THERMIONIC CULTURE

# THE CULTURE VULTURE

*valve distortion unit*

**OPERATING MANUAL**



# WARNING

Do not take this unit seriously. The Culture Vulture is a ‘fun’ effects unit and has been designed for maximum pleasure!

However, for your personal safety, please read this operating manual thoroughly before using the equipment.

To reduce the risk of electric shock, it is essential that the unit is disconnected from the mains supply before any of the covers are removed.

Please also note that the power supply capacitors within this unit can remain charged even after the mains supply has been disconnected. It is essential that these capacitors are discharged after the mains supply has been disconnected and the covers have been removed.

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# 1 Introduction

The Culture Vulture is the first and only all valve unit, dedicated to producing the best harmonic distortion money can buy.

It can ‘warm’ a sound gently, or create a noise like a 200 watt guitar stack overdriven with all speakers slashed.

The Culture Vulture is a two channel unit for adding harmonic distortion to a variety of input sources. By biasing and configuring the distortion valve (6AS6), three types of distortion with infinite variations can be achieved.

Although the unit can be ‘clean’ (less than 0.2% THD), added valve distortion may be quite desirable, improving naturality and smoothing off unwanted digital spikes. But The Culture Vulture can be used for effects! Push it and try it!

The user has total control over the type and amount of distortion, which can be changed from even to odd harmonics or a combination of both. Starved, the sound from The Vulture becomes thin and loses its body, overfed, it becomes fatter and more rounded.

The Culture Vulture features two channels which can be used independently on individual tracks, or put across a whole stereo mix.

## 2 Controls & Meters

The ‘drive’ and ‘output level’ controls simply vary the amount of gain that the input and output signals are subjected to.

The ‘bias’ control adjusts the current through the distortion valve.

The ‘distortion’ switch changes the valve from triode ‘T’ (even harmonics) to pentode ‘P1’ (odd harmonics). ‘P2’ is an unusual version of pentode and will give more drastic distortion at high bias settings, especially when ‘overdrive’ is selected.

The ‘overdrive’ switch set near the ‘drive’ control increases gain and bias.

The ‘filter’ is a 12dB/octave low pass filter operating at 4 or 7 kHz.

The ‘bypass’ switch links the input to output directly, cutting out the electronics of The Culture Vulture.

The meter reads the current flowing through the 6AS6 valve.

## 3 General Operational Hints

For normal line output, the ‘output level’ control should be at 7-8. Use higher settings when The Vulture is ‘starved’ to make up gain.

‘Normal’ current setting is 0.2-0.4mA. At 0.6mA you will get an even ‘warm’ distortion (The Vulture is over-fed !). At less than 0.1mA The Vulture is starved and distortion is uneven. On overdrive and max. bias serious starvation occurs and only peaks get through. The current meter will twitch and the result can sound like the effect of overdriving a Marshall stack with all the speakers slashed! (especially on ‘P2’ with hard drive).

Note: A good setting to simulate analogue tape distortion is ‘T’, normal drive. Current setting 0.3-0.4mA.

The ‘T’ setting gives the lowest distortion and a warm sound (even harmonic).

The ‘P2’ setting will add an octave to the original note at certain settings (but not cleanly).

## 4 Inputs & Outputs

Inputs and outputs are unbalanced stereo jacks on the rear panel.

There are two output sockets per channel. ‘Hi’ is standard line level (+4dBV). ‘Lo’ is 20dB below this and can be used to drive an amplifier. Both outputs can be used together. NB. When in ‘bypass’, the ‘Lo’ output will be 20dB below the input level.

There are also input jacks on the front panel for ‘D.I.’ use. These cut out the signals from the input jacks on the rear when a jack plug is inserted.

## 5 Servicing & Maintenance

### 5.1 Valves

All valves are selected to ensure that the unit gives optimum and consistent performance across both channels.

Although Thermionic Culture Ltd. guarantees the valves for twelve months, they can last for up to twenty years.

Spares can be obtained from Thermionic Culture Ltd.

Valve complement:

Input - 2 x EF86;
Distortion - 2 x 6AS6;
Output - 5963 (12AU7 / ECC82 near equivalent)

### 5.2 Operating voltage / Fuse

The Culture Vulture is factory set to operate from either 230V or 115V 50/60Hz AC mains supply. The operating voltage of this unit is marked on the rear panel, next to the mains inlet.

NOTE: Mains fuses may be replaced in accordance with the following table:

| Operating Voltage | Fuse Rating |
|---|---|
| 115V | T1A 20mm type |
| 230V | T500mA 20 mm type |

## 6 Specification

| | |
|---|---|
| Maximum Output level: (M.O.L) | +17dBV |
| Distortion: | 0.2% to 99.5% |
| Noise: | better than 75dB below M.O.L at typical settings |
| Input impedance: | 30kΩ |
| Output impedance: | 2kΩ (should ideally drive a 10kΩ input impedance) |
| Frequency response: | ± 1.5dB over 50Hz to 15kHz at low distortion) |
| Max. gain (clean): | 35dB |
| Max. gain (overdriven) | >60dB |

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