

video

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QUANTUM 720 5.1-SET



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The Quantum 720 is a new range with which Magnat wants to build on classic hi-fi virtues. This can be seen straightaway from the design, which is really far too attractive to be hidden away in a dark basement cinema. The elaborate MDF enclosure has been equipped with extensive bracing, stable cross members and particularly low-resonance 2.5 cm thick baffles to protect against interfering resonance. In addition, the enclosure forms rounded to the rear minimise standing waves on the inside. Furthermore, this makes the new Quantum speakers look incredibly sleek. Despite the film veneers, they come across as being considerably more high-quality than the normal angular representatives of their class.

Practical details

In the Quantum 727 main loudspeakers, two bridges with manually adjustable metal cone spikes ensure further enhanced looks and stability. In addition to the metal spikes, rubber tips are also provided to make sure that sensitive parquet floors do not get scratched. The tweeter of the Quantum 727 is also used in the Center 72 and in the Quantum 723 shelf-top speaker for the surround sound channels. Its 3 cm diameter fabric membrane is assisted by a so-called Harmonic Radiation Horn made of aluminium, which improves efficiency and optimises the dispersion characteristics. In addition, Magnat has equipped its textile dome with special damping and ferrofluid cooling for best behaviour at any conceivable volume.

From the computer

In the Quantum 727, designed as a 3-way bass reflex speaker, the tweeter hands over to the FE Dynamics woofer at 3,200 hertz. Its diameter in the two bass units is 17 cm. The designs for the mid and bass ranges, optimised using efficient Klippel software, one of the company's specialities, rely on solid steel baskets with generous ventilation openings, ventilated voice coils and lightweight, rigid aluminium-ceramic membranes. Solid aluminium cover rings give the advanced drivers the necessary visual polish to underline the high-quality appearance and impression of the loudspeakers.

The acoustic icing on the cake are the amplitude and phase-optimised crossovers of the Quantum 727. With their 24 dB filters, they limit the working areas of the individual chassis with a very steep cut-off.

Fourth order must prevail

Appropriately, Magnat also opts for fourth order filters in the Center 72. The 2-way bass reflex design uses a tweeter offset at the top to improve the omni-directional sound distribution. The two subwoofers are structured as in the Quantum 727 and are 17 cm in diameter. The Quantum 723 two-way shelf-top speaker follows the same specifications, although its crossover frequency between the operating ranges is set quite a bit lower at 2,600 Hz, compared with 3,100 Hz for the Center speaker. Apart from that, the two speakers are built according to the bass reflex design.

Heavy equipment

This design is also the inspiration for the Quantum Sub 7230A, in which the long excursion 30 cm subwoofer operates according to the downfire principle. Like every single minute detail, its magnet system originates from the computer and, thanks to elaborate simulations, ensures that excessive distortions do not come into play with the high amplitudes. Magnat relies on a coated, hardened paper membrane with a ventilated high-performance voice coil to permanently withstand the high power output of 360 watts (measured according to RMS). To cope with every type of use, there are also screw terminals at the rear, in addition to the usual RCA sockets, to enable connection to a normal hi-fi receiver that does not have a subwoofer output. There were, of course, no such restrictions in our listening test on the Denon AV receiver. Here, the 5.1 set from the Rhineland region showed what it really is capable of under optimum conditions. And that was quite a lot! The remarkable musical pleasure hit our ears immediately. Those watching action movies with this smart, snappy unit will get the shock of their lives. When Sylvester Stallone or Jason Statham let go with their guns, you'd think you were sitting on a powder keg.

The way the shots whip around your ears is extremely spontaneous, and the timing was simply breathtaking for this category. Explosions, when larger buildings were blown up for example, were emitted from the speakers in a perfectly timed and extremely terrifying way. However, there was no need at all to feel claustrophobic because the special effects team from Magnat has produced a large, stable space. And the Quantum range was also totally up to the task when interesting dialogues emerged in the breaks between shooting. Besides the high level of speech intelligibility, the high degree of homogeneity was also very pleasing. When the main speakers played in stereo, the bass came across as very contoured but sacrificed a lot of its volume without the subwoofer. The homogeneity of the soundscape was retained in principle. However, the 727 duo could not resist a certain glamour effect in the treble ranges. With the high precision, exemplary cleanliness and great enthusiasm displayed, the two speakers really would not have needed this very discreetly deployed overstatement. However, this did nothing to change the predominantly positive assessment of the very slender looking and snappy sounding speakers. Magnat really makes music a pleasure.

Conclusion

With the Quantum 720 range, Magnat delivers extremely solid performance at a fair price. The sound and finish are above the standard for this class.