

Decked to impress

Add three inches to a 9in tonearm and you gain big improvements not just in angular error but distortion. The trade off? An arm too heavy or not stiff enough. Until now. Ken Kessler has the exclusive on the SME solution...

DETAILS

-  **SME 20/12 & 312S**
-  **£11,132.63 (package)**
-  **www.sme.ltd.uk**
-  **01903 814321**
-  **Sound quality, build, looks**
-  **Big rack needed, that's all**

REVIEW SYSTEM

Source: SME 10/ Series V tonearm
SME 30/2/SME Series V turntables
Amplifiers: Musical Fidelity
Nu-Vista, McIntosh C2200 pre-amps,
McIntosh MC275, AudioValve Sunilda
and Audio Research PH5 phono stages
Speakers: Rogers LS3/5A,
MartinLogan Vantage and
Wilson WATT Puppy System 7

ALTERNATIVES

SME 20/2 (£4416.67) and Series V arm (£1781.46): Like the man says, the 'short wheelbase' version
SME 30/2A (£13,672.01): Still the ultimate expression of SME-ness

Clarity is the quality that most exemplifies SME's Alastair Robertson-Aikman, and on many levels. It's a property of the sound reproduction of his company's products, of the very instructions contained in SME owner's manuals, and – above all – it applies to Alastair's thinking. It's this clarity that is embodied on not one but two new products from SME, a company that is positively Quad-like in the rate at which it introduces new models.

And they are never introduced 'just for the sake of it.' Invariably, a new model arrives because AR-A had a brainstorm while tweaking his system, a vision that results in some canny device which his *éclaircissement* will render so obvious that you can only marvel at the ingenuity. This time, the two products are so closely interrelated that the words 'chicken' and 'egg' might spring to mind. But, in fact, the first to arrive was the 312S tonearm.

SME has had 12in tonearms in its catalogue for over 40 years, but they've always

had appeal mainly on cult level. As AR-A explained, 'In the past, there have been many 12in tonearms used especially in record manufacture. They lost popularity because their extra length meant that they were either too heavy or not stiff enough, and it is only with the advent of our magnesium tonearm that these problems were addressed.'

Alastair thus had an impetus for pursuing once again the benefits of 12in arms, in the form of ultra-light, ultra-strong magnesium; you can stand on a 9 in SME pressure die-cast magnesium tonearm tube and it will not bend nor break. The benefits of a mere three inches? Primarily the reduction in tracking error that occurs because the arc that the cartridge follows in a

12in arm is closer than the arc of a 9in arm to the ideal straight line of the LP cutting head. It's geometry so simple that even I can understand it. And if you want numbers, SME's general manager Reg Edey calculates that a 12in arm is 27.23% better than a 9in arm for both angular error and distortion.

TRADE-OFF

So, while some of us have happily employed the 12in Ortofon, the SME 3012, M2-12 or even the regular 312 – or other 12in arms – we have had to deal with a trade-off: substantially reducing the distortion due to the tracking error of a 9in arm [see chart, p32], while having to deal with the inevitable increase in the effective mass of the longer arm.

RIGHT: The 20/12 with 312S arm and latest SME power supply



The arrival of the 312S, however, with its arm tube made entirely of magnesium, enables the increase to be sufficiently off set and no longer be an issue.

AR-A notes that, 'The tonearm fitted to the 312S, including the headshell, weighs 48g. This compares with 75g if it were made in aluminium, making it unsuitable for cartridges of normal compliance, that is, between 20 and 25cu.' So now we have a 12in arm, probably the lowest mass 12in tonearm ever made, that is comfortable with the vast majority of cartridges in the 'normal' weight range of 6-12g.

Other benefits that are provided by the 312S are said to include a smaller excursion of the counterweight, higher contact loading of the bearings, greater length in which the acoustic signal generated in the arm can dissipate, a reduction in susceptibility to warp/wow, and a greater range of movement when adjusting VTA. So it's not just the reduction in tracking

error that make 12in arms so appealing, once they're free of concerns about effective mass.

SME merged elements of the Series V, including its arm tube and damper, with the counterweight assembly and detachable headshell of the Series 300 to create the 312S. Increasing the Series V's arm to 12in status involved fitting an extension to the basic Series V tube, using pressure fitting and an adhesive, the arm then finished entirely in black.

THE 20/12

Which begged the question that led to a second new model: To what can it be fitted? The SME 10 was out, because

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under no circumstances would AR-A countenance an armboard extension floating out in the breeze. [Of course,



ABOVE: New arm features smaller excursion of the counterweight, higher contact loading of the bearings, plus a greater range of movement when adjusting VTA

any extension SME would fashion would be as robust as

30/2? Because it was conceived as a cohesive source component with the Series V, and because its performance is so far 'out there' as to obviate any need for improvement, that combination was left alone. For the time being, at least.

one could possibly want, but Alastair does not approve of arm-boards supported only at one point.] And the SME

SME had introduced new power supplies for the entire range in late 2005 [see 'The Inside Track, p33], so the turntables were all 'up to date.' There was, however, a substantial price difference between the SME 20/2 and SME 30/2. Adapting the former to cope with a 12in arm presented a perfect opportunity to fill the gap. So AR-A chose the middle model, the SME 20/2, as the candidate for what he wryly calls



WE LISTENED TO



Ray Charles & Cleo Laine: Porgy & Bess (Classic/Rhino/Jazz Planet JP-1831)



Jose Feliciano: Feliciano! (RCA LSP-3957)



The Crickets: Bubblegum, Bop, Ballads & Boogies (Philips 6308 149)



Taj Mahal: Recycling The Blues & Other Related Stuff (Pure Pleasure PPN31605)

the long wheelbase version. Broadening the 20/2's chassis to accommodate a 12in arm resulted in a model deserving a new model designation: the 20/12. With the new power supply in the mix, added to the increased chassis size, the longer arm, and a larger platter than the 20/2's, SME's efforts produced what is, effectively, a new design. Even the chassis mass was increased, to offset any decrease in rigidity due to the extra width.

Quite unexpectedly, a non-sonic benefit emerged: the new look of the 20/12 emerged as a cosmetic makeover. As one visitor to SME noted, it looks more 'right' than the standard, almost square '20, as if the deck had been waiting all along

to have its width extended. Its new proportions can be likened to those of the 20/2's, as 16:9 widescreen video images are to 4:3. But it also means that owners will need space for a record spinner with a footprint of 375 x 520mm, compared to the 320 x 420mm of the 20/2.

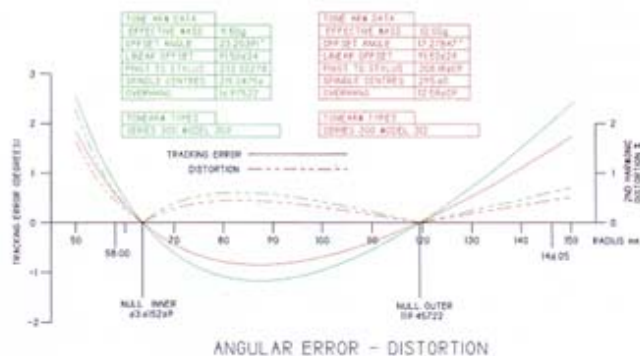
LISTENING

HAVING duly prepared just such a space, on a robust GM Accessori table, I fed the SME 20/12 and 312S into Audio Research and AudioValve phono stages. And thank goodness for detachable headshells. The one made for the 312S bolts securely to the tube, so, please, let's not even re-open the fixed-vs-detachable debate. I appreciated the ease with which I could move from the Transfiguration Orpheus and Blue Angel moving-coil cartridges I had been using in the SME 30/2 with Series V arm.

While I was expecting minor differences, I was certainly not

'This arm/turtable combo is the most graceful-sounding analogue front-end I've heard'

ready for the slight change in character that will make choosing between the 20/12 and 312S package and the flagship 30/2 with Series V somewhat easier. It's obvious that direct comparisons are almost impossible to make because the 312S has no direct 9in equivalent, and the 30/2 doesn't exist in a long wheelbase



ABOVE: Distortion error of the 9in SME 309 and 312 arms, shown in green and red respectively; the arc a cartridge follows when mounted in a 12in arm is closer to the ideal straight line of the LP cutting head and so distortion is reduced

edition. So I stopped worrying about pecking orders and just sat back to revel in qualities that were new to my ears. All my 12in arms are of the Jurassic variety, and work well only with massive moving coils of the Ortofon SPU variety, and they're mounted on aged idler wheel decks, so the reduction in tracking error was a new sensation. And I've

boon when listening to the exotic instruments found on Taj Mahal's *Recycling The Blues & Other Related Stuff*. That LP features a preponderance of fast and delicate sounds, many with an almost liquid clarity, and they benefited marginally but repeatedly from the added arm length. Both cartridges were affected by this, more so the Blue Angel than the Transfiguration, but I also enjoyed short spells with the Denon 103 (conical stylus) and the mono Lyra, and with both you could still hear subtle benefits from the reduction in tracking error.

ROBUST

Hard to separate from this is the influence of the deck itself. The performance is so stable, so grounded, so robust, that the bass acts almost as much as a platform for the mid and treble as it serves its own musical role.

BELOW: Nine-inch arms can be used with the 20/12 by rotating the cut-out



There's a solidity that doesn't just hint at the sturdiness of the Model 30/2 – it comes so close that you'll need a truly wide bandwidth system, with unconfined dynamic contrasts, to appreciate the differences.

SHEER FINESSE

But the most impressive aspect of the 20/12-plus-312S machine is its sheer finesse. I've been listening to more and more acoustic guitar lately so it was a no-brainer digging out a mint original of Jose Feliciano's eponymous classic and listening to his unplugged Latin guitar work. The nuances found in his simple strumming, the air around the performer, the sound of fingers on strings, the thumps on the guitar body, the character of the strings themselves: if you truly value 'in the room' realism, the SME 20/12 and 312S will allow your cartridge to retrieve and reproduce it with alarming authenticity. This arm/turntable combination is, by a large measure, the most graceful-sounding analogue front-end I've ever experienced.

Please note the use of the word 'graceful' in its dictionary-definition usage: 'elegant and easy; marked by a propriety and fitness.' This is a turntable that doesn't just reproduce music. It respects it.

I couldn't tear myself away from the system. For assessing its competence with vocals, I pitted Ray Charles against Cleo Laine, with their utterly opposing textures. They never confounded the SME combination, and the warmth and expressiveness came through, such that you could imagine their smiles in the studio without referring to the LP sleeve. 180° away from Porgy and Bess is the fuzzy, hard rock of the Guess Who's 'American

Woman,' which was equally detail-rich, the SME pairing extracting some low-level information that many systems skate over. Percussion was particularly seductive here; I'll admit to

having been distracted by the vocals for over 35 years, but hearing it via the SME was educational.

So whether the SME 30? The '30 still has that last ounce of extra mass,

'The 20/12 with 312s is, beyond doubt, one of the three or four finest turntables on the planet'

slightly darker silences, slightly faster attack. Presentation is almost identical, with both exhibiting wide and cavernous soundstages. The line of the sound was in the same position relative to the speakers. But the 20/12 has a slightly lighter touch, the 30 more command. Is one better than the other? In other words, the SME 20/12 plus 312S fits exactly where SME wanted it to be in the line-up.

DECK ALONE

Although SME prefers to see the 20/12 turntable and 312S arm sold as a package, for £11,132.63, the 20/12 can be

purchased on its own for £9,724.26. This might appeal to users who already have decent arms,

such as a Series V or an M-2, which can be accommodated by rotating the armboard for the 9in

ABOVE: In true SME style, sub-chassis motion is controlled by fluid dampers, one in each supporting column

cut-out. But the 312S, which by deduction costs £1408, will only be sold to 20/12 owners. Will AR-A one day relent, and make it available to non-20/12 owners? Don't bank on it.

Far more important a question is: will there one day be an SME 30/12? When asked of AR-A, all you get is a twinkle in the eye. For now, the 20/12 with 312S will more than suffice. Because it is, beyond doubt, one of the three or four finest turntables on the planet. Best of all ... it's the least expensive. □



DATA FILE

SPECIFICATIONS

Design	suspended subchassis
Speed range	33 $\frac{1}{3}$, 45, 78
Mains voltage selector for	AC 115 & 230V \pm 10%
Power consumption	9 watts
Dimensions	520 x 174 x 375mm (whd)
Tonearm weight	48g inc headshell
Tonearm suitable for cartridges	6-12g

HI-FI NEWS VERDICT

Prejudiced as I am toward SME turntables and arms, I can accommodate and justify this bias with long-term experience of the 30/2 – my reference and the reference of many other audiophiles for a number of years. The 20/12 complements it perfectly, and with the 312S it addresses the matter of tracking error with breathtaking confidence. If behaviour at the extreme top end and cartridge setting to a molecular level matter to you above all else, you must audition this turntable. And once people get used to its refreshingly sweet top end, you can anticipate a flood of new 12in tonearms for SME's rivals.

THE INSIDE TRACK ON... POWER SUPPLIES

The new power supplies add clever fine-speed adjustment for all models, plus 78 rpm and magnetic braking for the Model 10. Existing owners of Model 10s can have their power supplies factory-upgraded, probably through an exchange program to be determined,

but the new supplies for the Models 20/2 and 30/2 are completely different from the originals. Existing 20/2 and 30/2 owners can, however, purchase the new power supplies separately, without any 'trade in' allowance. All decks now ship with the new supplies.