

Purity meets Performance

The voice of Avantgarde Acoustic



**avantgarde**  
ACOUSTIC



The answer is: "Purity meets Performance."

This is the answer to the question that is likely to arise, after just a glance at the Duo Grosso in "Turmaline Vivid Black". Or the Trio Classico together with Basshorns. Or may be after reading the strong convictions held by customers and industry experts alike. And you will marvel at what this is all about. About these speakers which not only look like part of some exciting faraway world; but which seem to catapult their listeners into exactly these new spheres.

As mentioned earlier, we believe the answer is actually quite simple. It originates in the inimitable and unique fusion of "purity and performance". This is the formula which has resulted in Avantgarde Acoustic™ becoming the reference benchmark for audiophile performance. A formula much to be said about. In this brochure we want to start to do so.



Heike & Jürgen Schwelm

"In the meantime more often our TV is turned off, so are the lights, and we sit in the dark and listen to music."

"I did not listen to music,  
I was inside the music."

Tobias Heibl

"The DUO gets close to the listener, reaches him *entirely* and floods the room with music – escape is impossible."

HIFI TEST, V. Frech, Germany

"What was so fascinating?

...it simply is *pure fun* being touched by these sounds."

K. Krämer

AUDIO QUARTERLY, C. Beeching, UK

"I would have sworn Joan Armatrading was *singing in my living room*, but then so was Louis Armstrong, and Pat Metheny...and... and... and the *neighbours kept finding excuses to visit*"

Ulla Püschel

"A good life is the fulfillment of *extraordinary longings!*"

"The experience listening to a horn system, simply cannot be described. Everybody who has the chance to audition these speakers, should take the chance. Thereafter *nothing is as it was before!!!*"

Gregor A. Ingenhoven

"Knowing to own the *best* gives peace of mind! - every day."

Werner Adelsberger

"I am as mesmerized by my Duo as I was *on the first day*. And the *best of it all*, it is a fascination which never fades!"

J. Pfeiffer

"The Uno is *exciting and intuitive*. It lets me forget about the speaker to *simply dissolve* in the music."

STEREO, M. Eichelsdörfer

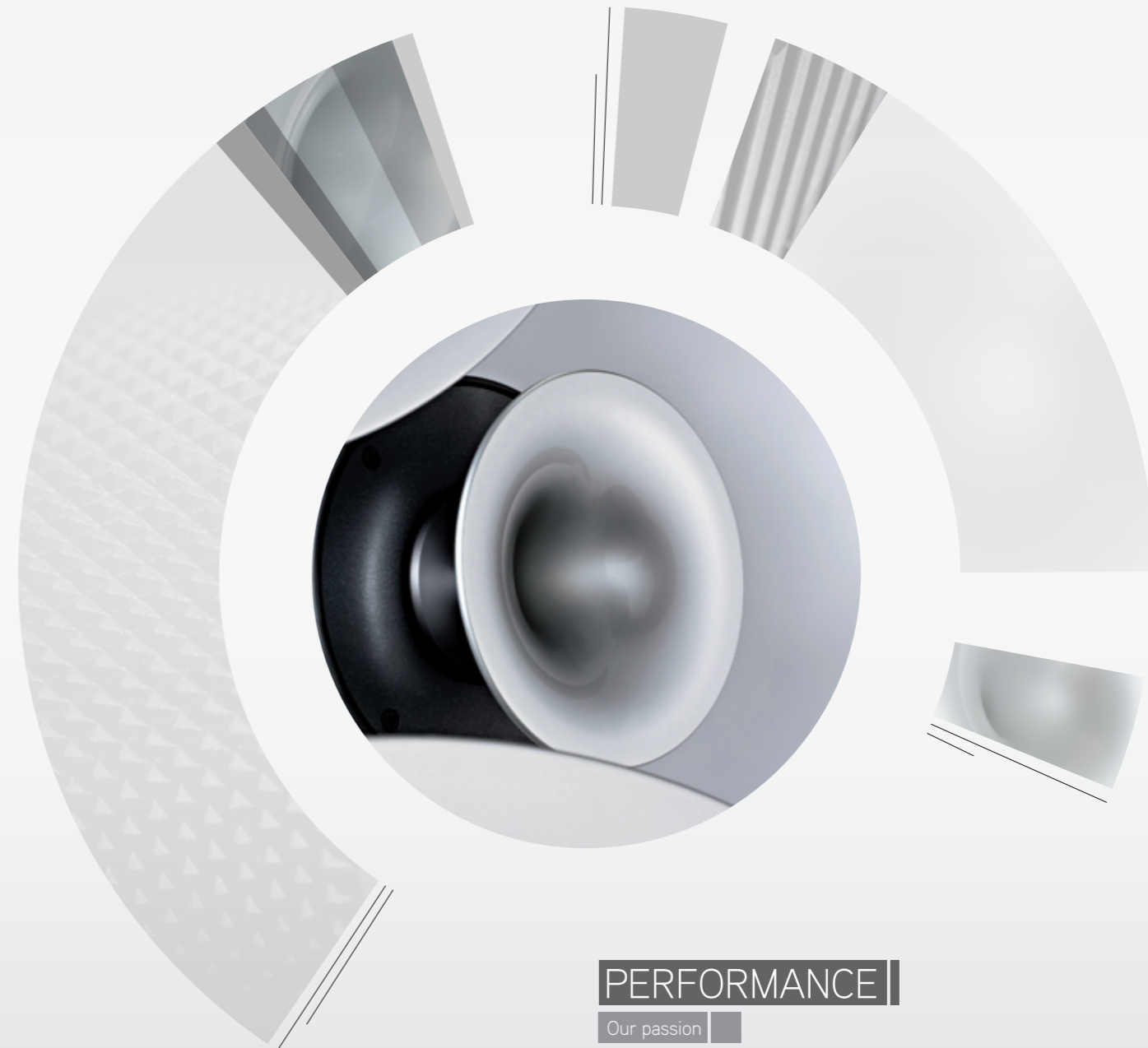


## PURITY |

Our mindset

Functional design which arises imperatively from its application. Plain, stringent and without alternatives. Bionically formulated technology, geared to the funnel shaped physics of the human ear, allowing the most ingenious principles of sound transduction to unfold. Enduring, precise and incredibly powerful. And last but not least a listening experience with an originality and neutrality which is utterly faithful to what actually took place in the studio or on the stage. Whether it's a violin sonata in minor or a heavy metal guitar riff.

This is purity.



## PERFORMANCE |

Our passion

To build systems which are best in class within the world of Super-Speakers today. To adhere faithfully to natural principles and take them to their limits. To surpass physical restrictions by inventing unexplored electronic circuitries. Unremittingly optimising each and every component and their interactions within the system to all-time perfection. To question part by part. Stripping away as much as possible. And by doing so, gain so much more. In just two decades making the name of Avantgarde Acoustic™ the voice of the audiophile upperclass.

This is performance.



Holger Fromme, CEO

When we speak of our company we are often reminded of a quote from Johann Wolfgang von Goethe: "When all is in agreement it gives us peace of mind, but the contradiction is what makes us productive". In actual fact, we embody key contradictions and opposing characteristics.

This already begins at home. We are located less than an hour away from Frankfurt Airport, the international hub of Germany, yet still in the heart of the scenic, picturesque Odenwald. In our small village of Lautertal with its 7.189 residents, it's old natural beech grove forests, tender grass fields and cultivated acres. In other words exactly in a place where you would least expect to find a high-tech company with international customers from all around the world.

Or lets have a look at the people. The idyllic rural ambience give ease and composure. Both so indispensable to shape and realize great ideas. But at the same time they are gifted with the resolute-ness to ignore prevailing opinions and to get them to fight for their convictions.

Not to hide behind the anonymity of the global markets is one of these convictions. We seek for the personal contact to our customers. Ultimately we all have the same passion, which is worth sharing. Our customers should know where and by whom their speakers are built and we respect them for their faith and the trust which they have placed in us.

Another conviction is our existence as a 100% family owned company. We would very reluctantly accept being driven by the share value on the stock market. We would rather use all our liberty and independency to enforce our claim: building the best speakers in the world.

Finally we reach the point of transcendence of all contradictions: our speakers. Each of them tells an inspirational story full of fascination. It is a story of the longing for a singular solution. And it is a story about groundbreaking innovations. About the excitement of experiment for the scientist and about the intentional restraint of the minimalist. A story about the goal oriented addiction of the creator and the quest for sustainability of the purist.

From this fertile merging of contradictory claims and desires, our speakers have sprung to life. They are the fascinating outcome of the duality where "Purity meets Performance". They capture all of our commitment, dedication and enthusiasm.

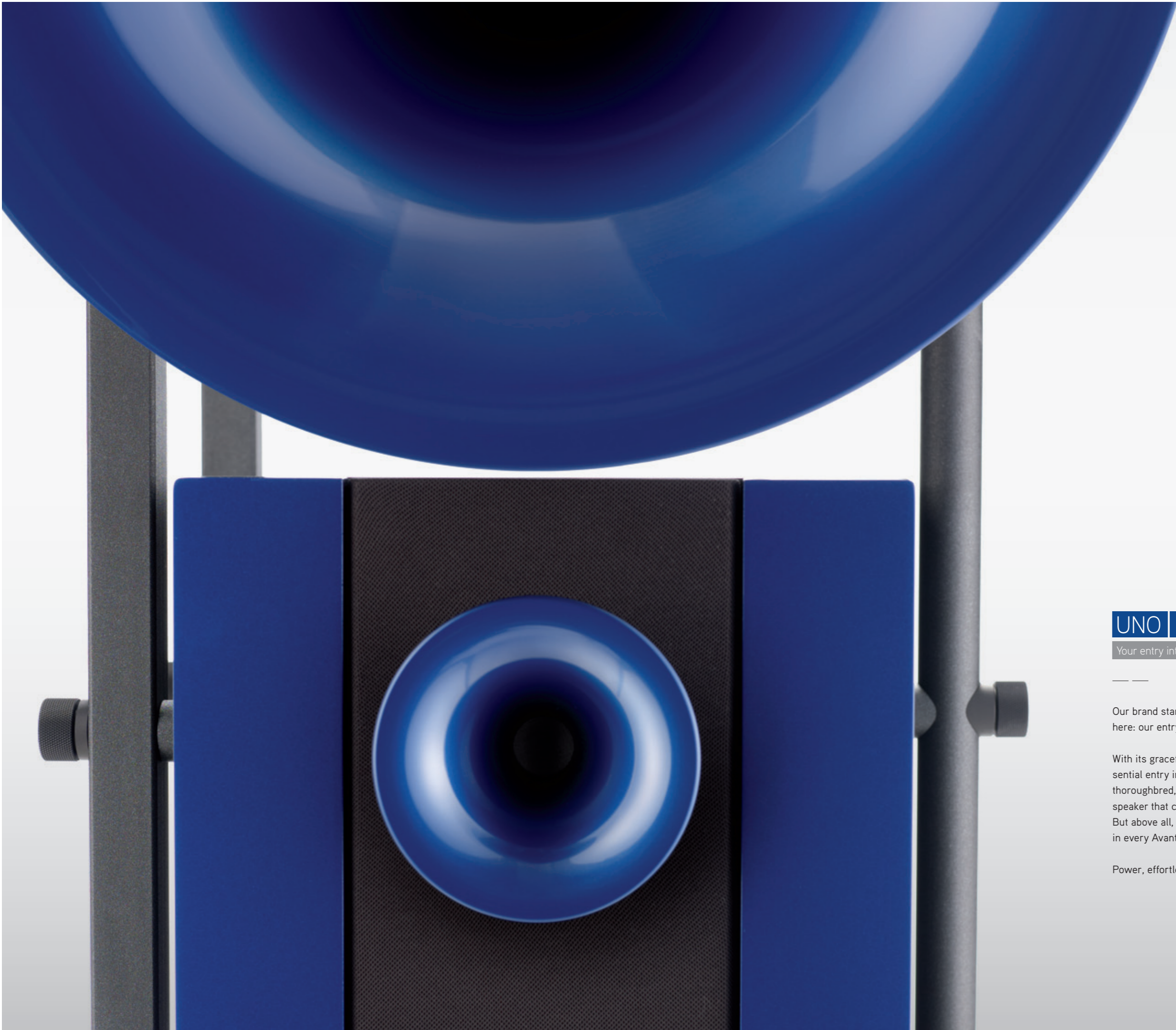
Just as this brochure will hopefully capture your interest in the most ingenious principle of sound transduction.



PURITY MEETS PERFORMANCE

*The emergence of a unique voice.*





## UNO

Your entry into the world of spherical horns

Our brand stands for a clear promise. And this promise begins here: our entry model.

With its graceful spherical 20 inch horn the Uno is the quintessential entry into the world of Avantgarde Acoustic™. A true thoroughbred, the Uno is that rarest of things, a performance speaker that combines pristine beauty with exhilarating intensity. But above all, the Uno encapsulates the true qualities embodied in every Avantgarde Acoustic™ system:

Power, effortlessness and pure fun.

# UNO

Your entry into the world of spherical horns

## UNO

104 dB sensitivity

8 ohm drivers

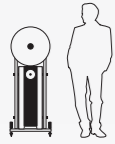
20 inch spherical midrange horn

CDC system with no crossover

Bass with active feedback control

2 x 10 inch neodymium bass drivers

250 watt subwoofer amplifier with 60.000  $\mu$ F



The Uno is exceptionally powerful, a high performance system with supreme balance, resolution and dynamics. At the heart of the system, midrange frequencies – stunningly deep down to 300 Hz – are covered by the remarkable 20 inch spherical midrange horn powered by Avantgarde Acoustic™'s proprietary 5 inch M1 driver. Above 3 kHz, the 1 inch tweeter driver H1 with a 5 inch spherical horn complements the upper range of the frequency spectrum.

Power is nothing without control, and the Uno is engineered for poise and accuracy at all times. Using meticulously designed CDC-technology, the midrange has no passive filter components in the signal path – routing the music signal directly to the heart of the driver engine. Less components, less interactions, less friction ensuring exceptional detail. Purity meets Performance at its best.

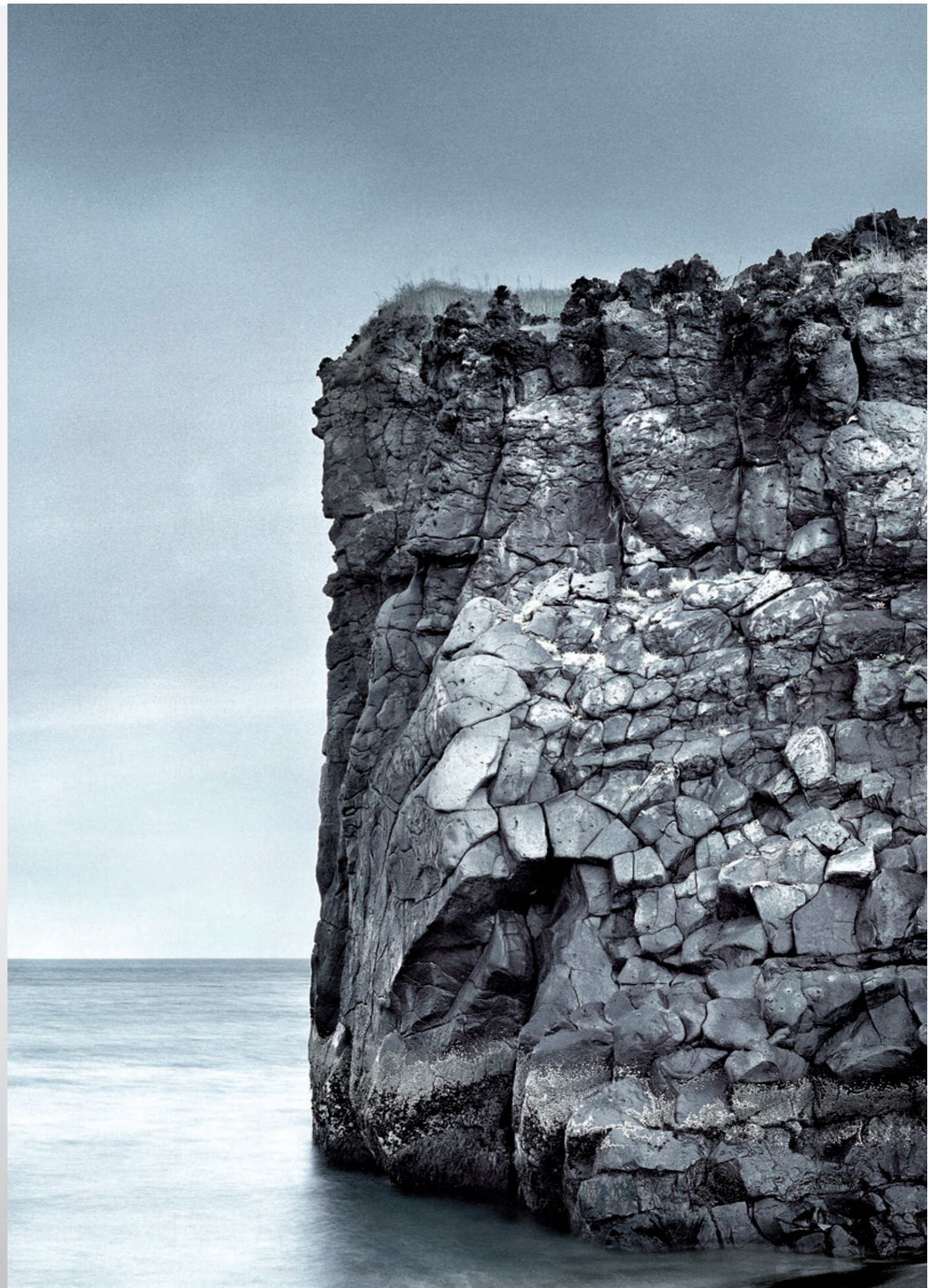
The subwoofer SUB225 supplements the balance between spherical horn performance and low frequency reproduction. It is actuated by two impressive 10 inch long-excursion drivers. Exclusive neodymium magnets are employed for boosted magnetic force and reduced driver displacement.

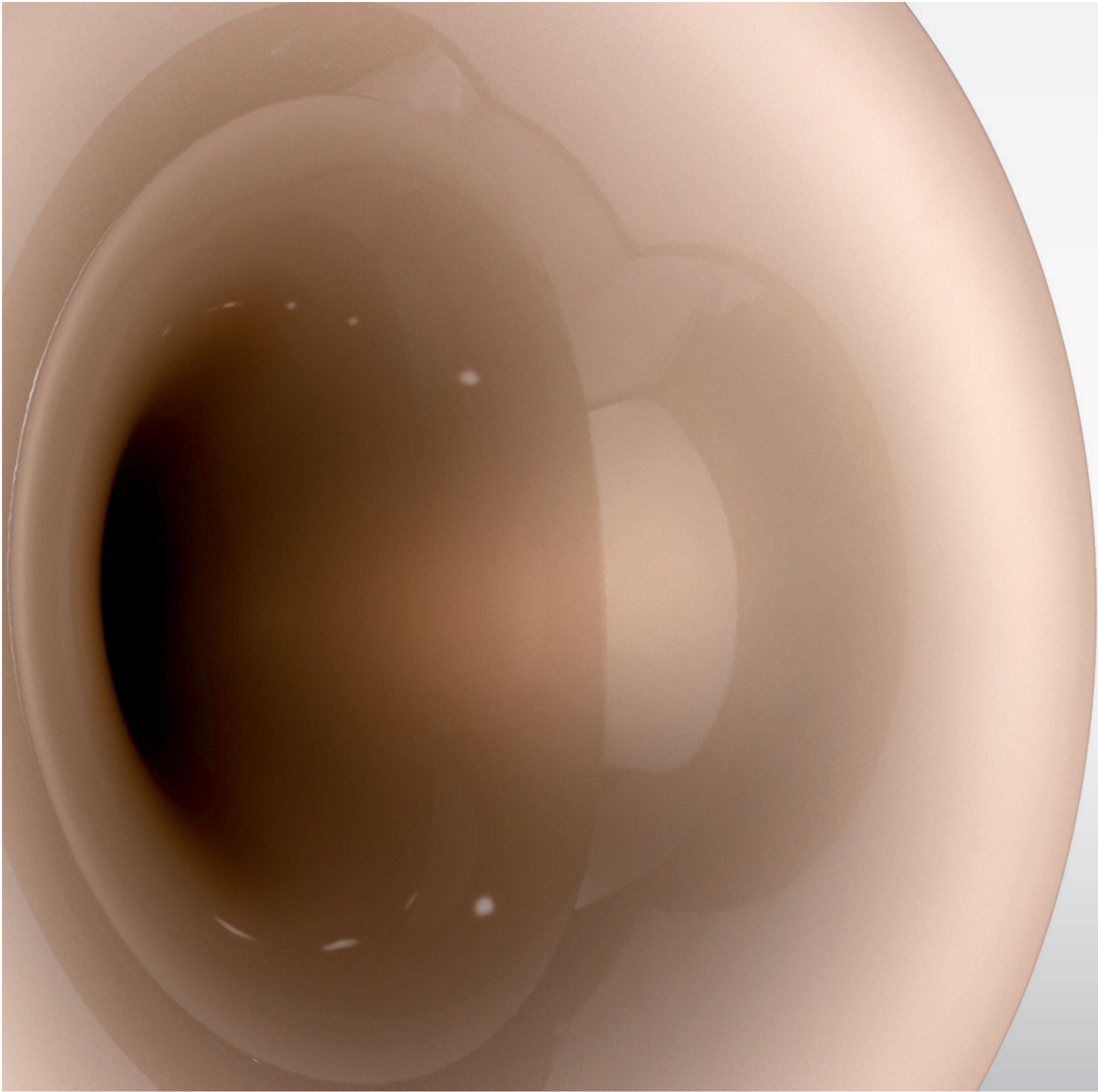
Generous power is provided by the integrated "intelligent" active 250 watt amplifier module. A forceful 330VA transformer and an ample energy reservoir of 60.000  $\mu$ F, combining effortless listening ability with super-speaker precision and agility even when pushed hard to the limits.

Avantgarde's genuine adaptive motional feedback circuitry compensates signal deviations induced by the circuit and the drivers in real-time, ensuring that the bass response of the Uno is clean, deep and dynamic – regardless of room size and listening level.

The active input stage provides analogue controls for bass volume, crossover frequency and subsonic filtering. Regulated by precision knobs fashioned from solid, turned aluminium – placing the user always full in control.

But the Avantgarde experience is not just about technology and performance. Sophisticated design is reflected in lean straightness and elegance of form. A dream system with the intensity of fully grown spherical horn speakers, suitable even for smaller listening rooms, to transport their owner from ultimate relaxation to ultimate exhilaration.





## DUO SERIES

Our biggest product family

Powered by its impressive 27 inch spherical horn, the Duo is the epitome of performance and dynamic beauty. Technical perfection is swathed in elegant design—work, with lines that are elegant and modern yet classic and, above all, typically Avantgarde Acoustic™.

The Duo series will change your perception of music.  
Do not expect less.

DUO

DUO OMEGA

DUO GROSSO

DUO MEZZO

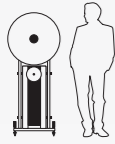
DUO PRIMO

# DUO

The classic horn system

## DUO

104 dB sensitivity  
8 ohm drivers  
27 inch spherical midrange horn  
CDC system with no crossover  
Bass with active feedback control  
2 x 10 inch neodymium bass drivers  
250 watt subwoofer amplifier with 60.000 µF



HÖRERLEBNIS, A. Aschenbrunner

*"The sound is distinctly addictive.  
Musik pure – in all its facets!"*

In the captivating world of horns, size matters: the bigger the dimensions of the horns, the more extended the bandwidth becomes, and the more the listener takes advantage of the incredible performance of the horn technology. That is why our engineers focused all of their expertise to develop a set of unique enlarged spherical horns with an extended frequency range of one full octave – compared to its smaller Uno brother. The result is the spectacular 27 inch spherical midrange horn, seamlessly powered by the high performance 7 inch M2 driver.

The tweeter H2 is now integrated within the subwoofer assembly. The bass resonance chamber has been increased, while the overall depth of the system has become significantly smaller.

Perfectly in tune with our design philosophy, there are zero components along the signal path. There are no filters and no crossovers. No unnecessary interactions or losses. Only crisp response, unforgettable detail and endless dynamics – the true Avantgarde experience.

The system rests on a solid cast aluminium base frame with integrated micro-levelling spikes. The precision handles are made from solid, turned aluminium and respond with smooth easy motion when setting up the system.



Duo with "Diamond Crystal Silver" horns and "Stealth Nocturne Grey" frontpanels



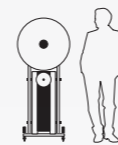
Duo Omega with "Akoya Pearl White" horns and "Tiashan Mystic Walnut matte" frontpanels

## DUO OMEGA

Our bestseller

### DUO OMEGA

107 dB sensitivity  
 18 ohm omega drivers with neodymium magnet  
 27 inch spherical midrange horn  
 CDC system with no crossover  
 100V CPC crossover (patent pend.)  
 Bass with active feedback control  
 2 x 10 inch neodymium bass drivers  
 250 watt subwoofer amplifier with 60.000 µF



*"These speakers are simply the best I have ever heard."*

THE LISTENER, C. Beeching, USA

Based on the classic Duo, the new Duo omega is a super-speaker combining extreme power with the pioneering Omega and CPC technology by Avantgarde Acoustic™. It represents a perfect relationship of two decades of spherical horn heritage and engineering excellence. A muscular spherical horn system created through the continuing desire to raise the bars.

The Duo Omega began as a "boot camp" style project, to explore the possibilities of improving the interaction of membrane movement with amplifier signal, to realise the full potential of the speakers already formidable 27 inch spherical horn system. The project resulted in a system re-engineered, re-tuned and re-mapped to achieve phenomenal super-speaker potency.

Great spherical horns need great drivers – it is the heart of any high-performance system. In the Duo Omega case, those great drivers are powerful yet meticulous, refined midrange and tweeter systems – the M2<sup>0</sup> and H2<sup>0</sup>. Both are equipped with precious neodymium magnets and the boundless unsurpassed Omega high impedance voice coils of Avantgarde Acoustic™. Assembled by skillful hands in Lautertal. Made with pride and esteem. Piece by piece.

The result is a stunning 18 ohms impedance combined with a staggering 107 dB system sensitivity – likely the highest figures in any production speaker on this planet.

Despite these immensely impressive figures and the instantaneous nature of their response, the Duo Omega is also full of finesse. The tweeter of the Duo Omega is exclusively equipped with the patent pending Capacitor-Polarization-Circuit to bypass the structural

limitations of capacitors. By applying a polarization current to the conductors of a uniquely constructed capacitor, the Avantgarde Acoustic™ engineers managed to eliminate the physical phenomenon known as "dielectric memory effect".

Built with the finest materials available today, crafted with ultimate precision and painstakingly matched, these CPC capacitors are a piece of engineering art in their own right.

The effect of CPC is stunning. There is much more detail. But at the same time the sound is more fluid and sweet. Under hard acceleration, the Duo Omega can project an exhilarating roar; but at the same time, the growl always remains tender and melodic.

Although from the outside identical to the standard 8 ohm Duo and using the same SUB225 bass module, the Duo Omega is in a class of its own. The innovative technology of Avantgarde's State-of-the-Art Omega drivers and the patent pending CPC circuits are not only evident in reproducing subtle musical nuances, but manifest as an unforgettable lifetime experience.

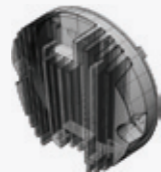
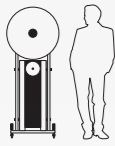


# DUO GROSSO

The big among the big

## DUO GROSSO

107 dB sensitivity  
18 ohm omega drivers with neodymium magnet  
27 inch spherical midrange horn  
CDC system with no crossover  
100V CPC crossover (patent pend.)  
Bass with active feedback control  
2 x 12 inch neodymium bass drivers  
500 watt subwoofer amplifier with 120.000 µF



*"In short, they're exactly my kind of  
breathless fantasy audio device."*

SOUNDSTAGE, S. Ebaen, USA

Welcome to the power of choice. The Duo Grosso is the larger version of the Duo Omega, featuring the same phenomenal spherical horn assembly combined with the significantly more powerful SUB231 subwoofer module. Born of the same heart as the Duo Omega but with a different spirit. Darker. Sportier. Tauter.

By utilizing two powerful 12 inch drivers, the dynamic headroom of the bass has been practically doubled, compared to the Duo Omega. Exclusive neodymium magnets are used for increased magnetic force and reduced driver displacement.



The engine to push the twin drivers is the massive PA106 power block. This active module incorporates a 2 x 250 watt power amplifier with an astonishing 560VA toroidal transformer and a plentiful supply of 120.000 µF, giving an impression of effortlessness, a sense that endless reserves of power remain.

Great speakers must handle superbly. They should respond quickly and predictably to the music signal; they should be nimble and

agile. Achieving full control to overcome the inertia of the driver mass, that is the starting point for such agility. And that's where the PA106 power block takes full responsibility, taking advantage of Avantgarde's genuine adaptive motional feedback circuitry. These ultrafast analogue electronics compensate for signal deviations induced by the circuit and drivers in real-time. At a glimpse of a second, insuring that the bass response is clean, profound and dynamic.

At Avantgarde Acoustic™, this precise control is very much in the foreground of the listening experience. It is particularly appreciated during day to day listening where the system develops its full bass extension. This translates to an immediate sensation of power and richness even when idling at low volumes – a landmark characteristic of every Avantgarde.

The active input stage provides analogue controls for bass volume, crossover frequency and subsonic filtering. Operated by precision knobs fashioned from solid, turned aluminium.

The Duo Grosso – with its significantly bigger subwoofer module – melds the smoothness and finesse of the Duo Omega with the dynamic, effortlessness and power of the twin 12 inch driver engine. It is fluent and composed, capable of delivering both, refined immersion into classical sounds and thrillingly dynamic rock and roll. A superspeaker for an exquisite and mindblowing music experience.



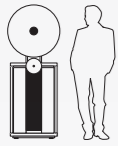
Duo Grosso with "Turmaline Vivid Black" horns and frontpanels

## DUO MEZZO / DUO PRIMO

The full horn loaded speakers within the Duo line

### DUO MEZZO

107 dB sensitivity  
18 ohm omega drivers with neodymium magnet  
27 inch spherical midrange horn  
CDC system with no crossover  
100V CPC crossover (patent pend.)  
Horn subwoofer with active ADRIC feedback control  
2 x 12 inch neodymium bass drivers  
500 watt subwoofer amplifier with 120.000  $\mu$ F



Taking advantage of the unrivalled performance of the horn principle by consequentially extending it to the lower octaves, the new Duo Mezzo and Duo Primo are the first spherical full range horn systems in the Duo product line. An utterly thrilling way to experience the magic of the ultimate spherical full-range horn principle. The design conveys the speaker's enormous potential. The appearance of these systems suggest the sheer potency that is concealed beneath, expressed in the taut lines and naturally sculpted slope of the bass horn flare.

The Duo Primo is very similar to the Duo Mezzo system, differing only in having an additional ADRIC horn subwoofer module, to provide even more power in larger rooms.

But thrilling emotional impact is not a result of extrinsic design. In our case it results from a combination of engineering excellence and intellectual creativity.

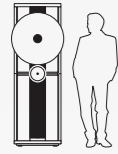


## DUO MEZZO / DUO PRIMO

The full horn loaded speakers within the Duo line

### DUO PRIMO

107 dB sensitivity  
18 ohm omega drivers with neodymium magnet  
27 inch spherical midrange horn  
CDC system with no crossover  
100V CPC crossover (patent pend.)  
Horn subwoofer with active ADRIC feedback control  
4 x 12 inch neodymium bass drivers  
2 x 500 watt subwoofer amplifier with 120.000  $\mu$ F

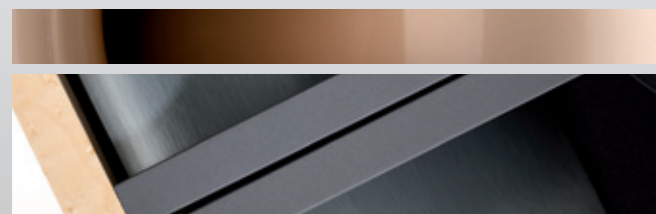


*"Pure dynamics, it pulls your fillings.  
Pitch black bass – clear and precise."*

HÖR-FORUM, M. Schmid

Basshorn systems are a myth and enjoy a legendary but at the same time – when they are constructed too small – an ambivalent reputation. Too small dimension will inevitably cause bouncy impedance curves and a boomy frequency response. That's the law of physics. That's the challenge. And that's where Avantgarde Acoustic™'s technological leadership comes into play. Introducing ADRIC, the worlds only technology to surpass the physical constraints in bass horn design.

The proprietary "Active Dynamic Radiation Impedance Compensation" technology of Avantgarde Acoustic™ ensures that relative small horns size and overwhelming low frequency extension does not necessarily exclude.



ADRIC is based on our fundamental research of the electro-acoustical interdependencies of wavefronts being induced in horn funnels. The complex ADRIC circuits detect the characteristic impedance peaks and precisely compensate through ultrafast analogue feedback loops.

The compensation is precisely calibrated and linearized. It is determinative and predictable. It is nimble and subtle. It is sensitive and agile, ensuring that the bass response is crisp, instantaneous and without the slightest soupçon of protraction. Perfect, legendary, unforgettable.

Tall, purposeful and elegant, the Duo Mezzo and Duo Primo communicate performance and agility. Perfect proportions with a sophisticated and desirable proposition. Each system is made to order: by skillful hands, with ultimate care and precision, employing esteem and respect to their becoming owner, taking an endless 70 days to complete.

It simply is the most personal and intense form of the unforgettable Duo experience.



Duo Primo with "Light Amber Bronze" horns and "Flower Birdseye Maple" body



## TRIO SERIES

Welcome to the audiophile nirvana

Have a seat. Relax. Smile. And enjoy . . .

Welcome to the audiophile nirvana. Welcome to the most exhilarating, uncompromised, consequent, natural and outstanding speaker system in the world. Welcome to the Trio. The one and only Trio. The ultimate dream system with no contenders.

Let's face it: the Trio is unique. Unique in its artistic design. Unique in its craftsmanship. Unique in its State-of-the-Art technology. Unique in its condensed-to-the-max spherical horn architecture. And last but not least: unique in a performance that is impossible to describe.

As the proverb says: all good things come in three's. Trio. That's all that needs to be said.

TRIO

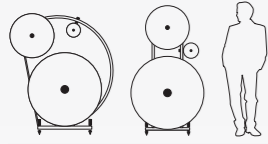
TRIO CLASSICO

# TRIO CLASSICO | TRIO

Welcome to the audiophile nirvana

## TRIO CLASSICO / TRIO

109 dB sensitivity  
19 ohm system impedance  
38 inch low-midrange horn  
23 inch midrange horn  
7 inch tweeter horn  
CDC system with no crossover  
100V CPC crossover (patent pend.)



Trio Classico with "Diamond Crystal Silver" horns und Basshorn

Let the facts speak for themselves: The Trio is a 3-way spherical horn satellite which – below 100 Hz – is complemented with active subwoofers. The transmission of the lower frequencies is handled by the 38 inch low-midrange horn. It is driven by the new 8 inch L3<sup>o</sup> driver with 16 ohm omega voice coil. The heart of the Trio – the midrange with coverage down to 600 Hz – is covered by the redesigned 27 ohm 2 inch M3<sup>o</sup> driver with the 23 inch midrange horn. The 16 ohm 1 inch tweeter H3<sup>o</sup> with its 7 inch horn blends in at 4 kHz.

The CDC technology allows for a minimalist concept with only 4 passive crossover components for the complete 3-way system. All capacitors have been completely redesigned and are configured with the patented CPC-technology. The sensitivity of the system is 109 dB.

In the low frequencies the Trio-series can be combined alternatively with the SUB231 subwoofer of the Duo Grosso, the ADRIC

horn bass modules of the Duo Mezzo or, in its ultimate configurations, with from 2 up to 6 Basshorn modules.

To put it simply, the Trio is the best speaker available from Avantgarde Acoustic™! And let us be honest: the Trio is not necessarily prudential. But in man's quest for the ultimate in performance, always the most fascinating things arise. The Trio is such a landmark – in respect to technology and in respect to sound. And that's why it exists.

STEREO, H. Barske

*"The spherical Trio horn is without any doubt the most fascinating and sensible speaker system of our times."*



Trio with "Ruby Brilliant Red" horns

# TRIO CLASSICO

Welcome to the audiophile nirvana

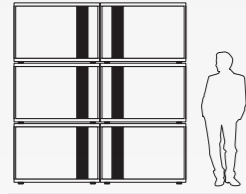


# BASSHORN

The high end myth

## BASSHORN

1,400 mm expo-spherical horn length  
8,500 cm<sup>2</sup> horn mouth area per module  
1,100 cm<sup>2</sup> driver area per module  
active ADRIC feedback control (patent pend.)  
2 x 12 inch neodymium bass drivers  
2 x 250 watt subwoofer amplifier with 120,000 µF



Why is the Basshorn a high end myth? Why is its nature of response so explosive, precise, natural and pure? Why is any other bass technology – even the most elaborate designs – so dramatically outperformed? Just look at it and you know why!

Then we'll examine the specs. The Basshorn is a fully active bass system with a response of 18 to 250 Hz. Each Basshorn is driven by two powerful 12 inch long excursion drivers with 600 watts RMS. With their 185 inches squared of membrane area, the drivers are capable of displacing 31 inches of cubic air which is thrust into throat of the horn.

The sound waves are then guided through the 55 inch long expo-spherical horn and propagated into the room. The horn mouth area of each Basshorn module is 9 ft squared. In a 6 x Basshorn configuration this translates to 54 ft squared! Each Basshorn is powered by our patented ADRIC amplifier.

Maybe the Trio with Basshorns is the most beautiful speaker from Avantgarde Acoustic™. But in respect to its holistic technology it is for sure the most perfect speaker system. Designed for people with an obsessive passion for music – from people who esteem the exceptional.



Basshorn in "Hanami Lucent Cherrywood"



# COLORS

For our horns

Our speakers have never tried to modestly hide or conceal themselves. They take the space they need, to make the sound that has been dream't about. But our speakers should not be loved for their audio performance alone. We rather wish that the unique experience of an Avantgarde Acoustic™ system continues after the last strains of music have faded away and the eyes open.

For this reason our customers can freely choose the color of the horns. A selection of eleven colors are available. All inspired by the pristine hues of mother nature. Whether it's a Jewel, which seemed to have waited for millions of years to endow us with its gleam of light. Or a miniscule grain of sand – which on its own appeared to be colorless – but which in caribbean aggregations create this irresistible warm creme color gradation we've named Saona Beach Creme.

**Turmaline Vivid Black**

*A black so deep and clear it competes with the bass.*

**Stealth Nocturne Grey**

*Fascinating surrealism. Scary beauty. Sounds under the magic cap.*

**Diamond Crystal Silver**

*A classical color. Lucent, ageless and as impregnable as the precious stone which gave it its name.*

**Akoya Pearl White**

*Famous cultured pearl. Dream wedding in tender white.*

**Light Amber Bronze**

*The warmest color we can offer. Complement it by playing Barry White and your heating costs will likely go down.*

**Saona Beach Cream**

*Inspired by the most beautiful beaches in the world. Disarmingly warm and full of serene composure.*

**Shiny Citrine Orange \***

*A vibrant color in full bloom. It will enliven even the most tranquil moments.*

**Ruby Brilliant Red**

*In many cultures red is the color of life. Select this color and you'll know why.*

**Sapphire Burma Blue**

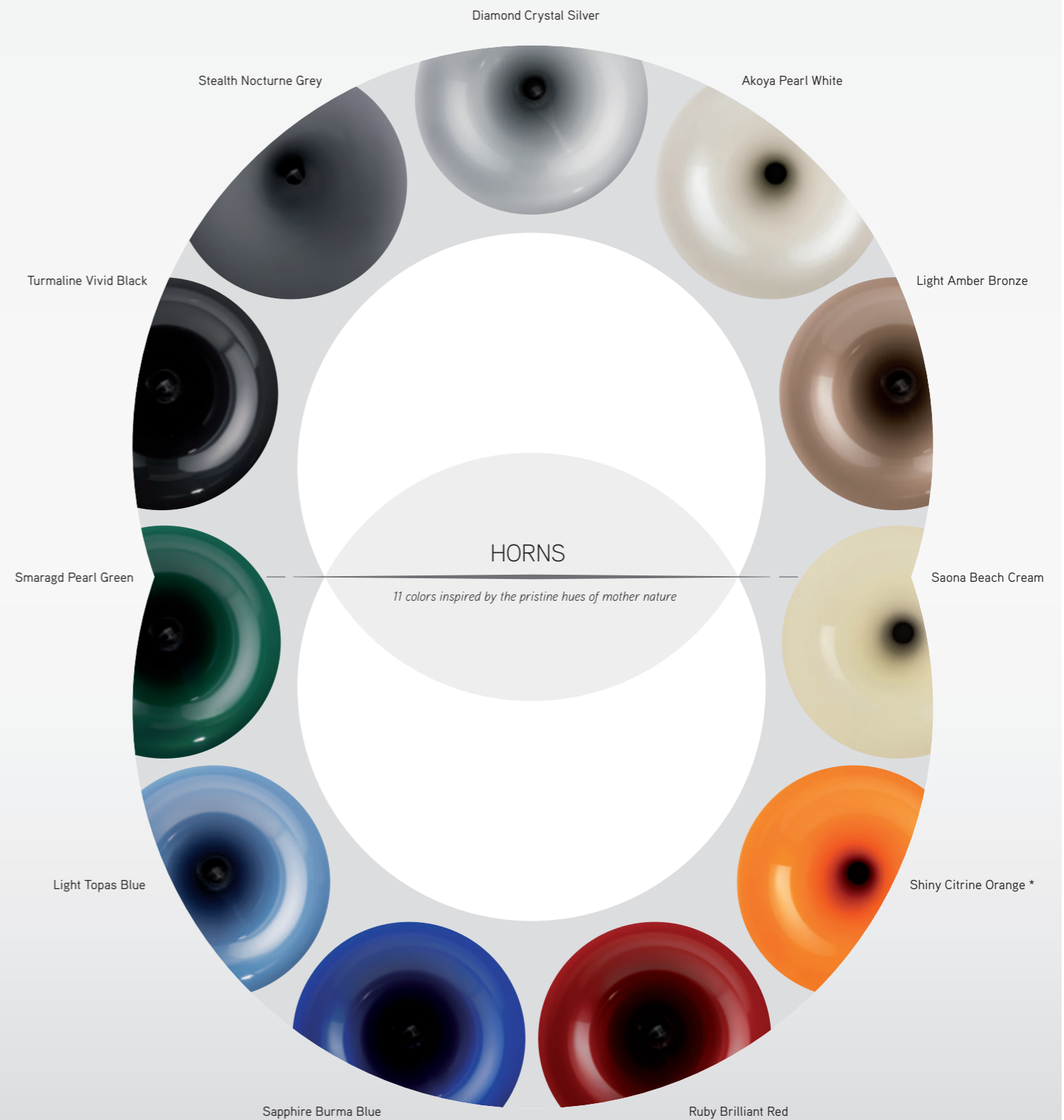
*Blue is the favored color of many people. The alleged lack of exclusivity will be forgotten as soon as you regard it for the first time.*

**Light Topas Blue**

*The transparency of condensed emptiness. Associated with heaven and water. Airy, agravic, dreamy.*

**Smaragd Pearl Green**

*With this horn option green is no longer the color of tranquility and sedation. A green is full of emotions and statement.*





\* optional customized color



# COLORS AND VENEERS

For the front panels

Our desire has always been to design speakers which will move people visually in a similar way that they are moved when they listen to music through them. Speakers that will unleash emotions and memories even when standing silently in the room. In short, speakers that are loved.

But every true love story requires a certain kind of exclusivity. For this reason we have extended the possibilities of meeting individual aesthetic desires much further. It is now possible to combine all eleven horn colors with any of the sixteen colors and veneers available for the front panels. This way you will get an exclusivity, which makes it very unlikely, that you will share the same looking speaker with any other person you know.

-  **Flower Birdseye Maple \*\***  
*Very restraint and elegant surface of the famous maple wood. Difficult to process.*
-  **Jacaranda Aura Rosewood \*\***  
*Brasilian temperament and heat merge with spherical sounds. Just check the Duo Mezzo on page 24 in this brochure to see what we are talking about.*

-  **Hanami Lucent Cherrywood \*\***  
*A maestro of shiny texture. Remincent of the Hanami festivities during the japanese cherry blossom season.*
-  **Tianshan Mystic Walnut \*\***  
*The mystic Tianshan mountains in Kirgisistan not only host one of the most scenic panoramic views and the biggest walnut forests in the world. But they give their name to this incredible rich and elegant veneer.*



\*\* For the models Uno, Duo, Duo Omega und Duo Grosso, these veneers are optional available with piano lacquer finish.

\* optional customized color

# TECHNICAL SPECIFICATIONS

Product overview



UNO



DUO



DUO OMEGA



DUO GROSSO



DUO MEZZO



DUO PRIMO

UNO | DUO | DUO OMEGA | DUO GROSSO | DUO MEZZO | DUO PRIMO

## SYSTEM DATA

Frequency response satellite  
subwoofer

Power capacity

Sensitivity (1 Watt / 1 m)

Crossover frequencies

Nominal Impedance

Recommended amplification

Recommended room size

CDC (Controlled Dispersion Characteristic)

CPC crossover (patent pend.)

290 – 20.000 Hz  
18 – 350 Hz  
50 Watts  
> 104 dB  
290 / 3.000 Hz  
8 Ohm  
> 10 Watts  
> 16 m<sup>2</sup> / 170 ft<sup>2</sup>  
Yes  
No

170 – 20.000 Hz  
18 – 350 Hz  
100 Watts  
> 104 dB  
170 / 2.000 Hz  
8 Ohm  
> 10 Watts  
> 20 m<sup>2</sup> / 200 ft<sup>2</sup>  
Yes  
No

170 – 20.000 Hz  
18 – 350 Hz  
100 Watts  
> 107 dB  
170 / 2.000 Hz  
18 Ohm  
> 10 Watts  
> 20 m<sup>2</sup> / 200 ft<sup>2</sup>  
Yes  
Yes

170 – 20.000 Hz  
18 – 350 Hz  
100 Watts  
> 107 dB  
170 / 2.000 Hz  
18 Ohm  
> 10 Watts  
> 20 m<sup>2</sup> / 200 ft<sup>2</sup>  
Yes  
Yes

170 – 20.000 Hz  
18 – 350 Hz  
100 Watts  
> 107 dB  
170 / 2.000 Hz  
18 Ohm  
> 10 Watts  
> 20 m<sup>2</sup> / 200 ft<sup>2</sup>  
Yes  
Yes

170 – 20.000 Hz  
18 – 350 Hz  
100 Watts  
> 107 dB  
170 / 2.000 Hz  
18 Ohm  
> 10 Watts  
> 20 m<sup>2</sup> / 200 ft<sup>2</sup>  
Yes  
Yes

## HORN

Horn type

Horn material

Horn finish

Dispersion type

Spherical horn  
ABS injection mold  
polished  
180 degree

Spherical horn  
ABS injection mold  
polished  
180 Grad

Spherical horn  
ABS injection mold  
polished  
180 Grad

Spherical horn  
ABS injection mold  
polished  
180 degree

Spherical horn  
ABS injection mold  
polished  
180 degree

Spherical horn  
ABS injection mold  
polished  
180 degree

Horn mouth area low mid range  
mid range  
high range

n/a  
0,196 m<sup>2</sup> / 304 in<sup>2</sup>  
0,013 m<sup>2</sup> / 20 in<sup>2</sup>

n/a  
0,353 m<sup>2</sup> / 547 in<sup>2</sup>  
0,025 m<sup>2</sup> / 39 in<sup>2</sup>

n/a  
0,353 m<sup>2</sup> / 547 in<sup>2</sup>  
0,025 m<sup>2</sup> / 39 in<sup>2</sup>

n/a  
0,353 m<sup>2</sup> / 547 in<sup>2</sup>  
0,025 m<sup>2</sup> / 39 in<sup>2</sup>

0,470 m<sup>2</sup> / 729 in<sup>2</sup>  
0,353 m<sup>2</sup> / 547 in<sup>2</sup>  
0,025 m<sup>2</sup> / 39 in<sup>2</sup>

0,940 m<sup>2</sup> / 1458 in<sup>2</sup>  
0,353 m<sup>2</sup> / 547 in<sup>2</sup>  
0,025 m<sup>2</sup> / 39 in<sup>2</sup>

Horn mouth diameter low mid range  
mid range  
high range

n/a  
500 mm / 20 in  
130 mm / 5 in

n/a  
670 mm / 26 in  
180 mm / 7 in

n/a  
670 mm / 26 in  
180 mm / 7 in

n/a  
670 mm / 26 in  
180 mm / 7 in

n/a  
670 mm / 26 in  
180 mm / 7 in

n/a  
670 mm / 26 in  
180 mm / 7 in

Horn length low mid range  
mid range  
high range

n/a  
280 mm / 11 in  
65 mm / 2.6 in

n/a  
370 mm / 15 in  
85 mm / 3.3 in

n/a  
370 mm / 15 in  
85 mm / 3.3 in

n/a  
370 mm / 15 in  
85 mm / 3.3 in

210 mm / 8.3 in  
370 mm / 15 in  
85 mm / 3.3 in

210 mm / 8.3 in  
370 mm / 15 in  
85 mm / 3.3 in

## HORN DRIVERS

Diameter low mid range  
mid range  
high range

n/a  
127 mm / 5 in  
25 mm / 1 in

n/a  
170 mm / 7 in  
25 mm / 1 in

n/a  
170 mm / 7 in  
25 mm / 1 in

n/a  
170 mm / 7 in  
25 mm / 1 in

2 x 300 mm / 12 in  
170 mm / 7 in  
25 mm / 1 in

4 x 300 mm / 12 in  
170 mm / 7 in  
25 mm / 1 in

Magnet material low mid range  
mid range  
high range

n/a  
Ferrite  
Ferrite

n/a  
Ferrite  
Ferrite

n/a  
Alnico  
Ferrite

n/a  
Alnico  
Ferrite

n/a  
Alnico  
Ferrite

n/a  
Alnico  
Ferrite

## SUBWOOFER

Power Output (RMS)

Power capacitance

Toroidal transformer

REAL TIME feedback control

ADRIC circuit (patent pend.)

Aktive frequency crossover

Subsonic filter, 3-positions

Automatic 12V remote On/Off

Smart Limiter

SoftStart circuit

250 Watts  
60.000 µF  
330 VA  
Yes  
n/a  
variable 60 – 350 Hz  
20 / 30 / 40 Hz  
Yes  
Yes  
Yes

250 Watts  
60.000 µF  
330 VA  
Yes  
n/a  
variable 60 – 350 Hz  
20 / 30 / 40 Hz  
Yes  
Yes  
Yes

250 Watts  
60.000 µF  
330 VA  
Yes  
n/a  
variable 60 – 350 Hz  
20 / 30 / 40 Hz  
Yes  
Yes  
Yes

2 x 250 Watts  
120.000 µF  
540 VA  
Yes  
n/a  
variable 60 – 350 Hz  
20 / 30 / 40 Hz  
Yes  
Yes  
Yes

2 x 250 Watts  
120.000 µF  
540 VA  
Yes  
Yes  
variable 60 – 350 Hz  
20 / 30 / 40 Hz  
Yes  
Yes  
Yes

4 x 250 Watts  
2 x 120.000 µF  
2 x 540 VA  
Yes  
Yes  
variable 60 – 350 Hz  
20 / 30 / 40 Hz  
Yes  
Yes  
Yes

Driver diameter

Number of drivers per module

Magnet material

250 mm / 10 in  
2  
Neodym

250 mm / 10 in  
2  
Neodym

250 mm / 10 in  
2  
Neodym

300 mm / 12 in  
2  
Neodym

300 mm / 12 in  
2  
Neodym

300 mm / 12 in  
4  
Neodym

## DIMENSIONS/WEIGHT

Dimensions width  
depth  
height (+/- 15 mm)

Weight

529 mm / 21 in  
584 mm / 23 in  
1.425 mm / 56 in  
71 kg / 156 lbs

670 mm / 26 in  
600 mm / 24 in  
1.595 mm / 63 in  
79 kg / 174 lbs

670 mm / 26 in  
600 mm / 24 in  
1.595 mm / 63 in  
81 kg / 179 lbs

670 mm / 26 in  
600 mm / 24 in  
1.695 mm / 67 in  
88 kg / 194 lbs

670 mm / 26 in  
650 mm / 26 in  
1.705 mm / 67 in  
106 kg / 234 lbs

670 mm / 26 in  
650 mm / 26 in  
1.800 mm / 71 in  
177 kg / 390 lbs

# TECHNICAL SPECIFICATIONS

Product overview



TRIO CLASSICO



TRIO



BASSHORN

SUB231

SHORT BASSHORN

## TRIO SERIE

		TRIO CLASSICO	TRIO	BASSHORN	SUB231	SHORT BASSHORN
<b>SYSTEM DATA</b>						
Frequency response	satellite subwoofer	100 – 20.000 Hz 18 – 350 Hz	100 – 20.000 Hz 18 – 350 Hz	n/a 18 – 350 Hz	n/a 18 – 350 Hz	n/a 18 – 350 Hz
Power capacity		150 Watts	150 Watts	n/a, active	n/a, active	n/a, active
Sensitivity (1 Watt / 1 m)		> 109 dB	> 109 dB	n/a, active	n/a, active	n/a, active
Crossover frequencies		100 / 600 / 4.000 Hz	100 / 600 / 4.000 Hz	60 – 350 Hz	60 – 350 Hz	60 – 350 Hz
Nominal Impedance		19 Ohm	19 Ohm	n/a, active	n/a, active	n/a, active
Recommended amplification		> 2 Watts	> 2 Watts	n/a, active	n/a, active	n/a, active
Recommended room size		> 25 m <sup>2</sup> / 250 ft <sup>2</sup>	> 25 m <sup>2</sup> / 250 ft <sup>2</sup>	> 25 m <sup>2</sup> / 250 ft <sup>2</sup>	> 20 m <sup>2</sup> / 200 ft <sup>2</sup>	> 25 m <sup>2</sup> / 250 ft <sup>2</sup>
CDC (Controlled Dispersion Characteristic)		Yes	Yes	n/a	n/a	n/a
CPC crossover (patent pend.)		Yes	Yes	n/a	n/a	n/a
<b>HORN</b>						
Horn type		Spherical horn	Spherical horn	Expo-spherical horn	n/a	Expo-spherical horn
Horn material		ABS injection mold	ABS injection mold	MDF-Alu compound	n/a	MDF-Alu compound
Horn finish		polished	polished	Aluminium finish	n/a	Aluminium finish
Dispersion type		180 degree	180 degree	180 Grad	n/a	180 Grad
Horn mouth area	low mid range mid range high range	0,709 m <sup>2</sup> / 1099 in <sup>2</sup> 0,255 m <sup>2</sup> / 395 in <sup>2</sup> 0,025 m <sup>2</sup> / 39 in <sup>2</sup>	0,709 m <sup>2</sup> / 1099 in <sup>2</sup> 0,255 m <sup>2</sup> / 395 in <sup>2</sup> 0,025 m <sup>2</sup> / 39 in <sup>2</sup>	0,850 m <sup>2</sup> / 1318 in <sup>2</sup> n/a n/a	n/a n/a n/a	0,470 m <sup>2</sup> / 729 in <sup>2</sup> n/a n/a
Horn mouth diameter	low mid range mid range high range	950 mm / 37 in 570 mm / 22 in 180 mm / 7 in	950 mm / 37 in 570 mm / 22 in 180 mm / 7 in	n/a n/a n/a	n/a n/a n/a	n/a n/a n/a
Horn length	low mid range mid range high range	650 mm / 26 in 430 mm / 17 in 85 mm / 3.3 in	650 mm / 26 in 430 mm / 17 in 85 mm / 3.3 in	1.400 mm / 55 in n/a n/a	n/a n/a n/a	210 mm / 8.3 in n/a n/a
<b>HORN DRIVERS</b>						
Diameter	low mid range mid range high range	200 mm / 8 in 50 mm / 2 in 25 mm / 1 in	200 mm / 8 in 50 mm / 2 in 25 mm / 1 in	2 x 300 mm / 12 in n/a n/a	n/a n/a n/a	2 x 300 mm / 12 in n/a n/a
Magnet material	low mid range mid range high range	Ferrite Strontium Ferrite Ferrite	Ferrite Strontium Ferrite Ferrite	Neodym n/a n/a	n/a n/a n/a	Neodym n/a n/a
<b>SUBWOOFER</b>						
Power Output (RMS)		n/a	n/a	2 x 250 Watts	2 x 250 Watts	2 x 250 Watts
Power capacitance		n/a	n/a	120.000 µF	120.000 µF	120.000 µF
Toroidal transformer		n/a	n/a	540 VA	540 VA	540 VA
REAL TIME feedback control		n/a	n/a	Yes	Yes	Yes
ADRIC circuit (patent pend.)		n/a	n/a	Yes	n/a	Yes
Aktive frequency crossover		n/a	n/a	variable 60 – 350 Hz	variable 60 – 350 Hz	variable 60 – 350 Hz
Subsonic filter, 3-positions		n/a	n/a	20 / 30 / 40 Hz	20 / 30 / 40 Hz	20 / 30 / 40 Hz
Automatic 12V remote On/Off		n/a	n/a	Yes	Yes	Yes
Smart Limiter		n/a	n/a	Yes	Yes	Yes
SoftStart circuit		n/a	n/a	Yes	Yes	Yes
Driver diameter		n/a	n/a	300 mm / 12 in	300 mm / 12 in	300 mm / 12 in
Number of drivers per module		n/a	n/a	2	2	2
Magnet material		n/a	n/a	Neodym	Neodym	Neodym
<b>DIMENSIONS/WEIGHT</b>						
Dimensions	width depth height (+/- 15 mm)	1.300 mm / 51 in 830 mm / 33 in 1.550 mm / 61 in	950 mm / 37 in 830 mm / 33 in 1.670 mm / 66 in	1.025 mm / 40 in 1.060 mm / 42 in 740 mm / 29 in	340 mm / 13 in 435 mm / 17 in 910 mm / 36 in	600 mm / 24 in 650 mm / 26 in 960 mm / 38 in
Weight		62 kg / 137 lbs	56 kg / 123 lbs	89 kg / 196 lbs	65 kg / 143 lbs	80 kg / 176 lbs

## CONTACT

One question remains

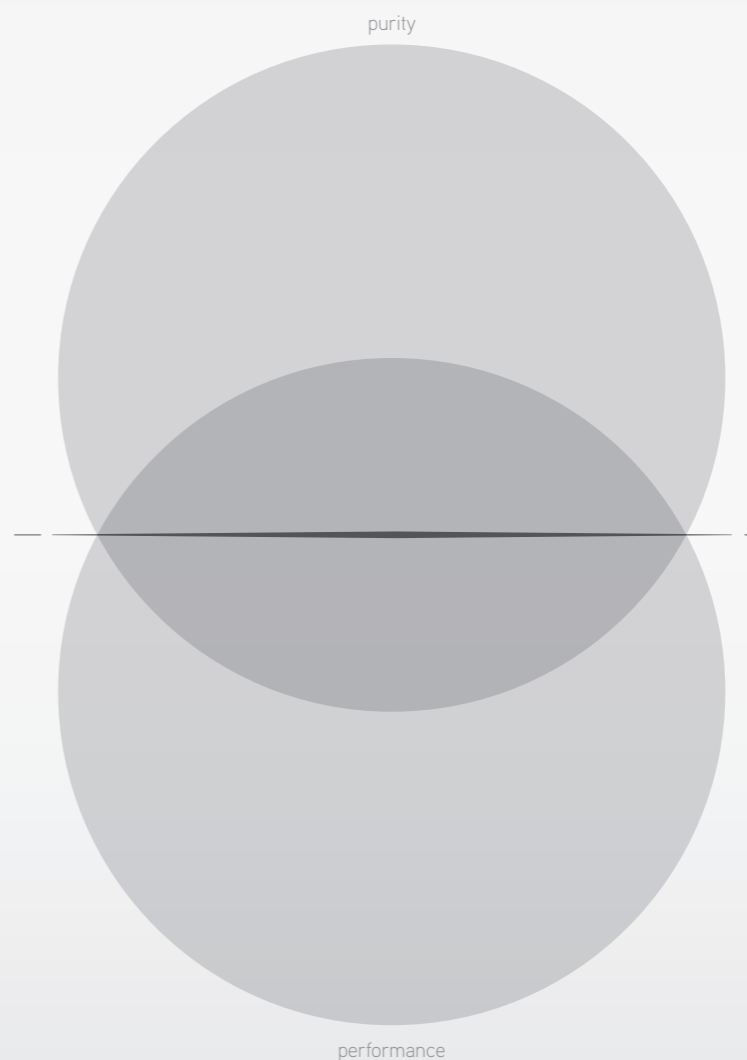
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This brochure has fulfilled its purpose if it has been able to answer some of your questions. But one question will still remain. This one question should in the meantime be all-dominant. Because we can write about the most fascinating form of sound metamorphosis. We can tell you how the voice of Avantgarde Acoustic™ came about, and we can share the reactions of our customers when auditioning this voice. But the one thing we cannot do is answer your one and only pivotal question. In fact you have to find out by yourself how this voice actually sounds.

For this reason we would be very happy if you pick up the phone or contact us through our website. Here you can obtain up to date information on dealer demonstration facilities in your area, as well as exhibitions and listening events. But even more so we would be happy if you set up an appointment and visit us here in our master showroom in Lautertal. You already know by now where this is and which people you will encounter.

Yours faithfully from the Odenwald,  
your Avantgarde Acoustic™ team

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