Audes ST-900DC power conditioner

Jason Kennedy

t's not often that you look up the history of a lessthan-famous brand and find that it has been in
existence since the 1930s, in fact there are very few
hi-fi brands still in existence today that can make
such a claim. One reason why Audes is not better
known is that for much of that time its market was
limited to the Soviet Union, not all that limiting in itself
but not so good for international export. Based in Estonia,
Audes is a conjugation of Audio Estonia, the company
was a substantial concern in its heyday making all manner
of audio electronics including radiogrammes, turntables,
CD players you name it under the Estonia brand. Today
Audes makes drive units and complete loudspeakers, valve
amplifiers and power conditioners.

The ST-900DC is the smallest conditioner in the Audes range but it's a proper unit nonetheless. Weighing in at 18 kilos it has five outlets and contains a balanced toroidal transformer that is good for up to 900 Watts. The largest Audes conditioner is the ST-3000 with eight outlets that weighs nearly twice as much as the 900, I'm glad I didn't have to unpack that one. The company's long history

means that they are well acquainted with transformer design and make a wide range of the devices that includes single and triple phase types alongside transformers with different core technologies that are supplied on an OEM basis. It's not hard to see why they make valve amplifiers as such things require at least three transformers per stereo chassis.

Transformer reliance

The Audes power conditioners rely on a transformer to isolate the outlets from noise on the mains, rather than re-generating the required voltage or using techniques to clean the mains, a transformer is a tried and trusted way of keeping the high frequency noise that besets the grid at bay. The transformer in this case acts as a low pass filter, blocking frequencies above 800Hz where this noise typically resides. We're not talking about noise that you hear directly through the loudspeakers but very high frequency electrical pollution whose effect is tangible in a background hash that raises the noise floor on the signal that comes out of the speakers.



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EQUIPMENT REVIEW Audes ST-900DC



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The Audes filtering effect is achieved by self-inductance in the "very large core" of the transformer. Another benefit to this DC version of the ST-900 is that any DC offset present on the mains supply is also blocked. DC offset is hard to stop without compromising current flow and can be heard as transformer buzz in audio components, it not only produces a noise in itself but undermines the performance of affected devices. The ST-900DC also addresses the current flow issue that can affect conditioners and DC blockers by virtue of having a low DC output impedance. This is achieved with the aforementioned large core and a large amount of turns in the primary winding. Conditioners of this kind rely almost exclusively on the quality of transformer inside the chassis and Audes scores well here.

SMPS, no thanks

The ST-900DC has five power outlets with, in this case, 13A sockets with a 16A rating which should therefore be capable of supplying pretty well any component you can think of. The only component type that Audes does not recommend connecting are those with switched mode power supplies, which given the popularity of such things seems a bit strange. It's not that the conditioner won't work with them but that the noise that such supplies inject back into the unit pollutes all of the outlets. Audes suggests either connecting such devices directly to the mains or using a second conditioner.

The case on the ST-900DC is built around a steel chassis with an MDF cover, the latter is very nicely machined and finished and could pass for aluminium if it were a bit colder to the touch. On the back are five 13A sockets in a traditional orientation, I tried conventional 13A plugs and Furutech types where the cable exits

backwards, the latter had a tendency to pull out slightly under the weight of the cable, suggesting that the sockets could do with more grip. The meters on the front show incoming voltage and outgoing amperage. In my system the amperage didn't get to one amp, even with a substantial power amplifier in use. The power inlet has an illuminated switch, the only light on the device, and this provides an easy way to switch off everything at once.

Go down easy

Listening commenced by comparing the system plugged directly into the wall with the ST-900DC using a set of fairly ancient Russ Andrews Powermax cables on a system consisting of a music server, streamer, DAC, preamplifier and 150W power amp. The change brought about by introducing this conditioner was not small, in fact it was quite a transformation with the most obvious improvement being in ease and openness, the soundstage expanded in depth and scale, the 'air' in the recording being reproduced in such impressive fashion that the sense of presence was doubled. There was more timbre and depth to each voice on Crosby, Stills and Nash's 'Helplessly Hoping' and the singers seemed a lot more real as a result. With a classical piece, Mendelsohn Octets, the melodic flow was much stronger and the tonal colour of the instruments much less grey, essentially more rich and vibrant, they sounded like gut and wood rather than a facsimile thereof. All of which made the music significantly more involving, a characteristic that was apparent on Felix Laband's 'Red Handed' where there was more depth in the voice and in pretty well every note for that matter. Here the speed and dynamics of the bass line improved thanks to greater precision, this also enhanced timing

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>> because the leading edges were cleaner and clearer. The Audes brought about an all round upgrade that would be hard to match for the price in what was quite a pricey system (c£50k).

I do have problems with DC offset on my mains supply so it's likely that the DC blocking capabilities of the ST-900DC were helping, the Longdog Audio power supply on my Lumin streamer is inclined to buzz under normal circumstances, so it was likely enjoying its removal. Moving over to a vinyl source of Rega P10 turntable and Tom Evans Groove+ SRX phono stage and contrasting that between wall and Audes also proved to be highly worthwhile. Here the benefit came in the form of greater three dimensionality of imaging with sounds being much more solid in the air, there was also a greater sense of the space or reverb in the recording. Timing was likewise enhanced, with the playing of Michael Franks' super slick band (*The Art of Tea*) gaining clarity and separation.

With a rather more up to date pressing in the form of Tord Gustavsen Trio's *The Other Side* the transformation was even more pronounced when the ST-900DC was put in the power chain. Here the timing jumped several notches in quality, making the raw power version sound incoherent and clunky by comparison. If I didn't already have some form of power conditioning I would have made Audes an offer there and then. The fact that I was using DALI's very

revealing Epikore 11 speakers and Bricasti amplification undoubtedly makes such changes more obvious but I suspect that they would be clear on most decent systems.

Tiglon factor

I tried similar comparisons using some much fancier TPL-2000A power cables from Japanese brand Tiglon, these made the system sound much better overall when connected to the wall but the benefits of adding the Audes conditioner were still very clear. The changes wrought with the streaming system were very similar to those achieved with the Russ Andrews cables, the definition of leading edges being perhaps the most obvious. Now the highs were clearer and cleaner and this opened up the soundstage, brought out low level detail and balanced the dynamic characters of the various instruments within a mix. Once again the Tord Gustavsen Trio piece gained a big timing uplift, the way that the three musicians work their magic together becoming more cohesive and engaging.

Finally I tried the Audes with Hegel's big H600 streaming amplifier, a 300W beast that does everything in one box. Here the result was very much in the conditioner's favour, the sound opening up and relaxing in equal measure whilst retaining the snap of the percussion on Joni Mitchell's 'The Drycleaner from Des Moines' (*Mingus*). This fabulous tune became more immediate and exciting with the horn blasts really jumping from the system and the extra resolution brought to the bass playing making it clear that Jaco Pastorius really was that good, especially when he played with Joni.

I think it's safe to say that if your system is plugged into the wall the Audes ST-900DC will lift its performance in no small measure. There are plenty of alternatives on the market of course but this one does a very good job for the money and appears well built and finished. +

Technical specifications

Type AC mains power conditioner.

Outlets Five outlet 13A UK or EU. No US version available at this time.

Dimensions (H×W×D) $130 \times 477 \times 347$ mm

Weight 18kg

Price €2.850

Manufacturer Audes LLC OÜ

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