

Magnepan MG2.7i

Described by Magnepan as an 'MG3.7i lite' the MG2.7i is the smallest 'Maggie' with a true ribbon tweeter

Review: **Mark Craven** Lab: **Paul Miller**

Stanley Kubrick's *2001: A Space Odyssey* often comes to mind when I'm faced by large, black speakers. The MG2.7i from Magnepan, in the black trim and matching black fabric grille of our review pair – and measuring 1.82m tall and 56cm across – really fits the bill. The 'trick' here, of course, is that it's only a few centimetres deep.

Other finishes give it a slightly more fun appearance. The MG2.7i's MDF side cheeks (or 'stiles') can be chosen in Silver, Gold, Cherry or Oak, and the cloth is offered in Grey, Off White and Cherry White (although not all colours are available in all markets). Still, regardless of finish this is an imposing loudspeaker and, despite its manufacturer's insistence to the contrary, not especially suitable for 'smaller' listening rooms.

Fans of the American brand won't care though. Magnepan, established by the late Jim Winey in 1969 [see boxout, p71], has earned its reputation among audiophiles for the largescale sound developed by its loudspeakers, aka 'Maggies'. Planar magnetic models, they promise a musical quality that lies somewhere between the openness of an electrostatic and the punch of a dynamic driver design.

FOILED AGAIN

The MG2.7i sells for £7995, which will appear good value if your brain works on a size/price ratio. It's a midrange option in the Magnepan hierarchy, below the larger 3.7i, 20.7 [HFN Apr '18] and 30.7 flagship – the latter a four-box system with separate bass panels. The manufacturer also offers a £12,750 'X' version of the MG2.7i whose improvements include higher-quality, individually matched and tested components in the crossover network, additional bracing of the speaker frame, and the use of silver solder connections.

The technology inside the speaker's full-length acoustically transparent cloth will be familiar to Magnepan watchers.

Midrange and bass are handled by what the manufacturer calls a 'quasi-ribbon' – an isodynamic panel featuring ultra-thin aluminium foil traces that are bonded to a 28x145cm Mylar (polyethylene terephthalate) diaphragm. These conductors, one handling bass frequencies below 500Hz, are motivated by vertical rows of iron/polymer bar magnets mounted behind. As part of the assembly process (all Magnepan's speakers are hand-made at its facility in Minnesota), small 'buttons' are added to the surface of the Mylar panel for resonance control.

TAKING SIDES

On the MG2.7i, and Magnepan's costlier models, high frequencies are delivered by a 'true ribbon' drive unit – a magnetically suspended, pleated thin-film aluminium strip said to be 1/10th the thickness of a human hair. Look around the rear of the speaker [p73] and you'll find this runs a

little over half of its height (1m approx.) and is positioned to one side. To the low ~20ohm resistance of the ribbon is added a 20ohm series resistor, ensuring amps are not faced with an impossible load [see PM's Lab Report, p73].

The speakers are sold in mirror-imaged pairs, enabling installation with the ribbon tweeter either on the outer or inner edge. The former will suit most rooms/seating positions, although Magnepan suggests arranging the speakers with tweeters on the inside if they are sited close to side walls.

The MG2.7i's series crossover features shallow, first-order roll-offs, so ➞

'Largescale
electronica falls
squarely within
its comfort zone'

RIGHT: Available with a natural oak, dark cherry or black frame (or with silver, black, or gold aluminium trims), the panels and ribbon are protected by a choice of a cherry/off-white, grey or black 'sock' grille



'Remove the jumper bars and replace them with the supplied resistors to alter the MG2.7i's tonal balance'



MAGGIE MOMENTS

Formerly an engineer at Minnesota Mining & Manufacturing, Jim Winey (1934-2024) established Magnepan Inc. in 1969. A year later he filed a patent for an 'electromagnetic transducer utilising one or more vibratable diaphragms', and in 1972 introduced the Tympani, his first 'magneplanar' loudspeaker. Fellow Minnesotan hi-fi marque Audio Research initially handled the distribution.

Its physical form inspired by a folding room divider, the Tympani featured three hinged panels, two dedicated to bass frequencies. Upgraded versions followed, with the Tympani IV of 1978 debuting Magnepan's first ribbon tweeter. Winey had by then launched the single-panel speakers for which his company would become best known – the MG2.7i auditioned here is a descendant of the MG-II of 1973, the series having remained a constant for more than 50 years. During this time, Magnepan switched from bonded wire to foil conductors, starting with the tweeter in its MG1.5 in 1991. The MG1.7 of 2010 was its first 'all-foil' full-range model. The Tympani line, meanwhile, was retired in the 1990s, although the multi-panel approach eventually returned in 2018 with the flagship MG30.7.

while the tweeter nominally operates above 3.3kHz, it also 'plays down' to 400Hz (similarly, Magnepan says the midrange section of its panel extends to 10kHz). A full frequency range of 40Hz-30kHz ($\pm 3\text{dB}$) is claimed, while there's the potential for midrange and tweeter attenuation. Beneath each speaker's single set of speaker inputs are terminals linked by jumper bars. Replace these with the supplied 1ohm resistors to alter the MG2.7i's tonal balance, perhaps in a bright-sounding/reflective listening environment.

Magnepan's usefully detailed manual states the speakers should be installed a minimum of three feet from rear walls but warns of a hollow and/or weak output if this distance exceeds 6ft. On-axis listening is also recommended. Thankfully these large speakers are not especially heavy and can be easily manoeuvred on their T-bar feet. As for partnering equipment, the manual calls for an amplifier delivering 160W/4ohm 'to properly drive' the speakers, this a consequence of their low-ish sensitivity.

VANISHING POINT

With that in mind, the MG2.7i was paired in the *HFN* Listening Room [*HFN* Yearbook '25] with amps including Gryphon's Antileon Revelation [p44] and Constellation's Revelation 2 [*HFN* Jan '25] – suitably 'juiced', the results from both were excellent.

Magnepan's dipolar, planar-magnetic designs have a sound quite unlike a conventional moving-coil 'box' speaker. Cabinet colouration is not a concern because there is effectively no cabinet, although the panels themselves have their own resonances. That said, the ambient, synth-laden techno of Ary's

'The Sea' [Universal/Island] really did seem to arrive out of nowhere, such is the ability of the MG2.7i to disappear from view.

For some, this excellent soundstaging, not only in terms of width but also depth, height and cohesion, will more than compensate for the MG2.7i's lack of out-and-out low-end bass extension and slam. Here it falls short of some 'conventional' loudspeakers around the same price, its sub-50Hz roll off reducing the impact and involvement from drum 'n' bass, hip-hop and cinematic soundtracks.

SWEET TALK

But accepting that caveat, the MG2.7i still impresses with its handling of the wider bass range. Bass guitar lines were well-defined and detailed, as shown by 'Black Country' from Black Country Communion's eponymous album [J&R Adventures PRAR92338], where one-time Deep Purple frontman Glenn Hughes wails and snarls alongside the drums of Jason Bonham and Joe Bonamassa on guitar.

There's quite a narrow focus to this mix, particularly during the verses, which was emphasised by the spatially revealing Maggies. Production on the set-piece epic, 'Song Of Yesterday', is grander, and played to the speakers' strength of scale. The lengthy guitar solo was beautifully rendered, centrally positioned but well integrated within the wider musical picture.

Meanwhile, Shelby Lynne's *Just A Little Lovin'* album [Lost Highway, 96kHz/24-bit], cut with legendary producer Phil Ramone in Capitol Records' Studio A, brought with it more high-frequency sparkle and a sense of space. The MG2.7i seemed an ideal match for these exceptional recordings, the smallest of percussion details enunciated by a well-extended but always smooth treble (listener fatigue is simply



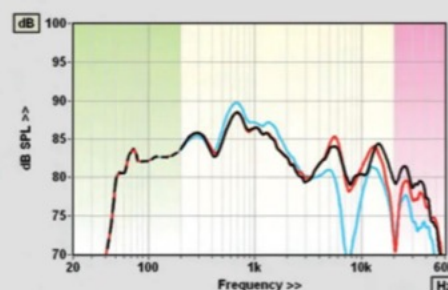
ABOVE: Leaning back slightly, and stabilised by two long flat feet, the MG2.7i includes a 1m-tall ribbon tweeter and 28x145cm Mylar panel with conductive mid/bass foil traces

LAB REPORT

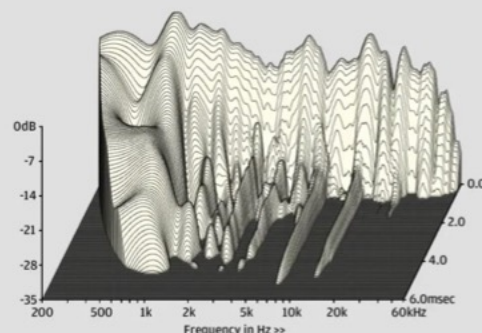
MAGNEPAN MG2.7I

Measuring a substantial planar speaker at a standard 1m on-axis does not give a truly accurate picture of the panel's integrated output – this only starts to become apparent at 4m+ distance. Tested here at 2m, with no boundary behind the speaker (bifold doors opened to the outside) and with all figures corrected for a 1m distance, the response shows a gently declining trend between the midrange panel's 500Hz-3.3kHz crossover points [Graph 1]. The response errors of the ribbon tweeter thereafter held to a fine $\pm 3.4\text{dB}$ on one speaker and a poorer $\pm 9.1\text{dB}$ on the other, the notches correlating with resonant modes [CSD waterfall, Graph 2]. As a result, pair matching deviates by a max. 1.4dB up to 10kHz but a full 12dB right up to the 20kHz limit [black vs. red traces]. The output of the ribbon tweeter is otherwise impressively extended out to 49kHz (-6dB re. 10kHz). Magnepan recommends on-axis listening – the ribbon axis being preferred – and while our $\pm 15^\circ$ off-axis [blue trace] shows a smoother output to 5kHz, there's a -15dB notch that follows.

Magnepan also specifies an 86dB sensitivity which was met on test at 86.5dB (re. 1kHz/1m/2.83V) but falls to 83.8dB across 500Hz-8kHz. The 4ohm nominal impedance is justified with a minimum 3.05ohm just after the ribbon takes over at 3.8kHz, and while the (isodynamic) load is almost wholly resistive, the EPDR is still pushed down to a low-ish 2.1ohm/2.3kHz. Useful nearfield bass measurements are almost impossible to achieve with a dipole so the sub-200Hz response, including 75Hz peak and modest 48Hz bass extension (-6dB re. 200Hz), are estimated here from a ground plane test [dashed traces, Graph 1]. PM



ABOVE: Response including ground plane bass estimation [green], freefield corrected to 1m at 2.83V [yellow], ultrasonic [pink]. L, black; R, red; $\pm 15^\circ$, blue



ABOVE: While free of bass 'cabinet' modes, the panel and ribbon still show complex breakup resonances

LEFT: The crossover is buried inside the cabinet frame. There's no provision for bi-/tri-wiring but resistor pads may be added into the mid/treble paths. Mid and treble panels are fuse protected

of mellotron and keyboards. Our MG2.7i pair responded with a detailed wall of sound, almost IMAX-like in its scale and not in the least bit cluttered or muddled.

GOING APE

Despite the on-tap power from the Gryphon and Constellation amps, I would still have liked the speaker to leap more decisively into some music. Drums could at times enjoy more thrust and impact, just as the gorgeous instrumentation on The Beach Boys' 'Sail On Sailor' [Holland, Capitol Records; 192kHz/24-bit] came across as slightly held back.

Other times, though, the MG2.7i left nothing to be desired. Henry Jackman's 'Kong The Destroyer' theme, from monster movie *Kong: Skull Island* [WaterTower Music 39884] moved from dramatic low-strings and brass to softer woodwind motifs, and the speakers fully captured the scale of the performance, notes decaying beautifully. In the 'The Battle Of Skull Island', the roar of the horns was a standout, as was the handling of its fast, snappy string rhythms. With music such as this, and given the breathing room and amplification to succeed, Magnepan's MG2.7i is a sonic star. Ⓜ

HI-FI NEWS VERDICT

Not a speaker for hi-fi fashionistas, but Magnepan's MG2.7i trades its lack of kerb appeal for a gloriously cohesive and refined performance on a grand scale – bass extension doesn't count as a highlight, but soundstaging and articulation certainly do. For those tired of a market flooded with conventional box designs, this could be just what the doctor ordered. The cherry on top – their price lends them bargain status.

Sound Quality: 88%



HI-FI NEWS SPECIFICATIONS

Sensitivity (SPL/1m/2.83V – 1kHz/Mean/IEC)	86.5dB / 83.8dB / 81.7dB
Impedance modulus: minimum & maximum (20Hz–20kHz)	3.05ohm @ 3.8kHz 4.9ohm @ 480Hz
Impedance phase: minimum & maximum (20Hz–20kHz)	-15° @ 1.6kHz $+16^\circ$ @ 20kHz
Pair matching/Resp. error (200Hz–20kHz)	12dB / $\pm 5.3\text{dB}$ / $\pm 10.1\text{dB}$
LF/HF extension (-6dB ref 200Hz/10kHz)	48Hz / 49.1kHz/45.0kHz
THD 100Hz/1kHz/10kHz (for 90dB SPL/1m)	0.55% / 0.15% / 1.2%
Dimensions (HWD, inc. feet) / Weight	1820x560x460mm / 30kg



not an issue with these speakers). Lynne's effortless vocals, meanwhile, sounded sweet and honeyed.

In addition to well-recorded music, you can add largescale electronica to material in the MG2.7i's comfort zone. Armin van Buuren's 'This Is What It Feels Like' [Armin] might be dance music of the blandest kind, but pulsing bass and drums, thick synths and a huge vocal all made me wonder if these speakers wouldn't work in a certain kind of upmarket nightclub.

Also sounding massive was the Steven Wilson produced prog rock/metal of 'Windowpane' [Damnation, Music For Nations; CDMFN294], which augments its acoustic guitars and fluid basslines with lashings