

Pro-Ject XA B

The latest addition to Pro-Ject's X line of turntables features a crystal-clear acrylic plinth and comes equipped with a new 10in alloy tonearm and 'balanced' MM cartridge
Review: Adam Smith Lab: Paul Miller

While some companies look to completely re-brand in the face of changing attitudes, it's reassuring to see others persuade us of technological advancements in more familiar fashion. So, at the opposite end of the spectrum from the reborn Jaguar automotive brand, you get Pro-Ject Audio Systems being as evangelical as ever in its quest to steer all vinylistas towards balanced operation.

The latest model in Pro-Ject's X series of 'True Balanced' turntables is the EISA Award-winning XA B, retailing in the UK for £1099 complete with Pro-Ject Pick it PRO Balanced cartridge, felt mat and a Pro-Ject Record Puck E LP weight. The XA B is positioned between the £999 X1 B and the X2 B [HFN Sep '22] at £1499, but also harks back to a couple of the Austrian manufacturer's popular, historic designs.

I CAN SEE CLEARLY NOW

In practice, the main difference between Pro-Ject's X1 B and X2 B and the XA B (B for 'Balanced', in all instances) is the latter's clear acrylic plinth. This is something of a Pro-Ject speciality – first seen on the 6.9 Perspective in 1999, a turntable which, alongside its standard-plinthed 6.9 sibling, marked the company's move upmarket after the success of its budget designs.

Acrylic is also used further up in the X range, where you'll also find a sparkly, see-through plinth on the £2099 6PerspeX Balanced UK Superpack. Pro-Ject has always valued the material for its damping properties but also cautions that it can 'overdamp the turntable', resulting in a 'dry sound character' unless it is carefully implemented. The component parts of the XA B are therefore designed to ensure that the resultant balance is just so.

For the XA B, the acrylic plinth measures 460x340mm (wd) and is 20mm thick.

RIGHT: Seen here without mat (and bias thread and weight), the precision-balanced 1.7kg alloy platter sits on a plastic sub-platter that's driven via AC motor and flat rubber belt. The drive electronics are in a metal enclosure [top left]

Machined recesses are created for the arm, power supply, motor and trio of feet. Each of the last of those is in three parts, comprising an aluminium base, damping structure above, and a threaded upper that screws into the plinth and allows for easy levelling. A smart lid is supplied and this fits onto sturdy hinges that hold it open both upright or at an angle of your choosing.

The XA B's motor is an AC type, run from Pro-Ject's own generator circuitry inside the plinth. A big advantage is that 33rpm or 45rpm speeds are available via a switch on the side of the deck. In 2024, I really don't see any need for fiddling with belts and spindle pulleys – Pro-Ject clearly understands the value of electronic speed selection!

The XA B's motor drive circuitry is fed with 15V DC from what Pro-Ject wryly describes as a 'cheap-looking' plug-top PSU, before emphasising that this is a relatively benign item, given the new motor drive

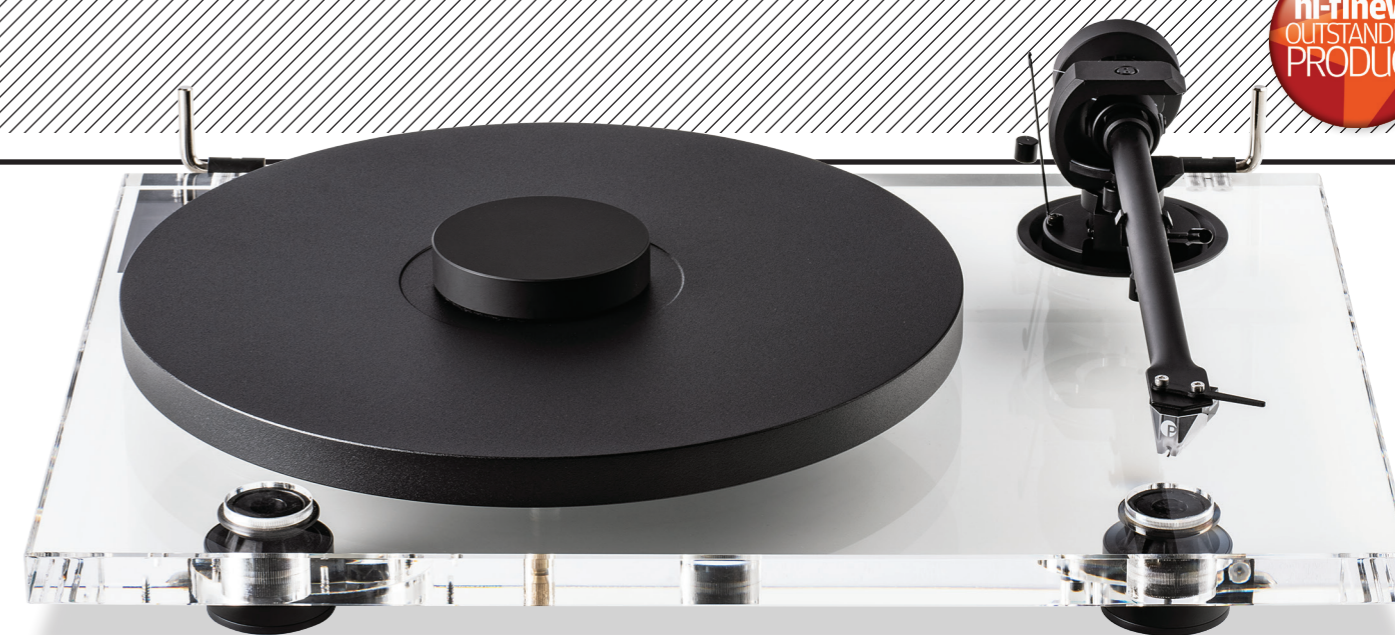
signal-generation circuit within the deck itself. It also offers an upgrade in the form of the Power Box S3 Phono, a beefier unit with a filtered DC supply and twin outputs for a turntable and phono stage. Improvements from units like this can be surprising so, for £159, it's worth trying.

A flat, continuous belt [see PM's Lab Report, p55] drives the XA B's sub-platter, while the main 1.7kg 'precision-balanced' alloy platter has an embedded layer of TPE damping.

NEW DECK, NEW ARM

The XA B is fitted with a new 10in tonearm, based around an aluminium tube and supported on four-point Cardan bearings. A TPE-damped counterweight is clearly marked to dial up VTF and the familiar thread and weight bias set-up applies the necessary anti-skating. Two Allen screws in the base allow for VTA adjustment and a small screw near the bearing housing

'The XA B's bass delivery is deep, taut and detailed'



can be loosened to rotate the armtube for precise azimuth alignment.

The final part of the XA B package is the Pro-Ject Pick it PRO Balanced MM cartridge [see PM's boxout, below], which normally sells for £199 and commands a £30 premium over the standard Pick it PRO model. This has been developed by Danish cartridge specialist Ortofon so that it can be used in a fully balanced system. To this end, a £65 Connect it E 5P phono cable, with a shielded twisted-pair layout for each channel, is supplied to make best use of the XA B's balanced configuration.

Installation of this turntable is a breeze, aided by a clear set of instructions which also includes a re-packing guide – handy for when you move house (and hi-fi reviewers, too...). During setup I double-checked the cartridge alignment and it was spot on, so was left with placement, foot levelling, fitting the belt/platter and setting up the

tracking weight and bias. I was up and running in less than ten minutes.

MASTER OF CEREMONIES

Connected through an Anatek MC phono stage into a Naim Supernait amplifier in an unbalanced configuration initially, it took barely half an LP side to make me realise that Pro-Ject has a real winner on its hands with the XA B. This has an overall mastery, poise and sophistication to its music-making that truly belies its modest price tag. Sure, Pro-Ject's budget models almost always put a smile on your face, but its new arrival wipes that off and changes the expression to one of surprise.

The XA B offers a very quiet background, largely free of intrusive vinyl roar and, when the music starts, the deck gets into its stride without hesitation. There's a confident, almost feisty

ABOVE: A new 10in alloy tonearm, fitted with Pick it PRO Balanced MM, is mounted into the crystal acrylic chassis. Three damped, adjustable feet are located into the chassis from below

sense of rhythm secured by this deck, and it never came close to sounding discomfited by any flavour of vinyl that I loaded onto the platter.

The deck's low-end handling is also impressive. There are a number of highly specified direct-drive turntables creeping onto the market around this price point, for which low-end loveliness is usually a given. On this occasion the XA B has donned its boxing gloves to firmly set out its stall in the 'belt drive' corner of the ring. Bass delivery is deep, taut and gorgeously detailed, meaning tracks like 'A Fragile Thing' from The Cure's long-awaited *Songs Of A Lost World* LP [Fiction Records 7503682] are driven along by a truly firm hand. Simon Gallup's basslines are always a prominent feature of a good Cure song, and this Pro-Ject turntable made sure his playing was clear to hear, offering up warmth, precise timing and an easy-flowing rhythm.

DIG FOR VICTORY

Give the XA B music of a more challenging nature and it still doesn't put a foot wrong. The bass underpinning The Wave Pictures' 'Red Cloud Road (Pt. 1)' from the *Helen* EP [Moshi Moshi Records MOSHI178] skipped along with head-nodding lustiness, and an excellent level of insight and separation to each note. Equally, although parts of Lizzy McAlpine's *Older* album [RCA 9568-84489-1] seem to have been mixed with the bass control turned up to 11, and can sound thick and leaden as a result, the XA B and Pick it PRO Balanced cartridge dug through the mire to pull out some very deep notes

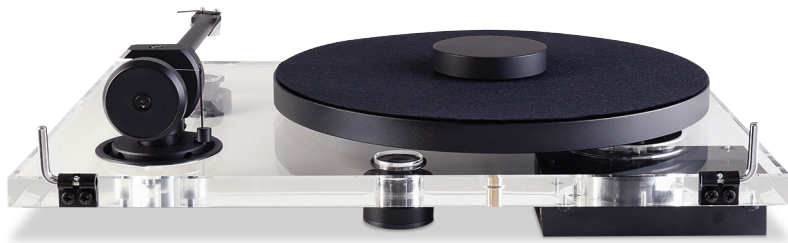
A MATTER OF BALANCE

Pro-Ject's irrepressible CEO/president Heinz Lichtenegger has been on a mission to promote the advantages of 'balanced' LP replay. Here the 'signal' and 'return' paths of both left and right channels float clear of ground, promising improved noise rejection and reduced distortion. All this depends on a tonearm with balanced internal wiring (not connected to the chassis earth) and a phono preamp offering both balanced XLR inputs and truly balanced RIAA equalisation. Outside of the high-end, few phono preamps offer this facility and so Pro-Ject's own balanced-operation Phono Box S3 B [HFN Sep '22] and premium DS3 B – alongside the 'full sized' M6x Vinyl, upcoming flagship M8x Vinyl and existing Nu-Vista Vinyl 2 [HFN Feb '24] from sister brand Musical Fidelity – are true gateway products.

Of course, your choice of cartridge must also have a balanced output... In practice the vast majority of MC pick-ups are balanced by design, with both the positive and negative arms of their 'moving coils' floating from ground. By contrast almost all MMs, including Pro-Ject's own Pick it PRO, have their right (green) output pin connected to ground, thwarting any chance of balanced operation. Not to be defeated, Pro-Ject tasked its pick-up partner (Ortofon) to develop a truly balanced version of the Pick it PRO MM. Fitted to the XA B turntable, this new MM features separate, fixed L/R coils with both 'green' and 'blue' pins disconnected from ground. PM



TURNTABLE PACKAGE



ABOVE: Pro-Ject supplies a 'Connect it E 5P' cable that plugs into the base of the tonearm [left] while an outboard PSU feeds the AC drive enclosure [lower right]

that were not only fulsome, but also well controlled and tuneful.

The more I listened, the more it became clear that the cartridge in Pro-Ject's package is a little gem. It tracked securely and excavated the finest details lurking in the bottom of grooves with carefree ease. The result was a beautifully open, insightful midrange that captured the nuances of instruments and voices very well. The emotion in Rosa Walton's vocals on Let's Eat Grandma's 'Sunday' [*Two Ribbons*; Transgressive TRANS5656XD] was clear to hear, while the strummed acoustic guitar behind her remained sweetly detailed.

SPACE RACE

The XA B was able to place a main performer precisely centre-stage, and establish a fine sense of space between the loudspeakers. However, a slight giveaway to this deck's position in the Pro-Ject range is revealed in its limited stage width. A good amount of front-to-back depth meant the sound was never small or congested, but super-wide sound is not its forte. That said, the title track from David Gilmour's *Luck And Strange* set [Sony 9802804611] was both detailed and spacious, while also sounding smooth and reflective.

An aspect of this track that made me really take notice of the XA B's fine-touch was the gently tapped cymbals backing the percussion. They didn't dominate; in fact they were neatly in the background as they should be. Yet they were somehow impossible to ignore and had a really vivid, golden shimmer. Once again the XA B and the Pick it PRO Balanced MM were doing their thing together without any sense of forced over-enthusiasm.

As a final step, I wheeled in my regular Yamaha C-5000 preamplifier [*HFN* Aug '20] for purely phono stage duties. Clearly, an £8000

preamplifier is not the most likely companion for a £1099 turntable package but the C-5000 has both balanced XLR and unbalanced RCA phono inputs, so I was able to make an easy comparison of the XA B in both its configurations without changing hardware. This was an A/B of the XA B, if you will.

CROWN JOOLS

Swapping between the preamp's two inputs showed that running the deck over a balanced connection just gave a little more of everything. Most obvious was a greater perception of the air around instruments, which made it easier to focus on what each performer was doing, and better soundstage width.

I had previously been delighted with Jools Holland's rousing piano solo on The The's 'Uncertain Smile', from the Brit band's 1983 *Soul Mining* LP [Epic EPC 25525] but, through a balanced chain, it was just that little bit more prominent and dynamic. You're not doing the XA B a disservice at all by running it in a conventional manner, but if you can go balanced, it definitely adds some icing and a cherry to an already sumptuous party cake. 🍷

HI-FI NEWS VERDICT

The XA B turntable package shows the Austrian vinyl guru is still going from strength to strength. Pro-Ject has designed a stylish, compact and well-engineered turntable, added a very fine tonearm and dressed it with a bespoke cartridge that is almost absurdly impressive at the price. The included accessories then bring everything together beautifully – the result is a veritable audiophile bargain.

Sound Quality: 88%

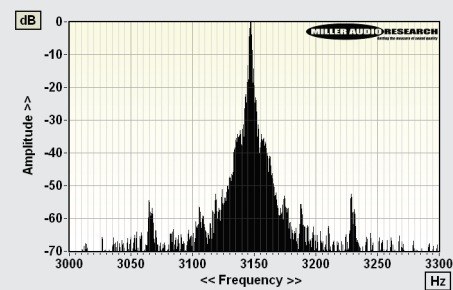


LAB REPORT

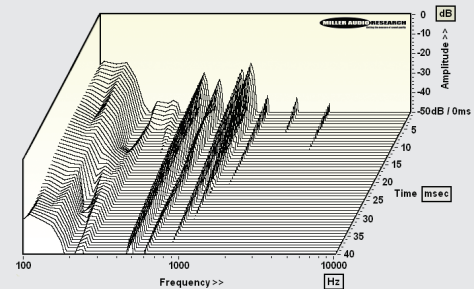
PRO-JECT XA B

For a deck with a host of style and engineering features, it's often the little things that count the most, in this case the high quality flat-section belt and AC drive system seen earlier in the model X1 [*HFN* Aug '19]. Like that turntable, the XA B is gifted with exceptional speed stability [see Graph 1]. Absolute speed is an imperceptible -0.1% slow while peak-weighted wow is reduced to a very pitch-stable 0.02% – this is firmly in direct-drive territory! Flutter is a little higher with shoulders between ±10-20Hz while the peaks at ±82Hz are also visible on the unweighted rumble spectrum [not shown here]. Nevertheless, 0.06% is still a fine figure for complete turntable solution at this price. Rumble from the stainless steel/brass bearing is slightly below average at -65.5dB (DIN-B wtd, re. 5cm/sec) but the XA B's dynamically-balanced alloy platter, with TPE damping, produces a lower through-groove rumble of -69.4dB. This is the key figure, of course, and there's no significant difference with or without the 190g 'Record Puck E' weight.

Pro-Ject's partnering 10in (9in effective length) alloy tonearm has a medium/low 10g effective mass, suiting a wide range of pick-ups, including the supplied Pick it PRO Balanced MM [see boxout, p53] with its 7.2g bodyweight and 12-14cu compliance. The four-point Cardan bearing was snugly adjusted in our sample – free of play and with a low ~20mg friction, while the counterweight calibration errs on the side of caution by under-reading by a slight 5%. The alloy armtube appears to be only lightly damped so while the main beam mode is deferred to a high 140Hz there are a series of higher frequency resonances at 510Hz, 625Hz, 870Hz and 1kHz that may contribute to a 'lively' sounding midrange [see CSD waterfall, Graph 2]. PM



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



ABOVE: Cumulative resonant decay spectrum for 10in carbon tonearm, illustrating various structural support and tube vibration modes (100Hz-10kHz over 40msec)

HI-FI NEWS SPECIFICATIONS

Turntable speed error at 33.33rpm	33.30rpm (-0.095%)
Time to audible stabilisation	3sec
Peak Wow/Flutter	0.02% / 0.06%
Rumble (silent groove, DIN B wtd)	-69.1dB (-69.4dB with weight)
Rumble (through bearing, DIN B wtd)	-65.5dB
Hum & Noise (unwtd, rel. to 5cm/sec)	-60.6dB
Power Consumption	3-5W
Dimensions (WHD, with lid) / Weight	460x130x340mm / 6.3kg