

ANTHONY H. CORDESMAN

Vienna Mahler Speaker



Photos: Len LaGruta

What strikes me most about the Mahler is the way it makes music more fun to listen to than many speakers that are technically more accurate. I don't mean that it's highly colored: It has excellent transparency and one of the most accurate and detailed soundstages of any speaker around. But its tuning gives it a rich, warm sound (with a touch too much bass) and a dip in the upper midrange at precisely the point where

far too many recordings and solid-state components add more than a little glare.

Listening to the Mahler reminds me in many ways of hearing concerts in Vienna. On visit after visit, I have been struck by the pleasure I get from listening to music in that city's older, warmer concert halls and to hearing performers who care about timbre as well as detail. Far too many of my listening experiences in the United States and Asia have been in modern, bright halls, hearing ensembles and orchestras that

seemed determined to emphasize upper-midrange information at the cost of music's richness and soul.

Recommending a speaker that has much the same richness and warmth as a great concert hall may sound mildly heretical. Let me remind you, however, that the purpose of audio equipment isn't to provide the best measured performance but the most convincing illusion that you're actually listening to a musical performance—and to do so, usually, in a room where no one would normally perform. If you don't understand that the overall illusion is more important than each component's technical performance, you can wind up with an expensive system of top-quality individual components that never quite achieve the synergy they need to sound real. All speakers suffer to some degree from sonic trade-offs; the Mahler's advantage is that with the right components its trade-offs can bring you something very close to the sound of a live concert.

The Mahler is simply styled, and its narrow front minimizes its visual impact. The cabinet front is raked back, which provides some degree of time compensation and helps avoid the "upright coffin" look of most floor-standing speakers. The veneers (beech or rosewood) and finish are excellent, and the overall woodworking is furniture-grade—which, at this speaker's price of \$9,800 per pair, it should be. There are also sophisticated touches that you can't see, such as separate enclosures for the individual drivers, excellent internal bracing, and front and rear baffles that are about 1½ inch thick for extra rigidity.

The front-panel drivers, a 1.2-inch silicone-layered silk-dome tweeter and two 7-inch cone midranges with carbon-fiber-

VIENNA ACOUSTICS

Rated Frequency Range: 22 Hz to 25 kHz.

Dimensions: 51¼ in. H x 8½ in. W x 18½ in. D (130 cm x 21.8 cm x 46.5 cm).

Weight: 150 lbs. (68.2 kg) each.

Price: \$9,800 per pair.

Company Address: c/o Sumiko, 2431 Fifth St., Berkeley, Cal. 94710; 510/843-4500.

filled paper diaphragms, are made by ScanSpeak. The lowest frequencies are handled by two side-firing 10-inch Eton woofers with honeycomb cones. The first-order (6-dB/octave) crossover contains high-quality resistors, capacitors, and air-core coils. Small switches on either side of the speaker terminals can cut the treble slightly or boost the bass a touch if needed to suit your room.

The Mahler's frequency range is specified as 22 Hz to 25 kHz and its sensitivity as 90 dB. Although its impedance is said to average 6 ohms, the measurements that accompanied my review samples indicate that its impedance is relatively low below 100 Hz. Further, my listening tests suggest that it's a bit of a difficult load.

Set up properly—that is, spaced farther apart than most speakers and angled toward the listener—the Mahlers had truly excellent imaging and depth. They sounded coherent, detailed, and natural. Overall transparency was equally good, and the soundstage was unusually realistic and musically natural.

Even at levels well in excess of 100 dB (about as loud as I care to listen), the Mahler preserved this excellent soundstage and accurately resolved detail without audible distortion. It did equally well in soft passages, unlike those speakers that seem to come alive only at a relatively high volume. Timbre and sound character were unaffected by volume, and the speaker reproduced subtle dynamics exceptionally well. At all practical listening levels, it sounded live and articulate.

The Mahler had no vertical dispersion problems at normal listening distances, and horizontal dispersion was wide enough to create a relatively large listening area without sacrificing detail or focus. The tweeter and midrange drivers are high enough to prevent floor bounce and provide a natural listening angle with a slightly elevated soundstage. In short, I found the Mahler easy to listen to in every respect.

The Mahler's timbre is what leads me to describe it as being more "musical" than technically accurate. The upper octaves were very flat and extended, with a great deal of smooth energy and no feeling of edginess. The midrange was exceptionally

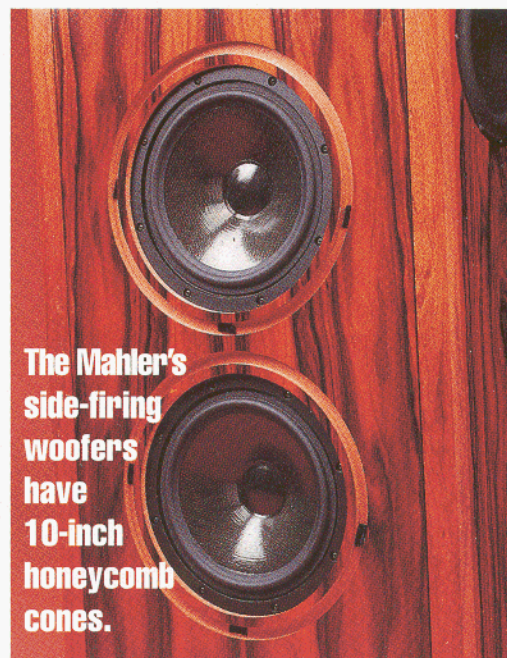
warm and sweet, and the upper midrange was a bit soft where most contemporary speakers tend to be a bit dry and hard. The middle and upper bass were also a bit warm; no matter how I placed the Mahlers, there was always a bit of a rise from about 100 Hz down to around 50 Hz. Low bass energy was very good. The bass rolled off gently below 45 Hz, yet there was still some useful output down below 25 Hz. The bass was more powerful than taut, however, and sacrificed a little detail to gain unusual drama and impact.

Odd as it may seem to say about a speaker, the Mahler's frequency response, timbre, and dynamics were much the same as a classic tube power amplifier's, with all the strengths and weaknesses that implies. Like the best tube amps, the Mahler could provide a great deal of upper-octave information without edginess or hardness. Throughout my long auditioning period, it neither softened nor hardened the upper octaves. Cymbals, female voices, harpsichords, flutes, and upper strings were consistently as musical and realistic as my

The Mahler comes surprisingly close to putting you in the best seat in Vienna's best hall.

recordings permitted. Vienna Acoustics and its U.S. importer, Sumiko, credit this mix of sweetness and detail to the specially modified silk-dome tweeter and to the fact that the tweeter is completely decoupled from the cabinet, secured only by silicone gel. These factors may account for treble detail that was close to what I've heard from some ribbon tweeters, the life and focus I expect from the best dynamic tweeters, and the warm, effortless highs of the best tube amps.

Although the two 7-inch drivers can each handle a great deal of power with very little apparent distortion, they perform different roles. One is tasked with covering nearly six octaves, from 70 Hz to 4 kHz. The other driver's range is narrower; it also begins at



The Mahler's side-firing woofers have 10-inch honeycomb cones.

70 Hz but has a gradually rolled off high end. At the bottom of their range, these drivers reinforce each other; as frequency increases, however, the total driven surface area gradually decreases to ensure uniform dispersion through the middle frequencies.

The Mahler's midrange was very clean, and its high quality seemed to be a key reason for the speaker's excellent imaging and power handling. The use of two midrange drivers may have contributed to a dip in the upper midrange that imparted the slightly warm coloration I mentioned earlier, but that coloration was euphonic. It gave the Mahler exceptionally realistic timbre on violin and cello, lent woodwinds and piano a warmth they lack through far too many competing speakers, and contributed to a more natural musical balance in baritone, tenor, and most female voices. To harken back to my Viennese listening experiences, I was struck by the way the Mahler's midrange gave me the sound I hear in older and warmer halls and the timbre I hear in live music. This speaker may be a bit colored, but it corrects for the dryness and close-miked character of many CDs (and LPs made from digital tapes, for that matter).

The Mahler's woofers, which handle the range from 70 Hz down to 22 Hz, have honeycomb diaphragms that Vienna Acoustics claims are 70 times more rigid, yet 30% lighter, than conventional cones. Each of

REVIEWS

the two woofers operates in a complex, rear-vented subcabinet whose walls are all nonparallel. The result is considerably deeper, more powerful bass than the Mahler's size might suggest.

I found that the Mahlers needed an amp whose power in the lowest frequencies was slightly reduced or, if it had deep bass extension, one with every bit of damping and control an amplifier can provide. Deep bass, for example, was much tighter and slightly deeper with a Krell 300-watt power amplifier than with the normally superb Pass Labs X600. And while I normally find differences between speaker cables to be fairly subtle, using Kimber Bifocal and Select cables with the Mahlers gave me considerably better overall bass response and control than the other cables I tried (though Dunlavy and Wireworld cables seemed to allow just a touch more deep-bass extension). Such sensitivity to amps and cables is scarcely unusual in speakers in this price range, but it does mean you will need to choose these components rather carefully.

The deeper and more powerful the bass response, the more sensitive a speaker is to the listening room and its placement in that room. The Mahler's low end was no more sensitive to placement than that of any other speaker with good bass—except below 50 or 60 Hz, where it was unusually touchy. I could never get the bass to sound quite right, in spite of playing around with different locations and rooms. Nevertheless, the bass was very good in most respects. It was very dynamic and had the drive and power of a live performance—something many high-priced monitors lack. The deep bass could really rock. If anything, there was a bit too much low end: Bass strings had just a bit of overhang, low organ notes sometimes had more power than nuance, and I could never get the tightness and transient speed I expected from bass drums. My listening panel split on the Mahler's bass performance. Some members found the Mahler's life and power in the deep bass preferable to the detail and control they

heard from other speakers; other members did not. Personally, I would have opted for less energy and more tightness and control. Although the coloration in the midrange provided a more realistic illusion with most recordings, I did not find the Mahler's deep bass conveyed such realism.

Vienna Acoustics' importer feels that this coloration may be caused by interaction between the Mahlers and my particular listening rooms. This may well be true. Certainly, room interaction is always a major problem in evaluating a speaker's bass performance, whether you're writing a review or hearing a dealer demonstration. Below 150 Hz, there is no such thing as a typical or neutral

listening room, and performance below 80 Hz will always be highly room-dependent.

The Vienna Acoustics Mahler is not a perfect speaker, but it is a damn good one and is exceptionally musical. It provides a high level of performance from an enclosure that's not so massive as to visually dominate a room or require that you be a weightlifter to move it. I would strongly advise a listen, particularly if you are tired of sound that tends to the dry, bright, and hard. The Mahler may not take you to the best seat in the best concert hall in Vienna, but it will take you surprisingly close. **A**



TEST RESULTS

T rue Technologies' measurements of the Vienna Mahler's on-axis frequency response (Fig. 1), with and without its grille, were gathered from near-field data and spliced with ground-plane data taken at 2 meters and normalized to 1 watt/1 meter. Apart from a moderate 3-dB hump in bass output between 80 and 110 Hz, the curve is fairly smooth from 40 Hz to 2.5 kHz—albeit with a gentle downward tilt toward the midrange. An abrupt 7-dB notch is evident between 3 and 4.5 kHz. This dip's severity is lessened a few dB by removing the Mahler's grille; still, the notch remains the most visible anomaly in the on-axis curves and will

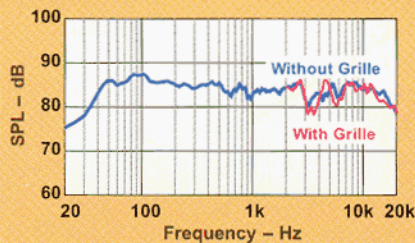


Fig. 1—On-axis frequency response.

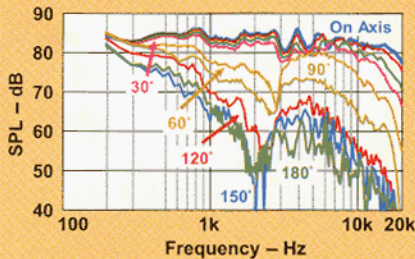


Fig. 2—Horizontal off-axis frequency responses.

likely affect the speaker's sound. Between 5 and 7 kHz, some irregularity is apparent. The highs then smooth out to 14 kHz, where they begin to gradually roll off. By 20 kHz, high-frequency output is 5 dB down from midrange levels.

Off axis, the Mahler's frequency response holds up very nicely to the left and right (Fig. 2). This is true out to fairly extreme angles, which should help the speaker project a wide and three-dimensional soundstage. The response gully at 3 kHz, so apparent in the on-axis response, is also present in the off-axis curves, which suggests it will be a significant part of the speaker's character. In the vertical off-axis responses (Fig. 3), things ain't so pretty—there are, for example, several dramatic dips between 1 and 3 kHz. But no matter: It is a speaker's horizontal dispersion, not its vertical, that contributes to early sidewall reflections in a listening room. These reflections signal our ear/brain mechanism that a speaker is spacious and open-sounding.

The Mahler's impedance (Fig. 4) hovers in the 3-ohm region from the deep bass to almost 100 Hz, which indicates you should use a stable amp with lots of current capability at low impedances to drive these Vienna Acoustics speakers. Above 200 Hz, the impedance never dips below 6 ohms and remains higher than that for much of the spectrum.

Figure 5 shows harmonic distortion generated when the Mahlers were driven to an output of 100 dB SPL. The advantage of using multiple drivers to share the

acoustical load is apparent. All harmonic distortion components are 1% or considerably less; indeed, the fourth and fifth harmonics are 0.1% or less, except in the deep bass. The Vienna Acoustics Mahlers should be capable of reproducing concert-hall dynamics unsullied by edginess or gritty distortion.—Alan Lofft

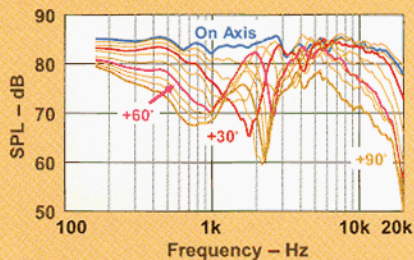


Fig. 3—Vertical off-axis frequency responses.

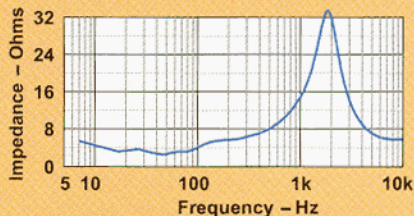


Fig. 4—Impedance magnitude.

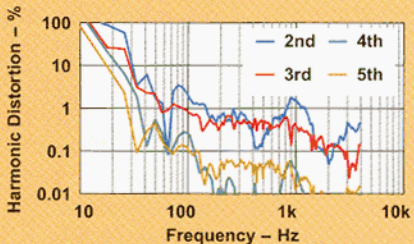


Fig. 5—Harmonic distortion.

S U M I K O

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