

Maggie 3.7 Speaker System

Session One

Harry Pearson

Two Magneplanar panels, the spanking new and sexy-looking 3.7s, arrived just after CES. And just as the FedEx guy was pulling away, who should arrive but Wendell Diller of Magneplanar in the flesh—fresh, like the speakers, from the audio doings in Las Vegas.

Within 30 minutes, Diller had not only unpacked the speakers, but had them set up in Music Room Two, where, three decades or so ago, he had first installed the earliest Magneplanars, the Tympani I-Us, then being distributed by Audio Research Corporation (which arrived along with Bill Johnson, a complete set of ARC tubed electronics, and a full playback system, down to a Decca cartridge). The two Magneplanar panels of the day were divided into three sections six feet high per side, extending in width almost the entire room, itself a shoebox-shaped affair—ideal, as it turned out, for Maggies.

The original Magneplanars were horrifically inefficient and had to be played very loud to achieve a real sense of life, which, in the lower midrange to midbass, they did in a fashion still unduplicated to this very day.

They were also rolled-off in the top octave

(not necessarily a disadvantage given the quite “bright” sounds back then), lacking airiness, dynamics, and harmonic extension into the atmosphere(s). They also had to be bi-amplified, and required an external crossover (from ARC, of course, since crossover design was not one of the strengths of the Magneplan products for many a year after).

In a day and age when almost no speaker, perhaps outside of the KLH Model Nine panels and original Quad electrostatic, could reproduce the critical harmonics of midbass fundamentals accurately, the Tympani’s were a revelation because, unlike the electrostats, the I-Us could reproduce the orchestral fundamentals, but also do so with a great deal of power, moving air much in the way air is moved in the concert hall. Thus, they were getting right what no one else could—the basis of music itself. To some, including



EQUIPMENT REVIEW - Maggie 3.7

Technology

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As for the quasi-ribbon: “The tweeter is a true ribbon. However, I am aware that these definitions have been a subject of debate. Our short version is that *any* deviation from a foil (usually aluminum) suspended in a magnetic gap is a ‘quasi-ribbon.’ And there have been a lot of creative variations of the true ribbon.”

And, to wit: “As I said earlier, the Tympani IVa bass is the Gold Standard we set as a goal and that is what we went after. The midbass is much fuller than the 3.6 which gives the subjective impression that the 3.7 is much more efficient. However, we are not making any claims for increased efficiency...The lowest frequency ‘achievable’ is the same as the 3.6, but, due to much better midbass ‘slam’ everyone is saying it goes deeper.”

And, to wit, a last thought: from HP. “When pressed for a more definitive technical explanation, Diller can still be frustratingly vague, at times, no change there. (Remember, I have known him since near TAS’s beginning days). So, what’s the big secret? Iranians aside. Maybe, from a marketing perspective, he thinks the review might be more interesting if he keeps me in the dark.”

this reviewer, they were a revelation even if, as revelations usually are, flawed.

Soon enough, all of Jim Winey’s planar designs were being sold and distributed under the Magnepan aegis. He set to work on refining the system, usually by lowering the mass of the *moving* parts of the system, a mass that had been quite high in the original Tympani, thus the lack of efficiency and slowness of response higher up in frequency. He devised a true ribbon for the upper frequencies, one widely admired (and illegally copied) with a “sparkle” and “airiness” new to his speakers, one whose inherent colorations (that “sparkle”) he in time tamed. (It is a little known fact that Winey’s first design, the one shown to ARC’s Johnson, was entirely a quasi-ribbon design, one that originally intrigued Johnson, but didn’t quite work out as a viable product.)

Heard in light of the succeeding models of Magnepan (or Maggies), the \$5500 3.7 is a hybrid fertilization of Winey’s true-ribbon design and the company’s more recent ventures into quasi-ribbon technology (as in the Model 1.7s), and it sounds unlike any of its ancestors. It is the culmination of Winey’s art. The technological ins and outs are things the company is trying to keep as secret as Iran its atomic research programs. (See the sidebar.) Maybe they fear being reverse-engineered.

In saying it doesn’t sound like its ancestors, I mean to suggest, before going into detail, that the 3.7s do not sound at all discontinuous as they have in the past, but rather as if cut from a whole cloth. Before this (and perhaps the same with the 1.7, which I haven’t heard), the perceptive listener could hear the differences between the ribbon tweeter, the midrange, and

the separate bass planar elements, and these differences were audible not only as difference in rise time, but also as a kind of characteristic texture. As Winey’s speaker designs evolved, there was greater continuity within the system, but still, one could pretty much guess where the crossover points were. No longer. With the 3.7 continuousness is so flawless that the speaker sounds as if there are *no* crossover points. And so, the first thing we heard this day was a *unified* field of sound.

And so for a moment, a bit of geography. The latest version of the ribbon is in its own panel, placed either on the outer (or inner) edge of the speaker, depending on how you choose to orient the speaker, with the separately mounted midrange and low-frequency quasi-ribbon strips comprising the guts of the system. Or, in Diller’s wording: “The midrange is a narrow, vertical, quasi-ribbon line-source, next to the true ribbon. The quasi-ribbon bass driver is adjacent to the midrange and runs the full length of the speaker; it is so wide that ‘strip’ doesn’t seem like the best word.”

A few factoids: The speaker’s impedance is 4 ohms. Its load is essentially a resistive one; therefore, driving it doesn’t pose the loading problems of electrostatics or many, many multi-driver designs. The 3.7 can handle massive amounts of power, in our case a 300-watt monoblock, the McIntosh 2301, and at CES, the 1000-watt monoblocks Magnepan used, the Bryston 28B SST² [reviewed by me several issues ago]. The speakers together weigh 128 pounds (as shipped) and a single unit measures 24” wide, 71” high, and 1.625” deep.

About the setup here: The startlingly good VPI

Classic 3 (we call it “neo-Classic”) turntable/arm system, with the Benz LP S-MR cartridge; the LaSource Aero CD player from France; the new and more reasonably priced Nordost Tyr interconnects; the Veloce battery-operated linestage and phonostages; and the McIntosh amps. All fed into the dazzling Silver Circle Audio 5 isolation transformer—more on its effect on the sound in a while. (The LaSource and the Tyr have not yet been reviewed; the other components in the system are our standing references at present.)

So, for the moment, let’s put aside the fact that the 3.7s are the best looking and, perhaps, best built of the Magnepan I have evaluated over the years, and get down to our first impressions.

Since Magnepan speakers have always performed at their best in Room Two, finding a close-to-right position for them at the outset was a snap. Diller had points he wanted to make. And these had to do with the positioning of the tweeter element. First, he toed the speakers (canted them) inward, with the tweeter strips near the center of the room. (I would, over the ensuing days, try them firing dead-on.)

I loaded up the Mercury CD of *The Composer and His Orchestra* and we listened through the introductory cut, where Hanson introduces the instruments and instrumental sections of the Eastman-Rochester orchestra. Hanson is placed dead center, in the empty hall, while the sections of the orchestra, recorded separately, were, placed as they would be in concert, arrayed around and behind the podium. The ensembles and individual instrumentalists were recorded with almost no compression, so the scaling in space and dynamics was close to what you

EQUIPMENT REVIEW - Maggie 3.7

might hear in person, thus justifying the term “living presence.”

I immediately heard the acoustic *behind* Hanson, which I had not before. It was as if I could hear the distance to the back wall. And the air that filled that distance. It was as if the speakers had retrieved a third-dimensional space behind the conductor himself. Thus the 3.7s were delineating a virtual sonic portrait of the hall acoustic itself. All Magnepan speakers are dipolar in operation (by design), but no dipolar has captured this space in the same way before.

When the different ensembles (strings, reeds, brass, and percussion) played, individual instrumental details and overtones, formerly lost in a tangle of conflicting sounds in the louder passages, became, so to speak, separated and untangled, clarified, not hyped up. In *forte* passages, particularly of the strings and less so of the brass, instruments almost always tend to blur and lose some of their individual signatures. If you consider massed percussion, that effect becomes more odious since the transient attacks either blur or become veiled. The speed of the present-day ribbon and its increased dynamic capabilities are responsible, it would seem, for much of this clarity—attacks do not now lose their individual timbral distinctiveness. On the Hanson, the percussion section gets a muscle-building workout and each of the instruments used here (consider the tambourine and its “pop,” for example, or the “shimmer” of the cymbal) comes strikingly alive.

We observed a more subtle illustration of the interweaving of ambient space and the illusion of true dimensionality during playback of the Regent recording of Ralph Vaughan Williams’ *Fantasia*

On Christmas Carols [RegCD330], which opens with a rich and vibrant cello solo, played in the capacious Worcester Cathedral. Here we not only heard some of the promised midbass realism from Magnepan, but more strikingly we could hear around and behind the cello—the entire instrument, its body resonant—and the same held true for the baritone solo that followed, the voice clearly defined (down to his chest’s vibrations). This picture became more complexly fascinating as the male and female choristers entered and activated the vast interior spaces of the British cathedral.

Keep in mind that the speakers were fresh from a quite cold January morning. Out of the box, and on first play, they didn’t sound *cold*. The highs were dynamic and extended, without any trace of rawness or any apparent need for break-in—this was, in and of itself, a surprise, a first. Indeed, as the session progressed, it became clear to me that the highs from the ribbon tweeter sounded unlike those in preceding models of Winey’s ribbon. In the face of Diller’s silences on this point, I was left to surmise that the current version of the true ribbon had either been significantly improved or employed in a different configuration from the usual (perhaps without extending as far down the frequency scale). He said later that there was little variation in the ribbon’s application, leaving me to suppose that the present-day Maggie ribbon suddenly has acquired the dynamics and power-handling capability that eluded it in the past, and that it now produces a sound similar to that, say, of the current Raven ribbon designs.

After the first playback of the Hanson, Diller insisted that we swap the speakers so that the ribbon drivers were now near the walls of the

room, instead of nearer to its center. He said this would give the soundfield a wider field of coverage for listeners instead of the almost fixed position (for a single listener) that the near-central position did. Like, that is, unto the ideal spot in electrostatic playback. With the near-wall tweeter setup, the soundfield became smeared and somewhat diffuse, and so goodbye to the precision placement and the deep dimensionality of the ambient field. Hanson’s positioning became vague, individual instruments seem to float, as if barely in phase. Me? I thought this position undermined much of what the speaker could achieve. And the near-wall position was out.

One thing that struck both of us during the CD playbacks was the quality of the string sound. Diller, from the Hanson onward, seemed particularly taken (he was not familiar with the titles I chose) with the 3.7s’ smoothness and open-ended airiness. Some of this I must attribute to the Silver Circle Audio 5.0 isolation transformer which, in its processing of RF interference and other induced high-frequency freak effects, actually smoothes out most digital glassiness, grit, and grain, thus bringing the much abused CD that much closer to analog. There were several dramatic examples of this, especially on the Vaughan Williams *Fantasia* when the chorus of high sopranos singing *forte* across the sonic stage did not break up, nor distort, nor do anything other than remind the heathen in me of angel voices.

The massed strings in the XRCD of Mehta’s reading of *The Planets* (“Saturn” and “Mercury” in particular) not only had an opulence that had hithertofore eluded playback in Room 2, but showed the 3.7s were indeed different from past Magnepans, and closer, in fact, to the low

coloration breakthroughs recently achieved by Carl Marchisotto with the Micro-Grand Reference and Michael Borresen with the new Danish Raidho speakers, for instance. There were illustrations of the 3.7s’ potential, when they are fully warmed up, in the way—at the opening of “Saturn”—the growl and weight of the double-bass section, along with its resinous overtones, were captured, and during the climax of the section, when, over soft strings and an organ pedal point, chimes large and small provided a backdrop of contrasting attacks.

As much as I was impressed with this initial session, I wasn’t prepared for what I heard from LPs in the next one, which you will read about very soon. **tas**

SPECS & PRICING

Frequency response: 35Hz-40kHz

Sensitivity: 86dB/500Hz/2.83V

Impedance: 4 ohms

Dimensions: 24" x 1.625" x 71"

Price: \$5495/pr.

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Maggie 3.7 Speaker System

Session Two

Harry Pearson

The Maggie 3.7s are the best speaker system that Magnepan has produced in years, and of such excellence that they foreshadow future and more impressive designs from the company. Their arrival shows that the company, seemingly having lost its way for almost a decade, has found again its old fire and sense of purpose.

Yes, I am suggesting there is a larger and more revelatory design in its future, and, aside from some not-so-subtle hints, no one at the company will out-and-out confirm this speculation. For as good as the 3.7s are, and they are breathtakingly so, there is more to be done.

For one thing, the new Maggies do not plumb the very most depths of the bottom octave, though they are so cannily balanced you won't ordinarily miss the shuddering response of organ pedal points or massive bass drum whacks (or synthesizer pulses). The 3.7s go down, with careful setup, just maybe, to circa 40Hz, with a gentle roll-off that allows some of the harmonics of the basement frequencies to be audible further up.

From the midbass (which I define as 40 to 80Hz) upward, the response is seamless, continuous,

and extended into what some would call the heavenly region.

You won't hear a trace of any crossovers from the true ribbon tweeter at the top (on which Magnepan holds a patent) to its new quasi-ribbon midrange and quasi-ribbon low-frequency drivers. And, at the outset, you won't be listening for such arcanities, so convincing is the coherency and continuousness of the system. Indeed, with the best playback material, especially analog, there is an "aliveness," even a sort of electricity in the presentation of individual images upon the soundstage that can and does create an illusion of the real thing I've not heard from any Magnepan speaker before, or, for that matter, almost any speaker system. So convincing is the 3.7 in its almost "living presence" that you won't miss those last few bottom-end frequencies.

The other things you'll note immediately is the size of the soundfield that these (relatively) modest-sized speakers project. The ambient space itself is huge (as in life) and envelops the distance behind the speakers (dipoles), but, unlike earlier Maggies, the images within that field are anything but "huge." Indeed, they are proportionate to the way you would hear them in concert (or in relation to the way the recording itself has been miked). Stir in, metaphorically speaking, the real-world attack and decay these ribbons and quasi-ribbons delineate, i.e., the "presence," and the distance between you and a sense of the real thing is reduced in a way it simply isn't with other reproducers. It has, in the words of a talented listener who sat in for a long session with me, "not only amazing dynamic abilities, but offers a coherence in timing, the



EQUIPMENT REVIEW - Maggie 3.7

Explaining the 3.7

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arrival of all the frequencies in the proper relative time frame.” The gradations and shading of dynamics, from the micro to the macro, is one of the speaker’s greatest achievements, and this, I believe, is a function of the exceptional rendering of transients, both in attack and decay.

Now, obviously, you aren’t going to get such results if you do not use the best recordings and the associated equipment capable of sustaining dynamics on transients and the power to cleanly enforce and back up those transients. In the first sessions with the 3.7s, I used a CD player that, unbeknownst to me at first blush, compressed dynamics, but did other things

admirably, including an almost spooky rendering of the depth and dimensional aspects within the ambient space (*vide*, the Regent recording—available through Albany Records—of Ralph Vaughan Williams’ *Fantasia on Christmas Carols*, recorded in the Worcester Cathedral). It took the insertion of the EMM Labs XD player to restore the dynamics to realistic proportions. However, at the cost of the dimensionality and ambient retrieval I made note of in the first part of this essay. Even with the enhanced CD dynamics, analog recordings had even more dynamic life and “presence (thanks, I believe, to the Veloce battery-operated line and phonostages, whose

real *forte*—forgive the intended pun—is an extended range of dynamic capability). Which brings me around to an obvious point: Anything your associated equipment does wrong or inadequately you are going to hear through these Maggies, and so, in these sessions, clarity and neutrality of character and purity of tone were the first things I aimed to achieve. I don’t think I have yet succeeded in realizing the 3.7s’ capabilities in this regard. For example, at the very last moment before this particular deadline, the Nordost Tyr interconnects gave way to a Furutech system, which I haven’t had time to evaluate, but which is at least as good as the Nordost, and maybe even better.

You will not realize the full potential of the system if you don’t have the Maggies set up in a way that helps them lock into the acoustics of your listening room. I say start with what I called the Pearson Rule of Thirds, i.e., both speakers a third of the way into the listening room (itself preferably shoebox-shaped) and the combination a third of the way from the side walls (equidistant). I also found, despite some thoughts otherwise from Magnepan’s Wendell Diller, that the speakers imaged best and not in a locked-in optimal seating for one (call it the electrostatic beaming effect) with the ribbon tweeters near the room’s midpoint, not adjacent to the outside walls. With the ribbons next to the walls, there is a loss of the speaker’s superb focus and instrument placement, even the layering effect.

Some experimentation with the distance from the room’s rear walls is a necessity for achieving the flat 40Hz bass I know is possible, and, you’ll have to give the 3.7s a fairly long break-in to achieve the full mid and lower bass of which it

is capable. (Me? I used some organ recordings from the aforementioned Regent label and put the system into repeat play. It worked.) Don’t worry about the speakers’ ability to handle power. Magnepan drove them quite successfully with Bryston’s 1000-watt monoblocks (the 28Bs—next on my agenda for new sessions). And I have had no trouble with the 300-watts-per-channel output of the McIntosh 2301s.

What has to be said is that the 3.7s, per pair, go for \$5495, or \$2747 each, in my opinion, almost being given away. That too, along with their superb build, is in the Magnepan tradition. Magnepan is nothing if not fair to its customers. Don’t think it isn’t high end because the price isn’t. The opposite: You could say this is putting music into the hands of the people.

During the extended listening in Round Two, I dug out first the Cat Stevens album *Tea for the Tillerman*, and specifically focused on “Hard-Headed Woman” and “Wild World.” It so happened that the pre-Islamic Stevens, a Greek, used to play these cuts, decades ago, on earlier Maggies installed at Mike Kay’s Lyric Hi-Fi in New York, and so these are part and parcel of the elite among my Super Discs. I was specifically listening to hear if the midbass guitar notes were as superlatively rendered on the 3.7s as they had been on the old Tympani speakers, one of Magnepan’s design goals with the new speaker. The answer is no, the 3.7s don’t have that quality of “authority” the Tympani’s did, but Stevens did sound as if he were in the listening room with me; alive, dramatically alive was the vocal rendering. It was a shock to me since I thought I knew all there was to know about this recording’s quality. I am never quite sure how to describe an experience that changes your

EQUIPMENT REVIEW - Maggie 3.7



perception of what can be done in the reproduction of recorded sound (“astonished,” “blown away,” “electrified,” “awe-stricken?”), but my reactions may have been all these. And this is a reference record (still in admirably clean shape), an original on the Island label (not a reference in its American pressings). It was, quite simply, as “there” and real as I’ve heard recorded sound. And it was not just the aliveness of Stevens’ voice, but also the definition of the instruments and the backup singers, clearly rendered as a smog-free day in the Rockies.

Of course, the first two movements of Prokofiev’s *Lt. Kije* (suite), by Reiner and the Chicago (on a 45-rpm pressing from Classic Records) was a must. The off-stage trumpet that opens the first movement really came from off the stage, the strings were layered so that you hear the spaces of air between some of the players, the bass drum was audible and its “attack” clearly rendered, but most striking of all was the expansion of the acoustic envelope surrounding the players and the shell of the stage, nicely differentiated from the different “sound” of the auditorium itself. And, lest we forget, the celesta in the second movement, in its own space, and perfectly suspended behind the left speakers, as its notes were hanging there in the corner of Room 2. Thinking about the added sweep and grandeur of the whole thing, I realize that words are, at this point, inadequate to describe what the ear *knows*.

(In each of these instances, and the ones to come, we had both cleaned the recordings, with the VPI Typhoon, and demagnetized them with the Furutech DeMag.)

A side note perhaps: If the record were not

cleaned, you could, through these speakers hear a slight grain, a grit and veiling. A test of this came with the 45-rpm Classic version of Louis Armstrong’s “St. James Infirmary” (taken from the old Audio Fidelity *Satchmo Plays King Oliver*). This disc, a single, was cut using the Clarity process (no magnetic particles). The reproduction was so clean you could hear the difference between the uncleaned and cleaned playings. More than this, you could also discern what was later confirmed, that the vinyl itself was not first-rate. (Little signs of wear even on the first playing.) Putting these nits aside, the recording on this system had an almost supernatural realism that made each person who heard it marvel. Satchmo sounded more like Satchmo himself than I have ever heard on disc—the backup musicians simply “there” and even against the very dark acoustic of the recording itself.

The acid test during these sessions came when the Decca Phase 4 recording of Bernard Herrmann’s *The Three Worlds of Gulliver*, a multi-miked spectacular with batteries of percussion instruments, themselves a delight to hear on a good speaker system, suddenly became “alive,” nay, make that resolved, illuminated. They had been so complexly and densely coloristically scored that their attacks, their steeper transient envelopes, had always been somewhat submerged. If you are a Herrmann fan (I am), you’ll get a three-dimensional rendering of his orchestrating genius.

I realize that it may “sound” as if I have gone over the top in some of these descriptions—and I could continue with notes from other LPs, even a few CDs (and will). But the speakers, as they are currently configured, sound as I am trying to

describe them, however inadequate the imagery I’ve used. I almost wish, given the impossibility of it, you could hear them with me. I believe every serious student of the art and the absolute sound itself owes it to himself to give these speakers an audition, understanding that, if they don’t almost knock you out, they are set up wrong or by the incompetent. Period. **HP**