ORIGIN EFFECTS

*Revival***DRIVE**

UNABRIDGED AMPLIFIER OVERDRIVE

Owner's Manual

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Important:

Keep these instructions and heed all warnings. Do not use this apparatus near water. Clean only with a dry cloth. Do not install near any heat sources such as radiators, heat registers, stoves or other apparatus (including amplifiers) that produce heat. Refer all servicing to qualified service personnel. No user serviceable parts inside.

When using an external power supply, use only attachments/accessories specified by Origin Effects. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus. Do not defeat the safety purpose of the polarised or grounding-type plug. A polarised plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet. Unplug this apparatus during lightning storms or when unused for long periods of time.

Welcome to the RevivalDRIVE

The RevivalDRIVE is a dual-channel overdrive pedal that accurately recreates a wide range of classic, non-master-volume valve amp tones, including distinctive power amp sag and "ghost tone" effects.

Under the hood, it contains a complete and unabridged valve amp-style signal path, with simulated preamp, phase inverter, power amp and rectifier stages. By successfully recreating the sophisticated interaction of these stages – and by imitating the complex relationship that exists between an amplifier and its mains power supply – the RevivalDRIVE puts incredible tone-shaping power at your disposal.

At the same time, the RevivalDRIVE incorporates a range of controls that will tailor its response to suit the amp you're plugging into. Unlike the vast majority of overdrive pedals, the RevivalDRIVE is genuinely designed to sound fantastic with any amp.

In short, we believe that this is the best-sounding, most flexible overdrive pedal ever created.

It is, however, a fairly complex device. We invite you read through this manual so you can gain a full understanding of all it can do. But if you can't wait, by all means skip ahead to the example settings on page 20 and start playing!

Simon Keats
Designer and Origin Effects founder

Introducing the RevivalDRIVE

Boost, overdrive and distortion pedals come in many flavours – there are probably more of them out there than all the other types of effects pedals put together. But for us, and for many others, the ultimate overdriven sound comes from plugging straight into a vintage, non-master-volume valve amp that's turned up loud.

When we decided to design an overdrive pedal of our own, this is the sound we wanted to capture. But what if we could reproduce the sound of not just one amp but many, with controls that would allow you to explore the differences in tone, dynamics and playing feel that are the result of each amp's circuit design? With the RevivalDRIVE, that's exactly what we've done.

Another motivating factor behind the RevivalDRIVE was to address a shortcoming of most, if not all, overdrive pedals. Whether consciously or unconsciously, pedal designers will usually voice an overdrive to work with their own amp of choice. If you happen to use a different style of amp, then you're out of luck. Either you're left with a sound that's too harsh or too muddy, or you end up sacrificing the amp settings you'd really like to use for your clean tone to accommodate the overdrive pedal.

We've built a range of EQ adjustment features into the RevivalDRIVE to make it flexible enough to sound great with any amp – or even a flat-response power amp – with no compromises.

HOW IT WORKS

With the Cali76 compressor, we took the sound and response of the legendary Urei 1176 studio compressor and reproduced it in a pedal, following the same analogue circuit topology but adapting the components to work in pedal format. We've applied exactly the same approach to the RevivalDRIVE.

Unlike the majority of overdrive pedals, which feature a relatively simple circuit that combines EQ with gain and clipping stages, the RevivalDRIVE is a complex device that recreates the entire signal path of a valve amp. This includes not only the preamp, phase inverter, power amp and rectifier stages, but also a synthesised mains power signal and a speaker-emulating reactive load.

In developing the RevivalDRIVE, we analysed a wealth of classic British and American amps to find out what made them sound they way the do. We examined circuits, plotted frequency response graphs and, most importantly, we listened.

Using all-analogue components and replacing the valves with discrete transistor-based circuitry, we have managed to reproduce the sound and circuit behaviour of these classics, all in a fully variable and controllable way. This means that you can use the RevivalDRIVE to nail the sound of a particular amp or recording, or you can mix and match the various properties of different amps to create your dream overdrive sound.

UNIQUE AMP-LIKE FEATURES

- **Dual Class-A preamp stages** with realistic amp gain-staging – balance headroom with natural preamp-style clipping.
- **Phase inverter** and **push-pull power amp** stages provide realistic tonal response, symmetrical harmonics, subtle crossover distortion and touch-sensitive drive characteristics.
- **Variable negative feedback** in the output stage lets you boost presence, or fine-tune dynamic response and clean-to-overdrive transitional characteristics.
- **Reactive load** models the interaction between a real valve output stage and a speaker cabinet, delivering amp-like feel and realistic harmonics.
- **Solid-state (silicon)** and **valve rectifier** channels, plus a simulated **mains power supply**, generate realistic "sag" characteristics and "ghost tones".

THE MOST FLEXIBLE OVERDRIVE EVER MADE

- **Wide gain range** from clean to fully cranked.
- **Preamp** and **bright cap** voicing switches offer a wealth of British and American amp flavours.
- **Lows** control lets you tighten up the low end or push the bass into thick distortion.
- **Dry blend** control lets you mix clean and overdriven signals.
- **Variable mid boost** for use on either channel or as a footswitchable solo boost.
- **Powerful re-amp EQ** tailors the sound of the pedal to suit your amp.

Inside the RevivalDRIVE: Some Key Amp Design Concepts

Understanding a little more about how valve amps actually work will help you get the most out of the RevivalDRIVE. Below, we decipher some terms that may or may not be familiar to you and explain how they relate to the pedal's unique range of controls.

BRIGHT CAPS

Some amplifiers have components known in the trade as "bright caps" wired across their volume controls. Bright caps act like a high-pass filter, allowing all frequencies above a certain point to bypass the volume pot. Because these high frequencies are effectively at full volume from very early in the pot's travel, this allowed vintage non-master-volume amps to deliver a clean sound with lots of bright, sparkly top end when the volume knob was set low. The "treble bleed" circuits attached to the volume pots in some guitars are there for exactly the same reason.

Bright cap switch on a 1966 Fender Twin Reverb

The RevivalDRIVE lets you experiment with two different bright cap settings – GB and US – via the BRIGHT CAP switch on each channel. The capacitor values of the US setting are based on a Fender Twin Reverb, for that bright, glassy top end heard on many classic studio cuts from the late '60s and early '70s.

For the GB setting, we have drawn inspiration from values introduced to the Marshall 1959 Super Lead circuit in the late '60s. Here, an unusually large capacitor allows not just highs but also mids to bypass the volume control. Consequently, the volume knob doesn't behave in the usual manner. As you turn the volume knob up from zero, the signal is pretty much all there almost immediately, with lows and distortion steadily increasing as you turn the knob clockwise. The volume knob effectively becomes a high-gain tone control.

Because they are created by actual capacitors acting on the RevivalDRIVE's unabridged amp-style signal path, you will find that these bright cap settings accurately reproduce the volume knob behaviour found on the original amps. As the volume knob is turned up, the audible effect of the bright cap is reduced. The low and mid frequencies steadily increase

in volume to meet the highs until all frequencies are as loud as each other and the pot effectively bypasses the cap.

BRIGHT CAP COMPENSATION

Bright caps are relevant to another feature of the RevivalDRIVE – the BRI-CAP CUT filter control in the RE-AMP EQ. This low-pass filter is designed to compensate for the presence of a bright cap in the guitar amp you're plugged into, something that can often prove problematic.

Many vintage (and vintage-style) amps make use of bright caps. The Blackface Fender Deluxe, the Marshall JTM45 and the Vox AC30's "Brilliant" channel are just three examples. These amps were not designed with overdrive pedals in mind – if you wanted overdrive, you simply turned the amp up! Today, when many players would rather use an overdrive pedal into a clean-ish amp to create a secondary, overdriven sound, the bright cap ends up boosting and accentuating the high-frequency harmonics in the overdrive pedal's output. This tends to lead to a harsh, unnatural and raspy tone, making even the best-sounding drive pedal sound like a wasp in a jam jar.

To compensate for this increased high-frequency emphasis, the BRI-CAP CUT filter progressively rolls off highs from the RevivalDRIVE's output so you can adapt it to perfectly fit the frequency response of your chosen amp.

LOW-FREQUENCY DISTORTION

Another crucial aspect of amplifier design is the treatment of low frequencies. Allowing the bass end to distort yields a thicker, more full-blooded driven sound, but with the risk of turning your sound to mush. Try cranking up a Tweed Fender amp or a Marshall JTM45 with the bass on full – the low frequencies push the power stage into severe distortion, to the extent that the amplifier is sometimes unable to fully recover between notes. Conversely, restricting low-frequency distortion will produce a tighter, more defined overdrive with immediate note recovery. A more well-behaved sound, in other words, though potentially too polite for some – it's all a matter of taste!

Happily, the LOWS knob on the RevivalDRIVE will let you experiment with this aspect of amp design so you can find your ideal setting. Turned fully clockwise, the response is modelled on the JTM45 and, true to the original, it has the potential to get pretty ugly! Turned fully counter-clockwise, the LOWS control imitates a Marshall Super Lead or the "Brilliant" channel on a Vox AC30. The low frequencies stay almost completely clean, delivering a lean and limber overdrive sound. In between these two extremes, the LOWS control reproduces the characteristic response of a Blackface-era Fender amp.

NEGATIVE FEEDBACK

Negative feedback is a technique used in the output or power stage of some amplifiers. The inclusion or absence of negative feedback, and the degree to which it is used, have a massive effect on the sound of amplifier, its transition from clean to dirty and – most crucially – how it feels to play.

In simple terms, negative feedback involves taking some of the signal from the power amp's output and feeding it back to the power amp's input, where it is compared with the original input signal coming from the preamp stage. If there are any discrepancies between the two signals, the amplifier will attempt to correct them. This helps extend and even out the frequency response, makes the power amp behave in a more stable and linear way, and generally contributes to a cleaner, more accurate sound.

That's all very good until the signal rises enough to push the power amp into distortion. Faced with an amplifier now behaving in a decidedly non-linear way, the negative feedback loop is no longer able to self-correct. The shackles are off and the power amp is free to distort.

Because of this, lots of negative feedback will mean the amp stays cleaner for longer as volume increases (it has more "clean headroom"), but once you pass a certain threshold, it will suddenly distort a lot. With no negative feedback, gain is increased and the amp will distort much sooner, but the transition will be smooth and gradual with no hard border between clean and dirty. Some people prefer amps that don't use negative feedback, often praising their "natural" or "organic" overdrive, while others prefer the more precise feel that negative feedback provides, with the ability to go from very clean to very dirty simply by varying picking dynamics.

Once again, the RevivalDRIVE lets you freely experiment with different amounts of negative feedback using the MORE side of the two-way MORE | PRES control. At 12 o'clock, the negative feedback applied to the RevivalDRIVE's output stage is at its maximum extent – akin to a Class-AB Marshall with the "Presence" knob turned right down. Turn fully counter-clockwise and negative feedback is removed altogether – as on the Vox AC30, Tweed Fender Deluxe, Sampson-era Matchless amps and many other "hot-biased" designs.

We recommend that you experiment with this control while varying your picking dynamics to find the right combination of headroom, break-up and dynamic sensitivity for your particular pickups and playing style.

Turned the other way (PRES), the MORE | PRES control releases the higher frequencies from the negative feedback loop, boosting the top end just like the classic Marshall "Presence" control.

GHOST TONES

Ghost tones (aka “double tones”, “ghost notes” and “ghosting”) describes the phenomenon of low-frequency notes occurring within the amplifier, underneath those you’re actually fretting. Play through a fully-cranked, hot-biased Blackface Twin Reverb, or an early 50-watt Marshall Plexi, and you will experience other-worldly, unique low tones, particularly when soloing further up the neck.

These dissonant ghost notes appear to be completely unconnected to the “true” note, but in fact they relate to the sums of differences between the frequency of the power supply and the frequency of the notes being played.

Ghost tones are certainly undesirable when they become very loud and prominent (usually indicative of faulty power supply filtering) but at lower levels they create a distinct vibe. The effect can be quite subtle – as much a question of playing feel as sound – but it is unquestionably part of the magic of these vintage amps, serving to thicken the overdriven tone and reinforce lead lines.

The RevivalDRIVE generates ghost tones in exactly the same way as the classic amps of the past. Turning the GHOST control clockwise reduces capacitance in the pedal’s simulated power supply, creating more of the “ghosting” effect.

We’ve designed this control to offer a broad range of adjustment while never reaching the extremes where ghost tones become undesirable. To do this, we examined the ghosting behaviour of a number of classic amps including a pair of 1968 Marshall Plexi heads, a pair of early 60's Fender Brownface amps, several mid 60's Fender Blackface amps and various others. We found that our 1964 Vox AC30, as well as our 1967 Fender Twin, offered the most pronounced ghosting. We then tweaked the GHOST control to go 30% further so it can also be used to create a more overt effect.

As an additional twist, the RevivalDRIVE’s simulated mains power supply can be switched between US and UK mains frequencies (50 and 60 Hz respectively, equating to 100 or 120 Hz once rectified) using the MODE DIP switch on the rear of the pedal. Changing the power supply frequency alters the pitch of the ghost tones generated.

SAG: VALVE VS SILICON RECTIFIERS

In a valve amplifier, the power rectifier’s job is to convert AC mains power to DC. The rectifier flips the negative portion of the AC sine wave to create a “bumpy” DC signal that is subsequently smoothed out by the filter capacitors to create a relatively steady (though still slightly wavy) DC supply.

The earliest guitar amps used a vacuum tube diode (a “valve rectifier”). From the late ‘50s onwards, amp designers began using more efficient, more stable silicon diodes instead (a “solid-state rectifier”). While the type of rectifier used has no direct effect on the fundamental clean tone of the amp, it does impact on dynamics and playing feel as soon as things are cranked.

Specifically, valve rectifiers can struggle to keep up with the demand for power created by sudden, loud notes. Referred to as rectifier “sag”, this phenomenon has the effect of slightly compressing the signal, smoothing out the initial note attack often in a pleasing way. Though silicon rectifier equipped amps “sag” too, the effect is much less pronounced, leading to less compression and a firmer, less spongey feel that some players prefer.

The RevivalDRIVE makes both of these flavours available in a very subtle and realistic way. The VALVE RECTIFIER channel offers the characteristic valve sag effect. The initial attack of the note is slightly compressed and sustained notes appear to “bloom” as the rectifier recovers. In contrast, the SILICON RECTIFIER channel delivers more aggression, less sag and a tighter, more precise and responsive feel overall.

For extra flexibility, you can switch the VALVE RECTIFIER channel to behave like a second SILICON RECTIFIER channel using the MODE DIP switch on the rear of the pedal.

RECTIFIERS, SAG AND GHOST TONES

Because both sag and ghosting are generated in the power stage of the amplifier, there is a degree of overlap and interaction between these two effects. As you would expect, this is fully reflected in the RevivalDRIVE.

Firstly, the choice of rectifier channel influences the sound of the ghost tones produced. This is because the waveshape of the rectified power signal is slightly different for each of them – something close to a smoothed triangle wave in the case of a valve rectifier, and a sawtooth wave in the case of a silicon diode. You can see these wave shapes represented on either side of the channel names printed on the pedal’s control panel. Though the effect is subtle, you should experience harder-sounding ghosting characteristics when you switch to the SILICON RECTIFIER channel.

Secondly, adjusting the GHOST control will also change the timing of the sag effect. Turned fully clockwise, sag is immediate. Like a compressor set with a very fast attack time, the reduction in level happens so quickly that you may not hear the change occur. By contrast, with the GHOST control turned fully counter-clockwise, the onset of sag is very slow. A medium to medium-fast setting offers a realistic real-world sag characteristic.

To understand what is happening here, we need to remember that the GHOST control

introduces ghost tones by progressively reducing capacitance in the power supply, and that it is these same filter capacitors that take in the bumpy DC signal from the rectifier and put out a smooth voltage for the power amp to use. You can think of the GHOST control as effectively changing the size of these capacitors, making them smaller as you turn clockwise.

With the GHOST knob fully clockwise, the capacitors run out of current very quickly and sag occurs almost immediately. Conversely, with the GHOST knob fully counter-clockwise, the capacitors are larger and can go on delivering full power for a bit longer, delaying the onset of sag. In this way, turning the GHOST control counter-clockwise is like progressively going from a particularly old vintage amp with technically inferior capacitors to a modern amp boasting better quality components that offer a larger charge capacity.

Remember that, regardless of which rectifier you use or where you set the GHOST control, the amount of sag you experience will always depend on how hard you are working the power stage. Sag occurs when the power amp is asking for more current than the power supply can, at that moment, deliver. The amount of sag, and its onset and recovery characteristics, will therefore depend on the level of your input signal, how hard you play and how high the VOLUME knob is set.

If you want a visual clue to sag behaviour in the RevivalDRIVE, watch the channel indicator LEDs and main jewel light. As with many vintage amps, these lights are fed by the main power supply and will dim as it sags. By watching them as you play, you can train your ears to identify different sag characteristics and decide which you prefer.

Connecting the RevivalDRIVE

INSTR input: Connect to your guitar, bass or other instrument.

AMP output: Connect to your amp, power amp, mixer or recording interface.

9VDC input: Connect a 9VDC 2.1mm centre-negative mains power adaptor.

F/SWITCH input: Connect the optional dual footswitch (sold separately).

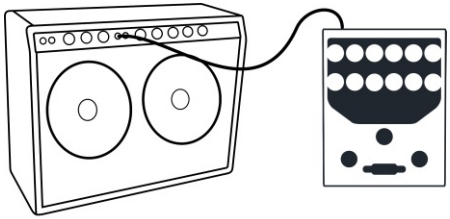
Rear connections. Left to right: Instrument input; External Footswitch; Power; Output

SUGGESTED CONNECTION SETTINGS

Plugging into a guitar amp, bass amp or amp modeller:

MODE DIP switch: On the rear of the pedal, set switch 1 on the MODE DIP switch to the downward position. No EQ is applied to the DRY signal or when the RevivalDRIVE is in bypass.
RE-AMP EQ: Select EQ1 (for brighter sounding amps) or EQ2 (for darker sounding amps) on the RE-AMP EQ switch and use the HI SHELF boost/cut control and BRI-CAP CUT filter to adjust for the high-frequency response of your amp.

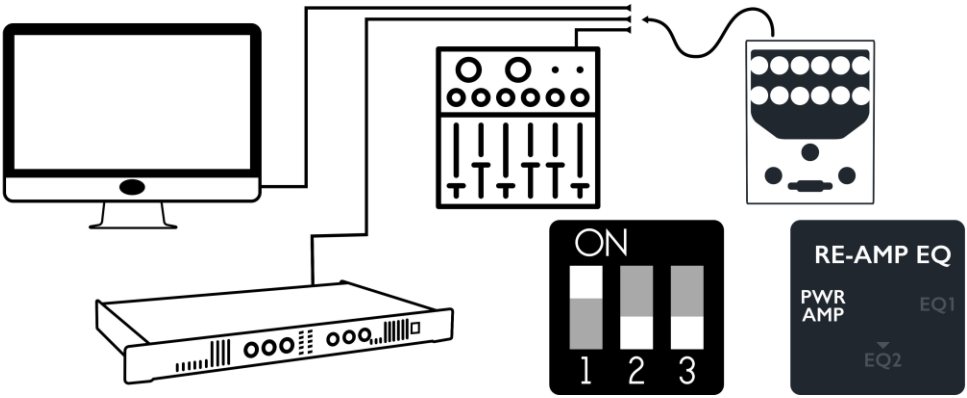
Note that in the case of the "Custom" model, switching to the EQ2 setting enables the FRONT-PANEL FILTER controls, which offer compatibility with bright and dark amps alike. Please see FRONT-PANEL FILTER controls for more information.



Plugging into a flat-response power amp, recording interface or mixer DI:

RE-AMP EQ: Select PWR AMP on the RE-AMP EQ switch and use the HI SHELF boost/cut control to fine-tune the high-frequency response. Set the BRI-CAP CUT filter control fully counter-clockwise (no treble roll-off).
MODE DIP switch: On the rear of the pedal, set switch 1 on the MODE DIP switch to the upward position. When the RevivalDRIVE is in BYPASS mode, or when blending DRY signal components, your input signal will still pass through the preamp EQ filters.

Please note that a cabinet simulator will be required for DI applications where the signal is to be reproduced via a full-range speaker system.



OPERATING THE PEDAL

ON footswitch: Toggles between BYPASS (“off”) and EFFECT (“on”) modes.

CHANNEL SELECT footswitch: Toggles between the VALVE RECTIFIER and SILICON RECTIFIER channels.

Channel indicator LEDs: The currently selected channel is indicated by the VALVE RECTIFIER (orange) and SILICON RECTIFIER (white) LEDs. These remain active when the effect is bypassed.

Jewel lamp: The central jewel lamp will illuminate when the effect is engaged. Because it is directly connected to the power supply, the lamp will dim as the power amp “sags”, just like the jewel lamp on a vintage amp.

VALVE RECTIFIER/SILICON RECTIFIER Channel Controls

The RevivalDRIVE features two channels, selectable via footswitch. While the controls are identical, the two channels offer a choice of rectifier styles.

Please note: the VALVE RECTIFIER channel can be switched to a second SILICON RECTIFIER channel using the rear-panel MODE DIP switch (see below).

VOLUME: In true vintage amp style, we've gone with the term "VOLUME", but we could equally have called this control "gain". Turn clockwise for more overdrive, counter-clockwise to clean things up.

LOWS: Having set the desired treble response using the PREAMP switch, the LOWS control allows you to adjust the amount of bass pushing the drive circuitry. This will take the user from a Vox-like, tight and clean low end all the way to '50s Tweed territory – thick, raspy and severely distorted!

MORE | PRES: This control combines two parameters, both related to the effects of negative feedback in the power amp stage.

- *PRES (turn clockwise):* The classic "Presence" knob, the PRES control releases the higher frequencies from the effects of negative feedback as you turn it clockwise from the centre position. This has the effect of progressively boosting higher frequencies in vintage Marshall and Brownface Fender fashion.

- *MORE (turn counter-clockwise):* The MORE control progressively reduces negative feedback in the pedal's push-pull output stage, increasing gain but also varying playing feel by modifying the clean-to-overdriven transition characteristics.

  With the control centred at 12 o'clock, there is a definite threshold to this transition, with an abrupt switch from clean to overdriven once you pick hard enough. Turning the control fully counterclockwise completely removes negative feedback, delivering maximum gain, early onset of distortion and a smooth, gradual transition from clean to fully overdriven. It will also slightly increase the amount of background hiss, which would otherwise be counteracted by negative feedback.

  In general terms, the response at 12 o'clock is akin to a Marshall with the "Presence" knob at zero. Turn the knob fully counter-clockwise and the pedal behaves like a Vox AC30, with no negative feedback whatsoever. In between, you'll find Fender Blackface territory.

Please refer to the Example Settings to see how to set this control to match the performance of your favourite style of amp.

OUTPUT: Sets the overall output level of the channel. Adjust the VOLUME and OUTPUT controls to achieve the desired combination of distortion and level.

BLEND: This control lets you adjust the mix between the dry input signal (DRY) and the overdriven signal created by the RevivalDRIVE (O.D.). From 100% O.D. when the control is turned fully clockwise, you can progressively mix your original clean tone back in to add more clarity and definition by turning the control counter-clockwise.

Please see notes on the DRY GAIN control and footswitchable BLEND OVERRIDE function below for more on this control.

GHOST: This control lets you introduce “ghost tones” by varying the amount of capacitance in the pedal's virtual amp-style power supply. Turn clockwise to lower capacitance and create more of the ghosting effect.

The GHOST control also affects power amp sag onset and recovery timing – how quickly the output level drops and then returns to normal when hit with a loud note. This is more noticeable when using the VALVE RECTIFIER channel. Turned fully clockwise (lower capacitance), the transition in and out of sag is almost immediate. Turned fully counter-clockwise (higher capacitance), the onset and recovery times are at their slowest.

In general, faster transition times will allow the pedal to sag in response to the individual notes contained in a musical passage, as the power supply has time to recover in the pauses between notes. However, too fast and you may struggle to hear the rapid onset of sagging. Slower transition times will tend to sag across entire passages of notes, which can also be less noticeable. Setting the GHOST control between these two extremes results in a “spongey” playing feel.

PREAMP: The PREAMP switch offers three snapshots of classic amp tone-shaping.

- *Centre position:* Based on a classic British tone shape – almost flat but with a subtle treble lift. Overall, this position is warm and round.
- *GB (switch left):* Modelled after a configuration widely used by those cranking early Plexi Marshalls – treble and mid tone controls set full, with the bass set very low. This equates to a tone rich in mids, with a tight, “mush-free” bass.
- *US (switch right):* Applies the same "mush-free" approach to cranking, but to a Blackface Fender amp for a glassier, brighter tone.

BRIGHT-CAP: This switch connects a capacitor to the VOLUME control, allowing high frequencies to sidestep any attenuation in exactly the same way as the "Bright" switch found on many Blackface, and Silverface, Fender amps.

- *Off (centre position):* No capacitor added – VOLUME control affects all frequencies.
- *US mode (switch right):* High frequencies see maximum gain while the low and mid frequencies remain clean, or overdriven, depending on where the user sets the VOLUME control. Perfect for bright, sparkly lower-gain sounds.
- *GB mode (switch left):* The effect is far more pronounced, with both mid-range and high frequencies allowed to bypass the volume control. Consequently, the volume control becomes very non-linear in operation and behaves more like a high-gain tone control.

MID BOOST CONTROLS

The RevivalDRIVE features a powerful mid-range boost that can be used to modify the overdriven tone or provide a solo boost to help you cut through the mix. Fully variable in both level and centre frequency, the MID BOOST can be applied to either channel or remotely activated using the optional footswitch.

MID ASSIGN: This three-way switch applies the MID BOOST to either the VALVE RECTIFIER channel (switch left) or the SILICON RECTIFIER CHANNEL (switch right). With the switch in the F/SWITCH position (switch centre), the MID BOOST is deactivated but can be switched in at any time using the optional footswitch.

Please note: in F/SWITCH mode, the MID BOOST is applied to both the DRY and O.D. signals when activated. In all cases, the MID BOOST is not active when the pedal is in BYPASS mode.

MID LEVEL: Sets the level of the MID BOOST, from +2 to +8.5 dB.

MID FREQ: Sets the centre frequency of the MID BOOST, ranging from 800Hz to 2kHz.

DRY GAIN CONTROL

The DRY GAIN trimmer adjusts the level of the DRY signal that is mixed with the O.D. signal using each channel's BLEND control.

Since the pedal's overdrive circuitry can introduce considerable additional gain, the DRY GAIN control allows you to effectively balance the relative levels of the DRY and O.D. signals when using the BLEND control and the footswitchable DRY DEFEAT function (see FOOTSWITCH below).

Please note: the DRY GAIN control is not active when the pedal is in BYPASS mode.

RE-AMP EQ CONTROLS

The RE-AMP EQ ensures compatibility with a wide range of amplifiers. Instead of altering your amp tone controls to suit the RevivalDRIVE, set your amp for the desired clean sound then use the RE-AMP EQ controls to adjust the RevivalDRIVE's output accordingly.

RE-AMP EQ switch: The RE-AMP EQ switch offers a choice of three different output filters.

- *PWR AMP:* Use this setting when plugging into a flat-response power amp. This EQ is set more or less flat, with a subtle bass boost applied after the overdrive circuit to imitate the resonant loading of the speaker in a guitar amp.

- *EQ1:* Designed to suit the response of a Blackface Fender amp, EQ1 applies a low-pass filter to roll off excessive highs. Use this setting when plugging into a bright-voiced guitar amp.

- *EQ2:* Voiced for a Marshall amp with the channels bridged, EQ2 sits between the other two filter shapes, applying a high shelf cut to gently rein in high frequencies.

REVIVALDRIVE CUSTOM OPTION PANEL:

With the additional front-mounted filter controls on the RevivalDRIVE CUSTOM, the EQ2 position on the standard RevivalDRIVE gives way to a highly tweakable custom filter, designed to deliver universal compatibility for most mainstream guitar amplifiers.

Please see FRONT-PANEL FILTER controls overleaf for more information.

HI SHELF: A fairly conservatively voiced treble boost/cut control for making small adjustments to the high-frequency component of your tone. In particular, it's designed to counteract Fender-style treble tone controls. This shelving filter provides up to +/-6dB. Starting from 12 o'clock (no boost or cut), turn counter-clockwise to tame highs if your amp sounds too bright, or turn clockwise to boost highs on a dark-sounding amp.

BRI-CAP CUT: This low-pass/high-cut filter is designed to compensate for the tonal effects of the "Bright Cap" (if any) wired to the host amplifier's volume control, which can lead to a very bright and harsh sound when fed by an overdrive pedal. *In the fully counter-clockwise position, the BRI-CAP CUT control has no effect.* Turn clockwise to progressively cut more highs. For best results, the BRI-CAP CUT trimmer should be adjusted whenever you make significant changes to your amp's volume settings.

REVIVALDRIVE CUSTOM ONLY: FRONT-PANEL FILTER CONTROLS

Working in tandem with the RE-AMP EQ controls on top of the RevivalDRIVE (see above), the RevivalDRIVE CUSTOM's FRONT-PANEL FILTER controls provide additional options to fine-tune the pedal's output to the response of your chosen amp.

SHELF FREQ: This three-way toggle switch varies the shelf frequency of the HI SHELF filter trimpot on top of the pedal, allowing greater flexibility.

CUT FREQ: Varies the low-pass frequency of the BRI-CAP CUT filter trimpot on top of the pedal, for optimal compatibility with all vintage Fender, Marshall and Vox amps.

To make use of these additional controls, set the RE-AMP EQ switch on top of the pedal to the central EQ2 position.

EQ 2: This carefully voiced EQ combines shelving boost and cut filters in a single intuitive control.

ADJ: Turn clockwise to reduce treble and boost bass, and counter-clockwise to increase treble and reduce bass.

FREQ: This three-way switch shifts the frequency focus of the EQ up or down.

MODE: Select MODE I when using a full-range amp that sounds wooly or muddy. Select MODE II when addressing an overly bright amp that needs taming.

These controls are highly interactive – the amount of boost and cut available from the ADJ control varies depending on how the FREQ and MODE switches are set. Be sure to use your ears when making changes.

MODE DIP SWITCH

Located on the rear panel, the MODE DIP switch controls the following settings.

1 DRY/BYPASS DIP SWITCH: The DRY/BYPASS switch is only relevant when the RE-AMP switch is set to the PWR AMP position (with the RE-AMP switch set elsewhere, changes to the DIP switch position will have no effect). With PWR AMP selected, the DRY/BYPASS DIP switch modifies the BYPASS and DRY signal path to incorporate the pedal's PREAMP circuitry.

In bypass, with switch 1 in the downward position, the signal present at the input connector is routed to the pedal's output via a high-quality buffer. With the pedal engaged, any blended DRY component is fed from the same buffer. Use this setting when plugging into a guitar amp.

When plugging into a flat-response power amp, move the switch to the upward position. When the pedal is bypassed, the input signal now passes through the preamp filter stage, controlled by the PREAMP switch on the currently active channel. This means you can still take advantage of the RevivalDRIVE's classic amp-style tone shaping, even when not using the main overdrive circuit. The pedal's two channels remain switchable even in BYPASS mode, allowing you to set up two distinct tones.

2 RECTIFER DIP SWITCH: Move switch 2 to the up position to transform the VALVE RECTIFIER channel into a second SILICON RECTIFIER channel.

3 GHOSTING DIP SWITCH: Switch 3 toggles between 50Hz/British (switch down) and 60Hz/USA (switch up) simulated mains frequencies, subtly altering the pitch of the ghost tones generated.

MODE DIP switch

REVIVAL FOOTSWITCH

Connecting the optional dual-button Revival Footswitch (sold separately) to the F/SWITCH input at the rear of the pedal provides two further functions.

MID-ENGAGE: With the pedal's MID ASSIGN switch set to F/SWITCH, this allows you to apply the adjustable mid boost to whichever channel is currently selected.

Please note: the MID BOOST is applied to both the DRY and O.D. signals mixed by the BLEND control. The MID BOOST function is not active when the pedal is in BYPASS mode.

BLEND OVERRIDE: This footswitch “overrides” or removes each channel’s BLEND control from the signal path. With the BLEND knob set for a mix of DRY and O.D. signals, engaging the BLEND OVERRIDE effectively removes the DRY component and reverts to a 100% O.D. signal.

This offers additional flexibility akin to having another channel on your amp. For example, with the channel controls set for medium gain and the BLEND knob at 12 o’clock, engaging the BLEND OVERRIDE footswitch lets you go from an organic clean tone with a little grit to a fully overdriven sound for aggressive rhythm playing.

By carefully adjusting the DRY GAIN trimmer, you can control the change in volume – up, down or unity gain – that occurs when engaging BLEND OVERRIDE. For example, as a contrast to the above, you could set up your core drive tone with BLEND OVERRIDE engaged, then transition to a cleaner "edgy" solo tone of greater volume by disengaging BLEND OVERRIDE and turning the DRY GAIN control up.

Example Settings

Please note: the RE-AMP EQ controls should be set to match the connected amplifier. Set OUTPUT to match the bypassed level or as a boost for solos.

LH channel: ***Clapton's Beano Album*** *Dimed Marshall 1962 'Bluesbreaker'* 30W combo.
RH channel: ***Manic Depression*** *Jimi's Marshall of choice, the JMT45/100. Try placing a fuzz and wah in front or roll down your guitar's volume for a classic late-sixties clean tone.*

LH channel: ***Tumbling Dice*** *A loose, growling, nasal Tweed Twin tone a la Keef.*
RH channel: ***Sultans of Swing*** *Knopfler used a Twin Reverb on this sizzling track. Note how the Blackface Twin employs a silicon rectifier, more efficient power caps & tighter bass.*

LH channel: ***We Are The Champions*** *AC30-style: brilliantly bright & harmonically-rich. The lack of negative feedback even gives softly played notes a distorted-edge.*
RH channel: ***Alright Now*** *Kossoff's 100W Marshall Plexi is, for many, THE sound of classic rock.*

LH channel: ***Blue Sky*** *My favourite Duane Allman tone, replicated using a '61 Brown Super.*
RH channel: ***Ramblin' Man*** *How Dickie Betts set his 100W Marshall Super Lead. Paired with some JBL speakers, this will provide a satisfying sparkle with a clean low-end.*

LH channel: ***Parallel rig*** *Mix DRY & O.D. for a strong note attack fading to rich harmonics.*
RH channel: ***Paranoid*** *Laney Supergroup tones reminiscent of Black Sabbath. Kick in the RevivalDRIVE's mid boost during solos to replicate Toni Iommi's Dallas Rangemaster.*

Specifications

Weight:	1200g.
Dimensions:	160 x 117 x 59 mm.
Accessories:	Revival Footswitch (sold separately).
PSU Spec:	120mA @ 9V, centre-negative (PSU not included).
Input impedance:	1M ohm.
Output impedance:	1K ohm.

Please note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Warning

Any changes or modifications not expressly approved by Origin Effects Ltd. could void the user's authority to operate the equipment.

For customers in Canada: This Class B digital apparatus complies with Canadian Interference Regulations CAN ICES-3(B)/NMB-3(B). Pour le Canada: Où indiquée sur le produit: Cet appareil numérique de la classe B est conforme à la norme CAN ICES3(B)/NMB-3(B) du Canada.

The crossed out wheely bin symbol indicates this product is classified as Waste Electrical and Electronic Equipment (WEEE) in the European Union and should not be discarded with household waste. Other territories may vary. Contact your local authority or Origin Effects for more information.

About Origin Effects

Origin Effects is the brainchild of Simon Keats, a guitarist, electronic engineer and analogue circuit designer who has worked for the likes of Vox, Focusrite and Trident Audio. Having built bespoke effects for professional musicians and producers for many years, he launched the Origin Effects brand in 2012 to bring his exceptional designs to a wider audience.

His first two pedals – the Cali76 compressor and the unique SlideRIG dual-chained compressor – were soon followed by the Compact Series for guitar and bass. Widely recognised as the best pedal compressors ever made, they have found favour with guitarists and bass players like David Gilmour, Pete Townshend, Peter Frampton, Lenny Kravitz, Ed O'Brien, and Graham Coxon, as well as Grammy Award-winning producers like Paul Epworth, Ross Hogarth and Terry Britten.

Please note: Origin Effects Limited is in no way affiliated with Fender, Marshall or Vox amplifiers, Urei or Universal Audio.

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