

Specifications

- Input impedance: Greater than 1M Ω
- Output impedance: Less than 40K Ω
- Controls: Mid Boost and Volume
- Features: Hi-Cut switch selectable low-pass
-3dB points at 3KHz and 6KHz
- All tube: Based on N.O.S. 'Sylvania' 6021WA
subminiature triode tube operating in class-A
- Gain: Continuously variable from $-\infty$ dB to 18dB
- True bypass: With 'anti-pop' or 'thump' foot-
switching circuitry
- Power requirements: 12VDC @ 600mA -
centre positive 2.1mm barrel connector
- Dimensions: Width 4.75"; Depth 3.75"
- Weight: 12oz (on Earth); 13.5oz (Neptune)
- Construction: Solid die-cast aluminum box
- Finish: Tough cobalt blue powder coat



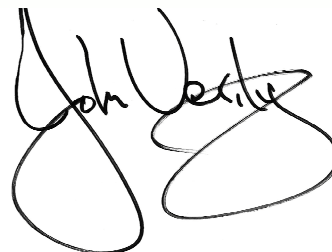
Warning: High D.C.
voltages of over 250 volts
are present in the circuit:
disconnect power before
opening the unit. There
are no user serviceable
parts inside this pedal. Contact Effectrode
regarding warranty or servicing issues.

Serial #

JV-1A

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BLUE BOTTLE INDUCTORIZED BOOSTER



12 Broughton Crescent, Barlaston,
Staffs, England. ST12 9DB
www.effectrode.com

Introduction

The JV-1A (a.k.a. *Blue Bottle™*) is a limited edition signature mid-boost pedal designed by *Effectrode* for guitarist John Verity (Argent). John wanted to fatten-up the tone of the single coil pickups on his *Corona* 'Strat' and we came up with the idea of basing his pedal on a vintage 'Pultec' inductor-based tube equaliser circuit—the way we see it, if you're going to build a mid booster in pedal, why not do it with some style! The JV-1A adds warm and musical sounding mids that work to enrich the natural harmonic character of the guitar *and* there's also 18dB of all-tube gain on tap allowing the *Blue Bottle* to push a tube amp into generating a beautiful, singing, bluesy overdrive.

Audiophile grade components and silver solder are utilised throughout the circuit along with precision, low noise, metal-film resistors, stellar-quality polyester coupling capacitors and ground-plane layout. The result of all this attention to detail is a mid-boost pedal with a full-bodied, rich and addictive lead tone for solo playing—John Verity seldom turns the JV-1A off!

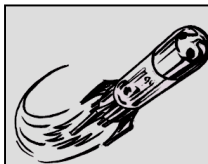
Thank you for trusting *Effectrode* to be your effects company. We wish you many years of musical enjoyment from this hand-built, all-tube pedal.



Phil Taylor — Designer

Tubes

The JV-1A signal path is based on a *Sylvania* 6021 N.O.S. subminiature twin triode pencil tube. These tiny tubes were specially developed by *Sylvania Electric* in the 1940s for military and aerospace applications to meet their stringent Mil-E-1 specifications for reliability and long service life under conditions of severe shock, vibration (20,000G!), high temperature and high altitude. *Sylvania* subminiature tubes represent the absolute pinnacle of thermionic technology and are unquestionably the finest tubes ever made by any company, ever—we will certainly never see the likes of them again.



To extend tube life, it is recommended that the unit be allowed to warm-up for at least one minute after being switched on. This is to allow the heater filament in the tube to heat the cathode, which is coated with a layer of barium and strontium oxide. This oxide layer gets torn off the cathode, a process known as cathode stripping, if the cathode has not reached its correct operating temperature. If operated well within their ratings, good quality signal tubes can last 100,000 hours or more: that's well over 11 years of continuous use. If you use your pedal for only 4 hours a day, they should last over 25 years. (We can't warranty tubes for this period, however experience shows that such lifetimes are probable).

In Practice

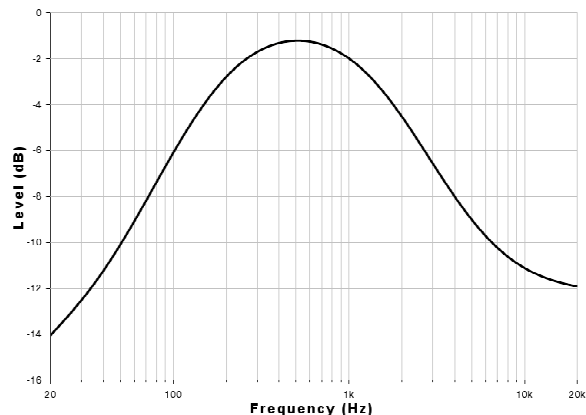
John Verity places his *Blue Bottle* pedal **after** his *Blackbird* tube preamp. This way the *Blue Bottle* is working purely to boost the output level of the *Blackbird*, rather than being used to push the input tube stage of the *Blackbird* into saturation. He then uses the 'Hi-Cut' filter to take some top-end off and smooth out his guitar tone. Applying low-pass filtering at the end of the signal chain also has the advantage of reducing hiss and high frequency noise as far as possible in his rig.

Tone Tip! To create the last word in all-tube preamp rigs we recommend placing the *Fire Bottle pickup* booster pre- *Blackbird* and the *Blue Bottle* post-*Blackbird*. This setup allows for an unprecedented degree of tone shaping possibilities for guitar.

All *Effectrode* pedals feature our innovative **Silent-Switching™** true bypass system, where an active audio circuit minimises the 'pop' or 'thump' when the effect is engaged. Additionally, as a failsafe, the circuitry will always default to bypass if power is interrupted to the pedal ensuring that you can continue to perform. Signals are switched using a precision audio relay with gold-plated contacts for superior tone and performance over multi-pole footswitches, which were not originally designed for constant use or audio signals. The relay also shortens the signal path so that signal is not routed through any internal wiring thus preventing noise contamination.

Controls

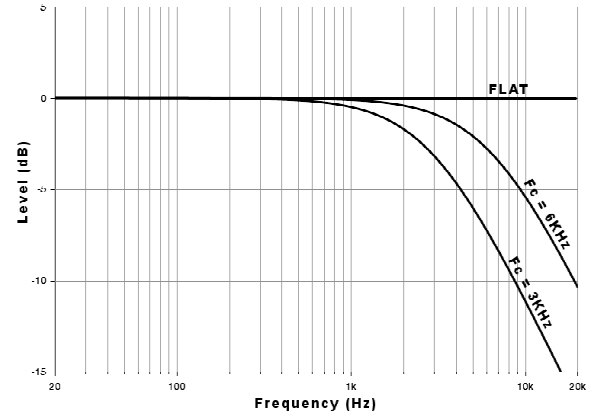
Mid Boost knob adjusts the level of middle frequencies centered about the 500Hz point relative to highs and lows. With the knob set fully anticlockwise the frequency response of the *Blue Bottle* is essentially flat and the pedal introduces very little, if any tonal colouration. Rotating the knob clockwise gradually increases the level of the mids adding some welcome girth to the tone of single coil pickups whilst retaining their unique sonic characteristics. With the knob set fully clockwise the *Blue Bottle* adds up to 12dB of pure tube mid-boost which can be used to great effect on a *Fender® Stratocaster™* type guitar enabling it to sing and sustain like a *Gibson®* 'Les Paul' or even '335'.



Midrange boost has long been an essential tool of guitarists such as John Verity, David Gilmour and Eric Clapton and they've used it to great effect on many iconic guitar solos. However, virtually all vintage tube guitar amps are only equipped with passive capacitor-resistor tone controls that 'cut' treble, bass frequency content. These amps exhibit a mid-scooped response, lacking those all-important mids a 'Strat' needs to truly soar when soloing. The JV-1A remedies this by utilising a tube buffered inductor-capacitor filter circuit—identical to the circuitry found in vintage 'Pultec' tube equalisers—to generate beautifully rich mids transforming a stock 'Strat' into an incredibly responsive and expressive musical instrument.

Volume knob increase the output level ranging from $-\infty$ dB to 18dB, ample gain to push a tube amp into a beautiful, rich, bluesy overdrive. Studio engineers can take advantage of the *Blue Bottle's* warm and natural boost capability to augment the recording levels of various instruments and even microphones. Think of the *Blue Bottle* as a miniaturised 'Pultec' tube equaliser with fixed mid boost at 500Hz.

Hi-Cut 3-way toggle switch applies a -6dB/oct low-pass filter at the output of the *Blue Bottle*. In the 'center' position the filter response is flat and when the switch is in the 'up' or 'down' position the low-pass filter has -3dB points at 3KHz and 6KHz respectively.



Footswitch allows selection between effectified (JV 'bluesified'!) and non-effectified (dry) signal. Silent true bypass switching ensures there are no 'pops' or 'thump' when engaging the effect and that there is absolutely no loss of tone from your guitar to your amp when the effect is disengaged. Additionally, the tube signal path in this pedal is built to demanding audiophile specification to ensure absolute highest-fidelity and signal integrity at all times—the benefit of all this attention to detail is that the guitar tone always remains pure, pristine and intact.