

GREAT. GREATER. GORGEOUS.



Magnet

Quantum Signature



- Sound: very good
- Configuration: outstanding
- Workmanship: very good
- Class: high-end
- Price/performance: very good*



Magnet

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Magnat is celebrating its 40th anniversary. The audio specialist from Pulheim wants to use this opportunity to show what's possible when passion and an unwillingness to compromise come together in one speaker. AV-Magazin puts this outcome to the test.

Magnat's Quantum Signature model is the result of decades of research and development work. This speaker, which represents the technological spearhead of the company's wide-ranging product portfolio, was developed under the motto of "not taking half-measures". The Signature series was created under the premise of combining all theoretical and physical specifications with uncompromising, practical implementation. This has resulted in a modern monument of speaker architecture. The necessary foundation for this has been laid by a team of dedicated employees who have been invariably committed to producing an excellent sound. The experience they have gained over the past few decades has been gathered and combined with state of the art technology. The outcome is a speaker whose visual appearance leaves us expecting big things. To ensure optimum harmony between design and technology, modern measuring techniques were employed in developing the Signature series. To see what effect this has had on the sound quality, please read the following report.

Design and workmanship

Magnat's Quantum Signature leaves a lasting impression from the very outset. With a height of 140 cm and a width in excess of 31 cm, it appears grand and powerful. So it's not surprising that the man-sized speaker is also considerably heavy. A single Signature speaker weighs in at an impressive 73 kg. When unpacking we notice the heavyweight metal spikes, which hint at the calibre of speaker we are dealing with. The impressive appearance is emphasised by the perfectly applied finish. The deep black coating is distributed smoothly and evenly over the solid housing. The thick layers create a high gloss, mirror-like surface. If the Signature speaker wasn't so large and heavy, it would be a perfect worry stone. Hiding underneath the luxurious black facade is an elaborately crafted wooden cabinet. This has been manufactured from medium density fibreboard, which is otherwise known as MDF. Magnat has also incorporated some specific design details here to ensure an optimum sound quality. The considerable thickness of the material, for example, guarantees a torsionally rigid and low-resonance body. Additional stability is provided by the various internal reinforcing elements.

These ensure that the speaker's susceptibility to vibration, which is caused by structure-borne noise, is effectively reduced. In order to construct a perfect body Magnat's engineers have come up with a double-walled configuration for the side panels. This not only increases the speaker's mass, but also reduces housing resonance that would have been caused by the inconsistent material thickness. The side panels, which are attached to the main body of the speaker, are tapered from the front to the rear in this setup. Another special feature is provided by the chassis supports, which are located behind each driver in the housing.

The baffle accommodates a total of six special drivers, which have been perfectly embedded in the front panel. The silver metal surrounds create a rather nice contrast to the deep black housing. Anyone wanting to hide the chassis from view or protect it from prying fingers can simply attach the front grille. This has a finely woven fabric cover whose sound permeability ensures it has no adverse effects on the sound quality. The lucky owner of this speaker is spared the view of unsightly mounting holes in the baffle thanks to the invisible magnetic mount.

Technology: Chassis

Each speaker in Magnat's Quantum Signature series utilises six drivers. The three lower chassis accommodate the woofers, which transmit frequencies from the deep bass range to around 200 hertz. Then come the two midrange drivers, which cover the frequencies between 200 and 2,900 hertz. Between these two cones is the tweeter, which takes over proceedings at around 3,000 hertz. By using multiple drivers for each frequency channel the Signature unit does not need to generate as much power to reach a certain volume, unlike a speaker with a conventional configuration. This in turn reduces the amount of measurable and audible distortion, thereby resulting in a crystal clear sound.

Sound quality

To evaluate the acoustic performance of the Signature series we connected the speakers to the DNA streaming amplifier from Audionet by using "XXL Fusion Four B" cables from Dehlbach. We began the test with the "Beethoven Classics" CD by DTS Entertainment. The Signature amazed us with its tonally balanced sound from the very outset. The two tower speakers reproduce a surprisingly subtle and detailed sound pattern, which we would not have believed possible at first glance due to their imposing size. The bass tones always sound perfectly controlled and cle-

an, even when the speakers are operated at high volume. The speakers also master all tones in the deep bass range. This is proven by the perfectly mastered audio CD "Tarantula" from US rapper Mystikal. Regardless of whether it's a crisp upper bass range or a profound, soft bass line, the Signature units reproduce the music with optimum articulation and authenticity. The connection of the two midrange drivers with the lower bass frequencies make vocals sound completely rounded. The Signature reproduces hidden details with a high level of precision and presence regardless of the tonal ranges covered by the artist. When presented with the jazz sampler "A 20-Bit Taste of DMP" the tower speakers demonstrate their complex and diverse character. The drum, double bass, saxophone and piano all sound extremely natural and realistic. The Signature speakers generate an enthralling performance with a perfectly balanced virtual sound stage, which propels the listener directly into the music. Despite its impressive size, Magnat's Signature series is more of a sophisticated guest than a ruffian. Behind the imposing appearance lies a remarkable smorgasbord of innovative technology, which produces acoustically what the speaker promises visually. It performs in such a dynamic manner with an almost unbelievable amount of level stability and pulse intensity that you will undoubtedly come to rediscover your music collection. This is something you should definitely look forward to!

Clear text

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