

Only massive speakers dominate large spaces. An old hi-fi rule. But the Dynaudio Confidence C4 explodes the limits of the traditional. With sophisticated technology it dominates the room acoustics and, in the Signature Edition, is more elegant and audophile than ever before.

By: Malte Ruhnke



There is no doubt about it: Elegant loudspeakers are popular. Even in the top class of high end a slim shape is welcomed by both the lady of the house and the interior designer. But not the box developer. The speaker developer, for acoustical reasons, likes large drivers, wide baffles and a volume of many litres. A conflict that cannot be resolved, at least in the context of coexistence of living and listening. But why do speakers for large rooms have to be so darned big?

An important acoustic reason: the directivity. In the case of large listening distances or poorly damped rooms it plays a special role. Because the listener is about five or six metres away from the speakers, the sound that reaches him directly becomes increasingly lower in level. The sound reflected through the room in turn becomes dominant and dominates the tonality and staging so the impression becomes diffuse, faded, echoey or slow – especially when the box is narrow and offers a broad dispersion pattern. The radical antidote: use horns or large flat-panel transducers. This would not be in the spirit of the philosophy of Dynaudio, which does not want to give up the grace and neutrality of its own dynamic drivers. The Confidence C4 Signature now stands out, even among the high end speakers in its class, with particularly svelte figure: It achieves the desired direction factor above all in the vertical, in that every frequency area,

The Confidence seems to sway, but is in fact stable, thanks to its base construction that also takes up the single wiring terminal.

that is the woofers, midranges and tweeters are reproduced by two drivers instead of one. Interference then leads to a situation where the sound pressure level increases in the direction of the listener, but fades out in the direction of the ceiling and floor. But if a DIY speaker developer thinks he can simply copy the Confidence, he will be disappointed. The acoustic cancellation caused by the two drivers is not frequency neutral, but increases with the frequency, which almost always results in an extremely unbalanced tonality and a diffuseness felt to be ‚phasy‘.

Dynaudio therefore does not provide the driver twins with an identical signal, but fades out the upper one to higher frequencies and controls the phase of both. This creates the desired perfect addition on axis and a cancellation of floor and ceiling reflections that is even, when considered over the whole space. „DDC“ (Dynaudio Directivity Control) is the name given to this unique concept, which makes larger listening distances possible and the use of the speakers in larger spaces without any loss of clarity. The driver technology is, as usual, of the finest quality: The pair of Esotar2 textile

dome tweeters are among the most transparent and, in terms of diaphragm weight, the lightest on the market. You can see the finely woven structure of the 28 mm dome with an additional layer only with a microscope or on the macro-lens.

The transition to the midrange drivers takes place at a gentle slope of six decibels per octave in order to minimize acoustic phase shifts. The two 15 cm drivers also play, thanks to their MSP (magnesium-silicate-polymer) diaphragm, above their optimal range without any noticeable distortion and resonances and can therefore be filtered with such a low filter slope. The diaphragms are shaped from full plates by the application of heat and, by means of special adhesives, fixed to the voice coil former, the centering and beading. The two 20s woofers are made in the same way – but they have greater voice coils, which drive the cones not only in the middle but also evenly over a large area. Thanks to this diameter inlying magnetic systems can be used, which make a more homogeneous magnetic field possible.

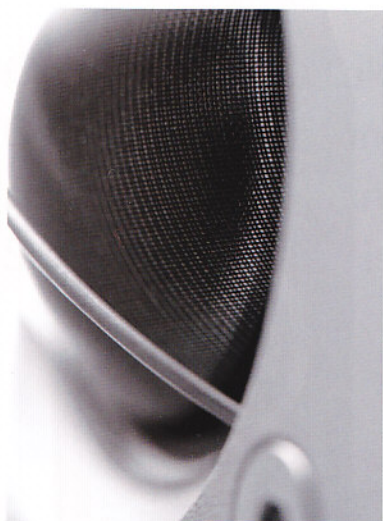
A special feature of the Confidence becomes clear when you go around the box: The 20s woofers are wider than the

”

Wilfried Ehrenholz, CEO Dynaudio Group

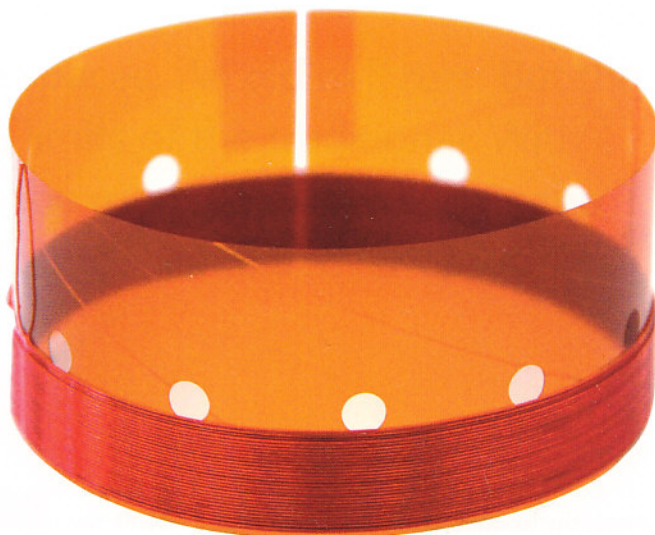
„Music is unbounded. As a musician or a music enthusiast - people all around the world are united by music. This passion also unites Dynaudio as a company.“





Fine silk: The dome of the tweeter is woven from the finest fibres using a special weaving technique - and is therefore feather-light.

A lot of engine capacity: Dynaudio uses very large voice coils in order to drive the diaphragm evenly.



actual loudspeaker housing! This is made possible by a baffle that projects out slightly above the housing and takes up the woofer baskets. From a different viewing angle you can see the bevelled shape to avoid edge reflections. In the workmanship the Signature Edition reveals the complete mastery of the Dynaudio joiners and the advantages of an in-house cabinet finish: This loudspeaker can be described only as perfect, right down to the last detail.

In the listening test it is well known that perfection is a question of taste. The first few sections of the C4 Signature revealed to me a detailed resolution and transparency such as I have seldom heard from a loudspeaker. Dvorák's 'Requiem' (RCO live) was served up to me in information density and precision and was able to capture every dynamic tonality, sound concentration and nuance with breathtaking clarity and neutrality.

However, – there was something missing in the first listening session, which cannot be expressed by means of technical data and only with difficulty in words. A little more comforting warmth in the tonality, a little more distance of the essentially superb projection would have been welcomed. Nevertheless, I had a feeling: The Confidence can do this. Together with my colleague Stefan Schickedanz, who had had come into the listening room to hear the Hegels (p.68),



It's narrow: The 20cm woofers can be accommodated only in 18 cm wide housing, because the baffle itself is somewhat wider. At the back you can see the strong damping inside the cabinet.

Dynaudio Confidence C4 Signature

List price: €19 400

Guarantee period: 10 years

Weight: 55 kg

Size (W x H x D): 25 x 175 x 44.5cm

Surfaces: bordeaux or mocca piano lacquer

Manufacturer and sales:

Dynaudio International GmbH
Ohepark 2
D-21224 Rosengarten
Germany

Telephone: +49 / 4108 / 4180-0

Internet: www.dynaudio.com

I tried out various amps. It was the Hegel power amplifier that enticed out of the Dynaudio still finer and dynamically more nuanced sounds, but did not dissolve the impression of the excessively present and direct tonality. Ultimately the situation was helped by an improved positioning. The DDC technology clearly functions so well that in the relatively dry listening room only with larger listening distances a harmonic spatial sound quality is produced.

We raised the distance first to 3.50 m and then to 4 m, at somewhat larger baseline width. And then, hey presto - everything that high enders calling for warmth and softness might have criticized previously about the C4 was gone! Even the rather leanly recorded 'Unplugged Session' of the 10,000 Maniacs started to develop comforting warmth and a real impulse in lower midrange, which with the magical projection the instruments in the bass regions caused genuine audiophile goosebumps. Stefan Schickedanz then requested a session with the inevitable 'Hotel California'. Thereafter to announce, with some emotion, that

he had never the piece delivered with such fine dynamics, with such neutrality and so harmoniously. I had to agree with him - because I normally leave the room on these occasions. But the way in which the Conference effortlessly brought the guitars and voices into the room, in which I from the furthest of the back seats was able to still enjoy the full musical information density, was quite simply breathtaking. In addition, there was a full, deep but musical and superbly integrated bass, which lost a little of its 'kick' only at extreme levels.

The combination of great theatre and fine tonalities is handled magisterially not only by the C4, but also by my favourite composer: Richard Wagner. His 'Flying Dutchman' sounds as opulent as it does in an open-air theatre and, in the quiet passages, as sensitive and structured. And at the same time so dynamic, gripping and harmonious that I listened to the whole opera from the beginning to the finale. The C4 is an outstanding loudspeaker that can dominate large rooms - if one takes the time and knows how to set it up.



Test-SACD Wagner – Der fliegende Holländer

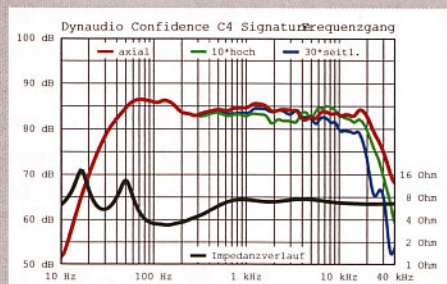
In addition to cultivated singing, the highest choral precision and audiophile recording, Janowski can also make Wagner sound raw and primitively violent. An enthralling and Scandinavian sounding „Dutchman“.



The author Malte Ruhnke

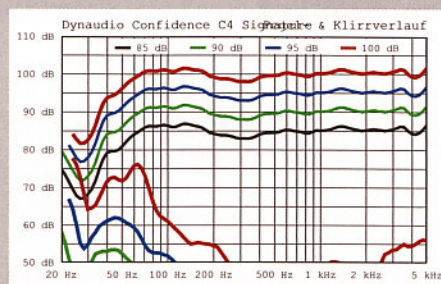
is an avid fleamarket and second-hand shop hunter, who searches purposefully for SACDs, DVDs and Quadrolps, whether classical, rock or jazz. For his browsing he uses online sources such as jpc and Amazon – or new articles that find their way into the editorial office of AUDIO.

Frequency response



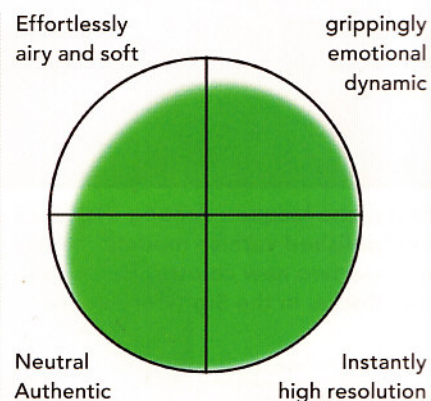
Perfectly neutral with powerful bass. Very deep (to 30 Hz), the slope is quite gentle, which indicates subjectively still greater depth. In the green graph (10° above the axis) you can see the even directivity as a result of the DDC technology.

Distortion



Mids and highs are perfectly clean. The deep bass also remains compression-free with negligible distortion. In a narrow band around 80 Hz the woofers reach their limit with 103dB, which in practical everyday terms means no limit.

AUDIOphile character



AUDIOphile potential



Recommendation

Larger distances (from 3.5 m) are recommended. If this could be realised the C4 has no difficulty in harmonizing completely with most rooms and amplifiers.