

Maggie Magic

Rafael Todes finds Magneplanar's new 3.7i panel loudspeakers can bring music to life like few others. They even get his wife dancing!

The concept of the planar magnetic speaker dates back to 1969 when Jim Winey, Magneplanar's founder, became frustrated with electrostatic speakers and tried a thin-film magnetic version of the electrostatic skin. The rest is history and Magneplanar has firmly established itself as the leader in this technology.

Jon Myles recently reviewed the 1.7 in the July 2004 edition of *Hi-Fi World*, while the model I'm reviewing here is based on the 3.7, released in 2011. The changes which make the 3.7i are small, significant but confidential, so technically speaking they cannot be described here! Suffice it to say, having heard these speakers at the Whittlebury Show, I got very excited with what they were doing and was champing at the bit to have a more extended listen.

The panel's dimensions are 1.8m high, 61cm wide, and 4.1cm deep, making them each a possible one-person lift – but they are heavy at around 28kgms each. At the rear of the speaker, there are treble and midrange bridging connections which offer the opportunity to insert a supplied resistor to attenuate each ribbon.

The user has a choice of speaker arrangement, as they are 'handed', the treble panels can either go inside or on the outside. I found the soundstage in my room to be more preferable with the treble panels on the outside.

Location within a room is critical; the speakers work best when they are toed-in, with optimum bass when the speakers are 3 feet from the rear wall.

SOUND QUALITY

First up on my Inspire Monarch turntable was a classic jazz album, Kenny Burrell's 'Midnight Blue' on the Blue Note Label. I was immediately struck by the immense ease and transparency of the sound. The hi-hats are sizzling with no overhang or slur, like they are in the room. The conga sounds similar, it has a life-like quality that leaves me awestruck.

Having been a fan and longtime user of B&W

More on Maggies...

NOEL SAYS...

I listened to the 3.7is in-house, running them from the 220 Watt Icon Audio MB81 valve amplifier I review in this issue, as well as the Creek Evolution 100A.

For sources we used an Astell&Kern AK120 portable high-resolution digital player feeding an Oppo BDP-105D Blu-ray player, used as a DAC as well as a CD player. We span LP on a Timestep Evo Technics SL-1210 Mk2 Direct Drive turntable, fitted with SME309 arm and Ortofon Cadenza Bronze MC cartridge feeding an Icon Audio PS3 valve phono stage.

The 3.7is were positioned with the vertical treble ribbon on the outside, which measurement showed gave flattest response. We swapped them around to ribbon on inside, but as measurement suggested this dulled the sound by suppressing upper midband whilst high treble remained strong, making for an incohesive presentation; they were not used like this as a result.

The soundstage sounded properly proportioned with the panels well apart, 7ft between centre lines being a minimum, and no 'hole in the middle' appeared with this wide spacing, when the panels were toed in slightly. Bass would be strengthened by use against side walls, but this is rarely practical as it demands a long narrow room.

Our 25ft long and 19ft wide listening room offered little modal support for deep bass and in this respect the Magneplanars got no help from their surroundings. An 18ft long room – about ideal for these speakers – would have enough floor space to accommodate them and add some room gain at 30Hz from the length mode, plus extra boost from a (narrower) width mode.

SOUND QUALITY

Magneplanar's 3.7is were a bit disconcerting: they are one of the best loudspeakers I have ever heard – but their lack of bass impact may be a fatal weakness for lovers of rock. A few classic tracks suffered particularly. Spinning Phil Collins 'I Don't Care Anymore' on 200gm LP, the opening drum solo was cleanly outlined but lacked visceral punch. From panels this size I expected more and felt a bit cheated. However, with a massive image painted up in front of me and Phil Collins singing ethereally down from a superbly smooth canvas devoid of blemish, I was still transfixed. Switching in a Magneplanar DWM bass panel – hooked up as B loudspeakers to a Creek Evolution 100A amplifier – added some extra heft, but not as much as I would have liked.

In spite of this loudspeaker's measured performance, in our room the 3.7is lacked deep bass power and this most affected tracks like Lady Gaga's 'Monster', where massive quantities of deep bass power from a synth are part of the artistic construct; without this element the track lacked the thunderous impact of its subterranean synth line and the song seemingly lost its delivery vehicle. A DWM panel helped, but it was insufficient to fully compensate; 'Monster' needed more heft and our Tannoy Kensington's beckoned from afar.

With a choir singing Veni Creator Spiritus, backed by the Chicago Symphony Orchestra (24/96) the 3.7is constructed a massive soundstage before me, the choir stretching upward toward the Gods. Toed-in slightly they delivered a soundstage of concert hall dimensions, on which singers were well differentiated, one from another, and there was a conspicuously smooth and cohesive quality much like that I've heard from Audeze magnetic planar headphones.

With simple vocal deliveries like Diana Krall's 'Narrow Daylight' the lack of box boom, overhang, colour or any other blemish gave the sound extraordinary purity, quite beyond that of conventional loudspeakers. The ribbon tweeter did at times have a bit of bite to it, making for viciously fast transients from strummed steel string guitars, such as those of Nils Lofgren's 'Keith Don't Go'.

Nigel Kennedy's Stradivarius violin was larger than I've ever heard it, I'll swear, exhibiting a lovely sense of body that made me almost able to reach out and touch it. For performances like this few loudspeakers could compare to the Maggies; box loudspeakers seem laughably restricted against them.

Magneplanar's 3.7i is a wonderful loudspeaker, but its restricted bass impact will be too strong a limitation for some I suspect, unless a powered subwoofer is used; Magneplanar's own DWM panels were none too effective.

Noel Keywood

JON SAYS...

The Magneplanar 3.7is do many things well – and, in fact, some things exceptionally well. But they also have some drawbacks to my ears.

First to the good points, though. In terms of soundstage, imaging and depth of field they are truly impressive. Being a full-range panel ribbon design with both forward and rear dispersion they can fill a room with a clarity and atmosphere few traditional box loudspeakers can even come close to.

Play acoustically-based music such as Pierre Bensusan's 'Altiplanos' and the leading edge of the guitar work is a delight. Even more impressive, you can actually tell where he switches from his traditional guitar to a Lowden S22 throughout the album. That's the detail and resolution that comes from a large panel loudspeaker.

The same goes for Portishead's 'Dummy' where every little studio embellishment can be heard loud and clear, while Beth Gibbons' voice has an intoxicating realism that makes you believe you are listening to a living, breathing human being instead of a digital reproduction.

Indeed, I heard that quality on all vocal reproductions and with solo acoustic instruments. The Magneplanar's really shine in this regard. Treble has a slight edge to it – just enough to add some tension to music but not so much that it veers into unpleasantness.

But moving to the likes of Lady GaGa's 'Monster' found an inherent lack of low-end punch. When this track's bass comes in it's there for a reason – to knock you off your chair, get a smile on your face and make you dance round the room like an idiot.

Here, the Maggies seemed a little short. Bass is there and does have definition but there's a lack of absolute power and slam. Similarly with Jackie Leven's mournful 'Working Alone/A Blessing' the rhythm section can't quite manage the power needed to give the track the scale it truly deserves.

Things are helped by the addition of the Magneplanar DWM which brings greater definition to the like of Phil Collins' drumming and – admirably – doing so without adding any sluggishness or drag to the overall sound.

But it still doesn't dig exceedingly low and I'd speculate the use of a powered subwoofer correctly tailored to the Maggies may be the better solution for some.

For those whose tastes veer towards more hard-hitting rock or bass-heavy dance music then, careful audition is definitely recommended.

Jon Myles





The rear view of the ribbon. This comes with a cover to protect it in transit.

the trumpet positively gleams, and the percussion mesmerises. Ray Gelato's voice is totally natural. There is complete clarity in the way the different instruments are portrayed. I haven't ever heard this track sound better.

CONCLUSION

On several levels these speakers are truly astonishing. They are extremely good value-for-money, as few speakers at this price can come close to the level of musical insight they bring. I find myself excited at the prospect of playing a new recording on the Maggies as they bring out the sheer joy in the music-making and the deepest sentiment in the material; they are by far the most emotionally affective component I've ever had in my system.

They can reproduce the music of small forces of musicians like no others I have heard, casting an almost magical spell on the listener with their extreme beauty of sound. And they are the closest thing I can think of to the often overused word 'musical'.

Like a great conductor who shows the audience how to listen,

they have a way of dragging the listener closer to the heart of the music.

Despite their crystalline clarity, they are the polar-opposite of being 'monitors'. They make tiny differences between cables and equipment harder to identify through the sheer force of their personality. This doesn't make life any easier for nit-picking reviewers like me! For raw musical insight, however, very little I've heard comes close.

REFERENCE SYSTEM

- Inspire Monarch turntable
- SME V arm
- Lyra Scala cartridge
- VAC Phi 200 monoblocs
- VAC Signature Mk2a Preamplifier/phono preamp
- Esoteric K-05 CD player
- B&W 802D speakers
- PS Audio PS10 mains regenerator

MEASURED PERFORMANCE

Frequency response of Magneplanar's Magneplanar MG 3.7i was similar to that of the 1.7 we reviewed in the July 14 issue. There is a plateau lift of lows from the bass/mid-range panel over highs, of around +4dB our analysis shows. This will add body to the sound, bringing it into line with that perceived from a typical box loudspeaker (panel loudspeakers sound lean by nature).

Output from the 3.7i was consistent over the full height of the panel. However, it was not consistent laterally, as the relative phase of the output of the panels changed. The smoothest result - and the best sounding one with pink noise - was off-axis with the narrow vertical high frequency panel on the outside when seen as a pair.

This is unusual; the tweeter usually works best on the inside because of the wavelengths and physical distances involved, but the 3.7i integrates best with the tweeter on the outside, the speakers facing down the room, or toed in slightly toward listeners.

Juxtaposed with the tweeters on the inside, a large midrange dip appears, producing a warm, bland sound balance, albeit with plenty of low midband and strong upper treble - a 'boom and turg' effect some may like.

This was with the jumpers installed, directing full output to the midrange and treble drivers. Inserting 1 Ohm resistors, supplied and recommended, pulled output down by a small, almost negligible 1dB, so subjectively the resistors supplied affect response little.

Resistors of 2-4 Ohms would have more audible effect, but they would make the 3.7i's sound dull. The only potential benefit of using the resistors supplied is to make the 'speakers an easier load, so as not to threaten the life of amplifiers unable to handle a load that sinks to a low 3 Ohms.

This brings in the issue of sensitivity. Producing a meagre 83dB sound pressure level (SPL) at 1 metre, from one nominal Watt (2.8V) the 3.7i's are very insensitive, meaning they need a lot of power to go loud. Measuring out at 4 Ohms impedance they also draw current, much more than most loudspeakers. Transistor amplifiers are designed to cope with a 4 Ohm load of this (resistive) nature, so no problem in outline. However, this will shake the power supply when volume is turned up, so the 3.7s may well magnify amplifier deficiencies.

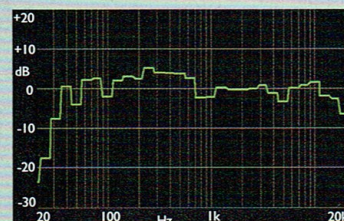
A small amelioration is that sound power decreases less with distance than with a normal (monopole) box loudspeaker, -3dB per metre measurement showed, so at a distance the 3.7i's improve on their deficit, even though they don't manage to eradicate their 7dB disadvantage. The 3.7i's need sturdy 100 Watt amplifiers - minimum - as partners.

Panel loudspeakers live or die by their lack of box colour, and the 3.7i's measured well here, as expected. With no box behind to reflect sound back out through the drive units, a 200mS decay map showed the speaker has low coloration, but not no coloration. The

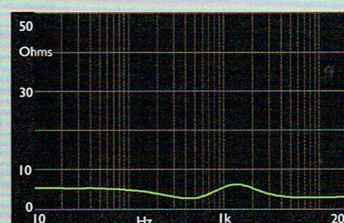
bass/mid panel in particular is a little hot, possibly because of an absence of air load damping, but its output falls away faster than that of a box loudspeaker, giving a different and better overhang/colouration pattern to that of a box loudspeaker. There is, all the same, a strong overhang at 40Hz and a lesser one at 80Hz, suggesting there is likely to be perceivable character to bass.

The new Magneplanar 3.7i now measures well enough in response terms to be a serious high end challenger amongst panel loudspeakers. Offering dipole bass and a box-free sound, plus smooth upper treble, it works well in all areas. The 3.7i needs big power, like all magnetic planar drivers, but this is a small drawback against its many strengths. **NK**

FREQUENCY RESPONSE



IMPEDANCE



MAGNEPLANAR 3.7i £7500 (depending on finish) DWM BASS PANEL £1100 (each)



OUTSTANDING - amongst the best.

VERDICT

These speakers put most others to shame. Transparency like no other.

FOR

- beautiful sound
- reproduce many instruments with integrity
- massive sound stage

AGAINST

- ugly
- bass lacks impact
- room dependent

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