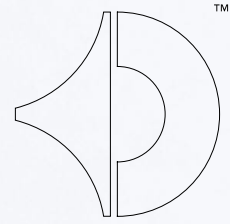


G2 series

The overwhelming intensity and effortless of horns



avantgarde
ACOUSTIC



G2 series

The overwhelming intensity and effortlessness of horns.



*“I have the simplest of tastes.
I am always satisfied with the best.” – Oscar Wilde*

High resolution at any volume. Minimum effort. Maximum enjoyment. Engaging. Compelling. Enduring.

At the heart of its taut, predatory form lie the most formidable horns ever built.

Yet what truly powers these speakers is the spirit to break boundaries.

From the very beginning Avantgarde Acoustic™ had an all-consuming passion to create a potent, authentic and utterly unique music experience with speakers that possessed an inherent ability to create something extraordinary. Throughout our history, our vision has driven the development of a seamless bloodline of spherical horn systems.

And now it has its ultimate realisation. To render homage to the UNO, DUO and TRIO – which have set standards in the audiophile market for the past two decades – Avantgarde Acoustic™ conveys these classics into their second stage of development. The new product portfolio has arrived – with unsurpassed technologies, craftsmanship and true superspeaker dynamics.

By using more powerful bass modules with Neodymium drivers, newly developed special capacitors and its optimized internal wiring, the new G2 series is soundwise the best Avantgarde Acoustic™ has ever made.

And from its looks the new G2 series is significantly different from its well respected predecessors:

Solid cast aluminium base frame with integrated spike micro-levelling, newly shaped frame fixations, the die-cast aluminium cover at the rear of the horn unit, the enlarged amplifier module and the frontpanels available in a variety of precious wood or metallic lacquer finishes.

Subtle changes, which are perfectly executed and already externally reveal what it means to convey a technical concept over a period of nearly a quarter of a century into perfection.

The power and effortlessness of horns.

Avantgarde Acoustic™ horn speakers are based on the physics of mother nature. They embrace the same principles that govern the functions of the human ear. The funnel shaped opening of the horn amplifies even the most minuscule deviations in sound pressure. A horn is the most natural and powerful way to amplify sound waves. At a given output, speakers with horns have an up to 95% lighter membrane. Driver over-excursion and the resulting distortion is avoided. In addition, for a given driver size, they have an up to 20-times higher acoustical output. As a result, the audio signature is livelier, as the membrane only has to execute a fraction of the movement.

A horn is the most sophisticated form of any loudspeaker: minimal mass and motion – maximum power – increased fidelity – reduced distortion.

Avantgarde Acoustic™ only designs speakers which are equipped with horns – circular spherical horns, with a precision as they have never been built before. The combination of lightweight drive system and performance make Avantgarde Acoustic™ horn systems inimitable. The spherical horn speakers are faster, more dynamic and more coherent.

Simplicity.

The crucial element in the development of any loudspeakers is to reduce the number of components to the minimum. Every single part in the signal path deteriorates fidelity, and colours the response. A principle element of Avantgarde Acoustic™'s puristic design philosophy is to reduce the number of components to only those which are absolutely necessary.

Nothing is decoration, nothing is obsolete. What is not needed is left out. Consequentially practiced reduction which at the end is so much more.

Thus, all Avantgarde Acoustic™ speakers are designed with no passive filters in the signal path of the midrange horns. As such, the electrical signal from the amplifier is directly connected to the voice coil of the driver assembly. This Avantgarde Acoustic™ concept has an outstanding strength: simplicity!

Impedance.

Any speaker presents a specific electrical load – which is varying, depending on the music signal – to the amplifier. The more complex these (feedback-) forces, the more the quality of the signal processing of the connected amplifier is suffering. Accordingly the development of Avantgarde Acoustic™ horn systems does not stop at the speaker itself. Avantgarde Acoustic™, rather sees the loudspeaker as part of the whole audio system. The optimization of the interaction of the individual components and the audio subsystems becomes part of the engineering discipline.

For this reason Avantgarde Acoustic™ engineering is exemplified in its sophisticated OMEGA driver technology. With OMEGA drivers, voice coils with very high impedance are utilized. The (feedback-) forces induced into the amplifier are thus being effectively reduced. Avantgarde Acoustic™ horn speakers pose a substantially less critical load, are easy to drive, and bring out the true potential of any quality audio amplifier.

Intelligence.

Large drivers are required to reproduce low frequencies at higher volumes. Inevitably big membranes have a relatively large mass. The inertia of this mass weighs down the music signal, resulting in a thick, muddled sound.

The lower the sound pressure level, the more this inertia mutes details of the signal response. Big passive speaker systems thus invariably have, at low volumes, a heavily reduced bass articulation. To avoid these effects, all Avantgarde Acoustic™ systems are equipped with “intelligent” active subwoofer systems. The electronics detect output deviations of the driver from the input signal, and fast analog circuits compensate the cone movement. Due to the intelligence of the adaptive electronical control, the bass response of the Avantgarde Acoustic™ systems is cleaner, deeper and more dynamic – independent of room and output level. In addition, a variety of user controls allow the response to be fine-tuned and matched to the room acoustics.

Innovation.

How does progress come about? It is driven by people who pursue new views, cognitions, and visions with focus and full determination – exemplified by the pioneers in speaker design at the beginning of the 20th century. Today the designers of Avantgarde Acoustic™ embrace this ideology. They have the courage to question accepted practices and principles, and to proceed in their own, unique direction.

The new product portfolio and underlying technology of Avantgarde Acoustic™ embodies this ideology: with the distinctive horns which set a benchmark in the superspeaker category, with the Omega driver technology which delivers unimagined clarity, and with innovative Avantgarde circuit design which accesses new dimensions of sound authenticity. Patented CPC circuits bypass the constructive limitations of capacitors, and patented ADRIC control boards eliminate the physically induced size restrictions of bass horns.

*Discover the fascination of progress. The new product portfolio of Avantgarde Acoustic™:
welcome in the new world of the audiophile upper class.*

*A revolutionary range of spherical horn systems that will take you into a completely different world.
A time for pure pleasure. Every music track and every minute a moment of intense exhilaration.
The freedom of horns allowing you to savour the inimitable Avantgarde Acoustic™ listening sensation.*



The **Uno nano G2** is a 2-way horn speaker system combined with the active SUB225-G2 subwoofer.

Midrange frequencies down to 300 Hz are radiated by the 5 inch M1-N driver – 20 inch SH5003 midrange horn subsystem. Using special CDC-technology, the midrange is driven without any passive filter components in the signal path. Above 3 kHz, the 1 inch tweeter driver H1-N with the SH1301 horn complements the upper range of the system's sound reproduction.

The subwoofer SUB225-G2 is driven by two powerful 10 inch long-excursion drivers. Exclusive neodymium magnets are used in the bass drivers of the G2 series.

The integrated "intelligent" G2 active module incorporates a 250 watt power amplifier with a bigger 330VA transformer and an increased 60.000 μ F capacitance. An adaptive motional feedback circuitry compensates signal deviations induced by the circuit and the drivers in real-time.

The active input stage provides user controls for bass volume, crossover frequency, and a 3-position subsonic filter switch.

The **Uno nano G2** is the entry model in the Uno-range. The ideal system with the intensity of fully grown spherical horn speakers suitable equally well for smaller listening rooms and for audiophile multi-channel systems.

uno nano G2

pure performance

*104 dB sensitivity
8 Ω 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 μ F*

uno series



duo series

The overwhelming intensity and effortlessness of horns.



duo G2

pure performance

*104 dB sensitivity
8 Ω 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*

The **Duo G2** is a 2-way horn speaker system, combined with an active subwoofer, model SUB225-G2. In the new G2 series, the tweeter is now integrated in the subwoofer assembly. Thus the bass volume could be increased, besides Avantgarde Acoustic™ managed to decrease the overall depth of the system significantly. This way the footprint of the new Duo G2 series is 25% smaller than its previous version.

Midrange frequencies down 170 Hz are handled by a 7 inch driver – 27 inch SH5704 midrange horn subsystem. The 1 inch tweeter driver, coupled with the SH1801 horn, crosses over to the midrange below 2 kHz. Using CDC-technology, the midrange is driven without any passive filter components in the signal path. System efficiency is at 104 dB.

The subwoofer unit is identical to the SUB225-G2 bass module of the Uno nano G2.

The **Duo-series** is the most significant product line within the Avantgarde Acoustic™ portfolio. The 670 mm spherical midrange horn of this series is a perfect symbiosis of low cut-off frequency and size.

Due to its wide bandwidth and linearity, the **Duo** is already considered a classic among audiophile 2-way horn systems.

duo Ω G2

pure performance

*107 dB sensitivity
18 Ω omega drivers with alnico 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*

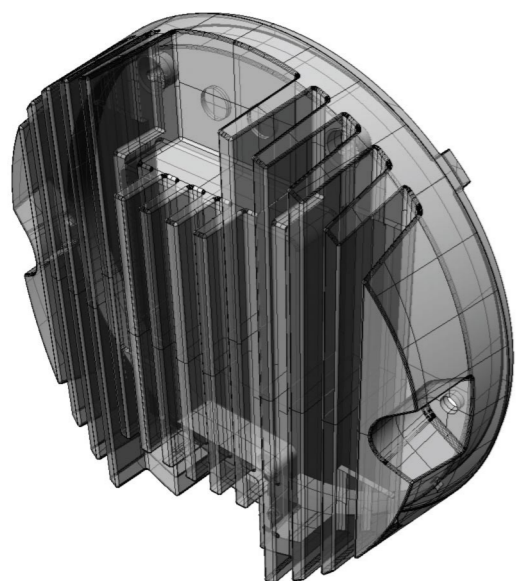
The **Duo omega G2** represents the state-of-the-art in the Duo family. It differentiates itself from the standard Duo through its use of the elaborate **Omega driver technology**.

Both drivers for midrange and tweeter – the M2Ω and H2Ω – are equipped with **Omega high impedance voice coils**. The nominal impedance of the system is 18 ohms. The magnet of the M2Ω is made of Alnico material, and enables system sensitivity of 107 dB. The midrange is driven without any passive filters, and the patented CPC-technology is being used in the crossover of the tweeter.

The subwoofer unit is identical to the SUB225-G2 bass module of the Uno nano G2 and the Duo G2.

Although visually identical to the standard 8 ohm Duo G2, the **Duo omega G2** is in a class of its own. The technology of the Omega drivers is not only evident in reproducing subtle musical nuances, but manifests itself in a completely new sound characteristic:

the ideal speaker for the audiophile connoisseur.



The **Duo grosso G2** is the bigger version of to the Duo omega, and differentiates itself with its more powerful SUB231-G2 subwoofer module, providing much more impact in the bass range.

The spherical horns and drivers – the M2Ω and H2Ω – are identical to the Duo omega.

The subwoofer SUB231-G2 features two powerful 12 inch long-excursion drivers. Exclusive neodymium magnets are used in the bass drivers of the G2 series.

The integrated “intelligent” active module incorporates a 2 x 250 watt power amplifier with an increased capacitance of 120.000 µF, including adaptive motional feedback circuitry. Together they compensate in real-time for signal deviations induced by the system electronics and the drivers.

The active input stage provides control for bass level and crossover frequency. Also included is a 3-position subsonic filter switch.

The **Duo grosso G2** – with its significantly larger subwoofer module – melds the smoothness and finesse of the Duo omega G2 with the dynamic, effortlessness and power of big “super” woofers.

grosso G2 *pure performance*

*107 dB sensitivity
18 Ω omega drivers with alnico magnet
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*





The **Trio G2** 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 SH9504 low-midrange horn. It is driven by the new 8 inch L3 Ω G2 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 Ω G2 driver with the 23 inch SH5702 midrange horn. The 16 ohm 1 inch tweeter H3 Ω G2 with the SH1801 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 G2-capacitors have been completely redesigned and are configured with the patented CPC-technology. The sensitivity of the system is 109 dB.

Simply spoken, the Trio G2 is the best speaker available from Avantgarde Acoustic™!

But let us be honest: the Trio G2 is not necessarily prudential. But in man's quest for the ultimate in performance, always the most fascinating things arise.

The Trio G2 is such a landmark – in respect to technology and in respect to sound. And that's why it exists.

trio G2

pure performance

*109 dB sensitivity
19 Ω system impedance
38 inch low-midrange horn
23 inch midrange horn
7 inch tweeter horn
100V CPC crossover (patent pend.)*

basshorn G2

ultimate performance

*55 inch long expo-spherical horn
Horn mouth area 9 ft2 per module
Cone area 185 in2 per module
2 x 12 inch neodymium bass drivers
Active ADRIC compensation (patent pend.)
500 watt subwoofer amplifier with 120.000 µF*



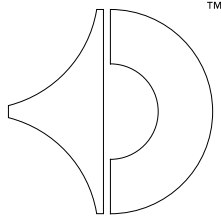
The **Basshorn G2** is a fully active bass loudspeaker system, with a response of 18 to 250 Hz. Each Basshorn G2 module is driven by two powerful 12 inch long-excursion drivers with 600 watts RMS of power. Exclusive neodymium magnets are used in the bass drivers of the G2 series.

With their 185 inch² of cone area, the drivers are capable of displacing 31 inch³ of air and thrusting it into the horn throat. Through its 55 inch long expo-spherical horn the sound waves are guided and pressure-transformed into the room. The horn mouth area per Basshorn G2 module is 9 ft², in its full configuration with 6 x Basshorn G2 modules representing a total mouth area of 54 ft²!

Each Basshorn G2 module is powered by a special version of the Avantgarde Acoustic™ 500 watt subwoofer amplifier with 120.000 µF, incorporating the patented ADRIC circuit. This active electronic control dynamically compensates for small horn mouth dimensions, and linearizes the bass response below the cut-off frequency of the horn.

The **Trio G2 with Basshorn** is maybe the most beautiful, but in respect to its holistic technology for sure the most perfect speaker system of Avantgarde Acoustic™.

Designed for people with an obsessive passion – from people who esteem and design the exceptional.



avantgarde
A C O U S T I C

G2 series

The overwhelming intensity and effortlessness of horns.

*The power of horns. The luxury of music.
One of the greatest luxuries in life is music.
Savor every second.*

*Some speakers make you dream.
Some make you float.
Only one makes you fly.*

*Breathtaking performance. Understated confidence.
Unmistakably Avantgarde.*

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nano

duo

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trio



uno series



duo series



trio series