

Pro-Ject Audio Automat A1

Austria's vinyl juggernaut has leveraged German expertise to launch a series of fully-automatic turntables. The range starts spinning with the A1, inc. a built-in phono stage
Review: **Ken Kessler Lab: Paul Miller**

Decades ago, along with tone controls, the automatic turntable was relegated to 'amateur' status because audiophiles revel in masochism. 'What? The arm lifts up at the end of the side?'. As lies were told about CD, so were falsehoods spread about how triggering the arm lift would snap your cantilever. It was a load of tosh, and as many new to LP want convenience, Pro-Ject has responded with the A1 at only £369.

Supplied with a cartridge and an MM phono stage, the A1's 'plug 'n' play' status is literal, not wishful thinking. Its fixed counterweight, to eliminate set-up challenges, limits the A1's upgradeability over the years, but we are talking 'entry level'. This is *not* a deck aimed at the hardcore who owned Syrnix or Hadcock tonearms in the '70s and '80s, early Oracle decks, or other great gear that nevertheless required the patience of a saint and the skills of a watchmaker.

MEMORY LANE

Appropriately, the A1 took me back to my own introduction to audio via a Dual 1019. In 1968 I didn't even know what a 'manual turntable' was, and the 1019 was idler drive (not my favourite technology) whereas the A1 is belt-drive. Pro-Ject CEO Heinz Lichtenegger revealed a Dual connection to me, reminding me that the name was in use elsewhere. Thus the 'Automat' range is being launched under the Pro-Ject banner.

Says Heinz, 'I want to keep this short as there is a lot of confusion out there, and why should I be concerned about the past? To clear the air, Alfred Fehrenbacher GmbH produced decks for Dual and Thorens for many years. In spring 2021, Audio Tuning Vertriebs GmbH (Pro-Ject's parent corporation) agreed with Fehrenbacher to take over 100% of the production capacity.'

RIGHT: Seen with felt mat removed, the damped, non-magnetic alloy platter has cut-outs that give access to the MM phono preamp switch [see inset and boxout, p73]. Speed select, auto start and manual lift/lower are all included

Pro-Ject will also use Fehrenbacher to manufacture Rekkord. 'This', reveals Heinz, 'is a new brand, concentrating more on classic and automatic turntables, as well as lifestyle-oriented products designed by my daughter Nicole'.

And the A1? It could pass for the results of a racy weekend involving a Pro-Ject Debut [HFN Jul 2000] and Dual CS-505 [HFN Feb '13]. It is, however, far more substantial than the latter, which used more plastic than a LEGO Millennium Falcon. Although that material is used for some of the A1's trim, its black 430x130x365mm (whd) plinth is made of resonance-damped wood, so it feels substantial enough.

Clearly designed to please tech novices, the A1 lacks nothing. It's not semi-automatic, with just auto-lift at

the end of the side, but fully automatic with a 'start' position to set everything in motion. The only quirk occurs with 45rpm audiophile LPs or 12in singles – with the speed selector set to 45rpm, the A1 assumes the presence of 7in vinyl, so you must catch it first with the cueing lever.

BETTER THAN 'BUDGET'

Beginner's deck or not, Pro-Ject has not scrimped. The aluminium platter is damped and topped by a decent felt mat. The 8.3in aluminium tonearm, pre-adjusted for the supplied Ortofon OM10 cartridge, has a carbon fibre-reinforced, anti-magnetic headshell. Accessible through the platter is the built-in switchable MM phono stage [see PM's boxout, p73], which presents the only quick way to upgrade as you could feed the A1 into



a costlier MM preamp. Blocking another potential upgrade are captive leads, but they are Pro-Ject's excellent Connect-It E cables, so why complain?

The A1 sits on damped feet, and it wasn't far off the Debut PRO [HFN Sep '21] for isolation and quietness when I sited it on a Pro-Ject Ground-It Carbon base. Also supplied is a dust cover with friction hinges, so there is nothing at all to add except, perhaps, for a lightweight grip like Pro-Ject's Clamp It.

If we take the 1980s best-selling Dual CS-505 as the benchmark – it *did* launch a generation of audio enthusiasts, after all – then the A1 ranks as very high value. A CS-505 cost £75 in 1981 (£306 today), minus pick-up, phono stage and with lower VAT, so the A1 actually costs *less* in real terms in 2022.

As an aside, there is a crude way to upgrade the OM10 if you can swap it out for a cartridge of the same ~5g weight. Install it with an overhang gauge (you need to be blasé about anti-skating), and add shims if necessary for VTA, and weight

to the fixed counterbalance or headshell to achieve the ideal tracking force. For example, a London (Decca) weighs 6.7g, Ortofon 2Ms are 7.2g, Audio-Technica VMs are 6.4g, etc. But this should not be taken as a recommendation!

If Pro-Ject is right about the potential market for a deck that lets you relax when

an LP is about to end (while I do value the exercise forced by having to get up to flip over an album), there's more in store, according to Heinz. 'An A2 automatic is planned for 2023, for which we will invest in tooling for more aluminium parts, and it will have a subchassis. In 2024, we hope to release a high-end automatic turntable.'

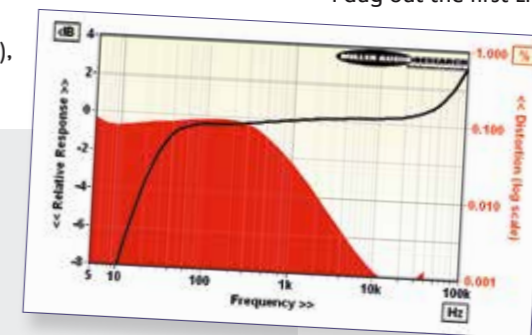
PLACE YOUR ORDERS

Smiling at a range of decks named after a much-missed fast-food American dining concept (and a short-lived London eatery), I believe the

'Here's a taste of big band/supper club sophistication'

PHONO ONBOARD

Although both decks include their fair share of German technology, the Pro-Ject A1's internal MM phono stage is a different design, built to different compromises, to that in Thorens' TD 202 [HFN Jan '22]. Nevertheless, like the Thorens solution, the A1's fixed +33.8dB gain is *somewhat* short of the +40dB to +50dB expected for an outboard MM phono preamp. However, the A-wtd S/N ratio remains generous enough at 78.4dB (re. 5mV input) and proper thought has been given to 'building in' a usefully wide input overload margin. While this was the TD 202's Achilles' heel, the A1's tethered output holds to <1% THD until the cartridge output exceeds 84mV – equivalent to +26dB headroom beyond the 4mV (1kHz/5cm/sec) of the supplied OM10 pick-up. So, not only will this accommodate the fiercest grooves in your collection but the output enjoys a low ~0.01-0.003% mid/treble distortion, only increasing to 0.1%/20Hz [red trace, inset Graph]. This increase in bass THD, and output impedance (from 100ohm/1kHz to 2.4kohm/20Hz) is linked to the A1's inbuilt subsonic filter (-3.5dB/20Hz to -6dB/13Hz). The latter will cool the worst excesses of any warped LPs while the slightly 'bright' +0.4dB/20kHz presence/treble top-end might add some sparkle [black trace]. PM



ABOVE: Designed to a budget and with a clear purpose, the A1 turntable has a textured vinyl-covered wood plinth and pre-adjusted 8.3in alloy tonearm with Ortofon OM10 pick-up

Pro-Ject Automat A1 to be the fastest I have ever had a turntable up-and-running. I plugged it straight into a system likely to have £400 or so allocated to a deck, with a £1000 integrated amp and £600 speakers, for a total value below £2000. Aside from the Ground It platform – unfortunately necessary in my room – no tweaks or accessories were applied.

All remarks, then, refer to the A1 via its internal phono stage, but without the Clamp It (which I recommend). Playing it through even affordable phono stages, like MoFi's £499 UltraPhono [HFN Mar '20], provides clearly audible benefits but that defeats the object. Believe me: the stock set-up will satisfy any newbie... and quite a few jaded veterans.

Given the nostalgia flooding over me, I dug out the last LP I ever played on my Dual 1019. My original US mono *Meet The Beatles* [Capitol T2047] is near-mint thanks to my father instilling in me how to handle records, and its Yankee mix is punchier and brighter than the UK original – neither better nor worse,

just different. Via Pro-Ject's A1, it was exactly the kind of sound ideal for seducing a novice vinyl user or first-time hi-fi owner, because the Automat series' debutante model truly sparkles.

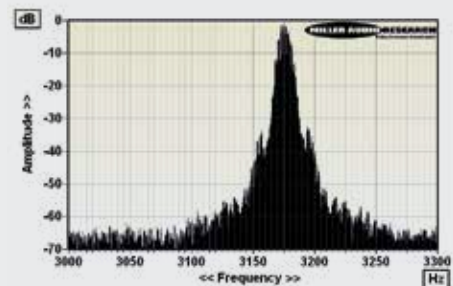
However, this isn't quite the same as 'bright', that edgy, cutting, unpleasant sound which marred early solid-state amps and certain 1960s Japanese loudspeakers. The A1 may never be accused of sounding silky, but neither is it as aggressive as entry-level products deliberately voiced to impress the neophyte by being the slightly

LAB REPORT

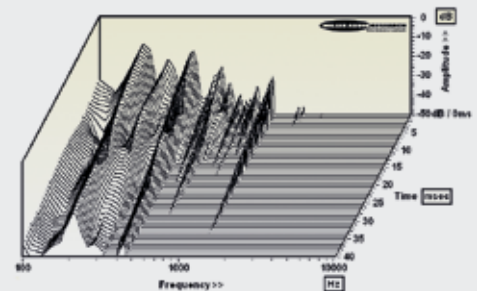
PRO-JECT AUDIO AUTOMAT A1

While the A1's auto-start/lift/lower mechanism operates with slick efficiency – and without influencing the deck's playback performance – I am bound to say that the underlying speed stability and mechanical rumble/hum is not especially illustrative of Pro-Ject's 'finest hour'. Leave that to its manual decks like the Debut PRO [HFN Sep '21], for the A1 is built to a budget and to tolerances that Pro-Ject itself graciously acknowledges. It specifies a W&F of 0.27%, drift of $\pm 0.75\%$ and an 'S/N' of 65dB – none of these figures supplied with qualifying parameters but all in the ballpark of what I obtained on the bench. So, absolute speed was +0.8% fast in our sample (providing some wiggle-room for the motor to slow with age), while the peak-wtd wow clocked up a full 0.21% courtesy of a series of $\pm 2\text{-}3\text{Hz}$ sidebands [see Graph 1, below]. The total peak-wtd W&F is $\sim 0.3\%$. Rumble looks poorer than Pro-Ject might indicate, although the through-groove/through-bearing figure of $\sim 61.3\text{dB}$ (DIN-B wtd re. $1\text{kHz}/5\text{cm}/\text{sec}$) is influenced by high 50Hz, 150Hz, etc, hum breakthrough. Spectral analysis indicates that the mechanical rumble is closer to a more respectable 66-67dB.

The 8.3in tonearm is a 211mm effective length/low effective mass design, built to suit the 25cu compliance of the OM10. A fixed counterweight reduces complexity just as the bearing is basic and free of obvious 'chatter', but the main alloy tube is not well damped. Thus the primary bending mode is elevated to a high 200Hz but there are harmonic and torsional resonances at 270Hz, 410Hz and 625Hz followed by higher-Q/short-lived modes from 800-1.2kHz, the latter possibly associated with the carbon-reinforced headshell [see waterfall, below]. PM



ABOVE: Wow and flutter re. 3150Hz tone at 5cm/sec (plotted $\pm 150\text{Hz}$, 5Hz per minor division)



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



ABOVE: The A1 is fitted with a captive Connect-IT E phono cable, adjacent to the 15V DC PSU input. The tonearm counterweight is non-adjustable and set for the OM10

louder of two challengers in an A/B demo. This is more vibrant and inviting, most notable on George Harrison's guitar leads, or Ringo's hi-hat and cymbals.

Stability and solidity were the other early impressions, this mono musical event positioned perfectly dead-centre and with a believable roundness to the sound space. The airiness made it easy to hear each voice amidst the harmonies, especially on 'This Boy'. The attack was just what I recall of Ortofon's 'Concorde-nose' MM cartridges, clean and crisp, though slightly coarse compared to the 2Ms.

Sentiment now satisfied, and moving to stereo, I put on Jackson Browne's latest, *Downhill From Everywhere* [Inside Recordings INR1126], a particularly fine-sounding album, with ten tracks spread over two LPs. It has no audiophile pretensions, but the warmth and clarity of the vocals and the percussion make this a sonic stand-out. What surprised me was the weight the A1 was able to deliver, especially on the rhythm section of the country rocker 'My Cleveland Heart'.

EXCITING TIMES

Notwithstanding any reservations I (or, for that matter, you) might have about the finesse available from so cost-effective a package, the A1 reproduced this track with precisely the refinement needed to recall the Left Coast sound of Browne's debut, which predates this album by 50 years. It also features growly, effects-laden guitar work, a combination of textures that revealed the A1's ability to deal with contrasts. What it lacked in absolute richness, especially of the sort associated with classic MC cartridges, was balanced by that inescapable sense of excitement.

It was the new 45rpm transfer of Joe Jackson's eclectic, originally-recorded-in-digital *Body And Soul* [Intervention IR-030] that exposed the aforementioned tonearm travel

which assumes a 7in record is on the platter when playing at 45rpm. Amused rather than irritated, I lowered the arm manually and was rewarded with a lushness I simply did not anticipate.

This 1984 release, regardless of its PCM origins, was a taste of big band/supper club sophistication for an audience primarily assaulted by the artifice-driven pop of the time. Joe Jackson, like Bryan Ferry, Donald Fagen and a handful of others filed under 'rock', has a deep appreciation of the music of previous generations, with leanings toward jazz, Latin-flavoured material and the hippest of bebop, so if anything was going to show the A1's limitations, it was *Body And Soul*.

RIGHT ON CUE

Boy, was I in for a shock. The trumpet had just the right amount of brassy punch, the saxophone the right reediness, but above all, the piano defied anyone to scream 'digital!'. There was top-to-bottom coherence, a convincing sense of the massive hall in which this was recorded, and – above all – a total absence of lo-fi brashness.

It's not just as a champion of automation for which the A1 deserves recognition: it also proves that a sub-£400 all-in-one package can truly satisfy. ☺

HI-FI NEWS VERDICT

To appreciate the Pro-Ject Automat A1, you must think back to when you bought your first deck. This is, in spirit and intent, truly a Dual CS-505 for the 21st century – even its price. Admittedly, it doesn't encourage upgrading without some lateral thinking, but, man-oh-man, it sounds swell right out of the box. Lively and inviting, the A1 is a fine introduction to genuine hi-fi – and without the masochism.

Sound Quality: 84%



HI-FI NEWS SPECIFICATIONS

Turntable speed error at 33.33rpm	33.6rpm (+0.8%)
Time to audible stabilisation	3-4sec
Peak Wow/Flutter (Peak wtd)	0.21% / 0.09%
Rumble (silent groove, DIN B wtd)	-61.4dB
Rumble (through bearing, DIN B wtd)	-61.2dB
Hum & Noise (unwtd, rel. to 5cm/sec)	-46.8dB
Power Consumption	2W (1W standby)
Dimensions (WHD, with lid) / Weight	430x130x365mm / 5.6kg