

A VISIT TO ANZUS, BØRRESEN AND AAVIK

A GREAT SOUND EXPERIENCE

Words: Håvard Holmedal



We like getting out and about and visiting hi-fi manufacturers, but obviously things have been a little difficult during the past couple of years. We were therefore delighted to finally be able to book a seat on a flight and head off to the attractive city of Aalborg. Although the trip was a pleasant surprise in culinary terms, it was the many great sound experiences that proved to be the highlights of this trip; it is a long time since I have heard so much good music and audio during the course of two days.

The purpose of the trip was to get an in-depth insight into the products made by Anzus, Børresen and Aavik: cables and leads in all price categories, including incredibly expensive items; power components and network products; loudspeakers; and, not least, amplifiers and other electronic equipment.

Definitely not novices

Audio Group Denmark is now the official name of the umbrella company that is home to development and production for Anzus, Børresen and Aavik. The three companies were founded by Michael Børresen and Lars Christensen, who have both enjoyed impressive careers in the hi-fi industry. Børresen made a name for himself with his Raidho loudspeakers, and many clients and enthusiasts would have run into Lars Christensen at one of his demos of Nordost cables before he cast everything aside and founded Anzus.

The moment you walk through the door of the extensive premises in Aalborg you realise that we are not talking about novices here, a feeling that is reinforced on a regular basis throughout the next two days of the visit. There is plenty of space and the layout is professional, with several excellent audio rooms, own production line, knowledgeable individuals in all positions, and a carefully considered and accomplished way of

presenting the company to outsiders. Furthermore, the atmosphere was very pleasant.

Lars and Michael are real characters and have a huge knowledge of the field in which they work. Nevertheless, a lot of what is said seems to overplay the mystery card and – from my own point of view – is a little too close to the arguments wheeled out by the alternative industry. However, this is before you begin to peel away a little of the sales gloss and the obvious desire to make themselves appear unique. If you delve a little deeper over a beer, or indeed the company's own cryo-treated gin (Lars is a dedicated gin enthusiast), you receive more information than you are able to process, in which case the best argument is to demonstrate how the different solutions influence the sound. And to do this in a quick, but nevertheless interesting, blind product test.

A number of the products that they make are not necessarily solely the result of research and physics, but stem from theories cooked up by Lars and Michael about things that they wish to experiment with. Prototypes are then made, which are tested both in the laboratory and in blind product tests.

Majority of components produced in-house

The premises are full of components, pre-cut cables, speaker drivers, silver rings and cabinets, but in fact the biggest surprise was that they had their own silversmith who cast the silver rings that were subsequently used in their ultimate speaker drivers.

Production seemed to run at a relaxed pace, but nevertheless finished components filled the shelves surprisingly quickly.

I must admit that I am fundamentally sceptical about a lot of what the high-end hi-fi sector gets up to, but there was plenty of time to ex-

plore this during the visit. Not everything made a great deal of difference, and some things had perhaps no effect at all as they were demonstrated, but some of what we heard started out by sounding good and was gradually tweaked until it sounded absolutely fantastic.

As expected, loudspeakers provide the biggest perceived difference in demos, but we also had a really interesting demo of the differences between the various Aavik amplifiers and – hold tight! – power cables which come in assorted sizes and lengths. Anzus claims that the most important cable is the cable running from the mains socket in the wall to the power strip, and that this should ideally be 4 metres in length. Not around 4 metres, you understand, but exactly 4 metres! And this results in a sound – again according to Anzus – that is better than with the same cable that is only 2 metres long.

I am at a complete loss to explain why, but the demonstration of power cables that we were given could not be ignored, regardless of the psychological factors that may be suspected of playing a part. Not only are the variations between each cable considerable, but from the most reasonably priced to the most expensive cable the difference was undeniable. Whether this difference is worth the money you have to spend is likely to depend on the health of your bank account, but there is no question that the surprising quietness, smoothness and extreme fluidity in terms of sound you experience from a solid package of these products cannot be matched by spending the equivalent sum of money on a couple of expensive loudspeakers. Expensive speakers clearly represent an upgrade, but it is another form of upgrade and another experience.

If you have connected up your system with the full range of expensive (and occasionally ridiculously expensive) power cosmetics, cables and network switches and then remove everything in one go and replace it with a poor-quality power strip, Biltema cables and a cheap Chinese switch with power adapter ditto, you will end up once again with a very underwhelming experience. Although a much cheaper and eminently more reasonable solution, it may well take a couple of days of listening to the clock radio by your bed before the sound system in your living room attains its full glory and dignity once more.

Børresen and low induction

A term that is repeated throughout the facility, almost irrespective of which type of product is being demonstrated, is “low induction”. Michael Børresen has set about conducting comprehensive analyses of speaker drivers and has come up with a number of innovative solutions.

One of the differences to which Michael attaches significant importance in terms of the final result is a speaker driver with as low induc-

tion as possible. Low induction ensures faster response from the drivers and thereby more detail, smaller phase angles and less impedance variation for the amplifier. The drivers also have enhanced dynamic linearity, which makes the bass more controlled and results in more detail at the deep end of the bass.

As most enthusiasts know, Børresen has developed its own ribbon tweeter. It has a moveable mass of just 0.01 grams and is literally as light as a feather when placed in your hand. Mounted in the magnet system, it is lightning fast and has virtually no limitations at the top of the frequency range. What we heard in the numerous demos, however, was not a treble that dominated the sound. In fact, it melts together elegantly with the mid-range and produces an extremely transparent sound image which is pleasant and relaxing to listen to at the same time.

Own silversmith

If you use components made of silver in your speaker drivers, it is nice to have your own silversmith on site. Silver rings are cast that are then integrated into the most sophisticated speaker drivers – and they need plenty of them, according to Michael Børresen, with the loudspeakers having really taken off in the global market.

According to Børresen, the advantage of using silver in the drivers is that inductance is further reduced when measured against “normal” – but still ferrous-free – drivers with copper rings. However, this is still not sufficient to produce the optimal speaker driver. All the drivers with silver rings therefore undergo cryogenic treatment. This means three days’ gradual freezing down to -196 degrees Celsius, followed by slow thawing back up to normal room temperature. According to Børresen, cryogenic treatment strengthens and compresses the crystal structure of the metal and reduces the residual stress that occurs when the metal hardens during the casting process.

Good demos

In order to be able to run good demos, you need good audio rooms, but according to the Danes you do not get this if the room is excessively damped. The demo rooms do have some damping, but it is surprisingly sparse compared to demo rooms at other producers. The sparse damping makes the rooms quite lively, which you notice as soon as you begin to talk.

The most surprising demo was a blind demo in which we were unable to see which loudspeakers were playing and which type of electronics they were connected to – it was, in other words, the day’s guessing game. What sounded as though it was a large (and expensive) loudspeaker proved to be the tiny Z1 speaker connected to electronics from Primare. From there the experience just got better in either smaller

or larger increments.

The demos were all good. We were given plenty of time to listen out for differences, and the equipment was swapped back and forth if there was anything we were unsure about, but when it came to loudspeakers and electronics, there was little doubt as to in which direction things were heading. Better speakers and more advanced electronics resulted in differences that were easy to perceive, but I must admit that I was somewhat taken aback by the difference between Børresen 01 and Børresen 01-SSE. Silver components are integrated into the drivers of the latter, which have also undergone the aforementioned cryogenic treatment. These speakers appear to be very much alike, and also have the same tone balance, but the similarities end there. The clarity, detail, lightness, holography and focus really boosted the experience, which could be subjectively measured in terms of goosebumps per square metre!

The compact Børresen 01 speakers are already very impressive, so it was difficult to believe that there would be anything more to extract from them – and that the extra oomph is simply due to a few hundred grams of silver. Of course, this extra oomph comes at a price, but Børresen is not exactly aimed at sound buffs on a budget. Incidentally, the latter also applies to their less expensive models.

Aavik electronics

In spite of all this talk of silver and cryogenic treatment, it is the electronics from Aavik which produce the music – as source, digital converters and amplifiers. The design is perhaps open to discussion, but there is every reason to take a closer look at the electronics if you are looking for an upgrade. The most impressive is the basic model, I-180, with its UMAC technology, virtual GND topology and low noise floor.

This is a PWM amplifier (class D), but unlike other designs, it uses sinusoidal modulation instead

of the more common sawtooth modulation. The sine waves result in less noise and require less filtering on the outputs. According to Aavik, this means lower induction (that term once again) on the output and better damping factor. Whether this alone explains the good sound we experienced is not completely clear, but we are very curious to test these units under controlled conditions at home.

Where is the hi-fi industry heading?

There is every reason to question where the hi-fi world is heading. It is rather easy when walking round at Anzus, Børresen and Aavik to get carried away by the great demos and constant upgrades of the sound quality and thus risk losing sight of the economic aspect. These are very expensive products – and there is no end to the upgrades.

There are a number of things that suggest that the technology that is being used both here and elsewhere has begun to reach a saturation point, such that even small improvements to equipment that already costs as much as a good family car become ridiculously expensive and are only relevant for Russian oligarchs (who are not subject to sanctions) and Arab sheiks. However, according to Børresen, the most interesting market lies a little further east – i.e., China, Korea and Japan, and perhaps even Norway!

Full openness

We would like to take the opportunity to say thank you for two incredibly educational days, which also featured delicious Danish open-face sandwiches and cryo-treated beverages. The openness, interest and patience exhibited towards us was without parallel, and it gave us a solid insight into what Anzus, Børresen and Aavik are up to. There were no secrets, and everything was laid bare for testing and examination.