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EQUIPMENT REPORT

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Nordost Valhalla 2 Reference

INTERCONNECT, SPEAKER CABLE, PHONO CABLE, POWER CORD

It would be an understatement to say that in 2001, when Nordost introduced their original Valhalla cables, they were a revelation for me. Their focus and resolution of detail were like nothing I'd ever heard, and revealed in recorded performances a startling energy and realism. Throw in their seemingly absolute transparency, and similarly unique levels of spatial and temporal precision, and the Valhallas established a new standard of sound quality in audio cables. Although their tonal balance was cool, as I reported in my first review of them in the November 2001 issue,¹ they were the only game in town in terms of reproducing the feel of a live performance. I immediately adopted them as a reference cable, and they remain a reference for me today.

Over time, other cable manufacturers upped their games and made the leap into the Valhalla cables' universe. None has matched the Valhallas' incredible transparency, focus, and detail, but they've equaled or surpassed them in other ways, such as reproducing music's seamless flow, or creating more solid aural images or more coherent portrayals of individuals playing in a single, continuous space. The coolness of the Valhallas' tonal balance became more obvious to me, and



¹ See www.stereophile.com/cables/1101nordost/index.html.

SPECIFICATIONS

VALHALLA 2 REFERENCE ANALOG INTERCONNECT: Connectors: Holo:Plug RCA or XLR.

Serial numbers of units reviewed V0021 (RCA); V1251, V1262 (XLR).

Price \$7599.99/1m pair; add \$1100/additional 0.5m.

VALHALLA 2 REFERENCE

SPEAKER CABLE: Connectors:

Holo:Plug spade or banana.

Serial number of unit reviewed V0148.

Price \$14,849.99/3m pair; \$1500/additional 0.5m.

VALHALLA 2 REFERENCE

TONEARM (PHONO) CABLE: Connectors: Holo:Plug RCA, XLR, straight or 90° DIN.

Serial number of unit

reviewed V0021.

Price \$4799.99/1.25m, \$600/additional 0.5m.

VALHALLA 2 REFERENCE

POWER CORD: Connectors: US, EU, UK, Aus, 15A IEC, 20A IEC.

Serial numbers of units

reviewed V0887, V0888.

Price \$5999.99/2m, \$1000/

additional 1m.

COMMON TO ALL: Approximate number of dealers 100.

Manufacturer Nordost Corporation, 93 Bartzak Drive, Holliston, MA 01746. Tel: (508) 893-0100. Fax: (508) 893-0115. Web: www.nordost.com.

I became more aware that what had seemed like precision was actually a slight overemphasis of the edges of images. I began thinking of the best audio cables as each having a place on a continuum: at one end were the Valhallas, with their resolution and precision; at the other end were cables with superb coherence, tonal richness, and flow.

Improving on Perfection?

As good as they can be, even the very best audio cables fall short of absolute transparency in one way or another. Each comes tantalizingly close, but needs just a tweak here and there to step out from the pack. My wish list for the Valhallas comprised three items: a slightly warmer tonal balance; a little less edge/a little more body; and more coherence across space and time. Great minds think alike, or maybe I just got lucky, but Nordost has evidently seen it the same way. As they acknowledged when they introduced the Valhalla 2 Reference models, the development program for the new line was aimed squarely at addressing these issues. Suffice it to say that the Valhalla 2 References jumped to the top of my Must Hear list.

Design and Technology

The pursuit of these characteristics—tonal warmth, a better balance between an image or note's body and edges, a more natural feel to the coherence of individual elements within the surrounding space, coupled with seamless, natural musical flow—has been a major driver for all of Nordost's design evolutions. Following their first-generation cables, across their Flatline, Blue Heaven, Red Dawn, and SPM lines, these characteristics improved over time (*and* as you moved up through the lines).

What I think of as the second generation of Nordost cables included the Quatro-fil interconnects and the first Valhalla line of interconnects and speaker cables. Nordost's ongoing R&D had begun to show that mechanical resonances had a much greater effect on cables' performance than had previously been thought. These results led Nordost to abandon their flat layouts of parallel conductors in favor of a round cross-section cable within which individual conductors were wound around a hollow core. The latter provided many more opportunities to vary design elements to better control mechanical resonances.

This second generation also used Nordost's Mono-Filament system, in which a small-diameter Teflon FEP filament was wound around the conductor prior to their co-extrusion into a Teflon FEP tube: the filament maintained a constant gap between conductor and tube. In addition to physically damping and tuning the conductor, the contact between the conductor and its surrounding material was reduced to only 20% of the former's surface area. Thus the Mono-Filament system more closely approximated an air-dielectric design, increasing the cable's speed of signal transmission.

The third generation of Nordost cables, which began with the cost-no-object Odin series and includes the Valhalla 2 References, incorporated two major design changes. One was Nordost's *Dual Mono-Filament* system, in which not

one but two Teflon FEP filaments separate the Teflon tube from the conductor. Dual Mono-Filament further reduces the conductors' contact with the dielectric tube, to just 15% of its surface area.

The second change was Nordost's switch from using OEM connectors that best fit their designs—*eg*, the WBT RCA plugs on the original Valhalla interconnects—to designing and manufacturing their own connectors in-house. Their R&D program had highlighted the importance of minimizing the formation of eddy currents in cables, and that the place to start was the connectors. The results were Nordost's Holo:Plug RCA, XLR, and spade connectors, all used in the Valhalla 2 References.

The materials used in Nordost's cables have also evolved, though far less than the structural changes. The silver plating on the conductors has thickened, from 60 to 85µm. Teflon has been used throughout for the filaments and the tubes that surround the individual conductors, the only change being the switch, in the Valhalla 2 References and other recent designs, to a high-purity Class 1.1 extruded FEP.

Use and Listening: First Things First

The first step in my review process was to hear how the Valhalla 2 References' sound quality compared with that of the original Valhallas, and to assess if, or how well, Nordost had met their design goals. This turned out to be very easy to do. First, there was no comparison between the two generations. The Valhalla 2s' performance was different enough from and so dramatically better than the original Valhallas' that, if not for the name printed on the cables, I would never have thought they were the same product line from the same company.

It was also obvious that, in terms of meeting their goals, Nordost had hit a home run. My first impressions of the Valhalla 2 References, which remained unchanged throughout my listening, were of how smoothly the music flowed from note to note; of a very natural warmth and tonal richness of the sounds of instruments; and of how solid, dimensional, and tangible images and soundstages seemed. That's where my analysis would begin.

Listening Approach: prix fixe or à la carte?

Listeners typically view cables in one of two ways. The first is to think of all of the cables in an audio system as a single component; in the other view, each individual cable is considered a separate component. (Holders of this second view will want to know the audible effects—manifesting, one presumes, from the cable designer's vision—that will be imparted to their systems by, say, a single run of Valhalla 2 Reference interconnect.) Nordost sent me only two Valhalla 2 Reference power cords; otherwise, I had everything I needed to wire my entire reference system with Valhalla 2s. This made it possible for me to examine them from both perspectives.

One Big Bite

What I heard from the all-Valhalla 2 Reference system is easy to describe. It is also impossible to describe. The simple part is that, with the Valhalla 2s, my system sounded better than I can recall it ever sounding. Recordings of all types of music seemed raised to a higher level. Musicians were both more precise and more expressive, and the soundscapes created by orchestras were dazzling in their intricacy and color. Combos were tighter, guitar and sax solos were cleaner, drums had more realistic impact—the list goes on. With the Valhalla 2s, I had a more direct connection to the music, and

The net effect was to dramatically change the feel of the piano, in ways that made the instrument seem more alive.



my listening room was a much more compelling place to spend an evening.

Better, but . . . better in what ways? I have no simple or satisfying answer. It's hyperbole to say that the Valhalla 2 References were perfect, or that they had *no* sound of their own, but that's how they seemed to me. No amount of switching cables in and out allowed me to home in on a sonic thumbprint I could attribute to the Nordosts. All that my efforts accomplished was to identify the things that *other* cables were contributing to the system's sound.

One Nibble at a Time: Valhalla 2 Reference analog interconnect

I listened extensively to both unbalanced (RCA) and balanced (XLR) Valhalla 2 Reference analog interconnects, but decided to focus most of my listening on a pair of 1m-long interconnects with unbalanced terminations. In part, I did so to establish consistency, to make all of the cable-swapping I'd be doing as easy as possible. A second reason for the choice was my hope that it would make my observations relevant and easily understood to the greatest number of readers: 1m RCA interconnects are the most commonly used in AudioLand.

CHARACTERISTICS AND IMPACT: What I found over the course of my listening will be great news for people who'd like to add to their systems just a single run of Valhalla 2 Reference interconnect (\$7599.99/1m pair; add \$1100/additional 0.5m). Of all the Valhalla 2s, it was the 1m interconnect with RCAs that had the greatest effect on the sound of my system.

It was no surprise that the Valhalla 2s improved the system's transparency and resolution of detail. Those attributes have long been strong points of Nordost cables, as have the speed and precision with which they reproduce dynamic and tonal transients. Having the Valhalla 2 References in the system made it possible for me to "see," for the first time, into the soundstage and identify more than just the fronts of the various aural images—or, more correctly, to see into the assemblage and to perceive each individual piece.

What *was* surprising was that the Valhalla 2s weren't doing this by accentuating spatial and temporal edges, as the originals did. The V2s more clearly identified elements within the recording by providing more information on what exists between the boundaries separating one track, one microphone feed, from the other. For example, in "The Midnight Special," from Creedence Clearwater Revival's *Willy and the Poor Boys* (LP, Fantasy/Analogue Productions APP 8397-45), the Valhalla 2 interconnects made it embarrassingly easy to distinguish between vocals: John Fogerty's voice in the verses was crystal clear, but had a tangible, almost liquid-like presence; in contrast, the harmonized voices in the choruses weren't nearly as clear or distinct, instead consisting of a slightly foggy texture that created a more diffuse picture of the voices and surrounding space.

The additional precision and detail I heard with the Valhalla 2 Reference didn't come as results of unnaturally sharp interfaces and transients, or at the expense of the tonal richness and harmonic complexity of the voices and instruments—just the opposite. Voices and instruments were all richer and warmer when the Valhalla 2 interconnects were in the system, and the sonic interactions that developed behind the notes' initial transients were more clearly defined.

Bottom line: Of all the Valhalla 2 Reference cables and all the different runs, it was the 1m interconnect with unbalanced RCA termination that had the biggest impact on my system's sound. Inserting only this interconnect didn't improve the sound as much as when my system was wired entirely with Valhalla 2s, but it did take it further than the single cable's simplicity and cost would suggest.



It was the 1m interconnect that had the biggest impact on my system's sound.

Valhalla 2 Reference speaker cable

Although Nordost's speaker cables continue to be flat arrays of parallel conductors, for the most part the other

aspects of their construction are similar to those of Nordost's other cables. In the case of the Valhalla 2 Reference speaker cable (\$14,849.99/3m pair; \$1500/additional 0.5m), these include a solid-core conductor of 99.999999% (8N) pure oxygen-free copper (OFC) plated in silver, the Dual Mono-Filament system, and the co-extruded Teflon sleeve. The number and size of the conductors have also changed: the Valhalla 2 Reference speaker cable has four sections, each comprising seven 22AWG conductors. The four groups in some of Nordost's other models can be used in a biwire configuration, but that's not the case with the Valhalla 2.

CHARACTERISTICS AND IMPACT: Most people instinctively assume that the choice of speaker cables will have a greater effect on a system's sound than that of any other cables, and in some ways that's been my experience. But what I've also found is that speaker cables usually have the largest effect, by far, on more *obvious* aspects of a system's sound, such as the overall tonal balance.

What I heard with the Valhalla 2 Reference speaker cables was completely consistent with that expectation: using the Valhalla 2s gave my system a tonal balance that was slightly on the warm side of absolute neutrality. But however slight that added warmth may have been, examples of its musical consequences make up a significant proportion of my listening notes. I love and listen to a lot of Ray Brown's recordings, and the Valhalla 2 References' extra bit of warmth gave his double bass a slight glow, or a bit more of the woody body sound he's so good at bringing out on his own. It was absolutely gorgeous, but after a lot of hand-wringing and soul-searching, I couldn't avoid concluding that it was just a bit *too* gorgeous.

In terms of their impact on a system's sound, the Valhalla 2 Reference speaker cables were second only to the Valhalla 2 Reference interconnects. But really, the ways these two cables affected my system's sound were too different for me to rank their relative performances. I've done so here because my approach doesn't permit ties, and I ranked them in the order I have, mostly because the subtle, less obvious aspects of a component's performance are more important to me than its tonal balance.

Valhalla 2 Reference Tonearm (phono) cable

Next in line with respect to its impact on my system's performance was the Valhalla 2 Reference Tonearm phono cable (\$4799.99/1.25m, \$600/additional 0.5m). The Valhalla 2 is a purpose-built model, though it does incorporate elements of the technologies used elsewhere in the line: the Dual Mono-Filament system, the materials and structure used in the conductors, and individual conductors woven around a hollow central core. Other design elements are unique to the Valhalla 2 Tonearm cable. One obvious example is the use of only four conductors, rather than 8 or 10 or 28. Another is the addition of a ground wire.

CHARACTERISTICS AND IMPACT: My experience with phono cables has been that they have a huge effect on a system's sound, if in subtler ways that take longer to understand but that far more profoundly affect my connection to the music. Oscar Peterson's piano on his *Reunion Blues* (LP, MPS MB-20908) offers good examples of both large and small changes. One of the largest changes was how installing the Valhalla 2 brought all of the distance and size information into focus, tied it all together, and locked it into place on the stage. Prior to hearing the Valhalla 2 Tonearm cable, I'd largely written off *Reunion Blues* as poorly recorded—which wasn't the case at all.

A less obvious aspect of the change with the V2 in place was how each piano note evolved from an initial impact and simple string sound into the complex choral nature created as the piano's soundboard and body begin contributing to the sound. After going back and forth with the original Valhalla and several others, it became clear that the V2 bettered the best aspects of each. It was more transparent than the original Valhalla, and even more detail was revealed. At the same time, all of that detail was woven into a coherent whole. The notes, even the components of each note, flowed more naturally. The net effect of these subtle changes was to dramatically change the feel of the piano, in ways that made the instrument seem more alive.

Nordost Valhalla 2 Reference power cord

The cable package Nordost sent included two 2m-long Valhalla 2 Reference power cords (\$5999.99/2m, \$1000/additional 1m). Most of my listening was to LPs, where the V2 cords fed my pair of Sutherland Engineering Phono Block monoblock phono preamps. With CDs, I used the Valhalla 2 Reference cords to power my Simaudio Moon Evolution 750D player and 850P preamp. Although I power my reference system through an Audience AdeptResponse aR12-TS power conditioner,² I did all of my listening and made comparisons with the Nordost AC cords plugged straight into the wall.

CHARACTERISTICS AND IMPACT: The Valhalla 2 Reference power cords were a surprise—their contribution to sound of the all-V2 system was far greater than I'd expected. Using anything other than the Valhalla 2s to feed the Sutherlands caused differences that weren't subtle shadings; I'm certain those were there, but they were swamped by obvious, even gross audible differences. In an instant, my earlier thoughts about differences between power cords being minimal were rendered obsolete.

Without the Valhalla 2 cords feeding my Sutherlands, the perfection I spoke of earlier began to come apart. The effect produced one of those puzzling "Did I hook something up wrong?" moments. Pachelbel's Canon in D was once again the disjointed mish-mash it had been before I first installed the Valhalla 2 loom. Violins again sounded aggressive and edgy, even in their lower ranges. The individual elements of the recording, so distinct and clear with the Valhalla 2s in the system, now bled together into something wide and deep, but incoherent and inconsistent. Any sense of musical tempo or flow vanished; at best, when a simple passage would emerge, the adjective I found inescapable was *strident*.

Dexter Gordon's tenor sax in his *A Swingin' Affair* (LP, Blue Note/Classic ST-84133) had a rich, reedy bite with the Valhalla 2 References, blooming naturally into a tenor's characteristic mix of harmonics. With one of my other AC cords, the blare was brassy rather than a reedy buzz, and the note behind the transient never evolved into anything beyond a threadbare outline of Gordon and his sax. The same was true of Sonny Clark's piano and Billy Higgins's drums,

ASSOCIATED EQUIPMENT

Analog Sources Spiral Groove SG-2 turntable & Centroid tonearm, VPI HR-X turntable & tonearm, Grado Master Reference & Statement Reference cartridges.

Digital Sources Primare CD32 CD player, Simaudio Moon Evolution 750D CD transport-DAC.

Preamplification Sutherland Engineering Duo & Phono Block phono preamplifiers; Placette Audio Active, Sutherland Engineering Line Block line stages; Simaudio Moon Evolution 850P preamplifier.

Power Amplifiers Simaudio Moon Evolution 880M, VTL Ichiban monoblocks.

Loudspeakers Wilson Audio Specialties Sophia 2.

Cables Phono: Nordost Valhalla. Interconnect: Nordost Valhalla, Audience Au24e. Speaker: Nordost Valhalla, Audience Au24e.

Accessories Audience aR12-TS & aR2-TS power conditioners; Echo Busters room treatments; Finite Element Reference equipment rack; VPI HW-16.5 record cleaner; MusicTools CD shelves. —Brian Damkroger

which were rich, complete instruments with the Valhalla 2s in front of the Sutherlands.

I can't say how adding one, two, three, or more Valhalla 2 cords might have affected my system, were the balance of it not wired with Valhalla 2s. Nor can I say how my standard setup, in which my electronics' power cords are plugged into the excellent Audience aR12-TS power conditioner, would fit into the picture. What I can say is that if you're replacing your system's cables with Valhalla 2 References, *don't* neglect the power cords.

Wrapping Up

After spending vast amounts of time listening to the Valhalla 2 References, and even vaster amounts of time trying to analyze their characteristics, I ended up where I'd begun. The Valhalla 2 Reference cables are the best I've ever heard, and made my system sound the best it ever has.

Were I to regard all of the cables in my system as a single component, upgrading it to Valhalla 2 Reference would cost me about \$85,000. That upgrade absolutely, positively, and very significantly improved my system's performance. That said, I believe that other upgrades—replacing my speakers with ones further up Wilson's line perhaps—represent greater value. On the other hand, in a system made up of components costing in the hundreds of thousands of dollars, switching to Valhalla 2 could easily represent the highest value among potential upgrades.

It's a horse of a different color for the enthusiast to whom an individual run is a single component. Make no mistake about it, prices like \$5000 for a phono cable or \$8000 for an interconnect are well into the nosebleed seats. Yet a 1m interconnect will tell you a lot about the vision that resulted in the Valhalla 2 Reference line, and will buy a disproportionately large piece of that sound quality: good value, in my book. ■

2 See www.stereophile.com/content/adeptresponse-ar12-ts-january-2012

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