Jamo DS7
wireless audio system

Jamo baby!

Take a design classic and swap out its 15-inch woofers for three-inchers, while shrinking the whole thing to 30cm high. It can't work, right?

This was the first box of speakers we received for a round-up we did of compact speakers a few issues ago. It was only when we received them that we saw that they came with a subwoofer, which didn't fit that grouping of speaker pairs only. So now you get a standalone review of this very unusual 2.1 speaker system, the Jamo DS7.

Equipment

Apart from anything else, it's visually unusual. The two smallish speakers — they stand just over 300mm tall — are modelled after Jamo's enormous R909 speakers which are famous for their lack of having anything resembling an enclosure. None of that closed box, acoustic suspension, or even tuned bass reflex port. They have a heavy baffle and bracing, but nothing else at the sides and back.

And so it is with the DS7 speakers. The review models had a high gloss, bright red baffle just under 10mm thick (Jamo's spec sheet says 3.5mm, but we're not sure where they could have put their micrometer for that...). Black and white, both also in high gloss, are also available. The rears of the three drivers in (or on?) each speaker poke out behind the baffle. A single brace — it could be metal but I think it's a sturdy plastic, curves up from the base, behind the drivers, to the top of the baffle to provide support.

You won't be surprised to read that there are no front grilles supplied to obscure their beauty.

The drivers are neatly finished, but it's not disguised what they are, so visually the result is highly modernistic or industrial. I for one like it a lot. Especially in the red.

Within the baffle of each speaker is situated a 20mm 'tetron' tweeter which uses neodymium magnets and two 87mm paper-cone midrange drivers, although Jamo calls them in different places 'midrange' and 'bass'.

Now, as I'm sure readers are away, the enclosure of a speaker does more than merely keep the dust out and the components in. It is a fundamental part of the speaker design. And, like most things in life, there are pros and cons to the types of enclosure that can be used, and whether or not an enclosure should be used at all. As you can see by looking at the

SUMMARY

Jamo DS7 2.1-channel wireless audio system
Price: $999

+ Really excellent imaging
+ Fast, dynamic performance
+ Striking appearance

- Volume adjustment extremely coarse
- Some emphasis of treble
- Subwoofer can be over-driven

selection of loudspeakers in any hi-fi shop, the general consensus is that the 'pros' of having an enclosure outweigh the 'cons.

A speaker standing alone without any kind of surround produces weak bass. We can talk about that in all kinds of ways, but the most intuitive is just to think about what happens when the speaker cone pushes out. It's pushing air in front of it to create a pressure wave. That wave propagates out into the room, and that's what makes the sound. But some of the pressure wave will make its way around to the back of the speaker driver, which is simultaneously pulling in. That part is lost energy.

It turns out that the lower the frequency, the more the energy that is lost in that way.

That's why the Jamo R909 speakers had two massive 15-inch bass drivers — they needed them. *(For more information on the R909, you can read the thoughts of their Danish designer Henrik Mortensen in the Jamo history we published in our last issue, particularly p46-47.)*

If you put a speaker driver into a flat baffle, then you increase the distance for the pressure wave to travel, and reduce the amount of power lost, and lower the frequency at which it becomes a problem. But a big flat speaker can be difficult to handle, so the baffle is turned into a box, and engineers can design exactly how the pressure waves at the front and back of the driver should interact.

Okay, so what are the pros of having a boxless design? One, really: the elimination of compression effects caused by the enclosure. If the enclosure is sealed, the driver is fighting all the time against the cushioning effect of the air trapped inside the speaker. It will resist the cone moving forwards, and resist the cone going inwards. Of course, drivers are therefore designed for these kinds of enclosures with that taken into account.

Even bass reflex speakers meet the same resistance to movement, at least across the bulk of their operating frequency range.

The Jamo DS7 speakers don't. So the thinking is that they could provide a more dynamic performance.

To overcome the bass limitations, the system has that subwoofer. Indeed, quite a large one. It has a 205mm driver — side mounted — and a 60W amplifier built in to power it. You don't want to waste power there, so it has an enclosure with a large bass reflex port on the back.

Built into the subwoofer are also two 30W amplifiers to power the small speakers. You may notice, glancing over those specifications overleaf, that the power for the two speakers and the subwoofer add up to 120W, whereas the total system power is said to be 160W. Why the discrepancy? Beats me.

Also on the subwoofer are the two inputs: optical digital and one analogue RCA pair. The unit also supports Bluetooth, but since no codecs are mentioned I am assuming that only SBC is available, not AAC or aptX.

I have to devote a few words to the remote control (pictured opposite). It's a moderately compact thing, with keys for selecting inputs, adjusting volume and bass level, setting up Bluetooth pairing and pause/play skipping Bluetooth tracks. What's interesting about it is the styling, which is delightfully retro. The black face looks normal, if a bit more squarish than usual, but around the 15mm thick edges is a chrome-look strip that's like nothing we've seen for decades.

ABOVE: The Jamo R909 was one of our 'Ultimate 30' last issue. The Jamo DS9 delivers the design in miniature.

Volume
Digital level controls for volume and bass balance complement the slightly tricky remote control.

Connections
Three choices — optical digital, analogue in, and Bluetooth, all made via the subwoofer, which contains amplification for itself and both main speakers.

Performance

Setting up the system is very easy. Speaker cables are provided for wiring them to the outputs on the subwoofer. It's then just a matter of plugging into power, using the remote to select an input, and then start pouring some music into the system. After checking that Bluetooth worked (it did), I used two sources for the bulk of my listening — mostly an audio streamer plugged into the optical input, plus a bit of vinyl played on a turntable with a built-in phono pre-amplifier, connected to the analogue input.

Use was easy. You select one of the three inputs using the dedicated remote control keys. The 'JAMO' on the front of the subwoofer glows when it's powered up: white with analogue inputs, orange with optical, blue with Bluetooth. It switches off automatically after some minutes of no signal being detected.

I had one immediate problem, and one that remained with me throughout. The

LEFT: The original R909 overcame the lesser bass of baffle-less design by using twin 15-inch drivers. The DS7's more home-friendly solution is to use a subwoofer instead.

volume control — which is effectively only the one on the remote, since the other is on the rear of the subwoofer — is way too coarse-grained, or perhaps too touchy. Initially, using the remote like any other I found the system jumping by perhaps ten decibels up or down in volume when I touched the volume key — way, way too much. Fiddling with a combination of the rear control knob (which quickly proved to be a digital controller, not an analogue level control) and the remote showed that its setting made no difference. With practice I managed to get my stabs at the remote keys quick enough to get the adjustment down to perhaps five or six decibel jumps. As you can imagine, that made it difficult to get it 'just so'. In practice, it tended to end up with the level raised to a higher level than was perhaps good for me.

But there was another reason for the higher level: it was easy not to notice how loud the system was playing. That's a side effect of low levels of distortion. When things are playing cleanly, there's a subjective sense that it's lower in level than it really is. So while I was delighting in a marvellously rounded stereo soundstage and a subtle richness of the cymbal work, early in the Deodato rendition of *Nights in White Satin*, there was also a disturbing overloading of the subwoofer at a couple of points, with it producing something of a rattle. I hastily backed off the volume by as small a notch as I could manage, making the overload go away. And discovered that even then the SPL levels in my listening position a couple of metres from the speakers was over 97dBSPL. Goodness knows what I'd been trying to make the system produce before that!

Which, incidentally, suggests that Jamo has placed a fair bit of trust in the user: rather than aggressively protecting the system and potentially thereby limiting what it might be able to achieve, Jamo leaves it to the listener to hear problems and back off. That's the way I prefer it for me, but I'd suggest a little training if you're buying this for an inexperienced listener.

So while we're listening, let me return to the sound. On track after track, analogue and digital, the system proved to deliver a very detailed, and engrossing soundstage. Far better than any $999 system ought to.

Again, the upper midrange and treble was generally handled with a particular control and produced an almost eerie coherence to the quiet mids and trebles that sometimes decorate musical performances. They occupy a place in space that is conveyed by this system in a manner well beyond what the same number of dollars would normally purchase.

The bass from the subwoofer was strong, and it joined with the upper frequencies from the small speakers reasonably well. It was tight and coherent within its band of coverage. Only occasionally did it sound not quite as fast as the main speakers.

The main mini-D909 speakers in turn did produce, in the midst of their very open sound with excellent clarity and imaging and low distortion, also something of an emphasis in the upper midrange and lower treble which could sometimes translate into a slight whistle on female vocals, particularly when they were leaning anyway towards sibilance on the recording. So not perfect, but not a deal-breaker.

Conclusion

So there you have it. We confess when we first spotted the DS7 a couple of years ago at IFA, we imagined it was a collector's novelty, rather than a quality audio system. But in fact the Jamo DS7 powered speaker system produces a sound quality well beyond its pricing, though requiring monitoring to ensure you don't overdrive it. With that, and that upper midrange brightness in mind, I'd still suggest that there's a bold dynamism here that makes this a very different and very satisfying system. ⊣ *Stephen Dawson*

SPECS

Jamo DS7 $999

Firmware when tested: 6.0.1/MUE34

Total system power output:
160W (continuous, less than 0.2% THD)

Speaker power output:
2 x 30W (continuous, less than 0.2% THD)

Subwoofer power output:
60W (continuous, less than 0.2% THD)

System frequency response: 20Hz-20kHz

Speaker drivers (each):
1 x 20mm tweeter, 2 x 87mm midrange

Subwoofer driver: 203mm side firing

Inputs: 1 x stereo analogue audio (3.5mm), 1 x optical digital audio, Bluetooth

Dimensions (whd): 102 x 305 x 89mm (speaker)

Dimensions (whd): 254 x 305 x 381mm (sub)

Weight: 1.7kg each speaker, 7.9kg subwoofer

Warranty: Six years (three years for subwoofer)

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