



The Alessandro Bluetick Coonhound Amplifier

Specs:

4 EL34, 6L6, 5881 or 6V6 power tubes at 20 Watts

2 5691/6SL7 preamp tubes

4,8 or 16 ohm impedance output

Volume, Treble, Mid and Bass controls

<http://web.archive.org/web/20060521191617/http://www.alessandro-products.com/amp-bluetick.shtml>

Although the Bluetick amp was reviewed in this month's, November 2004, Guitar Player Magazine, I felt the debut of this Guitar Amplifier Magazine would give me an opportunity to get into the fine minutia of the Alessandro designs. I believe wholeheartedly that quality is in the details and the Bluetick helps define quality. I have taken this quality to the next level, thus the High-End concept. I found that if utilized properly, materials developed in the High-End Hi-Fi Audio Market allowed me to take the amplifiers to new quality and musical levels never before attempted in a guitar amplifier. The Bluetick utilizes many of these concepts and materials.

The basic idea of the Bluetick was to get the feel of classic English 4 EL34 power tube amp but at a more usable power level. By running the 4 output tubes in Pure Class A operation the Bluetick develops about 20 watts of clean power and 30 watts of continuous distorted power. In contrast, a vintage Class AB 4 EL34 amp can develop 100 watts of clean power and close to 200 watts of continuous distorted power, a loud and unrealistic amount of power for today's bar gigs. Pure Class A operation is different than traditional Class A operation in that it does not come out of Class A operation when pushed into clipping. The main design aspects of this operation is low plate voltage, high output transformer impedance and high idle power tube plate current. The Bluetick has nearly 300 VDC B+ voltage and the Winged C EL34's draw about 90mADC plate current per tube. This plate voltage and current equate to about 25 Watt of Plate Dissipation, their designed max Plate Dissipation. I have found that if I design the amps to operate at or about the max Plate Dissipation point of the tubes, that they have the best feel and most harmonics. Another key aspect of Pure Class A design is that the tubes operate at the center of their Characteristic Curves.

Since we talked about the output section of the Bluetick we should look at the preamp section next. It is probably not commonly known that preamp tubes almost always operate in Pure Class A operation. Because the Bluetick only has 2 gain stages in the preamp, it does not have enough gain to push them out of Pure Class A operation. The Phase inverter is a traditional Long Tailed Pair, also running in Pure Class A. I have an affinity for Octal preamp tubes and the Bluetick uses the 5691/6SL7 in the gain and phase inverter stages. I have been using the Octals in my amps since I started building amps professionally a decade ago and find them to be sonically superior to

the 9 pin Miniatures although slightly more problematic. I use Audiophile grade, ceramic tube sockets with silver plated contacts for all the tubes. The preamp circuit is very traditional but utilizes many exotic materials in its materialization.

High-End materials are utilized starting from the beginning of the signal path, throughout, till the very output to the speakers. The input jack is a mill spec, silver plated ¼" shorting jack. The input is directly connected to the grid of the first gain stage, no input resistors or voltage dividers to distress the guitar signal. The Cathode resistor, as all the resistors throughout the amp, is an Audiophile grade Carbon Comp. type with gold plated copper lead out. The Cathode by-pass capacitor is Black Gate capacitor and is the finest that exists for use in an audio signal path. The first gain stage feeds a traditional Treble, Middle and Bass tone stack. The tone controls are proprietary Alessandro 2 watt, mill spec, custom audio taper pots with gold plated copper leads. The tone stack feeds into the Volume control, also an Alessandro pot, bypassed with another Alessandro proprietary part, a 1950's style Silver Mica capacitor. The Volume control outputs into the second gain stage, set up similarly to the first stage. The second gain stage is coupled to the traditional Long Tailed Pair phase inverter. The coupling capacitors in the preamp of the Alessandro amp are also proprietary, custom-made Foil In Oil type. I have found the Foil In Oils to have a classic sound but have dynamics and detail unlike inexpensive "poly" caps.

Once the guitar signal passes through the phase inverter stage, it feeds into the power tube grids. I have already talked about the class operation of this stage but have not mentioned the fact that they are connected ultra-linear. Ultra-linear power tube operation is another feature that I have been doing since the start of my carrier and I just find it to be very musical when utilized correctly. The power tubes are dual-symmetrically cathode biased and there is no need to bias the amp when matched quads are installed. The output transformer's 4, 8 and 16 Ohm secondary is connected to the impedance selector and then a pair of silver plated, mill spec ¼" output jacks

The aforementioned specs are an important part of the amp but are only able to sonically shine due to the superior foundation of the amp. The initial building block and backbone, the chassis, is solid copper (the second most conductive metal) that is silver plated (the most conductive metal). All the tube sockets and ground contact are also silver and are connected to the chassis by a unique Alessandro developed technique that welds them to the chassis with a Audiophile grade silver eutectic solder. This silver on silver contact is the most conductive junction and is not prone to galvanic corrosion or oxidation. This silver on silver connection is continued throughout the amp, as the internal wire is also silver. The wire upgrade option for the amps utilizes an Audiophile grade, directional, solid silver wire. Whenever using the audiophile materials, I am sure to wire the entire inside of the amp's circuit following the direction of the guitar's signal flow as the wire and caps have a signal directionality to them. As the chassis is the foundation of the amp, the transformers are the heart and soul. We make the transformers completely by hand. An operator that has been winding audio transformers for nearly 40 years winds them on a Universal 108 machine. We own 3 of these machines that were built in the 50's and have wound over a million transformers used in the vintage Dynaco Hi-Fi and early Sunn amplifiers. They are leaded with silver plated copper wire with Teflon insulation and then hand stacked with grain oriented M6 laminations. Special covers and hardware are the final components of these masterpieces. Stainless Steel mounting hardware is used and torqued to assure strong, reliable connections.

The muscles of the amp, the parts that give the amp the ability to work, are the power supply. The power input of the amp includes the power cord and IEC connector, I use heavy gauge cable and a high grade connector here. Alessandro also has High-End AC Power cables available for the ultimate coupling of the amp to the power source, I usually insist upon these cables for our top-flight amps. The switches are heavy duty, high current capable for extended reliable service. I opted for a Solid State power supply in this amp, as it would significantly out perform a tube rectifier in this design. I use special Hyper Fast, Soft Recovery diodes that sound like a tube rectifier but function like Solid State. The rectified high voltage supply is then filtered through my custom choke and high-end power filters. Black Gates, Elnas or my new custom, proprietary Alessandro Foil In Oil caps are used to keep the power supply solid, but with the correct feel that musicians expect. I am not a fan of Ghost Notes in a Class A amp and I specifically build my power supplies to be free of those non musical sounds.

Having married into a family with a master woodwork, I could not turn down his services when designing the Alessandro amp line. My brother-in-law, Andreas, offered to help get me started a decade ago and has become addicted to the Exotic woods like myself. I offer two types of cabinets, functional and exotic. The functional cabinets are either the Oak or Black Poplar wood cabs. These are very durable and are roadworthy. The exotics are also durable but are not something that you would let a band mate put his drink on. The exotic woods we have used to date include; Flame Maple, Quilted Maple, Blistered Maple, Birds Eye Maple, Crotch Maple, Cocobola, Claro Walnut, Crotch Walnut, Black Walnut, Quilted Mahogany, Flamed Mahogany, Mahogany, Flamed Koa, Ohi Alii (Royal Hawaiian Wood), Brazilian Rosewood, Mango, Cherry and others. We use no stains on the cabs, what Mother Nature gives us is what you get. The cabs are hand oiled and can take up to 6 months to get the finish perfect, so if you want our finest woods you may need to be patient.

Oh yeah, the sound. I would say the Bluetick with the EL34's installed have a traditional British 60's sound, incorporating both the Class A and the Class AB British amp qualities. The rig I use in this configuration is a vintage SG with real PAF's through an Alessandro Instrument Three (coming late 2004) directly into the Bluetick (no pedals

needed), then an Amp Two cable driving either a 2x12 open back Alnico Blue loaded cabinet or my vintage '68 full stack with 20's in the top cab and 30's in the bottom cab (all original, no recones). The sound is that of the recording that I grew up listening to and that unobtainable sound guitar players are looking for. Since the Bluetick has the ability to use multiple output tube types like EL34, 6L6, 5881 or 6V6's it tone can be fine-tuned by the owner. With the 6L6's or 6V6's into a open back 1x12 or 2x12 cab with an American sounding speaker, like the Jensen C12N, the amp has a wonderful 50's/early 60's American amp sound. I use the same aforementioned cables but with my vintage '61 Strat or '59 Tele for the American sound.

The Alessandro High-End amps are still completely built by 1 person, George Alessandro, and are limited in availability. We can only build a limited number of amps per year and they are built to order. Normal build time is 2-8 weeks and there is a 50% deposit required upon ordering. We do have a few dealers that carry the amps but the High-End amps are primarily direct since they are couture. The base selling price for the Bluetick is \$2000, well dressed and with the High-End options will get you closer to \$3k. For those of you that insist on the finest that money can buy, the Bluetick with the High-End options, Vintage Tube upgrade and Solid Silver chassis will deliver (cost is about \$6000).

I pride myself in original designs that push the envelope of quality and tone. The Bluetick is unique in many ways but when played, has a very familiar sound. As I have covered the majority of the amps internals, there are still some trade secrets that I prefer not to disclose. You can be guaranteed that these are the finest quality amplifiers ever built, but since sound is subjective you will have to decide if these are the finest sounding.

Please feel free to contact us by phone or E-mail for orders or if you have any questions.

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