

Belt-driven turntable system with manual speed control Made by: Pro-Ject Audio Systems, Austria Supplied by: Henley Designs Ltd, UK Telephone: 01235 511166

Web: www.project-audio.com; www.henleydesigns.co.uk Price: £239 (inc. arm and cartridge)



Pro-Ject Essential III

Pro-Ject has updated its evergreen Essential turntable model to version III status. In an increasingly crowded market, is it still a high value, complete vinyl playing solution? Review: **Adam Smith** Lab: **Paul Miller**

uch is the pace of progression in the turntable market, and in Pro-Ject's range of decks in particular, that it seems only yesterday that the company's Essential model was the baby in its line-up. However, the new Essential III version now retails for £239 and sits above the latest entry-level model, the Elemental. In many ways, the Essential can be thought of as steadily evolving, in much the same way as the Debut before it.

The Essential has always been something of a star, however. The first version used a surprisingly capable unipivot arm which was later fitted to a £600 model, the 2 Xperience Basic+, and it was more than able to hold its own at this level. It was replaced by a standard dual pivot arm for the Essential II but the deck still proved to be a winner.

GLOSSY FINISH GAINS

It's a brave company that fiddles with a winning formula, but Pro-Ject has never shied away from doing this. Equally, I can't recall the last time it got it wrong, so the Essential III has great promise from the off! Here, Pro-Ject has concentrated on performance improvement, but the rather lovely new paint job is the first thing you notice. The Essential II was offered in red, black and white but these were matt finishes – certainly elegant but possibly a little too understated.

There's a lot to be said for catching the eye of a potential budget buyer and the Essential III's glossy plinth finish does this perfectly. While the plinth rests on three vibration-absorbing feet these are not adjustable, so the deck's mounting surface needs to be level before use.

The next obvious change is the platter. Pro-Ject's Acryl-it E design, which has long been available as an £85 upgrade for the Essential and Elemental turntable models, is now standard on the Essential III. This

RIGHT: The Essential III's belt drive system now uses an aluminium motor pulley and the deck comes fitted with Pro-Ject's Acryl-it E platter.

A black felt mat is also supplied as standard

replaces the old laminate particle board one and should provide a more secure and less resonant support for records – although a felt mat is also supplied. This platter spins on a stainless steel bearing with a bronze bushing, all underpinned by a Teflon-coated bearing base.

The motor pulley is now nicely machined in aluminium, offering a good step up from the plastic type with the Essential II. As well as imparting a more quality 'feel' to the deck, its metal construction has the potential to offer both a better diameter tolerance for steadier speed, plus a modicum of extra weight for more of a flywheel effect when rotating. As before, the platter is driven from this pulley via a rubber belt of circular cross-section.

The motor itself is a synchronous AC type, which may cause some momentary confusion when unpacking the deck and finding a DC power supply in the box!

However, the Essential III, like its predecessor, actually has its own

drive PCB on board that generates a clean sine wave to power the motor. The DC supply provides a steady filtered source of power, meaning that the circuit can do its thing, undisturbed by external power variations. It's a relatively common solution in the turntable world, but is not often found at this price level.

COUNTERING NOISE

One new aspect of the motor's implementation, however, is the use of what Pro-Ject describes as an 'integrated grounding link'. Put simply, the motor's control circuitry is earthed to the turntable's RCA output lead. Normally the motor drive circuit and its PSU are floating with respect to electrical earth, but Pro-Ject feels that by making this link the turntable is less susceptible to electrically noisy environments. With the increasing use of switchmode power supplies these days, such noise is on the increase, so this certainly seems like a wise move.



TURNTABLE



ABOVE: Unlike many of Pro-Ject's decks, the Essential III has a captive but very substantial arm lead. Wall-plug PSU feeds 15V DC to the deck's built-in motor control

fitting around him perfectly. The synth bass line bounded forcibly along and possessed fine impact. making this '80s story of doomed love a thoroughly moving listen.

It was with this track that I experimented with the mat and concluded that removing it made the midrange a little more vivid. The downside was that it robbed the bass of some weight. On balance, I decided things were better with the felt mat in place.

MAGIC AT THE TOP END

At the top end, the OM10 worked its magic once again and things were clean, smooth and assured. Those seeking the ultimate in clarity and insight may wish to experiment with a more vibrant-sounding cartridge but, initially, I felt no great compulsion to change. Cymbals were clear and well defined and the hi-hat gently tapping along in Barclay James Harvest's 'Poor Man's Moody Blues' from the Gone To Earth LP [Polydor 2442 148] never wandered backwards in the mix. Equally, the sharper cymbal strikes at the start of 'Friend Of Mine' had excellent impact and at no point sounded splashy.

If the Essential III has a surprisingly fruity low-end it is well controlled and provides good levels of detail. All too often, budget decks can offer up a resonant lumpiness which, on a cursory listen, may sound like a big bass but is soon shown to be lacking in refinement. The Essential III presents no fears on this score. It may not plumb the depths with the precision of its bigger brothers but it always remains tuneful and pleasingly taut.

As a result, the bass line from '1000 Miles Away', on the eponymous Case/Lang/Viers album [Anti- 7473-1], was solid and led the track perfectly. Equally, the vocal

interplay between Case, Lang and Viers was easy to follow. Only a slight softening of the hi-hat in the background relative to my usual turntable reminded me that this entire deck indeed costs less than two pairs of my usual interconnects!

The urge to meddle was now too strong to ignore, so a spot of cartridge swapping seemed timely. I first tried an Ortofon 2M Red and the results proved very interesting. The 2M Red is a brighter and crisper cartridge than the OM10 and it lifted up the Essential III's treble performance a healthy notch. Cymbals became properly metallic and crisp, with recordings gaining a little more air, space and scale. However, the drawback was that the midrange occasionally presented a slight edginess when poorer vinyl pressings were played.

Pushing the budget further with a £475 Goldring 2500 cartridge restored that civility and added yet another layer of sophistication to the Essential III's performance. Ultimately, this level of cartridge would be a little overkill, but the fact that the deck accepted it happily speaks volumes for its design. O

HI-FI NEWS VERDICT

Pro-Ject has done it again. By subtly improving critical aspects of the Essential II turntable and making a small cartridge change to big effect, the Essential III once again jumps nimbly to the top of the budget turntable class. The whole package is beautifully judged, well made and superb value for money. Even more importantly, its sound perfectly illustrates to a newcomer exactly what is so good about vinyl.

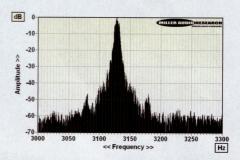
Sound Quality: 85%



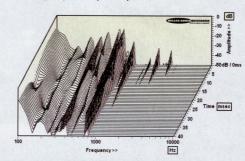
PRO-JECT ESSENTIAL III

Pro-Ject has engineered this package to a price and while its sub-£250 ticket is extremely generous for a full deck/arm/MM vinyl-playing solution, the Essential III is a necessarily weaker technical proposition than either the £600 RPM 3 Carbon [HFN Sep '15] or EISA Award-winning £800 Classic [HFN Aug '16] Rumble is about 2dB higher at -67.5dB (through-groove) and -69.2dB (through bearing) than with these costlier decks while the Essential's AC motor demonstrates a little more low-rate drift than the asynchronous drives used further up the range (the figures are very close to those measured for Pro-Ject's 1 Xpression III, HFN Mar '08). Absolute speed was a little slow at -0.73% (33.09rpm) while peak wow was high at 0.9% and flutter acceptable at 0.4% [±50Hz sidebands are visible along with the pitch shift on Graph 1, below]. Nevertheless, a peak-weighted total of 0.13% is still well within Pro-Ject's conservative 0.21% specification. The motor still has sufficient torque, and the 'Acryl-IT E' Perspex platter is sufficiently lightweight at 1.2kg, that start-up time is a very rapid ~3secs.

The partnering 8.6in alloy tonearm offers a low 8g effective mass that suits the Ortofon OM10's moderate compliance while its gimbal-type bearing, with sapphire points, offers a reassuring combination of low friction (<20mg) with minimal spurious play. However, and despite its headshell and tube being 'all of a piece', the arm's mechanical behaviour remains a little 'lively'. The primary (tube) bending mode is at ~110Hz $\,$ with harmonics reaching out to 200Hz, 280Hz and 390Hz and with higher-Q modes at 470Hz, 660Hz, 750Hz and 1kHz potentially having some subjective influence over the midband [see Graph 2, below]. PM



ABOVE: Wow and flutter re. 3150Hz tone at 5cm/sec (plotted ±150Hz, 5Hz per minor division). Absolute speed is slightly slow (-0.7%)



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	33.09rpm (-0.73%)
Time to audible stabilisation	3sec
Peak Wow/Flutter	0.09% / 0.04%
Rumble (silent groove, DIN B wtd)	-67.5dB
Rumble (through bearing, DIN B wtd)	-69.2dB
Hum & Noise (unwtd, rel. to 5cm/sec)	-62.6dB
Power Consumption	3W
Dimensions (WHD) / Weight	420x112x330mm / 5.0kg



The Essential III's 8.6in tonearm is an aluminium item that the company claims is both lightweight and rigid. A cartridge is pre-fitted as standard, but this time it's the Ortofon OM10 rather than the OM5E, which should again offer a healthy step up in quality. The arm's wires terminate in a junction box under the plinth, and are soldered to the end of a captive version of Pro-Ject's new Connect-It E turntable interconnect lead. This has a twisted pair

geometry with foil screen and integrated drain wire for improved grounding.

Set-up of the Essential III is as close to plug and play as can be hoped for. Simply unpack, fit the counterweight and bias weight, balance the

arm, set tracking force and anti-skating and you're pretty much good to go. It's a simple process aided by clear instructions, but a second pair of hands won't go amiss when fitting the belt. Due to its circular cross-section, it does have a tendency to roll up or down the platter edge and ping

off while you're trying to hook it around the motor pulley! With the belt securely in place, however, my listening could commence and when one of my first notes was 'a £239 turntable really shouldn't sound this good' I knew that Pro-Ject had succeeded once again.

BOLDNESS AND WARMTH

The Essential III belies its eminently affordable price tag with a sound that

is fluid, musical and generally highly accomplished. The deck is sure-footed and more than able to dig deep into the heart of a recording to reveal inner detail. Another early note I made regarded

the deck's quietness – not in terms of its musical output but that hiss, hum and general background intrusion were very well suppressed. That simple earth wire clearly does its job well.

Even more impressively, the Essential III delivered recordings with an appropriate

ABOVE: The deck's plinth has a lovely glossy finish in red, black or white. The aluminium tonearm is carried over from the Essential II but now sports a superior Ortofon OM10 cartridge

sense of scale and impact. Given that I own turntables with platters that weigh more than this entire deck, I couldn't shake off an initial nagging worry that the sound might be a little 'lightweight', but nothing could be further from the truth. The Essential III has a boldness and warmth in the lower registers that belies its humble status in the turntable hierarchy.

The change of cartridge from Ortofon OM5E to OM10 has made a big difference too. Back in the 1980s, I remember *Hi-Fi Choice* magazine declaring that 'The OM10 is a hi-fi cartridge; the OM5 is not' – or words to that effect. This was perhaps to over dramatise the comparison, but there can be no doubt that the OM10 is definitely a hop, skip and a jump ahead of its more affordable brother.

The OM10 is a bit of a smoothie in general, but it works well in the Essential III's arm. As can be seen from PM's Lab Report [p71], the arm is structurally somewhat lively, which potentially could give rise to issues in the midband. However, with the OM10 a fine balance is struck with the result that the Essential III sounds insightful without being too unruly.

Meanwhile, instrument definition is excellent for the money and the Pro-Ject package has no problem in setting up a good, solid image between the speakers. True, in absolute terms the sonic depth of field is a little shallow and there is nothing much going on beyond the loudspeakers' lateral limits. But between the speakers, there is little to complain of.

Glenn Gregory's vocals on Heaven 17's 'Come Live With Me' from *The Luxury Gap* [Virgin V2253] were located nicely centrestage, with the rest of the performance \hookrightarrow

ESSENTIAL VINYL

In terms of the Essential III's competition, there are many Chinese-made USB-equipped direct-drive designs to choose from, some of which resemble a famous turntable bearing the 'SL1200' moniker. Unfortunately, the purpose of many of these models can be surmised by the fact that they include built-in USB phono preamplifiers. As a result, they are adequate for digitising your old records but, for a serious step on the ladder of vinyl replay, they are less capable. Their inclusion of dubious features, indifferent cartridges and sometimes suspect build quality means the sound will likely suffer. Arguably, Pro-Ject's only 'serious' opposition is the Rega RP1. As standard this is a good deck and has a fine arm, but its Ortofon OM5E cartridge does rather give the advantage to the Essential III with its OM10. Never discount outsiders like the Audio-Technica AT-LP5, however. Yes, it has a USB preamp built in, but it's a good one. Also, it is a nicely built direct-drive with no silly DJ pretensions, has a quality arm and is pre-fitted with an AT-95EX cartridge. That said, it costs £100 more than the Pro-Ject so, once again, the Essential III retains its competitive edge.

'The package

is fluid, musical

and highly

accomplished'