

TONE TIPS and Frequently Asked Questions

Using the Ethos with a Power Amp

The *Ethos* Overdrive sounds great using an external flat band power amp (with the GAC switch off (down)). One thing I have found however is there are different input sensitivities for various power amps. I originally designed it to drive a power amp, but when it was used with a guitar amp, the output volume control was WAY too sensitive (LOUD). In the end, I padded it down to work reasonably with guitar amps. This means for power amps that have a very low input sensitivity, an external device may be needed to boost the ETHOS output signal.

Headroom for Best Tone

The Ethos Overdrive circuitry has a current draw of 35mA at 9VDC. This current draw is due to the fact that the *Ethos* contains the circuitry equivalent to the front end of a guitar amp and more. This current draw will result in a battery life of approximately 15 operating hours. After 15 hours the battery voltage will decrease reducing the operational head room of the Ethos. Headroom loss may result in undesirable overdrive tones. To remedy this, either replace the battery or simply plug in the AC to DC adapter supplied with the *Ethos*. Maximum headroom results in optimum tone.

When to Use the GAC Switch

Using the ETHOS with a Guitar Amp

The Guitar Amplifier Compensation or GAC Switch is designed to reduce the degree the guitar amp colors the Ethos Tone, so the combination (Ethos + Guitar amp) sounds more like the amp itself. The GAC circuit design is based on compensating for tone stacks found in typical Fender and Marshall Amps.

In some cases guitar amps have a more flat response than a Fender or a Marshall. For example, the Normal Channel on a VOX AC30 has no tone stack. In this case, the amp is "relatively" flat and the GAC switch does not need to be engaged. Amps that sound like they have more midrange may sound better with the GAC switch off.

If you are looking for more lows and highs in your ETHOS tone, turning off the GAC switch will provide this as well. The 90's version amp has a post overdrive tone stack. In an interesting way, turning off the GAC switch can

approach this effect, where now the amp's tone stack is acting like the post 90's version tone stack.

Using the ETHOS Direct or into a Flat Band Power Amp

When you are using the Ethos in a DI application or going into a power amp, turn off the GAC switch. In this application no compensation is required.

Smoothing Your Overdrive Tone

The ETHOS tone stack is extremely diverse in nature. If you are trying to obtain a smoother or silkier overdrive tone, turn down the middle control. Some great tones can be had by setting it between 8:00 and 10:00. The higher the middle control is set, the more aggressive tone you'll get.

Using the Hi-Cut Control:

The Hi-Cut (HC) control is a very effective control that tapers the highs as it is turned clock wise. If you need to warm up your tone, simply turn up the HC control. The HC control affects both the Overdrive and Clean channels. Popular settings range between 10:00 and 1:00.

Frequently Asked Questions

What's the Difference between the Ethos Clean w/Fusion Boost Mod and the Ethos Clean-Fusion Model?

The Fusion Boost Mod provides a pre Soft Drive gain boost with a carefully contoured equalization, resulting in a nicely balanced smooth and rich overdrive (w/soft drive activated). The Fusion Boost is activated via a rocker switch located on the side of the unit. The Fusion Boost mod comes with the latest Guitar Amplifier Compensation (GAC) and Speaker SIM Design Updates. The new GAC adds Richer Body to your tone. The Speaker SIM emulates top end compression, making it sound better with all types of distortions and overdrives.

The Clean-Fusion Model takes the Ethos Clean w/Fusion Boost Mod and raises it to another level with

5 Additional Key Features

- 1) The Clean-Fusion provides a Second Independent Fusion Overdrive Channel.
- 2) The Fusion OD Channel includes dedicated Gain and Volume Controls.
- 3) The Fusion OD Channel is selectable via an On-Board Foot Switch.
- 4) The Fusion OD Channel includes a Soft Drive Circuit, independent of the Clean Channel. This allows the Clean Channel to be operated in two modes.

Soft Drive ON for natural limiting, or OFF for maximum headroom.

5) The topology of the Clean-Fusion is similar to the Dxmble Overdrive Special, whereby the Fusion OD Channel shares the Equalization controls with the Clean Channel.

6) Like the Ethos Clean w/Fusion Boost Mod, the Clean-Fusion Preamp comes with the latest Guitar Amplifier Compensation (GAC) and Speaker SIM Design updates. The new GAC adds Richer Body to your tone. The Speaker SIM emulates top end compensation making it sound better with all types of distortions and overdrives. Note: The Clean-Fusion Amp offers all of the above plus an integrated 30 Watt (RMS) Power Amplifier.

Where are the prices listed?

Prices are posted on the Prices/Order page of the website.

If I order the Ethos with the TLE-Classic Switch, will the original tone of the TLE or the Classic be compromised in anyway?

Having the Switch installed does NOT affect the integrity of the TLE tone or the Classic tone in anyway.

What are the dimensions of the Ethos Pedal Preamp?

7.5" x 4.75". The hi-cut knob extends .75" out on the upper right hand side. The new TLE/Classic Switch extends 3/8" on the upper left hand side of the unit.

What does "TLE" stand for?

TLE stands for Tighter Low End.

What is the difference between the Ethos Classic and Ethos TLE?

The Classic Ethos was modeled after the 80's version amp. This version was voiced to obtain a thicker tone. One contributor to this tone was to drive the low end hard to bring out harmonics and compression. One side effect however is if you play on the lower register, the bottom strings (E and A) mush out or splatter a bit. This is more noticeable with single coil pickups than hum-bucking pickups. If you play in the mid to upper registers this side effect does not occur.

Folks who play with humbuckers with heavy Overdrive and SINGLE note leads say they don't have a problem with this side effect. Folks who want to play chords in the low register (with low E and A strings below the third fret)

with more definition and less compression do not like the compression / splatter effect. This is where the TLE comes in. The TLE was designed to provide more string clarity on the lower strings with less compression, harmonics and splatter, while still maintaining the bottom frequency response. Because the bottom does not compress as much, the TLE sounds like it has more bass when you push it over into overdrive. IMO its not better, just different.

I boil it down to this:

- a.) If you want the more traditional tone go with the Classic with the expectation of more compression, overdrive and splatter on the lower strings
- b.) If you want a tighter low end to support low register chordal work, especially with single coil PUs, go with the TLE.

Does the Ethos use a True Bypass?

No, when the ETHOS is in the in-active mode, the signal runs through a unity gain buffer. The buffer is flat band in response, having an input impedance of 1 Megohm and an output impedance of 1k ohm. The buffer is very effective in mitigating loading effects downstream of the ETHOS.

Can I Use a +9V AC to DC Adapter?

An un-regulated +12V AC to DC adapter rated at 500mA is required based on the following: The ETHOS provides filtering circuitry that removes the noise (60 Hz Ripple) from typical AC to DC unregulated power adapters. This filtering circuitry develops a voltage drop across it, so the adapter voltage becomes +9VDC by the time it reaches the ETHOS analog circuits. Additionally, an unregulated +12VDC supply (not a regulated supply) is required due to the fact that it actually outputs 15 to 16 volts with the ETHOS load. This higher voltage provides the adequate headroom for the ETHOS to operate correctly. Using a +9VDC AC to DC external adapter will result in poor ETHOS performance.

What Does the BOOST Footswitch do and is it adjustable?

The boost function is set up just like the amp's circuit topology. When engaged, it reconfigures the tone stack (actually isolates portions of it from ground) so less mid frequencies are attenuated to ground, resulting in a boost effect. There are no trimmers or adjustments as part of this circuit.

I can't seem to get much difference between the MODERN and CLASSIC switch setting, is it only noticeable on certain settings?

Yes, you will notice a significant difference in the settings when the MIDDLE control is set between full CCW and 12:00. In this range the voicings are very different. This switch was included since it can offer a great diversity to the pedal. The CLASSIC switch setting configures the tone stack to what was used in the early amps. Its voicing can be more Fender-ish sounding where there is a less low mids. The MODERN switch setting reconfigures the tone stack to be more like the 80/90's amps. Here the voicing has more low mids resulting a thicker tone. When the MIDDLE control is turned up greater than 12:00 the difference in settings are not noticeable.

I'm not sure if I need the HRM eq...What is the tonal difference between the regular eq and the HRM eq?

The HRM eq is a 3-band eq located after the preamp stage (post OD as well). It expands the tone sculpting of the unit whereby Vox/Marshall like tones can be achieved. Folks who want to pursue a rock tone prefer the HRM.

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The **Clean-Fusion Preamp** model takes the Fusion Boost Mod and raises it to another level with 5 Additional Key Features:

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Who designed the Ethos and what is his background?

Rob Hall from Custom Tones, LLC designed the Ethos Overdrive. Rob received an Electrical Engineering degree in 1984, and has been designing electronics at an Aerospace firm for the past 30+ years, (building subsystem and black box electronics for aircraft).

Rob's been playing the guitar since he was 12 years old and has been in numerous bands ever since. He has been making amps and pedals for 34+ years. During the last few years he has gone into limited production on a couple of his designs. He is totally obsessed with Tone, music and gear.