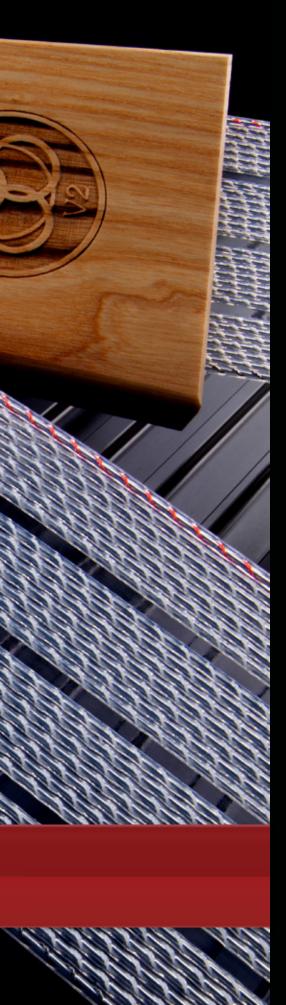


### VALHALLA 2 Reference Cables



MAKING THE CONNECTION

# REFERENCE REDEFINED



#### REDEFINING REFERENCE STANDARDS ONCE AGAIN...

When the original Valhalla cables were released in 2001 it changed our ideas of what was possible. Valhalla provided proof that cables could improve the musical performance of a hifi system profoundly. Universally praised by reviewers around the world, it set a new standard for cables against which all others have been measured – and consequently found wanting. Valhalla became the benchmark of cable performance. It emphasized the importance of cables like never before.

With the introduction of the Valhalla 2 cable series, the bar has been raised yet again. Audiophiles will be amazed and delighted by the performance of this ground-breaking range of cables. Nordost is the only cable manufacturer that has the technical resources to produce products like these.



#### COMMITTED TO RESEARCH ...SERIOUS ABOUT SOUND

Ever since Nordost was first founded, our commitment to research and development has provided us with an extraordinary wealth of proprietary knowledge, allowing us to make truly great cables. In order to weigh the effects of our products, we embarked on an extensive project with Acuity (a UK signal research facility), to measure and verify the improvements that listeners hear when applying cables to audio systems. The results were astounding.

#### HOLO:PLUG<sup>®</sup> COMPLETING THE CONNECTION

The HOLO:PLUG<sup>®</sup> is Nordost's patent pending connector designed to be the best possible interface between the cable and component. It maintains perfect signal integrity throughout the system that can be measured and quantified. Designed to transfer every last nuance of detail, the HOLO:PLUG<sup>®</sup> is a miracle of mechanical and electrical integrity. Each connector is designed to work at maximum efficiency in its particular application. The HOLO:PLUG<sup>®</sup> imparts a 3D, holographic image to the musical performance.

The HOLO:PLUG<sup>®</sup> is a very different design from that of a conventional phono plug. It features a unique, low mass, dual ring design to facilitate "asymmetrical but balanced" cables.

Each connector has unique attributes that optimize power and signal transmission.

The male HOLO:PLUG<sup>®</sup> XLR connector uses goldplated, solid brass alloy pins. It is tuned for optimum mechanical performance to reduce vibration and unwanted resonances.

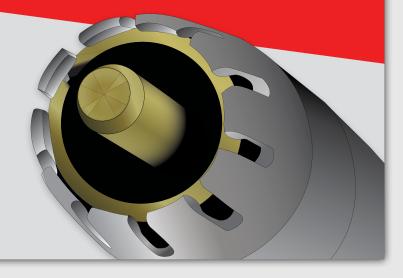
The female HOLO:PLUG<sup>®</sup> XLR connector uses goldplated, brass alloy hollow pins. It is designed to reduce non-conductive elements when mated to a male chassis mounted connector.

#### HOLO:PLUG<sup>®</sup> technology is available in the following products:

- V2 Analog Cables use RCA/phono plugs and XLR Balanced connectors.
- V2 Loudspeaker Cables use HOLO:PLUG<sup>®</sup> spade connectors.
- V2 Power Cords use HOLO:PLUG<sup>®</sup> carbon fiber IEC and US or SCHUKO wall plugs.
- V2 USB 2.0 Cables use HOLO:PLUG<sup>®</sup> USB connectors

#### HOLO:PLUG<sup>®</sup> Features

- Gold-plated, Solid Core Bronze Alloy pin
- Low mass, dual ring design
- Front ring with multiple redundant contact points
- Proprietary rear ring termination to improve grounding
- 360° contact mating surface to minimize eddy currents
- Vibration control
- Triple-plating process
- Made in the USA





#### NOT JUST ONE GOOD IDEA... MANY GREAT IDEAS.

The strength of Nordost products is that they are not based on just one good idea, but many great ideas. Valhalla 2 cables incorporate all of them.

- V2 cables use Dual Mono-Filament technology to achieve the most effective insulation method in the industry. This complex construction combines the very best available FEP insulation material in a virtual-air construction. This achieves minimum insulation contact and excellent mechanical damping.
- V2 conductors are made with extremely pure, silver-plated, solid copper cores.
- Nordost manufacturing techniques include the use of extruded FEP in a precisely spaced and dimensioned tube for signal cables.
- Superior geometry and consistency in conductor spacing.
- Terminated by hand in our US factory using HOLO:PLUG<sup>®</sup> technology.
- V2 provides solutions for each and every application, offering a continuous interface, utiliazing consistent materials and technology.



Dual Mono-Filament Technology









#### POWER CORD



Thanks to the application of our Dual Mono-Filament technology, our Valhalla 2 Power Cords set an unprecedented margin of performance over the competition. The cable consists of 7 solid, silverplated 16 AWG OFC conductors, each suspended in a Dual Mono-Filament matrix. The separate solid core conductors eliminate strand interaction. hot spots. and carbonization, which can occur in stranded cables. Unlike conventional power cables, which have propagation speeds that are less than 50% the speed of light, the Valhalla 2 Reference Power Cord has a speed of 91% the speed of light. Extruded FEP insulation used in V2's construction is superior to all other materials. It has very low signal loss and high thermal efficiency, causing it to dissipate heat quickly. The use of FEP in a Dual Mono-Filament construction means that power is transferred more effectively, while the low resistance of the cable keeps power loss extremely low. The result... truly superb sound quality.

- Insulation: High purity class 1.1 extruded Fluorinated Ethylene Propylene (FEP)
- **Construction:** Mechanically tuned lay, length and Dual Mono-Filament design
- **Conductors:** 7 x 16 AWG
- Material: Silver-plated 99.999999% solid core OFC
- DC Resistance: 1.33 Ohms per 1000 ft
- Cable Power Rating: 20 Amp
- Velocity of Propagation: 91%
- Termination: Nordost HOLO:PLUG<sup>®</sup> US (Nema), EU (Schuko), AUS or UK (Furutech) to Nordost HOLO:PLUG<sup>®</sup> IEC-C15 or IEC-C19 connectors



### ANALOG INTERCONNECT



The Valhalla 2 Interconnect consists of 10 conductors made from solid, optimized diameter 99.999999% oxygen free copper, each plated with 85 microns of silver. Its surface is highly polished and treated before a precision Dual Mono-Filament wrap is applied. A precision FEP tube is then extruded over each conductor. The ten FEP tubes are then bonded with a proprietary technique to create a tubular interconnect cable, enclosed in two layers of silver shielding. The V2 interconnect is offered with either RCA or XLR HOLO:PLUG<sup>®</sup> connectors.

V2 is extremely fast, at over 87% the speed of light. It transmits wide bandwidth signals with incredible speed and minimum phase shift. The V2 cable is state of the art, bettered only by the mighty Odin. It delivers incredible transient response and dynamic resolution so that no musical detail is lost. Each Valhalla 2 interconnect cable is hand built in the USA with HOLO:PLUG<sup>®</sup> RCA phono plugs or HOLO:PLUG<sup>®</sup> XLR connectors.

- Insulation: High purity class 1.1 extruded Fluorinated Ethylene Propylene (FEP)
- **Construction:** Mechanically tuned lay, length and Dual Mono-Filament design
- Conductors: 10 x 24 AWG
- Material: Silver-plated 99.999999% solid core
  OFC
- Capacitance: 17.0pF/ft
- Inductance: 0.076 uH/ft
- Overall Shield Coverage: 97% Total coverage with 2 layers of silver-plated shielding
- Velocity of Propagation: 87%
- Termination: Nordost HOLO:PLUG<sup>®</sup> Gold Plated RCA or XLR

## TONEARM CABLE



- Insulation: High purity class 1.1 extruded Fluorinated Ethylene Propylene (FEP)
- **Construction:** Mechanically tuned lay, length and Dual Mono-Filament design
- **Conductors:** 4 x 22 AWG
- Drain Wire: 1 x 24 AWG silver plated stranded OFC
- Material: Silver-plated 99.99999% solid core OFC
- Capacitance: 17.0pF/ft
- Inductance: 0.076 uH/ft
- Overall Shield Coverage: 97%
- Velocity of Propagation: 87%
- Termination: Nordost HOLO:PLUG<sup>®</sup> Straight or 90<sup>°</sup> low-mass 5pin Din, RCA or XLR

The Valhalla 2 Tonearm Cable is designed specifically to pass the most fragile signal in your system. The quality of the conductors, connectors, and the termination itself are all critical to realizing the performance of a high-quality analog replay system. This is especially true since the output of a typical moving-coil cartridge is around 10,000 times smaller than many CD players. The V2 Tonearm Cable's conductors use the same silver-plated, solid 99.999999% OFC copper as the other Valhalla cables but are tuned and configured for their specific task.

The following terminations are available: HOLO:PLUG<sup>®</sup> Din-type to HOLO:PLUG<sup>®</sup> RCA, HOLO:PLUG<sup>®</sup> Din-type to HOLO:PLUG<sup>®</sup> XLR, and HOLO:PLUG<sup>®</sup> RCA to HOLO:PLUG<sup>®</sup> RCA. An integral earth wire is provided, while balanced terminations are available to special order.

## DIGITAL INTERCONNECTS



Digital signals are subject to extremely precise transmission and termination standards. Ensuring that your digital cables meet those standards is vital to achieving the best possible performance from high-resolution digital systems. Valhalla 2 Digital Interconnects employ our advanced Dual Mono-Filament construction to mechanically dampen its silver-plated, solid copper conductors, while also reducing dielectric contact by over 85%.

In order to achieve exact impedance matching, Nordost's Valhalla 2 Digital leads offer a double layer of silver shielding. Like all our Valhalla cables, these Digital Interconnects are hand built in the USA. The 75 Ohm cable is terminated with goldplated HOLO:PLUG<sup>®</sup> BNC connectors for correct impedance matching and is supplied with goldplated RCA adapters, while the 110 Ohm cable uses gold-plated HOLO:PLUG<sup>®</sup> XLR connectors. Ensuring that they have the minimum effect on the digital signal, our HOLO:PLUG<sup>®</sup> connectors are designed to enhance sonic properties and maintain constant impedance throughout each cable.

- **Insulation:** High purity class 1.1 extruded Fluorinated Ethylene Propylene (FEP)
- **Construction:** Mechanically tuned spacing, length and Dual Mono-Filament S/PDIF (75 Ohm): Co-axial design AES/EBU (110 Ohm): Twin-axial design
- Conductors: S/PDIF (75 Ohm): 1 x 16 AWG AES/EBU (110 Ohm): 2 x 18 AWG
- Material: Silver-plated 99.999999% solid core OFC
- Capacitance: S/PDIF (75 Ohm): 15.3pF/ft AES/EBU (110 Ohm): 10.5pF/ft
- Impedance: S/PDIF: 75 Ohm AES/EBU: 110 Ohm
- Overall Shield Coverage: 98% Total coverage with 2 layers of silver-plated shielding
- Velocity of Propagation: 89%
- Termination: S/PDIF (75 Ohm): Gold-plated true 75 Ohm HOLO:PLUG<sup>®</sup> BNC. Gold-plated BNC to RCA adapters included. AES/EBU (110 Ohm): Gold-plated true 110 Ohm HOLO:PLUG<sup>®</sup> XLR

Made in the USA

## USB 2.0 CABLE



The Valhalla 2 USB 2.0 is a revolutionary USB cable design. For the first time, Nordost is introducing a flat, twin-axial geometry to its USB cables, allowing two signal wires to run parallel, both shortening the signal path, and drastically increasing transfer

- Insulation: Fluorinated Ethylene Propylene (FEP)
- **Construction:** Mechanically tuned length, Dual Mono-Filament, Flat, twin-axial design, with individually shielded power and signal conductors
- **Conductors:** 4 x 19 AWG
- Material: Silver-plated 99.999999% solid core OFC
- Overall Shield Coverage: 100% Total coverage, dual-layer silver foil and braid, with full metal HOLO:PLUG<sup>®</sup> backshell
- Velocity of Propagation: 90%
- Termination: Gold-plated HOLO:PLUG<sup>®</sup> Type A or B USB 2.0

speeds. Additionally, this twin-axial design separates the power (+) and ground (-) legs of the cable, both isolating the signal from the power legs, as well as from each other. It also ensures that each signal conductor and power leg are covered by respective braided, silver shields, which are then connected to the metal plated backshell, completely ridding the cable of any EMI or RFI, and eliminating noise.

The V2 USB 2.0 is constructed using four, 19 AWG solid core, silver-plated copper conductors, suspended using Nordost's proprietary Dual Mono-Filament technology, which increases dielectric and mechanical damping, while maintaining overall flexibility. The V2 USB 2.0 also takes advantage of Nordost's unique, mechanically tuned lengths, reducing internal microphonics and high-frequency impedance resonance. Finally, the V2 USB is fitted with HOLO:PLUG<sup>®</sup> connectors. Nordost built this fully shielded, low mass USB connector to ensure that there is no loss of signal transfer from the cable to the connectors themselves.





The Valhalla 2 4K Ultra High Definition Cable was purpose built, from design to material, in order to optimize high speed digital signaling, while eliminating harmful factors such as jitter, timing errors and crosstalk. The V2 4K UHD cable is constructed using 24 AWG silver-plated, solid core conductors, which allows the flow of ultra-high frequency current, used to carry TMDS (Transition Minimized Differential Signaling), to reach critical speeds for excellent data transfer. Nordost's proprietary Micro Mono-Filament technology is then implemented, permitting the current and voltage to travel above the conductor's surface, virtually unimpeded by insulation. The conductors are arranged in a twin-axial, shielded pair design, reducing transmission distance and timing errors, while the shielding eradicates destructive crosstalk.

Nordost's Ultra High Definition cables are mechanically tuned for optimal visual and audio performance. To further these excellent results, proprietary technology is implemented to ensure that 4K bandwidth requirements are surpassed on lengths up to 8 meters. The Valhalla 2 4K UHD cable is an American Made, future proof cable, held to the highest standards of 4K specification as defined by DPL Labs.

- Insulation: Fluorinated Ethylene Propylene (FEP)
- Construction: Mechanically tuned lay, Micro Mono-Filament, twin-axial shielded pair design
- **Conductors:** 19 x 24 AWG
- Material: Silver-plated 99.999999% solid core
  OFC
- Overall Shield Coverage: 100% Total coverage
- Velocity of Propagation: 86%
- Termination: Gold-plated, shielded, 19 pin, type A, High Definition connector
- Approvals: DPL 4K Certification



### LOUDSPEAKER CABLE

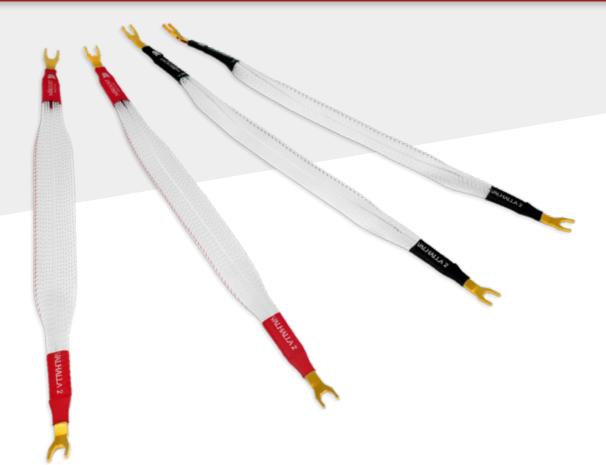


The Valhalla 2 Reference Speaker Cable consists of twenty-eight conductors divided into four groups of seven. Each conductor is made from solid core 99.999999% oxygen free copper and plated with 85 microns of silver. A Dual Mono-Filament wrap is applied and helically wound around each conductor before a precision FEP jacket is extruded over the outside. The transmission speed of the cable is extremely fast, at 97% the speed of light. V2 exemplifies state of the art technology with very wide bandwidth signals and minimum phase shift. It delivers incredible transient response and dynamic resolution, preserving depth of musical detail and allowing listeners to follow complex recordings with ease. The V2 Speaker Cable is terminated with HOLO:PLUG® gold-plated spade connectors or Nordost's low-mass Z-plugs.

- Insulation: High purity class 1.1 extruded Fluorinated Ethylene Propylene (FEP)
- **Construction:** Mechanically tuned spacing, length and Dual Mono-Filament design
- Conductors: 28 x 22 AWG
- Material: Silver-plated 99.999999% solid core
  OFC
- Capacitance: 10.9pF/ft
- Inductance: 0.125 uH/ft
- Velocity of Propagation: 97%
- Termination: Nordost HOLO:PLUG<sup>®</sup> gold-plated Spade or Nordost's gold-plated, low-mass Z-plug Banana

Made in the USA

### **BI-WIRE JUMPERS**



- Insulation: High purity class 1.1 extruded Fluorinated Ethylene Propylene (FEP)
- **Construction:** Mechanically tuned spacing, length and Dual Mono-Filament design
- Conductors: 28 x 22 AWG
- Material: Silver-plated 99.999999% solid core
  OFC
- Capacitance: 10.9pF/ft
- Inductance: 0.125 uH/ft
- Velocity of Propagation: 97%
- Termination: Nordost HOLO:PLUG<sup>®</sup> gold-plated Spade or Nordost's gold-plated, low-mass Z-plug Banana

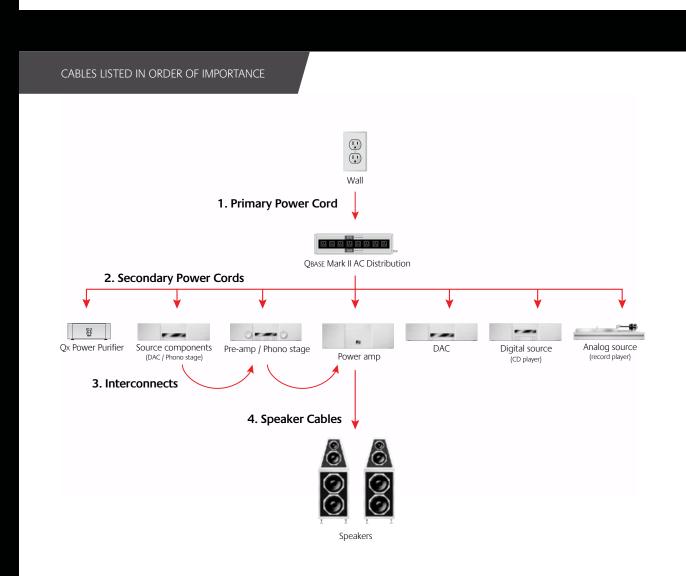
For true hifi enthusiasts, a system isn't something that simply gets slapped together without thought. Each component, treatment and cable is chosen specifically in order to reach the ultimate goal: produce the best sound possible. Why would the last few inches of cabling receive any less attention at the risk of ruining the result you have devoted so much time and expense on?

Valhalla 2 Bi-Wire Jumpers are the optimal solution for achieving exceptional sound by replacing the standard metal plates and generic wires supplied with most bi-wire loudspeakers. V2 Bi-Wire Jumpers are even a huge improvement from Nordost's Norse 2 and Reference Jumpers. With V2 Bi-Wire Jumpers, not only are you maintaining the same technology and cable philosophy, as you do with Nordost's other jumpers, but you are essentially purchasing an extension of your speaker cables, ensuring an identical sonic signature throughout your system.

#### GETTING CONNECTED...

Of course, you'll get first-rate results by wiring your entire system with Valhalla 2, but if that's not practical or you are upgrading from an existing cable system such as the old Valhalla, where should you start?

Cables are the foundation of your system and your system is only as good as its weakest link. The most important cable in your system is the power cord coming out of the wall, feeding your QBASE AC distribution block, and everything else flows from there. Within the system itself, your priorities should be in the order we've laid out below, running from top to bottom. Don't worry if you don't own one of the units shown on the diagram— simply pass on to the next.





MAKING THE CONNECTION

Nordost 93 Bartzak Dr Holliston MA 01746 USA

Email: info@nordost.com Website: www.nordost.com