



# Cubular Belle

**Lehmann Audio's new high end Black Cube Decade phono stage proves that small is beautiful, says David Price...**

**S**urely it was the Michell ISO that started it all? Back at the end of the eighties, word got out that there was a little black box that, when plugged between your turntable and amplifier's aux input, would transform your vinyl sound. The rest, as they say, is history. Within a few years there were countless designs reaching the market, and by the mid-nineties we were seeing the advent of the £1,000 phono stage – a lot to pay for what used to come as standard in your preamplifier or integrated!

Germany-based Lehmann Audio has been an increasingly strong player in this market in recent years, especially in mainland Europe. The £300 Black Cube put the company on the map, and has proved enduringly popular. Now though, the new £1,100 Black Cube Decade finds itself in a different market altogether,

one with some established favourites such as the ISO's distant relative – the Trichord Diablo – plus Whest Audio's PS.20/MsU.20 and Eastern Electric's MiniMax Phonostage – competition is indeed tough.

The package comprises two standard-sized (280x110x44mm) Lehmann boxes, with a choice of either black or silver aluminium fascias. One is the phono stage itself, the other the PWX II power supply and they are joined to one another via a chunky cable terminated in XLRs. The audio stage boasts high quality electronics – Lehmann says its input stages can also be found in “top notch mixing consoles or well-known professional microphone preamps”. The passive filter network between the two linear gain stages has “high precision MKP caps” and there's a zero global feedback Class A output stage. Gold-plated RCA connectors are fitted to the high quality double

sided printed circuit board. The power supply actually has two power output feeds, so two phono stages can be run from its 30VA toroidal transformer, which sports a grounded isolation coil between the primary and secondary coil. There are chokes before and after the voltage regulation, and high quality double-sided printed circuit boards are used for optimal signal routing and component placing

Unlike the Whest Audio PS.20/MsU.20, which is highly adjustable but uses fiddly loading plugs (which must be obtained from Whest in advance), in some respects the Lehmann Black Cube Decade is more easily configurable via the front panel. One switch allows for MM or MC cartridges, and there's another giving an additional 10dB of gain. However, cartridge loading is less easily configurable, as it comes set up for 100 Ohm and 1k Ohm, and any change of input

capacitance means you'll need to use the internal slot system. The input capacitance can be set to 100pF, 220pF and 1nF — an unusually wide range. A 60Hz subsonic filter is fitted, switchable from the front panel.

**SOUND QUALITY**

First things first, and in my system at least, I found the Black Cube Decade's performance was severely hampered by the supplied mains lead — a change to a Black Rhodium Fusion (£81/m) made a dramatic difference. I also placed the audio box on four Bright Star IsoNode feet, which really moved it forward in terms of clarity and musicality for around £20. I compared it to my solid-state reference, the Whest Audio PS.20/MsJ.20, which was also thus set-up.

Properly fettled, the Black Cube proved a state-of-the-art £1,000 solid-stage phono stage, giving away little to either the Whest or the Trichord Diablo at the price — but that is not to say it sounds the same... If the Trichord were at the far left of our scale — very musically engaging and propulsive, then the Lehmann would be at the right, and the Whest in the middle. By this I mean that it is a silky sounding solid-stater with lots of detail and space, but doesn't have the vim that the Trichord or (less so) the Whest possess. This is interesting, because until recently I thought the Whest was on the ultra smooth and analytical side of things — and here we have something that makes it seem quite rough and ready!

Don't get me wrong, I am not about to lapse into cliché and call it a typically Teutonic 'hi-fi' sounding device that tells you everything that's happening but doesn't involve you — that is not the case. But it has what I'd call a 'studio sound', inasmuch as it is technically excellent but lacking in any real character of its own. There are two schools of believers here — Noel loves the *joie de vivre* of the Eastern Electric tube stage, whereas I often find myself going more towards this type of presentation, which is obviously more detailed, better architecturally and more 'technical' sounding. Still, one listen to the Note Products PhoNote tube phono stage (at nearly twice the price of the Lehmann) and I find I can be pulled back to valves!

The Crusaders' 'Street Life' saw the Lehmann offering a wide open window on the music. Most striking is the proportionality. Whereas valve stages like the Eastern Electric throw you right in the 'stalls', the Lehmann puts you on the best seat in the balcony, where you can hear how

everything relates to everything else in the mix with total precision. By the same token, it's a less intense emotional experience, but it's that classic trade-off. The Whest puts you in the circle, by the way, just a bit closer to the proceedings, but retains an excellent sense of scale despite its greater immediacy.

The midband is excellent then, but in a solid-state sort of way. Like Naim amplifiers, it doesn't major on telling you about the tonal texturing of the instruments in question. It's smooth and almost silky tonally, but everything sounds this way, even the raw clarinets on The Crusaders 'Rodeo Drive'. Instead, the Lehmann focuses on the start and stop points of notes, and how they all fit together in the big musical jigsaw puzzle that is the mix. To wit, it's very fast and clear across the bass, mid and treble.

Another one of its talents — and this is only when it's isolated and powered by a decent mains cable — is dynamics. It is deceptively dynamic in fact, and enjoys signposting the subtle accents of Robert Fripp's guitar as much as it does snare drums being assaulted by a young Keith Moon. The Charlatans' 'Then' proved great fun — it's a busy mix, somewhat dull sounding but very brooding, and the Lehmann did its stuff by cutting through the dirge like a hot knife through butter, throwing out a wide, well proportioned recorded acoustic and masses of detail. Bass was taut and tuneful, midband clear and spacious and treble sweet. Indeed, moving to the Whest showed less 'breathing room' around the individual elements in the mix, and a very subtle loss of detail. By the same token, it was obviously more engaging and tuneful, making the musicians sound like they really meant it.

**CONCLUSION**

Had I not souped up the Lehmann Black Cube Decade with a decent mains lead and spent some time isolating it from mechanical



vibration then I don't think it would have got the reception it did, which was very positive. Surely it wouldn't hurt the company to throw in at least a slightly better mains lead with their top phono stage? Likewise, these two pressed steel £1,100 boxes lack the mechanical vibration resistance of a £300 Trichord Dino. Still, in the end, the top Lehmann delivered the goods very nicely thank you very much. It has a wonderfully spacious sound, and is truly exceptional in this respect at the price, with fine dimensionality, dynamics and a very natural, airy treble. As such, it comes heartily recommended, but it won't suit those who place immediacy over accuracy, for whom there are many choices.

**VERDICT** Excellent solid-state phono stage with tremendous detailing and a silky sound, but faces stiff competition from tube and transistor designs alike.

**LEHMANN BLACK CUBE DECADE** £1,100  
 Henley Designs  
 ☎ +44 (0)1235 511166  
 www.lehmannaudio.de

- FOR**
- detail
  - perspective
  - space
  - smoothness
- AGAINST**
- set-up dependent

**MEASURED PERFORMANCE**

The Black Cube Decade offers High and Low gain with either MM or MC cartridges. MM Low was very low at x60, x100 being a common minimum, and High will be most useful, as MM cartridges rarely give more than 5mV or so output when playing an LP. With MC at High there is enough gain even for low output types, although only just. With insensitive amplifiers of 400mV or more, volume will have to be turned up a little, but this should not be a problem as the Decade is reasonably quiet at 0.074uV equivalent input noise, if not up with the best that manage 0.04uV — around 5dB quieter.

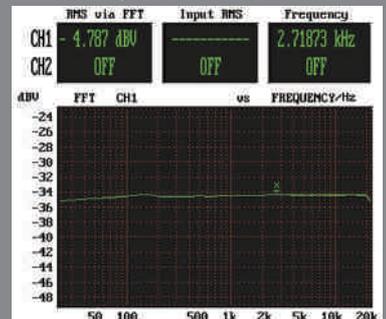
Equalisation was deadily accurate right across the audio band, the -1dB limits being 20Hz-96kHz. Our analyses clearly show this. Switching in the Warp Filter rolls down bass below 125Hz (-1dB), which is a bit severe, the -3dB frequency being 52Hz. There is a healthy -18dB attenuation at 5Hz, where warps live.

The stage overloads at 8.8V output, so input overload values depend on gain used, but are high enough for all real life situations. Distortion was minimal and separation wide.

The Decade is a well engineered, simple to use stage that performs very well. The warp filter could usefully have been a little more slick, as it affects audible bass as well as warps. NK

Frequency response (MM&MC) 20Hz-96kHz  
 Separation (MM, MC) 68/78dB  
 Noise (MM/MC) 0.24/0.07uV  
 Distortion 0.001%  
 Gain x60, x184 x628, x1908  
 Overload 8.8V out

**MM FREQUENCY RESPONSE**



**MC FREQUENCY RESPONSE**

