

# Monitor Audio Bronze 2

The latest generation of MA's entry standmount is very affordable and sounds anything but cheap  
Review: **Andrew Everard** Lab: **Keith Howard**

The ability of British loudspeaker companies to make over-achieving little speakers with cut-throat pricing always used to be a thing of wonder among those overseas. They just didn't get how the likes of Mission, Wharfedale, KEF, Tannoy and Mordaunt-Short managed to squeeze so much sound out of foot-high boxes many of which sold for around £100 a pair.

OK, so we've moved on a bit from those glory days, and prices have inched up to the point where the Monitor Audio Bronze 2 speakers we have here are £280 per pair, in a market where sub-£200 is now the entry-level norm. What's more, many of the companies once caught up in the budget speaker trench-warfare of the 1990s and the early years of this century are now either owned by foreign conglomerates or at least making their products in lower-cost countries – even if their headquarters are still ostensibly back here in Blighty.

However, those celebrated names still make excellent speakers with very sensible pricing, and prove up to the task of continually innovating to stay ahead of the game. The Monitor Audios are a case in point. The company has long had a range simplified by 'colour-coding' – Bronze is the entry-level, and the line-up goes up through Silver, Gold and Platinum.

The Bronze 2 is the larger of two standmount models in a line-up starting with the £230 Bronze 1, and going all the way up to the Bronze 6 floorstanders at £700, taking in dedicated centre and surround speakers, plus a powered subwoofer, along the way. That pattern is echoed all the way up the range, offering the buyer the choice of either a no-frills dedicated stereo set-up, or the ability to build a surround system without compromising two-channel quality.

Launched in May 2015, the current Bronze Series is the latest generation of a line-up that's been a mainstay of the Monitor Audio offering for some years, and develops the old BX range with the adoption of technology from further up the hierarchy. The tweeter is the familiar 25mm 'Gold Dome' Monitor Audio model, but the more striking visual aspect of the speaker – and indeed the entire Bronze range – is the use of a 16.5cm 'dish' C-CAM driver for the mid/bass, this enabling the whole diameter of the driver to be used as the radiating area, without the change in geometry at the centre caused by a conventional centre-cap or phase-plug design [see boxout, facing page].

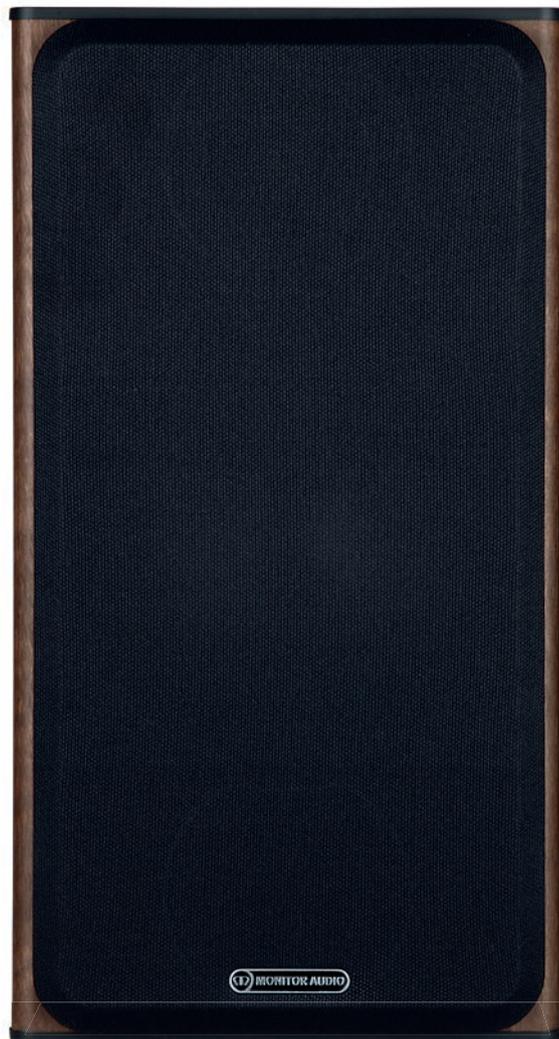
## BOLT MOUNT DRIVERS

The bass is tuned using a front-venting port, itself a second-generation version of Monitor Audio's HiVe (high-velocity) design – trickled down from the company's Gold range, this uses rifling grooves to speed the airflow within the port tube, and is designed for more bass power and enhanced transient response. Bunges are provided to restrict the airflow in the tube should the speaker have to be positioned in a location

giving rise to bass boom.

The crossover design has also been revised for the new Bronze series, using polypropylene capacitors and both air-cored and laminated steel core inductors, with bi-wirable terminals provided with the usual jumper bars. The crossover point here is 3.1kHz, and the impedance has been raised slightly compared to the previous

*'It delivers toe-tapping sounds with not a hint of a rough edge'*



Bronze BX range, to a claimed nominal 8ohm, combined with a stated 90dB sensitivity [but see Lab Report, p71]. The idea is to make the B2s better suited for use with price-comparable amplification.

The drivers are held in place with a 'through-bolt' mounting from the rear panel of the enclosure, a method the company first used in its Radius speakers and has now extended through the range. Again, it's not a unique design idea, but it does have the advantage of holding the driver to the cabinet under tension, as well as bracing the cabinet itself. So it also reduces resonances while – as Monitor Audio puts it – 'simultaneously boosting aesthetics' with the absence of visible fixings for either drive units or grilles.

An Allen key is provided with the speakers to fit the head of this through-bolt, which is mounted in the rear panel just above the terminal block. It needed a turn or so to tighten up the review speakers' fixings, which was something of a



## CERAMIC COATING

Monitor Audio's proprietary C-CAM driver technology is used for both tweeter and woofer here, emphasising the fact that the company still makes its own drivers. At the heart of these Ceramic Coated Aluminium Magnesium drivers is an alloy core, chosen for lightness and stiffness, to which is applied the ceramic material to further enhance the rigidity without significant weight increases.

The dome tweeter, though it looks just like the ones used as an MA hallmark for several decades, is a new design, its geometry and 'motor' claimed to improve accuracy and extension at the top of its range (~30kHz). Improved venting into the rear loading chamber is said to improve damping, reduce air compression effects and mechanical resonances.

The design of the woofer is also all about rigidity, reducing cone 'break-up', just as the direct coupling of the voice-coil to the back of the cone improves its thermal stability and power handling under load.

**LEFT:** MA's Bronze 2 is a two-way design featuring a 165mm C-CAM bass/mid driver, loaded through a front-firing port, and 25mm gold treble dome crossing over at 3.1kHz

and at around 35cm tall are still more than compact enough to be used on conventional 60cm/24in speaker stands.

## TAKING A STAND

As is usual with speakers of this kind, I placed them on my long-serving, trusty (and only slightly rusty) Atacama SE24 stands – the oxidation came from a period during which they were filled with sand some years ago; these days they're about two-thirds filled with Atacama's Atabytes interlocking metal chips.

They proved a good match with the Monitor Audios, tightening the bass when compared with the 'on shelves' alternative, so I guess a more modern equivalent, such as the same company's Nexus I 600mm or Duo 6i models, would be suitable. Only if you sit on a very low sofa while listening would I suggest a lower stand, as I found the treble response on these speakers relatively sensitive to ear-height, and if the speakers are too high the mid/bass can dominate a little. In that case, some slightly shorter stands, such as the Atacama Nexus I 500mm, might be advised, but I'd suggest trying, if at all possible, to get a listen to the speakers on stands of different heights to discover which is preferable.

In terms of positioning, following Monitor Audio's suggestions – 1.8-3m apart, 20-45cm from rear walls and 1m from side walls – serves pretty well as an initial set-up. Pushing the speakers back much closer to the rear wall did instil some slowness and boom to the bass, which could be partially ameliorated with some judicious bunging. Pulling them out too far into the room did give a very tight low end – just not much of it! ☞

surprise given that I couldn't find anything in the manual about the need to do this.

At its price, the Bronze 2 is a rather fine-looking speaker, with neatly-radiused edges to the front baffle, and a choice of high-quality finishes: yes, the covering is a vinyl wrap rather than 'real' (which is only to be expected at this level), but it's clearly of a superior quality. Given Monitor Audio's past history in finishes from piano lacquer through to a range of exotic woods, it's pleasing to see that attention is still being paid even down at this level of the range.

The Bronze speakers look good in a choice of Black Oak, Walnut, Rosemah – which is halfway between rosewood and mahogany – and White Ash. The darkish Walnut of the review pair, with its matt finish, was particularly distinctive and yet subtle in its appearance.

## RHYTHMICALLY ADEPT

What's immediately striking about the Bronze 2 speakers is that not only do they

look rather superior to the average £250-£300 box – they also sound it. Positioned correctly and driven by decent, if not excessive, electronics (of which more in a moment), they have excellent bass power and control for their size, being as adept with kicking rhythms as they are with the weight of orchestral strings and percussion.

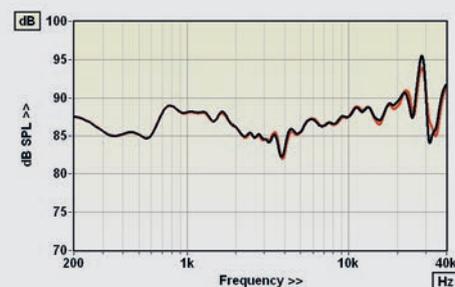
Add to that a fine, fresh view of the midband and treble, enabling them to bring out the character of voices and lead instruments, and a high treble that's detailed while at the same time sweet and clean-sounding, and you have a speaker fully able to take the listener into the heart of the music. System-friendly and at the same time highly involving – sounds like a pretty good deal for the money...

Setting up the Bronze 2s is pretty simple, thanks to a design and specification clearly aimed at making them as fuss-free as possible. It's worth noting that they feel solid and well-built straight from the box, weighing a decent 5.3kg each,

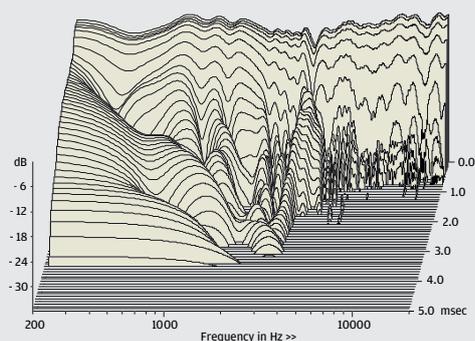
## MONITOR AUDIO BRONZE 2

Monitor Audio claims 90dB sensitivity for the Bronze 2 but that substantially exceeds what we measured, our pink noise figure of 86.8dB and music spectrum figure of 86.5dB suggesting that 87dB would be more representative. This is achieved without resort to low impedance. While the 3.7ohm minimum modulus we recorded is incompatible with the stated 8ohm nominal value, it's still higher than we typically encounter in modern speakers. Moreover, the impedance phase angle is well controlled, remaining within an absolute value of 40° throughout the audible range. As a result the minimum EPDR (equivalent peak dissipation resistance, which takes into account both modulus and phase angle) of 2.2ohms at 125Hz is a full 0.5ohm higher than typical, although this good result is rather diluted by there being four other dips to below 2.6ohm in the range 20Hz to 400Hz.

Forward frequency response [Graph 1, below], measured on the tweeter axis without grilles, is not flat in trend but the departures are sufficiently well contained for the response errors to be modest at ±3.6dB for both of the review pair. Pair matching, over the same 200Hz-20kHz, was exceptionally good at just ±0.6dB, indicating excellent driver matching and quality control in the MA factory. Bass extension of 55Hz (-6dB re. 200Hz) – determined using diffraction-corrected nearfield measurement – is what you'd expect of a speaker of this size and sensitivity. The CSD waterfall [Graph 2] is clear of resonance in the upper treble but evinces an obvious ridge at just under 4kHz, coinciding with a dip in the frequency response and probably caused by bass-mid driver cone breakup. KH



ABOVE: Forward response shows a strong mid and high treble with some loss of presence band output



ABOVE: Small cabinet is well damped but the C-CAM bass/mid driver shows a resonance mode at ~4kHz

### HI-FI NEWS SPECIFICATIONS

|  |                                  |
|--|----------------------------------|
| Sensitivity (SPL/1m/2.83Vrms – Mean/IEC/Music) | 87.5dB/86.8dB/86.5dB             |
| Impedance modulus min/max (20Hz–20kHz)         | 3.7ohm @ 182Hz<br>15.7ohm @ 95Hz |
| Impedance phase min/max (20Hz–20kHz)           | -40° @ 105Hz<br>37° @ 28Hz       |
| Pair matching (200Hz–20kHz)                    | ±0.6dB                           |
| LF/HF extension (-6dB ref 200Hz/10kHz)         | 55Hz / >40kHz/>40kHz             |
| THD 100Hz/1kHz/10kHz (for 90dB SPL/1m)         | 0.7% / 0.6% / 0.3%               |
| Dimensions (HWD)                               | 350x185x281mm                    |



**LEFT: The two-way crossover is split, enabling separate bass/treble connections in bi-wired or bi-amped systems. Note the large bolt – this ‘pulls’ the bass driver into place on the baffle**

accomplished and much pricier speakers will deliver more room-shaking low-end impact and increased clarity from this, or indeed large-scale orchestral music, but all things considered the Monitor Audios do a fine job, sounding more like great speakers subtly rolled-off at either end of the frequency spectrum, rather than compromised designs having anything significant missing from the music.

### HONEST AND ATTRACTIVE

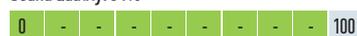
That's also true with Adele's 25 [XL Recordings XLCD740]. Having sold squillions of copies of her past albums, Ms Adkins was clearly able to get a great recording team to keep the numbers rolling, and it shows in the big, bold presentation of tracks like 'I Miss You' and 'River Lea'. Via the Bronze 2s, now driven by my usual Naim reference system – around £21,500 of electronics powering £280 of speakers! – those production values are very much in evidence, as they are with the intimacy of 'Million Years Ago'.

OK, I wouldn't swap the Monitor Audio Bronze 2s for the big floorstanders which they replaced temporarily, but would I enjoy them if they were at the limit of my loudspeaker budget? Very much so – these are honest, attractive and classy little speakers, and they're a great buy. ☺

### HI-FI NEWS VERDICT

Monitor Audio has been making its Bronze series range for many years, picking up plaudits along the way, and it shows: these are beautifully finished speakers with a refined, mature sound for the money, and yet have that spark of vitality and excitement destined to grab the listener's attention. It's a real world design, perfect for use on the end of modest electronics yet capable of withstanding future upgrades.

Sound Quality: 84%



As has been my experience with most speakers of this size – and it's hardly surprising given the vertical dispersion effects I mentioned above – the Bronze 2s did give the best stereo imaging when toed in a little towards the listening position. Just enough to make the outer sides of the cabinet visible seemed to do the trick nicely.

That really snapped into focus the positioning of the performers on Kyle Eastwood's *Time Pieces* set [Jazz Village JV 570034], played via the excellent £200 Onkyo A-9010 amplifier and using the £40 Gramofon network player as a source to show just what the Monitor Audios could do on the end of affordable electronics.

And what it could do was deliver an entirely convincing, toe-tapping sound, with no shortage of subtlety and not a hint of rough edge even with the hard-working brass of Brandon Allen and Quentin Collins, while Eastwood's lightning-fast bass work is presented with both weight and drive, and the percussion well-balanced in mixes clearly in the hard-bop idiom. It's impressive stuff for a speaker this small and affordable, to show so convincing a blend of control and expression.

Change gear to the tight and deep synth-bass of Jean-Michel Jarre's *Electronica 1 – The Time Machine* [Aero Productions/Sony Music 88875123472] and the Bronze 2's are by no means out of their depth. Yes, bigger, more