

**CLONE THEORY****PRICE:** £69**ORIGIN:** USA**TYPE:** Chorus/vibrato stompbox effect**PROGRAMMABLE:** No**CONTROLS:** Mode, depth, rate**CONNECTIONS:**

Quarter-inch instrument input, main output and stereo output

**OTHER FEATURES:** True

bypass, mode control switches between two chorus types and vibrato

**POWER:** Single nine-volt PP3 battery or nine-volt mains adaptor**OPTIONS:** None**RANGE OPTIONS:** For arguably the most iconic chorus sound of them all, check out the Small Clone (£59) or the new Nano Clone (£39)**CONTACT:** E-HX pedals are available from a variety of UK dealers including the Guitar, Amp & Keyboard Centre 01273 665400[www.ehx.com](http://www.ehx.com)**STEREO POLYPHASE**

As the Clone Theory, except...

**PRICE:** £139**TYPE:** Phase shifter stompbox effect**CONTROLS:** Feedback, gain with overload LED, mode, start, stop, rate, two-way toggle switch controls LFO shape and envelope speed**CONNECTIONS:**

Quarter-inch instrument input, main output and stereo output, expression pedal

**OTHER FEATURES:** True bypass, mode control position dictates whether the phase shifter is controlled by an envelope follower, low-frequency oscillator or an expression pedal (not included)**POWER:** 24-volt mains adaptor included**RANGE OPTIONS:** The ever-popular Small Stone phaser now comes in a compact Nano configuration (£49)**STEREO PULSAR****PRICE:** £49**TYPE:** Tremolo stompbox effect**CONTROLS:** Depth, shape and rate knobs, shape switch**OTHER FEATURES:**

Shape switch toggles between triangle and square wave modes

# Electro-Harmonix Clone Theory, Stereo Polyphase & Stereo Pulsar

£69, £139 & £49

A trio of stereo modulation units from NYC's kings of stompbox cool... by Chris Vinnicombe

When we reviewed a couple of new Electro-Harmonix dirtboxes back in issue 279, it was noted that the NYC effects wizards could well be on to something very good indeed by offering their unique brand of frazzled stompbox psychedelia in more compact and robust housings. Alongside the genuinely pocket-sized Nano line, there are the slightly larger – but still diminutive by E-HX standards – EHXO pedals, of which we have a trio here.

The Stereo Polyphase, Clone Theory and Stereo Pulsar are all stereo modulation units with very similar physical attributes so we'll deal with what they have in common first.

Anyone familiar with the boutique end of the pedal market will know what to expect from the diecast aluminium Hammond-style chassis and they should stand up to years of heavy stomping. The lack of a quick-release battery access hatch isn't really an issue with something like a Big Muff, as the battery life is such that you won't have to unscrew the back plate very often. However, in the case of modulation effects such as the Pulsar and Clone Theory, it's often a different story. We would like to see some provision for this in the form of a simple plastic hatch, or metal plate like many manufacturers utilise. Of course, this is hardly a deal-breaker, and it's not even an issue in the case of the Stereo Polyphase because that gets its considerable juice requirement from the supplied 24-volt mains adaptor.

All three units are road-worthy in the places that count; pots, switches and input and output jack sockets feel chunky and dependable. The Clone Theory is an old name for the seventies E-HX catalogue that's been revived and given a fresh lick of paint. Its three modes provide one chorus voice with a preset depth that its designers regard as the 'perfect chorus', a second setting that allows you to set the depth and a third vibrato voice that removes the dry signal entirely, and should provide interesting results.

The original Pulsar was a more recent addition to the range, but operated in mono and came in a large,



CLONE THEORY	TEST RESULTS
Build quality	★★★★★
Features	★★★★★
Sound	★★★★★
Value for money	★★★★★
<ul style="list-style-type: none"> <li>■ <b>WE LIKED</b> Workmanlike chorus with added weirdness thanks to the vibrato mode</li> <li>■ <b>WE DISLIKED</b> Fiddly battery access; not quite the knock-out sonics we'd hoped for</li> </ul>	



STEREO PULSAR	TEST RESULTS
Build quality	★★★★★
Features	★★★★★
Sound	★★★★★
Value for money	★★★★★
<ul style="list-style-type: none"> <li>■ <b>WE LIKED</b> Improves on the original's performance with the addition of stereo panning and a smaller housing</li> <li>■ <b>WE DISLIKED</b> Fiddly battery access</li> </ul>	

## In the studio the stereo spread can open up some very interesting possibilities and really help to enliven your sound

Big Muff-sized package. The addition of stereo outputs here is a big plus for more dramatic panning effects that ping-pong from one channel to another, while the smaller footprint can only be a good thing. Essentially the pedal provides a great deal more control over the shape of the waveform than most tremolo circuits thanks to a toggle switch that flips between triangular and square waveforms and an accompanying shape knob. In triangular wave mode, as the shape knob is turned from left to right the waveform changes from a rising sawtooth into a triangle at the centre position, then finally into a falling sawtooth at hard right. In square wave mode the mode knob has a similar effect, moving from a small pulse width wave, into a square wave, then into large pulse width wave at hard right.

The Stereo Polyphase is the most complex proposition here, and as a result it enables you to have an almost synth-like level of control over the

effects parameters. You can select whether the phase shifter is controlled by envelope follower, low-frequency oscillator or external expression pedal, then control its range with the start and stop controls. In LFO mode, the rate control is active and the toggle switch determines the shape of oscillation, while in envelope follower mode the switch determines how quickly the phase shifter reacts to the incoming signal. Okay, so we know that there's a lot going on here, and this is beginning to sound like a column from Synthesiser Monthly, but plugging it in quickly reveals that you don't need to be wearing a lab coat or have an unkempt beard to get a good sound out of the Polyphase.

**SOUNDS:** So that we could experience the full psychedelic spread of this trio of stereo modulation pedals, we set up a pair of valve combos either side of a decent-sized room, turned the lights down low, switched on a couple



of lava lamps and sat back in a nice, comfy chair. Grooovy. Suitably prepared, we set about enjoying the hypnotic panned throb of the Stereo Pulsar. It's easy to forget just how musical an effect tremolo can be and, despite it being one of the oldest effects available to guitarists courtesy of Fender and Vox amplifier circuits, you still don't hear it on the radio all that often. The Pulsar's controls allow you to mimic old-school amp tremolo effectively, but some of our favourite of its sounds are the more dramatic How Soon Is Now?-style gated staccato flourishes. The depth control is interesting as it produces the most dramatic panning effect at around two o'clock, after which the sound begins to warp and the signal becomes more overtly modulated.

The Stereo Polyphase is the key to an experimental guitarist's paradise; it offers a level of interactivity way beyond most of its rivals and as a result its potential is enormous. At more tame

settings, the liquid warmth of the Small Stone is a definite reference point, while the three mode settings allow you to enter previously unexplored swirling aural vistas. Adding an external expression pedal cranks the weirdness potential up a notch, helping you to achieve some dramatic rhythmic effects. The Polyphase can also do a pretty convincing impression of the phase sound on Sonic Youth's *The Diamond Sea* from their 1995 *Washing Machine* album, which our office Youth aficionado assures us is top of the tree for phaser sounds.

After all these sonic fireworks we must admit to initially being a little nonplussed by the Clone Theory. In CHR 1 mode, there's a nice vintage-style analogue chorus sound, but to our ears it doesn't quite have the three-dimensional mojo of a Small Clone. CHR 2 gives you more control over the pedal's tonal shape and adds extra depth, and with our stereo set-up it's easy enough to make a decent fist of

#### STEREO POLYPHASE TEST RESULTS

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

■ **WE LIKED** Masses of potential, highly interactive and an abundance of great sounds

■ **WE DISLIKED** Some will find the price prohibitive when you factor in the cost of an expression pedal

lush Andy Summers-style washes. If this all sounds too mundane then try the vibrato mode: with the dry voice removed, it's possible to add anything from a subtle wobble to a completely inebriated warble that wavers in pitch like a knackered old turntable. It's great fun, but not a sound that you'd want to trigger by accident at a gig!

Extraneous noise is always an issue with pedals, especially when you're using modulation effects along with overdrives and distortion boxes. It'd be fair to say these Electro-Harmonix pedals aren't the quietest stompers available, with discernible hiss from the Clone Theory in particular. Make sure you give it a good demo at volume to see if that's a problem for you.

Using them in the traditional way – mono into the front of a single amplifier – also offers good results, but if you have the facility to use it, the stereo spread opens up some very interesting possibilities to enliven your sound.

#### Verdict

If you regard Electro-Harmonix as the preserve of leftfield noise-mongers, or you're put off by the pedals' sheer physical size, you should have a serious rethink. There are plenty of units in the current catalogue that will breathe new life into your music, and you no longer need a pedalboard the size of a Gibson Thunderbird case to accommodate a handful of them.

In the current climate, when even E-HX has a number of pedals that street close to £30, asking £139 for the Stereo Polyphase may seem steep. But with 24-volt operation and extensive features, what a phaser it is. The Pulsar is great value and outstrips its larger sibling with the addition of stereo operation. Finally, the Clone Theory isn't our personal favourite Electro-Harmonix chorus, though the vibrato mode widens its appeal considerably, making it a reasonable value choice. **G**

#### E-H Clone Theory

Guitarist RATING ★★★★★

#### E-H Stereo Polyphase

Guitarist RATING ★★★★★

#### E-H Stereo Pulsar

Guitarist RATING ★★★★★

## The rivals

### CLONE THEORY

Ibanez CS-9	
Classic Chorus	£99
Line 6 ToneCore	
Space Chorus	£89
MXR Stereo Chorus	£209

With its cool 9-series cosmetics, the Ibanez is an old-school analogue reissue with plenty of character. If you feel like going down the modelling route, the Line 6 unit has stereo inputs and outputs, two chorus modes and vibrato along with a tap tempo control for hands-free control of the effect rate. The MXR is the pricier option, but it also offers stereo operation and a nifty bass filter function that applies the effect only to higher frequencies.

### STEREO POLYPHASE

Danelectro DJ-6	
Pepperoni Phaser	£35
DigiTech Hyper Phase	
Stereo Phaser	£89
Pigtronix EP-1	£199

Many people in the market for a phaser won't look much further than E-HX's own Small Stone, but other options include DigiTech's Hyper Phase which offers stereo outputs, and the ultra-simple and wallet-friendly Danelectro Pepperoni. If you want more control and a greater degree of complexity, check out the EP-1 from Pigtronix.

### STEREO PULSAR

Behringer TP300 Ultra Tremolo/Pan	£22
BOSS TR-2 Tremolo	£69
Jim Dunlop Tremolo Stereo Pan	£175

Behringer's latest tremolo stompbox includes variable waveform shapes and stereo inputs and outputs for roughly the same price as four sets of strings. While it's a little expensive in this company, the purple Dunlop unit is rugged and road-ready, while if you are happy with an old-school mono tremolo stompbox then you could do far worse than check out the immensely popular BOSS TR-2.