TURNTABLE PACKAGE

Belt-driven turntable system with electronic speed control
Made by: Pro-Ject Audio Systems, Austria
Supplied by: Henley Audio Ltd, UK
Telephone: 01235 511166
Web: www.project-audio.com; www.henleyaudio.co.uk

'Radiohead's

re-released *OK* 

Computer was

a lot of fun'





# Pro-Ject Debut PRO S

The longest serving, and arguably most diverse of Pro-Ject's turntable ranges is the Debut, launched in 2000. Now there's a new model, with an equally new S-shaped arm Review: Jamie Biesemans Lab: Paul Miller

aunching new turntable models as regular as clockwork is part-and-parcel of Pro-Ject's business model, but say what you will: its approach of incrementally improving and tweaking proven designs has certainly not done the Austria-based manufacturer any harm. Lacking accurate market numbers, it's hard to say conclusively, but there seems little doubt the company founded by Heinz Lichtenegger in 1991 is surely the largest turntable manufacturer on the planet, both for the in-house Pro-Ject brand and as an OEM supplier for third parties.

Joining the ranks of its popular midrange Debut family is the belt-driven Debut PRO S, launched this autumn. You might think this is a special edition of the EISA Award-winning Debut PRO [HFN Sep '21] presented last year to celebrate the company's thirtieth anniversary, as Pro-Ject has a tradition of offering upgrades and 'superpacks' for existing products. But the PRO S is neither an 'SE' model nor an outright replacement for the existing PRO. Instead, we're talking about a very similar turntable with one – well, actually more than one, but we'll get to that - crucial difference, as indicated by the addition of an 'S' at the end of its name.

## CONCORDE TAKE-OFF

This is a Debut fitted with a 10in (254mm effective length) S-shaped tonearm, offering an alternative to the straight arms bundled with all other models in the range. In fact, Pro-Ject currently only implements S-shaped tonearms on a few of its products, notably the flagship Signature 10 and 12. As you would expect, the factory-fitted cartridge isn't the Pick-IT PRO of the Debut PRO but a custom-built version of Ortofon's iconic Concorde moving-magnet. It's not a new cartridge, though, as Pro-Ject has been offering it separately for a while now.

RIGHT: With the TPE-damped alloy platter removed, the new diamond-cut sub-platter, belt and AC motor are all revealed beneath. The speed selector is underneath [bottom left] – switch right for 45 rpm and left for 33.33 rpm

Both Debut PRO models will continue to exist side by side, offering music lovers wishing to step up from the Debut EVO two very distinct choices. Yes, a lot of elements are the same, such as the motor assembly, main platter and feet, but you won't quickly find a competing brand offering

a dual midrange flagship like this. Priced at £799, the Debut PRO S is more expensive than the regular PRO model (£699), making the choice one that won't purely be based on taste. The price hike is not only caused by the changeover

to another tonearm, but also some other upgrades handed to this new model.

## PAINT IT BLACK

Probably the most impactful difference is replacing the standard sub-platter used on most Debut models with a heavier aluminium disc. With a Debut PRO and the Debut PRO S deck next to each other,

it's also immediately obvious that the newcomer has a wider MDF chassis.

The plinth also retains the MDF material and the clean layout of motor and rear/underside RCA connections [see pic, p69]. There are no changes to the sleek matte black finish either – and because the

turntable's feet, tonearm, and elements such as the bearing block and counterweight are dressed in the same way as the plinth, and there are no logos in sight (except on the dust cover), the Debut PRO S has a brooding,

modern look to it, reminiscent of the matte skins much beloved by some drivers of German performance cars. On top of that Pro-Ject bundles a Record Puck E with this model, which is usually a £25 aftermarket accessory. And, yes, this natty little record weight is also finished in matte black.

Wondering about another colour option, such as the rather nice green or





yellow available for the Debut EVO? Don't bother: black is the only option available for the new Debut PRO S model.

#### **UPGRADE PATHS**

Setting up the Debut PRO S is a doddle. After a few million disc spinners sold, Pro-Ject has its documentation and setup instructions down to a tee. Tonearm and cartridge are factory-fitted, and normally speaking no user adjustments to azimuth or VTA are required. Of course, if you're looking ahead to future upgrades, those adjustments are possible.

It's during the limited assembly required that you'll encounter the hefty aluminium sub-platter, which is placed first so you can loop the flat belt around the pulley. As is often the case with Pro-Ject turntables, there's also a second, round belt included which can be swapped in to spin 78rpm discs. Presumably most people will be playing 45 or 33.3rpm vinyl, and changing

between these two speeds is achieved via a three-way switch on the bottom of the deck. This is easily reachable, so operating the speed control is no problem, and makes the already sleek plinth look cleaner still by the lack of visible buttons. The main platter, developed from the PRO, is a machined aluminium disc with a resonance-damping ring of TPE looped around the inside.

Setup flexibility is what you'd expect from a turntable positioned well above first base. Height-adjustable damped feet allow you to quickly level the deck, and the new S-shaped tonearm, with SME-compatible connector, makes it easy to upgrade to a new cartridge and headshell, which is a key reason to opt for this particular PRO S model [see boxout, below].

Completing the package is a dust cover and a Connect-it E RCA cable. The turntable's internal wiring is in line with Pro-Ject's recent drive to promote balanced

ABOVE: This latest Debut PRO has a larger (wider) hand-painted plinth, new sub-platter and very new S-shaped alloy tonearm with detachable Pick it S2 'Concorde' MM

connections [HFN Sep '22], allowing users to make a balanced link with a suitable cable adapter and phono preamp such as the Phono Box S3 B. Of course, you'll need to change to a moving-coil cartridge to reap those balanced benefits.

# PLAY IT LOUD

As mentioned, the Pick it S2 C cartridge is derived from Ortofon's Concorde line, which many would associate with a DJ deck – yet its sound in the Debut PRO S is more refined and detailed than needed for spinning discs in a nightclub. The emphasis does remain on producing a dense, massive sound, but it's one from which dynamic, bright detail still stands out. It's big and roomy, but always hi-fi.

These characteristics suited listening to 'Sonnenaufgang' from Richard Strauss's Also Sprach Zarathustra [Decca 028948409617], the prelude to the rest of his symphonic poem. Although less than two minutes long it is instantly recognisable – a few notes suffice, thanks to Stanley Kubrick's memorable use of it in 2001: A Space Odyssey. With the Debut PRO S hooked up to a Primare I15 amplifier [HFN Oct '18] and a set of DALI Rubicon 2 standmounts, the music filled my room.

There's a lot of sheer power and dynamics in this 1959 Herbert von Karajan recording, re-released 60 years later in a limited edition pressing from Decca and Pro-Ject itself. And while working through the piece's nine parts the Debut PRO S proved capable of handling big orchestrations, opting for a relatively largescale, weighty portrayal with a palpable sense of depth. Individual instruments were also well-defined – the church organ at the end of 'Der Genesende' (>>>)

## BEND IT LIKE PRO-JECT

Nearly all current Pro-Ject turntables are equipped with a straight aluminium/carbon sandwich tonearm. However, you don't need to travel too far into the company's past to discover multiple decks fitted with S-shaped arms. That came to a stop a few years ago, as the required diamond polish technique became too expensive, and Covid-related labour shortages added to the burden. 'That's resolved and producing them is easier now', says Pro-Ject founder Heinz Lichtenegger, and he sees some advantages in embracing this type again. 'The effective mass is greater with an S-tonearm than an equivalent straight arm, which gives you another resonance frequency to work with.'

Traditionally, S-shaped tonearms were made from aluminium. The Austrian brand isn't changing that, opting to forgo its signature aluminium and carbon mix. 'This would be very hard to do', says Lichtenegger. 'Carbon is not a material we can easily form into a curved shape. Also, it is difficult to fit a detachable headshell. An aluminium tonearm also has a bit of a softer sound, which is why we chose the Pick it S2 to emphasise a bigger, louder presentation.'

According to Lichtenegger, a lot of vinyl lovers want to change cartridges on a regular basis. This desire has increased pressure to bring back S-shaped tonearms, as the SME-connector makes changing a headshell and cartridge extremely easy. And it turns out the Debut PRO S isn't a one-off – according to Lichtenegger, Pro-Ject has big plans to do more with S-shaped arms in 2023...

## TURNTABLE PACKAGE



ABOVE: Stereo RCA sockets are mounted under the left of the plinth, PSU input to the right. Three machined feet screw into place for levelling and vibration control

and the horns in 'Das Tanzlied' appearing rich and distinct – while the soft dynamics displayed at the end of 'Das Nachwanderlied' were treated with respect.

#### MORE THAN JUST OK

Good definition and deft handling of midrange frequencies made rediscovering Radiohead's OK Computer OKNOTOK 1997 2017 [XL Recordings XLLP868] a lot of fun as well. This triple-LP version of the 1997 album, with its numerous B-side additions and trio of previously unreleased songs, is a diverse, genre-hopping exercise, and one which found Pro-Ject's turntable up to the task. It positioned the overdriven guitar which backs up Thom Yorke's vocal on 'Lift' out to the far left of the soundstage, keeping it detailed rather than a wash of distortion, and gave bass and percussion their own presence.

Listening to some more rockorientated albums showed this deck and cartridge to be an excellent performer with the genre, thanks to the full-range, full-size sound. There was no smearing of the image either when spinning the complex avantgarde music of Burn from Sons of Kemet [Naim NAIMLP201]. Marrying Afrobeat and Caribbean folk influences with jazz orchestrations - sometimes driven by a very fat tuba – the Kemets' music can be an acquired taste, yet the Debut PRO S had the timing and resolving ability to play these rousing songs with impressive coherence.

Comparing a Debut PRO with Pick-IT PRO cartridge to the Debut PRO S with its Concorde derivative was... interesting. Sonic differences were quite pronounced, with the Pick it S2 C cartridge and S-tonearm putting more of a spotlight on the minimalistic piano playing and vocals of Melanie de Biasio on 'Your

Freedom Is The End Of Me' [Lilies, PIAS PIASLO70LP] than the Pick-IT PRO. Furthermore, a little extra precision and a tad more bite to the sound better suited the overall feel of this album, which continually lurches between triphop and jazz.

The final track on side A, 'Sitting In The Stairwell', consists only of De Biasio's sultry vocals and her snapping her fingers, recorded in a reverberant space that sounds suspiciously like a stairwell. I recently played this same song on a Pro-Ject X2 B [HFN Sep '22] with an Ortofon Quintet Red MC, and the level of microdetail and envelopment was astonishing. The Debut PRO S couldn't rival that performance, but was still a very satisfying listen, and compared to the 'regular' Debut PRO there was definitely a greater sense of drawing the listener in.

#### THE CHOICE IS YOURS

Does that make the PRO S superior to the Debut Pro? Not per se, even though one is slightly more expensive than the other. But there really is a choice on offer in terms of sound character. And no one would complain about that, surely? (b)

### HI-FI NEWS VERDICT

The Debut PRO S is an enticing package, with a well-designed deck at its core, together with all the bits and bobs you need to listen to vinyl in higher quality. It lives up to its promise of offering a real performance uplift over Pro-Ject's (and other brands') entry-level players – and quite a few midrange models too. It's also a foil for the Debut PRO, with a distinct and brighter sound plus painless upgrade potential.

Sound Quality: 87%

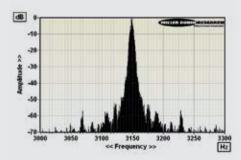


## LAB REPORT

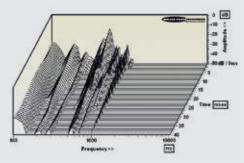
## PRO-JECT AUDIO DEBUT PRO S

Like the original Debut PRO [HFN Sep '21] the new 'S' shares the same PSU and decoupled AC motor as the earlier X1 [HFN Aug '19] and X2 [HFN Nov '19] models, although the TPE-damped alloy platter now sits on a 'diamond-cut' alloy sub-platter. Once again, the deck is supplied with glued round-section (78rpm) and continuous flat-section (33.3/45rpm) rubber belts, the latter essential to realise the low 0.02% peak-wtd wow [see Graph 1] and very minor -0.06% absolute speed error. We've seen the ±82Hz/0.04% flutter before on the Debut PRO and X2 turntables, this component also popping up on the unwtd rumble spectrum. However, the new sub-platter brings some 2dB less throughbearing rumble on the PRO S at -65.9dB (DIN-B wtd), improving to a very fine -70.5dB when measured through-the-groove. This performance deteriorates very slightly to -68.5dB once Pro-Ject's puck/record weight adds a little extra load to the bearing and 'couples' the LP more effectively onto the platter.

The new S-shaped tonearm features a four-point cardan bearing, a decoupled counterweight system and one-piece alloy tube with SME-style detachable headshell/cartridge mount. This also reduces its effective mass to 8g – ideal for high compliance MMs. S-shaped tubes typically have more complex resonances than straight beams, and so it is here with the rather 'lively' series of modes beginning with a main flex at 105Hz, and harmonics at 200Hz/280Hz, followed by a cluster of other bending/torsional modes from 440Hz-760Hz [see CSD waterfall, below]. The sharp but quickly dissipated break at 960Hz looks to be associated with the long, end-of-arm fingerlift. Otherwise the arm bearings are impressively free of play and friction is just ~10mg. PM



ABOVE: Wow and flutter re. 3150Hz tone at 5cm/sec using Pro-Ject's flat belt (plotted ±150Hz)



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	33.31rpm (-0.06%)
Time to audible stabilisation	3-4sec
Peak Wow/Flutter (Peak wtd)	0.02% / 0.04%
Rumble (silent groove, DIN B wtd)	-70.5dB (-68.5dB with weight)
Rumble (through bearing, DIN B wtd)	-65.9dB
Hum & Noise (unwtd, rel. to 5cm/sec)	-57.9dB
Power Consumption	5-8W (1W standby)
Dimensions (WHD, with lid) / Weight	462x145x345mm / 7kg