



winner over its much more expensive competitor? Perhaps not quite. Albert thought the performance was superb, but had found the song more touching with our own cable. Such differences are not always easy to qualify.

The second selection was *I Got Lost in His Arms* from Margie Gibson's *Say It With Music* (Sheffield CD-36). We often consider it to be the best song on an entire album of terrific songs, because it's so... Let's just say you have to hear it for yourself.

"You know," said Gerard, "when we first listened to the Unidisk player, this was the song that persuaded me that it had to become our reference. With this cable the music is not quite as lively, but the difference is subtle, and in musical terms this version just works."

Albert agreed. "Of course her voice doesn't have quite the same roundness, as though there were less emphasis on the bottom end. But what *does* come through is reproduced with a remarkable mix of clarity and smoothness. Very interesting."

Steve, for his part, wasn't in the mood to search for flaws. "I liked the subtlety, the gentle vibrato in Margie's voice," he said.

After this brief session Albert asked to listen to the Expressions at home, where he placed them between his Cambridge IsoMagic DAC and his Copland CTA-305 preamplifier. He was comparing them to a cable that, long ago, had come from *The Audiophile Store*: a Wireworld Equinox fitted with WBT Topline 0108 locking plugs. His first impression: on recordings with a lot happening, with a great many voices and instruments, the BIS Expression really shows off its mettle.

Ah well, perhaps some other time BIS Audio will disappoint us. Not this time.

The BIS USB cable

The *what?* We'll forgive you for being skeptical, because we went into this session not expecting much. Audio cables — whether interconnects or speaker wires — carry the actual analog representation of the music. Get any part of it wrong, and...well, it will come out wrong at the other end. But no analog

TWO BIS CABLES

BIS Audio is one of those small companies that would rather be known for making good products than for its growth rate or its revenue-to-equity ratio. It's a cable company. We have had occasion to review a number of its products, including interconnects, power cables and power bars, and they have yet to disappoint us.

Whereas many cable designers work with cable they obtain on the market, possibly (but not always) modified, BIS designer Bernard Brien buys individual wires. He's not one to give away trade information — not even to us — so there's not much we can tell you about the inner workings of these cables.

Oh, he does have one secret he's willing to share: he listens to his products before he puts them on the market. What a concept!

The BIS Expression interconnects

There are three copper conductors in this cable, even though it isn't balanced. The two that carry signal are arranged in a pair of inverse spirals. The third is a shield. You may recognize the connectors, which are ETI's Bullet Plugs. We are on record as big fans of these connectors.

The 1 m pair costs C\$480 (equivalent

to about US\$450 as we write this.

We listened to them in our Omega system, placing them between our Linn Unidisk player and our Moon P-8 preamplifier. Our long-time reference is from Pierre Gabriel, and cost about the same as the Expression...plus \$1200 or so!

We selected two particularly revealing CDs and settled in for some rather pleasant listening.

The first selection is Pauline Viardot Garcia's *Hai Luli* (Analekta AN 2 9093). This gorgeous song was stunning with both cables, which didn't come as a surprise, but were there significant differences?

Certainly they weren't huge. Both Albert and Gerard wrote on their sheets that the piano notes flowed like a sparkling mountain stream. Soprano Isabel Bayrakdarian's voice was clear, and took its place in the palpable space (that of the Oscar Peterson Hall in Montreal — no artificial reverb here). Pacing was excellent, and Isabel's variations in tempo — slow and languorous, to rapid, to a near stop — were especially effective. "I could hear her breathe more clearly with the Expression," said Steve, "and her highest notes were wonderful. They *can* be really troublesome."

Was the Expression the ultimate

information travels directly along a USB cable. It's digital, so what can go wrong?

But wait a minute, we've always said (and our blind tests have borne out) that digital cables do make a difference. We use upscale digital coaxial cables ourselves between a digital source and a digital-to-analog converter. We've even proved, through another blind test, that the *length* of a digital cable has an audible effect, and sometimes a radical one. Yes, length matters...

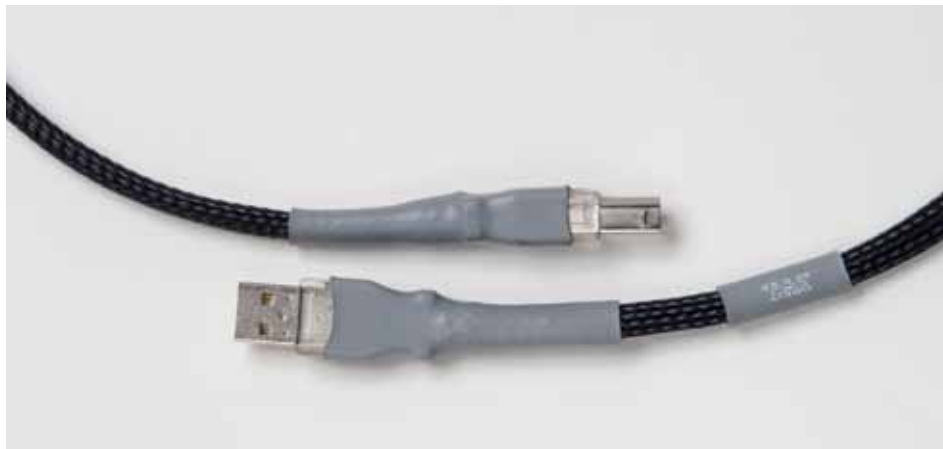
But wait a minute, didn't Denon, last year, bring out an Ethernet cable (Ethernet is also digital) that cost \$500? And didn't they get hooted at for it by the on-line hordes? Does a "hi-fi" USB cable make any more sense? After all, bits are bits...well, you know the drill.

But there's a difference between Ethernet and USB. Ethernet is *asynchronous*, meaning that data is sent in packets that contain no clock data (a synchronous version exists, but is not widely used). USB is *isochronous*, which means that several data streams are transmitted at the same time. Is it then, conceivable, that USB might have a cable-related vulnerability that Ethernet does not?

In any case, the shortcomings of USB for the transmission of audio have been documented by music professionals who wish it were better. There have been complaints that, in a portable computer with two USB connections, one of the two will "sound" better than another. That doesn't appear to be the case of the MacBook Pro portable we used for this evaluation, but we concede it may be true in some cases.

"Ordinary" USB cables considered suitable for either "slow" USB 1.0 or "high speed" USB 2.0, can cost between \$2 and \$10. As far as we had been able to determine in the past, the cost difference is due mainly to construction quality. That is nothing to sneeze at, but it wouldn't seem to be a fit subject for a listening comparison. BIS claims superior performance for its USB cables, which cost between C\$120 and \$180, depending on the length. We did our listening with the 1.8 m (six-foot) cable, which costs C\$150.

For the comparison we pulled out our Edirol UA-25 interface box (you can see



its picture on page 34 of *UHF* No. 87). It is designed for audio recording on a computer, and so it contains both a DAC and its mirror image, an analog-to-digital converter. Though some USB-connected products have their own power supplies, the Edirol draws its power from the USB bus itself. The cable needs to carry that too, of course.

For the sake of comparison we used the generic beige USB cable that came with the Edirol. We listened to three music files that were on the MacBook Pro, all of them of course without compression.

We began with one of the selections we had used in the first cable test, *Hai Luli*. Even listening with the generic cable we were reminded how good computer audio can be. You would need a pretty good CD player to beat this.

And with the fancy USB cable?

Initially we weren't sure (and remember, we hadn't come into this session expecting much of a difference). Were we imagining things? The piano accompanying the song seemed to have more body. "Her voice too," said Albert. "It seems to be richer, with more roundness. I think the text is easier to follow as well." But he added he was reserving judgement until he had heard the other two selections.

We then listened to the *Scherzo* from Bruckner's *Symphony No. 9* (Reference Recordings RR-81CD). Once again, even what we heard with the generic cable surprised us. "No wonder so many audiophiles are moving their digital music to hard drives," said Gerard.

Good as it was, it was noticeably better with the BIS cable, with the full orchestra taking on more of a ferocious

tone, full of angry, chaotic energy. In the softer passages following, the woodwinds had a particularly delicious tone, their distinctive timbres coming across as totally natural.

"It seems to me there's more of a feeling of space too," said Albert, "and the orchestra has more weight, more substance."

Finally, Margie Gibson's CD, a favorite of ours, partly because it is so revealing, but also because we hardly need an excuse to play it again. We selected *You Keep Coming Back Like a Song*.

It was superior with the BIS cable, and this time there was no doubt about it. Both Albert and Gerard independently wrote down the same thing: *more presence*.

Of course presence is not something Margie Gibson lacks anyway, but the impression that she was actually in the room was enhanced. "Listen to the way she glides across the notes!" said Gerard. Albert admired the excellent articulation of voice and instruments. At the very end the cellist draws his bow against two strings, and the dissonant effect was clearer with what we were starting to think of as the "good" cable.

But we wanted to be sure, and so we listened again with the beige cable, then with the BIS cable. No more doubt was possible. "With the cheap cable her voice has less body, and the piano is off in its own bubble," said Albert. "With the good cable everything is right again. And the sound is natural, it's not some sweetened version of reality."

Conclusion? USB cables make a difference. We don't know why, but if the bloggers want to laugh at this company, we'll be here to defend it.