

Ghost Drive – V2F-L

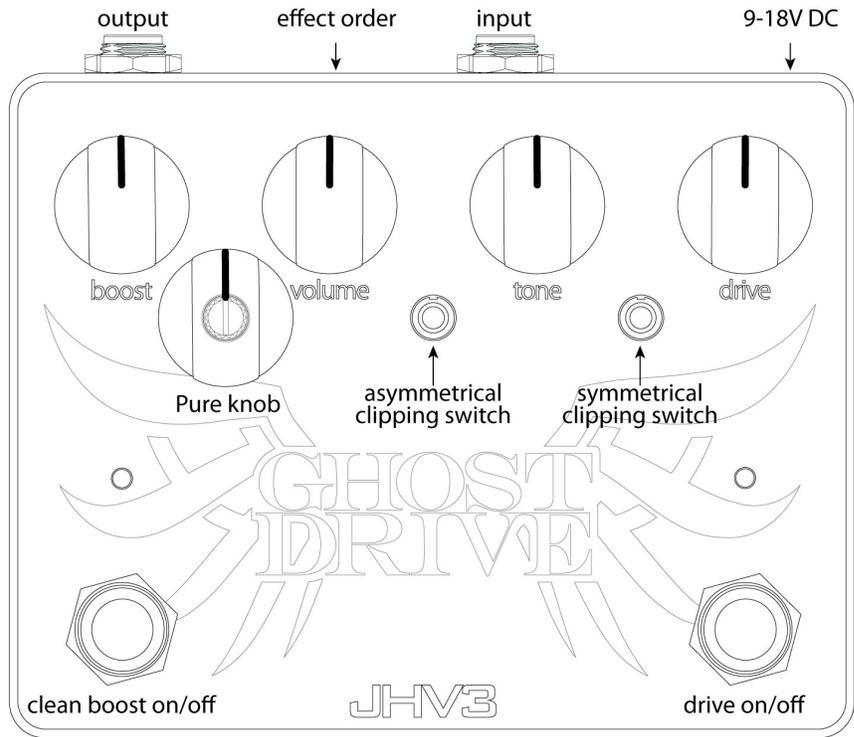
Thank you for trusting JHV3 with your tone!

The design goal of the Ghost Drive was to leverage the best ideas and techniques into one pedal to create an unusually versatile and inspiring overdrive/boost to equip the player for most any environment where they need an outstanding drive tone, enabling you to attain many different forms of natural grit and overdrive while preserving the magical dynamic between your guitar and amp. Each circuit is inspired by several great pedals/builders that made a significant difference in the way we play. Several years were invested in trial, error and iterations leveraging component selection and techniques to please the most demanding tone snobs.

The independent clean boost and drive sections were paired together in the same enclosure to create an remarkably versatile tool that leverages the benefits of pairing similar effects that would otherwise require more resources from your equipment setup. Here you'll find a range from extremely transparent chime to warm/fat/rounded chunk. Certain to be one of the most useful low to medium gain pedals you'll ever own, this pedal will serve you well for years and quickly become a trusty "secret weapon" whether you're playing live or trying to nail a remarkable in-context tone that gets you called back again and again for session work.

As simple as you want it to be. Plug it up, dial everything to noon and go! On the other hand, if you're more into the fine details of crafting tone that's unique to you, there's plenty of details to give you control over your dirt of choice.

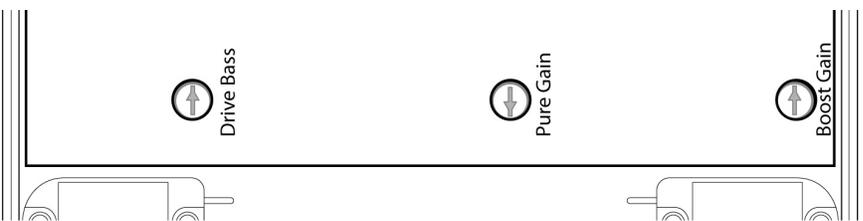
As a designer/builder my hope is that the Ghost Drive helps to inspire some of the greatest playing and art you'll ever produce. As a listener, I'm looking forward to enjoying what you come up with!



Internal Trim Pots

There are three more adjustments on the inside to help fine tune the Ghost Drive for your unique application:

Drive Bass Control - Adjust this control to find the sweet spot between your specific guitar and amp combination. Leaving it neutral plus a bit will allow single coil guitars to remain full sounding without becoming muddy. If your main guitars are usually darker sounding (semi or full hollow bodies) dialing this back a bit will help your tone cut rather than become "woomy" at higher gain settings.



It leaves the JHV3 shop at a fairly neutral position that covers most single and double coil solid body guitars.

PURE Gain Control – (read *Gain* here as the ratio of input to output, not as adding “dirt” or another drive control) **This is the amount of unaffected clean signal that is available as you mix clean and drive signal together.** Adjust the pot to fine tune the dynamic of adjusting the Pure knob which changes the amount of clean signal relative to it's (PURE) position. The Pure is designed to introduce clean into the drive signal from about 4:00 to 8:00 (at noon is 1/3 clean, 2/3 grit). Max to the right (5:00) is no clean signal, you'll hear exactly what the drive alone sounds like. Max to the left (7:00) is all clean buffered signal from the input, the Drive output volume knob still controls the overall signal level when the drive is engaged. With the Pure knob turned full CCW the Drive side becomes another pristine clean boost! (See how you can leverage this to your favor below.)

Clean Boost Gain - Adjust this to increase available volume at the Boost control. Setting this trim high will add a bit of top end sizzle to your notes after 12 on the level control. Decrease if you begin to hear noise in the boost. If running the pedal on an 18v supply, you may need to decrease this pot to get rid of the same type of noise.

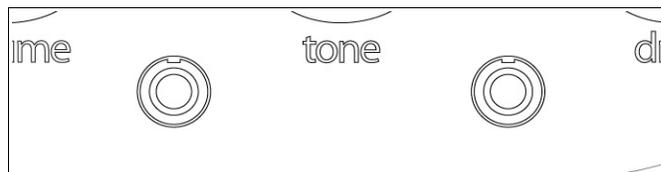
Clipping Switches

The Asymmetrical and Symmetrical clipping switches are designed to provide multiple contours or intentional grit that pre-shapes the signal waveform before hitting your pre-amp tubes. These shapes or “feels” range from very transparent/open/full/articulate to more compressed/singing/traditional boutique overdrive. Because the main audio path of the Ghost Drive is intended to maintain the original content of your guitars tone the more clipping you select the more you'll need to adjust the output volume to get back to your original signal strength. Even at the most compressed setting (asym switch up) there's an abundance of available volume to drive the front end of any amp into saturation. Each setting interacts with the gain, tone and pure control differently. It's safe to consider that each position is like having a completely different overdrive pedal. Each of these may need minor adjustments to land the grit texture you're looking for.

The new Ghost Drive (made from April 2012) has clipping components in every position. Earlier versions do not when both switches are set to the middle position. This can be modified for the cost of return shipping to JHV3, or a DIY instruction set can be made available.

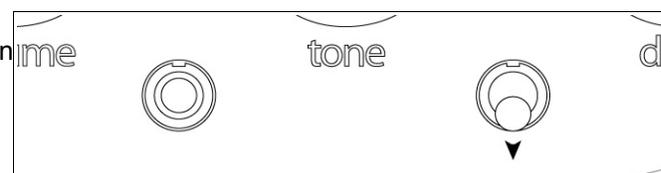
Asym - middle, Sym - Middle

Most open/full/articulate, breaks up later in the gain range. Loudest of all settings, great for mild amp-like rhythm tones. Articulate high end with the most headroom and sparkle.



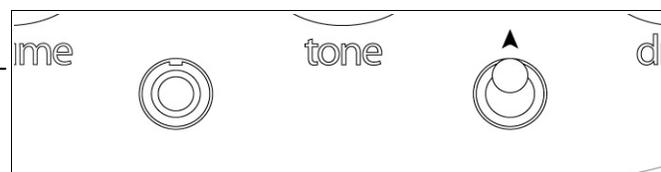
Asym - middle, Sym - down

Very similar to the mid-mid setting, but earlier breakup in the gain range. This range is the same as most other “transparent” overdrives. Adjust volume to match or boost output.



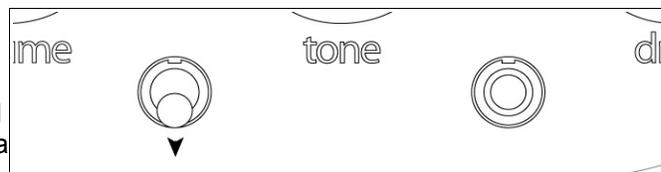
Asym - middle, Sym - up

Slightly more grit range as mid-down setting with a rounder top end. Gives the overall drive a more sustain-ish singing tone with a tighter bottom end. Adjust volume to match or boost output. (Great for detuned riffing too!)



Asym - down, Sym - middle

About the same volume as the mid-down setting but twice as much clipping on one half of the waveform. Grit takes on a more complex nature, feels “looser” and when dialing in a slight amount of PURE you can hear a very rich and colorful overdrive that makes your amp think it's a lot bigger than it really is! Sizzle, chunk and sparkle.



Asym - down, Sym - down

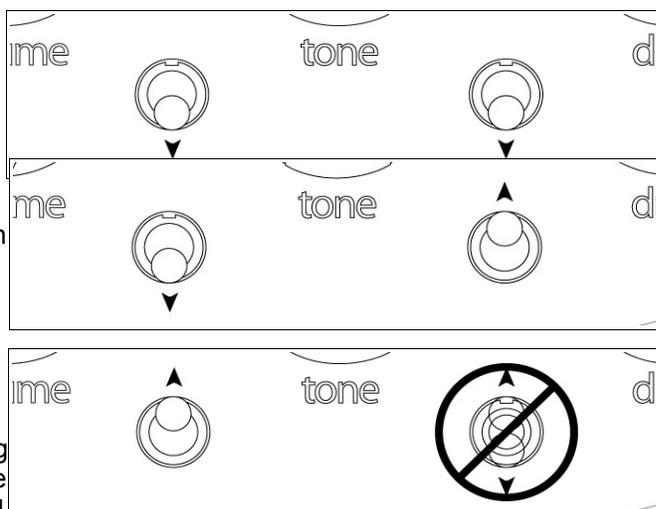
Rounds off the louder grit from the down-mid setting, very subtle but a handy option when splitting asymmetrical hairs.

Asym - down, Sym - up

Further rounds, warms up and tightens the bass compared to the down-mid setting, more noticeable than the down-down setting.

Asym - up, Sym - any

This overrides all other clipping settings for a more traditional overdrive sound, the most available grit, most compressed, tightest bottom end. The volume will need to be increased to compensate for the additional clipping of the waveform. At higher gain settings this can achieve a very heavy rock sound (even with extended range and baritone guitars) without sounding muddy.



Effect Order Switch:

On the back of the pedal between the input and output jacks is a small hole which allows you access to a slider switch that changes the order of the two effects inside the Ghost Drive. Because this pedal is considered a “2 in 1” you can use it either as a Boost as and additional gain stage into the Overdrive, or as a “louder” Boost that just makes the drive and whatever is before it jump out when engaged.

The glowing PURE knob is also an effect order indicator. The color of the knob tells you which effect is **LAST**:

PURE is BLUE = Drive is after Boost: the boost will act like a pre-gain stage when both effects are active. You will notice the drive signal “fill out” or become “fatter” with longer sustain and a more aggressive breakup.

PURE is WHITE = Boost is after Drive: when both are active the Boost switch will simply make the existing drive tone louder.

Thinking of the Ghost Drive as having Modes:

Other than thinking of the pedal as a “2 in 1” you can approach the Ghost Drive from two other perspectives that will help you leverage the adjustments to invoke subtleties in your tone that make a world of difference in your total signal chain: as a complex clean Booster or a versatile overdrive.

Using the Pedal as a Dual Booster:

If you find your circumstance or equipment setup requires you to cascade clean boosts to manipulate your amp you're in luck! The Ghost Drive can be thought out as two types of pristine clean boosts, one transistor based (Boost) and the other OpAmp based (Drive).

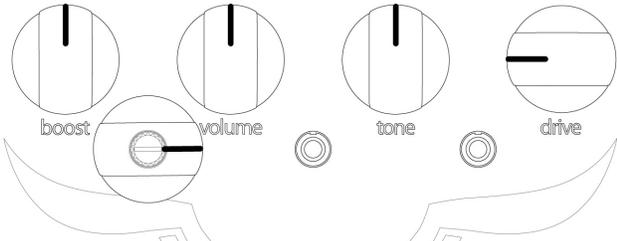
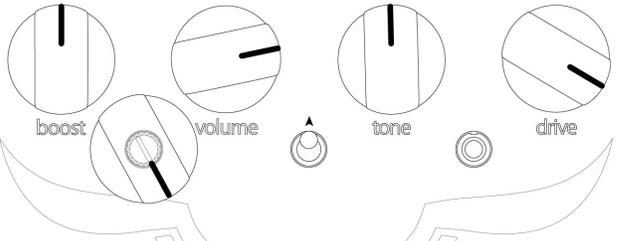
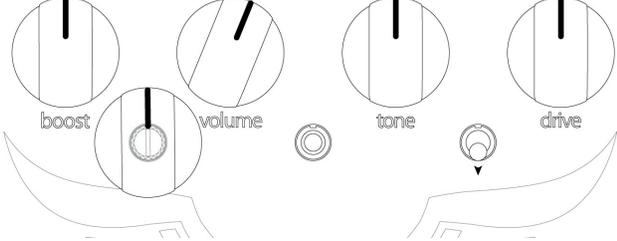
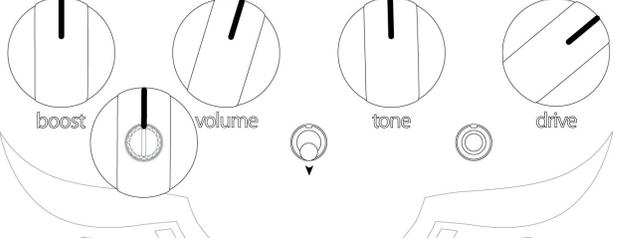
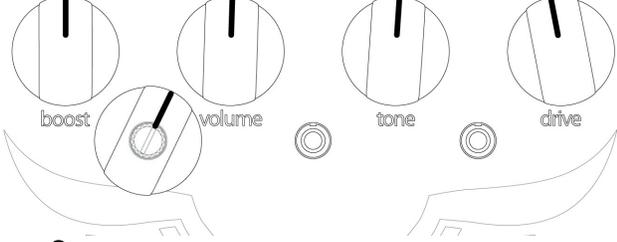
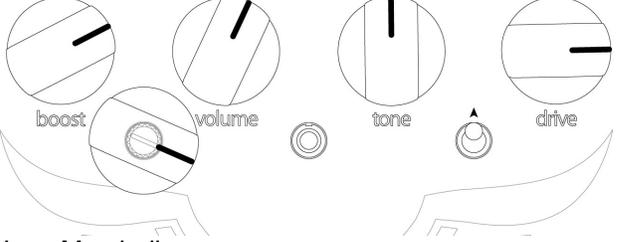
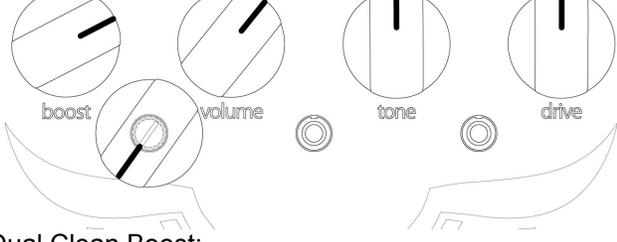
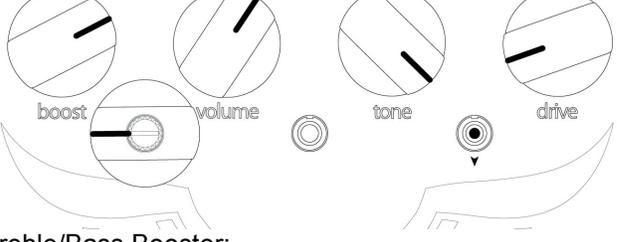
By adjusting the Boost knob and its internal gain pot you can establish either a true clean signal jump or a boost with a little bit of grit.

On the Drive side, turn the Pure knob full counter clock wise to have copious amounts of clean signal at your disposal. Here the tone knob, gain control and clipping switches have no effect on the Drive signal.

If you find that you need this boost to specifically but subtly color the tone ease the Pure knob back to about 9:00, leave both clipping switches in the middle position, turn the tone knob either full CCW to warm up the tone or CW to brighten the treble side, then increase the gain until you hear the the change become prevalent. If you start to get grit from the drive, back off on the gain just a bit, then increase the Pure knob CW until the tone color comes back.

If you find yourself needing to use the pedal exclusively as a dual booster for a season, you can adjust the bass control on the inside to further tailor the tone boost color. Turning the Bass control off will make the drive side act more like a treble booster, increasing the bass will make it more of a fat-booster. If you ever want to induce grit, remember you have the clipping switches to further shape the tone boost!

A few settings to start:

 <p>Start Here: To get a base for how much the Ghost Drive affects your tone, set you controls here and adjust until it's hardest to distinguish when the drive side is on or off. Use this as a starting point in the future.</p>	 <p>Classic OD: This texture and feel is reminiscent of a well made Tube Screamer. The most compressed. Increasing the gain has less noticeable effect past 4:00. Adjust tone for cut.</p>
 <p>Big and Transparent: Tight, big grit, what you would expect from any other transparent overdrive, but with the added benefit of the Pure control.</p>	 <p>Big 3D Drive: Asymmetrical, multi-layered drive that allows single coils sound big as they want to be. Great for carrying the rhythm weight as the only guitar player in a trio.</p>
 <p>Amp Saver: This adds a big overdrive channel to your already great sounding amp. Adjust the volume for jumps, use the boost after the drive (Pure knob White) for more volume. Adjust Tone CW for "chirp" and "chime".</p>	 <p>Warm Marshall: Need a big and dark Marshall kind of sound? Give this a shot... adjust the tone control for presence.</p>
 <p>Dual Clean Boost: Two separate forms of pristine clean boost, one via transistor the second via op-amp. Keeping the Pure control full CCW adjust it's output with the Drive Volume control. Perfect for overdriving amps in the 5-30 watt range. Experiment with order switch.</p>	 <p>Treble/Bass Booster: Like the Dual Clean Boost settings, you can re-introduce boosted signal that has been shaped by the drive tone/gain/bass-trimpot/clipping. After setting the drive controls for added warmth or bite, slowly dial in the pure control CW until it's just right.</p>

Customized Switching Options:

If you discover that you use the pedal in a particular way and find that it's awkward having to hit two switches each time to either access the combination or cut both off simultaneously you're in luck.

If you think of a preferable combination of switching just let me know, your Ghost Drive has a programable microcontroller that can be changed to meet your needs.

For example, you have a clean part after using the boost and Drive together in most or all of your set and you'd like to turn both of at the same time for a cleaner transition. Your pedal can be programed to switch on each effect normally, but when both are active the Drive switch can be programed to turn off both effects simultaneously when hitting the boost switch will disengage the Drive side only leaving the clean boost on.

It may sound strange, but you'll know it if you ever need it!

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