

# stereoplay

06/2013

**“The MOST AUDIOPHILE SPEAKER  
in Magnat’s history”**



**Magnat**  
Quantum Signature

**“OUTSTANDING”**

(Price/performance)

stereoplay  
Highlight

6/2013

Did you know? Magnat has been enriching the market with its designs for 40 years now. These include a large number of price-performance sensations: Mega-sellers like the All Ribbon 10 P, the Vintage 520 or, most recently, the Quantum1005. And those that have set standards, such as the MP-X101 or the Vintage 990, with the latter still holding the stereoplay bandwidth record for passive loudspeakers: from 12 hertz to above the measuring limit. Measured against the last two flagships mentioned, the Quantum Signature is perhaps not quite so spectacular in terms of design, but is definitely just as ambitious with regard to sound.

To achieve this, the Magnat developers took the previous top model, the Quantum 1009, as the basis, though almost every component has been completely reworked, perfected and upgraded to state of the art. The Head of Development and Marketing, Shandro Fischer, is satisfied: "We really have put in a lot of hard work."

And that's easy to see when the Magnat, now 40 years old, starts working away: A 1.4 metre high object, weighing in at around 80 kg and with the finest high-gloss black lacquer finish. The multiple strutted nobel enclosure has a material thickness (MDF) of 24 millimetres throughout – as a basis. And with two more 22 millimetre thick MDF's added at the sides. They are connected to each other by a stable, screwed aluminium strip. This not only looks rather elegant, it also reduces vibrating surfaces, ensuring more pleasing resonance behaviour.

This extremely stable acoustic furniture item offers exactly the right surroundings for the three 20 cm bass drivers, which – as is normal for the high-end Magnat models – are equipped with the hard aluminium oxide-ceramic cones and, for the Signature, are also fitted with even more stable inverse dust caps. Like the midrange, they have been provided with completely new and lower distortion drives – with the agreeable side effect of making them considerably more efficient. As the three woofers and two subwoofers are also connected in parallel in each case (and therefore make the individual paths louder), the classic Quantum tweeter could no longer keep up – in terms of level alone.

So a new tweeter was needed. One with an extremely light textile dome that plays both higher as well as louder due to its low weight. The Magnat developers have achieved this with a textile dome which they have coated with crystalline polymer. This considerably stiffens the textile, but hardly makes it any heavier. The frequency response graph shows impressively that textile domes can reach up to the measuring limit of 40 hertz.

Even more sensational, however, are the distortion values of the Signature. Only very few loudspeakers can be found in the annals of the test laboratory that display such low distortion (in the range of 200 – 1000 hertz **below the measuring limit!**). This shows what modern driver technology is now capable of.

#### Care and attention wherever you look

But it also requires an elaborate combination of bass, mid and high frequency paths. It is also noticeable in this regard that, with Jürgen Falke, Magnat has a development engineer on board with more than 30 years' experience. Falke and the team found a steep-slope crossover with separation of 24 decibels per octave in acoustic terms to be the best solution. This crossover facilitates very efficient protection of the midrange and tweeters against

low frequencies – which is also why the Signature displays such low distortion in the mid-ranges.

#### New low distortion

The question presents itself whether this new low distortion can also be heard. We think: yes, it can. The Signature celebrates the music fed through it with very rare tranquillity and serenity, as otherwise only experienced with excellent tube amplifiers.

#### Like a good tube

The comparison actually is very appropriate. The top model from Magnat quickly captures the listener with its warm-hearted, subtle sensitivity. Of the many visitors in the listening room during the Signature test phase, almost all of them immediately fell in love with the large, black-lacquered body, though also with the commanding, relaxed reproduction. The tonal qualities of Magnat have always been in the subtly fine range - at least in the mid/treble range. The Signature supplements this laid-back sound (which can be heard in an exemplary manner from the Quantum 1009). However, the Signature sounds more sophisticated, finer and more commanding, especially in the bass range.

#### The real deal

The new Magnat is big and powerful in the bass range – that's something potential buyers have to keep in mind. Placing it in the corner is taboo, because the bass would simply be too much. In the stereoplay listening room, we very quickly found the optimum position and then got really excited. The power in the lower ranges immediately captivates the listener – not so much because it can easily get down to 30 hertz but, rather, also on account of the precise differentiation in the sub-range despite the full richness. It is not absolutely necessary to test this with the notorious Kodo drums, but it really is a lot of fun. The relaxed way in which the Signature projected the powerful instrument into the listening room so authentically and in live volume was impressive. That was not the point, however, that made the Signature so special. Even more amazing was the apparent effortlessness of the sound reproduction. Markus Schirmer's piano in "Pictures at an Exhibition" calls on the entire system at the higher level and can quickly sound strained. Not with the Signature. The individual keys of the piano emerged from the drivers in fine detail and combined to produce a very captivating sound. This warm, fine sound character is particularly beneficial for choral recordings. Bach's Christmas Oratorio with Fritz Wunderlich, a critical recording that can sound very harsh, displayed a rare and commensurate beauty with the Signature. Also very positive: It could be turned up as loud as you like - and with the 600 watts of the Ayre Reference mono amplifiers, it did get extremely loud.

#### Phaeton speaker

When VW brought the Phaeton onto the market, it was the most luxurious member of the automobile upper class. The comparison is appropriate: There is hardly a loudspeaker that exudes a greater feel-good sound factor than the Magnat Signature. It requires no effort to get its several hundred horse power up and running. Superb: a highlight!