



## Review: Stax SR-L300 Electrostatic Headphones



By Sonis | February 21 2020



When most Audiophiles see or hear the word “Stax” they conjure up in their minds lots and lots of dollar, euro, or pound sterling signs floating before their eyes. And not without good reason. A pair of the Stax “flagship” model headphones, the SR-900S is \$4,500 (all prices given are US dollars) and the SRT-700T (for tube) or SRT-700S (for solid state) energizer/amp is \$3,500. That makes electrostatic headphone listening a pretty expensive proposition to most of us working stiffs. At one time (and not so long ago at that) \$8,000 was a lot of money to spend to listen to headphones. Today, the landscape has changed somewhat in that one can spend upward of \$11,000 for a pair of Abyss AB-1266 Phi TC Reference ‘phones which comes with a fancy cable that doubles the base price of 1266 alone!

Well, while it appears possible to spend the price of a small car (in some countries) on a pair of headphones, it is possible to get a fantastic sounding pair of Stax “Earspeakers” (that’s what Stax prefers to call its headphones) at a more than reasonable price and that is the subject of this review.

### Stax, The Company

The Stax company was founded in 1938, but the first “Earspeakers” didn’t arrive on the scene until 1959. What they made before 1959, is kind of hazy, but in the last 50 years or so, through a myriad of foreign distributors and an ever changing dealer network, Stax has sold, at one time or another, a range of electrostatic speakers of all sizes, power amplifiers, DACs, and even a CD player or two. But they are mostly known for their headphones and right now, their catalog of products available in the USA is relatively small, compared to what they are actually making.

## The SR-L300 and the Energizer/Amplifier

The SR-L300 phones list for \$430.00. I'll let that sink-in. Four hundred and thirty dollars. In today's headphone market, that's not just inexpensive, it's downright CHEAP! Of course, that's not the only cost one will incur, electrostatic headphones require an amp/power supply. Right now, the cheapest one that Stax offers is the \$899 SRM-D10, which is a portable, battery-powered DAC/energizer/amplifier for one pair of Stax "Pro Bias" phones (all current Stax phones are Pro Bias meaning that they require a polarizing voltage of 580 volts DC). The combination of the two will push the cost of electrostatic headphone listening to just over \$1300.

Now, one way to look at it is that a pair of HiFiMan Jade 2 electrostatic/phones/amp are \$2500. So the SR-L300/SRM-D10 is \$1100 cheaper. More versatile Stax units (sporting XLRs for instance) are over three grand and it seems somewhat incongruous to spend \$3500 for a headphone amp to drive a four hundred dollar pair of headphones. Luckily, today, there are quite a few other solutions for an energizer for Stax pro-bias 'phones, such as the Jade2 amp from HiFiMan at \$1300, or the iFi Pro iESL for \$1,500. Right now, the cheapest solution for the SR-L300s is the Woo WEE electrostatic headphone energizer. This unit retails for \$599 and must be placed in-line with a power amplifier and a pair of speakers. When you switch the WEE on, it cuts the speakers out. Although this energizer was designed with the SR-L (the L stands for "Lambda" Series of Stax phones) in mind, it is not recommended for the SR-700 or SR-900 series of Stax phones.

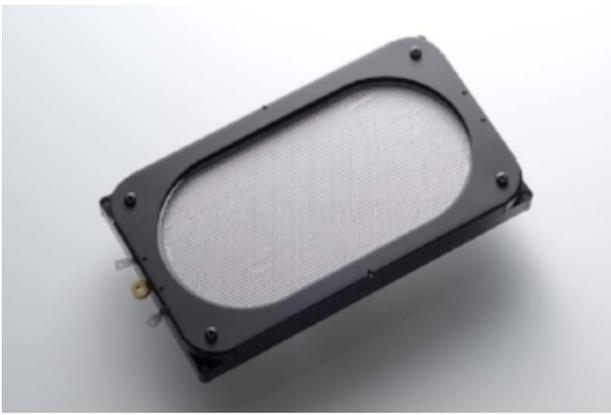
My advice is to look on Amazon (if you don't already own a suitable energizer/amp) for the Stax SRS-3100 system. This combination of the SR-L300 'phones and the SRM-252S energizer/amp is around \$800. It will have to come from Japan because Stax USA doesn't import it, but The Amazon partner company "AmazingJapan" has been doing this forever, and they offer free delivery. Be advised that it will take between 2-weeks to a month to get them, but anyone who has bought something from China will be used to that. Still, it's the best and cheapest way to get into a budget, quality pair of Stax Earspeakers.

### SR-L300 Components and Build Quality



OK, a pair of electrostatic 'phones selling for under \$500 must have some compromises, right? Well, of course, and the SR-L300 is no exception. The frame, the ear-cup yoke, and the headband are all made of plastic in this model. But it's not cheap plastic, and if handled with reasonable care, there's no reason why these phones shouldn't last as long as any other headphone set. The other concession to price is the ear-pads. I don't know what the pads are made of, they look like leather, but are probably a man-made material and they are thin. For me this is

not a problem. My ears lay pretty close to my head, but if yours are more like Clark Gable's ears, the pads might not be adequate to keep your ear pinnate from touching the inside surface of the 'phone. Fear not, though. Contrary to what some other reviewers have said about electrostatic headphones in general, there is no way for the 580 volt bias voltage to shock you. The parts of the transducer (the stators) that are open to the elements and could possibly be touched by the wearer carry only the low voltage audio signal. The high-voltage, low-current bias voltage is applied only to the diaphragm and is encased between the stators. Even if the diaphragm were to touch one of the stators, the charge would be carried away by that stator causing no more than a large "snap" to be heard.



Now, Stax's next most expensive 'phone is the SR-L500 Mk2. According to other sources, the only difference between the \$792 SR-L500 and the \$430 SR-L300 is that the 500 has a metal yoke and headband and the ear pads are somewhat thicker. The actual ES unit itself is identical between the two. The SR-L300 has a fixed cord which cannot be removed while the SR-L500 Mk2 has a detachable cord. Both have the "blue" striped cable indicating the same 2.5 meter low-capacitance Oxygen-Free Copper (OFC) conductors. By all accounts, the two

sound identical. If the "cost conscious" build quality of the SR-L300s bothers you, by all means spend the extra \$362 for the 500s.



### **...And What About That Sound?**

These headphones are incredible. In fact they are jaw-dropping good! The frequency response goes from 7 Hz on the low end to a high of 41kHz on the top. What I find interesting about headphones is how different makes and models differ in the perspective they give. For instance, the HiFiMan Jade 2 electrostatic 'phones give a somewhat distant perspective, say 5<sup>th</sup> row center of the concert hall, while the Stax SR-900s put the listener first row, center and the SR-L300 put the listener up on stage with the performers.

Now all of my listening with these phones was done with either the new Stax SRM-700T (for Tube) or the HiFiMan Jade 2 energizer/amplifier (solid-state). I'm very fond of my Jade2 system. It is clean, articulate and the phones are super comfortable. But in spite of the Stax being over a thousand dollars (List price) cheaper than the Jade2s (by themselves – no energizer/amp) they blow the HiFiMan cans out of the water. The amount of detail retrieval is an order of magnitude better, and the in-your-face perspective of the Stax still manage to give a soundstage that is at once wider and deeper. While this difference is much more pronounced with the Stax amp, both amps allow two sets of phones to be auditioned at once. This makes comparisons between different sets of phones much easier because one can switch very quickly and one can tell which amp does what to which phone (confused yet?). For instance, Between the SR-900S (\$4500) and the SR-L300 (\$430) on the Stax amp, one can easily hear that while the former are about 10X the latter, the sound of the two (except the difference in perspective, of course) are actually fairly close. There is certainly not 10X

the difference in performance, and given the lightness of the SR-L300s, they certainly are more comfortable than the flagship model over long-term listening.

If I were to put numbers to the difference between these two Earspeakers, I'd say that the SR-900S is twice as good as the cheaper phones. Mainly the difference is in smoothness of the frequency response. The SR-L300s have a broad peak in the presence region. Not enough, mind you to make the 'phones sound like something's amiss, but enough to give what I think is responsible for the "in-your-face" perspective. Far from detracting from the SR-L300's performance, this up close and personal aspect to the 'phones makes music more exciting to listen to. Vocals are more intimate, and I mean both female and male vocals. On the Sinatra compilation album "Greatest Love Songs" from the Capitol years (WEA), Frank's voice and breath control is very apparent on his rendition of Cole Porter's 'In the Still of the night'. The intimacy that these phones instill into the performance is breathtaking. Likewise on Billie Holiday's rendition of 'A Fine Romance' on the Waxtime label's (PolyGram) "Music for Torching" the extra soupcon of intimacy is very welcome.

Frequency response wise, in the opening bar (Sunrise or Introduction) of Richard Strauss' 'Also Sprach Zarathustra' on Telarc from the Vienna Philharmonic with Andre Previn Conducting, The piece starts, as most everybody knows, with a sustained double low C on the double basses, contrabassoon and organ. With many headphones, this comes across sounding more like a piece of canvas fluffing in the breeze than the sustained low note that it's meant to be. With the SR-L300s, it sounds like exactly what it's meant to be. A sustained low note. While no headphone can produce low organ notes with wavelengths of 16 to 64 feet accurately, at least these Stax don't double like many headphones do. They produce clean low frequency notes that at least sounds like music.

On the top end, I use one of my favorite recordings; the superb Rozsa Violin Concerto performed by Jascha Heifetz, the violinist for whom the piece was composed. Heifetz is playing His famed 1714 Stradivarius named the "Dolphin" in this piece with the Dallas Symphony for RCA Victor. Heifetz preferred unvarnished gut strings for his Strad, with a silver wound gut G string. These produce a particularly sweet top end on the instrument and I find the recording (although more than 60 year old) to show of the treble response of any transducer whether headphones or speakers. Here the SR-L300s shine. There is a shimmer to the high notes that I find missing in almost all dynamic phones and in many electrostatics. It's here in spades in all the Stax phones I've ever played it on. This not only shows the high frequency extension of the phones to best advantage, but is demonstrates the lack of even-order harmonic distortion in general that is a characteristic of the push-pull nature of electrostatics, but especially of the long tradition of building this kind of transducer in general enjoyed by Stax.

## Conclusion

I was interested in these phones as a second pair that I could hand to visitors so that we could listen together; me on my Jade2s, and my guests on the "inexpensive" Stax. After listening to them for more than a month, I've changed my mind. When you come to my house for an audiophile visit, I'll hand you the HiFiMan Jade2 headphones and I'll keep the Stax SR-L300s for myself. They are now my go-to pair of electrostatic headphones. They're that good!

## Product Info:

Product: SR-L300 Earspeakers

Price: \$430

Product Page - [LINK](https://staxheadphones.com/collections/earspeakers/products/earspeaker-of-advanced-lambda-series-2) <https://staxheadphones.com/collections/earspeakers/products/earspeaker-of-advanced-lambda-series-2>

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