



FELLOW ANALOG ADDICTS, phonogramians, and vinlyphiles, I'm here to spread the good news! As some of you are doubtless aware, the Lehmann Audio Black Cube phono stage has caused quite a stir, not only in the audio press, but at most of the audio-related sites on the World Wide Web.

Norbert Lehmann, the Black Cube's designer, has reaped his fair share of kudos for his efforts in introducing this inspired device to a market niche sorely in need of an affordable alternative to the prices normal to high-end phono stages. The Cube really isn't much to look at; in fact, it's a little two-piece affair that is very plain and unpretentious. I'd say it was designed to be listened to and kept out of sight-heard, but not seen, as it were! It boasts no face-plate, no fancy emblem, no embossed logo or even anodizing for that matter. The best part of that tune is that you, the consumer, won't be paying for any of that jazz. Le Cube is all performance and no jive. If you're looking for glitz or a status symbol or a trophy, then I recommend that you purchase a Rolex and put it around the Cube. Secure it with a dab of Mortite, and I don't see how it could fail to impress your friends or significant other! Upon close inspection of the device in question, I detected one minor inconsistency. The Cube, when measured, was in reality more of a chunky rectangle than a true cube, as it measures 108 mm wide by 114 mm deep by 44 mm high. Hmmm, perhaps that's a bit suspicious - but then, what's in a name?

The Cube, however, is all business. Lehmann uses double-sided PCBs in both the power supply and phono stage modules. A passive RIAA phono network is employed, using high-grade, 5%-tolerance WIMA MKS capacitors and low-noise metal-film resistors. Although the gold-plated RCA

input and output jacks could not pass for expensive German WBTs, they are soldered directly to the main circuit board. This technique ensures a short, intimate signal-path to and from the circuitry, thereby eliminating the usual connecting wire and extra solder joints. This would appear to be a very effective strategy, especially in view of the very low voltages produced by the many low-output moving-coil cartridges on the market today. An outboard regulated power supply features a very low-noise, high-precision, dual-voltage regulator chip and fast diodes that provide excellent transient response and linearity. A female IEC connector allows the use of aftermarket power cords. It is tethered to the chassis by a two-meter umbilical cord and supplies clean power to the main printed-circuit board where the power is further regulated and purified. To accommodate both moving-magnet (MM) and moving-coil (MC) cartridges, the Cube offers switchable gain and loading options via two PCB-mounted sets of DIP-switches. You can toggle between 40 or 61 dB of gain at 47-kilohms, 470-ohms, or 100-ohms input resistance. An additional position allows the user to simply plug-in his choice of quality custom-value load resistors, and I utilized this option with excellent results.

The unweighted signal-to-noise ratio, referenced to 0 dB re: 775 millivolts, is stated as -77 dB for the MM input and -69 dB for the MC. Both are good specs. I found the unit to be extremely quiet in actual use and I didn't encounter any unusual hum or noise-related problems. The input capacitance is 220 pF, and the output impedance is less than 100 ohms. Both are proper figures. The first means that there will not be a roll-off filter formed at the input by too much capacitance being designed in. The second means that the Lehmann Cube will have an easy time driving virtually any preamp with an input impedance of 10 kilohms or greater (practically all preamps), be it active or passive. An on/off switch is not included on this device as it is designed to be powered-up at all times. Since it takes several days to a week for the Cube to sound its best, or so I found, this would appear to be the best strategy. Its power consumption is a low 0.7 VA, so this won't add much to your electric bill.

**Preparing for Insertion**

Installation of the Black Cube into my system was both easy and painless. To select between moving-magnet and the higher-gain moving-coil configuration, it is necessary to remove the, four Allen-head cover screws and then set the internal dip-switches for each channel to the desired positions. For use with my low-output Transfiguration MC cartridge, I chose the

higher gain +61-dB setting and set the cartridge load for 100 ohms, the same value that I normally employ with my AHT/P phono stage. I tried some preliminary listening to this configuration and then did a comparison involving use of higher quality 100-ohm Vishay resistors in the optional loading position. It's my feeling that the Vishay resistors demonstrated smoother and more detailed high-frequency reproduction and were generally more transparent sounding than the stock resistors. Therefore, the bulk of my impressions are based on listening with the Vishay load resistors in circuit. It should also be noted that when using the 47-kilohm MM position, this extra load resistor is effectively eliminated from the signal path and does not factor into the sound quality.

**To The Grooves!**

My audiophile cronies never fail to chide me whenever I use Debbie Gibson's 12-inch disc Shake Your Love, the "Bad Dubb Version" (Atlantic 0-86651), for reference; but I do so for a couple of reasons. First, it throws a huge multilayered, three-dimensional soundstage with some interesting quasisurround effects. And secondly, not only does it have some slammin' deep bass, but it contains some very high frequency cymbal crashes that are precisely focused and just appear to pop-up out of nowhere in specific locations within the soundstage. Using the Krell KAV-250p line stage in conjunction with the Cube revealed the strengths of this particular recording to a surprising degree. In fact, I can't remember when I've heard the high frequencies on this cut sound quite so precise in their position and in their extension and focus. This was due, at least partially, to the imaging precision of my new reference speakers. Still, it showed clearly and beyond any doubt that the Black Cube is very detailed and focused in its high-frequency reproduction. What's more, the quality of those highs shimmered silky smooth, with no edge or hardness to detract from the presentation.

I dare say the little Cube is so adept in its reproduction of the uppermost audible frequencies, that it will take a near state-of-the-art line stage to exploit the Cube's full potential in this area. I mention this simply to make you aware that in many instances the Cube's considerable sonic virtues may be limited or masked by one or more of the downstream components.

Switching to my new AHT tube line stage and going to some "real" music, I broke out my 1961 copy of the Columbia Masterworks' release Igor Stravinsky Conducts (Columbia MS 6272). Playing through the various cuts on this album revealed that the natural timbre of the instruments was captured quite well. On "Double Canon for String Quartet," for example, George Neikrug's work on the cello was extremely convincing. One could

clearly discern the state of the rosin on his bow, but without the exaggerated spittily quality that lesser electronics routinely impart. Instead, the cello sounded more like what one might expect to hear in the concert hall, sweet and immediate, without veil. On the next cut, 'Epitaphium for Flute, Clarinet, and Harp,' Dorothy Remsen's harp plucking sounded very natural, with good dimensionality, and a good sense of string snap, without excessive ringing or overbite. Proceeding to my heavy-hitter, Witches Brew (RCA LSC- 2225), the Classic Records reissue, provided plenty of excitement and musical surprise.

Starting with "Danse Macabre, Op. 40" on side 2, 1 was very impressed with how easy it was to discern the low frequency rumble from the train in the subway near Kingsway Hall in London. The rumble was quite recognizable as having been produced by a train, a rather noteworthy accomplishment. Enter the violin, ripping in dramatic fashion from the left of the soundstage; the aural onslaught had begun! Now, the most prominent feature of this recording is the



incredible dynamic range this violin presents to the listener when reproduced on the best equipment.

I'm happy to report that the bone-chilling crescendos of the full symphony orchestra were reproduced very cleanly with little if any perceptible compression and with no homogenization of the instrumental lines. In other words, the trumpet blasts and the impact of the BIG bass drum with all the other instruments blaring with ghoulish glee, pretty much pinned me to my seat.

Dear readers, I implore you to tell me how much more one can expect of a phono stage - regardless of price!

Female vocals proved to be captivating "Cubed" as well. Listening to Karla Bonoff's soulful duet with James Taylor, 'The Water Is Wide,' from Restless Nights (Columbia JC 35799) was, in a word, 'enchanting.' The interplay of their two acoustic guitars, neatly located on the far left and right of the soundstage, served to frame their vocal harmony in a vivid picture of musical bliss. I

could kick back in my listening seat and stay engrossed in that type of sound for hours without a thought to mundane matters.

#### Flaws-What Flaws?

I know you aren't expecting me to tell you that the Black Cube's performance was perfect and I'm not about to do that. If I did, I wouldn't have any credibility with you readers. However, in view of its low price, it is closer to perfection than I would have ever imagined. To lend some perspective here, I'd have to say that my custom AHT/P phono stage, at several multiples of the Black Cube's price, sounds conspicuously similar to the Cube. My particular AHT/P unit has a Class-A modification that makes it sound just a touch sweeter and perhaps slightly more fleshed-out than the Black Cube (or a stock AHT/P). But other than that fairly small difference, I'd have to admit it was a very close contest between them. bit more ground. Images through the Non-Signature are more solid and palpable, and it seems to throw a more expansive soundstage. The dynamic range of the Non-Signature is

flabber-gasting and while the Black Cube is very competent in its rendering of dynamic contrasts, it is not quite the equal of the Non-Signature here. The Cube's articulation and dexterity in the nether-regions is quite impressive and satisfying, while

the Non-Sig exhibits virtually ironfisted control over the entire bass range that results in unrivaled articulation of bass lines and a heightened sense of pace, with spot-on pitch. Then again, at AHT's price of nearly \$6,000, you'd hope and expect such a piece to be demonstrably better. However, I really don't see how this diminishes the virtues of the Black Cube in the slightest. Many could argue - and perhaps justifiably so - that this is a very unfair comparison. But for me, to have to compare the Cube to a piece costing more than eight times its price before any areas for improvement could even be detected speaks volumes for the performance that this feisty competitor brings into the arena. It is a testament to its outstanding value - not an indictment. I know of no other phono preamp remotely close to the Black Cube's asking price that can better or even rival its performance.

#### Conclusion

It would be easy for me to go for the obvious cheap shot here by criticizing the Black

Cube for being too modestly priced. Considerable sonic attributes that this cocky little contender sports in spades, one profound thought did cross my mind. Perhaps it is the Black Cube that is fairly priced-with most other high-end phono preamps being way overpriced!

I found the build quality and the quality of the individual component parts used in this phono stage to be very high in relation to similarly priced competition. I like the flexibility in the various cartridge-loading options, the switchable gain, and the fact that this flexibility will allow the Black Cube to properly interface with almost every phono cartridge on this planet. Also, the outboard power supply with IEC receptacle eases use of quality aftermarket cords, which many 'philes use and appreciate.

Without the slightest hesitation or reservation, I can wholeheartedly recommend the Lehmann Audio Black Cube phono stage for inclusion in any high-end analog playback system. It offered performance comparable to my reference phono preamp for a small fraction of its price and I'd call that a bargain -The Best I Ever Had!

Frank Alles

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