

Electro-Harmonix Germanium 4 Big Muff Pi & Freeze Sound Retainer

£74 & £89

Guitarist
CHOICE

E-HX's latest stompboxes offer two completely different routes to providing sustain *by Trevor Curwen*

Electro-Harmonix revealed several new products at this year's Summer NAMM show, including a headphone amp for practice and a stompbox-sized amp head. Also new were an analogue chorus pedal and the two pedals we have here for review: the Freeze Sound Retainer and the latest in the Big Muff family – the Germanium 4 Big Muff Pi.

Germanium 4 Big Muff Pi

The Germanium 4 Big Muff Pi circuitry is based around four Germanium transistors used to drive independent overdrive and distortion effects that can be stacked together if so desired. Each has their own set of two germanium transistors so all four transistors come into play when the two effects are used together.

The pedal is delineated into two sections, the left housing the overdrive footswitch and four knobs to control the sound, while the right-hand side is similarly dedicated to the distortion. Both effects have a gain knob for preamp gain and a volume knob to set the output level. Both also have a Bias knob, which is designed to change the character of the effect by changing the bias of the signal before it hits the transistors. Besides these controls, the overdrive section gets a simple Tone knob while the distortion section has a Volts knob that adjusts the amount of voltage supplied to the circuit – turning it anti-clockwise simulates a dying battery, compressing the signal more and making it start to clip.

Sounds

The overdrive section of the G4BM provides crunchy, just breaking up and overdriven amp sounds adding an extra facet when playing through a clean amp, but providing enough oomph to tickle the front end of an overdriven unit further into the zone if you want it to. There's plenty of control over tonality too, with juxtaposition of the Bias and Tone knobs covering a very useful range. Likewise in the distortion section, turning the Bias knob clockwise can dial in a strident top-end presence that will penetrate a mix, while the

Volts knob can change the texture and character of the sound, rolling back towards buzzy fuzztone territory before crapping out completely into sputtering dead battery-style sonic mayhem.

The distortion section is capable of much more dirt than the overdrive section and the two together (the distortion feeding the overdrive) pile it on further, creating plenty of sustain but with a different character to the fat, saturated sustain that's generally regarded as the classic Big Muff Pi sound. A Big Muff Pi in name then, but the completely new

circuit design makes it quite a different beast.

Freeze Sound Retainer

Contained in one of E-HX's Nano enclosures, the Freeze doesn't take batteries but will run off a standard 9V adapter, which is supplied with the unit. Part sustainer and part looper, it's designed to capture a moment of your playing to use as a sonic foundation to play over. The idea is that you play a chord and press the pedal's footswitch, initiating infinite sustain of that chord.

Besides a volume knob to set the level of the sustaining sound, there are three selectable modes: Fast, Slow and Latch. In Fast mode the pedal will immediately sustain the input sound for as long as your foot is on the switch and cut to silence immediately you release it. Slow mode is similar to Fast mode but the sustained sound fades in and fades out at a rate that you can set – three fade in/fade out rates are possible: 200ms/400ms, 200ms/1.0sec, 800ms/3.2sec. In Latch mode the sound is immediately sustained by a single press on the footswitch and continues sustaining until

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The dual-distortion makes the Germanium Big Muff very versatile

The rivals

We can't think of any other pedal like the Freeze but any looper such as the **DigiTech JamMan Solo** (£229) or the **BOSS RC-2 Loop Station** (£172) can record a looped chord to play over. In the world of dual overdrive/distortion pedals the **T-Rex Mudhoney II** (£215) offers two identical channels of classy overdrive/distortion but you can't have them both on together. **Blackstar's HT Dual** (£159) offers two channels of valve-powered distortion. **Foxrox's ZIM overdrive** (\$259) offers changeable circuit cards for each channel that can be used in various ways.

the footswitch is pressed again at which point the current input sound becomes the new sustained sound.


Sounds

Playing a chord and stepping on the footswitch results in the Freeze snatching and looping a section of the sound and outputting a sustained drone that doesn't sound very guitar-like, but is more akin to a Hammond organ or the drone from bagpipes. It is, though, a very solid harmonic base to play over. In Latch mode, if you coordinate playing a chord with stepping on the footswitch, you can play a whole song with both conventional guitar and a constant background pad with smooth transition from chord to chord – this can really give you something extra on a solo guitar or guitar/voice gig. In the other two modes you can just step on the switch to sustain certain notes or chords at will while you play over the top of them. With practice, this can create some extremely cool musical juxtapositions that will confound your audience, making them wonder just how you're doing it.

Verdict

Twin overdrive or distortion pedals are becoming more common and are a practical choice for the gigging musician. This Big Muff is one of the more versatile of the genre, offering

not only two quite distinct sounds but also the ability to use both together as well as individually for some distinct dirty textures.

While that should have fairly universal appeal, the Freeze is a more niche item – one of the coolest, most creative new pedals we've seen for ages... and great fun! 

The Bottom Line

Germanium 4 Big Muff Pi

We like: Two pedals in one; Volts knob, tonal variety

We dislike: Why call it a Big Muff Pi when it's very different to it?

Guitarist says: Separate overdrive and distortion for the price of a single stompbox, and with enough control to create a wide-ranging dirty tone

Freeze Sound Retainer

We like: Instant sustain on demand, different modes add versatility, compact size

We dislike: Very little – some may bemoan the lack of battery power

Guitarist says: A creative idea that can add a really interesting new dimension to your playing



Electro-Harmonix Germanium 4 Big Muff Pi

PRICE: £74

ORIGIN: USA

TYPE: Dual-mode overdrive/distortion

CONTROLS: Gain, Bias, Tone, Volume, footswitch (Overdrive), Gain, Bias, Volts, Volume, footswitch (Distortion)

PATCHES: None

CONNECTIONS: 6.4mm jack input and output

POWER: 9V battery or 9V DC adapter (not supplied)

DIMENSIONS: 150 (w) x 120 (d) x 60mm (h)

WEIGHT (kg/lb): 0.623/1.4

RANGE OPTIONS: Big Muff Pi (£49), Little Big Muff Pi (£39), Bass Big Muff Pi (£51), Big Muff Pi with Tone Wicker (£59)

Electro-Harmonix

www.ehx.com

Test results

Build quality	★★★★★
Features	★★★★★
Sound	★★★★★
Value for money	★★★★★

GUITARIST RATING ★★★★★



Electro-Harmonix Freeze Sound Retainer

PRICE: £89

ORIGIN: USA

TYPE: Infinite sustain pedal

CONTROLS: Effect level, Fast/Slow/Latch switch, footswitch

PATCHES: None

CONNECTIONS: 6.4mm jack input and output

POWER: Supplied 9V DC adapter

DIMENSIONS: 68 (w) x 112 (d) x 55mm (h)

WEIGHT (kg/lb): 0.2/0.44

Test results

Build quality	★★★★★
Features	★★★★★
Sound	★★★★★
Value for money	★★★★★

GUITARIST RATING ★★★★★



The Freeze Sound Retainer is a truly interesting and unique idea

Big Muff: What's The Story?

Big Muff is one of the iconic names in stompboxes, but how did we get to the current E-HX line-up of no less than five types of Big Muff Pi and six other pedals that bear the Muff moniker?

Mike Matthews started Electro-Harmonix in New York in 1968 and the Big Muff Pi was born at the cusp of the sixties and seventies with a design that featured four silicon transistors and provided a smooth fuzz with plenty of sustain. The first version had three knobs in a triangular layout, but was superseded by models with knobs in a line that, with changes in circuitry and appearance, remained until E-HX ceased trading in 1984.

After the demise of the company, a demand for the Big Muff Pi saw secondhand values to rise. Matthews had moved to Russia to manufacture valves, but to supply the demand resurrected the Big Muff Pi in a Russian-made version in the early nineties. This went through various incarnations until being finally discontinued last year. Meanwhile, after re-acquiring the Electro-Harmonix name, Matthews started production in the USA once more with a new Big Muff Pi appearing in 2000 followed by a version in a smaller enclosure – the Little Big Muff Pi – in 2006. Since then we've had the 2008 Bass Big Muff Pi, 2009 Big Muff Pi with Tone Wicker and this year's Germanium 4 model.