

# SME Model 12 MK2

SME's flagship Model 60 turntable was more than an aspirational torch-bearer for the UK brand – it set the tone for revisions that will trickle down through the entire range  
 Review: **Adam Smith** Lab: **Paul Miller**

Every hi-fi era has its buzzwords, and while variations on the theme of 'digital' and 'high-res' have permeated our collective consciousness over the past few decades, the 2020s have so far proved thick with references to 'trickle-down technology'. Brands have always launched flagship products to showcase technologies that eventually 'trickle-down' to middle and entry-level ranges, but nowadays there's almost an expectation that this osmosis of tech will happen swiftly, and wholesale.

Following the launch of SME's fabulous Model 60 turntable [*HFN* Jul '22] the 'trickle down' has begun within six months, across the range, and debuts in the replacement for its Model 12A [*HFN* Sep '19]. The unveiling of the unannounced, non-press-released £10,475 Model 12 MK2 turntable has been an exercise in stealth, but the first production sample is here and revealed exclusively on these pages.

## FEET OF ENGINEERING

The 'A' in the name is also no more – previously this signified the deck was complete with arm, but as this is now the only way to buy a MK2, the 'A' is superfluous. The changes are not immediately obvious as the Model 12 is still available in Black, Dark Blue and Grey and is still based on a curvaceous main chassis that sits on four adjustable feet. Look closely, though, and you'll notice one foot appears to be in a slightly different position. First clue...

Above the base of the chassis resides the same three-pronged subchassis as the older model, which supports the main bearing. On a longer limb is the arm mounting plate. The subchassis is isolated from the main chassis by polymer studs, but there is no 'give' in SME's arrangement – it all feels pleasingly solid.

**RIGHT:** Viewed from above, the Model 12 MK2 is all but indistinguishable from the Model 12A. It features the same 4.6kg damped alloy platter with SME's diamond-turned surface, plus screw-down record clamp and outrigger arm board

The main bearing spindle is made from high chrome tool steel, 19mm in diameter and highly polished. This spins on sintered bronze bushes in a sealed housing and supports the belt-driven sub-platter. The main platter is still a machined aluminium item weighing in at 4.6kg, and topped by a layer of SME's 'isodamp' material that has been diamond cut and scrolled for best contact with the record. A screw-down clamp ensures even contact across the entire playing surface.

## AC (NOT) DC

So far, so familiar then, but here's where things start to change. The old Model 12 had only one power supply/controller unit for its DC motor but the MK2 has two power supply enclosures, clearly modelled on those of the Model 60, with which it shares the new AC motor. This drive is

custom-made to SME's specification, as opposed to the old DC unit, which the manufacturer used to strip down and modify in-house [see PM's boxout, p47].

It's still mounted into the chassis via a series of rubber O-rings, providing a deal of isolation, but the motor is physically

much larger – hence that re-located foot. As per the Model 60, one of the PSU boxes houses the mains transformer and DC output which, in turn, feeds the second enclosure [pictured, p47], which provides the synthesised AC feed to the

motor – 33.3rpm and 45rpm only for the MK2. A power switch on the rear of the transformer box illuminates the controller's last-used speed LED on power-up. You then start and stop the deck

*'Higher organ notes seemed to be floating up in the air'*





using the power switch on the controller, while speed change is achieved by pressing the large central knob. This rotary encoder is also used to fine-tune the speeds if required, and then store the new settings.

#### EXQUISITE FINISH

The Model 12 MK2 is supplied pre-fitted with SME's Model 309 tonearm. Still looking fresh, it's based around a machined magnesium arm, with constrained layer damping, and has a detachable magnesium headshell. For this deck, internal wiring is provided by SME's sister company, Crystal Cable, and terminates to RCA phono sockets on the rear of the main plinth.

Fit and finish of the turntable is exquisite, setup is easy and it's a joy to use with very swift start-up and beautifully damped arm cueing. However, do watch out when playing 7in singles, because the screw-down clamp is sufficiently large

that the arm just makes contact when in the runout groove, giving rise to some alarming noises! If you play a lot of 45s, I'd advise being swift with the cueing lever as the music ends, or simply omit the clamp [see PM's Lab Report, p49]

#### SIBLING RIVALRY

Fitted with a Clearaudio MC Essence cartridge [HFN Aug '17] and used with my Yamaha C-5000/M-5000 amps [HFN Aug '20], the influence of SME's flagship Model 60 was clear to hear. It transpires the Model 12 MK2 has the same delicious sense of insight and clarity as its biggest brother, and still one of the best front-to-back soundstage scales of any deck at the price. It immerses you in music and brings the performers into your listening area.

There's an unflappable sense of solidity to the Model 12 MK2's performance as nothing seems to faze it or make it sound

**ABOVE:** The Model 12 MK2 is supported on four large, adjustable, polymer-damped feet and powered via a two-part supply. The partnering 309 tonearm is re-wired with silver Crystal Cable

the slightest bit wobbly or uncertain. The impeccable engineering in its construction translates to an even-handedness, both in a technical sense across the audio band, and a musical sense as it tackles every style and genre. Some turntables excel in a specific area, meaning you keep reaching for a particular category of music to hear them at their best. This one, on the other hand, takes everything in its stride.

#### SETTING THE STAGE

In describing the precision of the Model 12 MK2's performance, it's just too easy to reach for the 'book of superlatives', nevertheless it has qualities, a hallmark sound, that marks it out as distinctly 'SME'. To my ears, no other deck or arm manufacturer has quite managed to blend confidence and detail together with such a sense of consummate musical ease. As I've said previously, I've always felt that more detail just means more music, and the Model 12 MK2 illustrates this point.

With Wayne Marshall's recent *The Willis Organ Of St. Mary's Episcopal Cathedral, Edinburgh* [Base2Music 10LP] on the platter, this turntable had me all but purring with pleasure. The bass presence of this recording is magnificent and it powered through my listening room with real drive, while the sense of space and depth set up by the deck was astonishing, as was its dynamic range.

Marshall's higher, quieter organ notes seemed to be floating up in the air, rising behind and between my loudspeakers from an eerily quiet background. As things picked up in both pace and level, however, ↻

#### PRODUCTION ENGINEERING

In less well-run factories, design and production engineers can find themselves in conflict – the former assuming a utopian ideal where the best components and materials are readily at hand while the latter are tasked with optimising layouts for production and sourcing components with proven reliability from known suppliers. Production engineers must also deal with parts, large and small, suddenly becoming unavailable or subject to unexpectedly long lead times. Post-Covid, the reality of chaotic supply chains is something almost everyone is now acutely aware of from hi-fi to automotive to construction. Viewed in this light, the fact that SME employed the same DC motor in its turntables for nearly 30 years is something of a miracle although, SME being SME, almost every part of those OEM drives, short of the coils, was re-engineered using its own precision tooling. Consistency and performance was thus assured, albeit at a price. So it was fortuitous that the eventual withdrawal of that motor, and many of the components used in the original speed controller, coincided with SME's quest to secure what has turned out to be a superior, and rather larger, AC motor-based solution complete with entirely fresh electronics. Judging by SME's track record, and despite the turbulence of the times, who would bet against SME providing any lesser support for this new 'AC generation' of turntables? Not me... PM

# LAB REPORT

## SME MODEL 12 MK2

While this MK2 Model 12's chassis, 4.6kg platter and sintered bearing are all taken from the Model 12A [HFN Sep '19], and the Synergy turntable [HFN Mar '19] before it, the AC motor and two-box PSU/speed controller are directly trickled down from the new flagship Model 60 [HFN Jul '22]. The immediate benefit to the proven Model 12 chassis is realised in its reduced W&F [see Graph 1, below] and 2-3sec start-up (from 4 seconds). The Model 12A's 0.015% peak wow was already as good as might be achieved with a DC motor solution but this sharpens up to <0.01% here – firmly in 'direct-drive' territory! More tellingly, the new AC motor drive has halved the peak flutter to 0.02% and, interestingly, while the 65Hz noise component seen with the Model 60 was also clearly visible on the unwt'd rumble spectrum here, it did not punch through to the W&F spectrum...

Now, in case you're thinking the Model 12 MK2 offers Model 60 performance in the round, I'll burst that bubble now. While speed stability is in the 'top drawer', the deck's rumble is a little poorer than the 60's, and the Model 12A's, at -69.5dB through-groove (unaffected by the record weight/clamp) and -70.5dB through-bearing (DIN B-weighted). This, I suspect, is the trade-off between the old DC motor and new, higher-torque/reduced rpm AC motor, but it's absolutely one that advances the Model 12's subjective performance. The partnering 309 tonearm, meanwhile, despite not being a 'one-piece' tube/headshell, still offers a very stable cartridge platform [see Waterfall, Graph 2] with a broadly compatible 10g effective mass. The first bending mode occurs at around 150Hz with a higher-Q harmonic/ twisting mode appearing at a higher (midrange) 680Hz. PM



I could easily pick out the different location of the big organ pipes, as well as the sound bouncing off the cathedral walls. The Model 12 MK2 placed me in the centre of the action – if you took me to the venue itself, I'm pretty sure I could tell you the row, if not the seat, I had been 'sitting' in my listening room!

This degree of openness and detail made everything sound crisp, clear and lifelike. The deck cut through the crackles on my old 45rpm copy of Charlie Dore's 'Pilot Of The Airwaves' [Island Records WIP 6526] to pull an unexpected level of detail out of the grooves. Dore's vocals were proudly centre stage and the music around him bounded cheerily along, just as it should.

### ALTOGETHER NOW

Across the mid and treble, the Model 12 MK2 captured musical subtleties, whether vocal or instrumental, in a typical – for SME – effortless manner. Backing effects were precisely judged, being kept on the edges of the performance but always easy to discern, and the main action was always brought well clear.

Playing the atmospheric electronica of 'Fratolish Hiang Perpeshki' from Gwenno's *Y Dydd Olaf* album [Heavenly Recordings HVNLP118], the vocals seemed to be coming from mid-air just in front of me, the bassline from the floor under my speakers and the backing synths from halfway up the speakers and just behind them. I've yet to hear a vinyl player at this level dissect this track so effectively in sonic terms but keep the playing so masterfully together. The performance was still very much a 'whole', but enjoying a more spacious aspect than I am used to.

As for the Model 12 MK2's low-end delivery, it is deep and precise with a fine sense of pace and timing, but also carrying a pleasing hint of

**ABOVE:** The combined outrigger/ arm base is part of a 'trilateral' subchassis, supported on three damped columns, and also holding the bearing. The new, larger, AC motor is visible here [right]

of rounded softness that is really quite endearing. That is not to say that the deck is ever fluffy or wallowy – far from it. This low-end warmth is very definitely a character, rather than a distracting flaw.

### FLYING COLOURS

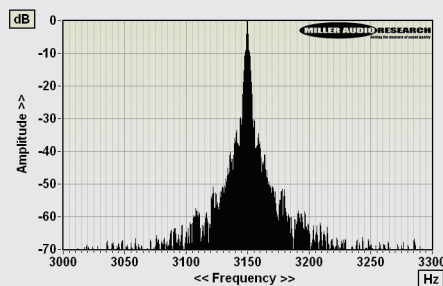
The title track from Joker's *The Vision* LP [4AD CAD3131] instantly dispelled any potential worries of a flagging low end. The synth bassline on this track is deep and snappy, so a deck with less-than-perfect timing will soon find itself struggling. The Model 12 MK2 stormed through the test with flying colours. Each note started and stopped with aplomb, and there was an excellent feeling of impact and tunefulness.

Yes, SME's Model 60 punches harder and tighter, but then so it should – it's five times the price. On its own terms, the Model 12 MK2 also still never lets you forget you're listening to an analogue format, and makes the best of this at all times. ☺

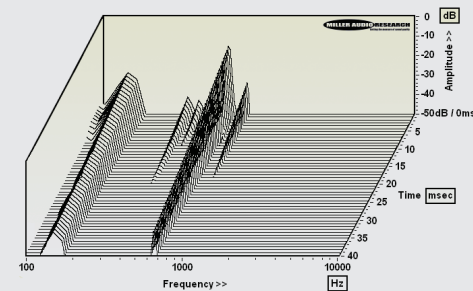
### HI-FI NEWS VERDICT

The 'trickle-down' upgrades to the SME Model 12A turntable have taken this deck a step closer towards its big brother, the Model 60. The Model 12 MK2 is a gloriously secure and solid-sounding deck with a bass warmth that underpins a deeply insightful performance. All of this combines to give a sound that is truly captivating, and wrapped up in a compact, stylish and exquisitely engineered package.

Sound Quality: 88%



ABOVE: Wow and flutter re. 3150Hz tone at 5cm/sec (plotted ±150Hz, 5Hz per minor division)



ABOVE: Cumulative tonearm resonant decay spectrum, illustrating various bearing, pillar and 'tube' vibration modes spanning 100Hz-10kHz over 40msec

### HI-FI NEWS SPECIFICATIONS

Turntable speed error at 33.33rpm	33.34rpm (+0.02%)
Time to audible stabilisation	2-3sec
Peak Wow/Flutter	0.01% / 0.02%
Rumble (silent groove, DIN B wtd)	-69.5dB / -69.4dB (with clamp)
Rumble (through bearing, DIN B wtd)	-70.5dB
Hum & Noise (unwt'd, rel. to 5cm/sec)	-58.6dB
Power Consumption	17W (12W idle)
Dimensions (WHD)/Weight (inc PSUs)	370x178x350mm / 23.2kg