

Nordost Qkore Grounding System

by Marc Mickelson, July 5, 2017

© www.theaudiobeat.com

Even with the breakneck pace of advancement in the consumer-electronics industry, high-end audio has remained rather staid, the not-too-recent rise of high-resolution file playback notwithstanding. Playing records, the most ancient of recording media, is as hot now as it has ever been since the advent of digital. The majority of speakers still use dynamic drivers, tubes remain popular, and traditional solid state has mostly withstood the challenge of class-D amplification.

Interconnects still carry line-level signals, speaker cables still send along the amplified signal and power cords still provide the AC power for it all. Audio advancements do occur, although at a pace more glacial than galactic.

Even so, Nordost's Qkore grounding system really does represent something new, if not an absolute first for the audiophile market. It addresses an aspect of the electrical chain that will have you hitting your forehead with your palm, wondering why you didn't think of it. The ground leg of the AC system has some

very important functions, alleviating the possibility of electrocution among them. In audio circuits, the ground is also a path for noise. Because each circuit is designed and implemented differently, ground noise can be a small or large issue, depending on how well the AC system is shielded and how well the power supply has been designed.

Qkore levels the playing field, offering both a method for taking ground noise out of the audio chain and sequestering it. Noise has been an eternal adversary for audiophiles, and Qkore is an effective, and nearly unique, ally in this battle. I say "nearly unique" because a





couple of other companies (CAD and Entreq) have come up with their own solutions for addressing this same problem. But Nordost, with its manufacturing prowess and worldwide retail might, may represent the most serious attempt to address the issue of ground noise for the audiophile market.

The Qkore line includes three different physical units. Each is fully passive, requiring no AC. They are all about the size of a large textbook, and they look ostensibly like each other, the differences occurring in the function -- and shown on their rear panels. The Qkore 1 addresses the primary or AC side of the power system, connecting directly, and exclusively, to an audio system's power distributor or conditioner. Only power products, like those from Nordost's own Quantum line, that have a separate ground lug (or facility to add one) can be used, as that lug is the connection point. The Qkore 3 addresses the secondary or signal side of the power supply. It connects to as many as three separate components, analog and digital. With a Qkore 1 and Qkore 3, you can treat an

entire system -- provided that there are no more than three AC-consuming components. For larger systems, you simply add an additional Qkore 3 or use a single Qkore 6, which features connection points for both the AC distributor and up to five audio components.

With each unit, Nordost includes one (Qkore 1 and 3) or two (Qkore 6) Qkore Wires, which connect each electronic component to the Qkore system. These have banana connectors on both ends for the primary ground (between the Qkore 1 or 6 and the system's power distributor) or a banana on one end and an RCA on the other for the secondary ground (between the Qkore 3 and the preamp, amp, sources, etc.). Extras are available with different connectors on the component end: spade, XLR (male and female), BNC, USB A, USB B or RJ45 (for Cat 6/Cat 6a network).

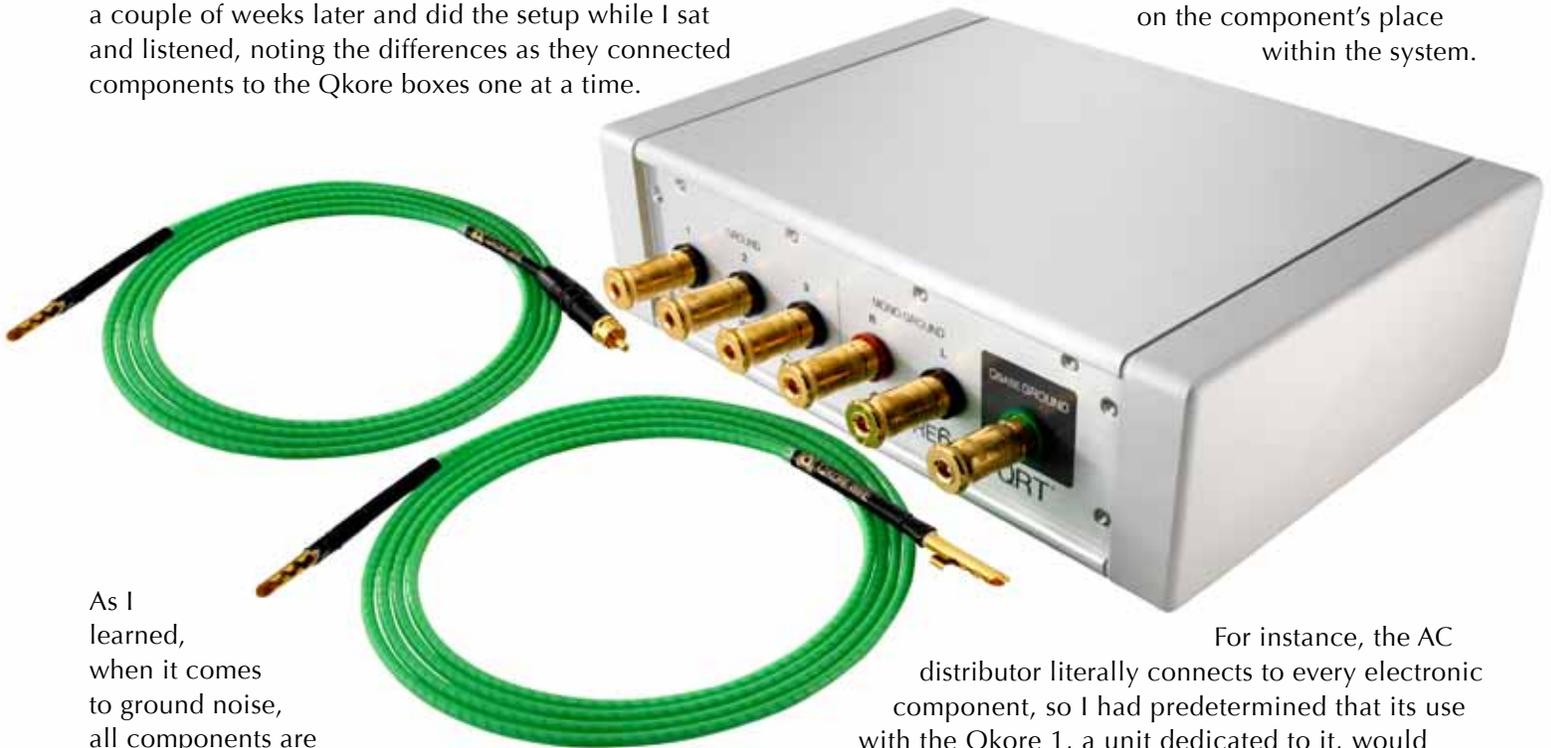
The Qkore system employs both electrical and mechanical means in its battle against ground noise. Inside each unit are what Nordost calls LVAPs -- Low-Voltage Attractor



Plates -- which are made of a special alloy and include a passive electrical circuit. These draw away stray high-frequency noise and magnetic fields from the ground leg of connected equipment. All of the Qkore units use Nordost's Mono-Filament technology, a cornerstone of the company's cable designs, and each unit's housing is mechanically tuned, a particular area of emphasis for Nordost. Removing each unit's rubber feet reveals recesses into which Nordost Sort Kones fit perfectly, further enhancing Qkore's mechanical tuning and sonic effectiveness.

For initial setup, Nordost sent me one of each Qkore unit along with extra Qkore Wires. Jon Baker and Michael Taylor of Nordost arrived a couple of weeks later and did the setup while I sat and listened, noting the differences as they connected components to the Qkore boxes one at a time.

and discovering which connection point maximized Qkore's sonic impact (in no instance was the effect minimal or nonexistent). It was easy to hear the effect of the Qkore system, even with a single component connected, although, as suggested above, what I heard wasn't universal in magnitude from product to product. I offer this in the spirit of experimenting -- exactly what you should do if you audition one or more of the Qkore products. What you hear will be positive, and dead obvious, with every recording, but it won't be static across all preamps, for instance, or even all connection points for a single preamp. Furthermore, Qkore challenged some preconceived notions about the sonic importance of each component, based on the component's place within the system.



As I learned, when it comes to ground noise, all components are not created equal. Some reject it better than others, and each will have a certain connection point that maximizes the sonic effect of the Qkore system. That might mean using either an RCA or XLR connection, so it's worthwhile to try both and even to try different connection points of the same type. Jon and Michael began with the AC distribution block, a Nordost Quantum QB8 Mk II, and proceeded through digital components, amps and preamps. Because my turntable was disconnected for cartridge realignment, they didn't connect either the turntable or phono stage, leaving me to experiment with both.

For instance, the AC distributor literally connects to every electronic component, so I had predetermined that its use with the Qkore 1, a unit dedicated to it, would have far and away the greatest sonic impact. And that was the case, until my CEC TL1 CD transport was connected to the Qkore 3 and the effect was even greater. I would have bet the deed to my house that the order of magnitude would be just the opposite of what I was hearing, with the CEC transport displaying more subtle improvement. But that wasn't the case. Then Jon and Michael connected the Genesis Digital Lens data buffer, used between the CEC transport and Timbre TT-1 DAC, to the Qkore 3 and threw another wrench in the process.

After Jon and Michael left, I went a step or two further, connecting and disconnecting each of my electronics

What exactly did I hear? There are generalities -- the sort of across-the-board improvements for which power conditioning is often credited -- along with specifics



tethered to certain products. In the former was an opening up of the soundstage similar to what happens with a very good subwoofer, along with a more airy presentation and stronger image outlines. You can surmise that these are all tied to a reduction in noise -- that with the absence of noise, the signal was more prominent. Much of my early listening was to recordings and cuts I know very well, because I've heard them on various collections of equipment in my own listening room and on many, many show systems. Among these, the half-dozen tracks from Suzanne Vega's *Close-Up Series* [Amanuensis 2507] that I've burned to CD-Rs were especially illustrative. These purist recordings of small ensembles, such as "Bad Wisdom" and "Headshots," made plain Qkore's contributions, as the recording venue sounded bigger and the musicians more in-the-room present, no "maybe" about it. This occurred across recordings and components, Qkore expanding musical horizons and making everything in them sound more vivid -- more grounded, you could say.

at the same time, had better leading-edge definition. This underscored what I wrote earlier: experimentation with not only the type of connection but also its location can reap great benefits. It can also be a bit tedious with a product like the TL-7.5 III, which has a plethora of inputs and outputs, both RCA and XLR. Jon and Michael had also mentioned that double connection -- to more than one Qkore unit -- reaps noticeable benefits, but I was unable to test this. It does make sense, however, given that different connection points certainly produced different sonic results.

Along with all of the obvious sonic benefits of the Qkore system, there are a couple of practical matters that are worth pondering. The first is specific to audiophiles living in apartments or in houses like mine, where adding a separate ground line connected to a ground rod sunk in the yard isn't feasible. (In my case, it would be impossible to add the wiring to the outlets in my listening room, or add new dedicated lines.) Qkore



On top of this, specific components displayed newfound capabilities once connected to the Qkore system. The bass of the CEC TL1 has never been a bona fide strength, but once this CD transport was connected to a Qkore 3, the bottom end firmed up and sounded more powerful, the bass on "Headshots" taking on a growl it didn't have before. After changing from an RCA connection to an XLR and then back to a different RCA, the VTL TL-7.5 III preamp sounded noticeably more liquid and,

settles the issue, providing a clean separate ground when no other option exists.

The second consideration is trickier to sort out but potentially more beneficial. System upgrading is almost as important a part of being an audiophile as listening to music. Given that treating the ground plane as a vital part of an audio system is just now becoming a serious endeavor, Qkore represents an important consideration:



do you upgrade a part of your existing system or add a Qkore box or two? For systems like mine, with top-flight (and expensive) sources, electronics and speakers, I don't know of an upgrade that would be more profound and economical than adding a Qkore system, as doing so lifted the performance of the entire audio system, because it *affected* the entire audio system. Buying a new amp or speaker may scratch an itch, but in sonic terms, adding a clean ground where none existed before makes a great deal more sense.

After the Qkore system was fully installed and I had done some listening, I used a line from *Star Trek* to sum it up, calling it "The final frontier." But Jon Baker of Nordost one-upped me, likening the Qkore units to the devices used for trapping paranormal goblins in *Ghostbusters*. Both fit, because the AC ground has been largely ignored, and with Qkore, ground noise

goes into each box and never leaves, making for an utterly clean ground. You won't have to struggle to hear what it does -- no picking particular recordings to highlight this or that.

Every recording will sound more realistic, and in obvious ways. While the Qkore system I reviewed isn't cheap, coming in at over \$10,000, it treated my entire extensive audio conglomeration and provided something greater than a component-level upgrade. A single Qkore 6 would cost half that and be all you'd need for a less complicated system. Either way, a pair of new interconnects or speaker cables can cost you more and not deliver half as much.

While Qkore isn't necessary for your audio system to function, it is essential for hearing it at its absolute best. It doesn't take much insight to predict that this "final frontier" will become commonplace in audiophile systems, so obvious and profound is the improvement it brings.

Price: Qkore 1, \$2499.99; Qkore 3, \$3499.99; Qkore 6, \$4999.99; Qkore Wires, \$360 for one meter plus \$150 per additional meter.

Warranty: Five years parts and labor.

Nordost Corporation
93 Bartzak Drive
Holliston, MA 01746
(508) 893-0100
www.nordost.com

Associated Equipment

Analog: TW-Acoustic Raven AC turntables; Graham B-44 Phantom Series II Supreme and Tri-Planar Ultimate U12 tonearms; Denon DL-103R and Dynavector XV-1s (stereo and mono) cartridges; Nordost Odin 2 and Valhalla 2 phono cables; Lamm Industries LP2.1 phono stages.

Digital: Ayre Acoustics DX-5 DSD "A/V Engine"; CEC TL1 CD transport; Timbre Technology TT-1 digital-to-analog converter; Genesis Digital Lens; Toshiba Satellite laptop.

Preamplifiers: Audio Research Reference 6, Convergent Audio Technology SL1 Legend, VTL TL-7.5 Series III Reference.

Amplifiers: Kenwood L-07M and Lamm M1.2 Reference monoblocks.

Loudspeakers: Wilson Audio Alexx.

Interconnects: Nordost Odin 2.

Speaker cables: Nordost Odin 2.

Digital cables: AudioQuest Diamond USB cable; Nordost Valhalla 2 S/PDIF, AES/EBU and USB cables. Ethernet cable: Nordost Heimdall 2.

Power conditioners: Essential Sound Products The Essence Reference, Quantum QB4 and QB8 Mk II, Quantum Qx4, Shunyata Research Denali 6000/T and 2000/T.

Power cords: Essential Sound Products The Essence Reference and MusicCord-Pro ES, Nordost Odin 2 and Valhalla 2, Shunyata Research Zi-Tron Cobra.

Equipment rack and platforms: Silent Running Audio Cra3 8 equipment rack and Virginia Class Reference platforms (under Lamm M1.2 amps), Harmonic Resolution Systems M3 isolation bases.