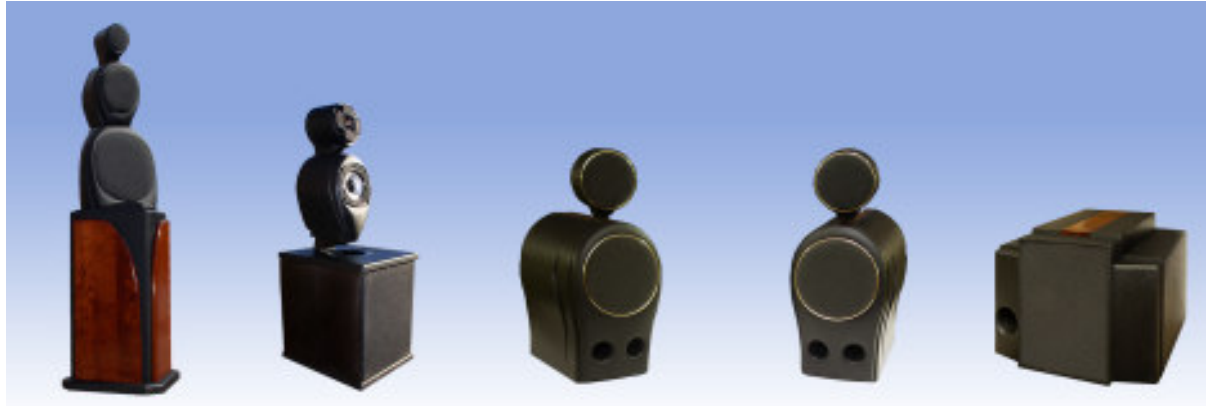


Specifications

Overview | [Woofers](#) | [Ports](#) | [Midranges](#) | [Tweeters](#) | [Wiring and Circuits](#) | [Acoustic results](#) | [Accessories in the box](#)

Visit our website for more information.



Calypso HD

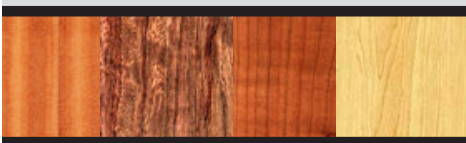
Pico Executive HD

Eos HD

Eos

Aperture HD

	Calypso HD	Pico Executive HD	Eos HD	Eos	Aperture HD
Application(s)	Time-coherent 3-way floorstander for use in all but the largest of rooms.	Time-coherent 3-way sounds best on the floor, a credenza, or bookshelf.	Time-coherent 2-way sounds best on stands or a bookshelf.		Time-coherent 2-way sounds best in tight places (bookshelf or center channel).
Room size	Medium to large, 200-1,000sf	Small to medium, 150-600sf	Small to medium, 100-600sf		Small to medium, 100-600sf
User adjustability (Soundfield Convergence™)	Midrange and tweeter adjust front-to-rear independently and together as one unit.	Midrange and tweeter adjust front-to-rear independently and together as one unit.	Tweeter adjusts front-to-rear in its channel via easy-to-use thumb-nut.		Tweeter adjusts front-to-rear under removable top cover.
Power (amplifier's 8 ohm rating)	7 to 170 Watts	7 to 170 Watts	7 to 150 Watts		7 to 170 Watts
Response +/- 0.75dB - 3dB frequencies	45Hz to 20kHz 40Hz, 22kHz in room	55Hz to 20kHz 45Hz, 24kHz in room	55Hz to 20kHz 47Hz, 26kHz in room		55Hz to 20kHz 47Hz, 23kHz in room
Size and Weight	51"H; 13.5"Square at base. 100lbs. (45kg) each; may vary depending upon side panels chosen.	30.625"H; 10.5"W; 12.75"D. 45lbs. (20.5kg) each; may vary depending on side panels chosen.	19.875"H; 8.8"W 12.625"D. For speaker stand, base: 7"W, 10.875"D. 45lbs. (20.5kg) each.		10.875"H; 13.875"W 13.5"D. 29lbs. (13.2kg) each.
Finish Choices	Solid wood side panels of (from left) African Ribbon Mahogany, Bubinga, Cherry, or Maple. Other wood, granite or stone installed for extra charge.	Side panels in black leather, standard; choose other color or send 4 (12x12") stone or marble tiles for us to install.	Cocobolo trims the top channel. No other finish choices available.		Cherry trims the top of the speaker. No other finish choices available.

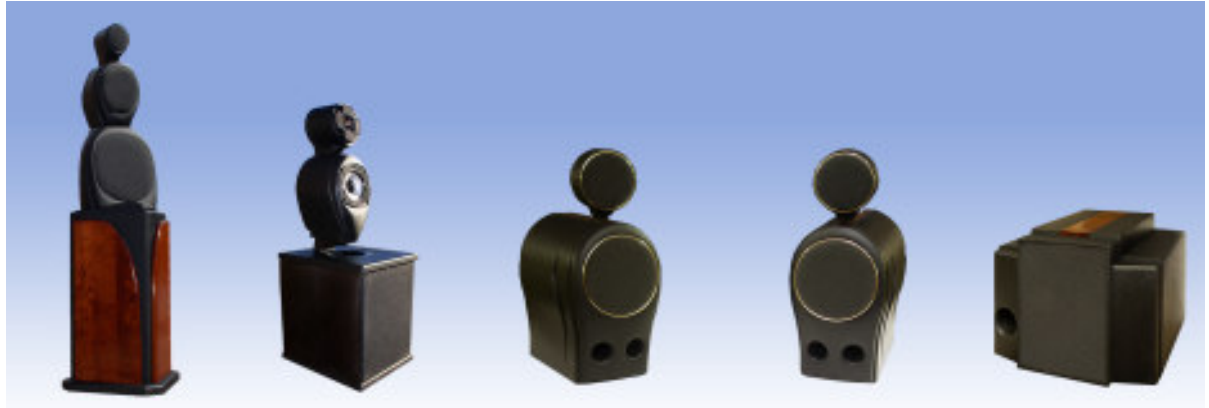


Notes

- All speakers are clad in black Texture-Kote™ for the look and feel of pin-grained leather.
- Original owner receives Happy Ears for Life™ warranty after forwarding Product Registration and copy of original bill of sale (within North America). Warranty may vary in other countries; check with GMA import agents for details.

Specifications

Overview | **Woofers** | Ports | Midranges | Tweeters | Wiring and Circuits | Acoustic results | Accessories in the box



Calypso HD

Pico Executive HD

Eos HD

Eos

Aperture HD

Woofers

8" (21cm)

6" (17cm)

6" (17cm)

6" (17cm)

Woofers

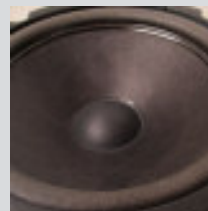
Low-mass Nomex fiber rigid cone. Very low resonant frequency from highly-compliant ultra-linear suspension of synthetic rubber and fully-vented flat spider; high-power, 4-layer 1.25" (32mm) voice coil. Alloy chassis; 22.5oz. (640g) magnet; 0.35" (9mm) p-p linear excursion; 30.6g moving mass. Shorting rings around voice coil for low distortion.

Single-pressed paper/carbon fiber cone with ultra-linear suspension, vented under-hung 2-layer, 1" (25mm) voice coil wound on Kapton former. Mechanically damped chassis. Shielded, radially-magnetized, neodymium-iron-boron magnet structure with heat dissipating black coating; 0.32" (8mm) p-p linear excursion; 9.85g moving mass.

Single-pressed paper/carbon fiber cone with ultra-linear suspension, vented under-hung 2-layer, 1" (25mm) voice coil wound on Kapton former. Mechanically damped chassis. Shielded, radially-magnetized, neodymium-iron-boron magnet structure with heat dissipating black coating; 0.32" (8mm) p-p linear excursion; 9.85g moving mass.

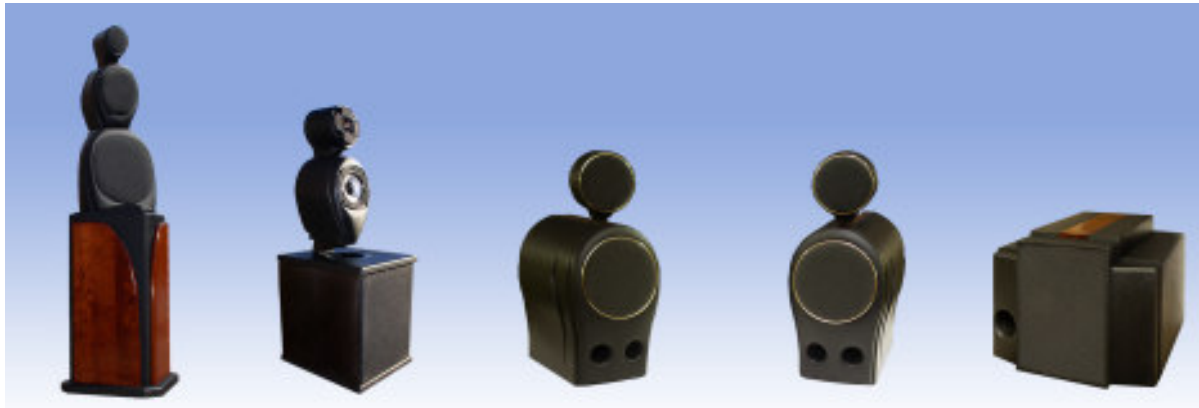
Single-pressed paper/carbon fiber cone with ultra-linear suspension, vented under-hung 2-layer, 1" (25mm) voice coil wound on Kapton former. Mechanically damped chassis. Shielded, radially-magnetized, neodymium-iron-boron magnet structure with heat dissipating black coating; 0.32" (8mm) p-p linear excursion; 9.85g moving mass.

Speakers have been designed for grilles to be left in place.



Specifications

Overview | Woofers | **Ports** | Midranges | Tweeters | Wiring and Circuits | Acoustic results | Accessories in the box



Calypso HD

Pico Executive HD

Eos HD

Eos

Aperture HD

Woofer cabinet

Woofer mounted in Q-Stone™ chamber atop slender wood column, twisted 45 degrees to reduce reflections. Internal Golden-Ratio Baffle™, 4th-order Butterworth ported with nearly zero box loss.

Woofer mounted in 2-layer wood cabinet of 13-layer Baltic Birch plywood and MDF. 4th-order Butterworth ported.

Woofer mounted in Q-Stone™ cabinet. 4th-order Butterworth ported with nearly zero box loss.

Woofer mounted on Q-Stone™ faceplate attached to cabinet of multiple-layer MDF with Golden-Ratio Baffle™, 4th-order Butterworth ported. Attached vibration-absorbing rubber feet.

Woofer Port

3" (7.5cm) aerodynamic port on rear side tuned to 42Hz.

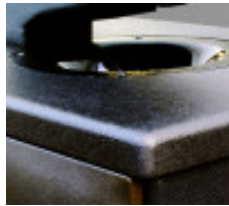
3" (7.5cm) aerodynamic top port tuned to 54Hz.

Twin 1.625" (41mm) aerodynamic ports tuned to 54Hz merge to become one port inside (Bi-Port™).

2" (50mm) aerodynamic port on front tuned to 54Hz.



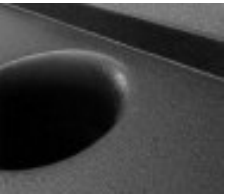
An angled location prevents the Calypso HD's port from resonating with the space to the wall behind. Working with the internal Golden-Ratio Baffle™, the port transmits pressures most efficiently. No tones other than the lowest bass will emerge. Mirror-imaging allows proper operation in all rooms.



The Pico Executive HD's port is large for its woofer size. Its top location keeps it close to the floor while allowing bass pressures to fully expand into the room. All this produces maximum bass from a small enclosure.



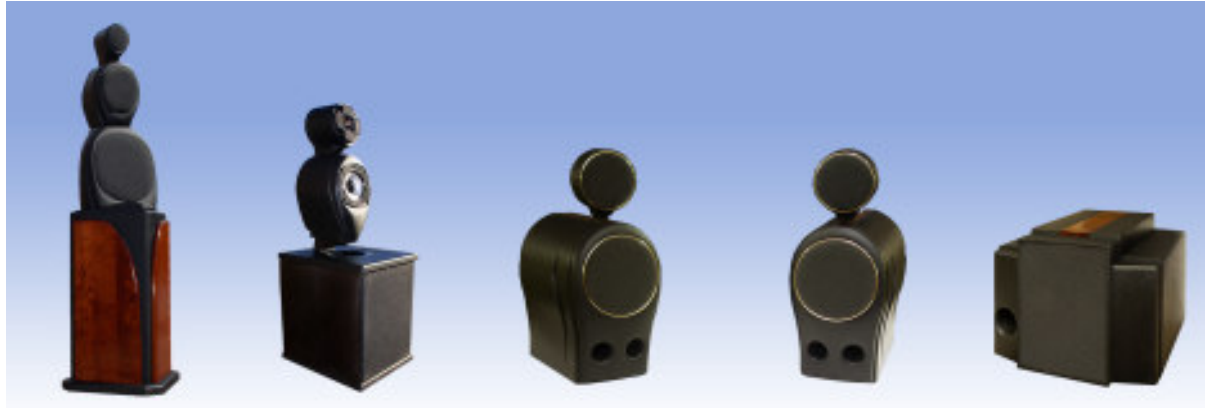
In both the Eos HD and Eos, the Bi-Port™ intake opening more efficiently transmits bass pressures from its ideal placement inside the enclosure. It also optimizes delivery of bass pressures into the room with its larger-than-usual twin openings on the outside.



The Aperture HD's port is tuned to maximize low bass from a shelf-mount position. It is angled to transmit bass pressures most efficiently from inside the cabinet.

Specifications

Overview | Woofers | Ports | **Midranges** | Tweeters | Wiring and Circuits | Acoustic results | Accessories in the box



Calypso HD

Pico Executive HD

Eos HD

Eos

Aperture HD

Midrange diameter

4" (10cm)

5.25" (13cm)

N/A

N/A

N/A

Midrange construction

Low-mass rigid cone of Kevlar skins laminated over Nomex honeycomb core. 6.2g moving mass. Very low resonant frequency from high-compliance suspension. Coated foam surround and large spider. 1" (25mm) hex-wound copper voice coil on Kapton former, vented at rear. Carbon fiber reinforced ABS non-magnetic chassis; 20oz. (567g) magnet. 0.25" (6mm) p-p linear excursion. Response -3dB at 350Hz and 3,150Hz.

Ultra-low-mass rigid cone of graphite and wood fiber. 3.13g moving mass. Low resonant frequency from high-compliance suspension. Coated multi-fold cloth surround and large spider. 1" (25mm) voice coil, alloy phase plug. Alloy chassis; 20oz. magnet. 0.25" (6mm) p-p linear excursion. Response -3dB at 350Hz and 3,150Hz.

Midrange enclosure

Resistively vented in alliptic, non-diffractive Q-Stone™ enclosure containing damped acoustic line.

Resistively vented in alliptic, non-diffractive Q-Stone™ enclosure containing damped acoustic line.



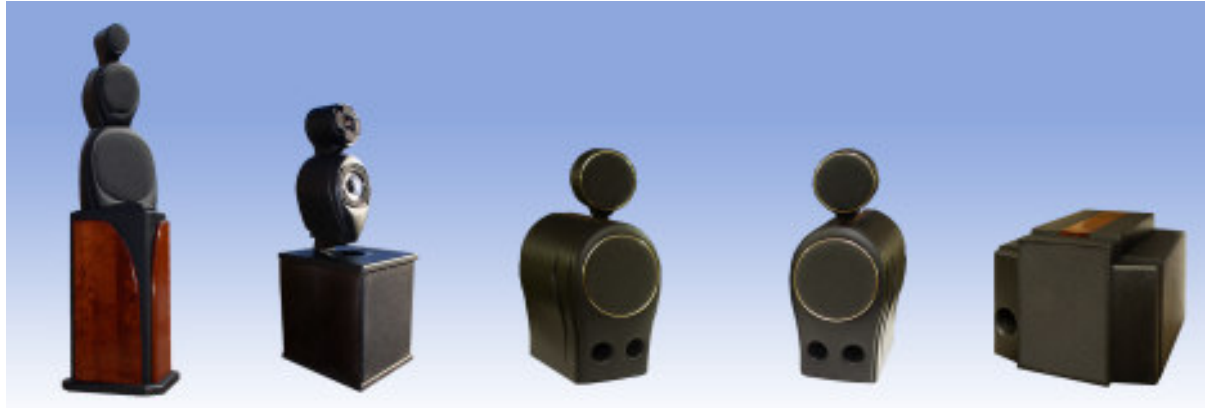
A resistive vent loads the rear of both Calypso HD and Pico Executive HD midrange cones, suppressing each one's natural low-frequency resonance. The Calypso HD's midrange enclosure adds a second-stage muffler over the rear of this vent.

Speakers have been designed for grilles to be left in place.



Specifications

Overview | Woofers | Ports | Midranges | **Tweeters** | Wiring and Circuits | Acoustic results | Accessories in the box



Calypso HD

Pico Executive HD

Eos HD

Eos

Aperture HD

Tweeter diameter

1.1" (28mm)

1" (25mm)

1.06" (27mm)

1.1" (28mm)

Tweeter construction

Lightweight linen dome, hand-coated with polymer. High-compliance, inverse-roll contiguous suspension. Hex-wound copper-clad aluminum voice coil wire, Ferrofluid cooled, high-strength aluminum alloy former, vented into large, damped rear chamber. 0.46g moving mass. Double neodymium magnets, fully shielded.

Lightweight, treated-fabric dome. High-compliance polymer suspension. Ferrofluid cooled voice coil with highly-flexible lead-in wires. Fully vented into large, damped alloy rear chamber. 0.35g moving mass. Six radially-magnetized neodymium magnets.

Lightweight, impregnated fabric dome with high-compliance polymer suspension. Ferrofluid-cooled voice coil with highly-flexible lead-in wires. Fully vented into large, damped rear chamber, with extruded heat sinks. 0.31g moving mass. Neodymium ring magnet.

Lightweight linen dome, hand-coated with polymer. High-compliance, inverse-roll contiguous suspension. Hex-wound copper-clad aluminum voice coil wire, Ferrofluid cooled, high-strength aluminum alloy former, vented into large, damped rear chamber. 0.46g moving mass. Double neodymium magnets, fully shielded.

Tweeter enclosure

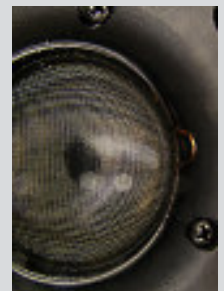
In alliptic, non-defractive, Q-Stone™ enclosure with integrated tweeter chassis damping.

In non-defractive, Q-Stone™ enclosure with integrated tweeter chassis damping.

In non-defractive, Q-Stone™ enclosure with integrated tweeter chassis damping.

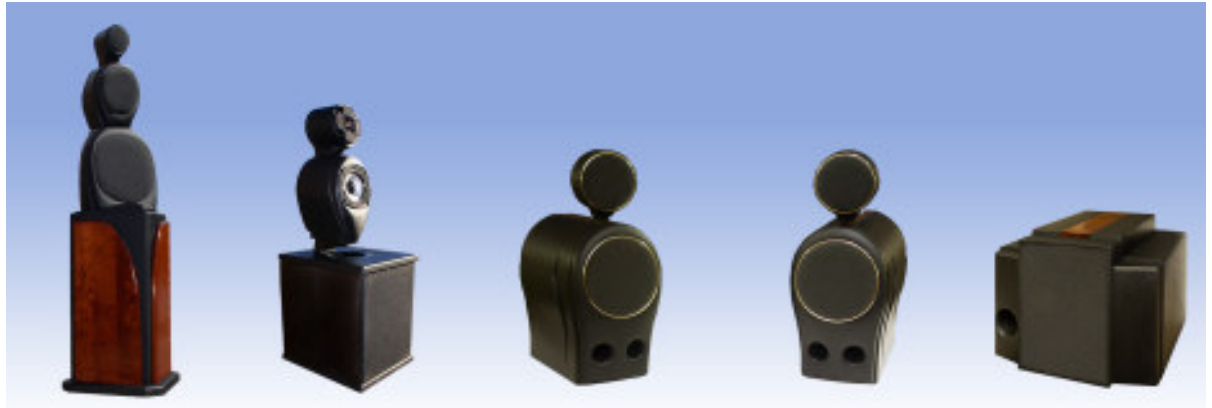
In Q-Stone™ enclosure, surrounded by inverse acoustic-foam and -felt horn. Integrated tweeter chassis damping.

Speakers have been designed for grilles to be left in place.



Specifications

Overview | Woofers | Ports | Midranges | Tweeters | **Wiring and Circuits** | Acoustic results | Accessories in the box



Calypso HD

Pico Executive HD

Eos HD

Eos

Aperture HD

Wiring

Woofers, Midrange, Tweeter

Exclusive High Definition CopperMatrix™ wire by Marigo Audio: 18-gauge, 500+ strand Litz wires of six-nines purity, single crystal, oxygen-free copper with proprietary winding geometry; double cryogenically-treated, organic dielectric insulation; proprietary internal vibration damping system.

Woofers, Midrange, Tweeter

Exclusive High Definition CopperMatrix™ wire by Marigo Audio: 18-gauge, 500+ strand Litz wires of six-nines purity, single crystal, oxygen-free copper with proprietary winding geometry; double cryogenically-treated, organic dielectric insulation; proprietary internal vibration damping system.

Woofers, Tweeter

Exclusive High Definition CopperMatrix™ wire by Marigo Audio: 18-gauge, 500+ strand Litz wires of six-nines purity, single crystal, oxygen-free copper with proprietary winding geometry; double cryogenically-treated, organic dielectric insulation; proprietary internal vibration damping system.

Woofers

Double run of 14-gauge, heavily silver-plated and polished oxygen-free copper strands cryogenically treated, Teflon insulated; by Audio Magic.

Tweeters

22-gauge fine-stranded pure oxygen-free copper, cryogenically treated, polyethylene insulated; supplied by Jena Labs.

Woofers, Tweeter

Exclusive High Definition CopperMatrix™ wire by Marigo Audio: 18-gauge, 500+ strand Litz wires of six-nines purity, single crystal, oxygen-free copper with proprietary winding geometry; double cryogenically-treated, organic dielectric insulation; proprietary internal vibration damping system.

Crossover

Balanced-Phase™ first-order circuit.

Balanced-Phase™ first-order circuit.

Balanced-Phase™ first-order circuit.

Balanced-Phase™ first-order circuit.

Zobel circuit's capacitor

Woofers
Midrange
Tweeters

Ultra-premium quality.
Ultra-premium quality.
Ultra-premium quality.

Ultra-premium quality.
Ultra-premium quality.
Ultra-premium quality.

Ultra-premium quality.

Premium quality.

Ultra-premium quality.

Ultra-premium quality.

Ultra-premium quality.

Crossover principal capacitor

Woofers
Midrange
Tweeters

N/A
Ultra-premium quality.
Ultra-premium quality.

N/A
Ultra-premium quality.
Ultra-premium quality.

N/A

N/A

Ultra-premium quality.

Ultra-premium quality.

Crossover bypass capacitor

Woofers
Midrange
Tweeters

N/A
Ultra-premium quality.
Ultra-premium quality.

N/A
Ultra-premium quality.
Ultra-premium quality.

N/A

N/A

Ultra-premium quality.

N/A

Ultra-premium quality.

Binding posts

Pure oxygen-free copper, directly gold plated. Mounted on bottom.

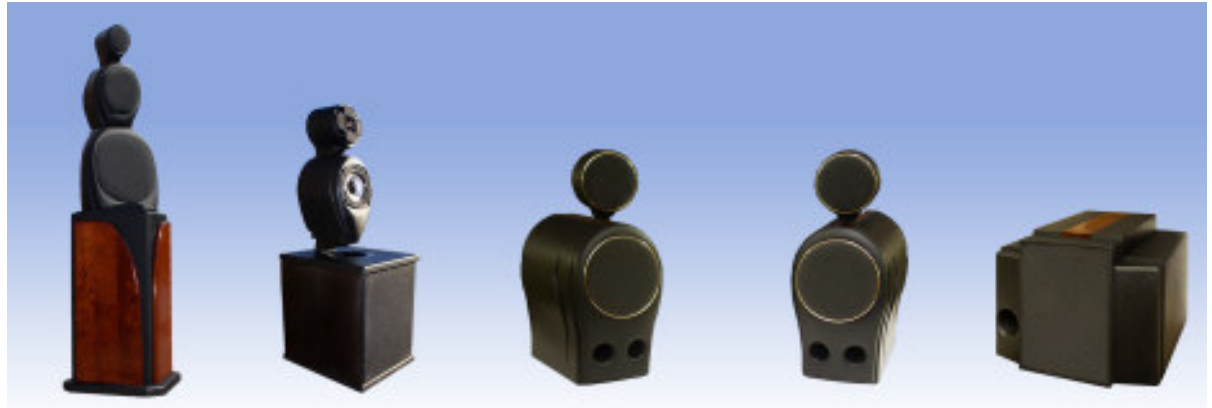
Pure oxygen-free copper, directly gold plated. Mounted on back.

Pure oxygen-free copper, directly gold plated. Mounted on back.

Pure oxygen-free copper, directly gold plated. Mounted on back.

Specifications

Overview | Woofers | Ports | Midranges | Tweeters | Wiring and Circuits | **Acoustic results** | Accessories in the box



Calypso HD

Pico Executive HD

Eos HD

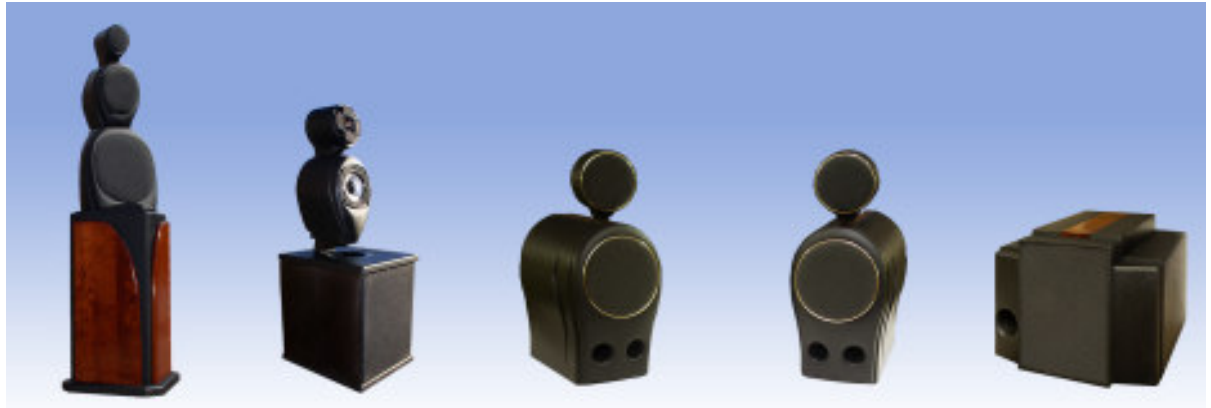
Eos

Aperture HD

	Calypso HD	Pico Executive HD	Eos HD	Eos	Aperture HD
Distortion (*I.M.D. is for any two frequencies separated by a 10:1 ratio.)	<0.5% harmonic 100Hz-12kHz, <1% intermodulation, both at 100dB at 1m*.	<0.5% harmonic 100Hz-12kHz, <1% intermodulation, both at 98dB at 1m*.	<0.5% harmonic 100Hz-12kHz, <1% intermodulation, both at 98dB at 1m*.	<0.5% harmonic 100Hz-12kHz, <1% intermodulation, both at 98dB at 1m*.	<0.5% harmonic 100Hz-12kHz, <1% intermodulation, both at 98dB at 1m*.
Phase Shift	+/- 3 degrees acoustically, from 220Hz to 8kHz. Does not vary with loudness.	+/- 2 degrees acoustically, from 220Hz to 8kHz. Does not vary with loudness.	+/- 2 degrees acoustically, from 200Hz to 8.5kHz. Does not vary with loudness.	+/- 2 degrees acoustically, from 200Hz to 8kHz. Does not vary with loudness.	+/- 2 degrees acoustically, from 200Hz to 8kHz. Does not vary with loudness.
Rise time	<10 microseconds, positive or negative input. Does not vary with loudness.	<10 microseconds, positive or negative input. Does not vary with loudness.	<10 microseconds, positive or negative input. Does not vary with loudness.	<10 microseconds, positive or negative input. Does not vary with loudness.	<10 microseconds, positive or negative input. Does not vary with loudness.
Polarity	Positive, over full bandwidth.	Positive, over full bandwidth.	Positive, over full bandwidth.	Positive, over full bandwidth.	Positive, over full bandwidth.
Dispersion	Omni at 40Hz, smoothly decreasing to cardioid at 10kHz.	Omni at 45Hz, smoothly decreasing to cardioid at 10kHz.	Omni at 47Hz, smoothly decreasing to cardioid at 12kHz.	Omni at 47Hz, smoothly decreasing to cardioid at 10kHz.	Omni at 47Hz, smoothly decreasing to cardioid at 10kHz.
Impedance	4.75 Ohms, +/- 0.75 Ohms 150Hz to 20kHz. Does not vary with loudness.	5.25 Ohms, +/- 0.75 Ohms 150Hz to 20kHz. Does not vary with loudness.	4.8 Ohms, +/- 0.75 Ohms 100Hz to 20kHz. Does not vary with loudness.	4.8 Ohms, +/- 0.75 Ohms 100Hz to 20kHz. Does not vary with loudness.	4.8 Ohms, +/- 0.75 Ohms 100Hz to 20kHz. Does not vary with loudness.
Sensitivity	88dB for 2.83V at 1m, at sea level. Dynamically linear within 0.5dB to 100dB.	90dB for 2.83V at 1m, at sea level. Dynamically linear within 0.5dB to 100dB.	90dB for 2.83V at 1m, at sea level. Dynamically linear within 0.5dB to 100dB.	90dB for 2.83V at 1m, at sea level. Dynamically linear within 0.5dB to 100dB.	90dB for 2.83V at 1m, at sea level. Dynamically linear within 0.5dB to 100dB.
Max SPL	105dB peak at 3m from a stereo pair, first-arrival (without room gain).	105dB peak at 3m from stereo pair, first-arrival (without room gain).	105dB peak at 3m from stereo pair, first-arrival (without room gain).	105dB peak at 3m from stereo pair, first-arrival (without room gain).	105dB peak at 3m from stereo pair, first-arrival (without room gain).
Pair matching	Amplitude +/- 0.25dB; impedance +/- 0.15 Ohms, 160Hz-8kHz; crossover parts +/- .15%.	Amplitude +/- 0.25dB; impedance +/- 0.15 Ohms, 160Hz-8kHz; crossover parts +/- .15%.	Amplitude +/- 0.25dB; impedance +/- 0.15 Ohms, 160Hz-8kHz; crossover parts +/- .15%.	Amplitude +/- 0.25dB; impedance +/- 0.15 Ohms, 160Hz-8kHz; crossover parts +/- .15%.	Amplitude +/- 0.25dB; impedance +/- 0.15 Ohms, 160Hz-8kHz; crossover parts +/- .15%.

Specifications

Overview | Woofers | Ports | Midranges | Tweeters | Wiring and Circuits | Acoustic results | **Accessories in the box**



Calypso HD

Pico Executive HD

Eos HD

Eos

Aperture HD

Accessories

EarSticks; nut driver; T-handle Allen wrench; adjustable cone feet with hardwood floor protectors, Ownership Guide.

EarSticks; nut driver; T-handle Allen wrench; adjustable cone feet with hardwood floor protectors; brush for dusting tweeter and midrange drivers; bottle of leather polish, Ownership Guide.

EarSticks; stick-on felt disks to protect furniture and bookshelves, Ownership Guide.

EarSticks; Allen wrench, Ownership Guide.



Note

The Ownership Guide will lead the owner through the steps of Receiving and Unpacking, Connecting and Conditioning, Positioning and Adjusting, Using the EarSticks, Fine-tuning the Sound, and Setting up a Home Theater. It will also include our Happy Ears for Life™ warranty and the Product Registration card.