



REVIVALTREM

INTRODUCING THE REVIVALTREM

The RevivalTREM is the first ever pedal to faithfully recreate the power tube bias tremolo effect found in late-'50s and early-'60s guitar amps.

Based on the groundbreaking circuitry found in the Origin Effects RevivalDRIVE, the RevivalTREM houses a complete valve amp style signal path recreated in all-analogue electronics. This allows it to not only deliver the authentic bias tremolo effect, but also serve up a range of realistic valve amp tones voiced after our 1962 Fender Brown Deluxe.

Harmonically rich and dynamically responsive, the RevivalTREM combines the unique sound and feel of bias tremolo with a range of modern features like switchable wave shapes, tap tempo, rhythmic subdivisions and effects switcher integration. The powerful Post-Drive EQ section will make sure that the RevivalTREM's broad palette of tremolo and drive tones will sound their best whether it's plugged into an amp, flat-response power amp, mixer or recording interface.



KEY FEATURES:

- Rich clean tones and growly overdrive voiced after the 1962 Brown Fender Deluxe.
- True bias tremolo with authentic touch-sensitive dynamic response.
- Engage overdrive with or without the tremolo effect using the TREM footswitch.
- Powerful tone-shaping Post-Drive EQ.
- Footswitch input jack for tap tempo and effects switcher integration.
- High-current, low-noise electronics.
- Ultra-high input impedance.
- High-quality buffered bypass.
- Advanced power supply filtering and protection.
- Premium components throughout.
- Designed and hand built in England.



WHAT IS BIAS TREMOLO?

Power tube bias tremolo can be heard in valve amps from the late 1950s and early 1960s including, most famously, the Brown Fender Deluxe.

Bias tremolo modulates the gain of the amplifier's output stage by varying the bias voltage fed to the power tubes, resulting in a smooth, deep and highly musical tremolo that is particularly responsive to playing dynamics. As signal level increases, loud notes and chords rise above the effects of bias modulation. Digging in harder allows you to "play through" the tremolo effect, which progressively fades back in as notes decay.

Most other tremolos – from the circuits built into the later Blackface and Silverface Fender amps to the countless stompboxes available today – produce their effect by attenuating the signal directly, usually by means of a light-dependent resistor coupled with a lamp or LED (optical tremolo), or by using a voltage-controlled amplifier (VCA tremolo). These circuits impose themselves on top of your playing, while bias tremolo has the capacity to respond to it. This crucial dynamic element is a massive part of the magic of bias tremolo and a key reason why so many players feel that it sounds so good.

ABOUT THE REVIVALTREM

The RevivalTREM is the first pedal to truly capture and reproduce this effect. Using the technology developed for the RevivalDRIVE range of pedals, the RevivalTREM houses a complete valve amp style signal path, recreated using all-analogue components, with discrete transistor-based circuitry replicating the valves themselves. This has allowed us to recreate real bias tremolo, with all the subtleties of the interaction between gain, bias voltage, playing dynamics and harmonic content fully intact.

Whilst researching and developing the pedal, we fell in love with a 1962 Brown Fender Deluxe and decided to voice the amp circuit after this particular combo. But while the amp circuit stays true to the Deluxe, with simple but highly effective Drive and Tone controls, the tremolo side of the RevivalTREM goes much further.

As well as a wider range of Speed and Intensity settings, tap tempo and a speed multiplier switch, we've provided two different LFO wave shapes – a classic, Deluxe-style sine wave and a less symmetrical shape that's perfect for smooth, slower tremolo speeds.

The end result is not just the first ever genuine bias tremolo pedal but also quite possibly the last word in early '60s valve amp tone.

CONNECTING THE REVIVALTREM

INSTR: Insert your guitar, other instrument or signal source here.

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

If you're playing through something other than a guitar speaker (e.g. PA speakers, studio monitors, headphones or direct recording), we strongly recommend using a speaker simulator after the RevivalTREM.

F/SWITCH: The F/SWITCH input allows you to connect an external footswitch or effects switching system and allows control over the following parameters:

Tap Tempo - this sets the tremolo speed remotely by sensing the time between two pulses. The tap rate will be multiplied by the setting of the MULTI toggle switch.

TREM - the tremolo enable function can be switched from the F/SWITCH jack as well as from the stomp switch, allowing recall over a range of sounds.

9VDC: Connect a 9V DC 2.1mm centre-negative mains power adaptor that can supply at least 100mA.

Effects switching systems: If using an Effects Switching System such as the Boss ES8, the tip should be configured to send tempo pulses while the ring should be set for latching operation. Both functions are activated by shorting the respective pin to Ground (sleeve) using a switch closure.

The connector is wired as follows:

CONNECTOR PIN	FUNCTION
Tip	Tap Function
Ring	Tremolo Enable
Sleeve	Ground

The Tap Tempo function can also be used by connecting a momentary footswitch via a TS jack.

MAIN CONTROLS

ON footswitch: Toggles between BYPASS and EFFECT modes. When in BYPASS mode the jewel light will turn off.

TREM footswitch: Switches the bias tremolo effect on and off. When TREM is turned on the jewel light will turn green and will pulse at the selected tremolo speed. When TREM is turned off the jewel light will turn red. This is a lot like switching the tremolo off when using a vintage amp – you still hear the tone of the amplifier, but without any modulation.

DRIVE: The DRIVE control behaves like the volume knob on a vintage non-master-volume guitar amplifier. Set anticlockwise for clean sounds, or turn it up for more overdrive.

TONE: Turn the TONE knob clockwise for a brighter sound. Turn anticlockwise to tame highs.

True to the simple but effective Tone controls found on small Fender amps from the Tweed and Brownface eras, the DRIVE and TONE controls are highly interactive. At lower DRIVE settings, the TONE knob will boost high frequencies above 12 o'clock and cut highs below 12 o'clock. With DRIVE pushed past 12 o'clock, the TONE control progressively loses the ability to boost until, with DRIVE at maximum, it's essentially a high cut control.

OUTPUT: The output control sets the pedal's overall output level. This control comes after the pedal's simulated valve amp circuitry, meaning that you can adjust output level without affecting the tone or character of the overdrive.

SPEED: Turn clockwise to increase the rate of the tremolo effect. The range of the SPEED control is set by the three-position MULTI switch.

INTENSITY: The INTENSITY knob controls the depth of the tremolo – in other words, how much the tremolo will vary the amplitude of the signal. Turn clockwise to increase the depth of the effect.

MULTI: The MULTI switch applies a preset multiplier to the speed of the tremolo, whether it is set by the pedal's SPEED knob or by attaching an external tap tempo footswitch.

When using the tap tempo function (see F/SWITCH, above), the tapped value will be multiplied by the setting of the MULTI Switch, so the x1, x2 and x3 settings can be thought of as quarter-note, eighth-note, and eighth-note triplet modes respectively.



SHAPE: The SHAPE switch allows you to choose between two different LFO waveforms.

SINE WAVE - With the SHAPE switch in the “up” position, the bias of the power stage is modulated by a sine wave. This is the classic Tweed- and Brownface-era bias tremolo sound – ultra-smooth, rounded and musical.

FULL WAVE - With the SHAPE switch in the “down” position, the LFO waveform uses an asymmetrical waveform with a higher duty cycle. This waveform has characteristic ‘hump’, with a longer ‘on’ phase and a shorter ‘off’ phase, and a harder transition between the two. This is especially useful at slower speeds where it adds movement without obscuring your playing.

POST-DRIVE EQ CONTROLS

The POST-DRIVE EQ ensures compatibility with a wide range of amplifiers.

Instead of altering your amp or its tone controls to suit the RevivalTREM, set your amp for the desired clean sound then use the EQ controls to adjust the pedal’s output accordingly.

MODE switch: This switch offers a choice of three different output filters.

- **P/AMP:** Use this setting when plugging into a flat-response power amp, mixer or recording interface. Selecting the P/AMP setting disengages the ADJ variable filter control (see below).
- **EQ1:** Designed to suit the response of a Blackface Fender-style 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 connecting to a Marshall-style amp, EQ2 applies a high shelf cut to gently rein in high frequencies. Use this setting when plugging into a fuller-sounding, mid-rich amp.

ADJ: When EQ1 or EQ2 is selected, the ADJ knob lets you fine-tune the pedal’s output to suit the individual response of your amp and the way its controls are set. As you turn the ADJ knob counterclockwise, this proprietary filter design gradually rolls off bass and adjusts the high shelf response. The end result is a very powerful and intuitive control.

If your amp sounds too bright or thin with the RevivalTREM engaged, turn the ADJ control clockwise. If it sounds too dark and wooly, turn the ADJ control counterclockwise.

Use the tables below to help you set up the RevivalTREM for the first time with a new guitar amplifier or flat-response device. Working through Steps 1 and 2 allows you to “set-and-forget” the POST-DRIVE EQ controls and move on to having fun dialling in your ideal tone with the main controls.

Step 1: Set POST-DRIVE EQ switch for the connected amp or device

AMPLIFIER OR CONNECTED DEVICE	POST-DRIVE EQ SWITCH POSITION
Power amp & guitar speaker Mixing desk & cabinet simulation Recording interface & cabinet simulation	P/AMP
Bright, mid-scooped guitar amplifier	EQ1
Dark or Mid-rich guitar amplifier	EQ2

Step 2: Fine-tune the POST-DRIVE EQ with the ADJ control*

HOW IS THE REVIVALTREM'S TONE?	TURN THE ADJ CONTROL...
Too bright or thin	Clockwise
Too dark or woolly	Counterclockwise
Just right!	Leave in this position and enjoy using the pedal!

**Please note: the ADJ control is not active when the POST-DRIVE EQ switch is in the P/AMP position.*

EXAMPLE SETTINGS



Dynamic Brown Deluxe Tone: Inspired by our original 1962 Brown Deluxe. These settings deliver a harmonically rich, dynamically responsive tone. Set the *SHAPE* switch to the sine position and the *MULTI* switch to x2 for an authentic 60s American tremolo effect.

Please note: For Post-Drive EQ settings, refer to Post-Drive EQ setup table.



Edge of Breakup: These settings lend themselves to the interactive drive tones of the RevivalTREM. Vary your playing dynamics to achieve both expressive cleans and edge of breakup tones. The full-wave shape provides a less symmetrical, choppy tremolo effect.

EXAMPLE SETTINGS... CONTINUED



Clean Tremolo: The RevivalTREM cleans up nicely, just like an amp! In order to achieve a clean tremolo setting, dial back the GAIN control and compensate for any loss of volume with the OUTPUT control. These specific tremolo settings will deliver a faster, more intense effect.



Cranked Deluxe: All out vintage overdrive! Pushing up the DRIVE control introduces a harmonically rich driven tone that's almost fuzz-like! Combine that with a high intensity, slow speed tremolo for some subtle modulation that creeps in as notes decay.

Please note: For Post-Drive EQ settings, refer to Post-Drive EQ setup table.

ABOUT ORIGIN EFFECTS

Origin Effects is the brainchild of Simon Keats, a guitarist 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 of compressors 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, Pino Palladino and Steve Lukather, as well as Grammy Award-winning producers like Paul Epworth, Ross Hogarth and Terry Britten.

In 2018, Origin began a new chapter with the launch of the RevivalDRIVE, a groundbreaking overdrive pedal that recreates the circuit topology, sound and response of a cranked non-master-volume valve amp.

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



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