors on the market is now available as a mono device, with extra bells and whistles to make it well suited to guitar and bass processing — but without compromising its suitability for use on other sources. You could think of this as the first half of an excellent guitar amp, or as a great piece of studio outboard.



The rear panel sports two different level outputs, and a switchable power supply capable of operating at 110V or 240V.

» than anyone should need, so all tastes should be catered for.

The clean channel is a new feature, too, providing an active stage between the input and output (the original Vulture had a hard bypass). This is, of course, for the benefit of guitarists and bassists, who can then balance the clean and dirty output levels so that they both present the same sort of level to the amp.

### Test Flight

To get a feel for the Solo Vulture, I played both guitar and bass directly through it via the front-panel DI, feeding the 'Lo' output into my Fender Blues Deville's power-amp stage, and later tried feeding it directly into my DAW at line level, monitoring the dry distorted sound without any power amp or speaker colouring the resulting sound. I then used it as an insert processor for a few alternative sources with my DAW.

The first thing to say is that the unit oozes quality. It feels nice, solid and well built, and the case is well enough ventilated that it didn't get unduly warm during my tests. The front panel is neatly

### Alternatives

The character of a distortion processor comes down very much to personal taste, which makes it really difficult to recommend specific alternatives, and there are few that offer so much control, or which have been designed so specifically with both the studio engineer and guitar/bassist in mind. Driving any tube or transformer-laden preamp or processor into distortion is one alternative, perhaps combining that tactic with a little pre-distortion compression, but the tonal results will vary immensely in character. For outboard gear that's dedicated to the art of distortion, the other Vulture processors are worth consideration, as is the **Looptrotter Monster** — and perhaps a few of the better guitar-preamp pedals will get you into similar territory, albeit without the same degree of functionality and versatility.

Painted in a glossy black, and it's cleanly laid out, with plenty of space between the controls, all of which I found very intuitive in use. The sound is everything I've come to expect from Thermionic Culture's high-quality valve gear, with everything from thin and brittle, through warm and rounded to woolly fuzz on offer, and being able to switch between the clean and dirty channels with a footswitch, as if this were a guitar amp, was great. Once I'd found a setting I liked, it was easy to balance the clean and dirty levels, though I should note that there's no level-matching between the different distortion settings, and that you'd therefore be left with a certain amount of juggling to do to match the clean and dirty channel output levels if you were to switch between distortion settings mid-performance — between songs at a gig, for example. I can understand why this is the case, but it would be nice to see the output levels better matched, somehow. While I'm on the subject of output levels, it's worth noting that this thing seems to kick out a hell of a loud signal at times, whichever output is being used! Feeding my RME Fireface 800's line level inputs (with no gain provided by the Fireface), I was doing all the level tweaking in the 1-2 region of the dirty channel for some settings, to avoid overloading the interface's inputs, and I found this a little fiddly — although, in the event, perfectly doable. It's hard to be too critical about this aspect of the Solo Vulture, though, as the levels are inherently related to the settings you choose: there are much quieter settings available, particularly when you bring the Bias control into play, for which you'll want to turn the output levels up much further.

For both guitar and bass, this is a beautiful, rich-sounding distortion processor, but the applications stretch far beyond that. I routed various sounds through it to see what I could come up with: amongst other things, it was great

for overdriven rock vocal effects, for smacking a bit of attitude into a humdrum mono drum loop, for lending a bit more grit to snare drums, and for fattening up soft-synth patches, lending the sound a real and desirable analogue flavour.

### Conclusion

In short, then, I'm a fan, although I probably wouldn't quite class the Solo Vulture as 'perfect' for me. As well as the level-matching issues I discussed earlier, I'd love to see the option to high-pass filter the signal running through the distorted channel, and the ability to blend between the clean and dirty channels, as this would make the Vulture much more versatile on sources such as bass, drums and vocals, allowing you to keep more of the energy of the low frequencies intact. 'Combi' input sockets on the rear might also have made integration into some setups easier without pushing up the cost significantly. But while such features do appear on my wish-list, they aren't major criticisms, by any stretch of the imagination. In fact, this is a stunningly good distortion processor, and definitely a worthwhile refinement of a piece of gear that already deserves to be called a classic. The price isn't in stomp-box territory, so it will be a serious purchase for the non-professional guitarist or bassist — but given the quality of design and execution, and if you think of this as a combination of tube preamp, tube distortion processor and EQ, it's actually very fairly priced. For the non-guitarists out there, it's got just as good a chance of making it into the studio rack as it has a guitar-amp rig, and the price will probably seem keener in comparison with similar-quality studio outboard. Recommended. **■■■**

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