

JOHN ATKINSON

Göbel High End Divin Marquis

LOUDSPEAKER

Ithough it was founded by ex-Siemens loudspeaker engineer Oliver Göbel in 2003, I am embarrassed to admit that I had never heard of Göbel High End until I visited the room hosted by Florida retailer Bending Wave at the 2019 AXPONA.¹ There, I listened to the German manufacturer's ginormous \$220,000/pair Divin Noblesse loudspeakers, which were making their US debut. I was impressed by what I heard. I was interested, therefore, to learn that Göbel was introducing a smaller Divin model, the Marquis, which would not be too large for my listening room and would be priced at \$80,000/pair.

The Divin Marquis

Smaller it might be than the Noblesse, but at almost 4' tall, 16" wide, and 29" deep (with its binding posts), and with its high-gloss finish, the Divin Marquis still has a physically imposing presence. And at 330lb each, it is by far the heaviest loudspeaker I have had in my room. I asked designer Oliver Göbel via Skype why the Divin Marquis was so massive. "The front baffle is 75mm-thick polyurethane ... normally used in machinery shops for [supporting] the tools. This material is extremely rigid and has a high mass, but it also has a very nice damping behavior at certain frequencies. The rest of the [constrained-layer damped] enclosure is a melamine-bonded fiber material. It has a very high density of 1.1kg/liter (MDF has a density of 0.6kg/liter), and it's extremely rigid."

What strikes the eye first when you see the Divin Marquis is the relatively large $(3.5" \text{ tall } \times 1.5" \text{ wide})$ AMT tweeter, which is acoustically loaded with a waveguide machined from aluminum. This waveguide is more than 2" deep and has what appears to be a Tractrix flare. "It's not a *pure* Tractrix curve progression," Göbel explained. "We tried a lot with different angles and different curve progressions [to best match the dispersion of] the midrange driver." The tweeter is sourced from Mundorf but is modified extensively for use in the Marquis to allow the crossover frequency to be set at a relatively low 1.6kHz.

Mounted below the tweeter is a fairly large, 8" midrange unit with a copper-coated aluminum voice-coil wound on a glass-fiber former and powered by a neodymium magnet. Oliver Göbel said that this is the key driver in the Divin line: "It was developed and enhanced based on our bendingwave technology and knowledge in order to better control resonances. ... It has a special cone geometry and dust cap, a special surround, special coatings on the membrane and surround/spiders, specific glues."

The midrange unit has a shallow, flared waveguide and is loaded with a subenclosure that has nonparallel walls to minimize air-space resonances. The driver's cone is made from paper impregnated with Kevlar fibers, with multiple surface treatment on both the front and back. It is terminated with a corrugated surround rather than the usual half-roll rubber type.

The 12["] long-throw woofer takes over below 140Hz. It uses a treated-paper cone impregnated with carbon fiber and also uses a corrugated surround. I asked Göbel why he had chosen this kind of surround. "With the right coatings, the lossless behavior is much better for this kind of surround," he responded. "Normally, the disadvantage of this surround is that you have resonances, especially for the midrange driver." (Such resonances are due to the reflection from the surround of the wave traveling through the cone,

1 See stereophile.com/content/bending-wave-ch-precision-goebel-techdas.

SPECIFICATIONS

Description Three-way, reflex-loaded, floorstanding loudspeaker. Drive-units: 3.5" × 1.5" AMT tweeter with aluminum, modified-Tractrix-curve waveguide, 8" (200mm) doped paper/ Kevlar-fiber-cone midrange unit, 12" (300mm) doped paper/carbon-fiber-cone woofer. Crossover frequencies: 140Hz, 1.6kHz. Frequency response: 21Hz-28kHz, -3dB. Nomi-

nal impedance: 4 ohms. Minimum impedance: 3.4 ohms at 95Hz. Sensitivity: 92dB/W/m. Power handling: not specified. **Dimensions** 46.5" (1180mm) H \times 16.15" (410mm) W \times 28.35" (720mm) D. Weight: 330lb (150kg) each; 396lb (180kg) each in flight case. **Finish** Piano black lacquer, aluminum parts in black, "ultra-matt, soft touch" finish with natural aluminum, brushed-silver highlights. "Any finish possible on customer request!" Serial number of review samples DMQ02003M31L & '32R. "Made in Germany." Price \$80,000/pair in standard finish. Approximate number of dealers: one at the time of writing. (North American distribution plans were interrupted by the COVID-19 pandemic.) Warranty: 5 years parts and labor.

lanufacturer

Göbel Audio GmbH, Schabweg 4a, 82239 Alling, Germany. Tel: +49 (0) 8141 2255887. Web: goebel-highend.de. US distributor: Bending Wave USA, 10404 West State Rd. 84, Suite 101, Davie, FL 33324. Tel: (954) 716-7407. Web: bendingwaveusa.com.



due to the mechanical impedance mismatch.) "We solved this with coatings on the surround [to get] a progressive damping behavior."

The woofer is loaded with four triangular ports symmetrically placed around its circumference. "We put a lot of work into our bass-reflex alignment of the bass enclosure," Göbel explained. "We came up with a symmetrical arrangement of the bass reflex ports and a symmetrical internal enclosure design ... in order to provide a symmetrical air load on the back of the [woofer cone, which] prevents the membrane from wobbling." He went on to explain that he was not a fan of using a lot of damping material in the enclosure. Instead, he uses an internal Helmholz resonator, heavily stuffed with damping material to control the first standing wave in the woofer subenclosure.



MEASUREMENTS

used DRA Labs' MLSSA system and a calibrated DPA 4006 microphone to measure the Göbel Divin Marquis's frequency response in the farfield, and an Earthworks QTC-40 mike for the nearfield and in-room responses. Usually, I measure loudspeakers in our backyard, weather permitting, or in our living room with the furniture pushed to the sides. This eliminates or moves back in time the reflections of the speaker's output. However, as this 330lb loudspeaker was too massive for me to move outside, I had to do the quasi-anechoic measurements in my listening room. I slid one of the speakers forward so that it was aimed across the room's diagonal and was as distant as possible from the nearest sidewall. However, the proximity of room boundaries, the floor in particular, meant that even though I measured the Göbel's quasi-anechoic farfield behavior at 1m rather than my usual 50", I still had to aggressively window the time-domain data. This reduces the measurements' resolution

in the midrange.

Göbel specifies the Divin Marquis's sensitivity as 92dB/W/m; my estimate was a little lower, at a still-high 89.5dB(B)/2.83V/m. The Divin Marguis's impedance is specified as 4 ohms with a minimum value of 3.4 ohms at 95Hz. The impedance magnitude (fig.1, solid trace) remains between 4 and 6 ohms for almost the entire audioband, with a minimum value of 2.9 ohms between 83Hz and 99Hz. The electrical phase angle (dashed trace) is generally low, but there is also a current-hungry combination of 5 ohms and a phase angle of -45° at 26Hz. I used the formula in a 1994 JAES paper by Eric Benjamin to calculate what UK writer Keith Howard has called the "equivalent peak dissipation resistance" (EPDR).¹ The Divin Marquis has minimum EPDRs of 1.77 ohms at 25Hz and 1.53 ohms between 53Hz and 57Hz. Though the EPDR is close to 4 ohms in the midrange and treble, this Göbel loudspeaker will work best with amplifiers that are comfort-

0.00 0.00 12.00 0.00 15.00 10.00

Fig.2 Göbel Divin Marquis, cumulative spectraldecay plot calculated from output of accelerometer fastened to center of top panel close to rear (MLS driving voltage to speaker, 7.55V; measurement bandwidth, 2kH2). able driving loads below 4 ohms.

The Divin Marquis seemed extremely inert to the "knuckle rap" test. When I investigated the enclosure's vibrational behavior with a plastic-tape accelerometer, the only resonant modes I found were extremely low in level. Fig.2 shows the only one I found on the top panel, at 602Hz. Any modes on the side panels were even lower in level.

The saddle centered at 25Hz in the impedance magnitude trace implies that this is the tuning frequency of the four ports, and the resultant minimummotion notch in the woofer's nearfield output (fig.3, blue trace) lies at that frequency. The nearfield response of the ports (red trace) peaks between 20Hz and 60Hz, though I suspect that the measured output is contaminated

1 EPDR is the resistive load that gives rise to the same peak dissipation in an amplifier's output devices as the loudspeaker. See "Audio Power Amplifiers for Loudspeaker Loads," JAES, Vol.42 No.9, September 1994, and stereophile.com/ reference/707heavy/index.html.



Fig.3 Göbel Divin Marquis, anechoic response on tweeter axis at 1m, averaged across a 30° horizontal window and corrected for microphone response with the nearfield responses of the midrange unit (green), woofer (blue), and ports (red), respectively plotted below 300Hz, 1kHz, and 600Hz.



Stereophile Gobel Divin Marquis Impedance (ohms)

& Phase (deg) vs Frequency (Hz)

6.000

0.0

Fig.1 Göbel Divin Marquis, electrical impedance (solid) and phase (dashed) (2 ohms/vertical div.).

-45.0

-90.0



The Helmholtz resonator is coupled to the internal volume with a 3cm-thick layer of ceramic foam—"this tightens up the bass."

All three drive-units are made exclusively for Göbel

High End. The crossover uses high-quality parts from Mundorf and Duelund, with multiple in-house, epoxyresin vacuum impregnation steps, and is mounted in its own sealed subenclosure. This is sealed with epoxy resin

measurements, continued

by some crosstalk from the woofer. The ports' upper-frequency rolloff is clean overall, though two low-level peaks are visible between 400Hz and 600Hz. These peaks are also present in the woofer's high-frequency rolloff, and I could just hear them with the noiselike MLSSA signal when I drove the woofer and ports by themselves. There is the usual upper-bass boost in both the woofer and port outputs in fig.3, which are due to the nearfield measurement technique, which assumes the baffle extends to infinity in both lateral and vertical planes.

The woofer crosses over to the midrange unit (fig.3, green trace) at the specified 140Hz; the farfield response of the midrange unit and tweeter, averaged across a 30° horizontal window (fig.3, black trace above 300Hz), is impressively even up to the top of the audioband. A small suckout is visible between 800Hz and 1.2kHz, as well as some small ripples in the response

higher in frequency. This implies interference between the midrange unit's output and the reflections of its output. (The woofer was not connected for this measurement.) The geometry of the measurement setup meant that the reflection of the midrange driver's output from the floor—the closest boundary—arrived at the microphone approximately 3ms after the direct sound. The suckout must therefore be due to a reflection occurring earlier in time, perhaps from the edges of the wide baffle. But, given the evenness of the farfield response, this is probably of academic interest only.

Fig.4 shows the Göbel's horizontal dispersion, normalized to the response on the tweeter axis, which thus appears as a straight line. The geometrical limitations of my listening room meant that I could only plot the Divin Marquis's off-axis responses to 45° instead of my usual 90°. The hornloaded tweeter offers wide dispersion up to 10kHz, and the contour lines in this graph below that frequency are relatively evenly spaced, which correlates with the stable stereo imaging I noted in my auditioning. In the vertical plane (fig.5), with the off-axis response again normalized to the tweeter-axis response, the Divin Marquis's balance doesn't change appreciably up to 10° above and below the axis. A suckout develops 15° above the tweeter axis at the upper crossover frequency of 1.6kHz, but this will only be heard by a listener standing close to the speaker.

Fig.6 shows the Divin Marquises' spatially averaged response in my room when they were driven by the Parasound amplifiers with AudioQuest cables. It is generated by averaging 20 V_6 -octave-smoothed spectra, taken for the left and right speakers individually using a 96kHz sample rate, in a vertical rectangular grid 36" wide \times 18" high and centered on the positions of my ears. This tends to average out the



Fig.4 Göbel Divin Marquis, lateral response family at 1m, normalized to response on tweeter axis, from back to front: differences in response 45–5° off axis, reference response, differences in response 5–45° off axis.



Fig.5 Göbel Divin Marquis, vertical response family at 1m, normalized to response on tweeter axis, from back to front: differences in response 15-5° above axis, reference response, differences in response 5-10° below axis.



Fig.6 Göbel Divin Marquis, spatially averaged, ¹/₆-octave response in JA's listening room.

and mounted to the enclosure on decoupling "silent blocks." The internal wiring is based on Göbel High End's Lacorde Statement cables, and electrical connection is via two pairs of WBT binding posts. (A single-wired version with one pair of binding posts is also available.)

Setup

Bending Wave USA's Elliot Goldman assures me that he will require Göbel dealers to commit to delivering and setting up the speakers in order to be able to sell them. This was not possible with the review samples, however, as we were still in Phase One of New York's COVID-19 lockdown. I was on my own.



measurements, continued

peaks and dips below 400Hz that are due to the room's resonant modes.² Even so, the Göbels still excite the lowest-frequency modes in my room, and a slight excess of energy can be seen between 500Hz and 800Hz. The in-room response is otherwise superbly even from the midrange through the mid-treble and smoothly slopes down above 6kHz, this due to the increasing absorption of the room's furnishings in this region. While performing these measurements, I noticed both that the responses at the listening position of the two Divin Marquises were closely matched in the midrange and treble and that the horn-loaded tweeter did indeed offer wide dispersion.

The Göbels' in-room response is shown as the red trace in fig.7 but is overlaid with the spatially averaged responses of the two pairs of speakers that had preceded them in my room: the GoldenEar BRXes that I reviewed in September 2020 (blue trace) and the Vimberg Minos that I reviewed in April 2020³ (green trace). While the small BRXes have a little more upper-bass energy than the two floorstanding speakers, their low frequencies roll off much faster, of course. The GoldenEars also have a similar peak in the upper midrange to the Divin Marquises, and both the BRXes and Minos have a little more mid-treble energy than the Göbels. Compared with the Divin Marquises, the GoldenEars have a little too much top-octave output in-room, the Vimbergs not quite enough.

In the time domain, the Divin Marquis's step response on the tweeter axis (fig.8) indicates that the tweeter and midrange unit are connected in positive acoustic polarity. The decay of the tweeter's step smoothly blends with the positive-going start of the midrange unit's step, which implies optimal crossover implementation. The woofer is connected in inverted acoustic polarity. Its output arrives at the microphone after that of the midrange unit, but the smooth blend of its step with the decay of the midrange unit's step is disturbed by a reflection 1.5ms after the midrange unit's step. As above, this reflection is too early to be due to a floor bounce, but because of the presence of this reflection, interpreting the Göbel Divin Marquis's cumulative spectral-decay plot (fig.9) is difficult. However, this graph is relatively clean in the region covered by the tweeter.

The late Spencer Hughes, founder of Spendor, used to say that "big speakers have big problems." The Göbel Divin Marquis may be one of the biggest loudspeakers I have had in my listening room, but its measured performance reveals that if it has any problems, they are minimal.—John Atkinson

2 See stereophile.com/content/measuring-loudspeakers-part-three-page-8.

3 See stereophile.com/content/vimberg-minoloudspeaker.



Builden and the second second

Fig.7 Göbel Divin Marquis, spatially averaged, γ_6 -octave response in JA's listening room (red), of the GoldenEar BRX (blue), and of the Vimberg Mino (green).



Time in ms

Data in Volts

-0.5

Fig.9 Göbel Divin Marquis, cumulative spectral-decay plot on tweeter axis at 50" (0.15ms risetime).

Once the Divin Marquises had cleared customs at Newark Liberty airport, I reminded the shipping company that the driver of the delivery truck needed to have a pallet jack. He did, thank goodness, but once he had deposited the pallet with two huge flight cases strapped to it, the total weighing 836lb, outside the vestibule to my listening room, I was stuck. I couldn't even move one of the flight cases onto the wheeled dolly I had ready for it. Fortunately, my youngest niece's husband could come over later that afternoon, and with both of us suitably masked, we managed to get each flight case through the vestibule and down the two steps to the listening room. And there I blessed Oliver Göbel both for the ingenuity of his packaging and for having emailed me a detailed pdf on how to unpack the speakers.

With a flight case lying horizontally on its feet, we could remove the end cap. Carefully rotating the case upright onto its now-exposed end meant that the speaker inside was now resting on *its* feet. The remaining two halves of the case could then be unfastened and removed. Included in the case were four Delrin coasters; placing these

under the speaker's four feet allowed us to slide the speaker close to where it would be used. We repeated the procedure for the second speaker, my nephew-in-law went home for dinner, and I decided to wait until the next day to start laboriously but carefully sliding the speakers around to optimize their positions.

I had emailed Oliver Göbel a diagram of my room, and he was confident the Divin Marquises would work well in it. I ended up with the woofer of the left-hand Marquis 37" from the LPs that line the nearest sidewall, the right-hand loudspeaker's woofer 34" from the bookshelves that line *its* sidewall. The woofers were 88" from the wall behind them. This was a little farther out than I wanted, but I couldn't place the speakers any closer to the wall due to the two stairs and raised platform behind the right-hand Marquis that led to the vestibule. The speakers were 120" from the position of my head. Once the speakers were optimally placed, I removed the Delrin coasters and the plastic strips that locked the feet's suspensions.

Listening

I started my serious listening with the speakers driven by the Parasound Halo JC 1+ monoblocks that I reviewed in the June 2020 issue.² The source was first a PS Audio Direct-Stream processor, then the latest version of MBL's N31 CD player/DAC, both fed audio data over my network from my Roon Nucleus+ server and controlled with the Roon app.



There was no indication that these are big loudspeakers with *big* woofers.

The review samples had two sets of binding posts to allow biwiring, but I singlewired the speakers with my regular AudioQuest K2 cables, using jumpers made from short lengths of Göbel's Lacorde Statement cable to connect the woofer and midrange/tweeter binding posts.

A common mistake made by audiophiles is to choose loudspeakers that are too large for their room. In a small room, the low-frequency room gain with a big speaker can exaggerate the bass to the point that the music is messed with. (I first experienced this phenomenon when I visited the founder and editor of *The Absolute Sound*, Harry Pearson, in 1985. Harry was using the enormous, floor-to-ceiling Infinity IRS IIIs, and while his listening room was not that small, the bass produced by the twin IRS subwoofer towers made me feel that my chest was being crushed.)

Fortunately, while its lows were indeed weighty, the Divin Marquis passed this test. It reproduced the $\frac{1}{3}$ -octave warble tones on my *Editor's Choice* CD (Stereophile STPH016-2) with good weight down to the 25Hz band, though the 63Hz, 50Hz, and 31.5Hz warbles were somewhat exaggerated by the lowest-frequency modes in my room. The 20Hz band was only just audible at my usual listening levels, with no chuffing coming from the ports, but this is definitely a full-range loudspeaker. The halfstep-spaced low-frequency tonebursts on *Editor's Choice* spoke cleanly down to 32Hz, with only a slight emphasis of any of the tones with frequencies below 80Hz. When I listened to the speakers' panels with a stethoscope while these tones played, I couldn't hear any vibrational modes on any of the panels other than the name plate on the speaker's

2 Vol.43 No. 6; see stereophile.com/content/parasound-halo-jc-1-monoblock-power-amplifier-0.

rear; despite its size, the Marquis's enclosure is effectively nonresonant.

After the minimonitors that I usually listen to, the support given recordings by the Divin Marquises' extended low frequencies was a delight throughout my auditioning. The deep organ notes at the climax of Philip Ledger's performance of Franck's Chorale No.3 in A minor (24/192 AIFF needle drop from Organ Music from King's College, HMV HQS 1356) were reproduced with seemingly limitless power. And although the speakers' lows sounded weighty, this was not achieved at the expense of definition. My Fender bass guitar on the channel identification and phase tracks on *Editor's Choice* sounded as well-defined as I have heard, as did the dropped-octave synth bass notes on "The Trader," from the Beach Boys' Holland (24/192 AIFF needle drop from Brother/Reprise K54008). The sampled kickdrum in "Fit Song," from Cornelius's Sensuous: la musique de 21° siècle (ALAC files ripped from CD, Warner Japan EVE016) had both impact and weight.

Higher in frequency, the dual-mono pink noise track on the *Editor's Choice* CD sounded too dull if I slumped in my seat but was uncolored and smooth when I sat upright so that my ears were level with the centers of the Divin Marquises' tweeters. I did feel that there was a slight emphasis at the very top of the midrange but assumed that this would disappear as the speakers continued playing. The central image of the noise signal was stable, with no splashing to the sides at some frequencies, but not quite as narrow as I experienced with the GoldenEar minimonitors I reviewed in September.

After a week's listening, with the speakers fully broken in, their balance still seemed a little forward in the upper midrange. As I was already using Göbel's Lacorde Statement jumpers to single-wire the Divin Marquises, I replaced the AudioQuest K2s with 3m lengths of Lacorde Statement cables. The midrange-to-treble transition now sounded even, but the new cables unmasked a touch of mid-treble emphasis. Replacing the Parasounds with Lamm M1.2 Reference monoblocks,³ used with their output-stage bias set to "1–6 ohms," resolved that issue, but the top octaves now sounded a touch too sweet. I went back and forth between the two pairs of amplifiers throughout my auditioning.

It is always easier to describe "how much" a speaker delivers than to put that into a musical context. The Göbel loudspeakers were chameleons. They sounded small when appropriate, as with Chris Thile's transcriptions for mandolin of Bach's *Sonatas and Partitas for Violin, Vol.1* (16/44.1 AIFF, Nonesuch 5353602) but massively powerful when the recording called for it, as with Joe Walsh's "Rocky Mountain Way" (24/192 AIFF needle drop from a 12" 45rpm single, ABC ABE 12002).

My ears frazzled by giving in to the temptation to play Joe Walsh as loud as the Göbels would allow without strain, I gave them a rest by cueing up Leonard Shure's performance of Schubert's Piano Sonata in B-flat, D.960 (24/96 ALAC, released on LP as Audiofon 72010). Peter McGrath recorded this performance in analog in 1982, and it has been in constant rotation since he gave me the 24/96 digital transfer a few years back. The piano's left-hand register sounded suitably majestic, its upper frequencies delicate when called for. Peter had placed his microphones relatively close to the piano; there is therefore only a slight hint of hall sound with this recording, but the Divin Marquises were sufficiently transparent to make me aware of it.

ASSOCIATED EQUIPMENT

Analog sources Linn Sondek LP12 turntable with Lingo power supply, Linn Ekos tonearm, Linn Arkiv B cartridge, Channel D Seta L phono preamplifier.

Digital sources Roon Nucleus+ file server; Ayre Acoustics C-5xe^{MP} universal player; PS Audio PerfectWave Direct-Stream D/A processor, MBL N31 CD player/DAC, Ayre Acoustics QA-9 A/D converter.

Power amplifiers Parasound Halo JC 1+ and Lamm Reference M1.2, both monoblocks.

Cables Digital: AudioQuest Vodka (Ethernet), AudioQuest Coffee (USB), DH Labs (1m, AES/EBU). Interconnect: AudioQuest Wild Blue (balanced). Speaker: AudioQuest K2, Göbel Lacorde Statement. AC: AudioQuest Dragon Source & High Current, manufacturers' own.

Accessories Target TT-5 equipment racks; Ayre Acoustics Myrtle Blocks; ASC Tube Traps, RPG Abffusor panels; AudioQuest Niagara 5000 Low-Z Power/Noise-Dissipation System (amplifiers) and AudioQuest Niagara 1000 Low-Z Power/Noise-Dissipation System (source components). AC power comes from two dedicated 20A circuits, each just 6' from breaker box.

Room 20' (left side), 25' (right side) × 16' × 8'.—John Atkinson

I returned to Chris Thile with a recommendation from Jason Victor Serinus, another album of Bach transcriptions, this time played by Thile on mandolin with Yo-Yo Ma on cello and Edgar Meyer on double bass (*Bach Trios*, 24/96 AIFF files, Nonesuch/HDTracks). I played "Wachet Auf," a work I've known inside out since playing the obbligato on violin at a school orchestra concert in the early 1960s. Thile plays the obbligato with appropriate delicacy, and Edgar Meyer plays the walking bass line *pizzicato*; the lowest notes were nicely fleshed out by the Göbels but without any boom: There was no indication that these are big loudspeakers with *big* woofers.

Bach led naturally to Beethoven, specifically a new recording of the Sixth Symphony, the "Pastoral," from the Akademie für Alte Musike Berlin led by concertmaster Bernhard Forck—no conductor! (16/44.1 FLAC, Harmonia Mundi/Tidal). As I was expecting, the thunderstorm in the fourth movement was reproduced in full measure by the Divin Marquises. But it was the unexpectedly delicate way in which these speakers got right the country-dance character of the third movement, the bassoon punctuations in particular, that impressed. And the glorious restatement of that I-vi-IV-V chord sequence—so overused since Beethoven's time—at the end of the finale rocked my world on the Göbel speakers.

Conclusion

Full range, low distortion, no coloration: The thoroughbred performance of the Divin Marquis confirms that Göbel High End presents serious competition to the Wilsons, Magicos, Rockports, Tidals, von Schweikerts, and YG Acousticses of the cost-no-object loudspeaker world. I am going to miss the Göbels when they go back to the distributor, and I am *not* looking forward to packing them into the flight cases and maneuvering them up the steps to my vestibule.

3 See stereophile.com/content/lamm-m12-reference-monoblock-power-amplifier.