



RADIANT ACOUSTICS

CLARITY | DEEP DIVE

EVERY MUSIC LOVER DESERVES TRULY GREAT HIGH-END HI-FI

Throughout my nearly 50 years in the audio industry, my goal has always been to redefine what great sound can be. Radiant Acoustics marks the latest chapter in this journey, and I'm thrilled to share it with you!

Born from the collaboration of several talented minds in my organization, Radiant Acoustics delivers outstanding sound quality at an incredible value. Our Clarity-series, designed for discerning music lovers, offer a faithful reproduction of live music with truly outstanding dynamics—all in a compact, elegant design.

Peter Lyngdorf
Founder, HiFi Klubben & DALI
Co-Founder, PURIFI



THIS IS RADIANT ACOUSTICS

Radiant Acoustics is not just another speaker brand; it's a game-changer in the audio industry. Born from the collaboration of three esteemed Peter Lyngdorf companies, Nordic Hi-Fi, PURIFI and HiFi Klubben, Radiant Acoustics aims to redefine the hi-fi experience and set new standards for premium audio products. The mission is to provide high-end audio products at affordable prices, bringing exceptional sound quality within reach of discerning listeners and enabling audio enthusiasts everywhere to experience music in its purest form.





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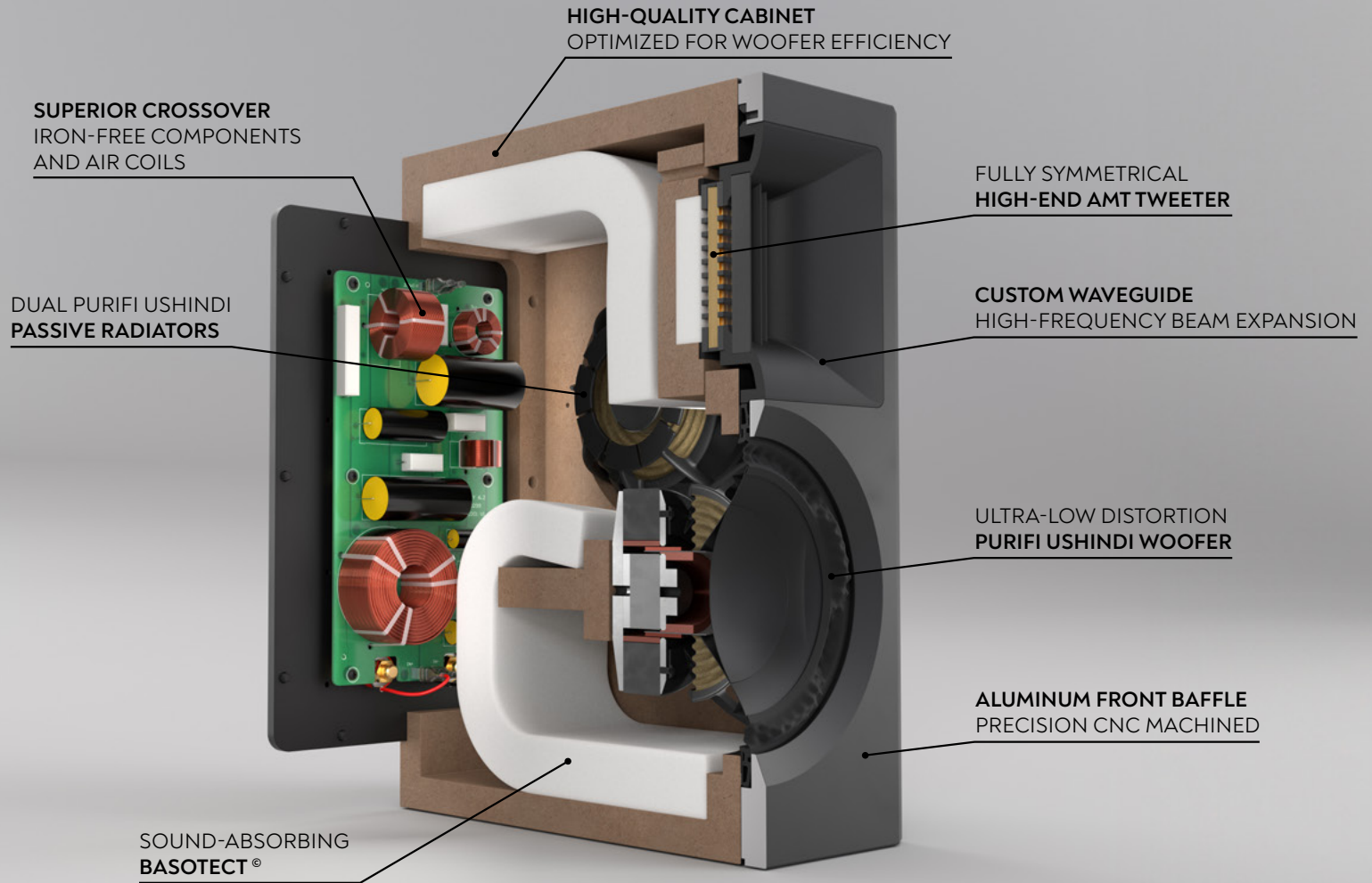
CLARITY 6.2

CUTTING-EDGE INNOVATION

Imagine a speaker delivering deep, well-defined bass alongside clear mid and high frequencies with no audible distortion. A speaker system with sound that defies conventional limitations, offering the full dynamic range of live music while preserving the purity and authenticity of the original recording – all in a two-way system!

This is the essence of the Clarity 6.2. With a level of refinement and authority rarely found in its class, Clarity 6.2 earns its place among true high-end loudspeakers. Its seamless, expansive soundstage fills the room with striking detail and realism, delivering a musical experience that is both focused and emotionally engaging.

This level of performance is made possible by the use of cutting-edge technology and meticulous, uncompromising design, incorporating groundbreaking innovations that set Clarity 6.2 apart from any other speakers in their class.





RADIANT ACOUSTICS

CLARITY 4.2 REWRITING THE RULES

Sharing much of the advanced technology found in the 6.2 model, the Clarity 4.2 speakers are engineered to deliver an astonishingly low level of distortion, setting a new benchmark for precision and fidelity in their class. The clarity and power delivered by a speaker this compact is nothing short of extraordinary. It's a performance you simply have to hear to believe.

Despite its ultra-compact size, Clarity 4.2 delivers an expansive, full-bodied, and deeply immersive presentation. The ultra-low distortion design ensures that what you hear is nothing but the music itself—pure and uncorrupted. Clarity 4.2 isn't just a compact speaker. It's a bold redefinition of what high-end hi-fi can be. While its sensitivity may be modest on paper, the Clarity 4.2 delivers ample output for rich, room-filling sound—as long as you give it the power it deserves.



PURIFI NEUTRALSURROUND

ULTRA-LOW DISTORTION PURIFI USHINDI WOOFERS

At the core of the Clarity speakers lies cutting-edge woofer technology from PURIFI Audio. Radiant Acoustics exclusively uses PURIFI's top-of-the-line USHINDI woofers, which deliver unprecedented performance levels for compact driver units.

USHINDI woofers are engineered to minimize distortion and maximize efficiency, allowing these compact long-stroke woofers to rival much larger woofers with shorter strokes in pure output. Typically, a long-stroke woofer would compromise the midrange in a compact speaker due to the excessive movement of the driver, but PURIFI's advanced technology has created a woofer with both an exceptionally long stroke and extremely low distortion. As a result, the USHINDI woofers offer remarkable frequency extension with no audible distortion and deliver deep bass while maintaining clarity and precision in the midrange.

USHINDI woofers feature several patented solutions to eliminate distortion, including the PURIFI PureDrive ultra-linear motor system, cone geometry optimized through mathematical refinement, and the acclaimed PURIFI NeutralSurround.

CLARITY 6.2 USES **PTT6.5X04-NLA-10** WOOFER.

CLARITY 4.2 USES **PTT4.0X04-NLC-02** WOOFER.

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I think it's a dream come true to have a project like Radiant Acoustics that offers such exceptional performance at an affordable price. Radiant Acoustics insisted on no compromises, which is why they're using the full-blown USHINDI woofers with all the bells and whistles—and they've managed to do that in an affordable product. Personally, it's a joy to see more people have access to the full package of everything we've worked on at PURIFI over the last 10 years.

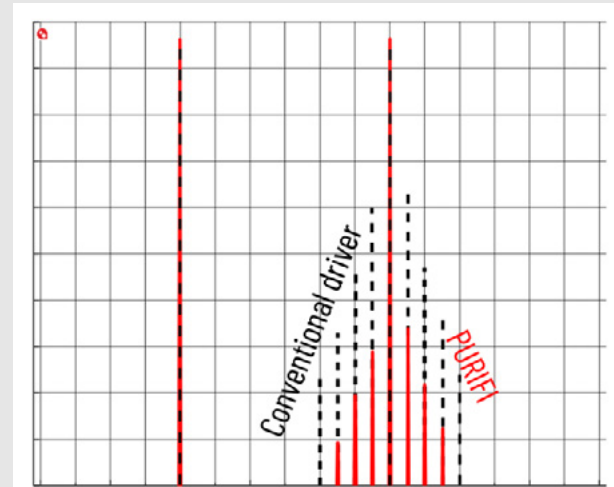
Lars Risbo

Co-Founder & CTO, PURIFI

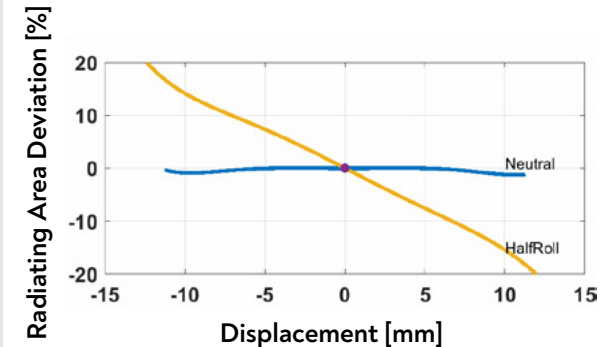
KEY FEATURES

PURIFI USHINDI

1. **Ultra-Low Harmonic Distortion (HD):** USHINDI woofers minimize HD to levels comparable with top amplifiers, ensuring minimal audible coloration and a more accurate sound.
2. **Ultra-Low Intermodulation Distortion (IMD):** USHINDI woofers dramatically reduce intermodulation distortion (IMD), which occurs when different frequencies, such as a female voice and a bass guitar, are played simultaneously. This distortion, which can blur the clarity of music by allowing low-frequency tones to interfere with mid and high-frequency sounds, is reduced by over ten times compared to other high-end drivers, thanks to PURIFI's advanced technologies.
3. **NeutralSurround:** A standout feature is the "NeutralSurround" edge suspension. With its mountain-like design, it can maintain a consistent diaphragm area even during large fluctuations. Unlike standard suspensions that often cause sound distortion, especially IMD when frequencies overlap, this mirror-symmetrical design ensures almost no deviation in the radiating area, maintaining superior sound quality even in the most complex tracks.



2. Ultra Low Intermodulation Distortion (IMD)

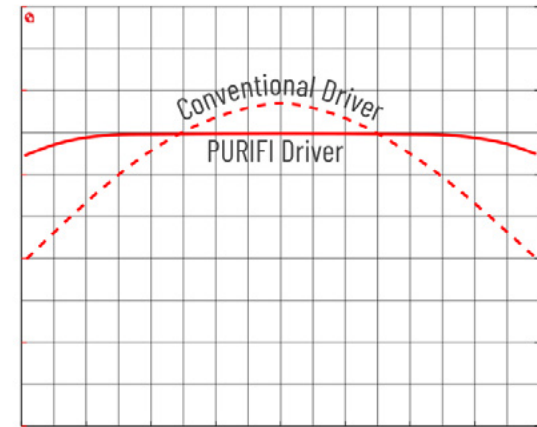


3. NeutralSurround

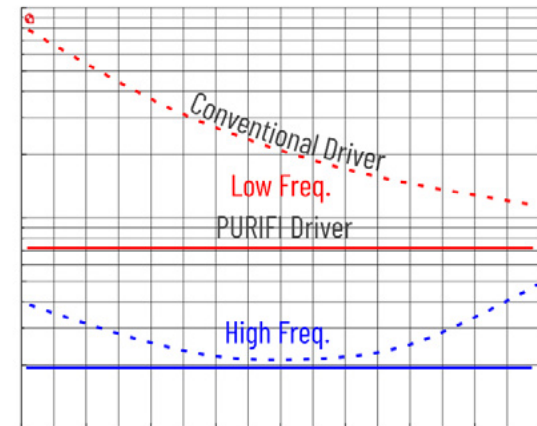
KEY FEATURES

PURIFI USHINDI

4. **Constant Force Factor Across Voice Coil Position ($Bl(x)$):** USHINDI woofers maintain a nearly constant Bl across the voice coil's range, reducing amplitude modulation and distortion, ensuring clear midrange performance even at high sound pressure levels.
5. **Constant Inductance Across Voice Coil Position ($L_{gen}(x)$):** USHINDI woofers minimize distortion through an advanced motor design that maintains consistent inductance, resulting in lower intermodulation distortion and more accurate audio output, ensuring exceptionally pure sound reproduction.
6. **Ultra-Low Current Distortion:** USHINDI woofers minimize magnetic hysteresis distortion, reducing unpleasant artifacts in higher frequencies for an exceptionally clean, grain-free audio experience with a deep, black background in the music.
7. **Smooth Frequency Response with Excellent Dispersion:** The optimized cone geometry and proprietary materials, such as PURIFI NeutralSurround and ConeRing, provide USHINDI woofers with a smooth frequency response and controlled dispersion, minimizing break-up modes, ensuring natural high-frequency roll-off, and enhancing integration within crossover networks for a more immersive listening experience.



4. Constant Force Factor Across Voice Coil Position



5. Constant Inductance Across Voice Coil Position

FULLY SYMMETRICAL HIGH-END AMT TWEETER

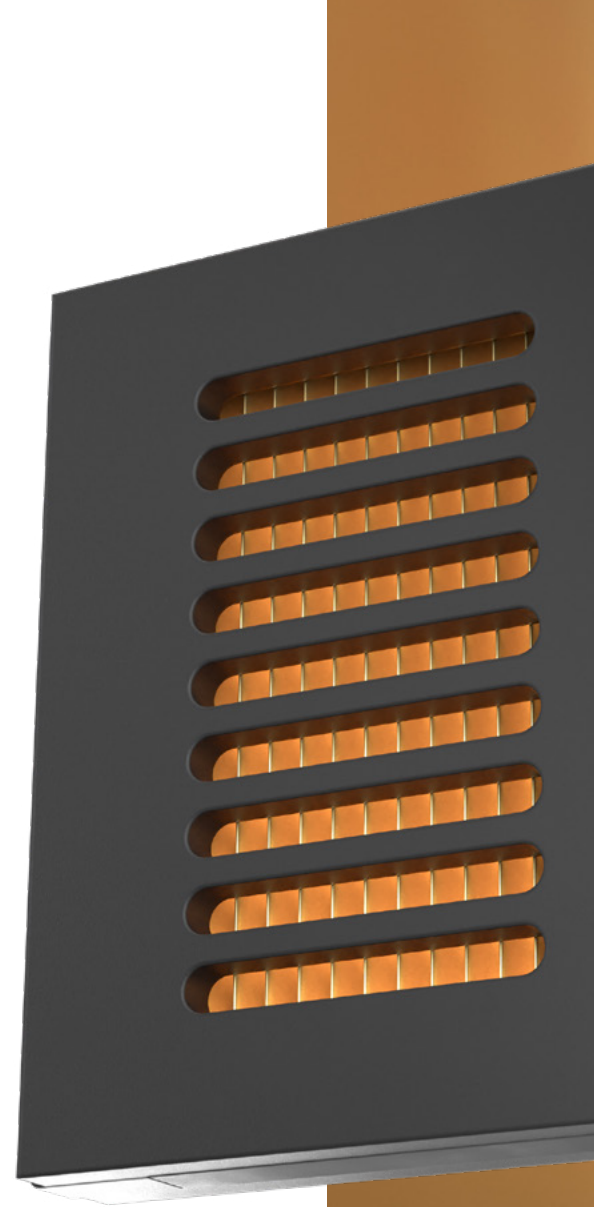
The Clarity speakers features a custom-designed, top-of-the-line AMT (Air Motion Transformer) tweeter with an ultra-thin folded diaphragm and a large surface area, which delivers powerful and precise high-frequency reproduction. The super-sized AMT tweeter, meticulously crafted for Radiant Acoustics by sister company DALI, boasts very high efficiency—up to four times greater than a typical dome tweeter, and way higher than other, smaller AMT-tweeters. This high output capacity significantly reduces the risk of overload and current compression, minimizing distortion.

A key feature of this AMT tweeter is its symmetrical dual-magnet configuration, providing a stronger and more stable magnetic field compared to the more common single-magnet design used in other AMT tweeters. This dual-magnet system ensures greater control over the diaphragm's move-

ment, leading to even lower distortion and improved clarity in high-frequency reproduction. The increased magnetic force also contributes to the tweeter's exceptional efficiency and power-handling capabilities.

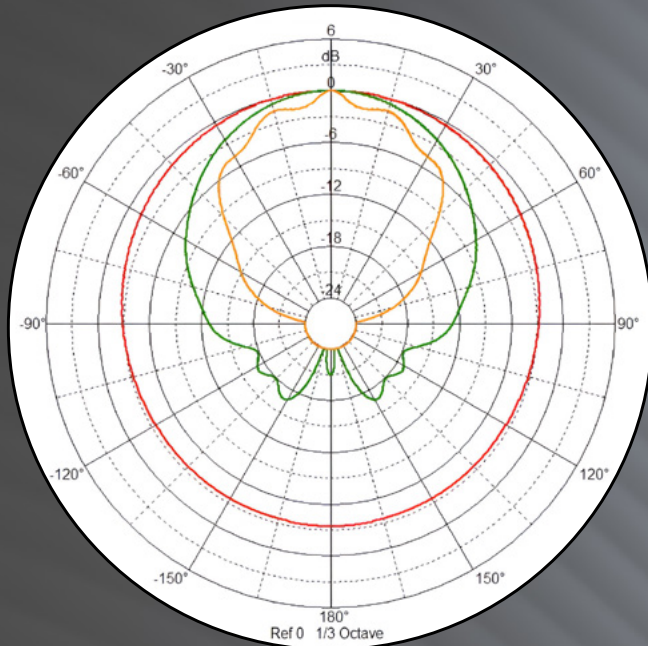
Compared to a standard dome tweeter, the Claritys AMT's exceptionally large diaphragm and absence of typical diaphragm break-up provide excellent linearity across all frequencies, once again resulting in incredibly low distortion. Its outstanding power handling also ensures there is no thermal compression.

Overall, the different technologies in the tweeter come together to deliver extremely low distortion and crystal-clear, yet powerful and dynamic sound, making it the perfect match with the PURIFI woofers, allowing the Clarity speakers to fully harness the potential of the USHINDI technology.





ONLY IN CLARITY 6.2



2D DIRECTIVITY ANALYSIS

360° horizontal radiation, measured at three frequencies

(200 Hz / 2000 Hz / 20 kHz)

Dispersion decreases steadily and consistently as the frequency increases.

At 20 kHz, the SPL remains within 6 dB of the on-axis level until nearly 40° off-axis.



CUSTOM HIGH-FREQUENCY BEAM EXPANSION WAVEGUIDE

Developed by PURIFI for Radiant Acoustics and featured in the Clarity 6.2, the custom waveguide with five aluminum “fins” (or coherers) is more than a design feature—it addresses a key challenge in integrating an AMT tweeter with a 6.5” PURIFI woofer. Typically, pairing an AMT tweeter with a mid/woofer requires the woofer to operate at higher frequencies to match the AMT at the crossover point. This can cause the woofer to become very directional, or “beamy”, at higher frequencies, while the AMT has a much wider dispersion, leading to a discontinuity in the sound.

The waveguide narrows the AMT’s directivity to align with the woofer at the crossover region, creating a seamless and smooth transition between the two. This alignment ensures an accurate and cohesive soundstage. Additionally, the shape of the waveguide restricts vertical dispersion, minimizing unwanted reflections from the ceiling and floor. To achieve the most precise, even, and natural sound distribution, PURIFI fine-tuned the waveguide’s geometry through extensive simulations, resulting in the distinctive and effective design used in the Clarity 6.2.

What sets this waveguide apart is its dual function: while the shape of the waveguide itself narrows the tweeter’s directivity to perfectly match the woofer around 2400 Hz, the aforementioned fins also help broaden the AMT’s dispersion at higher frequencies. This dual design allows the listener to enjoy intricate details even when not situated in the classic “sweet spot”.

In short: this custom waveguide not only enhances the transition between the AMT and the woofer but also ensures a consistent and engaging listening experience across the entire room in the higher frequencies. This is why it is referred to as a dual-purpose waveguide, and it represents a truly unique and innovative design made especially for the Clarity 6.2 speakers.

In developing the Clarity 4.2, we made a conscious decision not to include the custom waveguide with aluminum fins. The main reason lies in the physical constraints of the compact 4.2 cabinet. The waveguide and its five aluminum “fins,” or coherers, require significant space to function effectively. Incorporating it would have necessitated a much larger enclosure, undermining the 4.2’s core purpose as a compact, space-efficient speaker.

But most importantly, the Clarity 4.2 uses a 4” PURIFI woofer, which behaves quite differently in the crossover region compared to its larger sibling. This smaller woofer naturally exhibits wider dispersion at higher frequencies, which aligns more closely with the AMT tweeter’s characteristics. As a result, the need for directivity control via a waveguide is greatly reduced. While the absence of the waveguide is a small compromise in terms of advanced dispersion control, it does not significantly impact the speaker’s overall performance thanks to the inherent compatibility between the woofer and tweeter.



DUAL PURIFI USHINDI PASSIVE RADIATORS

To further enhance performance, the Clarity-series utilizes passive PURIFI USHINDI radiators instead of conventional bass reflex ports. These radiators essentially function as motorless woofers, dramatically improving the bass extension of the speakers. The two 6.5" radiators in the 6.2 model and the two 4" radiators in the 4.2 feature large surface areas, enabling slower movement ensuring deep bass with incredibly low distortion. This design achieves deep bass in a compact cabinet, something a ported design would require a larger cabinet to accomplish. The smaller cabinet also reduces internal standing waves, improving sound quality, while passive radiators eliminate port noise, resulting in cleaner bass that doesn't compromise mid-range clarity.

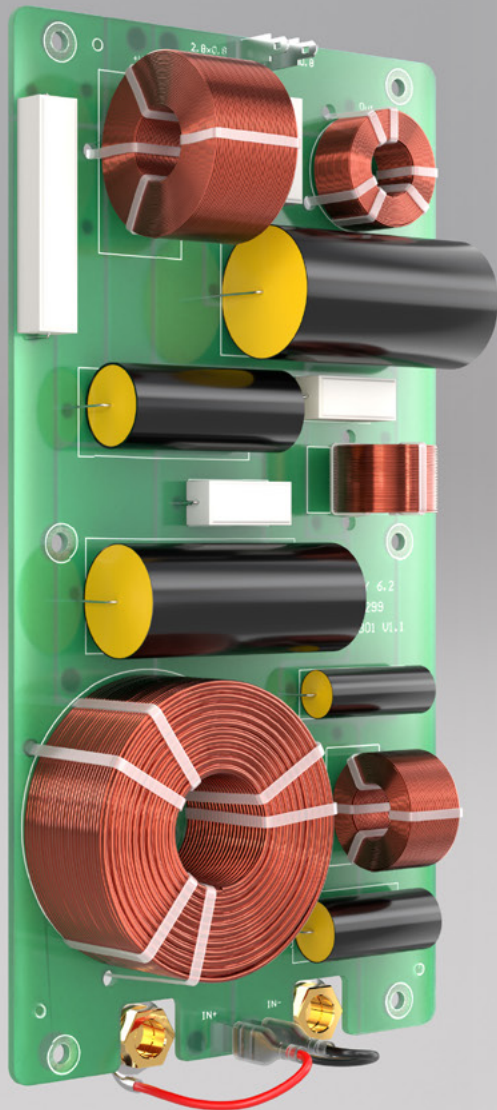
While the PURIFI passive radiators are much more expensive than conventional options, matching the passive radiators exactly to the active woofer is key to achieving the low distortion and exceptional sound quality that the Clarity speakers was designed to deliver.

The passive radiators are positioned back-to-back in a Dual Balanced Push-Pull configuration, with both units aligned along the same horizontal center axis, perpendicular to the active loudspeaker drivers' axis. This arrangement ensures that the mechanical forces exerted by the passive units on the enclosure balance out to zero, even during extreme displacement. As a result, any intermodulation distortion of the direct sound from the units or front baffle is eliminated. Additionally, this configuration prevents the loudspeaker system from becoming 'self-driving,' which could otherwise occur due to the powerful impact of the passive radiators.

The passive radiators used in the Clarity 4.2 have been specially tweaked exclusively for Radiant Acoustics by PURIFI. Additional weight has been added to them, lowering the resonant frequency and allowing the Clarity 4.2 to deliver deeper, more controlled bass than what's typically possible in a speaker of this size.

CLARITY 6.2 USES **PTT6.5PR-NL2-02** RADIATORS.

CLARITY 4.2 USES **PTT40PR-NL2-03** RADIATORS.



SUPERIOR DISTORTION-FREE CROSSOVER

The crossover in Clarity is engineered to deliver pristine sound quality by thoroughly minimizing distortion. Using top-tier drivers required significantly reducing iron distortion by minimizing the use of iron in all components, including the terminals. Air coils are employed throughout to ensure linearity, with thick coil wires minimizing DC resistance and optimizing sensitivity and unit attenuation.

Capacitors have been chosen based on rigorous objective measurements, aiming for a high self-resonance frequency and low internal resistance. This approach minimizes loss and distortion while ensuring high power handling. Similarly, resistors are designed to maintain linearity with low self-induction and high-power capability, all while minimizing the use of iron parts.

AS **SIMPLE** AS POSSIBLE,
AS **COMPLEX** AS NEEDED.

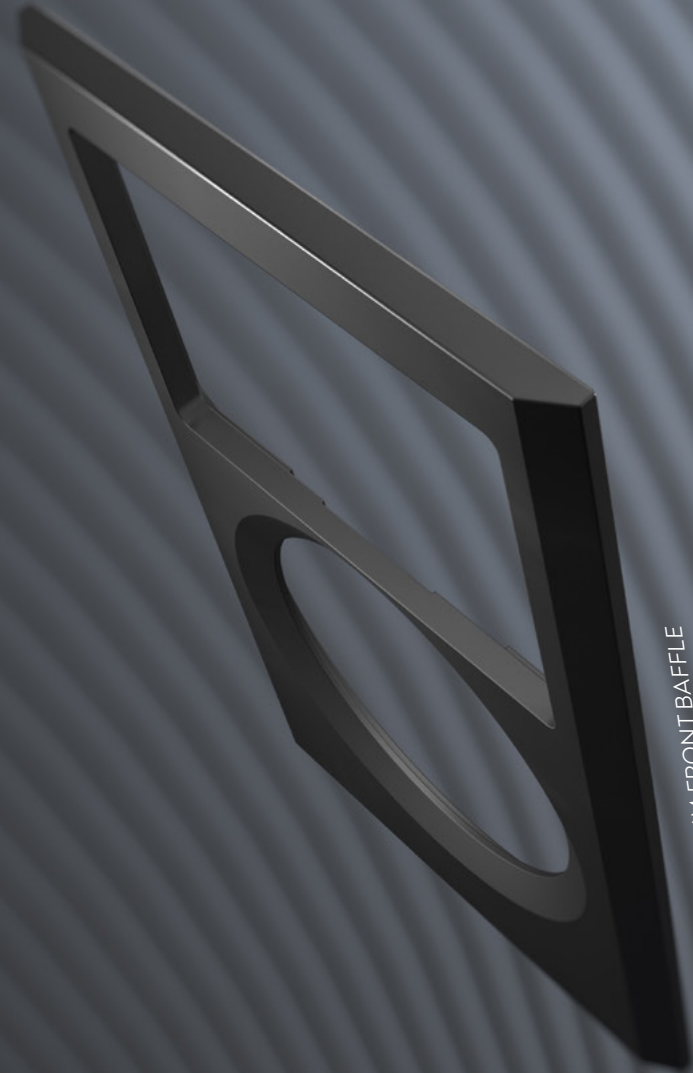
In designing the crossover, the focus was on achieving perfect synergy between the woofer, tweeter, and passive radiators, while ensuring controlled and consistent horizontal directivity across the entire frequency range. This enhances the interaction with the listening room, enlarging the classic sweet spot and making sound reproduction less dependent on the listener's position.

All of the high-quality materials used in the crossover were meticulously evaluated and selected using objective measurements as well as subjective listening tests, ensuring that each component provides genuine value without relying on expensive brand names that can inflate costs. The crossover design follows the principle of “as simple as possible, as complex as needed,” allowing for maximized value while maintaining exceptional performance.

ALUMINUM FRONT BAFFLE PRECISION CNC MACHINED

The front baffle in the Clarity-series is crafted from a single, thick piece of aluminum—15 mm for the Clarity 6.2 and 12 mm for the Clarity 4.2. It is CNC-machined from a solid aluminum block and bonded to a MDF front panel. This sandwich design minimizes vibrations and distortion, ensuring optimal conditions for the PURIFI woofers. Although the use of a single-piece, heavy-duty aluminum baffle is a substantial investment, it significantly outperforms the MDF-only baffles commonly found in other speakers, even within this price range.

The aluminum baffle provides remarkable sturdiness, greatly reducing flexing and distortions from the enclosure and ensuring that nearly all audio output originates from the woofers only. The chamfered edges of the front baffle reduce unwanted diffraction, further enhancing sound clarity.



CLARITY 6.2 ALUMINUM FRONT BAFFLE

HIGH-QUALITY CABINET WITH BASOTECT®

Conceptualized in Peter Lyngdorf's personal wood shop, the thick MDF cabinet with a horizontal bracing member is crafted to maximize stiffness and minimize cabinet noise. A specialized support pad provides ample space around the woofers to optimize the performance conditions. Additionally, the woofer magnet is supported by a brace-plug that directs energy to the center of the cabinet, minimizing flexing in the rear and front baffles, where it would have added more audible distortion.

Internally, the cabinet is dampened with Basotect®—a flexible, open-cell foam made from melamine resin, renowned for its excellent sound absorption properties. This material is particularly effective in dampening the backward sounds produced by the AMT tweeter, ensuring the cabinet remains quiet and the overall sound quality is preserved.

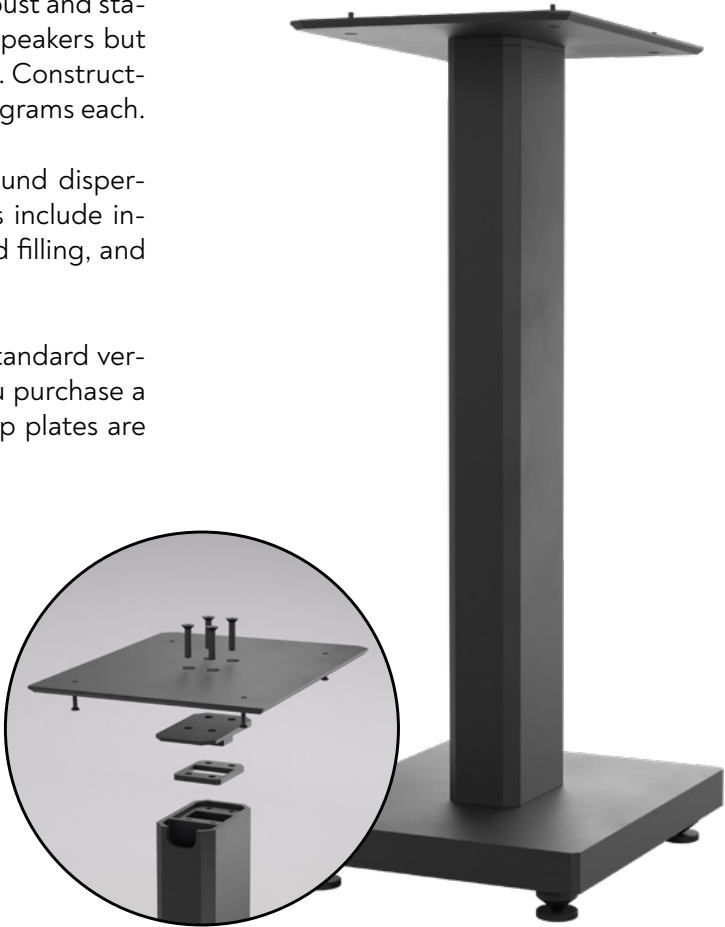
CUSTOM CLARITY **SPEAKER STANDS**

To fit the high quality of the speakers, we constructed these exceptionally robust and stable speaker stands, custom-tailored for the Clarity standmount/bookshelf speakers but versatile enough to support a wide range of compact speakers on the market. Constructed with a solid aluminum plinth, these stands are substantial, weighing 22 kilograms each.

They feature an adjustable and optional upward tilt for optimal vertical sound dispersion and offer flexible internal cable management. Additionally, the stands include interchangeable top plates, secure mounting options, a compartment for sand filling, and height-adjustable spikes with floor-protecting tablets.

For the Clarity 4.2, a dedicated top plate is sold separately to replace the standard version—ensuring a precise fit for the more compact speaker design. When you purchase a pair of Clarity Stands together with the Clarity 4.2 speakers, the custom top plates are automatically added at no additional cost.

Color	Powder Coated Black
Material	Stand: Aluminum Spikes: Stainless Steel, Grade 201
Weight	22.36 kg / 49.29 lbs. each
Height	Max: 647 mm / 25.47 inches (4° angle, spikes, taplets) Mid: 632 mm / 24.88 inches (No angle, with spikes, taplets) Min: 606 mm / 23.86 inches (No angle, no spikes, taplets)
Length	250 mm / 9.84 inches
Depth	300 mm / 11.81 inches
Top Plate Angle	1.3 or 4°
Accessories	Height adjustable spike set w. tablets + Hex keys for assembly



CLARITY FINISHES



WALNUT
VENEER



WHITE
6-LAYERS LACQUER



BLACK
6-LAYERS LACQUER

CLARITY MODELS

When choosing between the Clarity 6.2 and Clarity 4.2, you're not comparing good vs. better—you're choosing between two outstanding speakers designed for different needs, spaces, and listening preferences. Both models are engineered with Radiant Acoustics' signature attention to detail and low-distortion performance, but each brings its own character to the table.

The most immediate difference lies in physical scale. The Clarity 6.2 is a larger, more commanding speaker, housing a 6.5" PURIFI USH-INDI mid-woofer flanked by a pair of matching passive radiators. This configuration allows it to delve deeper into the low end—reaching an impressive 35 Hz—while maintaining clarity and control, at even higher SPLs than its smaller counterpart. Designed to excel in spacious environments, the Clarity 6.2 delivers cinematic scale and visceral impact for those who demand uncompromised performance. Recommended for bigger rooms or discerning listeners who want to crank the volume!

In contrast, the Clarity 4.2 is a masterclass in compact loudspeaker design. Outfitted with a 4" PURIFI mid-woofer and dual 4" passive radiators, it offers remarkable low-frequency extension for its size—reaching down to 40 Hz—without sacrificing visual elegance or space. Its modest size makes it an exceptional choice for smaller rooms, nearfield listening setups, or minimalist interiors where sleek aesthetics and space efficiency are paramount.

CLARITY 6.2



CLARITY 4.2



CLARITY 6.2

Frequency range	35-20.000 Hz (-3dB)
Sensitivity	82 dB @ 2,00 VRMS ~ 1 W @ 4 ohm 85 dB @ 2,83 VRMS ~ 1 W @ 8 ohm
Impedance	4 ohm
Tweeter	Custom AMT (Air Motion Transformer)
Midrange/woofer	6.5" PURIFI USHINDI (PTT6.5X04-NLA-10)
Passive radiators	2 x 6.5" PURIFI USHINDI (PTT6.5PR-NL2-02)
Enclosure type	Dual Balanced Passive Radiators
Crossover frequency	2400 Hz
Crossover components	Low-iron composition, air coils
Recom. amplifier power	Min. 100W
Power handling	250W
Connections	Gold-plated banana connectors
Cabinet	21 mm MDF, 15 mm aluminum front baffle
Internal dampening	Basotect®
Front grill	No
Dimensions (W x H x D)	222 x 364 x 266 mm 8.74 x 14.33 x 10.47 inches
Weight	Net weight: 10.8 kg / 23.8 lbs. each Gross weight: 12.5 kg / 27.5 lbs. each
Finishes	Black, White (6-layers lacquer) Walnut (Veneer)

CLARITY 4.2

Frequency range	40-22.000 Hz (±3dB)
Sensitivity	78 dB @ 2,83 VRMS ~ 1 W @ 8 ohm
Impedance	4 ohm
Tweeter	Custom AMT (Air Motion Transformer)
Midrange/woofer	4" PURIFI USHINDI (PTT4.0X04-NLC-02)
Passive radiators	2 x 4" PURIFI USHINDI (PTT40PR-NL2-03)
Enclosure type	Dual Balanced Passive Radiators
Crossover frequency	2300 Hz
Crossover components	Low-iron composition, air coils
Recom. amplifier power	Min. 60W
Power handling	200W
Connections	Gold-plated banana connectors
Cabinet	15 mm MDF, 12 mm aluminum front baffle
Internal dampening	Basotect®
Front grill	No
Dimensions (W x H x D)	164 x 260 x 194 mm 6.46 x 10.24 x 7.64 inches
Weight	Net weight: 5.6 kg / 12.35 lbs. each Gross weight: 13 kg / 28.66 lbs. pair
Finishes	Black, White (6-layers lacquer) Walnut (Veneer)

NO NOISE, JUST MUSIC

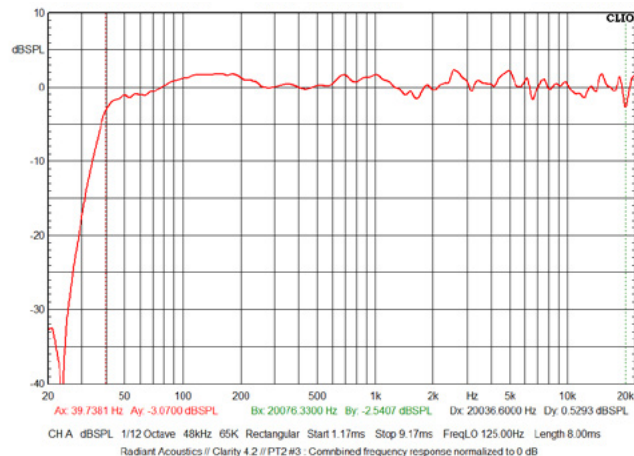
Radiant Acoustics Clarity-series represents the culmination of decades of expert craftsmanship, groundbreaking technology, and an unwavering commitment to high-fidelity audio. By leveraging the unique strengths of PURIFI drivers, paired with a cost-no-object AMT tweeter and an innovative, truly unique waveguide designed by PURIFI exclusively the Clarity 6.2 speaker, along with a high-quality cabinet and a superior crossover, the Clarity delivers a listening experience that defies the limitations of its size and price point.

For audiophiles, discerning listeners or just plain music lovers, Clarity offer an extraordinary level of detail, dynamic range, and clarity—qualities typically found in much larger and more expensive systems. This achievement is the result of a unique collaboration among some of the brightest minds in the audio industry, all with a shared goal: to make high-end sound accessible without compromise.

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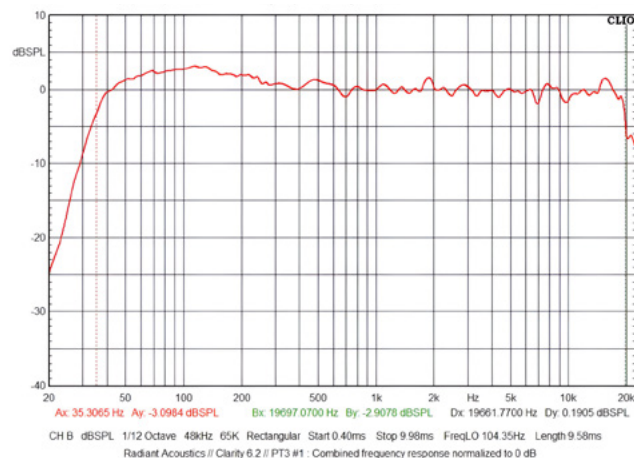
When you sit down to listen to a pair of Clarity speakers, the first thing you'll notice is the lack of distortion, resulting in a smooth and natural sound. You experience all the details in the recording, but they aren't harsh or overwhelming. Your shoulders relax, and you think: "OK, this sounds just right..."

Henrik Reinholdtsen
CEO, Nordic Hi-Fi



CLARITY 4.2 FREQUENCY RESPONSE

Measured at tweeter height, 1 meter distance, on-axis (horizontally). Contrary to Clarity 6.2, we recommend for the Clarity 4.2 to be toed-in to fine tune the treble response to the listener's preference.



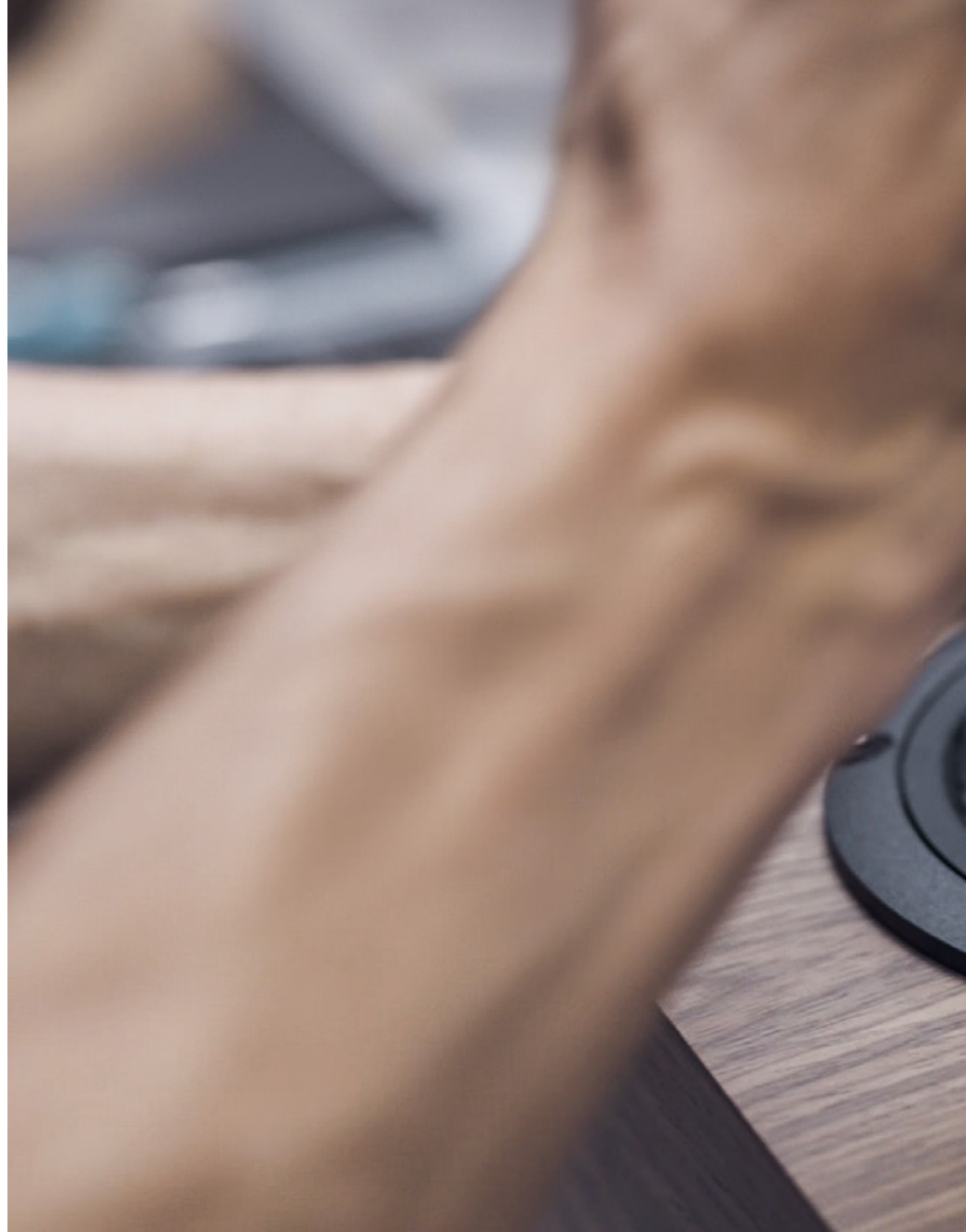
CLARITY 6.2 FREQUENCY RESPONSE

Measured at tweeter height, 1 meter distance, 20 degrees off axis (horizontally). The slight dB increase below 200 Hz is to adapt the speakers to a typical listening position where the speakers are placed some distance from the back wall.



ASSEMBLED, QUALITY-TESTED, AND APPROVED IN NØRAGER, DENMARK

Every product undergoes rigorous testing using advanced equipment in Nørager, Denmark, before being carefully packaged and shipped to you. This meticulous process ensures that each product meets our high standards, guaranteeing an exceptional experience for our customers.







MUSIC IN ITS PUREST FORM
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