

ISIS & SAGA Signature



Introduction

Four decades in pursuit of High-End audio idealism has taken us from the drawing board to the recording venue and back once again to the workshop. From the beginning our credo was simple, “always speak the musical truth”. The experience of the musicians performing live while the recording was being made has always been our template, with the challenge being to translate as much as we heard and felt through our designs.

It began with inventing the first high mass, constrained multi-layered cabinets for our Ascent loudspeakers, recognising the essential role of time and phase, resolution and dynamics, while presenting it all on a three-dimensional soundstage. We named it ‘Sonic Holography’; it is the essential hallmark of each Avalon Acoustics loudspeaker.

Research is the bedrock of technical innovation, being always mindful of preserving the delicate subtleties so easily destroyed in the process of transduction from electrical signal to physical acoustic waveform. The laboratory taught us that point-source accuracy and purely-piston driver behavior was essential

to tightly focused imaging, with baffle shape and eigenmode cabinet resonances dictating lobe dispersion characteristics. Perfecting a new family of all-pass phase networks and low noise circuits was necessary for presenting correct stage depth information. Dynamic contrasts, both macro and micro, could only be realised if the impedance structure comprising the driver/network combination was non-reactive. Most importantly, each technical achievement needed to transport us to the time and place the performers inhabited, to witness the emotion and expression of people in the act of musical creation.

Emulating old world craftsmanship, we insisted upon beauty and elegance in the aesthetic appearance of the loudspeaker itself, perfecting the labor-intensive process of unique natural wood veneering for each cabinet form.

Our journey continues to this day through our Precision Monitor and Signature Series transducers. Each is a distillation of the quintessential qualities of their heritage brethren. Each represents a unique slice of artistry and technical innovation, achieved through years of dedication to unwavering scientific principles, always in service to the music.



“There is profound beauty in truth, connecting the story that is music to the poetry and prose long written in our souls.”

Neil Patel







ISIS Signature

A signature is the mark we make to signify responsibility. We pledge our bond that the article is authentic, truthful, and faithfully represents our intentions. Each Signature design is a reaffirmation of our personal commitment to Fidelity. Not a concept to be taken lightly, Fidelity is a vow of allegiance to preservation of truth, without leaving any fingerprints.

The delicately nuanced structure of music requires an authentic translation, lest we lose the intent and humanity of the artist. Each of these Signature designs is a work of art unique unto itself, a portal into an exploration of musical history and self.

How does one describe the indescribable? Surpassing all previous design conventions, Isis Signature represents a profound achievement in pinpoint accuracy from a full range high-energy transducer. Retaining its classic form, Isis Signature has been fully redesigned utilising our proprietary Silent Inert Composite system, eliminating the eigenmode sonic degradation of any single material design. We have improved upon the linearity and headroom of the drive units, controlling each with proprietary all-phase, high-current networks connected throughout with our custom-smelted precious metal conductors. Low frequency impedance structure is flat, without system resonance, and easily driven. Isis Signature is music in its most 3-dimensionally dynamic form.

ISIS SIGNATURE FEATURES

- Advanced light weight driver diaphragm materials minimise energy storage and time-domain distortion.
- Proprietary Second-Generation Neodymium magnetic structures for improved dynamic range.
- Smooth, wide polar response for superlative imaging capabilities.
- Silent Inert Composite materials and techniques utilised throughout.
- Proprietary hard-wired conductors and circuitry, eliminating deleterious sonic effects of printed-circuit boards.
- Wide bandwidth crossover circuitry for precise inter-driver phase alignment
- Careful crossover control of all magnetic field interaction.
- Proprietary magnetics technology increases energy transfer and reduces the noise floor.
- Constrained-mode damping system absorbs cabinet vibrations.
- Acoustically-engineered grille assembly decreases edge diffraction effects.
- Distinctive faceted cabinet design provides optimal polar characteristics for seamless dispersion.

Specifications

Driver Complement	1" Concave Diamond Diaphragm tweeter 7" Concave Ceramic Midrange 2 × 13" Composite/low Q magnetic structure woofers
Sensitivity	90 dB
Impedance	4 Ohms Nominal
Frequency Response	20 Hz to 100 kHz
Recommended Amplifier Power	50 to 500 watts
Wiring Methods	Two position binding post
Dimensions	60" (152cm) high, 14.5" (37cm) wide, 17" (43cm) deep
Weight	175 pounds (80 kg) each
Finish options	Standard finishes: Birdseye Maple, Satin Dark Polychrome Premium wood finishes: Quilted Cherry, Curly Maple, Figured Walnut. All above options are available in a Premium Deep Gloss finish.







SAGA Signature

SAGA SIGNATURE Is a full immersion in transparency and liquidity, a time-portal into the past, to that moment when each piece of music was born.

Saga Signature represents the synthesis of our multi-year research into low noise circuitry, developed during the Tesseract Signature design project. Proprietary conductors and magnetic technologies, as well as silent inert composite techniques in cabinet construction have been intertwined with immaculate dispersion characteristics. A proprietary family of all-pass phase networks confers empirical improvements in all aspects of energy transfer and transient speed. The noise floor is lower, the transient response faster, and the storage of stray energy is less than ever before. Most importantly, the octave-to-octave energy balance is equivalent throughout the extended bandwidth envelope, developed without compression and yet critically damped.

Careful control of 2pi to 4pi lobe characteristics generates a coherent energy envelope which dissolves room boundaries, Life-sized images are delivered in a dynamic and holographic spatial presentation revealing the most subtle tonal colors, focused in space against the blackest backgrounds.

Saga Signature is much more than technical achievements and grandness of scale; at its core is the emotionally evocative poetry of music.

SAGA SIGNATURE FEATURES

- Proprietary Silent Inert Cabinet material/process.
- Advanced light weight driver diaphragm materials minimise energy storage and time-domain distortion.
- Each driver individually tested and matched for optimum performance.
- Smooth, wide polar response for superlative imaging capabilities.
- Exceptionally flat impedance characteristics, damped and purely resistive, for ideal interface with any amplifier.
- Crossover circuitry is hard-wired with surface-only conductors, eliminating deleterious sonic effects of printed-circuit boards.
- Proprietary all-phase crossover topologies.
- Careful crossover control of all magnetic field interaction.
- Proprietary magnetics technology increases energy transfer and reduces the noise floor.
- Constrained-mode damping system absorbs cabinet vibrations.
- Three dimensional staging through meticulous 2pi-4pi baffle shaping.
- Purely pistonic driver behaviour. No diaphragm break-up modes within 70dB of signal.

Specifications

Driver Complement	3/4" Concave Carbon/Glass Neodymium Tweeter 7" Concave radial magnetic Ceramic Midrange 2 x 13" Composite/low Q magnetic structure woofers
Sensitivity	92 dB
Impedance	4 Ohms Nominal
Frequency Response	20 Hz to 100 kHz
Recommended Amplifier Power	50 to 500 watts
Wiring Methods	Dual binding post
Dimensions	68" (178cm high), 14.5" (37cm) wide, 17" (43cm) deep
Weight	195 pounds (89 kg) each
Finish options	Standard finishes: Birdseye Maple, Satin Dark Polychrome Premium wood finishes: Quilted Cherry, Curly Maple, Figured Walnut. All above options are available in a Premium Deep Gloss finish.





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