

hardware review



Clearaudio Performance DC

Wednesday, July 16, 2014 Chris Beeching

Turntables have come in many shapes and sizes since the transition occurred from cylinder to disk replay. Technology has changed too, with the advent, firstly of clockwork platter mechanisms and acoustic recording, followed by electrically-powered and amplified audio systems, and later with contactless direct-drive platters and pick-up arms with non-contact main bearings. The player footprint has also varied from the 'barely large enough for a 7inch' to large enough to cope with an arm rather longer than 15 inches. As for standardization, the record itself, in the post-mono era, is perhaps the only real constant. Against this backdrop, and despite the relentless march of digital audio development vinyl replay continues to fascinate, and in a well-set-up system offers a level of performance and engagement that is hard to match. Enter Clearaudio's Performance DC. This is a turntable with a relatively small overall footprint,

Enter Clearaudio's Performance DC. This is a turntable with a relatively small overall footprint, simple but modern technology, and carefully thought-through details, making it a very inviting package. First thing to note is the inverted bearing, with the inner platter sitting atop a ceramic shaft. Here, though, convention is pushed aside as the inner platter on its own will not sit right down on the shaft, this because a magnet reduces the downthrust of the whole inner and outer platter assembly. There is no thrust plate or ball bearing at the base of the main bearing which means there's no friction at this point as is the case with most other turntables. This results in one of the quietest turntables I have ever had the opportunity to review or audition.

A real doddle

The DC motor and belt are hidden underneath the main platter assembly, with speed change being effected through push-button selection atop the plinth. Three speeds can be selected; 33.3, 45 and 78rpm. In listening these proved to be particularly wow-free, but more of that later. The main plinth is a housed in a brushed aluminium case, the whole ensemble supported by three adjustable, compliant and shock-absorbing feet. These make leveling the turntable a real doddle, and reduce set-up time.

The Clarify arm is another matter. I have long thought magnetic bearings should be a good thing, but as my experience with this one has shown, they can be tricky to set up. The arm bearing comprises two opposing magnets for vertical, and 'rotational' movement. In theory this should provide a friction- and wear-free bearing that will outlast any of us. However, when it comes to setting up the arm, getting the tracking downforce correct is a challenge. The magnetic field within the arm-bearing yoke area is very strong, but it's not constant. As a

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result, as the cartridge rises, the 'magnetic resistance' of the arm increases. As the arm falls, the downforce decreases. Thus, with a warped record the stylus will have to cope with varying downforce. The reality of this is that you have to set arm-height so that the arm is absolutely parallel to the record surface. This then gives a 'constant' against which to set the tracking downforce, with the variations in record height or thickness (or record warp) making a very minimal difference to the tracking weight. The actual tracking downforce is then set using the counterweight – no surprises there, and this works very well in practice.

The manual recommends setting downforce without a record on the platter, and after initially setting it slightly too high, it took a few judicious tweaks of the counterweight to get near the optimum for the cartridge, in this case Clearaudio's Virtuoso v2. Azimuth is surprisingly stable



given the magnetic main arm bearing, and I have to say I was impressed with its stability once in the 'play' position. However, after nearly two months of use, I still find it a tad disconcerting to see the whole arm move about the main arm pillar as I ease it out of the arm-rest! As for the cartridge, with, perhaps, price being a determining factor Clearaudio fitted their moving magnet Virtuoso v2. In the past I've been a fan of MCs, despite their sometimes more finicky setting up, and loading requirements. However, Clearaudio's offering was a real surprise, offering a very transparent window on the groove contents, to the degree that I never felt there was anything missing. It has very low colour, good dynamic capabilities, and is surprisingly open and 'easy' at the top end, while providing a very solid and yet deft bottom end. The midrange is also nicely open without being overly lean or rich; overall it seems a very well-balanced cartridge and suits the turntable and arm combination very well.

Balance

So, overall, how did it sound? In reality, my one overriding impression was that of neutrality. The combination seems to be very balanced. Backgrounds are commendably quiet for a turntable, arm and cartridge combination at this price point, if I had to be picky I'd say that it could be more revealing in the manner of higher priced players. But the sum of the parts would have you believe (with ease) that this little lot should cost a whole lot more. The benefit of the quiet background (evident even when the stylus hits the lead-in groove at the start of a record) is that the music is presented on its own without the intrusion of something unwanted, something to distract and blur. This was also true of records where there is normally high background noise. Maybe this is due to the stylus shape, though that doesn't seem to be particularly 'special', it probably has more to do with the integrity of the platter bearing, and possibly the lack of actual mechanical connection through the magnetic arm bearing. Sadly I didn't have an opportunity to try a different arm, but it might have been an interesting exercise.

I know that 'neutral' has been used to damn something with faint praise in the past, but here it really is a virtue. It did take some while to make the combo really 'sing', with small changes in tracking weight and arm height making noticeable differences, but the end result is a player of very satisfying musical performance. Although neutral it lacks the dryness that might be inferred. It also has great punch when needed, and Gordon Giltrap's title track Fear of the Dark is a testament not only to the dynamics achievable from the 'humble' LP, but also a credit to Clearaudio

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that this modest player is able to retrieve so much of the inner detail with the drums and bass having such percussive impact. Soundstaging is always something which fascinates people; the Vespers from Tewkesbury Abbey presents a fantastic aural picture of the acoustic space giving the listener a very good representation of the size of the abbey, with depth, width and height all seeming to extend far beyond the 'limits' of the speaker size. Absence of any discernible 'wow' here made the acoustic image all-the-more stable and credible. Conversely, close-miked stuff draws you much closer to the performer, with at least some indication of whether the singer was smiling or grimacing as they sang. Simple jazz, the much-loved piano, bass and drums variety, with the odd singer thrown in also failed to upset the system, with a very marked difference between large-stage performances, and the smaller-stage club renditions.

So, after a couple of months in my system, does this Clearaudio combo have any failings? Well, setting up, to get the very best out of it can take some time and care, but then this investment will be more than amply repaid in musical enjoyment. Dynamics and recorded-acoustic representation are of a very high order, as is what is called 'presence', you can get a real feel for the performer doing their stuff. While having punch when needed, it also exhibits subtlety and deftness with small inner-detail stuff. My only criticism, and it's being really picky is that it lacks the ultimate resolving power of an ultra-fi set-up, but if the rest of your system's not up to that level you'd never miss it. Overall the Performance DC is highly recommended as good value for money, it's a highly creditable performer which should do well at its price point, and which seems to have few, if any vices.



Specifications:

Construction Details: Resonance-optimised turntable, highly compressed wood chassis in sandwich construction embedded between two aluminium plates.

Speed ranges: 33, 45 and 78 rpm

Drive unit: Decoupled and resonance damped DC motor, drive belt and plug-in power supply unit designed for worldwide use with all networks and power frequencies.

Bearing: Cut and polished ceramic shaft in a sintered bronze bushing, Clearaudio ceramic magnetic bearing (CMB)

Platter: CNC precision-machined black coloured POM platter, 40 mm thickness

Total weight: Approx. 11.5 kg inc motor

Dimensions (W/D/H): Approx. 400 x 330 x 130mm

Warranty: 3 years (5 years*)

* Only if the guarantee card is filled out correctly and sent to Clearaudio within 2 weeks.



The ear is all about great music and great sound. It is written by hard bitten audio enthusiasts who strive to find the most engaging, entertaining and great value components and music of the highest calibre. This really is what living is all about.