Silbatone Acoustics mission is 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 but we recognize that progress can and must be achieved. Modern materials, manufacturing techniques, and generations of perspective on circuit design are resources which allow us to take this inspiration 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. Our power amps use our proprietary high bandwidth, low loss “semi silver” foil output transformers on high nickel 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. In recent years, our engineers have been working with hybrid circuitry and now digital to follow the path of technical and musical improvement and meet the needs of our listening public. No Silbatone products are copycat designs and we do not make any design compromises to meet arbitrary price points.

Since Silbatone’s target market is limited and our audience consists 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 2014 lineup represents the current state of our engineering achievement and we are pleased to share it with you today!
Western Electric 12A and 13A Vitaphone System

Each year Silbatone chooses a landmark Western Electric theater sound loudspeaker from our museum collection to share with our audio show visitors. This year we are excited to present something truly extraordinary, the very first theater system, the Adam and Eve of sound, the Western Electric 12A and 13A! Introduced for the Warner Brothers’ Vitaphone project in 1926, only a few months before Al Jolson’s voice in “The Jazz Singer” amazed moviegoers, this loudspeaker system represented a major breakthrough and a bold move in the then-cutting edge technology of talking pictures.

Even today, one look at the WE 12A/13A reminds you that you are looking at something special and unique. The 12A and 13A both use the early “mesh back” variation of the famed WE555 “Loud Speaking Telephone” drivers and both horns are connected in parallel without any crossovers. The combination of the down-firing 12A above and the up-firing 13A below creates a rich and vivid auditorium-filling sound field. Back in the day, these horns brought action to life with a few watts of triode power, as we presenting them today.

The tenure of the 12A/13A was very short as it was replaced one year later in an exploding market by the economy model WE 15A horn, familiar as Silbatone’s 2012 traveling exhibition item. Eighty-five years later, it is almost impossible to find a complete pair of 12A/13A for stereo listening anywhere in the world and it also very difficult to find a listening room to fit them into! Very few have heard this rare and important system but we are happy to increase that number by many thousands by experiencing it together with our show visitors.

The WE 12A/13A is one of our favorite loudspeakers in the Silbatone collection and an eternal source of musical enjoyment. We invite you to enjoy the sound of the mother of all high-fidelity sound systems and to evaluate what we have gained --and lost-- in the many years since Jolson’s voice first excited moviegoers eighty-seven years ago.
New products for 2014

Silbatone DAC105 Converter and L105 Line Amplifier

We at Silbatone are strong advocates of vacuum tube amplification and well known to take the technology to extremes. In recent years, laboratory tests and listening evaluations have pointed us in the direction of hybrid JFET/tube circuitry where vanishingly low noise and studio-grade accuracy are concerns. Our designers are artists when it comes to integrating tubes with modern devices and the circuitry of the DAC105 and L105 are quite unlike any previously-known designs.

Our first digital offering, the DAC105 Converter combines State of The Art digital design with highest-performance analog stages we could invent for the task. Native DSD (2.82MHz/64fs, 5.64MHz/256fs), 32bit/384kHz sampling rate with automatic switching, based on 2x ES9018 Reference DAC chips from ESS Technologies. Asynchronous USB eliminates jitter. Two S/PDIF outputs (ABS/EBU and coaxial) with super shielded digital transformers reduce jitter. Optical SS/PDIF is also furnished.

The analog section of the DAC105 had an AD797-based IV converter into a fully-balanced, ultra-wide bandwidth (10-500kHz) using a Telefunken 6211 and JFET buffer which does not require an output capacitor. All audio wiring is silver litz. We feel the DAC 105 is a technical tour de force and we invite musical comparison with any D/A converter at any price!

The matching L105 Line Amplifier is an innovative adaptation of the symmetrical, fully balanced circuits used in classic tube studio gear. A balanced FET input stage drives a differential 8416 triode stage which is buffered by balanced parallel JFETs. The output is servo-controlled to avoid the need for output capacitors. Remote control is provided for source selection and volume control, provided by a Tokyo-Kcuon broadcast grade attenuator. All audio cabling is silver litz. The 8416 triode is a super tube and it sets the character of the L105 in a region that is certain to please music lovers from both sides of the tube/transistor discourse.

Although less expensive than our reference series models, the DAC105 and L105 are built to the high standards of construction and performance that Silbatone is famous for maintaining. We fully understand how earlier hybrid gear earned its lesser reputation as a halfway measure, but the Silbatone DAC105 and L105 require no excuses. Silbatone marries vacuum tubes and JFETs and analog and digital without any hybrid identity crises. The sound is pure Silbatone!
SILBATONE RP-300 AMPLIFIER

While not the most fancy or exotic amplifiers Silbatone has produced, the JI-300 and R-300 series have always been among our favorites due to the unexcelled musical performance of a single Western Electric 300B in a well-optimized circuit. It is tremendous fun to explore the world of tubes, but it is always nice to come home to the 300B.

The RP-100 Amplifier takes our house recipe one step further, with results that surprised and delighted us. A new current feedback driver topology using a silver-wired interstage transformer, a select NOS 12AY7/6021, and a Bendix 6900 is directly-coupled all the way through to the 300B grid. Low distortion with big drive! There are no caps, only silver litz wire in the signal path. The output transformer is a monster version of our semi-silver foil output, built on an insanely large EI-114 75% nickel core. The power supply was also enhanced with an even bigger, low resistance transformer for maximum current delivery on demand.

When we first auditioned this recent chapter in Silbatone 300B amplifier development, we were shocked by the sense of massive power the 300B power stage developed! Bass is fast, detailed, and very deep. The amp presented all of the harmonic rightness and quality of timbre that we expect from a 300B, with even more dynamic control and resolution. From the first few notes, we knew that we had entered a revolutionary new phase of our long love affair with this classic Western Electric tube.

The Silbatone RP-300 Amplifier will be a revelation for newcomers to the 300B and old hands alike. If you want to experience the highest level of performance available anywhere in a medium-power single triode amp, you must audition the RP-300!
Silbatone Preamplifiers

Many audio products claim to be innovative but on close inspection they are not much more than recycled vintage consumer designs. We have taken on preamps as a special challenge, because we know we can do better by stepping beyond typical budget-driven design conventions. A preamplifier is the heart of any system but low level amplification has until now been a relatively underdeveloped art.

The C-100 Reference Preamplifier features a radical new transconductance amplifier circuit that provides 10,000X front end gain using our world-class silver litz wire and amorphous core step-up transformer and only one active stage. RIAA EQ is LCR type. Line section uses a silver wire input transformer volume control, a Bendix 5900 triode push-pull stage in Blumlein self-balancing configuration, and a silver-wired output transformer with 600 ohm balanced output. Only transformers and tubes exist in the signal path. Capacitors are used only for equalization. We feel that the C-100 is without competition as the finest preamp on the market today.

For people who require a separate line amplifier, the L-100 offers the output stage from the C-100 in an single chassis format with enhanced control panel. This is a modern implementation of classic studio technology built to the ultimate standard. Highly flexible and logical connections and controls are designed into the L-100 platform. Silver transformer/attenuators allow 24-step attenuation. Mute, Mono, Monitor, and Phase Invert controls are available via front panel buttons. Balanced XLR inputs and outputs are furnished in addition to multiple RCA inputs. The L-100 Line Amplifier is a superior control center for digital systems and a perfect interface for separate phono amplifiers.

Among the Silbatone line of uncompromising preamplifiers, our C-102 MKIII design stands out for rich, emotional, and enjoyable musical performance. This is a preamplifier that we can truly recommend for all music lovers. For maximum flexibility, dual silver litz step up transformers are provided to accommodate both low and medium impedance cartridges. Many phono enthusiasts use more than one turntable or multiple tonearms, with both SPU and modern MC cartridges, and the C-102 MKIII allows for input selection via a front panel control. One is no longer forced to choose between cartridge technologies because the C-102 MKIII selectable 1:10 and 1:20 MC transformers offer optimal configurations for all types!
The C-102 MKIII uses Western Electric small signal tubes in the phono section and a 12AY7/6900 line stage with a silver amorphous output transformer. Balanced inputs and outputs are provided, using a balanced configuration relay switched silver autoformers at the line input. Performance with line level sources is among the best we have heard.

We think of the C-102 MKIII as a control center for the discriminating audio generalist, featuring top-level music reproduction for multiple phono inputs and line sources. Why limit yourself to less?

For our L-103 line amplifier, we refined the classic approach taken by manufacturers of the best vintage professional studio gear. We use a powerful output tube driven by a push-pull input stage, all directly-coupled circuit without capacitors, featuring a silver-wired, amorphous core line output transformer. Our line amp configuration will drive any tube or transistor amplifier on the market, using any cable, and provide compelling depth, precision, and solidity in the musical presentation that will never happen with typical cathode follower line stages. The L-103 features a remote control switched attenuator and remote input switching for the best in modern convenience.

After one song, you will realize that you are listening to a new class of performance with Silbatone preamplifiers, the sound of progress in vacuum tube audio design!
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 so many current designs.

The L-101 is a marvel in circuit simplicity. 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 novel “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 select 8416 triodes 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!
Silbatone Phono Amplifiers

SQ-100 LCR Phono Equalizer

The Silbatone SQ-100 phono amplifier offers the highest level of performance for archival reproduction, critical music analysis, and ultimate listening enjoyment. Using a novel JFET/D3a folded cascadic hybrid stage in combination with a silver litz input transformer and careful attention to gain structure, the SQ-100 achieves ultra-low noise performance (0.1 nV/√Hz) rarely achieved by state of the art solid state devices. Phono equalization is implemented using pure silver LCR inductors on nickel cores. Relay switched playback EQ settings include RIAA and various obsolete formats for accurate playback of non-standard vintage recordings. Makeup gain is provided by a Western Electric 457A triode transformer coupled to a Bendix 6000 output stage. Controls phase invert and variable EQ are provided for optimization. The SQ-100 is a specialized tool designed to do one job, phono reproduction, at the highest available level of technical and musical performance.

SQ-101 LR Phono Equalizer

Silbatone is proud of our legacy of achievement in RIAA amplifier design, including several reference-grade models in which EQ is realized using a silver wired LCR network. This year, Silbatone introduces the global audio market’s first very first LR EQ phono preamplifier, The Silbatone SQ-101. Due to novel design and careful implementation, it is now possible to eliminate not only capacitors but also resistors from the signal path, while providing precise phono equalization. Each channel of the SQ-101’s simple yet sophisticated design consists of a custom-wound silver input transformer, a pair of triode-wired German Post D3a tubes, two EG inductors, and a 6416 employed as output buffer. The sound of the SQ-101 is the sound of silver litz wiring and great tubes with very little else in the way. The SQ-101 is deserving of a place on the same shelf as our Silbatone reference preamplifiers. The musical presentation is fresh, direct, and detailed, while retaining all of the coloratura and emotional impact that musical performance requires, an engrossing sound that is guaranteed to please all vinyl enthusiasts.

SQ-102 CR Phono Equalizer

Our SC-102 Phono Amplifier is based on the radical design of the phono section of our C-100 Reference Preamplifier, using a transconductance amplifier circuit with our world-class silver litz wire and amorphous core step-up transformer. The circuitry is all direct coupled, using capacitors only for equalization. Astonishing detail, rich tonal color, and powerful dynamics are the benefits of this novel approach.
Silbatone P-300 Mono Amplifiers

The world of audio has enjoyed a great revival of directly heated triode amplifiers, however the strengths of push-pull triode amps have been virtually neglected in the modern era. After all, the push-pull 300B Western Electric Model 86 was the premium theater amp of its day and the very famous single-ended WE 91 was an economy version!

The P-300 is our first entry into the push-pull 300B arena. This new direct-coupled, three-stage design conceived to bring the best of the 1930s into the third millennium. Although we are SE specialists, the power and dynamic accuracy of push-pull with the smooth and musical flavor of a great 300B amp provides a very exciting listening experience.

The P300 direct-coupled circuit uses a differential pair of WE310A pentodes, driving an RCA 8C8-G dual triode in a cross-coupled local feedback arrangement. The circuit is self-balancing for AC signals, providing long term stability and very high technical performance. The output stage has a separate power supply and no global feedback is used. Only silver wire and tubes are in the signal path from the input jack to the silver foil output transformer.

Our goal with the Silbatone P300 Mono Amplifiers is to do something special celebrate the glory of push-pull 300B’s, the premier audio power tube of all time. Build quality of the P-300 exceeds that of all other amplifiers manufactured to date. Production of this presentation-quality instrument will be strictly limited to five pairs maximum.
Silbatone RP-30 Power Amplifiers

At Silbatone we use many rare and unavailable NOS tubes in our designs because we understand that the best sound requires the best tubes and supporting parts. For the past years, we have been producing a series of limited-production amplifiers using exceedingly scarce tubes that even serious tube collectors seldom get to see, let alone hear.

With our WE262 mono amplifiers and DA100 integrated amplifiers, thousands of people at audio shows have enjoyed the performance of these rare and exotic tubes. In a market where sameness is all too familiar, these amps provide a fresh listening experience of the highest order.

For 2013, we are crafting a series of five sets of RP-30 Amplifiers, featuring the Osram DET25 triode, the military version of the industrial DA60. Production is strictly limited to the number of units we can support with existing tube stock from our collection, gathered over several decades of dedicated searching.

The RP-30 is a 30 watt class push-pull amp using German Post C3m pentodes, one of the best small signal tubes ever manufactured, in a fully direct-coupled circuit. A unique self-balancing circuit ensures perfect performance independent of tube differences or drift of characteristics due to aging. Output transformer for the RP-30 amplifier is a silver foil unit designed specifically for this amplifier and constructed in-house at Silbatone’s laboratory.

With the RP-30, we believe that we have developed a highly-optimized platform to experience, enjoy, and understand the DET25 triode. For the audiophile who has everything, we don’t think they have a DET25 amplifier yet! The RP-30 is a triode amplifier offering the highest echelon of musical performance with a special flavor that this rare antique British tube provides.
Silbatone Silver Integrated Amplifiers

For over a decade, Silbatone has led the way with the finest stereo integrated tube amplifiers ever produced. The latest generation of our famed Ji-300 series, the Mark III, maintains our tradition of quality, value, and performance, with significant upgrades over previous models. As with all Silbatone products, build quality is far beyond other commercially-produced amplifiers. Teilion boards and silver internal cabling are employed for ultimate musicality and detail and our exclusive semi-silver foil output transformer, built on exotic nickel material, pushes the limits of output transformer performance.

The Reference 300 silver signature, our flagship 300B single amplifier, now features all directly-coupled circuitry for maximum purity and quality of musical reproduction. The new driver stage features a current feedback architecture using premium 7062 and 5867 dual triodes for very low distortion, large signal performance at an impressive bandwidth – 180Vp-p, -3dB at 20kHz into 100k ohms – a level of performance rarely achieved in any tube or solid state designs. There is little in the signal path except triode tubes and silver wire and no error correction or feedback is used in the final stage, an elegant solution that imparts very little of its own character, allowing the flavor of the 300B output stage and silver foil secondary output transformer to be presented in all its simple beauty.

The new Reference 300 Silver Signature version features remote-controlled sixty position (1 dB/step) volume switching using a pure silver autoformer to provide the ultimate in sonic and ergonomic satisfaction.

The Ji-300 and Reference 300 series are easily the ultimate integrated amplifiers in existence today and we are quite confident that they are among the very finest music amplifiers on the market, even when compared to our own more expensive products. We achieve the highest musical potential of the classic WE300B triode with innovative designs engineered for today’s world-class systems.
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 Ed and DA100 power triodes 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 Siemens Ed is similar to a 2A3 but considered far superior by many listeners. The DA100 is roughly equivalent to the common 845 but it has a flavor all its own. Today these historical triodes are collectors’ items, the rarest of the rare, but they deserve to be heard and enjoyed.

When listening to the RI-25 amplifier, one is immediately impressed by the special musical character this instrument offers. It is a high powered single-ended implementation but it exhibits delicacy and detail on par with the most sophisticated low-power triode amps—a very colorful and emotional presentation, yet precise and well-controlled. We never heard anything else like the tasty sound of the RI-25 and we consider it to be a highly successful advanced experiment in the possibilities of tube amplification. Production of the RI-25 will be limited to 10 pieces.