

## Apertura Audio Armonia speakers review



French loudspeaker company grabbed my attention with their captivating aesthetics, unique speakers shape and their own way of doing things. Apertura Audio are not presenting them selfs as and exotic/esoteric speaker manufacturer,, but an heterodox one. That might be seen as a company is not using the same principles as all others, but they clearly pursue their work based on the scientific basis and as they say: “for very good, proven, and measured reasons.” In this regards Apertura Audio way of doings things differently brings impressive results.

For company the basic, primal idea behind Armonia and all of their models) is keeping things simple. But, not simple for the sake of simple. Simple as Einstein used to say: “Things have to be simple, but not simpler.” Then again. Even the basic configuration with two ways, two drivers such design is not exactly easy to design and make them in performing as wholw. It is a complicated task.

Apertura Audio focus is not based on highlighting one single aspect of the design. They see their speakers as a harmnoius sum of elaborated technical choices. They see the loudspeaker as an acoustic electro-dynamic converter and as such is a mix of various design choices of equivalent importance. For them using the exotic materials without actually benefit is of no use and feel, that many forgot how cabinet have acoustic modes, that create the masking effect.

For them the sub-assemblies or treatment are related to each others in only one goal: bring or retrieve nothing from the original musical signals. In such spirit they're making the speakers for music lovers and not typical audiophiles. They urge in having no sonic signature and strive for the music reproduction, that is closer to music.

For all of their speakers Apetura audio uses Christian Yvon crossover technology.

This topology he found 30 years ago. They found it, how for their designing its simply the most efficient tool available to design a crossover taking into account the real nature of electro-mechanical drivers. All traditional circuits (Bessel, Butterworth...) consider the load a pure resistance and Armonia strongly feels, that in reality drivers are a little bit more complex than a pure resistance.....

Armonia is selecting their drivers for speakers based on three main parameters among others:

Naprava za varčevanje z elektriko



Zmanjša račun za elektriko za 75 %

Izvedite več

NATURAL SOUND

S.r.o.



T: 00386 40 800 754

Chameleon Audio



French Refinement at its best

- Linearity - no fracture on the bandwidth, so good damping parameter.
  - Moving part weight, to keep transition speed as high as possible
- Magnet circuit

For them consistency is also of highest importance. They feel, that customers are buying a speaker that must be as closed as the one design principle led by Christian Yvon vision.



For Apertura Audio the acceptance of same quality of the drivers are in the same production batch doesn't hold much. Even drivers, that are coming from the top range of different manufacturers. Their ultimate solution and approach is simple, yet very time and money consuming. All drivers sets (Woofer+Tweeter) are measured together in an Armonia Cabinet with an adjustable crossover. The final crossover is manufactured according to these new value and linked to its driver set. So practically every speaker its tuned in sole fashion. That is for sure something, that clearly put Apertura ahead from most speaker companies.

## APERTURA DRIM

*In 1978, bored by the lack of attenuation, efficiency, but mainly by the lack of versatility and capabilities of common crossovers structures (.....), Christian Yvon began his first work on crossovers and corrections specifically intended for drivers generated signals.*

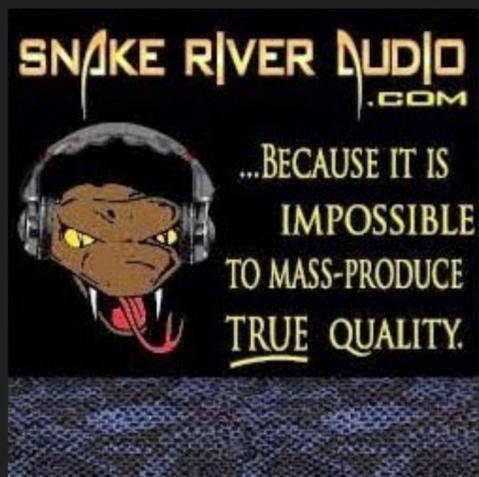
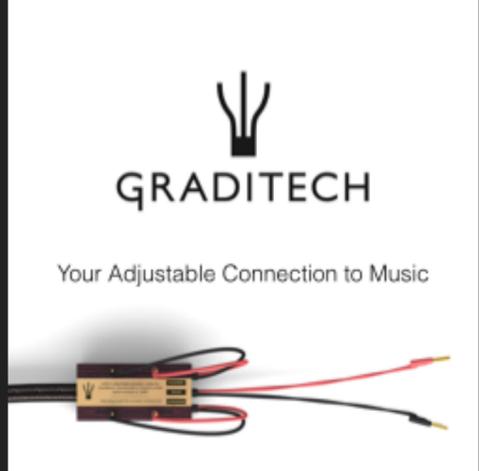
*He was looking for a subtle but powerful tool capable in priority of modelling, carving and slicing with efficiency the signal with no erratic compensation. The trail of the resonators, never used at that time for the treatment of speakers, appeared obvious to him.*

*However, he realized very quickly that a simple adaptation of the "Cauer" structure in the speaker's field did not allow reaching his goal: subtlety and precision on the razor's edge.*

*He also noticed that some amount of adaptation and damping should be inserted in the ellipse structure to compensate the non-linear profile of impedance and frequency response.*

*After much research and experimentation, it became clear to him that the configuration of the resonator - to achieve the flexibility he was looking for (corrections and use of multiple slopes), - relied on the use of an additional specific circuit.*

*Thus were born the structures "DRIM" (Dual Resonant Intermodulation Minimum) that is capable of "brutal" 90° cut-off as well as complex multi-slopes roll-off.*



*In the aftermath he created his first company "PROLOGUE Research and Development" whose purpose was not the manufacturing but the study and design of loudspeakers for various brands. (Sometimes competitors)*

*His first project was "Dialogue Logos" which had great success in the United States, and was in fact, the first Goldmund Loudspeaker of which he became for many years, the appointed designer.*

*Among his first clients he counted: Jacques Mahul (Focal JM Lab) Point Source, Auditor, Joseph Szall (Capriccio Continuo), Einstein, Sonus Faber, etc ... for which he specifically acted in the crossover part, for their Luxury high-end models.*

*At the time (we are in the early 80s), nobody in the loudspeaker industry had experimented such deep crossover attenuation. Christian, thanks to the DRIM structure, was capable of designing transition slopes so close that even by reversing the polarity of one drive, the summing phase remains almost unchanged. In fact the phase rotation was there, but in a frequency range as short as you may consider it rotates in the void!*

*A little later: Birth of Apertura, which Christian Yvon had always been the sole acoustic designer.*

## ARMONIA

I'm always affected by the first encounter with the product under review . It shows a how is company is seeing themselves and how they want to be presented to the world. Both to the media industry and final customers.



applied physics...  
...in audio connections



unique high end audio

Burmester

LINNENBERG



VIVACE  
32 Bit / 384kHz - DSD  
- DXD - DAC

aqua  
acoustic quality

GRAAF



From the packaging to the last detail everything was spot on touched by the hand of ordinance with Apertura Audio Armonia speakers. When it comes to doing the things in right way the attention to all little details matters. In this day and age we all became susceptible to this and those who wants to lead the industry embraced this ignited by their own urge and understanding of the service quality.

Apertura Audio team really took everything most seriously. This is the way it should be and quite few of the upper echelon speakers manufactures could learn a lesson in packing and presenting of their products. For those of them who read, look, learn and do address the needed.

The second pleasant surprise happened with the actual uncovering of both speakers. What a sight! The finish on these two speakers was special. High glossy lacquer covering the rosewood veneer was clearly something I would expect from speakers of class above the Armonia price range. Hats off!

## TECHNICAL

Apertura Audio uses as as structural material MDF in fine layers of 3mm. These parts are glued together in a moulding process. Through the testing they found, that such structure is more efficient in terms of vibration damping than single layer structure and they succeed the vibration rejection and attenuation due to transmission via successive layers of MDF and Glue.

For them the damping is a very important matter, that is to often underrated by most of people.

*"You have to damp internal panel in a proper manner, but most important the load itself and keep in mind that one deals with the very same acoustic energy generated by drivers in listener direction as inside the cabinet. Considering that this energy will be dissipated by miracle or position or geometry of panels is a dream. If non attenuated it will have a enormous influence on the final tonal balance of your speaker."*



With Armonia speakers they use a mix of four different materials for this purpose,. With that combination they guarantee that all their speakers are free from any parasitic standing waves.

Returning to the speakers drivers. Armonia spots 7" Isotactic Matrix cone Bass/mid-range unit and 3" ribbon tweeter. Importance and practical stand result of their implementation I've already mentioned above. Apertura team succeed in crossing the bridges of drivers synergy in very refined way. Still. When implemented right ribbon tweeter can reproduce the music with the utmost closeness and intimacy, that are closely connected to the live musical experience. Armonia's higher spectrum was radiant and ethereal. The rides, hi-hats and rest of percussion amplitudes were reproduced in a convincing and feather like way. My listening notes haven't showed at any point the shifting toward the harshens. Even when things went more loud.

## FIXATING

Apertura Armonia implements interesting way to fixate the speakers on the floor. Along the usual four spikes, there is a thicker centre spike, that gives the speakers really firm and solid grip to the floor. These makes the solid standing and not easy to swing at any point. Very clever solution, that deals in great way with steady placement

## THE SOUND

It seems all high-end audio products holds the same common fact of being affected by the moving - transporting. Obviously there is a certain sound change from the moment of arrival and placement and the interval of settling in. This can take from few days and up to the week. The change can be quite a dramatic one. With speakers even a non trained ears will mark the difference and it took Armonia five to six days in getting on the plane where my listening notes showed no drastically avid changes.

Speaking of this phenomena it might closely connected to the materials being resonating with the changes of the temperature and climate. Each material has its own resonating frequency and once affected by some external energies it act s differently in different soundings.

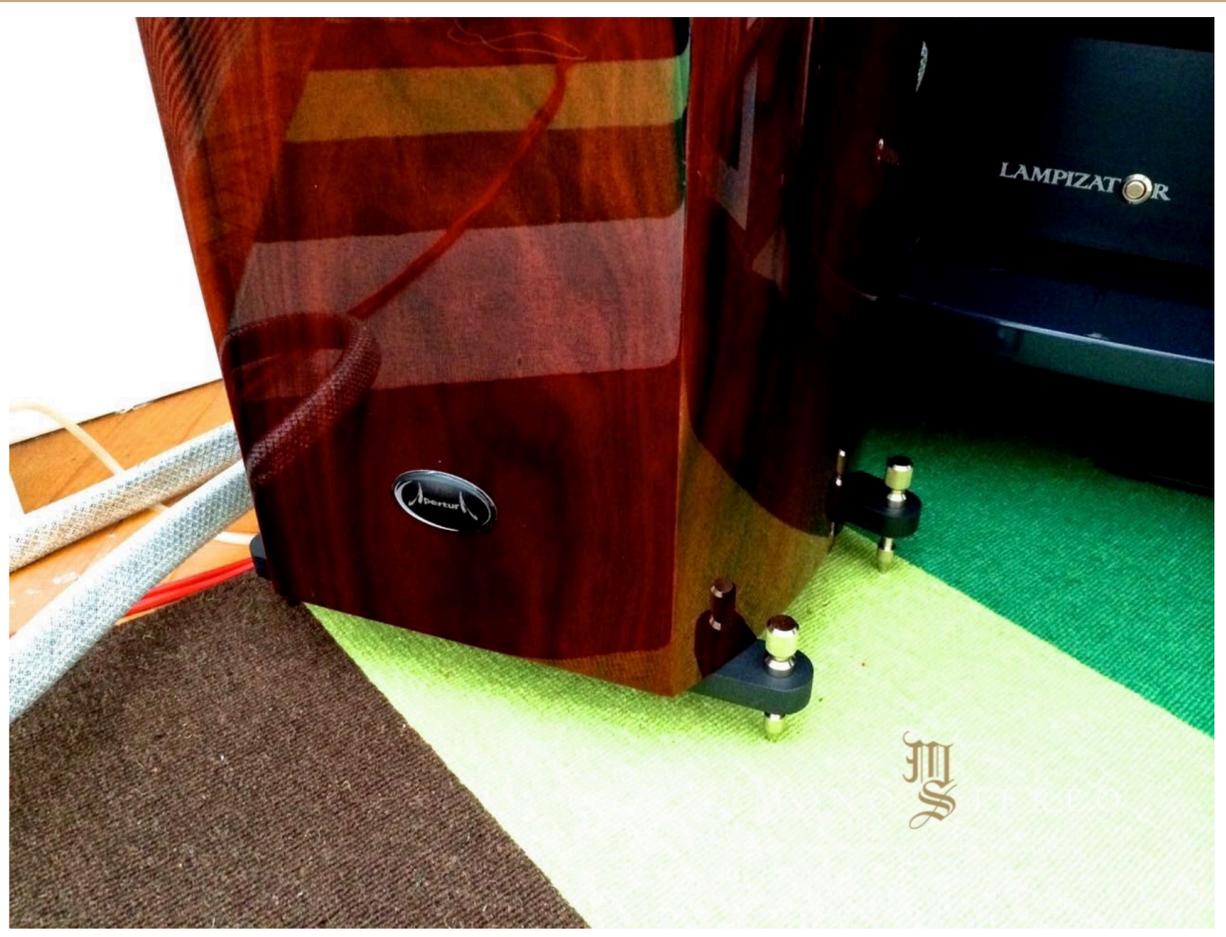
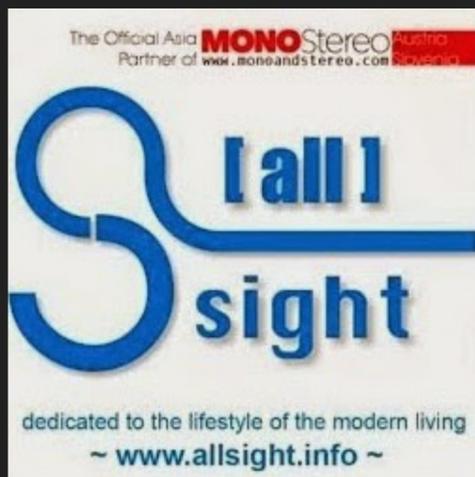
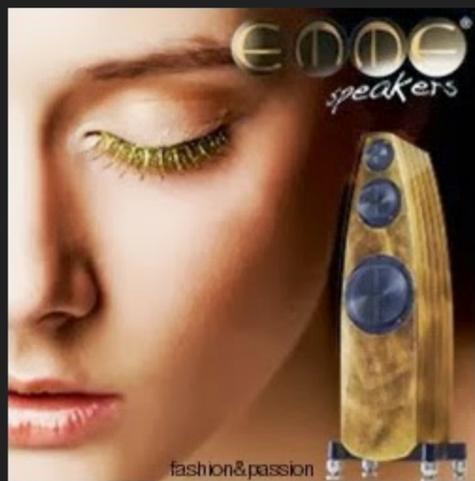
PLACING AN AD IS FREE

myaudioshop

FOR EVERYBODY!



オーディオ・ユートピア  
by **amplitude**



Connected to this I cannot avoid further speaking about the resonances and materials being used for creating the speakers chassis. We've seen the variety of materials being used for loudspeakers enclosures in past few decades. From aluminium, magnesium, carbon fibre etc. Yet, wood or industrial wood based mixtures (MDF etc.) still holds a special place as a building material. It might be true, how some more extremely rigid materials act as a solid absorbers and eliminators of the resonances and micro vibrations. Wood, wood laminates and mixtures on the other hands resonate differently and deals with the resonances in both technical manner and to some point as with musical instruments. For me, the illusion of live music and acoustical un-amplified instruments comes recreated more lifelike when these are the building blocks of speakers. Especially with one thing I hold very dear. The tone! We don't often hear or read about the tone these days. It's something, that is closely connected with real music and not really easy to get it right when designing loudspeakers.

For the correct tone there is no substitute in high end audio chain. With almost all other components, there might be a working solution for affecting the sound with the desiring outcome. Tone on the other hand cannot be "injected " or inserted if the loudspeaker don't hold the original ability to recreate it.



BEST AUDIOPHILE  
TWEAK UNDER \$ 50!



KEITH JARRETT  
CHARLIE HADEN

LAST DANCE

ECM

W  
NAXOS  
CLASSICS

PURE  
MARIA CALLAS

eventide

voce s 8



PIERRE-LAURENT AIMARD

BACH  
THE WELL-TEMPERED CLAVIER I

Intriguingly Apertura team managed to embrace this utmost importance elaborately. Armonia speakers relate closely with the music as it is. Intimate, naturally dark sounding and a being able to evoke emotional response.

Being around high end audio dealings for more then 25 years my demands and references took the shape into the urge of searching and writing for the products, that can convey the language of the music to our listening rooms as their primary goal. Music is special and listening to the recreated musical events it's not only a luxury, but one of the greater gifts to humanity. In that regards I'm appreciative highly towards the High-end audio ventures with clear ability to explore the given knowledges and technologies for the sake of bringing the music as it is. As whole!

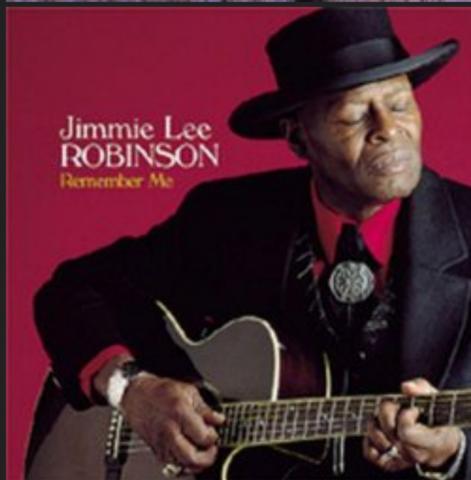
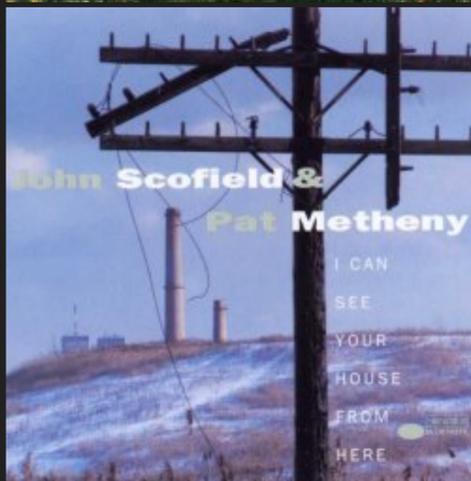
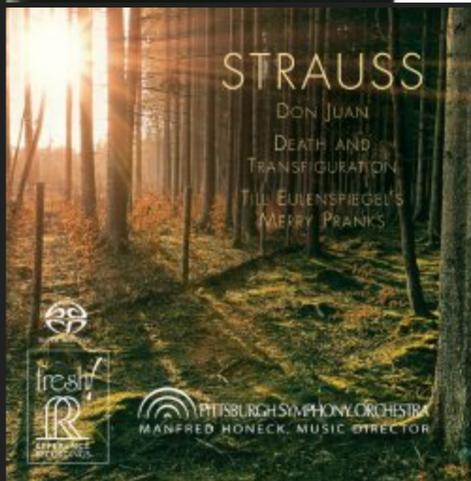
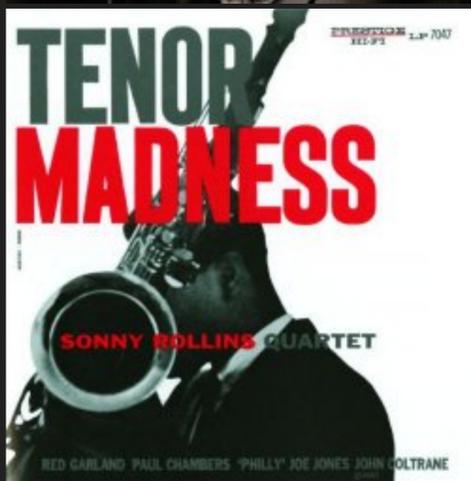
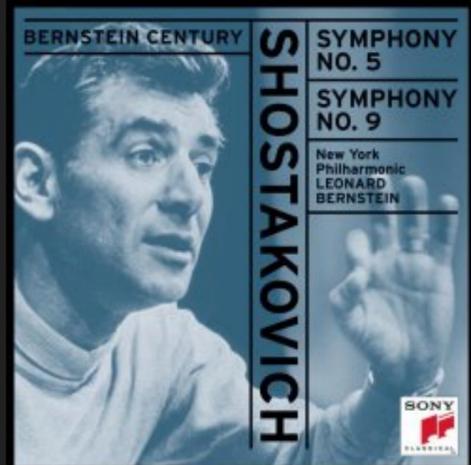
It takes prolonged technical elaboration and listening in being able to present a product of musical nature. We're witnessing the arise of pure technological take on the music replay and presenation. In search of the false holly Grail of details, dynamics and resolution the common human sense was lost in so to speak translation of the music. It feels like we're being forced into experiencing the music as the sum of technological details and not as harmonically treated entity of wholeness. The sum of doing things right and making right technologies and materials working hand in hadn.

Live music always comes in a sort of virtual bubble that travels coherently through the time. We can differentiate the autonomy of singular voices and instruments in orchestral music for example as natural way of perceiving things. Sole violin will still sound like a solitude standing, but always in a conjunction with the rest of the orchestral impact. I'm talking about the wholesome energy being traveling towards us and how we respond to it. We are very sensitive beings and especially with music our perception and reaction is special and one of the kind. When music is reproduced correctly we're experiencing the joy, calmness and positive impact. Its emotional empowered experience.

And this reaction has all to do with the way certain product are being designed. If in the alliance with the tone, then the interaction with the music and performer will take place intimately. At the end of the day it all comes down to the people and their choices being made. Their vision and conclusions are being implemented into the final product and resonate as the core DNA of dedicated brand vision and implementation of the sound.



For Apertura Audio the clear focus was the music. And Armonia speaks music. Vividly, intimately and close to what real music is. The real transfer of event taking space in time and continuum reflecting the actual event with the ability to moving our inner subtle world. There are vast recordings reflecting the infinite potency of the musical message being presented and high-end speakers utmost role should always be reflecting to this in most clear way of doing things. No exotics mushrooms or mystified takes, but a wedding of technology, experience and actual listening. Armonia speakers embraced the positive technological takes in a result that lucidly relate to the music.



## MUSIC

What is any loudspeaker's true value? If they cannot convey the music in a believable manner, they fail at first stress test. As a given fact in reproduction of music we're dealing with the illusion of the musical events, that happened at some point in time and place. The timeless musical message was created. Yet, even with the reconstruction of these moments we're connecting with an energetically empowered musical message, which can strongly affect our emotional state of mind and body. Listening to the music brings more, than people and even a lot of audiophiles are aware of. Our sensible receptors are not only the main aural ones. Our body is working as a whole and complete in receiving the message of musical interaction. As simple as all this transfer of music might seem, the right way of doing things is as complex as it gets. We might progress with all the computer (CAD) ability to simulate and predict the sound outcome. Yet, there can be no assured aural results and absence of practical listening being the part of the process. This is where the structural points of timbre, tone and colour are made. And, this is where the expertise of a jointed elaborated conjunction between proper technical approach and profound listening are being projected in the real world situation. The end product.

## CONCLUSION

Apertura Armonia speakers radiate more like a luxury pair of speakers rather than a company second entry level product. It might sound like *Cliché*, but Armonia sounds as good as they look. Harmonious, elegant and most importantly close to something we all cherish dearly. The music!

I cannot recommend more wholeheartedly any floor-standing speakers in this price range as these pair of French loudspeakers. They are packed with style, offer a real acoustical engineering, technologic background, respect to the heritage and they bring out music at its best.

I'm not often instantly connected to some product, but with Aperturas my inner clock got aligned at once.



It's hard to argue against Apertura's technological explanations and elaborated takes on their way of designing the speakers. The result speaks on its own. These are the very pair of speakers I've enjoyed highly from the very first moment I've played music through them.

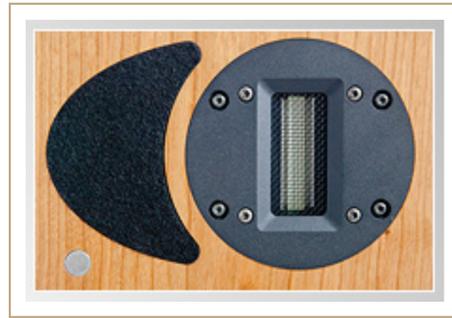
Apertura Audio Armonia speakers come with down-to-earth pricing and offer some of the better values in the industry. For true music lovers I cannot clearly and wholeheartedly recommend better value. These are great, musical-sounding floor-standing speakers that show the real ability of Apertura Audio's expertise in music reproduction.



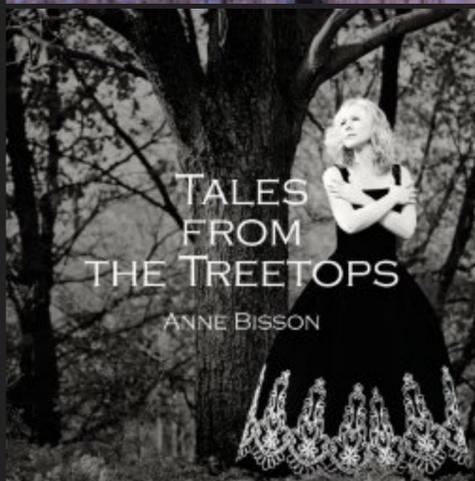
Apertura Audio Armonia speakers are a prime example of a product done right. From first to last take they're offering visual and aural pleasure, that resonate for much longer than most similar speakers. They still do with me. Highly recommended!

**Text: Matej Isak**

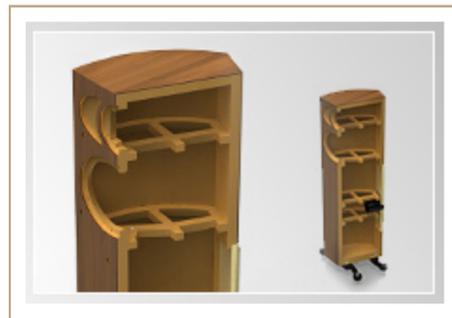
## ARMONIA FEATURES:



*Ribbon tweeter. 3" Sandwich diaphragm of only 18mg. Neodymium magnet.*



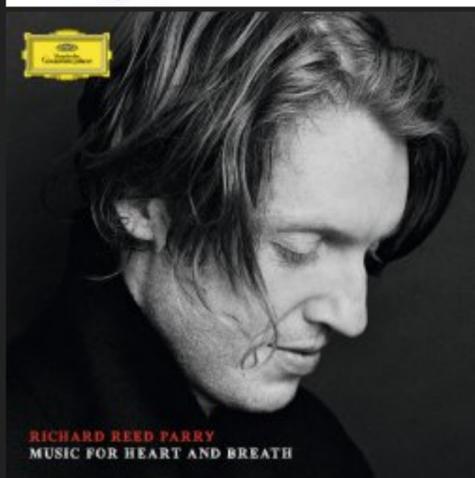
*7" Isotactic Matrix cone (woven polypropylene composite). Linear on a wide frequency range, and well damped. Powerful magnet circuit with a 11cm ferrite, and a heavy copper ring on pole piece for reduced non-linear and modulation distortions.*



*21mm multilayers, high-density MDF structure. Panels pressure molded on a four bracing skeleton. Premium solution to achieve an outstanding neutrality of speaker enclosure.*

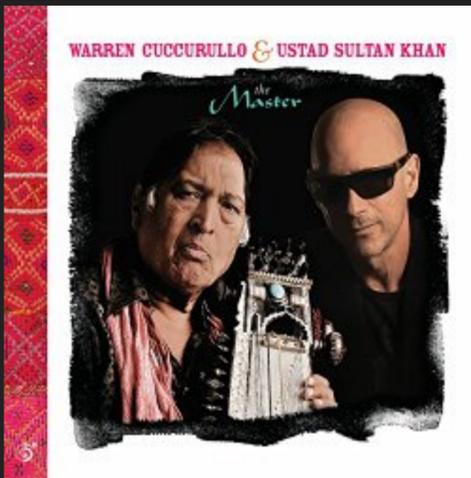


*Proprietary DRIM structure. High-end audio components: Jantzen coil with 1.4mm<sup>2</sup> baked wires, Mundorf & Jantzen polypropylene capacitors. Hand wiring on FR4-4 oz Pcb. Silver plated/ copper PTFE internal wiring.*



*To optimize the dispersal of structure-borne noise, Armonia stands on a central cone positioned on the axis of the center of gravity. The four other spikes are for stability only.*

## TECHNICAL SPECIFICATIONS:



### Armonia - Technical specifications

**2 way, 2 drive-units, floor-standing loudspeaker..**

Frequency range : 37-30 000Hz/ +3dB

Sensitivity : 88dB/1w/1m

Impedance : 8Ω

Load : Vented box

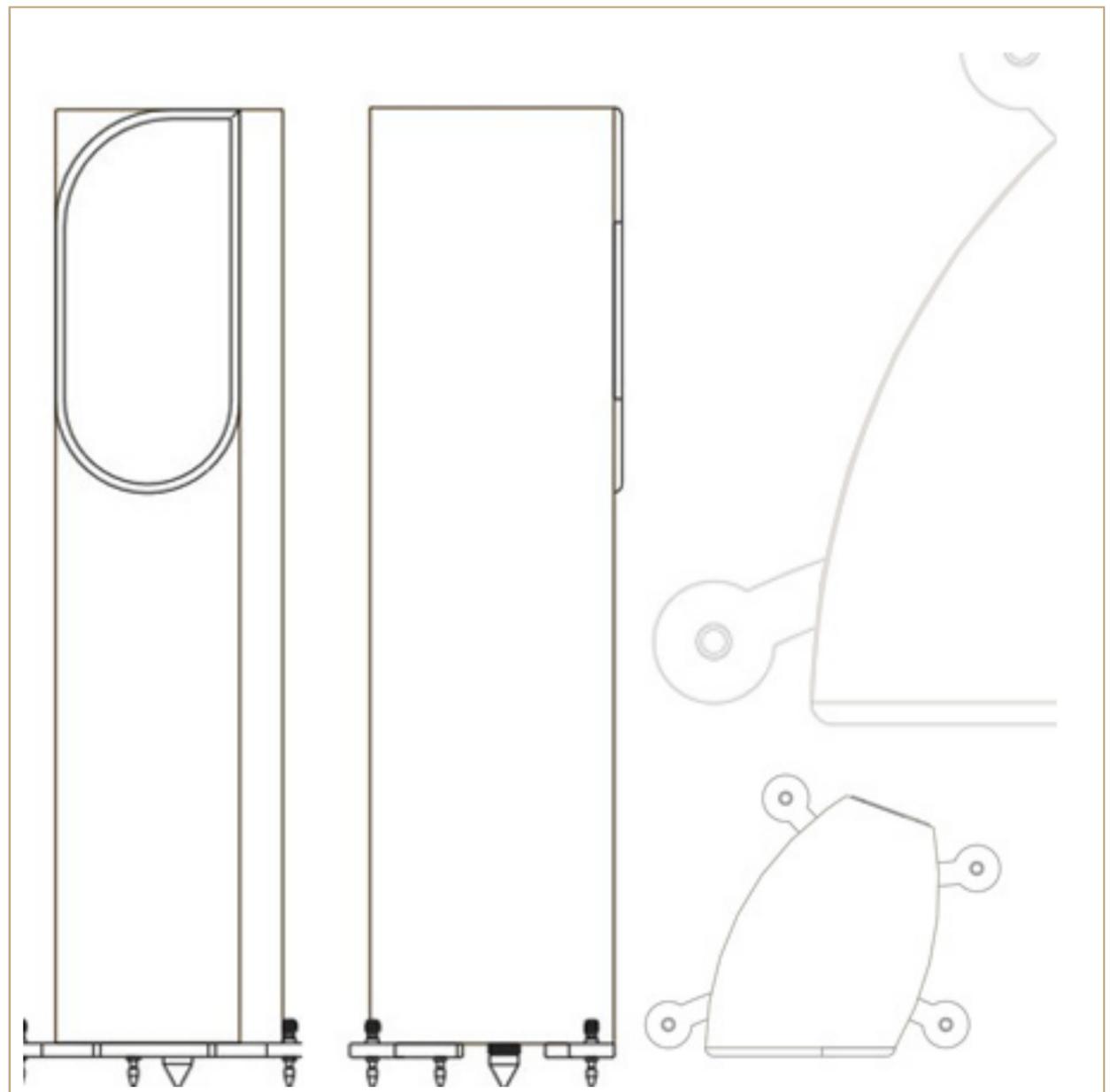
Drive-units : 7" Isotactic Matrix cone Bass/mid-range unit 3" ribbon tweeter

Crossover frequency : 3kHz

Terminals : Single wire binding posts (bananas or spades)

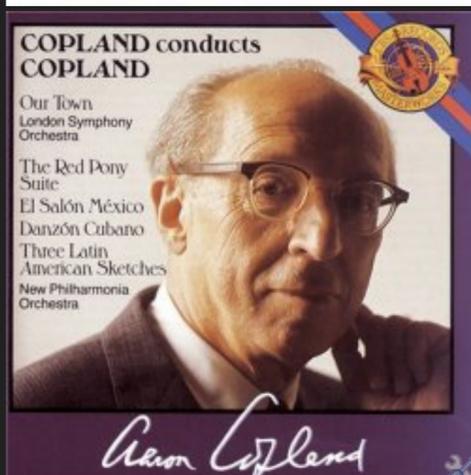
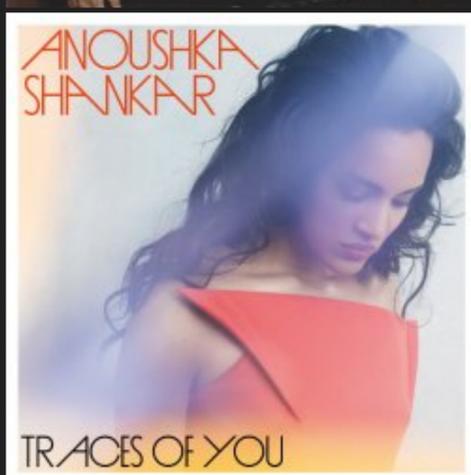
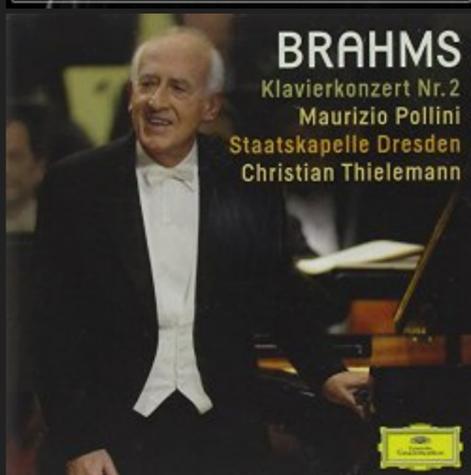
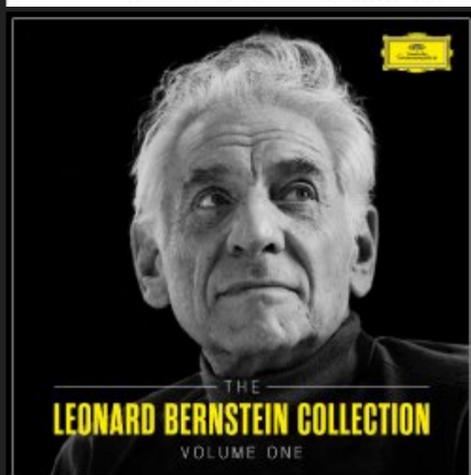
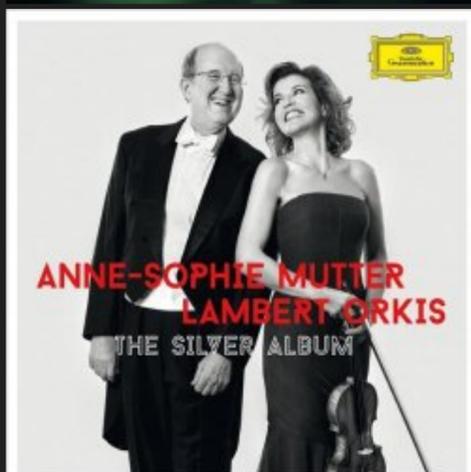
Dimensions : 216x271x1030mm (WxDxH)  
(with metal stands) 350x293x1081mm

Weight : 25,6kg net - 29kg (shipping weight)



## APERTURA

Apertura - a brand of Stentor SAS



**MOTORNO OLJE  
+ OLJNI FILTER  
+ MENJAVA**  
Cena velja za člane MAXX Service Cluba.  
Veľja za vozila Fiat Punto starejša od štirih let.  
**29,90 ŽE ZA EUR**  
service **MAXX** Mreža najbolj prijaznih servisov  
Veľja za vozila starejša od štirih let, menjava olja do 4L z viskoznostjo 10W-40, ACEA: A3/B3, A3/B4. Slike so simbolične.



Newer Post

[Home](#)



Older Post



RUBIDIUM ATOMIC CLOCK  
AUDIOPHILE EDITION

ZODIAC *Platinum*<sup>DSD</sup>

d256

**Antelope**  
64-BIT AFC Technology

Ultra-Low Noise **3R** Triple  
Analog Power



*applied physics in...  
...audio connections*



www.signalprojects.com



**HiFiAdvisor**

| Create Worldwide Opinions

#### SEARCH THIS BLOG

#### TIP US

Name

Email \*

Message \*

Send

#### FOLLOW BY EMAIL

**Mono & Stereo** High-End Audio magazine takes an in depth look at high-end audio industry trends, movements, latest and greatest with the critical touch. Matej Isak twenty + years of active traveling through the unique landscape of high-end audio unmistakably shaped his vivid and strong perception about audio, music, high-end industry and manufacturing. It's his goal and passion to listen, review and reveal great and carefully carved high-end audio products.

#### THIS WEBSITE USE COOKIES

*You can change your browser settings to disable cookies but it may affect your experience of this website. Click here to find out more about our cookies and how we use them. If you continue to use this site without changing the settings, you consent to the use of the cookies. If at any time you change your mind, you can of course change the cookie settings in:*

[Continue to use the site](#)  
[Change cookie settings](#)

Subscribe to t

Follow me on

Find me on F

Join me on G

Connect with  
LinkedIn