

Stax SR-009S

REFERENCE ELECTROSTATIC EARSPEAKER



About Stax

Stax was formed in 1938 in Japan and in 1960 they released their first electrostatic Headphone or 'Earspeaker' as they are better known. Being an electrostatic design, a Stax Earspeaker requires an energiser unit to drive them making it a complete package. Over the last 50+ years Stax have refined their designs making them the leaders in electrostatic headphones and arguably the leaders in high performance headphones today.



In 2018 Stax celebrate 80 years as the pre-eminent manufacturer of Electrostatic audio products. Stax has established themselves as makers of the worlds finest Earspeakers (Headphones).



Eighty years of innovation and class-leading design has resulted in many awarding winning products. Products that have stood the test of time.

Stax Earspeakers are used by tens of thousands of music lovers around the world. Mastering engineers rely on Stax to make critical decisions on the balance of sound on their recordings. Stax have an enviable reputation. To celebrate 80 years of Electrostatic design Stax are pleased to announce the availability of the new SR-009S.

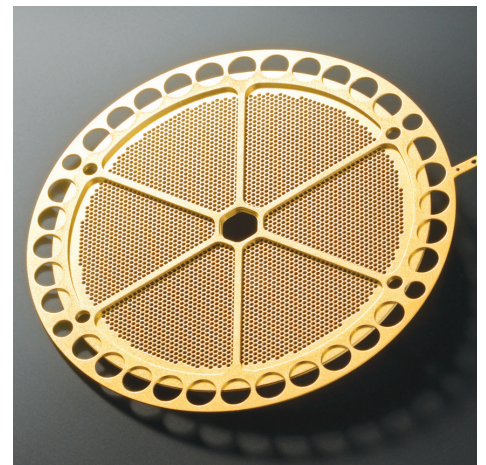
The Stax SR-009 has established itself worldwide as the finest electrostatic headphone currently available today. It has gone on to be one of the best selling models Stax has ever designed. Reviewers and critics alike have agreed there is no better headphone. Two years ago Stax embarked on a project to see what improvements could be made to the SR-009, to see if there was a way to make this already incredible Earspeaker even more transparent and natural. Their efforts have been rewarded.

Symmetry is pleased to announce the launch of the new Stax SR-009S. The SR-009S is a refinement of the original SR-009 Earspeaker. Stax engineers examined every element of the original model and where possible made changes in construction, materials and implementation. The result is a new Earspeaker that offers higher levels of resolution and transparency.

The electrostatic diaphragm assembly of the SR-009S is where most of the design changes have been made. The diaphragm is the heart of the Earspeaker. Improvements made here yield the biggest sonic gains. Attention to detail is paramount.

1

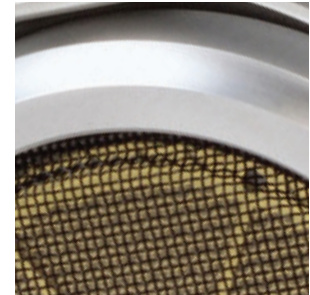
The SR-009S has a revised electrostatic diaphragm, with improved electrodes. If the fixed electrodes become thinner, the air resistance will be decreased and the permeability of the sound waves will be improved. However thinner electrodes are poor in rigidity and suffer with vibrations and resonances, in-turn colouring the sound. Multi-layer fixed electrode MLER (Multi-Layer-Elect-Rodes) established in the SR-009 have evolved into MLER 2. The edges of the electrode holes have been smoothed through finish-etching processing. This reduces the air resistance and noticeably improves the permeability of the sound. Moreover, the resonance of the ultra-thin electrodes has been minimised by the high-density gold plating of the electrode itself. Reducing vibrations and ringing to a minimum. The sound quality has been further improved by lowering the resistance of the electrode as well. In addition, the holes on the electrode are precisely placed, ensuring smooth sound permeation.



The ultra-thin diaphragm is made of super engineering plastic. The mass of the diaphragm itself is close to zero, ensuring excellent transient response. The ultra thinness of the diaphragm ensures colourations are kept to an absolute minimum. The push-pull electrostatic open-air diaphragm in the SR-009S has a frequency response from 5Hz to 42,00KHz. Unmatched by any moving coil diaphragm.

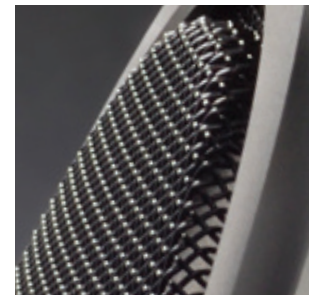
2

The SR-009S features an advanced cup design. The best cup is 'no cup' and lessons learned with the Stax SR-L700 Earspeaker, which featured a reduced number of bars on the rear of the cup, proved that the reduction of cup size and mass has noticeable benefits to the sound. The cup on the SR-009S is made of solid aluminium. The cup features thicker mounting points to secure the SR-009S diaphragm. Sound from the diaphragm is improved due to the solid mounting of the whole assembly. The thickness of the cup has been reduced to the bare minimum. In-turn reducing resonances and making the flow of acoustic sound waves smoother.



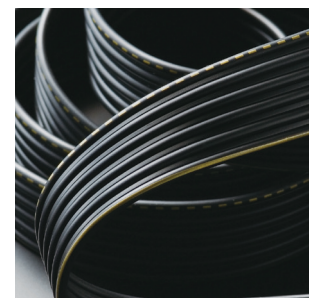
3

The SR-009S is an open-air design, where sound waves leave the rear of the cup. The sensitive diaphragm of the SR-009S need protection from the outside world. The guard mesh on the SR-009S was re-examined. A new design which featured a curved surface was developed. The curve on the guard mesh gives increased rigidity and lowers resonance of the mesh. This in-turn ensures improved resolution and transparency of the sound. The new guard reduces the amount of contaminants entering the diaphragm, whilst at the same time improving the sound quality.



4

The cable of the SR-009S is a 6N Hybrid design. 6N Cu high-purity annealed copper wires are employed for the central cable. Six Silver plated annealed copper wires are arranged at the perimeter. The structure of the cable utilises parallel conductors arranged in wide spacing. This spacing ensures low capacitance which is ideal for the higher voltages needed to run the electrostatic diaphragm. Reduction of capacitance also results in improved transparency and smoother high frequencies.



5

The ear cushions of the SR-009S have been improved. The highest quality of genuine leather is adopted for the material that touches the skin. High-quality artificial leather is used for the surrounding portion of the ear cushion. Wearing comfort for long periods is improved by use of genuine leather. This material has good breathability and is more pliable, which ensures a good fit around the listener's ears. A good seal, minimises air leakage and in-turn improves bass response and low-frequency reproduction. As for the side pressure to the ear, a dual-arc spring system has been adopted to realise both rigidity and flexibility. Like the SR-009, it automatically follows everyday head movement during listening.



6

The headband arc assembly features a 10 step click mechanism for height adjustment. The optimum feel and fit is obtained for different size heads, by precisely adjusting the step click mechanism. Once adjusted, the optimal position of the arc assembly is maintained. Making it unnecessary to re-adjust the next time you use the SR-009S.



Paulownia wood has been adopted for the exclusive storage box for the SR-009S. Paulownia is lightweight and is insect proof. It has antiseptic qualities and outstanding humidity rejection. Moreover, it features excellent fire-retardant qualities and offers low heat conduction. This attention to detail assures safe storage of the SR-009S over many years.

Stax SR-009S specifications

- Type: push-pull electrostatic large circular sound element, open-air type enclosure
- Frequency response: 5 - 42,000Hz
- Electrostatic capacitance: 110pF (including cable)
- Impedance: 145kΩ (including cable, at 10kHz)
- Sound pressure sensitivity: 101dB / input 100Vr.m.s. / 1kHz
- Bias voltage: DC580V
- Right/left channel indication: Golden solid line (left) and dotted line (right) on the cable
- Earpad: Genuine leather (skin touching portion), high-quality artificial leather (surrounding portion)
- Cable: Silver-coated 6N (99.9999%) OFC parallel 6-strand, low-capacity special wide cable, 2.5m full length
- Weight: 583g (including cable), 441g (without cable).

For further information on the Stax SR-009S, please contact Symmetry using the details at the bottom of the page.



Stax SR-009S Gallery

A library of hi-resolution product images is available to download. For access, please contact Symmetry using the details at the bottom of the page.

