

# B&W CM6 S2

This new two-way with bolt-on dedicated stand draws on advanced technology from proven B&W models  
 Review: **Andrew Everard** Lab: **Keith Howard**

The Bowers and Wilkins CM series is the product that became a range. It was initially planned as just a single speaker design: the Compact Monitor from which the designation is derived, appeared in 2006 but later grew into an entire line-up, from the standmount original to floorstanders.

The original CM1 drew on the technology of models in the more rarified strata of the Worthing company's catalogue, and while it sits rather higher up the price range than the new CM1 S2, the CM6 S2 we have here, at £1499 in a choice of black, white or rosenut finishes, continues that trend of trickle-down technology. Familiar features include the famous woven Kevlar cone of the mid/bass driver, the Flowport dimpling of the rear-venting port and the use of a tapered Nautilus tube behind the 25mm aluminium-dome tweeter to dissipate unwanted rear radiation.

Also on show are features taken from the last of the 'old' CM range to hit the shops, the CM10 (launched as recently as July '13), including the Decoupled Double Dome tweeter [see boxout] and, most noticeably, the mounting of the tweeter in a decoupled pod atop the main cabinet: a design element derived from the 800 Diamonds.

## BUILDING UP STOCKS

At the launch event for the latest range, held in its Worthing HQ at the end of August, the inevitable 'When will they be available in the shops?' question was met with the answer 'Next Monday.' In fact, I was surprised to be told that the speakers had been in production since April, building up stocks. According to product manager Andy Kerr, one warehouse was primed with some 6500 pallets of the new speakers! And that gives some idea of the scale of the Bowers & Wilkins operation...

So why the need for the new CM S2 Series now? Well, Kerr explains that having 'redeveloped' the 600 Series, it was clear

that improvements would be needed to the CM range in order to distance it from the less expensive models. During the launch event demonstrations were made not just of the benefits of moving up through the new range, but between the new CMs and the most similar models in the 600 S2 line-up.

The stand-out model in the new CM S2 range, both in design and – B&W hopes – performance, is the CM6 S2, designed to sit below the company's PM1 design. This is a compact and relatively simple-looking two-way design, but the most ambitious of its three new standmount speakers.

I have to say that my initial reaction to the CM6 S2 was that it was a slightly odd-looking speaker, that 'Tweeter on Top' design leaving quite an expanse of blank baffle area below the bright yellow 16.5cm

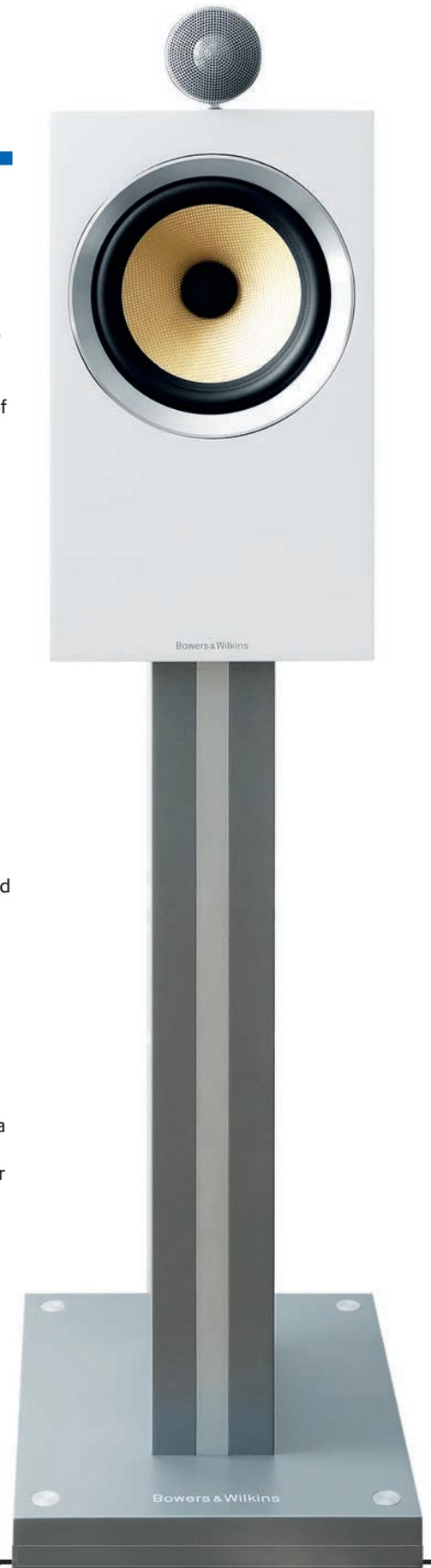
Kevlar-cone mid/bass unit. This impression is emphasised by the satin white finish of the review pair, but lessened in the other versions.

The mid/bass driver fixings are concealed by flush trim-rings,

removable should servicing require it, while the tweeter has a fixed metal mesh protector (a tool is provided to remove this should the user wish to). The main speaker grille, grey in the case of the satin white finish, has hidden magnetic fixings, leaving a clean front baffle when removed.

Self-adhesive rubber feet are provided for shelf-mounting, but new stands have also been developed for the CM S2 speakers. Selling for £400, the FS-CM2 stands are 56cm tall, come in silver or black to match the various speaker finishes, and have a central column divided for mass-loading and to provide a cable-management channel. They weigh 5.5kg unfilled, have spikes for the 252x298mm base, and (like

**RIGHT:** The CM6 S2 uses the familiar B&W Kevlar-coned mid/bass driver, but mounts the Decoupled Double Dome tweeter in a pod, compliantly attached to the top of the main cabinet. Satin White is a new finish for B&W





## DECOUPLED DOME

The CM6 S2's tweeter employs B&W's Decoupled Double Dome design. The Double Dome designation refers to the use of a ring of aluminium around the edge of the tweeter diaphragm, adding stiffness by effectively doubling the thickness of the metal where it meets the surround, thus giving a more pistonic operation. The 'Decoupled' bit comes in the compliant mounting of the driver in one of B&W's familiar tapered Nautilus tubes, filled with damping material to absorb the rear energy from the driver. In this speaker, and the CM10 S2, this assembly is housed within a bullet-shaped pod atop the main cabinet, with further decoupling provided by its gel mounting, ensuring vibration from the mid/bass unit doesn't get to the tweeter. The mid/bass driver itself is reflex-loaded via a rear-venting Flowport tube with a bung to tune the bass output.

the earlier FS-700/CM stands for the original CM series speakers) use a bolt-attachment for the speakers to the top-plate.

The large base-plates and bolt fixings are all in the cause of protecting purchasers from any danger of the speakers tipping, or falling off the stands when tilted: it's to do with the inevitable

European Health and Safety rulings, Kerr explained, adding that the sound of the speakers is improved significantly when the stands are pretty well mass-loaded.

I sourced several tubs of Atacama filling material at Atacama for the stands, Kerr having suggested that at least two tubs per stand gave the best results, and that once filled the stands would be extremely heavy. He was right: adding 15kg or more of this high density filler – made from minute zinc-coated steel discs – to each stand makes for a hefty but remarkably stable support; and the whole assembly becomes absolutely rock-solid.

In accordance with B&W's suggested positioning, I used the speakers some 3m apart, around 70cm out from the rear wall and the better part of one metre from side walls; and after some experimentation settled on a very slight toe-in toward the listening position – just enough to allow me to see the whole of the outer side of the cabinet of each speaker.



## AN OPEN, EXPLICIT VIEW

The system used for auditioning was my usual reference set-up: a Naim NDS network music player with 555PS power supply, Naim Supernait 2 amplifier with HiCap power supply, and Chord Company Odyssey bi-wire speaker cable.

And while initial impressions were of a very polite speaker, but one lacking some involvement and excitement, it soon became clear that this is

a design not built to impress with hi-fi fireworks straight out of the box, but grow on the listener over a familiarisation period, during which the appreciation of its combination of transparency and refinement grows.

OK, so these probably aren't the B&W CM2-series speakers to buy if all you're interested in is raw air-shifting power and the ability to play at party levels all day – for that, you might be better advised to consider the CM8 S2s – but what these little standmounters lack in sheer clout, they more than make up for in the sweetness of their treble, delivered as part of an open, explicit view of the music.

## WIND AND RAIN OUTSIDE

Playing some of the recently remastered Maria Callas tracks on *Pure* [Warner Classics 25646 33994], the B&Ws leave one in no doubt about either the quality and dynamics of what are, after all, recordings in the region of half a century old, or the sheer power and commitment of Callas's performances. As the initial hardness of the speakers factory-fresh gives way to their freer-breathing true character, so it seems the mouth of the singer opens, and that voice rings out in dramatic style.

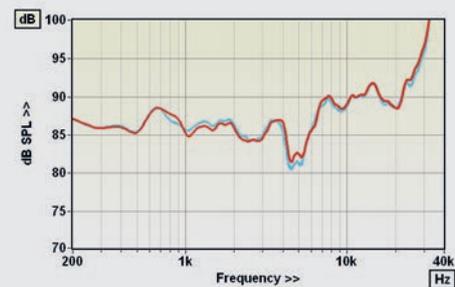
Exchanging these vintage recordings for a much more modern digital session, The New Esterhazy Quartet's self-released *Haydn In America* [NEQ 03], I was initially troubled by some strange noise going on seemingly around and beyond the closely-focused ensemble – the kind of thing to have your averagely paranoid reviewer frantically checking connections and the like! However, my mind was put at rest, and my appreciation of the B&Ws increased, when I discovered mention in the sleeve-notes of the wind and rain when the disc was recorded in a church in California.

'The attentive listener can hear a bit of the wild weather in the background,' it says, and that's certainly true with the

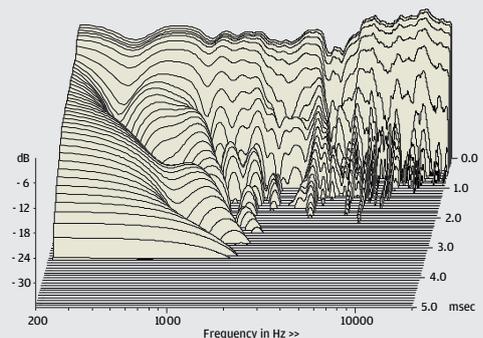
## B&W CM6 S2

B&W claims 88dB sensitivity for the CM6 S2, within 1dB of the 87.3dB pink noise figure we measured. As you'd expect of a compact standmount, this is lower than typically achieved by today's floorstanding designs which benefit from a larger internal volume. Low impedance could have been used to make up the shortfall but B&W has played safe and not made the CM6 S2 a notably difficult load. Although the 8ohm nominal spec. doesn't chime well with the claimed 3.7ohm minimum (exactly what we measured), impedance phase – though the max/min figures are high – has been well enough controlled to result in a minimum EPDR (equivalent peak dissipation resistance) of 1.8ohm/9.7kHz. More relevant with most music is the dip to 2.5ohm/132Hz, so the CM6 S2 presents an easier load than many comparably priced competitors.

Frequency response [Graph 1, below], measured on the tweeter axis with the tweeter grille in place, is far from flat, declining output up to the 4kHz crossover being followed by a shelved up tweeter output. As a result response errors of ±5.2dB and ±5.6dB respectively for the pair (200Hz-20kHz) are on the high side. Pair matching error was also a little disappointing at ±1.2dB given that B&Ws so often demonstrate exceptional performance here. Our diffraction-corrected near-field bass measurement showed the bass extension to be 52Hz (-6dB re. 200Hz) while the exceptionally high (and high-Q) tweeter breakup resonance at about 36.5kHz ensures that ultrasonic output extends beyond 40kHz. The CSD waterfall [Graph 2] evinces fast initial energy decay but some bass-mid cone breakup resonances are visible in the treble. KH



ABOVE: Forward response shows a declining output to the 4kHz crossover with a strong treble thereafter



ABOVE: Cabinet resonances are very well controlled but bass/mid driver resonances are visible above 5kHz

## HI-FI NEWS SPECIFICATIONS

Sensitivity (SPL/1m/2.83Vrms – Mean/IEC/Music)	88.8dB/87.3dB/86.6dB
Impedance modulus min/max (20Hz–20kHz)	3.7ohm @ 19.7kHz 53.6ohm @ 29Hz
Impedance phase min/max (20Hz–20kHz)	-60° @ 3.8kHz 60° @ 24Hz
Pair matching (200Hz–20kHz)	±1.2dB
LF/HF extension (-6dB ref 200Hz/10kHz)	52Hz   >40kHz/>40kHz
THD 100Hz/1kHz/10kHz (for 90dB SPL/1m)	0.7% / 0.7% / <0.1%
Dimensions (HWD)	403x200x301mm



**LEFT:** Bi-wire/bi-amp terminals are provided, while the bass port can be used open, or with B&W's two-stage bung that allows the bass to be tuned. The speakers bolt to dedicated stands

and characteristic tones of Leonard Cohen on his *Popular Problems* [Columbia 88750 142924] are rendered by the B&Ws with every detail intact. With voice very much centre front, the speakers give the accompanying instruments plenty of space to snake around, beneath and behind the vocals. It's one of those combinations of recording and reproduction guaranteed to merit a second play, if only to prove that yes, at 80, the old boy's still got it!

Similarly with the breezy pop of Nick Lowe's *Jesus Of Cool* album [Proper Records CHOSEN1] the B&Ws' combination of speed and definition is attractive, keeping instruments in focus even in the more Spectorish arrangements – although it does make it clear that the tambourine on 'I Love The Sound Of Breaking Glass' never quite manages to hit the beat!

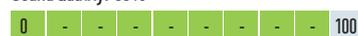
So the new B&Ws manage to be analytical as well as highly musical, even crashing out The Clash's *London Calling* [Sony 2-89056] with more than reasonable conviction.

For use in smaller rooms they have much to like, and while I can't quite endorse them without qualification (I prefer music rather more full-blooded than these compact boxes will allow), what is lost in absolute low-end slam will, for many listeners, be more than compensated for by the speed, dexterity and refinement on offer. 🎧

## HI-FI NEWS VERDICT

Not the most forthright of speakers, and to some ears perhaps a little too restrained in the midband, the B&W CM6 S2s nonetheless have an attractive mix of refinement in the upper vocal and presence bands and airiness in the extreme treble, enabling them to convey a good sense of space and ambience with the right recording. The extra £400 for the dedicated stands is money well-spent.

Sound Quality: 83%



CM6 S2s. The instrumental tones and textures are rendered extremely well, but there's that little sense of 'threat' going on just offstage, that's both strange and rather wonderful!

No such oddness with Claire Martin's new *Time And Place* [Linn Records AKD 42], where she's backed by the Montpellier Cello Quartet, and where the snap and drive of the tango-infused take on Bowie's 'The Man Who Sold The World' shows both the ability of the speakers with intertwining instruments, in the form of big fiddles both bowed and pizzicato – and the way they can focus a solo voice and bring out its character.

## SPEED AND DEXTERITY

Yes, there's a slight lack of ultimate low-end extension, as you might expect from enclosures so small, but the speed and definition in the bass is never in question, at least when the speakers are firmly clamped on their well-filled stands.

If you've formed the impression by now that I'd probably favour some slimline floorstanding speakers over the CM6 S2s, you're probably not too far from the mark, but that's possibly a matter of personal taste – a lot to do with the visual appeal of a single form rather than a speaker/stand combination, however well-executed it may be.

That said, these new B&W standmount speakers can certainly make a statement, and not just in visual terms but in the way they get their teeth into a wide range of music. The growling bass-lines, beautifully-realised instrumentation