



the Stereo Times
The Complete Audiophile Magazine

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The Karan Acoustics KA-S 450 Amplifier

Welcome to the Big Time

December 2006



Associated Equipment:

Digital Front End

Nova Physics Memory Player

Amplification

Vitus Audio SM-101 mono amps and SL-100 pre. Tact 2.2x preamp/ room correction processor Gryphon Encore amplifier Boz 2200/216 digital Amplifier

Loudspeakers

Von Schweikert VR7 SE, Escalante Fremont

Cabling

Vitus Audio Andromeda Speaker wire interconnects and power chords., Purist Audio Anniversary Speaker wire, Virtual Dynamics Master and Revelation series power cords, interconnects, digital link and speaker wire Silversmith Palladium interconnects and digital link

Power

Conditioning

Audience Adept Response Power conditioner



For a few simple reasons, amplifiers have been my favorite link in the audio chain to review. My library of reviews will attest to that. I think it is the set it up, turn it on and "show me what you can do" simplicity of an amplifier that makes it so appealing. Even if you want to, there is not a ton you can do to tweak an amp. There are stands and power chords, that's about it. Sure you can throw a brick on top or paste a dot on the transformer but in my experience, those types of additions may take any given amp further down the road but in the end, the overall character of the amp typically remains in tact. At the time of this writing, Avatar Acoustics (the U.S. Distributor) offers an Acoustic Systems Resonator inside the amplifier as an additional cost option.

The subject of this review, the Karan KA-S 450 is the most expensive amp I have had in house. At \$21,000, it occupies a



place in a select group of amplifiers that wear the "cost no object" badge and thus, begs to be judged and scrutinized upon a much higher level of expectations.

What exactly are those expectations? For my tastes and system demands, I must have an amplifier that can deliver nearly unlimited power and driver control, all the while preserving the delicacy, color, detail and air on the recording. While nearly all amplifier manufacturers claim to meet these needs, we all know, and try to accept the fact that these objectives are met with varying degrees of success regardless of price.

Before we get to the sonics, a little about the specs. The KA-S 450 is a true dual mono, fully balanced design requiring two separate power cords. Keeping the signal path as short as possible, the KA-S 450 sports gold plated circuit boards and twenty fairly exotic ultra fast Sanken RET output devices per channel with



total current capability of 400 Amperes. The KA-S 450 uses four stages of voltage regulation and each channel uses a 1,500 VA low loss toroidal transformer with 188,000 mF of capacitance. What is pretty unique about the KA-S 450 is its unusually high damping factor- better than 10,000 into 8 Ohms, 20Hz-20kHz. This spec goes a long way in accounting for the KA-S 450's fantastic bass response and over all sense of composure. While the KA-S 450 does not double down its power rating as a big Krell may, its rated power output of 450/810/1,500W into 8/4/2 Ohms is pretty impressive and left no sense of strain on swelling or sudden shifts of high level dynamics. The KA-S 450 is an all Class A design employing no overall negative feed back.

Build quality is first rate, though the 450 lacks hand-handles making the 167 lb. amp a chore to move. Adding injury to inconvenience, the heat sinks on the KA-S 450 are covered in saw like teeth, adding a significant amount of surface area in which to dissipate heat. So if you have not figured it out were this is going, do not grab the KA-S 450 by the heat sinks when moving it. It hurts, a lot. As for aesthetics, I find the overall look pleasant if a bit dated. Picture a spruced up Levinson circa 1990. I may be a bit to critical on this issue but I have owned some really slick looking amps from the likes of Gryphon and Pass Labs. With this level of industrial engineering, I can attest to a level of pride in ownership that adds value to the high-end experience.

Daren Censullo of Avatar Acoustics started making noise about the KA-S 450 a few months before 2006 CES. I am quite familiar with much of the gear Censullo represents so I had to pay attention when he began to sing its praises. The amp arrived shortly after the CES and quickly took up a position between the newly arrived Von Schweikert VR7SE and was promptly pressed



into service. Censullo warned me that the amp required about 200 hours of burn-in and he was largely correct. Upon first listen, the amp was a bit too dark and a little slow sounding. There just wasn't the jump factor the KA-S 450 watts should provide. I settled in for the long haul and let the amp really cook before I would firm up my impressions.



Within the month the sound really opened up and the transient response was much cleaner, lending a fine sense of pace and impact. During this time it became quite clear that this was going to be one ear opening experience.

As far as analog amplifiers go, no other amp I have heard balances such an array of virtues leaving so little to criticize. First off, the KA-S 450 is the most organic/least electronic sounding solid-state amp I have heard to date. This organic quality comes to the KA-S 450 honestly. There is little softening, smearing or homogenization to the sound to "simulate" natural realism. It is by way of resolution and a deep sense of silence that this wonder full quality comes to light. Purity of instrumental tone, vocals and ambient space are all extremely well resolved. Tube lovers looking for a powerhouse amp should look no further. It is here that the KA-S 450 really distances itself from the competition but remember, for me to really fall for this amp, it must go further to prove it's metal.



You would think that a contemporary solid-state amplifier of its rating would have no difficulty whatsoever controlling a speaker. The KA-S 450 does not disappoint. With the KA-S 450's unusually high damping factor it would lead one to expect iron-fisted control over the entire frequency range. The KA-S 450 does in fact inspire great confidence, as the music that comes out of the amplifier gives very little clue that it has taxed the amp. Having said that, the bass of the Karan is a bit different than that of another amp I have on hand for review, the new Pass X-350.5. Both amps go very low with ease, but differ in a couple of ways. The KA-S 450's bass is warm and full bodied while the Pass is more linear and sounds perhaps a bit faster. Whether the Pass is restricting some harmonics or the KAS 450 is heavier handed, I do not yet want to draw specific conclusions as to which is correct as both presentations integrate and make sense within the context of its own sonic palette.



As for the rest of the spectrum, music had at once, a wonderful architecture by way of confident imaging and sound staging while somehow sounding completely relaxed and liquid. The ability to render a solid three-dimensional image without resorting to thickening of textures or blunting harmonics was extremely convincing. Listening to Stanley Clark's self titled *East River Drive* as I have a million times, the flute that takes over the lead mid way through the song sounded very convincing. For once there is the harmonic, resonant signature with all the texture that had gone MIA within the congested innards of other amps. The low bass instrument



had trigger finger quickness despite its staggering extension and power. The synthesizer, despite being awash in reverb, sounded sweet and very open. These traits would prove to be great gifts on all but the worst of recordings that simply have nothing to offer.

Dynamics proved to be very special. Strapped to the Von Schweikert Audio VR7 SE by way of Virtual Dynamics Revelation Signature cables followed by the Audioquest Everest and the latest offering from Vitus audio allowed for varied examples of this amplifiers dynamic prowess. If you don't have Deep Purple's *Machine Head*, get it. Even if you are not a huge fan, this is a great album with a really cool studio feel. Instruments are represented in life size with great dynamics and nearly no edge to be found save the organ that floods the opening of what I think is the best track on the album, *Lazy*. This bar room brawl of a performance fly's free of the speakers and



really does give, if even for a few moments, the experience of having Deep Purple in the house. Leading edge transients are so clean, so fast; the music has great traction and really swings. True, most competent components can create the image on the stage, and give a nice clean account of the music, but add the power, texture and control provided by the Karan and the experience fundamentally changes.

Is there a fatal flaw to be found that tarnishes the other wise superlative KA-S 450? No. Is the KA-S 450 without any flaw at all? Almost. After having spent much time with the Boz digital amplifier, there is immediacy and light in the upper registers that the best digital amplifiers reproduce that can make even the best analog amps sound comparatively a shade darker with less sparkle in the treble. I don't feel short changed by this characteristic, but I cannot deny that it is there, if even to a very small degree. On its own merits, the KA-S 450 strikes a fantastic balance and just may have rung out nearly all there is to be had from analog technology. Short of the \$60K Behold amplifier, I have not heard an analog or digital amp that comes even close to striking such an artful balance of strengths. In particular, the KA-S 450 has the ability to put real flesh on the bones of an instrument or vocal. Nor do the digital amps I have heard have near the bass control, dynamics or bottom end extension. Perhaps the Karan monos take the treble further into the light than the KA-S 450, but that cannot be confirmed at this time.

But be warned, all these wonderful traits can vanish like President Bush during a crisis if the up stream gear is at all under performing. It was the inclusion of the Nova Acoustics Memory Player digital play back system that showed just how far the performance capabilities of the KA-S 450 could be stretched. Without getting too far into it, I simply did not think sound like this was available in my system. With the KA-S 450 in the chain, I was treated to a glimpse into the future, via the present. The stunning neutrality provided by the Nova Physics Memory Player reveals the individual sonic shapes/signature from recording to recording as well as differences between the engineering



techniques from track to track. Change the disc, everything changes right along with it. This adds much to the drama and intimate individual relationship we all have with our favorite music and recordings. Unlike some other high-resolution analog amps that have become popular as of late, there is no cool or dry signature to the KA-S 450. It can go from sumptuous to skeletal just by advancing the track.

It would be great to throw the Karan over my shoulder and take it on a shoot out tour around the east coast to really broaden my depth of understanding of the KA-S 450. Having both the Focus Audio Master II along with the Von Schweikert VR7SE have allowed me to get enough of a perspective to draw the above conclusions, but when I come across a special product like this, I want to take it to the streets.

Conclusion

The KA-S 450 is the kind of amplifier many will be very happy to live with deep into the future. Such power and finesse, it's like finding peanut butter in your chocolate - a very tasty surprise. No bones about it, the Karan KA-S 450 is a truly special amplifier that should send shudders up and down the spines of manufacturers that may have become a little too comfortable with their successes of the past. But what about the inevitable new kid on the block that shows up with a Duracell on it's shoulder with a ton of attitude itching for a fight? At the KA-S 450 price point, there are no amplifiers in the queue for review at the moment. The likes of the \$60k Behold amplifier system and the soon to arrive \$50k Vitas mono blocks, however, are slated for a listen. While the similarly priced Karan Monoblocks would be the natural competition for the soon to arrive challengers, this opportunity for comparison will go a long way in determining where the KA-S 450 falls on an absolute scale. Yes, you can spend a whole lot more on an amp. Whether that money would be well spent is a story that must wait for another day.



Digital Front End

Reimyo CDP-777

Amplification

Tact Audio Boz 216 x 2

Acoustic Reality

eAR1001

Karan Acoustics KAS-450

Karan Acoustics KAL

Reference dual mono preamplifier

Loudspeakers

Consensus Audio

Conspiracy, Ascendo

System Z

Talon Thunderbird Sub

Cabling

Virtual Dynamics

Revelation Speaker

Cable; Virtual Dynamics

Revelation Digital Cable

Virtual Dynamics Master

Digital Cable

Virtual Dynamics Master

Power Cord

Virtual Dynamics

Revelation Power Cable

Virtual Dynamics

Revelation Signature

Digital Cable

Greg Petan

Second Opinion from Key Kim

In almost every way from just about every perspective I have to concur with Greg Petan's full review of the Karan Acoustics KAS 450 power amplifier. Milan Karan, a newcomer from Yugoslavia - and to the U.S audio scene - has taken the super-high-fidelity game to a new level with this stereo amplifier.

My curiosity about the KA-S 450 led it to be my new reference amplifier. This all began when I auditioned it for a weekend from Greg Petan while I was in the middle of reviewing the Conspiracy L loudspeaker. To cut to the chase, I went out and bought the KS A 450 after this very short audition. Why? What struck me right away, and set the mighty Karan amp apart from everything previous in my experiences, was its organic quality. It is easily the

Power Conditioning

Audience Adept
Response Power
conditioner Shunyata
Hydra AC conditioner

Accessories

Acoustic System
International
(Resonators)
Acoustic System
International (Top Line
feet)
Acoustic System
International
(Component platform)
Acoustic System
International
(Diffuser/Interface)

least electronic sounding amp I have heard to date and this magic persisted throughout its range, from top to bottom through my countless hours of listening.

With the KA-S 450 in my system, all types of music sounded incredibly life-like. As good as my reference Tact Audio Boz 216 digital amp is, the KA-S 450 took me to an entirely different level of musical enjoyment. There is purity without ruthlessness, smoothness without obscuring softness. The music flowed in such a silky and velvety way, with notes so richly expressed that compared to an already great design in the Boz amplifier the KA-S 450 proved revelatory. The KA-S 450's ability to physically control the many Conspiracy Audio drivers proved remarkable as well. With its pure 450 watts of Class-A power supported by an oversized power supply, one would assume that the KA-S 450 would be nothing short of explosive or thunderous. However, the Karan didn't sound big and powerful or polite - it simply did what the music asked, no more, no less.



The Karan's performance moved even further into the stratosphere, when mated with its Karan KAL Reference Dual Mono Preamplifier. Teamed, I got to hear what the Karan Acoustics' sound really wanted to say. Everything sounded more natural and less emphasized thanks to its effortless power and control. This is part of what makes it sound more tonally correct, more natural and organic. Amazingly, it had the ability to reproduce sound with utmost transparency and detail rivaling perhaps the best in that department in the Boz amplifiers.

The KA-S 450 extracted more music from a recording while, simultaneously, drawing this listener in. This deft feat is rare in my opinion and it allows this listener to be emotionally involved in ways unlike before. Whether it was Beethoven's symphony or Jacintha accompanied by a quartet, new shades and nuances were revealed in each recording. While the soundstage remained superbly reproduced, it now extended beyond the speakers outer edges and far beyond my listening room's wall, making the speakers vanish. The KA-S 450's magic persisted throughout its range, from the softest notes to crashing crescendos. One good example would be when listening to solo legend of our time, such as Mstislav Rostropovich playing Johann Sebastian Bach's Cello suites (EMI 7243 5 55365 2). The result was simply breathtaking.

The added dimensionality was also quite obvious as was solidity, focus and immediacy. The nuances of subtle details, of bowing texture and pitch variation, were vividly presented.

The Karan Acoustics KA-S 450 represents the pinnacle of design in amplifiers. The KA-S 450s magic is addictive; look what happened to me, I bought it. Feed the KA-S 450 with the best and it might give you what you never thought was possible.

Specifications: - Fully balanced topology; extremely short signal path, 24k gold plated circuit boards.

- 20 ultra fast Sanken RET output devices per channel, with a total current capability of 400 amps.

- Channel separated power supplies from two 1500 VA toroidal power transformers, 188,000mikroF filter bank and four stages of stabilization.

- Frequency response DC-300kHz +0,-3dB.

- S/N ratio better than -112dB.

- Damping Factor better than 10,000:1 into 8 ohms, 20hz to 20khz.

- Current feedback topology, with no overall feedback and with less than 0.03%. - Intermodulation distortion at rated power into 8 Ohms.

- Pink noise min RMS Power 450/810/1500 W into 8/4/2 Ohms.

- Dimensions 500x235x590 mm (19.7"x9.25"x23.2" inch) WxHxD.

- Net weight 76kg (167lbs).

Price: \$21,000.00 USD

U.S. Distributor

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