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





# Pro-Ject Debut Carbon EVO

Launched in 1999, the original Debut turntable set the bar for starter vinyl packages. Twenty-one years later and the 'Carbon EVO' raises it to pole-vault standards... Review: Ken Kessler Lab: Paul Miller

eck/arm/cartridge/dustcover: check. Price £449: check. A choice of nine finishes including wood veneer, or gloss or satin colours: check. Everything included in the package readying it for connection to a phono stage: check. That list tells you Pro-Ject's best-seller remains, after two decades, the go-to 'turnkey' record deck for newcomers (or seasoned audiophiles on a budget). The basic recipe is unchanged but refined, which is why it has sold over 1.000.000 units. Rest assured, however. that this latest incarnation, the Debut Carbon EVO, is far more than a merely cosmetic upgrade.

Before describing the improvements, a reminder of the basics. The Pro-Ject Debut Carbon EVO is, like the original Rega Planar which pretty much established the look and genre, an unadorned, rectangular slab, oozing functionality and the kind of minimalist look which evokes a certain German styling school of the pre-WWII era. There is - literally - nothing above the plinth save for platter, arm/cartridge and hinged dustcover. The lone control, an on/off switch that also chooses between 33rpm and 45rpm, is under the plinth's left front corner [see picture, p75].

#### **UP TO SPEED**

This is ostensibly a two-speed deck – you simply flick the on/off switch to the left for 33 and to the right for 45. But there's a bonus. In addition to the flat belt supplied for 33 and 45. Pro-Ject supplies a second. round cross-section belt [see PM's Lab Report, p77] which, when fitted around the larger pulley and with the turntable switched to '45rpm', will play 78s!

Continuing the basic recipe, the carbonfibre arm is an 8.6in single-piece model pre-fitted with an evergreen Ortofon 2M Red MM cartridge [HFN Oct '08]. It's a honey and worth nearly £100 as a separate

RIGHT: With platter (and tonearm's thread-andweight bias) removed the sub-platter, peripheral belt and AC motor are all revealed. 78rpm is also accommodated by the stepped pulley

purchase. Oh, and Ortofon offers a 78rpm stylus for it, so that spare belt might come in handy for some of you.

Blessedly, Pro-Ject follows the fashion of fitting its deck with phono sockets at the back instead of a captive lead from the arm, and a really nice cable with earthing wire comes in the kit. The arm is not changeable, but it's a sweet performer, so will not hold 'This EVO has back owners from upgrades. enough élan to

improvements that earn exorcise any this deck its 'EVO' suffix. arquably the most important snobbery' is the heavier metal platter, which has circumferential damping applied underneath. The motor suspension also enjoys improved damping, while the height-adjustable metal feet provide some decoupling. The two-speed

switch is new, as is the plethora of colour

choices. Traditional types are served by

wood veneer, or satin or gloss black or

While there are many

white, but the demographic of vinyl users has changed over the past decade, so styleconscious urbanites may be drawn to gloss red or satin blue, green or yellow, as here.

#### **WEIGHT GAIN**

What this colour palette has to do with performance is irrelevant. What it has to do

> with spreading the word about vinvl is everything. There is also, of course, the aforesaid, often-vexing issue of an upgrade path. Yes, this arm can handle lightweight MC cartridges, and you can change cables. This is the prerogative of

every insatiable audiophile. But there's one upgrade I advise you to consider from the get-go, and that's either a screw-down clamp or a record weight.

Whichever you prefer, both will audibly tighten up the bass and add a frisson of crispness to treble attack and transients.





I tried an LP weight and a universal, lightweight, screw-down clamp, and found both more rewarding than changing the supplied felt record mat. I preferred the clamp to the weight (better for the bearing, too) and as most consumers shopping at this price point need to look after every pound, Amazon can supply something for as little as a tenner.

Thanks to the pre-fitted cartridge and a set of digital stylus scales, I had this making music in under 15 minutes. The only info I needed from the owner's guide was which notch to use for the anti-skating.

## MELLOW YELLOW

Imagine the 'culture shock', so to speak, of reviewing a £449 front-end after living with one that costs four times that (the EAT Fleetwood Mac 1973-1974 [Reprise R1

In February 1990, when most people thought that

vinyl was in its twilght years, a successful Austrian

the Czech border to visit a factory in Litovel, near

turntable for his customers, but it had to be very

offered by this once-state-owned factory weren't

suitable. Heinz looked through the archives

turntable designed back in the 1970s. This,

he realised, was the basis for his own deck

and within a year he'd set up a collaborative

venture to produce the 'Pro-Ject 1'. This was a

reworked version of the 'Gramofon Tesla NC 500', a two-speed belt-

player in real wood veneer, complete with acrylic lid. PM

driven deck with an AC motor mounted, as with so many of Pro-Ject's subsequent

models, using a rubber suspension at 10.30 o'clock at the back of the plinth [see

www.vinylio.cz/tesla/tesla-nc-500-stereofonni-gramofonovy-pristroj-cerveny-

prospekt]. What followed, as every audiophile knows, is arguably the biggest

in Mistelbach, Austria [see HFN Sep '18] and pictured here is its latest 'Debut'

success story in hi-fi history. Pro-Ject Audio Systems' new headquarters is based

and identified a well-made single-play

retailer and distributor took an exploratory trip across

Prague. Heinz Lichtenegger was looking for a decent

affordable. While the mass-market players currently

THE VINYL PROJECT

B-Sharp deck [HFN Jul '20] plus Jo N°5 MC cartridge [HFN Dec '18]) - to say nothing of following a TechDAS/Graham set-up worth £60k. I'd like to think a similar iolt affects a wine critic going from Petrus to something from a supermarket for £3.99, or a car reviewer following a Ferrari with a Dacia. But it wasn't that extreme.

Ah, you're thinking, here come the back-handed compliments because Kessler is working from a negative, nay, apologetic standpoint. Not so. Aside from two immediate impressions on the downside losses in ultimate refinement and absolute scale of the soundstage - any drop in performance was far from intolerable.

Fleetwood Mac's remastered LPs from the pre-Buckingham/Nicks era box-set,

ABOVE: Seen here in its 'golden yellow' finish, the machined MDF plinth is available in no fewer than nine gloss/satin/real wood colourways. The 8.6in tonearm is fitted with an Ortofon 2M Red

596007/603497851294] were handy, so I went straight in with *Penguin*. As first impressions often deliver 80% of the final judgment, I was delighted to be distracted swiftly from the previously-cited negatives by a rich, solid, extended bass and utterly dazzling percussion. The snap, the solidity and the impact, allied to John McVie's virtuoso bass guitar playing, delivered enough authority to elevate the Debut Carbon EVO above its like-priced rivals and certainly above its progenitors.

Amusingly, it wasn't an original composition which had me sit up and take notice, but the deliriously funky

interpretation of '(I'm A) Road Runner', that classic first gifted to us by Jr Walker & The All Stars. It was enough that the rhythm section had this usually sedentary excuse for a three-toed sloth boogieing along, but the harmonica solo was the dealmaker. This little sucker cooks.

## **DREAM DECK**

Next was Dire Straits' eponymous debut [Mobile Fidelity MFSL2-466] on two 45rpm LPs. Knopfler's slithery, twangy quitar demands fluidity from a system, while his voice

has its own unique rasp. The Debut Carbon EVO handled both with enough élan to exorcise any snobbery. It forced me to listen to the strains of 'Sultans Of Swing' with an open mind. This deck, to use the inexact, irrational parlance of the non-discriminating vinyl worshipper, is truly 'musical' and therefore absolved of any sins such as absolute refinement. →

### TURNTABLE



ABOVE: Stereo phono sockets are mounted beneath the far left of the plinth with Pro-Ject's 'Connect-it E' RCA cables supplied as part of the turntable package

But absolutes there are, as editor PM points out in his Lab Report about the exactness of the Debut Carbon EVO's speed [see opposite]. Armed with a chronograph, I compared assorted 33rpm and 45rpm LPs' and singles' playing times and even dug out a strobe disc and found this turntable to be the budget-constrained perfect-pitch-fanatic's dream deck.

#### LITMUS TEST

Vocals, however, remain my final arbiter of everything, so the possibly-too-familiar strains of Carly Simon's album *No Secrets* [Speakers Corner ELEKTRA75049] served as my initial foray into the deck's midband capabilities. For those who value emotional content above all other aspects of sound reproduction, whether soundstage or bass extension or transient snap, this LP offers the contrasting feelings expressed in the heartbreak of the 'The Carter Family' and the arch contempt in 'You're So Vain'.

A system conveying both with equal grace, finesse and conviction is what many of you strive for in your quest for audio satisfaction.

Ms Simon is hardly Aretha Franklin, and could be accused of a certain coolness akin to Sade's aloofness, yet both tracks elicited in this listener the same response as if hearing them with a honeyed Koetsu MC at the front. Which is to say that the Debut Carbon EVO is greater than the sum of its parts.

Here we witness the genius of a company that can do this for a sane price, giving you a made-in-Europe turntable/arm/cartridge with pedigree and performance so far beyond its market category as to embarrass the rest. Recall that the cartridge alone is worth more than 20% of the entire purchase price. Whoever combined and 'voiced'

the three elements of turntable, tonearm and cartridge has displayed system-assembly genius.

This raises the subject, which is too often neglected, of synergy and compatibility. We assume too much, imagining that any combination of three high-end components will work together blissfully. We've been lulled into this state, afraid to argue that £20,000 Amp A actually sucks when used with Speaker B, or that Cartridge X simply cannot mate perfectly with Phono Stage Y.

In the Pro-Ject Debut Carbon EVO, the pain of a front-end mismatch has been removed, the sole potential for such a calamity lurking only in the future for those who choose to upset the balance with an arbitrary upgrade. So I picked as the litmus test another 2x45rpm, high-cost LP, Janis Joplin's Pearl [Mobile Fidelity MFSL2-454] and that most revealing of tracks, the a cappella 'Mercedes-Benz'.

Suffice it to say, my reservations about absolute refinement were rendered meaningless, for the resultant sound was in-the-room/in-your-face, as-real-as-you-need presence. And that's magic. (b)

## **HI-FI NEWS VERDICT**

Not only was this sub-£500 analogue package a joy for the money, it also provided a reality check. While the Pro-Ject Debut Carbon EVO is entry-to-mid-level, its performance through a system 200x its price revealed it to be punching wa-a-y above its weight. So while long-term readers may have moved beyond such budget esoterica, if asked by one of the 'new generation' then we can recommend this unreservedly.

Sound Quality: 86%

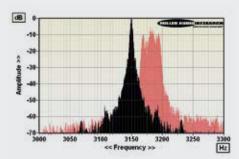


## LAB REPORT

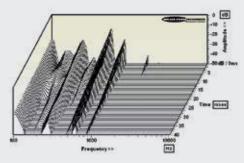
## **PRO-JECT DEBUT CARBON EVO**

My lab report for the original Debut Carbon deck [HFN May '12], noted 'the enlarged 12in metal platter might benefit from some damping'. Pro-Ject has now added TPE damping to the (heavier) 1.7kg steel platter, so while the lightweight injection-moulded sub-platter and stainless steel/bronze bearing are unchanged, the increase in loading only results in a 1dB hike in through-bearing noise (from -68.8dB to -67.7dB here). More importantly, the improved platter damping has reduced through-groove rumble from -66.8dB to -69.1dB in the EVO [all DIN-B wtd, 20Hz-20kHz, re. 1kHz/5cm/sec]. The mechanical stability of the AC motor is also improved now the suspension resonance identified in the X2 [HFN Nov '19] has been addressed by Pro-Ject. Absolute speed accuracy is bang-on target and W&F reduced to a very fine 0.05% peak-wtd figure [black spectrum, Graph 1]. A component at ±41Hz visible in the rumble spectra is also manifest in the W&F spectrum but this is insignificant compared to the palpable deterioration in W&F and rumble caused by the use of Pro-Ject's glued, round-section belt option [shaded red spectrum, Graph 1]. Always use the flat-section belt for 33/45rpm!

Pro-Ject's 8.6in arm with its lightweight, rigid carbon fibre tube and headshell is a familiar choice – its low 7g effective mass ideally suited to the compliant 2M Red pick-up. The (sapphire) bearing friction is low at ~15mg in both planes while the short, stiff armtube shows its principal resonance at 260Hz with higher-Q harmonic/twisting modes at 590Hz and 880Hz [see Graph 2]. This arm is a little 'livelier' than the alloy/carbon tubes fitted to Pro-Ject's 'The Classic' [HFN Aug '16] and X2 decks. PM



ABOVE: Wow and flutter re. 3150Hz tone at 5cm/sec (plotted ±150Hz, 5Hz per minor division; red trace, round-section belt vs. black trace, flat belt)



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	33.32rpm (-0.03%)
Time to audible stabilisation	4sec
Peak Wow/Flutter (Peak wtd)	0.02% / 0.03% (flat belt)
Rumble (silent groove, DIN B wtd)	-69.1dB
Rumble (through bearing, DIN B wtd)	-67.7dB
Hum & Noise (unwtd, rel. to 5cm/sec)	-58.7dB
Power Consumption	4W (<1W standby)
Dimensions (WHD) / Weight	415x113x320mm / 5.6kg