

TEST

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November 2011

Magnat

Quantum 807

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Price tip



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TEST RESULT: VERY GOOD

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Listen beautifully ...

It's not only the visual appearance of Magnat's Quantum 807 that is captivating. Thanks to premium ingredients and extensive expertise the sound would also have to be convincing, right?

The art of building harmonious speakers lies less in the ability of screwing a good chassis into an adequate housing, but rather in developing the chassis itself according to such standards that require extensive technical knowledge and a significant degree of experience. In other words, knowledge of the "nuts and bolts" of generating the right tone in the living room. A speaker developer should therefore be well-versed in room acoustics; after all, the speaker isn't going to be operated in an empty room, but rather in a home with restricting surfaces, resonance and reverberation. This knowledge needs to be incorporated into development of the speaker.

Magnat's engineers have been able to pick from an embarrassment of riches for the 800 series, as they have used the experience and know-how gained from developing the Quantum 1000, their top-of-the-range model. The chassis, crossovers and enclosures used are very similar to those in the flagship products. The largest of the series is the Quantum 807, which is a tall, slim floor-standing speaker. Customers are able to choose between a Piano White, Piano Black and Piano Palisander finish. Immaterial of the version selected, the speaker, which is housed on a base plate and large aluminium feet, simply exudes class and timelessness.

Slender acoustics

The sleek column speaker, which measures 113 cm in height and has a footprint of 18.5 by 36.5 cm, houses three 17 cm chassis units and a 25 mm fabric dome at its front. The midrange, which is mounted above the tweeter in its own separate compartment, is the heart of the speaker. The cone geometry used (so-called "Controlled Flexing Cone") has been calculated in such a way to ensure the cone acts like a bending wave transducer, thereby maintaining better control over the dispersion properties in the upper midrange. The cone acts like a rigid piston in the bass and lower midrange frequencies; it's only in the upper midrange frequencies, and particularly in the transition area to the tweeter, that the chassis units operate with controlled partial oscillation. Thanks to this and a smaller effective radiating surface, the angle of radiation is roughly similar to that of the tweeter. The result is a largely constant omni-directional characteristic and therefore good tonality. The die-cast aluminium baskets are equipped with delicate struts which provide hardly any reflective surface for the sound radiated towards the rear, yet they also boast sufficient stability to give the vibrating cone a sturdy foundation.

The tweeter is also based on the 1000 series. Special features of the tweeter, which Magnat has christened "fmax" (maximum magnetic flux density), include the fabric dome which has been coated with ceramic particles as well as the broad surround. The developers' aim was to extend the upper frequency range and improve dynamic behaviour at the lower end of the frequency spectrum. This has been realised, among other things, by front ventilation of the dome and a short sound guide in the form of an aluminium flange. By increasing the acoustic resistance in the frequency range it enables the dome to operate with more dynamism.

Cleanly designed

In order to ensure the stability of the housing it is reinforced internally and partially constructed in a double-walled configuration. Flow noise is prevented in the bass reflex system at high levels thanks to the large openings and rounded ends of the rear

airflex ports. The crossover has been phase-optimised and equipped with high quality components. It divides the operating ranges: The midrange plies its trade between 250 and 3,200 hertz, while the woofer and tweeter cater for lower and higher frequencies respectively. Steep-flanked filters help minimise interference in the transition between the midrange and tweeter thanks to a narrow area of overlap, thereby optimising omni-directional properties.

Connections from renowned cable manufacturer Oehlbach are used for internal wiring between the chassis and terminal. Also worthy of mention is the large terminal area, which ensures even larger cable cross sections can be connected with any fumbling. The customer is also offered the option of a bi-wiring or bi-amping configuration. A particularly elegant solution for this speaker is the attachment of the front grille: Small but strong magnets hold the frame firmly to the front of the speaker. Anyone wanting to operate the speakers without the grille in place will not be left with unsightly plastic sockets, but simply a smooth front with an elegant chassis.

Ready for play

In view of the excellent efficiency level, amplifiers with a clean 50 watts of rated output are sufficient to satisfy even ambitious listeners. The best impression in our listening room was generated by angling the speakers slightly towards the listening position and aligning the tweeter at ear height. Sara K.'s performance in "Curtain Calls" was powerful with a beautiful presence that never appeared dominant, yet everything in the recording was revealed. The ballads "Dark Day" and "Cold Rain" from the Blues Company also sounded like they had been cast from a mould. The fine metallic whisper of the brushes never sounded artificial, but simply realistic. The delicate overtones and the space around the instruments and singers made listening with the Magnat 807 effortless.

In Joss Stone's "Dirty Man" the intimacy of the recording studio emerges clearly. Good recordings not only require an accurate focus, but also an impressive degree of plasticity. The bass chassis, reflex tubes and even the housing are put to the test by Peter Wenger's "Half-Life". Everything has to be attuned here in order to generate the immense pressure cleanly in the listening room. As a matter of fact, the 807 succeeds in pumping the rich electric bass into the room without the housing creaking or ventilation sounds emanating from the bass reflex tubes. The drums, while very powerful, also sounded extremely dry.

Anyone finding the bass pressure too much should try it with a free installation. For setups near a wall it helps to insert a piece of cloth into the bass reflex ports. It's not only the dynamic potential that is impressive, however, as the fine dynamic graduations are also more than convincing. The small Quantum units not only manage to set voices like that of Patricia Barber (in "Love, Put On Your Faces") at the centre of the piece, but they also provide the necessary degree of plasticity. The sound is generated very nicely by the sound transducers here. Piano key strikes are accurately reproduced with the correct harmonic spectrum, which is one of the hardest tasks for a transducer.

Test result

In addition to precise sound reproduction, the most striking features of Magnat's slim Quantum 807 speakers include a wide-ranging rendition and high level stability - all attributes that account for its natural performance. The level of precision generated here is not simply defined by superficial presence, but rather by a degree of effortlessness - which can certainly be attributed to the excellent chassis development. More acoustic power in this price range, if there is such a thing, is extremely rare indeed.