

# Heavy Mettle

If ever there was a high end loudspeaker built to last and dressed to impress, it is Monitor Audio's giant PL300 floorstander. Noel Keywood listens in...



Audio's new Platinum 300 range topping loudspeaker was the first thing that caught my attention. I know what Monitor Audio like and thrive on and guessed that the rest of their vast PL300 had been voiced to match this new tweeter, to sound equally fast, engaging and deeply revealing. I wasn't

far wrong, it turned out...

The PL300 is quite a monster. It stands over one metre high (1,113cms/43ins) and weighs a whopping 43.2kgs (95lbs) because it is so massively built. So it stays firmly where it is put, a large area plinth spiking in to the floor to make the whole feel very stable. Monitor Audio are the BMW of the loudspeaker world, giving all their products a level of detailing and finish that's a clear cut above price rivals. Even the rear ports look good - they're not just cheap plastic push-ins - and the connection terminals are lovely. Quite why I don't know, but there is even a leather covered front baffle, and a grill to hide it if you so wish.

I was happy to run the PL300s without the grilles. Their drive units look intriguing - well, to me at least - and grilles do nothing for stereo imaging in any case. Another small point is that ribbon tweeters are smooth, intense and directional in

their output; it isn't a good idea to put things in their way. The huge cabinet has a deep gloss finish and the whole assembly looks very smart.

The PL300 has been designed to be not only technically effective, but also something of a sonic piledriver. Those two 8in bass drivers each have their own chamber and can transmit enormous acoustic power I found, to give a massive bass blow. I was going to say "a sledgehammer blow", but it isn't quite that, on which I will elucidate later. Their shallow concave cones are formed from a lightweight aluminium honeycomb, Monitor say, optimised using Finite Element Analysis to give a very light and stiff cone that acts as a "lightning-fast piston for a clearer more natural sound". They work smoothly up to 550Hz. Measurement suggested the chambers are identical and not stagger tuned.

Above 550Hz a midrange unit comes into play. It too uses the same lightweight concave cone made from Monitor Audio's lightweight aluminium honeycomb, again with no central dust cap over the magnet. Monitor Audio say it uses high strength Neodymium magnets for high sensitivity, to match that of the bass units. The midrange unit works up to a high 4kHz, meaning it crosses over at a very short wavelength to the tweeter. Crossing over here is difficult, a common drawback to using ribbons. Potentially, this affects vertical integration, making seating height more critical, but measurement showed this has been handled well and in use there was little phasiness as I moved vertically.

Few midrange units reach smoothly to 4kHz without breakup,

I've always had a partiality for ribbon tweeters since living with the Tonigen in the Heybrook Sextet. Think incisive treble that's cuttngly clear, yet at the same time supremely even, correct and uncoloured. There's always a hint of Wilkinson Sword to the ribbons I've heard, yet at the same time they've revealed detail no dome could manage and have proved impressive and untiring over time. So the new ribbon tweeter in Monitor



so I looked closely at this possibility with the PL300 when measuring and listening. It's another difficulty ribbons bring with them.

The benefit is that ribbon tweeters truly do work well, offering fast, clean treble that is smooth and always very insightful. They lift detail right out of a mix in a startling manner and in use this one did too. In spite of the difficulties I think ribbons are worth using and, as I mentioned earlier, the presence of a ribbon in this loudspeaker was an immediate plus point to me. I still find dome tweeters a little uneven and coloured in contrast to either an electrostatic panel or ribbon tweeter.

Monitor say the PL300 can run very loud, delivering 118dB Sound Pressure Level; I can believe it. Power handling is rated as 300 Watts so they can absorb a lot of power. Looking at a huge loudspeaker like this you might be tempted to think they need such large amounts of power, but peculiarly the situation is exactly the reverse. Well engineered big loudspeakers like this one need little power. That means most listening will be carried out at a few Watts, an area where all but the best solid-state amplifiers are at their worst. Add in the fact that the PL300 is so revealing it ruthlessly magnifies what an amplifier is doing and you end up with something of a matching problem. It isn't insurmountable of course, but how the PL300 sounds is very amplifier-dependent I found, after swapping in and out numerous amplifiers.

Best are low power Single-Ended valve amplifiers like the superb Almarro A318B replete with 6C33C and no crossover distortion. A good 300B amplifier will also work, because 300Bs are a proper audio triode with a silky smooth sound. Unfortunately, I tried an assortment of solid-state designs and found they all made the PL300 ribbon sound over-bright, sometimes screechy. Even a Class A Sugden A21a Series 2 didn't match, even if it did sound very good in many ways.

So a good amplifier is essential and if a solid-state amplifier matches

the PL300, all I can say is I didn't find it! Most high power designs will be unsuitable I suspect. I was fortunate in having a perfect match for the PL300s however, a pair of Icon Audio's new 845 monoblock power amplifiers; I used them for most of the listening (a full review will appear in our Jan 09 issue). I always monitor power into a loudspeaker when reviewing, and rarely did I push more than 10 Watts into the big Monitor Audios - and even then I was hanging onto the settee to avoid being thrown over it by their massive bass!

Straight out of the box the PL300s sounded metallic and shouty; a lot of running in was needed. Editor David Price found the same with the PL100s some months back, but afterwards they will sound "almost warm" he told me. And that was the case; somewhere in there was a kind of warmth, but it wasn't attributable to the tonal balance but a lack of distortion hash, and low colouration giving dark inter transient silences.

## SOUND QUALITY

The PL300 Series are Monitor Audio's new flagship loudspeakers, but they haven't sought to make them a more academically refined version of the excellent GS60 I reviewed and was very impressed by in our August 06 issue. The opposite in fact. The PL300s are pumped up versions of what Monitor Audio do so well generally. The large cabinets issue thunderous bass that runs deep and has conspicuous presence. There's no asking "where's the bass" with this one, and it is of the deep furniture moving variety too. At times I was a little disappointed by the fact that there's the same sort of tubbiness that affected KEF's Reference 103/2 I reviewed recently. It comes from a small amount of bass peaking and this relatively under-damped characteristic makes for a feeling of great bass vigour, as if the 'speaker is eager to play a bass line. Switching our Pioneer PLC-590 turntable to 45rpm and putting on Goldfrapp's 12in single 'Ride a White Horse' had a subterranean bass line start suddenly and forcefully, somewhere beneath me it seemed. The PL300 has the feeling of being able to travel endlessly downward with nonchalant ease, very much like the Meridian DSP-7200 I reviewed in our November issue.

This isn't artifice either; measurement showed the Monitor Audios were strongly exciting the

24Hz main mode of our listening room, so they really do go super low in practice, and the sense of freedom to their bass lies both in its lightly damped nature and this extension to subterranean depths. It also accounts for the small sense of tubbiness, but at the same time that is not to say they either boomed or slurred. Quite the reverse, bass lines from the big PL300s strode along with a muscular grip that rhythmically underpinned Ride a White Horse with great confidence. This also gave drums both scale and power, so the opening kick drum on Steve Earle's 'You Belong to Me' hit me firmly and forcefully in the stomach in a way few other loudspeakers have managed.

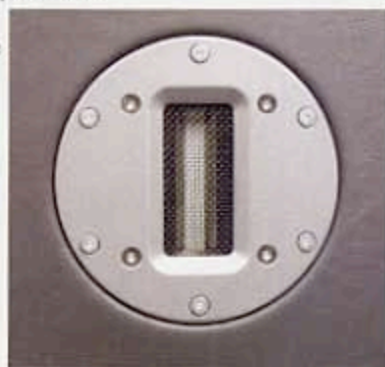
Only Tannoy Yorkminsters could eclipse the PL300s here, which puts them well up the scale of ability in this area. What applied to rock also applied to Classical, the kettle drum in 'Mars, Bringer of War' from Holst's Planets had a lovely resonant quality and a strength that made it stand out nicely from the instruments around it.

One small reservation I have with low frequency reproduction is that in a smaller room with modes closer to those of the loudspeaker's prodigious low frequency output the PL300s will likely induce room boom, making bass sound heavy, a problem I suffered with the Yorkminsters. They worked beautifully in our big listening room, but not in my medium sized lounge (the only reason I did not buy them!). I suspect this is why Monitor Audio have shelved upper bass downward a bit, to lessen such an effect.

Another difficulty, one I also ran into with the KEFs, is that with solid-state amplifiers bass was even heavier - and generally too heavy for my liking.

As you might expect from a set of aluminium drive units there is a light timbre, characteristic of all Monitor Audio loudspeakers. Yet at the same time the PL300 saw so far into music it revealed extraordinary levels of detail. My attention was drawn to some amusingly ornate and deft stick work by the Zutons drummer as he pulled off a rapid stream of small percussive strikes in the background to Valerie. This was the ribbon working its magic, extracting fine details from the mix seemingly with magical ability and laying them out with a firm precision beyond the vaguer sound of a dome.

A fine



demonstration of both this strength and also the extraordinarily strong dynamic contrasts was made obvious, perhaps surprisingly, in Holst's 'Jupiter', from 'The Planets' suite. I usually find it easy to sit through our Naxos recording without being drawn in, putting this down to the often distant nature of classical recordings. The PL300s changed this. From the fine yet sonorous tinkling of bells at the start, through the succession of firm and powerful kettle drum strikes, to beautifully dense and detailed reproduction of strings as they enter with the main theme, the PL300s were masterful. I was drawn right in by their deep insight, vividly crisp timing and thunderous power. Yes, strings are bright, even from the graphite anode of an 845 valve which is a 'dark' source, yet the purity of the treble, its lack of phasiness and the way temporal strands were well separated made the questionable tonal balance aurally acceptable; bright did not equate to 'screach' with this loudspeaker, a benefit of very low distortion and colouration.

Just to dive into technicality quickly, the ribbon unit is measurably prominent and also has an unusually smooth frequency response, which means a lack of local resonances that beset dome drive units. That's why ribbons sound good: it's simply because they are good - measurably so. You will hear this with the PL300, every time someone hits a cymbal or shakes a tambourine. It was something I loved about the Heybrook Sextets, as characterful as they were in other areas. A big technical difference here is that Monitor Audio's midrange unit

reaches right up to 4kHz to meet the ribbon, so there's none of the warmth of the Sextet. However, there are a few wiggles at the top end of the midrange unit's output and these account for a small amount of cone colour that I occasionally became aware of. Spinning Duffy's 'Warwick Avenue' on the Rockferry LP I was aware of a hint of this colour to sibilance in her voice. Aluminium drive units possess a light air about them but there is usually a small giveaway somewhere and as good as it is the midrange unit reveals small limitations here, avoided by a good electrostatic panel for example.

But talking about Duffy brings me to Patti Smith - sorry about the obscure logic! The PL300s beautifully revealed the deadpan delivery of Patti Smith, her lack of vocal inflection but the gruff strength in her voice; listening to 'Gloria' captured all this beautifully. Duffy by way of contrast uses inflection as an art form, her vocal gymnastics and richly modulated tones being made very evident by the PL300s. Again it was a performance that had me spell bound by its closeness, its vivid dynamic range and fantastic clarity. In spite of the emphasis of highs, I found old LPs (I use mostly new re-pressings for reviewing) that commonly sound awful, like The Who's 'My Generation' where Roger Daltrey seems to be singing into a baked bean tin, were handled with aplomb. You get to hear how bad the basic recording is, that's for sure, but performances retain their dynamic vigour and were thoroughly enjoyable.

The PL300s image sharply and have good focus. The ribbons integrate well subjectively and there's

little change in image quality vertically, although listening on an axis between midrange and treble is perceptibly best. There isn't quite the sense of height a dome driver achieves, because ribbons don't throw much energy at the ceiling, but the PL300s still arrange a convincing array of well hewn images across the sound stage.

## CONCLUSION

The Monitor Audio PL300 has been made characterful to entice, I believe. Its thunderous bass brings life to all performances, even those where the drummer was put under the stairs! But at times I wished for a slightly drier, more concise quality. It's a small point, but measurement suggests easily achievable. Similarly, Monitor Audio's superb ribbon tweeter has been made just a little too prominent, making suitable solid-state amplifiers difficult to find.

All the same, paired with the right ancillaries this big beast sounds breathtakingly fast, dynamic and clean, just as Monitor Audio like it. The engineering is both unique and impressive. Classical music lovers will revel in the way they pinpoint individual instruments and grace strings with a rich harmonic structure. Rock lovers will adore the clarity and dynamic power. The PL300s bring life to music and can be overwhelmingly enjoyable, offering a sound that's both genuinely and conspicuously high fidelity at the same time.



## MEASURED PERFORMANCE

Monitor Audio's Platinum PL300 delivered exactly the results I would expect from a quality ribbon tweeter and good cone midrange. The ribbon tweeter in truth, with the microphone placed on-axis, measures almost ruler flat, as good ribbons do. Apart from high accuracy, this also connotes to extreme - by dome standards - lack of colouration.

There's a small but obvious step down at 1.5kHz in output of the midrange unit, but otherwise it too has an impressively flat frequency response down to 350Hz. Below 350Hz overall level is lower than that of higher frequencies, suggesting a lack of body to vocals. Low bass below 100Hz suddenly rises upward to form a wide plateau down to 60Hz, after which forward output falls abruptly and the ports

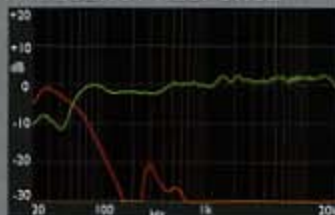
come into play. Tuned to 32Hz these take output way down to 20Hz and lower. Our 28ft room had its main mode at 24Hz strongly excited by the PL300s. This will give the loudspeaker prominent low bass, plus seismic subsonics.

Sensitivity measured a high 90dB and overall impedance 6 Ohms, DCR measuring 4 Ohms as is common nowadays. The impedance curve is nicely smooth above 100Hz and this is useful as it helps reduce amplifier matching problems. The usual twin peaks of a reflex are there and need suppressing in a loudspeaker of this cost and stature.

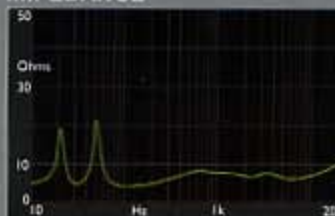
The PL300s measure well, ignoring the lower midrange plateau dip. This will draw body and smoothness from the sound. Otherwise, expect them to run high beautifully, due to the smooth ribbon

tweeter, go low with eye-popping weight, but sound more technical than accurate. NK

### FREQUENCY RESPONSE



### IMPEDANCE



### VERDICT

Serious 'statement' speakers with an unusually clean, fast and open sound underpinned by truly muscular bass.

### MONITOR AUDIO PL300

£5,500

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### FOR

- extraordinary dynamics
- powerful, deep bass
- very sensitive

### AGAINST

- amplifier critical
- prominent treble
- technical colour balance