## Foot-Race... SME's 312S 12" Tonearm

by Roy Gregory

As reported in Issues 50 and 51, it's becoming increasingly difficult to ignore the claims for inherent superiority made for 12" tonearms over their shorter (or should that be "stunted") nine-inch relatives. It's not just the sonic evidence either. Whilst this trail arguably started with the revelatory uplift in performance offered by the SME 20/12, and was significantly reinforced by subsequent. experience with the VPI JMW 12.7. Kuzma 313 and Schroeder tonearms. there seems to be no abatement in the flood of new arms reaching the market. Time then to examine these newcomers. and discern whether the 12" effective length is of special significance or just a happy accident.

There's no denying the significant reduction in tracing distortion that comes with increased effective length. The questions that go with that observation are whether that increase can be achieved without compromising other areas of tonearm performance (effective mass, structural integrity and resonant behaviour) and perhaps more pertinently, if it's so significant, wouldn't we be better off using a linear tracking design? With these issues in mind, I've assembled a second group of tonearms to assess just how consistent the musical qualities detected in the previous reviews prove to be, Is this a function of arm-length and reduced tracing distortion, or something else entirely?

## The SME 312S

Covered in detail in Issue 50, I'll confine myself to the high-points here. The 312S differs from the original 312 in several important respects. Whereas the original model used an aluminium casting for the armtube, the S version employs a magnesium tube derived from the one used in the Series V, delivering a stiffer structure and one that's a third lighter. The S also borrows its up-rated ABEC 7 bearings from the Series V, along with the damping trough. However, the counterweight assembly is drawn from the 300 series arms, eliminating the sprung downforce of the flagship design. Whilst this represents a step backwards in terms of ease of use, many owners of the V

actually prefer to use gravity to set VTF wholly or in part, feeling that the arm sounds better that way.

At first sight, the decision to use a detachable headshell might seem like a poor compromise, but SME's collet connection is about as secure as a detachable design can be, whilst also allowing proper azimuth adjustment, a critical alignment denied by one-piece designs and particularly important given the greater effective mass of a 12" arm. Add the reduction in tracing error to the simplified tracking force arrangements and you have an arm that in many respects represents possibly the best overall sonic compromise in the range. Although originally only available as a. package with the 20/12, the 3125 is now also available as a separate item, at a price of £1408.37. Naturally you get a full suite of SME's familiar tools, making accurate set-up a simple and methodical process, with easy and more importantly, repeatable steps. Don't however be fooled by the apparent versatility offered by the detachable shell. Swapping

cartridges requires readjustment of VTF, VTA, azimuth and overhang and is really only a practical proposition for those wanting to run mono and stereo versions of the same pick-up. Wiring comes from vdH and as usual, I chose to upgrade the external lead as mentioned above.

To anybody familiar with SME arms

past (at least from the 5 onwards) it should come as no surprise that the sound of the 312S is characterized by its stability and smooth, unflustered poise, under even

the most demanding musical loads. Nor will it surprise you that that smoothness can, if provoked, tip over into a velvety darkness, making cartridge choice a significant factor. Prior experience with the MySonic Eminent had delivered good results, while Lyra's also work well. Conversely, the Koetsu Urushi Sky Blue took on a syrupy, closed in quality dramatically at odds with its powerfully energetic performance in the Brinkmann and Consonance arms. So this time round most of my listening fastened on the Lyra Skala, a cartridge whose combination of speed, transparency and substance seems ideally suited to

Playing Johanna Martzy's wonderful 'Kreutzer' sonata on Coup d'Archet, the 312S holds the relationship between the violin and piano perfectly, the speed and quicksilver sprays from the fiddle poised against the sonorous presence of the unmistakably percussive piano. The changing lead, the way in which the emphasis passes from one ▶ Instrument to the other is beautifully served, the pauses and created tension between them perfectly preserved. This is all about the music, the composition served by the understated brilliance of Martzy and her astonishing understanding with her accompanist. What you hear is a breathtaking realization, musicians at the height of their expressive powers, music conjured to life, vibrant and dynamic, colourful, energetic and affecting.

It's a performance that rests on the SME's evenness top to bottom and the easy flow it allows the music. Despite the weight and dynamic wallop it delivers when called for, this is an arm that doesn't carry the burden of a big stick, wielding it when necessary but otherwise unencumbered by impending weight that's waiting in the wings. Whilst the 312S will never match the airy delicacy of the Brinkmann (or for that matter the awesome power and drive of the ST600) overall it offers the most balanced performance of the three pivoted arms reviewed here. Equally at home with the almost balletic demands of a violin sonata; the scale and pomp of Carmen, or the pre-grunge, undulating murk of early Cure, it manages to harness the music's forward momentum and energy to illuminate its phrasing, to weave its interlocking strands into their proper shape. Whereas shorter SMEs can sound tight and overtly controlled in their delivery, the 312S allows the players an almost carefree latitude when required, whilst never losing its grasp of the music's tempo and structure, the shape of the bigger picture.

Another noteworthy aspect of the Skala/312S pairing is the absence of grain or mechanical intrusion on proceedings. Again, relative to the other pivoted arms here this is the least aurally invasive, the one you notice least in operation. Instead it puts the musical performance firmly first, its own contribution notable more by absence than commission. There's still a subtle loss of air and acoustic detail, and it stops just short of the widest dynamic swings. But these are subtle fallings indeed, and outside of direct comparison across arms or 'tables it's unlikely you'll be troubled by them. Besides which, any arm that betters the SME is also considerably more expensive!

One factor that should be noted is the inclusion of VTA adjustment in the Stabi XL's arm towers, a vital factor in achieving record-to-record consistency with the Lyra cartridges. If that isn't an available option with your deck, and it generally isn't, you'll need to rely either on SME's threaded rod arrangement to optimise arm-height for each disc or select a less critical cartridge. The aforementioned MySonic suits perfectly, whilst the various Clearaudios also work well. Freed of such considerations, the 312S/Skala pairing has sailed through material as varied as Americana and madrigals.

the tonal

Respighi and fragile beauty of Corelli, the grandeur of RVW and the spiky, angular intricacy of *Terpsicore*. Never has it

brilliance of

stumbled and never once has it disappointed. Being lauded as a great all-rounder is

tantamount to damning with faint praise in every field save Lords cricket ground. All-rounder? The 312S is Ian Botham, a larger than life character who grew out of a gentlemanly tradition. And if this arm thankfully lacks Both's propensity to offend, it also makes significantly livelier and more charismatic music than its 9" siblings. Don't be confined by preconceptions or past experience, the 312S re-writes the sonic rulebook, building significantly on the engineering foundation of its predecessors. Here is a 12' arm that offers superb performance that, thanks to its excellent range of setup and alignment tools you should have no trouble in realising. It offers the practical benefits of a beautifully executed detachable headshell and service and support that is second to none. A joy to use, a joy to own, most importantly the 312S is a joy to listen to.

## Conclusion

This arm, along with the 12' VPI JMW, Kuzma 313 and Scroeder, all share a common quality, a sense of uninhibited musical flow, that can only derive from their increased effective length and the subsequent reduction in tracing distortion. Reduce that factor still further and the gains become greater still. For once the verdict is clear; despite the associated compromises when it comes to complexity, rigidity and effective mass, as far as pivoted tonearms are concerned, longer is indeed better. Factoring parallel trackers into the equation simply demonstrates just how important this issue really is, with even significant deviations from the mechanical ideal easily being outweighed by the performance gains overall. For serious record replay 12" arms are fast becoming the de facto standard - and rightly so.

## TECHNICAL SPECIFICATIONS

SME 312S Price: £1408.37 Manufacturer: SME Etd Tel. (44)(0)1903 814321 Net, www.sme.ltd.uk