Audioquest Pearl and Vodka

Audiophile cables and interconnects will always be a controversial subject.

While nobody will argue that a thicker-gauge, well-shielded cable is better at transmitting audio signals than a thin piece of twin-flex ripcord, the notion of spending tens of thousands of rands on specially constructed cables using exotic metals and configurations is more contentious.

That said, there is no doubt that a good cable makes a difference. How much of a difference will depend on what the cables are being compared to, as well as the ability of a system to resolve those differences.

Going from a cheap and nasty, in-the-box interlink to a carefully constructed interlink with oxygen-free copper conductor and decent termination makes an audible, repeatable difference readily identified in blind listening tests. That's a fact.

With the growing popularity of streaming and network-based audio solutions, it's no surprise that the attention of cable companies is turning towards network cables. Until recently, not too many people gave much thought to the cables linking modems and routers to switches and computers.

But now, the likes of AV receivers, network players, streaming devices and more all require connectivity, which means they've also become part of the Ethernet signal chain. Yes, there's always the option of Wi-Fi, but even the latest generation 802.11 standards aren't as stable as good old Cat5 network cable. And besides, you can reliably transfer data across cable lengths of up to 100 metres.

Ethernet cables are twisted-pair designs commonly operating at between 100 MBit/sec and 1 Gbit/sec, although 100 Gbit/sec is already an accepted industry standard, if not yet in domestic applications.

The most common Ethernet cables are Cat5 or Cat5e certified, which allows for up to 100 MHz of bandwidth at speeds of up to 2,5 Gbit/sec. Cat6 improves on this with 250 MHz of bandwidth, and speeds of up to 10 Gbit/sec. Cat6 cables also offer better frequency response and reduced crosstalk.
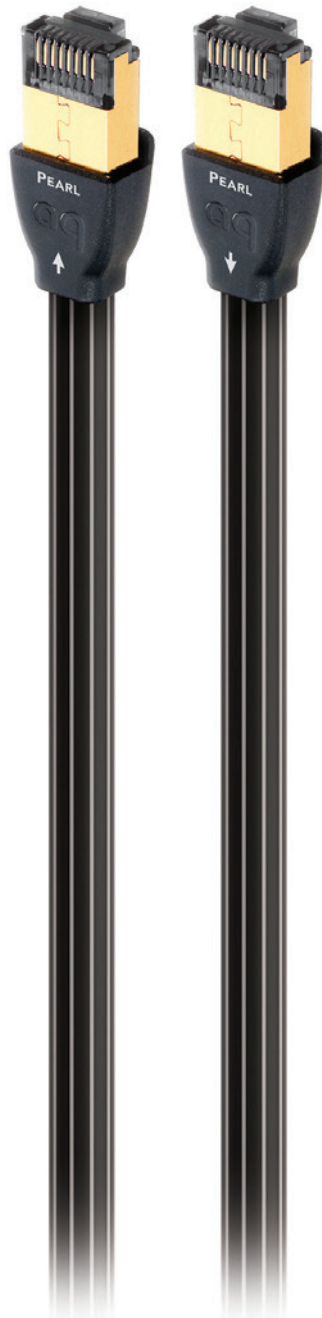
Both Audioquest Ethernet cables under review here conform to the Cat7 standard, which ups bandwidth to 600 MHz, and specifies shielding of individual twisted pairs, as well as for the cable as a whole. The construction provides for four pairs of twisted wire, typically using copper-stranded conductors.

The Audioquest Pearl recognises the key benefits of transporting music data via Ethernet: high speed, low time delay, long cable runs and extremely low jitter, bit-perfect data transfer. In an audio system offering the choice of coaxial digital, asynchronous USB or Ethernet bridge data transfer, the latter will often (but not always) sound consistently superior.

According to Audioquest, the Pearl augments the Cat7 cable standard by using solid, long-grain copper conductors which don't suffer from strand interaction-based distortion and further improve jitter, while also excelling at high-frequency applications such as this.

Insulation is via high-density polyethylene, which keeps the twisted-pair geometry consistent, and minimises insulation-induced phase distortion, while the nickel RJ45 connectors are gold-plated for optimum signal transfer.

The Audioquest Vodka is several steps up the Audioquest Ethernet cable ladder, with the primary difference being the use of solid copper conductors with a 10 percent high-purity silver surface coating.

According to Audioquest, the high-frequency data signals typical of music data transfer travel mainly along the surface of the conductor, where the performance benefits of silver are at their greatest.

The Vodka also employs the brand's proprietary metal-layer noise dissipation system, which prevents RF interference captured by the cable's shielding from affecting the connected equipment's ground reference. The system employs metal and carbon-loaded synthetics to prevent RFI transfer.

The Vodka's enhanced RJ45 plugs are even more substantial than those of the Pearl, and link an all-nickel body to silver-plated connecting surfaces.

The network in my listening room is a mess of Ethernet cables, utilised for both Internet connectivity and data transfer, as well as for music streaming purposes. Internet access is via a wireless repeater linked to a 10/1000 switch, which also interconnects a variety of networked components.

These include a PS Audio DirectStream D/A converter with Bridge II network

bridge that can act as a Roon endpoint, a Naim Uniti2 with streaming capability, a Mac Mini operating as a Roon server, and a Synology NAS DS213+, which stores my considerable music library.

For this review, I started off running the Audioquest Pearl between the network switch and the PS Audio DirectStream's Bridge II, figuring that this would be the most critical data path from a sonic perspective.

Later, I replaced the Pearl with the higher-spec Vodka. And finally, I added the Pearl between the Synology NAS and the switch, while leaving the Vodka between the switch and the PS Audio DS. Amplification was via the Naim Uniti2, with Vivid Audio V1.5s on loudspeaker duty.

With just the Pearl in place, the differences were discernable but subtle, with the trebles and upper frequencies the primary beneficiaries.

Listening to Holly Cole's rendition of 'I Can See Clearly Now' (from *Don't Smoke In Bed*, Blue Note 44/16 WAV), the singer's voice had a slightly cleaner edge, and the piano's upper registers sounded clearer and keener, too.

The soundstage appeared slightly expanded, affording the performance more breathing space. And as the arrangement becomes increasingly populated, the sense of enhanced lucidity and definition became more apparent.

These trends became more emphatic when I swapped the Pearl for the Vodka. The vocals were more vivid, and finer nuances were extracted with greater assurance, adding to an enhanced sense of presence and awareness.

Certainly, the definition of individual instruments was more pronounced — a further result of the sound's heightened clarity. And with the Vodka, the sonic gains extended to a cleaner, better defined bass, too.

Let me hasten to add here that we're not talking massive, night-and-day differences, but rather subtle enhancements that often only become apparent after repeated comparisons with familiar, well-recorded material.

Logic tells me that the network switch

is a key factor in the signal chain, and may well obscure some potential benefits. I wouldn't be surprised if Audioquest comes up with an own solution in this regard. By the same token, with both the Pearl and the Vodka in play, there was a cumulative advantage, further underscoring that quality Ethernet cables do have a positive impact.

Just how significant those gains will

be will depend on system resolution, network configuration and even listening acuity. But what is guaranteed is superior construction, effective shielding and the knowledge that the Ethernet signal transfer is optimised.

Deon Schoeman

VITAL STATS

Audioquest Pearl
Type..................................... Cat 7
Termination ...RJ45, gold-plated nickel contacts, break-resistant tab
Directional..............................Yes
Conductors ..... Solid long-grain copper
Shielding .... Individually shielded pairs and overall
Length tested ....1,5 m

Audioquest Vodka
Type..................................... Cat 7
Termination .... Shielded RJ45, silver contacts, break-resistant tab
Directional..............................Yes
Conductors .... Solid 10% silver
Shielding .... Individually shielded pairs and overall
Length tested ....1,5 m

Verdict
Can careful construction enhance data transfer to the benefit of sonic performance in a networking/data streaming environment? Yes — but system resolution may be the limiting factor.

Price
Audioquest Pearl R499
Audioquest Vodka R4 999

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OUR RATING: 78/100