

# Burmester BC150 floorstanding loudspeaker

by Alan Sircom

e were invited by Burmester to visit Berlin at the time of the launch of the new BC150 floorstanding loudspeaker. This new speaker design is an impressive statement; not only in terms of its physical presence and its £97,500 price tag, but in the sheer amount of research and development engineering that went into the project.

Just a look around the specification sheet shows why the BC150 is notable. Each BC150 weighs in at a shade under 200kg, a figure achieved by using a combination of aluminium, MDF, and steel (where appropriate) for a cabinet. This trio of materials combine (aided by some carefully chosen viscoelastic materials) making a cabinet that maximises the benefits of all three materials while minimising their own respective downsides. An aluminium frame with MDF housings and steel plates, carefully bonded together is a rare and uniquely successful approach in making a cabinet as non-intrusive and non-interactive as possible.

Each component or subsystem in the BC150 is given the same uncompromising, obsessive-compulsive approach to design and engineering. Alongside the two AMT folded ribbon tweeters (one front firing; a second, smaller and rear-mounted for adjusting spatial properties in room), the midrange is heavily modified to Burmester's exacting specifications. That last sentence needs exploring; usually 'heavily modified' means "can you put our name on the front of the basket?" not "can you change the dust-cap for a phase plug, can we make that phase plug oval, and can we revise the doping materials on the paper of the cone, please? Thanks!". In fact, when it comes to the side-firing bass unit, the company making the driver liked Burmester's changes so much, they retrofitted many of them (such as beefing up the magnet) into its own designs.



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The crossover too, shows just how seriously Burmester is taking things with the BC150. The board is large, populated with the highest grade components (many of which are 'potted'... more on that later) and then sits on its own suspension system within its own chamber inside the loudspeaker. Short of playing the loudspeaker during an earthquake, nothing's going to trouble that crossover. Furthermore, because it's going to have to handle some high power, everything is built to last. Perhaps the adjustment for the rear-firing tweeter highlights this best; rather than a simple potentiometer mounted in the rear of the speaker, Burmester went the extra mile and built its own stepped attenuator. No one else does this!

Those aforementioned potted capacitors are a part of Burmester going the extra mile once more, in that the BC150 is one of the few passive loudspeakers to achieve UL certification. This means every aspect of the loudspeaker needs to be tested for fire safety, and usually applies to electronic components. Granted, if you are sufficiently infernoed to be concerned about the potential for loudspeaker terminals or internal capacitors in a crossover network to either catch fire or release toxic fumes, it's probably already a bit late, but the fact Burmester even considered going the distance on this is impressive in its own right.

One of the things you should get from all this is that the engineers in Burmester are driven by passion, and it's a passion that is shared by the people who end up buying the loudspeakers and enjoying them. OK, few engineers are unmotivated by their own projects, but to create a project like this, you need engineers who will spend hours on end talking about the design of the BC150's feet, and how many iterations they went through to create the right dial-in adjustable foot sitting on its own bearings. They'll even tell you about the creation of the tool used to adjust that foot with the kind of bright-eyed enthusiasm you might use to describe your child's first day at school.

Following statements made earlier in 2021, Burmester recently announced the debut of two new products in its home audio segment. The company had dedicated itself to developing new products in its core business as part of its ambitions to grow internationally.

The company remains dedicated to its quality promise, sourcing more than 95 percent of its materials locally and relying purely on handmade manufacturing processes in Germany.

Beginning with the new BC150 loudspeakers, Burmester has translated and extended the innovation leaps from its benchmark-setting BC350 loudspeakers and brought into a more compact form.

"The BC150 brings clarity and purity of sound to another level. The time and dedication our engineers spent on its development have really paid off and will be felt from the first second the loudspeakers are played", says Thorsten Poenig, Chief Sales Officer.

The BC150 is available for orders with Burmester now. First products will be ready for international sale starting November 2021.

In addition to a new set of loudspeakers, Burmester is bringing an electronic component to market: the new Burmester turntable 217. Inspired by the multiple awardwinning 175, the new 217 prioritises optimal playback quality and is equipped with two belt drive motors.

"The 217 extends our product portfolio in the vinyl playback field. During the R&D processes, we could draw on more than 35 years of processing experience with the highest-quality phono signals, which allowed us to set a new benchmark", comments Poenig.

The 217 is available for orders with Burmester now. First products will be ready for international sale starting October 2021.

Of course, all that passion and obsessiveness is as nothing if the loudspeaker itself does not perform in the listening room. However, that attention to detail pays off as the BC150 is one of the most detailed, exciting, dynamic and transparent sounding loudspeakers you can hear. There's also a distinct family sound emerging that follows in these lines, from the B38 up to the vast BC350, they have a lot in common; just that the further up the line you go, the more dynamic range, volume headroom and detail from a cabinet that does an increasingly impressive vanishing act (obviously not physically... it's a big box). Granted, a loudspeaker like the BC150 needs a lot of quality electronics upstream, but that's something Burmester already knows well, and having these loudspeakers driven by a pair of 911 mk3 power amps running in bridged mono mode is a perfect way of delivering a truly outstanding performance.





# "Any loudspeaker that can keep up with these musicians is impressive."

For such an imposing loudspeaker, it's remarkably fast and musically reactive; transients hit home with speed and precision, making many 'boxes' sound like, well, boxes. These loudspeakers are too substantial to be a point source loudspeaker (unless you were playing them in a room about the size of Berlin itself), but the speed of the BC150 suggests otherwise; One of my regular recordings is 'Memphis Soul Stew' by King Curtis [King Curtis Live at Fillmore West, ATCO], not just because it's an unsullied live mix taken almost directly off a desk a few days before King Curtis' murder, but because each musician in the group is a master in their own art. I mean, every other drummer tries - and usually fails - to deliver a Purdie Shuffle, but when you have Bernard Purdie himself playing that shuffle, it's like a lesson in the craft. Similarly, getting to hear Cornell Dupree play that funky rhythm guitar sound with licks he invented, and so on... you couldn't ask for a better lesson. Any speaker that can keep up with these musicians is impressive in the extreme.

The vanishingly low cabinet coloration not only acts to keep the BC150 fast, it keeps it extremely detailed too. This is a loudspeaker that throws the window wide open on your music. Pick an instrument, preferably a solo instrument on a well-recorded album; that instrument sounds detailed, articulate, and physically 'there' in the room, solidly placed within a wide soundstage that projects slightly into the room, but not so much as to be intrusive. It's detailed and precise enough that colorations are more likely to be to do with the room than the speaker, and many of those are 'nailed' thanks to the rear-firing tweeter. The BC150 loudspeaker is an audio reproduction instrument of high-precision, and as such if your room has a bit of a midrange hump, you'll notice it more immediately

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here. Given the BC150 and the company it keeps, that's no bad thing, as room acoustics should be a strong consideration at this level. But, regardless, listening to something like 'Love in Vain', by the Rolling Stones [Stripped, Polydor] and you get to hear Jagger's voice unsullied by the speaker itself; other speakers seem to play something more like an impression of Mick Jagger by way of comparison.

Then there's the bass. Lung-emptying, bowel-clearing, demolition-grade bass that you can feel at the back of your eyes. Given some heavy-set amplifiers feeding the BC150, the likelihood is either you or the room give up long before the loudspeakers have hit their end-stops. I routinely use 'Chameleon' by Trentemøller [*The Last Resort*, Poker Flat] because its fast, deep, near-square wave synth bass is a torture test of ported loudspeakers. Here, however, the depth and intensity of that bass is enough to reflect the torture back on the listener... there are big, nasty things lurking in that recording, and the BC150 isn't afraid of letting them out to play.

Perhaps most importantly though, that bass is like the rest of the frequency range; very well integrated. Everything hangs together well in the BC150, almost in the way a simple but well-made two-way loudspeaker can. The engineering that makes that effortless integration is extremely hard to do, and even some of the big names in high-end sometimes struggle with a sound that is more individuated 'bass-midrange-treble' than an integrated, musical performance.

Interestingly, I found many parallels with the last Burmester loudspeaker I tested, the B38 from Issue 189. That could seem like damning the BC150 with faint praise, but hear me out for a while. This is in fact a wholly good thing. First, it shows great consistency of design; a company that has wild changes in tone and balance between its product lines is doing something very wrong indeed, even if the price differential between the speakers is as profound as the one between the BC150 and B38. But, better still, the BC150 sounds more like a B38 with greater abilities to scale. Or, looking at it from the opposite direction, the B38 has much of what the BC150 offers, but in a smaller size for the more svelte listening room and wallet. Both loudspeakers have an excellent ability to portray a small-scale musical event and a larger orchestral work in their correct sizes, but where the BC150 really shines is that it both has the ability to scale up (to make that large orchestral work have the scale and majesty it deserves) and scale down (so that fey sounding 'girl with guitar' recording doesn't sound like The Attack of the 50' Woman (incidentally, great title... lousy movie). That kind of true-scale reproduction isn't impossible to find elsewhere, but in larger full-range designs, it's usually the preserve of the absolute pinnacle of high-end loudspeaker engineering. The BC150 shows that Burmester should be taken seriously as a loudspeaker brand in its own right. The B38 certainly had the chops, and so does the BC150.

It's a harder job to get the big ones right in many ways. There's so much more to go wrong in a larger loudspeaker, and the threshold of expectation is far higher. As a consequence many loudspeakers go for 'big' rather than 'natural' reproduction. One could even look to some of the earlier Burmester loudspeaker designs from about a dozen years ago and point that finger... but not any more. Yes, the BC150 does 'big' in the same way it does 'deep'. It needs to; no one buys a loudspeaker this 'physical' with the expectation of listening to a shrinking violet of a performance, so the BC150 is impressively large sounding and dynamic when it's called upon to be so and when its called to be more subtle and display a deft touch on the music, it can do that too.

This scaleable sound and excellent dynamics have profound implications in the BC150s ability to handle the reproduction of well-recorded unamplified instruments recorded in a natural acoustic space; one of the most significant challenges of high-end audio. The instrument should approximate the real-world sound in terms of size, its more subtle sonic characteristics, its sense of being rooted in space rather than disembodied sound, and it should have much of the air and reverberation of the room reproduced and delineated from the sound of the instrument itself. In other words, the sound of the audio system should approximate the sound of the live thing playing in the room. Few get close, and in most cases there's always something of a trade-off (better solidity, less ambience for example). Here, however, the BC150 is a loudspeaker of great balance. There's no sense of sacrificing one aspect of the performance in favour of another. Instead, there's an organic feel to the way the musicians 'sit' in the soundstage.

It's time to sneak another of my favourite recordings in here; Joyce DiDonato singing the 'Tu sola, o mia Giulietta...' from Act 2 of Bellini's I Capuleti e I Montecci [Stella de Napoli, Erato]. OK, so this is the sort of recording that would sound good on even the cheapest audio equipment, but it – like the BC150s – has an ability to scale, and through these loudspeakers it positively shone. If you hear these big, deep and massive loudspeakers, it's going to be a continual source of amusement how they disappear sonically, but disappear they do. You can listen to Joyce DiDonato on any speaker and be impressed by her breath control and the dynamics of her voice, but through the BC150 you also get the feeling of a performance, to the point where you want to stand and applaud at the end.

A big part of this comes down to the vast amount of detail the BC150 can resolve. It doesn't matter whether the recording is on vinyl, CD, or high-resolution download; the level of information imparted by these loudspeakers is substantial. In lesser hands, this might feel like drowning in data, but the BC150 is as musically organising as it is detail-packed. Meaning that any information in the recording is likely to be presented to the listener as accurately and honestly as possible.

I'm mindful here that this could sound like an 'all detail, no fun' loudspeaker. There are some high-end loudspeaker designs that make music a sterile, if detailed, event. There are others that go for the sense of occasion, at the expense of transparency, clarity and detail. Few manage to have feet in both camps, and the BC150 is one of those rare exceptions that are both musically communicative and musically analytical at the same time. That's a heady mix, but might require some sensory readjustment on the part of the listener; we are used to having to make a choice in this trade-off, and the first time you get to experience both the detail and the musical intention that underpins that detail, it can be a daunting experience. Don't be surprised if that doubles your listening energies at first, but you soon get past this and will find the sound just beguiling and inviting you to play further.

A sonic reevaluation could be short-hand for 'it sounds so bright, you need to wait a little for your ears to be reprofiled' in some cases, but not the BC150. This is a loudspeaker of great balance, remember. The BC150 is not bright, or boomy... it's extremely neutral. There's just so much neutrality on offer, it takes some time to process at first. Once you get over that hurdle, there's no real going back however. It's that good a loudspeaker.

This is an important loudspeaker for Burmester, as the brand has been through a quiet patch of late (in fairness, given COVID-19, who hasn't?). This is clearly not a brand that rests upon its laurels, though, and the BC150 shows Burmester's high-end approach is equally at home making ultra-high-grade loudspeakers as it is producing top-end electronics and the best in automotive entertainment.

This is not the only new product from Burmester, and – in looking around the R&D department in the Berlin factory – and to quote Rutger Hauer's Roy Batty character from Blade Runner, "I've seen things you people wouldn't believe." OK, so no attack ships on fire off the shoulder of Orion this time but not just Burmester's new 217 turntable... new products in the company's traditional audio lines, and beyond.  $\blacksquare$ 



#### **TECHNICAL SPECIFICATIONS**

Type: Three-way bass reflex floorstanding loudspeaker Drive units: Air Motion Transformer tweeter (front and rear), 180mm midrange, 320mm woofer Crossover frequencies: 155Hz, 1.8kHz

Frequency response: 34Hz–20kHz ±3dB Sensitivity: 88.5dB at 2.83V/1m

Nominal impedance: 3Ω Nominal load capacity (DIN EN 60268-5): 400W Dimensions (W×H×D):

30.9 × 60.1 × 143.3cm Weight: c195kg per loudspeaker Price: £97,500, €98,000 per pair.

#### Manufacturer:

Burmester Audiosysteme GmbH URL: burmester.de