



A star is born

The latest high-tech materials, full 3-way assembly and Aluminum housing weighing 80 kilograms - Magico's new A5 is a speaker statement. Its sound is neither technical nor cool, but a prime example of musicality and transparency, so close to perfection like no passive speaker at stereoplay before.

The sound transducers from the Californian manufacturer Magico are undoubtedly not yet as well known as they deserve given their sound quality. This may also be related to the fact that founder and thought leader Alon Wolf ignores two otherwise serious market principles: He does not rely on a decades-long history with a corresponding fan base from the golden hi-fi era, Magico was only founded in the 2000s. And he refuses to compromise on materials and production, which, from the point of view of consumers with a normal budget, catapults his constructions into unattainable realms.

He recently even announced a flagship model in the M series, which is expected to cost just under a million euros. The A5 follows a completely different line. The structure and technical ingredients are worthy of a flagship, but the structure of the case keeps the price at around 1/30 of the aforementioned Megabox, so

still in dimensions where other high-end manufacturers at least dare to produce in series.

Brothers in spirit

Wait a minute: does the story sound familiar? Yes, the A3 was based on a similar approach. Nevertheless, Alon Wolf was of the opinion

It hardly needs to be mentioned that this had to be specially developed for the loudspeaker and that only the company's best material combination with the miracle cure graphene was used here.

Aluminum domination

The housing follows the construction principles held high at Magico:

The Magico A5 uses the most modern high-tech materials exclusively to serve musicality. You definitely can hear that.

that he had to draw on full resources again in the A series. What is the reason for the price difference? Well, first of all, the effort involved in basic research. While the A3 was still based on existing chassis geometries, the A5 3-way speaker is old school. In particular, a smaller midrange driver, which can then also sit closer to the tweeter, promised the Magico team a more stable image, even in typical living room environments and listening distances.

solid aluminum panels according to the specifications of aircraft construction are screwed to an internal skeleton. Because aluminum plates themselves have unpleasant resonance properties, which can manifest themselves in a bell-like ringing if they are not silenced over a large area.



In the A5, this is done by a matrix skeleton that holds each outer wall, including the baffle, together in asymmetrical partial proportions with a huge number of screws.

Conveniently, two of the partial struts can again be designed as solid panels, which means that the same Partial volume for the midrange would be divided off. Since both acoustically relevant chambers are designed to be closed and the diaphragms themselves are not susceptible to parasitic sound due to their hardness, classic damping of the interior volume is no longer necessary.

About Material

There are probably more theories and assumptions circulating about the advantages, disadvantages and inherent sound of different membrane materials than about any other question of high fidelity. Magico's boss Alon Wolf is a cool technician

and a sound-loving perfectionist. Beryllium has so proven itself for him in the high range that it is now used in all newer constructions, including the even more expensive ones. The A5 is accordingly equipped with the beryllium dome, which was already a guarantee for the finest resolution and silkiness in the A3.

It already plays from 2200 Hz with the help of a sound guide made of aluminum, which also achieves a harmonious transition to the midrange in the radiation angle. The star of the new ensemble is a much smaller specimen than what we are used to from Magico. Alon Wolf gives 5 inches, i.e. 12.5 cm, as the diameter, but the active membrane does not exceed 10 centimeters. This makes this new chassis a pure midrange driver without ambitions in the bass, which already experiences high-pass filtering at 250 Hz.

So if you have slimmed down in the midrange,



Surprisingly sparsely equipped for a 3-way crossover, only the best components are used for this. In front (on the red heat sink) the new Mundorf Super Resistors.

Graphen, Nano and Beryllium – the Hightech Drivers

Magico always develop all drivers themselves. The Californians use materials at the limit of what is physically feasible in all three ways of the A5. But not for their own sake, but with a clear acoustic goal in each case. The dome tweeter is made of beryllium, the lightest light metal of all, which is difficult and complex to work with, but has surprisingly good acoustic properties due to its natural properties with smaller membrane surfaces. The cone speakers, on the other hand, are three-layer sandwich diaphragms, the construction of which has been designed to achieve the lowest possible weight with high tensile strength, torsional rigidity and frequency-independent internal damping.

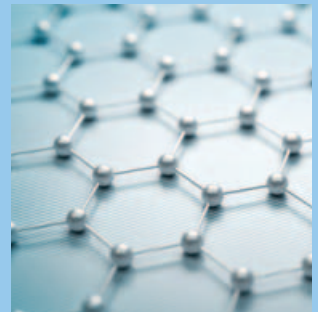
In the case of larger membranes, everything is in contradiction to one another, and the effort is correspondingly high. The result was a sandwich, the outer layers of which consist of a mesh of carbon fiber nanotubes with a graphene surface coating. This material has unbeatable tensile strength in two dimensions and is therefore ideal for stabilizing carbon fibers. These are baked according to a secret process for which a patent is pending with a stabilizing internal structure (see top right) that uses the hexagonal structure of the graph in rough dimensions.

Sandwich: carbon braid on the outside, a stiffening honeycomb structure made of aluminum on the inside.



Wonder material: Graphen

The natural elementary forms of carbon are diamond and graphite. Graphene is an artificially synthesized third state in which the atoms in hexagonal, but two-dimensional lattices are particularly firmly connected in only one plane.



The bass (above) is optimized for use in closed spaces with its gigantic, well ventilated voice coil and hub-friendly surround.

The dome (right) made of pure beryllium has a light sound guide to adapt the radiation.



The small midrange driver (above) has been completely redeveloped for the A5. Its membrane in the form of an inverted dome shows the mesh of graphene-coated carbon fiber nanotubes (top) under the microscope.

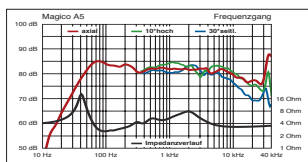


Magico
A5

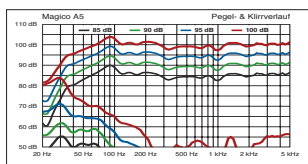
32,500 Euro

Vertrieb: Audio Components
Telefon: 040 / 40 11 303 80
www.audio-components.deDimensions (W×H×D): 26,5 × 114 × 38 cm
Weight: 82 kg

Measurement Diagrams



Frequency response & impedance curve
Powerful deep bass, balanced, tending to descend towards highs



Level and distortion curve 85-100 dB SPL
Perfectly clean from the fundamental, distortion rising a little faster in the sub-bass

Lower limit frequency -3 / -6 43/36 Hz
dB maximum level 109 dB

Praxis und Kompatibilität

Amplifier Compatibility Chart

A little more demanding in terms of current and stability due to the low minimum impedance

Spannung 15,8 V
Impedanz-Δ 2,6 - 8 Ω
Strombedarf 6,1 A

Room acoustics and placement
Place the midrange speaker towards the listener, and determine the distance to the wall in the bass precisely experimentally

Hearing Distance 1 m 5 m
Wall Distance 0 m 1,5 m
Reverberation time 0,2 s 0,8 s

Bewertung

Naturality	15
Resolution	15
Dynamics	12
Bass Quality	13
Staging	14

A fascinating combination of silkiness, transparency and pearly dynamics amalgamated with a wide spectrum of timbres, precise grooving bass and wide, stable space to an overall experience close to perfection. Hearing is addicting!

Measurement	Practice	Value
8	6	9

stereoplay Verdict

Sound Performance absolute highend 69

Overall Score 92 points

Price/Performance highend

the bass and lower keynote are moving up.

Yes, easily doubled! Three 9-inch devices are the maximum that fits on the 26.5-centimeter-wide baffle. These ultrapower basses have the same high-tech material combination as the midrange driver, but are designed for extreme strokes and high outputs. This is also necessary, because Magico consistently dispenses with bass reflex support in favor of pulse processing and therefore forces the bass to larger deflections.

Gigantic voice coils with a diameter of 12.5 cm process the great power on a titanium support, the resulting large centering and the coil that acts on the membrane far outside makes the vibrating structure, which is also reinforced by the matrix in the sandwich structure, insensitive to tumbling movements and mechanically induced distortion. At the same time, the magnetic drive was perfected down to the last detail, as the field with completely symmetrical field lines is available linearly over a wide stroke range, a pole cap made of pure copper reduces unwanted inductions and parasitic magnetic fields caused by compensating currents.

One for all

Could this armada be causing too much bass? The answer is clear: No, in the classic free-standing configuration, the A5 was more precise to slim. However, there was a longer optimization of the positioning, especially the distance to the rear wall.



The aluminum inner skeleton holds the housing panels of the A5 together with hundreds of screws. The asymmetrical arrangement of the matrix systematically suppresses resonances from partial plates. In the top center you can see the panels for the division of the midrange volume in raw aluminum.

As little as the closed principle struggles with roar and fat bass, the overall system reacted sensitively to the room acoustics and demands care here. Peter Gabriel's controversial "US" was able to open the hearing test.

And how! Contrary to its heavy weight appearance, the A5 turned out to be a lightning-fast maneuverable, ultra-dynamic impulse talent.



The bass attacks from "Steam" just clicked into the listening room, the energy of the impulses was present in all registers and at the same time perfectly balanced, without any grease in the bass. The real sensation became apparent when you turned it a little louder: No trace of harshness, even this track sounded ultra-transparent, even audiophile, without compromising on the fine dynamics, without losing any of its dynamics.

The same can be said for the current soundtrack of "A Star is Born" (Lady Gaga, Bradley Cooper). Intimate live atmosphere, a bit snotty production, but wonderful voices from start to finish! Let's stay with it: The Eagles intoned "Seven Bridges Road" (Hell freezes over) in the style of barbershop singing. There was a devout silence. The transparency, this impression of total cleanliness, was already worth the "world class" judgment, but here the voices were also served with maximum articulation and the typical live pressure with the close-up effect of the microphones. She intoned Smetana's Moldau (Süsskind, MFSL) with a special swing in the strings and pressure in the winds. With the best of intentions, the listeners could not say whether it was a historical or a modern recording, because the best of both worlds seemed to unite here

Revelation for choir

Although all questions were answered after the compulsory round, there were still some philosophical considerations.

Unless there are bad recording errors, the metal American always managed to tease out the best from every recording from an audiophile point of view, without glossing over or slowing down. In this respect, it fits perfectly into the modern age with streaming services and library software, where the user is only guided by his musical taste, but not by sound restrictions.

Nevertheless, the special fascination unfolds most with complex movements, inexperienced listeners are best amazed with choirs, big bands and brass orchestral movements. Which works with the A5 without any riot effects. Natalie Cole's "My baby just cares for me" is such a fascination, always right on the border between intimate vocal jazz and loud big band interjections. The Magico simply met this limbo between meditative and dynamic perfectly. The voice stood with a dreamlike certainty, very close to the listener in the room, the wall of brass surrounds it like a large holographic backdrop that one wanted to reach into. Bruckner's 8th Symphony in the excellent MDG recording (Blunier) put us in similar trance-like states: purring string carpets, elegiac melodies, cracking brass. On the Magico the tension lasted for over 88 minutes, and the fortissimo inserts never sounded noisy, but only led the magic of the music to new heights.

After the final chorus from Wagner's "Tannhäuser" (Solti, Decca) in all its intoxicating complexity, only one question remained: Has the A5 achieved perfection in the sum of all sound aspects? Yes!

- **Malte Ruhnke** ■