

Magico S5 Loudspeakers

Category: Full-Length Equipment Reviews

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Written by Doug Schneider



When Magico makes a loudspeaker, it's not to be taken lightly -- literally. The three-way, four-driver S5, the largest model in Magico's S series (there are also the two-way S1 floorstander, the three-way S3 floorstander, and the three-way SCC center-channel), weighs a backbreaking 195 pounds. Without a doubt, it's stout.

So, since my back nearly *was* broken a few years ago, when the S5s and their wooden crates landed in my garage, I didn't try to muscle them up the stairs to my listening room. Instead, I called some furniture movers, and *they* sweated, grunted, and swore as they moved the two behemoths. And as soon as they'd positioned the S5s to either side of my amps, the review began.

Description

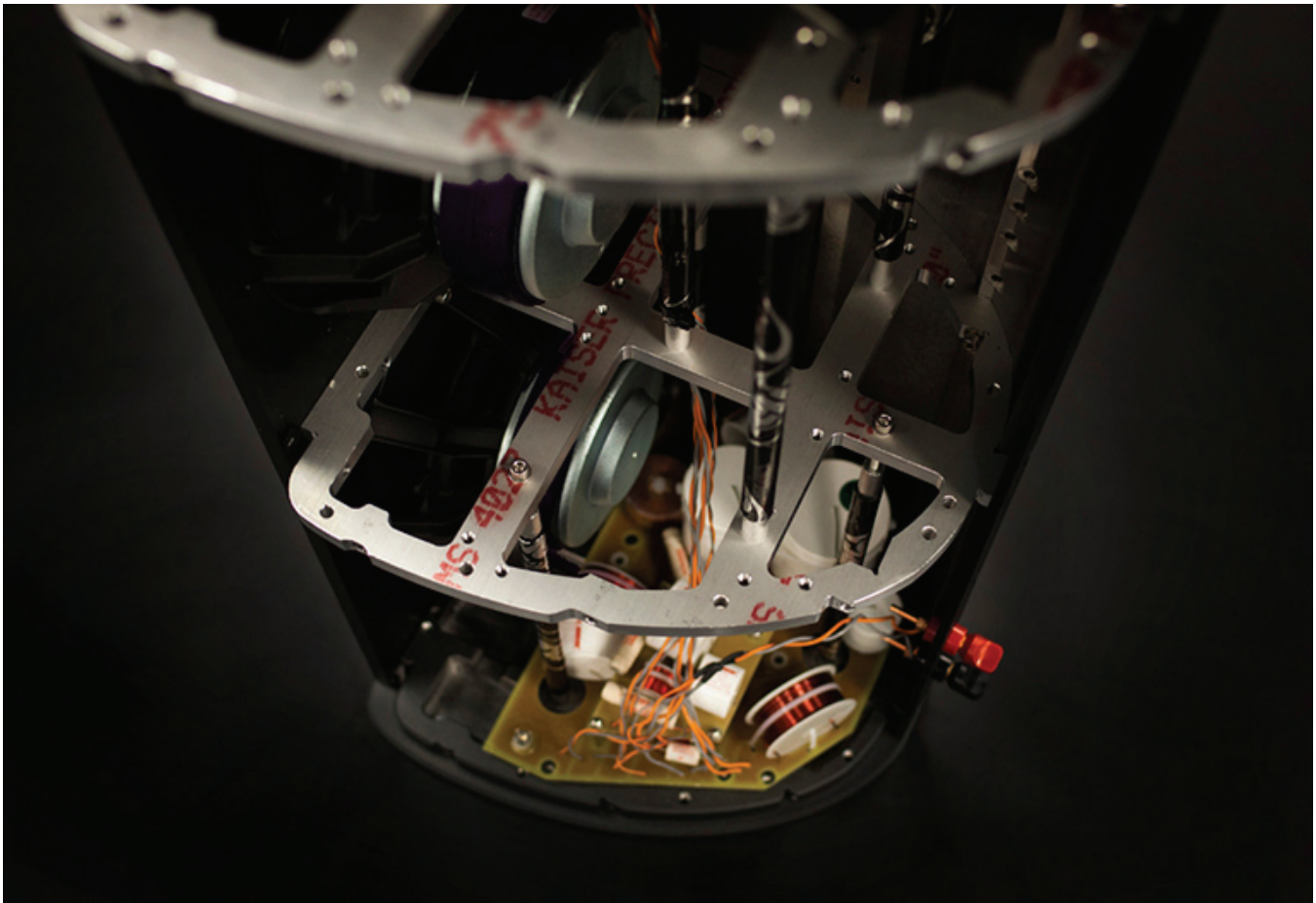
The S5 retails for \$29,400 USD per pair in one of Magico's six standard M-Cast finishes (Black, Pewter, Silver, Rose, Bronze, Blue), and for \$32,500/pair in one of six colorful M-Coat finishes (Black, Titanium Grey, Pearl White, Candy Red, Orange, Blue). The M-Cast finishes are lightly textured and satin-like, while the M-Coats are glossy automotive paints. Which looks better depends not on price but on individual tastes -- both are high-quality finishes. Much of the S5's weight is attributable to its all-aluminum enclosure, which measures 48"H x 15"W x 14"D. Its sides and back form a single, continuously curved surface, and inside it's extensively braced with more aluminum.



This elaborate structure is exceptionally well made, but words can't do justice to the way it's constructed, particularly the way the rear and side panels are attached to the skeletal internal frame. But pictures can -- I

recommend looking at the photos of the S5's interior and exterior to get an idea of what's involved.

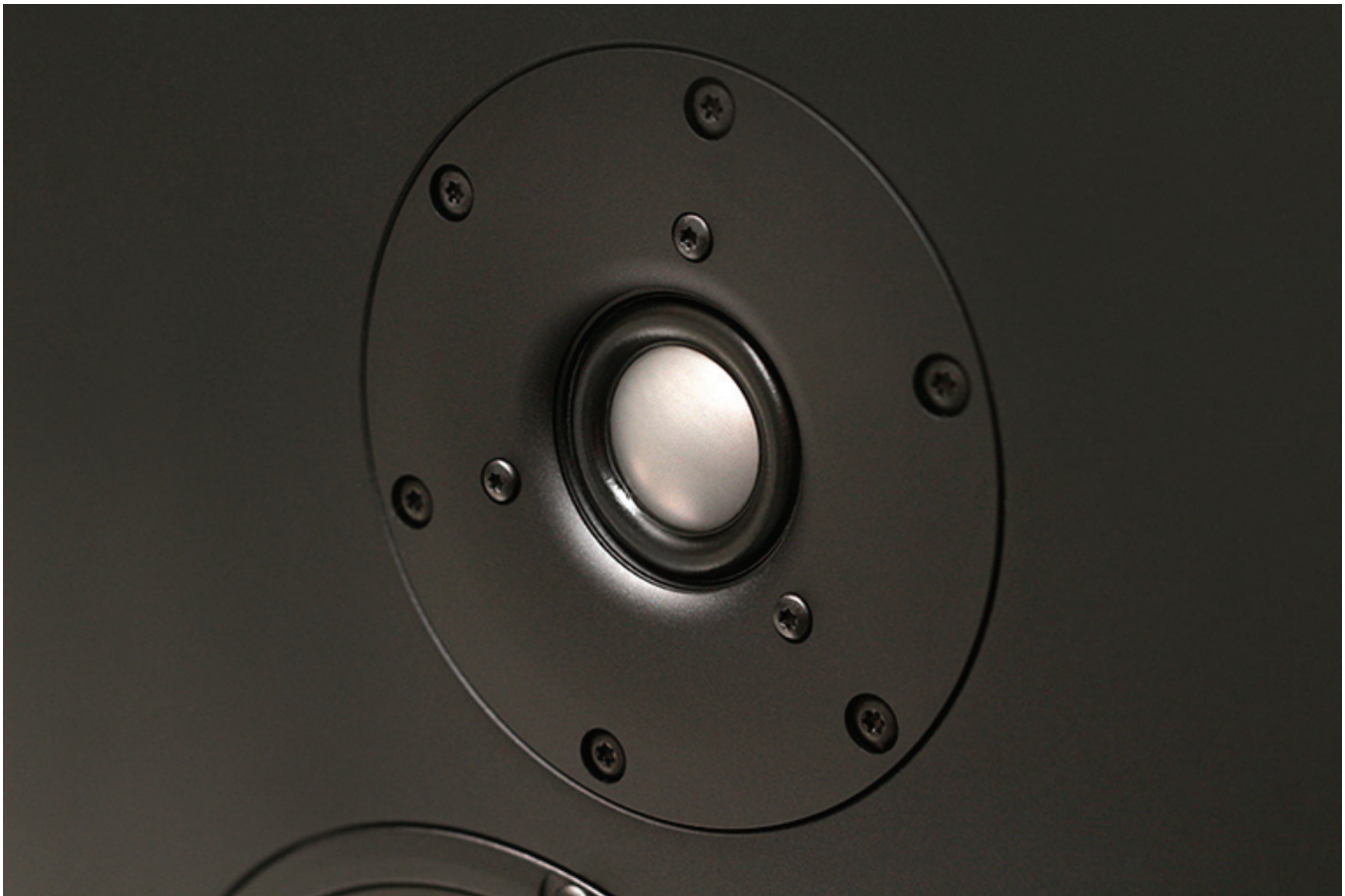
Probably most relevant for this review is the cabinet's density. With all its concentrated weight, the S5 sits rock-solid on the floor when the supplied spikes are screwed into its base, which is the entire purpose of this exercise in military-grade speaker-design -- because Magico's designers want the drivers, not the enclosure, to make the sound, the enclosure must be stable and nonresonant. It seems to work -- the S5 is as sturdy a speaker as I've seen. It also has a better structure than Magico used for the V2 loudspeaker, which I reviewed over four years ago and which then cost \$18,000/pair. The V2 was built of aluminum (the front baffle) and wood (pretty much everything else). The problem was that the baffle was held in place by rods that ran from the front to the rear, and were terminated there with puck-type heads that had to be tightened every so often -- they'd wiggle loose. In the superdense S5, nothing wiggles loose.



The S5's 6" midrange driver is the M380, a proprietary design whose entire cone is made of Nano-Tec, a Magico material made of a combination of Rohacell, carbon fiber, and carbon nanotubes. Rohacell, a structural foam, has excellent strength, stiffness, and temperature resistance -- it can withstand heat up to 428°F (220°C)! Look up information about carbon nanotubes and you'll find they have many properties, but insofar as loudspeaker cones go, strength is likely the biggie. According to Wikipedia, "Carbon nanotubes are the strongest and stiffest materials yet discovered in terms of tensile strength and elastic modulus respectively." Carbon fiber is known for its high ratio of strength to weight, and strong, stiff, light driver cones are crucial to Magico's design philosophy. One of their goals is to ensure that their drivers operate pistonically throughout their range; in other words, that they maintain their shape.

The S5's two 10" woofers, sourced from driver-maker Scan-Speak, are customized with Nano-Tec dustcaps. The woofers occupy their own sealed cabinet, instead of one with a port (which would add about 3dB around the

tuning frequency). Magico's owner, Alon Wolf, believes that's the only way to get accurate bass. The S5's claimed lower limit of bass response is 22Hz -- which is *really* low for a sealed-box design.



The tweeter, which Magico calls the MB30, is made by Scan-Speak and customized for the S5. Its 1" dome is made of beryllium, whose stiffness allows the dome's response to approach 40kHz without incident, whereas typical tweeters, with domes of aluminum or titanium tend to break up just above or even below 20kHz, at the theoretical upper limit of human hearing.

The woofers and midrange hand off to each other at about 200Hz, the midrange and tweeter at about 2kHz. These crossover frequencies, which are pretty typical for drivers of these sizes, result in smooth on- and off-axis transitions between them.

The S5's sensitivity is said to be 89dB, presumably with a 2.83V input and measured at 1m, and its nominal impedance 4 ohms; most solid-state stereo amplifiers with good current capability should have no trouble driving a pair. No biwiring or biamping is possible with the S5s; each speaker has only one pair of binding posts on its rear panel. That's alright with me, as I usually single-wire my speakers.

Unique to the S-series speakers are metal grilles -- something that's not available for the Q series or models that came before. Alon Wolf is a purist who believes in grilles no more than he believes in ports -- he thinks grilles usually degrade the sound. But he must have eventually succumbed to practicality; perhaps it was the S5's baffle full of drivers, including that unprotected beryllium dome just begging to be touched. Whatever the case, I'm glad -- the S5's grille well protects the drivers, and since it's magnetically attached, it takes but two seconds to remove it for serious listening. The best of both worlds: safety and sound quality.

The effort that goes into making an S5 is obviously Herculean, and has resulted in a loudspeaker that's superb in terms of build quality. In fact, the S5 makes many similarly priced speakers look like toys. The only thing I found lacking is styling -- despite the two types of finishes and the dozen colors, the S5 doesn't look nearly as nice as Magico's own, super-elegant Q3, which is the next step up in price; it sells for \$38,950-\$42,850/pair, depending on finish. I prefer the Q3's shape, particularly its curved front baffle -- it's not only more nicely shaped, it's built in a way that conceals the driver bolts and frames. But that's a matter of taste; others may prefer the S5's choices of colorful finishes.



Sound

It's been four years since the Magico V2s were in my room, so making microcomparisons between them and the S5s was largely impossible. Still, some big things stood out.

On the whole, the S5 was far more neutral than the V2. In my review of the V2 I called it "expertly voiced," meaning that it had a distinctive *sound* built around the mids being made slightly more prominent than the bass and extreme highs, to better project the sounds of voices and instruments that share that range. In comparison, the S5 sounded -- and measures -- dead flat.

Another had to do with the bass. The V2 went quite low, but lacked impact and punch; I always found myself turning the volume up, and using bigger, more powerful amplifiers to compensate for what I later realized was the V2's inability to boogie. The S5's bass not only went deeper in my room, I found it punchier and more forceful; in short, it boogied better at volumes low or high, even when driven by only a moderately powerful amplifier.

It was also clear that the S5 was more sensitive than the V2 -- not tremendously so, but enough that I didn't feel the need to dig out my most powerful amps, as I had with the V2. Nor was this just because of the bass thing --

to get up and go, the V2 just needed a lot more power than the S5. The S5 certainly appreciated the headroom provided by such monster amps as Simaudio's Moon Evolution 870A (300Wpc) and Anthem's Statement M1 monoblocks (1000W) (both power ratings into 8 ohms) when I play them extremely loud. But when I played the S5s at normal volume levels, as I did for much of my listening, I drove them with Ayre Acoustics' VX-5 stereo amp, which puts out 175Wpc into 8 ohms. The sound with the VX-5 was always full-range, forceful, visceral, and detailed, provided I didn't crank the volume *too* high.

In short, the S5 is not only a bigger, better-built speaker than the V2, it's also a far better-performing one that, in my mind, not only justifies the \$11,500 more it costs, but can be easily compared with the very best loudspeakers now available.

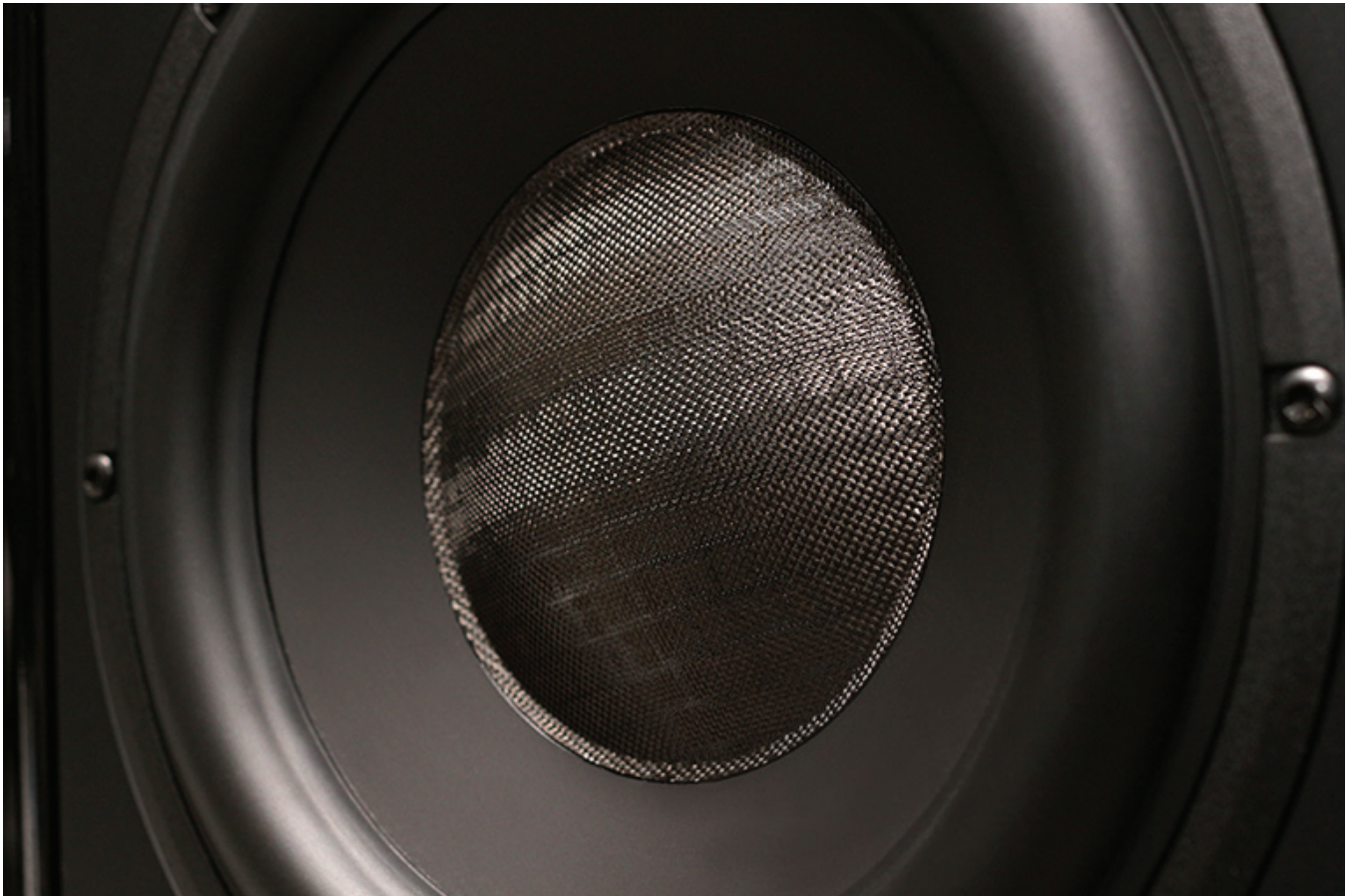


For example, the S5's midrange and highs were not only superneutral -- more so than those of my reference speaker, Revel's Ultima Salon2 (\$22,000/pair) -- but the Magico also sounded exceptionally clean and ultra-resolving of the finest details, particularly when the components upstream were good enough to pass them along. For instance, when I installed in my system EMM Labs' DAC2X digital-to-analog converter, I was rewarded with a marked increase in detail. Even the most subtle inflections in Willie Nelson's and Paula Nelson's voices in "Have You Ever Seen the Rain," their beautiful duet on Willie's *To All the Girls...* (16-bit/44.1kHz FLAC, Columbia/Legacy), were reproduced with state-of-the-art clarity. Their placements on the soundstage were rock-solid, tightly focused, and easy to discern. The same could be said of singer Sade Adu's voice in every recording of her band that I played, but it was particularly obvious in the close-miked "Long Road Home," from her *Soldier of Love* (16/44.1 FLAC, Epic). Vocal phrasings that I didn't think were there suddenly were, and her position on the stage was spotlit and clearly separate from the musicians around her. About that last thing: The S5s didn't create the largest soundstage with the greatest precision that I've ever experienced in my room -- that distinction goes to Aurelia's XO Cericas (\$7100/pair), which I just reviewed, and which are pretty much beyond

reproach in that regard -- but they were among the top tier of speakers I've reviewed, and certainly on a par with, if not a little better than, the Revel Ultima Salon2s.

But those tracks, and others, showed me that I had to be a little careful with the S5's extreme highs. Like the mids, they were exceedingly clear, but they were also designed to be neutral -- there was no subtle rolloff in the highest frequencies, as there was with the V2, which was a tad polite up top. As a result, the S5 sounded quite lively on top, even a little hot, depending on the recording. This wasn't a problem in my room, which is very large, and has a carpeted floor that absorbs some of the highs. What I experienced with the S5s, even when listening on the tweeter axes, was a clean, thoroughly extended top end not at all unlike the XO Cericas', which was also prominent. In a room more reflective than mine, the S5's lively top end might have to be compensated for with speaker placement (less toe-in, meaning listening farther off the tweeter axis), and/or absorptive materials.

The S5's bass had the same clarity and definition as the mids and highs, and was really impressive to hear. My first "Oh wow!" moment with the S5's bass came as I (along with 90% of North America) watched the final episodes of *Breaking Bad*. The deep-bass tones under the opening credits were rendered with such awesome depth and definition that I couldn't help but sit up and take notice. And "Mining for Gold" and "Misguided Angel," from the Cowboy Junkies' *The Trinity Session* (16/44.1 FLAC, RCA), revealed bass depth that plummeted toward 20Hz with spellbinding control.



That said, while the S5 could reach deep while remaining incredibly tight, it never sounded bass-heavy. In fact, compared to my Revel Ultima Salon2s and most other big speakers I've had in here for review -- including the Polymer Audio Research MKS (\$42,000/pair), which I'm reviewing next -- the S5's upper bass, while more prominent than the V2's, was still a touch subdued. The tightness and impact in that region were there, just down a touch in level. As a result, the S5's bass was never overpowering. However, there were times when I *did*

want the greater upper-bass heft that I'm used to, which adds weight and grandeur. I compensated as I had with Tannoy's DC10As (\$16,500/pair), which I've just reviewed, and which exhibited a similar quality: I pushed the S5s closer to the front wall, to get a little more boundary reinforcement for the low end. Everything fell into place and, from top to bottom, the S5s sounded nothing short of spectacular.

So it was no surprise that coupling the S5's inherent tightness and control in the low end with proper setup resulted in bass drums sounding punchy, tight, and supercontrolled, even when I strapped the big amps to the speakers and put the volume levels way, way up -- they stayed startlingly clean. What's more, the S5's reproduction of piano ranked among the best I've heard -- even better than the Tannoy DC10A's, which impressed me in precisely that regard -- because the Magico's sound remained clean and clear whether I was playing them very quietly or incredibly loudly. For instance, Ola Gjeilo's piano in "The Line" and "Michelle," from his extremely well-recorded *Stone Rose* (16/44.1 FLAC, 2L), thundered into my room and remained thoroughly composed through the S5s, even when I played them at levels far louder than I suspect he was playing when he recorded them. That was my second "Oh wow!" moment -- most speakers just break up and distort when you abuse them as I did. But through the S5, everything from the deepest bass to the highest highs stayed remarkably clear. The only other speaker with which I've experienced those kinds of output levels with that kind of composure is Vivid Audio's Giya G2 -- which costs \$50,000/pair.

Conclusions

While I'd prefer a speaker that's more stylish in appearance, such as Magico's own Q-series models, I can't quibble about the S5's build quality -- it's heavy, dense, and made with exacting precision. Overall, the S5 is so impressive that, when you see how well it's built and what it's made of, you immediately understand why it weighs and costs what it does. Also noteworthy are the color and finish options, which many customers will prefer to the limited palette available with Magico's Q models.

But in terms of what counts most -- the sound -- the S5's resolution is superb, it's about as neutral as a speaker can be, and it can go extraordinarily low in the bass for a sealed-box design. Provided the S5s are set up properly, I can't imagine *anyone* thinking they'll need to add a subwoofer.

For those who are shopping for speakers in this price range and who value strict neutrality, high definition, prodigious output capability, awe-inspiring build quality, and don't mind a pair of speakers that weigh 195 pounds each, the Magico S5 is likely the best available, and among a handful of great-sounding speakers at *any* price.

... *Doug Schneider*

das@soundstagenetwork.com

Associated Equipment

- **Loudspeakers** -- Polymer Audio Research MKS, Revel Ultima Salon2, Aurelia XO Cerica, Tannoy Definition DC10A
- **Amplifiers** -- Simaudio Moon Evolution 870A, Anthem Statement M1, Ayre Acoustics VX-5
- **Preamplifiers** -- EMM Labs PRE2-SE, Simaudio Moon Evolution 740P
- **Digital-to-analog converters** -- Meitner Audio MA-1, EMM Labs DAC2X
- **Computer** -- Samsung laptop running Windows 7 and JRiver Media Center 18
- **Digital interconnect** -- AudioQuest Carbon

- **Analog interconnects** -- Crystal Cable CrystalConnect Standard Diamond
- **Speaker cables** -- Siltech Classic Anniversary 330L

Magico S5 Loudspeakers

Price: \$29,500-\$32,500 USD per pair.

Warranty: Five years parts and labor.

Magico LLC

3170 Corporate Place, Hayward, CA 94545-3916

Phone: (510) 649-9700 Website: www.magico.net
