# Magnepan MGMC1 and MGCC2 Loudspeakers

One of America's most esteemed manufacturers has a uniquely satisfying solution to surround sound, and the dilemma of where to put all those speakers.

s a guy who makes a living reviewing home-theater gear, I'm used to having my evaluation room overrun with equipment. Even so, the way this room looks is important to my wife and me, and we often wonder how "regular" people deal with the five-plus speakers required for multichannel playback. Between the very wealthy, who can hand over a large wad of cash to a custom installer to do the job for them, and the budget-minded or gearphobic, who opt for a home-theaterin-a-box solution, are the regular folks who want to enjoy great sound without spending a fortune or giving up their living room to a small army of speakers.

Enter Magnepan. For the past thirty years this Minnesota-based company has been building some of the most natural sounding, reasonably priced, and innovative speakers on the planet. For the benefit of those who haven't experienced the "Maggie" sound, I'll offer a brief explanation of inventor Jim Winey's concept. In a nutshell: Get rid of the box. Unlike conventional designs, Magnepans-also called Magneplanars, for their planar-magnetic technology—have no enclosure. Instead, these one-inch-thick panels have a machine-routed MDF frame that holds the speaker elements. And unlike the piston-like drivers that reside in box designs, the low-mass (just .0005" thick) stretched Mylar diaphragms used in Magneplanars are evenly driven across their entire surface, making for an unusually linear response. Amplified signals are delivered through a set of thin aluminum wires, held in place by a spray-on

adhesive, that snake up and down the length of the diaphragm. Sandwiched with the Mylar sheet is a perforated metal plate supporting a series of bar magnets. When signals in the wires interact with the magnets diaphragm moves back and forth, creating sound from both sides of the panel. In addition to its lack of box coloration and uniform wave launch, Maggie's design has other benefits: an open, airy, almost spooky-real sound; image placement in height as well as width and depth; and an unwavering impedance load to the amplifier—though it will need to drive 4 ohms, something most good amps do with no problem. The planar-magnetic driver covers the bass and middle frequencies, while something called a quasi-ribbon covers the highs. (In top-end Maggies the quasi-ribbon does midrange duty while a proprietary rib-

bon driver—considered one of the great tweeters—delivers the treble.)

Naturally, there is a downside to this approach. In order to produce deep bass and realistic dynamics, Magnepans need to be of a certain size—the originals were three-panel affairs that stood some six-feet tall and four-feet wide! And though current models, using only one panel, are considerably smaller, they still need to be a few feet away from rear and sidewalls in order to "breathe." No on-wall mounting for these

babies...or is there?

The answer—at least with one of Magnepan's latest efforts—is yes.

Specifically designed for wall mounting, the svelte MGMC1 measures ten inches wide, forty-six inches tall, one-inch thick, weighs just twelve pounds. The supplied wall-mount brackets act like hinges, allowing the angle of each panel to be sonically fine-tuned as well as folded flush up against the wall when not in use. At \$725 per pair, the MC1 an astonishingly affordable speaker given its high level of performance. A quartet of them provides the foundation for a home-theater system, while Magnepan's new MGCC2 (\$950) center-channel does Both speakers share the technology described above, but the CC2's panel is curved for wide dispersion,

horizontally configured, and housed inside a necessary but rather bulky cloth-wrapped frame.

Setting up the system isn't difficult, but requires careful planning. The front left/right speakers should obviously be placed on the walls immediately to the sides of your video display, which also act as a kind of sonic mirror, reinforcing each panel's output. As mentioned above, the speakers require two-to-three feet from the wall behind them in order for the rear sound wave to unfold gently, rather than reflect



## Maggie's design has other benefits: open, airy, almost spooky-real sound; image placement in height as well as depth and width; and an unwavering impedance load to the amplifier.

harshly back into the listening area. Although the center channel will fill any holes in 5.1-channel reproduction, too wide a spread between the front left and right speakers will result in an unnaturally wide stage for stereo applications. For the surround channels, the hinged approach gives you flexibility with side or rear wallmounting as well as the ability to tweak the angles of the panels for either a more direct sound (generally better for surround music), or a more diffuse sound (generally better for movie soundtracks). Center-channel speaker placement, however, is not flexible—it must be where the picture is. The CC2 will fit on top of most 40" or larger RPTVs, and it can also be placed on a dedicated stand. Either way, the CC2 should also have a few feet of space between it and the wall.

A good subwoofer is a must for home theater, but mating one up with planar designs such as Maggies can be tricky. Here, agility and tunefulness are preferable to weight and slam. Both are better still, but costly to achieve (for a list of candidates, see this issue's Recommended Subwoofers). I used a pair of Velodyne SPL-800s (\$899 each). With an 8" woofer and a 600-watt amp, these baby-Velodyne's match beautifully with the Maggies; plus, their speed lets you cross them over at higher frequencies than many subs are comfortable with. Magnepan recommends 80Hz for the MC1s, but an unusually high 160--200Hz for the CC2. If your A/V controller's bass management system can't accommodate the necessary frequencies, Outlaw Audio makes a specially modified Maggie version of its ICBM-1 Bass Manager with a 2x setting for the center channel (\$325).

The ideal speaker of course, is no speaker at all or, in reality, a speaker that has so little signature of its own that it allows immediate access to the space the original sound was recorded in-or with electronically generated sounds, the space the engineer had in mind. Maggies come very close to this ideal. And though they have minor colorations-most notably a slight texture that some listeners call "white"—as well as detractors among listeners who prize the widest dynamics and deepest bass above all else, for those who cherish the sound of live music, a set of Magnepans is hard to beat—their sound is...addictive.

Surround movie soundtracks are all about placing the viewer in an environment. While some mixes grossly exaggerate these effects, the best add hugely to the mood of a given scene. Take the opening of *The Sixth Sense*. From James Newton Howard's ethereal score to the feeling of a dank cellar to the warmth of the living room and marital love that waits above, the soundtrack helps us to sense the emotional as well as physical environment of the film. The qualities that make Magnepans so lifelike with musictheir transparency, air, and detail; their way of projecting the reed, body, and horn of a sax, the shimmer of a cymbal, the human presence of a vocalist and ambience of an acoustic-translate marvelously here. The same holds true with blockbusters like Gladiator, where the riveting first battle sequence, with its surging score and multiple layers and directions of sounds, pushes the Magnepans to expand the perceived size of a listening room into a space far more vast; or Moulin Rouge with its dizzying Can-Can sequence; or Memento, with its own creative and mood-enhancing soundtrack.

Because Maggies have always been particular favorites among vocalmusic lovers, they're a natural for movies. When dialogue clarity, timing, and emphasis are more realistic, a comedy classic like My Man Godfrey is funnier; and with musicals-be it Gene Kelly's title number in Singin' in the Rain or Nicole Kidman's "Diamonds Are A Girl's Best Friend" in Moulin Rouge—the results are magnificent.

Unless your room is huge, or you're into sonic self-punishment, dynamic range is very satisfying. Action-filled scenes pack plenty of wallop, but to achieve it remember that a quality subwoofer is a must.

It's taken awhile for Magnepan to develop a system that does what Maggies are loved for, while at the same time appealing to the aesthetically minded. Congratulations to Jim Winev and company; the MGMC1/CC2 combo excels at both, and marvelously so.

### **SPECIFICATIONS**

Magnepan MGMC1

Driver complement:Planar-magnetic bass/ midrange, quasi-ribbon tweeter Frequency response:80Hz-24kHz±3dB Dimensions:10.25" x 46" x 1" Weight:12 lbs. each

Magnepan MGCC2

Price:\$725/pair

Driver complement:Planar-magnetic bass/ midrange, quasi-ribbon tweeter Frequency response:160Hz-20kHz±3dB Dimensions:35" x 10.5" x 8" Weight:22 lbs. Price:\$950

#### MANUFACTURER INFORMATION

#### MAGNEPAN INC.

1645 Ninth Street White Bear Lake, Minnesota 55110 (651) 426-1645 www.magnepan.com

