EVERYTHING ON THE FORTY



For its 40th birthday, Burmester is hitting the hi-fi world with a new standmount speaker, the B18. And by Burmester standards, it's very moderately priced

n July, Berlin-based high-end manufacturer Burmester celebrates its 40th birthday – and though sadly founder Dieter Burmester didn't live long enough to see the celebrations, we're sure he'd look with full enthusiasm on the latest addition to the range, the B18 loudspeaker.

Visually rather discreet, this two-anda-half-way bass-reflex standmounter is packed with many good (and expensive) things, and weighs a substantial 35kg. The case is neatly veneered or varnished - five different finishes are available - and a sturdy aluminum plate, designed for mass and low torsion, reinforces the mounting of the tweeter and midrange driver. The 17cm bass and midrange drivers use glass-fiber cones, and the bass unit is mounted in its own enclosure; the crossover, meanwhile, high-quality components between its single-wire terminals and the drivers, and is also isolated in its own enclosure.

The user can tune the reflex bass enclosure with a bung depending on the room and the position of the speakers, and in addition there's a bass range adjustment switch. Measurement suggests this is making only a marginal difference, but the effect is very easy to hear.

At first we were somewhat disappointed that, instead of the hoped-for Burmester jet-tweeter the speaker "only" has a ring-radiator for the high frequencies, but the seamless acoustic integration with the midrange driver soon reassured us – but more on this later on. For now, it's worth noting for the technically interested that the crossover frequencies are at 400 and 2300 Hertz.

Decoupling instead of spikes

Burmester is particularly proud of its housing construction, and not just that aluminum/MDF baffle, almost 5cm thick: the bracing of the housing was developed in cooperation with the TH Berlin using finite element analysis to prevent unwanted energy losses and ensure lean, crisp bass and a highly dynamic performance.

Cabinet vibrations are often tackled via grounding them using three or four spikes, but here the problem has been solved differently with a newly developed spring-mass-damping system to decouple the loudspeaker from the ground. The loudspeaker enclosure is actually decoupled from its base, and while threads are provided for spikes, they're there not out of necessity, but to allow users to experiment without complications if they wish.

Flawless laboratory performance

The photographer was delighted, the tester full of anticipation, but the B 18 still had a date in the test laboratory inbetween – and this was completed without any abnormalities: clean frequency response



▲ The massive aluminum baffle houses the midrange driver and tweeter, and has a total thickness including MDF of almost 5cm!



on axis to 30°, a non-critical impedance, a very decent efficiency at 87 decibel and very low distortion –new Burmester chief Andreas Henke and his team obviously did a good job.

We started the listening in our small, 20 square meter room, and with the speakers used in free space: i.e. about one meter from the wall behind them, about 50cm in from side walls, some 2.5m apart and almost 3m from the listening position. The bass switch set to Plus, and the port undamped, we started with the Technics SU-G700 was initially used as an amplifier.

However, it quickly emerged that while the Technics was up the job in electrical terms, and a very good amplifier for the money, sonically the B 18 is in a different league. Changing various cables didn't help: the sound remained comparatively uninspired and uncontrolled, especially with Yello's "You Better Hide" and "Till Tomorrow", which lacked sonic magic.

Combining the B18 with the complete Marantz system of SA-10 and PM-10 brought significantly more solidity and better dynamics, with more distinct



▲ The finely built housing has a recessed terminal plate for single-wiring.

information about the recording venue and instrumental timbres. Suddenly the sound was joyful: Haiou Zhang's performances of Liszt "Piano Works" darker-toned, with the resonance and the sense of hammers on the strings of the Bechstein D 282 concert grand piano were palpable.

Authentic and real, and very emotional the Burmester worked extremely well with this amplifier/CD combo: Yello flew around the ears, with taut and powerful bass pulses in the room. The attack and decay of notes was depicted with ease, even with the speakers now set with the bass adjustment to negative, still without any plug in of the reflex tube.

Here, the B 18 delivered in Till Brönner's trumpet playing neutrally, conveying the joy of the performance, and the speaker was also able to make our armhairs stand, even with the seemingly cool techno music of Mr Meyer & Blank - an effect it managed again and again. Not only that, but also the lower registers of B 18 were deeply impressive, being both bone-dry and yet a musical warmth. This bass challenged at times many more expensive speakers in a manner until now unknown from Burmester designs. And all this despite the fact that the last few Hertz have deliberately been sacrificed in order to increase efficiency and the speakers' dynamic capabilities, including maximum volume, to beyond the average for this size and price level.

Acoustic gentleness

Despite our initial skepticism, the ring radiator tweeter turned out to be integrated perfectly here, compensating for its slightly less spectacular resolution (when compared to a Jet tweeter) with very dispersion characteristics. Combining it seamlessly with the partnering midrange driver, the B 18 showed a mildness of tone in which the critical sibilants in voices were reproduced cleanly and without distortion.

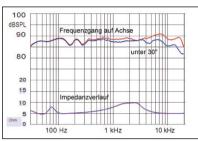
An important aspect was that the soundstage image was maintained even at low volume levels - Grammy Award winner Shelby Lynne showed her vocal facets in the song "You Don't Have To Say You love Me" even when played quietly. The decoupling concept of B-18 with the sprung base is also proved – we didn't ever miss the spikes. Burmester has done it again! *Michael Lang*

BURMESTER B 18

from €7800 Warranty: 5 years Contact: Burmester Phone: 030/78796868 www.burmester.de

This 2.5-way speaker from the Berlin-based manufacturer uses a novel damping concept between the main cabinet and base. Top-quality components and workmanship ally themselves with a very harmonious and dynamic sound.

MEASUREMENT RESULTS





DC resistance	4 Ω
Minimum impedance at	50 Hz
Maximum impedance at	2700 Hz
Sound pressure level (2,83 V/m)	87.2 dBSPL
Performance for 94 125dbspl	11.2 W
Lower cut-off frequency (-3dBSPL)	40 Hz
Total harmonic distortion at	

LAB-COMMENT

0.3 / 0.1 / 0.1%

63 / 3 k / 10 k Hz

Excellent results in all areas. Good efficiency, linear frequency response, good dispersion and very low distortion. Impedance curve fluctuates only slightly from the ideal.

FACILITIES

Single-wiring, switch for bass boost; Damping material for the bass reflex opening; five different cabinet finishes; detailed operating instructions.

