JULIE MULLINS

MBL 120 Radialstrahler

LOUDSPEAKER

ou never know when an idea might hit you, maybe when brushing your teeth, standing in the shower, or stirring the

Have you ever flexed a playing card (or a few) back and forth close to your ear? They generate a little sound. According to MBL company lore, that action and sound sparked the design idea for the original Radialstrahler omnidirectional driver.

Omnidirectional speakers are rare. I can think of only a few companies that make them: German Physiks. Morrison Audio. Ohm Acoustics. Duevel. MBL¹

The MBL 120's design, like the design of most other omnidirectional speakers, is visually distinctive. More than one visiting friend who saw them in their piano-black finish (with grilles on) called them "the Darth Vader speakers." With the grilles off, or in piano white, the Darth Vader effect is less pronounced. Even so, they don't look like other speakers.

They sound different, too. MBL's omnidirectional drivers—which, as the adjective suggests, send energy out into the room equally in all directions—provide an open, 3D, relaxed sound, as in a concert hall, which of course presents lots of direct and reflected sound to



your ears. As in life, the sound seems freed up, not boxed in.

If the MBL 120 were a book, it would be one that was hard to put down: I kept listening when I should have been going to bed—or finishing this review.

Design and drivers

According to some MBL history shared with me by Jeremy Bryan of MBL North America, Wolfgang Meletzky-the M in "MBL"-came up with the radial tweeter idea while playing a game of cards. He held a few cards near his ear and flexed them. He noticed the way the bending card "membrane" moved air against his ear. That action led to the patent on the radial tweeter concept, in 1979. The company's engineers, Bienecke and Lenhardt (the B and L in "MBL"), had trouble getting the concept to work reliably in the real world. Jürgen Reis,² now MBL's chief engineer and technical designer, heard the prototype at a hi-fi show in Berlin soon after he

1 The more you look, the more you find: There's also an Italian company called Alkèmia Audi-see alkemiavero.com-and a Dutch company, Veddan: veddan.com. There probably are others. Some of these designs are quite beautiful.-**Jim Austin** 2 Reis also records music (including some Concerto Köln performances), plays in a rock band, and sings in a choir.

SPECIFICATIONS

Description Three-way standmount loudspeaker with "Radialstrahler" radial carbon-fiber omnidirectional tweeter and midrange drivers and two side-firing 6.5" woofers with aluminummembrane cones in a rearported enclosure. Sensitivity: 79dB/2.83V/m into 8 ohms, 80.5dB in-room. Crossover: fourth-order Linkwitz-Riley crossing over at 600Hz and 3.5kHz and with a secondorder high-pass filter below the port-tuning frequency. Frequency response: 48Hz-15.5kHz -6 dB in-room. Nominal impedance: 4 ohms. Recommended amplifier power: 200W into 4 ohms. **Dimensions** 11.8" (300mm) W × 23.6" (600mm) H (27.4" w/grille; 47.7" on stand) × 15.3" (389mm) D. Weight: 33lb (17kg); 61.7lb (28kg) w/stand. Finishes Piano Black, Piano White, Piano Silver with chrome or gold accents on any color cabinet. Serial numbers of units reviewed 44940, 45040. Designed and built in Germany. Price \$24,900/pair; matching stands \$1,850/pair. Approximate number of US dealers: 10. Warranty: 5 years parts and labor.

Manufacture

MBL Akustikgeräte GmbH & Co. KG, Kurfürstendamm 182, D-10707 Berlin, Germany. Tel: +49 (0) 30 23005840. Web: MBL.de. US distributor: MBL North America, 217 North Seacrest Blvd. #276, Boynton Beach, FL 33425. Tel: (561) 735-9300. Web: MBL-northamerica.com. had completed his electroacoustical engineering studies. The sound wasn't good, but he believed he could make the concept viable. He got a job at MBL. In 1984, he invented the radial drivers; nothing remains from the original design. They've evolved some since—for example, the tweeter now uses Kapton—but their basic design remains the same.

The MBL 120 (\$24,900/pair) is a three-way design. The tweeter and midrange are "Radialstrahler" omnidirectional "bending mode" drivers. They're mounted atop the 120's bass-reflex cabinet. These intricate, delicate diaphragms are comprised of thin carbon-fiber strips called lamellae—the playing card-inspired part-glued by hand into bowed arcs that contract and expand. The tweeter lamellae are unidirectional and single-layer. The midranges use carbon fiber that's woven like a flattened rope, two-layer, and bidirectional. Copper-wire voice-coils wind around the bottom of each driver, and on top of the array is an enclosed magnet structure. Bass comes from a pair of side-firing, opposed 6.5" woofers with aluminum-membrane cones mounted on heavy aluminum rods in the rear-ported bass reflex cabinet; Reis says that the edge of the cone "is capped for stability." This push-push configuration causes the woofers' back waves to cancel to reduce cabinet vibration, and delivers a more homogeneous radiation pattern that better matches the midrange's and tweeter's omnidirectional radiation, Reis said in an email.

Reis shared a few of the 120's tricks for extending bass in a smallish cabinet. The 120's crossover adds a passive second-order high-pass filter below the midbass region, which "pushes the lower bass and also helps to suppress subsonic bass in order to prevent too large of a woofer excursion," Reis explained by email. "This additional high-pass filter also allows me to tune the group delay of the woofers. ... This delay helps me to make the bass more 'full' because



MEASUREMENTS

used DRA Labs' MLSSA system and a calibrated DPA 4006 microphone to measure the MBL 120's frequency response in the farfield, and an Earthworks QTC-40 mike to measure the nearfield responses. I used Dayton Audio's DATS V2 system to determine the MBL speaker's impedance.

Designer Jürgen Reis wrote in an email that the MBL 120's sensitivity on an axis level with the top of the tweeter magnet—the recommended listening axis—was 79dB/2.83V/m. Though my estimate was slightly higher than this, at 81dB(B)/2.83V/m, this is still significantly lower than average. However, as the MBL 120 is an omnidirectional loudspeaker, its in-room subjective sensitivity will be somewhat higher.

I had understood from Reis that the 120's impedance is 4 ohms. However, the solid trace in fig.1 indicates that the impedance magnitude remains between 5 and 10 ohms for almost the entire audioband. The minimum magnitude is 4 ohms between 66Hz and 74Hz, and the electrical phase angle (dashed trace) becomes increasingly capacitive below 80Hz, due to the presence of a second-order electrical high-pass filter. The "equivalent peak dissipation resistance" (EPDR)¹ is an easy-to-drive 5 ohms or higher from the upper bass to the low treble but drops to 2 ohms between 39Hz and 79Hz, with a minimum value of 1.5 ohms at 58Hz. As is often the case, this loudspeaker will work best with amplifiers that are comfortable driving 4 ohms and below.

The traces in fig.1 are free from discontinuities that would imply resonances of some kind. I investigated the enclosure's vibrational behavior with a plastic-tape accelerometer and found that all the surfaces were relatively inert. Fig.2, for example, is a cumulative spectral-decay plot calculated from the accelerometer's output when it was fastened to the center of the front baffle. While a couple of modes can be seen close to 1kHz, these are very low in level.

The impedance magnitude trace of a reflex loudspeaker usually includes

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

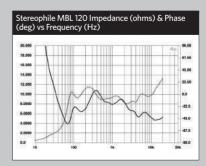


Fig.1 MBL 120, electrical impedance (solid) and phase (dashed) (2 ohms/vertical div.).

I can timewise modulate this behavior. I can also adjust the tilt of the bass to match the sound character of the midrange and tweeter."

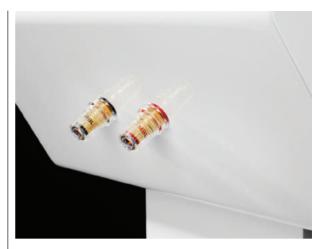
The 120 has a nominal 4-ohm impedance. The impedance curve doesn't dip lower than 3.2 ohms, Reis said in an email, and it's "mostly between 4 ohms and about 10 ohms with an average around 7 ohms," he added. "All our speakers do have load-matching circuits built in to compensate for any bigger impedance and phase variations in the main audio area."

Detachable aluminum grilles on metal frames shield the delicate tweeter and midrange drivers and keep curious hands and paws away from the conductive membranes. If you have pets or kids, you might want to leave the grilles on, but I found the sound clearer and more open without them.

Arrival and setup

A pair of 120s ships in a single wooden crate; the stands ship in a separate box. Unpacking and assembly proved easy enough, but it's advisable to have a second pair of hands to assist. The 120s aren't very heavy, at 33lb each, but because of those delicate drivers, they require careful handling. I enlisted a friend's help, and Bryan talked us through the process on a video call.

I set the 120s up according to the manual's instructions then moved them about as I listened. Experimenting with placement, I found I wanted to sit closer to them than I do to most other speakers, as if I were drawn to them magneti-



cally. My preferred setup wound up being close to an equilateral triangle, the speakers 6' 8" apart center to center and about an equal distance from my listening couch. At times, I moved the couch closer. The reason I wanted to get close, I suspect, was to get more direct sound from the speakers' blend of direct and reflected sound. MBL says the 120s must be run in for about 100 hours before they're at their best. During the pandemic, it didn't take me very many days to reach that number.

As the pandemic settled down and the vaccination rate

measurements, continued

a "saddle" that indicates the tuning frequency of the port. This is obscured in fig.1 by the behavior of the high-pass filter. The blue trace in fig.3 shows the nearfield output of the woofers on the MBL 120's side panels. That trace has a minimum-motion notch, which is when the port resonance holds the cone stationary, centered at 37Hz. The port's output (red trace) peaks higher in frequency than I was expecting, between 50Hz and 100Hz, though the upper-frequency rolloff is very clean. The presence of a high-pass filter in the woofer circuit means that the ultimate rolloff of both the woofers and port is close to 24dB/octave rather than the

usual 12dB/octave.

The black trace below 300Hz in fig.3 shows the complex sum of the nearfield woofer and port responses (the latter taking into account the fact that the port is on the back panel). The boost in the response in the upper bass, as with the woofers' output (blue trace), will be due in part to the nearfield measurement technique, which assumes that the radiators are mounted in a baffle that extends to infinity in both vertical and horizontal planes. (For reasons of consistency

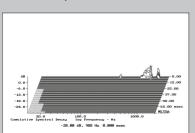


Fig.2 MBL 120, cumulative spectral-decay plot calculated from output of accelerometer fastened to center of front baffle (MLS driving voltage to speaker, 7.55V; measurement bandwidth, 2kHz).

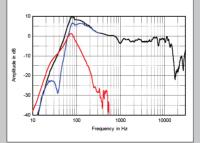


Fig.3 MBL 120, anechoic response on listening axis without grille at 50", averaged across 30° horizontal window and corrected for microphone response, with the nearfield responses of the woofers (blue) and port (red), respectively plotted below 300Hz and 550Hz. over the three decades I have been measuring loudspeakers, I don't apply a correction based on the loudspeaker's geometry to my nearfield responses.) Even so, the MBL 120's low frequencies are somewhat exaggerated in level.

I measured the MBL 120's farfield behavior on the recommended axis, level with the top of the tweeter magnet. The response, averaged across a 30° horizontal window centered on that axis, is shown as the black trace above 300Hz in fig.3. Other than a small rise in the lower midrange, the response is even before rolling off above 14kHz. The output is down by

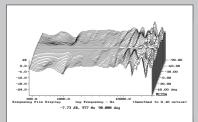


Fig.4 MBL 120, lateral response family at 50", normalized to response on listening axis, from back to front: differences in response 90°-5° off axis, reference response, differences in response 5°-90° off axis.

approached 50%, Bryan visited to dial in the setup and observe how the speakers worked in my room. He'd been listening to some old vinyl favorites from his childhood including Neil Diamond's live album Hot August Night (Geffen Records). For fun, we put on several different versions of the album, streamed from Tidal and Oobuz via Roon, moving between a couple of familiar songs. Bryan made some slight adjustments by ear, and I moved around some of my room treatments. We found that removing the bass traps from the corners behind the speakers made the bass seem tuneful and prominent, especially on bass-heavy tracks. I liked the effect, but the measured room response was smoother with the traps in place, and at times I heard better integration that way. I went back and forth. With or without traps, the bass seemed to extend deeper than the specs indicate.

During his visit, Bryan said that



the 120s "thrive in chaos." What he meant was that, more than with more conventional loudspeakers, the omnidirectional MBLs work well in an actual living space with furniture and stuff. Room treatment can improve the sound, but generally the 120s function well playing off whatever is in the room, except for some highly reflective materials like glass windows. (My apartment has lots of glass, but I do all my critical listening with the shades down.)

For my critical listening, I powered the 120s with one of three integrated amplifiers: the VAC Sigma 170i iQ tubed amplifier, the Soulution 330—both of those amps have an onboard phono stage—and my MBL Noble N51, which does not have the available phono option installed. I did most of my listening with the N51, which MBL says is an "atypical" class-D design. It's rated at 380 watts into 4 ohms.

measurements, continued

6dB at 15kHz, close to the 15.5kHz that Reis mentioned in his email.²

Fig.4 shows the MBL's horizontal radiation pattern, with the off-axis responses normalized to the response on the tweeter axis, which thus appears as a straight line in the center of the graph. Some narrow ridges and gullies are visible above 10kHz, but these are likely inconsequential. The off-axis suckout just below 1kHz will be due to the difference in arrival times of the two side-mounted woofers at extreme angles. Other than that, the MBL 120 maintains its output throughout the midrange and mid-treble up to 90° off-axis: This is a true omnidirectional loudspeaker. The MBL's vertical dispersion is shown in fig.5, with the off-axis

responses shown up to 15° above and below the tweeter axis. Some off-axis peaks and dips are visible in the high treble, and a suckout develops in the upper crossover region 15° above the recommended axis. For optimal performance, do not listen to this loudspeaker while standing.

In the time domain, the MBL 120's step response on the tweeter axis (fig.6) indicates that all four drive-units are connected in positive acoustic polarity. The tweeter's step arrives first at the microphone; the decay of its step blends smoothly with the positivegoing start of the midrange's step, which confirms the good blend of their outputs in the frequency domain. The MBL 120's cumulative spectral-decay plot (fig.7) indicates a clean decay in the region covered by the midrange unit, but the decay of the tweeter's output is disturbed by some low-level ridges of delayed energy.

The MBL 120's measured performance confirms that this is a true omnidirectional design. Its low-frequency behavior, where an overdamped reflex alignment is combined with an underdamped second-order high-pass filter with a corner frequency slightly lower than that of the port tuning, suggests that the MBLs will sound rich. —John Atkinson

2 In this respect, the 120's top-octave response is very similar to that of the MBL 101E Mk.II that MF reviewed in April 2012; see fig.2 at tinyurl.com/ zwmf5eun.

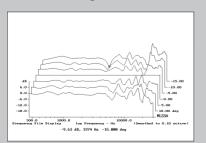


Fig.5 MBL 120, vertical response family at 50", normalized to response on listening axis, from back to front: responses 15°-5° above axis, reference response, responses 5°-15° below axis.

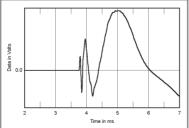


Fig.6 MBL 120, step response on listening axis at 50" (5ms time window, 30kHz bandwidth).

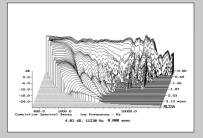


Fig.7 MBL 120, cumulative spectral-decay plot on listening axis at 50" (0.15ms risetime).

According to MBL's recommendations, the VAC amp was underpowered, but read on.

Listening

Loudspeakers with hybrid driver designs—here I'm referring to the MBL's blend of radial midrange and treble and bass-reflex bass—can be tricky to blend. And yet, to me the MBLs were strikingly coherent. They delivered seamless sound from top to bottom, which made the presentation seem more realistic. Music sounded "of a piece," seamlessly woven within the soundstage, not a patchwork of disparate pieces stitched together. These effects often enhanced artistic expression.

On music with layers of instruments, the 120s resolved those layers with ease, with good separation-again, within a single, unified soundstage. As Talking Heads' "This Must Be the Place (Naïve Melody)"³ from Speaking in Tongues bopped along (24/96 FLAC, Qobuz), nothing stuck out as exaggerated. Throughout, the song felt intense, close-up. Byrne's harmonized vocals came across as more impassioned and vivid, more in-your-face. When he pleads, "Love me 'til my heart stops/ Love me 'til I'm dead," you think he means it. I heard a few flourishes and details in this familiar music that I hadn't noticed before. or that I had not registered so clearly: a guitar riff; a woodblock; a triangle; chimes. It felt like the musicians kept picking up instruments at random and playing them for a moment. I had not heard this familiar music in quite this way before, and it added to the track's quirky playfulness.

This sweet little song always charms and cheers me, yet it can seem lightweight, peppy but without much depth. The 120s (and the ancillary components in my system) kicked it up a notch. The song hit harder. From the first two downbeats through to David Byrne's crooning at the end, there was more punch, pop, body, and heft.

I don't often listen to silver discs, but when I do-well, I do occasionally pull out some special ones I've kept around. An example is Ben Webster and Harry "Sweets" Edison's *Wanted to Do One Together* (SACD, Columbia 8691/ORG 117-3), recorded in 1962. Webster's buzzy breath off his tenor sax reed took its time decaying. The 120s captured his style as if it were here and now, on "How Long Has This Been Going On" and especially on "My Romance," where his breathing technique was audible, close enough to hear a little spittle. A natural sense of air and space between instruments made me feel like I was at the session or sitting in a smoky jazz bar (ideally without smoke).

Switching to classical, I played the Henri Dutilleux Métaboles, for orchestra, from Dutilleux: Métaboles, L'arbre des songes & Symphony No. 2 "Le Double"⁴ performed by the Seattle Symphony Orchestra under Ludovic Morlot (24/96 FLAC, Seattle Symphony Media/Qobuz). The leading-edge transients on the fits and starts of "Incantatoire" compelled me to listen more closely. "Obsessionel" has a lively soundtrack vibe that wouldn't be out of place in a cartoon; its crescendos lifted my mood. At the end, the textures of the soft snare rolls and pianissimo taps deep in the right channel drew me in to listen more closely. On "Flamboyant," the final movement, the stage opened up, expanding to fill the whole area surrounding the speakers, including the space behind them all the way to the front wall. I closed my eyes. Though not to



I had not heard this familiar music in quite this way before, and it added to the track's quirky playfulness. full scale, the space was *there*, contextual, present.

Producing a soundstage at orchestral scale is a tall order, a hi-fi holy grail. It's exciting when any system can do it. It's especially rare for standmounts, but the 120s, while not quite all the

way there, managed to reproduce a pretty good semblance of the live event.

Next, I switched to a different style of live recording: Can's *Live in Stuttgart* 1975 (24/44 FLAC, Spoon Records/ Qobuz), which was just released earlier this year. I closed my eyes and sank into a seat 10 or 15 rows back and soaked up the Eins and Zwei tracks of the album's five meandering improvisations. Here, the system provided a decent portrayal of the venue's width and depth; what I didn't expect was the impression I had of the venue's *height*, that third dimension. On Can's "Vitamin C," from *Ege Bamyasi* (FLAC 16/44 Qobuz) as remastered by Andreas Torkler, Jaki Liebezeit's sharp snare attacks transfixed with their crisp realism. They sounded as taut as, well, a drumhead.

These deep grooves felt effortless, and yet the MBLs responded well to power—and to higher volumes (within reason). More than other speakers I've used, the intensity of the experience correlated with how loud I listened. With the 120s I could often subtly *feel* the soundwaves, especially at higher levels. Their energy was palpable, visceral, like live music, adding to the sense of immersion. It gave more muscle to rock 'n' roll. The soundwaves' energy was like a gentle force field. Or not so gentle.

I dig the semisleazy, dance-y art rock of Franz Ferdinand's self-titled studio debut (16/44 FLAC, Qobuz and CD), which is laced with post-punk edge. The Beach Boys must have inspired some of their blended vocal harmonies. The production may not be flawless, or all that consistent, but I like its raw, grungy feel—it's part of the experience. It's fun to crank it up, and when I did that, the MBLs delivered more heft and substance. The decay of the final guitar chord on "The Dark of the Matinee" lingered a long time, as matinée darkness should. On "40'," parts I seldom pay close

³ Even stripped down, it's a good tune: Lyle Lovett and Shawn Colvin performed a mellower acoustic guitar version during a concert encore I saw a few years back. 4 Another work from this album appears on the *Editorial Tracks from Stereophile* playlist on Qobuz.

attention to—the near-staccato guitar intro, Alex Kapranos's lackadaisical "la la la's," the ending riffs, and what might be melodica interplay—took on new interest, more distinct in the mix.

I rolled on to some Roxy Music. The weirdly wonderful "Mother of Pearl" from 1973's *Stranded* (16/44 FLAC, Qobuz) winds down and shape-shifts from heavy 4/4 driving rocker to moody, quirky melody. I loved John Gustafson's few, simple bass notes leading into Bryan Ferry's vocal antics and affectations as they glided into the mellower main part of the track. Those notes were crystal clear, closer to the center of consciousness.

Again, the higher the volume, the deeper the immersion. This was especially true, and welcome, with atmospheric music. The 120s rendered St. Vincent's latest full-length, Daddy's Home (LP, Loma Vista LVRO1856 and 24/44 FLAC, Qobuz), with full body and color. St. Vincent, aka Annie Clark, reinvents herself again here with a mix of styles incorporating influences from the Eurythmics to yacht rock, with serious '70s flair. Plus, sitar. The off-kilter opener "Pay Your Way in Pain" staggers through layers of sass and exasperation, culminating in Clark's not-so-pretty nearscreeching raw wails. Via the MBLs, the David Gilmour-ish guitar soared and filled the room on "Live in the Dream," which is about a hazy close-call overdose. On "Melting of the Sun," Joe Walsh-worthy guitar swells and swirls make for a curious counterpoint against this roll call of iconic long-suffering ladies: Marilyn, Joan, Joni, Nina, Tori.

A tale of two (other) amps

Early in my MBL 120 listening, I experimented with the 85Wpc, tubed VAC Sigma 170i iQ integrated amplifier.⁵ Although it's rated at 85Wpc-well below the MBLs' 200W recommended minimum power spec-it yielded pleasing results.

The MBL 120s can deliver sound with involving intensity even on quiet, subtle material. On A Delicate Motor's *Fellover My Own* (LP, SofaBurn Records 0711574844623), the 120s driven by the VAC displayed the chamber pop album's depth of field and intimate delicacy. Adam Petersen's kalimba (thumb piano) bookends the opening track, "Do for Self." Its strikes rang out within the space, its sustains seeming almost to travel in slow motion. Ben Sloan's kickdrum had pleasing body, texture, and bloom, especially as its intensity increased. Ditto the soft cymbals and gentle tambourine. Vocal harmonies sounded somewhat richer and more nuanced than with the MBL amp, increasing earnest expression. The 120s disappeared as they conveyed the music's ethereal qualities. The sounds seemed to emerge from thin air.

I also used the Swiss-made, class-A Soulution 330, which outputs 240W into 4 ohms and 120W into 8 ohms. For comparison with the N51 reference amp, I adjusted the volume on each for an 82dB average at the listening position.

The 330 might have had a slight edge over the N51 in fine detail retrieval and resolution, but on some tracks, musicians' positions seemed to shift more toward one speaker or the other. On vinyl playback, changing the cartridge loading from 200 to 400 ohms reduced these differences. With the Soulution, timbre and tone color seemed slightly more neutral. With the N51, they sounded slightly darker and richer.

With the Soulution amp, backgrounds seemed quieter, which benefitted recordings such as *Ali and Toumani* with Toumani Diabaté and Ali Farka Touré (LP, World Circuit

ASSOCIATED EQUIPMENT

Digital source MBL N31 CD player/DAC.

Analog sources Clearaudio Performance DC Wood turntable with Tracer tonearm and Talismann v2 MC cartridge; MoFi Electronics UltraDeck turntable with UltraTracker MM cartridge.

Amplification VAC Sigma 170i iQ integrated amplifier; MBL Noble Line N51 integrated amplifier; Soulution 330 integrated amplifier with phono stage.

Cables Ansuz Acoustics D2, AudioQuest NRG, and Morrow Audio (some interconnects).

Accessories AudioQuest Niagara 1000 Low-Z Power Noise-Dissipation System with NRG 10 power cord and Vodka Ethernet cable, Critical Mass Systems Maxxum equipment racks, Record Doctor VI record cleaning machine, AudioQuest Anti-Static Record Brush, Onzow Zerodust stylus cleaner.

Room treatment Zanden Audio AT-1 proprietary foam bass traps/tubes (2), AP-1 proprietary foam acoustic panels 35.5" × 23.75" × 1.5" (4). **Room** 18.5' × 17.5' × 12'.–Julie Mullins

WCV083). The West African kora is a soft-sounding, 21-stringed instrument that mixes elements of lute and harp.⁶ The 120s' omnidirectional dispersion patterns made this record sound natural, relaxed, and expansive. The transient attacks with Diabaté's kora were crystal clear. Sustains overlapped and harmonized. I'm no kora expert, but this setup made it easy to hear the effects of various playing techniques, from quick-plucked runs and polyrhythmic riffs to delicate taps and subtle string squeaks. Textures on all instruments-kora, bass, congas, voice-were convincing in detail and dimensionality. The instruments sounded true to life. On other material, some basslines were easier to follow with the class-A 330's grip and control.

Did I prefer one solid-state integrated over the other? Not really. They provided two different experiences. Both were satisfying.

Conclusion

The MBL 120s sound big and full—voluptuous at times, especially when you turn up the volume, which I did often, though not to excess. Because the Radialstrahler drivers radiate sound in all directions, they avoid the hazards of beamy tweeters and shout-at-you midrange drivers. I love how the sound seems to float in the air rather than be fired at you. Many instruments and voices sound natural. The 120s elevate musical material—they maximize but don't exaggerate what's there, like dressing to highlight your best features.

Unlike some speakers, the MBL 120s don't favor one genre of music over another—which is essential for my eclectic tastes. Wallflowers they ain't: Immersive and involving, these speakers are built for fun. Their sound, though always substantial, tends to stay detailed without getting thick or muddy.

The MBL 120s can be addictive. I'm not here to be a bad influence, but if you're not careful, you might need to call your nearest dealer.

⁵ See stereophile.com/content/vac-sigma-170i-iq-integrated-amplifier. 6 See en.wikipedia.org/wiki/Kora_(instrument).