

Magnepan MG-20.1 Loudspeaker

Scrumbling around to find out what I had said about the original version of Magnepan's MG-20, I was a bit startled to learn that this top-of-the-line Maggie was introduced a decade ago. Ten years is an audio lifetime between model improvements, and while the Point One was shown at the Consumer Electronics Show in Las Vegas two years ago, it is just now making its way to the marketplace. It seemed obvious that designer Jim Winey wanted to produce something special and to make a statement.

After reading my capsulized review [Issue 83/84], I wanted to kick myself. It might not have been such a bad thing if I had, as I said I would do, continued with an in-depth follow-up. But I never did. Bad, bad boy, you HP you.

The one thing that made it difficult for me to come to grips with the original 20 was the way its bass panels would "flap" if jolted with a sharp low-frequency transient. Organ pedal-points it could handle, and handle to several frequencies below the 32 mark, but a whack on a bass drum or some such would lead to the grossest "mistracking."

And it isn't that I didn't want to keep these Maggies as a reference. There was not, at that time, another speaker on the market—that I had heard—lower in overall tonal coloration, from top to bottom of the spectrum. They sounded more natural than anything else in my listening experience. And that legendary Winey-designed ribbon tweeter lent the top half of the soundfield a

transparency (in the real sense of that word, which is a Zen-like absence of things between you and the music) unduplicated by any other high-frequency reproducer in the audio world of 1992.

These things I said then.

What I should have gone on to discuss were other aspects of the speaker—a three-way system—that were more troublesome and challenging, shortcomings that would

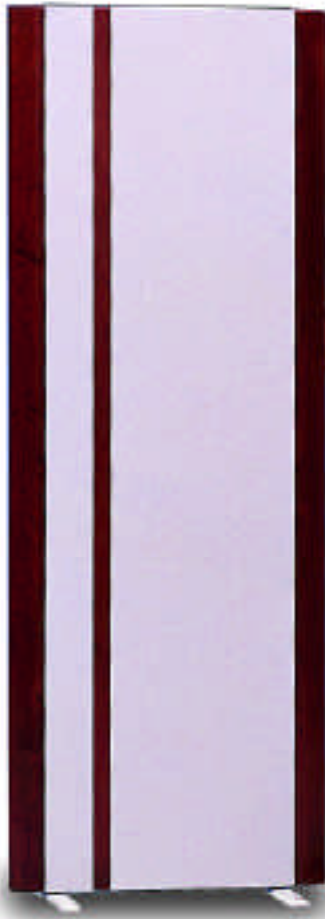
point the way for future improvements. To wit:

There were discontinuities between its three drivers. For a design of its day, these would have been considered quite minor. But we have all learned better since then, thanks to much-improved speaker designs. In retrospect, the discontinuities and coherency problems can be more easily analyzed.

Matching the speed of response and the purity of that ribbon tweeter would be no easy task for its then single-ended midrange planar design (not a true "ribbon"). And arrestingly enough, matching that single-ended midrange to the push-pull design of the speaker's bass panels was almost as challenging, less so in sonic terms than in dynamic ones.

Brief sermonette: I've argued in an essay on dynamics that, metaphorically, we must, if audio design is to advance, separate the frequency domain from that of time, particularly time as seen through the lens of dynamics. Early Magnepan designs, particularly the top-end Tympani series that Winey designed for Audio Research, were limited in both senses, but actually more in the resolution of dynamics. These speakers could play loudly (and in point of aural fact, they sounded their best only when played well above an equivalent concert-hall level), but were dynamically dead during softer passages.

In the original MG-20, the dynamic response of the three drivers was different, with the tweeter being not only "faster" but able to resolve dynamics into the mezzo-



forte region.* The midrange section of the original was dynamically the most compressed (the “slowest,” if you will), while the bass panel, despite the flapping, was dynamically more responsive. If you’re ahead of me, you can readily guess that the midrange of the 20 sounded somewhat veiled in comparison with the elements at either end of the frequency range, even as it exhibited quite low coloration, or what I would call freedom from character.

In subsequent reviews of other Magnepan speakers, I found a 7kHz resonance in the tweeter to be a highly glamorous coloration, lending, as it did, a sweet, silvery shimmer at just the right point in the overtone structure. It was there in the original as well.



In evaluating the 20 Point One system, I returned to Music Room 2, which has long been a happy home for Magnepan designs. I have, for instance, always been able to get considerable bottom-octave response, and flat response down to the 30Hz point, which, given the boxless nature of all Maggie designs, sounds more impressive than you might suppose.

Perhaps it is the room’s roughly shoe-box shape that allows the speakers to “couple” well therein, and perhaps its opposite end irregularities (a bay at the one, a back wall/walkway at the other) that help break up the nodes that can play such havoc with a speaker’s sound. In measurements of the room, done by David A. Wilson and others, it

would appear that the only measurable nodal resonance can be easily avoided if one simply avoids the bay area of the outside wall. (It is not a particularly significant resonance, in any case, unlike Room 1, created after the Fire, which is nightmarish in this respect.)

I used the Rule of Thirds to locate the speakers, using the tweeters as the focal point for the one-third point.** As usual, I had to fiddle after I got the speakers to obey the Rule of Thirds. Magnepan recommends a slight inward cant to achieve correct time alignment, and we found, after trying them firing forward, that this was best in our setup. The fiddling consisted of achieving the exact focal point where speakers and room *coupled*. This process can madden those who want

to just stick the things somewhere and, voila!, perfect sound forever. But the sonic improvements one can achieve by taking the time to set them up optimally are so audible, it justifies the time. (You may wish, as I routinely do here, to use transparent tape to denote the exact positioning of the speakers in case they get moved—not difficult to do since they are more bulky in size than heavy. And sometimes you may want to move the speakers aside if you need extra room for doing whatever comes naturally.) I found, in my particular set-up, that the tweeter strip had to be attenuated—provision is provided for doing this, but things would have been easier if one could have just thrown a switch. Operating in its “flat” position, there was entirely too much treble energy, which might not have been so objectionable if the sound hadn’t been so raspy and edgy. I also opted to close the drapes in the bay area behind the speaker, thus damping the rear wall and providing additional image focus and specificity. That move may have cost me something in the way of a kind of depth-of-field that all dipole radiators simulate. But, of late, I’ve been asking myself whether the simulation is a replication of the signals on the discs or just a lovely (in some cases) enhancement of that.

One additional thought: Maggies take a long while to break-in, particularly the bass panels. My pair has been around. They are two years old. Winey says there is no bass-panel “flap” once the speaker settles in, which may take several hundred hours. For sure I can tell you that any Magnepan design sounds better and better over time, sort of like the Bordeaux wines the French made 40 years ago.

The Point Ones can be either biwired or biamplified. Winey himself prefers biwiring, although he says he is at a loss to explain why, technically, the speaker sounds better that way. This can be achieved through its external crossover network, whose connecting apparatus Scot Markwell intensely dislikes.¹ And I used, in the initial round of evaluation, many a different component. Sometimes to the speakers’ advantage; sometimes not. What remained constant were the Nordost Valhalla connectors, which are, in my experience, sonically invisible in every system in which they are used. Otherwise, we ran the gamut. In full-featured preamplifiers, that meant the Burmester 808 Mk V; in line stages, the Wyetech Opal and Conrad-Johnson ART II; in CD decks, the Gamut CD-1 and the new Burmester 001; the amplifiers, the

Plinius SA-250, the Gamut 250 monoblocks and the Gamut 200 stereo amp, the Halcro DM-68, and the Joule Electra Rite of Passage. And we will use more in upcoming listening sessions, since I am so intrigued with the Point One.

I have to confess that I have no real fix on why the Maggies sound less than pleasant with some combinations of componentry. Be that as it may, the speakers could sound raw and edgy in the crossover region between tweeter and midrange, that is, circa 3kHz. I know Winey uses solid-state components in designing and fine-tuning his speakers (which is why, dear children, the speakers sound so good with solid-state), so I asked if he could think of any reason for the unpleasant interactions I was sometimes getting. He could think of none, noting that the crossover designs were relatively simple and “ought not to provide any difficulty” for components driving the speakers. I’d like to report that I have gotten to the bottom of these and could make specific recommendations about combos to avoid with these speakers, but . . .

During the final phase of my initial sessions, that is, almost at deadline for this issue, I had a massive system failure, possibly from a power surge (Sea Cliff is next door to the power plant and there are often huge voltage surges, some of which we have measured in the past), that took out one channel of the Burmester preamplifier (which I would have thought indestructible), the Wyetech Opal line stage’s power supply, and one of the Gamut monoblocks, as well as one channel of the Edge NL-10 stereo amplifier. And so, I asked Scot to insert the Conrad-Johnson line stage and Joule Electra O (utput) T (ransformer) L (ess) monoblocks, to rather spectacular effect. But clearly, there is much more assessing to be done.

* I am going to have to use musical annotations to describe the dynamics of the spectrum. That’s because we have nothing like a more precise—or scientific—language for discussing dynamic gradations. So when I say *mezzo-forte*, or *mf*, I am talking about passages of average loudness; *p* stands for *piano*, or soft, but there are four degrees of that, with the softest sounds being *ppppp*; *f* stands for *forte*, which is loud, while *fffff* is as loud as it can get. No audio equipment with which I am familiar can satisfactorily encompass the full range from *pppp* to *ffff* without compression or distortion, although highly efficient speakers, particularly those that are horn-loaded, come close.

** If you are in doubt about the best placement for any speaker system, other than an exotica of questionable origin, it is best to start at the one-third points. That is, the speakers should be placed one-third of the distance into the room from the back wall, and each individual speaker at the one-third points from the side walls.

1 I am adamant on two particulars here: First, the “high-current” connectors Magnepan insists on using on both the speaker panels and the crossover box are, at the least, annoying, and at the worst, as in the case of the tweeter attenuator on the right-channel panel, nearly impossible to access unless one partially removes the inner-side “foot” of the speaker, a procedure fraught with danger to the speaker and adjuster, as well as a considerable pain-in-the-keester.

Second, as HP mentions, it would be far easier and sonically preferable, I imagine, if the tweeter level in each panel were adjustable via a small two-or-three-position slider switch, or the like, that would shunt the treble energy through an appropriate resistor, so that the user would not have to go through the contortions of inserting the flimsy, too-skinny legs of an ugly bar-type resistor into holes designed for 12 gauge or tinned bare wire. Whatever happened to the high-quality standard speaker lugs that “regular” speakers use? Also, the end user is required to manufacture his or her own jumpers that go from crossover to speaker panels. Depending on the type of metal and the construction of these jumpers, one can, as we learned to our dismay, alter the sound of the speakers, perhaps obviating somewhat the intended sonic goals of the designer. I think that it would be wise for Magnepan to provide its own properly terminated jumpers so that this step could be avoided. It took me an extra two hours of work just to make noise from the speakers because I had to find some suitable good-quality multi-strand copper wiring of sufficient gauge and then prepare it to work correctly with the speakers. SM

In a sense, to roll out an old cliché, I'm putting the cart before the horse in describing some of the changes that Winey has made to the 20s. These changes were perfectly obvious from the outset in my listening sessions.

The most significant one, from both a sonic and dynamic standpoint, lay in his decision (finally!) to operate the midrange driver in push-pull fashion, rather than single-endedly. To me, it was a curiosity that he designed the bass drive to work push-pull, but did not apply the same principle in the critical midrange.

In push-pull operation, he said, he got an increase in flux density "which brought the efficiency up, and with a little adjusting, we increased the speaker's transient capabilities. I also thought, let us use a little lower crossover point (to the bass driver), going from 250Hz to 200Hz and fairly gradually, with a knee under 150Hz in an 18dB-per-octave slope. This gave us a wider bandwidth in the midrange." Since there was more flux available, "the midrange was more linear, with a considerable increase in dynamics. The speaker didn't 'poop out' on loud passages."

At the other end of the spectrum, Winey limited the ribbon tweeter's response, crossing over at 3kHz, using a quasi 12dB-per-octave slope (it drops off at 6dB the first octave and then 12dB below that point). In olden Maggie designs, Winey would sometimes run the tweeter down close to the 1kHz point, with the result of many a burned-out ribbon. Now, he says, the ribbon is much the more foolproof.

For the moment, one more point: I asked what happened to the sound of the tweeter since the 7kHz shimmer was gone. Winey said that that resonance was caused by a mounting problem. He modified the mounting design and the sonic aberration disappeared.

I am not certain which of the

design changes he described would account for the improvement we heard in the Point One's imaging depiction. With many a Maggie design, including that of the original 20, the speakers would create a soundstage that would place near-field instrumental images in places where they didn't belong (and where no other speaker system did). With the Point Ones, the near-field images are where they are supposed to be on the orchestral soundstage.

That said, at least up until this point in my evaluations, the Maggies (drapes closed) have not recreated a deep *sounding* field. Layered depth I have not yet achieved, nor that sense of the volume of a soundspace. Canting the speakers, as Magnepan suggests, may have played a role in this spatial peculiarity: In my experience, toeing speakers inward compromises the width of the stage, but not the depth. So this is another of the mysteries I have not been able to resolve, along with that of the anomalies with some component combos in the crossover region.

So where does that leave us?


Well, it leaves this writer certain that even if the Point One is touchy about the things behind it in the chain and even if there are some as yet unresolved spatial anomalies in the soundfield, it stands alone among contemporary speaker design.

Ten years ago, the original MG-20 sold for \$8,600, which we thought as close to a steal as you could get short of burglary. Today's Point One sells for just \$4,000 more and is far superior sonically to the impressive original. It is, in short, the best work that designer Winey has done in his 30 or so years at the drafting board. He himself says: "Now, I don't know why it took me 30 years to do certain things I did here. That's part of the art of it; it isn't all science you know. You learn things that aren't in the books."

The first thing the experienced listener is going to note upon listening to

the Point One is its remarkable freedom from the colorations I sum up as "character." Which is to say the speaker is neither warm nor cold, yin nor yang, dry not wet. Now, these are some of the same words I used to describe the original MG-20 back then and it was the impression I took away with me and it was the way I have remembered the speaker over the years. But in this case, the purity and freedom from any discernible character has been pushed forward even further. It was, we might say, the most uncolored speaker of its day, that being a day when speaker colorations were more readily perceived.

If you listened to the original over time, you could have detected the node in the ribbon tweeters response, you would have become aware of a discontinuity in sound between the purity and transparency of the top octaves and the slightly veiled, somewhat clouded, and slower midrange, along with a less than perfect articulation of the lower midrange fundamentals.

So how does one, an audio writer for instance, come to grips with and describe even less of what already was in short supply? 



Part II will run in an upcoming issue.

SPECS

Frequency response: 25Hz-40kHz +/-3dB
 Recommended power: 100-250 watts
 Sensitivity: 85dB/500Hz/2.83v
 Impedance: 4 ohms
 Dimensions: 29 x 79 x 2.062 inches

MANUFACTURER INFORMATION

Magnepan, Inc.
 1645 Ninth Street
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 Phone: (651) 426-1645
 www.magnepan.com
 Warranty: limited three years to original owner, extendable to five years
 Price: \$11,500/light oak; \$12,000/cherry