SILBATONE ACOUSTICS New Audio Legends



www.silbatoneacoustics.com



Silbatone Acoustics mission is to capture the impact and excitement of the great Western Electric triode and horn theater loudspeaker systems of the 1930s and 1940s for modern listeners. Obviously we are enthusiasts and students of classic vintage equipment but we also know the challenges and limitations that come with being antique collectors. Most advanced audio men appreciate a more direct path to good sound and a system configuration that is more suitable for home use than industrial equipment racks from an old projection room.

Keeping a healthy respect for the classics, we believe that continual progress must be made. Modern materials, manufacturing techniques, and many decades of perspective on early tube electronics design are foundations for great improvements. Modern audio specialists demand higher performance in many areas than older equipment can provide. We take inspiration and advice from the past masters but we pursue the goals of audio reproduction with a progressive and uncompromising contemporary focus. Some might even say Silbatone Acoustics is obsessed and perhaps even excessive, but we take this a compliment.

Being tube lovers and collectors ourselves, we put a lot of emphasis on choosing the highest quality tubes for our designs. Silbatone does not design for mass production, so we are able to choose our parts without worrying about easy supplies of new manufacture tubes from Chinese and Eastern European factories. All of our products feature NOS vacuum tubes and frequently we select extremely rare specimens from our extensive collection to produce limited edition or custom designs.

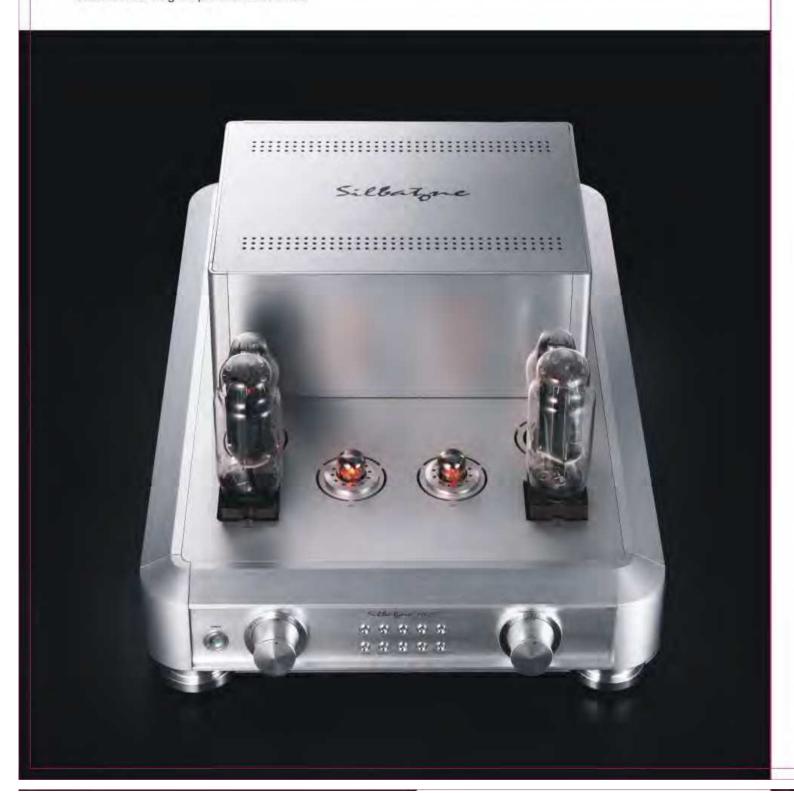
For example, we are using Western Electric 437A and Bendix 6900 tubes in some of our electronics. These are fantastic devices but almost impossible to source at any price, because they are so scarce and highly-sought after. Our RI-25 Amplifier is based on seldom-seen Siemens Ed and Osram DA100 industrial triodes which are among the rarest of the rare in vintage circles. We think these collector's items deserve to be heard and appreciated. Many Silbatone creations are limited in production to the numbers we can support with the vintage tube stock we have in our possession.

In other cases, the tubes we select are quite inexpensive and sometimes a bit off the beaten track, but they offer extremely high performance in our applications. The goal is not to be exotic simply to be exotic, but to reject conventional limitations of the marketplace and explore new territory of vacuum tube music reproduction. There are hundreds of 12AX7 preamps... what is the point in making one more? Silbatone designs sound refreshingly different and hopefully better because it all begins with the tubes!

RI-25 DA100 Stereo Integrated Amplifier

At Silbatone, we understand that the first step in designing for superior audio is to select the best tubes for our products. Our new RI-25 Integrated amp is an extreme case, using insanely rare and expensive devices that are legendary for their performance. Most audiophiles and vintage collectors never get to see these items, let alone listen to them! We had to dig very deeply into our treasured vintage tube collection to produce this extraordinary limited edition amplifier.

The all-triode RI-25 uses Western Electric 437A voltage amplifiers, the legendary German Ed low mu triode as a driver, and the British DA100 for output tubes. The Ed, usually produced by Valvo or Siemens, is similar to a 2A3 but considered far superior by many listeners. The DA100 is roughly equivalent to the common 845, a high power triode used in radio modulators and theater amps, but it has a flavor all its own. All of these special quality tubes are built to the very highest standards for long-life professional service.





Inspiration of the legends... Contemporary realizations for enhanced musical experience

Reference 300 Stereo Amplifier

Our flagship integrated amplifier, the Reference 300, presents the ultimate refinement of our 300B stereo integrated approach. 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.

The Reference 300 is a cost-no-object realization of the stereo integrated triode amplifier, Broadcast grade attenuator with solid milled knobs permit precise control.

Five input switch is a high reliability unit. We designed the Reference 300B to be an effective and elegant control center for your system.

As with other Silbatone products, build quality is far beyond most commercially-produced amplifiers. Teflon boards, custom silver capacitors, and silver litz internal

cabling are employed for ultimate musicality and detail. Our latest generation "Semi-Silver" foil-wound nickel core output transformer stands alone in musical quality. The chassis is CNC milled from aluminum billet, designed by a celebrated industrial artist for visual aesthetics and functional considerations such as shielding, cooling, and vibration control.

The power supply in the R300 is very stable under load, offering extremely low noise and a very low source impedance. This overbuilt PSU results in an amplifier with incredible drive capability for an 8W single ended amplifier. The R300 is often partnered with modern speakers such as the Kharma models and Wilson Watt/Puppy which do not perform well with typical 300B amplifiers.

The output transformer we developed for this amplifier uses our exclusive semi-silver foil technology, wound on an oversize core of exotic nickel material. Lead wires are pure silver litz. The extremely high efficiency of our silver foil transformer design contributes to the strong drive capability and exemplary low frequency performance of the Reference 300 amplifier. With this new transformer, we are at the extreme limits of transformer performance using existing materials and the subjective listening results are as encouraging as the technical specifications.

Voltage amplifier (E180CC) is industrial-grade twin triode device, chosen for high performance. The rare and very costly Bendix 6900 is offered as an upgrade over the 5687 used in our JI-300 amplifiers, recommended for those seeking the ultimate tube selection for music listening. The R300 is compatible with original WE 300B power tubes and modern improved versions.

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 ever produced.



- Exclusive Semi-Silver nickel core output transformer with pure silver litz lead wires.
- Tokyo Ko-on broadcast attenuator, highest-grade five input switching, solid milled knobs for positive control
- Removable tube cage for protection and international compliance
- WE300B, E180CC, 6900 vacuum tubes
- Precision machined aluminum chassis for shielding plus heat and vibration management
- Powerful 8 watts, 4/8/16 ohm output, compatible with quality conventional speakers
- 37 kg, 50cm x 47cm x 26.5 cm

Silbatone C-100 Preamplifier

The C-100 is our latest statement in MC phono and line preamplification. Since we are still great analog enthusiasts, we tried to achieve something special in MC phono design in the C-100 project because it is hard to find really great phono preamplifiers and we took it as a duty to expand the art.

Our phono stage uses a German telecom-grade D3a tube in a radical new transconductance amplifier circuit that achieves a remarkable 10000x gain with one tube, with very low distortion and super low noise. Equalization is implemented using passive LCR filters with nickel core inductors and precision matched capacitors. Our MC step up trans are silver wound on huge amorphous cores and we are confident that they are among the top few units available at any price anywhere, because we compared everything out there and we know the real story.

The C-100 line stage offers balanced or unbalanced inputs and outputs, featuring silver wired stepped-impedance volume controls with an integral input transformer, a pair of rare NOS Bendix 6900 triode tubes in a self-balancing Blumlein arrangement, and a silver wired line output transformer on an amorphous core. This topology was inspired by classic studio program amplifiers but realized with a discriminating modern ear for components and materials.

All in all, the C-100 design is as close as we could get to using only tubes and wire. Low audio parts count and simple signal path although we took a technically sophisticated and expensive path to get there. No capacitors are used in the line stage and only one coupling cap at the output of the phone stage. Silver litz cabling is used throughout the unit.

All of this adds up to a rather substantial and sturdy package worthy of the King of Preamps, housed in a machined aluminum enclosure finished to Silbatone's customary high standard of visual appeal and mechanical solidity.



SQ-102 Phono Amplifier and L-103 Line Amplifier

Many audio products claim to be innovative but on close inspection they are not much more than recycled 1980s designs, which are mostly based on glorified 1950s consumer hi-fi circuits. Although we are enormous fans of classic technology, we know it is often possible to do much better today.

Silbatone has taken on preamps as a special challenge, because we know we can do a better job by stepping beyond the usual commercial design conventions. The preamplifier is the heart of a system and until now it seems that low level amplification has been a relatively underdeveloped art.

Our SQ-102 Phono Amplifier is based on research conducted during the design of the phono section of our C-100 Reference Preamplifier. We use the same radical new transconductance amplifier circuit in an elegant direct coupled arrangement. This provides 2500X front end gain using our world-class silver litz wire and amorphous core step-up transformer and only one active stage! No negative feedback or other active error correction is necessary.

The tubes chosen for the SQ-102 are not used in any other contemporary high end designs, a premium E80CF for the transconductance amplifier and an 8416 which is an instrumentation-grade dual triode (mostly seen in Tektronics oscilloscopes) for post-EQ gain recovery and output driver. The output stage uses a very high grade silver-wired output transformer on an amorphous core. The circuitry is all direct coupled, using capacitors only for equalization. Three phono inputs plus balanced and unbalanced outputs are provided.

Noise-free operation plus astonishing detail, rich tonal color, and powerful dynamics are the benefits of this novelapproach. After one song, you will realize that you are listening to a new class of phono performance with the SQ-102.





Sibatone C-102 MK2 Preamplifier

The C-102 is already a unique statement in the "high end" audio world. Battery powered tube phono and line amp says a lot, but the parts quality, amazing finish and a sound some have described as the best ever*, has secured its place at the top. We haven't left well enough alone. The new C-102 retains all the obsessive attention to detail of the original, but upgrades the performance to a new standard.

The new phono stage now incorporates the Western Electric/Raytheon 404A/6688 pentode for more detail and lower noise. WE/Raytheon 402A/5755 triodes do buffering and RIAA make-up gain duties. This performance is achieved with only 3 milliamps current draw per channel. Silver litz wire and V caps are used through out. The 220 Volt battery power supply insures the lowest noise and supply impedance possible. The charger design monitors battery state for peak performance and long life. The entire module is built point to point on 5mm Teflon with gold plated solder points.

The line amp has been upgraded with changes to the biasing and the operating point to achieve better small signal resolution as well as transient response. The silver litz and silver coupling caps are used throughout. The construction is done on the same 5mm Teflon. No cost has been spared. It is difficult to improve things at the top, it is said, but that is what we have done. You can expect more air, space and a substantial quality to digital recordings, as well as a gracious compliment to the best analog.

Add to this the magnificently machined aluminum cabinetwork and you have a remarkable combination. Maximum flexibility is offered with many inputs and matching capabilities. Connector quality is first class. The battery supply and charger are in a separate stackable chassis. Electrical connections are made via umbilical. The new Silbatone C-102 MK2 Preamplifier raises the standard.





Silbatone Collection Spotlight: Western Electric 757A Monitor Speaker

The Western Electric 757A is one of the best compact loud speaker systems. It is a two-way 20W design including a WE 713C compression driver on a KS-12027 HF horn and the WE 728B 12" low-frequency driver. The WE 728B is the larger full-range brother of the famous WE 755A and it provides a memorable sound with great character, presence, and nuance. The heart of the WE 757A is the very impressive 702A crossover network with many paralleled Western Electric paper capacitors.

Introduced in 1948, the 757A is historically important as the first dedicated professional studio monitor speaker and it was a feature mounted on the walls of the most prominent broadcast and recording installations. Total production numbers for this unit were very low since these were from the final days of Western Electric sound system manufacture. Finding even one original unit is almost impossible, although there are many fakes in circulation. It is especially hard to locate a well-matched pair for stereo playback because 757s date to the mono age, when a single unit was sufficient.

When you listen to the Western Electric 757A, it will take you to a place where no modern speakers go. The sound is very clear and precise as expected from a monitor speaker yet the presentation has a delicious emotional quality with good source material. It is a speaker that helps you judge whether the music is good, not only whether the recording is good. There is a very smooth, open, and dynamic quality which is completely different from typical high-end loudspeaker models.

The original WE 757A pair we enjoy taking to shows and exhibitions is from the Silbatone Acoustics museum collection. Rare collectors items such as this are much more valuable to us when we can share their special pleasures with fellow audio students. It would be nice if there were more existing 757A loudspeaker systems to go around, but we are pleased to have the opportunity to play our treasured pair for visitors.

