

Magnat Signature Edelstein

These super-compact loudspeakers are simply the tip of the iceberg for Germany's expansive Magnat brand whose ranges encompass the gamut of 'lifestyle' to 'purist'
 Review: **Jamie Biesemans** Lab: **Paul Miller**

Bigger is better' seems to be one of those unwritten rules of hi-fi that ensures every audio show is packed with speakers towering high above the audience. Unfortunately, out there in the real world most people don't have the space to wheel in a pair of Wilson Audio Alexx Vs [*HFN* Jan '22] or Focal Grande Utopias [*HFN* Dec '18]. So, in an age when tiny houses are proclaimed as the way to go, Magnat's Signature Edelstein might be the speakers that better fit the zeitgeist. But these are not especially low-cost petite models. As 'Edelstein', or gemstone in German, indicates, these particular Magnat boxes – priced at £949 – are positioned as small and luxurious.

If all this sounds familiar, you're not mistaken. The new Edelsteins are not the first foray into the miniature speaker space for this 50-year-old German brand. Ten years ago it launched the Quantum Edelstein – a similar concept that boasted the same aesthetic. Taking a broader look, the two-way Signature Edelsteins fit into a peculiar mini segment of super-small but opulent speakers where you'll also find ELAC's new BS 312.2 and the DALI Menuet. Even Wilson Audio's TuneTot [*HFN* Nov '18] could be considered as something similar, albeit at far higher cost!

DEEP THINKING

Cleverly, the Signature Edelsteins pull off a neat optical trick. Viewed front on they appear very small – they're only 232x135mm (hwxw). Their 'secret' is their depth, which at nearly 25cm isn't extreme but gives the cabinet more volume than you'd first expect, making them not many cubic centimetres away from Musical Fidelity's recent LS3/5A homage.

While the Edelsteins' elongated shape makes them challenging to install on speaker stands with small top-plates, it's arguable that a freestanding location is not the right choice for these models anyway. Furthermore, it doesn't take a genius to

realise that small loudspeakers like these aren't meant for use in large rooms. That said, if you aren't seeking bass thrills or, perhaps, are prepared to run the Edelsteins with a subwoofer, then they can perform very admirably in a larger living space at normal listening levels.

As for their looks, it turns out 'Edelstein' is not just a smart marketing label; the

'The synths rolled out in suitably epic fashion'

speaker also incorporates a design element with a jewel-like aspect. Separating the machined alloy base from the rest of the cabinet is a clear 'crystal acrylic' layer that, from a distance, creates

an illusion of cabinets floating above the shelf, desktop or stands on which they're sat. The Signature Edelstein's heavy, layered base section also lowers the speaker's centre of gravity, helping to improve stability.

LITTLE BEAUTY

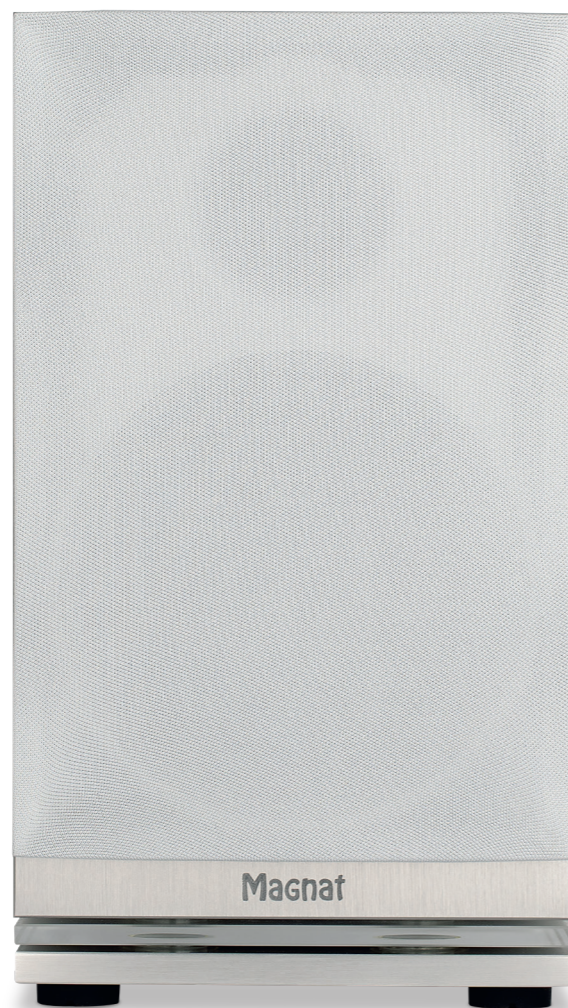
The rest of the speaker is finely crafted, too. The hefty MDF cabinet is finished in a satin white or black that exudes a function-before-form vibe, but this is extinguished the moment you remove the (black or light grey) front grille to uncover the brushed metal baffle. Incidentally, the white edition is the 'looker' of the two, with the textured alloy baffle complementing the lighter cabinet finish to pleasing effect.

Even though Magnat is wont to combine tweeters and supertweeters [see boxout,

RIGHT: The satin black and satin white (MDF) enclosure finishes are complemented by matching grilles while a stylish alloy and 'crystal acrylic' sandwich base aids both stability and cabinet damping

p63], the Signature Edelstein is graced with a single 25mm dome tweeter – albeit a very capable one [see PM's Lab Report, p65]. This is sunk into a large waveguide machined out of the alloy baffle plate and combined with a 115mm 'woofer' that utilises Magnat's '3L Sandwich' cone material – a magnesium alloy stiffened by an outer surface of ceramic. This driver is reflex-loaded via a deep port that exits through the rear of the cabinet.

The Edelstein's sensitivity is rated at a high 90dB, which would be an impressive number for something this compact – PM's



RIGHT: Magnat's 25mm soft dome tweeter, with large roll surround, nestles in a waveguide formed by the thick alloy baffle faceplate. The 115mm alloy coned mid-woofer is stiffened by ceramic (oxide) on its front and rear surfaces

Lab Report paints a different picture, so you'll need a bit more oomph when it comes to amplification. Then again, few are likely to combine a pair of circa-£1000 speakers with a tiny, budget amp.

SPEAKER SURPRISE

Setting aside my usual larger testing kit, I connected the Signature Edelsteins to an analogue-only Primare I15 amplifier [*HFN* Oct '18] with a WiiM Pro Plus for streaming and a Pro-Ject X1 turntable [*HFN* Aug '19] for some vinyl fun. Electing to audition the speakers with a real-life, keep-it-simple system felt truer to form in this case. At the same time, the Primare amp has a measured 2x140W/4ohm to drive the more demanding Edelsteins, and its slightly laid-back character turned out to be a good match. When I subsequently used Magnat's speakers with NAD's C 658 pre and C 298 power amps [*HFN* Oct '21], the sound edged in a more analytical direction.

Very small speakers that are well made have one advantage: they tend to surprise casual listeners. Nobody expects too much from something the size of a shoebox, which makes for eye-opening reactions. It's a bit like seeing a Fiat 500 Abarth race down the street for the first time, leaving you wondering how something so minuscule can accelerate like that.

It's a similar experience with the Signature Edelsteins. The first time you hear them, chances are you'll be amazed by their sense of detail and even their low-end extension. Yes, while objectively they don't deliver sub-bass –

there's no beating physics – the bass performance of these speakers will still make you sit up and take notice. For example, the grand synths in 'End Titles', from Daft Punk's soundtrack for *Tron: Legacy* [Walt Disney Records 50999 9472892 7], rolled out of the Edelsteins in suitably epic fashion. 'Recognizer', featuring orchestral blasts added to the pounding electronica, was equally impressive in its scale, while the opening tones of 'Armoury' – with the volume of the Primare amp turned up high – resounded throughout the room.

SILVER SERVICE

Also likely to impress first-time listeners – and probably keep quite a few coming back for more – is the slight presence/treble emphasis shown by these speakers – this, seemingly, also 'sharpening' their stereo imaging. Compressed recordings can appear airier, while guitar-driven tracks have a thrilling edge. It is key, however, to not toe-in the units too much; to my ears a completely turned in position brought too much aggression. Spending time with the placement of loudspeakers is always worthwhile, but it's doubly true here.

Playing Horace Silver's signature set *Song For My Father* [Blue Note 84185; 192kHz/24-bit], Magnat's speakers really displayed their ability to lay down a smooth and entrancing performance. They're nimble too, making them cut out for this

SPEAKER MAGNATES

Although arguably less well known than some of its contemporaries, Magnat is one of the mainstays of the German hi-fi industry. Like ELAC and T+A, the company started as a loudspeaker manufacturer but nowadays offers a full range of audio products. In addition to catering for the 'mass-market' and custom install speaker sectors, it also has amplifiers (with a focus on tubes) and sources. For its 50th anniversary, celebrated in 2023, it brought out a special edition direct-drive turntable co-designed by industry veteran Helmut Thiel.

The company sprang from the 1960s German importer of Goodmans loudspeakers. Magnat's founder, Rainer Haas, was the son of one of the business partners, and believed he could improve on the UK designs. His Goodmans Magnat speaker was a success, leading to the creation of the autonomous Magnat brand (the name sounds like 'magnet', but its meaning is closer to 'magnate') in 1973. Based in Pulheim, near Cologne, since the 1990s – a move that enabled it to build an extensive testing facility – Magnat became part of the Premium Audio Company in 2023, alongside Esoteric, Onkyo, Pioneer, Jamo, and many others.

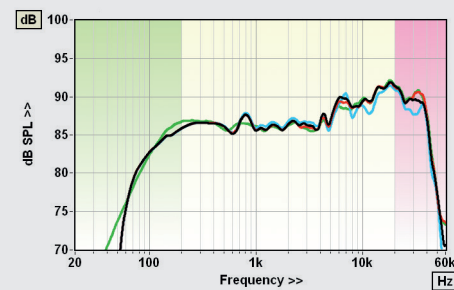
Over the years it has launched some notable products, including the spectacular Vintage 990 floorstander. Standing 185cm tall and weighing 250kg each, this comprised a passive three-way speaker mounted on top of an active twin driver subwoofer. Magnat also has a penchant for novel HF arrays, offering several models with dual and triple tweeters of its own design, including those featured on its affordable Signature 503 and 703 standmounts.

LAB REPORT

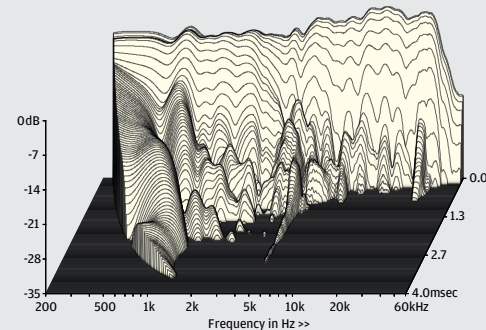
MAGNAT SIGNATURE EDELSTEIN

While differently dimensioned and 'voiced', Magnat's Signature Edelstein has an LS3/5A-esque [HFN Jun '23] cabinet volume – so the '90dB sensitivity' is a tad optimistic, despite porting! Principally, it demonstrates a steadily rising axial response above 5kHz, its 25mm fabric dome tweeter reaching a remarkable 43kHz [-6dB re. 10kHz; see Graph 1], while pair matching is an impressively tight 0.6dB. This potentially bright top-end is largely responsible for the ± 3.4 dB and ± 3.3 dB response errors, respectively, and while not significantly attenuated by the snug-fitting grille [blue trace, Graph 1], can be managed by toeing-out the speakers by 10-15°. Also, while the upper mid/presence between 1kHz-4kHz (including 2.5kHz crossover) is very smooth, the small 'bumps' at 800Hz and 4.5kHz are linked to a strong port and a mild driver resonance, respectively, that are both revealed in the CSD waterfall [see Graph 2, below].

In reality, a sensitivity figure of 85.6dB/1m/2.83V (re. 500Hz-8kHz) is more realistic. This partially explains the ~1% THD at low bass/high treble (re. 90dB SPL/1m), but Magnat has still squeezed out as much level – and bass – as possible at the expense of impedance. The load nudges below 30ohm from 250-360Hz while, with hefty +53°/-67° swings in phase angle, the EPDR (equivalent peak dissipation resistance) drops to 1.2ohm/180Hz and 1.6ohm/715Hz. Bass is still necessarily limited – the 115mm woofer, with 62Hz port tuning, reaching 73Hz (-6dB re. 200Hz). Shorting the port attenuates the 800Hz resonance and further smooths response [green trace, Graph 1] but bass pulls back to 87Hz. Bookshelf/rear-wall siting will yield deeper, with care. PM



ABOVE: Response inc. nearfield driver/port [green shaded], freefield corrected to 1m at 2.83V [yellow], ultrasonic [pink]. Left, black; right, red; grille, blue



ABOVE: The MDF/alloy/acrylic cabinet is well damped but a strong port resonance is shown at 800Hz

HI-FI NEWS SPECIFICATIONS

| | |
|---|-----------------------------------|
| Sensitivity (SPL/1m/2.83V - 1kHz/Mean/IEC) | 85.6dB / 86.7dB / 85.6dB |
| Impedance modulus: minimum & maximum (20Hz-20kHz) | 2.93ohm @ 296Hz 33.4ohm @ 42Hz |
| Impedance phase: minimum & maximum (20Hz-20kHz) | -67° @ 118Hz +53° @ 35Hz |
| Pair matching/Resp. error (200Hz-20kHz) | 0.6dB/ ± 3.4 dB/ ± 3.3 dB |
| LF/HF extension (-6dB ref 200Hz/10kHz) | 73Hz / 43.1kHz/43.1kHz |
| THD 100Hz/1kHz/10kHz (for 90dB SPL/1m) | 1.1% / 0.3% / 0.9% |
| Dimensions (HWD) / Weight (each) | 232x135x246mm / 5kg |



LEFT: The Signature Edelstein's long and relatively narrow rear-facing reflex port is flared at its exit. The 4mm cable terminals, and supporting alloy plate, are all solidly constructed

As an aside, seeing the Signature Edelsteins sat underneath a wall-mounted flatscreen TV made me realise the speakers could provide a flexible 'dual-role' solution for music and film/TV audio. Used with NAD's streamer/preamp and power amp pairing, the former fitted with the optional HDMI board, Magnat's Signature Edelstein speakers proved to be an enjoyable listen with streamed video content. They don't deliver the home theatre kicks,

but their broad and immersive soundstaging, and generally even-handed balance, make for good dialogue comprehension.

FOR THE RECORD

Back to music, and vinyl replay further revealed the appeal of the compact Signature Edelsteins. Calexico/Iron & Wine's largely acoustic *Years To Burn* [City Slang SLANG50244LP], played on the Pro-Ject X1 turntable (with Pick It Pro Balanced MM), found smooth slide guitar on 'Midnight Sun' and brilliant texture in the trumpets mixed left and right on 'What Heaven's Left'. It was a fascinating, clear sound on a larger scale than you'd imagine possible. Magnat's new jewels have plenty of sparkle! 🎧

jazz classic's intricate compositions. There are tracks on this 1965 album where the rhythm and melody frequently takes an unexpected turn. 'The Natives Are Restless Tonight' is a prime example of an up-tempo piece featuring breathtaking solos, including Roger Humphries going full pelt on his drumkit.

UP AGAINST THE WALL

Communicating such a sense of excitement is a strong suit of these bookshelf speakers, but they're also up for more subtle work, such as the understated, light-touch percussion in the latter half of the eastern-themed 'Calcutta Cutie'. When the bells and gentle hi-hat appeared far to the left and right of the Edelsteins' cabinets, it was another illustration of their imaging ability.

As PM suggested, placing some bungs in the Signature Edelsteins' rear ports resulted in an improved tonal balance, helping Silver's piano playing and Joe Henderson's sax into the foreground. In particular, Henderson's thrilling solo on the title track became easier to appreciate, even if the role of the rhythm section felt a little diminished.

Moving the speakers from the DALI E-600 stands I had pressed into service, and onto some AV furniture next to a wall, was productive. The (rear wall) boundary gain partially compensated for the blocked port, bringing back some bass solidity – not a bad compromise to make.

HI-FI NEWS VERDICT

It's pretty clear these diminutive boxes are not mere dinky trinkets. Rather, Magnat's attempt to create a compact speaker offering true fidelity playback pays off. The Signature Edelsteins are not only neat little jewels to behold, but in the right setting will deliver precious listening moments filled with detail and engagement. While unsuited to large spaces, they're a treasure in small living rooms and home offices.

Sound Quality: 84%

