

Dynaudio Contour S 3.4 LE

Smart new finishes aren't the whole story as one of the Danish brand's longest-running models gets a makeover
Review: **Steve Harris** Lab: **Keith Howard**

When it comes to branding and product names, Dynaudio clearly believes in not fixing something that ain't broke.

There have been Dynaudio Contour speakers since the late 1980s, and they've become some of the company's most successful offerings: the £5250 Contour S 3.4 LE reviewed here is the latest update of a model first seen back in 2003.

Despite the 'Limited Edition' designation, the Contour S 3.4 LE and the smaller Contour S 1.4 LE actually replace the existing Contour S 3.4 and S 1.4. The new versions claim upgraded audio performance and come in four new luxury finishes: mocca, oiled walnut and black piano lacquers plus the Bubinga seen here. The large, three-way Contour S 5.4 model has now been discontinued.

TWEETER AT THE BOTTOM

A striking feature of the Contour series is the 'upside down' driver layout, and in the 3.4 LE the tweeter is placed below the twin bass/mid drivers [see boxout, opposite]. For the piano black version, this becomes particularly striking [see p3] because the shield-shaped front plate is left as bright metal, whereas with the other cabinet finishes, the steel is painted satin black.

Cosmetics aside, the steel plate forms part of a high-rigidity sandwich-construction front baffle, being firmly bolted to the 20mm MDF cabinet, and with a thin layer of damping material in between. This damping layer does not in any sense decouple the drive units, but provides some absorption of mid and high frequencies within the structure.

Except for the colour of the baskets, now also satin black, the 170mm woofers are unchanged from those in the latest iteration of the preceding Contour 3.4. Each cone is made from a single piece of Dynaudio's MSP (magnesium silicate polymer), so there is no dustcap and no

need for glued joints. The circular lines visible in the cone are a structure in the material at the point where the 75mm-diameter aluminium-wire voice coil is bonded to the cone. This decouples the central 'dust cap', so that it can act like a midrange dome.

With this concept, the driver becomes a true bass/mid, there is no need for 'two-and-a-half-way' operation and a first-order crossover can be used. So the two units are connected in parallel, both covering frequencies up to 2kHz.

As usual with Dynaudio, the tweeter is essentially a 28mm coated soft dome type, but for the LE this has been upgraded to the Esotar² grade used in Dynaudio's more expensive ranges, with its 'Precision Coating'. Here the mesh of the dome fabric, as seen under a microscope, is more regular, while the coating is more even. Dynaudio says that this gives a slightly more refined sound quality.

Bass reflex loading is provided by a large flared port, low down on the back of the cabinet [see p45], and the speakers come with foam bungs to reduce their bass output. They weren't needed in our case, but will be helpful if you have to place the speakers close to the back wall.

Artfully mitred and curved so as not to look clumsy, the plinth itself is deep and wide enough to give great stability. Made from a combination of MDF and LDF to defeat resonances, it carries threaded inserts at the four corners to accept the supplied spiked feet.

Between the speaker cabinet proper and the plinth comes the block which houses the crossover, which is thus very much less subject to vibration than it

RIGHT: Twin 170mm bass/mid units and 28mm soft-dome tweeter are mounted on a steel baffle plate, bolted through to the cabinet front to form a very rigid baffle. All drive units are made in-house by Dynaudio in Denmark





DIRECTIVITY CONTROL

Most hi-fi loudspeakers have their tweeters above their bass unit(s), but there can be compelling reasons for arranging things differently. Back around 1980, Mission launched its first 'upside down' two-way speaker, while the 1990s brought Castle's Inversion series, with a tweeter-below configuration housed in tapered cabinets that got wider at the top. In 1983, Joseph D'Appolito proposed his now well-known solution, with bass units above and below a central tweeter. Today, Dynaudio's high-end Evidence and Confidence ranges offer DDC (Dynaudio Directivity Control), using completely symmetrical driver arrays and special crossovers to control vertical dispersion. Meanwhile, the Consequence and Contour models simply have the tweeter below the other drivers. Though less elaborate than DDC, this approach still offers benefits. Placing the bass units higher reduces floor reflections, while the longer path length from the tweeter gives time-alignment of the drivers without having to resort to a sloping baffle.

would be if attached directly to a cabinet wall. For the 3.4 LE, the crossover has been upgraded with audiophile-grade Mundorf capacitors and tighter selection for the other components. At the back of this crossover block is a single pair of 4mm gold-plated socket/binding posts for amplifier connection. Dynaudio states that 'Dividing the frequency sections through bi-wiring or bi-amping is neither beneficial nor optional.'

RINGING GUITAR SOUNDS...

Once connected up and driven via a Melco N1A/Devialet 800 system, the speakers seemed to settle easily into the Editor's listening room [see www.hifinews.co.uk/news/article/meet-the-team;-paul-miller/9952]. We started with the most obvious placement: 1m from the back wall, just under 1m from the side walls and toed-in to face the central listening position. Of course, we did experiment further but the speakers were decidedly unfussy about placement and gave a large usable listening area.

Right from the start, the Contour S 3.4 LE gave an impression of ease, neutrality and impeccable balance, while further listening revealed its true abilities in terms of detail and dynamics.

Starting with female vocals, we put on Rebecca Pidgeon's 'Spanish Harlem' from *The Raven* [Chesky JD115] and found that the speakers brought out the fullness of the Chesky Records sound, with all its carefully-crafted reverb around the voice. And the 3.4 LE was certainly able to lay bare the studio technique, so that you could really appreciate the way the production blended a string group with the other instruments, all placed so intelligently

around Pidgeon's vocal, gently supported on its cushion of studio reverb.

By contrast, with a really punchy 1980s track like Cyndi Lauper's 'Girls Just Want To Have Fun' (the hit single from her first album, *She's So Unusual* – Portrait A 3943) you could certainly be hit by the treble-heavy, compressed nature of the mix, but even when turned up to party levels the sound didn't tear your ears off.

Male vocalists fared equally well with this speaker, and Gregory Porter's voice was absolutely silky on 'Hey Laura', from the 2013 *Liquid Spirit* album [Blue Note Records 0602537410538].

Travelling back 40 years to 'Walk On The Wild Side' [*Transformer* – BMG 44541-2],

Lou Reed's voice took on an engaging and intimate quality while the production sounded smooth and glossy. Here there was fabulous detail in the cymbal sounds and a lovely texture to Ronnie

Ross's baritone sax sound.

With classic rock, the Dynaudio always delivered without hesitation, and could give you a new appreciation of any album that combined fabulous musicianship and a brilliant studio production. With The Eagles' 'Another Tequila Sunrise' from *Desperado* [Asylum Records 7559-60627-2], the speakers were really at their smoothest, convincingly rhythmic, with the well-recorded bass sounding nicely breathy, but still spot-on timing-wise. Those beautiful guitar sounds came alive, ringing out sweetly around the vocals.

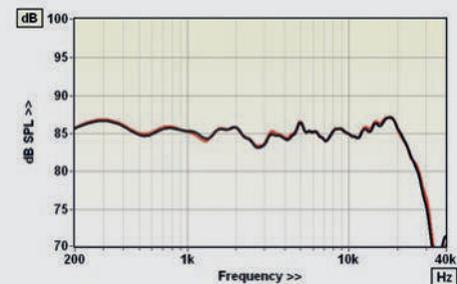
With the big production sound of the album's title track, that huge wash of strings filled the width of the room around the solidly-placed vocals, while the bass had enough weight and oomph to propel the rhythm, yet was always clean. ➞

'A huge wash of strings filled the room round solidly placed vocals'

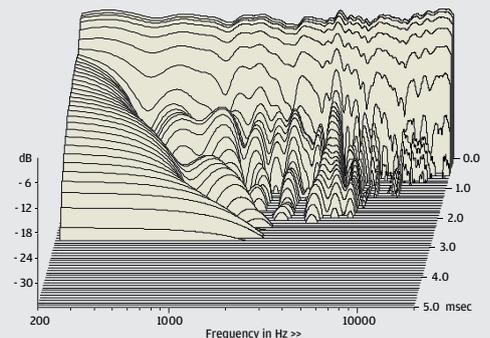
DYNAUDIO CONTOUR S 3.4 LE

Dynaudio claims 86dB sensitivity for the Contour S 3.4 LE. This accords well with our measured pink noise result of 85.5dB although the fact that the figure obtained using a music-shaped test spectrum is a little lower at 85.1dB suggests that 85dB may be more indicative of perceived sensitivity in normal use. The upside of this relatively low figure for a modern floorstander is that Dynaudio has not exploited punishingly low impedance to achieve it. Yes, the specified nominal impedance is 4ohm, justified by our measured minimum modulus of 3.9ohm, but well-controlled impedance phase angles mean that the minimum EPDR (equivalent peak dissipation resistance) dips to a minimum of 2.2ohm at 107Hz, about 0.5ohm higher than typical of modern floorstanders. The Contour S 3.4 LE thus presents a fairly easy amplifier load.

The forward frequency response (measured at 1m on the tweeter axis with grille removed) has the slightest 'smile' due to a mild presence band suckout but is remarkably smooth, with the result that response errors are very low for a passive speaker at $\pm 2.0\text{dB}$ and $\pm 1.9\text{dB}$, respectively [see Graph 1]. Furthermore, pair matching over the same 200Hz-20kHz range is just $\pm 0.4\text{dB}$ – the lowest we've measured and testament to Dynaudio's fine quality control. Diffraction-corrected near-field measurements showed the bass extension to be 50Hz (-6dB re. 200Hz), while at the other end of the spectrum, output drops off swiftly from just above 20kHz. The cumulative spectral decay waterfall [Graph 2] is less outstanding with treble modes visible at about 3kHz and 5kHz which are almost certainly indicative of cone breakup resonances. KH



ABOVE: Superb pair matching and essentially very flat response but a rapid roll-off above 20kHz



ABOVE: Cabinet resonances are quickly damped but there are (mid) driver modes at 3kHz and 5kHz

HI-FI NEWS SPECIFICATIONS

Sensitivity (SPL/1m/2.83Vrms – Mean/IEC/Music)	85.6dB/85.5dB/85.1dB
Impedance modulus min/max (20Hz–20kHz)	3.9ohm @ 153Hz 13.3ohm @ 57Hz
Impedance phase min/max (20Hz–20kHz)	-36° @ 91Hz 31° @ 46Hz
Pair matching (200Hz–20kHz)	$\pm 0.4\text{dB}$
LF/HF extension (-6dB ref 200Hz/10kHz)	50Hz / 27.3kHz/27.9kHz
THD 100Hz/1kHz/10kHz (for 90dB SPL/1m)	0.5% / 0.4% / 0.1%
Dimensions (HWD)	1226x357x366mm

LEFT: A single terminal pair connects directly to the crossover housed in the block between cabinet and plinth. Foam bungs are provided to reduce rear port bass output if required

The speaker also seemed to give an unerringly searching definition of the various orchestral timbres without ever becoming clinical, retaining all the beauty and magic of, say, the woodwinds; the percussion were exquisitely conveyed too.

PIANOFORTE IN THE ROOM

After this, I found myself really enjoying the solo piano of Paul Lewis in *Pictures At An Exhibition* [96kHz/24-bit download; Harmonia Mundi]. This is surely a fine example of how to record a piano, as it has both delicacy and weight. The 3.4 LE seemed to respond positively to both aspects, a good example being 'Cum mortuis in lingua morta', where at the start, shimmering tremolandi seem to represent the departed souls hovering over a vaguely menacing bass. After this comes the dramatic conclusion, with those muscular striding octaves in a low register.

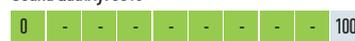
Here, as on other musical examples, the bottom end always seemed very well-behaved and although the bass notes might not seem to project into the room quite as you might expect, they had an even, assured quality.

Overall, the neutrality of the speaker made it possible to turn this track up to a realistic level – to the point where we began to imagine there actually *was* a full-sized grand piano behind the curtains of the Editor's listening room. ☺

HI-FI NEWS VERDICT

Dynaudio's 'Limited Edition' tag isn't to be taken literally, but does denote a significant upgrade to what was already a very competitive product. In its latest guise, this thoroughly-engineered two-way loudspeaker is smooth and seamless from top to bottom, with a combination of sweetness and inviting detail that will just have you happily playing record after record in any chosen music genre. Outstanding!

Sound Quality: 86%



From a headbanger's perspective this speaker might seem polite, as it didn't produce obviously gut-wrenching bass. But in fact the bottom end was reliably accurate and never exaggerated or boomy.

Turning to orchestral music, the 3.4 LE could give a beautifully airy sound and a tremendous sense of space, on good recordings. A case in point was Rachmaninov's *Symphonic Dances* with Eiji Oue and the Minnesota Orchestra [Reference Recordings RR-96]. When the music paused you could count the beats of the hall reverberation coming back.