

Magnat

Quantum 750 series

5.1 Set

Quantum 757



Quantum Center 73



Quantum 753



Quantum 731A



audiovision
very good
Test result issue: 1/2013

"The Quantum 750 series from Magnat generates a spirited performance for both home cinema and music playback - but only with the right receiver.

German speaker manufacturer Magnat presented the new additions to its Quantum 750 series at the last IFA exhibition in Berlin. The fabric grilles used for the new speakers dispense with magnetic mounts and are now fitted in place, while the glossy piano finish (available in black or white) has been maintained for the front and base plates. In terms of the side panels you can choose between a satin surface or a real wood "mocha" finish with a hint of cherry. The elegant visual appearance and excellent build quality are impressive. With regard to technology the 757 front speakers, the 73 centre speaker and the 753 surround speakers, which feature sleek aluminium/ceramic drivers, are controlled by a steep slope fourth-order crossover. The 731A active subwoofer caters for the bass range.

Technology

The fairly narrow 19 cm wide front speaker doesn't visually allude to its rather heavy nature. The weight of the speaker is made up by its solid housing construction, additional reinforcing struts and MDF front panels that are up to 45 mm thick. These prevent the 106 cm high speaker from falling over, even though it doesn't have a wide base. It, like the surround speakers, stands on rounded feet with non-slip rubber rings or the supplied metal spikes. Small, hard rubber feet ensure a low overall height of the centre speaker, which bodes well for flat screen TVs. A tapping test conducted with our fingers reveals a solid, acoustically "dead" build quality for all of the speakers in the ensemble. Elegant sections of trim and screw connections at the front and bi-wiring terminals and screwed bass reflex tubes at the rear emphasise the high level of investment that has gone into production. Many of the features are new, such as the flow-optimised die cast aluminium baskets and the black anodised 35 mm voice coils for heat dissipation. Magnat has utilised finite element computer programmes to optimise the shape of the cone and to increase the level of dispersion in the mid and treble range. The laser-guided measuring system from German company Klippel has been used to fine-tune the bass reflex configuration. The bass reflex tube at the rear of the front speaker supports the two 17 cm woofers with a low tuning frequency of 34 hertz. The high torsional rigidity of the aluminium cones, which are coated with ceramic particles, contributes to a crisp and clean reproduction. Magnat has ensured the treble range is not left wanting. The manufacturer relies on its tried and tested 25 mm tweeter with a polyester/epoxy compound dome here, as well as a damped chamber behind the tweeter. Magnat's APOC crossover regulates the treble from 2.5 kHz. In the centre speaker the two cones take over reproduction of the midrange and can interfere with one another at lateral angles. In contrast to some of its competitors, Magnat has dispensed with acoustic tuning elements such as bass reflex plugs and level controls for the treble range. However, depending on the acoustics of the room and individual requirements, audio boffins can use the bi-wiring terminal to discreetly dampen the reproduction of the treble range with the help of a small series resistor. The active subwoofer is equipped with the most important controls and a phase switch, but it does not feature any extras such as a switchable low bass equaliser or room compensator. The 30

cm long-throw woofer radiates downwards with its hardened paper cone, while two flow-optimised bass reflex tubes amplify the low bass range at the rear.

Surround sound quality

Pink noise from the DVD "Multichannel Universe" helped us to adjust the levels and check all of the channels. Compared to the neutrally balanced front speakers the two compact surrounds and the centre speaker sound somewhat brighter. Less of a direct alignment of the surround speakers helps here. This is rarely applicable for the centre speaker, however, as it is usually positioned directly towards the listener. In our listening room the centre sounds more coherent with a small 1.5 ohm resistor before the tweeter. Having said that, the fantastic high frequency resolution exhibited by the centre speaker in the original setup ensures maximum articulation and speech intelligibility when watching "Werner 3". Female voices sound clear with spotlessly clean sibilants. The motorcycle sputters solidly and directly from the centre of the room, while dialogues can be followed with ease even amidst the greatest of turmoil. The soundtrack to "Fascinating Nature 2" reveals a high degree of precision, with percussion instruments being reproduced extremely clearly at both the front and the rear. To get the ice plates to crack with real force in the documentary "Arctic Northeast", it is advisable to operate the subwoofer with an inverted phase. We have heard deeper bass levels when watching "Iron Man", however, we have rarely heard explosions that are as dynamic and dry. Magnat's subwoofer easily takes a peak level of 108 decibels in its stride without any distortion! When used in conjunction with a stable AV receiver, the set makes the gun shots that are fired during the attack on the military convoy whistle through the listening room with realistic dynamics, with fine details such as the falling cartridges sounding particularly clear. The precise rendition generated by the speakers is also impressive in the track "Lie in Our Graves" by Dave Matthews and Tim Reynolds at Radio City Music Hall. The acoustic guitars sound firm and powerful, while the sound of the audience creates an excellent live atmosphere.

Stereo sound quality

The front speakers subtly generate low bass levels below 30 hertz without any distortion. These levels, however, cannot quite match the louder mid/treble range. In the track "Boom Boom Pow" by the Black Eyed Peas, the 5.1 set generates hard and deep bass drum beats in the listening room that are as dry as a bone. Despite the famous dynamics and resolution, the vocals and percussion form an integral, and not superficial, part of the rendition.

Conclusion

The visual appearance and build quality of the Quantum 750 set from Magnat are a dream. The front speakers, however, are rather low-impedance in nature, which is why you need a stable AV receiver. The set is then capable of creating an outstanding resolution and spatial representation with an enormous bass range."