

TURNTABLE

Roksan Xerxes 20plus (£6890 inc)

Roksan's iconic vinyl spinner remains one of the most forward-thinking decks on the market and the latest version now comes with a raft of considered upgrades

Review: **Andrew Simpson** Lab: **Paul Miller**

Back in the early 1980s if you were serious about vinyl replay and had the money, the obvious contenders to splash your cash on were Linn's LP12, followed by rivals such as Michell's space-age GyroDec or the left-field Pink Triangle. Despite drastically different looks, all three decks were essentially attempts to take the late Edgar Villchur's ground-breaking three-point sprung suspension design to the next level.

Then, in 1985, Roksan came onto the scene with the Xerxes, which promptly turned this perceived wisdom on its head. As Tufan Hashemi, Roksan Audio's Managing Director, explained: 'We argued that using a suspended or floating surface to support a record could not allow it to be accurately read, as the record itself would be floating. We said that the record surface should remain stationary and solid but in complete isolation from the rest of the deck, and our design provided a very stable base for isolating a record without suspending it.'

WELL ISOLATED

So, instead of springs, Roksan used rubber mounts to isolate the sub-plinth. This worked to great effect and gave the Xerxes an enviable reputation – even Inspector Morse bought one! [see *HFN* July '11]. It's a testament to the original that the design has been able to evolve over 25 years into this £2420 Xerxes 20plus, which Roksan says is closely based on its ultimate statement TMS3 deck (starting at £9k and now only available to order).

Notwithstanding its no-compromise build, the 20plus is relatively compact. No expense has been spared on the deep-lacquered real wood veneered finishes (available in black or maple, rosewood is £220 extra) which all look simply gorgeous and make this one of the best looking turntables on the market.

RIGHT: With its plectrum-shaped cut-outs the Rmat-5 is held firm by a retaining 'O' ring on the centre spindle. Tabriz ZI arm features a hanging counterweight and top quality cable

The deck's top plinth (the thickest layer when viewed from the front) supports the motor and sits on three adjustable feet which pass through the bottom plinth. This connects to the top plinth via Roksan's 'Antivibration mounts' and supports the sub-plinth via more Antivibration mounts and special de-coupler mountings. The sub-plinth sits inside the top plinth cut-out, but without making contact, and supports the main bearing, platter and tonearm, which is further isolated via a damped armboard.

The custom-made AC motor is held by Roksan's trademark springs that allow it to rotate within its own axis, which according to Roksan counteracts load variations caused by fluctuating belt tension. The motor hums a little on start-up but this subsides once the platter is up to speed.

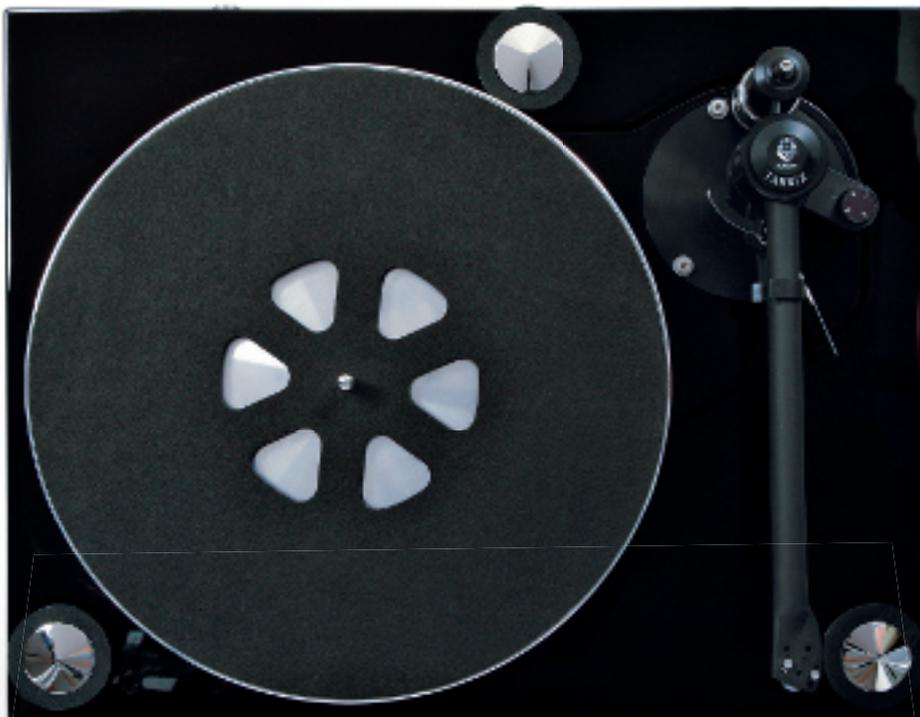
At the heart of the 20plus is a self-centring bearing which uses a solid phosphor bronze sleeve. Inside this sleeve runs the sub-platter's slender hardened steel spindle, with a tapered tip which

locates against a captive 2mm tungsten carbide ball (handed down from the TMS3). Owners of older Xerxes decks will be pleased to hear that the majority of these improvements can be retro-fitted to earlier models, which is another testament to Roksan's proud Xerxes legacy.

Here, Roksan uses a two-piece alloy platter whereas the Radius 5 MkII (£1375 including arm) is fitted with a one-piece acrylic platter. 'If you tap each piece individually, you will hear a slight ringing sound; however, if you tap the platters mounted as they should be on the record player, you will notice that the tap returns a completely dead sound,' says Tufan.

WHERE'S THE CLAMP?

The sub-platter is driven around its periphery via a precision-ground neoprene belt, which Roksan recommends treating to a dab of Mr Sheen or similar before being installed. The outer platter rests on the sub-platter against a finely profiled





lip and locks into place with a reassuring click. For the final degree of isolation Roksan advises against using any kind of record clamp which, to quote the manual, 'directly connects the vinyl to the structure and allows unwanted noise to be immediately picked up by the cartridge'. Instead, Roksan incorporates its trademark removable centre spindle – and with this link severed, the only parts of the deck in physical contact with a record during play are the mat and stylus.

Set-up is quite straightforward providing the instructions are followed: site the base, level the feet, check the bearing with the supplied cotton buds and add a few drops of the included oil before installing the belt and platters. If all is not level, or the gaps between platter and plinth(s) are inconsistent then fine tuning can be achieved by tweaking various allen bolts in the top of the subchassis and via a tilt adjustment screw.

The manual also explains how to adjust the height and angle of the motor, although this was not necessary on our review sample. For the Xerxes, Roksan offers a choice of three external PSUs starting with the XPS7 (£360) through to the reference DS1.5 (£1200) which came supplied with our unit, along with Roksan's

flagship Shiraz MC cartridge (£2475). Also fitted was Roksan's Tabriz Z1 tonearm (£795) which complements the simple lines of the deck – although the arm tube's matt finish could be easily marked by its retaining clamp. Total price: £6890

INFECTIOUS SOUND

After growing accustomed to bouncy suspension designs, putting an LP on the Xerxes platter I had to remind myself that this was still a form of suspended deck, as its granite-like feel said otherwise. To get the measure of the 20plus's sound without being overly influenced by what the Shiraz brought to the table, I began listening with my usual reference Benz Micro cartridge installed, feeding an Astin Trew AT8000 phono stage. All listening tests were performed with the deck's centre spindle cap removed.

Kicking off with The Great Lake Swimmers' *Lost Channels* [Weewerk 0 6700 30893 1 9], I was startled by what this deck does to timing. Okay I'd read the marketing blurb about the motor de-coupling springs and watched them in action with the top platter removed, but none of this prepared

ABOVE: The 20plus's three highly polished veneered MDF plinths are decoupled using 'Antivibration mounts' for maximum isolation; maple/rosewood hardwood finishes cost extra

me for the magical effect this has on the music. As soon as the needle hit the groove of the opening track, 'Palmistry', the song burst into life with an energy that was utterly contagious and yet delivered in an unnervingly calm manner. This was a 'serious listening session', so I had to restrain myself from dragging reluctant

family members into my listening room while shouting 'you must hear this!' With my excitement restrained, I understood that what was drawing me was the deck's unswerving control of rhythm and

'The 20plus throws open a window as few others can do'

pace. This deck doesn't just get on with playing the music with a no-frills start and stop attitude: instead the deck sounds as though it's constantly assessing and adapting itself to all that's going on in the mix. What you're presented with is a sound that seems to be closer to the nature of the recording – there's the feeling the 20plus removes itself from the equation and can throw open a window on to the recording as few others can do.

Moving on to The Beatles' *White Album* [SWBO 101] gave the Xerxes the perfect vehicle to show off its unique ability to put a listener at the centre of the performance. On 'I'm So Tired', McCartney's walking bass line was relaxed while in total control of the song's tempo, geeing the track along for the faster section and then slowing it right down to underpin Lennon's persuasively weary lyrics. With the following track, 'Blackbird', the contrast between the way in which the Xerxes rendered the plucked guitar with 

XERXES 1985-2011

The original Xerxes was Roksan's debut hi-fi product and sold for around £300 in 1985 (around £100 cheaper than an LP12 at that time). It remained largely unchanged for a decade, apart from subtle improvements to the main bearing, including the addition of a screw-cap base to support the ball [see *HFN* July '11]. In 1987 Roksan introduced the Artemiz arm and Shiraz MC cartridge, followed by the Artaxerxes phono stage two years later, designed to fit inside the Xerxes chassis. To mark the company's 10th anniversary Roksan launched the Xerxes X (or '10') which boasted improved isolation through a new three-plinth design based on its range-topping TMS deck. The Xerxes was replaced in 2005 with the logically named Xerxes 20, which came in a new high gloss finish and sported the Rmat-5 and an improved bearing assembly from the TMS2.

TURNTABLE



ABOVE: Caspian casework can house a choice of Roksan's PSUs and phono stages all within the same box. Front LEDs indicate what's under the lid

military precision, while allowing McCartney all the time in the world to hold his longer vocal notes, was simply spellbinding – just as if the deck had had a quiet briefing from George Martin while I'd been cueing the track up...

I began to realise how good the Xerxes was at capturing the vocal delicacies which put the real emotion into a performance, making you want to explore a singer's stories and the passion that drives them. During 'At Seventeen', from Janis Ian's 1975 *Between the Lines* [Columbia X698], the Xerxes brought out how Janis holds her voice back to great effect to create the track's whispery beauty, without the deck suggesting the slightest hint of sibilance.

On the following track, 'From Me To You', the deck delivered Janis's vocals with effortless conviction, allowing her voice to spread its wings across the soundstage.

Perhaps because of the lengths to which Roksan has gone to attempt to eliminate any external interference reaching a record's surface, the clarity that the *20plus* achieves is exceptional. The precise click of the rim shots on 'Your Latest Trick' from Dire Straits *Brothers In Arms* [Vertigo VERH25] were pinpoint sharp and focused, while the lead guitar's echo sliced through the air like a samurai sword.

But don't be fooled into thinking this deck is in any way sterile or cold sounding, as its tent is resolutely pitched in the analogue camp with a sound possessed of a subtle lush warmth that will have vinyl addicts pledging their allegiance in droves.

The area where the Roksan's strengths can be appreciated the most is bass. Like its firmly supported sub-platter, the deck's grip on the lower registers is unswervingly rock-solid. The *20plus* plundered the depths of the title track from John Martyn's *Solid Air* [ILPS 9226] with

confidence. There was no lingering reverb from Danny Thompson's double-bass, as its rope-like strings could be heard being firmly plucked before resonating.

DIFFERENT CARTRIDGE

Re-visiting the test material with the Shiraz fitted was a revelation. Not that there'd been any failings between the Xerxes's synergy with the Benz Micro, but moving on to the Shiraz suggested I'd been doing something akin to drinking a vintage wine a few months before it had hit its peak. I thought I'd found damn' near perfection only to hear the final piece of the puzzle click into place.

With The Beatles tracks, the midband became more refined, especially with the guitar work on 'I'm So Tired' and 'Blackbird', which seemed to have gained more weight in the bottom E string of the acoustic guitar. Voices seemed to have greater space around them as the soundstage grew deeper. With the Janis Ian album the brass section on 'Seventeen' had extra layers of separation which, for example, helped distinguish the trombone from the flugelhorn, such that each instrument's contribution to the track could be fully appreciated. ⚡

HI-FI NEWS VERDICT

Thanks to some well thought out refinements, the Xerxes in *20plus* guise retains its place as one of the most innovative and best-sounding turntables around. And when combined as part of a top-flight Roksan package with an in-house arm and cartridge, this deck takes the listener to another level, well beyond the sum of its parts. For many audiophiles this will be the last record deck they'll ever need to buy.

Sound Quality: 85%

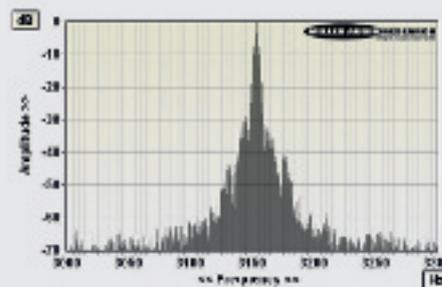


ROKSAN XERXES 20PLUS (£2420)

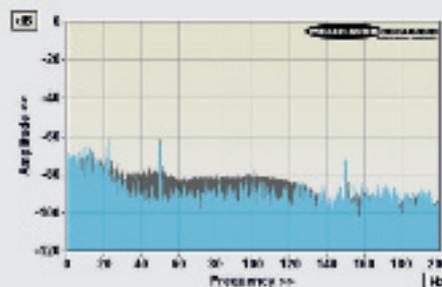
This is a fascinating design, beautifully built and clearly finished to an extremely high tolerance. The long, thin bearing spindle with its 11:1 ratio is highly unusual as are the lengths Roksan has gone to in isolating the LP record. In fact its centre pin is removable 'to eliminate any direct mechanical contact between the record and the main bearing spindle'.

Regular readers will know we measure noise via a silent LP groove and also through the main bearing itself – the latter is almost always at a lower level thanks to modern materials technology. Instead, the Xerxes *20plus* showed a broad spectrum noise (doubled-checked), mechanically filtered above 140Hz [see black trace, Graph 2 below] that was marginally higher than that obtained through the groove. The latter is close enough to state-of-the-art at -69.1dB (re. 5cm/sec) but only because of the Xerxes' removable spindle. Coincidence?

Roksan's custom 24-pole synchronous AC motor delivers excellent speed stability, illustrated by the generally sharp and well-defined 3150Hz driving tone in Graph 1. It is worth giving the platter a helping finger during start up, however! The flutter sidebands appear as clusters of peaks at ± 11 Hz and ± 22 Hz but are very low in level, amounting to a cumulative peak of 0.04%. Shielding by the friction-fit platter helps keep hum and other electrical noise very low indeed, just -59.1dB (re. 5cm/sec) but this will inevitably vary with choice of pick-up and tonearm cabling. Roksan's earthing structure is certainly well thought out. Readers are invited to view a full QC Suite report for the Roksan Xerxes *20plus* by navigating to www.hifinews.com and clicking on the red 'download' button. PM



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



ABOVE: Unweighted bearing rumble from DC-200Hz (black infill) versus silent LP groove (blue infill) re. 1kHz at 5cm/sec. Tested with Tabriz tonearm

HI-FI NEWS SPECIFICATIONS

Turntable speed error at 33.33rpm	33.36rpm (+0.095%)
Time to audible stabilisation	5sec
Peak Wow/Flutter	0.02% / 0.04%
Rumble (silent groove, DIN B wtd)	-69.1dB
Rumble (through bearing, DIN B wtd)	-68.9dB
Hum & Noise (unwtd, rel. to 5cm/sec)	-59.1dB
Power Consumption	6W
Dimensions (WHD)	450x115x370mm