

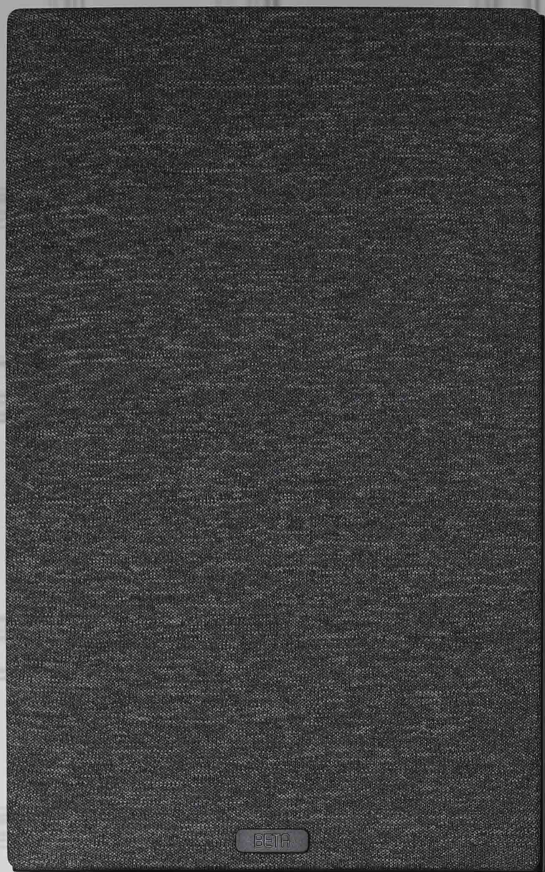
BETA

Simply Listen

STARKE
S O U N D







Beta7

Celebrating 15 years of Starke Sound, the Beta7 is one of our most ambitious and high-value loudspeakers yet. Forged from decades of uncompromising driver design and cabinet engineering expertise, this is the embodiment of our relentless pursuit of perfection.

Featuring a classic 2-way topology, the Beta7 was engineered with a singular focus - to deliver the pinnacle of high-fidelity musical reproduction, preserving every nuance and dynamic detail. No expense was spared in crafting this high-value masterpiece, from the bespoke high-excursion transducers to the robust crossover network capable of handling the most demanding audio signals.

Our goal was simple yet lofty - to create a loudspeaker that offers the "pure listening enjoyment" that only the most passionate music lovers can truly appreciate. The Beta7 is the physical manifestation of this vision, a triumph of audio engineering that will transport you to the very heart of the musical experience.

Precision 2-Way Design for Phase-Coherent Naturalism

The classic 2-way crossover design features a single crossover point. By precisely tuning the phase and frequency at this critical crossover point, we ensure exceptional phase coherence and frequency response across the entire spectrum.

The result is an accurate, natural and warm sound signature.

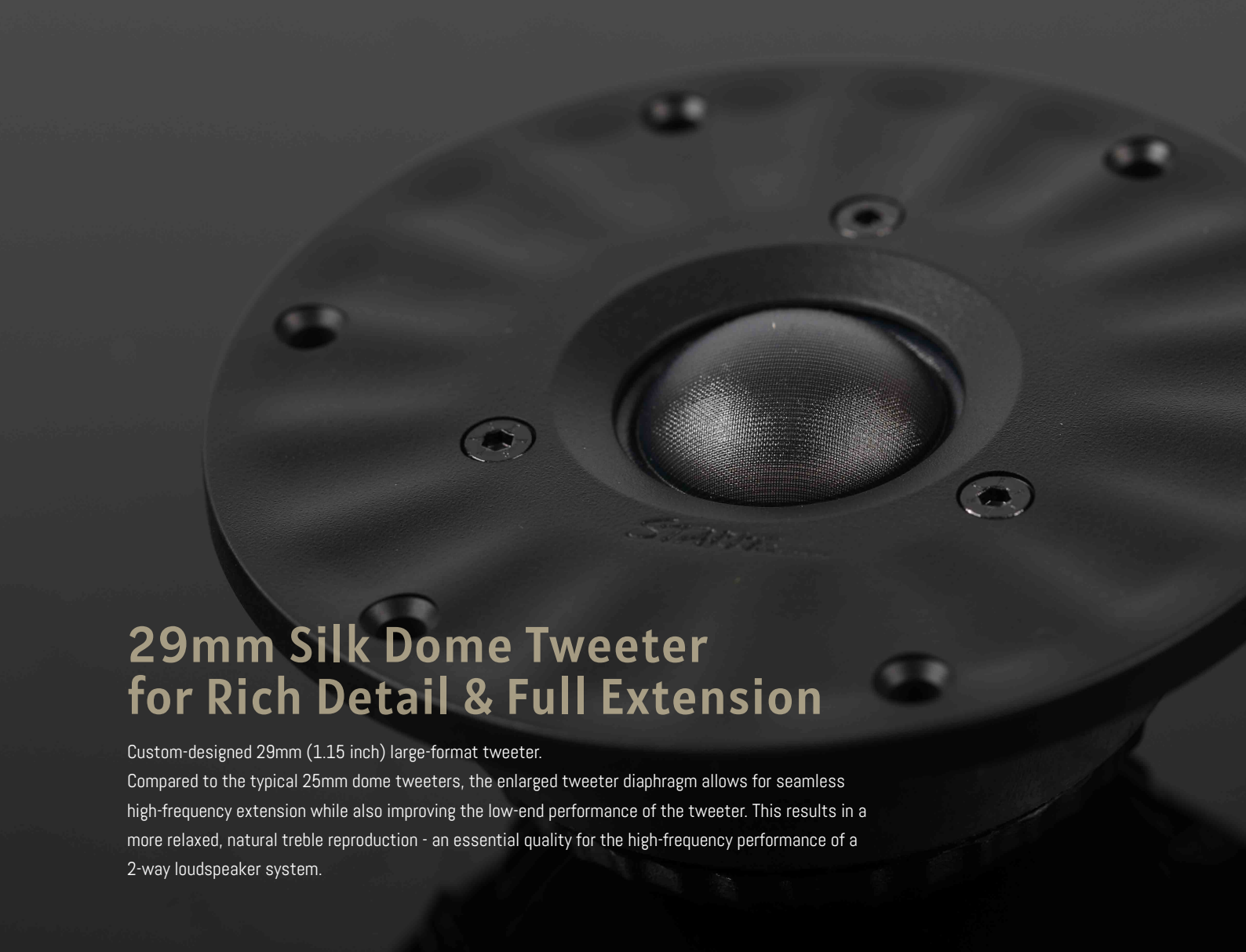




110dB Dynamic Range Versatile for Music & Film

A) Dynamic range is a fundamental parameter in evaluating loudspeaker performance. Loudspeakers with a large dynamic range can be used in larger spaces and ensure the perfect expression of the creator's intent when playing back music and movies with wide dynamic variations. This allows the creator's high-investment content to be reproduced more faithfully in your listening environment.

B) In the context of large dynamics, low distortion is the true high fidelity. Just as a sports car's real performance is proven on the track, a loudspeaker's low distortion during extreme dynamics reveals its true high fidelity.



29mm Silk Dome Tweeter for Rich Detail & Full Extension

Custom-designed 29mm (1.15 inch) large-format tweeter.

Compared to the typical 25mm dome tweeters, the enlarged tweeter diaphragm allows for seamless high-frequency extension while also improving the low-end performance of the tweeter. This results in a more relaxed, natural treble reproduction - an essential quality for the high-frequency performance of a 2-way loudspeaker system.



The enlarged rear chamber design of the tweeter reduces rear-facing reflections, which in turn lowers distortion. This also further enhances the smoothness of the low-end extension in the frequency response.



The efficient magnetic circuit design ensures high sensitivity and high power handling capacity of the driver unit. This is the key to Beta's ability to ultimately deliver 110dB sound pressure level.



Advanced Bass Driver Exceptional Bass Refined Midrange

The custom-designed 7-inch driver unit ensures a seamless transition to the treble while also achieving the best bass performance. The 7-inch size is the "sweet spot" we have calculated - it can perfectly blend with the high frequencies, while also extending the low-end response down to 39Hz. For a bookshelf speaker, this qualifies as **"ultra-low bass extension"**.

Innovative Multilayered Diaphragm

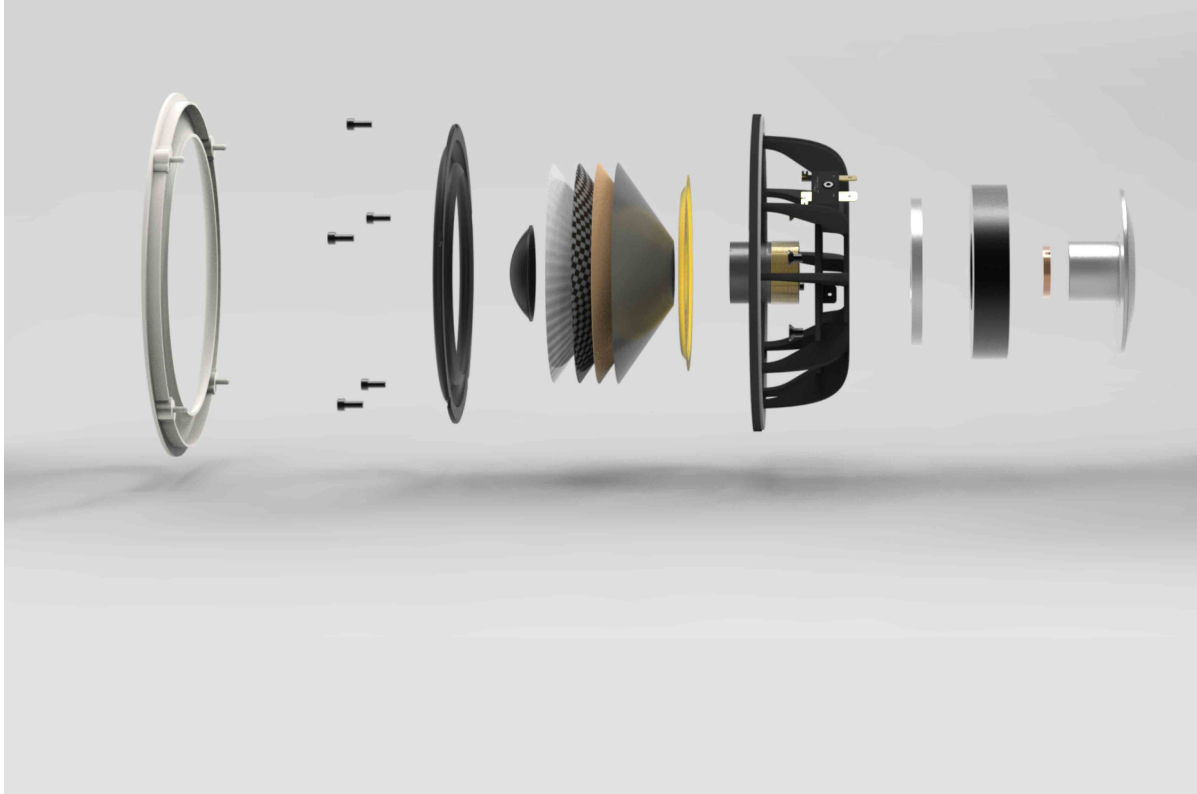
The innermost Layer 1 is made of ultra-fine 0.5K glass fiber woven from Japan, providing excellent surface damping properties.

The Layer 2 middle layer is a 1mm-thick PMI high polymer foam material from Germany, which serves as the optimal damping layer.

The Layer 3 surface layer is a super-thin 3K woven carbon fiber from Japan, providing the primary rigid support to ensure the diaphragm's perfect piston-like motion.

The outermost Layer 4 is a super-thin matte resin coating from the US, further enhancing the diaphragm's rigidity.

Overall, this diaphragm assembly exhibits exceptionally high rigidity and superior damping characteristics. The sound is transparent, rich in detail, yet warm and fatigue-free. Even under high dynamic conditions, distortion remains remarkably low.

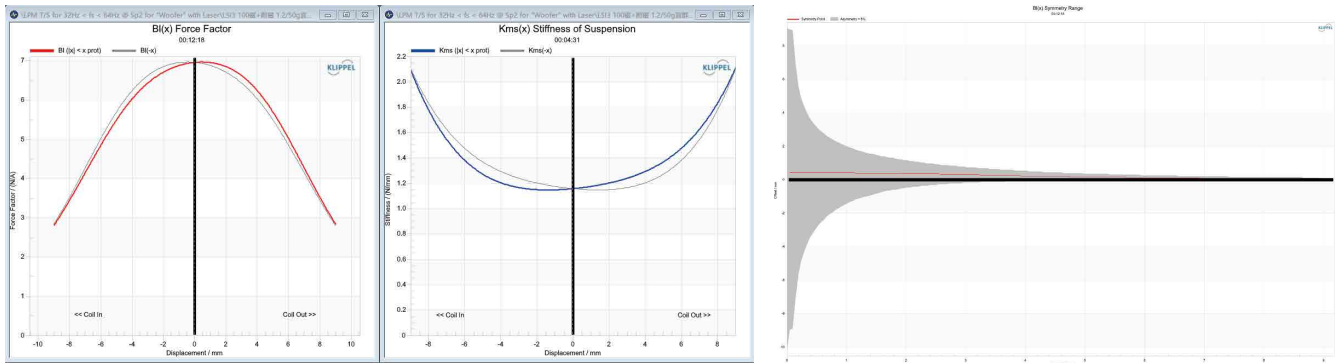




Technical Details

Symmetrical Magnetic Construction with HEMF Technology

The transducer features SMC technology (Symmetric Magnetic Construction), designed through FEA simulation and incorporating HEMF[®] technology. This is combined with a custom-designed CCAW voice coil and specialized suspension, resulting in a fully symmetrical magnetic system.



The symmetrical magnetic circuit ensures that the same input signal will consistently produce an identical sound output from the transducer, regardless of the circumstances. Compared to a conventional magnetic circuit, this design significantly reduces distortion, resulting in more accurate sound reproduction and a vastly expanded soundstage.

First-Order Crossover, The Maestro of Beta Acoustic System

To achieve the highest possible phase accuracy, we have adopted a 1st-order crossover design. The key attribute of a 1st-order crossover is its gradual 6dB/octave slope, which ensures superior phase coherence. However, this comes with extremely high demands on the tweeter, woofer, and crossover components themselves. Undaunted by the challenge, we have spared no effort to deliver the best possible sound performance.

The Beta crossover utilizes silver plated copper terminals and MPT polypropylene capacitors, which demonstrate over 10 times the signal transmission efficiency of standard MET polyester film caps, greatly enhancing the transient response.

We have also employed 6N purity Litz wire, wound into compact 10mm air-core inductors. This design minimizes skin effect, allowing the signal current to flow evenly through the conductor while maintaining an exceptionally low DCR (DC resistance). Even the tiniest audio signals can pass through unimpeded.

Lastly, we've selected high-precision, non-inductive carbon film resistors, providing an accurate yet warm sonic signature.



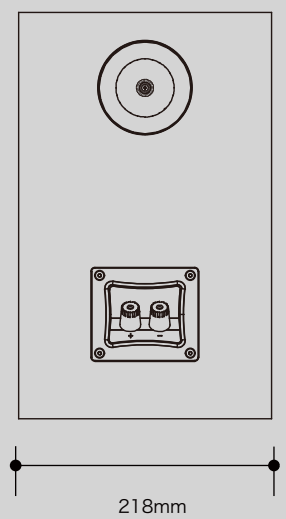
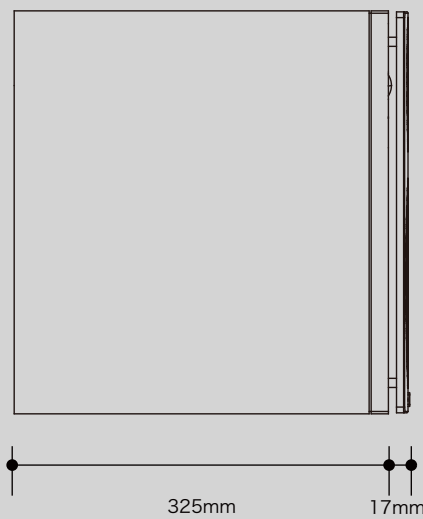
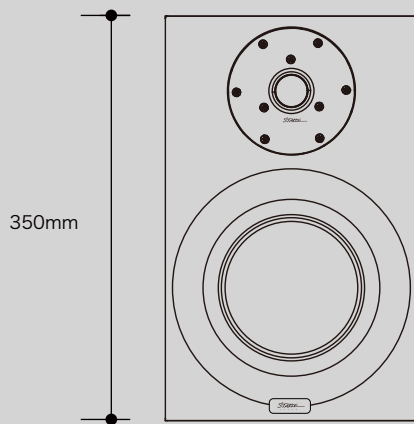
HEMF (Hybrid Effective Magnet Field)

For audio transducers, sensitivity, distortion, and dynamic range are interdependent parameters. Improving one inevitably requires compromising one or both of the others. After 5 years of dedicated research, the STARKE engineering team has developed a solution - HEMF

We have combined ferrite and neodymium magnets in a specialized structure to create a powerful yet uniform magnetic field. Concurrently, we have innovated the voice coil design, using a unique copper-clad aluminum wire (CCA) structure and implementing special grooves on the coil surface...

This highly sensitive HEMF-based voice coil is both lightweight and perfectly matched to the specialized composite magnetic circuit. We call this unique magnetic structure coupled with the specialized coil design the "Hybrid Efficient Magnetic Field (HEMF) system."

HEMF is a remarkable technology. It can significantly boost sensitivity and dynamic range of audio transducers without any increase in distortion...





Technical Specifications

Max SPL output (1m)	110dB
Frequency response (-3dB)	39Hz - 23 kHz
Recommended amplifier power	40 - 200w
Nominal impedance	4 ohms
Sensitivity (2.83v at 1m)	87dB
Drivers	1.15 inch 7 inch
Tweeter	1.15 inch silk dome tweeter
Bass driver	7 inch Carbon fiber Sandwich Drivers with HEMF technology
Cabinet Structure	Ported Box
Input terminals	Binding posts
Crossover	2 Way
Crossover points	1850
Grille	Cloth mesh over ABS frame
Finish	Varnish and Veneer
Color options	Oak Ebony Black / Euro Oak White / Aoki Flaxen Grey
Full size	H 13.8 x W 8.6 x D 13.5 inches H 350 x W 218 x D 342 mm
Weight	18.3lbs (8.3kg) / each
Shipping size	L 24.2×W 17.8×H 18.4inches / 2 units each Box L 614×W 453×H 467mm/ 2 units each Box
Shipping weight	44.1lbs (20kg) / 2 units each box
Warranty	8 years (from original purchase date)





Crafting Resonant Moments

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