

# ELAC FS 509 VX-JET loudspeakers

By Alan Sircom



Some of the most innovative things done with a loudspeaker box today come out of the ELAC factory. The company's use of Heil Air Motion Transducer tweeters, 'Crystal Membrane' aluminium composite mid-bass units and now the VX-JET dial on the tweeter makes for a loudspeaker that is state of the art. Of course, this is the preserve of the company's Line 500 big guns, and those big guns don't come much bigger than the FS 509 VX-JET.

This is a tall, thin and perfectly glossy loudspeaker, perfectly black glossy that is; it seems ELAC applies Henry Ford's Model T maxim to flagship loudspeaker colour schemes. A four-way design, with a down-firing bass port, the 509 features ELAC's own drivers throughout. Given the drive units (apart from the AMT tweeter's gold-like finish) are gloss black too. There is a splash of colour from the speaker base spikes and the rest, and the rear panel features the VX-JET adjustment, as well as bi-wire terminals linked with short runs of van den Hul's The Wind Mk II speaker cable.

The VX-JET system connects the JET III AMT ribbon tweeter to a small vernier dial at the rear of the loudspeaker. Turn the dial clockwise or counterclockwise and you can change the time alignment of the loudspeaker slightly. This does allow a degree of fine tuning, adjusting the loudspeaker's stage width and presence as you see fit. Perhaps more importantly, these can be used to help reduce inconsistencies in the room itself, adjusting each VX-JET control carefully to change the side wall reflection pattern. It works surprisingly well, but remember two key things. First, this must be done with a buddy. Getting up, adjusting, sitting down again will wreck your short term audible memory, while another person can adjust the dial while you sit and assess the performance. Second, it's not meant as a way of correcting less than ideal installs; put the speakers clear of the sides and rear walls with a slight toe-in as you should (almost) always do and do well. Then and only then should you adjust the VX-JET system.

The speaker itself uses all-ELAC cones through the mid and bass too. The JET III tweeter sits in the acoustic centre of a special AS-XR ring radiator midrange. The drive units are totally disconnected from one another and this does make the treble and mid act as a form of point source. Below that is the second midrange, a 180mm 'crystal' aluminium sandwich design, which is backed up by a pair of 220mm units of the same construction. All of these drive units are housed in a basket of cast aluminium, chosen for maximum rigidity without maximum weight. The crossover points are key in any loudspeaker, but in a four-way, they become vital. Here, they are at 120Hz, 600Hz and 2.8kHz respectively, managing to keep crossover points outside the worst possible places.

There's a classic ELAC sound. These speakers are fast, free from any kind of overhang and incredibly detailed. In many ELACs, that comes with a suffix, "... and perhaps too much of a good thing". Because many ELAC speakers go for so much detail the sound borders on brightness. There's a great loudspeaker inside any ELAC design, but sometimes you have to struggle to find it. ▶



The 509 makes that less of a struggle. While the FS 509 is never going to be the kind of loudspeaker one might use with stark or forward sounding electronics – because the sound of the speaker is very clean, well into the brilliance region – this is a loudspeaker that is highly satisfying and insightful. Use it with a valve amplifier – at 89dB and an impedance that swings between four and eight ohms, it's OK with almost anything that isn't a SET, and although it was a trifle underpowered, the balance and the inherent warmth of the Dynaco-like AA34 and the ELAC is a fine match.

If there's an overarching characteristic of the FS 509 it's that it creates a very dry sound. There's no stray resonance or added thickening, no syrup or overhang. This means you get to listen into reverb tails and panning accuracy. It's a precision that so many people crave, although those who seek something overly romantic from their loudspeakers might not like what the FS 509 does so well. There's an interesting and obvious comparison to make with the Reference 3a Veena Mk II also tested in this issue, because they are almost diametrically opposed on almost everything that goes with voicing a loudspeaker. The FS 509 is very definitely for the person who wants a precise portrayal of what's on the recording, rather than a possibly slightly romanticised version of the same.

There's a Four Tet/Fabric album that I occasionally listen to. It's the kind of thing loud clubland PA systems do very well, but the subtlety of hi-fi speakers makes it sound a bit of a mess. The 509s took it in their stride, because of the depth and precision of the bass and the dryness of the sound. Moving over to the Haydn Nelson Mass (the classic 1962 Decca recording with Sir David Willcocks and the Kings College, Cambridge Choir) and then on to the Hilliard Ensemble's *Audivi Vocem*, it became clear the FS 509's precision and depth apply universally, and very successfully.

The downside to the clean, sophisticated sound of the 509 is that sometimes that dryness can pull a recording apart. On good recordings, this is a wonderful experience, like listening into the mix in a way few people get unless they are in a studio control room. However, on those recordings that make you wonder if it was mixed by someone wielding a chisel or two, poor tracking, bad microphone technique, too much or too little compression, reverb or EQ, and even poor pan pot use will be all too apparent. If the recording industry anticipated thousands and thousands of ELAC 509 listeners as their audience, we'd all be getting better sounds.

▶ The other problem with the 509 is a headroom issue. Yours, not the loudspeakers. Clean loudspeakers that can take an almost infinite amount of power are easy to play at surprisingly high levels. If the amp and the speaker don't complain, your ears tend to stay blissfully unaware of the volume levels until the sound levels have reached the threshold of pain. I nodded along happily

## TECHNICAL SPECIFICATIONS

**Type:** four-way bass reflex floorstanding loudspeaker

**Drive unit compliment:** 1x JET III AMT tweeter, 1x 50/105mm AS-XR ring radiator upper-midrange, 1x 180mm AS-XR midrange driver, 2x 220mm AS-XR bass driver

**Crossover Frequencies:** 120Hz, 600Hz, 2.8kHz

**Frequency Response:** 24Hz-50kHz

**Sensitivity:** 89dB

**Nominal impedance:** four ohms

**Minimum impedance:** 3.1 ohms at 75Hz

**Dimensions (HxWxD):** 137.3x33x46.6cm

**Weight:** 57.2kg

**Price:** £15,000 per pair

**Manufactured by:** ELAC

**URL:** [www.elac.com](http://www.elac.com)

**Distributed by:** ELAC UK

**URL:** [www.elac-audio.co.uk](http://www.elac-audio.co.uk)

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playing Tool at a level far louder than is healthy without any perception of how loud it actually was. Take note... these speakers are better than your ears in this respect.

I think ELAC has done the right thing for the wrong reasons in its VX-JET control. It's not a tone control or a 'studio/domestic' control, it can be used to make the installation of the loudspeakers so much easier than usual. Have the loudspeakers positioned in the room (each speaker a metre and a half from the centre-line of the room and a metre from the rear wall is perfect), and instead of minute adjustment of the whole loudspeaker, moving the vernier scale on the VX-JET allows incredibly precise tweeter time alignment in room. It's best done with a solo female voice in the middle of the image and having you in the listening chair while a friend adjusts the scale forward and back slowly, until everything snaps into focus.

A hidden joy of this – plus the overall taut bass presentation – means the loudspeaker can slot into some surprisingly small spaces without complaint. Of course, a loudspeaker as physically big as the 509 doesn't necessarily make for an easy installation into very small rooms, and even the best installation doesn't solve the intimidation factor of staring down very big, very black loudspeakers in a small room, but dedication to audio can overcome all sorts of things.

The ELAC FS 509 VX-JET is an uncompromising loudspeaker. It's the rare combination of flagship design and a loudspeaker that can act as everyman; it's not the kind of loudspeaker that limits your musical tastes. The loudspeaker does have its character – and that clean character defines the sound – but that does not affect your choice of music. In fact, it makes that music appear impressive no matter what's playing. If the musicians and recording engineers know what they are doing, the recording will sound remarkable, whether that music was written in a church a thousand years ago, or on the back of a tour bus last week. In other words, an all-round goodie that comes strongly recommended. +

