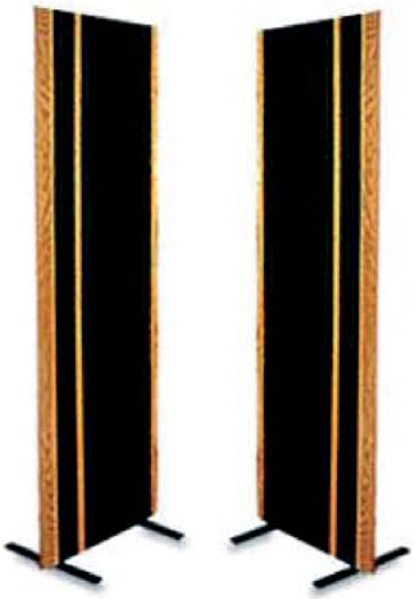
Magnepan MG 3.6

Getting Thin For The Summer

Review By Steven R. Rochlin



Loudspeakers come in all shapes and sizes. From small stand mounted minimonitor to the huge room hogging 500 lbs. monolithic "Dream Reference Statement". Virtually every high-quality speaker has many areas it excels in and areas it leaves a bit to be desired. For it is only *you* who knows which part(s) of the music you can live with and without. Nothing is perfect my friend. Bassheads need not venture into Minimonitor Land while small jazz ensemble lovers probably can do without the 32 drivers per channel "Dream Reference Statement." Then there are people such as myself who want it all. From small duets during the quiet moment in life to big rave club action for those Saturday night techno parties. Can one pair of speakers suit all my needs... or yours? In the end is it true what they say, "size matters?"

It is well known the optimum driver would be of extremely little weight, extremely rigid and have the ability to respond to electrical signals at blindingly fast rates without over or undershoot. According to the company's website "Magneplanars use ultra low mass components. For example, the Magneplanar ribbon element is so thin, that on edge, it is invisible to the naked eye. It is so light that when a piece of it is dropped from a height of 6 feet it takes and average of 5 seconds for it to reach the floor." Their old University website goes on with a bit more detail in saying "Using a .0005" Mylar diaphragm and a .001" ribbon this dipole, cabinet less design leaves the sound absolutely uncolored by box resonances." Box resonances have been an audiophile buzzword for many years now. There are a few 'schools of though' concerning cabinets. One is to have the most solid, heavy, inert and cross-braced cabinet. Another, employed by legendary Snell and Audio Note designs, is to take advantage of a cabinet's resonances as part of the design. Still another would be to have no cabinet at all, as experienced with Magnepan loudspeakers.

Other design concerns regard impedance. In my opinion lesser designs have an impedance that dips below 3 ohms in the bass and goes above 12 ohms in the uppermost ranges. While this type of design provides an average of 8 Ohms impedance, bass notes and very demanding on an amplifier and may cause cause problems with lesser amplification that does not also provide good current. Another school of thought is to have a high, 16 ohm impedance as seen in the old Rogers LS3/5a that is easy for an amplifier to drive. The other being a smooth, virtually flat 8 or 4 ohm impedance curve. While a good amplifier is necessary to drive the 3.6 speakers that present a flat 4 ohm resistance, I flirted around with a small 25 watt at 8 ohm solid-state amplifier to good affect and also a multi-hundred watt solid-state amplifier with great current drive.

Physical Aspects

This seemingly large speaker is 71" high and 24" wide, though only upon fully studying the speaker did visitors into my humble abode learn the 3.6 is a skinny 1 5/8" deep! Like all Magnepan speakers, a special ribbon tweeter is used for the upper frequencies while planar technology provides the lowermost audio spectrum. This model uses a 55" long (5/32" wide) ribbon tweeter, a 199 square inch planar midrange and 500 square inch

bass unit. Why use planar technology instead of normal dynamic driver (cone) units? For now here are the basics.

The Magnepan 3.6 speakers differ from the older 3.5 models in that the 3.6 uses a larger midrange panel. This, in turn, allows for a lower crossover point between the midrange and bass unit. The remaining improvements are primarily in the blending of drivers and good ol' audiophile speaker designer "toil and trouble." The 3.6 is bi-wireable for those of us with four channels of matching amplification or wire-heads like myself to have fun! An external crossover is used so those of you with really tweaky intentions can use many types of external crossovers and amplification configurations until musical nirvana is achieved.

For amplification i first used wonderful 47 Labs (25 wpc.) Gaincard until the Magnepan suggested super powerful Bryston 7B ST (500 wpc.) arrived. While the Gaincard excelled in delicacy and small ensemble music, it did not have enough power to really drive the speakers when higher dynamic levels were desired. My guess is that the single chip amplifier within the Gaincard did not have enough current to truly handle the Magepan's 4ohm load. This is where the Bryston amplifier has more than enough brute force power. In fact, while using the Bryston 7B ST, the tweeter protection fuse within the Magnepan 3.6 blew a few times during my heavier usage. When i say "heavy", this is in reference to techno jams reaching louder-than-necessary levels.

As for speaker wire, I eventually settled on using either the Nirvana S-L or Kimber Select KS-3035. The Nirvana had better overall clarity while the Kimber rendered a bit fuller sound in the midbass. Front end was either my VOYD turntable/Audio Note silver-wired tonearm with Clearaudio Insider Reference wood body cartridge (mind-numbingly good folks) or my custom mastering-type system, which hardly resembles anything commercially available. Interconnects were either Audio Note AN-Vx all silver Litz or Kimber Select KS-1030.

Is Bigger Better?

My very first memory of Magnepan speakers was at the House of Stereo in Jacksonville Florida. I was done auditioning a preamplifier and was heading out the door when I heard some drums. It sounded like real drums! Oh joy! As a drummer myself I always enjoy hearing drums and wanted to check out who was playing those tasty chops. Low and behold it was the Sheffield Drum Test CD playing through, now get this, a Yamaha 5-Disc changer, Yamaha receiver and about five foot tall Magnepan speakers. I was in awe how such an inexpensive system could sound so good. Sometimes being an music lover contemplating buying a $4,000 preamplifier can be hard. That experience really shook me for months. How can not so "high-end" gear sound so very good? Is it legal? Legal it is my friends as many years have come and gone since that first experience. I sit here today having had the pleasure of reviewing Magnepan's pride and joy 3.6. If there is one thing this review is filled with is memories. I remember how bad and metallic the Infinity EMIT ribbon tweeters sounded with acoustic music, but great with techno/electronica. In my humble opinion one of the biggest strengths is that the 3.6's long ribbon tweeter delivers mind-blowing transparency and very delicate upper frequencies. This is not *just* that "see through" clarity we have all heard about. This is in a league of it's own!

This type of tweeter must be experienced in a properly setup system to be understood in my humble opinion. Why? Because it is not *just* a high frequency reproducer like dome or smaller ribbon tweeters. The Magnepan ribbon covers a very wide rage of frequencies, from 40kHz to below 2kHz to be exact. Going down to 2kHz is quite low for a tweeter yet it never seems to suffer from breakup as I have heard from lesser drivers. What does this all mean to you? It means incredibly smooth upper frequency reproduction without all those peaks and dips due to crossover parts or horribly designed crossover networks getting in the way of the music. In fact the crossover for the 3.6 is extremely well designed and the icing on the cake is that it presents an almost flat 4-ohm load to your amplifier.

I make no secret that my favorite inexpensive (around $2,400 when new, now available used for under $1,000) dynamic cone speaker is the KEF 104/2. This speaker, like the 3.6 presents a very flat 4 ohm impedance curve. What seems to happen in Audiophile

Land is that once someone buys a speaker with a horribly wide impedance curve they are forever going to Amplifier City buying new boxes. This can also usually be said about speakers that use very complicated crossover networks. If you can not count the individual crossover parts on two hands I try to *strictly avoid* these designs in general. Maybe my experiences are different than yours, yet after in-home auditioning over ten different speakers within this past year has taught me something (I hope). *Beware wide impedance curves and complicated crossovers!* This way may lead to Audiophile Neverosa.

The midrange and bass panels are also impressive on the Magnepan 3.6, though maybe not to the extent of the tweeter. While the various other manufacturers panels I have heard sound more transparent than the Magnepan, the 3.6 does not have that overly sterile sound. There seems to be nothing "missing" with the 3.6's as far as musicality. The music is definitely whole in nature while, like any good panel, the imaging and soundscape is exceptionally impressive. Of course like all panels the "sweet spot" is also more narrow than a dynamic driver (cone) based design. Ya know what they say, "no pain, no gain." As large as the Magnepan 3.6 are, they never seemed to give clues as to their *true* size. Hmmm, perhaps in this case bigger is indeed better. Dynamic cone monoliths of this size generally give hints as to its size. Maybe the bass is low in the soundscape while the highs are near the ceiling. Most of us have heard large speakers where the drivers' positioning is obvious.

The supplied owner's manual gives very good detailed information about setup. Once they are properly positioned there was a seamless melding of all the frequencies. No "highs way up here and bass way down there" sound. The panels simply reproduced the music and the ambience on the software dictated the soundscape's size and shape. Because panel speakers are bipolar, emitting sound from both the front and rear, proper acoustic dampening of the listening room can yield a wonderfully natural balance between hall ambience and precise imaging. As it wisely says in the owner's manual, "Moderation is the word."

Maybe Size Doesn't Matter After All

It is amazing how such a physically large speakers can handle small ensemble music so *very* well. Virtually all big speakers seem to sound, well... big. Too big in fact when the music is on a smaller scale. How many of us have heard those super-wide super-high solo guitar music reproductions? American audio shows seem to be infamous for this "bigger is better" sound. While it is impossible for one pair of speakers situated in one position to reproduce the appropriate size of all music, the 3.6's seem to get more right than others. For instance, while playing the Sara K. *Hobo* DVD (CHDVD177), all those small and subtle highs were transported into my room with such delicacy that I sat there in awe. Of course stringed instruments were brought forth with uncanny natural vibrancy. Some days it feels good to be a reviewer.

On other relatively small-scale music such as the much (and rightly) raved about Patricia Barber *Modern Cool* (PREM-741-2), all the small timing cues are there as is the wonderful voice and piano playing of Patricia. This CD is a must-have for anyone looking for spectacular musicianship mated with refreshingly clever lyrics. Also, the CD from Chesky titled *The Unknown Piazolla* (CD 190) may be solo or duet pieces, yet some songs are dynamic dynamite! The musicianship here is, as on the Patrician Barber CD, nothing short of magnificent! The lower registers of the piano were very well defined, as one would expect with a large panel speaker such as this. So what about large-scale full orchestra pieces you ask?

Of course with so much sheer size these large panels easily play large-scale music without a hint of strain. In fact it seems the fuses blow before you really hear the panels strain. During one of my hard block rockin' beats the tweeter fuses blew. (Sigh) Well, maybe these speakers are not for those with over eager SPL tendencies from time to time. For instance the audiophile fave Berlioz *Symphonie Fantastique* (Reference Recordings RR-11CD) with its scary stringed parts takes one an even more spider web-like subtle glistening. The highs seem to dance and play as was intended by Berloiz. While I have mainly been praising the upper frequency registers it is now time for a bit

of harsh reality.

As much as panels are considered to be extremely transparent, the Magnepan 3.6's main tradeoff seems to be in the below 500Hz or so transparency. While not as a rain cloud on a wonderfully sunny day, it is more like very thin shading. Stringed bass and larger wind instruments seem to be ever so slightly veiled. On my favorite version of Tchaikvosky's *1812* (Teldec 4509-90201-2) by the Israel Philharmonic Orchestra, the cloudiness also manifests itself in slightly shortening the rear part of the front soundscape. While nothing to really be alarmed about in my humble opinion, it is my job to report what I hear. In fact I was very happy with the more "warm sounding" midbass which gave a wonderful sense of fullness. It was only during more modern music with extremely deep bass did I find the need for adding a subwoofer for that "gut pounding" bass. Still, there was something not quite Kosher in the frequencies below 500Hz or so. It took some time for me to realize why this ever so slightly lack of clarity was so easily heard.

This One Is Just Right

No, I am not going to play the ego trip of how well I hear or how good the upstream equipment is (or how good my room/power/lighting/exotic parrot/lover is). From what I can tell it is due to the extremely clear upper registers that this slightly less than totally translucent lower frequency reproduction seem more apparent. No speaker is perfect. I do not care if it retails at ten times the price of these speakers! For it is only *you* who knows the weakness *you* can live with (and without). As for myself, I would take the Magnepan 3.6 speakers in a New York second over sterile sound any day of the week.

Without pulling any punches I will say the Magnepan 3.6 speakers are one of the most amazing speakers for both large and small-scale music. For those of us who hate harsh or hard upper frequencies the Magnepan 3.6 could be *exactly* what the doctor ordered... and the rest of the frequencies are no slouch either. While large, these visually attractive units are among the *very few* speakers I could live with for *many* years without that nagging "upgrade me soon" feeling. My main caveats are the slight opaqueness below 500Hz and SPL limitation. Of course not everyone is looking to have a techno/house dance club in their listening room. Many audiophiles will probably audition the Magnepan 3.6 and fall in love for many years. By producing such wonderful sound and handling both large and small-scale music so very well how could you *not* fall in love? Beauty is in the eye and the ear of the beholder. Of course in the end what really matters is that you...

Enjoy the Music,
Steven R. Rochlin

Specifications

Type: 3-way, planar/ribbon
Driver complement:
55" long ribbon tweeter
199 square inch planar-magnetic midrange
500 square inch planar-magnetic bass
Frequency response: 34Hz to 40kHz (+-3dB)
Crossover points: 200Hz, 1700Hz
Sensitivity: 86dB
Impedance: 4 ohms (nominal)
Hookups: Bi-wirable / bi-amplifiable
Recommended Power: 75 to 250 watts
Warranty: Non-transferable ribbon foil element 1 year, balance of speaker 3 years
Weight: 70 lbs. each
Size: 24 x 71 x 1 5/8 inches (WxHxD in inches)

Company Information

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