Balanced Audio Technology



BAT VK-53SE PREAMP



TRANSFORMER-COUPLED OUTLETS FOR UTMOST MUSICAL PURITY

VK-53SE is BAT's finest single-chassis preamplifier. Transformer-coupled outputs catapult the performance to rarified peaks. You'll get greater dynamics, transparency, top-tobottom extension, and a more coherent portrayal of music.



EIGHT 6H30 SUPERTUBES UNDER THE HOOD

An octet of 6H30 SuperTubes affords extraordinarily high-current, low-impedance drive capability. A Unistage circuit provides the ultimate simplicity of amplifying the incoming signal only once, while using no global feedback to impact signal integrity.



USER-FRIENDLY INTERFACE AND CUSTOM OPTIONS

Boasting one of the most flexible user interfaces in the high end, the VK-53E features myriad customizable options. Plus, a proprietary electronic shunt volume attenuator offers 140 steps of 0.5dB resolution and ensures the volume is always right.

SPECIFICATIONS

Inputs	5x XLR	Output Impedance	200Ω
Outputs (Main)	2x XLR	Noise (Unweighted)	-100dB
Outputs (Tape)	1x XLR	Distortion at 2V Output	0.005%
Maximum Gain	18dB	Maximum Output Signal	50V
Global Feedback	None	Absolute Polarity	Switchable
Volume Control Resolution	0.5dB	Power Consumption	250VA
Volume Control Steps	140	Dimension	19" x 5.75" x 15.5"
Frequency Response	2Hz to 200kHz	Weight	45 lbs
Input Impedance (Minimum)	100kΩ	Tube Compliment	8x 6H30

BAT VK-53SE PREAMP

The VK-53SE preamplifier is the finest single chassis preamplifier ever offered by Balanced Audio Technology. It features a transformercoupled, high current, single gain-stage topology. The VK-53SE's transformer-coupled outputs catapult the performance of this fully balanced, zero-feedback design to a higher level, making this the biggest step up in performance since the introduction of the groundbreaking VK-50SE.

TRANSFORMER-COUPLED OUTPUTS

The VK-53SE preamplifier now features transformer-coupled outputs. These transformers replace BAT's venerable Six-Pak of output capacitors with custom-designed amorphous core output transformers. Each transformer is encapsulated within a mu-metal shield for the ultimate in signal purity and noise isolation.

This change to transformer-coupled outputs has a solid engineering foundation. All devices have inherent imperfections. Yet, while both capacitors and transformers can perform the same task of DC decoupling, in many cases the transformer can be designed closer to the model of an ideal device. This benefit, however, does not come easily.

First - the design of a linear, and close-toideal, transformer is not trivial. Second - some applications are more suitable for transformers than others. And third - the highest quality transformers are also quite high in cost. The combination of these three elements explains why good transformers are relatively uncommon in high-end audio.

In order to achieve this "transformational" goal, years were spent in prototyping and testing various output transformer designs. The result: BAT's new transformer-coupled output stage proved itself to be substantially superior to any capacitor in maintaining a purity of signal transmission. Electrically, these custom transformers significantly improve the VK-53SE preamplifier's ability to drive low impedance loads. Sonically, they offer greater dynamics, transparency, top-to-bottom extension, and a simultaneously more coherent and organic portrayal of music.

UNISTAGE™ DESIGN

Simplicity of design, especially in the direct signal path, has always been the hallmark of Balanced Audio Technology's purist approach to circuit topology. Some advocates of this purist approach like to talk about a "direct wire with gain" as being the ideal circuit. The VK-53SE preamplifier deftly meets this simple design criterion. Effectively, the signal in the VK-53SE preamplifier is transmitted through only one gain stage. It is a design that is free from the negative artifacts attributable to both extremes of modern preamplifier designs: passive preamplifiers at one end of the spectrum and multi-stage buffered active circuits at the other.

The benefit of the Unistage[™] circuit is that it provides the ultimate simplicity of amplifying the incoming signal only once, while using no global feedback to double back on the straight-through integrity of that signal. Imagine telling a joke to your friends and telling them to "pass it on".... Pass it on enough times and you won't recognize the joke. Pass the music through too many gain stages, and you'll no longer recognize the genius and beauty of your favorite recordings.

HIGH-CURRENT 6H30 SUPERTUBE CIRCUIT

Well over a decade ago, Balanced Audio Technology introduced the world to the 6H30 SuperTube with the introduction of the VK-50SE preamplifier. Today, most all of our major tube competitors have followed Balanced Audio Technology's lead by designing their own reference products based on this stellar vacuum tube. As the fourth generation of our renowned VK-5x series of preamplifiers, the VK-53SE preamplifier continues to proudly use eight of the 6H30 SuperTubes to form an extraordinarily high-current, low impedance drive capability. As we had written upon introduction, "comparing the 6H30 tube to a standard 6922 is like comparing a Formula 1 race car to a family sedan." Balanced Audio Technology is certainly proud of having the longest "track record" in using this stellar device.

FULLY BALANCED DESIGN

Of course the VK-53SE preamplifier is balanced. Balanced Audio Technology staked its reputation on this principal of circuit design from day one. Today, it isn't hard to find many followers in the industry. Why have we always believed that balanced is better? In our opinion balanced topology simply provides a complete signal representation. Something magical happens when you free yourself from the limitations of the single-ended structure with its half-signal processing. If a one-handed craftsman can be very good, imagine what he could do with two hands.

It is fairly common to associate the benefits of balanced design with improved signal integrity when dealing with long interconnects, for example. In fact, the true benefits of a balanced approach to circuit design go much further than signal transmission. These benefits include such fundamental aspects of design as the interaction between the power supply and its associated gain stage. It is now common wisdom that the power supply should be considered a part of the signal path. However, whereas the sonic contribution of the power supply can be overwhelming in a single-ended design, it is much less of a concern in a balanced circuit. As the circuit becomes more symmetrical, the residual effect of the power supply becomes less intrusive. In effect, the demand on the power supply is reduced, making it easier to design a balanced circuit that conforms more closely to the engineering ideal.

SHUNT VOLUME CONTROL

The VK-53SE preamplifier employs a proprietary electronic shunt volume attenuator that offers one hundred and forty steps of 0.5dB resolution. Only a single Vishay bulk foil resistor per phase – the most precise and thermally stable resistor available – is in the signal path. Discrete metal film resistors are used to bleed the unused signal to ground. With this circuit, only the highest quality Vishay resistor is in series with the signal. In addition, the one hundred and forty steps give precise repeatable volume settings that sound continuous to the human ear. With the VK-53SE preamplifier, you can always get the volume just right!

SUPERB USER INTERFACE

The VK-53SE preamplifier is easy to use right out of the box. It is also just as easy to customize! Its user interface has been widely acknowledged to be one of the best and perhaps the most flexible in the industry. You can dim the display (or turn it off entirely) from the comfort of your chair by using the BAT remote. Fade the music gently at the touch of one button. Name your sources: for example, name your home theater playback input THTR. Fix the volume for your THTR input to allow easy master control of your home theater system from your pre/pro remote. Switch phase from your chair to see if a recording was made in reverse absolute polarity. The list of features is extensive. If you only use one of the many delightful features of the VK-53SE preamplifier, you may find it a godsend in making your audio setup perfectly tailored to fit your needs.

CUSTOMER-ORIENTED UPGRADES

The VK-53SE can be fully upgraded to the Rex II preamplifier. This well thought out engineering allows the VK-53SE to become the REX II Control Module when it is mated to the REX II Power Module. With this upgrade, each module will contain the supply for one polarity: positive in the Control Module and negative in the Power Module.

Balanced Audio Technology is proud of its longterm focus on serving the customer with welcome upgrades - which began with the first upgrade from the VK-5 to VK-5i line-stage preamplifier in 1997. Thus, the VK-52SE preamplifier can be fully upgraded to the VK-53SE preamplifier as well.

SUMMARY

Given the pedigree established by the superb VK-50SE through VK-52SE series of BAT preamplifiers, the VK-53SE certainly had a tough act to follow. As anyone who has heard the evolution of these BAT preamplifiers over time knows, each new model has been a noticeable improvement over the product that it replaced. Yet, the VK-53SE, with its new transformer coupled output stage, offers the largest step up in performance in the history of this world-renowned series. Every aspect of performance is improved. From the deepest bass, to extraordinary dynamics, as well as a greater sense of layered transparency - the VK-53SE is rightfully proud to take its place at the top of this preeminent podium.