

MAGNEPAN MG12 AND MMG LOUDSPEAKERS Equipment report

By Jonathan Valin | Nov 29th, 2008

Last issue, in my review of the excellent Focal/JMLab Electra 1007Be mini-monitor, I laid out the case for the superiority of two-way dynamic loudspeakers, which mostly amounts to the fact that they disappear more completely as sound sources than multiway loudspeakers thanks to smaller enclosures, fewer drivers, and simpler crossovers. But two-ways don't just come in little boxes with little cones. They also come in planar form, like the two floorstanding dipoles from Magnepan that I'm about to review, and I can tell you upfront that what is good for the dynamic goose is every bit as good for the planar gander—in some ways, maybe even a little better.

The thing about planars is that they have no boxes—just wooden frames, like picture frames, to hold their parts in place. They also have next-to-no drivers. In both the Magneplanar MG12 and its littler brother the MMG, music is made by a quasi-ribbon tweeter and a planar-magnetic woofer—featherweight sheets of Mylar with very thin metal strips (or wires) attached to their surfaces. Suspended between or above stationary bar magnets, the Mylar diaphragms vibrate as the positive and negative electrical signals passing through their metallic “voice coils” are alternately attracted and repelled by the magnets.



Not only do Maggie drivers have very low mass; they also have very large surface areas. The quasi-ribbon tweeter in the smallest of these two speakers—the four-foot-high, approximately 14" wide MMG—is equivalent in surface area to seventy-two 1" dome tweeters, the planar-magnetic woofer to nine 8" woofers. Size matters here, particularly when you're playing back big instruments like pianos and drum kits, or large ensembles like orchestras. Because of their large drivers, the MMG or MG12 don't “miniaturize” such instruments and ensembles to the extent that many two-way mini-monitors and some multiway dynamics do. By “miniaturize,” I don't just mean shrink their physical size; I mean reduce our sense of the amount of air they move when they play. As I've said repeatedly, the illusion of listening to real instruments largely depends on recreating the distinctive ways the directionality, size, and presence of those instruments changes with changes in pitch and dynamics— what I call “action” or bloom. A large line source with large planar drivers, like these two Maggies, will recreate action more convincingly than typical two-way cone speakers, while preserving (and, in some cases, improving on) the two-way's disappearing act.

Indeed, without a box and with large, very-low-mass drivers, the two Maggies disappear into their soundfield as well as most minis. However, having no box is also a bit of a mixed blessing. As with all

dipoles, these two Maggies project equal amounts of sound to their front and their rear, and you will have to cope with the backwaves of both the quasi-ribbon and planar-magnetic diaphragms in each speaker, which for better and worse (mostly for better) aren't being "damped" by firing into an enclosure.

Theoretically, if you place a dipole far enough out into a room, the reflection of the rear waves off the backwall will be delayed long enough not to interfere with your perception of the "first arrival" of the front waves (and, thereby, not to mess up the sound with a jumble of out-of-phase information). However, placing these little Maggies well out into a room may defeat their intended purpose, which is to deliver the Magneplanar virtues in a package small enough not to be obtrusive. (One of the perceived drawbacks—perceived by Magnepan, at least—of the much taller and wider Maggies, like the 1.6, 3.6, and 20.1, is what used to be quaintly called the "wife acceptance factor"—nowadays, politically corrected to "spouse acceptance factor." Properly placed, Maggies simply dominate a room, and some folks find two freestanding monoliths sitting in the middle of their floor a little too 2001: A Space Odyssey.) Happily, a bit of damping behind the speakers, like a wall hanging, can solve the backwave problem (which, to be fair, isn't restricted to dipoles).

One of the things that dipoles don't have issues with (and box speakers generally do) is sidewall reflections. The Maggies' dispersion pattern is a figure 8; in the plane of the speaker little to no sound is sent to either side, which means Maggies can be placed closer to sidewalls than boxed speakers (although, even here, you need to be careful of energy being bounced from backwalls toward sidewalls and, thence, on to you).

One of the things Maggies do have issues with is power. You will need a good deal of it to drive them properly. An amp like the \$2k 400Wpc (into 4 ohms) Parasound Halo A21 will do just fine.

Since these two speakers are sonically identical twins—save for the modestly larger soundfield of the slightly taller and wider MG12—I'm going to discuss them together. How do they sound? I'm tempted to say, "Like live music"—and leave it at that. If there are more realistic speakers for this kind of money (and I'm going to save their prices for last), I've not only never heard them; I can't imagine them.

The four things I think most listeners will notice first about these scaled-down Maggies are their presence, their air, their soundstage, and their resolution. By presence, I don't mean a lumped-up upper midrange/lower treble. I mean presence in the sense of making instruments sound "there"—present in the room with you, regardless of whether they're playing in the bass, the midrange, or the treble. All Maggies have this wonderful immediacy, which comes from the absence of box coloration, relatively low levels of driver distortion, high transient speed, and a larger, more life-sized wavelaunch. Whether it is Joan Baez and the Greenbriar Boys' noir balladry on "The Banks of the Ohio" (Joan Baez, Vol. 2 [Vanguard]), Aaron Neville's quivery falsetto on "Save the Last Dance for Me" (A Tribute to Doc Pomus [Rhino]), Wladyslaw Szpilman's piano and the strings of the Warsaw Piano Quintet on Grazyna Bacewicz's hauntingly beautiful First Piano Quintet [Muza], or the Berlin Philharmonic under Karajan playing the dickens out of the Prokofiev Fifth [DG], the two mini- Maggies make vocalists, instruments, and entire ensembles sound as "there" as twoway dynamics, without as much miniaturization of instruments as typical two-way dynamics, and with a more lifelike sense of the way these instruments move air when they play.

Speaking of air, the Maggies seem to have more of it—everywhere. For instance, when I comment in my review of the ARC 610T (elsewhere in this issue) on the realistic way these incomparable powerhouses reproduce the cello and doublebass ostinatos at the start of the Passacaglia of the Lutoslawski Concerto for Orchestra [EMI], I am also commenting on the MMG and the MG12, which not only reproduce the

snap of the pizzicatos and the pitches of each note with high realism, but also reproduce the way these pizzicatos charge the air around them, dividing it, setting it in motion towards us (and toward the rear and sides of the hall). This uncanny ability to suggest that instruments aren't playing in vacuums but in large distinctively atmospheric spaces, where the eddies and currents of music set the very air in motion like pebbles dropped in ponds, is a specialty of dipoles and omnis and is, in my experience, only rarely captured as realistically by cone speakers (although some can do it).

This brings us to soundstaging. One of the great side effects of capturing the way instruments move air when they play is a heightened sense of the boundaries that very air comes up against—the walls, the floors, the ceilings of the recording venue. Very few speakers can suggest the vastness of a concert hall the way Maggies can (and those other are mostly 'stats, omnis, and expensive direct radiators). These are speakers that don't just make instruments sound "there" in the room with you; they make venues sound "there" in the room with you, too.

Finally, there is the Maggies' resolution. Though not as delicately nuanced as something like the \$5200 Focal/JMLab Electra 1007Be (and why should they be, given the huge disparity in price?), both the MMG and MG12 are excellent at re-solving low-level details. For instance, on the "Save the Last Dance for Me" cut I mentioned above, Aaron Neville sings his own accompaniment on a separate track that is potted into the mix (along with the tracks of the backup singers that are seemingly spread out behind him). Both Maggies not only make every single word of Neville's own accompaniment and that of the backup singers perfectly clear; they make the slight differences in the atmosphere and reverb of his vocal, his own accompaniment to his vocal, and the voices of the backups perfectly clear. That is remarkable resolution.

As for timbres and dynamics, both of these Maggies are extremely lifelike from surprisingly deep in the bass (upper 40s) to surprisingly high in the treble (though not as high as Maggie's "true ribbon" speakers). Though on paper they may not seem to plumb the depths, they certainly don't sound bass-shy—because of their big wavelaunch, their superior dynamic range and scale, and the gobs of air they generate right down to their low-frequency resonance point. No, these Maggies are not as smooth, colorless, transparent, extended, detailed, and coherent as the Electra 1007Be's, but they are very smooth, colorless, transparent, extended, detailed, and coherent, nonetheless. In fact, I've often thought that the two-way quasi-ribbon Maggies (the MMGs, the MG12s, and the 1.6QRs) have a slight leg up on their "true ribbon" brethren in coherence. Call me an audio martinet, but because their quasi-ribbon and planar-magnetic drivers are so closely matched in speed, timbre, and resolution, their tweeters and woofers seem to play together more seamlessly (though not as discerningly or as full-rangingly) as those of the bigger Maggies, where the superior speed and resolution of the "true ribbon" tweeter/mid can stick out a bit.

Now, for the best part. Though the entire Maggie line is and has always been priced within reach of every flavor of audiophile, this duo represents unbelievable value for the dollar. The MG12 is \$1099/pair; the MMG, which is only available direct from Magnepan, is a mere \$550/pair (with a 60-day money back guarantee and credit if you trade up to a bigger 'Pan within a year of purchase)!