in-akustik NF-2405 Air XLR cables

Rafael Todes

I am slightly wary of reviewing cables. Don't get me wrong, I do 'believe' in cables and the differences they can make in fine-tuning a system, but these differences aren't normally night-and-day. While there are large differences between the stock cables bundled with most high-end products and high-end cables themselves, the differences between two high-end cables can be small.

Cable manufacturers seem to fall into two categories. Some go through existing cable catalogues, make up the cables, and listen carefully. This is entirely valid, because while any punter could make this cable up at a fraction of the cost, the listening and taste of the cable assembler are what you are paying for in the price differential.

Technology-based

Then there is another type of manufacturer, one that builds cable through research and development using proprietary technology. in-akustik is one such manufacturer. Founded in 1977 by Ilse and Günther Sumser, the company is based in Ballrechten-Dottingen, near the Black Forest in south-west Germany.

The company's "Air Helix" architecture permits signal conductors to be nearly 100% insulated by air. Special clips have been developed to provide the supporting framework. Positioned at regular intervals inside the cables, the clips keep the helically arranged conductors apart. Unusually good cable flexibility is assured by two struts that keep the clips together while maintaining a precise distance between them. From the outside of the cable, these appear like vertebrae.

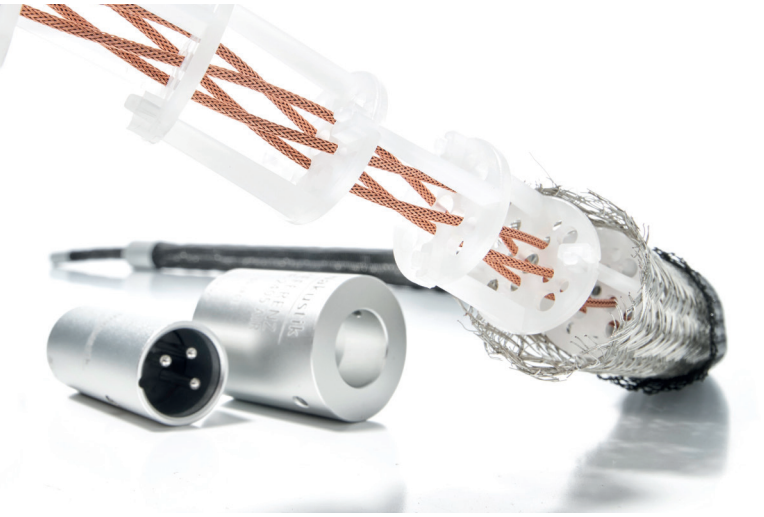
All cables have resistance and capacitance. In-akustik cables are constructed this way to use air as a dielectric and minimise capacitance. The cable strands are held in place by a plastic helix, and the individual strands are nested to create overlapping magnetic field areas, which significantly reduces inductance. A new feature of this fifth generation of the cable is that the helix structure is maintained throughout the entire length of the cable.

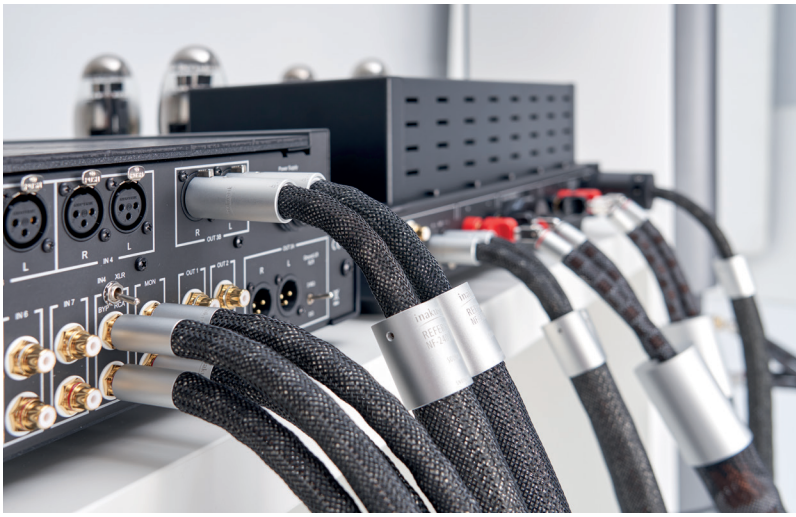
The cables are woven with a braided structure that avoids skin effects caused by eddy currents. A skin effect is a phenomenon whereby alternating current flows more near the surface of the cable than through the cross-section. A lacquer finish also helps minimise eddy currents. The NF-2405 utilises pure oxygen-free copper in its construction. Dense shielding is employed to keep the signal from external interference. It is surprising that a single cable comprises 195 individual components, 296 drill holes, and is hand-assembled. Not only are the connectors flexible, with a rotation range of +/- 90 degrees, but this also ensures the long life of the cable under heavy usage. The connectors are made from rhodium-coated tellurium copper, a hard metal alloy that maintains high connectivity. The rhodium coating provides excellent contact and wears far better than gold, which wears out faster.

While most cable shields are made from PVC, in-akustik uses polyethylene monofilaments, which hold the conductors together and help reduce microvibrations. »



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Attention to detail

So you can see, from the attention to detail and the research and development that have gone into the production of this cable, there is a world of difference between a catalogue-selected, ready-produced cable, which is finished, i.e., terminated and dressed, and one such as this, which has had every detail of its construction thought through and further developed over time and through iterations.

Because of the cable's flexibility and relative lightness, as well as its easy rotation, I found the in-akustik a pleasure to use. Large-diameter, heavy cables can be awkward to insert and remove, and with frequent use they are easily damaged. This rotational ability is a clever solution to a problem that, in many cases, can be a reviewer's concern. A blue-sky approach to this problem is appreciated.

Listening through my system, a dCS Apex Bartók DAC feeding a Townshend Allegri Reference preamplifier, a pair of VAC Signature 200iq power amplifiers, a PS Audio PerfectWave PS10 mains regenerator and Bowers & Wilkins 802 D4 speakers using Townshend speaker cables, the system as a whole sounds fulsome, organic and a match made in heaven! Listening to Simon Rattle's 2003 recording of Beethoven's Fidelio with the Berlin Philharmonic Orchestra, starting with the overture that Beethoven took many attempts to perfect, there is real punch to the opening outburst and a beautifully ordered sense of the space in which the performance is recorded.

The bass is full and tight, in a real way, not that 'grippy, rubbery' manner, but in a natural sense. I find cables can change the size of the image, and this is fairly large as images go. The sound stage extends backwards, well behind the speakers. There is nothing 'rough' about the sound. It is delightfully smooth and luxurious.

The dynamic range of this recording is very wide, and the transients are allowed to reach their full potential. I would say I can't really put a finger on what the in-akustik cables are doing. Sometimes cables add sheen or brilliance, like a tone control, and sometimes they can add a rubberiness to the sound. None of that here, just a very clean, detailed and big sound.

Later on in this recording of Fidelio, when the singers join in, the treble voices, which can sound bright at higher frequencies, are really beautiful. Marzelline, sung by Juliane Banse, sounds particularly beautiful.

Not all cables are created equal

To paraphrase former UK Prime Minister Theresa May, "cables are cables", but not all cables are created equal. This Iin-akustik creation has been designed from the ground up. Every aspect has been carefully considered, and the solutions arrived at are admirable and, quite frankly, worth every Pfennig of its price. I have enjoyed my time with them and can heartily recommend them to anyone looking to put the finishing touches to a high-performance system. +

Price and contact details

NF-2405 Air

Price: £1,815, €2,049, $2,500 (1m XLR)

Manufacturer in-akustik

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