

SILBATONE ACOUSTICS

New Audio Legends
2019



www.silbatoneacoustics.com
www.wecomuseum.com



For 20 years, it has been the mission of Silbatone Acoustics to capture the impact and excitement of the great Western Electric triode and horn theater sound systems of the 1930s for modern home musical enjoyment. We are great enthusiasts of great classic equipment to the point of being museum curators, but we feel that ongoing progress can and must be achieved. Modern materials, manufacturing techniques, and enlarged perspectives on circuit design are resources which allow us to take this vision to ever-higher levels.

As dedicated tube lovers and collectors, we put a lot of emphasis in choosing the highest quality tubes for our creations. Given our small-workshop handmade approach, we are not limited to currently manufactured tubes from China and Eastern Europe. All of our products feature NOS tubes and we often select extremely rare specimens from our extensive collection to produce limited or custom designs. Too many legendary tubes are being "conserved" forever in closets...they deserve to be heard and appreciated! Life is too short to save every rare tube. Let's enjoy!

Our concern with parts quality goes far beyond vacuum tubes. Silbatone creations use the best silver wired magnetics available, mostly wound in-house. Our power amps use our proprietary high bandwidth, low-loss silver foil output transformers on high nickel or Hitachi Finemet cores. All of our products are wired with silver litz cabling. Volume controls are silver transformer type or broadcast-grade attenuators. Substantial precision machined, hand finished aluminum chassis contribute to the sound as well as the beauty of our instruments.

The Silbatone design team of JC Morrison and Dr. Stefano Bae specialize in minimal parts count, directly coupled designs using intelligently innovative topologies with sophisticated power supply implementations. For the past five years, our engineers have been working with hybrid triode circuitry and advancing the intersection of digital and analog to follow the path of technical and musical improvement, participating in the ever-growing sophistication of our listening public. No Silbatone products can never be called copycat designs and we refuse to make any design compromises to meet arbitrary price points.

Since Silbatone's target audience is essentially composed of a small circle of highly-specialized and experienced audiophiles like ourselves, we feel a special relationship with the people who appreciate our extremist approach. Our goal is not to profit in the marketplace but to achieve musical enjoyment and contribute to the evolution of sound system design. Our 2019 lineup represents the latest refinement of our engineering achievements and we are pleased to share our work with you today!



Our Demonstration Loudspeaker System for 2019

Every year we put together a special system drawn from our museum collection to entertain and educate our guests. This year we have chosen to showcase a pair of antique horns from the Golden Era of early 1930s theater sound and team it up with a novel subwoofer implementation of Altec 515s 15" LF drivers, an arrangement inspired by the Air Motion Transformer concept magnified to low bass dimensions.

The HF horn is the familiar Western Electric 22A, driven by original field coil WE 555s. This model exists in contemporary reproduction and has been popular with modern listeners seeking an enjoyable and rich horn listening experience in a package that is not unreasonably large for domestic use.

The mid-bass horns are incredibly rare and obscure 1930-era fiber horns made by Racon, who manufactured the small KS-series fiber horns for Western Electric. Clearly some special reciprocal agreement was in place since the Racons bear a very close resemblance to the iconic Western Electric 12A snail horn from the Vitaphone system of 1928. WE 555 drivers are also employed on the Racon LF horns.

The two horns are run in parallel with no crossover, much in the manner of the 12A and 13A Vitaphone system previously demonstrated at the show. Doing so extends the frequency downward over the 22A alone and adds a significant boost to the sense of scale portrayed by the system. This adds up to a "wall of sound," quite literally.

The Altec/AMT inspired subwoofer comes into play below 70hz where the horn response tails off. JC Morrison's novel design yields a very low resonant frequency, high output, and very low distortion for a room-filling cloud of bass. Eight Altec 515s should provide a very satisfying low end foundation for our presentation.

The addition of this novel woofer demonstrates our commitment to ongoing development within and occasionally moving beyond classic paradigms and hopefully it will add an extra dash of the excitement and impact a good demonstration systems should possess!

We hope you will appreciate and enjoy our one of a kind loudspeaker entry for this year, a tasty salad of decades theater sound technology that is unlikely to be repeated anywhere else, ever. This system is all about the unique experience, hearing something new, something old, and maybe interesting. Enjoy our demonstration speaker!



SQ-107 Phono Preamplifier

Although we fully understand the concept of diminishing returns, we often take build quality to extreme levels in Silbatone reference series designs, because we try to reach for the stars with these highly expensive models. The truth is that extremely high caliber performance is accessible at somewhat less cost because much of the quality we seek is inherent in our approach to circuit design rather than the particular fancy parts used in implementation of one model or another.

For our mainstream production phono stage, we took the concept of our reference-class SQ-102 Phono Amplifier, with D3a and silver MC step up and output transformers. And transformed it into the slightly more modest SQ-107, built around a German Post C3m voltage amplifier and a 7044 buffer, same as the top model Lundahl amorphous core output transformers help acquire the sound that we often look for with silver, high definition with a sense of musical truth. Aside from copper instead of silver transformers, the designs are fundamentally alike, and the much of their sound quality is shared as well.

At the level we working on, the differences between one of our phono models and another is a question of personal preference and subtle characteristics. Some are more fancy than others but all share the same technological DNA. We are pleased to adopt the SQ-107 into our family of refined phono preamplifiers, as we are always seeking to meet the vinyl maniacs desire for a little bit more from a phono stage. The SQ-107 will get you there.

For convenient organization of your analog life, the SQ-107 features MM and MC inputs with selectable 7x/16x gain step up transformer. 5MV for 1V out MM input sensitivity, very usable for outboard transformers. Balanced and unbalanced transformer isolated output jacks are provided. A flexible central hub to moderate the complexities of the phono wing of any advanced phono setup!

The L-107 and the SQ-107 are a team made in heaven for the analog lover seeking very high levels of performance in a moderately-priced suite of electronics, built the Silbatone way. We think the L-107 and SQ-107 is a very good place to be for musical enjoyment and value. For no-nonsense quality, convenience and cutting-edge performance, we invite you to consider the Silbatone 107 line!



SQ-102 Mk.II Phono Amplifier

Over the past decade, Silbatone has dedicated tremendous resources to designing and refining very ambitious tube phono preamplifiers. We think the phono preamp remains foremost among challenges for the designer and continues as the promised land of the art of music reproduction, yet in general, the field lags behind other areas of audio in innovation and evolution. It may be a digital world but for really deep listening, many here in attendance still turn to analog, as we do. We believe that phono is still the soul and conscience of specialist audio, the reality check.

Our newest entry in the stable, the SQ-102 Mk.II is a phono-only preamplifier incorporating various refinements that emerged in the course of our R&D programs. The new SQ-102 features a new twist on JC Morrison's transconductance amplifiers using the German Post D3a. The all-important input stage sets the noise figure of the entire system and does much to establish its character. This first stage can swing 45V and the gain window is optimized for headroom to lessen record noise. The phono EQ is craftily incorporated into the input stage circuitry as opposed to a separate lumped filter stage driven by the input stage, as found in most non feedback RC and LCR based preamps. This topology minimizes series components and enhances the dynamic and nuanced presentation we have come to expect from the D3a transconductance circuit. A DC servo on the 6900 buffer is used to avoid coupling capacitors enroute to the transformer output.

The SQ-102 is built to high Silbatone standards. A handsome and heavy milled chassis provides a non-resonant foundation for the electronics. Input (1:10) and output transformers (600 ohm) are super quality pure silver wired models that we have relied on for years. Two MC and Two MM inputs are supplied with front panel push button selectors. Single-ended and balanced XLR outputs are available on the back. No muss, no fuss...just high performance.

For those who wish to experience the leading edge of phono preamplifier performance, Silbatone invites you to audition the SQ-102 Mk.II, a perfect partner for our line amplifiers and integrated amps, and a gateway into the magic of high-end phono reproduction in the 21st century.



Silbatone SQ-100R Silver LCR Phono Amplifiers

For the past decade, Silbatone has specialized in the design of truly reference grade phono preamplifiers, not only because we are great fans of this medium, but also because we feel that the potential of LP playback is only recently beginning to be fully understood. Technologically and in performance terms, the phono preamp has lagged somewhat behind in development compared to power amplifiers. Indeed, phono preamplifiers offer very difficult challenges to designers and manufacturers and these have often gone unmet in even very expensive models. We want to do better.

Our latest entry in the reference grade preamplifier arena is the SQ-100R all-silver LCR preamp. There are a total of six silver transformers in this unit: switchable 1:10 and 1:20 silver litz MC transformers of the finest grade and a silver-wired nanocrystal core output transformer. LCR inductors are also silver wired on permalloy cores. Great measures were undertaken to make the SQ-100R a fully direct coupled instrument, with no signal capacitors aside from the few shunt caps necessary for RIAA equalization.

The SQ-100 employs only the highest-quality vacuum tubes. A German Post D3a in a super low noise configuration is the input tube, followed by a 7044 buffer, silver inductor LCR EQ filter, a triode WE 310A voltage amplifier, and then our 7044 silver transformer-coupled output buffer. The output stage has been refined through several generations of line amplifiers, including a medium-priced unit introduced last year, the L-103, that was adopted as personal reference unit by the two most prominent audio magazine editors in Japan.

We designed the SQ-100R circuit for incredible headroom which we consider a neglected quantity in phone amplifiers. This circuit can tolerate an astounding 0.5V signal at 10kc before overloading! Sensitivity is 2V output for 5mv in at the MM input. Exceptionally low noise and a combination of great detail, delicacy, and free realistic dynamics make this a true stand-out among reference quality preamplifiers.

Frankly, it is not easy to equal, let alone surpass some of our best previous efforts in phono amplifier design. Even incremental improvement comes at the expense of considerable resources and experimentation. In the case of the SQ-100R, we put forth our best parts and design concepts in a rather ambitious program to create a reference unit that we believe stands with the best phono preamplifiers the world has known.

We invite analog enthusiasts who are weary of compromises to consider the Silbatone SQ-100R Preamplifier, luxurious in construction quality and execution, and built that way by phono fanatics to bring home the ultimate luxury of profound musical enjoyment of your treasured LP collection.



L 103 MK2 and L-107 Line Amplifiers

Although many believe that an active line amplifier is not necessary with digital sources, we find that interest in line amplifiers seems to be continually growing at the higher end of the audio market. Not only do separate amplifiers provide convenient control center functions, but a really fine line amplifier can greatly improve the overall presentation of a quality system. Even in the best DACs and players, the output stage is usually somewhat of a compromise and this can become a weak point in an otherwise well-appointed system, one which Silbatone can remedy with our specialist preamplifiers.

The newest Silbatone collection of line amplifiers features trickle-down technology from our reference-grade L-101 preamp which features a WE 262B triode in a unique zero volt in/zero volt out circuit that requires no coupling capacitors from the silver autoformer input to the Bendix 6900 driven silver wired double C core Finemet output transformer. To date, this is the best line amp topology we have experienced and we decided to explore the possibility of this approach on a slightly less costly basis.

Although much of our research at Silbatone Labs is focused on cost-no-object designs for the extremist crowd, some of our best ideas provide direction and inspiration for more popularly priced products. A case in point is our new L-107 Line Amplifier, which could be called a trickle-down version of our high-dollar L-107 Mk.II, a line amp of substantial merit and corresponding price tag.





When the two most prominent audio magazine editors in Japan heard our fancy L-107 Mk.II silver input and output transformer line stage based around the WE 310A, they both wrote personal checks for full retail and bought the unit on the spot. They even told us it was underpriced, after they paid of course. One thought it might be the best piece of audio gear he ever heard. Frankly, we were impressed that they were so impressed. We liked it too but we surely welcome such validation! It was a statement piece, as they say, an attempt to nail down a particular point in our line amp evolution.

For the production L-107, we substituted a 7044 triode section for the collector item WE 310A tube and switched to copper transformers, but we must say that it is not far behind its expensive sister in musical performance, if at all. Built to high Silbatone standards, it features a broadcast-grade 40 step Tokyo Ko-on attenuator and a 7044 output buffer configuration that is actually one generation beyond the Mk.II output stage. Input and output transformers for maximum isolation and optimal drive.

The L107 features four inputs-- 2x balanced and 2x unbalanced - with both balanced and unbalanced outputs available for optimal system building extensibility.





Silbatone L-101 Line Amplifier with WE 262B Triode

Back in the 1980s, the ideal audio component was considered to be equivalent to a "straight wire with gain." At Silbatone, we know this is not enough. In the case of our L-101 Line amplifier, comparing it with a direct connection from a digital source shows that it is the direct connection that is missing something crucial to musical understanding and appreciation that our preamplifier provides. Our goal is to produce preamplifiers that make musical experience better in every way - both more vivid and more realistic, making an important contribution to listening pleasure rather than adding noise and electronic colorations to the signal as do so many current designs.

The L-101 is a marvel in circuit simplicity, requiring very novel and advanced thinking to achieve. A silver wire input transformer allows for balanced or unbalanced inputs. A 64 step relay-switched silver wire nickel core autoformer provides adjustable gain trim to establish proper system sensitivity. A Western Electric 262B small signal triode is the primary active device in the signal path, configured in a unique "zero volt in, zero volt out" structure which is directly coupled, requiring no signal capacitors at input or output. The 262B is directly coupled to a buffer using a very powerful WE 437A driving silver wire output transformers, providing balanced and unbalanced connections. Bandwidth is 10hz-200khz with a remarkable musical presentation.

The L-101 power supply is double-regulated, with a remarkably low noise floor and featuring an extremely fast buffer optimized for audio performance sidestepping the sonic footprint that lesser regulator designs impose on musical sound. Noiseless, smooth, and natural music is our goal and sophisticated power supply approaches are essential resources for getting there.

As dedicated preamplifier specialists, Silbatone has been leading the way in low level amplification for some years, but we feel that a new level of performance has been discovered with our L-101 Line Preamplifier. Those seeking the best possible line amplification need look no further!



JI-300 Mk V 300B Integrated amplifier

The JI-300 series of amplifiers has always been Silbatone's most popular product line, with hundreds sold in the Korean home market since 2001. Introduced as a moderately priced but very high performance amplifier, many JI-300 owners replaced far more expensive imported high end gear with Silbatone. Today even the earliest models remain very well loved by their owners and few appear on the used market.

Over the past fifteen years, the JI-300 platform has undergone a continuous program of enhancement and upgrades. With the introduction of the Mk. V, we are taking our "standard" 300B amplifier to a new generation of design and performance.

The new JI-300 is a directly-coupled design incorporating our latest perspectives in circuit topology, including a novel super low distortion current feedback driver circuit field tested in our most expensive and elaborate recent efforts. We retained the broadcast grade Tokyo Ko-on stepped attenuators and straightforward ergonomics of the JI-300. But changed.

The heart of the JI-300 and the secret to Silbatone amplifiers' remarkable performance is our unique semi-silver foil transformer, upgraded in the Mk. V to an over-sized permalloy core unit that trickled down from the premium Reference 300B amplifier line. The extremely good low frequency coupling, low distortion, and low losses of our transformer contribute to an amplifier whose real world drive and authority stand apart from the general run of single-ended triode designs. All voltages including the main B+ supply are intelligently regulated, delivering extremely low noise levels inaudible on the most sensitive loudspeakers and a refreshing purity of sound.

The end result of the extensive JI-300 makeover is a cutting edge 300B integrated that we are proud to offer.



Silbatone Reference 300 Silver Signature Amplifier

For over a decade, Silbatone has led the way with the finest stereo integrated tube amplifiers ever produced. The Reference 300 Silver Signature is the latest generation of our flagship 300B single amplifier, now featuring all directly-coupled circuitry for maximum purity and quality of musical reproduction and massive upgrades for 2016.

The new driver stage features a current feedback architecture using premium 7062 and 6900 dual triodes for very low distortion, large signal performance at an impressive bandwidth-180 Volts, peak to peak, -3dB at 200KHz, into 100K ohms - a level of performance rarely achieved in tube or solid state designs from any era. There is little in the signal path except triode tubes and wire and no error correction or feedback is used in the final stage. This elegant design imparts very little of its own character but allows the signature of the 300B output stage to be presented in all its simple beauty.

Build quality of the Reference 300 is far beyond other commercially-produced amplifiers. Teflon boards and silver litz internal cabling are employed for ultimate musicality and detail. We now use an expensive 62 step silver-wired remote control autoformer for volume control because it is by far the best we have heard. Our latest generation silver wire Finemet core foil output transformer pushes the limits of performance. This is a no compromise effort, deserving of true reference status.

We feel that the Reference 300 is easily the ultimate integrated amplifier in existence today and we are quite confident that it is among the very finest music amplifiers on the market, even when compared to our own more expensive designs. This is a platform to realize the highest musical potential of the WE300B triode, engineered for the way today's audiophiles build world-class systems.



P107 140W Power Amplifier

One might think it is totally out of character for Silbatone to create a 140 watt power amplifier. Fair enough, perhaps, since we are well known for resurrecting ancient super low power tubes and great advocates of the most sensitive horn speakers ever known to man. The social fact remains that there are legitimate applications for big amps. Some popular high end loudspeakers need this level of power to perform their best. Some very ambitious low frequency systems could also benefit. While we do not wish to condone mindless excess, the market for high power amplification has been somewhat under-served in terms of musical quality.

Silbatone decided to explore a new approach to meet this need, with results that doesn't require explanations or apologies and technology owes little to what has gone before. Historically, attempts to marry tubes with solid state devices have been unsatisfying, to the point that the term "hybrid" scares most serious listeners away. Much of our research these past few years has been focused to develop successful unions of tube and solid state devices, as seen in our NeoHyb series and now in the P107 Power Amplifier.

The P107 Amplifier is entirely direct coupled, using an input transformer, a WE 310A triode voltage amplifier, and a unique I/V converter topology that sidesteps the soul-crushing issues usually encountered when trying to drive solid state output stages with vacuum tubes. The elimination of coupling capacitors is achieved via sophisticated and stable servo level shifting methods that we perfected in earlier top-line designs. Basically, we reset the dialogue on high-power hybrid amplifiers by opening a completely new chapter in the history of the field.

The result of our efforts is big power with natural tube character. The P107 amplifier exhibits the grip and control of the best solid state amps yet it plays music with the heart of an artist. We anticipate that this genre-busting effort will convince even the most die-hard skeptic that there is promise in high-power hybrid approaches and open the door of Silbatone to a new category of high end audiophiles who prefer relatively power-thirsty modern loudspeakers. Big power without compromise, the Silbatone way!



Silbatone P106 NeoHyb 45 Amplifier

At Silbatone Labs, we engage in a lot of experimentation and exploration to discover new things that work. Our newly-patented NeoHyb current multiplier circuit is one of our best inventions yet.

Our NeoHyb circuit uses parallel mosfets to enhance the current delivery of vintage triodes, yielding greater power and allowing for more conservative tube operating points at the same time. The mosfet is completely locked to the plate of the tube and adds no measurable influence, except greater current swing. The musical performance and distortion spectra are pure triode. All signal current passes through a Silbatone foil output transformer. It acts and sounds like a pure tube stage, only boosted in output power.

Although we use mosfets in this topology for their awesome current delivery capabilities, this is completely unlike previous "hybrid" attempts, which usually involved a tube driver slapped onto a transistor output stage, the worst of both worlds, and never a high performance solution. This is why we call it NeoHyb. It has nothing to do with 1980s style hybrid amplifiers.

Take, for example, the 45 tube, a 1930s design triode often considered one of the very best sounding tubes on the planet, but very low powered at only two watts output. Now, imagine an eight watt SE 45 amplifier. This is what we have accomplished in the new P106 NeoHyb amplifier. A single 45 amp that can really drive a practical speaker, finally!

The NeoHyb P106 plays with all of the grace, dynamics, and musicality we know from the legendary 45 triode, but with a magnified power output that is far more useful in the world of practical speakers. Thanks to the high current output stage and low ratio foil transformer, the P106 will demonstrate more drive and punch than expected from an 8 watt amplifier. Although it works great with super-high efficiency horns, the P106 can play many dynamic speakers with satisfying weight and authority.

We love to fit this amplifier with beautiful antique globe shaped 45s from the 1930s, not only because they are very great sounding tubes but they also symbolize the marriage of old and new that is at the core of the Silbatone NeoHyb project. This is no vintage style amplifier, being very low noise, wide bandwidth, and dynamic, yet it evokes the dream of the golden days when musical electronics were new and the triode amplifier ruled the empire. Those days are back with Silbatone NeoHyb!



Silbatone P105 NeoHyb WE 275A Amplifier

Although not as famous as its big sister, the Western Electric 300B, we really can't think of enough good things to say about the WE 275A tube. Another 1930s triode designed for sound reproduction, the 275A was only used in several rare WE push pull amplifiers which most audio people don't know anything about. This tube is natural, detailed and very lively, just sweet enough to be emotionally compelling while never sounding processed or overblown. A tour de force of early triodes and a great favorite of ours.

Perhaps one reason this sleeper tube has not attracted more attention is due to the lowish power rating. This is essentially a three watt tube, more or less Western Electric's answer to the 2A3. And although single 2A3 amps are favorites among specialist tube maniacs, many listeners require more juice to make their speakers come alive.

Well, this is exactly the job that the Silbatone NeoHyb circuit was intended to perform. We take the wonderful-but-low power 275A, and with our current multiplier arrangement, the P105 can produce a potent 8 Watts of musical bliss! Low output impedance, plenty of drive for real world loads, and the harmonic characteristics are an exact match for the standalone tube. Pure 275A sound!

Since this will be the first time most people ever heard a 275A tube, we wanted to provide a top notch platform for the power stage to perform at its best. We outfitted it with a really excellent 12AY7 driver stage using select types of 1950s NOS tubes and we designed a special foil transformer with a Hitachi Finemet double C core. Operating points are chosen to ensure stress-free operation and long life for the NOS antique output tubes.

In listening sessions between the P105 and P106, both eight watt class NeoHyb amplifiers, it is interesting to observe how some are drawn to one design and some to the other. Maybe one can say that the 45 tube based P105 is a favorite with jazz lovers and classical listeners might prefer the 275A based P106, but the next listener will surely break that mold, or the next song.

For Silbatone, the NeoHyb project is all about providing more options for music lovers to find their sound. Our NeoHyb series brings great classic triodes forward into the realm of practicality for today's systems. Give them a listen. You just might fall in love!



P-103 Stereo 205D Convertible NeoHyb Amplifier

Working within our NeoHyb platform for several years has brought us many insights, allowing us to explore higher power with real single-ended triode sound, an especially valuable trick with tubes that are simply too low powered to be usable as output tubes in typical amplifiers and most home systems. We were surprised how great some of the very earliest triode tubes played music when we were able to boost their output to practical levels with out current multiplying technology.

Our new P-103 Stereo Amplifier cuts right to the heart of the issue, bringing our best NeoHyb techniques to bear in a flexible design that plays the antique 205D triode natively, one of the best tubes of all time. However, the P-103 allows the user to substitute the VT-2, WE 216, Type 50, and even the WE 300B with adapters! It is a tube lovers dream amplifier, bringing a world of musical possibilities into hand, pretty much the defining purpose of the NeoHyb platform.

Only the finest parts are used in the reference class P-103 Amplifier, including our best "Five Star" silver primary/silver foil secondary output transformers, built on custom-produced over sized Hitachi Finemet cores. Transformer-isolated balanced and unbalanced inputs featuring silver 10 kohm input transformers are provided for system building flexibility.

The low parts count P-103 circuitry is fully direct coupled, avoiding the inevitable colorations of coupling capacitors. The Bendix 6900 is our voltage amplifier tube of choice: rare, expensive, and requiring particular care in implementation to get right, but we use it because nothing else captures the amazing quality that it gives us. The voice of the P-103 is the pure song of silver transformers and the best tubes on the planet, so we know you will enjoy!

Output power of the P-103 is a substantial eight watts, regardless of output tube choice. In the case of the 50 and 300B, the operating points chosen are very conservative and guarantee an easy ride for your precious tubes. Let's face it, vintage tubes are finite resources. With the P-103 and its relatives in the NeoHyb family tree, you can run your tubes where they sound best and enjoy the longest life, instead of pushing them to the limit for maximum power. The current multiplier does the rest, magnifying the drive capability of the output tube without any modification or degradation of harmonic character. A constant current filament supply provides an extra measure of care for your antique triodes.

We present the P-103 Stereo Amplifier as an exemplar of the NeoHyb project. We put everything we know into this paradigm statement of a mature R&D program, an adventure that has brought us a lot of enjoyment and edification. The P-103 Amplifier is a unique and uncompromising entry in the Silbatone catalog, offering many exciting possibilities that will surely appeal to the serious tube lovers among us.

Experience the best tubes have to offer with the NeoHyb advantage!



P102(RP30W) MONO NeoHyb Amplifier

Silbatone has always been a great champion of the Western Electric 300B tube and many of our highest aspiring amplifiers have been based on this ancestral triode. It is no exaggeration to say that the triode revival and the rise of single-ended amplifiers over recent decades was built on the reputation and outstanding performance of the famous and fabled WE 300B.

One factor in the success of the 300B is that it can provide eight watts, enough to play many speakers for home listening...or fill a movie theater, with appropriate speakers, of course. Beyond that, the musical balance of a good 300B tube has been a great education for music lovers. It is natural but animated, detailed yet lush when it is supposed to be. Organic sound that captivates the ear and brings the musical message home. Yes, we love the 300B.

Naturally, when we developed the NeoHyb circuit, a voice from somewhere above began "What would a 15 watt 300B amp sound like? How about a 30 watt SE 300B amp?" We had to try it, and the results were very rewarding. NeoHyb boosted the power as expected and the familiar 300B flavor was retained, one could even say enhanced in some ways. Dynamics, low frequency drive, and midrange speed were magnified. The harmonic structure of the NeoHyb measured on our Audio Precision workstation was extremely close to our Reference 300 stand-alone 300B amplifier. It worked better than we hoped!



New REVIEW

Mr. Yoshida, Tube Kingdom 2019 winter Vol. 91

"Confident and grand in scale. Emitting the purest sound from a deep place. One could confuse this achievement with the product of a parallel single arrangement. This attests to the successful arrangement of the output tube and the output transistor. Despite a high signal-to-noise ratio, the sounds produced are fresh and invigorating.

There is no hiss to detract from the overall experience. The degree of realism is as if the instruments were present in a wide space.

The Nicholas Hodges performance was pleasing to the ears due to an extended sound field that leaves plenty of room for expansive sound pressure. "Junko Okashi" was exceptional. A moderately dampened bass and the scintillating sounds of certain instruments combined generate an outstanding experience.

I give it a perfect score."



Silbatone RP-100 205D VT-2 NeoHyb Power Amplifier

At Silbatone Labs, we engage in a lot of experimentation and exploration to discover new things that work. Our newly-patented NeoHyb current multiplier circuit is one of our best inventions yet, allowing us to explore tubes in a whole new light, bringing previously ignored classics to the forefront of the art.

Although we use MOS-FETs in this topology for their awesome current delivery capabilities, this is completely unlike previous "hybrid" attempts, which usually involved a tube driver slapped onto a transistor output stage, the worst of both worlds, and never a high performance solution. This is why we call it NeoHyb. It has nothing to do with 1980s style hybrid amplifiers.

Our NeoHyb circuit uses parallel MOS-FETs to enhance the current delivery of vintage triodes, yielding greater power and allowing for more conservative tube operating points at the same time. The MOS-FET is completely locked to the plate of the tube and adds no measurable influence, except greater current swing. The musical performance and distortion spectra are pure triode. All signal current passes through a Silbatone foil output transformer. It acts and sounds like a pure tube stage, only boosted in output power.

Our RP-100 VT-2 Amplifier uses one of the very first vacuum tubes, the WWI era VT-2, a very low powered triode of simple construction, which happens to be one of the very best sounding tubes on the planet. This tube is not well known because it is very early and rather scarce, but it is also not particularly useful as a power tube in conventional circuits. In our NeoHyb configuration, we can produce 20 watts with the pure sound of the VT-2, enough to drive many practical speakers to room filling volumes, transforming it into an extremely usable treasure of the first decade of tube electronics.

This is not our first round with the venerable VT-2 tube but we have been so impressed with it in past trials that this time we pulled out all the stops. The RP-100 amplifier uses a silver input transformer, a WE 205D, directly coupled to a VT-2 and our first "Six Star" output transformer, all silver foil, primary and secondary, on a double Finemet core. By virtue of novel design, we have managed to eliminate all capacitors from the audio path so the voice of the RP-106 is the tone of triode tubes and silver signal conductors.

The NeoHyb RP-100 plays with all of the grace, dynamics, and musicality expected from an amplifier of its class. Thanks to the high current output stage and low ratio foil transformer, the RP-100 will demonstrate more drive and punch than expected from a typical 20 watt "high end" amplifier. Although this amp works great with super-high efficiency horns, the RP-100 can play most dynamic speakers with satisfying weight and authority.

We love to use fabulous antique tubes like the Western Electric 205D and VT-2. They are beautiful and superb sounding devices, but they also symbolize the marriage of old and new that is at the core of the Silbatone NeoHyb project. This is no vintage style amplifier, being very low noise, wide bandwidth, and dynamic, yet it evokes the dream of the golden days when musical electronics were new and the triode amplifier ruled the empire. Those days are back with Silbatone NeoHyb!