



# Chandler Germanium Preamp/DI

There's a misconception in some quarters that 'pleasing' colouration of sound by a preamp requires the use of a valve somewhere in the audio path. This has resulted in the simplistic but incorrect view that solid-state equals clean, and valve equals coloured. Chandler's new Germanium Preamp/DI helps challenge that view head on.

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The name on the box is the most immediate clue as to where it's coming from — the guts of the unit are based around discrete Class A designs that use germanium rather than silicon transistors. Germanium devices have been favoured for many years by some guitarists when used in stomp boxes and fuzz pedals, and were used in many vintage pro-audio designs. Ultimately, they were largely replaced with silicon-based devices that featured higher gains and less susceptibility to thermal problems. But a return to the 'old-school' was perhaps inevitable given our current obsession with vintage gear, and indeed the Preamp/DI is just one of a range of 'Germanium' branded products produced by Chandler in addition to its EMI/Abbey Road TG series.

This old-school approach is in evidence on the exterior and interior of the unit. Pointer knobs in a rather fetching shade of yellow coupled with big pushbuttons set the tone for the front panel. A brief inspection of the internals reveals chunky transformers on input and output and high quality components on a no-nonsense, over-sized PCB. Unfortunately, the active side of things in the shape of the germanium devices employed is sealed in a plastic enclosure; whether to keep it away from prying eyes or to aid in temperature control is unclear.

The unit is powered by an external box that supplies +/-28V and +48V via a 4-pin XLR. A balanced input and output on XLR complete the

rather minimalist rear panel. The front panel has two rotary controls — a switched gain control (also labelled as Germanium Drive — images of Scotty and Star Trek spring to mind (*That would be Dilithium. Ed*)) with 10 positions in 3dB steps, and a continuously variable Feedback control. This has an effect on the overall gain of the unit, as increasing it effectively reduces the amount of negative feedback used by the amplifier. Of course, by doing so the response becomes less linear as a result. At its lowest setting, the unit produces overall less gain but with better HF response, lower THD and a more open sound. Higher settings tend to result in increased gain, higher THD, a gentle lift in the low-end and a more muted HF response.

Pushbuttons are provided for phantom power, polarity reverse and a -15dB pad, and output metering is via a large, 10-segment LED bargraph whose range can be switched to either -12 to +3dB or +5 to +20dB. An unbalanced ¼-inch jack on the front panel also gives a high impedance input for DI sources — this is selected by means of a recessed toggle switch adjacent to the socket. Last, but not least, a final pushbutton, labelled 'Thick', does exactly what it suggests in adding a gentle low end boost to the signal.

Using the unit is really all about balancing different settings of Drive, Feedback, Thick (or Thin?) and judicious use of the pad to keep the output level under control when exploring the upper reaches of Drive. What you get from all of this is

quite an astonishing range of tonality from what appears to be such a simple box.

At its cleanest setting (lowest feedback setting, Thick disengaged) and with a C414 plugged in as a first point of reference, the Germanium sounds reasonably neutral and open. There isn't quite as much detail as the Millennia HV-3, it's more like a Neve 1073 in character, although it sounds a little brighter in the high-mids. Dial in a little more (well, strictly speaking, less) feedback and the mid range starts to sound a little grittier. It's not an unpleasant characteristic, but I'd say that it adds an edge to the sound rather than warmth. Push in the Thick button, though, and the low end fills out noticeably not unlike a little proximity effect coming into play.

The combination of Thick together with the Feedback control is a nice tool for fine-tuning a microphone to a vocalist although it does start to sound a little bit grainy on some voices with a mic like the 414. Switching to a U87 tames things a little, but capacitor microphones in general and extreme settings of the Feedback control don't make terribly good bedfellows to my ears.

It's a different story with dynamic microphones, here the ability to thicken up the low and draw some grittiness out of the sound works beautifully. My favourite combo from the test session was a Beyer 201 in conjunction with the Germanium. It helps here that the 201's output is on the low side, so it needs plenty of gain to begin with. Up close and personal on a diminutive Orange Crush combo, Thick engaged, plenty of Drive and just a touch of Feedback — hands down one of the fullest close mic guitar sounds I've heard for a long time (and not an SM57 in sight!)

It's also quite possible to drive a line level source through the unit with the pad engaged if you're looking for something to liven up your mixes although you'd need a pair and frankly there are other boxes in the Germanium range that would be better suited to this task. What's on offer here really comes down to versatility. There are better choices in the market if out and out transparency or ultra-low noise performance is the priority, but very few that can match the sheer variety of sonic textures that this box delivers. Valves... who needs them? ■

## PROS

Simple, fuss-free front panel; excellent range of tonal variation; headroom.

## CONS

Can get a touch noisy with certain Drive/Feedback settings; 'cleanest' setting lacks a little clarity in the HF compared with more conventional solid-state designs.

## EXTRAS

Chandler's Germanium Tone Control uses active and passive EQ circuits in combination with the amplifier developed for the Preamp and incorporates the Feedback and Drive controls. The passive low frequency section is selectable between Pultec/Lang interactive curves and more standard low frequency with pass filter while the Treble and Presence bands are active



The Germanium Compressor starts with the same all-Class A amp while the compression circuit uses a FET gain reduction element with controls for Wet/Dry mix, Comp Curve (which selects the knee using various diode combinations), Clean/Dirty Comp, and Sidechain Filter.

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