

Dynaudio Evoke: product information

Welcome to Dynaudio Evoke. Here you'll find more in-depth information on the range's highlights, plus specs for each product.

What's Evoke?

It's a range of five brand-new home hi-fi speakers that brings true high-end technology and performance to every lifestyle. Evoke gives every hi-fi enthusiast a chance to experience our very latest acoustic and aesthetic achievements as they embark on their high-end hi-fi journey.

What makes it so special?

It's been developed and designed by the same teams behind our most prestigious and most advanced products, including the all-new Contour and Confidence ranges and our professional studio monitors.

Each speaker in the range has been designed from scratch – including drivers – and incorporates technology directly derived from our high-end home and professional products. It's also been analysed extensively in our Jupiter measuring facility – a 13 x 13 x 13m room containing a 7m robot array bristling with high-quality microphones (see more in 'What on earth is Jupiter', below).

We've put what some might say is a disproportionate amount of effort into making Evoke so advanced, especially for its price. But we've hit the Goldilocks zone: the perfect balance of performance and price. Not everyone can afford Confidence or Contour, but we think listeners should still be able to experience much of what those super high-end speakers offer, both in terms of audio performance and in on-board technology and build quality.

The new Cerotar tweeter

The Cerotar is totally new. Its design is based on two other Dynaudio drivers: the Esotar Forty tweeter from the award-winning Special Forty anniversary speaker, and the mighty new Esotar3 tweeter from the all-new, money-no-object Confidence series (unveiled at the Munich High-End show in 2018).

Like all other Dynaudio tweeters, it has a 28mm precision-coated soft-dome diaphragm. The coating – applied in exactly the right places, at the right density – helps the tweeter's frequency response reach north of 20,000Hz without distorting, without delivering unwanted resonances and without experiencing wavering or compression in its transient response. It's a technology proven to work since Dynaudio's inception, and has been continually refined and improved ever since.

Underneath the soft-dome diaphragm sits the Hexis inner dome – something you'll currently only find in the new Confidence's Esotar3 tweeter. The Hexis replaces the felt ring that used to fill the cavity behind the playing surface, and has been engineered to further optimize airflow. It has the effect of further smoothing out the tweeter's frequency response and minimising resonances – so all you get are the desirable ones.

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Behind it all, the new motor system uses new strontium carbonate Ferrite+ ceramic magnets to further increase tweeter sensitivity.

The new Esotec+ woofers

The Evoke's woofers all have diaphragms made from MSP (Magnesium Silicate Polymer), a proprietary material formulated, refined and developed by Dynaudio over the past four decades. MSP provides exactly the right combination of lightness, stiffness and damping for the most faithful sound reproduction.

They have new surrounds to extend their throw, their frequency response and their low-frequency dynamics, all while maintaining the same high level of midrange performance.

The Esotec+ woofers have 0.4mm diaphragms. They're a one-piece design – the central dome isn't just a dust-cap; it's part of the playing surface. Integrated Balance Ribs form the bridge between it and the cone, and connect directly to the glass-fibre voice-coil former. That means the whole unit moves as one, in a predictable (and carefully tuned) way, for a performance that delivers the ideal balance between bass and midrange.

The Evoke family uses a combination of lightweight aluminium (a long-time Dynaudio trademark) and copper voice-coils in its woofers. The material used depends on the driver it's being used in; one material doesn't suit every purpose, so we've made sure we use the correct one for the job in all cases.

Evoke 10, Evoke 20 and Evoke 25C use aluminium. It's lighter, which means we can use more windings for a given total weight. More windings means more control over the cone's movement, which means more control over its performance at high volumes and high frequencies.

Evoke 30 and Evoke 50 use copper for their woofers. It's ideal for them because it gives more moving mass while maintaining the right amount of grip on the midrange for a perfectly integrated performance. In the case of Evoke 50, its woofers are pure bass-drivers; they don't need the fleet-footed agility of a dedicated midrange unit, so we were able to give them more moving mass.

In all cases, including the Evoke 50's midrange driver below, the spider keeping it all stable and true is made from Nomex.

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Evoke 50's new neodymium midrange driver

The only speaker in the range to have a dedicated midrange unit is Evoke 50. So our designers decided to make it a little bit special. The 15cm unit they chose is derived directly from the high-end Contour range – which means a powerful neodymium magnet, a 0.4mm-thin diaphragm and a glass-fibre voice-coil former with a trademark Dynaudio aluminium voice-coil.

Why neodymium and not the Ferrite+ of the woofers? Because it's light, and it's powerful. Why aluminium and not copper? Again, because it's light (and lets us put more windings in the voice-coil for a given weight). That's a combination that gives our team amazing control over how the driver responds – they were able to fine-tune it to integrate perfectly with the woofers and tweeter.

In fact, the Evoke team did such a good job that you really are getting Contour-level performance out of this midrange driver.

Timeless Danish design

Evoke is simple, clean, traditional, modern and luxurious. All at once. Lead designer Louise Dalgaard was adamant that the whole product family – even when used as a full multi-channel system – would be realistic for, and sympathetic with, real homes and real lives.

She and her team drew inspiration from furniture designers, interior-design showcases, showhomes, and even sniffed around real-life dwellings to get the look just right. They took models and prototypes home and sat with them, refined the shape on paper, in clay and in simulations, and did extensive research into materials and finishes that would be simultaneously modern, retro and timeless.

It's the kind of speaker you'll still be looking at in 30 years, and thinking to yourself that it makes the rest of your stuff look a little humdrum by comparison.

Evoke 50 is available in four beautiful finishes. Black High Gloss and White High Gloss both use a new lacquering technique that gives a gloriously deep, glass-like look. At the other end of the tactile spectrum are the lovely open natural veneers of Walnut Wood and Blonde Wood.

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What on earth is Jupiter?

Jupiter is the state-of-the-art measuring facility that sits at the heart of Dynaudio Labs, the sprawling new research-and-development building at our headquarters in Denmark.

It's a colossal $13 \times 13 \times 13$ m impulse-response room, and its sole job is to measure speakers. That robot, and the space it lives in, are just two parts of our endless drive to elevate our research to new levels.

The first thing you do when you go into Jupiter is look up; you can't help yourself. That's because suspended 6.5m above you is a massive moving robot. It can take 31 measurements at a time in a giant 7m arc, creating a spherical sonic model of how a loudspeaker behaves when we put a signal through it. What once could take three days, our robot can now do in 28 minutes. But it isn't necessarily about saving time... in the words of one engineer, "it's not that it goes from six months to one month; it goes from impossible to possible".

We spent a huge amount of time measuring Evoke prototypes in Jupiter – from individual drivers to complete speakers, crossovers and everything in between. Using the robot, the proprietary analysis tools we've created and – of course – the incredible minds that work all over Dynaudio Labs, we've been able to bring true Confidence-level technology to this new product family.

Key specs

| Evoke 10 | |
|-----------------------------|---|
| Sensitivity | 84dB (2.83V/1m) |
| IEC power handling | 180W |
| Impedance | 6Ω |
| Frequency response (± 3 dB) | 47Hz–23kHz |
| Box principle | Bass reflex rear ported |
| Crossover | 2-way |
| Crossover frequency | 1400Hz |
| Crossover topology | 2nd order |
| Woofer | 14cm Esotec+ MSP cone |
| Midrange | - |
| Tweeter | 28mm Cerotar with Hexis |
| Weight | 6.7kg / 14.8lb |
| Size (WHD) | 180 x 315 x 266mm |
| | 7 ¹ / ₁₆ x 12 ³ / ₈ x 10 ¹ / ₂ in |
| Size with feet/grille (WHD) | 180 x 315 x 277mm |
| | 7 ¹ / ₁₆ x 12 ³ / ₈ x 10 ¹⁵ / ₁₆ in |

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Evoke 20

Sensitivity IEC power handling Impedance Frequency response (± 3 dB) Box principle Crossover Crossover frequency Crossover topology Woofer Midrange Tweeter Weight Size (WHD) 86dB (2.83V/1m) 180W 6Ω 40Hz–23kHz Bass reflex rear ported 2-way 3200Hz 2nd order 18cm Esotec+ MSP cone -28mm Cerotar with Hexis 9.9kg / 21.8lb 215 x 380 x 307mm 8 $7/_{16}$ x 14 $^{15}/_{16}$ x 12 $^{1}/_{16}$ in 215 x 380 x 317mm 8 $7/_{16}$ x 14 $^{15}/_{16}$ x 12 $^{1}/_{16}$ in

Size with feet/grille (WHD)

Evoke 30

Sensitivity IEC power handling Impedance Frequency response (± 3 dB) Box principle Crossover Crossover frequency Crossover topology Woofer Midrange Tweeter Weight Size (WHD)

Size with feet/grille (WHD)

88dB (2.83V/1m) 200W 4 Ω 40Hz–23kHz Bass reflex rear ported 2.5-way 1200/2300Hz 2nd order 2x 14cm Esotec+ MSP cone -28mm Cerotar with Hexis 15.5kg / 34.2lb 180 x 900 x 267mm 7 $1/_{16}$ x 35 $7/_{16}$ x 10 $1/_{2}$ in 268 x 920 x 342mm 10 $9/_{16}$ x 36 $1/_{4}$ x 13 $7/_{16}$ in

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Evoke 50

Sensitivity IEC power handling Impedance Frequency response (± 3 dB) Box principle Crossover Crossover frequency Crossover topology Woofer Midrange Tweeter Weight Size (WHD) 87dB (2.83V/1m) 260W 4Ω (3Ω minimum @100Hz) 35Hz-23kHz Bass reflex rear ported 3-way 430/3500Hz 3rd/2nd order 2x 18cm Esotec+ MSP cone 15cm Esotec+ MSP 28mm Cerotar with Hexis 26.9kg / 59.3lb 215 x 1140 x 307mm 8 7/16 x 44 7/8 x 12 1/16in 305 x 1162 x 373mm 12 x 45 3/4 x 14 11/16in

Size with feet/grille (WHD)

Evoke 25C

| EVORE 200 | |
|-----------------------------|---|
| Sensitivity | 88dB (2.83V/1m) |
| IEC power handling | 200W |
| Impedance | 4Ω |
| Frequency response (± 3 dB) | 50Hz–23kHz |
| Box principle | Bass reflex rear ported |
| Crossover | 2.5-way |
| Crossover frequency | 1200/2300Hz |
| Crossover topology | 2nd order |
| Woofer | 2x 14cm Esotec+ MSP cone |
| Midrange | - |
| Tweeter | 28mm Cerotar with Hexis |
| Weight | 11.8kg / 26.0lb |
| Size (WHD) | 600 x 180 x 267mm |
| | 23 ⁵ / ₈ x 7 ¹ / ₁₆ x 10 ¹ / ₂ in |
| Size with feet/grille (WHD) | 600 x 180 x 277mm |
| | 23 ⁵ / ₈ x 7 ¹ / ₁₆ x 10 ¹⁵ / ₁₆ in |
| | |

You can find high-res images of Evoke at <u>http://mediakit.dynaudio.com</u>, and see the entire range at www.dynaudio.com/home-audio/evoke

About Dynaudio

Dynaudio was founded in 1977 in Skanderborg, Denmark. Today, it's recognised as a leading manufacturer of high-quality audio systems, and one of the world's most distinguished high-end audio companies. Dynaudio designs, engineers and manufactures dedicated systems for professional studios, as well as car audio and home hi-fi and consumer loudspeaker products, from its state-of-the-art facility in Denmark. The company is particularly recognised for its advanced driver technology designed, engineered, and continuously developed in-house, not to mention its furniture-grade, handcrafted Danish cabinetry.

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