



DIGITAL CABLES REFERENCE SERIES V2



Similar to Shunyata Research's award-winning USB and Ethernet cables, the v2 Delta, Alpha and Sigma digital and clock cables offer technologies that do not exist in any comparable product. The Delta v2 model features Ohno copper, premium fluorocarbon dielectrics and PMZ geometry to eliminate noise and jitter. Alpha v2 and Sigma v2 models add the incredible CMode module that reduces common-mode noise without introducing the sonic compression effects common to other cable designs. It reduces high-frequency noise distortion, providing an analog ease and background silence that closes the gap between digital and analog front-end performance.

SHUNYATA RESEARCH

shunyata.com

SIGMA AES/EBU



CMode Filter



ALPHA AES/EBU



SIGMA/ALPHA Connectors



DELTA AES/EBU



DELTA Connectors



Technology and performance.



Precision Matched Z

Shunyata Research digital cables are produced using a **Precision Matched Impedance** cable geometry — PMZ. This means that tolerances of the conductor surface, dielectric extrusion, and the precision of the braided shield are held to minute variances. To achieve tight tolerances, extrusion and braiding machines must be run at one-quarter speed during the manufacturing process. Better performance is achieved through a reduction of cable-induced signal jitter.

— Definition: $Z = \text{impedance}$



CMode

Common-node noise is different than differential noise and is much more difficult to measure and eliminate. For the purest signal possible, Shunyata Research has developed a **CMode filter** that effectively reduces common-mode noise without introducing the sonic compression effects associated with conventional filters. It reduces high-frequency noise distortion while delivering an analog ease and palpable background silence that closes the gap between digital and analog systems.

— Reduces common-mode noise



Σ SIGMA AES/EBU

Cable Type	PMZ twin-axial
Conductors	ArNi®/VTX/Ohno/OFE
Dielectric	Fluorocarbon
Impedance	110 ohms
Connectors	SR-XLRb-110
CMode Modules	Two
KPIP™ Processing	4-days
Standard Length	1.00 meters



Α ALPHA AES/EBU

Cable Type	PMZ twin-axial
Conductors	ArNi®/VTX/Ohno/OFE
Dielectric	Fluorocarbon
Impedance	110 ohms
Connectors	SR-XLRb-110
CMode Modules	Single
KPIP™ Processing	4-days
Standard Length	1.00 meters



Δ DELTA AES/EBU

Cable Type	PMZ twin-axial
Conductors	ArNi®/VTX/Ohno/OFE
Dielectric	Fluorocarbon
Impedance	110 ohms
Connectors	SR-XLRa-110
CMode Modules	N/A
KPIP™ Processing	4-days
Standard Length	1.00 meters



KPIP

Kinetic Phase Inversion Processing was developed by Caelin Gabriel after years of research into the underlying causes of various effects such as burn-in, wire directionality and the effects of cryogenic treatment. He discovered that there was an underlying core principle that burn-in and cryogenics only partially addressed. Once the governing principle was understood it became possible to create a processor that reduces the need for long burn-in periods and eliminates the effects of cryogenic treatment.



ArNi™

ArNi® wire is the trade name for Shunyata Research's many custom designed conductors. ArNi® wire is used by top electronics and speaker manufacturers because of its refinement and performance. ArNi® begins with the highest purity raw copper and silver metals, including Ohno (single crystal), CCC silver and OFE C10100 conductors. Fluorocarbon dielectrics, another key feature, can be found in aerospace applications due to extremely low dielectric absorption and superb heat resistance. ArNi® wires are pre-treated with KPIP to extract the best performance possible.



Ohno

Ohno wire, also called PCOCC was invented in 1986 by professor Atsumi Ohno of the Chiba Institute of Technology in Japan. Copper wire is created by an extrusion process that pulls a rod of cold copper through a small orifice which creates multiple crystalline boundaries. By contrast, Ohno wire is made by a process using heated molds that cast a wire to form a single crystalline structure. Ohno wire is well known for its exceptionally pure, grain-free sonic qualities.



SIGMA S/PDIF SIGMA CLOCK

Cable Type:	PMZ coaxial
Conductors	ArNi®/Silver
Dielectric	Fluorocarbon
S/PDIF Impedance	75 ohms
Clock-75 Impedance	75 ohms
Clock-50 Impedance	50 ohms
S/PDIF Connectors	SR-RCAb-75
Clock-75 Connectors	BNC-75
Clock-50 Connectors	BNC-50
CMode Modules	Two
KPIP™ Processing	4-days
Standard Length	1.00 meters



ALPHA S/PDIF ALPHA CLOCK

Cable Type:	PMZ coaxial
Conductors	ArNi®/Silver
Dielectric	Fluorocarbon
S/PDIF Impedance	75 ohms
Clock-75 Impedance	75 ohms
Clock-50 Impedance	50 ohms
S/PDIF Connectors	SR-RCAb-75
Clock-75 Connectors	BNC-75
Clock-50 Connectors	BNC-50
CMode Modules	Single
KPIP™ Processing	4-days
Standard Length	1.00 meters



DELTA S/PDIF DELTA CLOCK

Cable Type:	PMZ coaxial
Conductors	ArNi®/Silver
Dielectric	Fluorocarbon
S/PDIF Impedance	75 ohms
Clock-75 Impedance	75 ohms
Clock-50 Impedance	50 ohms
S/PDIF Connectors	SR-RCAa-75
Clock-75 Connectors	BNC-75
Clock-50 Connectors	BNC-50
CMode Modules	N/A
KPIP™ Processing	4-days
Standard Length	1.00 meters

Safety Assurance: All models

Continuity and polarity tests — by two technicians

HiPOT tests insulation breakdown @ 1,200 VAC

LIMITED LIFETIME WARRANTY

The unparalleled craftsmanship and build quality of Shunyata Research products is backed by a limited lifetime warranty.

This demonstrates our commitment to building the finest products on the planet and providing exceptional customer support.

— VALID ONLY IN THE US AND CANADA —

©2020 Shunyata Research Inc.

Reproduction of this brochure and its contents, in part or whole, is strictly forbidden without prior consent from Shunyata Research. Shunyata Research reserves the right to change specifications at any time without prior notice.

SHUNYATA RESEARCH

26273 Twelve Trees Lane, Poulsbo, Washington 98370

360 598 9935 | www.shunyata.com

2020.10