

Magico Q1 Mini-Monitor Exclusive First Review!



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Last weekend I traveled to Berkeley, CA, and spent three solid days listening to Magico's latest aluminum - enclosed speaker, the \$25k stand-mounted Q1 mini-monitor. To be honest, though I'd been invited to audition the Q1s several months before, this was a trip I'd decided not to make. The way I saw it, having reviewed the Minis, the M5s, and my current references the Q5s, I'd done enough Magico'ing for awhile. Plus I had my hands full with other loudspeaker-review projects, including the Scaena 3.4 that so impressed me at CES 2011 and the Audio Physic Avantera that had done a bit of the same thing at this year's Munich show.

However, when my colleague Jim Hannon's raved about the Q1 in his California Audio Show report, I got curious. Like me Jim is an electrostatic enthusiast - and for the very same reasons that I am. Up until very recently there was simply nothing in a dynamic speaker that could match the transparency, disappearing act, and, with a first-rate source, realism (at least on acoustic music) of a really good electrostat or planar - nothing with multiple cones that could compare to the seamless presentation of a "boxless" Quad or CLX or Sound Lab or Maggie, or equal their transient speed and low-level resolution. True, as I've noted before, big multiway cone speakers own the bottom octaves and impact on the loud side of the dynamic spectrum; they also have more three-dimensional "body" than 'stats and, sometimes, tighter image focus and wider soundstages. But, as I've also noted before, the price you pay for these things in octave-to-octave coherence, overall neutrality, low-level resolution (particularly at lower volume levels), room interaction, and transparency to sources can be steep - too steep, in fact, to interest a listener like me (until the M5, followed abruptly by the Q5, came a'callin'). No bass is better than lousy bass in my book (yet to be published, BTW). And even if the bass proves passable, hearing different sounds in the low end, the midrange, and the treble from ill-matched drivers in a large noisy enclosure is simply an unacceptable trade-off for an extra octave of bottom end.

Indeed, until about two years ago the only dynamic speakers that passed muster in the Valin house were two-way mini-monitors. Why? Because they sounded more like single-driver electrostats and planars (augmented by some of the virtues of cones).

Of course, it's a lot easier to design and build a good two-way mini-monitor than it is to design and build a three-and-a-half or four-way or five-way behemoth. First, you only have to deal with two drivers and one crossover - not that this is a snap, but it is certainly simpler than wrestling with five or six drivers and multiple crossovers. Second, you only have to deal with a tiny box. Once again, engineering and constructing a really good tiny box isn't a walk in the park, but whatever the build quality it is substantially less difficult to make a small enclosure disappear into the soundfield than it is a large one.

All of which means that minis inherently have a leg up when it comes to driver coherence and enclosure inaudibility. In addition to this, they generally don't produce much (if any) low bass making them a lot less likely to excite those 60-80Hz room nodes that automatically remind you that you're listening to a woofer in a cabinet. Their much smaller footprints allow them to be placed farther away from sidewalls and backwalls, further reducing room reflections and allowing them to throw vast, minutely detailed soundstages into which they more or less disappear.

This said, many of the same things that a mini gets right it also gets wrong. First, there is the bass issue. Minis generally don't have any. From a room-interaction viewpoint, this is great (as noted)-from a musical one, not so much. Electrostatic Quads and CLXes and planar Maggie 3.7s may not plumb the depths below 45-55Hz, but they go down low enough to give you a fair semblance of the sound of bass fiddles, pianos, tubas, contrabassoons, etc. Oh, they may not reproduce the lowest pitches of these instruments (or all the power with which fortés are sounded), but they get the harmonics right and thanks to the way our brains and ears work we supply the missing fundamentals.

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Many two-ways, on the other hand, are lucky to make it down to 80–90Hz. They often have a built-in bump at their LF cutoff, intended to give you the impression of deeper-going bass, but (minus the addition of a subwoofer, itself a very iffy proposition) a typical two-way mini-monitor cannot “imply” the bottom octaves or fill in the “power range” from 100Hz to 400Hz the way a good ‘stat or planar can and does. As a result, two-ways tend to sound thin in balance, lacking the body and weight and power of the real thing. Of course, this lighter balance also makes them sound nimbler in the midrange and can foster the impression of great transparency and detail, in the same way that certain electronics that are depressed in the mid-to-upper bass and lower mids can sound more transparent and detailed.

Second, there is that soundstage. Because they only have two drivers, a (relatively) simple crossover, and tiny enclosures with much less surface area to reflect/diffract off (and much less mass to resonate), minis, as noted tend to disappear into the soundfield more completely than any other kind of speaker, including ‘stats and planars. However, at the same time that their diminutive enclosures and simple complement of drivers allow them to disappear as sound sources, those selfsame diminutive enclosures and simple complement of drivers are also constantly reminding us of their presence in the thinness of timbre and lack of weight, body, and power that I’ve already mentioned, and the miniaturization of instruments and voices that I haven’t. Detailed a mini’s soundstage certainly is, often vast in width and depth and precise in focus. But realistic image height is almost always a problem. Now it’s true that all loudspeakers have a “size” issue - I’ve never yet heard one capable of reproducing the sheer breadth (and enormous power) of, oh, a drumkit as it is heard in life, much less a symphony orchestra—but when it comes to lifelike imaging mini-monitors typically are worst-case scenarios. They tend to shrink instruments and voices to unusually small dimensions.

Unfortunately, image size isn’t the only thing they shrink. A single 5-7" mid/woofer in a tiny box simply can’t move the amount of air that a big panel or several large woofers in a well-engineered cabinet can move. The result isn’t just a lack of low bass; it is an overall lack of dynamic range and impact on sforzandos and fortissimos and a definite SPL limit at the loud end of the loudness scale. As is the case with ‘stats and planars, this dynamic shortfall on the very loud side is compensated for by superior speed of attack and greater delicacy of timbre and texture on the very soft one. Nonetheless, dynamic-range and ultimate-loudness limits are the banes of most minis.

In small rooms on a large slice of acoustic music, mini-monitors can (minus image size) sound very persuasively realistic and very transparent to sources. But they won’t do the big orchestral stuff - or any power rock - with the verisimilitude of larger dynamic, planar, or electrostatic speakers. It is just the price you pay for what mini-monitors do well.

At least, this was the scenario chez Valin up until the arrival of the Magico Mini and Mini II about four years ago. Thanks to the superior engineering of their cabinets, drivers, crossover, and heroic T6 aluminum-and-birch stands, the Minis (which were rather misleadingly named, in that they were much much larger and more substantial than typical two-ways) began to turn the ship around.

The Minis and Mini IIs had all the virtues of two-ways: the neutrality, the low-level resolution, the coherence, the vast soundstage, the incomparable disappearing act - but they also had three things that other minis did not (or at least not in this abundance): bass, dynamics, and image size. Now when I say the Minis had bass, I don’t mean they plumbed the depths the way the M5s or Q5s do. But their carbon-fiber drivers, massive neodymium magnets, unusually well-engineered spiders and suspensions, and sealed birch-ply-and-T6-aluminum cabinets allowed them to play down into the upper-forties flatly and to roll off below that at 12dB/octave, giving them “usable” response into the mid-to-low forties and upper thirties. Many ‘stats, planars, and smaller three-way dynamic speakers would’ve been proud to own the Mini IIs’ bass, for it was not only extended, it was also discriminating - a far cry from the humped-up bass of earlier gen two-ways.

With this increase in bass extension and resolution came concomitant increases in neutrality through the power region, volume limits, and overall dynamic impact. The Mini IIs could play louder and with greater power than other minis I’d owned or reviewed. And this expansion of dynamic range made them more suitable on a larger variety of music, although they were still far short of the ideal speakers for certain kinds of rock-and-roll, electronica, and very-large-scale classical.



Whether because of their sleek tapered enclosures, their superb stands (which lifted them further from the floor than typical mini stands), their new-tech drivers and crossovers, or the combination of the three, the Minis and Mini IIs were also not “miniaturizing” loudspeakers. They managed to produce closer-to-life-sized voices, violins, even pianos, and they did so without the laser-cut focus of most two-ways. They were larger and more naturally expansive-sounding, without any loss of stage width or depth or inner detail.

As good as the Minis were - and they were the speakers that put Magico on the high-end map-they weren't perfect. Their tweeter was rather bright and although its out-of-passband breakup modes (and those of the mid/woof) were greatly reduced in the Mini II version of the speaker, the tweet was still vaguely audible on-axis (much less so off-axis). There was also a graininess-not dissimilar to the brushed-snare noise in all but the latest-gen Magneplanars-to the Minis' soundfield that I assumed came with the cone drivers (particularly the ring-radiator tweeter). In addition, the Minis were not easy to drive. Like all Magico speakers they were a difficult low-sensitivity load that necessitated the use of the best and most powerful amplifiers, tube and solid-state, to get the best sound.

Replacing a classic is never an easy task, but Magico has made a habit of trumping its own best efforts (often with disconcerting rapidity, as in the cases of the Mini I and Mini II and the M5 and the Q5). So when Wolf and Co. showed a mockup of the aluminum-bodied, beryllium-tweetered Q1 at last year's CES, I was sure that the new speaker would be better. What I didn't guess was how much better.

As I started off by saying, it took Jim Hannon's rave write-up to get me interested enough to toy with the idea of paying Magico a visit after all. As was the case with the M5/Q5, I was promised a side-by-side comparison of the Mini II and the Q1, using the same electronics (Solution 700 monoblocks and 720 linestage, with which I am very familiar) and, to further entice me, using the same analog sources a Clearaudio Innovation Wood turntable, a Graham Phantom II Supreme tonearm, and my current reference mc, the Clearaudio Goldfinger Statement, plus a variety of phonostages from Aesthetix, Souldion, and (the surprise of the bunch) the Tube Preamp from Dan Schmalte of The Tape Project and Bottlehead Electronics. I was told I could bring as many of my own LPs as I could fit in a carry-on suitcase and listen at length to recordings I know by heart through electronics that were until lately my references. (Magico had never showed its gear with vinyl prior to this past Munich High-End Show. Now I'd be surprised if it didn't. Alon Wolf is nothing if not a true believer and once he finds a “better thing” he goes all out to find the best of breed. The wonder, to me, is that it took him this long to rediscover the joys of LPs, especially since he has thousands of albums in his home and in his showroom).

Before I cut to the chase, a few words about me and Magico. There are folks out there who seem to think that I only like Magico loudspeakers (and I advise them to read my reviews of the Quad 2905s, the MartinLogan CLXes, the Magneplanar 1.7s and 3.7s, the Morel Fat Ladies, the TAD CR-1 Compact Monitors, the Nola Baby Grands, the MBL X-Tremes, etc. and also to take a close look at my RMAF and CES show reports). Though I confess to feeling odd about reporting on yet another honest-to-goodness great loudspeaker from this little Berkeley-based company so soon after reviewing its great Q5, what should I do in the face of genuine sonic distinction? Keep mum? Pass on the opportunity? Wait till next time? Before I read Jim's CAS report, all of these thoughts went through my head. But after reading it, it came to me that my primary job at TAS is to report on cutting-edge excellence, whatever its source. And while Magico is certainly not the only speaker manufacturer at the pointy end of today's technology, it is one of the foremost. Ergo, this review.

So, to get the sticky part over with, let me just outright say that the Magico Q1 is the highest-fidelity stand-mount two-way I've yet heard. It is not just a little better than its predecessor, the Mini II, it is a whole lot better in every sonic regard. Switching from the Mini II to the Q1 (on the same sources with the same electronics) is almost exactly like switching from an LS3/5a to a Quad 57—or for that matter from an M5 to a Q5, only in a couple regards the Q1 is better than the Q5.

I suppose the first thing that stands out about the Q1 is its much lower noise floor - the virtual elimination of the upper-midrange/treble hash and grain of the Mini II. As was the case with the Q5 vis-à-vis the M5, a good deal of this lower distortion has to be attributed to the Q1's superior, elaborately braced aluminum enclosure, which, unlike the Mini II's birchply-and-aluminum enclosure, is not storing energy and then playing it back ever-so-faintly in a time-smear fashion.

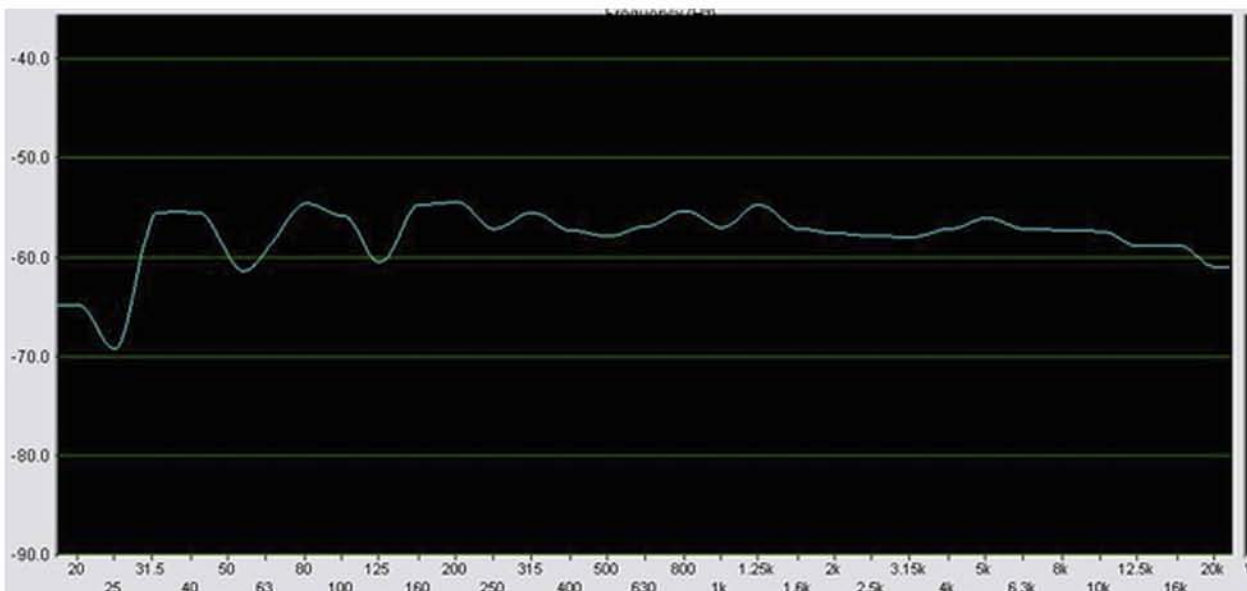
But with the Q1 the improvement in the cabinet is only half the story. The other half is the improvement in the blend of its 1" beryllium dome tweeter and its 7" NanoTec carbon-fiber-Rohacell-sandwich mid/bass. It is my understanding that, since the launch of the Q5, Magico has been “working on” its beryllium tweeter and, one assumes, on the crossover between the tweeter and the other drivers. I don't know precisely what has changed here but I can tell you for a fact that this is the most seamless blend of a beryllium tweeter and a cone mid/woof I've heard. As a result, the Q1 come closer to sounding like a single-driver loudspeaker (on-axis) than any loudspeaker Magico has yet made. The effect is magical - like getting a Quad or a CLX (with better bass and large-scale dynamics than either) in a 9" by 14.2" by 14.2" package. Where the Q5 comes very close to this same magical seamlessness (when listened to slightly off-axis), I'm not sure that it fully matches that of the Q1 in the upper-mids and treble, where the little speaker isn't “virtually” like a 'stat but is “fully” so. In the

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treble, its low-level resolution is at least as good (if not better) than that of the Q5. In fact, the only area in the upper-mids and highs where the Q5 seemingly exceeds the Q1 is transient speed - and that may be because its slightly "rougher-sounding" (on axis) beryllium tweeter is goosing up attacks. In any event, this is one very neutral, very detailed, very well-integrated, very transparent loudspeaker that not only taught me a few new things about recordings I know well but also taught me a few new things about the Soulution electronics it was being used with (for which, see below).



Let's turn to the bass and dynamics, as those are the bêtes noires of minis. Magico claims that the Q1 is capable of 32Hz extension +/-3dB and has the measurements to prove it.



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While I'm not sure that the Q1 was going quite this low this flatly when I heard it, it was certainly going lower than any other two-way I've auditioned - flat at least into the upper 30s. In stand-mounts only the TAD CR-1 equals it in bottom-end extension (and exceeds it in bottom-end clout) - and the TAD CR-1 is a \$40k three-way with a separate 8" woofer.

Once again I'm not sure how Magico achieved this legerdemain from such a small box and driver, but musical notes that would've been veiled or absent on the Mini II - such as the capering contrabassoon and doublebasses in the Overture of Stravinsky's Symphony in Three Movements [Decca], the thunderous pedal point of the piano in Paul Dessau's First Sonata [Nova], and the sharp cracks of the drumkit in Reiner Bredemeyer's Schlagstück 5 [Nova] - are here reproduced almost in their entirety.

I say "almost" because while the Q1 can supply a low-end clarity and extension that puts other minis to shame, it cannot supply all the power that accompanies these deep notes (where the much larger Q5 can). You simply don't get the room-shaking power and utterly clear pitch-definition of Tina's rumbling bass intro on "Take Me To The River" through the Q1s the way you do with the bigger Q5s. Let's face it: There is a limit to the amount of air a 7" driver can move, although I think you would be surprised, as I was, by how close the Q1 comes to reproducing lifelike bass-range dynamics, particularly in the mid-to-upper bass.

Above the bass range, the Q1 is a dynamic dynamo (as was the Mini II, to be fair), although because of the unusually smooth blend of tweet and mid/woof (and the lower noise of its enclosure) that dynamism has a less roughed-up, lower distortion, more civilized feel. The new Q is also - with the right source components - a paragon of transparency and resolution, reproducing subtleties like Joan Baez's and Melody Gardot's tremolo with the clarity, delicacy of timbre and texture, dynamic range, and sheer "in-the-room-with-you" realism of an electrostat, albeit with more body and dimensionality than a 'stat.

Naturally, the Q1's soundstaging is vast (when the recording permits) and the speaker disappears into the soundfield - as all minis do - so completely that you have little-to-no sense of the sound being projected from or painted on drivers and faceplates. On top of this, the Q1 (like the Mini II before it) does not miniaturize instruments, although it does focus them a bit more crisply than the Mini did. Thus something like the concert grand piano in the aforementioned Dessau LP has the height, volume, and most of the power of a piano reproduced by a much larger multiway loudspeaker.

Now let me say something about this speaker's transparency to sources. With a couple of the phonostages we used, the Q1s had a sound that I associate with the Soulution 700 monoblock amps and MIT cables - very clear, neutral, and fast on transients but just the slightest bit "overcontrolled," as if some kind of sonic brake was being applied to the duration of notes after the sounding of the starting transient. This sense of overcontrol or restraint makes music sound slightly less freed-up, slightly less vital and lively than it does through a select few other components. Frankly, I thought this mechanization was due to the very elaborate feedback circuit in the Soulution 700 and to the networking of the MIT cable and interconnect. But, as usual, I was wrong.

When we stuck in a third phonostage at the end of the second day of listening, the Q1s sprang into even more convincing life-transparency, resolution, delicacy of tone and texture, see-through clarity, and above all liveliness markedly increased and the vague sense of mechanization vanished. Clearly it was not the amps or the cables that were causing the problem, such as it was (and you'd have to be familiar with the LPs and certain other very high-quality electronics to be aware of it); it was the other two phonostages. When a loudspeaker can discern this sort of thing, while also reproducing instruments and vocalists with astonishing realism, you have a transducer that will please "fidelity to mastertapes" listeners and "absolute sound" ones equally. And that, folks, is quite an accomplishment.

It goes without saying that I highly recommend the Magico Q1 to all but the hardest of hard-rock music lovers. It is, as I said, the highest-fidelity, fullest-range, most transparent-to-sources two-way I've come across (and I've heard a few). It is also, in my experience, one of the two finest speakers - the other being my beloved Q5s - that Magico has yet come up with. (I haven't had enough listening experience with the Q3 to include it in the charmed circle, although by all reports it too may very well belong among the Magico elect.) For listeners in small-to-medium-sized rooms who can't house (or won't stand for) big boxes or large panels that clutter up the décor, or for classical/jazz/acoustic-pop music lovers in any size room who want very close to the ultimate in transparency, resolution, and refinement at much less than a Q3/Q5 price, the Q1 would definitely be the Magico ticket I'd ride.

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Specs & Pricing

Type: Two-way, stand-mounted mini-monitor in a sealed enclosure

Drivers: One 1" beryllium tweeter, one 7" NanoTec mid/woof

Sensitivity: 86dB/1W/1m

Impedance: 5 ohms (4 ohms minimum)

Frequency response: 32Hz to 50kHz +/-3dB

Recommended amplifier power: 50W

Dimensions: 10" x 44" x 15.2" (on stands)

Weight: 120 lbs. (including stands)

Price: \$25,000 (including dedicated stands)

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