## HIFICRITIC HIGHLY RECOMMENDED

## **Vertere Techno Mat**



UK price £130

Call me a mat sceptic: it's not that I am against accessory mats but rather that I have tried numerous examples on my highly-specced Linn LP12, and so far have not found better than the current thin, designed and calibrated density, black wool felt example Linn provides. I recall extensive tests on the LP12 some eleven years ago (July Aug

Sept 2009 issue) where I even went as far as to check the sound difference for the Linn mat for the normal side up and then when inverted: yes, there was a small difference as felt manufacture involves laying the wool fibres such that there is a graded density with thickness. The 'correct' upper side is a better impedance match in the mid treble for the audio vibrations induced in the LP disc by the speakergenerated soundfield, and also from the stylus tip reaction while tracking the music modulations.

Testing mats requires some patience and experimental care, not least to avoid jumping to conclusions about merit just because the sound is different, and also checking that swapping different mat thicknesses does not materially alter the vertical tracking angle of the cartridge. Different mat weights may also affect the poise and static deflection of a suspended sub-chassis design. Non-suspended, 'solid' turntables are stable in this respect also noting that results for different mats for these types may differ from those experienced for the Linn. I also had the quite rigid Pro-Ject and Funk Firm mats on hand.

Experienced turntable and cable maker Vertere has launched an accessory platter mat – the Techno Mat we have here, in a review held over from the last issue of HIFICRITIC – which comes in two types, for spindle sizes of 4.5mm and the more usual 7 mm: its two sides provide respectively an underside with stroboscopic markings to check platter rotation speed, and a topside to support and terminate vibrations naturally present in the LP of a working replay system.

The underside comprises a polymer bonded cork composition section, the top side a thin fibrous felted layer in black and its overall thickness is a few millimetres greater than that of the Linn felt mat, with the result that it was worth raising the arm pivot correspondingly to maintain optimum vertical tracking angle.

Platter mat design is a black art and while technical explanations are possible much of the development relies on subjective evaluation of prototypes to refine the sound quality. For a given combination of mat and platter, first assuming that the mat fits and lies flat, the mat is tasked with dissipating through contact and material damping unwanted vibration energy in the platter.

That energy may arrive through many paths: acoustic coupling from the loudspeaker soundfield, coupled vibration from the floor and up through the supporting structures, plus excitation from the cartridge while tracking groove modulations. This path suggests a denser material than felt, one which is a better match to the platter. On the upper record facing side, industry experience suggests that a lighter touch to the LP disc itself is an advantage and that a 'mismatch' to a dense material can result in mechanical reflections. This is where the neutral absorption with frequency of the upper felt counterlayer plays its part.

## **Sound Quality**

Regardless of the preceding discussion, tests began with fresh acclimatisation to the Linn player with standard mat and alternatives on hand, reacquainting myself with the sound quality and taking notes. Then it was time to install the Vertere mat and, after a few tweaks to the Linn subchassis to restore the alignment for the greater mass of the Vertere. it was ready to go. My first impression was of a change almost comparable to a significant cartridge upgrade. There was greater soundstage depth, a lowered noise floor and more detail. Image focus was a little sharper, dynamic contrast was improved and perhaps surprisingly, surface noise slightly diminished.

In addition open string double bass lines were more dynamic, tuneful and articulate: rhythms were more upbeat, timing more secure. After living with it for a week I resolved to leave it in place thereafter.

## Conclusion

I found much to like in the performance and sound of the Vertere mat: it has become a fixture in my Linn LP12- based system.

