

ELAC AIR-X active loudspeaker system

by Alan Sircom

Like Audiovector (tested on page 29), ELAC has looked to the future of audio and concluded it lies in active loudspeakers driven by small digital hubs. This is known as AIR-X in ELAC parlance. However, although the basic concept in the two products is broadly the same, the two couldn't be more different in reality.

AIR-X is initially built into variations on two existing ELAC designs, the BS-403 standmount and BS-407 floorstander (pictured right). Both of these designs sport the excellent JET 5 folded ribbon tweeter and the 150mm AS XR cone woofer. We tested the AIR-X 403 model. The loudspeaker loses its passive crossover and this is replaced with an active module pack, called the AIR-X AMP. Both loudspeakers need to be powered from the mains as a result. Although a true state-of-the-art design, the amp module itself used 225W Class AB amplifiers, and that requires both power, and a rear mounted heat-sink. A series of DIP switches on the back panel of the loudspeaker offer a great deal of flexibility in terms of installation, because although the amp modules are conventional analogue amps, the crossover driving those amps is pure digital signal processing. This means it's extremely easy to change the speaker position from free-space to boundary or even on-console operation, there are also treble and bass boosts, a loudness boost, and other functions driven from this red eight-way DIP box.

The loudspeaker is intended as a true active design, fed from a balanced or single-ended preamp, or maybe a DAC/pre combo. But below these two inputs are three small switches that form and connect to the heart of the AIR-X system. There is a three-position room switch (for multiroom use), a left, right, and mixed L+R mode switch, and the all-important wireless control. The loudspeakers then receive information from the AIR-X BASE unit.

The BASE station connects to your system. BASE has a single-ended line-level input, a combination coax and optical digital connection, and a combination optical and USB input. These signals are selected (and level controlled) from a small remote handset, and are then sent in uncompressed digital audio up to 24-bit, 48kHz precision (using the KlearNet protocols) to the AIR-X loudspeakers. To ensure a robust signal set against a tide of Wi-Fi noise, the BASE has a three-position switch on the rear panel to find the ideal transmission channel to the loudspeakers. You pair the system by pressing the requisite button on the remote for four seconds. There are also two additional USB connections, but they aren't for USB audio use. One powers the BASE, via a plug-top USB charging device and a cable. The USB charger is a multinational device with interchangeable plugs, but the 13A one at least has a nasty habit of turning back into its constituent parts if you try to remove it from its socket too quickly. I'd prefer something that locks shut where AC power is involved. The final USB-like connector helps the AIR-X connect to Bluetooth sources with a receiver dongle. ▶



▶ This system is an ambitious bridge between today's systems and tomorrow's. The BASE unit can be a full system replacement hub in some settings, but in many settings, the BASE will sit in a modified version of an existing system, possibly hanging off the end of a preamp, the BASE acting in essence like some wireless speaker cables. In fairness, both modes work well. This does require a little more thought in installation than some systems, but fortunately, when set up, it stays set-up. Be aware that the channel selection switch is extremely useful in maintaining a signal; I found that as the evenings wore on and a street full of Wi-Fi routers (17 fighting over the same airwaves at the last count), sometimes you'd just have to change channels. Bluetooth dropouts were infrequent, although regularly finding and befriending the dongle was another matter. Bluetooth worked smoothly 90% of the time, and otherwise needed a couple of tries before success, but from experience Bluetooth users demand instantaneous connectivity over and over again.

I tended to use AIR-X BASE in 'replacing a preamp' mode, using it to connect to the amps in the loudspeakers in the same way I might use a preamp and long runs of interconnect cable. And in this setting, it worked extremely well and made a very fine sound indeed. The loudspeaker retains its signature transient speed, dynamic range, surprising depth for a loudspeaker so small, and outstanding stereo performance. It also has a lot of grunt behind the drive units, so it has the potential to go extremely loud or extremely dynamic without the least fuss. You'll be running to the doctor with damaged ear drums long before you push these speakers past their limits. Maybe a very careful amplifier selection in passive guise could find a partner even closer to ELAC's goals, possibly one that could bring its somewhat forward presentation back a notch. Certainly, experience with Norma electronics (also distributed by Hi-Fi Network in the UK) and a good guesstimate of its use with Primare (distributed by ELAC in Germany) would suggest there's a slightly less up-front balance to be extracted from ELAC designs.

In a way, though, this is sidestepping the point. The AIR-X system works as a complete package, its whole greater than the sum of its parts. What this does superbly is send signals from sources to the amplifiers, wirelessly and not only losslessly but in an uncompressed format that will support 48kHz, 24-bit data streams. They don't drop out and they don't sound materially different from running the same tracks through a wireless pathway. There wasn't much you could throw at this system that would faze it; I tried

everything from jazz chanteuse Madeleine Peyroux to dense modern classical orchestral hitting-things-until-they-hurt John Pickard, from the ticks and clicks of Trentemøller to the just plain weirdness of Dent May and his ukulele. It all worked without a hiccup.

Perhaps the big part of this impending future we are seeing appear in wireless connectivity is the fear we may be 'throwing the baby out with the bathwater'; in our keenness to make a less box-shaped future, we risk sacrificing the one thing that made audiophiles out of us in the first place. Good, old-fashioned sound quality. The ELAC AIR-X system, to its great credit, never gives the impression of doing that. It makes a good sound, not one that will please every listener, but a sound quality that is every bit as good as its wired alternatives. ▶



▶ OK, so the die-hard audiophile will never accept a preamplifier replacement that didn't cost thousands and isn't made out of battle armour for a tank. There are volume pots that cost more than the AIR-X BASE, and those who use such things will be reluctant to give up their audiophile credentials for a small box that could be mistaken for a computer router. But these are the same people who would never buy an AIR-X AMP equipped loudspeaker because they want the amp out in the room, even if it's just to show off their taste and the depth of their bank balance. But I suspect the AIR-X system is not for die-hard audiophiles. It's for those who want audiophile-grade sound without audiophile-grade clutter. Or paranoia.

There's a temptation to draw comparisons between this and the Audiovector concept, primarily because they launched at a similar time. In

fact, they move in very different circles, and comparisons would be as pointless as any other comparison between a floorstander and a standmount. They are both ambitious projects designed to bring good sound to a wider audience, and while they are different in direction and approach, I can find a lot to like in both directions. That said, ELAC's totally wireless separation of speaker and hub will find many friends.

For my part, I enjoyed my time with the ELAC AIR-X every bit as much as I have done with passive ELAC models. It's clean and energetic and detailed; all the things you might get from a pair of ELAC BS 403, but active. In the wired world of separates audio, you could find a solution that might better suit your tastes, but again that is missing the point. You'd have to search for that solution where one that does it all is right under your nose. +

TECHNICAL SPECIFICATIONS

Type: 2-way, two-driver, standmount ported speaker with active drive and separate control module.

Driver complement: One JEF-5 folded ribbon tweeter, One 150mm AS-XR composite mid/bass driver.

Inputs: on speaker, one XLR balanced, one RCA line inputs. On Hub one pair RCA stereo, one 3.5mm analogue, 1x ELAC WL USB interface, 2x TosLink, 1x USB

Crossover frequencies: 2.7kHz

Frequency response: 38Hz – 23kHz

Sensitivity: N/A (225W Class AB amplifiers driving loudspeakers)

Dimensions (HxWxD): 308 x 166 x 280mm

Weight: 7.8kg/each

Finishes: gloss white, gloss black.

Price as tested: AIR-X 403 £2,499/pair, AIR-X BASE £349, Bluetooth adaptor, £119

Manufacturer: ELAC Electroacoustic GmbH

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