

# Nordost

## QKORE 6 ground box

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In the last few years, I have built up a lot of experience with ground box by countless trial-and-errors in various systems at work and at home. I would not say I tested all the ground boxes on this planet as that there are many ground boxes I still haven't got a chance to test, e.g., some popular Chinese made ground boxes and some high end products like Tripoint. If you ask me for the tips #1 from my experience, I would tell you ground box should never be treated as just an accessory. It should be treated as a first class citizen in any high end audio system. While the construction and the materials of are crucial to the performance of the ground box and then to the system, how the ground box is configured or connected is even more important. Any misconfiguration would potentially deteriorate the performance of the system, not to mention if it could bring about any improvement at all.

## Division of labor

QKORE6 was one of the first three ground boxes which Nordost have ever made. As a matter of fact, they talked about designing a ground box two years ago but it was not until this year they have been able to release their first ground box. Along with the ground boxes, they also announced the availability of their ground cables, namely QKORE Wire. It is consistent with the ground boxes' naming, QKORE1, QKORE3 and QKORE6. If you wonder what the numbers after the names mean, they are the number of connectors in the ground box. For example, QKORE6 has 6 gold-plated WBT connectors, the others have 3 connectors and 1 connector respectively. QKORE6 is structurally different from the others because it has internal partitions. To understand why, one should look at the design of QKORE. QKORE1 is designed for the power bar with a ground connector, for example, Nordost QBase 8. QKORE3 is designed for typical audio equipments. QKORE6 combines all the functions offered by QKORE1 and QKORE3, and additionally provides 2 sets of connectors for

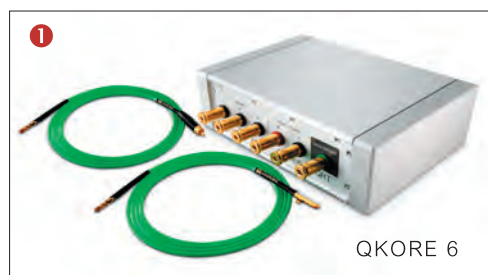
mono block power amplifiers. This leads to a question in my head, why not just QKORE3? I used a multimeter to measure the impedance among these connectors. I found that aside from the one used for grounding the distribution block (i.e., QBASE Ground), all the other binding posts are electrically conductive among themselves. In other words, QKORE6 is a 5+1 design. The mono block power amplifier connector is not really different from the other connectors.

## Flexible usage

At first sight, QKORE6 seems to have the highest price-performance ratio. But having a second thought, one would notice that all the models have the same size. QKORE is made of aviation-grade aluminium alloy bar with the centre hollowed out. It adopts Nordost's patented Mono-Filament technology with purpose-built, Low-Voltage Attractor Plates (LVAPs), constructed with a proprietary metal alloy and a passive electronic circuit. It is used as a parallel grounding device to provide a clean ground reference. As such, QKORE1 and QKORE3 would arguably have more obvious results. The manufacturer did not suggest deterioration would be caused by any usage other than the recommended method. It makes sense to assume that the user could select the combination of these products according to their requirements and budgets.

## Silver-plated ground cable

Ground cables plays an important role when establishing a grounding reference. It serves as a bridge between the equipment and the ground box. The dielectric and conductor are critical for its performance. The new generation of Nordost ground cable, namely, QKORE Wire, makes use of the same micro mono-filament technology in QKORE ground box to optimise the performance. It adopts silver-plated 6N OFC as conductor (thickness is 16AWG) and use FEP as dielectric. We



QKORE6 technical specification :

■ Size ( W × H × D ) : 270 × 80 × 200mm ■ Weight : 6kg ( QKORE1 ) / 6.2kg ( QKORE3 ) / 7.8kg ( QKORE6 ) ■ Retail Price :  
 ① QKORE6 - HKD 42,000. (including 2 QKORE Wires) / ② QKORE3 - HKD 29,500. (including 1 QKORE Wire) / ③ QKORE1 - HKD 21,000. (including 1 QKORE Wire)



once intended to have a detailed comparison between QKORE Wire and the existing QLINE (another Nordost ground cable) but the latter is tin-plated which is obviously not as good as QKORE Wire's silver-plated conductor. Hence, we don't think a comparison between them would be very meaningful.

## Excellent build quality

To enable us to have an in-depth evaluation, Nordost sent us two QKORE6 and 20 pieces of QKORE Wire's with different connectors for testing. The new ground cables are stiffer than QLine. The exterior of the cables is jade green, unlike the older generation which has transparent insulator. The twisted pair of wires inside the insulating tube is no longer visible from outside. The connectors at two ends are rock solid, which is essential for forming tight coupling with the binding posts of the ground box. The size of the spade connector is just right, unlike some products which is oversized enough to act as an antenna to attract EM interference into the ground box.

QKORE6 is around 1/3 smaller than our reference ground box, Entreq Tellus, but it is quite heavy for its size (7.8kg). There is no way for us to see what made it so heavy because we can't open it. There are special screws to secure the chassis and Nordost do not expect the user to open the chassis to see what's inside (which I suppose is their secret sauce). All we can do now is to listen how good it is!

## Energy transfer

Nordost engineers made use of electronic circuits and metal alloy in implementing QKORE. The reason I believe was to achieve stable and low impedance. When connected to the system, it serves as the signal ground for the connecting audio components. On the other hand, most equipments offer chassis grounding by connecting the ground to the chassis. These two types of ground are different. Signal grounding minimises the electric voltage difference between the ground

of the components. Chassis grounding serves mainly to fight against electromagnetic interference. Therefore, the reason why QKORE6 separate two types of grounding by making them independent is pretty sound. It arguably increases the immunity of the environmental interference but whether it will saturate as time goes by depends how the ground cables are connected. For example, the two partitions inside QKORE6 serves for signal grounding and chassis grounding respectively. The signal grounding will function well as long as there is no significant stray current running into the signal ground. On the other hand, the stray current flowing into the chassis ground will be dissipated by the resistive circuit and transformed into heat energy. The heat energy will then be transferred to the metallic chassis where thermal convection occurs. It is difficult to estimate how much stray current it could dissipate before the ground box becomes totally saturated. In the worst case, the user could unplug all the ground cables for a period of time. Then the ground box will be back to normal operation.

## No colouration

At first I was thinking of bridging two QKORE6 together to further reduce the internal impedance. However, as the number of binding posts are not sufficient for connecting all the components in the system, I gave up this idea. Then I connected the four-component dCS Vivaldi with one of the ground boxes. The preamplifier (Audionet STERN) and the power amplifiers (Audionet Heisenberg) are connected with the other one. The chassis ground binding post of both QKORE6 are connected to the ground connector of the preamplifier.

I first listened to the system by not connecting to any ground box for reference. I played a recent great hit, Vincent Bélanger

"Pure Cello" as a starter. The first track was the unaccompanied cello suites no. 5 from J.S. Bach. The first impression was not great. The cello was "inflated". The harmonics was not as rich as it used to be. It was not as airy as I expected. The sound stage was narrow and shallow. Actually the result was not



surprising as the system was normally connected to a ground box but now it wasn't. This also reminded me that the ground box is actually very critical to allow the system to stretch its potential. If you ask me to unplug the ground box from my system, I will feel like falling from heaven to hell. Why would I let it happen?

## Lively Music

I simply couldn't let my system unplug from the ground box for too long. Right after the audition reference was established, I immediately connected the two QKORE6 into the system and started playing the music again. The acoustical image of the cello from "Pure Cello" was crystal clear. When subtle variations of speed and force in bowing became much more obvious. The soundstage became deeper and wider. The



music became more airy. I could even feel the height of the church in which the recording was made. I was under the impression that QKORE does not really need time to settle down. Once connected, it performs as good as it could. Another thing I noticed is that there was no coloration at all. I could only hear more details. I would attribute the change to the fact that the equipments which were connected to QKORE share the same signal reference ground. The darkness of the background was also substantially improved although the background was already dark before QKORE substitutes the reference ground box. When I played music produced by multiple instruments, just like Saint Seans "Danse Macabre" as found in the reference CD from the HK AV Show 2012, the acoustic picture was so clear that I could nearly count the number of instruments being played. The triangle sounded shiny and transparent with rich overtones. The harp was charming and beautiful. The bassoon and violin sound delicate and distinct. Combining with timpani, the overall music picture was very rich and very wide.



At the beginning, I was a little worried whether the number of ground cables was sufficient. Apart from the 5 used in preamplifier, the power amplifier and Vivaldi (four units) was given one per unit. The result was amazing and I was completely satisfied with the it. Of course I didn't stop there. I hoped I would be able to get even better result by bridging both ground boxes together using a speaker jumper. It turned out that I was right - the sound picture was even clearer; the sound stage was even wider and deeper. High frequencies sounded even more transparent. I listed to Dance Macabre again. This time, the strings and woods were more lively and energetic. The ghosts danced even more excitingly. The percussion was more cheery even in the softer passage. In my opinion, I would suggest bridging two QKORE6 together if you have a system with super high resolution, like the reference setup in Audiotechnique. Otherwise, I found a single QKORE6 can still yield a very satisfactory result for a simple system with only 2 or 3 components.

## Conclusion

In summary, there are three characteristics which QKORE6 impressed me: 1. Highly stability of extreme low impedance; 2. Immunity to environmental influence; and 3. flexibility of usage. Any audiophile who want to stretch the potential of their system should consider it. Nordost adopted a unique approach by means of circuits and alloy plate to minimise the impedance. Yet QKORE does not beautify or add colour to the music. It is totally transparent. It simply allows you to hear more clearly and directly the music that your system is capable of producing. Whether this would be a good experience or not really depends on how good your setup is! 🎧

