

## Stax - 'In a League of Their Own'



Fig.1. Stax SR-40 ear speakers with a SRD-4 amplifier

As mentioned a few weeks ago I recently visited the [National Audio Show at Whittlebury Hall](#), there were many loudspeakers, headphones, amps and record players on display at the show but no sound has stuck with me more than that from the [Stax](#) headphones.

The [Stax 4170 system](#) that I listened to gave what is known as the classic 'Stax Lambda Sound'. Beautifully defined and clear. They delicately revealed every nuance of the tracks, a really musical sound. Unfortunately the headphones were hooked up to a shared system so I couldn't choose the music but Aerosmith sounded better than it perhaps should of. The Stax sounded spectacular.

Readers of this blog might have realised already that when I like something, I don't leave it there, I must know everything!

So here we go again. Upon researching Stax, I discovered this intriguing factoid that got me thinking 'In December 2011, Chinese manufacturer [Edifer](#) bought 100% of Stax Ltd. for just £987,441.77'.

Ask any audiophile what the best headphones they have used are and I'd bet the majority of them would name Stax. So why was a company that sells some of the best headphones in the world, all over the world, sold for less than £1 million? It seems crazy, right?

Stax founder Naotake Hayashi chose not to use the term headphones, preferring to use 'earspeakers' instead. Naotake preferred comparing the resolution to hi-end loudspeakers rather than other available headphones. Many people agree with Mr. Hayashi on this and use Stax as their main speakers, as to buy a power amp and speaker set up to rival the sound of the Stax would cost much, much more.

What sets Stax apart from other headphone manufacturers? I hear you say. Well, Stax do not just manufacture run-of-the-mill headphones, Stax only produce electrostatic headphones and have been doing so for 50 years. In fact Stax invented the electrostatic headphone, hence the name Stax, which was originally derived from the word 'electrostatic'.

Electrostatics are a whole different animal to the more common dynamic headphones. Conventional electrodynamic headphones use a coil inside a magnet to create an electromagnetic force and vibrate the coil which is attached to the cone, moving the cone in and out. Electrostatic headphones work using an ultra-light film. A static electric charge is applied to the film (without touching it) and when audio voltages are applied the static cling and repulsion causes the film to move. This basically means that no energy is stored and there are no resonances, leading to a superior, less distorted sound.

It was at the Tokyo Audio Fair 1959 that Stax introduced the SR1, the world's first electrostatic headphones, however despite the benefits mentioned above, electrostatics have not taken the headphone world by storm as you would imagine, mainly due to the fact that electrostatic headphones require a high-voltage amp.



Fig.2. A pair of Stax SR1 Earspeakers. The first ever electrostatic headphones

Many well-known brands have tried manufacturing electrostatic headphones including [Sony](#), [Pioneer](#) and [Audio-Technica](#) but all have soon stopped production and concentrated on more easy-to-sell dynamic headphones instead. This is what sets Stax apart from the others, where most companies have seen that seen the difference in sound that can be achieved they have still given up, but through their love of sound, Stax continue to sell amazing quality electrostatic headphones when no one else wants to.

Stax set out with a simple goal, to attain the most transparent, high resolution sound achievable. A goal the company still holds to this day. They may not sell millions of units a year, but they are a reference to many audiophiles who are happy to save up their pennies for Stax combinations.

Such was Naotake Hayashi's love for his electrostatic headphones that he was still putting in full days work when he was 84 years old. When he died in the early 90's, his son Takeshi took charge of the company. Thankfully Naotake had instilled the love for high resolution sound into Takeshi and the goal lived on.

So what has the Edifer takeover of Stax meant? Skimping on manufacturing costs and quality? Cutting the product range? Loss of jobs? Actually no. Edifer clearly stated when they bought Stax that all the production would remain in Japan, the current team would remain intact and all classic product lines would continue. In fact they are also pumping in more R&D funding to enable Stax to improve.



Fig.3. [Stax SRS-002](#) portable amp

One of the first Stax products to be developed using the increased R&D funding from Edifer, much to my excitement, was the recently released the [SRS-002](#) portable Stax amp which runs off two AA batteries. This is both the smallest and most affordable Stax amp available, meaning audiophiles everywhere are now able to enjoy the classic Stax sound at home and on-the-go. We have a pair of these in the [AAD](#) office and I can tell you that the sound they produce is quite astonishing, it's just a shame that I hardly get to use them as the boss is always taking them with him.

The current most popular Stax combo is the [SR-009](#) & the [SRM-007t II Kimik](#), which also happens to be the flagship system with a current pricetag of £5,990. This really demonstrates that although they may look a little funny at times and require a separate amp, when it comes to Stax audiophiles are willing to spend big for the amazing results.

As is so often the case in life, the truly great things are not necessarily the most popular things; Stax is one of those things. Cult headphones if you like. Naotake always had the mindset of a small business, he knew when he was manufacturing the earspeakers this would be the case, he knew they would not be sold in Argos or the Apple Store (Well, he would have if it existed back then) but he did know that those who saved up and bought a pair of Stax would truly appreciate them. So I guess this is why the company ended up selling for sub £1M, really Stax was never intended to be a multi-million pound corporation in the first place.

Long live Stax.



Fig.4. SR-009 earspeakers and SRM-007t II Kimik combination

— Posted by Lewis