A Decade On

Lehmann's Decade phono stage has history on its side. Noel Keywood enjoys its sound.

ehmann's Decade phono stage is an interesting design with some history. We reviewed it as the Black Cube back in our June 2007 issue – and not a lot has changed. It was good back then and it still looks good today, although the vinyl revival means it has strong competition from the likes of Project, Creek and Cambridge Audio. Today's Decade works with both MM and MC cartridges and potentially offers low noise to no noise. Priced at £1500 it has more competition than in 2007. There are two parts to the Decade, a PWX-II linear power supply (1.56kgs) and the amplifier itself (0.87kgs), separated by a 2 metre long power cable to give some leeway with positioning. Since both units are 110mm wide, 280mm deep and 50mm high they're easy to fit in.

VINYL SECTION

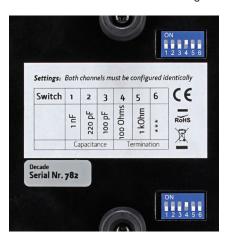






A neat internal circuit board with full size components (no Surface Mount Devices) and basic 8-pin silicon chips, plus small-signal relays (centre). Conventional but neatly laid out and symmetrical.

The main amplifier has a single pair of RCA phono socket inputs and outputs so only one turntable can be connected, but the advantage is that swapping from moving magnet (MM) cartridge to moving coil (MC) on a turntable can be accommodated by the flick of a small front panel lever switch: MM or MC. Cartridge



Miniature slide-switches (blue DIP switches) adjust resistive and capacitive loading to suit MM or MC cartridges.

> loading conditions are set by small DIP switches on the underside, with a range of capacitive loadings for MM that affect frequency response, and two loads for MM – standard 100 Ohms and a high alternative of 1000 Ohms for the few MC cartridges – high output designs – that need this.

In addition to the MM/MC switch Lehmann fit a Low/High gain switch to the front panel where, measurement showed, Low is very low and High unusually high! Although unconventional the settings allow all cartridges to be accommodated without the issue of overload creeping in. This latest version is as quiet as the original, making the Decade suitable for very low output (high quality) moving coils.

A third front panel mini lever switch selects a warp filter to suppress loudspeaker cone flap caused by warped LPs – more of which later.

Something like a decade later than the original, Lehmann's Decade is still in contention but it lacks niceties. There's no balanced output, nor a more rare balanced input. And no volume control to allow use with a power amplifier direct: it demands a preamplifier in-between, Drive turntable with SME309 arm and Ortofon Cadenza Bronze moving coil cartridge. Initially it fed a Creek Evolution 100A amplifier driving Martin Logan ESL-X hybrid electrostatic loudspeakers through Chord Company Signature Reference cables. In this system there was a slight hum I could not eliminate by all the usual methods. I installed a Music First Audio Magnetic Preamplifier (unpowered) and used its groundlift option to eliminate the problem. Then the Decade was deathly silent

"a slickly smooth sound that was easy on the ear"

if only a simple passive one. I hardly dare mention Bluetooth output like Cambridge Audio's Alva turntable to allow LP to be run through headphones connected to a mobile 'phone, and forget a digital output such as that found on Pro-ject turntables and the Furutech ADL Alpha/Stratos. Times move on and the Decade is short of facilities at the price, even a simple headphone socket.

SOUND QUALITY

I put the Decade into our review system comprising Timestep Evo tuned Technics SL-1210 Mk2 Direct at full volume with the Cadenza Bronze – a rare ability. But I was left wondering whether others might experience the same problem; ours is a vanilla set-up that doesn't suffer hum with most phono stages. The Lehmann amplifier has a 100 Ohm ground lift resistor measurement showed, so it shouldn't hum.

Spinning Mobile Fidelity's remaster of Dire Straits Love over Gold LP (45rpm, 180gm) I was met with a slickly smooth sound that was easy on the ear. Although measurement suggested a bright balance what I heard was supremely neutral, bass guitar having a solid



Gold plated input and output terminals, use with an MM or MC cartridge being selected by a front panel switch. An earth terminal and power input socket also.





The linear power supply has a compact toroidal mains transformer (left), a bank of four cylindrical smoothing capacitors and heat sink (top right) for the regulator.

presence in easy tonal alignment with all else. Mark Knopfler's vocals were casually present centre stage and I just sat back and enjoyed the music. The warp filter lightened bass slightly but there was still good timing and rendition.

LPs it became apparent, especially with 45rpm Dance singles like Alison Goldfrap's Ride a White Horse, that the pounding back beat was a tad mellow I could say. It was all very civilised when a little less civility would have been more appropriate. Yet with top recordings like Hugh

Working through a selection of



Rear of the power supply, with IEC mains input socket (right) and small rocker power switch (centre), plus two four-pin output sockets. Masekela's Uptownship (Analogue Productions, 180gm) Maselkela's trumpet punched out and hand drums had strong independent presence.

Such a presentation suited Classical wonderfully, Marianne Thorsen's violin sounding natural but well detailed, playing Mozart Violin Concertos, from a DXD384 mastered LP from 2L. The Trondheim Soloists filled a large space behind her, softly lit but atmospheric.

CONCLUSION

As LP pickup cartridges get ever more sophisticated they need a neutral preamplifier like Lehmann's Decade. It offers silence and a svelte sound rather than high drama. A neat and well designed phono stage that avoids the slight hiss of many, but best to get an audition first to ensure it works with the system.

MEASURED PERFORMANCE

Frequency response of the Decade – see our analysis – shows slight emphasis of high frequencies, consistent at all gains from MM Low to MC High. Gain rolls off below 20Hz to -7dB at 5Hz, giving a small degree of warp filtering. The warp filter cuts output below 100Hz drastically and will lighten bass subjectively by a very obvious degree; it's possible and common (Creek, Cambridge Audio) to attenuate bass sharply below 40Hz to eliminate subsonic warp signals below 20Hz without affecting sound quality.

Gain with MM was very low at x60 (x100 is target) but switching in High increased this to a high x180 (44dB) whilst maintaining satisfactory input overload headroom of 48mV; high output MMs rarely exceed 30mV on musical peaks.

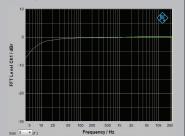
Similarly, MC gain was low at x630 (x1000 is target) but with High switched in a very high x1900 (66dB) – suitable for all MC cartridges. Overload ceilings were again satisfactory at 13mV for Low and 4.5mV for High (set by an 8.5V output limit).

Noise levels were extremely low, equivalent input noise (A wtd.) with MC measuring just 0.07μ V – right down to input transformer values. Such low noise, plus very high gain (MC, High) make the Decade a fine match for top quality very low output MCs; hiss will be inaudible. This is a very quiet phono stage – no hiss and no hum either.

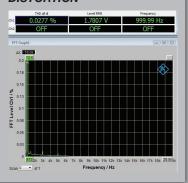
The Decade is very quiet. It suits all MM and MC cartridges. Tonally it may sound light and the warp filter was poor. **NK**

Eroquonov roononoo	20Hz-20kHz
Frequency response	
Separation	68dB
Noise (ein)	0.07µV
Distortion	0.03%
Gain (MM, MC)	x160/ x 1900
Overload (MM. MC)	48mV / 4.5mV

FREQUENCY RESPONSE



DISTORTION



LEHMANN DECADE £1500

EXCELLENT - extremely

capable

VERDICT

A smooth sounding phono stage that suits all MM and MC cartridges, with no noise. Lacks facilities though.

FOR

- smooth
 - gently insightful - no hiss with MC
 - no miss with N

AGAINST

- no ground lift to avoid hum
 separate power supply
- poor warp filter

Henley Audio +44 (0)1235 511166 www.henleyaudio.co.uk

www.hi-fiworld.co.uk