



EVEN MORE PRODUCTS

We love to get samples of new products. Some are essentially forgettable... or worse. Now and then we receive something that grabs our attention. The LVC's, shown above, are an example of the second category.

The initials stand for *Levitation Vibration Control*, and they literally levitate your equipment to prevent vibrations from travelling up from the floor into the system. The principle, which has been used before, is simple enough. Each of the LVC's contains a pair of magnets of the same polarity. For magnets, it's literally true that opposites attract, but these magnets repel. With the weight of the equipment on top of the puck, it floats.

Even in the domain of audio the idea isn't new, and it isn't quite as magical as it sounds. The magnetic link between the top and bottom sections can transmit vibration in both directions. To put it another way, if the bottom magnet vibrates, so will its magnetic field, and so, therefore, will the top magnet. The magnetic field, in short, is a two-way link.

Then again, other isolation devices suffer from the same problem. The most common problem with such devices, even expensive ones, is that they isolate in only one plane: protecting against vertical vibrations but not lateral vibrations, or vice versa. We've always liked

the Isobearing, because it is effective in both planes. In any case, listening would settle the matter.

We had the devices on hand when we were evaluating the Copland CTA-405-2 integrated amplifier (you'll find it elsewhere in this issue). It would be a perfect test. Our Alpha room has wood floors (covered in carpet), and both the amplifier and the Living Voice speakers were on that floor. Like the majority of modern audio components, the Copland has feet whose purpose is largely cosmetic.

Three of us (Albert, Gerard and Steve) had done the listening, and we were more than pleased by what we had heard. Could slipping the LVC's under the feet of the Copland make this terrific amplifier sound even better?

We had just listened to the song *'Round Midnight*, sung by Carmen Lundy. It had sounded wonderful, though not quite as good as with our reference electronics. Well...surprise! This magnetic levitation thing *does* work. The lush string introduction was smoother and more fluid. Lundy's voice had more roundness, with smoother sibilance. We had concluded that if the Copland had a down side, it was a slight but noticeable reduction in the bottom end. Amazingly, that bottom end was back.

Were we imagining things? Installing and removing the LVC devices is a matter of seconds, and so we went back

and forth several times. Any lingering doubts vanished. We could easily tell when they were present.

What about higher-resolution music? We returned to Rachmaninov's *Symphonic Dances*, a 24-bit/176.4 kHz file from Reference Recordings. When the full orchestra enters, following a soft introduction, the impact is startlingly powerful. With the LVC's in place, the impact was even greater, the detail improved. This was, in short, more like what we had heard with our reference electronics.

The units reviewed are the LVC 40's, intended for gear weighing about 40 pounds (about 18 kg). The larger ones, the LVC 100's, are designed for gear weighing 100 pounds (45 kg). Those ratings are not absolute. For best performance, there must be enough weight to depress the LVC's somewhat, but not enough to make them bottom out.

The list prices for four LVC's are \$325 and \$350 respectively.

A better TOSLINK cable?

Like us, most audiophiles using a computer as a music source are choosing to link the computer to the digital-to-analog converter with a USB cable. Sometimes, though, another choice is required. Some DACs have mediocre USB circuits. And some sources, such as the wireless Apple Airport Express, have no USB output at all (the one on the Airport Express is for a printer, not audio). TOSLINK to the rescue.

Optical cables have certain technical advantages. Because they are not metallic, they don't provide a ground link between two pieces of gear, a ground that electronic noise can travel along. The "TOS" in the name refers to Toshiba, which first developed the acrylic fibre optical cable. There was once a competing optical cable from telephone company AT&T, using glass fibre rather than plastic. Because it used a different connector, it was not compatible with TOSLINK, and it quickly disappeared.

However, it is possible to make a TOSLINK cable from glass, and numerous companies have done it. Some years ago, we tried one from Wireworld. We liked it, though at the time our digital gear was relatively primitive.

We were, therefore, intrigued by the new Atlas Mavros glass optical cable. It is much more expensive than the plastic ones we have been using (US\$324 for 1.5 m), but that might be worthwhile if its performance was truly superior.



To evaluate it, we ran it between an Apple Airport Express and our Moon Attraction converter (chosen because it can decode HDCD), and compared it to our own (plastic) optical cable. If we could hear a significant difference, it would be worth pushing on.

It took but a few seconds to determine that it would. We listened to *A Chorus Line* from Reference Recordings' *Beachcomber* album (RR-62CD). The difference was dramatic. The brass was delightfully dissonant, with harmonics that seemed to make more sense. There was more detail on the snare drum, the glockenspiel and even the triangle. "With the plastic cable," said Toby, "it sounded like a CD player of 10 or 15 years ago."

We moved on to the *Scherzo* from Bruckner's *Symphony No. 9* (RR-81CD), another HDCD-encoded disc. Though it also exists as a higher-resolution SACD, even this Red Book version, properly decoded, is outstanding. The glass connection turned in a far superior rendition. The pizzicato notes in the opening passage were clearer. "The loud parts were less harsh," said Steve, "and pianissimos were more delicate, though they always remained audible." The clarinets maintained their characteristic timbre, no longer sounding like generic woodwinds. Toby thought the version with the acrylic cable evoked a tank rolling into a valley of flowers; with the glass cable, the tank became a battalion.

That was enough to convince us that glass would beat plastic, but how would this premium optical cable measure up to

the way we usually connect our DAC to our computer, namely USB? We plugged the Atlas optical cable into our Mac mini and our 300D DAC's own optical input. We would need only one song to tell the story, Margie Gibson's *You Keep Coming Back Like a Song* (Sheffield CD-36).

The USB connection was the winner, and that wasn't unexpected, but the contest was much closer than we would have expected. Gerard found Margie's voice superb, with no obvious flaws. Steve also found the differences minor: the loss of a certain "aura" around each piano note, and less of a flow of Margie's high vibrato. Toby had more misgivings, noting disturbing sibilance and less richness in Margie's lower tones.

You're probably wondering how high a resolution an optical connection can provide. On our Mac mini, we could go to 24/96, good enough for all but a very few high-resolution music files. A USB connection can stretch to 24/192.

Of course, the Mavros is an expensive cable, costing over 10 times the price of even a very good plastic cable. Its performance is high enough, however, to make it a contender in a high-end system. Indeed, unless your DAC has really good USB performance, which many do not, it is your best choice.

The BIS Copper IIs interconnect



Why is this interconnect cable called "Copper" when BIS Audio uses copper for *all* its cables? Very simply, its two entry-level interconnect cables, the Accès and the Basis, use connectors made of brass. This one is the lowest-priced BIS cable fitted with gold-plated tellurium copper ETI plugs. Its list price is \$350 for a 1 m pair.

We evaluated it as we had recent interconnect cables, placing it between our Audiomat phono stage and our Moon P-8 preamplifier. We were comparing it to the superlative Atlas Mavros, which costs more than four times as much.

We used two LPs for this session. The first was Proprius' long-discontinued *Laudate!* choral recording.

"I would call it *euphonious*," said Toby. "I know that's usually pejorative as applied to audio gear, but I don't mean it that way. This cable doesn't dig out all the details, as the Mavros does, but it doesn't do anything bad." Steve noted that the slight surface noise on this veteran recording was less evident, and thought that might be a sign of missing information.

This recording is noted for its convincing presentation of vast acoustic space, as is that other Proprius choral recording, *Now the Green Blade Riseth*. The space remained impressive with the Copper interconnect, but it was noticeably narrower and shallower, with softer passages emerging more timidly. Still, there was no shrillness, and the timbres of both voices and organ pipes were satisfying.

The second recording was from the jazz world, singer Thelma Houston's *I've Got the Music in Me* (Sheffield LAB-2). This is an early direct-cut LP, and has dynamics that are nearly unequalled.

Her voice retained its great power, though it didn't have quite the lower-end richness we could hear with our reference cable. "With the Mavros cable her voice was there all the time," said Toby. "With this cable, each time she stepped back from the microphone, she got submerged by the accompaniment and the background singers. I had less of an impression that the real Thelma was right there in front of me." Steve complained of a trace of harshness in the louder passages, whereas Gerard, on the contrary, praised the smoothness of the voices.

BIS Audio's Bernard Brien, in nearly all cases, buys wires, not cables, and puts them together to perform the way he wants them to. He listens to the finished cables he builds, and it shows.

You should have the right to take that for granted, right? But alas...

