



## Elac 330 CE Loudspeaker

*By Chris Thomas*

**Y**ou may have come across the name Elac before. Their speakers turn up with regularity in high-end in car systems and they manufacture the drive units that Burmester uses for its own loudspeakers. But Elac, the German company, also designs and builds an extensive range of speakers themselves, in five tiers, that contain around thirty different models covering every application from small, modestly priced AV units to large high quality (and cost) monitors. This is my first experience of them as I have recently spent a few months with the 330 Crystal Edition, an economical, no flab, stand-mount speaker with some interestingly different design features.

What Elac has done with the 330 CE is to design and build a completely minimal cabinet from extruded aluminium around two excellent drivers. Nothing particularly new there you may think, but pay attention to the word 'around' then look at the pictures. This tube-like enclosure has been designed to offer absolute minimal baffle projection. Tight around the mid/bass driver and hugging the periphery of the tweeter plate, it is not hard to see where the designers are going with this one. Achieving a virtually baffle-free frontal aspect eliminates, at a stroke, all those early reflections that can muddle the very explicit and liberated, out of the box character that such small speakers should always claim as one of their unique gifts. The 7.5 mm thick enclosure itself is well over a foot deep and being aluminium, extremely rigid. It is internally damped and ported at the rear, but this round vent is located at the top of the cabinet, leaving space for the bi-wire terminals behind the larger driver. This means that the tweeter too is vented and can be viewed through the shaped port that is fabricated with a slide-in plastic moulding, apparently designed in a wind tunnel for smooth unhindered airflow. The drivers are quite unusual and Elac manufacture both of them. The tweeter, designated JET 111 is an adaptation of the well known and highly regarded Air Motion Transformer originally designed by Oskar Heil. In practice this ribbon-like device comprises a folded foil membrane with a thickness of 0.84mm driven by a powerful

▶ and precise magnet of neodymium rods. The devil is in the detail of this unit and its assembly requires extraordinary accuracy. The folding and fixing of the membrane itself is still performed by hand under a microscope while two SCARA robots undertake the general handling and critical gluing process. Elac claims a resonance-free performance of up to 50kHz from this unit. High frequency drivers have, in the past, been the very obvious weakness of so many small monitors and I have lost count of the number of these speakers I have heard that have been let down by totally inadequate tweeters. But, over recent years technological advancements and designers taking their smaller models more seriously have meant that these are now getting the drivers they deserve and the Elac 330 illustrates this perfectly.

The CE suffix stands for Crystal Edition and this name is derived from the interesting 180mm bass/mid driver. The cone is formed from an ultra-lightweight stamped aluminium foil glued to a paper cone and it certainly looks a like a large sparkling crystal. The multi-faceted metal surface stiffens the cone and reduces the internal resonances. It is rather like the way that other manufacturers introduce a broken aspect or series of spiralled details to the surface of their drivers. The voice coil, somewhat unusually, is joined to the paper cone in two places. Elac reckon this expands the frequency handling by almost an octave. Useful when you are not relying on a larger square box wooden cabinet to supplement the speakers perceived low frequency extension. The speakers can be bi-wired and Elac provide a very decent quality pair of jumper cables if single wiring is required that I think are so much better than the nasty stamped solid copper-plated types.

Such a neat and tightly packaged design requires a stand worthy of its attention to detail and Elac can of course supply a steel, single column sand-filled design named the LS 65+. This is a beautifully finished support that matched the review pair in colour and texture. Four adjustable spikes are used on the bottom plate for floor mounting while the smaller plate that supports the speaker offers a few different fixing alternatives. There is a spiked option that sits each point into a small cup on the bottom of the speaker itself. I think that sonically this is the best way to go though, be warned, as the speakers do teeter somewhat precariously and would need little in the way of a sideways blow from a child or clumsy dog to come crashing to the floor and believe me, you wouldn't want that to happen. But they can be fixed in this position by long bolts that pass through the stand into fixings in the bottom of the speakers and this is the best (safest) option although for pure sound quality I would still favour the un-tethered fixing. For those wanting a softer balance to the sound Elac also supplies some soft rubber dimples which can replace the spikes.

There is also a high degree of selective tuning possible with the speakers themselves. As the port is rear facing Elac figure that, in small rooms, the 330CE might be forced into situations too close to a rear wall to be ideal so offer a two part foam bung to inhibit the airflow in a couple of stages. There also is a thin foam ring that can be attached around the tweeter unit to restrict dispersion and this is intended for rooms with little sound absorption to provides a specifically judged touch of damping. I tried all of these treatments in my listening room (that I have purposely left quite un-damped) and still preferred to listen to the speaker in its unadulterated state. These options may be useful to some but I found that it resulted in a general feeling of softening that I really couldn't get on with. In my room the port bungs made the speaker sound quite congested and why would you want to inhibit the flow and

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articulation of that excellent tweeter at all? Not for me I am afraid.

Even with the stand, the 330 CE is a relatively low-impact design which should not require too much furniture shifting to get working, although if you want to hear it in its full-voiced glory I would always suggest allowing it as much breathing space as possible and keep it away from rear walls and corners. Actually the Elacs are able to strut their stuff in the most unlikely positions and just lately I have been using many speakers much farther apart than normal with interesting results, including the Elacs. This is amplifier dependent to a certain extent, but be sure to experiment with distances and toe-in angles. Otherwise the usual rules apply with all speakers that utilise

a rear facing port and believe me, this one shifts air like a piston through that particular orifice. Given that the designers went to so much trouble to remove any early reflections from the baffle by removing it altogether it would seem a shame not to play along. At 87.5dB efficiency you could get away with fairly modest amplifiers in a small room, but I would try to avoid anything below a decent 50 watts and certainly amplifiers of distinctly average musical abilities will sound quite horrible.

The 330 CE is quite a surprise when you first hear it. A chunky bass/mid driver in a totally minimal, deep metal cabinet with a ribbon-type tweeter tilted my expectations toward a more immediate, forward and dynamic, sound. What I got was a rather subtler blend of dynamics and textures with less pure bass power than I had imagined but rather more musical cohesion. But it is the presentation that first grabs you and makes you realise why Elac went along this particular route with the cabinet design. With no straight edges internal corners and so little in the way of a baffle, the music appears completely detached from the cabinet. It spreads across the room and hangs in space, hence the positioning recommendations. Get it right and when you close your eyes it is extremely difficult to point to where the bulk of the sound is originating. It is as though you can't hear the speakers and the mid/bass in particular working to project the music at you at all.

Where I was anticipating a punchy and rather full bass from that chunky driver I found the whole thing rather understated and far more linear in response than I was expecting. The bass just glides out of the speaker, although, during my time with them, I do believe that the unit was still loosening up and I wouldn't be at all surprised if it added an extra half an octave in extension over the first several months. What it might have lacked in leading-edge impact it went some way toward making up for with tonality and character. This would not be the first time that the Elacs would surprise me. Through the bass they proved more sophisticated and tonally revealing and as they moved up through the mid-band the 330CE became almost sumptuous, given the right equipment and music.

Integration with that tweeter is excellent and seamless and one of the speaker's real strengths. The JET unit is very ribbon-like in its qualities without any of the HF beaming that, up until recently, has been one of the less desirable aspects of such units. With no hint of leading edge compression or hardness, it never draws attention to itself by sitting on top of the sound but instead is an extremely fine match to the character of that bass/mid driver. The results are always interesting but rarely spectacular with sophistication rather than sonic fireworks being the result. ▶





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The more music I played, the more I began to get used to the Elac’s unexpectedly smooth and gently liquid ways. In some senses they operate on a fine edge. They have no noticeable cabinet colorations or extra warmth or presence that some conventional wooden enclosures bring to their performance, so if you play a lean or thin sounding piece of music, that is exactly how it will sound. They are also quite volume dependent and I didn’t find them particularly interesting at very low levels. But at normal or even higher volumes their spare, lean and nuanced character can become really involving. What is perhaps the most impressive is that they are capable of very interesting shades of tonal resolution and they couple this with a musical top to bottom togetherness that is a constant surprise. Add to this their projection and illustration of soundstage and depth and I think they offer a range of musical attributes which are going to suit some people, systems and rooms perfectly. Ok, at times I felt they were a little lightweight and in need of a decently matched subwoofer and as I mentioned, they are not remotely forgiving of indifferent recordings, but then again no really fine speakers are. They are certainly not for everyone as they break quite a few small speaker traditions. But, I can’t help but like them. +

## TECHNICAL SPECIFICATIONS

**Type:** 2-way stand mount

**Drive units:** Bass/mid 180mm AS-XR cone LLD; HF JET 111 (mag. shielded)

**Sensitivity:** 87.5 dB 2.83V/1m

**Crossover point:** 2,900 Hz

**Impedance:** 4 ohms nominal

**Freq. response:** 40-50,000 Hz

**Power handling:** 80-120 watts

**Dimensions:** 274x188x345mm (HxWxD)

**Weight:** 10.5kg

**Finishes:** black high gloss, titan shadow, white high gloss

**Matching stand:** LS 65+ single column, colour matched sand-filled

**Price:** £3699.99

**Stand:** £699.99

**Manufacturer:** Elac

ElectroacousticGmbH

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

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