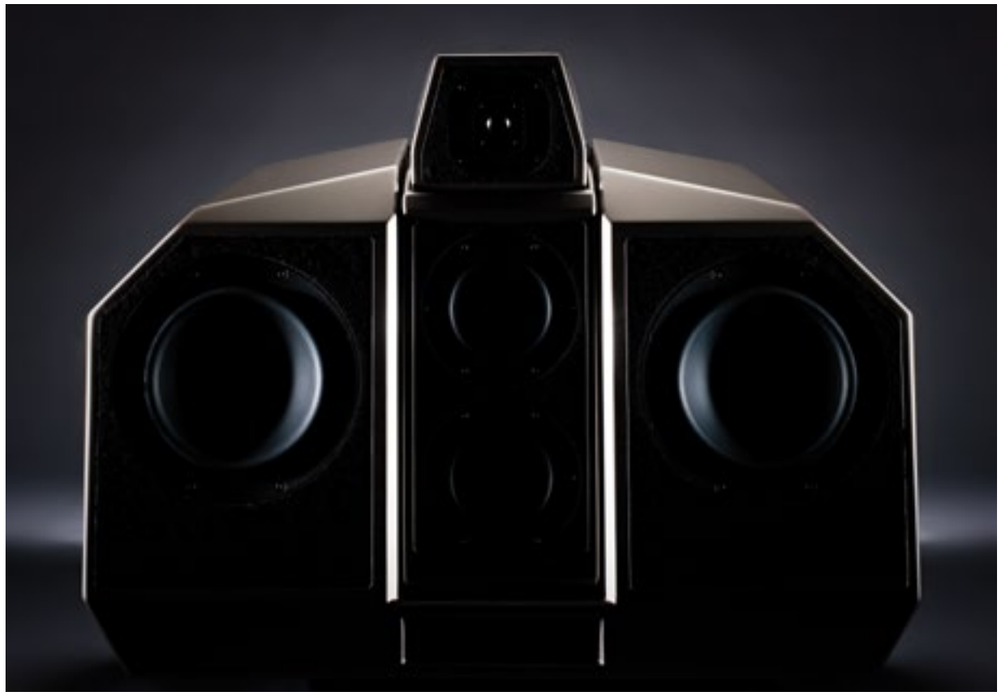
POLARIS™



WILSON AUDIO®

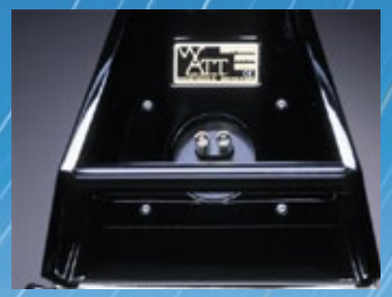
polaris—the North Star—anchors the rotating night sky as the immovable center above the north pole. The task of a center channel loudspeaker is to provide the still point around which swirls the action, music, and emotion of the home theater experience.

Polaris—the star—is, in reality, a triple star system, and likewise Polaris™—the loudspeaker—was conceived to serve more than a single function. Because it was engineered to achieve the same levels of performance as Wilson Audio's flagship loudspeakers, Alexandria® Series 2 and MAXX® Series 3, Polaris is a low profile flagship speaker designed to solve architectural challenges such as installations where a tall loudspeaker would obstruct a window view or intersect a wall-to-wall theater screen.

a tradition of special applications engineering

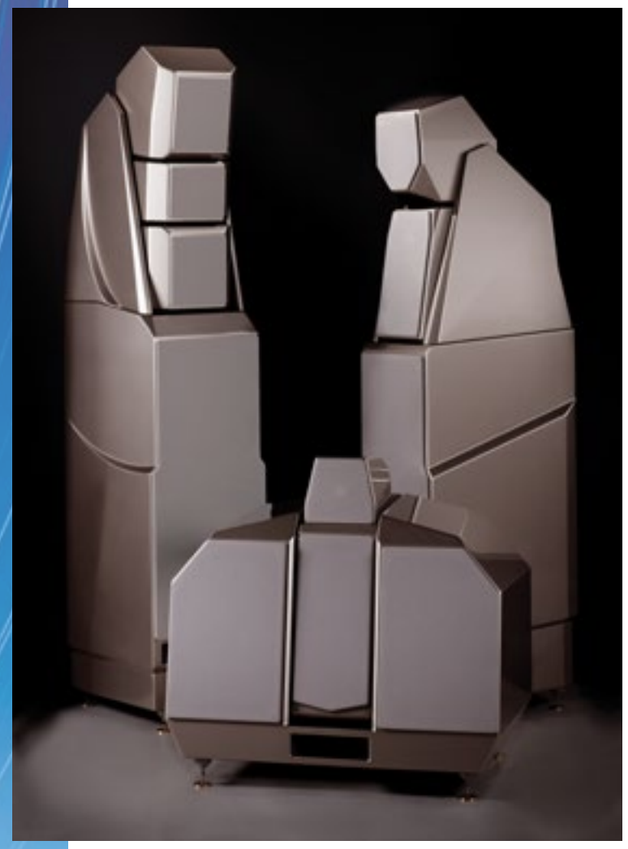
Polaris is only the latest—and the most ambitious—product from the Wilson Special Applications Engineering Team™. This group of products recognizes there are situations where the typical floorstanding loudspeaker fails to adequately meet needs that fall outside the typical listening room/home theater environments.

One could argue special applications are part of the DNA of Wilson Audio. The first product to fit that definition was the Wilson Audio Tiny Tot, or WATT®. Long before it became the mid and upper range part of the WATT/Puppy® combo (the largest selling over $10k loudspeaker in audio history), Dave Wilson created the WATT as a portable location monitor for the series of audiophile-quality records he engineered in the mid-nineteen-eighties. The WATT's original heritage was thereafter evident by the machined aluminum handle that traversed the rear blades, a safe and convenient way for Dave to carry the monitor to and from recording locales.



Prior to Polaris, the most complex Special Applications product was the Wilson Audio Duette®. This bookshelf-sized speaker was never a capitulation to a popular market segment. Rather, it was an answer to the challenge of creating a product that would perform to the exacting standards of Wilson's floorstanding speakers in environments hostile to good sound, such as against walls, in bookshelves, or in custom cabinets. Ingenious use of proprietary drivers, cabinet construction and crossover design proved that, even in these compromised environments, it was possible to achieve the level of dynamic contrast, tonal accuracy and soundstage transparency for which Wilson loudspeakers are renowned.

a new reference center channel

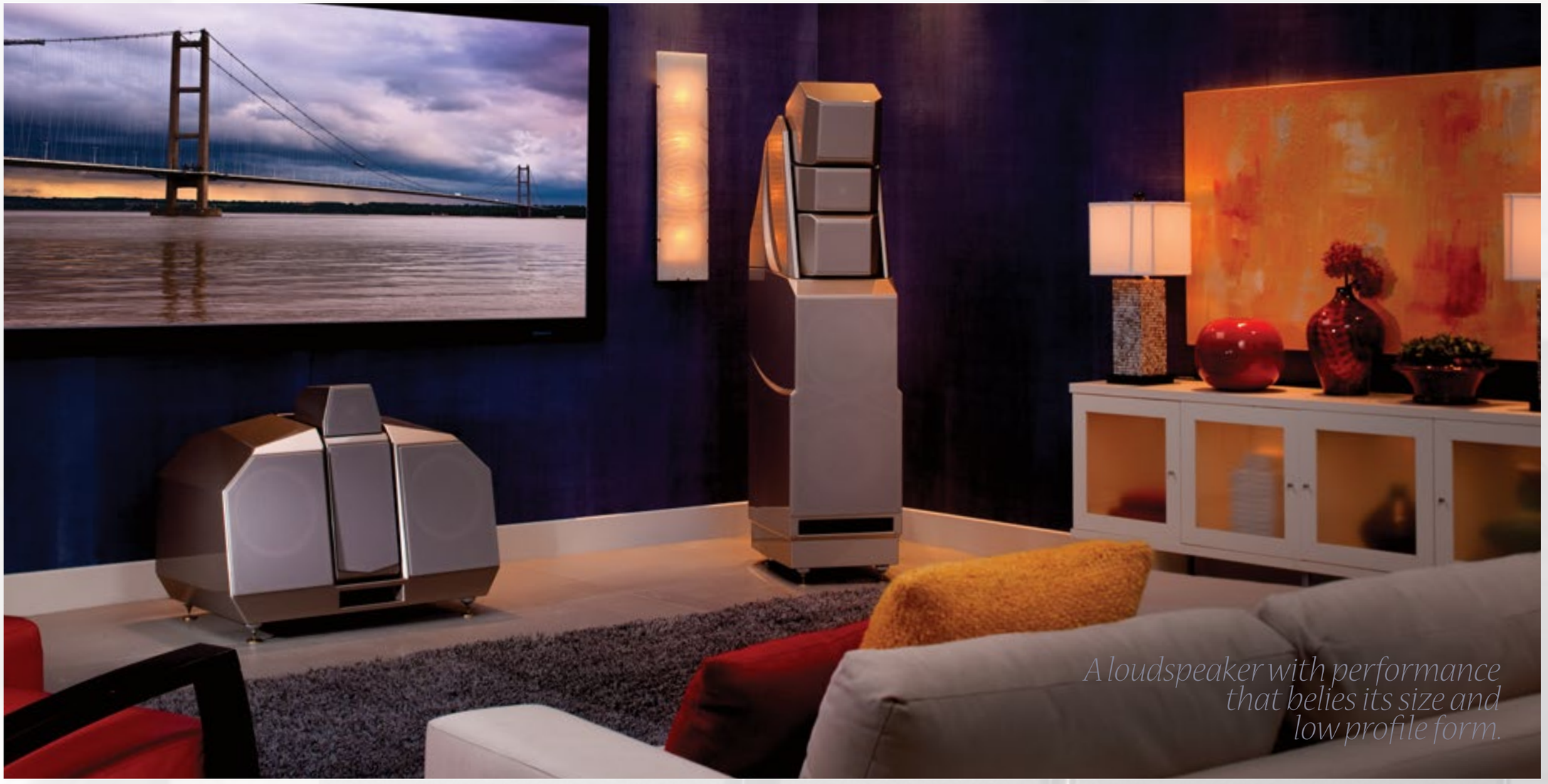


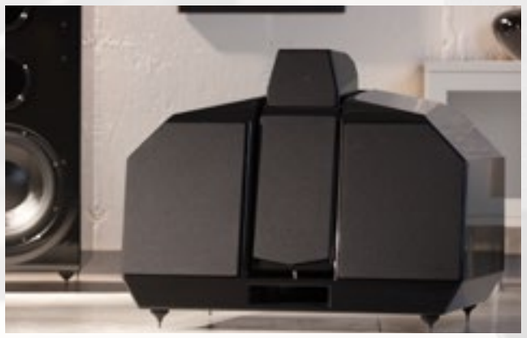
For Polaris, the design goal was simple yet daunting:

In a low-profile cabinet, create a loudspeaker that would integrate seamlessly with Alexandria Series 2 or MAXX Series 3 in the most demanding home theater installations, and, alternately, achieve the same measure of performance as those two high-end icons in installations demanding a low-profile presence.

This meant several specific challenges had to be met: Polaris had to incorporate the excellence of Wilson's flagship loudspeakers in the arena of tonal accuracy and coherence. It had to meet the same standards of dynamic contrast and speed, and it had to achieve the level of transparency, detail, and spatial resolution that set Alexandria and MAXX at the pinnacle of audio art.

In short, the same synergy of drivers, cabinet materials, crossovers and Aspherical Propagation Delay geometry that distinguish Wilson's state-of-the-art loudspeakers had to work in a radically new form factor—a reference quality center channel and low-profile loudspeaker.





The distinctive form factor of Polaris presented the obvious challenge of making a low profile loudspeaker create an acoustic image of the appropriate height for either a home theater or a music system.

In addition, it had to maintain tonal linearity and transient speed in typical installations, where it would be placed against the wall below a movie screen.

The large Wilson loudspeakers achieve their remarkable transparency and tonal cohesion in part through the vertical geometry of the upper-range drivers in an MTM (midrange - tweeter- midrange) array. It quickly became apparent in designing Polaris, however, that an MTM driver arrangement, with the woofers straddling the midrange, created undesirable comb filter effects, in addition to problems with linearity.

By combining the two midrange drivers in the center module, flanked by the dual woofers and topped by the separate tweeter module, it was possible to eliminate deleterious comb filter effects and make Polaris act like an acoustic point source.

Adjustable Group Delay allows Polaris to project a sound image above its physical height. Using these same adjustments, Polaris can be optimized for either stadium or traditional seating arrangements.

The front-firing port, using technology developed for Alexandria, minimizes interaction with rear boundaries and enhances the transient speed, dynamic contrast, and tonal linearity of the custom-designed woofers.

flagship pedigree

If you're going to stand among giants, it's to your advantage to share as much of their DNA as possible. For Polaris, that meant starting with the tweeter and midrange driver from the Alexandria Series 2.

During Alexandria's development, Dave and Wilson's engineers teamed up with a new driver manufacturer to implement a design strategy inspired by Dave's ongoing research into the sound of live, unamplified music. Listening to live music in renowned symphonic concert halls, Dave became conscious of the earliest reflections, which—unlike general ambience—define the sound of instruments playing in that particular hall. Because the earliest reflections arrive within 20 to 80 milliseconds of the original musical note, reproducing this level of detail requires a driver with extremely fast acceleration and very low intertransient noise.

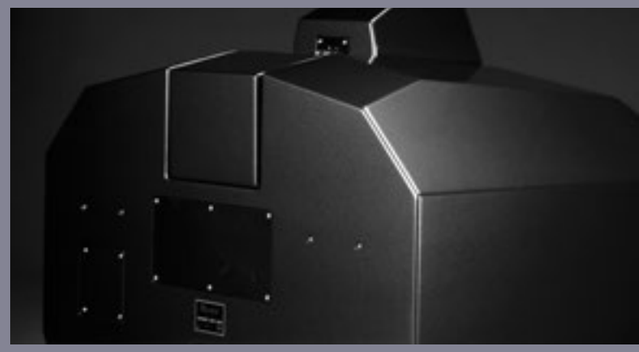
Dave and the Wilson engineers set out to redefine what was possible in cone midrange technology. Their efforts were rewarded with a midrange driver possessing greater tonal and dynamic clarity and truthfulness than any previous design.

The tweeter, also directly from the Alexandria X-2 Series 2, uses advanced technology and material in the area behind the diaphragm. All tweeter diaphragms are acoustically semi-transparent. Time-delayed back wave reflections from the rear of the tweeter enclosure that propagate through the diaphragm are heard and measured as noise and distortion. The Polaris tweeter employs proprietary materials in combination with Wilson-developed mechanical configurations that are extremely effective at reducing reflections originating behind the inverted dome, preventing them from corrupting the primary wave.

This tweeter excels in all areas of high-frequency performance: clarity, dynamic expression, sweetness of tone, and resolution. It is an excellent companion to the Wilson midrange driver. The vivid tonal tapestry woven by these two drivers is seamless and complete—richly portraying instruments as they are heard in life.

Working with an outside vendor, the Wilson engineering team designed a new ten-inch woofer. The design goal was to marry the high-speed, dynamic range, and low-frequency reach typical of Wilson loudspeakers to a compact, low-profile cabinet. Transient speed and grand-scale weight and authority, typically mutually exclusive loudspeaker traits, are achieved by Polaris with alacrity and effortlessness.

Over the years, much of Wilson Audio's research efforts have been focused on the creation of proprietary composite materials used in the construction of our loudspeaker cabinets. Polaris benefits from one of the newest—S Material—an epoxy resin laminate developed in conjunction with the Sasha W/P™ project. Used in midrange and high frequency baffles, S–Material reduces both measurable and audible noise and coloration in the critical midrange and lower treble. The rest of the enclosure is built from our legendary X Material, which is unsurpassed for its combination of high rigidity and low resonance.

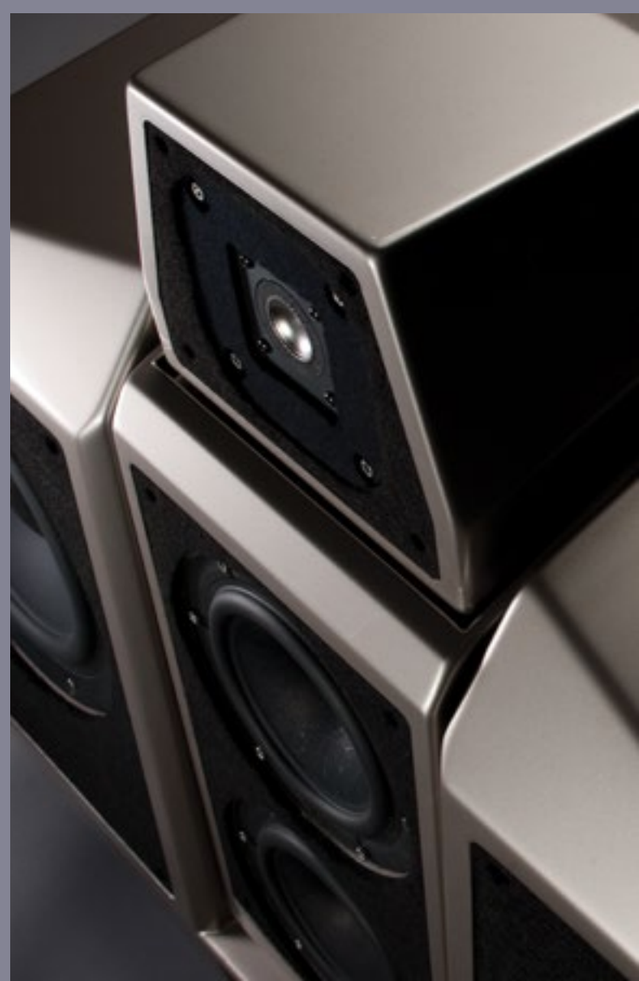


Group Delay, intrinsic to every Wilson loudspeaker, is a combination of physical driver geometry and crossover tuning to achieve the industry's most precise time-alignment of the upper-range drivers. This precision is perceived by the listener as superior soundstage size, as well as an overall tonal coherence and lack of grain.

With MAXX Series 3 and Alexandria, this concept is developed further, with Aspherical Propagation Delay™ , a distinctive feature now shared by Polaris.

By allowing the mid and tweeter modules to not only move forward and back in the time domain, but rotate on their polar axis, it's possible to achieve more precise time alignment for any designated listening position; the dispersion characteristics of the individual drivers can also be optimized for the chosen listening height and distance. The result is even greater transient clarity and tonal coherence, along with greater soundstage depth, width, and height.

Polaris also benefits from the latest crossover technologies developed for Alexandria Series 2, MAXX Series 3, and Sasha W/P. These advances further reduce propagation delay jitter while lowering the noise floor. In terms of overall resolution, intertransient silence and dynamic speed, Polaris is the equal of its larger brethren.



architectural solutions

Enjoy an uncompromised view
...with uncompromised sound

When optimal speaker placement would obstruct a view or works of art, Polaris may be the ideal solution to enjoying reference-quality sound without compromising the visual or architectural aesthetic of your listening environment.

specifications

Woofer:	2 9.5-inch (24.13 cm)
Midrange:	2 7-inch (17.78 cm)
Tweeter:	1 1-inch (2.54 cm) Inverted Dome
Nominal Impedance:	4 ohms, 2.2 ohm min. @ 49Hz
Sensitivity:	94dB @ 1w @ 1m @ 1kHz
Frequency Response:	20Hz - 21kHz +/- 3dB Room Average Response (RAR)
Minimum Recommended Amplifier Power:	20 watts per channel
Height:	28 1/2 inches (72.39 cm) w/o spikes 30 3/4 inches (78.11 cm) with spikes
Width:	38 inches (96.52 cm)
Depth:	24 15/16 inches (63.33 cm)
Weight (Uncrated):	294 lbs (133.36 kg)
Approximate Shipping Weight:	485 lbs (219.99 kg)