

Russound Sound Advantage™

Dec. 2002

Designed from the ground up!

"We felt the competition in custom loudspeakers was weak in two important areas — sound quality and ease of installation — both 'sore thumbs' to the installer as well as the final end user. Since installers often recommend products to their customers, and that is often what gets installed, the satisfaction of both is a top priority."

"The real breakthrough came when we were able to combine both requirements into a single feature. They were implemented in very different ways, depending on whether it was a ceiling speaker or a wall speaker, however the concept was essentially the same and did exactly what our research dictated. We went after the biggest sound quality issues for ceiling and wall speakers. We not only achieved our goals, we even made the Advantage speakers easier to install!"



One of the biggest challenges for a ceiling-mount loudspeaker is one of off-axis response. As a listener moves away from an overhead speaker, the listening axis becomes worse and worse and so does the sound! If the speaker could be tilted to better align with the preferred listening location, then this drawback would be greatly improved. Other companies have done so by implementing elaborate pivoting assemblies that add a great deal of cost and size. Our innovative design accomplishes this without added cost or size yet with an added benefit to the installer — no tools needed for installing the baffle! After the frame is secured, the speaker/baffle portion installs with a simple twist of the mounting system. This Twist & Tilt technology offers the option of tilting the driver/baffle assembly 15 degrees to focus the sound towards the chosen listening area OR standard mounting for uniform dispersion. So we did it: better sound, easier and faster installations — with no additional size or cost!

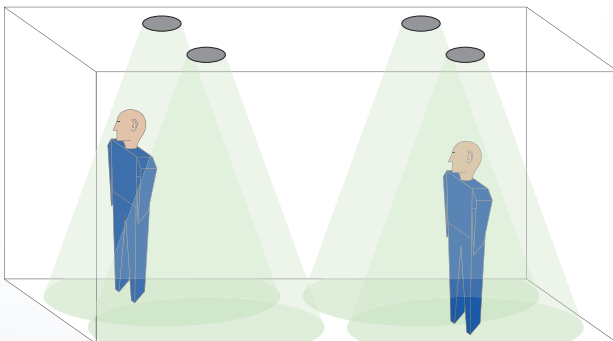
(0° angle) Uniform dispersion



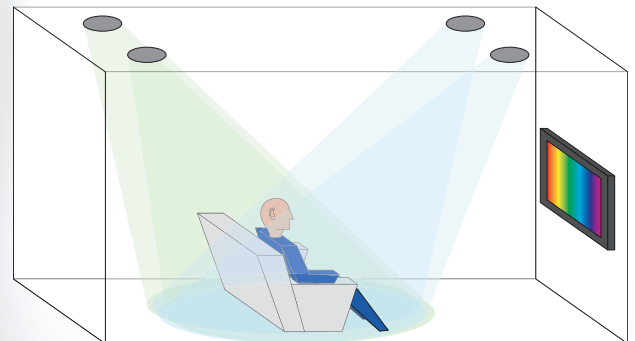
(15° angle) Focused dispersion



Uniform: full sound dispersion



Focused: preferred listening position



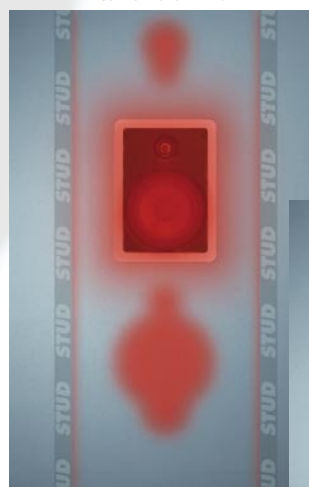
Advantage ISO-MOUNT™

Wall speakers pose a different sonic challenge. Since wall-mounts are generally located near or at ear level, off-axis problems inherent in a ceiling mount speaker are not the issue. Instead, wall vibration is the culprit, robbing sound potential by introducing low frequency information that interferes with the actual loudspeaker's music reproduction. We designed a custom thermopolymer gasket that effectively isolates the speaker baffle from the rest of the frame and wall, lowering unwanted wall vibration. Advantage Iso-Mount reduces critical wall vibration resulting in increased detail and clarity. Once again: better sound, easier and faster installations — with no additional size or cost!



The Iso-Mount thermopolymer gasket even wraps around the fasteners to dramatically isolate vibration.

Conventional in-wall



Iso-Mount in-wall



Red represents sonic vibrations — vibrations outside of speaker have a negative impact on sound quality

Advantage Drive Units — Dedicated to performance

"Many of the top brands of custom loudspeakers suffer from 'cookie-cutter' or 'mix-n-match' designs. Drivers are picked from existing stock or from a vendor's catalog of available designs while critical acoustical elements are left to more cosmetic or practical considerations."

Engineering began with the most basic core components and materials - polymers & metals - leading to advanced driver design and precise acoustical performance. Concepts such as using the highest quality woven glass fiber cone material on our Hi-Fi series AND on the more affordable Music series - ensure a matching vocal region on all of our products — the most important for retaining a balanced tonal quality. This enables mixing and matching both size and series for the greatest flexibility and the most consistent sound quality.

Drivers need to be designed specifically to perform in typical wall and ceiling cavities found in most homes. To do this, all Advantage drivers were engineered from the ground up, using advanced modeling software. Drivers could therefore be designed as a "family", each having target responses that match in terms of sound and performance. Although making the design more complicated, common parts could be engineered among the drivers to gain a competitive cost advantage. The result: a family of drivers with complementary tonal characteristics and increased performance — without increased costs.

All the while, acoustical design worked hand and hand with the practical and the cosmetic. Custom engineered drivers were seamlessly integrated with expertly designed injection-molded polymer components for a tailored sound response only possible when all aspects are considered.

Sound Advantage — designed from the ground up for better sound by design.

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Russound is a leading designer, manufacturer and supplier of state of the art audio/video and connectivity products. Founded in 1967, the company is based in Newmarket, New Hampshire and proudly markets their products throughout the world. Russound is known for excellence — in its products, service and people.