

Jamo Concert C 93 II

The latest compact speaker from Jamo blends designer appeal with solid audio engineering
Review: **James Parker** Lab: **Keith Howard**

The small speaker market is a fiercely fought arena, with every major speaker brand having at least one dog in the fight, and often several. It's not hard to see why: there's a tradition of speaker companies making over-achieving budget boxes, while the interior design appeal of small enclosures delivering a big sound has encouraged builders to develop the idea of the compact standmount/bookshelf speaker beyond the entry-level. The result is a choice of models with more expensive engineering – and hopefully even better performance – while still keeping the dimensions neat and tidy.

MOD SQUAD

The loudspeaker we have here, the £425 Jamo C 93 II, isn't quite the smallest model in the company's Concert 9 II series – that honour goes to the C 91 II, which costs £325. Featuring what are described as 'premium, furniture-grade finishes', with natural tweed grilles, the new models are designed to fit in with modern décor, and are part of a six-strong range following the current trend of slimming down lineups to the bare minimum, rather than the old way of launching a dozen or so variants designed to fill every niche in the market.

As for the rest of the range, this comprises two floorstanders – the £700 C 95 II and the C 97 II, at £900, plus a single centre speaker, the C 9 CEN II at £275, and the £475 C 9 SUR II surround speakers. UK distributor Henley Audio has further simplified the choice for buyers, for while Jamo offers the speakers in white with heather grey grilles, and either black ash or dark apple with charcoal grey grilles, Henley has chosen only to take the black, with white available to special order while stocks last on all but the C 9 SUR II.

'Then perhaps
I'm just a
square box
conventionalist!'

If the mention of black ash recalls those horrid 'open grain' foil wraps found on everything from cheap flatpack furniture of the past to some speakers of the same era, think again. Things have moved on, and the Jamo speakers are smartly finished, with the main enclosures toning well with the satin-painted front baffles, nicely set off with satin-finished trim rings around the drivers, polished chrome logos on the side of the speakers, and those magnetically-attached grilles. We may not get the full choice of finishes in the UK, but what we do get is very stylish, if a little unusual-looking, Jamo having clearly responded to the high standards of both industrial design and construction now available even at the lowest level of the speaker market.

The C 93 II is a beefy bookshelf speaker – Jamo calls it a 'monitor' – standing 35cm tall. It's equipped with a 25mm tweeter and a 15.25cm mid/bass unit, which is tuned by a single port at the rear, and connected using a single set of terminals. By contrast the entry-level C 91 II is just 26.5cm tall, and uses a smaller 10cm mid/bass driver. The layout looks conventional, but the silk dome tweeter sits in the centre of a large, deep 'Anti-Diffraction Waveguide', designed to control dispersion and enable a high standard of imaging even when one sits away from the 'sweet spot'.

When it comes to the mid/bass drivers, these are also recessed into the baffle,

giving a mild horn-loading effect, which again controls their dispersion. The unit itself uses the company's 'Hybrid Composition Conical Cone' technology, designed for a combination of stiffness and self-damping. It's a development of the previous 'Hard Conical Cone' used in the company's previous Concert series and built around a stiff/compliant/stiff sandwich construction. The stiff outer layers maintain the cone shape while the compliant layer aims to damp resonances at higher frequencies. The aluminium centre plug is there to aid the cooling of the 'motor' and also prevent cone break-up.

EASY DRIVE

The rated 88dB/W/m sensitivity is slightly optimistic [see KH's Lab Report, p75] but the C 93 II won't present too much of a challenge for modern amplifiers. In fact



the only controversial aspect of the design is likely to be the oversized baffle. This is a feature throughout the C 9 II range and certainly gives the speaker a distinctive look, extending out beyond the side panels

DANISH ROOTS

Jamo has come a long way since it was founded in 1968 by Preben Jacobsen and his brother-in-law, Julius Mortensen, taking its name from the first two letters of their surnames. The current company makes great play of its 'Danish design principles' and 'honours its Scandinavian roots', but 51 years on is a rather different beast. In the early 2000s, facing falling sales, a major backer sold off its share to a Danish bank, and production was transferred to China. It was bought in 2005 by Klipsch Audio Technologies, itself a subsidiary of VOXX International, which also owns Acoustic Research, Heco and Magnat, among others. These days Jamo describes itself as 'a high-tech collaborative, utilising resources from around the globe' in the creation of its products.

LEFT: Available in Black Ash, White Oak, and Dark Apple woodgrain finishes, the C 93 II's cabinet hosts a 1in silk dome tweeter (with waveguide) crossing over to a 6in Hybrid Composition Conical Cone (HCCC) woofer

of the main enclosure and avoiding some of the more obvious effects that arise when baffle meets side panel. Some manufacturers tackle this issue by radiusing the joints between the panels, smoothing them out, but Jamo has chosen to extend the baffle so all it meets at its edges is air.

Nonetheless, the baffle does add an impression of bulk, and at least one observer commented that it looked 'a bit of a fake', the speaker actually being smaller than it initially appeared. I get the point, but my own criticism would be that it merely makes

the speaker appear rather over-styled, and a bit fussy – perhaps I'm just a rectangular box conventionalist! When it comes to the larger C 9 II models, where the curve of the outer edges is lessened by the height of the speakers, the

effect is subtle, but shrunk down to the dimensions of a bookshelf enclosure, I feel it combines with those trim rings to make the speakers look a bit 'bug-eyed'.

PERFECT HIGHS

The manual for the C 9 II series gives little away about the suggested positioning of the speakers relative to side and rear walls beyond general diagrams suggesting all the stereo speakers, from the little C 91 II to the big C 97 II, should be used at least 2m/6ft apart, and the same distance from the listener, forming an equilateral triangle.

Jamo's illustration has the speakers placed hard against the rear wall and well in from the sides, firing straight forward. Indeed, the C 93 II even has a little key-plate at the top of its rear panel, designed to hang the speaker on a single wall-screw, even if I probably wouldn't risk that with a box weighing 6.4kg. However, hard against the wall was what I tried, with the C 93 IIs on solid, heavy stands and powered with amplifiers that ranged from the little Cambridge Audio AXA35 [HFN Sep '19] through to a Naim Nait XS 3 [HFN Oct '19].

The results were mixed: even with the speakers hard against the wall there was too much bass flabbiness, this diminishing as they were pulled out to around 0.5m into the room. Meanwhile the soundstaging and imaging, notable even with them in 'firing squad' formation – testament to Jamo's efforts in optimising the dispersion characteristics – became even better when the speakers were toed in ever so slightly, this adding to the sense of depth and focus. Your mileage may of course vary, as they say, as every loudspeaker will sound different in every room, however hard the designers try to dial out such variables.

So arranged, the C 93 II speakers showed just what they could do, which was both very impressive and highly

reminiscent of the admirable qualities of the company's past Concert-series models. They have gung-ho excitement when pushed hard, certainly sounding big and weighty with a bit – but not too much – boundary assistance, but at the same time they integrate the

midband and treble smoothly to create a sound that's both natural and generous.

However, there's nothing overtly rounded off or stifled here – well, apart from the lack of absolute bass from these ➔



JAMO CONCERT C 93 II



LEFT: Single, chrome-plated 4mm binding posts are fitted under the C 93 II's substantial, rear-facing reflex port

attractively-priced options for filling larger spaces, in the form of the two C 9 II floorstanding models.

Similarly, these maybe aren't the speakers to choose if you lean towards flat-out rock or huge orchestral forces, even though they will undeniably go loud, maintain good dynamics and focus the stereo image well – at least with sufficient amplification.

Pushing things hard with the inexpensive Cambridge Audio AXA35 amp, good though it is, gave an inkling of some edge-teetering going on with the Pittsburg/Honeck recording of Bruckner's 9th [Fresh! FR733; DSD128].

Indeed, it took a step up to the much more expensive Naim Nait XS 3 amplifier for the loudspeakers to get a better grip, but even here there was some sense of the music being held in check as the levels rose.

Things were much safer with the recent Channel Classics release of Schubert's *Winterreise* [CCS 42119; DSD128], enabling the speakers' natural fluidity and high levels of detail to come to the fore. Within its limits, this is undeniably a highly capable design, but it's vital to understand that limits there are, as is the case with any speaker of relatively modest size and price. ⚡

HI-FI NEWS VERDICT

The C 93 II speakers are very good, and will delight when used as they are intended to be, in medium-sized rooms on the end of a decent amplifier. Set them up well, and they will deliver focus, fine tonality and plenty of punch, only going slightly off the boil if you ask too much of them when it comes to room-filling or absolute volume levels. The aesthetics are a matter of taste, but these remain fine speakers.

Sound Quality: 82%



small enclosures. Instead these little Jamos sound detailed and explicit, with excellent rendition of the tonality and timbres of voices and instruments. The tweeter so nearly does its job to perfection, the speaker only sounding a bit dry and anonymous with recordings known to have superb ambience, but is undeniably 'of a piece' with the rest of the presentation.

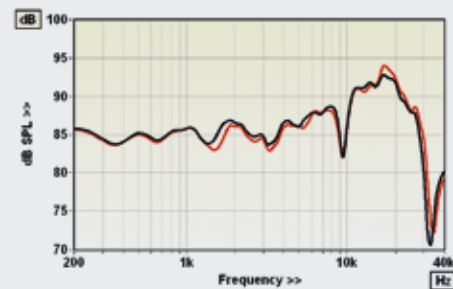
QUALITY TIME

With Chrissie Hynde's set of jazz standards, *Valve Bone Woe* [BMG 53850448; 44.1kHz/24-bit], the Jamo C 93 IIs are persuasive with the close-up recording of the voice, while tight and yet full with the accompanying Valve Bone Ensemble. What the bass lacks in ultimate extension it certainly makes up for in both speed and timing, and the sense of musicians in the room is strong when the speakers are listened to relatively close up – ie, within a few metres.

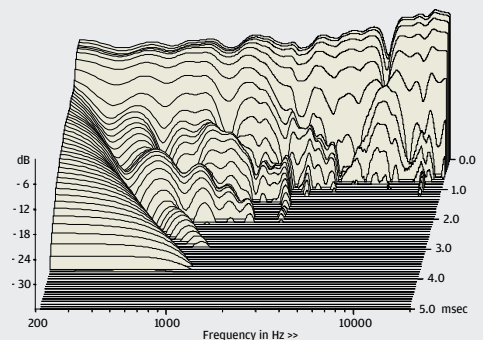
However, this feeling of 'presence' on the part of the performers becomes more diffuse as you ask the C 93 IIs to work over greater distances. These are definitely small/medium room speakers, and Jamo offers

Given the C 93 II's compact dimensions it was always likely that Jamo's specified 88dB sensitivity would prove optimistic, which our measurements confirmed. While our pink noise figure of 87.2dB is close, the 'music' figure of 86.1dB is more distant. This order of disparity always arises because of a non-flat frequency response [see Graph 1, below] measured here at 1m on the tweeter axis. The response trend is commendably flat to 4kHz, then begins a steep rise to 17kHz interrupted only by a deep, narrow suckout at 9.3kHz. This rise will be substantially corrected by listening sufficiently far off-axis, but then the effective sensitivity will fall further to around 85dB.

The 6ohm nominal impedance is a stretch too. Ordinarily this would mean the impedance modulus not falling below 4.8ohm but we measured a minimum of 3.4ohm, making this a 4ohm design. Quite high impedance phase angles reduce the EPDR to twin lows of 1.8ohm at 142Hz and 6.04kHz, so the C93 II is a moderately challenging load to drive, particularly bearing in mind the likely partnering amplifiers. Because of the treble rise, frequency response errors are high at ± 5.4 dB and ± 6.0 dB, respectively, but the limits to 4kHz are about ± 2 dB, so response flatness will be much better if the speakers are not tooed-in towards the listening position. Pair matching is a little disappointing at ± 1.7 dB but for much of the frequency range up to 14kHz the disparity is much less, within ± 0.7 dB. Diffraction-corrected summed nearfield measurements show the bass response to fall off rapidly below 70Hz, reaching 56Hz (-6dB re. 200Hz). The CSD waterfall [see Graph 2] shows some HF resonances, suppressed here by the treble response rise. KH



ABOVE: The forward response is flat up to 4kHz but then peaks upwards, save for a notch at 9.3kHz



ABOVE: Resonances are coincident with peaks and troughs in response but are masked by the treble lift

HI-FI NEWS SPECIFICATIONS

Sensitivity (SPL/1m/2.83V – Mean/IEC/Music)	90.0dB / 87.2dB / 86.1dB
Impedance modulus: minimum & maximum (20Hz–20kHz)	3.4ohm @ 210Hz 22.3ohm @ 37Hz
Impedance phase: minimum & maximum (20Hz–20kHz)	-51° @ 108Hz 50° @ 850Hz
Pair matching/Resp. error (200Hz–20kHz)	± 1.7 dB / ± 5.4 dB / ± 6.0 dB
LF/HF extension (-6dB ref 400Hz/10kHz)	56Hz / 29.7kHz/31.3kHz
THD 100Hz/1kHz/10kHz (for 90dB SPL/1m)	0.5% / 0.2% / 0.3%
Dimensions (HWD) / Weight (each)	350x200x259mm / 6.4kg